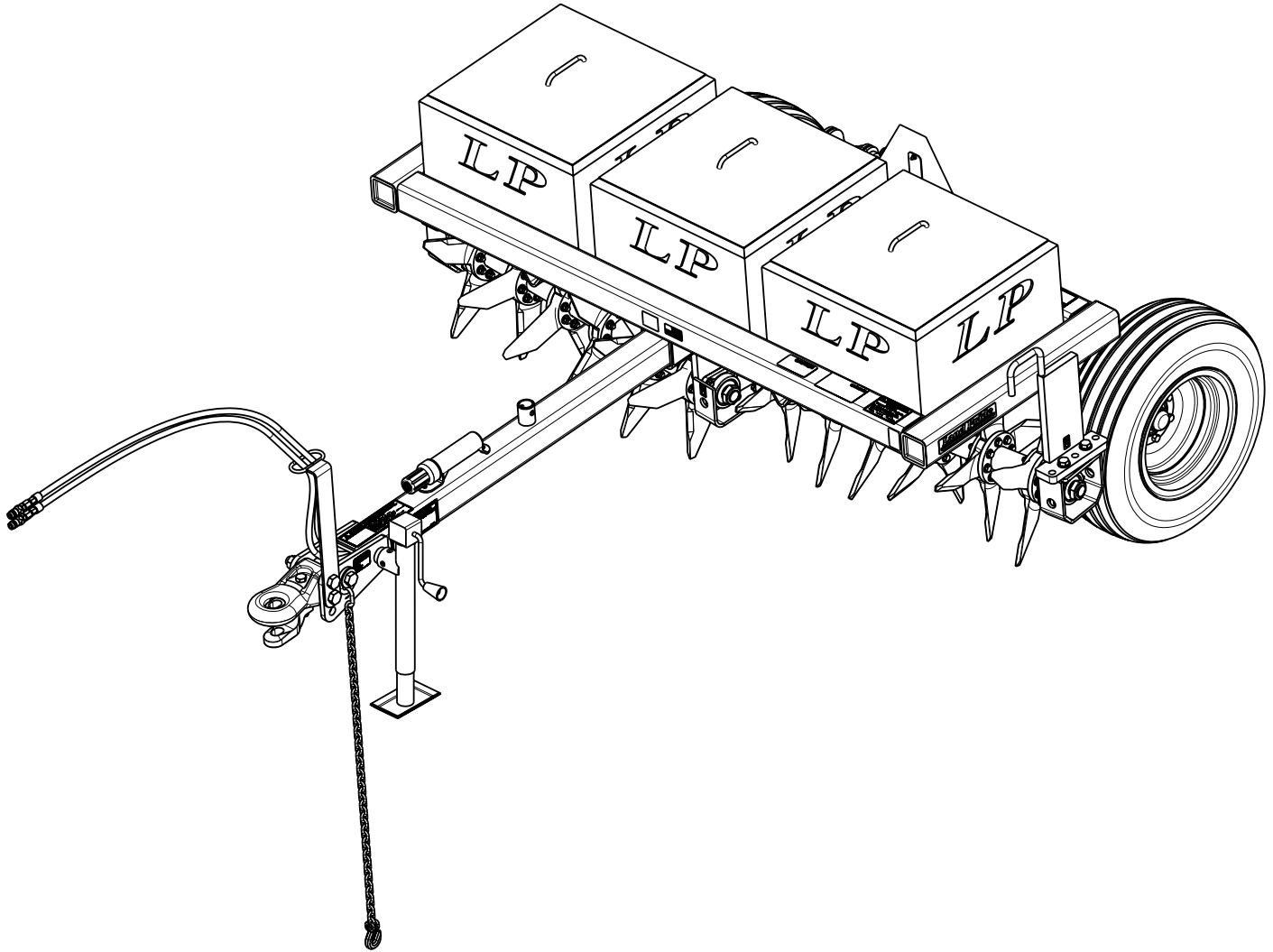


Pasture Aerators

AR2596 & AR2510



30018

325-127M
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.

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Printed in the United States of America.

Important Safety Information

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

Safety at All Times

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

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

- ▲ The operator must not use drugs or alcohol as they can change the alertness or coordination of that person while operating equipment. The operator should, if taking over-the-counter drugs, seek medical advice on whether he/she can safely operate the equipment.
- ▲ Operator should be familiar with all functions of the tractor and attachments, and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Operator must start tractor and operate controls from the driver's seat only. Never from the ground.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor can cause serious injury or death.
- ▲ Do not allow anyone to stand between tractor and implement while backing up to implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Watch out for fences, trees, rocks, wires, etc., while operating and transporting implement.
- ▲ Turning tractor too tight may cause hitched machinery to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert Symbol



The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

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

⚠ DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

⚠ WARNING

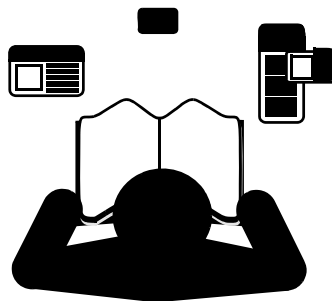
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

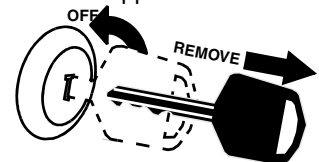
For Your Protection

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



Tractor Shutdown & Storage

- ▲ If engaged, disengage PTO.
- ▲ Lower attached implement to ground, put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
- ▲ Wait for all components to come to a complete stop before leaving the operator's seat.
- ▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.



Parts Manual QR Locator

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



Dealer QR Locator

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

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

Tire Safety

- ▲ Tire changing can be dangerous and should be performed by trained personnel using the correct tools and equipment.
- ▲ 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.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.



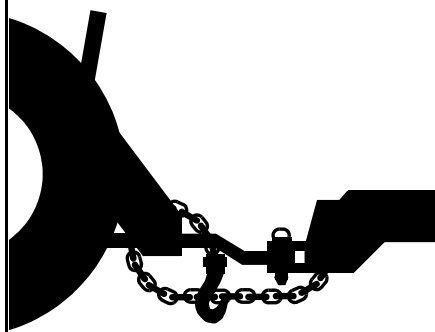
Transport Machinery Safety

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



Use A Safety Chain

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



Practice Safe Maintenance

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

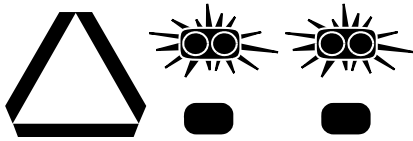


Important Safety Information

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

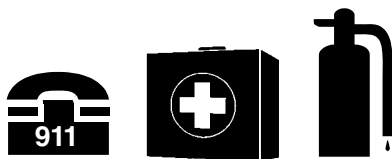
Use Safety Lights and Devices

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



Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital, and fire department near phone.



Avoid Underground Utilities

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



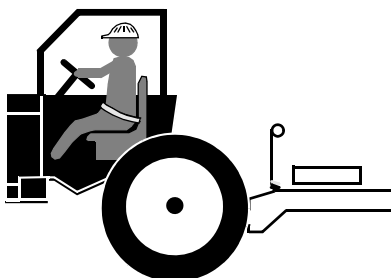
Wear Protective Equipment

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



Use Seat Belt and ROPS

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



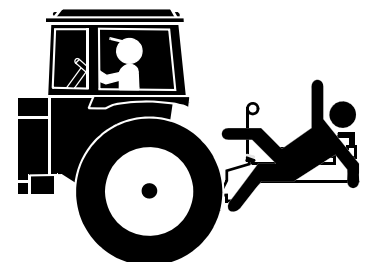
Avoid High Pressure Fluids Hazard

- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines or performing work on the system.
- ▲ Make sure all hydraulic fluid connections are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, see a doctor familiar with this type of injury immediately. Any fluid injected into the skin or eyes must be treated within a few hours or gangrene may result.



Keep Riders Off Machinery

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



Important Safety Information

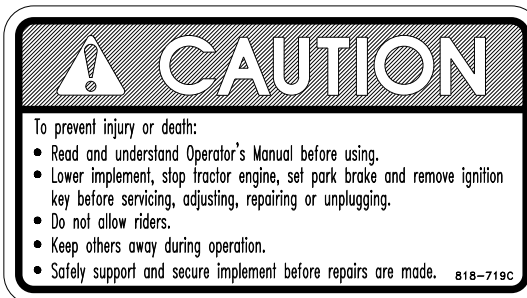
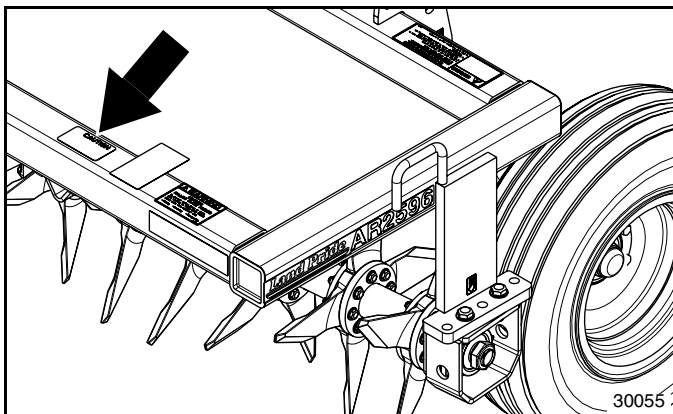
Safety Labels

Your Pasture 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

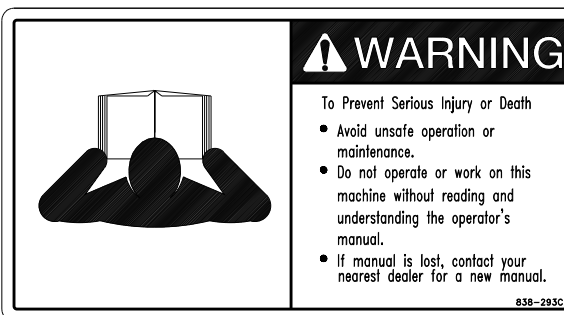
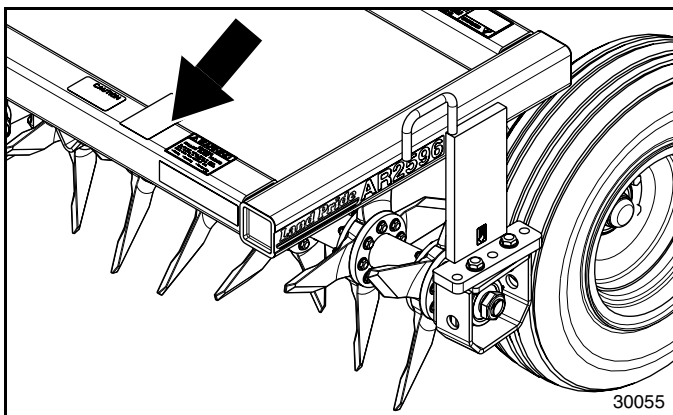
specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.

4. Refer to this section for proper label placement. To install new labels:
 - a. Clean area where label is to be placed.
 - b. Spray soapy water on the surface where label is to be placed.
 - c. Peel backing from label. Press firmly onto the surface.
 - d. Squeeze out air bubbles with edge of a credit card or with similar type straight edge.



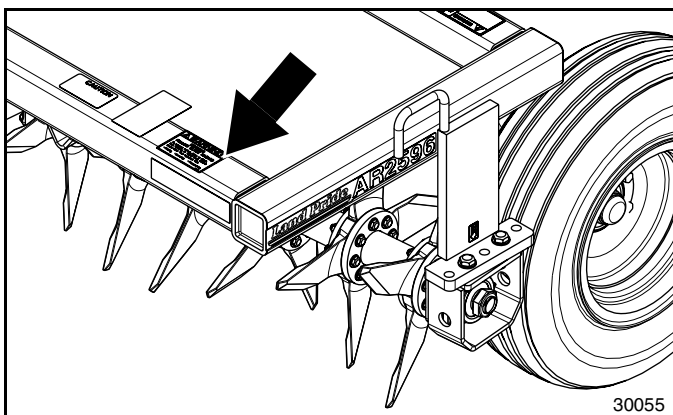
818-719C

Caution: Prevent Injury or Death



838-293C

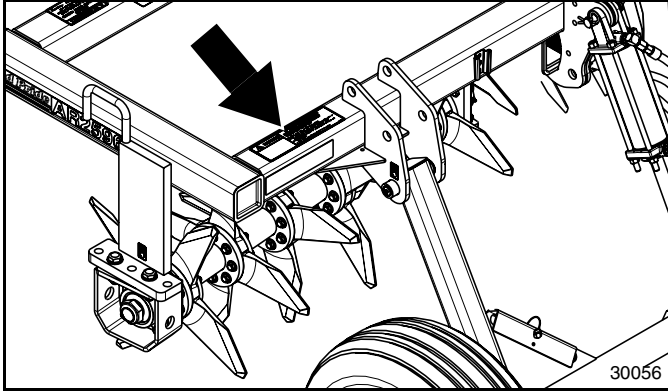
Warning: Safe Operation & Maintenance - Read Manual



848-247C

Warning: Crushing Falling Blade Hazard

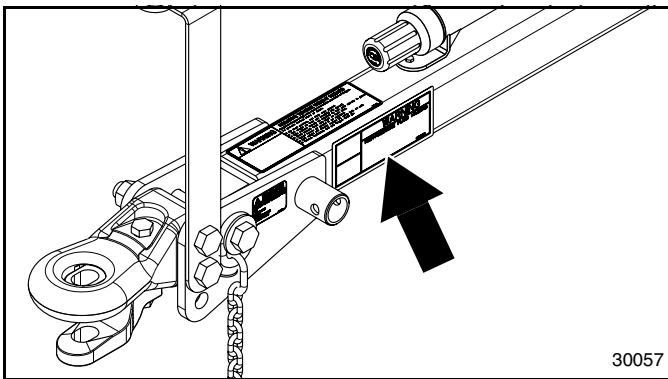
Important Safety Information



	WARNING
	<p>TIP OVER / CRUSHING HAZARD 3 Point unit w/Harrow package can tip over backwards. Harrow frame with Harrow can come down and crush. To prevent serious injury or death:</p> <ul style="list-style-type: none"> ○ Always store unit on solid level surface. ○ Set and pin all four park stands in down position prior to unhooking unit from tractor. (3 point unit only) ○ Completely lower Harrow to ground before unhooking unit from tractor. ○ Stay away from Harrow when it is in motion.

848-404C

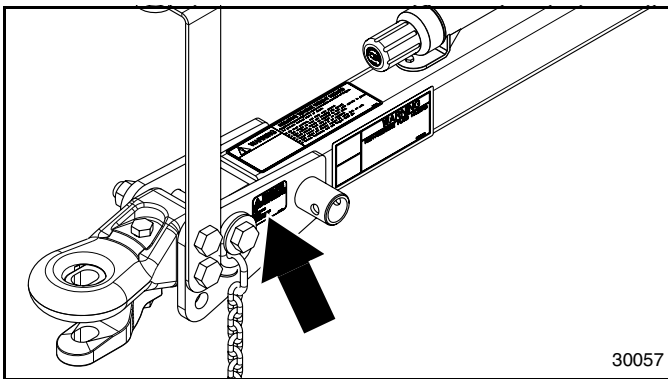
Warning: Tip Over / Crushing Hazard



	WARNING
	<p>HIGH-PRESSURE FLUID HAZARD To prevent serious injury or death:</p> <ul style="list-style-type: none"> * Relieve pressure on hydraulic system before servicing or disconnecting hoses. * Wear proper hand and eye protection when searching for leaks. Use wood or cardboard * Keep all components in good repair.

818-831C

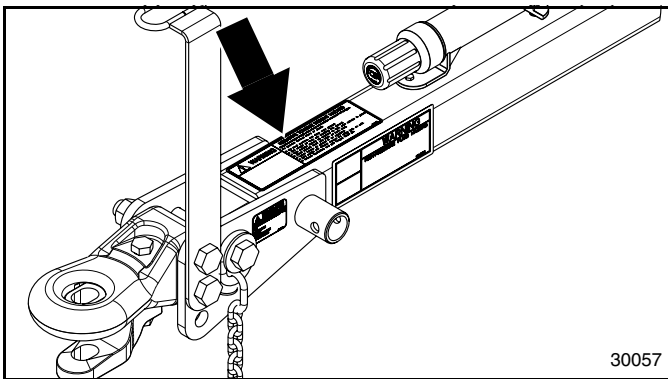
Warning: High-Pressure Fluid Hazard



WARNING
<p>DO NOT EXCEED 20 MPH TRANSPORT SPEED. TO PREVENT MACHINE DAMAGE LIMIT SPEED WHILE:</p> <ul style="list-style-type: none"> • TRANSPORTING • TURNING • IN WINDY CONDITIONS • IN ROUGH TERRAIN

838-588C

Warning: Do Not Exceed 20 MPH Transport Speed

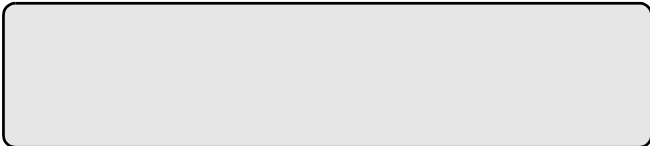
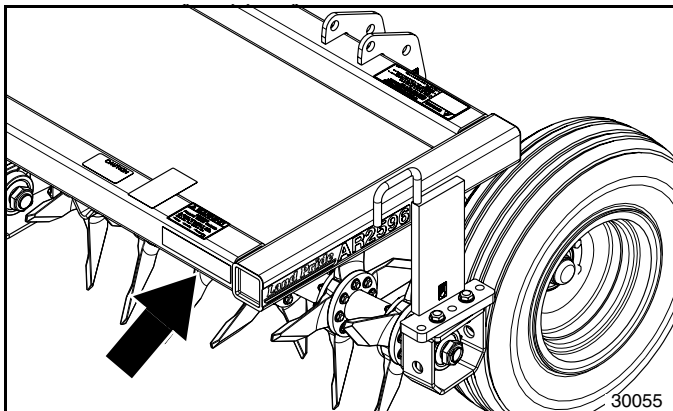


	WARNING
	<p>NEGATIVE TONGUE WEIGHT HAZARD Negative tongue weight may cause immediate elevation of tongue. To prevent serious injury or death:</p> <ul style="list-style-type: none"> ○ On level surface, set tires onto ground. ○ Set wheels so they are touching the ground. ○ Use cylinder donuts as required to lock axle cylinder in place. ○ Block (chock) front and back on both tires. ○ Lower harrow to ground if so equipped. ○ Lift weight off tractor tongue by using jack on unit. ○ Unhook hydraulics and pull tongue h pin.

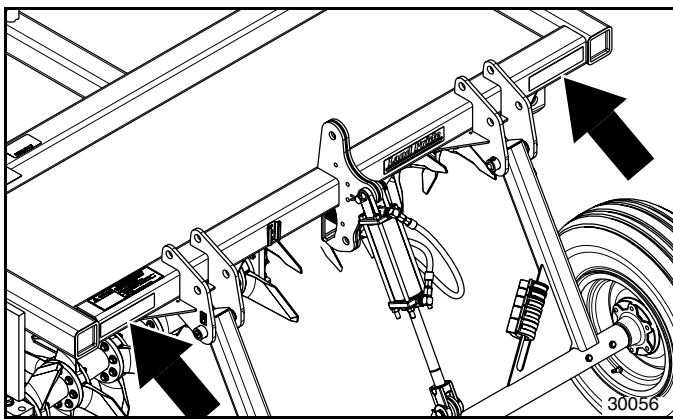
848-403C

Warning: Negative Tongue Weight Hazard

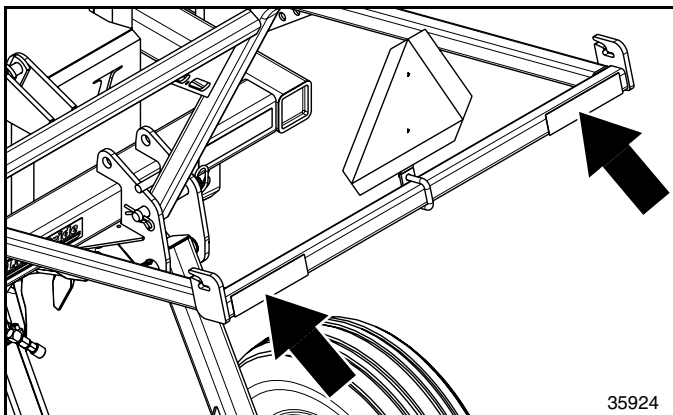
Important Safety Information



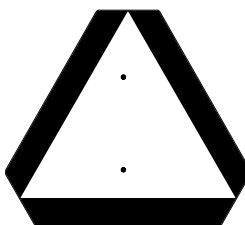
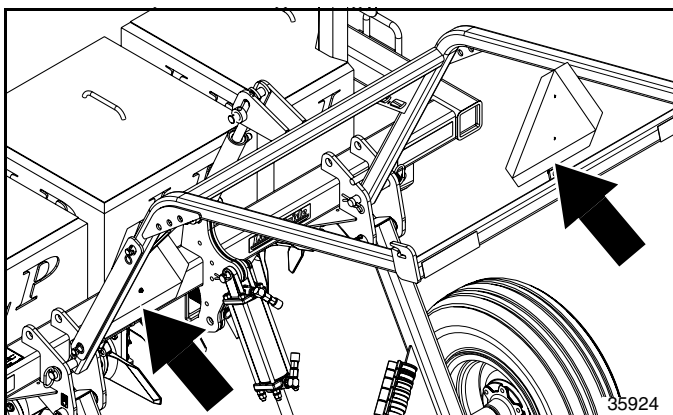
838-615C
2" x 9" Amber Reflector (1 place)



838-614C
2" x 9" Red Reflector (2 places)



838-614C
2" x 9" Red Reflector
2 Places on back of optional Drag Harrow Carrier



818-055C
Slow Moving Sign
Back of Pasture Aerator
Back of optional Drag Harrow Carrier

Introduction

Land Pride welcomes you to the growing family of new product owners.

This Pasture 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 machine.

Application

The Land Pride 25 Series Pasture Aerators are pull type Aerators designed to hitch to a standard drawbar or a hammer strap type drawbar. They have uses and applications in agricultural conservation tillage and pasture renovations and are available in 8 ft. and 10 ft. widths. The heavy duty knife like tines on the Aerator are designed with a twist in them to fracture compacted soil as they slice into the ground in a twisting fashion. This fracturing of the soil conditions the soil to soak-up run-off water faster, allow fertilizer to penetrate deeper into the ground and increase oxygen supply to the plant roots.

The twisted tines are constructed of hardened forged steel mounted on a heavy duty rotating shaft that can be angled up to 7 1/2° for an aggressive action. Optional concrete weights can be added to the Aerator. These weights provide significantly increased down pressure on the tines.

See “**Specifications and Capacities**” on page 21 and “**Features and Benefits**” on page 22 for additional information and performance enhancing options.

Using This Manual

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

Terminology

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

Definitions

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

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

Owner Assistance

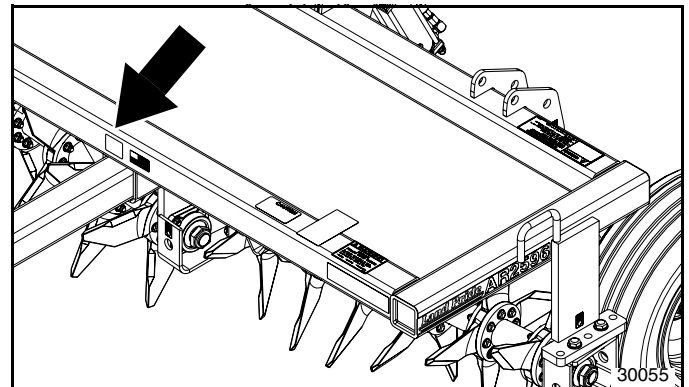
The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Pasture 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

Model No. _____ Serial No. _____

For quick reference and prompt service, record model and serial number in the spaces provided above and again on warranty page 25. Always provide model and serial number when ordering parts and in all correspondences with your Land Pride dealer. Refer to Figure 1 for the location of your serial number plate.



Serial Number Plate Location
Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new 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 the matter with your dealership service manager making sure that person is aware of any problems you may have and has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
3. For further assistance write to:

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060

E-mail address
lp servicedept@landpride.com

Section 1: Assembly & Set-up

Tractor Requirements

The tractor horsepower and weight must be capable of controlling the Aerator under all operating conditions. The Aerator is designed to be used on 40 to 90 hp tractors with a standard drawbar or with a hammer strap drawbar. Tractors smaller or larger than the rated horsepower range must not be used.

NOTE: Front tractor weights and/or ballast to tires may be required to offset weight of Aerator. Consult your tractor manual for instructions on installing additional ballast weights to your tractor.

Torque Requirements

Refer to “Torque Values Chart” page 24 to determine correct torque values when tightening hardware.

Dealer Set-up

The pull type Aerator is shipped partially assembled. Some components will need to be assembled at the dealership.

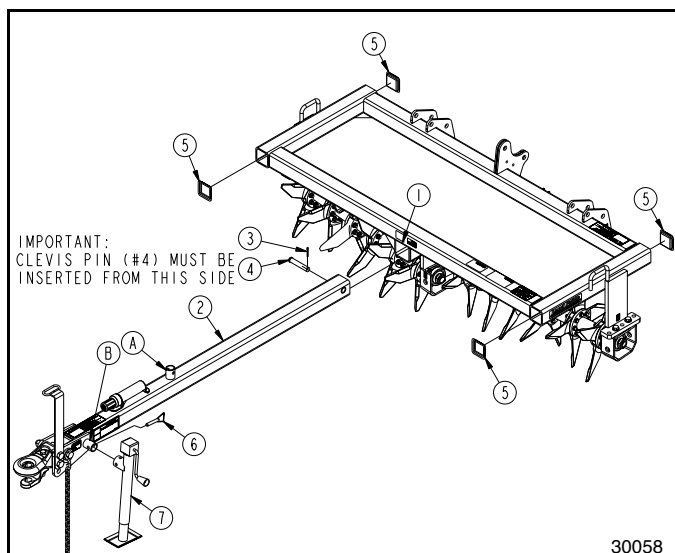
WARNING

The Aerator is top heavy. Make sure Aerator is properly supported under the upper square tube frame to keep unit from rotating on its tines during assembly and set-up. Otherwise, the unit could rotate and cause serious injury.

Tongue Assembly

Refer to Figure 1-1:

1. Apply silicone caulk to the surfaces on the plastic plugs (#5) that mate with square tube ends where the plugs are to be inserted into. (Silicone caulk supplied by customer.)
2. Insert plastic plugs (#5) into the four square tube openings at the four corners of the main frame.



Tongue Assembly
Figure 1-1

3. Insert tongue (#2) approximately 34" into receiver opening (#1).

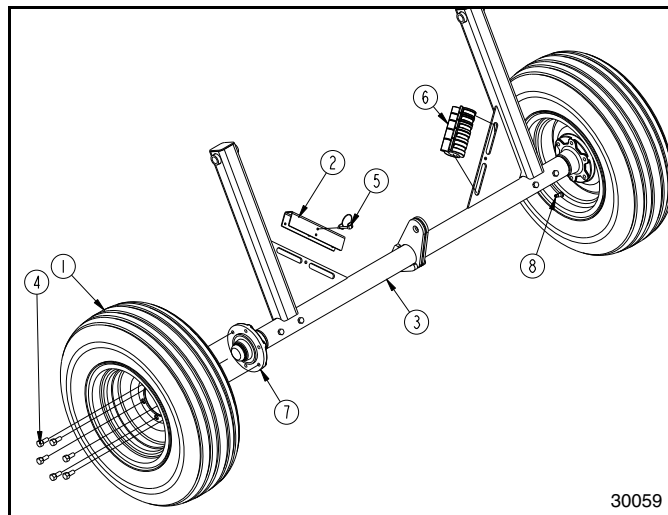
IMPORTANT: Clevis pin (#4) must be inserted from the right side as shown in Figure 1-1.

4. Attach tongue to the receiver tube by inserting 1" x 5" clevis pin (#4) from the right side. Secure clevis pin with cotter pin (#3). Bend one or more legs of the cotter pin to keep it from falling out.
5. Remove jack stand (#7) from top mount stob "A" and attach to side mount stob "B" with detent pin (#6). Make sure pin is fully inserted.

Transport Wheel Assembly

Refer to Figure 1-2:

1. Orient transport wheels (#1) with valve stems (#8) facing in towards the center.
2. Attach transport wheels to axle hubs (#7) with lug bolts (#4). Tighten bolts to the correct torque.
3. Attach cylinder stop (#2) to rear axle with wire retaining pin (#5). Make sure wire retainer is secured over the pin.
4. Attach five cylinder stops (#6) to the other rear axle gusset plate.



Wheel & Axle Assembly
Figure 1-2

Rear Axle & Lift Cylinder Assembly

Refer to Figure 1-3 on page 9:

IMPORTANT: Insert zerk end of pivot pins (#2) in first as shown. Protect zerks when hammering on pins by hitting pins on the end without a zerk.

1. Attach rear axle assembly (#1) to the Aerator's main frame with 7 1/4" long pivot pins (#2). Make sure the grease zerks on pins (#2) face out and lug (#1) is up.
2. Secure pivot pins with 5/16"-18 x 2" GR5 hex head cap screws (#4) and lock nuts (#5). Tighten nuts to the correct torque.

Section 1: Assembly & Set-up

3. Install orifice plug (#12) into the cylinder port located near the base end of hydraulic cylinder (#11). Screw plug in until orifice bottoms out. Do not tighten.
4. Screw elbow fittings (#9A & #9B) into both cylinder ports with O-rings facing ports. Do not tighten elbows until step #17.
5. Attach base end of hydraulic cylinder (#11) to the Aerator's main frame (#3) with 1" x 3 11/16" clevis pin (#10). Secure pin with hairpin cotter (#8).
6. Attach rod end of hydraulic cylinder (#11) to axle assembly (#1) with 1" x 2 3/4" clevis pin (#6). Secure clevis pin with cotter pin (#7). Bend one or more legs on the cotter pin to keep it from falling out.

Refer to Figure 1-4:

7. Attach 3/4" adapter (#18) to hydraulic hoses (#13 & #14) and tighten.
8. Attach quick disconnect couplings (#19) to adapters (#18) and tighten.

Refer to Figure 1-3:

9. Insert the longer (201") hydraulic hose (#14) into the back opening end of the Aerator tongue. Push hose through tongue and out its front opening.
10. Install flex guard (#15) over hydraulic hose (#14) at the cylinder end and push flex guard halfway into the tongue to protect hydraulic hose from wear.
11. Attach hydraulic hose (#14) to elbow fitting (#9B) and tighten.
12. Insert the shorter (185") hydraulic hose (#13) into the back opening end of the Aerator tongue. Push hose through tongue and out its front opening.
13. Install flex guard (#15) over hose (#13) at the cylinder end and push flex guard halfway into the tongue to protect hydraulic hose from wear.
14. Attach hydraulic hose (#13) to elbow fitting (#9A) and tighten.

Refer to Figure 1-4:

15. Pull hydraulic hoses (#13 & #14) out of opening (#17) until most of the slack in the hoses at the hydraulic cylinder have been removed.
16. Run hydraulic hoses through hose loop (#16).

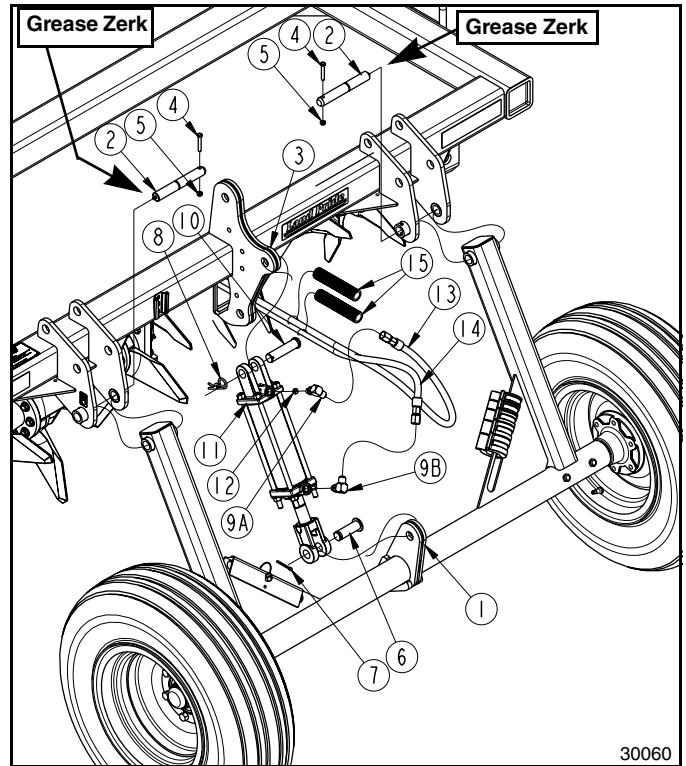
Refer to Figure 1-3:

17. Orient elbows (#9A & #9B) to suit and tighten to hydraulic cylinder (#11).

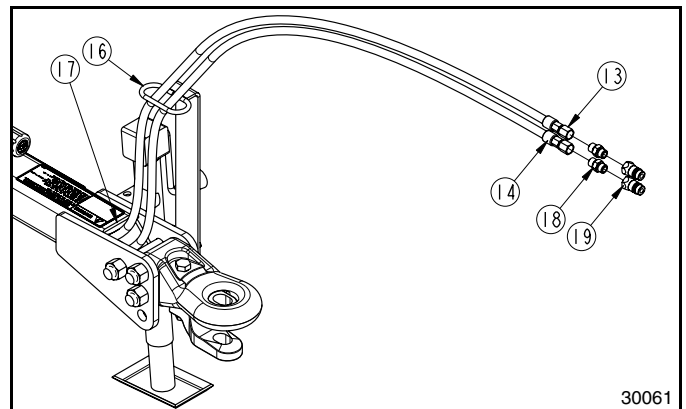
Slow Moving Vehicle Sign (SMV)

Refer to Figure 1-5:

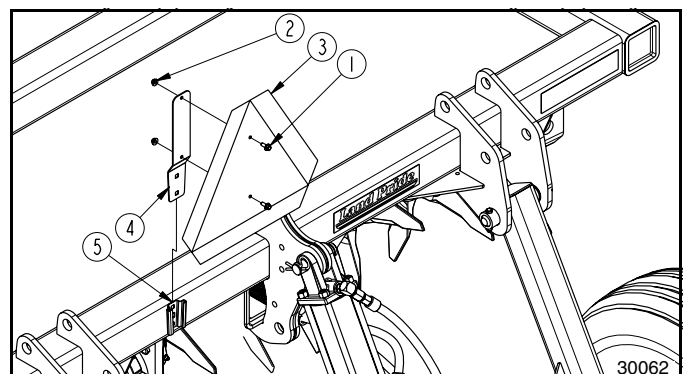
1. Bolt SMV sign (#3) to mounting blade (#4) as shown with 1/4"-20 x 5/8" GR5 hex flange screws (#1) and hex flange nuts (#2). Tighten nuts to the correct torque.
2. Insert mounting blade (#4) into mounting socket (#5).



Rear Axle & Lift Cylinder Assembly
Figure 1-3



Hydraulic Hose Routing & Quick Coupling Assembly
Figure 1-4



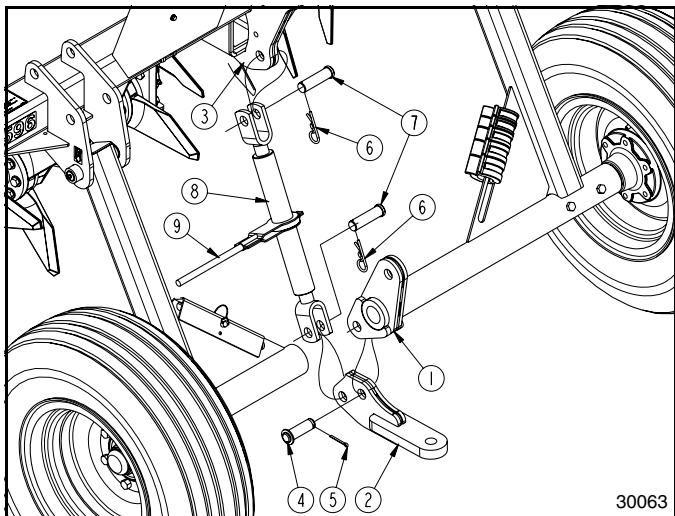
Slow Moving Vehicle Sign Assembly
Figure 1-5

Section 2: Options & Accessories

Rear Hitch Assembly (Accessory)

Refer to Figure 2-1:

1. Attach leveling hitch (#2) to axle frame (#1) with 1" x 2 3/4" clevis pin (#4). Secure clevis pin with 3/16" x 1 3/4" cotter pin (#5). Bend one or both legs of cotter pin to keep pin from falling out.
2. Attach ratchet jack (#8) to the Aerator frame (#3) and leveling hitch (#2) with 1" x 3 3/16" clevis pins (#7) and 3/16" hairpin cotters (#6).
3. Operate ratchet jack lever (#9) until hitch is level.



Rear Hitch Assembly
Figure 2-1

Concrete Weights (Optional)

Refer to Figure 2-2:



DANGER
Concrete blocks weight 740 lbs. each. Stay clear of them while lifting them into place. Hands and fingers can easily become pinched by the blocks or the blocks could shift suddenly or fall causing serious bodily injury or death.

IMPORTANT: Use equipment capable of lifting a minimum of 800 lbs. Lift one concrete block at a time using lifting rods "B" to raise and lower the blocks onto the platform frame.

NOTE: Remove SMV sign (#4) from its mounting socket to prevent hitting the sign while installing the concrete blocks. Replace SMV sign after the blocks are installed.

Mounting 2 Concrete Blocks

1. Position concrete blocks (#1 & #3) onto the platform ends. Make sure they are against the square tubes on the ends and resting fully on the platform floor.
2. Place a spacer or spacers between the blocks to keep them from shifting to one side. (Spacer(s) provided by customer)

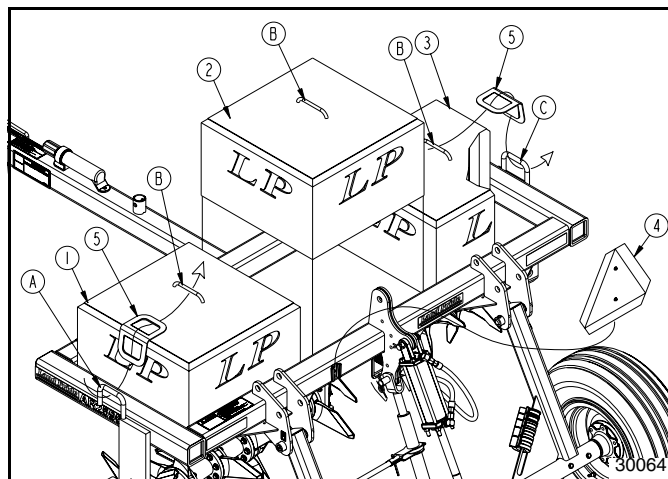
Mounting 3 Concrete Blocks

1. Position concrete block (#1) onto the platform against the left end. Make sure it is against the square tube on that end and is resting fully on the platform floor.
2. Position the middle concrete block (#2) centered on the platform frame.
 - **AR2596:** The center block should be approximately 3 3/8" from the first block and resting fully on the platform.
 - **AR2510:** The center block should be approximately 15 3/8" from the first block and resting fully on the platform.
3. Position concrete block (#3) onto the platform against the right end. Make sure it is against the square tube on that end and is resting fully on the platform floor.
4. Place spacers between the blocks to keep them from shifting to one side. (Spacers provided by customer)

Mounting 4 Concrete Blocks

Instructions For AR2510 Aerator Only

1. Position concrete block (#1) onto the platform against the left end. Make sure it is against the square tube on that end and is resting fully on the platform floor.
2. Position the second concrete block (#2) approximately 4" from the first block and resting fully on the platform.
3. Position the third concrete block (#4 not shown) approximately 4" from the second block and resting fully on the platform
4. Position the fourth concrete block (#3) onto the platform against the right end. Make sure it is against the square tube on that end and is resting fully on the platform floor.
5. Place spacers between the blocks to keep them from shifting to one side. (Spacers provided by customer)



Concrete Weight Assembly (AR2596 Shown)
Figure 2-2

Section 2: Options & Accessories

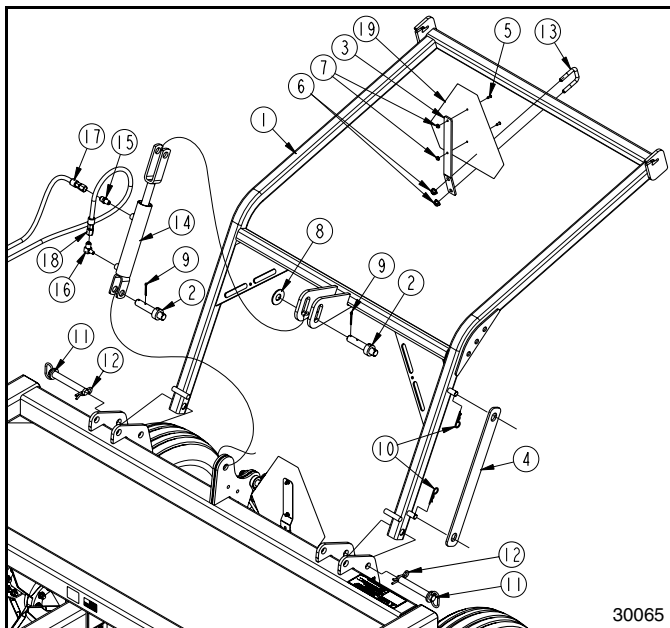
Tie Down Concrete Blocks

Refer to Figure 2-2 on page 10:

Always use heavy duty tie-downs, straps, and corner protector pads (strap & pads supplied by customer) to secure Land Pride concrete blocks from bouncing on the platform while traveling over rough terrain and on a road that may have bumps and ruts. Corner protector pads (#5) are available through Land Pride's Parts Department. Order 2 each of Part No. 816-646C.

NOTE: Weights can bounce out if bump is severe.

1. Attach strap to handle "A" on the left side.
2. Thread strap through corner protector pad (#5) on the left side, lifting rods "B"; corner protector pad (#5) on the right side and to handle "C". Tighten strap to secure blocks in place.



Drag Harrow Carrier Assembly
Figure 2-3

Drag Harrow Carrier (Optional)

Refer to Figure 2-3:

NOTE: Drag Harrow Carrier and Drag Harrow are sold separately.

IMPORTANT: Make sure the Aerator is properly supported so that it won't flip over backwards during installation of the lift frame. One method would be to hitch the tongue to a tractor.

1. Orient lift frame (#1) as shown and pin to Aerator frame with 1" x 6" hitch pins (#11). Secure hitch pin with hairpin cotters (#12).
2. Attach SMV sign (#19) to SMV bracket (#3) with 1/4"-20 x 5/8" round head screws (#5) and hex flange top lock nuts (#7). Tighten nuts.

3. Attach SMV bracket (#3) to back bar of lift frame (#1) with 1/2"-13 x 2" x 3" GR5 U-bolt (#13) and hex flange lock nuts (#6). Torque nuts tight.
4. Apply teflon tape to the 3/8" threads of straight adapter (#15) and screw adapter into the cylinder port located closest to the rod end of hydraulic cylinder (#14). Tighten adapter.
5. Apply teflon tape to the 3/8" threads of elbow fitting (#16) and screw elbow into the cylinder port located closest to the base end of hydraulic cylinder (#14). Tighten elbow oriented as shown.
6. Attach 3/8" x 201" long hydraulic hoses (#17) to adapter fitting (#15).
7. Attach 3/8" x 217" long hydraulic hoses (#18) to elbow fitting (#16).

Refer to Figure 2-4 on page 11:

8. Attach 3/4" adapters (#23) to hose ends and tighten.
9. Attach quick disconnect couplings (#24) to the adapters tighten.

Refer to Figure 2-3 on page 11:

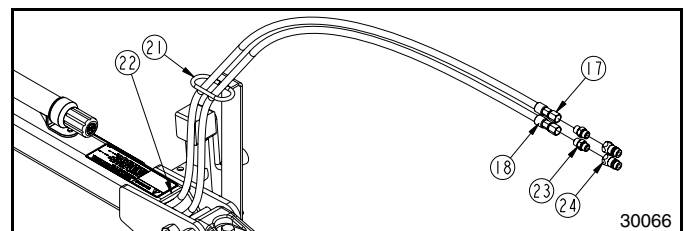
10. Orient hoses so that they are on the right side of the cylinder (#14). Attach base end of hydraulic cylinder to the Aerator frame with cylinder pin (#2).
11. Attach rod end of hydraulic cylinder (#14) to the lift frame with cylinder pin (#2) & flat washer (#8).
12. Insert 3/16" x 1 3/4" cotter pins (#9) into cylinder pins (#2). Bend one or both legs to secure them in place.

Refer to Figure 2-4:

13. Insert hydraulic hoses (#17 & #18) into the open end of the tongue located at the back of the main frame. Push both hoses together through the tongue and out the front (#22) as shown in Figure 2-4.
14. Pivot lift frame up and down to find the maximum distance between hydraulic cylinder and opening end of tongue. Pull hydraulic hoses (#17 & #18) out of end (#22) until most of the slack in the hoses have been removed.
15. Run hydraulic hoses through hose loop (#21).
16. Pivot lift frame fully up and down to make sure the hydraulic hoses are not hanging up.

Refer to Figure 2-3 on page 11:

17. Attach transport bar (#4) to the left side of the lift frame and secure in place with hairpin cotters (#10).



Hydraulic Hose Routing & Quick Coupling Assembly
Figure 2-4

Drag Harrow (Stand Alone Unit)

Refer to Figure 2-5:

Order Drag Harrow (#1) Model No. DRG08 (8 ft. harrow) from your nearest Land Pride dealer. Be sure to read the Operator's Manual 322-207M supplied with the harrow before continuing.

Drag Harrow Assembly

See "Drag Harrow Assembly" in the Drag Harrow Operator's Manual for instructions on how to properly assemble the unit.

Hook-up To Rear Level Hitch

See "Hook-up to Tractor Drawbar" in the Drag Harrow Operator's Manual for instructions on how to properly attach pull ring (#2) to the Aerator's rear level hitch.

Hook-up To Drag Harrow Carrier

DANGER

Make sure the Aerator's main frame is properly supported or securely hitched to a tractor before working on or around the unit to keep unit from flipping over backwards causing serious injury or death.

DANGER

Do not add extra weight to the lift frame or hang from the lift frame. The Aerator could flip over backwards causing injury or death.

DANGER

Do not climb on the unit or lift frame. Doing so can result in serious injury or death.

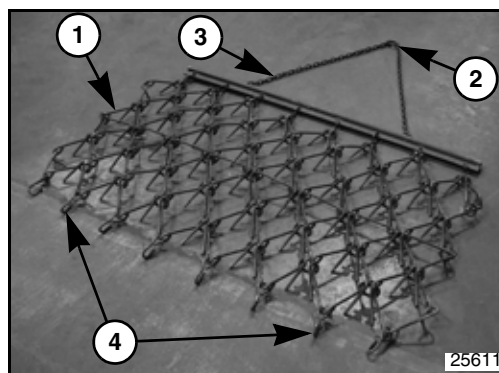
CAUTION

Refer to Figure 2-6: Be Careful not to pinch yourself in the jointed sections of the harrow while hooking the lower hooks (#4) to the transport holes (#7).

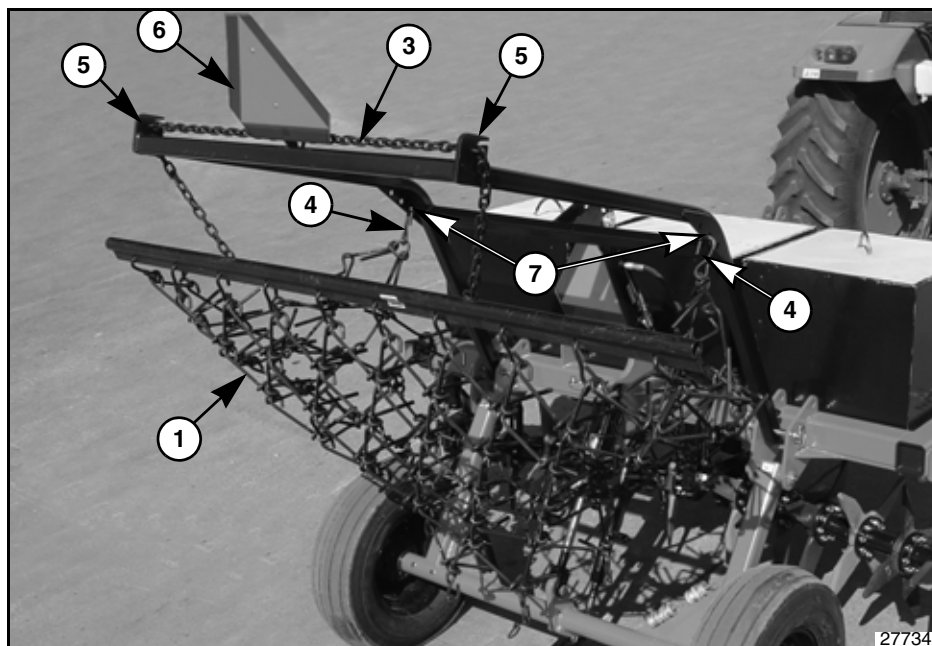
Refer to Figure 2-5 & Figure 2-6:

1. Properly orient harrow pull ring (#2) to the Aerator.
2. Place pull ring (#2) behind SMV sign (#6) so that it is centered between the two slotted pull hooks (#5).
3. With pull ring centered between the slotted pull hooks, hook pull chain (#3) to the slotted hooks (#5).
4. When transporting, attach rear hooks (#4) (second hooks in from the outside) to one of the three transport holes (#7) in the lift frame.

IMPORTANT: Hydraulic hose damage can occur if hooks (#4) are not attached to transport holes (#7) before transporting with the unit.



**Drag Harrow
Figure 2-5**



**Drag Harrow Hook-up to Drag Harrow Carrier
Figure 2-6**

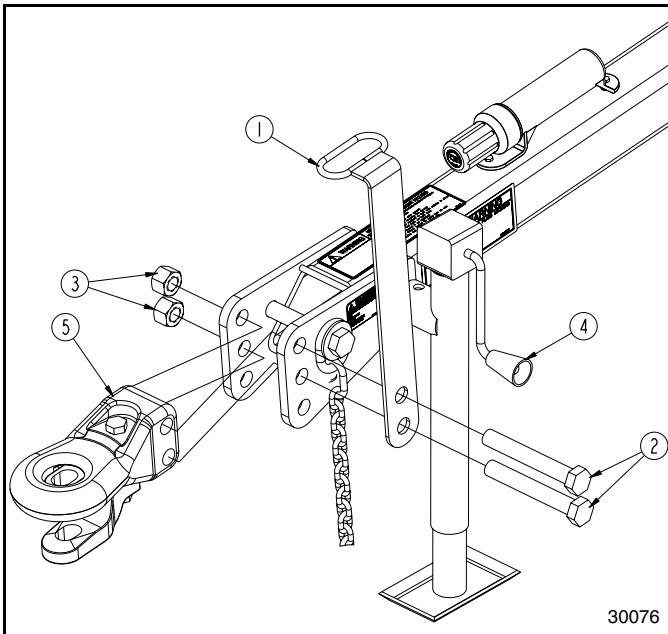
Section 3: Adjustments

Hitch Height

Refer to Figure 3-1:

Cat. IV hitch (#5) can be raised or lowered to suit. Hitch in Figure 3-1 is shown being installed in the highest position. Use this location for tractors with a high drawbar. Use the lower mounting location for tractors with a lower drawbar.

1. With tongue supported by the support jack (#4), remove cap screws (#2).
2. Align Cat. IV hitch with the top two holes or with the bottom two holes as needed.
3. Insert 1"-8 x 7" GR5 cap screws (#2) through mounting holes in hose holder (#1), nearside holes in the tongue, mounting holes in Cat. IV hitch (#5), and out through the far side holes in the tongue.
4. Secure cap screws with nylon insert nuts (#3). Tighten nuts to the correct torque.



Hitch Height Adjustment
Figure 3-1

Rotor Tine Gang Angle

WARNING

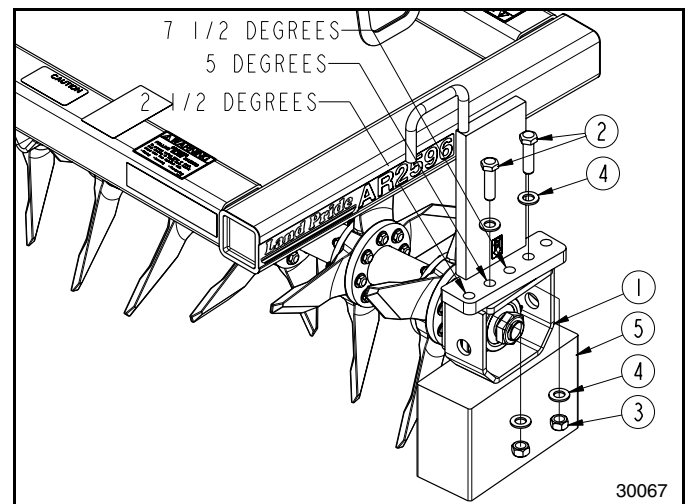
Keep everyone clear of the rotor tines while adjusting tine gang angle. Removing bolts to adjust tine gang angle will allow the gang to drop if not properly supported. Body extremities can be injured should the gang drop.

IMPORTANT: For safety, it is best to make adjustments to the gang angle with the Aerator raised just enough to support the tines off the ground by not more than 1".

The tine gang angle can be adjusted to 2 1/2°, 5° & 7 1/2°. The greater the angle the greater the cultivation action on the soil.

Refer to Figure 3-2:

1. Park on a flat level surface, engage park brake, raise Aerator until tines are approximately 1" off the ground, shut tractor engine off, and remove key before dismounting from tractor.
2. Place support block (#5) under bearing guard (#1) to keep the rotor tine gang from falling. **Do not force support block tight** against the bearing guard as this will make adjusting the gang angle difficult.
3. Loosen both hex top lock nuts (#3) until bearing guard (#1) is resting on support block (#5).
4. Remove hex top lock nuts (#3), cap screws (#2), and flat washers (#4).
5. Slide gang on the support block to one of the three positions where the front gang hole in bearing guard aligns with one of the selected three front mounting holes (2 1/2°, 5°, or 7 1/2°) in the bearing support.
6. Reinstall 3/4"-10 x 2 3/4" GR5 cap screws (#2), flat washers (#4), and hex top lock nuts (#3). Tighten nuts to the correct torque.
7. Repeat steps 2 to 6 for the other rotor tine gang.



Tine Angle Adjustment (5 Degrees Shown)
Figure 3-2

Section 4: Operating Procedures

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 Aerator. Therefore, it is absolutely essential that no one operates the Aerator without first having read, fully understood, and become totally familiar with the Operator’s Manual. Make sure the operator has completed the Operating Checklist below.

Operating Checklist

✓	Check	Page No.
	Read and follow all Safety Rules and alerts carefully. Refer to “Important Safety Information”.	Page 1
	Make sure all guards and shields are in place. Refer to “Important Safety Information”.	Page 1
	Read and follow Hook-up & preparation instructions. Refer to “Section 1: Assembly & Set-up”.	Page 8
	Read and make all required adjustments. Refer to “Section 3: Adjustments”.	Page 13
	Read and follow all operating procedures. Refer to “Section 4: Operating Procedures”.	Page 14
	Read and follow all Maintenance Instructions. Refer to “Section 5: Maintenance & Lubrication”.	Page 18
	Make sure there are no hydraulic leaks on the unit. Refer to “Avoid High Pressure Fluids Hazard”.	Page 3
	Read and follow all Lubrication Instructions. Refer to “Lubrication Points”.	Page 20
	Check Aerator initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.	Page 24

Operator Safety

DANGER

To avoid serious injury or death:

- Operator must wear a seat belt at all times. Without being seat belted, the operator can fall off and be ran over by the Aerator and its sharp tines.
- Never carry passengers on the Aerator or tractor and never operate the unit when bystanders are present. There is always a risk of running over the passenger or bystander.
- Operator must age 16 or older and must be properly trained in the safe operation of this Aerator.
- Do not operate on slopes too steep to maintain stability or near the edge of a drop off. The tractor and Aerator could roll over resulting in equipment damage, bodily injury, or death.
- Do not use tires as a step or lean against them. They can suddenly move even when they appear to be solidly against the ground causing a falling hazard against metal protruding objects and sharp tines.
- Keep everyone away from the Aerator while raising, lowering, and transporting the Aerator. Always keep your feet and legs out from under the Aerator and never work under the unit without properly blocking it up. The Aerator could drop instantly resulting in bodily injury or death.

- Do not work over any underground electrical wiring or gas lines. If there is any doubt, call your public service agency. Be sure to ask how close you can work to their flags or marks. Making contact with electrical wiring or gas pipes can cause serious injury or death.
- Hydraulic fluid under high pressure can penetrate the skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin or eyes, it must be treated by a doctor familiar with this type of injury within a few hours or gangrene may result. **DO NOT DELAY.**

WARNING

To avoid serious injury or death:

- Never pull the Aerator behind a vehicle at speeds exceeding the tire manufacturer’s recommend maximum speed of 20 mph. found on the tire sidewall.
- Always make sure the tractor is shut off and no one is near the tractor when installing stroke control spacers and/or transport lock. Also, keep away from possible pinch points during installation as the hydraulic lines could burst dropping the unit suddenly.

CAUTION

Make sure all safety labels are in their proper location and in good working condition before operation. Be sure to follow all directions on the safety labels.

Equipment Safety

- Use Aerator for its intended purpose only. Never use it as a wagon to carry things. Never pull post, stumps, or other objects. Misuse of the Aerator can break the unit.
- Make sure tractor 3-point arms are positioned so that they will not make contact with the tongue.
- 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.
- Do not exceed weight tray weight limit. Exceeding the limit can damage the tines, tires, Aerator frame.
- Make gradual turns with tines in the ground. Too sharp a turn can break the tines. Raise Aerator out of the ground to make sharp turns.
- Do not turn tractor tires into the tongue, tines, or frame. Slow down and watch tractor tires carefully when forced to make sharp turns.
- Never back-up with Drag Harrow making contact with the ground. Always raise Drag Harrow up before backing up. Not doing so can break the equipment and punch holes in the tires.
- Use the Aerator for its intended purpose only. Never use the Aerator as a wagon to carry things.

Section 4: Operating Procedures

- All nuts, bolts, screws, and fasteners should be checked daily for tightness. Refer to the “**Torque Values Chart for Common Bolt Sizes**” on page 24.
- Do not use to tear up asphalt or for anything other than to fracture/aerate soil.
- Do not alter the Aerator in a way which will adversely affect its performance or reliability or use the Aerator for a purpose for which it was not designed.

Tractor Hook-Up For Transporting

DANGER

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

CAUTION

Always make sure the hitch pin is secured with a keeper clip. Not doing so can result in the unit coming unhitched and out of control.

CAUTION

Always engage parking brake, shut off tractor, and remove key before dismounting from tractor to hook-up equipment.

1. Adjust jack stand to the correct height for the hitch to receive tractor drawbar.
2. Back tractor until drawbar hitch hole(s) align with Cat. IV hitch hole(s).
3. Place tractor in park or set park brake, shut off tractor, and remove switch key.
4. Attach Aerator hitch to tractor with hitch pin. Make sure hitch pin is secured with hitch pin keeper.
5. Remove jack stand from near the hitch and store on stob located on top of the tongue behind the manual storage tube.
6. Attach Aerator cylinder hoses and if included, Drag Harrow cylinder hoses to the tractor duplex outlets.

Refer to Figure 4-1:

7. Raise Aerator frame fully up with tractor hydraulic control lever. If installed, remove transport lock (#2) from cylinder rod (#1) and store on plate (#4) with wire retaining pin (#3).
8. Air in hydraulic lines can create erratic lifting behavior. Retract and extend lift cylinder several times to remove trapped air from the hydraulic lines. If needed, bleed hydraulic lines at the cylinder fittings to remove any remaining trapped air.

NOTE: The Aerator cylinder has an orifice installed to slow down cylinder movement. See item 12 in Figure 1-3 on page 9 for location of orifice.

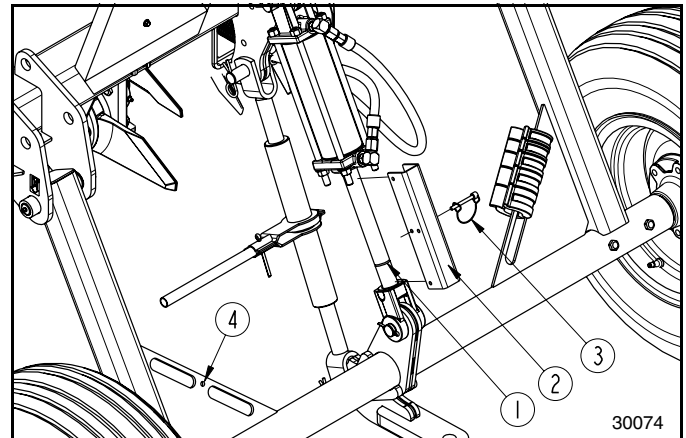
9. Raise Aerator frame fully up. Remove transport lock (#2) from the rear storage plate (#4) and attach it to cylinder rod (#1) with wire retaining pin (#3).

Refer to Figure 4-2:

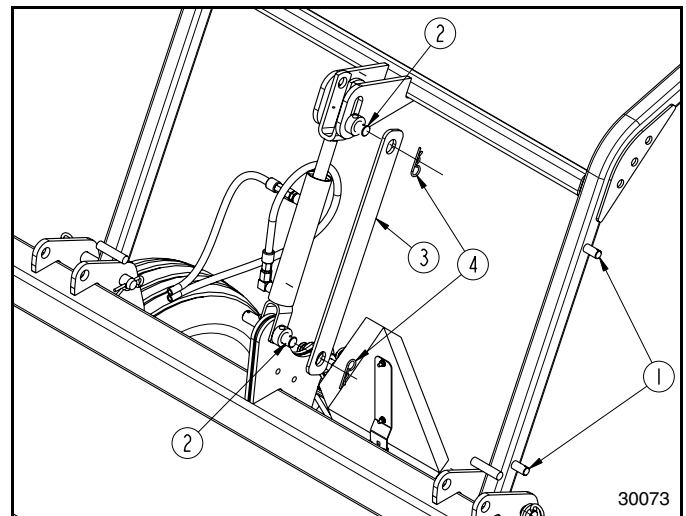
10. If included, raise Drag Harrow Carrier fully up and down several times to eliminate air in its hydraulic lines. If necessary, bleed hydraulic lines at the cylinder fittings to remove any remaining trapped air.
11. Raise Drag Harrow Carrier fully up. Remove transport lock (#3) from storage pins (#1) and attach it to cylinder rod pins (#2) with hairpin cotters (#4).

Refer to Figure 2-6 on page 12:

12. Attach Drag Harrow to transport frame. See “**Hook-up To Drag Harrow Carrier**” on page 12.



Pull Type Transport Lock
Figure 4-1



Drag Harrow Transport Bar Placement
Figure 4-2

Section 4: Operating Procedures

Transporting

CAUTION

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

1. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
2. Do not lower unit while transporting on pavement, blacktop, or road. Damage to unit and/or road may occur.
3. Select a safe ground travel speed when transporting from one area to another. Never exceed the tire manufacturer's maximum rated speed of 20 mph.
4. Be sure to reduce tractor ground speed when turning; and, leave enough clearance so that the Aerator does not contact obstacles such as buildings, trees, or fences.
5. When traveling over rough or hilly terrain, shift tractor to a lower gear.

Set-Up For Field Work

Refer to

Refer to Figure 4-1 on page 15:

1. Raise Aerator fully up with tractor hydraulic control lever, place tractor in park or set the park brake, shut tractor engine off, and remove switch key.
2. Remove wire retaining pin (#2) and transport lock (#1) from cylinder rod (#3).
3. Place transport lock (#1) on the rear axle storage plate (#4) and secure with wire retaining pin (#2).
4. Return to the tractor and lower Aerator tines down to their preferred working depth. Do not lower Drag Harrow Carrier while making depth and angle adjustments to the Aerator.
5. Travel forward while making adjustments to the tine depth until the preferred depth is determined.
6. Once the tine working depth is determined, stop tractor, place tractor in park or set the park brake, shut tractor engine off, and remove switch key.

Refer to Figure 4-3:

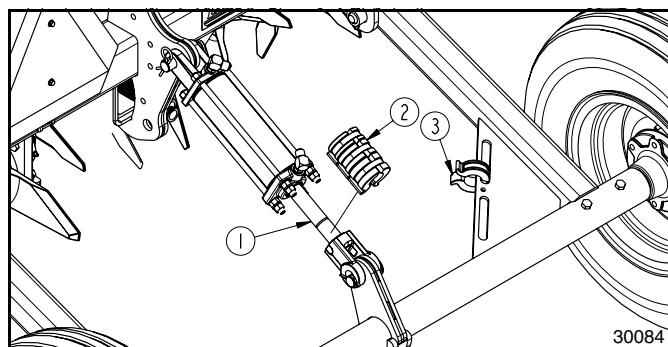
7. Determine which cylinder stops (#2) it will take to fill cylinder rod (#1) at the predetermined depth.
8. Return to the tractor, raise Aerator up, and then add the determined number of cylinder stops to the cylinder rod.
9. Lower Aerator against the cylinder stops.
10. Store remaining stops (#3) on the storage plate shown in Figure 4-3.
11. Adjust rotor tine angle per instructions under "**Rotor Tine Gang Angle**" on page 13.

Refer to Figure 2-6 on page 12:

12. If included, raise Drag Harrow Carrier fully up with tractor hydraulic control lever.
13. Unhook Drag Harrow hooks (#4) from Drag Harrow Carrier frame.

Refer to Figure 4-2 on page 15:

14. Remove Drag Harrow transport lock (#3) from cylinder rod pins (#2). Attach transport lock to storage pins (#1) with hairpin cotters (#4).
15. With Drag Harrow hanging straight down, pull forward in the field while lowering the Drag Harrow Carrier frame down.



Cylinder Stops
Figure 4-3

Unhook Aerator

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

1. Park tractor with Aerator on a solid level surface. Raise Aerator tines fully up.
2. **Refer to Figure 2-6 on page 12:** If included, hook Drag Harrow hooks (#4) to Drag Harrow Carrier frame and then lower carrier frame fully down.
3. Place tractor in park or set park brake, shut tractor off, and remove switch key. Chock in-front-of and in-back-of Aerator wheels to prevent movement.
4. **Refer to Figure 4-1 on page 15:** Remove Aerator transport lock from rear axle storage plate (#4) and attach it to cylinder rod (#3). Secure transport lock with wire retaining pin (#2).
5. Move tractor hydraulic control lever(s) back and forth to allow the cylinder to come against the transport lock and to release pressure in the hydraulic hoses.
6. Disconnect quick release couplings from the tractor's duplex outlets and store hoses with couplings on the Aerator in a location off the ground.
7. Attach jack stand to stob near the hitch. Make sure the detent pin is fully inserted. Adjust jack stand to lift the hitch weight off the tractor drawbar.
8. Remove hitch pin keeper and hitch pin. Store hitch pin and keeper in a safe location.
9. Be sure hoses are disconnected and implement is clear of tractor. Drive tractor away from implement.

Section 4: Operating Procedures

General Operation Instructions

By now you should have read your Operator's Manual and properly installed your Land Pride 25 Series Aerator on your tractor. If you haven't, please do so now.

Using the 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. 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 tines. Most important, do not work over underground electrical wiring or gas lines.



DANGER

Do not work over any underground electrical wiring or gas lines. If there is any doubt, call your public service agency. Be sure to ask how close you can work to their flags or marks. Making contact with electrical wiring or gas pipes can cause serious injury or death.

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 also help keep you from compressing freshly fractured soil.

Begin by lowering the Pasture Aerator until the cylinder has come against the cylinder stops. Pull ahead slowly to get the tines into the ground. If included, lower the Drag Harrow Carrier while moving forward until the Drag Harrow is on the ground. Gradually increase ground speed to approximately 5 mph. 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 of the ground to turn around. The Drag Harrow does not need to be raised to make turns. Keep the Aerator out 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 to the Aerator weight tray or wait until after a rain or after irrigation has been applied to soften the ground.

With very little practice you should become very proficient and effective with your Land Pride AR25 Series Aerator.

At the completion of the task the Aerator and Drag Harrow should be cleaned and lubricated. Any trash build-up should be removed. Units being put up for the winter should be stored per the instructions outlined under "**Storage**" on page 19.

Section 5: Maintenance & Lubrication

Introduction

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.

CAUTION

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

Tractor Maintenance

One of the most important things you can do to prevent hydraulic system problems is ensure that your tractor's reservoir remains free of dirt and contamination. Use a clean cloth to wipe hose ends before attaching them to your tractor. Replace your tractor's hydraulic filter element at the prescribed intervals. These simple maintenances will go a long way to prevent occurrence of control valve and hydraulic cylinder problems.

Tine Replacement

Refer to Figure 5-1:

WARNING

Always secure Aerator in the up position with solid supports before servicing the underside. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the Aerator instantly even when power to the hydraulics is shut off.

“Right-Hand” or “Left-Hand” as used in this manual is determined by facing the direction the machine will operate while in use.

Stamped on the tines (see Arrows in Figure 5-1) is Land Pride's name, tine part number, and LH for left-hand or RH for right-hand tine designation.

IMPORTANT: Make sure right-hand tines are mounted on the right-hand gang and left-hand tines are mounted on the left-hand gang and that the knife edge leads as the tine rotates about the shaft.

IMPORTANT: Tines are bolted on in a Spiral pattern 22.5 degrees from one blade to the blade on the next flange over. Arrow in Figure 5-2 shows tines shifting 22.5 degrees from one hub assembly to the next.

Refer to Figure 5-3 on page 19:

1. Loosen 8 nuts (#2) on one hub two or three turns.
2. Remove two bolts (#1) securing tine (#4) if working on the Left-Hand Gang or tine (#5) if working on the Right-Hand Gang.

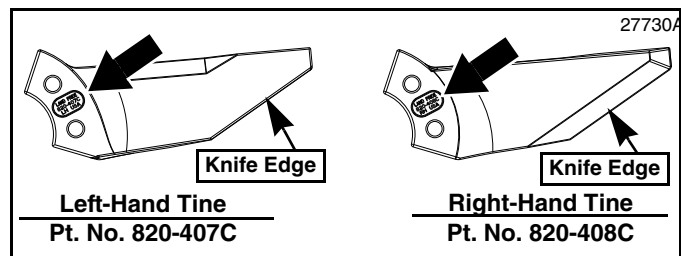
3. Examine removed hardware for wear. Replace worn hardware with new hardware if required.
4. Examine stamped information on the removed tine. Replace worn tine with a new tine that has the same stamped information.

IMPORTANT: Bolt installation direction is critical. Always insert bolts into the thicker 5/8" plate first.

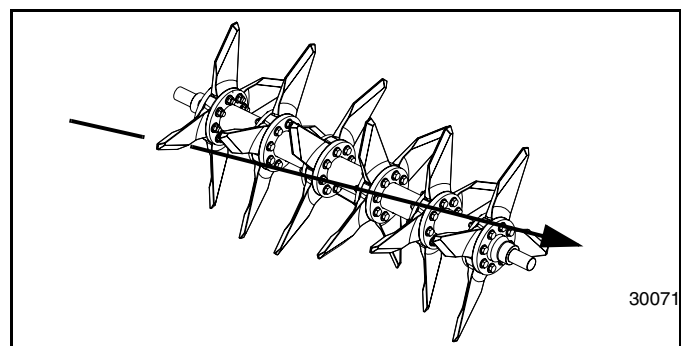
5. Install new tine (#5 or #6) by sliding one hardened flat washer (#3) over each 1/2"-20 x 3" GRL9 cap screw (#1) and then inserting the two cap screws into the thicker 5/8" plate first. After the bolt has been fully inserted, slide a second hardened flat washer onto the two cap screws as shown.

IMPORTANT: Loctite 246 should be applied to the cap screw threads before installing lock nuts.

6. Apply Loctite 246 on the end 1/4" length of threads. Screw hex flange lock nuts (#2) onto the cap screws on 3 or 4 turns only. Do not tighten.
7. Repeat steps 2 to 5 until all four tines on a single hub have been replaced.
8. Tighten all 8 hex flange lock nuts (#2) on that hub to the correct torque. See “Additional Torque Values” on page 24 for correct torque value.
9. Move on to the next hub and repeat steps 1 to 8.
10. Continue reworking one hub at a time until all worn tines have been replaced with new tines.



Right-Hand & Left-Hand Tines
Figure 5-1



Spiral Pattern of Tines (Left-Hand Gang Shown)
Figure 5-2

Section 5: Maintenance & Lubrication

Storage

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

DANGER

Always secure Aerator in the up position with solid supports before servicing underside of the unit.

IMPORTANT: The following should be adhered to when parking the Aerator:

- When parking for short periods with Aerator attached to the tractor, lower Aerator down so that its weight is resting on the tines.
- When unhooking from the Aerator, lower Aerator against hydraulic cylinder transport lock and support hitch with jack stand.

1. Clean off any dirt and grease that may have accumulated on the Aerator and moving parts. Scrape off compacted dirt and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the unpainted area to minimize oxidation.
2. Check tines and tine bolts for wear. Replace as needed.
3. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
4. Lubricate as noted in “**Lubrication Points**” starting on page 20.
5. Apply a light coat of oil or grease to the tines and exposed cylinder rods to minimize oxidation.

6. Replace all damaged or missing decals.
7. Store Aerator on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer Aerator life.
8. Follow all unhooking instructions on page 16 when disconnecting tractor from Aerator.
9. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride 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.

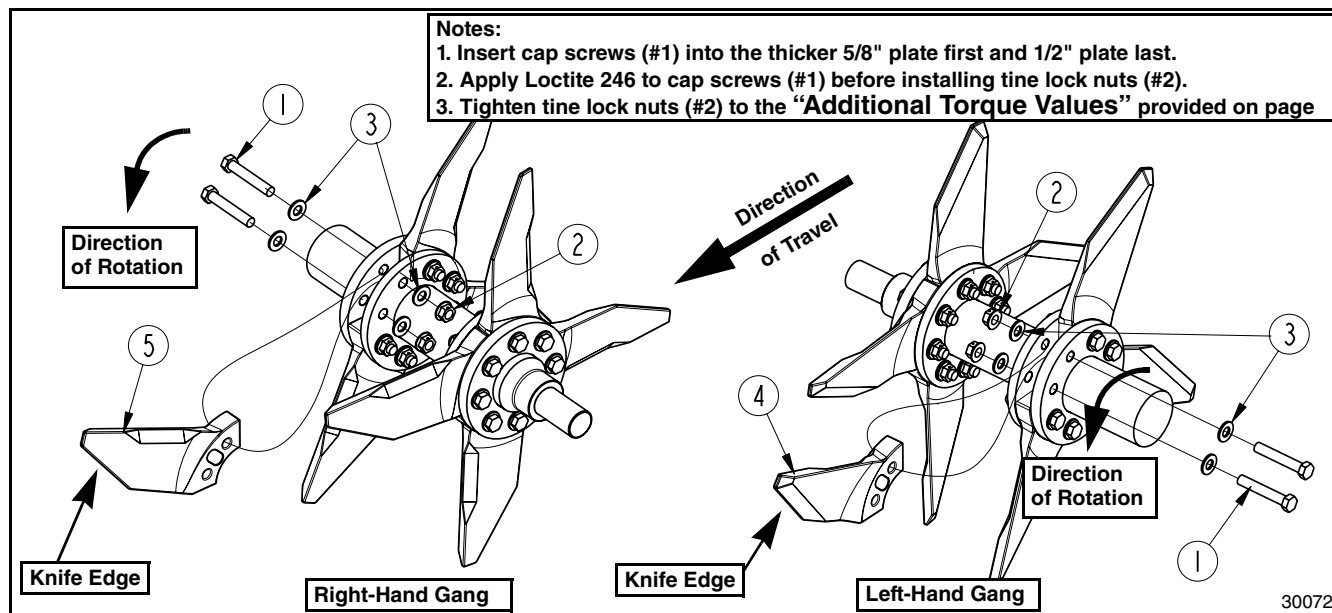
Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN
821-066C	PAINT ORANGE AEROSOL SPRAY CAN

Ordering Replacement Parts

Land Pride offers equipment in factory standard beige color with black highlights or optional color orange with black highlights. Special attention must be given to the part number when ordering orange to prevent ordering the wrong replacement part. The suffix number 82 must be added at the end of Land Pride’s beige part number when ordering an orange replacement part. Parts ordered without the suffix number will be supplied in factory standard colors.

For example, if you are ordering a replacement part with part number 555-555C and the existing part is orange (not beige), then add the suffix 82 to the end of the number to make the part number read 555-555C82.

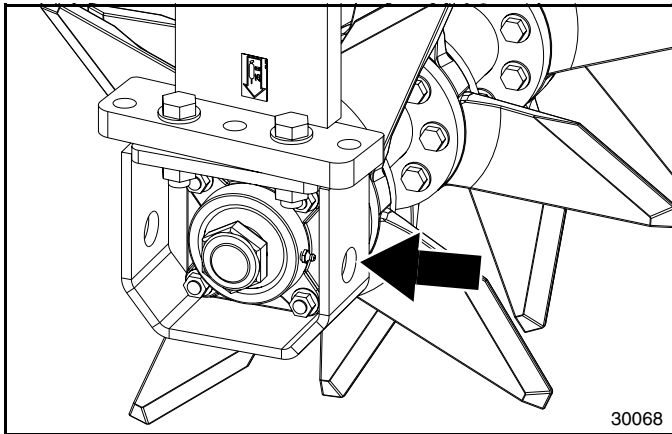


Tine Assembly (Front View)
Figure 5-3

Lubrication Points

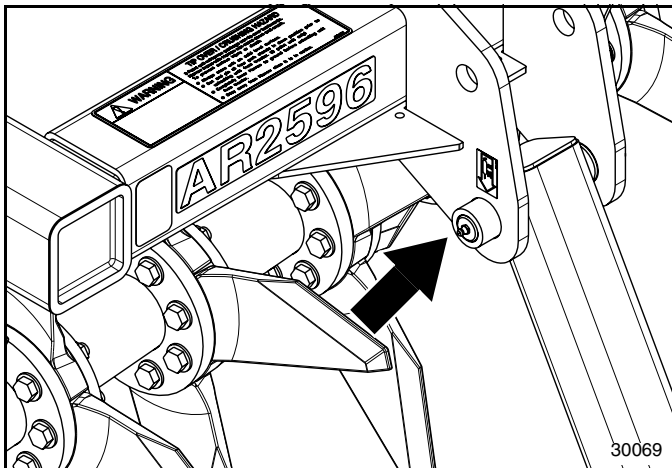
Lubrication Legend

- Multi-purpose spray lube
- Multi-purpose grease lube
- Multi-purpose oil lube
- 50 Hrs Intervals in hours at which lubrication is required


25 Hours

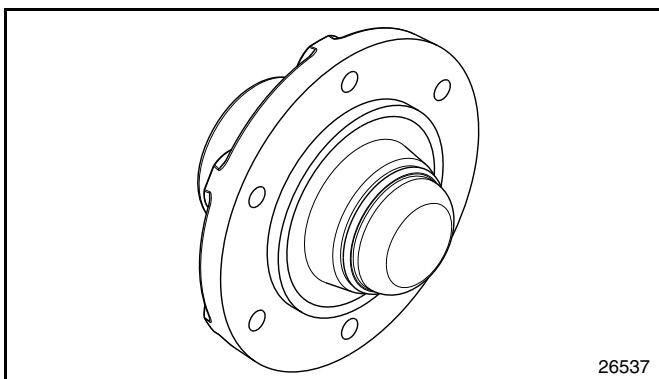
Tine Gang Hanger Bearings

4 - Zerks (1 for every hanger bearing)
 Type of Lubrication: Multi-purpose Grease
 Quantity = as needed


25 Hours

Rear Axle Pivot Pins

2 - Zerks
 Type of Lubrication: Grease
 Quantity = as needed


Repack Annually

Wheel Hub

Repack wheel bearings annually
 Type of Lubrication: Multi-purpose Grease
 Quantity = as needed

Table of Contents

Section 6: Specifications & Capacities

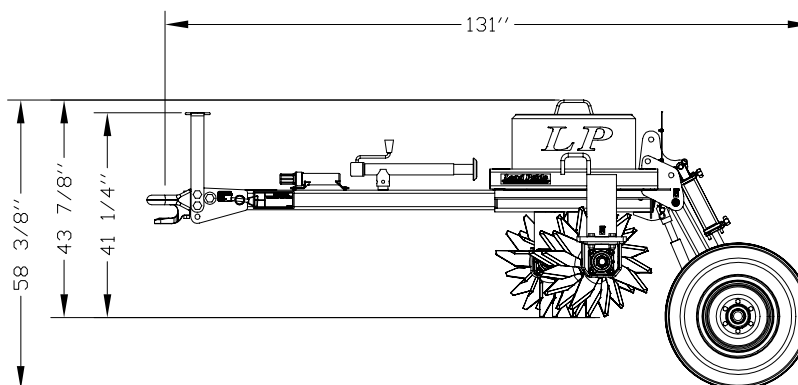
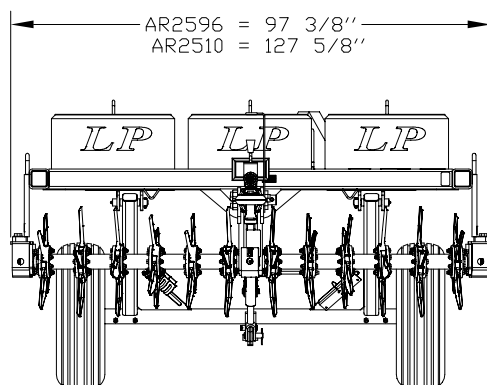


AR25 Series

Specifications & Capacities		
Model No.	AR2596	AR2510
Horsepower Requirements	40 - 90 HP	
Working Width	7' - 2"	9' - 8"
Overall Width	8' - 1 3/8"	12' - 3 5/8"
Overall Length	10' - 11"	10' - 11"
Overall Height (With tines on the ground)	41 1/4" Without concrete Blocks 43 7/8" With Optional Concrete Blocks	41 1/4" Without concrete Blocks 43 7/8" With Optional Concrete Blocks
Weight (w/o added weight)	1,700 lbs.	2,200 lbs.
Number of Tines	24 LH and 24 RH (Four per hub)	32 LH and 32 RH (Four per hub)
Tine Material	Forged and heat treated through steel	
Tine Hub Spacing	7 1/2"	
Tine Penetration	Up to 8" (Depending on ground conditions and added weight)	
Frame Construction	4 x 4 tubing all welded construction	
Hitch Type	Heavy duty pull type with clevis hitch Receives up to 1 1/4" pin dia. (2-positions)	
Main Tongue Beam	4" x 4" x 5/16" Wall tubing	
Hitch Jack	Tongue support jack (5,000 lb. load rating) (Stores on pull frame)	
Rotor/Tine Support Hangers	Heavy Duty	
Rotor Bearings	Heavy Duty greaseable bearings with triple lip seals	
Rotor Bearing Protection	Bump Guards	
Rotor Angle Adjustment	Angles from 2 1/2, 5 & 7 1/2 degrees	
Manual Storage Tube	Included	
Tires	2 ea., 9.5L x 15, 8 ply	
Rims	6-bolt	
Tine Depth Control	Add cylinder donuts to cylinder rod - included	
Hydraulic Couplings	Quick disconnects included	
Hydraulic Cylinder	3" x 8" stroke with 1 1/4" rod dia.	
Transport Lock	Manual cylinder lock	
Rear Axle Pivot	Greaseable	
Options		
Concrete Blocks	25" square x 18" high	
Number of Concrete Blocks	Available in quantities of 2 or 3	Available in quantities of 2, 3, or 4
Weight per Concrete Block	740 lbs.	
Lifting Bar	1/2" Round bar built in concrete block	
Drag Harrow	See Drag Harrow Operator's Manual 322-207M for a complete list of specifications. (Order model DRG08 as a stand alone unit.)	
Weight	DRG08 = 185 lbs.	
Settings	Three positions: Light, Medium, and Aggressive	
Drag Harrow Lift	Can be added to lift Drag Harrow off the ground without getting off the tractor. Drag Harrow sold separately,	
Weight	345 lbs.	
Hydraulic Cylinder	2" x 8" stroke with 1 1/8" rod dia.	
Transport Lock	Included	
Slow Moving Vehicle Sign	Included	
Accessories		
Trailing Hitch	Self leveling (Buy through Parts, Part No. 325-118A)	
Corner Protector	Protects straps from concrete corners (Buy through Parts, Part No. 816-646C)	

AR2596 & AR2510 Models

Features	Benefits
All Welded 4 x 4 Tubing Frame	Makes for a very strong frame.
4 x 4 x 5/16 Tongue With Clevis Hitch	Built heavy duty to withstand side loads from the tines.
Forged & Heat Treated Through Steel Tines	Forged and heat treated tines are very resistant to wear and breakage giving them a long life.
Tines	Tines are designed with a twist to lift while fracturing the soil sideways.
Bolt-on Tines (2 Bolts Per Tine)	Tines are easily replaceable with 2 bolts per tine.
8" Maximum Tine Penetration	Great penetration for aerating the soil. (Actual penetration depth is dependent on ground condition and added weight.)
Heavy Duty Rotary Tine Hangers	Designed to stand up to the rigors of hard rocky soil.
Bearings Are Protected With 3/8" Skid Shoes on 3-Sides	Protects bearings against hitting solid objects such as rocks and stumps. (Skid shoe protection is located on the front, bottom, and back sides of bearings)
Adjustable Rotors	Rotors can be adjusted from 2 1/2, 5 and 7 1/2 degrees to meet customers needs. The greater the angle the harsher the shattering of soil.
7 1/2" Tine Spacing (4/per Spool) AR2596 = 48 Tines Total AR2510 = 64 Tines Total	Tines spaced 7 1/2" apart provides good coverage.
Optional Weights Constructed of 740 lbs. Concrete Blocks With Lifting Lugs Built In	AR2596 accepts up to 3 concrete blocks and AR2510 accepts up to 4 concrete blocks. Helps Aerator tines penetrate the ground.
Optional Harrow Lift Package	Lifts the Drag Harrow off the ground for transporting on roadways.
Accessory Drag Harrow	Provides a means to smooth out the ground behind the Aerator. Drag Harrow has three positions it can be used: Drag Mat, Light Penetration & Deep Penetration.
Accessory Trailing Hitch	Hitch is self leveling for pulling implements behind the Aerator.



30075

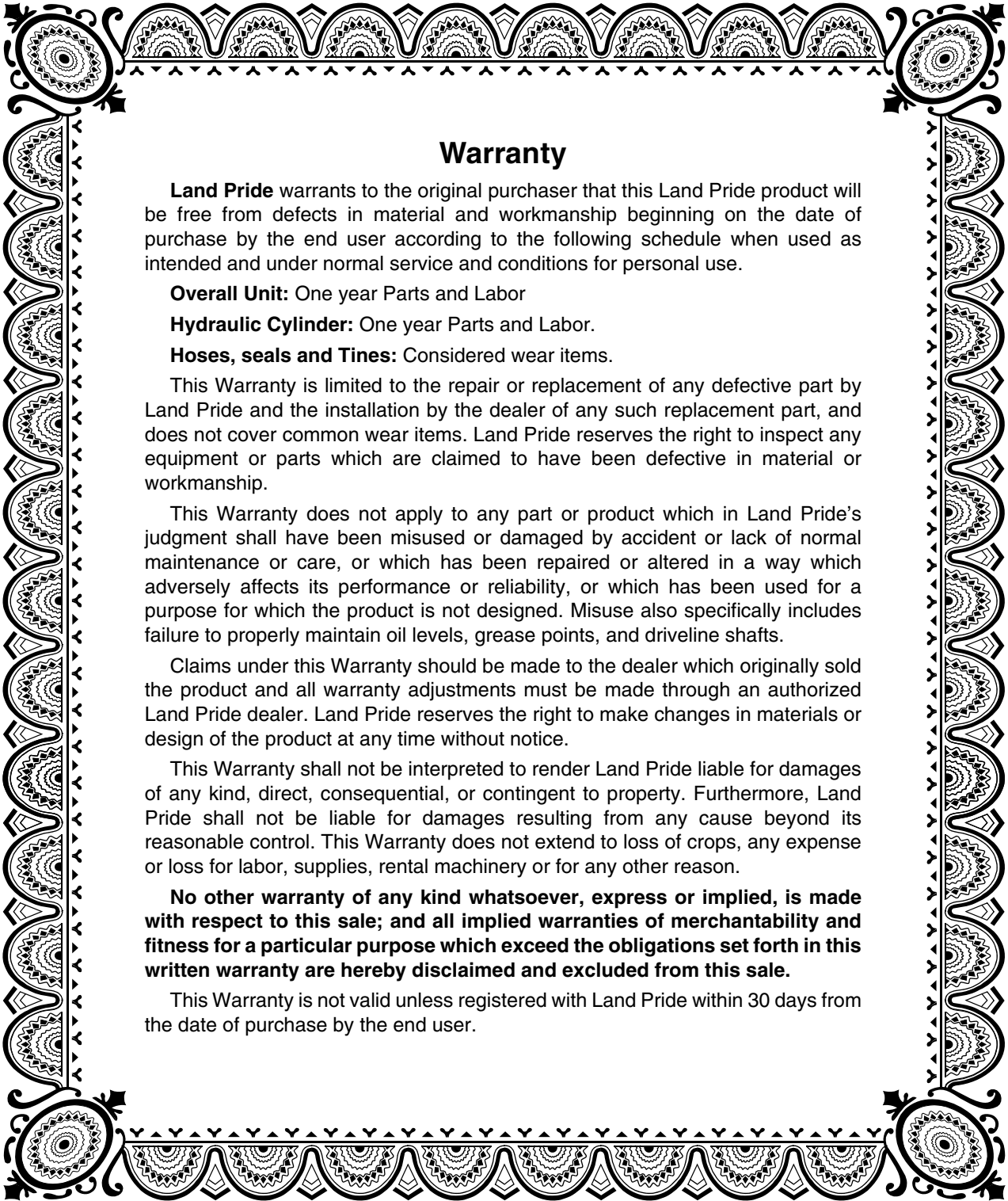
AR25 Series Troubleshooting Chart

Problem	Cause	Solution
Tillage depth is insufficient	Not enough weight in the weight tray. Ground is too hard. Ground speed is too fast. Aerator is set too high. Tines are worn or bent. Tines are incorrectly installed. Obstacles are entangled in tines and/or rotor. Tractor has insufficient power.	Add weight to the weight tray. Irrigate field or wait for a rain. Decrease ground speed. Remove one or more cylinder stops. Replace tines. Check placement of tine cutting edge. Clear rotor and/or tines of obstacles. Shift to a lower gear and increase tractor rpm.
Tines balling up with soil	Soil is too wet. Rotor is plugged with trash. Tines are worn or bent. Tines are incorrectly installed. Tractor speed is too fast.	Wait until soil dries. Remove trash from rotor. Replace tines. Install tines correctly. Decrease tractor speed.
Rotor will not turn	Obstacles are entangled in tines and/or rotor. Rotor is plugged with trash.	Clear rotor and/or tines of obstacles. Remove trash from rotor.
Aerator is bouncing on the ground	Obstacles are entangled in tines and/or rotor. Tines are not installed correctly.	Clear rotor and/or tines. Install tines correctly.
Tines breaking or bent sideways	Making too sharp a turn with tines in the ground. Hit a solid object.	Raise Aerator out of the ground to make sharp turns. Avoid hitting solid objects.
Bending frame and/or tines	Operating Aerator over concrete, asphalt, tree stumps, rocks, curbs & other solid objects. Too much weight in the weight tray.	Do not operate Aerator over solid objects. AR2596: Added weight not to exceed 2,220 lbs. AR2510: Added weight not to exceed 2,960 lbs.
Aerator makes intermittent clicking noise	Tines are loose.	Tighten tines.



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 ¹	N · m ²	ft-lb ³	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	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 in-tpi = nominal thread diameter in inches-threads per inch ² N · m = newton-meters ³ ft-lb= foot pounds ⁴ mm x pitch = nominal thread diameter in millimeters x thread pitch						
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							
Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.													
Additional Torque Values													
Tine Bolts, 1/2"-20 x 3" GRL9							105 ft-lbs						

Tire Inflation Chart	
Tire Size	Inflation PSI
9.5L x 15 x 8 ply Rib Implement	44



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

Hydraulic Cylinder: One year Parts and Labor.

Hoses, seals and Tines: 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 by the end user.

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

Model Number _____

Serial Number _____



**Corporate Office: P.O. Box 5060
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