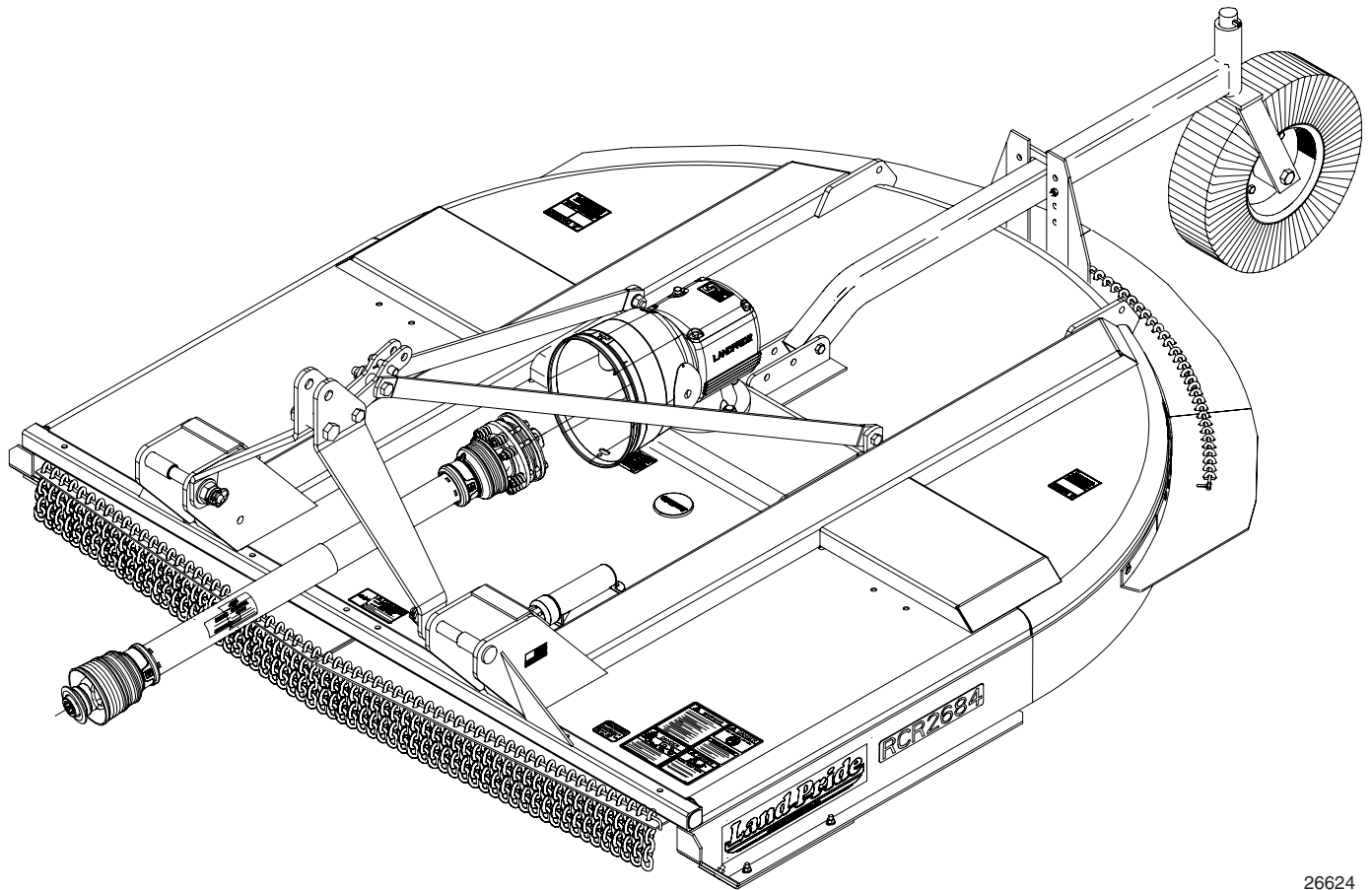


Rotary Cutter

RCR2684



26624

312-785M 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	<hr/> <hr/> <hr/>

Dealer Contact Information


Name: _____

Street: _____

City/State: _____

Telephone: _____

Email: _____

 California Proposition 65 WARNING: Cancer and reproductive harm - www.P65Warnings.ca.gov

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



Dealer QR Locator

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

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

Safety at All Times

Careful operation is your best assurance against an accident.

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

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



Look for the Safety Alert Symbol

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

Be Aware of Signal Words

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

DANGER

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

WARNING

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

CAUTION

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

Safety Precautions for Children

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

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

Tractor Shutdown & Storage


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



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


Tire Safety

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




Transport Safely

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




Use A Safety Chain

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



Practice Safe Maintenance

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



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

Prepare for Emergencies

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



Use Safety Lights and Devices

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



Avoid Underground Utilities

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



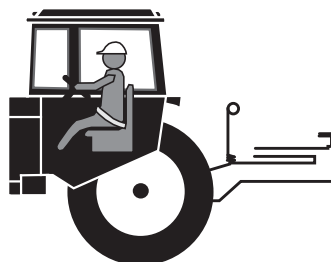
Wear Personal Protective Equipment (PPE)

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



Use Seat Belt and ROPS

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



Avoid High Pressure Fluids Hazard

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



Keep Riders Off Machinery

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



Important Safety Information

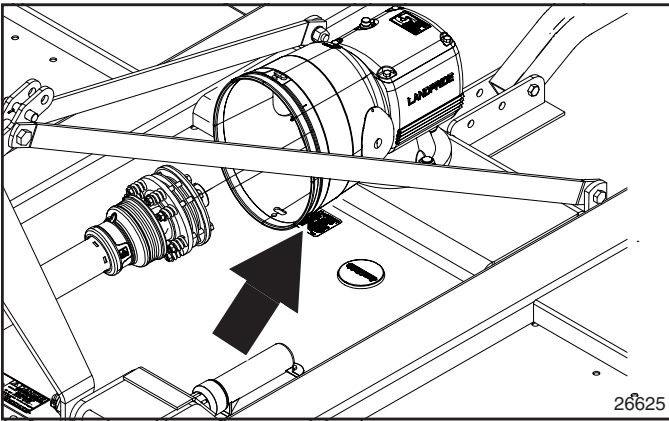
Safety Labels

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

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

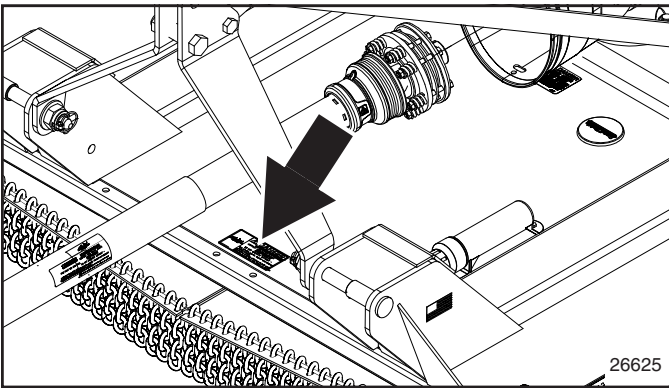
specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.

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



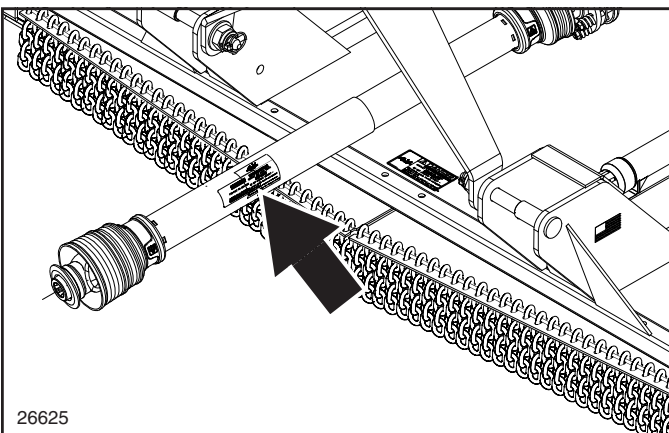
818-543C

Danger: PTO Guard Missing



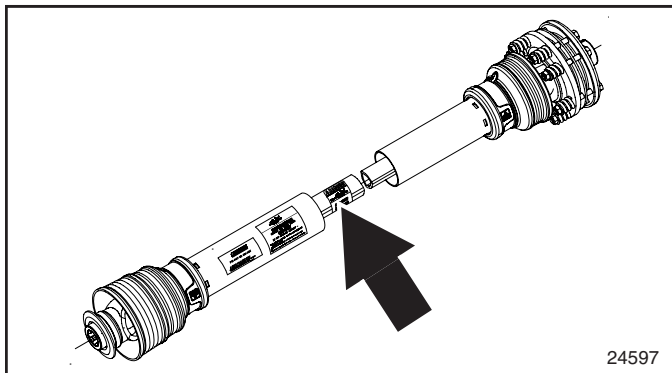
818-142C

Danger: PTO Driveline



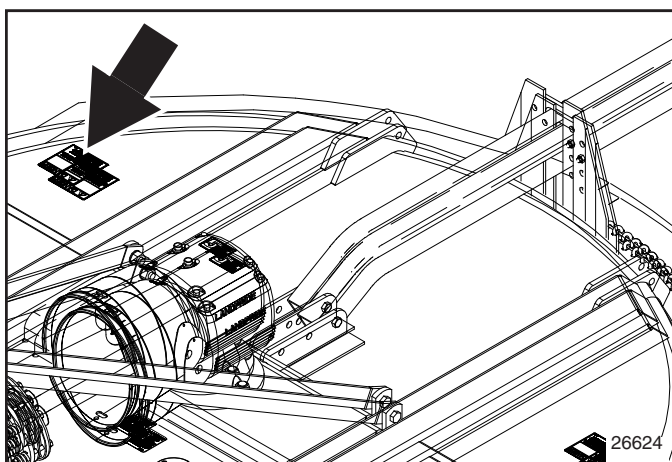
818-540C

Danger: Guard Missing



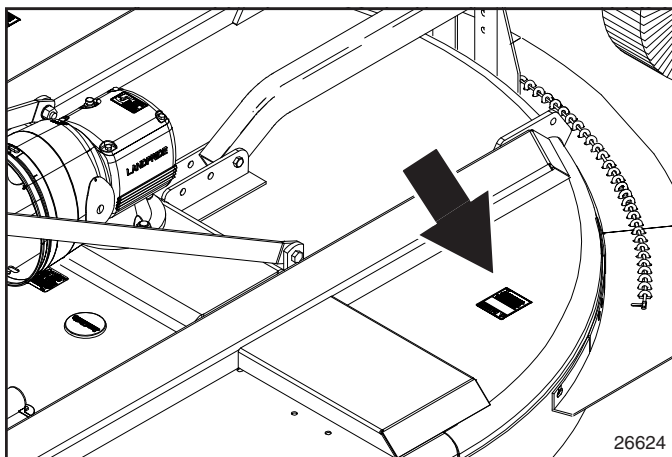
818-540C

Danger: Guard Missing



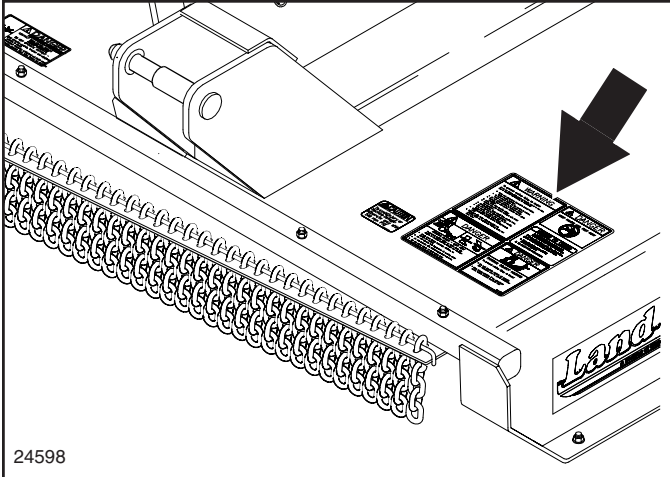
818-564C

Danger: Rotating Blades - Keep Away



818-556C

Danger: Thrown Object Hazard



⚠ WARNING

To Prevent Serious Injury or Death:

- Read and understand Operator's Manual before using. Review annually.
- Do not permit riders on tractor or mower.
- Operate only with guards installed and in good condition.
- Keep away from moving parts.
- Operate only with tractor equipped with ROPS and seatbelts.
- Before moving, clear debris from mowing area.
- Do not operate in the raised position.
- Stop engine, set brake and wait for all moving parts to stop before dismounting.
- Support mower securely before working beneath unit.
- Transport with clean reflectors, SMV and working lights as required by federal, state, and local laws.
- Do not allow children to operate mower.

⚠ DANGER

KEEP HANDS AND FEET AWAY

NOTICE TO OWNER

An OPERATOR'S MANUAL was attached to this implement during final inspection at the factory.

If it was not attached at the time of purchase please, contact your selling dealer at once.

- Read and understand manual BEFORE operating the implement.
- Pay attention to the safety messages.

⚠ DANGER

ROTATING BLADES - KEEP AWAY

To prevent serious injury or death when engine is running and blades are rotating:

- Never allow riders on tractor or mower.
- Do not operate with bystanders in mowing area.
- Do not operate with deflectors/guards removed.
- Do not place hands or feet under deck.

⚠ DANGER

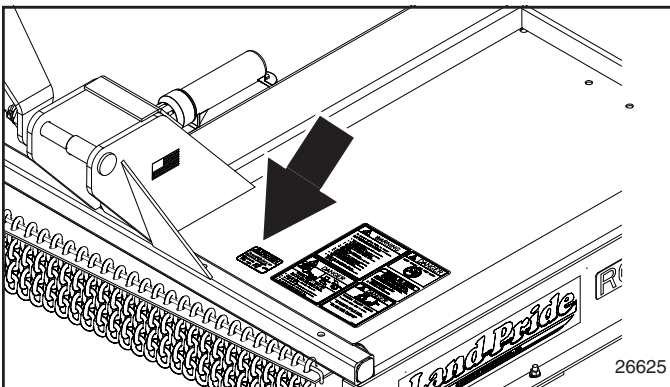
THROWN OBJECT HAZARD

To Prevent Serious Injury or Death:

- Do not operate unless all guards are installed and in good condition.
- Stop blade rotation if bystanders come within several hundred feet.

818-830C

Safety: Combo



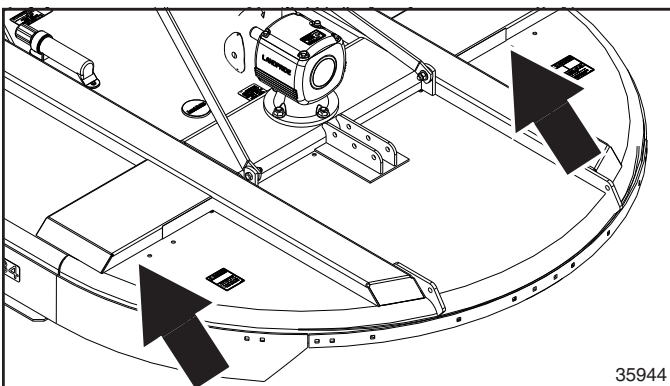
⚠ CAUTION

To avoid injury or Machine Damage

• Operate only with 540 rpm PTO

818-130C

Caution: 540 RPM



838-614C

2" x 9" Red Reflector (2 places)

Introduction

Land Pride welcomes you to the growing family of new product owners. This Rotary Cutter 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 medium duty RCR2684 Rotary Cutter is built and designed by Land Pride for cutting on gently sloping or slightly contoured right-of-ways, pastures, set aside acres, and row crop fields. Its 84" cutting width makes it compatible with the more maneuverable and lower 60 to 130 horsepower tractors with 540 rpm PTO and category II or III three point hitches and is Quick-Hitch adaptable. The driveline is protected with a 4 plate slip clutch.

The cutter clears grass, weeds, and light brush up to 3" in diameter and has a cutting height range of 2" to 12" with a cutting blade tip speed of 14,370 FPM. This unit comes with a standard 3/16" x 27" heavy-duty oval stump jumper and replaceable skid shoes. Optional rubber deflectors or chain guard selections are available.

See **"Specifications & Capacities"** on page 30 and **"Features & Benefits"** on page 32 for additional information and performance enhancing options.

Using This Manual

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

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.

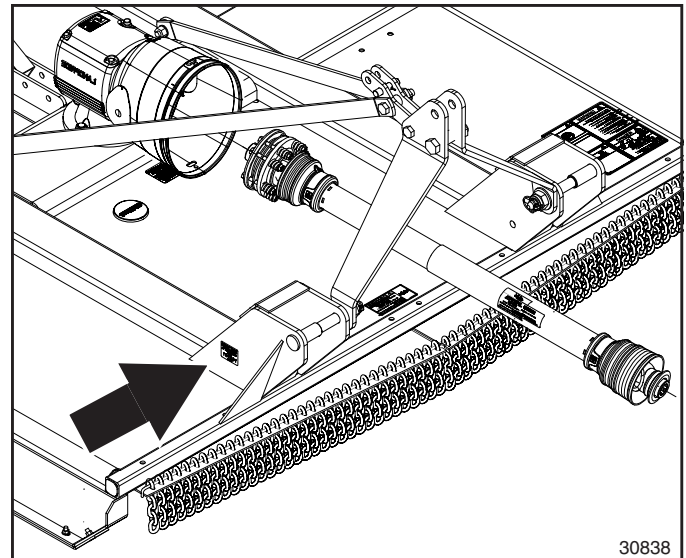
Owner Assistance

The 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 Rotary Cutter have been specially designed by Land Pride and should only be replaced with genuine Land Pride parts. Contact a Land Pride dealer if customer service or repair parts are required. Your Land Pride dealer has trained personnel, repair parts, and equipment needed to service the implement.

Serial Number

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



Serial Number Plate Location
Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new Rotary Cutter. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

1. Discuss any problems you have with your implement with your dealership service personnel so they can address the problem.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.
3. For further assistance write to:

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

E-mail address
lp servicedept@landpride.com

Section 1: Assembly & Set-up

Tractor Requirements

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

Horsepower Rating	60-130 HP
Rear PTO Shaft Type	1 3/8"-6 Spline
Rear PTO Speed	540 RPM
Hitch Type	3-Point Cat. II or III
Tractor Weight	See Note Below

WARNING

To avoid serious injury or death:

Lightweight tractors with rear attached implements may need weights added to the front to maintain steering control. Consult your tractor Operator's Manual to determine proper weight requirements and maximum weight limitations.

Gearbox Vented Dipstick

Refer to Figure 1-1:

IMPORTANT: Gearboxes are shipped with solid plugs in them to prevent oil loss during shipping and handling. The solid plug on top of the gearbox must be replaced with a vented dipstick before operating the implement.

A vented dipstick is shipped loose and packaged with the Operator's Manual. Remove temporary solid plug from top of gearbox and replace with vented dipstick. See your nearest Land Pride Dealer if dipstick is missing.

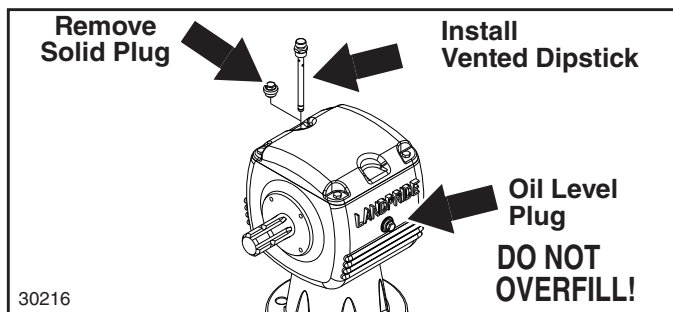


Figure 1-1

Hitch Assembly

NOTE: Do not tighten hardware to the correct torque until assembly is complete.

IMPORTANT:

Refer to Figure 1-2 & Figure 1-3 on page 9:

Bushing (#3), bolt (#6B) & stop pin (#9) are installed in one set of holes for Cat. II set-up (Figure 1-2) and in another set of holes for Cat. III set-up (Figure 1-3 & Figure 1-4). Be sure you know which Category your 3-point hitch is and that your following instructions for your hitch Category.

Refer to Figure 1-2 for Cat. II & Cat. III Hitches:

- Assemble hitch straps (#4 & #5) to clevis plates with 1 1/4" flat washers (#22) and 1 1/4" lock nuts (#14).
- Attach driveline hook (#11) to hitch strap (#4) using 5/16"-18 x 1 1/4" bolt (#27) and nut (#28).
- Assemble hitch braces (#1) to rear strap lugs with 5/8"-11 x 1 1/2" bolts (#12), spacers (#2), 5/8" flat washers (#19), and 5/8" lock nuts (#17).

Refer to Figure 1-2 for Cat. II Hitch

And Figures 1-2 & 1-3 for Cat. III Hitch:

- (See Important note below for Cat. III hook-up.) Insert 1"-8 x 4 1/2" GR5 hex head bolt (#26) through left-hand hitch strap (#4), 1 1/4" OD Bushing (#3), right-hand hitch strap (#5), and 1" lock washer (#21). Secure with 1"-8 hex nut (#13).

IMPORTANT: Special Cat. III Hook-Up Instructions.

Refer to Figure 1-3:

Bolt (#12) and spacer (#3) is installed in the top hole when attaching the mower to a tractor with a quick hitch set-up.

Refer to Figure 1-4:

Bolt (#12) and spacer (#3) is installed in the bottom hole when attaching the mower to the tractor's 3-point hitch system.

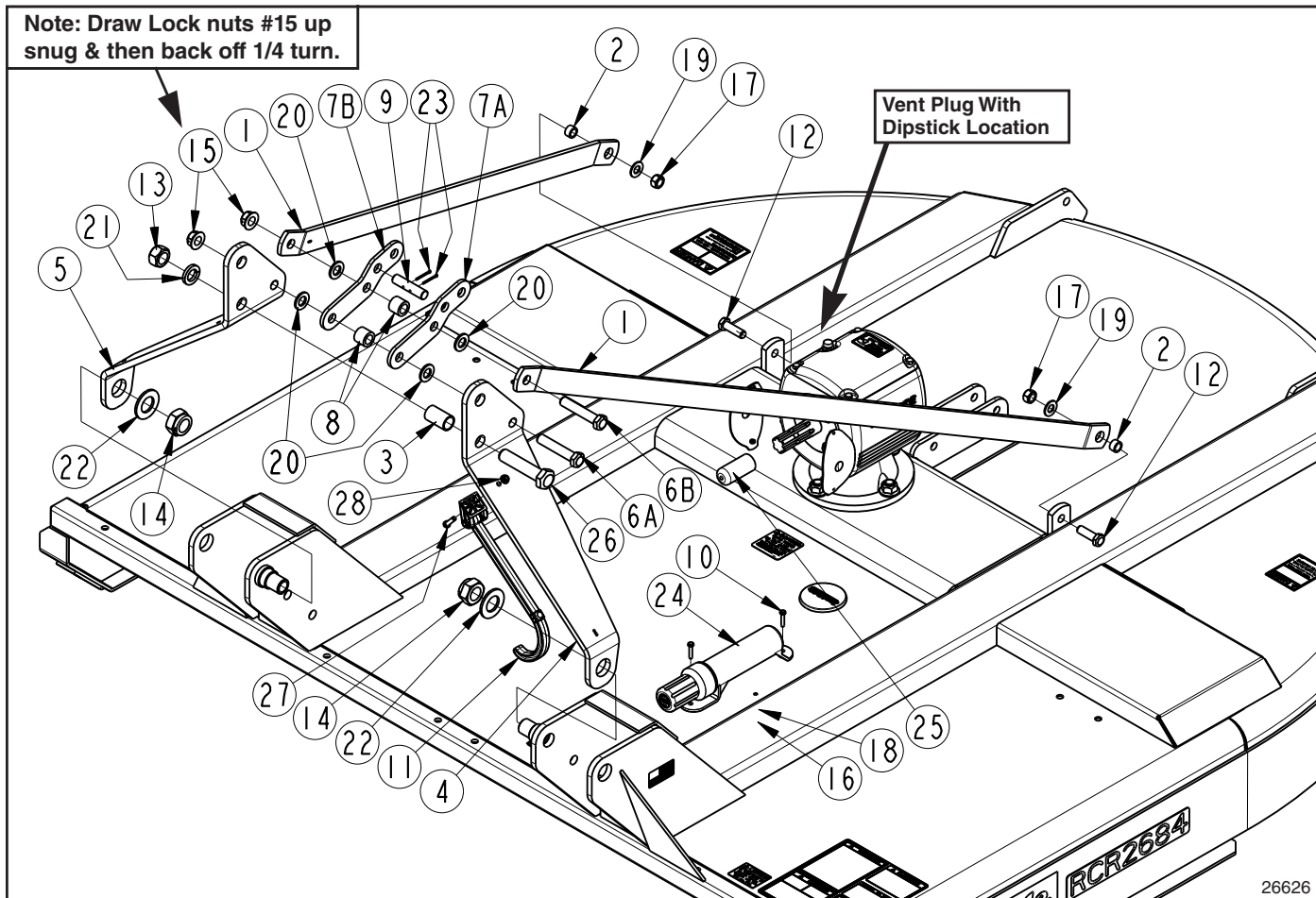
Refer to Figure 1-2 for Cat. II & Cat. III Hitches:

- Insert 3/4"-10 x 4" GR5 hex head bolt (#6A) through left-hand hitch strap (#4), 3/4" flat washer (#20), rear brace hinge (#7A), 1 1/4" OD x 1 1/32" lg spacer (#8), rear brace hinge (#7B), 3/4" flat washer (#20), and right-hand hitch strap (#5). Secure with 3/4" hex flange lock nut (#15). **Draw hex flange lock nut (#15) up snug and then back off 1/4 turn.**
- Insert stop pin (#9) through the two rear brace hinges (#7A & #7B). Secure between the two braces with cotter pins (#23). Bend cotter pins legs to prevent them from falling out.
- Rotate hitch straps (#4 & #5) and hitch braces (#1) up as shown.
- Insert 3/4"-10 x 4" GR5 hex head bolt (#6B) through left hitch brace (#1), 3/4" flat washer (#20), left rear brace hinge (#7A), 1 1/4" OD x 1 1/32" lg spacer (#8), right rear brace hinge (#7B), 3/4" flat washer (#20), and right hitch brace (#1). Secure with 3/4" hex flange lock nut (#15). **Draw hex flange lock nut (#15) up snug and then back off 1/4 turn.**
- Tighten hex nuts (#13, #14 & #17) to the correct torque.

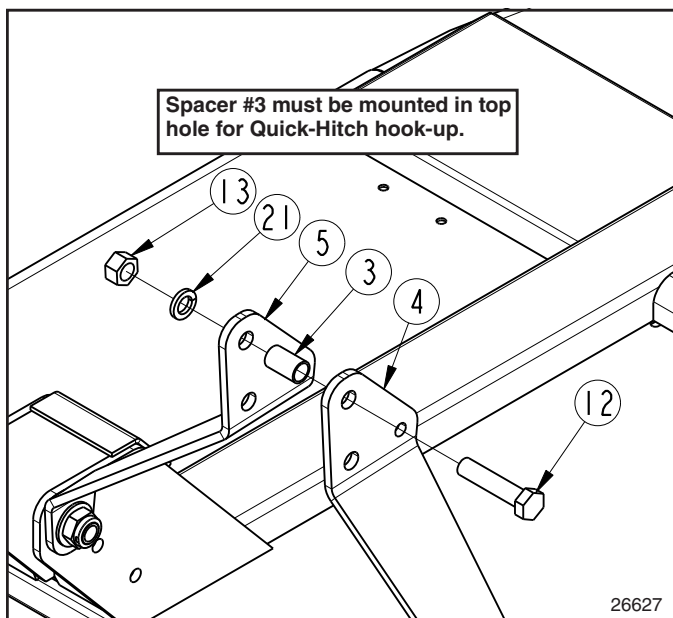
Manual Storage Tube Assembly

Refer to Figure 1-2 on page 9:

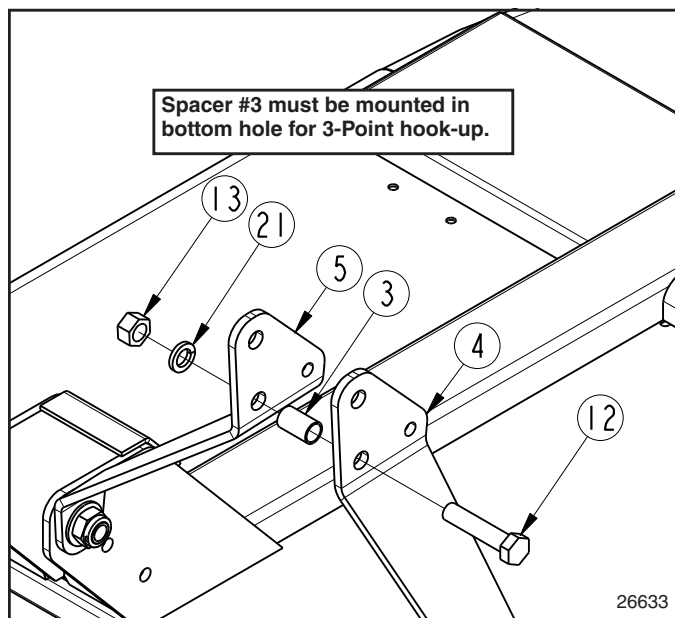
- Attach manual storage tube (#25) to the cutter deck with two 1/4"-20 GR5 hex head cap screws (#12), flat washers (#19), and hex head nuts (#17). Tighten nuts to the correct torque.



Cat II Hitch Assembly And
Cat III Hitch Assembly Except Spacer (#3) (See Figures 1-2 & 1-3 Below)
Figure 1-2



Assembly Of Spacer (#3) For Cat III Quick-Hitch Hook-UP
Figure 1-3



Assembly Of Spacer (#3) For Cat III 3-Point Hitch Hook-UP
Figure 1-4

Driveline Installation

DANGER

To avoid serious injury or death:

- Do not engage power take-off while hooking-up or unhooking the driveline, or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline.
- All guards and shields must be installed and in good working condition while operating the implement.
- Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

WARNING

To avoid serious injury or death:

Always disengage power take-off, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for blades to come to a complete stop before dismounting tractor.

CAUTION

To avoid minor or moderate injury:

Some tractors are equipped with two power take-off speeds. Do not exceed 540 rpm power take-off speed or equipment breakage may result.

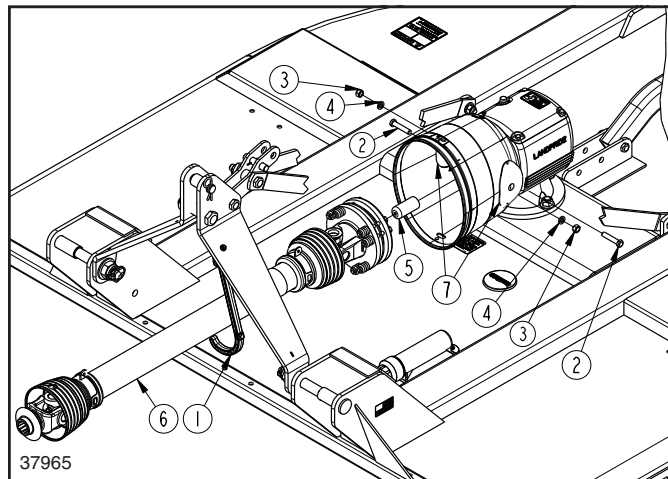
IMPORTANT: An additional driveline may be required if implement will be attached to more than one tractor.

The driveline must be lubricated before putting it into service. Refer to "**Lubrication**" on page 28.

The power take-off shaft and gearbox input shaft must be aligned and level with each other when checking driveline minimum length. A driveline that is too long can damage tractor and implement.

Refer to Figure 1-5:

1. Remove rubber protective sleeve (#5) from gearbox input shaft.
2. Unsnap side access doors (#7) from both sides of the gearbox shield. Save covers for reuse.
3. Slide slip-clutch end of driveline (#6) onto the gearbox shaft until hole in yoke aligns with notch in shaft.
4. Insert clamp bolts (#2) through hole in driveline yoke and notch in driveline (#6)
5. Secure bolts (2) with lock washers (#4) and nuts (#3). Tighten nuts to the correct torque.
6. Reinstall access covers (#7).
7. Raise driveline (#6) up and rotate driveline hook (#1) down.
8. Lower driveline (#6) until resting in driveline hook (#1).



Driveline Installation
Figure 1-5

Tractor Hook-Up

WARNING

To avoid serious injury or death:

Lightweight tractors with rear attached implements may need weights added to the front to maintain steering control. Consult your tractor Operator's Manual to determine proper weight requirements and maximum weight limitations.

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

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

Determine your tractor's hitch category.

- A **Category II** tractor will have a 1 1/8" dia. hole in the lower hitch links and a 1" dia hole in the top link.
- A **Category III** tractor will have a 1 7/16" dia. hole in the lower hitch links and a 1 5/16" dia hole in the top link.

Refer to Figure 1-6:

1. Slowly back tractor up to Rotary Cutter while using tractor's 3-point hydraulic control lever to align lower 3-point lift arm holes with cutter hitch pins (#3).
2. Engage tractor park brake, shut tractor engine off, and remove key before dismounting from tractor.
3. Slide lower 3-point lift arms onto cutter hitch pins (#3). Install linchpins (#7) through hitch pin holes to lock lower 3-point arms into position.
4. Connect top center link to upper hitch with customer supplied 1" clevis pin (#6) and hairpin cotter (#5). If your tractor is a Category III, then a customer supplied 1 1/4" spacer (#1) will be required.

Section 1: Assembly & Set-up

5. Ensure that the lower hitch arms are blocked to prevent excessive side movement.
6. Return to tractor and slowly raise and lower implement carefully to ensure drawbar, tires, and other equipment on the tractor do not make contact with cutter frame or driveline. Move or remove drawbar if needed.
7. Manually adjust one of the two lower lift arms up or down to level the Rotary Cutter from left to right. Final adjustments will be made later during "**Deck Leveling & Height Adjustments**" on page 15.
8. The arm lift rods on your tractor's 3-point hitch should be adjusted to allow for lateral float. Please consult your tractor's manual for adjusting instructions.

Hook-up Driveline to Tractor PTO

DANGER

To avoid serious injury or death:

Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

1. Park tractor on level surface. Place gear selector in park or set park brake. Make sure PTO is disengaged.
2. Slowly engage tractor 3-point lift lever to raise cutter until gearbox input shaft is at the same height as the tractor PTO shaft.
3. Support cutter deck at this height with support jacks or blocks to keep cutter from drifting down.
4. Shut tractor engine off and remove switch key.
5. Lift driveline (#8) off of driveline support (#4).

6. Driveline support (#4) will rotate up until secure against A-frame (#2) as it is spring loaded.
7. Collapse driveline (#8) by pushing tractor end of driveline towards the gearbox.

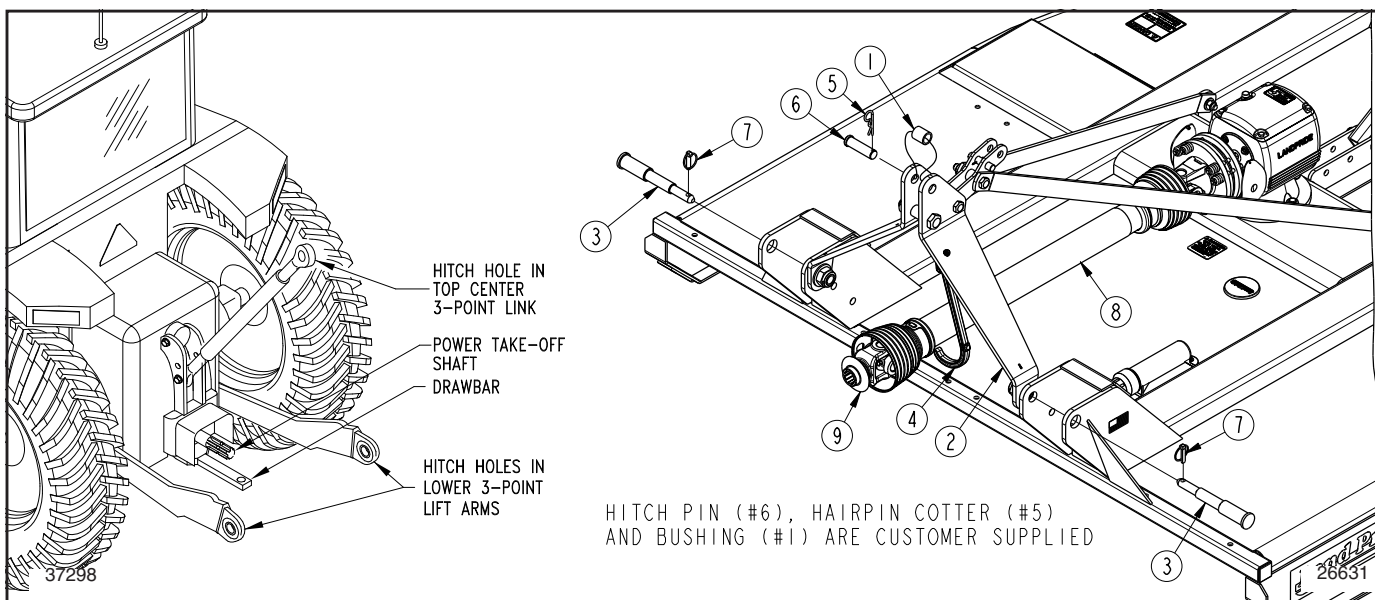
IMPORTANT: Skip to "**Check Driveline Collapsible Length**" on page 11 if driveline is too long to start on to tractor PTO shaft.

8. Pull back on driveline yoke collar (#9) and push driveline yoke onto the tractor PTO shaft. Release pull collar and continue to push driveline yoke forward until pull collar locks in place.
9. The driveline should now be moved back and forth to ensure both ends are secured to the tractor shaft and gearbox shaft. Reattach any end that is loose.

Check Driveline Collapsible Length

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

1. Make sure driveline is properly installed and level before checking driveline collapsible length. (Refer to "**Driveline Installation**" instructions on page 10 if needed.)

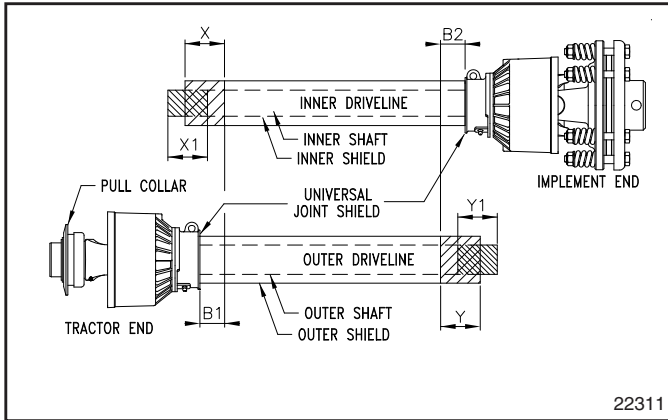


3-Point Tractor Hook-Up
Figure 1-6

Section 1: Assembly & Set-up

Refer to Figure 1-7:

2. With driveline level, measure 1" ("B" dimension) back from universal joint shield to end of outer driveline shield as shown in Figure 1-7.
3. If measurement is 1" or more, skip to "**Check Driveline Interference**". If measurement is less than 1", shorten driveline using instructions provided below.



Driveline Shortening
Figure 1-7

Shorten Driveline

Refer to Figure 1-7:

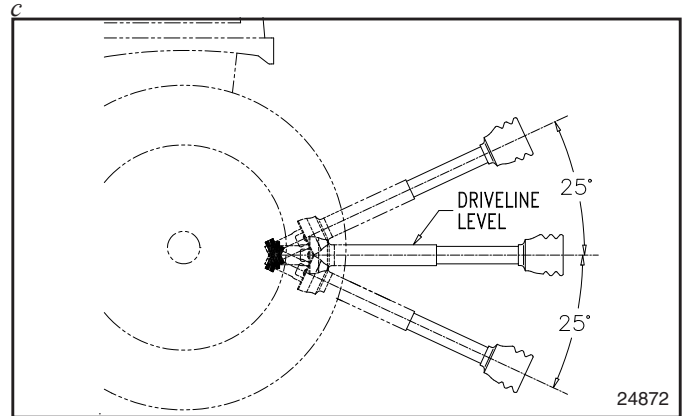
Be sure to first check "**Check Driveline Collapsible Length**". If required, shorten driveline as follows:

1. Unhook driveline from tractor PTO shaft and pull outer and inner drivelines apart.
2. Reattach outer driveline to tractor PTO shaft. Pull on inner and outer drivelines to be sure universal joints are properly secured.
3. Hold inner and outer drivelines parallel to each other:
 - a. Measure 1" ("B" dimension) back from outer driveline universal joint shield and make a mark at this location on the inner driveline shield.
 - b. Measure 1" ("B" dimension) back from the inner driveline universal joint shield and make a mark at this location on the outer driveline shield.
4. Remove driveline from tractor and gearbox shafts.
5. Measure from end of inner shield to scribed mark ("X" dimension). Cut off inner shield at the mark. Cut same amount off the inner shaft ("X1" dimension).
6. Measure from end of outer shield to scribed mark ("Y" dimension). Cut off outer shield at the mark. Cut same amount off the outer shaft ("Y1" dimension).
7. Remove all burrs and cuttings.
8. Apply multi-purpose grease to the inside of the outer shaft and reassemble driveline.
9. Reattach driveline to cutter and tractor. Refer "**Driveline Installation**" instructions on page 10.

Check Driveline Interference

1. Make certain driveline yokes are properly attached
2. Start tractor and raise cutter up just enough to remove support blocks. Remove support blocks.
3. Slowly engage tractor hydraulic 3-point control lever to lower cutter while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.

Refer to Figure 1-8:



Maximum PTO Driveline Movement During Operation
Figure 1-8

4. Raise and lower implement to find maximum extended driveline length. Check to make certain driveline does not exceed 25° up or down.
5. If needed, set tractor 3-point lift height to keep driveline from exceeding 25° up.

Check Chain Installation (Optional)

Refer to Figure 1-9:

1. Install lower end of check chain (#1) to inner hitch ear using 3/4"-10 x 1 1/2" GR5 hex head bolts (#2), lock washers (#3), and nuts (#4). Tighten securely.
2. Install chain lugs (#5) on either side of tractor top link mount using 1" Dia. pin for Category II and 1 1/4" for Category III (pin not supplied).
3. Cutting height is then set by placing proper chain link in key slot (#5).

Front and Rear Safety Guard Options

DANGER

To avoid serious injury or death:

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is mandatory with this cutter. Stop blade rotation if a bystander is in or around the area.

WARNING

To avoid serious injury or death:

Keep all safety guards in place. Rotary Cutters have the ability to discharge objects at high speeds. Use extreme caution when cutting in areas where people may be present. It is best to operate the cutter when no one is nearby. Stop blade rotation if someone is in or around the area.

Front Safety Guard

Refer to Figure 1-10:

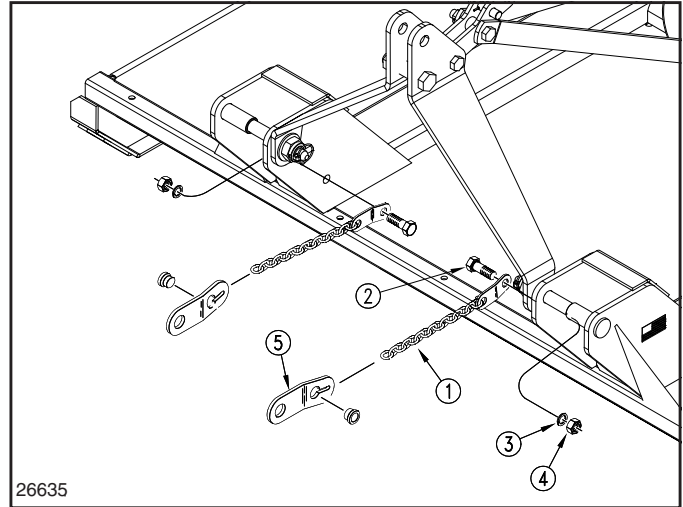
Install each segment of the front chain or rubber guards (#1) with 1/2" -13 x 2 3/4" GR5 carriage bolts (#2) and lock nuts (#3). Tighten all nuts and bolts to correct torque. See "**Torque Values Chart for Common Bolt Sizes**" on page 34.

Rear Chain Guard

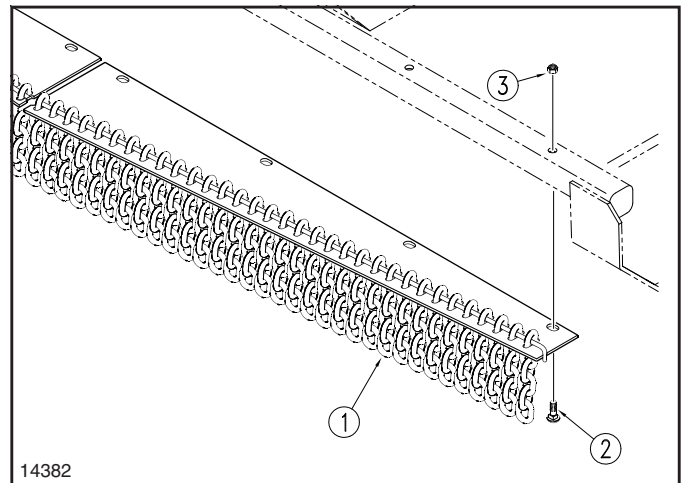
IMPORTANT: If chain guards are used, be sure to install them before installing the tail wheel.

Refer to Figure 1-11:

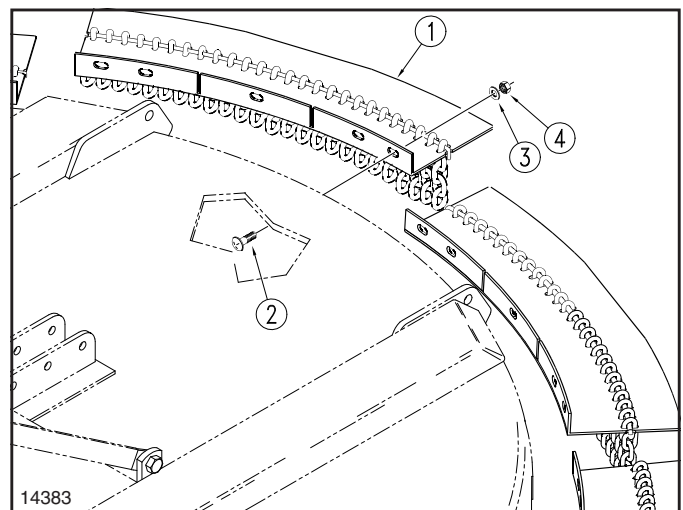
Install each segment of the rear chain guards (#1) as shown with 1/2" -13 x 1 1/2" GR5 carriage bolts (#2), 1/2" flat washers (#3), and 1/2" lock nuts (#4). Tighten all nuts and bolts to correct torque. See "**Torque Values Chart for Common Bolt Sizes**" on page 34.



Optional Check Chain Assembly
Figure 1-9



Front Guard (Chain Guard Shown)
Figure 1-10



Rear Chain Guard
Figure 1-11

Section 1: Assembly & Set-up

Single Tailwheel Assembly

IMPORTANT: If chain guards are used, be sure to install them before installing the tail wheel.

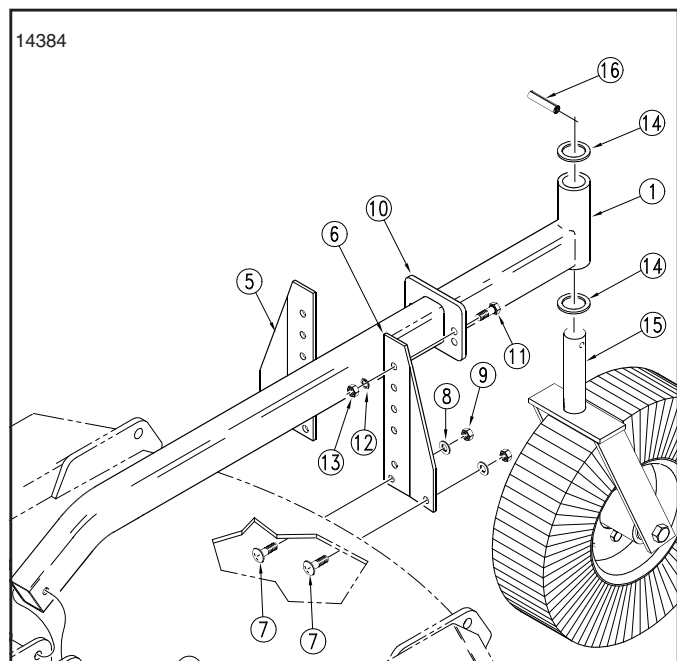
NOTE: Do not tighten hardware until assembly is complete. Refer to "**Torque Values Chart for Common Bolt Sizes**" on page 34.

Refer to Figure 1-12:

1. Slide adjustment plate (#10) onto tailwheel arm (#1) as shown.

IMPORTANT: The tailwheel arm must be located in the rear mounting holes of the deck channel when rear chain guards are included and front mounting holes when rear chain guards are not included.

2. Attach tailwheel arm (#1) to deck bracket with 5/8"-11 x 3 1/4" GR5 hex head bolt (#2), 5/8" lock washer (#3), and 5/8" nut (#4).
3. Assemble tailwheel adjusting brackets (#5 & #6) to deck with four 1/2"-13 x 1 1/2" GR5 carriage bolts (#7), 1/2" flat washers (#8), and 1/2" lock nuts (#9).
4. Install shim washer (#14) onto yoke spindle (#15) and insert spindle into tailwheel arm (#1). Slide 2nd shim washer (#14) onto yoke spindle and secure with roll pin (#16).
5. Assemble tailwheel mounting bracket (#10), to adjusting brackets (#5 & #6) with two 1/2" -13 x 1 1/2" GR5 hex head bolts (#11), 1/2" lock washers (#12), and 1/2" nuts (#13).
6. Refer to "**Tailwheel Height Adjustment**" on page 16 to adjust tail wheel height.



Single Tailwheel Assembly
Figure 1-12

Dual Tailwheel Assembly

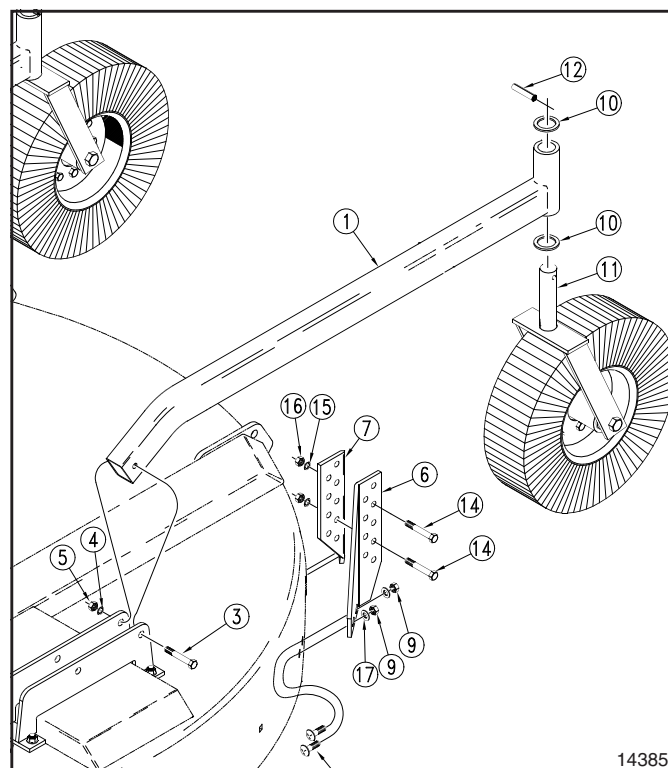
IMPORTANT: If chain guards are used, be sure to install them before installing the tail wheel.

NOTE: Do not tighten hardware until assembly is complete. Refer to "**Torque Values Chart for Common Bolt Sizes**" on page 34.

Refer to Figure 1-13:

IMPORTANT: The tailwheel arms must be located in the rear mounting holes of the deck channel when rear chain guards are included and front mounting holes when rear chain guards are not included.

1. Attach tailwheel arm (#1) to deck bracket (#2) with 5/8" -11 x 3 1/4" hex head bolt (#3), 5/8" lock washer (#4), and 5/8" nut (#5).
2. Assemble tailwheel adjusting brackets (#6 & #7) to cutting deck using four 1/2"-13 x 1 1/2" GR5 carriage bolts (#8), lock nuts (#9), and flat washers (#17).
3. Install shim washer (#10) on spindle (#11). Insert spindle into tailwheel arm and add 2nd shim (#10) to yoke spindle. Secure with roll pin (#12).
4. Install two 1/2" -13 x 3 1/2" GR5 hex head bolts (#14), lock washers (#15), and nuts (#16) in adjusting brackets (#6 & #7).
5. Repeat steps 1 thru 4 for opposite side.
6. Refer to "**Dual Tailwheel**" on page 16 to adjust tail wheel height.



Dual Tailwheel Assembly
Figure 1-13

Section 2: Adjustments

Deck Leveling & Height Adjustments

There are 4 primary adjustments that should be made prior to actual field operations:

- Deck Leveling From Left to Right
- Deck Leveling From Front to Rear
- Center 3-Point Link Adjustment
- Tailwheel Height Adjustment

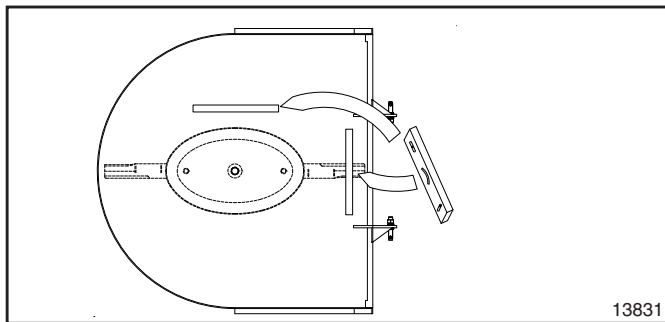
Proper adjustment of each of these items will provide for higher efficiency, improved cutting performance, and longer blade life. The following tools will be needed:

- Pliable tape measure
- Carpenters level
- 3/4" Open end or hex end wrench or socket set
- Protective gloves

WARNING

To avoid serious injury or death:

Always shut tractor down using "Tractor Shutdown Procedure" provided in this manual before dismounting tractor.



Deck Leveling
Figure 2-1

Deck Leveling From Left to Right

Refer to Figure 2-1:

1. Locate tractor and cutter on a flat, level surface.
2. use tractor's hydraulic 3-point control to lower cutter until tailwheel contacts ground surface.
3. Place a carpenters level or other suitable leveling device on the front of the cutter deck, Adjust either one or both of the tractors 3-point lower link height

adjustments to level the deck from left to right. Some tractors have only a single adjusting crank.

4. Place a carpenters level or other suitable leveling device on the front of the cutter deck, Adjust either one or both of the tractors 3-point lower link height adjustments to level the deck from left to right. Some tractors have only a single adjusting crank.

Deck Leveling From Front to Rear

WARNING

To avoid serious injury or death:

Avoid direct contact with cutter blades by wearing a pair of gloves. Cutter blades have sharp edges and burrs that can cause injuries.

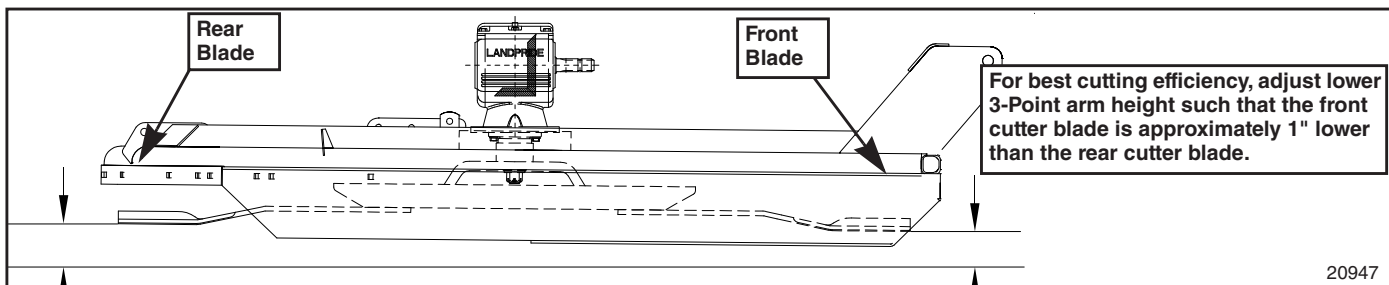
IMPORTANT: The front blade tip should be lower than rear blade tip by approximately 1". The cutter is subject to continuous material flow under the deck if the rear blade is at the same height or lower than the front blade causing horsepower loss, grass clumps, blade wear, and frequent blade sharpening.

Refer to Figure 2-1:

1. Place a Carpenters level on one of the main deck channels. Using the tractor's 3-point hydraulic control lever, raise or lower the 3-point arms until the deck is slightly lower at the front (approximately 1" lower) than at the back.
2. The top center link should be loose when deck rear is supported by the tail wheel. If not, lengthen center link until loose. Final adjustment will be made later.

Refer to Figure 2-2:

3. With gloves on, carefully rotate each blade tip to the position shown in Figure 2-2 on page 15.
4. At the front of the cutter, measure the distance from blade cutting tip to ground surface. This distance is known as the "Nominal Cutting Height".
5. The tail wheel will need adjusting if nominal cutting height is not at the preferred cutting height. Adjust tailwheel per instructions on pages 16 and 16.
6. Repeat steps 1 to 5 until preferred cutting height is achieved.
7. Set stop on tractor lift quadrant so cutter can be returned to the same height.



Cutting Height
Figure 2-2

Section 2: Adjustments

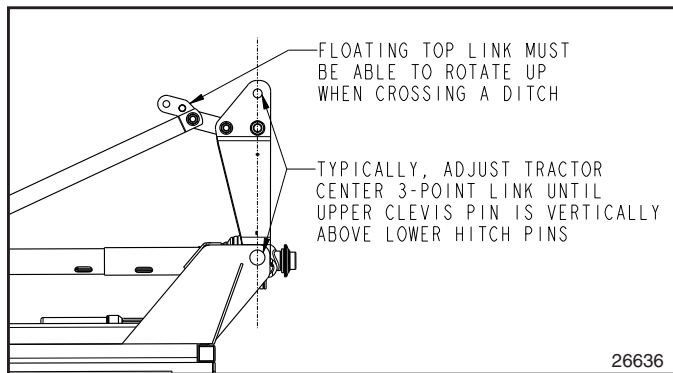
Center 3-Point Link Adjustment

Refer to *Figure 2-3*:

1. Lower cutter deck to the nominal cutting height.

NOTE: Customer may adjust center 3-point link to his or her preference. Lengthening center 3-point link allows more movement while going over raised surfaces. Shortening the link allows more movement while crossing over ditches. Also, shortening center link allows the cutter to be carried higher while traveling. Never lengthen center link to where the cutter is carried too low.

2. Typically the center 3-point link is adjusted so that the upper 3-point clevis pin is straight above the lower 3-point hitch pins. This arrangement allows for optimum ground contour following performance.
3. Lock center link in this position once correct length is achieved. Adjustment on center 3-point link can be made depending on customer's preference.



Top Link Adjustment
Figure 2-3

Tailwheel Height Adjustment

Single Tailwheel

Refer to *Figure 2-4 on page 17*:

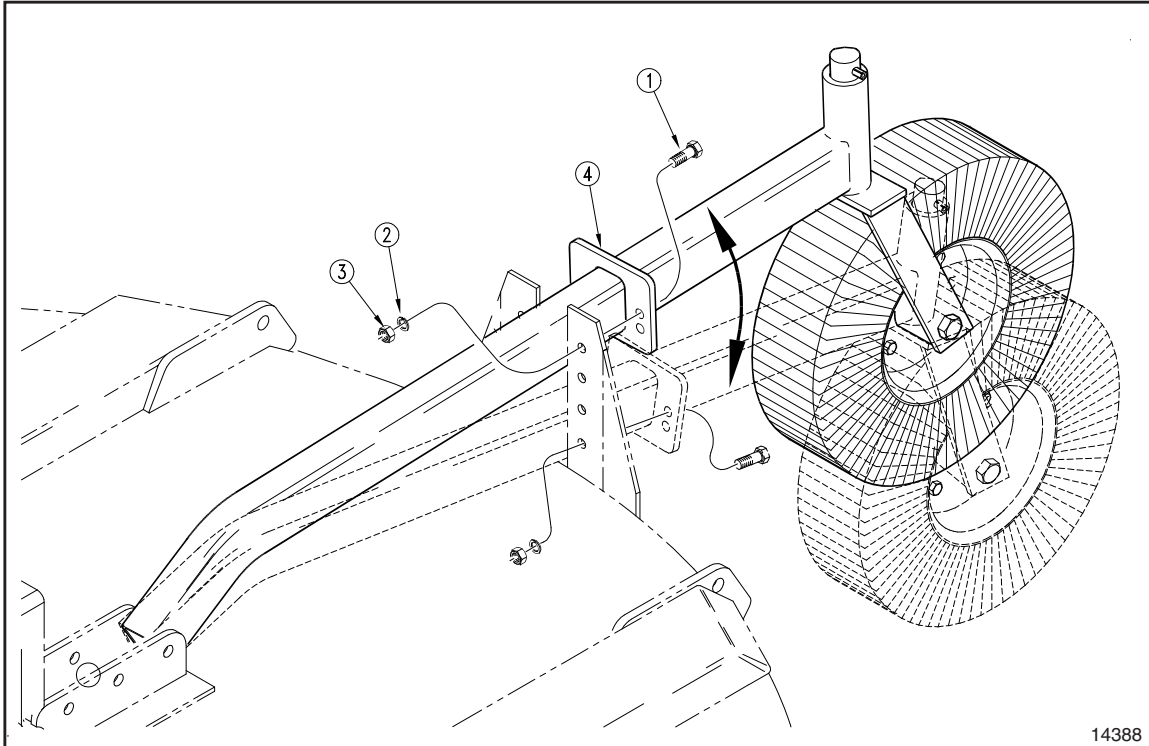
If the cutting height is too high or too low, the tailwheel must be adjusted as follows:

1. Use tractor's 3-point hydraulic control to lift the tailwheel off the ground.
2. Remove attaching hardware; 1/2" -13 x 1 1/2" GR5 hex head bolt (#1), lock washer (#2), and nut (#3).
3. Adjust tailwheel up or down to desired cutting height by repositioning adjusting plate (#4) and replace attaching hardware.

Dual Tailwheel

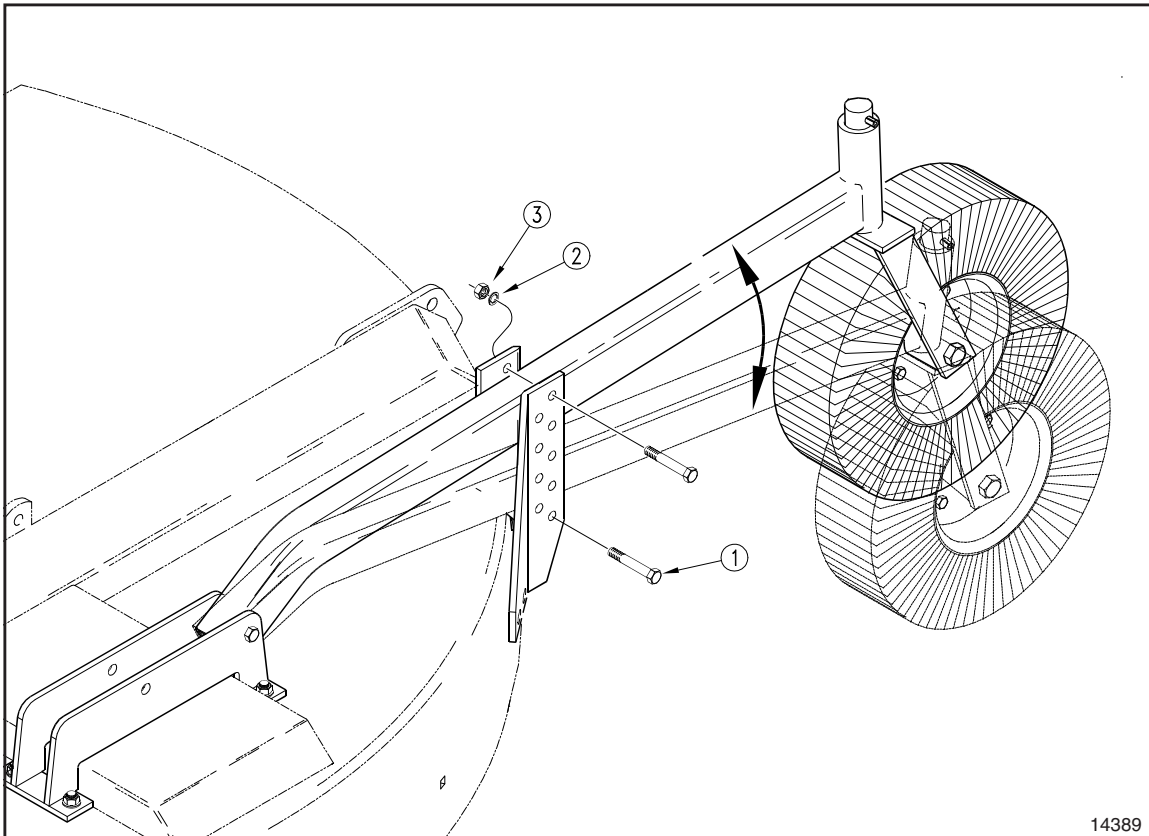
Refer to *Figure 2-5 on page 17*:

4. If cutting height is too high or too low, the tailwheels must be adjusted as follows:
 - a. Use tractor's 3-point hydraulic control to lift the cutter tailwheel off the ground surface.
 - b. Remove attaching hardware; 1/2" -13 x 3 1/2" GR5 hex head bolt (#1), 1/2" lock washer (#2), and 1/2" nut (#3).
 - c. Adjust tailwheel up or down to desired cutting height and replace attaching hardware.



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Single Tailwheel Height Adjustment
Figure 2-4



14389

Dual Tailwheel Height Adjustment
Figure 2-5

Section 3: Operating Instructions

Operating 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 Rotary Cutter. Therefore, it is absolutely essential that no one operates the Rotary Cutter without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, page 1
- **Section 1: Assembly & Set-up**, page 8
- **Section 2: Adjustments**, page 15
- **Section 3: Operating Instructions**, page 18
- **Section 5: Maintenance & Lubrication**, page 24

Perform the following inspections before using your Rotary Cutter.

Operating Checklist

✓	Check	Page
	Read "Important Safety Information"	18
	Read "Assembly & Set-up" Instructions.	8
	Read "Operating Instructions"	18
	Check cutter initially and periodically for loose bolts & pins, See <i>Torque Values Chart</i> .	28
	Check the cutter initially and periodically for loose bolts & pins, <i>Torque Values Chart</i> .	34
	Make sure all guards and shields are in place.	4
	Lubricate cutter as needed. "Maintenance and Lubrication"	28

Safety Information

! DANGER

To avoid serious injury or death:

- Do not engage power take-off while hooking-up or unhooking the driveline, or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline.
- All guards and shields must be installed and in good working condition while operating the implement.
- Tractor power take-off shaft shield, driveline shields, and gearbox shaft shields must be installed and in good working condition to avoid driveline entanglement and projectiles flying off of the driveline.
- Never place hands or feet under the deck or attempt to make adjustments to the cutter with power take-off engaged. Cutter blades rotating at high speeds cannot be seen and are located close to the deck sides. Body extremities will be cut off instantly.
- Always disconnect driveline from power take-off shaft before servicing underside of cutter. The tractor can be started with power take-off engaged.

- Do not use cutter as a fan. Cutting blades are not properly designed or guarded for this use.
- Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is mandatory when cutting along roadways and in areas where people may be present. Stop blade rotation if a bystander is in or around the area.
- Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

! WARNING

To avoid serious injury or death:

- Select a safe ground speed when transporting. Never travel at a speed which does not allow adequate control of steering and stopping, and never exceed 20 mph (32.2 km/h) with attached equipment. Rough terrain requires a slower speed.
- Always shut tractor down using "Tractor Shutdown Procedure" provided in this manual before dismounting tractor.
- Do not operate and/or travel across inclines where tractor and/or implement can roll over. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across.
- Never carry riders on the implement or tractor. Riders can obstruct the operator's view, interfere with control of the equipment, be pinched by moving components, become entangled in rotating components, be struck by objects, be thrown or fall from the equipment, etc.
- Allow only persons to operate this implement who have fully read and comprehended this manual, who have been properly trained in the safe operation of this implement, and who are age 16 or older. Serious injury or death can result from the inability to read, understand, and follow instructions provided in this manual.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting implement back into service. Serious breakdowns can result in injury or death.
- Always disengage power take-off before lifting cutter fully up. Never operate cutter in the raised position. The cutter can discharge objects at high speeds.
- A rotating driveline must not exceed an angle of 25 degrees up or down, and never engage a driveline while at an angle exceeding 25 degrees up or down. The driveline can break and send projectiles.
- 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.
- Do not exceed rated cutting capacity of your cutter. See specifications & capacities for specified cutting capacity. Exceeding rated cutting capacity can damage drive components, cutter blades, and deck components.

Section 3: Operating Instructions

- *Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.*
- *Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.*
- *Do not operate a broken or bent driveline. Such a driveline will break apart while rotating at high speeds and can cause serious injury or death. Always remove the implement from use until the damaged driveline can be repaired or replaced.*

CAUTION

To avoid minor or moderate injury:

Some tractors are equipped with two power take-off speeds. Do not exceed 540 rpm power take-off speed or equipment breakage may result.

Inspection of Tractor & Cutter

Make the following inspections with cutter attached to a tractor, PTO disengaged, and all moving components completely stopped:

1. Park tractor and cutter on a level surface.
2. Disengage PTO, place gear selector in park, set park brake, shut tractor off, and remove switch key. Make sure cutter blades have come to a complete stop before dismounting from tractor.
3. Inspect tractor safety equipment to make sure it is installed and in good working condition.
4. Inspect cutter safety equipment to make sure it is installed and in good working condition.
5. Check driveline to make certain it is securely connected to the tractor PTO shaft and cutter gearbox shaft.
6. Check driveline guards to make certain they are in good condition and in place.
7. Carefully raise and lower implement to ensure that the drawbar, tires, and other equipment on the tractor do not contact cutter frame or driveline.
8. With cutter resting on solid supports, PTO disengaged, and blade rotation completely stopped:
 - Check for and remove foreign objects wrapped around blade spindles.
 - Check for nicked, bent, broken, and worn cutting blades. Replace or sharpen blades as required. Refer to "**Cutter Blade Maintenance**" on page 24.
9. Remove solid supports from under the deck.
10. Verify cutter height is set correctly. See "**Deck Leveling & Height Adjustments**" on page 15.

The remaining inspections are made by engaging the PTO to check for vibrations.

WARNING

To avoid serious injury or death:

Stop power take-off immediately if vibration continues after a few revolutions during start-up and anytime thereafter. Wait for all components to come to a complete stop before dismounting from tractor to check for probable causes. Make necessary repairs and adjustments before continuing.

CAUTION

To avoid minor or moderate injury:

Some tractors are equipped with two power take-off speeds. Be certain your tractor's power take-off is set at the implement's rated power take-off speed or equipment breakage may result. RC models are rated for 540 rpm and RCM models are rated for 1000 rpm.

11. Start tractor, set throttle to idle or slightly above idle and slowly engage PTO. Initial start-up vibration is normal and should stop after a few revolutions. Stop PTO rotation immediately if vibration continues.
12. Once the cutter is running smoothly, increase tractor PTO speed to 540 rpm. Stop PTO rotation immediately if vibration occurs.
13. Investigate cause of vibration and make repairs before putting cutter back into service.

Transporting

WARNING

To avoid serious injury or death:

- *Select a safe ground speed when transporting. Never travel at a speed which does not allow adequate control of steering and stopping, and never exceed 20 mph (32.2 km/h) with attached equipment. Rough terrain requires a slower speed.*
- *When traveling on roadways, travel in such a way that other vehicles may pass you safely. Use LED 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.*

IMPORTANT: Always disengage power take-off and wait for driveline to stop rotating before raising implement to transport position.

1. Make sure driveline does not contact tractor or cutter when raising cutter to the transport position.
2. Reduce tractor ground speed when turning and leave enough clearance so cutter does not contact obstacles such as buildings, trees, or fences.
3. Limit transport speed to 20 mph. Transport only with a farm tractor of sufficient size and horse power.
4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Section 3: Operating Instructions

Blade Engagement & Disengagement

Cutter blades can lock-up against each other during start-up and shut-down especially if the tractor's PTO engagement is "**INSTANT ON**" and "**INSTANT OFF**". Following Blade Engagement and Blade Disengagement instructions on page 20 will help eliminate blade lock up.

Blade Engagement

1. Increase throttle to a speed just enough to get the cutter started without stalling tractor while slowly engaging PTO drivelines. Use tractor's PTO soft start option if available.
2. Ensure that all power shafts are rotating and that the cutter is not vibrating excessively after ramping up to PTO speed for at least 3 seconds. If excessive vibration continues after 3 seconds at full PTO speed, disengage PTO immediately, shut down tractor, and remove switch key.
3. Check blades for a lock-up situation. Block cutter deck up before working under the unit. Unlock blades, remove support blocks, and repeat "**Blade Engagement**" instructions.

Blade Disengagement

1. Slowly decrease throttle speed until engine idle speed is reached and then disengage PTO.
2. Engage tractor park brake, shut tractor engine off, and remove switch key. Stay on tractor until blades have come to a complete stop.

Field Operation

DANGER

To avoid serious injury or death:

Clear area to be cut of debris and other unforeseen removable objects before cutting. Mark non-removable hazards such as tree stumps, post stubs, protruding objects, rocks, drop-offs, holes, etc. with a visible flag.

IMPORTANT: Maintain correct power take-off speed. Loss of power take-off speed will allow blades to swing back resulting in ragged, uneven cutting.

Your cutter is equipped with free swinging cutting blades to reduce shock loads when striking obstacles. However, it is best to avoid striking obstacles to extend cutter and blade life.

NOTE: Do not cut in wet conditions. Wet material will build up on the deck underside creating poor discharge, high wear, and additional horsepower.

Periodically disengage PTO, turn off tractor, remove key & check for objects wrapped around blade spindle. Block deck up before removing objects.

Frequently inspect cutter for loose bolts and nuts. Tighten all loose hardware as indicated in the "**Torque Values Chart**" on page 34.

1. Thoroughly inspect area to be cut for debris and unforeseen objects. Mark any potential hazards.
2. Follow "**Blade Engagement**" instructions on this page to start cutter blades turning.
3. Optimum ground speed depends on density of material being cut, horsepower rating of tractor, and terrain. Always operate tractor at cutter's full rated PTO speed in a gear range that allows the cutter to make a smooth cut without lugging tractor down, usually between 2 to 5 mph.
4. Stop traveling and disengage PTO after the first 50 feet of cutting. Check cutter levelness and cutting height to make certain it is adjusted properly.
5. Do not engage PTO with 3-point cutter fully raised.
6. Periodically disengage PTO, shut down tractor, remove key, and check for foreign objects wrapped around the blade spindle. Block cutter deck up before removing objects.
7. Frequently inspect cutter for loose bolts and nuts. Tighten all loose bolts and nuts as indicated in the "**Torque Values Chart**" on page 34.
8. For additional information, see "**General Operating Instructions**" on page 21.

Unhooking the Rotary Cutter

Unhook Rotary Cutter from the tractor as follows:

1. See "**Long Term Storage**" on page 27 if cutter is to be stored for a long time.
2. Park on a level solid surface and lower deck to ground level or onto support blocks.
3. Engage tractor park brake, shut tractor engine off, and remove switch key. Stay on tractor until blades have come to a complete stop.
4. Disconnect driveline from tractor.
5. Unhook 3-Point hitch from tractor and drive tractor forward several feet.
6. Reinstall hitch pins and hair pin coters in cutter hitch for safe keeping.
7. Collapse driveline by pushing tractor end of driveline towards cutter gearbox.
8. Rotate driveline storage hook down and place driveline in storage hook.

Section 3: Operating Instructions

General Operating Instructions

It is important that you familiarized yourself with the Operator's Manual, completed Operators Checklist, properly attached cutter to your tractor, made leveling adjustments, and preset your cutting height before beginning a running operational safety check on your Land Pride 84" Rotary Cutter.

The running operational safety check may now be done. It is important that at any time during this safety check you detect a malfunction in either the cutter or tractor that you immediately shut the tractor off, remove the key, and make necessary repairs and/or adjustments before continuing on.

Make sure before starting the tractor that the park brake is engaged, the PTO is disengaged, and the cutter is resting on the ground. Start the tractor and set the engine throttle speed at a low idle. Raise the cutter with the tractor's rear hydraulic lift control lever to transport position making sure that the PTO shaft does not bind and does not contact the cutter frame. Lower the cutter to the ground and at a low engine speed engage the PTO. If everything is running smoothly at a low idle, slowly raise the cutter to transport height checking for bind or chatter in the driveline. Lower the cutter to the ground and increase the tractor's engine rpm until it reaches the cutter full PTO operating speed of 540 rpm. If everything is still running smoothly, once more raise the cutter to transport height to check for driveline bind or chatter. Lower the cutter to the ground, return the engine to a low idle, and disengage the PTO. Position the adjustable stops on the tractor's hydraulic lift lever so the cutter can be consistently returned to the same cutting and transport height.

You should now be ready to transport to your cutting site at a safe ground speed. On roadways transport in such a manner that faster moving vehicles can easily see you and pass you safely. Reduce your speed when traveling over rough and hilly terrain. Avoid quick or sharp steering corrections. Take extra care to ensure that the mower doesn't come into contact with obstacles such as trees, buildings, or fences. Use accessory lights and appropriate reflective devices to provide adequate warning to pedestrians and other vehicle operators when traveling on public roads and in the dark of night. Comply with all local, state, and federal laws.

It is important that you inspect the area where you will be cutting and clear it of safety hazards and foreign objects either before or after you arrive at the cutting site. Never assume the area is clear. Cut only in areas you are familiar with and are free of debris and unseen objects. Extremely tall grass should be cut twice to detect potential hazards. In the event you do strike an object stop the cutter and tractor immediately to inspect and make necessary repairs to the cutter before resuming operation. It really pays to inspect a new area and to develop a safe plan before cutting.

You will need to maintain 540 rpm PTO speed and 2 to 5 mph ground speed to produce a clean cut. Make a tractor gear and range selection that will enable you to maintain these speed combinations. Generally the quality of cut is better at lower ground speeds. Dense ground cover will create the need to slow down even more. In certain conditions tractor tires will roll grass down resulting in an uneven cut when the grass fails to rebound. Should this happens you may try reversing the direction of cut and/or double cut to achieve the desired finish. Avoid very low cutting heights especially on extremely uneven terrain. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and cutter. Slow down in turns. Remember to look back often.

Now that you're prepared and well briefed you may begin cutting. Begin mowing by doing the following:

- Reducing tractor's engine rpm
- Make sure the cutter is on the ground in cutting position
- Engage the PTO, raise the engine rpm to the appropriate PTO speed, and begin mowing.

Make wide turns when possible. Three-point hitch and optional Quick-Hitch models can be lifted into transport position to make tight turns and to reverse direction. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride Rotary Cutter can do.

Whether you are done mowing, need to take a break, or just need to make a few adjustments to the cutter, remember to always do the following:

- Reduce tractor's engine rpm and disengage the PTO
- Stop on level ground and set the park brake
- Turn off the engine, remove switch key, and stay on the tractor until the cutter blades have come to a complete dead stop.

Section 4: Options

Front and Rear Safety Guard Options

! DANGER

To avoid serious injury or death:

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety guards is mandatory with this cutter. Stop blade rotation if a bystander is in or around the area.

! WARNING

To avoid serious injury or death:

Keep all safety guards in place. Rotary Cutters have the ability to discharge objects at high speeds. Use extreme caution when cutting in areas where people may be present. It is best to operate the cutter when no one is nearby. Stop blade rotation if someone is in or around the area.

Land Pride offers two types of front guards to best suit your application. They are the rubber skirt guard and chain skirt guard. The rubber skirt guard is more economical and designed for light duty applications. The chain guard is designed to handle heavier applications where cutter blades make contact with solid dense objects that are capable of tearing through rubber skirts.

Front Rubber Guard

Refer to Figure 4-1:

Part Number & Description

312-483A Front Rubber Guard Assembly

See "Front Safety Guard" on page 13 for proper installation.

Front Chain Guard

Refer to Figure 4-2:

Part Number & Description

312-435A Front Chain Guard Assembly

See "Front Safety Guard" on page 13 for proper installation.

Land Pride offers a rear chain safety guard designed to handle heavy applications where cutter blades make contact with solid dense objects.

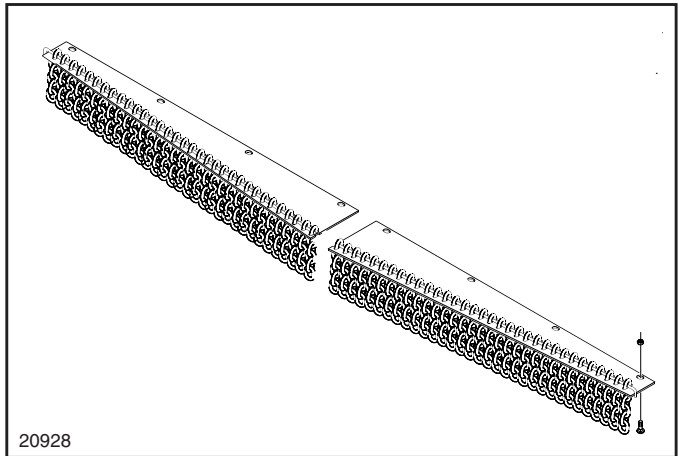
Rear Chain Guard

Refer to Figure 4-3:

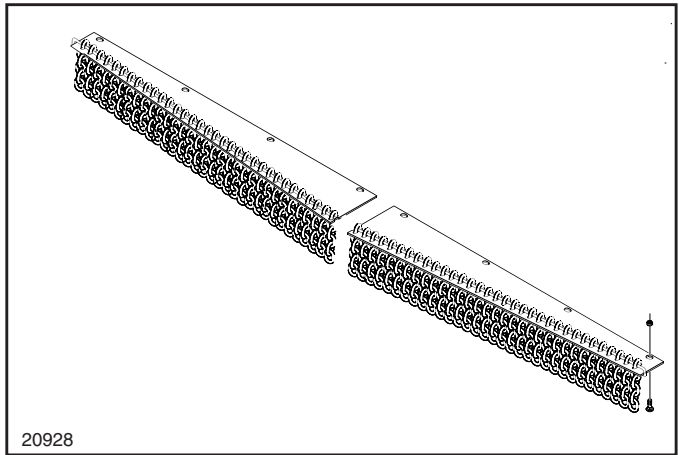
Part Number & Description

312-436A Rear Chain Guard Assembly

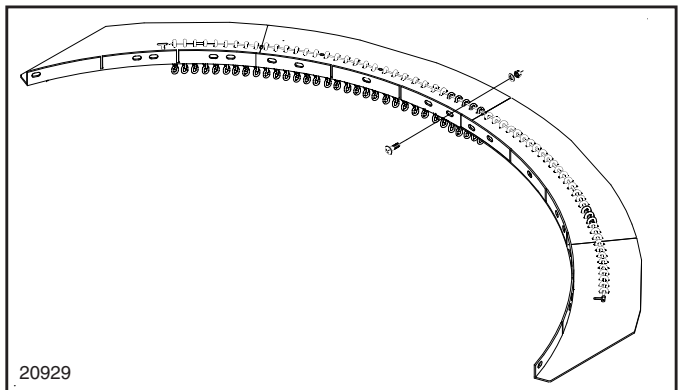
See "Rear Chain Guard" on page 13 for proper installation.



Front Rubber Safety Guard
Figure 4-1



Front Chain Safety Guard
Figure 4-2



Rear Chain Safety Guard
Figure 4-3

Section 4: Options

Hitch/Wheel Options

There are two Hitch/wheel combinations to meet your specific requirements.

Part Number & Description

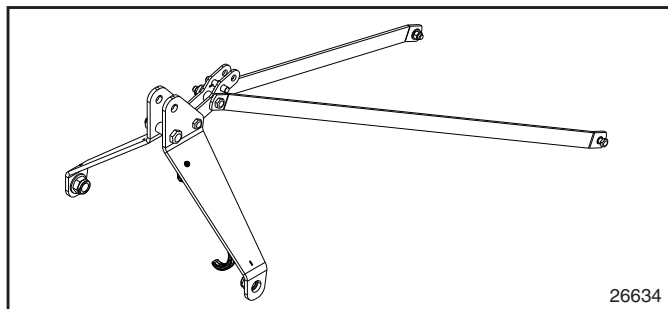
326-116A 3-Point Quick-Hitch with Single Tail Wheel

326-117A 3-Point Quick-Hitch with Dual Tail Wheels

3-Point Hitch

Refer to Figure 4-4:

The standard 3-point Hitch shown in Figure 4-4 is included with the single leveling wheel option and dual leveling wheel option.

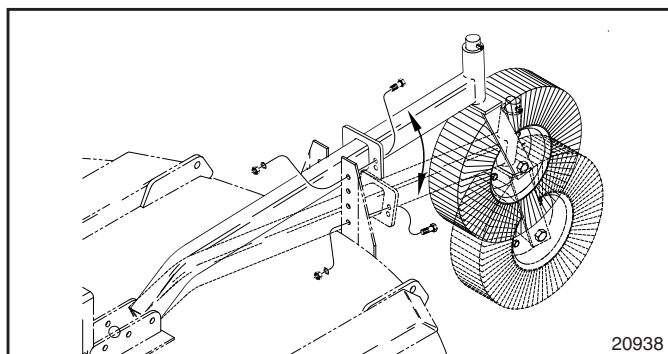


3-Point Hitch
Figure 4-4

Single Leveling Wheel

Refer to Figure 4-5:

The single leveling, 15" laminated tire is an economical solution to mowing when terrain is fairly level. Rear deck height is adjusted by manually raising and lowering the wheel in the rear support bracket. The cutter's front is leveled with the tractor's three point hitch. See "**Single Tailwheel Assembly**" on page 14 for proper installation and detailed adjustment information.

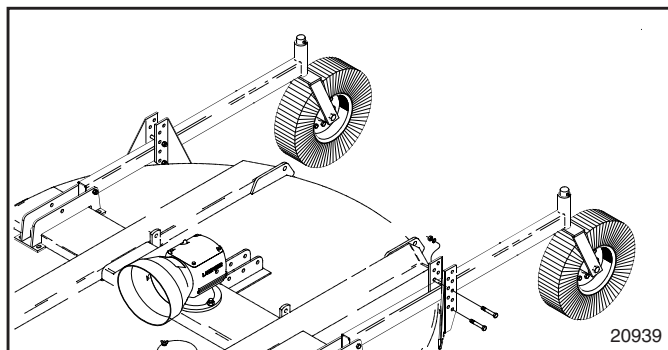


Single Leveling Wheel
Figure 4-5

Dual Leveling Wheels

Refer to Figure 4-6:

The dual leveling, 15" laminated tires is a tougher arrangement designed to distribute cutter weight over a wider area when mowing rough terrain. Rear deck height is adjusted by manually raising and lowering wheels in the rear support brackets. The cutter front is leveled with the tractor's three point hitch. See "**Dual Tailwheel Assembly**" on page 14 for proper installation and detailed adjustment information.



Dual Leveling Wheels
Figure 4-6

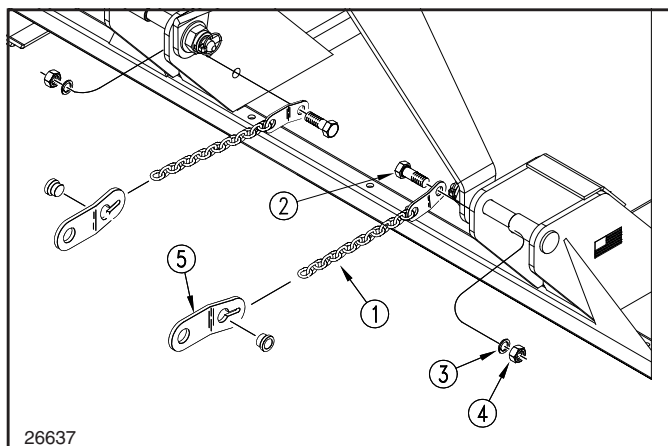
Check Chain Option

Refer to Figure 4-7:

Check Chains are used to control cutting height and allows the cutter to be lowered to the same preset cutting height effortlessly.

NOTE: For additional safety in transport, raise cutter as high as possible, and shorten check chains to prevent inadvertent falling in transport.

See "**Check Chain Installation (Optional)**" on page 13 for proper installation.



Optional Check Chain Assembly
Figure 4-7

Part Number & Description

312-071A Check Chain Assembly

Section 5: Maintenance & Lubrication

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 Paint is a.

DANGER

To avoid serious injury or death:

- Always disconnect driveline from power take-off shaft before servicing underside of cutter. The tractor can be started with power take-off engaged.
- Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.

WARNING

To avoid serious injury or death:

- Do not operate cutter with blades that are out-of-balance, bent, excessively worn, excessively nicked, or with blade bolts that are excessively worn. Such blades can break loose at high speeds.
- Do not attempt to straighten a bent blade or weld on a blade. Do not attempt to modify a blade such as hard surfacing, heat treating, cold treating, or by any other method. Always replace blades with new Land Pride blades to assure safety.
- 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.
- Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.
- Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.

Cutter Blade Maintenance

IMPORTANT: Replace cutting blades in pairs with genuine Land Pride blades only. Replacing single blades can result in an out-of-balance condition that will contribute to premature bearing wear/breakage and/or structural cracks in gearbox and/or deck.

Always inspect cutting blades before each use. Make sure they are properly installed and in working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Never try to straighten a bent blade! Small nicks can be ground out when sharpening. Remove cutting blades and sharpen or replace as follows:

1. Place tractor gear selector in park and/or set brakes, shut engine off and remove ignition key.
2. Disconnect main driveline from tractor PTO and secure cutter deck in the up position with solid supports before servicing underside of cutter.
3. Inspect cutting blades. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, worn, bent, or excessively nicked. Small nicks can be ground out.

Refer to Figure 5-1 on page 25:

4. Remove access cover (#5) and rotate blade bolt (#1) until aligned with blade bolt access hole (A).
5. Unscrew locknut (#3) to remove cutting blade (#6). Blade bolt (#1) is keyed and will not turn freely.
6. Repeat steps 4 to 5 for the other blade.
7. Both blades should be sharpened at the same angle as the original cutting edge and must be replaced or re-ground at the same time to maintain proper balance. The following precautions should be taken when sharpening blades:
 - a. Do not remove more material than necessary.
 - b. Do not heat and pound out a cutting edge.
 - c. Do not grind blades to a razor edge. Leave a blunt cutting edge approximately 1/16" thick.
 - d. Always grind cutting edge so end of blade remains square to cutting edge and not rounded.
 - e. Do not sharpen back side of blade.
 - f. Both blades should weigh the same with not more than 1 1/2 oz. difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.

Refer to Figure 5-2 on page 25:

8. Carefully check cutting edges of blades in relation to blade carrier rotation to ensure correct blade placement. Blade rotation is counterclockwise with cutting edge leading. Airfoil (lift) must be oriented towards the top of the deck.

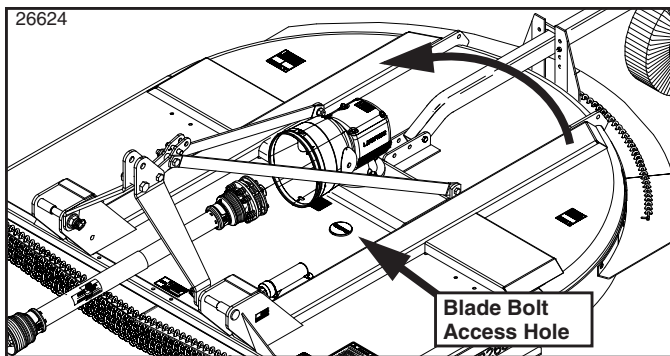
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Use 1-11/16" Socket Wrench On Blade Nut (#3)

Land Pride Cutter Blade Parts

Item	Part No.	Part Description
	318-586A	BLADE BOLT KIT (Includes items 1, 2, & 3 below)
1	802-277C	BLADE BOLT 1 1/8-12 x 3 7/16 WITH KEY
2	804-147C	WASHER FLAT 1 HARD ASTM F436
3	803-170C	NUT HEX TOP LOCK 1 1/8-12 PLATE
4	312-818H	27 OVAL DISHPAN WELDMENT
5	840-273C	PLUG LP 3" ID RUBBER
6	820-138C	STANDARD BLADE 1/2 x 4 x 32" CCW
6	820-194C	LOW LIFT BLADE 1/2 x 4 x 32" CCW

Cutter Blade Assembly
Figure 5-1



Counterclockwise Blade Rotation
Figure 5-2

Refer to Figure 5-1:

IMPORTANT: Examine blade bolts (#1) and flat washers (#2) for excessive wear and replace if worn.

IMPORTANT: A locknut that has been removed can lose its thread locking properties. Reusing a used locknut can result in a thrown blade. Always use a new locknut when installing blades.

9. Insert blade bolt (#1) through blade (#6), dish pan (#4), and flat washer (#2). Secure blade with a **new locknut (#3)** and torque to 450 ft-lb.

10. Repeat step 9 for the other blade.
11. Replace access cover (#5).
12. If replacing dishpan (#4), nut (#7) on gearbox output shaft should be torqued to 450 ft-lbs. minimum and cotter pin (#8) installed with both legs bent opposite directions around nut (#7).

Slip-Clutch Protected Drivelines

Cutter drive components are protected from shock loads by a friction slip-clutch. The clutch must be capable of slippage during operation to protect the gearbox, driveline and other drive train parts.

Clutch Run-In

Friction clutches should be "run-in" prior to initial operation and after long periods of inactivity to remove any oxidation that may have accumulated on friction surfaces. To prevent driveline and gear box damage, repeat "run-in" instructions at beginning of each season and when moisture and/or condensation seizes inner friction plates.

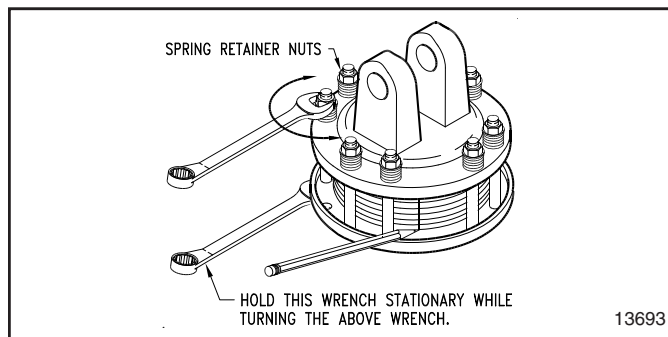
WARNING

To avoid serious injury or death:

Always place tractor in park or set park brake, disengage power take-off, shut tractor engine off, remove switch key, and wait for all moving parts to stop before dismounting tractor.

Refer to Figure 5-3:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction discs.



Clutch
Figure 5-3

2. Carefully loosen each of the 8 spring retainer nuts on the clutch housing a total of EXACTLY 2 revolutions. It will be necessary to hold the hex end of the retainer bolt in order to count the exact number of revolutions.
3. Start tractor and engage driveline for 2-3 seconds to permit slippage of the clutch surfaces. Disengage the PTO, then re-engage a second time for 2-3 seconds. Disengage the PTO, shut off tractor, and remove key. Wait for all components to stop before dismounting from tractor.

Section 5: Maintenance & Lubrication

- Inspect clutch and ensure that scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disc and plate are still aligned.

IMPORTANT: If clutch run-in procedure indicated that one or more friction disks did not slip, the clutch must be disassembled to separate the friction discs.

- Tighten each spring retainer nut on the clutch housing exactly 2 revolutions to restore clutch to original setting pressure. See "**Clutch Assembly**" on page 26 for exact spring length.
- The clutch should be checked during the first hour of cutting and periodically each week. An additional set of scribe marks can be added to check for slippage.

Clutch Disassembly

Refer to Figure 5-4 on page 26:

Disassembly of the clutch is simply a matter of removing the spring retainer nuts (#1), springs (#2), and bolts (#3) from the assembly. Each friction disc (#4) must then be separated from the metal surface adjacent to it.

Clutch Inspection

Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement. The original friction disc thickness is 1/8" (3.2 mm) and should be replaced if thickness falls below 3/64" (1.1 mm). If clutches have been slipped to the point of "smoking," the friction discs may be damaged and should be replaced. Heat build-up may also affect yoke joints.

Clutch Assembly

Refer to Figure 5-4:

Reassemble each friction disc (#4) next to the metal plate it was separated from. Install bolts (#3) through the end plates and intermediate plates as shown. Place springs (#2) over the bolts and secure with nuts (#1).

Refer to Figure 5-4 & Figure 5-5:

Install new friction discs if needed and reassemble all components in proper order. Progressively tighten each spring retainer bolt until spring length is 1.110" to 1.120".

Skid Shoe Maintenance

Refer to Figure 5-6:

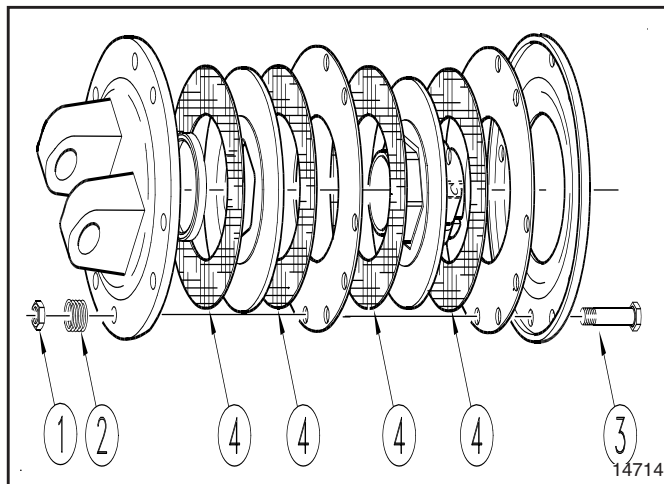
WARNING

To avoid serious injury or death:

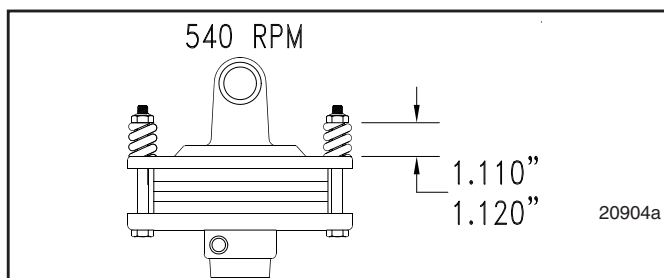
Excessive wear on skid shoes can damage side panels, cause inadequate operation of cutter, and create a safety hazard. Always replace skid shoes at the first sign of wearing thin.

There are two skid shoes mounted on the cutter sides. Check both skid shoes for wear and replace if necessary. Order only genuine Land Pride parts from your local Land Pride dealer.

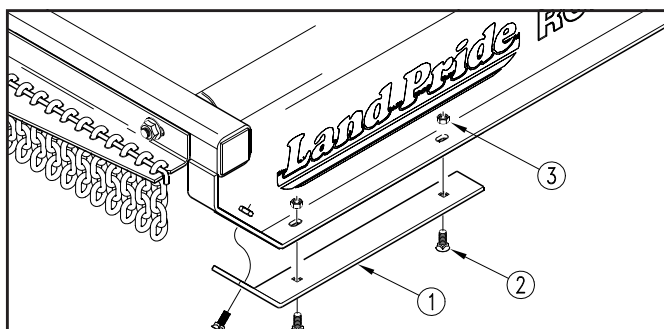
- Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2), and skid shoe (#1) as shown.



Clutch Disassembly
Figure 5-4



Clutch Adjustment
Figure 5-5



Land Pride Skid Shoe Replacement Parts

Part No.	Part Description
312-602D	SKID SHOE
802-603C	PLOW 3/8" - 16 x 1" GR5
803-198C	NUT HEX WHIZ 3/8-16 PLT

Skid Shoe Replacement
Figure 5-6

- Plow bolts should be checked for wear and replaced if necessary.
- Attach new skid shoe (#1) to cutter with existing 3/8" plow bolts (#2) and secure with 3/8" hex whiz nuts. Torque to 31 ft. lbs.
- Repeat on opposite side.

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.

DANGER

To avoid serious injury or death:

- Always disconnect driveline from power take-off shaft before servicing drivetrain and cutter blades. The power take-off can be engaged if tractor is started.
- Always secure equipment with solid, non-concrete supports before working under it. Never go under equipment supported by concrete blocks or hydraulics. Concrete can break, hydraulic lines can burst, and/or hydraulic controls can be actuated even when power to hydraulics is off.

WARNING

To avoid serious injury or death:

Always store cutter with 3-point hitch pivoted back as far as possible. The floating 3-point hitch when not hooked to a tractor can fall backwards unexpectedly causing bodily injury.

1. Clean off any dirt and grease that may have accumulated on the cutter and moving parts. Scrape off compacted dirt from the bottom of deck and then wash surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
2. Check blades and blade bolts for wear and replace if necessary. See "**Cutter Blade Maintenance**" on page 24.
3. Inspect cutter for loose, damaged, or worn parts and adjust or replace as needed.

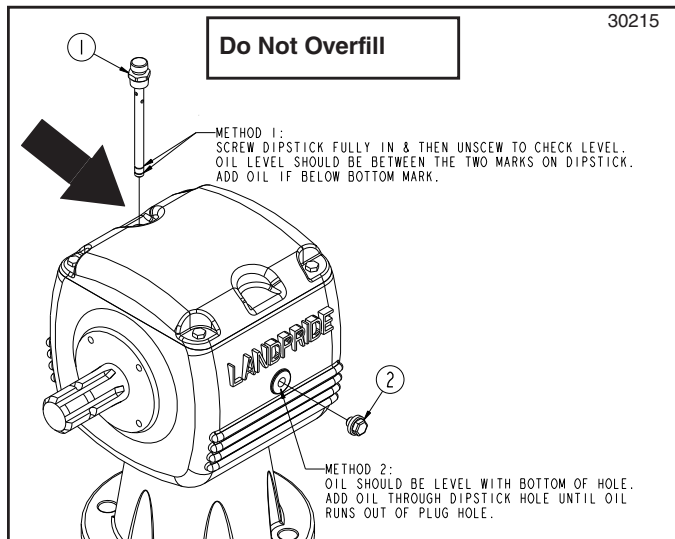
Repaint parts where paint is worn or scratched to prevent rust. Ask your Land Pride dealer for aerosol touch-up paint. Paint is also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.

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.
5. Lubricate as noted under "**Lubrication**" on page 28.
6. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
7. Follow all unhooking instructions on page 20 when disconnecting tractor from cutter..

Lubrication

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



IMPORTANT: This implement is shipped with a vented dipstick packaged in the Operator's Manual bag and should have been installed in the gearbox by your dealer. Please consult your dealer if vented dipstick was not included.

NOTE: Use a suction or siphon pump to drain gearbox of oil when there is not an oil drain plug.

	8 Hours
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Gearbox

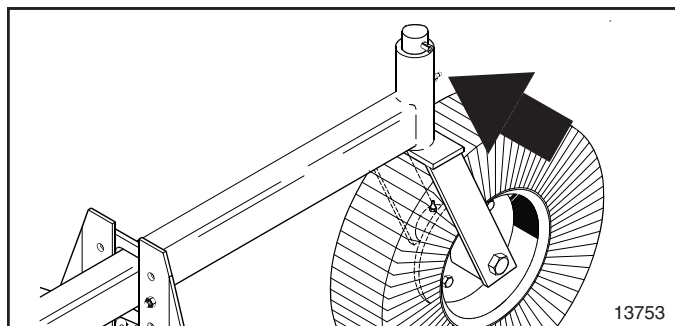
NOTE: Do not overfill! Cutter should be level when checking oil. Oil expands when hot, therefore, always check oil level when cold.

Method 1: Unscrew top vented dipstick (#1). Wipe oil from dipstick and screw dipstick in without tightening. Unscrew dipstick and check oil on dipstick. If below bottom level mark, add recommended gear lube through dipstick hole until oil reaches top mark on dipstick. Reinstall vented dipstick and tighten.

Method 2: Remove side oil plug (#2). If oil is below bottom of plug hole, add recommended gear lube through top dipstick hole until oil flows out of side plug hole. Reinstall and tighten side oil plug (#2) and vented dipstick (#1).

Type of Lubrication: 80-90W EP Gear Lube

Quantity = Fill until oil reaches top mark on dipstick or begins to flow out side plug hole in gearbox.

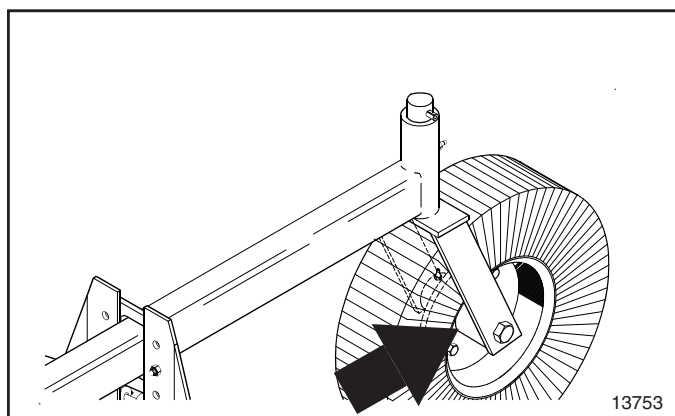


	24 Hours
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Tailwheel Spindle Tube

Type of Lubrication: Multi-purpose Grease

Quantity = 6 pumps



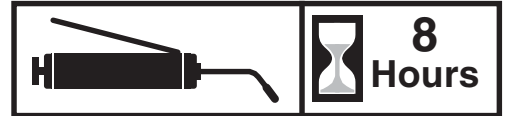
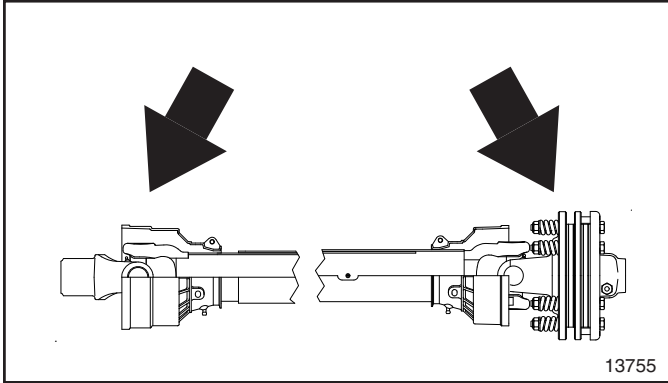
	8 Hours
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Tailwheel Hub

The tailwheel hub is equipped with a relief hole located directly opposite the grease fitting. The relief hole releases pressure from inside the hub casting when it is greased. The hub should be greased until grease purges from the relief hole.

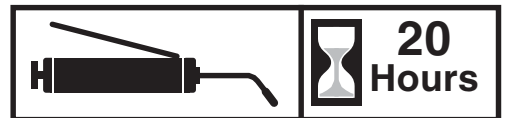
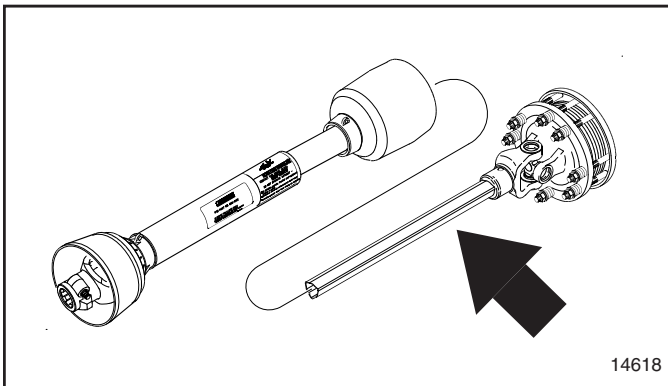
Type of Lubrication: Multi-purpose Grease

Quantity = Until grease purges from relief hole



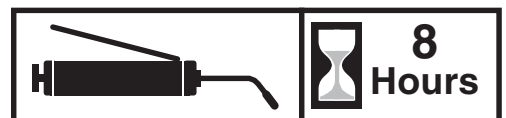
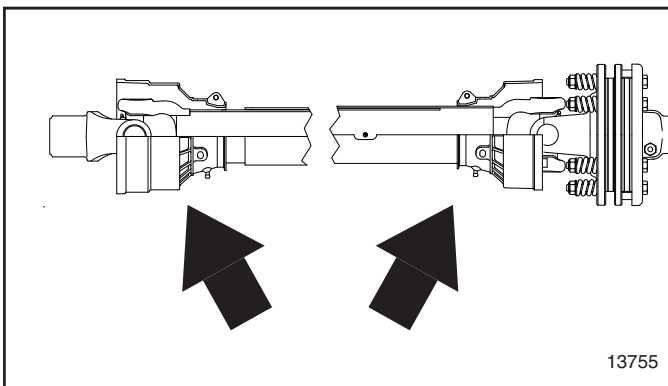
Driveline U-Joints

Type of Lubrication: Multi-purpose Grease
Quantity = 6 pumps



Driveline Profile

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

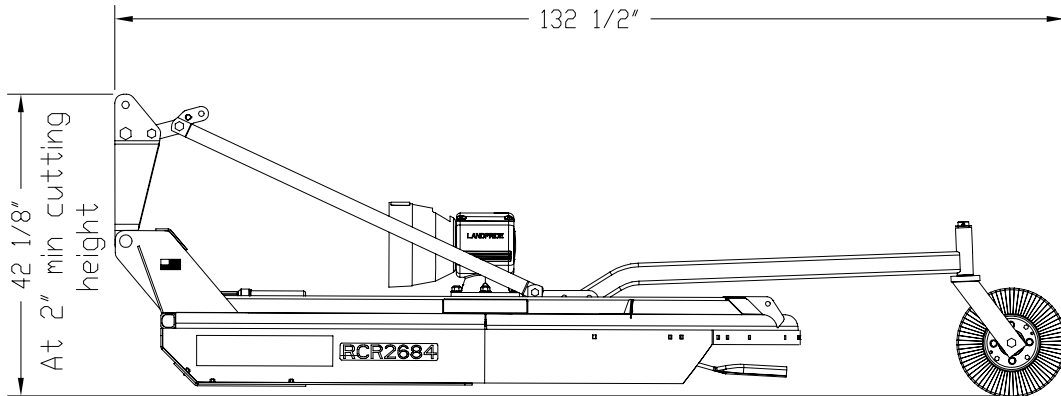
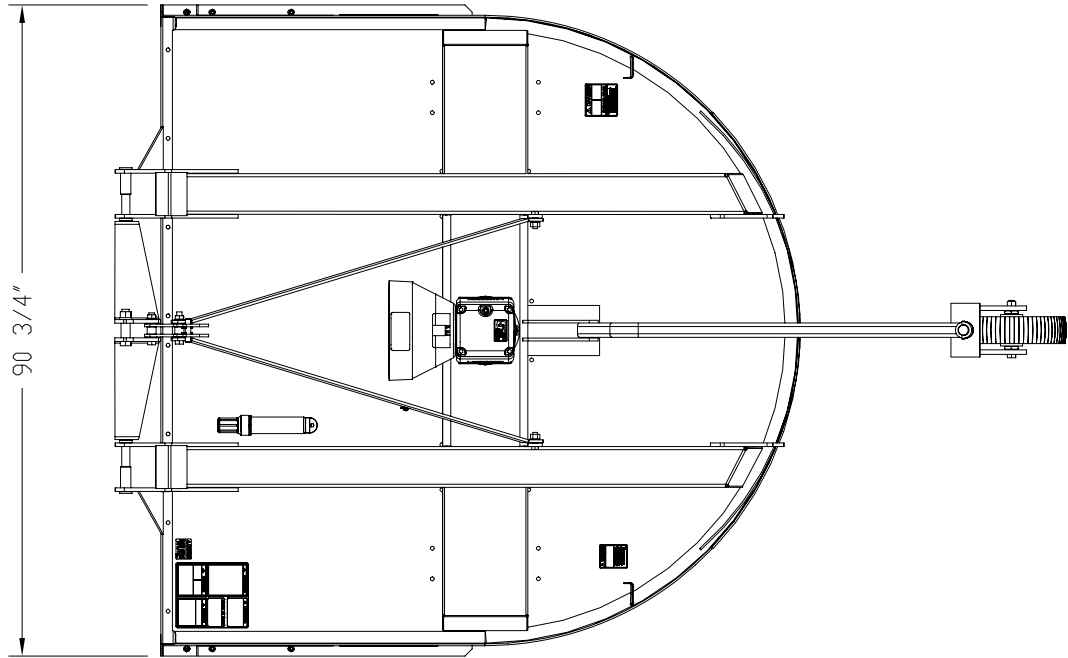


Driveline Inner Tube Bearing

Type of Lubrication: Multi-purpose Grease
Quantity = As required

RCR2684 Model

Specifications & Capacities	
Machine Weight	Single Tailwheel 1370# Dual Tailwheel 1500#
Hitch	Category II or Category III Quick-Hitch
Cutting Width	84"
Overall Width	90 3/4"
Overall Length (Including Tailwheel)	Single Tailwheel 132 1/2" Dual Tailwheel 116"
Deck Height	10 1/8" Bottom of deck to bottom of skid.
Cutting Height	2" - 12"
Cutting Capacity	3"
Recommended Tractor HP	60 to 130 HP
PTO Speed	540 rpm
Gearbox	540 RPM PTO Driven, 1 3/8" 6-Spline Input Shaft, Beveled Gears in Cast Iron Housing
Gearbox Lubrication Quantity & Type	6.5 pints of 80-90W EP Gear Lube
Gear box Input/ Output Shaft Size	Input Shaft = 1 3/8" - 6 Spline Output Shaft = 2" Dia.
Deck Construction	All Welded
Deck Material Thickness	10 Gauge
Deck Side Skirt Thickness	1/4"
Skids	Replaceable
Stump Jumper	Oval Pan 3/16" x 24" x 38"
Blades (2)	1/2" x 4" x 31" Heat Treated Alloy Steel Free-Swinging High Suction Blades
Blade Bolts	Keyed with Harden Flat Washer and Lock Nut
Blade Tip Speed	540 RPM PTO: 14,369 FPM / 163 MPH
Driveline	ASAE Category 4
Driveline Protection	4 Plate Slip Clutch
Tailwheel Mount Assembly	Welded Arm and Caster Fork.
Tailwheel(s)	Provided with single or dual tailwheels. 4.00 x 8 x 15 1/4 Laminated Tire(s) with Cast Iron Hub and Tapered Roller Bearings.
Front Guard	Optional: Chain guard Available through parts department: Rubber guard
Rear Guard	Optional: Chain guard



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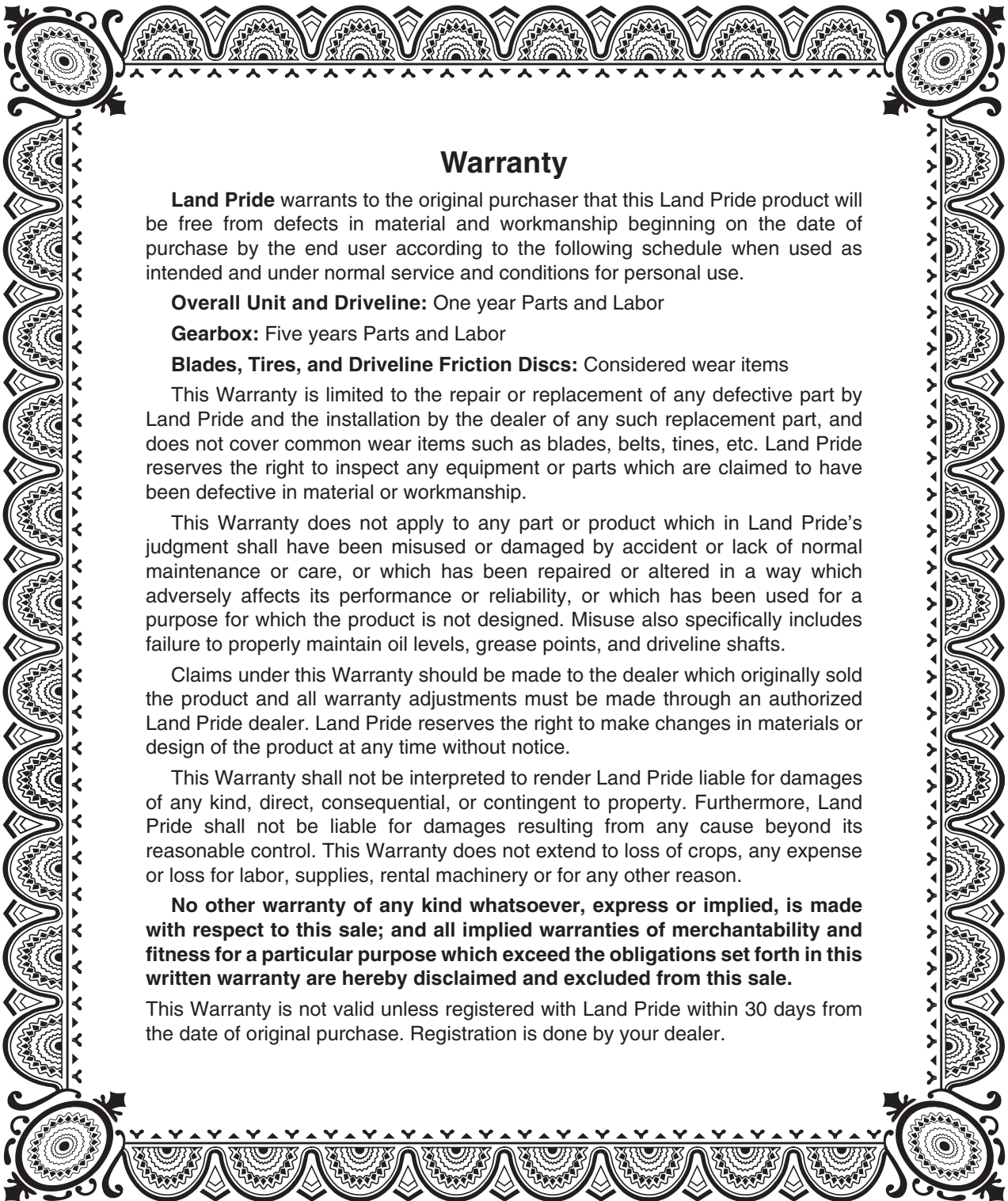
RCR2684 Model

Features	Benefits
Surpassed rugged industry standards	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
5 Year gearbox warranty	A rugged heavy built gearbox capable of handling heavy cutting applications. Shows Land Pride's confidence in gearbox integrity.
130 HP gearbox	A rugged heavy built gearbox capable of handling heavy cutting applications.
Cat. 4 driveline with 4 plate slip-clutch	Excellent gearbox protection with the slip-clutch slipping when encountering obstruction in the blade path. Standard slip-clutch offers convenience over shear-bolts.
Cat. II or III Hitch Quick-Hitch Capability	Permits deck to follow the terrain for an even cut. Quick-Hitch provides for fast hook-up.
Lower clevis type 3-Point hitch	Allows for ease of hook-up to tractor. Also adds additional strength allowing for an even pull from the tractor's lower arms, vs. pulling on a single pin design.
84" Cutting width	Wide cutting width, Reduces cutting time in the field.
Heavy 10 gauge deck construction	Can withstand more abuse than lighter gauge decks.
1/4" Side panels for overall reinforcement	Also protects sides from debris being thrown against them from the blades.
Fully welded deck	Robotically welded. Adds additional strength and deck integrity.
Round back design	Allows for more efficient handling and dispersing of material.
10 1/8" Deck Height	Allows cutter to handle heavy cutting conditions.
2" to 12" Cutting height	Provides for a wide range of cutting conditions.
High cutting capacity	Can cut brushy areas with saplings up to 3".
Full length skids with replaceable shoes	Full length skids protect side plate structure, replaceable shoes for convenience.
1/2" x 4" Heat-treated free swinging blades	Free swinging protects from obstructions. Heat-treated offers longer life.
Splined blade bar	Allows for tight positive fit of stump jumper and blade bar to gearbox output shaft.
3/16" Oval stump jumper	Standard stump jumper aids in sliding over obstructions, which helps protect gearbox output shaft.
High blade tip speed	Ensures clean cut. (14,369 fpm)
Available with single or dual tailwheels	Dual tailwheels offer greater stability in uneven terrain.
15" Rugged Laminated tailwheel	Laminated material is long lasting in rough conditions. Can't go flat.
Chain or rubber shield option	Located on front and rear. Reduces flying debris.

Troubleshooting

Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain to side plug hole.
	Seals damaged	Replace seals
	Grass or wire wrapped on shaft in seal area	check seal areas daily
Driveline yoke or cross failing	Shock load	Avoid hitting solid objects
	Needs lubrication	Lubricate every 8 hours.
Driveline clutch is slipping	Scalping the ground	Raise cutting height
	Cutting too fast	Reduce travel speed
	PTO being engaged too fast at high engine rpm	Slowly engage PTO at low engine rpm
	Cutting over solid objects	Avoid solid objects
Bent Driveline (NOTE: driveline should be repaired or replaced if bent)	Contacting frame	Reduce lift height in transport position
	Contacting drawbar	Reposition drawbar
	Bottoming out	Shorten driveline
Driveline telescoping tube failing	Shock load	Avoid hitting solid objects
Driveline telescoping tube wearing	Needs lubrication	Lubricate every 20 hours
Blades wearing excessively	Cutting on sandy ground	Raise cutting height
	Contacting ground frequently	Raise cutting height
Blades breaking	Hitting solid objects	Avoid hitting solid objects
	Blades hitting each other	Blade carriers need to be timed
Blades coming loose	Blades not tightened properly	Tighten blade hardware (refer to " Cutter Blade Maintenance " on page 24.)
	Improper deck attitude	Lower front of deck, see page 14.
Blade carrier becomes loose	Running loose in the past	Replace gearbox output shaft and blade carrier
	Blade carrier hardware not tight	Tighten to specified torque
Blade bolt holes worn	Blade hardware running loose	Replace blades and blade bolts if worn
Blade carrier bent	Hitting solid objects	Avoid hitting solid objects and replace blade carrier
Excessive side skid wear	Cutting height not level	Adjust cutter height
	Soil abrasive	Adjust cutter height
	Cutting too low	Adjust cutter height
Tail wheel support failing	Lowering too fast	Adjust rate of drop
	Hitting objects when turning	Reduce speed on turns
Excessive vibration	Driveline bent	Replace driveline
	Blades loose	Tighten blade bolts
	Blade carrier bent	Replace blade carrier
	Blade broken	Replace blade
	Blade will not swing	Remove and inspect blade
	Blades have unequal weight	Replace both blades

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													
Blade Carrier Hub Nut							450 ft-lbs. Minimum						
Blade Bolt Locknut							450 ft-lbs.						



Warranty

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

Overall Unit and Driveline: One year Parts and Labor

Gearbox: Five years Parts and Labor

Blades, Tires, and Driveline Friction Discs: 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 such as blades, belts, tines, etc. 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 original purchase. Registration is done by your dealer.

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

Model Number _____

Serial Number _____



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www.landpride.com
