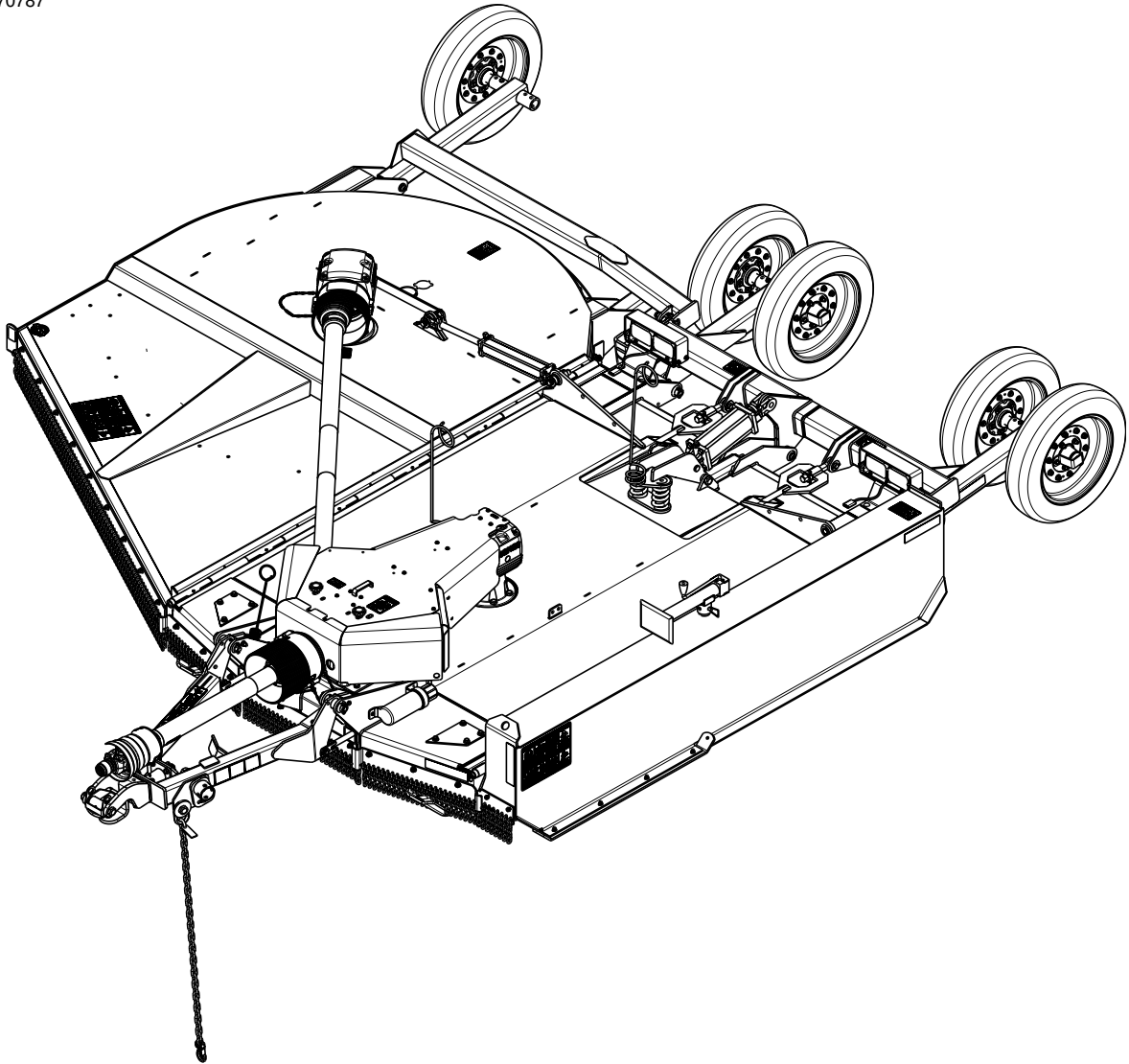


Rotary Cutter

RC(M)5014 Series 2 (S/N 1316091+)

70787



334-713M 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: _____

 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 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 to 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 the implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Start tractor from the driver's seat with hydraulic controls in neutral.
- ▲ Operate tractor and controls from the driver's seat only.
- ▲ Never dismount from a moving tractor or leave tractor unattended with engine running.
- ▲ Do not allow anyone to stand between 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 a safe and secure area where children normally do not play. When needed, secure implement against falling with support blocks.



Look for the Safety Alert Symbol

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

Be Aware of Signal Words

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

- ▲ **DANGER:** Indicates a hazardous situation that, if not avoided, will result in death or serious injury.
- ▲ **WARNING:** Indicates a hazardous situation that, if not avoided, could result in death or serious injury.
- ▲ **CAUTION:** Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

Be Aware of Special Notices

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

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

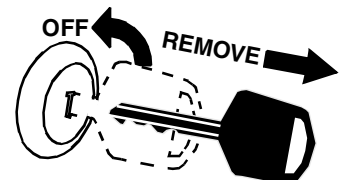
Safety Precautions for Children

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

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

Tractor Shutdown & Storage

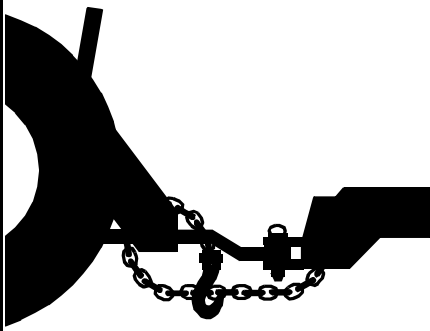
- ▲ If engaged, disengage power take-off.
- ▲ Park on solid, level ground and lower implement to ground or onto support blocks.
- ▲ Put tractor in park or set park brake.
- ▲ Turn off engine and remove ignition key to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressure to auxiliary hydraulic lines.
- ▲ Wait for all components to stop before leaving operator's seat.
- ▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.



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

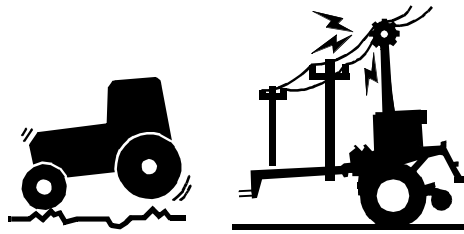
Use A Safety Chain

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



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 unexpectedly. Reduce speed if towed trailer is not equipped with brakes.
- ▲ Avoid contact with any over head 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.



Tire Safety

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



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Refer to the Operator's Manual for additional information.
- ▲ Work on a level surface in a clean dry area that is well-lit.
- ▲ Lower implement to the ground and follow all shutdown procedures before leaving the operator's seat to perform maintenance.
- ▲ Do not work under any hydraulically supported equipment. It can settle, suddenly leak down, or be lowered accidentally. If it is necessary to work under the equipment, securely support it with stands or suitable blocking beforehand.
- ▲ Use properly grounded electrical outlets and tools.
- ▲ Use correct tools and equipment for the job that are in good condition.
- ▲ Allow equipment to cool before working on it.

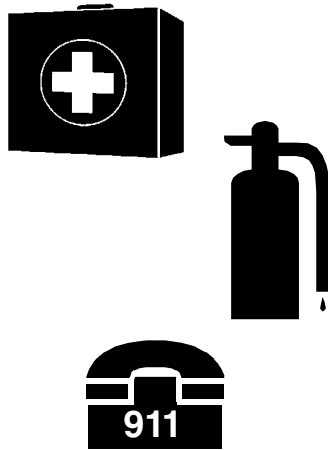
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Replace parts on this implement with genuine Land Pride parts only. Do not alter this implement in a way which will adversely affect its performance.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Always make sure any material and waste products from the repair and maintenance of the implement are properly collected and disposed.
- ▲ Remove all tools and unused parts from equipment before operation.
- ▲ Do not weld or torch on galvanized metal as it will release toxic fumes.



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

Prepare for Emergencies

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



Wear Personal Protective Equipment (PPE)

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



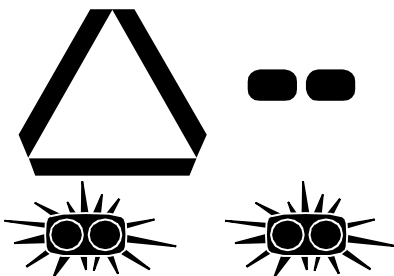
Avoid High Pressure Fluids

- ▲ Escaping fluid under pressure will penetrate the skin or eyes causing serious injury.
- ▲ Relieve all residual pressure before disconnecting hydraulic lines or performing work on the hydraulic system.
- ▲ Make sure all hydraulic fluid connections are properly tightened/torqued and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, seek immediate emergency medical care or gangrene may result.



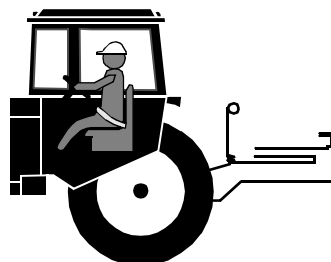
Use Safety Lights and Devices

- ▲ A Slow moving power machine can create a hazard when driven on public roads. They are difficult to see, especially at night. Use the Slow Moving Vehicle (SMV) sign when on public roads.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.



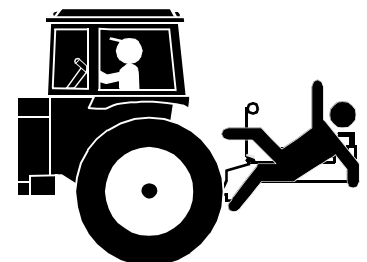
Use Seat Belt and ROPS

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



Keep Riders Off Machinery

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



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

Avoid crystalline Silica (quartz) Dust

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

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



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

Handle Chemicals Properly

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



Dig Safe - Avoid Underground Utilities

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





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Important Safety Information

Safety Labels

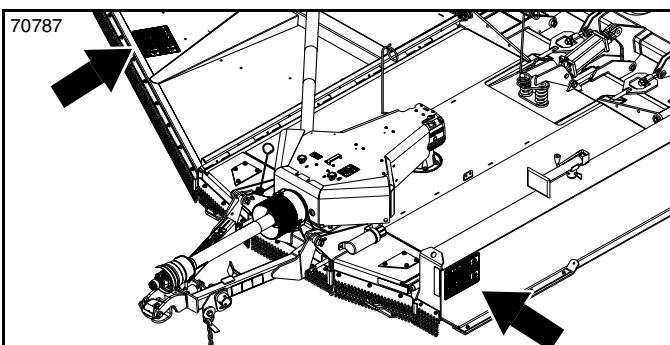
Your Rotary Cutter comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

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.

⚠ WARNING	⚠ DANGER	⚠ DANGER	⚠ DANGER
<p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Do not operate or work on this machine without reading and understanding the Operator's Manual. • Avoid unsafe operation or maintenance. • Transport with clean reflectors, SMV, and lights as required by federal, state, and local laws. • If manual is lost, contact your nearest dealer for a new manual. 	<p>ROTATING DRIVELINE CONTACT CAN CAUSE DEATH KEEP AWAY!</p> <p>DO NOT OPERATE WITHOUT:</p> <ul style="list-style-type: none"> • All driveline guards, tractor and equipment shields in place. • Drivelines securely attached at both ends. • Driveline guards that turn freely on driveline. <p>DO NOT USE PTO ADAPTORS</p>	<p>THROWN OBJECT AND ROTATING BLADE HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Do not operate unless all guards are installed and in good condition. • Inspect and clear debris from mowing area prior to mowing. • Do not operate with bystanders in or around mowing area. • Do not place hands or feet under deck when operating or when engine is running. • Do not operate with wing(s) raised. • Do not operate without wing(s) or weight box. • Do NOT dismount until blades come to a complete stop. 	<p>CRUSHING HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Do not transport without transport locks securely engaged. • Do not walk or work underneath raised wing unless it is securely locked. • Stay clear of wings while they are being raised and lowered.
⚠ WARNING	⚠ WARNING	⚠ WARNING	⚠ WARNING
<p>CRUSHING HAZARD</p> <p>Before performing maintenance on machine and to prevent serious injury or death:</p> <ul style="list-style-type: none"> • Read and understand operator's manual. • Stop engine, set brake, and wait for all moving parts to stop before dismounting. • Support mower securely and apply any supplied hydraulic cylinder locks before working beneath. 	<p>RUN OVER HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Always use seat belt when operating. • Never allow riders on tractor or machine. 	<p>ROLLOVER HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Always use seat belt when operating. • Only operate on tractors equipped with a rollover protective structure (ROPS). • If equipped with foldable ROPS, only operate in the unfolded and locked position. • Use caution when mowing along inclines. 	<p>ROLLOVER HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Do not transport on an incline with wing(s) raised. • Do not transport without wing or weight box.
⚠ WARNING: Cancer and reproductive harm - www.P65Warnings.ca.gov			



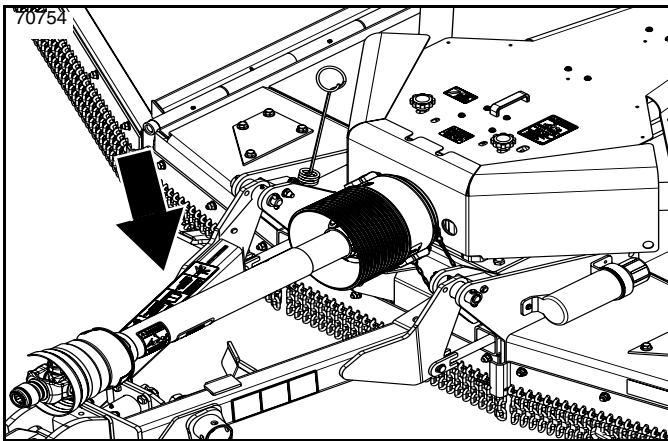
858-949C

Safety Combo
(2 places) Located on front end of wing and weight box

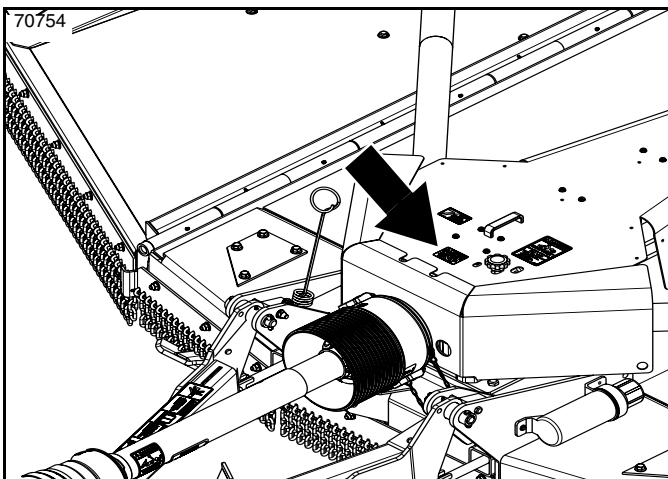


	<p>⚠ DANGER</p> <p>CRUSHING HAZARD To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Do not stand between implement and tractor when hitching together. • Keep others away. 		<p>⚠ WARNING</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Avoid unsafe operation or maintenance. • Do not operate or work on this machine without reading and understanding the Operator's Manual. • If manual is lost, contact your nearest dealer for new manual.
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	<p>⚠ WARNING</p> <p>HIGH PRESSURE FLUID HAZARD To prevent serious injury or death:</p> <ul style="list-style-type: none"> • Relieve pressure on system before repairing, adjusting, or disconnecting. • Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands. • Keep all components in good repair. 		<p>⚠ WARNING</p> <p>Do not exceed 20 miles per hour transport speed. To prevent machine damage, limit speed while:</p> <ul style="list-style-type: none"> • Transporting. • Turning. • In windy conditions. • In rough and hilly terrain. <p>858-954C</p>
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858-954C
Safety Combo

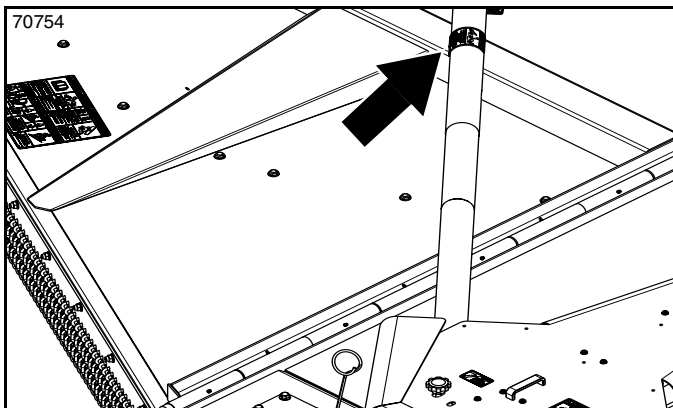
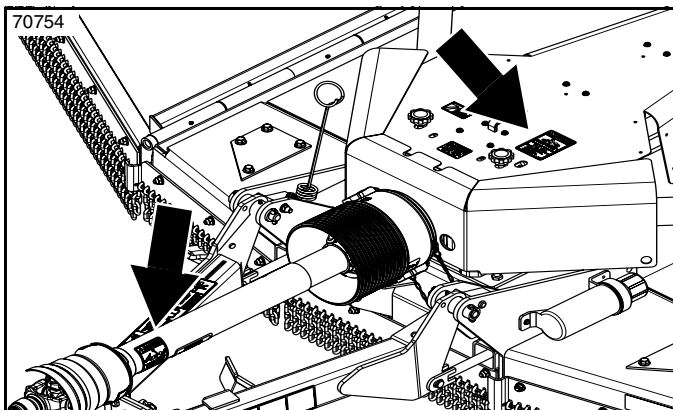
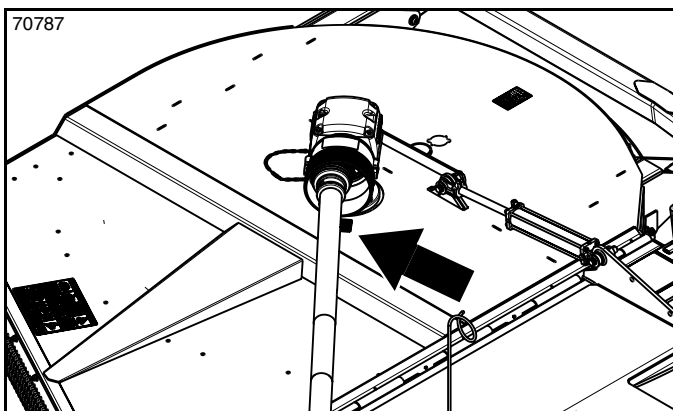
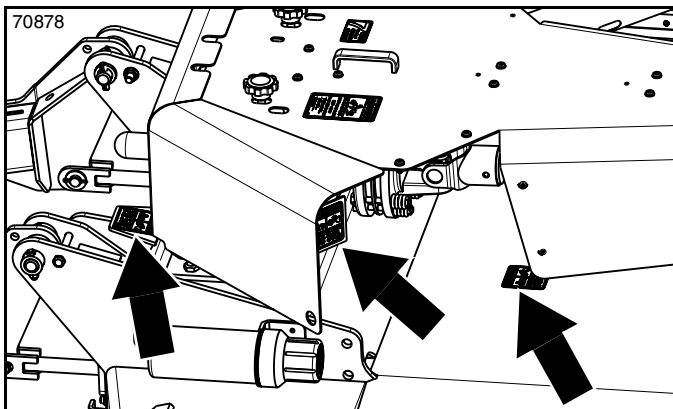


818-130C
Warning: Use with 540 rpm only (RC5014)



818-240C
Warning: Use with 1000 rpm only (RCM5014)

Important Safety Information



858-956C

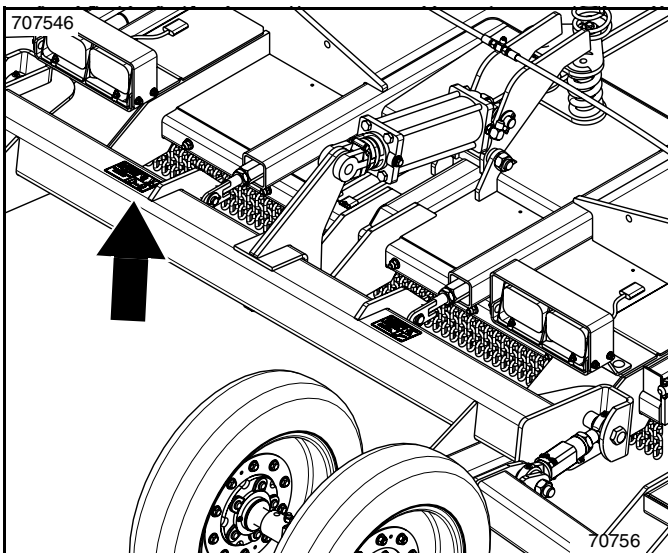
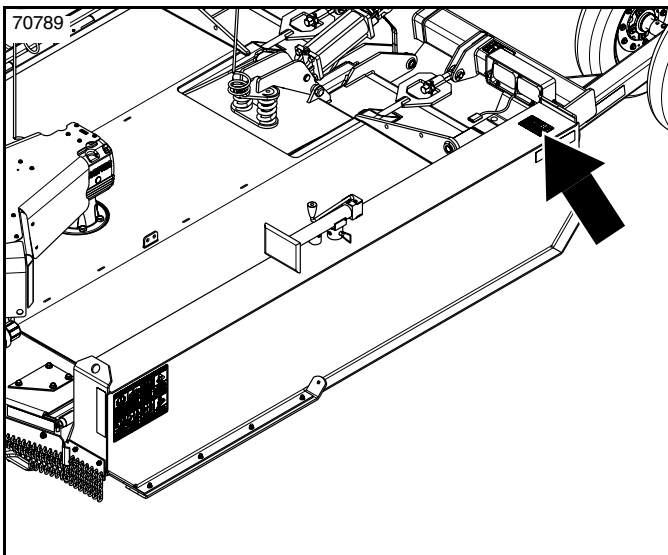
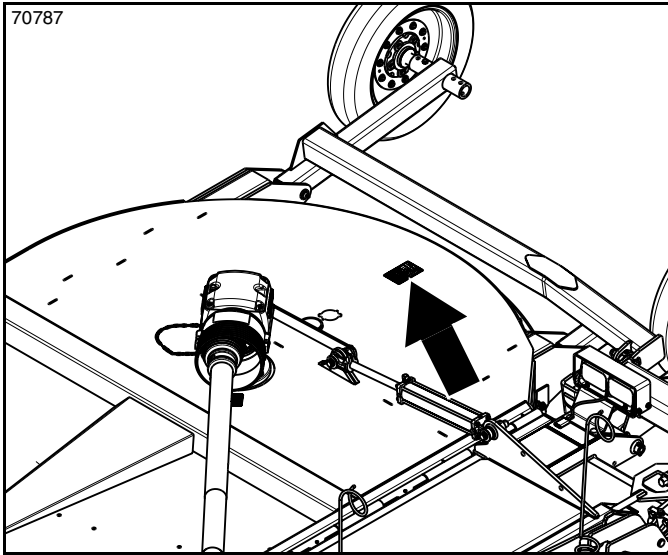
Danger: Guard Missing DO NOT Operate
 Located beneath each gearbox shield



818-552C

Danger! Rotating Driveline Hazard
 3-Places (Top of splitter shield, main driveline and wing driveline)

Important Safety Information



! DANGER	
<p>THROWN OBJECT AND ROTATING BLADE HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> ● Do not operate unless all guards are installed and in good condition. ● Inspect and clear debris from mowing area prior to mowing. ● Do not operate with bystanders in or around mowing area. ● Do not place hands or feet under deck when operating or when engine is running. ● Do not operate with wing(s) raised. ● Do not operate without wing(s) or weight box. <p style="text-align: right; font-size: small;">858-947C</p>	

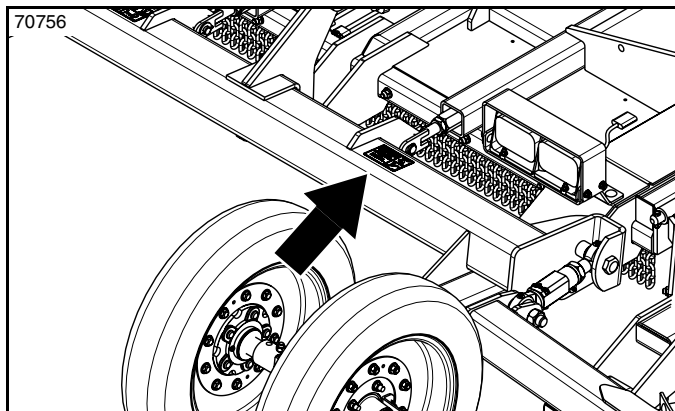
858-947C

Danger! Thrown Object & Rotating Blade Hazard
(2 places) Located on back of wing and weight box

! WARNING	
<p>PINCHING AND CRUSHING HAZARD</p> <p>To prevent serious injury or death, stand clear of machine while it is:</p> <ul style="list-style-type: none"> ● Folding and unfolding. ● Raising and lowering. 	
858-950C	

858-950C

Warning! Pinching & Crushing Hazard

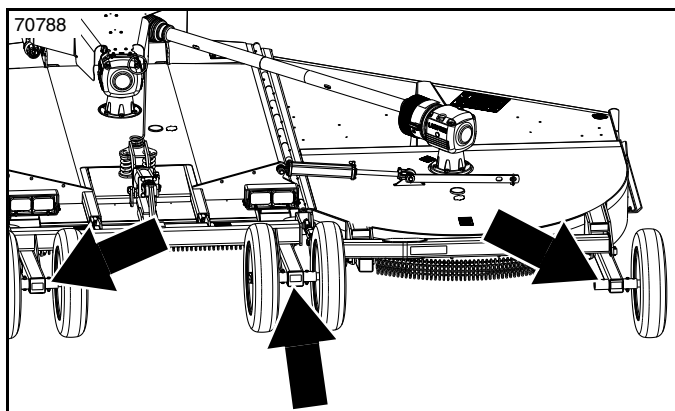


<p>WARNING</p> <p>CRUSHING HAZARD To prevent serious injury or death, always engage transport lock(s) before:</p> <ul style="list-style-type: none"> • Transporting on road. • Performing maintenance. • Disconnecting from tractor. 	

858-951C

858-951C

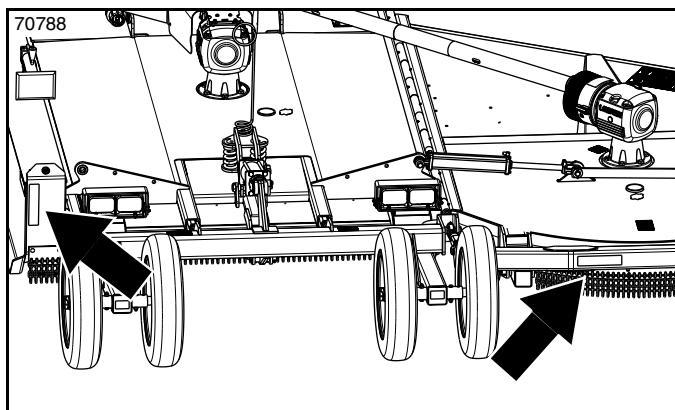
Warning! Crushing Hazard



818-230C

1 11/16" x 2 13/16" Red Reflector

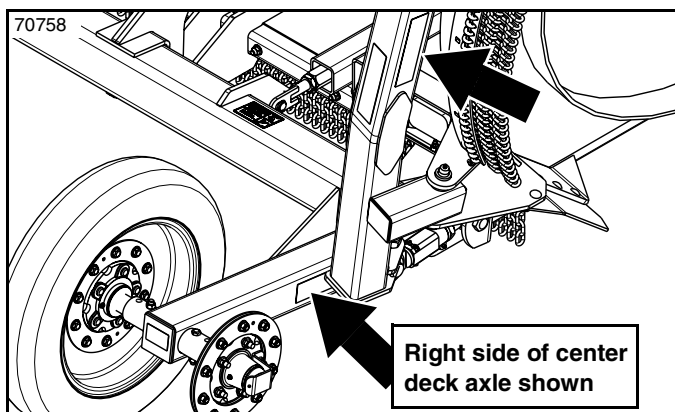
(3 places) Located on back side of wing axle and center deck axle



838-614C

2" x 9" Red Reflector

(2 places) Located on back side of wing axle and weight box

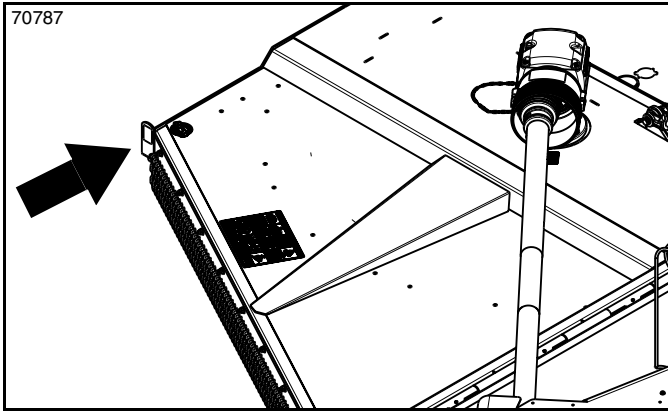


838-615C

2" x 9" Amber Reflector

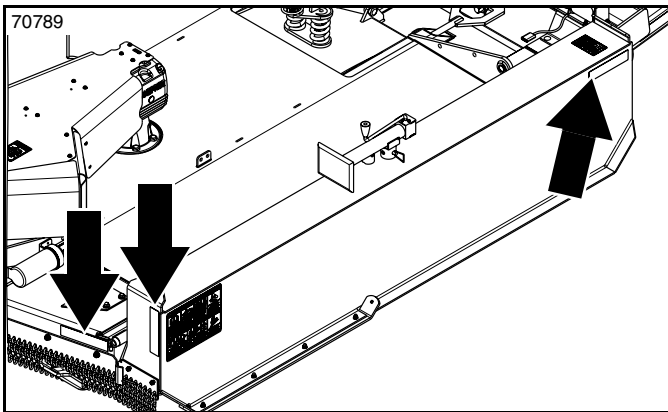
(3 places) Located beneath wing axle and left and right side of center deck axle

Important Safety Information



818-229C

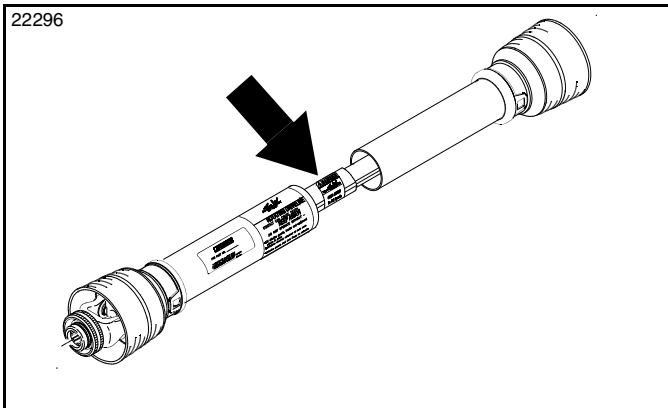
1 3/4" x 2 3/4" Amber Reflector



838-615C

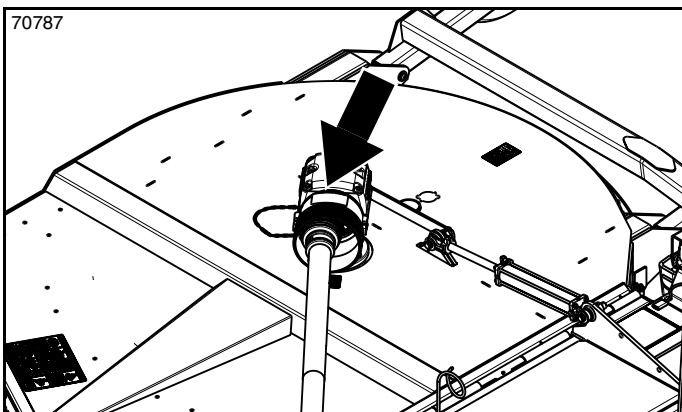
2" x 9" Amber Reflector

(3 places) Located front left corner of the center deck, front upper right corner of the weight box, and back upper right corner on the left side of the weight box



818-540C

Danger! Shield Missing - DO NOT Operate
3-Places (Located on main and two wing drivelines)



818-142C

Danger! Rotating Driveline - Hazard



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 product.

Application

The heavy-duty RC5014 and RCM5014 Series 2 Rotary Cutters are designed and built by Land Pride to provide excellent cutting performance on gently sloping or slightly contoured right-of-ways, roadsides, pastures, set-aside-acres, or for residue in row crop fields.

The 14' (4.27 m) cutting width, 2" to 14" (5.1 to 35.6 cm) cutting height (Cutting height may vary by tire size and drawbar height), and ability to cut weeds and brush up to 3" (7.6 cm) in diameter make them well suited for these applications.

Both models offer pull-type, self-leveling, clevis hitch and Cat. 6 constant velocity main driveline for attachment to 90 -250 hp (67.1 to 186.4 kw) tractors. The RC5014 attaches to 540 rpm tractors and RCM5014 attaches to 1000 rpm tractors. Two different chain guard options are available on each model to accommodate your cutting application.

See “**Specifications & Capacities**” on page 58 and “**Features & Benefits**” on page 60 for additional information and performance enhancing options.

Using This Manual

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

Terminology

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

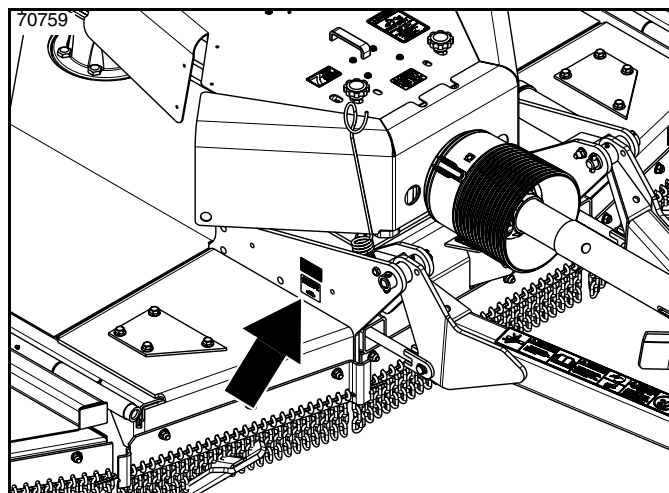
Owner Assistance

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

The parts on your 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 correspondence with your Land Pride dealer. For location of your serial number plate, see Figure 1.



Serial Number Plate Location
Figure 1

Further Assistance

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

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

Land Pride Service Department
1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060
E-mail address
lp servicedept@landpride.com



Section 1: Assembly & Set-up

Tractor Requirements

Horsepower

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

- Horsepower rating90 - 250 hp (67.1 - 186.4 kw)
- Hitch type (See Drawbar Set-up) Drawbar
- Rear power take-off speed:
 - RC5014540 rpm
 - RCM50141000 rpm
- Hydraulic outlets (See Hydraulic Set-up)
 - Factory standard 2 Duplex outlets
- Electrical7-pin outlet

Drawbar Set-up

Refer to Figure 1-1:

DANGER

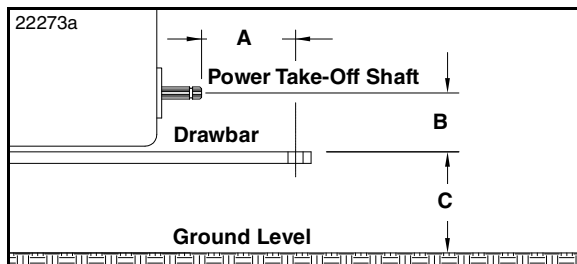
To avoid serious injury or death:
Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

WARNING

- To avoid serious injury or death:
- Do not use a tractor that is too small or too large. Small tractors can be pushed around and flipped over. Large tractors can damage the attached implement.
 - Power take-off and/or driveline damage may occur if distances "A" and "B" are not properly maintained.

Maintain proper distance, dimension "A," between center of drawbar hitch pin hole and end of tractor power take-off shaft.

- 540 rpm & 1 3/8" (3.5 cm) @ 1000 rpm power take-off speed:
 - "A" 14" - 16" (35.6 - 40.6 cm)
 - "B" 8" - 10" (20.3 - 25.4 cm)
 - "C" 18" - 22" (45.7 - 55.9 cm)
- 1 3/4" (4.4 cm) @ 1000 rpm power take-off speed:
 - "A" 18" - 20" (45.7 - 50.8 cm)
 - "B" 10" - 12" (25.4 - 30.5 cm)
 - "C" 18" - 22" (45.7 - 55.9 cm)



Power Take-Off Shaft to Drawbar Distance
Figure 1-1

Hydraulic Outlets

Two duplex outlets are required. One to raise and lower the cutter and one to raise and lower the wing. It is highly recommended to connect the wing fold hose to a duplex outlet with float capabilities and to use the float when in field operation.

If your tractor is not equipped with two duplex outlets, optional control valve kits are available from your local Land Pride dealer. See "Selector Control Valve Kit" on page 38 for optional control valve kits.

Torque Requirements

See "Torque Values Chart" on page 62 to determine correct torque values when tightening hardware. See "Additional Torque Values" at bottom of chart for exceptions to common torque values.

Before You Start

Read and understand the operator's manual for your cutter. An understanding of how it works will aid in the assembly and setup of your cutter.

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

Pre-Assembly Checklist

Check	Reference
<input type="checkbox"/> Have a forklift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
<input type="checkbox"/> Have a minimum of two people available during assembly.	
<input type="checkbox"/> Make sure all major components and loose parts are shipped with the machine.	Operator's Manual
<input type="checkbox"/> Double check to make sure all parts, fasteners, and pins are installed in the correct location. Refer to the Parts Manual if unsure. By double checking, you will lessen the chance of using a bolt incorrectly that may be needed later. NOTE: All assembled hardware from the factory has been installed in the correct location. Remember location of a part or fastener if removed during assembly. Keep parts separated.	Operator's Manual 334-713M Parts Manual 334-713P
<input type="checkbox"/> Make sure working parts move freely, bolts are tight & cotter pins are spread.	Operator's Manual
<input type="checkbox"/> Make sure all grease fittings are in place and lubricated.	Page 50
<input type="checkbox"/> Make sure all safety labels are correctly located and legible. Replace if damaged.	Page 6
<input type="checkbox"/> Make sure all red and amber reflectors are correctly located and visible when machine is in transport position.	Page 6
<input type="checkbox"/> Make sure all tires are inflated to the specified psi air pressure and all wheel bolts and axle nuts are tightened to the specified torque.	Page 62

Section 1: Assembly & Set-up

Hitch Types

The cutter is factory supplied with the standard clevis hitch. Other optional hitches are available. They include Land Pride Performance Hitch, bar-tite hitch, ball hitch, and pintle hitch. See your nearest Land Pride dealer should you want to change your hitch set-up.

Standard Clevis Hitch

Refer to Figure 1-2:

A clevis leveling rod attached to the underside of the clevis keeps the clevis parallel with tractor drawbar at all cutting heights. Cutter rotation about the tractor drawbar is limited to slots located in the clevis' upper and lower plates and drawbar hole size.

Land Pride Performance Hitch (Optional)

Refer to Figure 1-3:

The LP Performance Hitch is a drawbar friendly, self-leveling hitch that pivots up and down and side-to-side. It is held upright with customer-supplied hitch pin to allow single-person hook-up.

Bar-Tite Hitch (Optional)

Refer to Figure 1-4:

The bar-tite hitch functions similar to LP Performance Hitch except it clamps directly to the drawbar. The bar-tite hitch is sandwiched between hardened steel plates to eliminate drawbar wear. It has a bushing in the tongue to extend hitch life. Bushing and hitch swivel are greasable.

Ball Hitch (Optional)

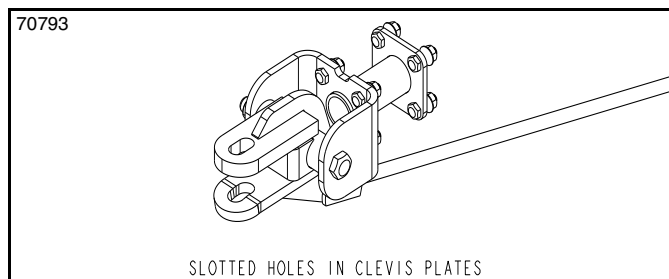
Refer to Figure 1-5:

Cutter rotation about the tractor drawbar is limited to swivel movement over the 2 5/16" tractor mounted ball.

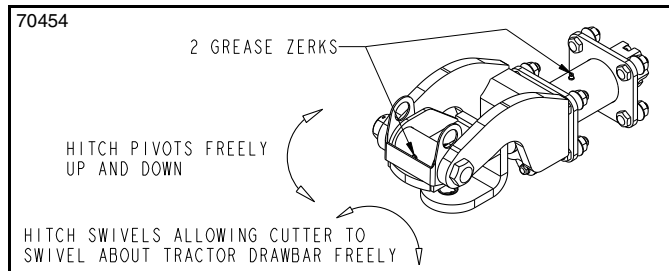
Pintle Hitch (Optional)

Refer to Figure 1-6:

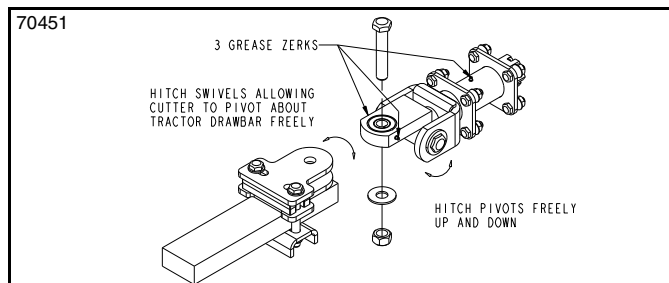
A leveling rod attached to the underside of the pintle hitch keeps the pintle parallel with the tractor drawbar at all cutting heights. Cutter rotation about the tractor drawbar is limited to movement about the pintle connection. The pintle hitch is ideal for a drawbar hammer strap.



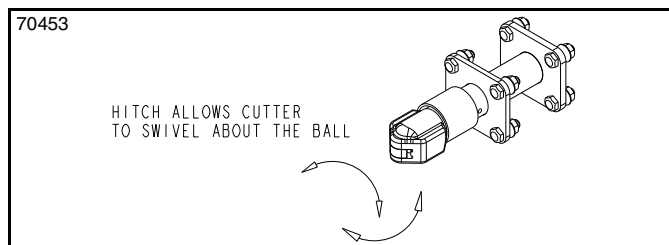
**Fixed Clevis Hitch
Figure 1-2**



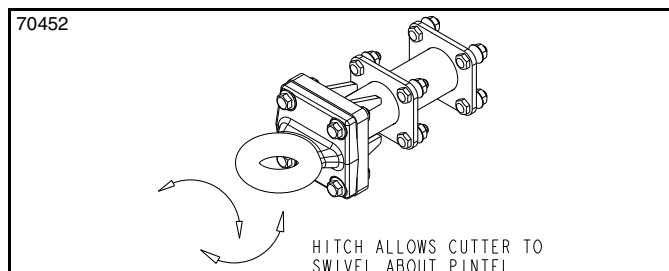
**LP Performance Hitch
Figure 1-3**



**Bar-Tite Hitch
Figure 1-4**



**Ball Hitch
Figure 1-5**



**Pintle Hitch
Figure 1-6**

Section 1: Assembly & Set-up

Tractor Shutdown Procedure

The following are basic tractor shutdown procedures. Follow these procedures and any additional shutdown procedures provided in your tractor Operator's Manual before dismounting the tractor.

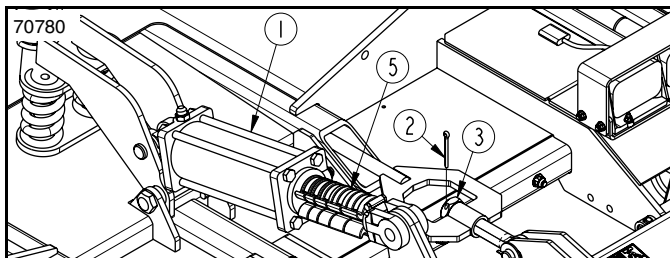
1. Reduce tractor engine speed to an idle.
2. If power take-off is engaged, disengage it.
3. Park tractor and implement on level, solid ground.
4. Lower implement to ground or onto solid, non-concrete support blocks.
5. Put tractor in park or set park brake, turn off engine, and remove switch key to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

Hitch Assembly

NOTE: The center deck lift cylinder hose will need to be connected to a tractor before the hitch on the cutter can be rotated down for assembly.

Refer to Figure 1-7:

1. Connect center deck lift cylinder hose to a tractor. See "**Hydraulic Hook-up**" on page 20 for instructions.
2. Raise cutter up with tractor control lever and remove cylinder stops (#5) from center deck cylinder (#1).
3. After removal of cylinder stops (#5), lower center deck down until it is fully resting on the ground.



Cylinder Stops
Figure 1-7

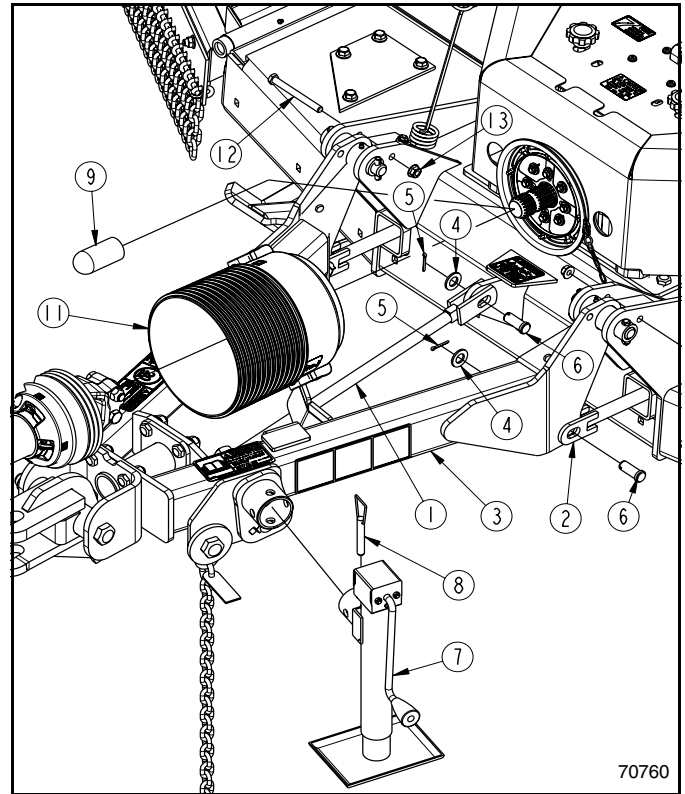
Refer to Figure 1-8:

4. Hitch (#3) is shipped hinged up and bolted in place. Hook-up hitch (#3) to a hoist then remove and discard 1/2" hex whiz nuts (#13) and 1/2" bolts (#12).
5. Use the hoist to rotate hitch frame (#3) down into pulling position as shown. Install left and right leveling rods (#2) to hitch frame (#3) with 3/4" clevis pins (#6), 3/4" flat washers (#4), and cotter pins (#5).
6. Leveling rod adjustments will be made after cutter is attached to the tractor.

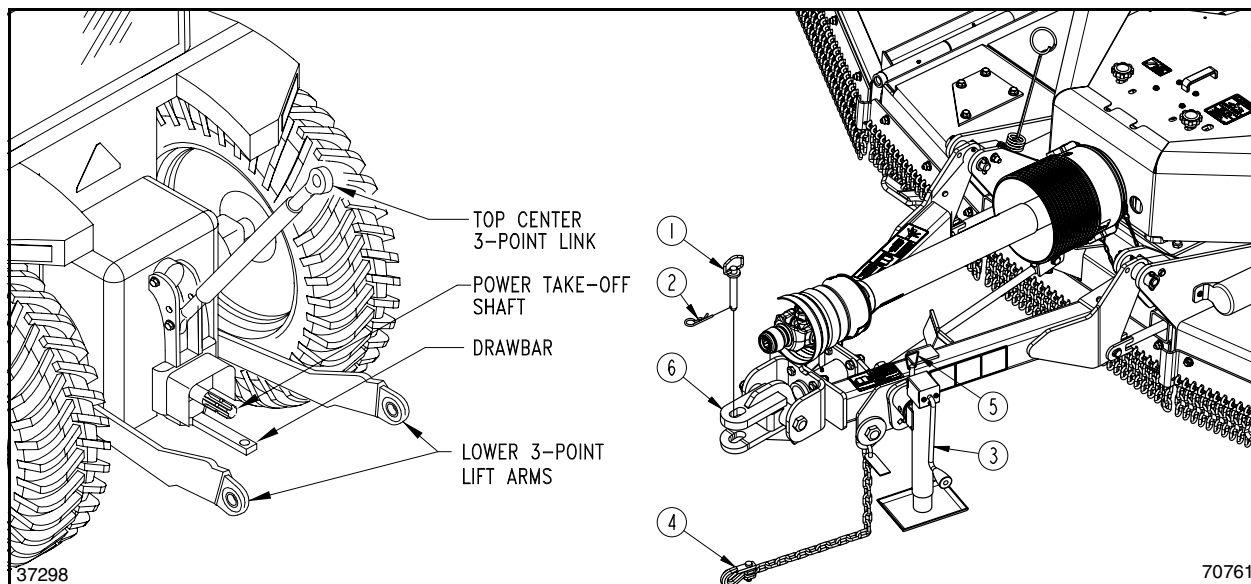
Attach Park Jack

Refer to Figure 1-8:

1. Attach park jack (#7) to jack mount as shown and secure with attached pin (#8).
2. If park jack is not vertical, adjust jack angle according to "**Park Jack Angle Alignment**" on page 27.
3. Adjust jack up or down until hitch frame (#3) is at drawbar height.



Hitch Assembly
Figure 1-8



Standard Clevis Hitch Hook-up
Figure 1-9

Standard Clevis Hitch Hook-up

DANGER

To avoid serious injury or death:

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

WARNING

To avoid serious injury or death:

- The ball detent pin must be fully inserted into the park jack with ball visible and popped out on the far side of the jack before working on or around an unhooked cutter.
- 3-point arms are known to contact & damage main drivelines. To avoid contact, keep 3-point arms in the raised position, or remove from tractor.

Refer to Figure 1-9:

1. Make certain park jack (#3) is properly attached to the cutter hitch and secured with detent pin (#5). If park jack is not vertical, refer to **“Park Jack Angle Alignment”** on page 27.
2. Store center 3-point link in its storage hook.
3. Start tractor and raise 3-point arms fully up.
4. Carefully back tractor within close proximity of clevis (#6).
5. Shut tractor down properly before dismounting. Refer to **“Tractor Shutdown Procedure”** on page 15.
6. Verify tractor drawbar is adjusted correctly. Refer to **“Drawbar Set-up”** dimensions on page 13.

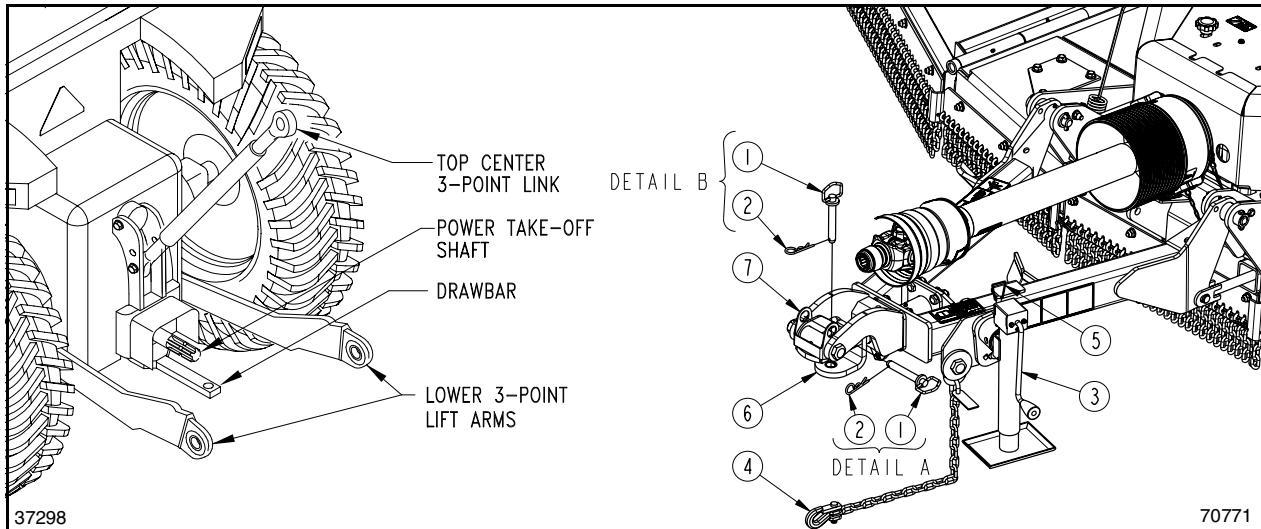
7. Raise or lower park jack (#3) to align clevis (#6) with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
8. Restart tractor and continue to back tractor up to cutter hitch until hitch holes in tractor drawbar and hitch clevis (#6) are aligned.
9. Shut tractor down properly before dismounting.

NOTE: Hitch pin (#1) and hairpin cotter (#2) are supplied by customer.

10. Attach cutter to tractor drawbar with customer-supplied hitch pin (#1) and hairpin cotter (#2).
11. Lower park jack (#3) until hitch weight is supported by drawbar.

IMPORTANT: Before moving the cutter, relocate protect park jack by attaching it to the weight box. Make sure the jack is stored with its base level or lower than the head to prevent water and freeze damage.

12. Remove park jack (#3) from hitch and attach it to the weight box storage base with detent pin (#5). Make sure base is level with or lower than the head. See cover picture for correct positioning.
13. Attach hitch safety chain (#4) to tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.
14. Continue with **“Hydraulic Hook-up”** on page 20.



LP Performance Hitch Hook-up
Figure 1-10

LP Performance Hitch Hook-up

DANGER

To avoid serious injury or death:

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

WARNING

To avoid serious injury or death:

- The ball detent pin must be fully inserted into the park jack with ball visible and popped out on the far side of the jack before working on or around an unhooked cutter.
- 3-point arms are known to contact & damage main drivelines. To avoid contact, keep 3-point arms in the raised position, or remove from tractor.

Refer to Figure 1-10:

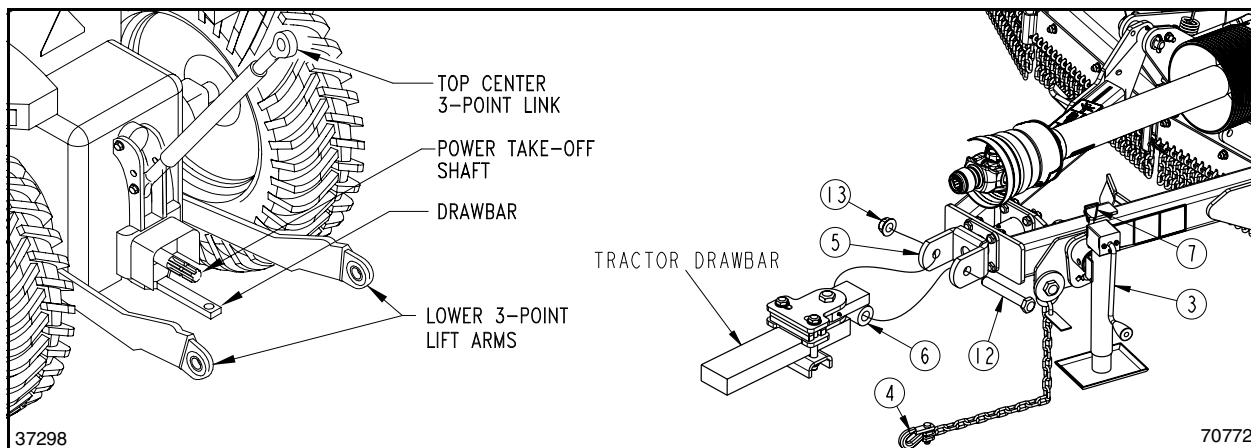
NOTE: Hitch pin (#1) and hairpin cotter (#2) are customer supplied.

1. Make certain park jack (#3) is properly attached to the cutter hitch and secured with ball detent pin (#5).
2. Adjust park jack angle if it is not vertical. Refer to “Park Jack Angle Alignment” on page 27.
3. If clevis hitch is not positioned horizontally, rotate clevis (#6) horizontal and flip hitch holder (#7) up positioning the holes on top as shown. Insert the customer supplied hitch pin (#1) through holes in hitch holder (#7) as shown. Secure with hairpin cotter (#2).
4. Remove bushings in clevis (#6) if customer supplied hitch pin diameter is larger than 1". See “LP Performance Hitch Hole Diameter” on page 27 for instructions.

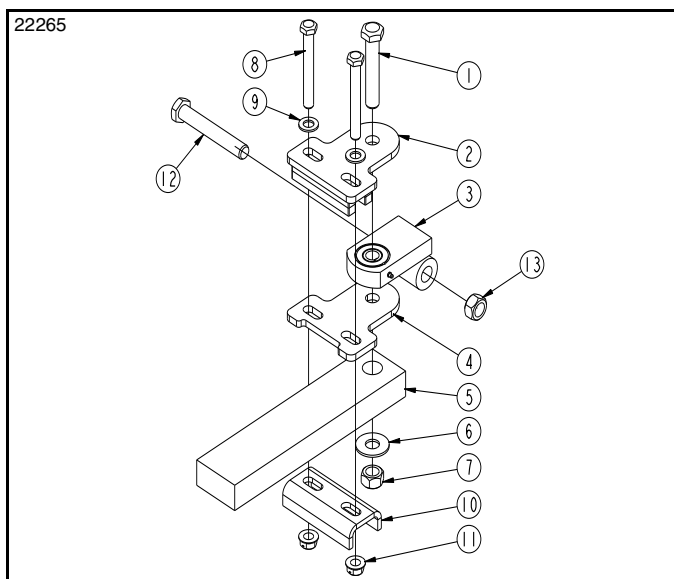
5. Store center 3-point link in the tractor’s storage hook.
6. Start tractor, raise 3-point arms fully up, and carefully back tractor within close proximity of clevis (#6).
7. Shut tractor down properly before dismounting. Refer to “Tractor Shutdown Procedure” on page 15.
8. Verify tractor drawbar is adjusted correctly. Refer to “Drawbar Set-up” dimensions on page 13.
9. Raise or lower park jack (#3) to align clevis (#6) with tractor drawbar. Drawbar should fit between lower and upper plates of clevis.
10. Restart tractor and continue to back tractor up to cutter hitch until holes in tractor drawbar and clevis hitch (#6) are aligned.
11. Shut tractor down properly before dismounting.
12. Remove hairpin cotter (#2) and hitch pin (#1) from hitch holder (#11) and rotate hitch holder down.
13. Attach cutter to tractor drawbar with hitch pin (#1) and hairpin cotter (#2) as shown.
14. Lower park jack (#3) until hitch weight is supported by tractor drawbar.

IMPORTANT: Before moving the cutter, relocate protect park jack by attaching it to the weight box. Make sure the jack is stored with its base level or lower than the head to prevent water and freeze damage.

15. Remove park jack (#3) from hitch and attach it to the weight box base with detent pin (#5). Make sure jack base is level or lower than the jack crank head. See cover picture for correct positioning.
16. Attach hitch safety chain (#4) to the tractor. Adjust chain length to remove all slack except what is necessary to permit turning. Lock chain hook securely to the safety chain.
17. Continue with “Hydraulic Hook-up” on page 20.



Bar-Tite Hitch Hook-up
Figure 1-11



Bar-Tite Hitch Assembly to Tractor Tongue
Figure 1-12

Bar-Tite Hitch Hook-up

Attach Bar-Tite Hitch to Tractor Drawbar

Refer to Figure 1-12:

1. Remove 1" x 6 1/2" GR5 hex bolt (#12) and 1" lock nut (#13) from hitch bushing (#3). Keep bolt and locknut for reuse.
2. Insert 1" x 5 1/2" hex bolt (#1) through hitch top plate (#2), hitch bushing (#3), hitch wear plate (#4), tractor drawbar (#5), and washer (#6) as shown. Secure with 1" locknut (#7). Tighten 1" locknut snugly to remove all play and then back nut one-quarter turn. **Do Not** torque 1" locknut.
3. Insert two 3/4" x 6" GR5 hex bolts (#8) through, 3/4" flat washers (#9), hitch top plate (#2), hitch wear plate (#4), and formed hitch support (#10) as shown. Secure with 3/4" locknuts (#11).
4. Tighten 3/4" locknuts to correct torque.

Attach Bar-Tite Hitch to Rotary Cutter

Refer to Figure 1-11:

! DANGER

To avoid serious injury or death:

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

! WARNING

To avoid serious injury or death:

- The ball detent pin must be fully inserted into the park jack with ball visible and popped out on the far side of the jack before working on or around an unhooked cutter.
- 3-point arms are known to contact & damage main drivelines. To avoid contact, keep 3-point arms in the raised position, or remove from tractor.

1. Make certain park jack (#3) is properly attached to the cutter hitch and secured with detent pin (#7). If park jack is not vertical, refer to "Park Jack Angle Alignment" on page 27.
2. Store center 3-point link in the tractor's storage hook.
3. Start tractor, raise 3-point arms fully up, and carefully back tractor within close proximity of clevis (#5).
4. Shut tractor down properly before dismounting. Refer to "Tractor Shutdown Procedure" on page 15.
5. Verify tractor drawbar is adjusted correctly. Refer to "Drawbar Set-up" dimensions on page 13.
6. Raise or lower park jack (#3) to align pivot tube (#6) with bolt hole in swivel clevis (#5).
7. Restart tractor and back up to cutter hitch until pivot tube (#6) aligns with holes in swivel clevis (#5).
8. Shut tractor down properly before dismounting.

Section 1: Assembly & Set-up

9. Insert 1" x 6 1/2" GR5 hex bolt (#12) through swivel clevis (#5) and pivot tube (#6). Secure bolt with locknut (#13). Tighten locknut snugly to remove all play. **Do Not** torque 1" locknut.
10. Lower park jack (#3) until hitch weight is supported by the drawbar.

IMPORTANT: Before moving the cutter, relocate protect park jack by attaching it to the weight box. Make sure the jack is stored with its base level or lower than the head to prevent water and freeze damage.

11. Remove park jack (#3) from hitch frame and attach it to the weight box storage base with detent pin (#7). Make sure base is level with or lower than the head. See cover picture for correct positioning.
12. Attach hitch safety chain (#4) to tractor. Adjust length to remove slack except what is necessary to permit turning. Securely lock chain hook to the safety chain.
13. Continue with "**Hydraulic Hook-up**" on page 20.

Driveline Assembly

DANGER

To avoid serious injury or death:

Make certain driveline yokes are securely fastened at each end. A loose yoke can work free allowing the driveline to rotate uncontrollably.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "**Lubrication Points**" on page 50.

NOTE: Wing must be lowered before removing the driveline from its shipping location. See "**Unfold Wing**" on page 22.

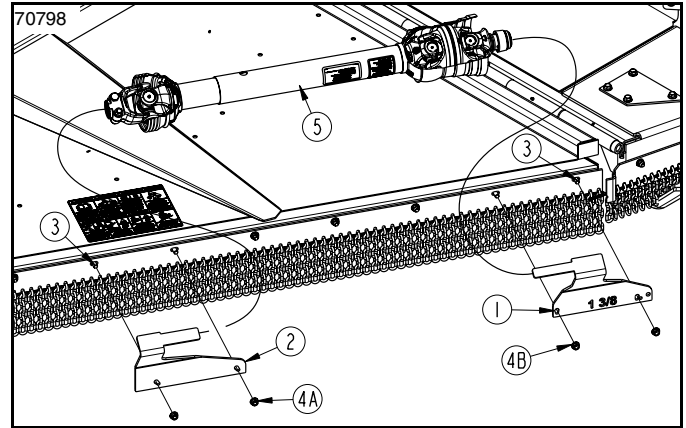
The main driveline type is a constant velocity, with or without overrunning clutch. Pull-collar and bolted couplers are used to secure the driveline to the tractor and implement gearbox, respectively.

Refer to Figure 1-13:

1. Remove hex whiz nuts (#4A), carriage bolts (#3), and shipping bracket (#2). Discard shipping bracket.
2. Slide driveline (#5) off end of shipping bracket (#1). Set driveline aside for attaching to splitter box later.
3. Reinsert carriage bolts (#3) and secure with hex whiz nuts (#4A). Tighten whiz nuts to the correct torque.
4. Remove hex whiz nuts (#4B), carriage bolts (#3), and shipping bracket (#1). Discard shipping bracket.
5. Reinsert carriage bolts (#3) and secure with hex whiz nuts (#4B). Tighten whiz nuts to the correct torque.

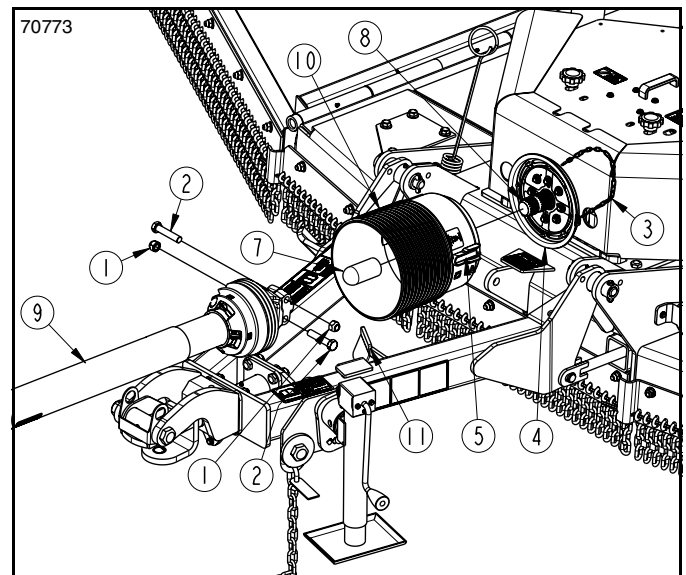
Refer to Figure 1-14:

6. Unsnap latches (#5) on both sides of gearbox shield (#10) and remove shield.



Remove Main Driveline from Shipping Position
Figure 1-13

7. Remove and discard rubber shaft protector (#7) from splitter gearbox shaft (#8).
8. Remove locknuts (#1) and bolts (#2) from bolted coupler end of driveline (#9).
9. Insert bolted coupler end of driveline (#9) through gearbox shield (#10) and attach to gearbox input shaft (#8) with removed bolts (#2) and locknuts (#1). Tighten locknuts to the correct torque.
10. Collapse driveline (#9) by pushing tractor end of driveline toward splitter gearbox.
11. Rotate driveline hanger (#11) up and support driveline (#9) on hanger. Final adjustments to hanger will be made later after tractor hook-up.
12. Return gearbox shield (#10) to mounting plate (#4) and secure with latches (#5).
13. Check safety chain (#3). Make sure it is latched to mounting plate (#4) and gearbox shield (#10).



Driveline Assembly and Tractor Hook-up
Figure 1-14

Section 1: Assembly & Set-up

Driveline Hook-up to Tractor

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.
- 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.
- 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.
- Make certain driveline yokes are securely fastened at each end. A loose yoke can work free allowing the driveline to rotate uncontrollably.

WARNING

To avoid serious injury or death:

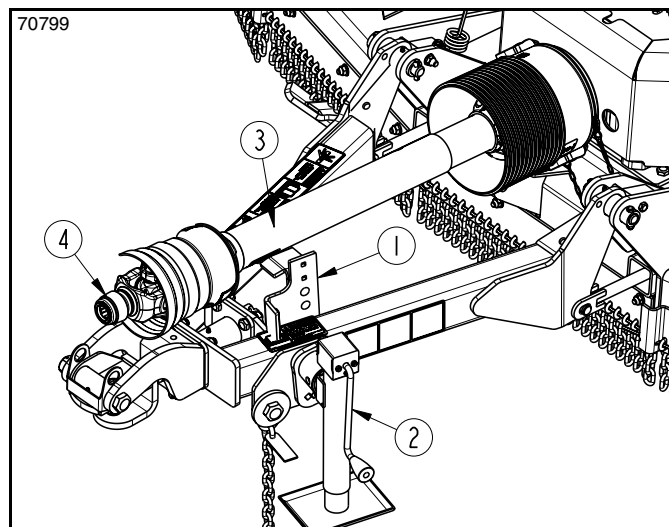
- Always disengage power take-off, put tractor in park or set park brake, shut tractor engine off, remove ignition key, and wait for blades to come to a complete stop before dismantling tractor.
- Some tractors are equipped with two power take-off speeds. Be certain your tractor's power take-off shaft is set-up to operate the implement at its rated power take-off speed. Do not exceed implement's rated power take-off speed. Excessive speed can damage drive components, cutter blades, and/or increase the risk of a thrown object hazard. RC models are rated for 540 rpm and RCM models are rated for 1000 rpm.

Refer to Figure 1-15:

1. If needed, collapse driveline (#3) by pushing tractor end of driveline against splitter gearbox.
2. Pull back on yoke locking collar (#4) and slide yoke onto tractor power take-off shaft.
3. Release locking collar (#4) and continue to push outer yoke onto tractor power take-off shaft until locking collar snaps in place.
4. Both yoke ends of driveline (#3) should be moved back and forth to ensure they are secured. Reattach yoke end if it is loose.

IMPORTANT: Always rotate driveline hanger down after hook-up to prevent driveline damage.

5. Rotate driveline hanger (#1) down.
6. If park jack (#2) is attached to the hitch, it should be removed and stored on the weight box. For detailed instructions, see steps 11-12 on page 16.



Driveline Assembly and Tractor Hook-up
Figure 1-15

Hydraulic Hook-up

WARNING

To avoid serious injury or death:

Hydraulic fluid under high pressure will penetrate the skin or eyes causing a serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. **DO NOT DELAY.**

IMPORTANT: The wing folding levers should be in float position to avoid damage to the wing hydraulic cylinders and axles while cutting on uneven terrain.

The standard cutter is equipped with two hydraulic cylinders with one in the center for lifting the cutter and one for folding the wing. Both cylinders are single action (one-way) operation.

Each duplex outlet on your tractor can perform only one operation. One outlet is needed for lifting the cutter and one for lifting the wing.

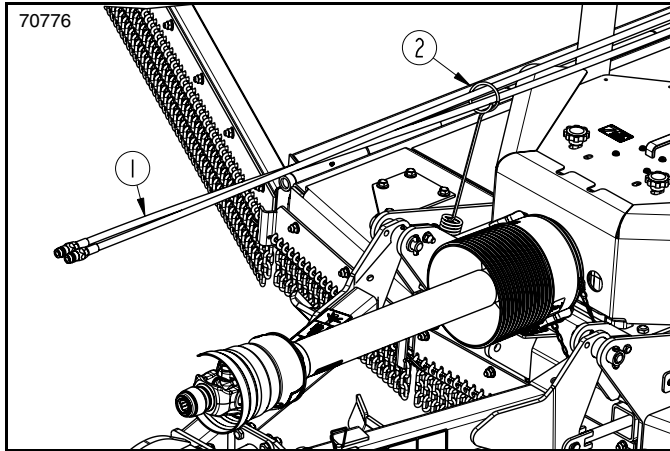
It is highly recommended to connect the wing fold hose(s) to a duplex outlet with float capabilities and use the float when in field operation.

An optional selector control valve kit is available if the tractor does not have the required number of duplex outlets. For additional information, see “**Selector Control Valve Kit**” on page 38.

Refer to Figure 1-16:

Route hydraulic hoses (#1) through hose support loop (#2) and connect to tractor remote outlets. If the tractor has a float option on one of the outlets, connect wing lift hose to that outlet and set tractor control lever for that outlet in the float position before cutting.

Section 1: Assembly & Set-up



Hydraulic Hook-up (LP Performance Hitch Shown)
Figure 1-16

Wing Axle Assembly to Center Axle

Refer to Figure 1-17:

WARNING

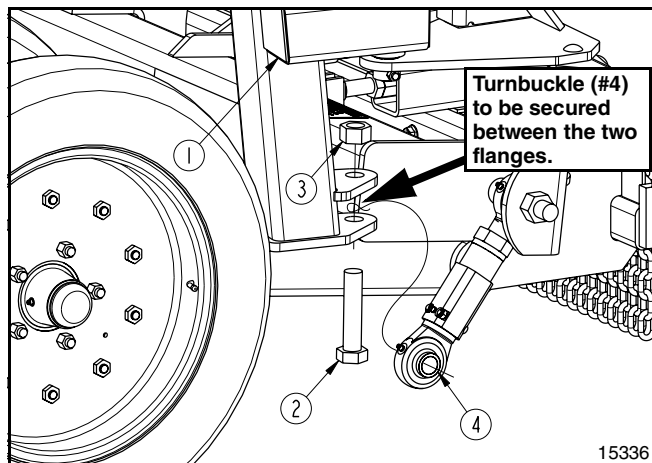
To avoid serious injury or death:

Connect turnbuckle to wing axle before lowering wing. Otherwise, personal injury and/or damage to the turnbuckle can occur.

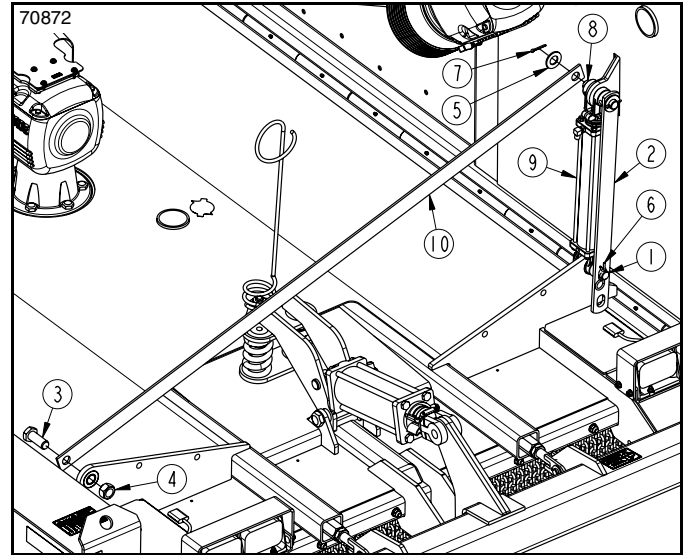
NOTE: Do not tighten hardware until wing axle assembly is complete.

The wing axle is secured folded back for shipping purposes.

1. Remove ties securing wing axle (#1) and rotate axle to install turnbuckles (#4).
2. Remove locknuts (#3) and bolts (#2).
3. Attach turnbuckle (#4) to wing axle with existing 1"-8 Gr8 bolt (#2) and 1" locknut (#3). Make sure grease zerks are facing up when wing is folded down.
4. Tighten locknut (#3) to the correct torque.



Wing Axle - Turnbuckle Assembly
Figure 1-17



Remove Shipping Bar With Transport Locks Set
Figure 1-18

Remove Shipping Crossbar

WARNING

To avoid serious injury or death:

- Metal shipping bands are under tension. Always wear eye protection when cutting bands. Keep head, body, and body extremities away from the area where the band will recoil into when cut.
- Make sure transport lock is set before removing shipping bar. Stay clear of wing while removing shipping bar. Once shipping bar is removed, the wing will fall suddenly until caught by transport lock.

NOTE: A come-along may be needed to pull the wing in before shipping bar (#10) can be removed.

Refer to Figure 1-18:

1. Make sure cutter is parked on a level surface with room for the wing to unfold onto.
2. Place gear selector in park, **fully retract wing folding cylinder (#9)** and shut tractor off. See "Tractor Shutdown Procedure" on page 15.
3. Verify transport lock bar (#2) is rotated down and secured to cylinder pin (#1) with hairpin cotter (#6).
4. Remove hex locknut (#4) and shipping bar (#10) from hex cap screw (#3).
5. Reinstall hex locknut (#4) to hex cap screw (#3) and tighten to the correct torque.
6. Remove cotter pin (#7), flat washer (#5), and shipping bar (#10) from cylinder pin (#8). **Do not remove cylinder pin (#8) or transport lock (#2).**
7. Replace flat washer (#5) and cotter pin (#7). Bend one or both legs of cotter pin to secure it in place.
8. Cut and remove shipping bands securing the wing wheels.

Section 1: Assembly & Set-up

Unfold Wing

Refer to Figure 1-19:

DANGER

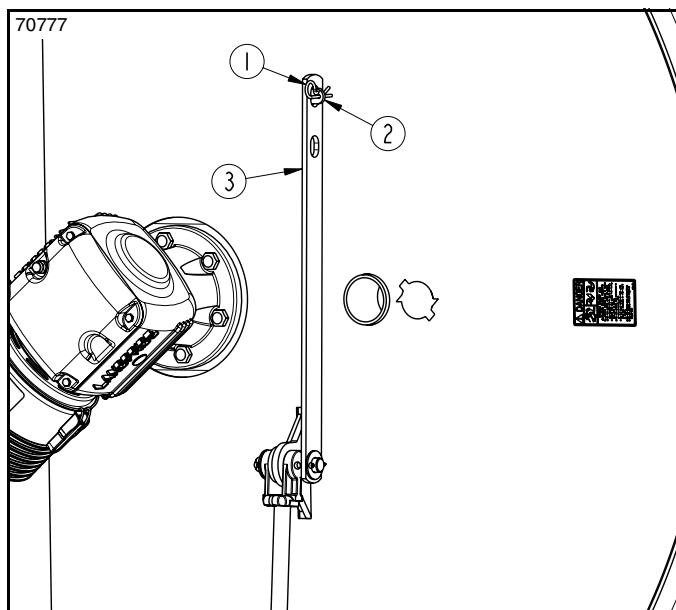
To avoid serious injury or death: Keep everyone out of the area where the wing deck will unfold. The wing deck can fall suddenly.

WARNING

To avoid serious injury or death:

- Metal shipping bands are under tension. Always wear eye protection when cutting bands. Keep head, body, and body extremities away from the area where the band will recoil into when cut.
- Watch hydraulic hoses as the wing lowers to be sure they don't catch causing hoses to stretch and pull loose from the hydraulic cylinders.

1. Make sure cutter is parked on a level surface.
2. Place gear selector in park, raise wing to its most upright position, shut tractor engine off, set park brake, and remove switch key.
3. Rotate transport lock bar (#3) up to storage bracket (#2). Secure with existing hairpin cotter (#1).
4. Start tractor and lower cutter wing down until resting on the ground.
5. It may be necessary to purge the wing folding cylinder and hydraulic hoses of trapped air if operation is sluggish. Cycle folding cylinder back and forth several times to purge air from cylinder. For additional details, see "Purge Hydraulic System" on page 23.



Transport Bar, Storage Position
Figure 1-19

Driveline Clearance Check

Check driveline for adequate clearance under all ranges of cutter height.

NOTE: The lift cylinder should raise the cutter up while pushing the control lever forward and lower while pulling the lever back. Switch connections at the duplex outlet if lift control lever works opposite.

1. With driveline attached to the tractor, slowly raise and lower cutter to its upper and lower limits while observing clearances between hitch and driveline.
2. Adjust tractor drawbar height and length if driveline interferes. See "Drawbar Set-up" on page 13 for correct placement of tractor drawbar.
3. Cycle hydraulic lift system several times to purge the hydraulic lift system of trapped air. For additional details, see "Purge Hydraulic System" on page 23.

Driveline Hanger Adjustment

Refer to Figure 1-20:

1. Move tractor control lever to extend hydraulic lift cylinder (#1) until pressure against stroke control spacers (#5) is removed.
2. Without relieving hydraulic pressure, shut tractor down properly before dismounting. Refer to "Tractor Shutdown Procedure" on page 15.

WARNING

To avoid serious injury or death: Stay clear from underneath the cutter and directly behind transport tires. The cutter could fall suddenly causing the decks to lower and tires to roll back.

3. Remove stroke control spacers (#2) from hydraulic lift cylinder (#1) by spreading them apart at break line.
4. Start tractor and lower cutter until front skids are resting on the ground or on solid (non-concrete) support blocks.
5. Shut tractor down properly before dismounting.
6. Replace stroke control spacers (#2) as needed to support wheels at this position.

Refer to Figure 1-21:

7. With driveline attached to tractor, rotate driveline hanger (#1) up as shown.
8. Loosen nuts securing carriage bolts (#3) and adjust driveline hanger (#1) up until there is a small gap between driveline (#4) and hanger (#1).
9. If driveline hanger (#1) is adjusted fully up and needs to adjust higher, remove carriage bolts (#3) and reattach hanger to the upper two square holes (#2) with existing flat washers, lock washers, hex nuts, and carriage bolts (#3). Continue to adjust hanger to underside of driveline.

Section 1: Assembly & Set-up

10. Draw nuts securing carriage bolts (#3) up snug and rotate driveline hanger (#1) down. If hanger makes contact with driveline (#4), re-adjust hanger down until it misses the driveline.
11. Tighten 3/8"-16 GR5 bolts (#3) to the correct torque.

IMPORTANT: Always rotate driveline hanger down before moving cutter to prevent damage to driveline.

12. Rotate driveline hanger (#1) down.

Purge Hydraulic System

DANGER

To avoid serious injury or death:

Never remove or install a folding wing cylinder with cylinder rod retracted and wing folded-up. The wing is unstable without its folding cylinder and can suddenly fall. Also, air trapped in a new or repaired cylinder will drop the wing suddenly when lowering the wing. Either situation can render the cutter inoperable and cause serious bodily injury or death.

WARNING

To avoid serious injury or death:

Be sure center and wing decks are lowered to the ground and all hydraulic pressure is relieved before disconnecting any hydraulic lines or fittings to purge the hydraulic system.

Wing Fold Cylinder

Refer to Figure 1-22:

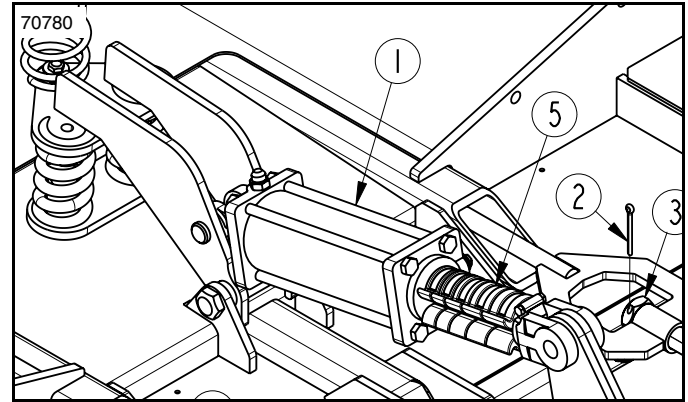
1. Lower center deck until it is supported by stroke control spacers (#5) on hydraulic cylinder (#3).
2. Lower wing deck until it rests on the ground.
3. See “**Tractor Shutdown Procedure**” on page 15. Shut tractor down properly and move wing lift control lever back and forth to relieve all hydraulic pressure.
4. Slightly loosen hydraulic hose fitting (#2) on wing cylinder (#1) to allow air to escape.
5. Restart tractor and slowly activate tractor control lever to retract wing cylinder (#1), and purge trapped air from the hydraulic system.
6. Shut tractor down properly. See “**Tractor Shutdown Procedure**” on page 15.
7. Tighten hose fitting (#2).

Deck Lift Cylinder

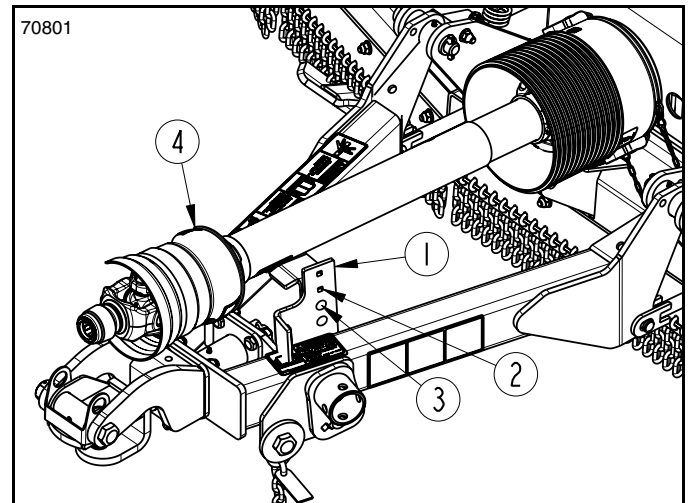
Refer to Figure 1-22:

1. Remove all hydraulic stroke control spacers (#5) and lower center deck.
2. See “**Tractor Shutdown Procedure**” on page 15. Shut tractor down properly and move deck lift control lever back and forth to relieve all hydraulic pressure.
3. Slightly loosen hydraulic hose fitting (#4) on deck lift cylinder (#3) to allow air to escape.

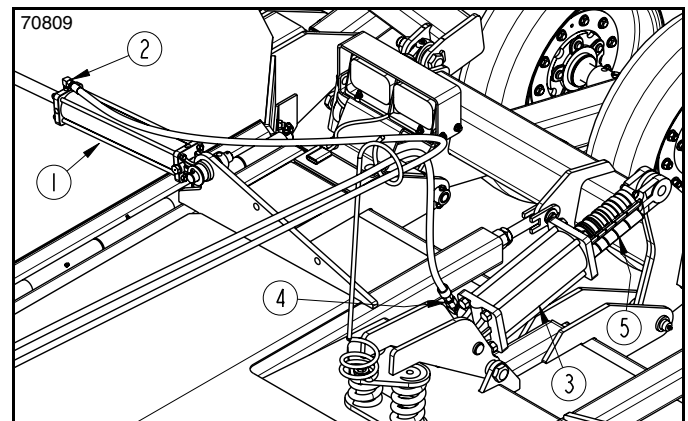
4. Restart tractor and slowly activate tractor control lift lever to extend lift cylinder (#3) and to purge trapped air from the hydraulic system.
5. Shut tractor down properly. See “**Tractor Shutdown Procedure**” on page 15.
6. Tighten hose fitting (#4) on lift cylinder (#3).



Hydraulic Lift Cylinder and Stroke Control Spacers
Figure 1-20



Driveline Hanger Adjustment
Figure 1-21



Purge Wing & Center Deck Cylinders
Figure 1-22

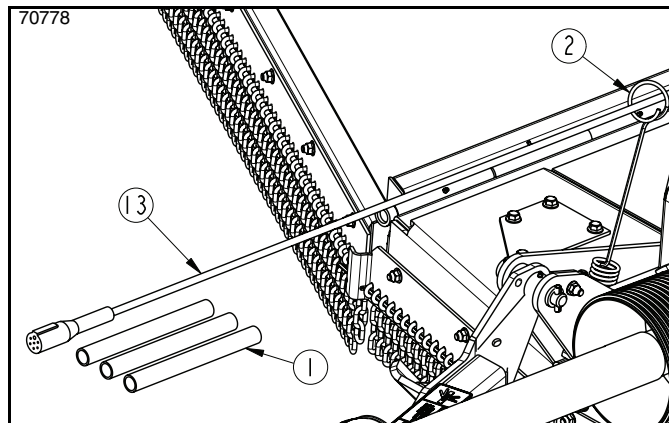
Section 1: Assembly & Set-up

Hook-up LED Lights

Refer to Figure 1-23:

The lead wiring harness (#13) is equipped with a 7-pin plug for connecting to the tractor's 7-pin electrical outlet shown in Figure 1-24.

1. Route lead wire harness (#13) through the front and rear spring hose loops (#2).
2. Connect plug on lead wire harness (#13) to the tractor's 7-pin electrical outlet.
3. It is best to have a second person to verify the lights are operating. Start tractor and operate lights as follows:
 - a. Turn on headlights to verify red lights illuminate.
 - b. Turn on flasher lights to verify amber lights are blinking on and off.

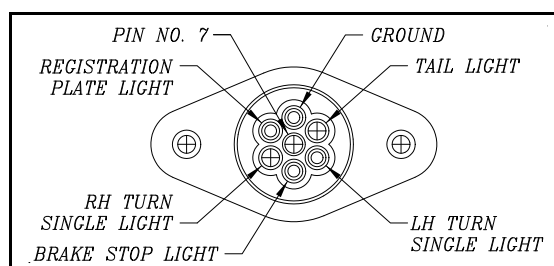


**Hook-up LED Lights
Figure 1-23**

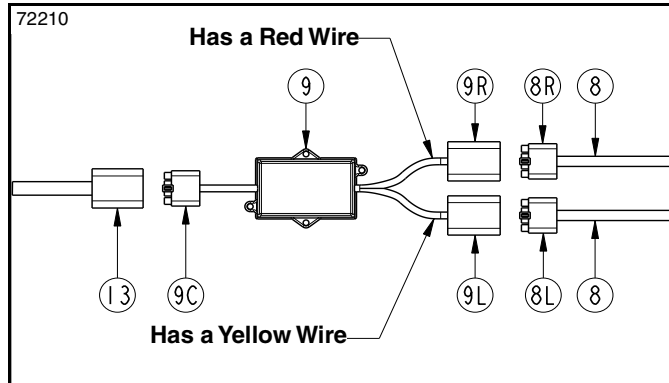
Refer to Figure 1-25:

4. If the lights did not operate properly, recheck hook-up of the enhance module (#9) and wire harnesses (#8 & #13) as outlined below. Make any necessary changes and repeat step 3 above.

- a. Reference wire harness (#8) leading to the LED lights on the right-hand side of the cutter. Make sure connector (#8R), labeled "ENHANCER", is connected to the Red wire connector (#9R) on enhance module (#9).
 - a. Reference wire harness (#8) leading to the LED lights on the left-hand side of the cutter. Make sure connector (#8L), labeled "ENHANCER", is connected to the Yellow wire connector (#9L) on enhance module (#9).
 - b. Make sure lead wire harness (#13) is connected to connector (#9C) on enhance module (#9).
 - c. **Refer to Figure 1-23:** Ensure that the 7-pin plug on the end of the 15' lead wire harness (#13) is properly seated in the tractor's 7-pin electrical outlet shown in Figure 1-24.
5. Check routing of wire harness (#8) to make sure they will not be pinched as the arms fold and unfold and while raising and lowering the cutter height.



**Tractor 7-Pin Electrical Outlet
Figure 1-24**



**Enhance Module Wire Connections
Figure 1-25**

Refer to Figure 1-23:

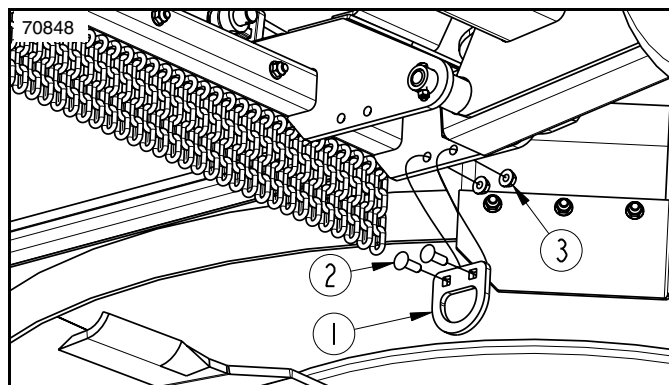
6. Check routing of lead wire harness (#13) to make sure it pass through the spring hose loop (#2).
7. Secure harness in place with spiral hose wrap (#3). If needed, add any cable ties to complete the process.

Remove Shipping Lugs

Refer to Figure 1-26:

Tie down lugs are installed on the rear two corners of the center deck for shipping purposes only. They should be removed and discarded before cutter is put into use.

Remove and discard both shipping lugs (#1) and attaching hardware (#2 & #3).



**Rear Shipping Lugs Removal
Figure 1-26**

Section 1: Assembly & Set-up

Unhook Rotary Cutter

1. See “**Long-Term Storage**” on page 48 when storing the cutter for long periods and at end of season.
2. If power take-off is engaged, reduce tractor engine speed to an idle and then disengage power take-off.
3. Park cutter on a level, hard surface. Place tractor gear selector in park or set park brake.
4. Wait for blades to come to a complete stop, then raise the cutter up and fold wing up to transport position.
5. Without relieving hydraulics, shut tractor off. Refer to “**Tractor Shutdown Procedure**” on page 15.

DANGER

To avoid serious injury or death:

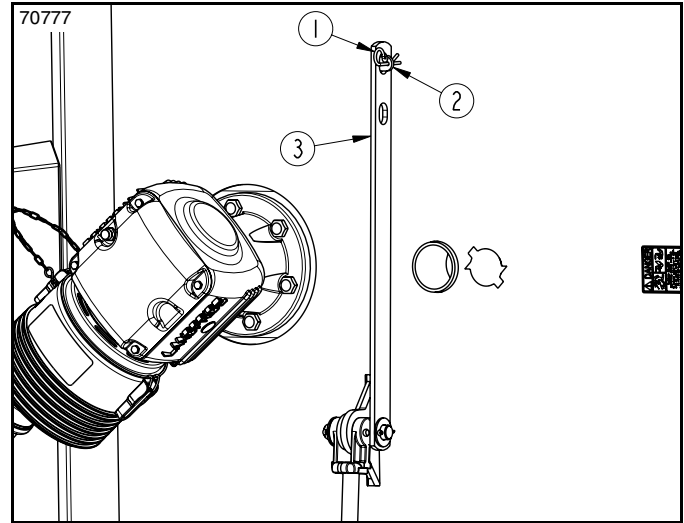
Do not walk, stand, or allow anyone else in the area where a raised wing will fall unless the wing is securely locked in the raised position with its transport lock.

6. **Refer to Figure 1-27:** Remove hairpin cotter (#1) from storage bracket (#2).
7. **Refer to Figure 1-28:** Rotate transport lock bar (#3) down and place over lock pin (#4). Secure with hairpin cotter (#1).
8. **Refer to Figure 1-29:** Spread stroke control spacers (#5) apart at the break line and remove them from hydraulic lift cylinder (#1).
9. Start tractor and lower cutter until front skid shoes are resting on the ground or on solid non-concrete support blocks.
10. Without relieving hydraulics, shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.

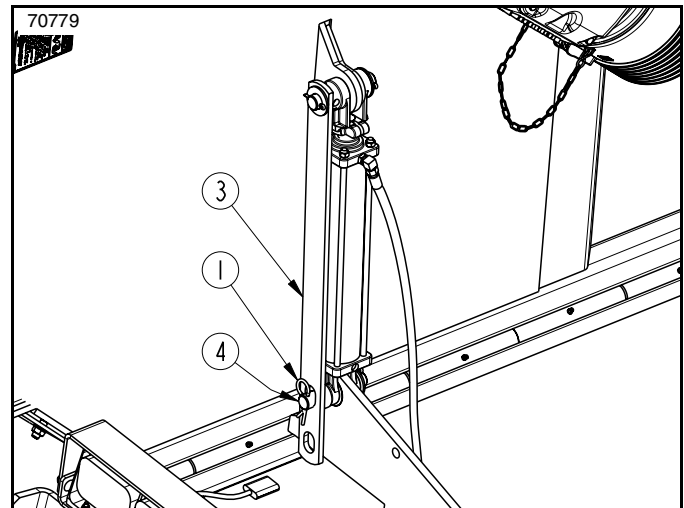
WARNING

To avoid serious injury or death: Stay clear from underneath the cutter and directly behind transport tires. The cutter could fall suddenly causing the decks to lower and tires to roll back.

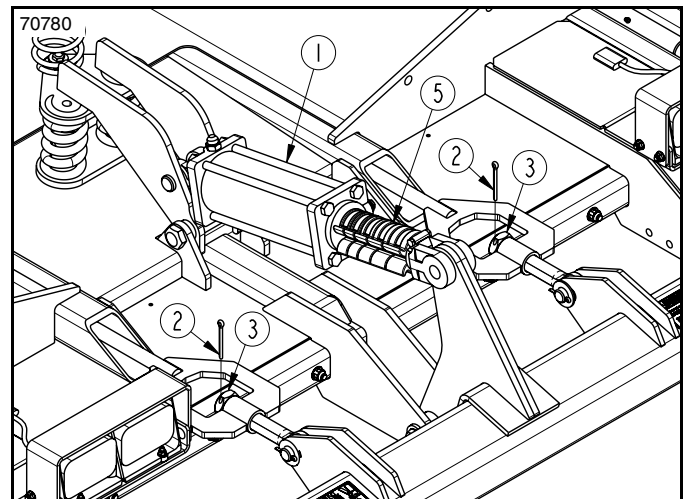
11. Replace stroke control spacers (#5) as needed to support wheels at this position.
12. Move cylinder lift levers back and forth to release all hydraulic pressure at the couplers.
13. Continue on page 26.



Transport Bar, Storage Position
Figure 1-27



Transport Bar, Locked Position
Figure 1-28

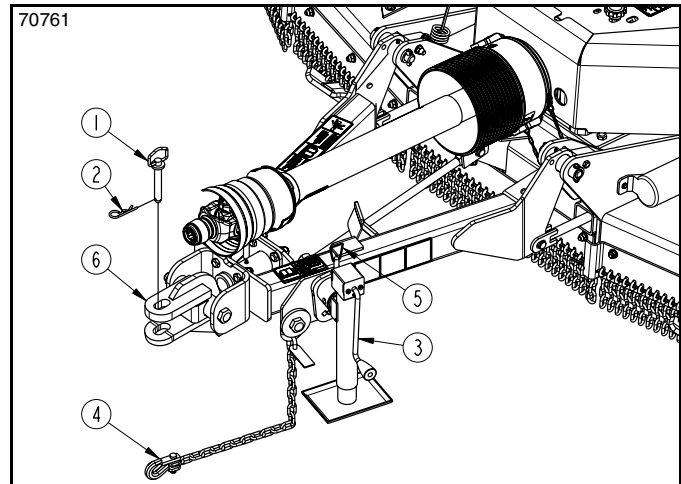


Hydraulic Lift Cylinder and Stroke Control Spacers
Figure 1-29

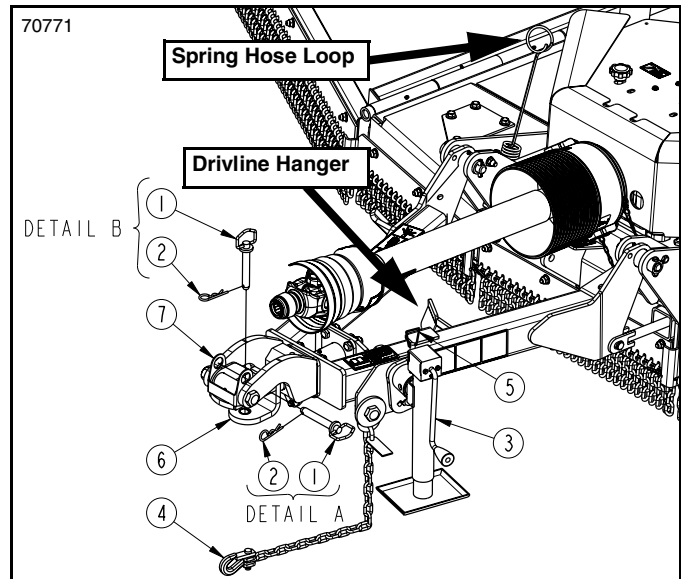
Section 1: Assembly & Set-up

Refer to Figure 1-30:

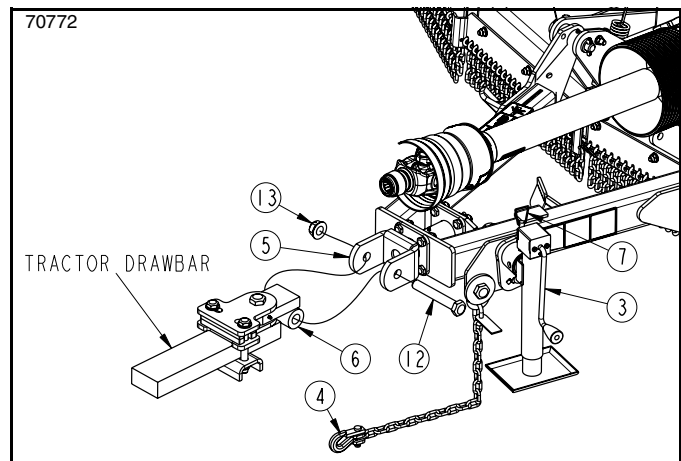
14. Remove park jack (#3) from weight box and attach to jack mount as shown. Fully insert jack detent pin (#5) to secure the park jack.
15. If needed, realign park jack to be vertical. Refer to **“Park Jack Angle Alignment”** on page 27.
16. Unhook hitch safety chain (#4) from tractor.
17. Unhook hydraulic hoses from tractor duplex outlet. Insert couplers through spring hose loop to keep couplers out of the dirt.
18. Unhook wire harness from tractor outlet. Coil wire harness and store over spring hose loop with connector hanging down to keep moisture out.
19. Rotate driveline hanger to the up position to store the driveline.
20. Pull back on lock collar and pull driveline from tractor power take-off shaft.
21. Collapse driveline by pushing tractor end of driveline toward the splitter gearbox.
22. Store driveline on the driveline hanger.
23. Adjust park jack (#3) as needed to remove cutter hitch weight off the tractor drawbar.
24. Remove connecting hitch pin or bolt as follows:
 - a. **For Standard Clevis Hitch, See Figure 1-30:** Remove hairpin cotter (#2) and hitch pin (#1).
 - a. **For LP Performance Hitch, See Figure 1-31:** Refer to **Detail B:** Remove hairpin cotter (#2) and hitch pin (#1).
 - b. **For Bar-Tite Hitch, See Figure 1-32:** Remove locknut (#2) and bolt (#1).
25. Restart tractor and drive tractor slowly forward several feet.
26. Shut tractor down properly before dismantling. Refer to **“Tractor Shutdown Procedure”** on page 15.
27. Lower park jack until cutter is resting on its front skid shoes.
28. Replace connecting pin/bolt (#1) as follows:
 - a. **For Standard Clevis Hitch, See Figure 1-30:** If unhooking standard clevis, replace connecting pin (#1) in clevis (#6). Secure hitch pin with hairpin cotter (#2).
 - b. **For LP Performance Hitch, See Detail A in Figure 1-31:** Rotate clevis (#6) horizontal and flip hitch holder (#7) up so that its holes are on top. Insert customer-supplied hitch pin (#1) through holes in hitch holder (#7). Secure with hairpin cotter (#2).
 - c. **For Bar-Tite Hitch, See Figure 1-32:** If unhooking bar-tite hitch, remove hitch (#6) from tractor drawbar and reattach it to hitch (#5) with removed bolt (#1) and locknut (#2), screw locknut on a few turns. Do not torque nut tight.



**Unhook Standard Clevis
Figure 1-30**



**Unhook LP Performance Hitch
Figure 1-31**



**Unhook Bar-Tite Hitch
Figure 1-32**

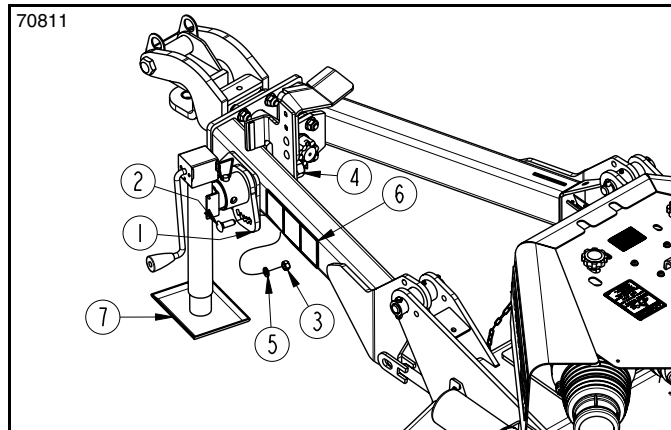
Section 2: Adjustments

Park Jack Angle Alignment

Refer to Figure 2-1:

The jack mount angle should be adjusted to position the park jack vertical while supporting the cutter hitch. This angle will vary depending on the number and size of stroke control spacers placed on the lift cylinder rod.

NOTE: Refer to decal (#6) and instructions below for jack alignment and torque value instructions.



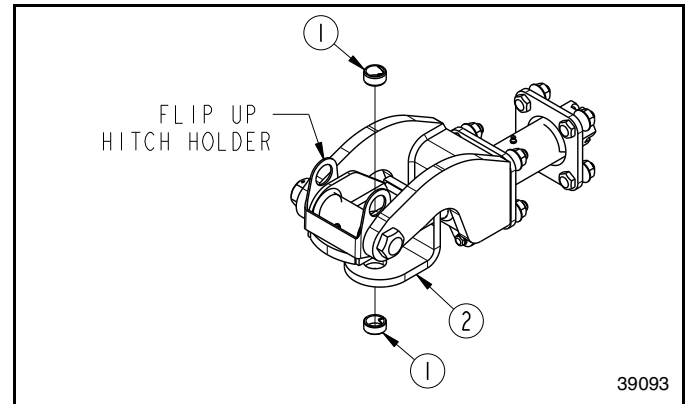
**Park Jack Angle Alignment
Figure 2-1**

1. With cutter hitched to a tractor, lower cutter until front skid shoes are resting on the ground or on solid non-concrete support blocks.
2. Shut tractor down properly before dismounting. Refer to **“Tractor Shutdown Procedure”** on page 15.
3. Install park jack (#7). See **“Attach Park Jack”** on page 15. Check jack angle. If jack is not vertical, proceed with step 4 below.
4. Remove hex nut (#3), lock washer (#5) and carriage bolt (#2).
5. Loosen 1" hex nut (#4). Do not remove.
6. Rotate jack mount (#1) to align jack as near vertical as possible.
7. Replace 1/2"-13 x 1 1/2" GR5 carriage bolt (#2) and secure with lock washer (#5) and hex nut (#3). Tighten hex nut to the correct torque.
8. Tighten 1" hex nut (#4) to 645 ft-lbs.
9. If moving cutter, skip to step 10. If unhooking cutter, see **“Unhook Rotary Cutter”** on page 25 for detailed instructions.
10. If cutter is to be moved, remove park jack (#7) from hitch frame and attach it to the left-hand wing storage base. Make sure base of park jack is level with or lower than the head, especially after the wing is folded up. See cover picture for correct positioning.

LP Performance Hitch Hole Diameter

Refer to Figure 2-2:

The LP Performance Hitch is designed to receive a 1" diameter hitch pin. To convert the hitch to receive a 1 1/4" diameter hitch pin, knock out upper and lower bushings (#1) in clevis (#2).



**LP Performance Hitch Hole Diameter
Figure 2-2**

Section 2: Adjustments

Level Cutter Decks

These adjustments should be made with your cutter hooked to the tractor operating the unit or to a tractor having the same drawbar height.

Level Center Deck

Refer to **Figure 2-3** & **Figure 2-4**

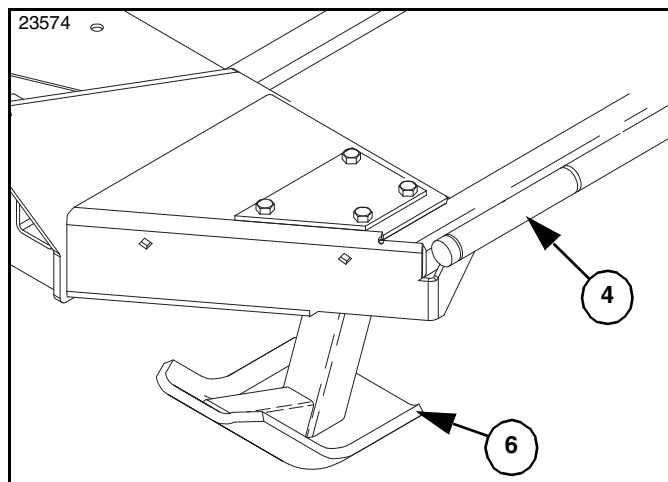
1. With cutter attached to a tractor, disengage power take-off, and park on a level, hard surface. Place tractor gear selector in park or set park brake.
2. Using hydraulic lift, adjust center deck height so that front skids (#6) are 2" to 3" (5.1 to 7.6 cm) above ground.
3. Wait for blades to come to a complete stop and then fold wing up to transport position.
4. Shut tractor engine off and remove switch key before dismounting from tractor.
5. Lock wing in the up position with the transport bar. See **"Transport Locks"** on page 33 for instructions.

IMPORTANT: See **Figure 2-4**. Loosening adjusting nuts (#3) will lengthen leveling rods and lower front of cutter. Tightening adjusting nuts (#3) will shorten leveling rods and raise front of cutter.

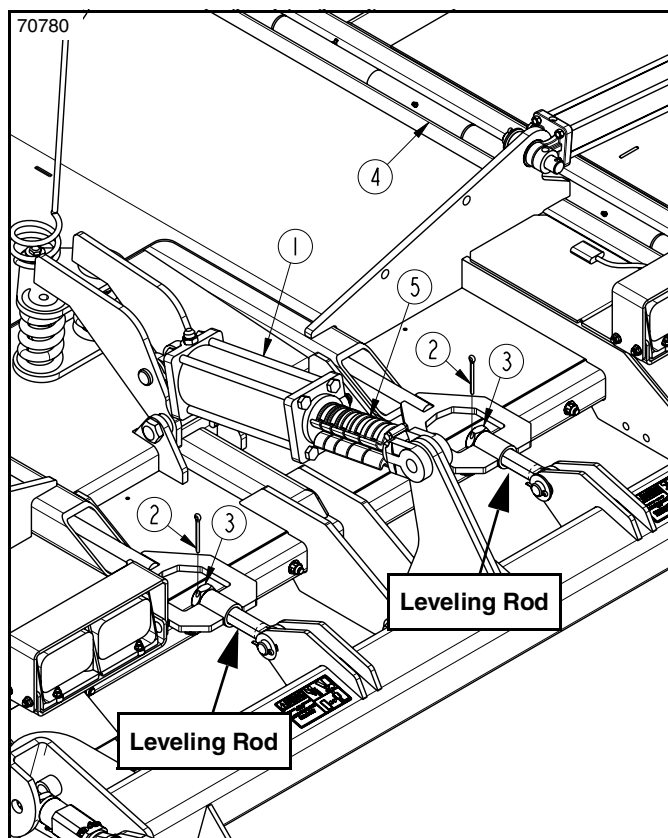
6. On both sides of the center deck are continuous hinges (#4). Measure distance from bottom of hinges to ground at the front and back. They should be equal distance off the ground at the back and 1" (2.5 cm) closer to the ground at the front than they are at the back.

NOTE: 1" measurement can be increased or decreased depending on cutting conditions.

7. Remove hairpin cotter (#2) from each adjusting nut (#3) on both leveling rods.
 - If continuous hinges are too high at the front:**
 - a. Unscrew adjusting nuts (#3) an equal amount to lower front of cutter until both hinges (#4) are 1" (2.5 cm) lower in the front than the back.
 - If continuous hinges are too low at the front:**
 - a. Tighten adjusting nuts (#3) an equal amount to raise front of cutter until both hinges (#4) are 1" (2.5 cm) lower in the front than in the back.
8. Be sure left and right leveling rods have equal amounts of tension.
9. Secure adjusting nuts (#3) at desired location with hairpin cotter (#2).

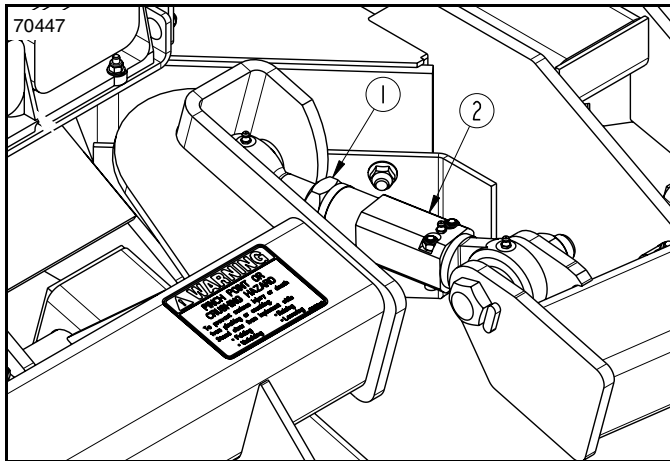


Front Skid Position
Figure 2-3



Center Deck Leveling Rods
Figure 2-4

Section 2: Adjustments



Leveling Wing Decks
Figure 2-5

Level Wing Deck

Refer to Figure 2-5:

The wing section will need adjusting if wing deck top is not level with center deck top when wing is unfolded.

1. Start tractor and lower wing down. Refer to “**Field Set-up**” on page 34 for instructions on how to lower wing.
2. Pull cutter straight forward six to ten feet to allow outer wing wheels to properly align themselves.
3. Check wing deck top with a level to see if it is level with the top of the center deck. If the outer edge of the wing deck is higher or lower than the center deck, then the wing should be leveled as follows:
 - a. **If outer wing edge is higher** than the center deck, loosen jam nut (#1) & tighten turnbuckle (#2) to shorten it until lower outer wing edge is level with center deck. Tighten jam nut (#1) to the correct torque when level.
 - b. **If outer wing edge is lower** than the center deck, loosen jam nut (#1) and loosen turnbuckle (#2) to lengthen it until outer wing edge is level with the center deck. Tighten jam nut (#1) to the correct torque when level.

Adjust Deck Cutting Height

NOTE: Make all cutting height adjustments in the field using height of cut grass/material as a guide. Do not measure blade height above ground as the non-operating blade height will be different than the operating blade height.

Refer to Figure 2-4 on page 28:

1. At the cutting site, unfold wing and raise center deck fully up with lift cylinder.
2. Without relieving hydraulics, shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.

WARNING

To avoid serious injury or death:

Stay clear from underneath the cutter and directly behind transport tires. The cutter could fall suddenly causing the decks to lower and tires to roll back.

3. Remove all stroke control spacers (#5) from center hydraulic cylinder (#1) by spreading them apart at the break line. Store spacers in a location they can be retrieved.
4. Start tractor and engage blades. See “**Engage Blades**” on page 35 for detailed instructions.
5. Using tractor control lever, adjust cutter to the desired cutting height and then travel forward for approximately 20’ to 50’ (6 to 15 m).
6. Without relieving hydraulics, shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.
7. Measure height of cut grass/material. This distance is the cutting height. If this height is acceptable, continue with step 8. If this height is unacceptable, repeat steps 4-7 until desired cutting height is achieved.
8. Select required size and number of stroke control spacers (#5) that will fit on the center hydraulic cylinder (#1). The following spacers are available.
 - Two 1" (2.5 cm) spacers
 - One 1 1/4" (3.2 cm) spacer
 - One 1 1/2" (3.8 cm) spacer
 - One 1 3/4" (4.4 cm) spacer

NOTE: Removing spacers lowers cutting height and adding spacers raises cutting height.

9. Return to tractor and raise Rotary Cutter up again.
10. Without lowering the cutter, shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.
11. With tractor shut off and switch key removed, install selected stroke control spacers on the center hydraulic lift cylinder rod.
12. Restart tractor and lower cutter against stroke control spacers.
13. Recheck cutting height using steps 4-7 above. If needed, adjust size and quantity of stroke control spacers until desired cutting height is achieved.
14. Keep remaining spacers with tractor for field adjustments.



Section 3: Operating Instructions

Startup Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Rotary Cutter. It is absolutely essential that no one operates the cutter unless they have read, fully understood, and are 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 13
- **Section 2: Adjustments**, page 27
- **Section 3: Operating Instructions**, page 30
- **Section 4: Options & Accessories**, page 37
- **Section 5: Maintenance & Lubrication**, page 40

Perform the following inspections before using your Rotary Cutter.

Operating Checklist

✓	Check	Page
✓	Make sure all guards and shields are in place and in good working condition. Refer to "Important Safety Information".	1
	Follow installation and hook-up instructions. Refer to "Section 1: Assembly & Set-up".	13
	Make all required adjustments. Refer to "Section 2: Adjustments".	27
	Perform all required maintenance. Refer to "Section 5: Maintenance & Lubrication".	40
	Lubricate cutter and driveline as needed. Refer to "Lubrication Points".	50
	Lubricate all gearboxes and replace oil plugs properly. Refer to Gearbox Lubrication.	53
	Check cutter initially and periodically for loose bolts and pins. Refer to "Torque Values Chart".	62

Safety Information

DANGER

To avoid serious injury or death:

- Do not walk, stand, or allow anyone else in the area where a raised wing will fall unless the wing is securely locked in the raised position with its transport lock.
- Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front & rear safety guards is mandatory with this cutter. Double row chain guards should be used when cutting along roadways and in areas where people may be present. Stop blade rotation if bystanders are in or around the area. It is recommended that a safety shield be placed between the operator and cutter on an open air tractor.
- 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.

- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is 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.
- Keep everyone away from the cutter when folding or unfolding the wings or when raising or lowering the cutter. The cutter can pinch or crush a person when performing these operations.
- Do not raise wing with power take-off engaged or drivelines rotating. Objects can be thrown by rotating blades. Always keep people away from a cutter that is operating.
- Do not use cutter as a fan. Cutting blades are not properly designed or guarded for this use.
- 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.
- 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.
- This cutter is equipped with free-swinging cutting blades to reduce shock loads. However, it is best to avoid striking solid objects for your safety and to protect the cutter from damage.
- 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.
- 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:

- Allow only persons to operate this implement who have fully read and comprehended this manual, and who have been properly trained in the safe operation of this implement. Serious injury or death can result from the inability to read, understand, and follow instructions provided in this manual.
- Never carry riders on the implement or tractor. Riders can obstruct the operator's view, interfere with controls, be pinched by moving components, become entangled in rotating components, struck by objects, thrown about, fall off and be run over, etc.
- Always follow "Tractor Shutdown Procedure" provided in this manual before dismounting the tractor.



Section 3: Operating Instructions

- *Cutter blades can continue to rotate while decelerating after power take-off is disengaged. Remain on the tractor seat until rotating parts come to a complete stop.*
- *Wait for blades to come to a complete stop before accessing blade bolts through blade bolt access hole.*
- *Do not operate and/or travel across inclines where the tractor and/or implement can rollover. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across. When traveling across steep inclines, ensure the wings are folded down.*
- *Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.*
- *Do not raise the wing off the ground when traveling across an incline. The weight of the wing will increase the risk of a rollover.*
- *Operate only power machines equipped with a certified Roll-Over Protective Structure (ROPS) and seat belt. Keep folding ROPS in the "locked up" position when appropriate. If ROPS is in the locked up position, fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.*
- *Watch while making tight turns to ensure that the rear tractor tires and lower 3-point arms do not make contact with cutter hitch, driveline or deck. Keep lower 3-point arms raised at all times when hitched to a pull-type cutter.*
- *Do not use implement to lift objects; to pull objects such as fence posts, stumps, etc; or to push objects. The unit is not designed or guarded for these uses.*
- *Do not use implement to tow other equipment unless it is designed with a tow hitch. Doing so can result in loss of control and damage the equipment.*
- *Do not operate a cutter with a hitch or hitch pin that is excessively worn, bent, broken, or has structural cracks. The hitch and/or hitch pin can break apart separating cutter from tractor.*
- *Some tractors are equipped with two power take-off speeds. Be certain your tractor's power take-off shaft is set-up to operate the implement at its rated power take-off speed. Do not exceed implement's rated power take-off speed. Excessive speed can damage drive components, cutter blades, and/or increase the risk of a thrown object hazard. RC models are rated for 540 rpm and RCM models are rated for 1000 rpm.*
- *Avoid catching hydraulic hoses on brush, posts, tree limbs, and other protrusions that could damage and/or break them.*
- *Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris.*
- *Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level.*
- *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.*

- *The cutter must be operated with wing and weight box attached. Removing one will increase risk of rollover. Removing one or both will expose the blades. Rotating blades will cut body extremities and throw objects.*
- *Do not weld or torch on galvanized metal as it will release toxic fumes.*
- *Do not operate a broken or bent driveline. Such a driveline will break apart while rotating at high speeds. Always remove the implement from use until the damaged driveline can be repaired or replaced.*

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

IMPORTANT: Do not let the wings flex down more than 20 degrees while operating the cutter. Doing so can cause damage to the cutter.

IMPORTANT: If wing driveline profile is bent or twisted, disconnect that driveline from the wing gearbox before folding the wing up. This will protect both the wing and divider gearboxes. Repair driveline before putting cutter back into service.

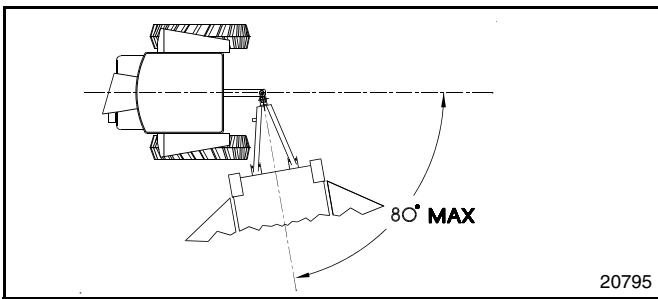
Tractor & Cutter Inspection

Make the following inspections with cutter attached to a tractor and cutter parked on a level surface, power take-off disengaged, and cutter blades stopped.

1. Inspect tractor safety equipment to make sure it is in good working condition.
2. Inspect cutter safety equipment to make sure it is installed and in good working condition.
3. Check driveline to make certain it is securely connected to the tractor power take-off shaft and cutter gearbox shaft. Also, make certain that the guards are in good working condition and in place.
4. Check driveline hanger. Make sure it is rotated down away from the driveline.
5. Remove 3-point lower arms or secure them so they do not interfere with driveline, hoses, or hitch.
6. Check all hoses and wire harness to be sure they will not pinch or come in contact with the folding wing and rotating drivelines.
7. Start tractor and carefully raise and lower implement to ensure tractor drawbar, tires, and other equipment on the tractor do not contact cutter or driveline. See also "**Driveline Clearance Check**" on page 22
8. Raise center deck fully up. Without lowering implement, shut tractor down properly. Refer to "**Tractor Shutdown Procedure**" on page 15.
9. Place sturdy, non-concrete support blocks or jack stands under the four center deck corners.
10. Start tractor and lower center deck down onto the supports.

Section 3: Operating Instructions

11. Shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.
12. With cutter resting on solid supports, power take-off 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 Blades**” on page 42.
13. Inspect Hydraulic hoses for wear, damage, and hydraulic leaks. See “**Avoid High Pressure Fluids Hazard**” on page 3. Replace damaged and worn hoses with genuine Land Pride parts.
14. Make repairs to cutter and tractor before continuing with “**Blade Operation Inspection**” on page 32.



Constant Velocity (CV) Driveline
Figure 3-1

Avoid Extreme Turning Angles

Refer to Figure 3-1:

Plan your field cutting to minimize number of turns, especially extreme turning angles. Avoid tractor-to-cutter turning angles that exceed driveline maximum turning angle. If the turn cannot be avoided, disengage tractor power take-off and wait for the driveline to stop rotating before making the turn.

- **Constant Velocity Driveline:**
Maximum turning angle = 80°.

Blade Operation Inspection

DANGER

To avoid serious injury or death:

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.

WARNING

To avoid serious injury or death:

- Stop power take-off immediately if vibration continues after a few revolutions during start-up and anytime vibration occurs thereafter.
- Always follow “Tractor Shutdown Procedure” provided in this manual before dismounting the tractor.
- Some tractors are equipped with two power take-off speeds. Be certain your tractor’s power take-off shaft is set-up to operate the implement at its rated power take-off speed. Do not exceed implement’s rated power take-off speed. Excessive speed can damage drive components, cutter blades, and/or increase the risk of a thrown object hazard. RC models are rated for 540 rpm and RCM models are rated for 1000 rpm.

IMPORTANT: Read all “**Safety Information**” starting on page 30 before operating the cutter.

1. Make sure cutter blades are not locked against each other. See “**Field Set-up**” on page 34.
2. Remove deck supports and set transport locks for field operations. See “**Transport Locks**” on page 33.
3. Lower cutter until blades are about 2" off the ground.
4. Start tractor and set throttle speed just above idle. If available, use tractor’s power take-off soft start option. Slowly engage power take-off to get blades rotating. (See “**Engage Blades**” instructions on page 35.)
5. Initial start-up vibration is normal and should stop after a few revolutions. Stop power take-off rotation immediately if vibration continues.
6. Once cutter is running smoothly, increase throttle to full cutter speed (540 or 1000 rpm). If cutter vibrates excessively for 3 seconds at full speed, immediately disengage power take-off, shut tractor down, and remove switch key.
7. Block center deck up before working under cutter.
8. Check blades for a locked-up situation. Unlock blades if locked-up.
9. Check for other probable causes such as broken or bent blades, loose blades, loose gearbox mounting bolts, bent driveline, etc.
10. Take proper precautions to make necessary repairs and adjustments.
11. Repeat steps 1-10 to make certain vibration is corrected before putting cutter back into service.

Section 3: Operating Instructions

Transport Locks

IMPORTANT: Always disengage tractor's power take-off & wait for blades to come to a complete stop before raising the wing to transport position. Wing driveline, gearbox, and splitter gearbox can be damaged if driveline is turning.

NOTE: The wing is controlled with a hydraulic lift cylinder. Be certain that the wing hydraulics are attached to the tractor and the hydraulic hoses are full of oil before proceeding.

1. Disengage power take-off and wait for cutter blades to come to a complete stop before raising wing.
2. Rotate cutter wing fully up with hydraulics.
3. Without relieving hydraulics, shut tractor off. See "Tractor Shutdown Procedure" on page 15.

DANGER

To avoid serious injury or death: Do not walk, stand, or allow anyone else in the area where a raised wing will fall unless the wing is securely locked in the raised position with its transport lock.

4. **See Figure 3-3:** Remove hairpin cotter (#1) from storage pin (#2).
5. **See Figure 3-2:** Rotate transport lock bar (#3) to cylinder pin (#4). Secure with hairpin cotter (#1).
6. Repeat steps 4 and 5 for the other wing section. Cutter is now ready for transporting.

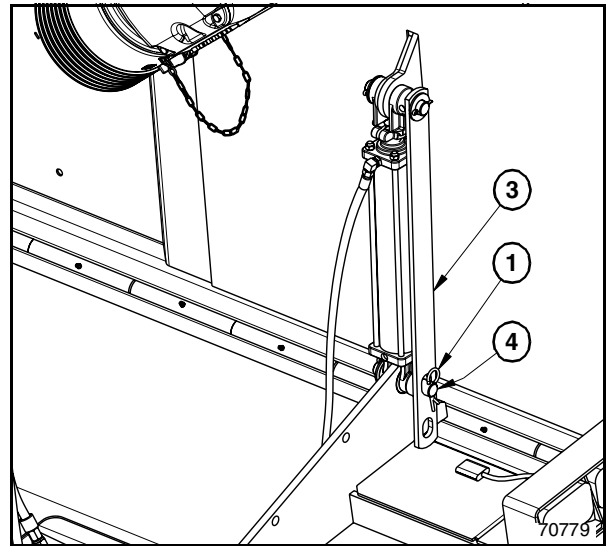
Transporting

WARNING

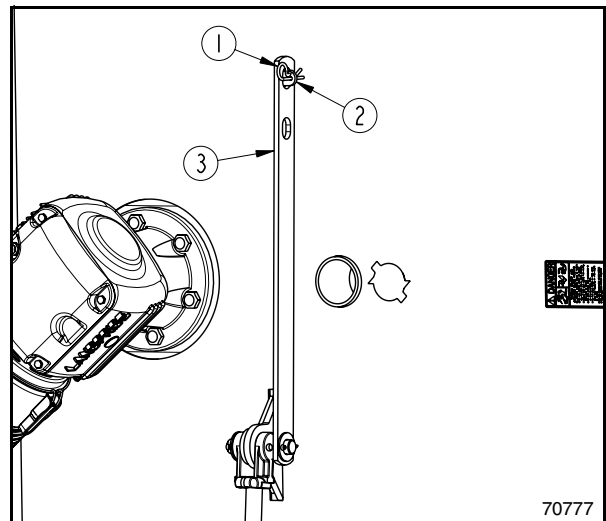
To avoid serious injury or death:

- Always raise wing and set transport lock before transporting from one work site to another and before traveling on public roadways. The wing can fall if not secured with the transport lock.
- Always travel with cutter at a safe transport height. be sure that it is high enough to clear ground obstacles but not too high that the cutter is unstable on side hills or tight turns.
- Select a safe ground speed that will allow adequate control of steering and stopping. Never exceed 20 mph (32.2 km/h) with attached equipment. Rough terrain requires a slower speed.
- Watch while making tight turns to ensure that the rear tractor tires and lower 3-point arms do not make contact with cutter hitch, driveline or deck. Keep lower 3-point arms raised at all times when hitched to a pull-type cutter.
- When traveling on public roads, use LED lights, slow moving vehicle sign, clean reflectors, and other adequate devices to warn operators in other vehicles of your presence. If implement blocks visibility of slow moving vehicle sign, relocate sign so it is visible from the back at all times. Always comply with all federal, state, and local laws.

1. Select a safe ground speed when transporting from one area to another. Maximum transport speed for the Rotary Cutter is 20 mph (32.2 km/h). **DO NOT EXCEED.**
2. Be sure to reduce tractor ground speed when turning and leave enough clearance so the cutter does not contact obstacles such as buildings, trees, or fences.
3. Always raise wing and set transport lock before traveling on public roadways.
4. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.



Transport Bar, Locked Position
Figure 3-2



Transport Bar, Storage Position
Figure 3-3

Section 3: Operating Instructions

Road Side Cutting

Land Pride recommends the Rotary Cutter be equipped with chain guards to stop flying objects when cutting road sides. Refer to “**Safety Guards**” on page 37.

Use the LED flashing lights on the cutter to make yourself more visible when cutting road sides.

Field Set-up

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.

WARNING

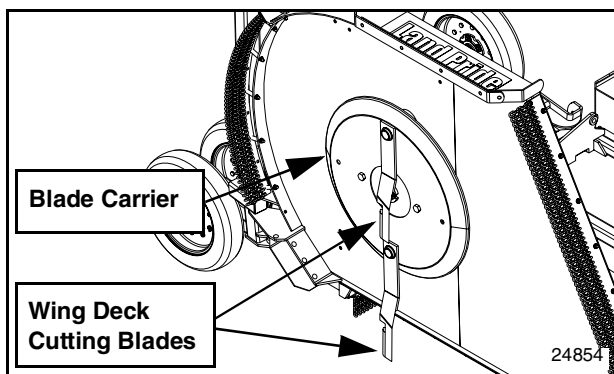
To avoid serious injury or death:

The following operational procedures should be carried out by the tractor operator. Other persons should not be in the area. All cutter operations including field set-up should be stopped when other persons are in the vicinity.

IMPORTANT: Cutting should **not be** done in wet conditions. Wet material will build up on the deck underside creating need for additional horsepower, high wear, and poor discharge.

Field Inspection

Thoroughly inspect area to be cut for debris and unforeseen objects. Remove all potential hazards and mark any that cannot be removed.



Wing Deck Blade Positioning
Figure 3-4

Unfold Wing and Set Cutting Height

Refer to Figure 3-4:

IMPORTANT: Cutting blades may become locked together (overlapped) when the wing is raised for transport. Operating cutter in this condition will result in severe deck vibration. Inspect wing for locked blades prior to power-on operation.

1. Inspect wing blade carrier and cutting blades for locked blades prior to lowering the wing. Separate locked blades.
2. Start tractor and raise wing up to release any tension on the transport lock bars.
3. Without releasing hydraulic pressure on the wing, shut tractor down before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.

Refer to Figure 3-2 on page 33:

4. Remove hairpin cotter (#1) and transport lock bar (#3) from cylinder pin (#4).

Refer to Figure 3-3 on page 33:

5. Rotate end of transport lock bar (#3) to storage pin (#2) and secure with hairpin cotter (#1).
6. Lower wing down.
7. Adjust cutter to field cutting height. See “**Adjust Deck Cutting Height**” on page 29 for detailed instructions.

Set Wing Lift Lever In Float Position

IMPORTANT: The wing folding levers should be in float position to avoid damage to the wing hydraulic cylinders and axles while cutting on uneven terrain.

IMPORTANT: Do not let the wing flex down more than 20 degrees while operating the cutter. Doing so can cause damage to the cutter.

Use the float position of your tractor’s hydraulic system to provide automatic floating of the wing for varying terrain conditions. This will ensure that the wing gauge wheels are in continuous contact with the ground at all times.

Select Gear Range

Optimum ground speed depends on density of material being cut, horsepower rating of the tractor and (in some cases) terrain. Always operate tractor at cutter’s full-rated power take-off speed in a gear range that allows the cutter to make a smooth cut without lugging the tractor down, usually between 2-5 mph (3.2 -8 km/h). Low power take-off speed will allow the blades to hinge back resulting in a ragged uneven cutting.

NOTE: Never run tractor in an economy mode or any other mode that will drop power or speed from the power take-off. This may result in ragged and uneven cutting.

Section 3: Operating Instructions

Engage Blades

IMPORTANT: Cutter blades can lock-up against each other during start-up and shut-down, especially if tractor's power take-off engagement is "INSTANT ON" and/or "INSTANT OFF." Follow Blade Engagement and Blade Disengagement instructions to help eliminate blade lock up.

1. Select a gear range that will allow the cutter to make a smooth cut without lugging the tractor down. See "**Select Gear Range**" above for instructions.
2. With wing lowered, increase throttle to a speed just enough to get the cutter started without stalling tractor while slowly engaging power take-off. If available, use tractor's power take-off soft start option.
3. Ensure power shafts are rotating and cutter is not vibrating excessively after ramping up to full power take-off speed for at least 3 seconds. If excessive vibration continues after 3 seconds at full power take-off speed, disengage power take-off immediately, shut tractor down, and remove switch key. Wait for blades to stop rotating before dismounting tractor.
4. Investigate the cause if cutter was shut down due to excessive vibration. See "**Blade Operation Inspection**" on page 32 for detailed instructions.
5. If cutter was not shut down, commence forward cutting operation at full power take-off operating speed. Make a new gear selection if tractor is lugging down or if cutter is making a rough cut.
6. Periodically disengage power take-off, turn off tractor, remove switch key & check for objects wrapped around blade spindles. Block deck up before removing objects.
7. Frequently inspect cutter for loose bolts and nuts. Tighten all loose hardware as indicated in the "**Torque Values Chart**" on page 62.

Disengage Blades

1. Slowly decrease throttle speed until engine idle speed is reached.
2. Disengage power take-off.
3. Place tractor in park or set park brake, shut tractor engine off, remove switch key, and wait for blades to stop before dismounting from tractor.

IMPORTANT: It will take longer for the blades to come to a complete stop on cutters equipped with a main driveline that has an overrunning clutch, as opposed to a cutter with a main driveline that does not have an overrunning clutch.



Section 3: Operating Instructions

General Operating Instructions

It is important that you familiarize yourself with the Operator's Manual, complete the Operator's Checklist, properly attach the cutter to your tractor, make leveling adjustments, preset cutting height, and set wing folding hydraulic control lever to the float position before beginning a running operational safety check on your Land Pride RC(M)5014 Series 2 Rotary Cutter.

It's now time to do a running operational safety check. 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.

Before starting the tractor, make sure the park brake is engaged and power take-off is disengaged. Start the tractor and set engine throttle speed at a low idle. If wing is folded up, follow instructions in this manual to unfold the wing. Raise cutter with tractor's rear hydraulic lift control lever to transport position making sure that the power take-off shaft does not bind and does not contact the cutter frame. Lower cutter to the ground and at a low engine speed engage power take-off. 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 cutter to the ground and increase tractor's engine rpm until it reaches the cutter's full power take-off operating speed which will be either 540 or 1000 rpm. If everything is still running smoothly, once more raise the cutter to transport height to check for driveline bind or chatter. Lower cutter to the ground, return engine to a low idle, and disengage the power take-off. Make a tight turn to ensure that the rear tractor tires are not coming in contact with the hitch or deck. Also, be sure tractor 3-point arms are raised and will not contact main driveline.

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 which 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 either 540 or 1000 rpm power take-off speed and 2 to 5 mph (3.2 -8 km/h) 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 happen you may try reversing the direction of travel 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 and avoid sharp turns if at all possible.

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

- Reduce tractor's engine rpm.
- Make sure the wheels supporting the wing are on the ground and the hydraulic control lever for folding the wing is set in the float position.
- Engage power take-off, raise engine rpm to the appropriate power take-off speed, and begin mowing.

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 14' (4.27 m) Folding Rotary Cutter can do.

When 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 power take-off.
- Stop on level ground, place gear selector in park or set park brake, turn off engine, remove switch key, and stay on the tractor until cutter blades have come to a complete stop.



Section 4: Options & Accessories

Safety Guards



DANGER

To avoid serious injury or death:

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front & rear safety guards is mandatory with this cutter. Double row chain guards should be used when cutting along roadways and in areas where people may be present. Stop blade rotation if bystanders are in or around the area. It is recommended that a safety shield be placed between the operator and cutter on an open air tractor.



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 safety guards for the RC5014 series 2 to best suit your application: single row chain guards, and double row chain guards.

- Single row chain guards are constructed with a single row of hanging chain links. They can withstand harsh applications.
- Double row chain guards are constructed with two staggered rows of hanging chain links. The second row provides additional barrier for stopping thrown objects.

Part Number & Description

Single Row Chain Guards

- 318-816A Front Single Row Chain Guards
- 318-823A Rear Single Row Chain Guards

Double Row Chain Guards

- 318-818A Front Double Row Chain Guards
- 318-825A Rear Double Row Chain Guards

Hitch Options

Refer to Hitch Types on page 14:

The cutter is factory supplied with the standard clevis hitch. Below are other available hitch options. See “Hitch Types” on page 14 for complete description of hitches.

Part Number & Description

- 330-225A Standard Clevis Hitch
- 330-333A Bar-Tite Hitch (Optional)
- 330-334A Pintle Hitch (Optional)
- 330-335A Ball Hitch (Optional)
- 334-045A LP Performance Hitch (Optional)

Deck Ring Option

Land Pride offers a deck ring option for extra protection for the deck sheet and structure. The deck rings are welded to the underside of the center deck and wing decks to protect from bent and deflected blades caused by hitting obstructions.

Blade Carrier Options

Land Pride offers two blade carrier options. A heavy duty diamond blade carrier option and a heavy duty diamond blade carrier with dishpan option. The diamond blade carrier can handle most cutting conditions and leave a cleaner cut compared to a diamond blade carrier with dishpan. The diamond blade carrier with dishpan option assists the blade carrier in passing over small tree stumps and other small obstructions that could damage the blade carrier.

Part Number & Description

- 334-685A Diamond blade bar
- 334-684A Diamond blade bar with dishpan

Tire & Axle Arrangement Options

Land Pride offers four different tires and two axle arrangements to best suit your application.

- Laminated tires are constructed of laminated layers of solid rubber that will never go flat.
- Aircraft tires are built tough to withstand the rugged use a cutter receives and to provide a smoother ride when transporting from field to field. If they are foam filled, they won't go flat.
- 5- Wheel axle arrangement: Four tires on transport axle and one on wing axle.
- 6- Wheel axle arrangement: Four tires on transport axle and two on wing axle.

Tire Part Number & Description

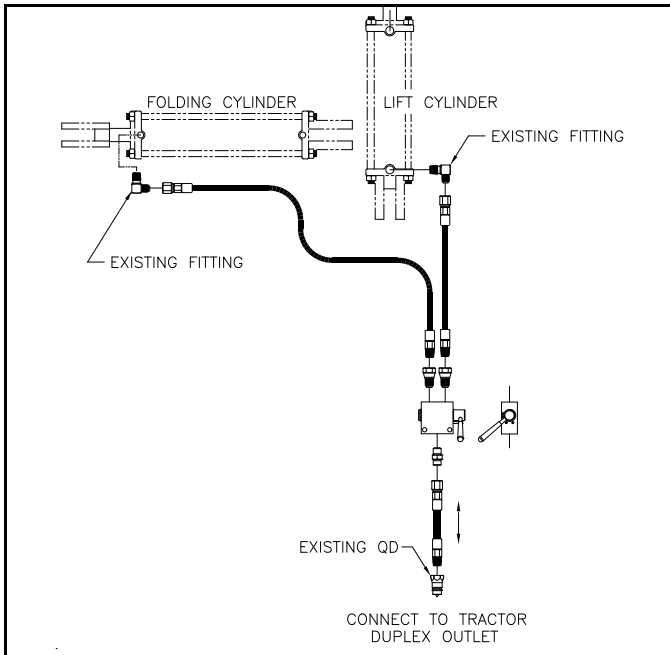
- 814-265C 6" x 21" Laminated Tire
- 814-673C 6" x 26" Laminated Tire
- 814-449C 29" x 9" x 15" Used Aircraft Tire without foam filling
- 814-287C 27" x 7.75" x 15" Used Aircraft Tire with foam filling

Center Axle Options

Land pride offers two axle options to best suit your application.

- Solid center axle with center spring suspension - Well suited for most general cutting applications.
- Walking tandem axle with center spring suspension - More suited for the roadside contractor to help hold side hills and ditches along road sides.

Section 4: Options & Accessories



Selector Control Valve Kit
Figure 4-1

Selector Control Valve Kit

Refer to Selector Control Valve Kit:

This kit is for tractors with two duplex outlets. It converts one of the tractor's duplex outlets into two duplex outlets with a control valve. A selector lever on the control valve selects which wing cylinder is operational with the tractor hydraulic control lever. It attaches to one of the tractor's duplex outlets.

See your local Land Pride dealer if your tractor is not properly equipped with the correct number of duplex outlets.

Part Number & Description

312-316A 2-Way Selector Control Valve Kit

Main Driveline Options

Land pride offers five main driveline options to best suit your application.

Part Number & Description

- 826-643C CV U-Joint - Cat 6 - 540 rpm - 1-3/8" - 6 Spline
- 826-884C CV U-Joint With Over-Running Clutch- Cat 6 - 540 rpm - 1-3/8" - 6 Spline
- 826-644C CV U-Joint - Cat 6 - 1000 rpm - 1-3/8" - 21 Spline
- 826-645C CV U-Joint - Cat 6 - 1000 rpm - 1-3/4" - 20 Spline
- 826-793C CV U-Joint With Over-Running Clutch- Cat 6 - 1000 rpm - 1-3/4" - 21 Spline

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Section 5: Maintenance & Lubrication

General Maintenance Information

Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

Check all bolts and pins after using the cutter for several hours and on a regular basis thereafter to ensure they are tight and secured. Tighten all loose hardware as indicated in the **“Torque Values Chart”** on page 62. Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride dealer.

Periodically, shut tractor down according to **“Tractor Shutdown Procedure”** on page 15. Dismount tractor and check for objects wrapped around the blade spindles. Block deck up before removing any objects.

DANGER

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

WARNING

To avoid serious injury or death:

- Make sure controls are all in neutral position or park before starting the power machine.
- Always follow **“Tractor Shutdown Procedure”** provided in this manual before dismounting the tractor.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.
- Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.
- Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris.
- Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level.

Hydraulic System

WARNING

To avoid serious injury or death:

Hydraulic fluid under high pressure will penetrate the skin or eyes causing a serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.

One of the most important things you can do to prevent hydraulic system problems is to ensure your tractor's hydraulic reservoir remains free of dirt and other contaminations.

Use a clean cloth to wipe hose ends clean before attaching them to your tractor. Replace tractor hydraulic filter element at the prescribed intervals. These simple maintenances will go a long way to prevent occurrence of control valve and hydraulic cylinder problems.

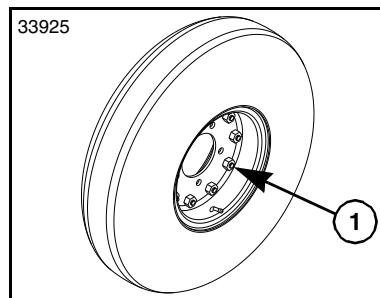
Check for signs of damaged or worn hydraulic hoses, fittings and cylinders before each use of the cutter. Replace damaged components as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

Tires

WARNING

To avoid serious injury or death:

- Tire changing can be dangerous and should be performed by trained personnel using correct tools and equipment. When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
 - Always release all air pressure in air-filled airplane tires before removing hardware bolting the split rims together. Not doing so can cause the split rims to blow apart instantly and could result in serious injury or death.
 - 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. Do not over inflate tires.
 - Do not weld on or heat a rim. High heat can weaken and/or warp the rim and damage the tire. Air pressure inside the tire can increase enough to cause an explosion.
1. Check tires for low air pressure, missing nuts, missing lug bolts, wear, separated rubber, and bent, broken, or cracked wheel rims.
 2. Inflate air-filled tires to the proper pressure. Refer to **“Tire Inflation Chart”** on page 62.



Air Filled Airplane Tires with Split Rims
Figure 5-1

Refer to Figure 5-1:

3. Replace wheel rims and tires as needed with genuine Land Pride parts. Do not loosen split rim hardware (#1) until all air pressure in the tire has been removed.

Section 5: Maintenance & Lubrication

Chain Guards

⚠ DANGER

To avoid serious injury or death:

Rotary Cutters have the ability to discharge objects at high speeds; therefore, the use of front & rear safety guards is mandatory with this cutter. Double row chain guards should be used when cutting along roadways and in areas where people may be present. Stop blade rotation if bystanders are in or around the area. It is recommended that a safety shield be placed between the operator and cutter on an open air tractor.

Before each use of the cutter, check that all chain guards are present, undamaged and in working order. Replace any damaged or missing chain guard components as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

Gearbox Driveline Shielding

⚠ DANGER

To avoid serious injury or death:

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.

Check that the wing gearbox driveline shielding and center gearbox driveline shielding is undamaged and in working order. Replace any damaged components as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

Wing Gearbox Driveline Shield Access

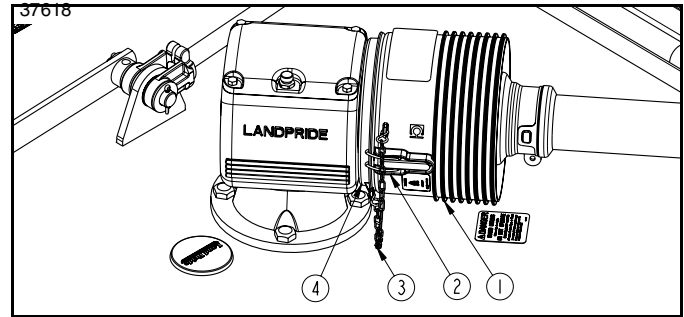
Refer to Figure 5-2:

1. To remove shaft guard (#1) at the spindle gearbox, use a flat head screw driver to unsnap latches (#2) on both sides of guard (#1) and slide shaft guard over driveline to expose driveline yoke. Do not unhook safety chain (#3).
2. When servicing of driveline yoke is completed, return shaft guard to its original position and secure with latches (#2).
3. Check safety chain (#3). Make sure it is latched to shaft guard mounting plate (#4) and shaft guard (#1).

Center Gearbox Driveline Shield Access

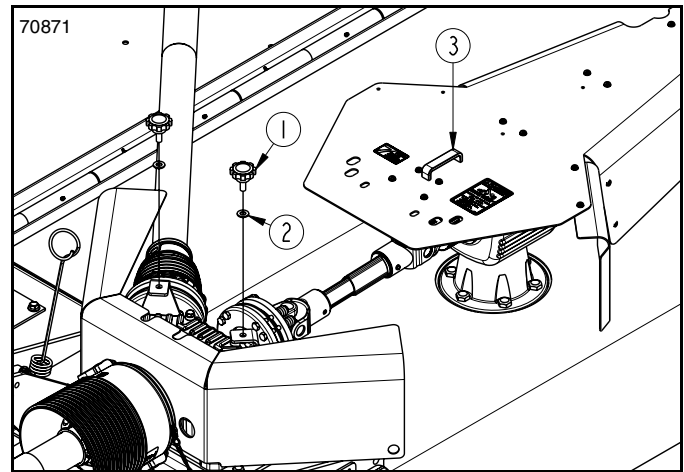
Refer to Figure 5-3:

1. To access the center driveline, remove threaded knobs (#1) and flat washers (#2).
2. Grab the shield by its handle (#3) and slide it back.
3. When servicing of driveline is completed, return shielding to its original position.
4. Fasten with flat washers (#2) and threaded knobs (#3).



Wing Gearbox Driveline Shield Access

Figure 5-2



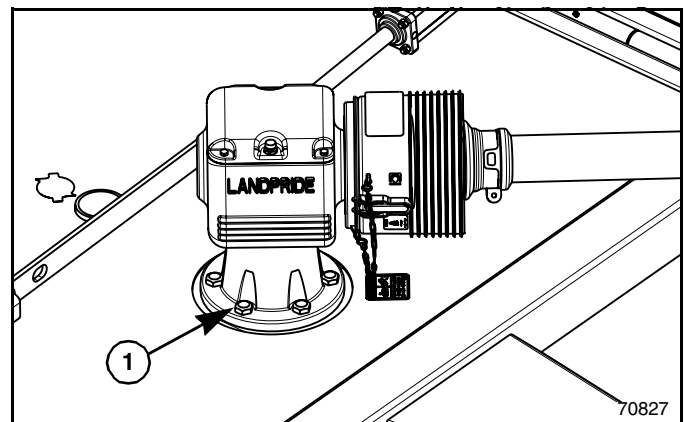
Center Gearbox Driveline Shield Access

Figure 5-3

Gearbox Mounting Bolts

Refer to Figure 5-4:

If at any time the center deck or wing gearbox mounting bolts (#1) are loosened, Loctite Threadlocker Red 271 should be applied to the bolts before tightening them to the proper torque. This does not apply to splitter box mounting bolts.



Gearbox Mounting Bolts

Figure 5-4



Section 5: Maintenance & Lubrication

Cutter Blades

DANGER

To avoid serious injury or death:

- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is 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 genuine OEM blades to assure safety.
- Wait for blades to come to a complete stop before accessing blade bolts through blade bolt access hole.
- Wear eye protection and gloves while inspecting, removing, sharpening, and replacing a blade.

IMPORTANT: Cutting blades must be replaced in mating pairs. Not replacing both blades will result in an out-of-balance condition that will contribute to premature bearing breakdown on the spindle hub and create structural cracks in the cutter housing.

Always inspect cutting blades before each use. Make certain they are properly installed and in good 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. Refer to Figure 5-5 on page 43 when ordering Land Pride replacement blade components.

Remove cutting blades and sharpen or replace as follows:

1. Secure cutter deck in the up position with solid, non-concrete supports before servicing underside of cutter.
2. Shut tractor down properly before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15.
3. Disconnect main driveline from the tractor.

Refer to Figure 5-5 on page 43:

4. Rotate blade carrier (#6) until blade bolt (#1) aligns with access hole (A).

5. Unscrew locknut (#5) to remove cutter blade (#2). Blade bolt (#1) is keyed and will not turn freely.
6. 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 in the cutting unit. 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 (.04 kg). difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.

Refer to Figure 5-6 on page 43:

7. Carefully check cutting edges of blades in relation to blade carrier rotation to ensure correct blade placement. Cutter blades must be installed with cutting edge leading in rotation.

Refer to Figure 5-5 on page 43:

WARNING

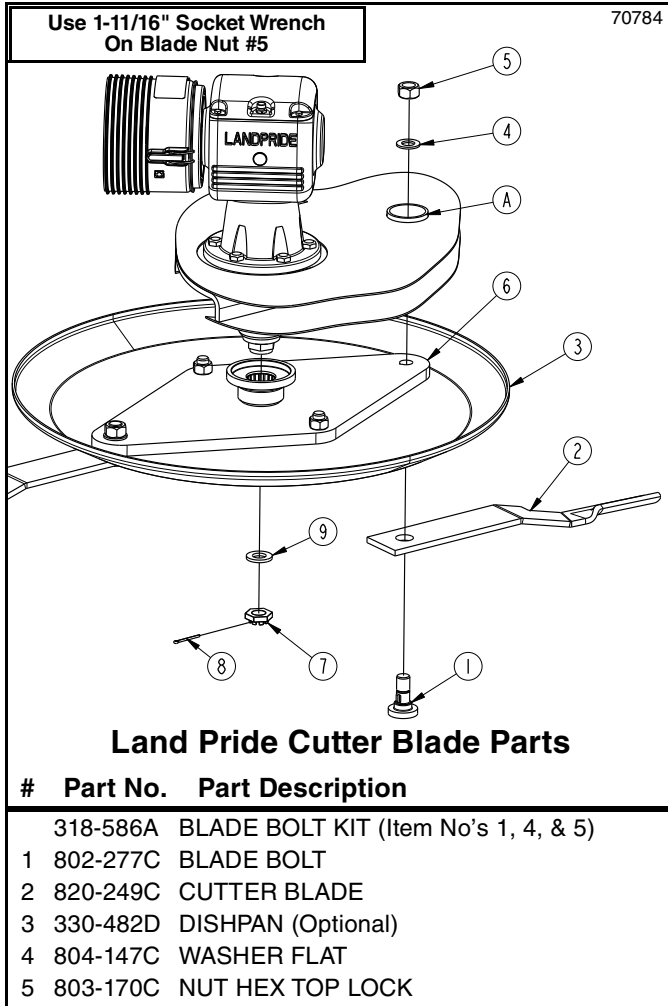
To avoid serious injury or death:

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.

IMPORTANT: Examine blade bolts and their flat washers for excessive wear and replace if worn.

8. Insert blade bolt (#1) through blade (#2), optional dishpan (#3), blade carrier (#6) and flat washer (#4). Secure blade with a **new locknut (#5)** and torque to 450 ft-lbs (610 Nm).
9. Reconnect main driveline to tractor power take-off.

Section 5: Maintenance & Lubrication



Cutter Blade Assembly
Figure 5-5

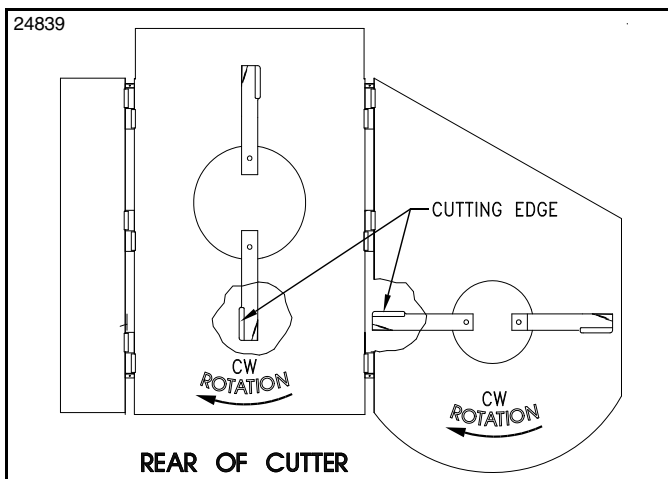


Figure 5-6



Skid Shoes

WARNING

To avoid serious injury or death:

Excessive wear on skid shoes may cause inadequate operation of cutter and create a safety hazard.

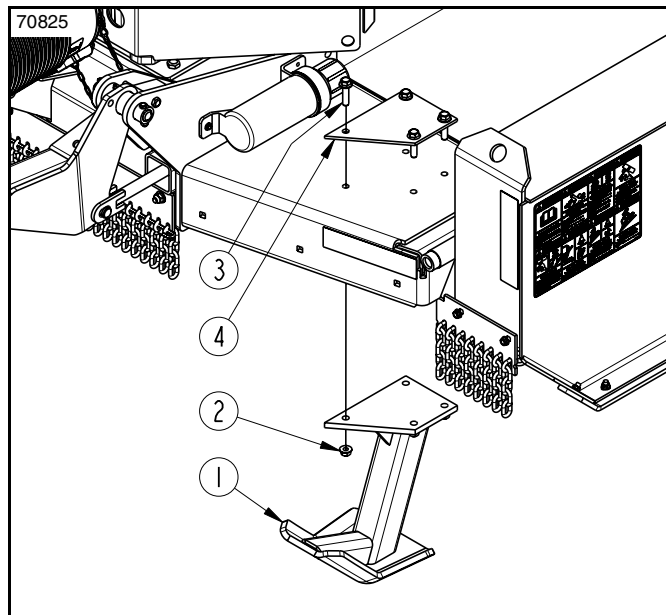
There is a skid shoe mounted on each side of the center section and two skid shoes mounted on each wing section. Check all skid shoes for wear and replace if necessary. Order only genuine Land Pride parts from your local Land Pride dealer.

Center Skid Shoes

Refer to Figure 5-7:

Replace center skid shoes as follows:

1. Remove 1/2"-13 whiz nuts (#2), 1/2" -13 x 2" GR8 hex bolts (#3), and center skid shoe (#1) as shown.
2. Attach skid shoe (#1) with existing 1/2" bolts (#3), and existing top plate (#4). Secure with existing 1/2" hex whiz nuts. Tighten nuts to the correct torque.
3. Repeat on opposite side of center section.



Center Skid Shoe Replacement Parts

Part No.	Part Description
1 318-145H	CENTER SKID SHOE (RH)
1 318-146H	CENTER SKID SHOE (LH)

Center Skid Shoe
Figure 5-7

Section 5: Maintenance & Lubrication

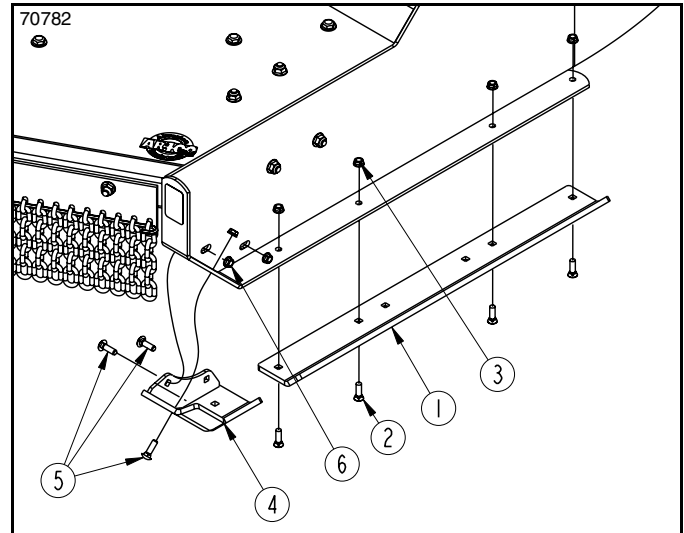
Wing Skid Shoes

Refer to Figure 5-8:

IMPORTANT: Excessive wear on skid shoes can weaken cutter side panels and cause damage that will require extensive repairs. Always replace skid shoes at the first sign of wearing thin.

Replace wing skid shoes as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2), and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Attach new wing skid shoe (#1) to cutter with 3/8" plow bolts (#2) and secure with 3/8" hex whiz nuts (#3). Tighten nuts to the correct torque.
4. Remove 3/8" hex whiz nuts (#6), 3/8" carriage bolts (#5), and hardened wing skid shoe (#4) as shown.
5. Attach new hardened wing skid shoe (#4) to cutter with 3/8" carriage bolts (#5) and secure with 3/8" hex whiz nuts (#6). Tighten nuts to the correct torque



Wing Skid Shoe Replacement Parts

Part No.	Part Description
1	330-835D WING SKID SHOE
2	802-466C PLOW BOLT, 3/8" - 16 x 1 1/4" GRADE 5
4	331-120H HARDENED WING SKID SHOE

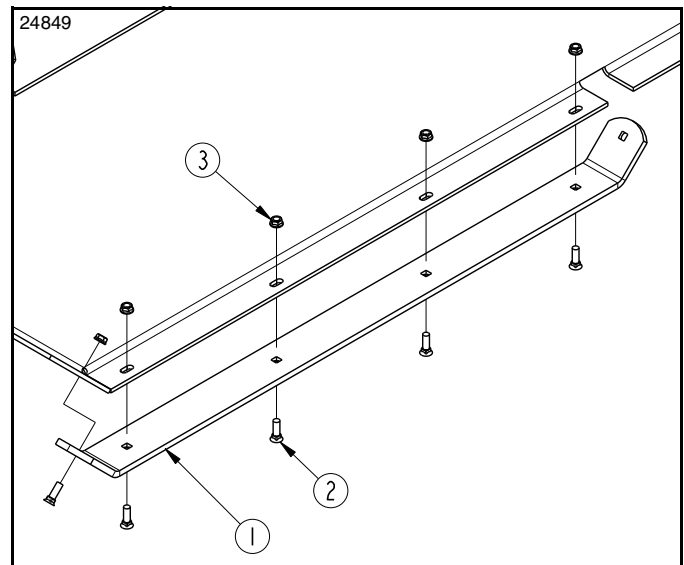
**Wing Skid Shoes
Figure 5-8**

Weight Box Skid Shoe

Refer to Figure 5-9:

Reverse or replace weight box skid shoe as follows:

1. Remove 3/8" hex whiz nuts (#3), 3/8" plow bolts (#2), and wing skid shoe (#1) as shown.
2. Plow bolts (#2) should be checked for wear and replaced if necessary.
3. Reverse existing skid shoe and reattach or attach new skid shoe with 3/8"-16 x 1 1/4" GR 5 plow bolts (#2). Secure with 3/8" hex whiz nuts (#3). Tighten hex whiz nuts to the correct torque.



Weight Box Skid Shoe Replacement Parts

Part No.	Part Description
1	318-441D SKID SHOE
2	802-466C PLOW BOLT, 3/8" - 16 x 1 1/4" GRADE 5

**Weight Box Skid Shoe
Figure 5-9**



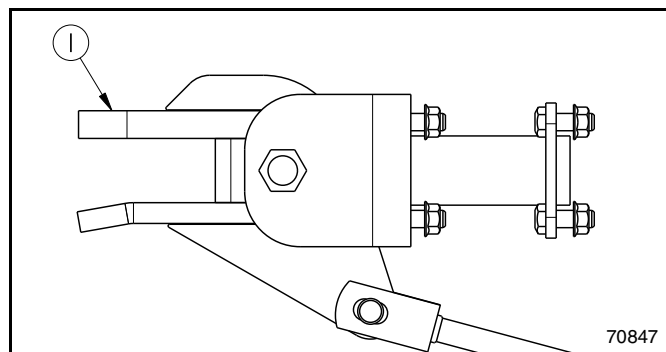
Hitch Wear Points

Before each use, check the wear points for the specific hitch on your cutter. Replace worn hitch components as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

Fixed Clevis Hitch Wear Point

Refer to Figure 5-10:

On the Fixed Clevis Hitch, check plate (#1) for excessive wear. If the thickness of plate (#1) is worn down to 9/16" (14 mm) or less at the hitch pin hole, the component must be replaced.



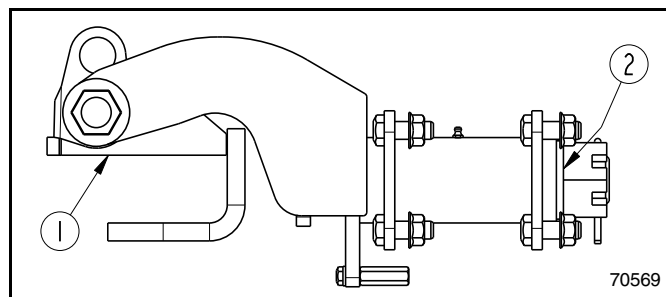
Fixed Clevis Hitch Wear Point
Figure 5-10

Land Pride Performance Hitch Wear Points

Refer to Figure 5-11:

On the Land Pride Performance Hitch, check plate (#1) for excessive wear. If the thickness of plate (#1) is worn down to 1/2" (13 mm) or less at the hitch pin hole, the component must be replaced.

Check for excessive wear on flat washer (#2). Replace as needed.



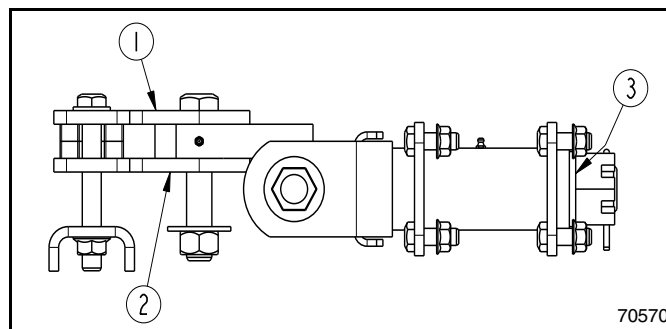
Land Pride Performance Hitch Wear Points
Figure 5-11

Bar-Tite Hitch Wear Points

Refer to Figure 5-12:

On the Bar-Tite Hitch, check plates (#1 & #2) for excessive wear. If the thickness of the plates are worn down to 3/8" (10 mm) or less at the bolt hole, the component must be replaced.

Check for excessive wear on flat washer (#3). Replace as needed.



Bar-Tite Hitch Wear Points
Figure 5-12

Section 5: Maintenance & Lubrication

Drivelines

Before each use, check that all driveline shields and drivelines are in place, undamaged and in working order. Replace shields and drivelines as needed. Order only genuine Land Pride parts from your local Land Pride dealer.

DANGER

To avoid serious injury or death:

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.

WARNING

To avoid serious injury or death:

Do not operate a broken or bent driveline. Such a driveline will break apart while rotating at high speeds. Always remove the implement from use until the damaged driveline can be repaired or replaced.

Drivelines With Slip Clutches

WARNING

To avoid serious injury or death:

- Always follow “Tractor Shutdown Procedure” provided in this manual before dismantling the tractor.
- A slip clutch that has been in use or has slipped for as little as only two or three seconds during run-in may be too hot to touch. Allow a hot clutch to cool before working on it.

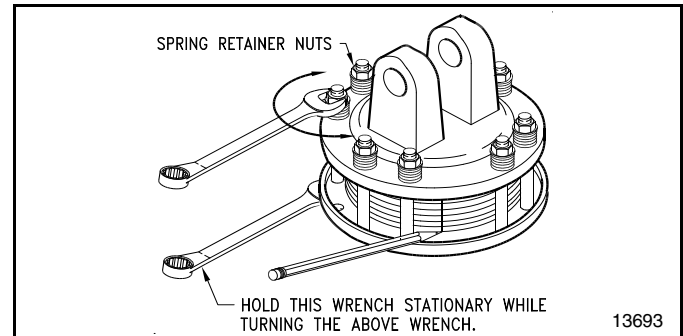
IMPORTANT: Prior to initial operation and after 10 days of inactivity, slip friction disks to remove oxidation and moisture. Moisture allows disks to slip easily. Oxidation can prevent disk from slipping causing driveline damage. This damage is NOT covered under the warranty.

Drive components are protected from shock loads by a friction slip clutch. The clutch must be capable of slippage during operation.

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 the friction surfaces. Repeat “run-in” instructions at the beginning of each season and when moisture and/or condensation seizes inner friction plates.

Refer to Figure 5-13:

1. Using a pencil or other marker, scribe a line across the exposed edges of the clutch plates and friction disks.
2. Carefully loosen each of the 8 spring retainer nuts by exactly 2 revolutions. It will be necessary to hold hex end of retainer bolt in order to **count the exact number of revolutions**.
3. Make sure the area is clear of all bystanders and machine is safe to operate.



Clutch Run-In
Figure 5-13

4. Start tractor and engage power take-off drive for 2-3 seconds to permit clutch surfaces to slip. Disengage and re-engage power take-off for 2-3 seconds. Disengage power take-off, shut tractor off and remove key. Wait for all components to stop before dismantling from tractor.
5. Inspect clutch and ensure that the scribed markings made on the clutch plates have changed position. Slippage has not occurred if any two marks on the friction disk and plate are still aligned. A clutch that has not slipped must be disassembled to separate the friction disk plates. See “Clutch Disassembly, Inspection & Assembly” below.
6. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore clutch to original setting pressure.
7. Allow clutch to cool to ambient temperature before operating again. Clutch is now ready for use.
8. 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. See Figure 5-15 to adjust spring length.

Section 5: Maintenance & Lubrication

Clutch Disassembly, Inspection & Assembly

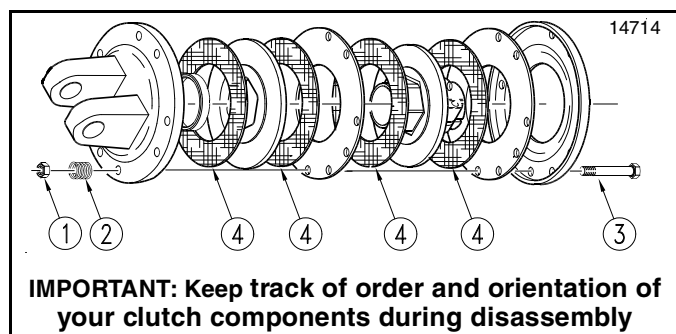
If clutch run-in procedure above indicated that one or more friction disks did not slip, then the clutch must be disassembled to separate the friction disks.

Disassembly

Refer to Figure 5-14:

IMPORTANT: Not all clutches are assembled the same with the same number of components. Be sure to keep track of order and orientation of your clutch components during disassembly.

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



IMPORTANT: Keep track of order and orientation of your clutch components during disassembly

Clutch Disassembly
Figure 5-14

Inspection

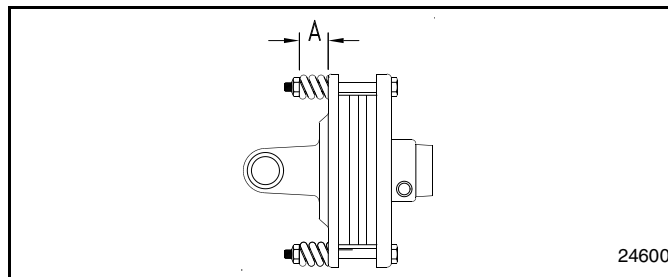
Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement. The original friction disk thickness is 1/8" (3.2mm) and should be replaced if thickness falls below 3/64" (1.1mm). If clutches have been slipped to the point of "smoking", the friction disks may be damaged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

Assembly

Reassemble each friction disk (#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 5-15:

Progressively tighten each spring retainer bolt until correct spring height "A" is reached.



Driveline No.	Driveline Location	Power Take-Off Speed	Cat. No.	"A" Spring Height
826-819C	Wing	540/1000	5	1.32" (3.4 cm)
826-820C	Center	540/1000	5	1.32" (3.4 cm)

Clutch Adjustment
Figure 5-15

Long-Term Storage

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

DANGER

To avoid serious injury or death:

- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is 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.
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. See "**Cutter Blades**" on page 42. Check blades and blade bolts for wear and replace if necessary.
 3. Inspect for loose, damaged, or worn parts and adjust or replace as needed.
 4. 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.



Section 5: Maintenance & Lubrication

Land Pride Touch-up Paint	
Part No.	Part Description
821-011C	PAINT LP BEIGE SPRAY CAN
821-054C	PAINT MEDIUM RED SPRAY CAN
821-058C	PAINT GREEN SPRAY CAN
821-066C	PAINT ORANGE SPRAY CAN
821-070C	PAINT GP GLOSS BLACK SPRAY CAN

5. Replace all damaged or missing guarding & decals.
6. Lubricate as noted in “**Lubrication Points**” starting on page 50.
7. Store cutter on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer cutter life.
8. Follow all unhooking instructions on page 25 when disconnecting tractor from cutter.

Ordering Replacement Parts

Land Pride offers equipment in factory standard Beige with black highlights. This implement may also be purchased in Orange, Green, or Red.





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

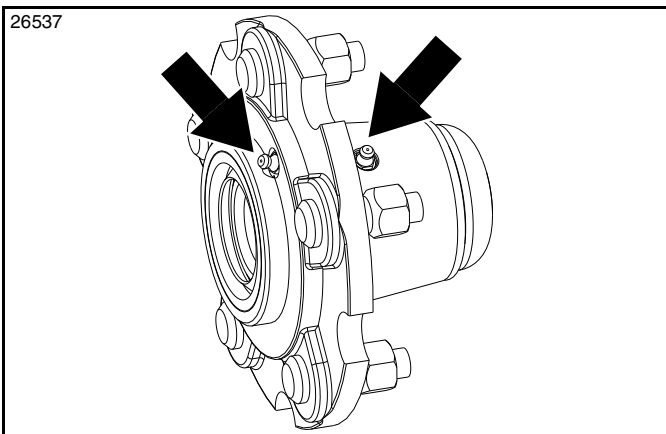
- | | |
|----------------------------|----------------------------|
| 81 Green | 85 Black |
| 82 Orange | 86 Yellow |
| 83 Red | |

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



Lubrication Points

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



	 150 Hours	Repack Annually
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Axle Hub Bearing

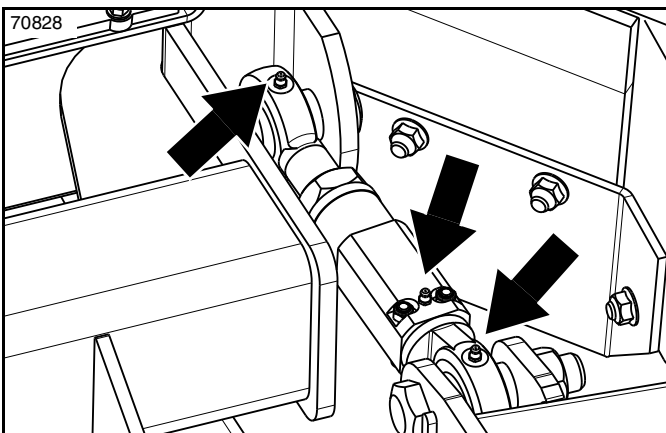
Type of Lubrication: Multi-Purpose Grease



Grease wheel bearings every 150 hours.

1-zerk per wheel (zerk can be on either side as shown)

Quantity = 2 pumps

Repack wheel bearings annually.



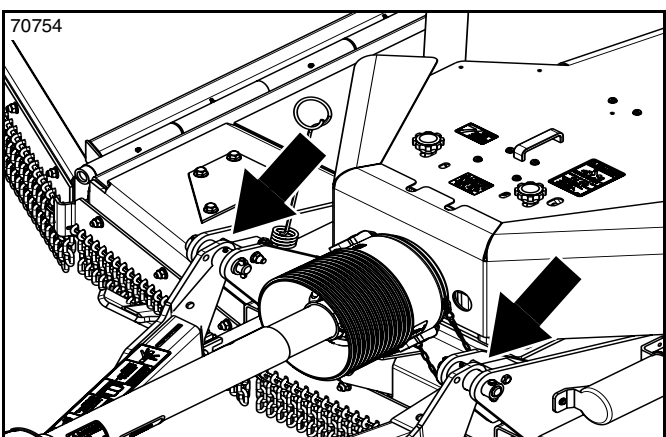
	 50 Hrs
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Adjustable Turnbuckle

Type of Lubrication: Multi-Purpose Grease

Quantity = As required

Grease with wing folded up to remove pressure on turnbuckle and allow grease to reach more areas.



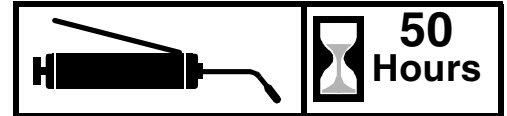
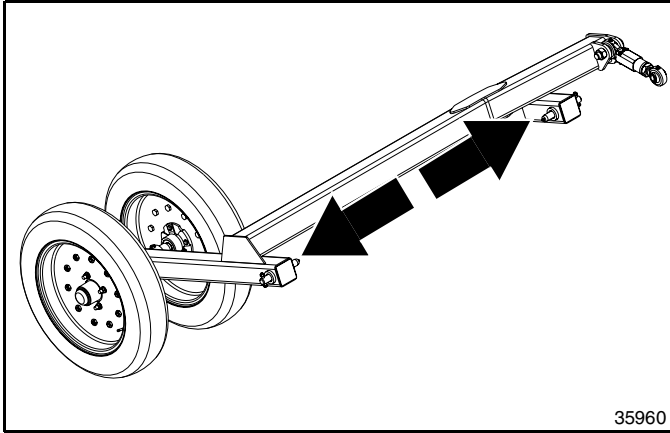
	 50 Hrs
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Hitch Frame

Type of Lubrication: Multi-Purpose Grease

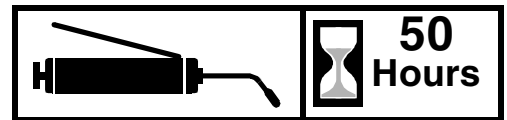
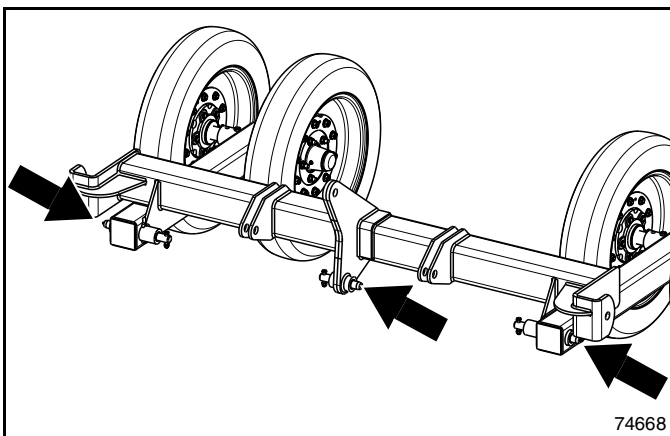
Quantity = As required

Section 5: Maintenance & Lubrication



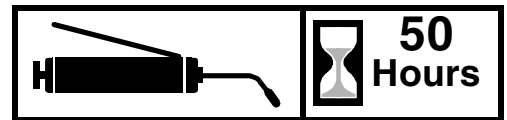
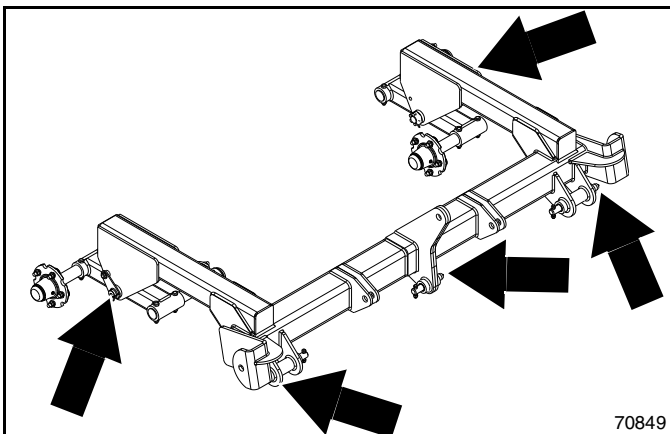
Wing Axle Pivot Pins

2-zerks per wing (right-hand wing shown)
 Type of Lubrication: Multi-purpose Grease
 Quantity = As required



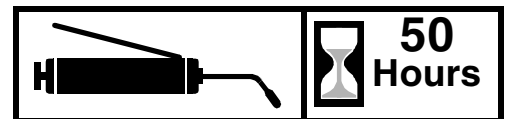
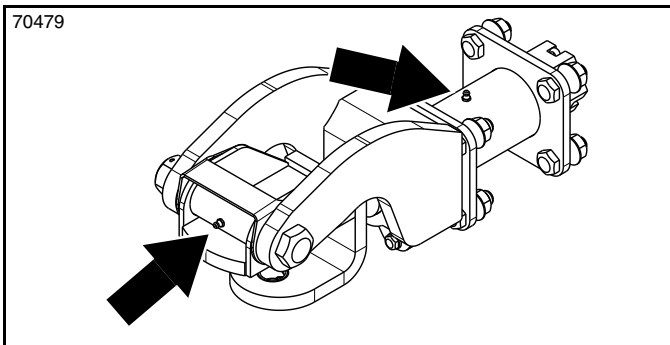
Center Axle Pivot Pins

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



Center Tandem Axle Pivot Pins

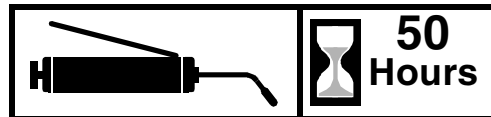
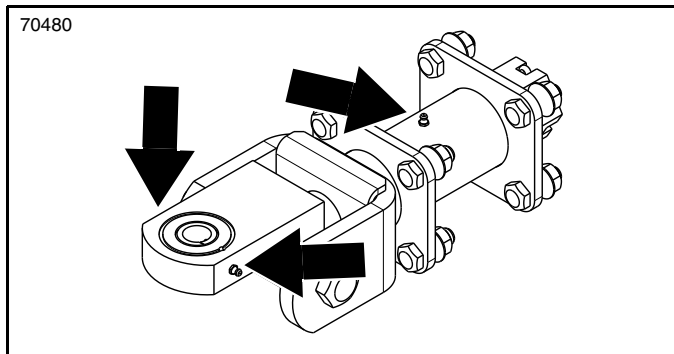
5-zerks
 Type of Lubrication: Multi-purpose Grease
 Quantity = As required



LP Performance Hitch (Optional)

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

Section 5: Maintenance & Lubrication

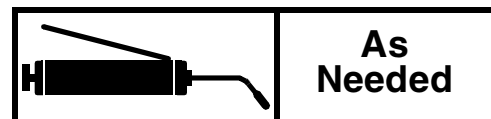
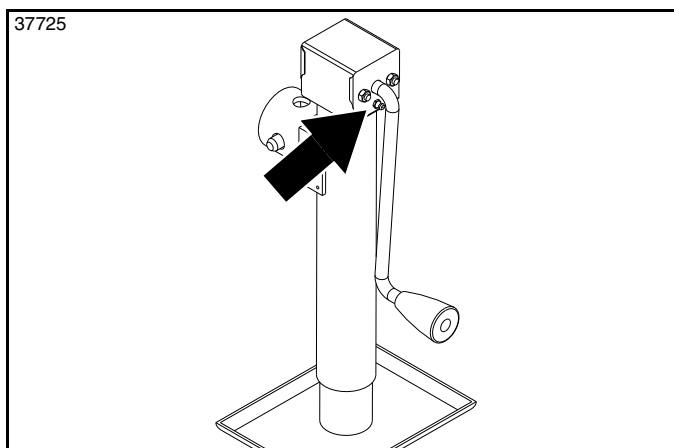


Bar-Tite Hitch (Optional)

3-zerks

Type of Lubrication: Multi-purpose Grease

Quantity = As required



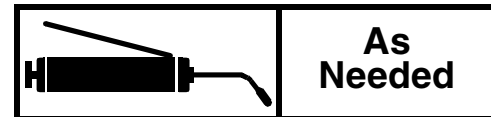
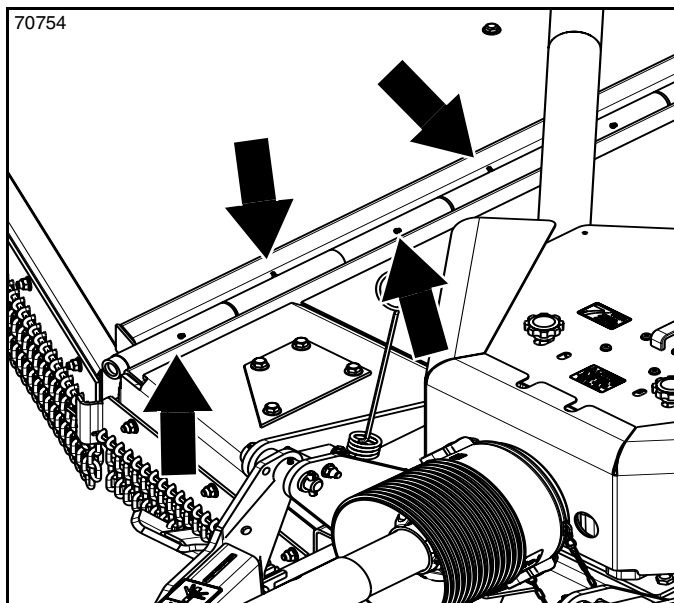
Park Jack

1 - zerk

Type of Lubrication: Multi-purpose Grease

Quantity = As required

Frequency = As needed and when unhooking for longterm storage.



Deck Hinges

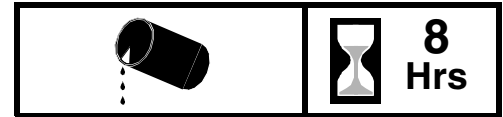
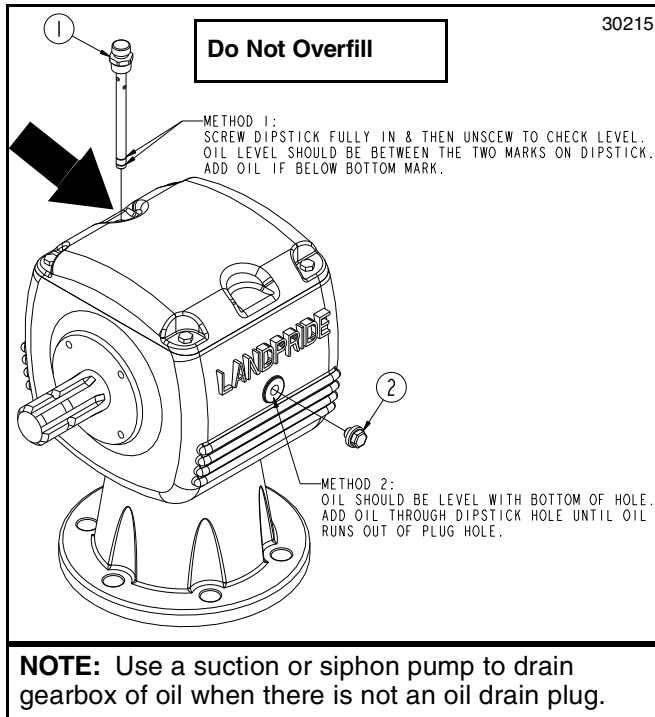
20- zerks

Type of Lubrication: Multi-purpose Grease

Quantity = As required

Frequency = As needed and when unhooking for longterm storage.

Section 5: Maintenance & Lubrication



Gearbox

Change oil after first 50 hours, then change it yearly or every 600 hours.

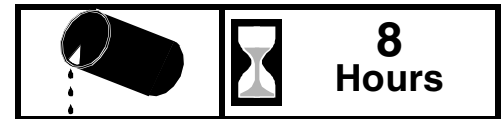
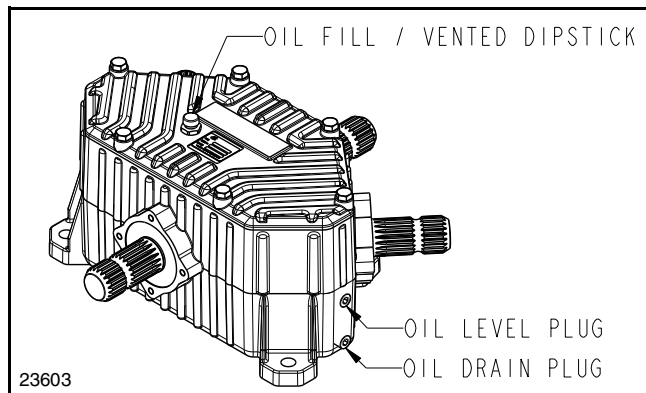
IMPORTANT: Do not overfill the gearbox with oil. Oil will expand when hot. Make sure the implement is level and oil is cool before checking oil level.

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.



Divider Box

Change oil after first 50 hours, then change it yearly or every 600 hours.

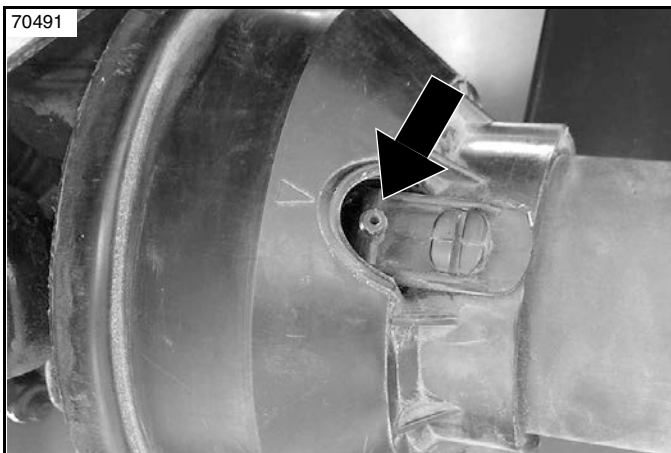
IMPORTANT: Do not overfill the gearbox with oil. Oil will expand when hot. Make sure the implement is level and oil is cool before checking oil level.

If oil has been removed from the gearbox, refill gearbox to plug level or full mark on the dipstick. Allow time for air to bleed up from the lower cavity, and then recheck.

Instructions: Remove oil level plug. If oil is below bottom of plug hole, add recommended gear lube through oil fill/vent plug hole until oil flows out of oil level plug hole. Reinstall and tighten oil level plug and oil fill/vent plug.

Type of Lubrication: 80-90W EP

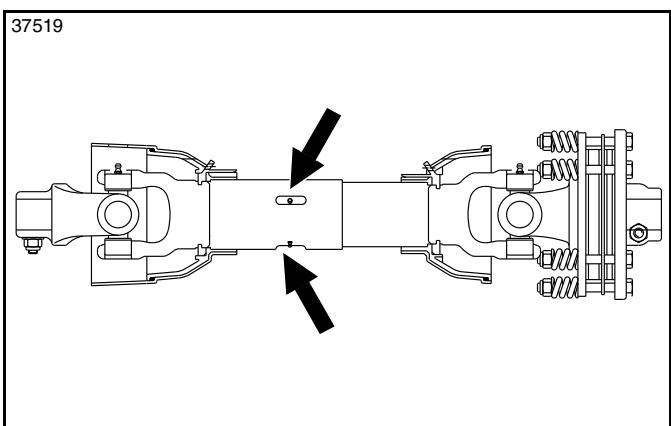
Quantity = Fill until oil begins to flow out oil level plug hole in gearbox.



Wing Driveline Shield Grease Point

Type of Lubrication: Multi-purpose Grease

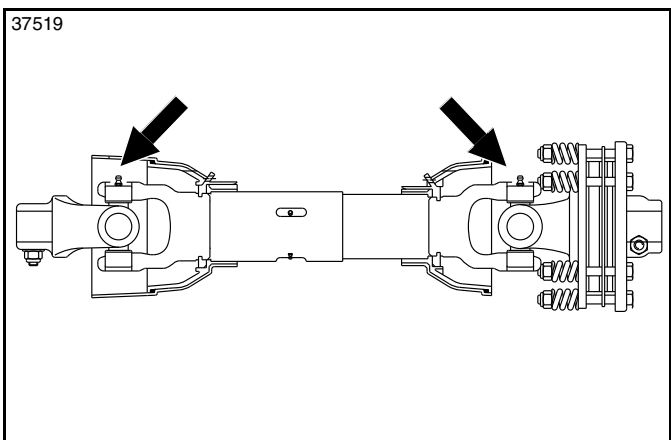
Quantity = 2-3 Pumps



Wing Driveline Profile Tubes

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously

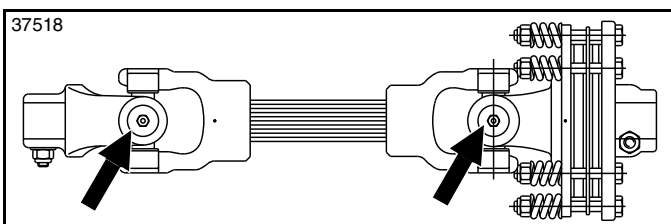


Wing Driveline Joints

Type of Lubrication: Multi-purpose Grease

Quantity= 2-3 Pumps

Drivelines with external profile tube grease point

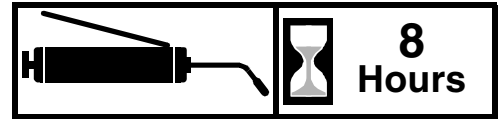
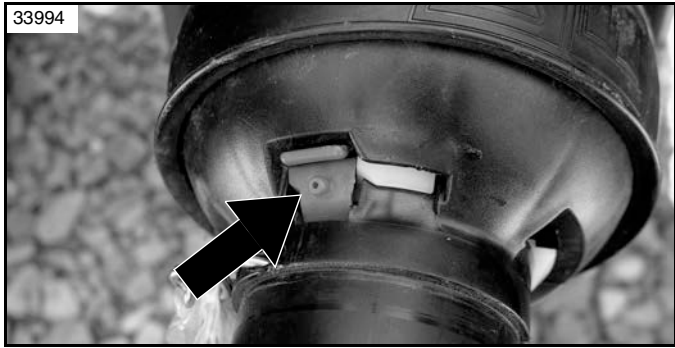


Intermediate Driveline Joints

Type of Lubrication: Multi-purpose Grease

Quantity= 2-3 Pumps

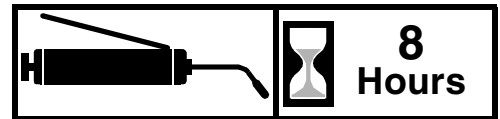
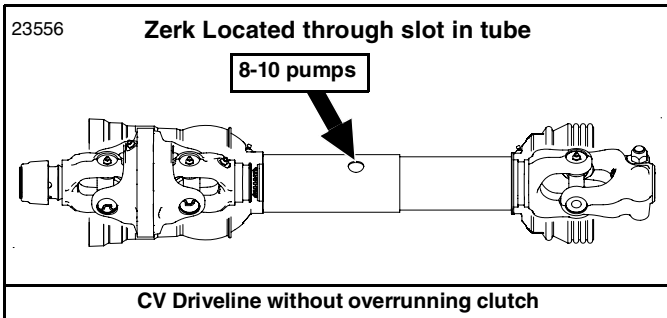
Section 5: Maintenance & Lubrication



CV Main Driveline Shield Grease Point

Type of Lubrication: Multi-purpose Grease

Quantity = 2-3 Pumps

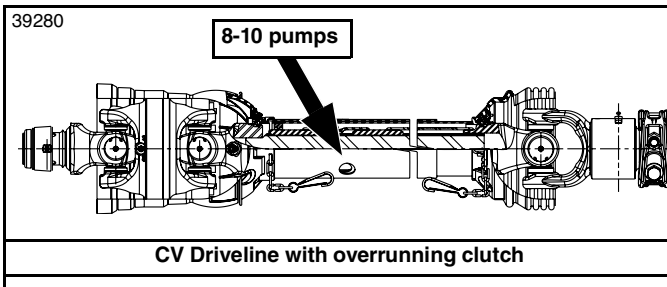


CV Main Driveline Profile Tubes With External Grease Point

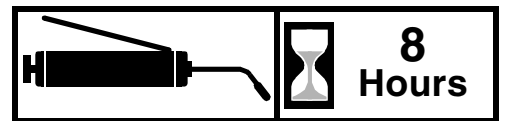
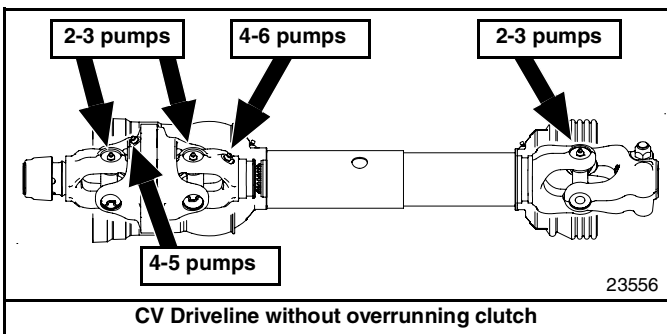
CV = Constant Velocity

Type of Lubrication: Multi-purpose Grease

Quantity = 8-10 pumps



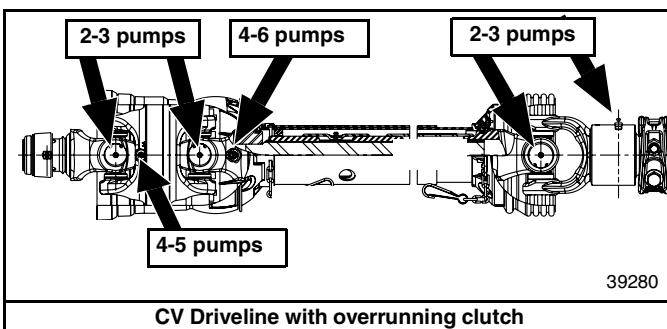
IMPORTANT: To extend the life of the constant velocity joint, extensive lubrication must be performed every 8 hours of operation.



CV Main Driveline Joints

Type of Lubrication: Multi-purpose Grease

For instructions on how to access grease zerks shown in **Figure 5-16:** See “**Accessing CV Driveline Joints**” on page 56.



- The constant velocity joint should be greased in a straight position forcing grease through the passages and into the cavity. After lubrication, grease should be visible around the ball joints.
- Grease fittings located on the u-joints, driveline shields and overrunning clutch should be lubricated every 8 Hrs of operation.

Figure 5-16

Section 5: Maintenance & Lubrication

Accessing CV Driveline Joints

Refer to Figure 5-16 on page 55:

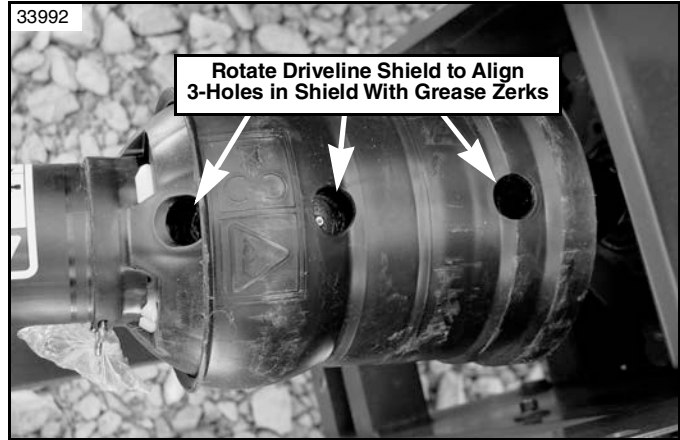
There are two ways the constant velocity driveline joints shown in Figure 5-16 can be accessed for lubrication. One is through holes in the driveline shield and the other is to slide the shields back to expose the grease zerks.

Lubrication Through Access Holes

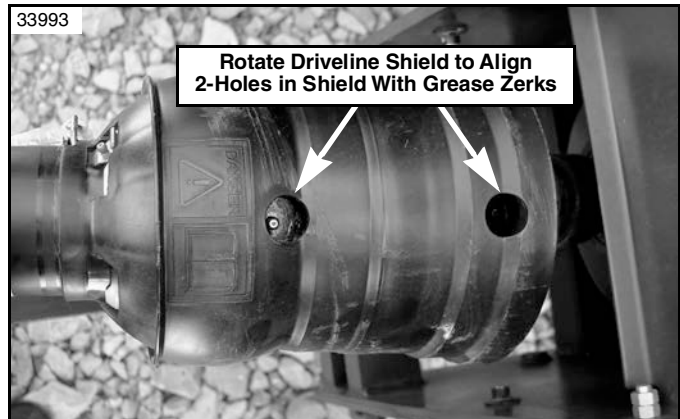
1. Refer to Figure 5-17: Rotate driveline shield until holes in shield align with grease zerks in CV joint.
2. Apply proper amount and type of lubrication. Refer to “CV Main Driveline Joints” on page 55 for quantities and type of lubrication.
3. Refer to Figure 5-18: Rotate driveline shield 180° until holes on opposite side of shield aligns with remaining grease zerks in CV joint.
4. Repeat step 2 above on any grease zerks that were not greased in step 2.
5. Steps 1-2 can be repeated to lubricate universal joint on opposite end of driveline. (Opposite end of driveline has only one grease zerk.)

Lubrication By Sliding Driveline Shields Back

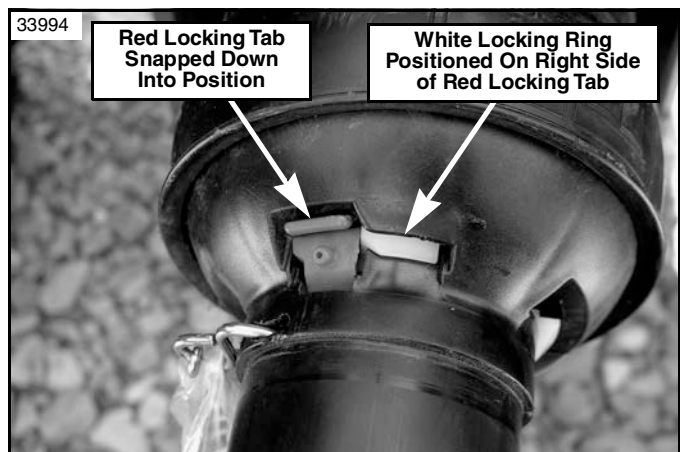
1. Refer to Figure 5-19: With a flat bladed screwdriver or similar tool, pry top of red locking tab up.
2. Refer to Figure 5-20: Rotate white locking ring fully counterclockwise to the position shown.
3. Refer to Figure 5-21: Pull back on driveline shielding until CV joint is exposed.
4. Apply proper amount and type of lubrication. Refer to “CV Main Driveline Joints” on page 55 for quantities and type of lubrication.
5. Slide driveline shield back to its operating position.
6. Refer to Figure 5-19: Rotate white locking ring clockwise and press locking tab down until it snaps in place as shown.
7. Steps 1-6 can be repeated to lubricate universal joint on opposite end of driveline.



Lubrication Through Three Holes In Driveline Shield
Figure 5-17

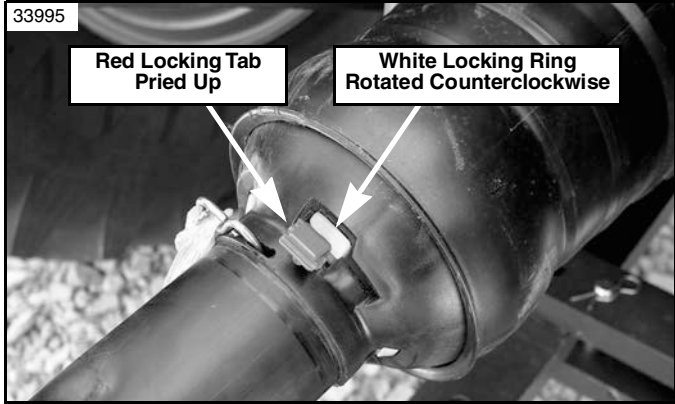


Lubrication Through Two Holes In Driveline Shield
Figure 5-18

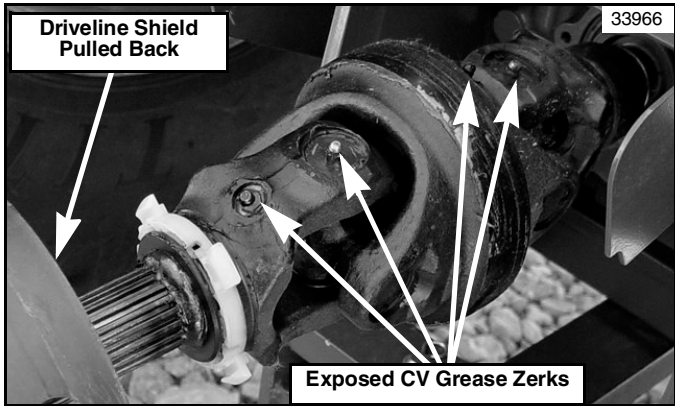


Locked Driveline Shield
Figure 5-19

Section 5: Maintenance & Lubrication



Unlocked Driveline Shield
Figure 5-20



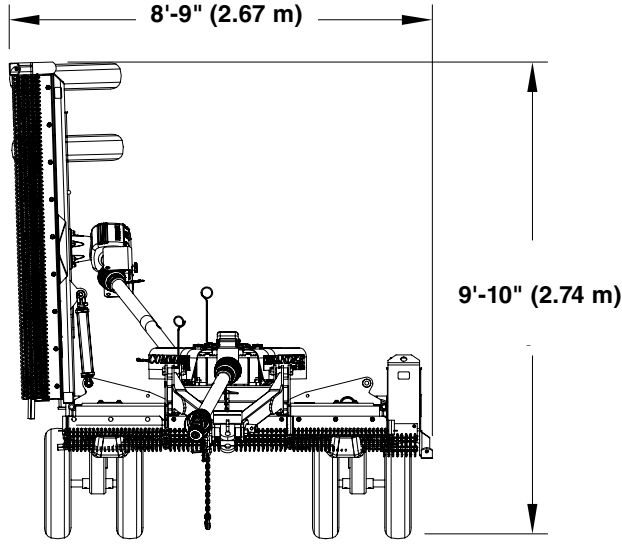
Slide Driveline Shield Back To Expose Grease Zerks
Figure 5-21



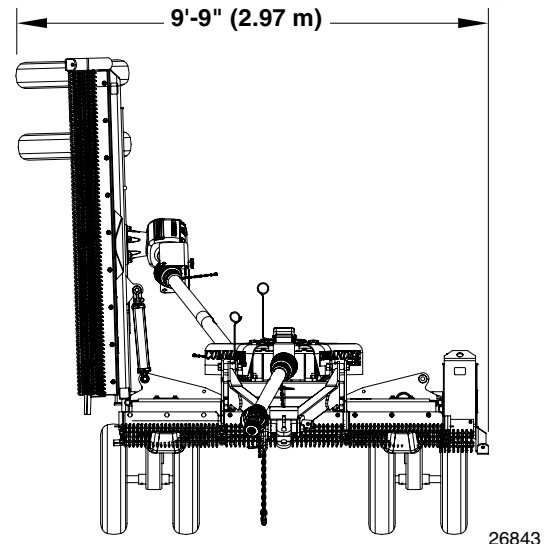
RC5014 & RCM5014 Models

Specifications & Capacities	
Min. horsepower	90 power take-off horsepower (67.1 kw)
Gearbox horsepower	250 (186.4 kw) Splitter 225 (167.8 kw) Center deck & wing deck
Gearbox lubrication & capacity	Center deck & wing: 10 pints (4.73 L) of gear lube 80-90W EP Divider gearbox: 5.5 pints (2.60 L) of gear lube 80-90W EP
Cutting capacity	Up to 3" (7.6 cm) material
Machine weight	7,340 lbs (3,329.4 kg)
Blade tip speed At 540 rpm At 1000 rpm	Center blade: 17,377 FPM (88.3 mps) & wing blade: 17,329 FPM (88 mps) Center blade: 18,165 FPM (92.3 mps) & wing blade: 18,317 FPM (93.1 mps)
Tongue weight	2,668 lbs (1,210.2 kg)
Hitch types	Standard clevis hitch, pintle hitch, ball hitch, LP performance hitch and bar-tite hitch
Hitch jack	Standard hand crank
Signal lights 7 Pin connector	LED (standard) SAE J560 pin configuration
Cutting width Overall width Minimum transport width	13'-6" (4.11 m) 15' (4.57 m) 8'-9" (2.67 m)
Overall length	19'-3" (5.87 m)
Deck height	10 1/2" (3.06 m)
Cutting height*	2" (5.1 cm) to 14" (35.6 cm) with hydraulic cylinder and stroke control spacers
Lift hydraulics	4" x 8" Hydraulic cylinder, hoses, fittings & stroke control spacers
Wing hydraulics	3 1/2" x 12" Hydraulic cylinders, hoses & fittings
Wing flex while operating	Max. 20° down, can float up as needed as long as the wheel(s) are still on the ground.
Wing transport protection	Wing transport lock
Deck sheet thickness	10g (3.4 mm) top and 10g (3.4 mm) bottom
Side skirt thickness	1/4" (6 mm)
Wing deck skid shoes Center deck skid shoes Weight box skid shoe	Replaceable Replaceable Replaceable
Blades - 4 (2 per carrier)	1/2" (13 mm) x 4" (10.2 cm) Heat-treated, free-swinging alloy steel with uplift
Blade overlap	6" (16.2 cm)
Blade bolt	Keyed with hardened flat washer & locknut
Stump jumper Blade holder	3/16" (5 mm) Round dish shaped bolt-on stump-jumper (optional) 1" (2.5 cm) diamond shaped blade bar
Deck rings (optional)	1/2" (13 mm) x 3" (7.6 cm) fully welded
Front & rear guards	Single chain or double chain
Heavy duty input driveline options	Constant velocity u-joint ASAE Cat. 6 with or without over running clutch
Heavy duty intermediate & wing drivelines	ASAE Cat. 5 with slip-clutch protection
Tire & wheel options	6" x 21" Laminated tires 6" x 26" Laminated tires 27" x 7.75" x 15" Used aircraft tires with foam filling 29" Used aircraft tires
Number of wheel	5 - Wheel option: 4 on transport axle and one on wing axle 6 - Wheel option: 4 on transport axle and two on wing axle
Transport axle	Spring-cushioned on center transport axle or optional walking tandem on center axle
Hubs	Cast iron 5-bolt hubs with tapered roller bearings and with 1 3/4" (4.4 cm) shafts

* Maximum cut height is dependent on tire options selected.

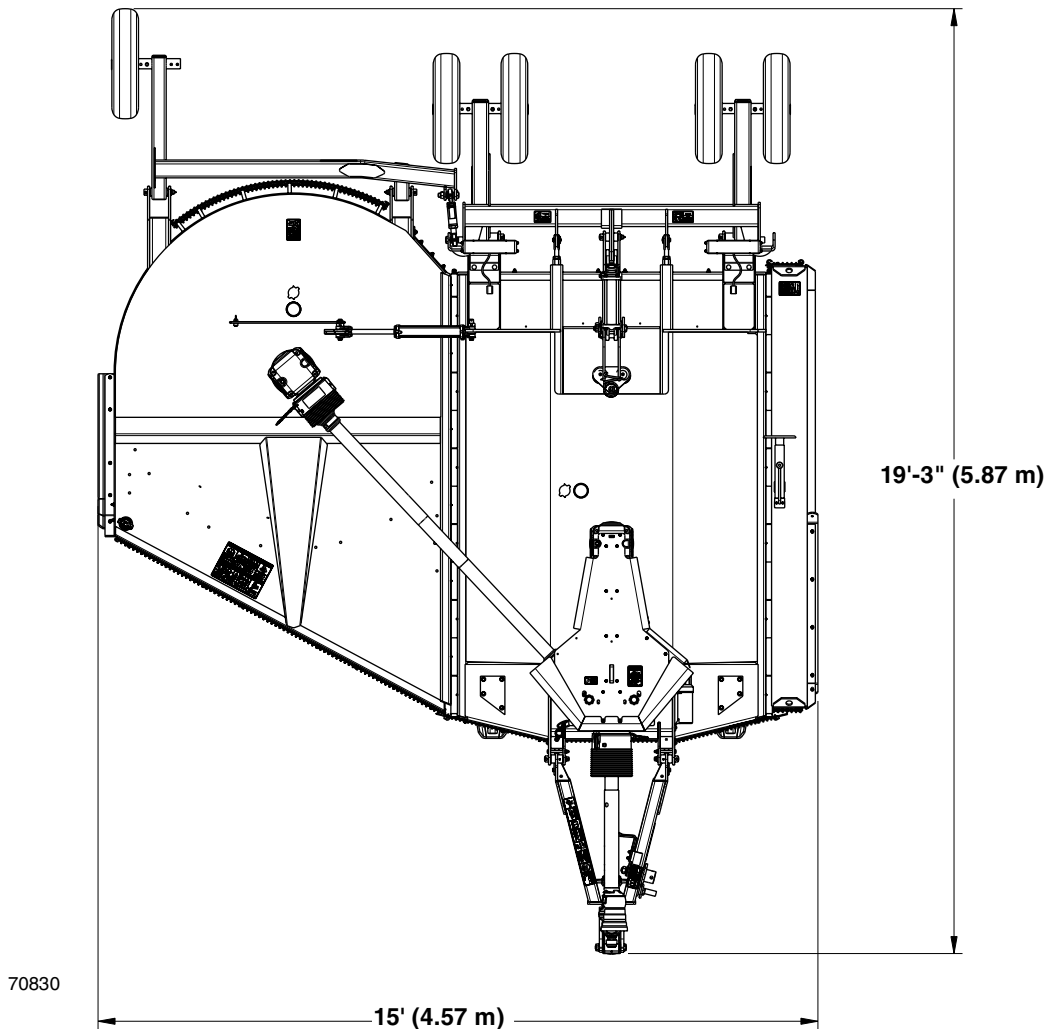


Transport Width With Wing Axle Disconnected At The Turnbuckle And Wheel Folded Back
(See Figure 1-17 on page 21)



Transport Width With Wing Axle Connected At The Turnbuckle

26843





RC5014 & RCM5014 Models

Features	Benefits
Surpassed industry safety standards	All Land Pride cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ISO & ASABE.
Factory assembled	Saves customer set-up time and money.
Fully welded top deck	Fully welded deck adds strength.
7 Year gearbox warranty*	Shows confidence in our gearboxes.
250 hp (168.4 kw) divider gearbox 225 hp (167.8 kw) spindle gearboxes	Rugged heavy built gearboxes capable of handling heavy cutting applications.
Gearbox seal protection	Gearbox bottom seal protection for longer bearing life.
Input driveline: Cat. 6 CV	Holds up to shock loads and harsh mowing conditions. Fits wide range of tractors including high horsepower tractors.
Star profile drivelines	Star profile spreads load out to many points on the shaft. More apt to resist bending and twisting under shock loads and harsh mowing conditions.
Easy greasable drivelines	Drivelines have access holes for greasing the U-joints and to grease the inner profiles.
4 Plate slip-clutch	Protects drivelines and gearboxes by slipping clutches rather than twisting the driveline when impacts are encountered.
High blade tip speed	540 rpm: Center: 17,377 fpm (88.3 mps), Wings: 17,329 fpm (88 mps) 1000 rpm: Center: 18,165 fpm (92.3 mps), Wings: 18,317 fpm (93.1 mps) Allows for a clean cut of material and even distribution.
6" (15.2 cm) Blade overlap	Generous blade overlap eliminates skipping, especially in turns.
High cutting capacity	Can cut brushy areas with saplings up to 3" (7.6 cm).
10 1/2" (26.7 cm) Deck height	Handles heavy cutting, which reduces balling-up of cut material under the deck.
3/16" (5 mm) stump jumper (optional) backed with a 1" (2.5 cm) thick mounting bar	Heavy round stump jumper with bottom gearbox seal protector. Can hold up to tough conditions.
10 gauge (3.4 mm) double deck	Heavy enough to handle conditions but not weigh unit down.
Self-leveling pull-type hitch (optional)	Reduces drawbar wear by keeping hitch level while going through ditches.
LED Signal lights	LED lights are bright, long lasting, and resistant to vibration, unlike incandescent counterparts.
Hinged wing section	Allow cutter to follow terrain. Ideal for rough ground where hillsides, ditches, and hollows can cause uneven cutting.
1" (2.5 cm) Solid hinge rods	Larger diameter hinge rod gives greater strength to the cutter from front to rear, and in the hinge area itself.
Wing transport lock	Safety feature. Holds wing up in case of hydraulic pressure loss.
1" (2.5 cm) Enclosed front to rear dual leveling rods	Dual leveling rods enable the cutter to pull equally on the rear axle during travel over rough terrain. Many competitors only use one leveling rod.
Drain holes in wheel rims	Allows water to drain from wheels mounted on the folded-up wing. Helps prevent paint deterioration and rusting to the wheel rims.
5" (12.7 cm) Square rear axle tubing	Heavy axle to handle harsh conditions.
Spring-cushioned center-axle	Protects unit from bumps and ground shock.
Replaceable wheel spindles	Wheel spindles can be replaced when damaged without replacing the entire axle. Simply remove two bolts to replace damaged spindle.
Bar-tite hitch (optional)	Ideal for extreme conditions. Clamps tight to drawbar eliminating drawbar wear.
Wheel options	Laminated tires: Eliminates flats. Airplane tires without foam filling: Give better cushion while transporting. Airplane tires with foam filling: Give better cushion while transporting and can't go flat.
Deck rings (optional)	1/2" (13 mm) x 3" (7.6 mm) Welded deck ring keeps blades from damaging the deck.

* Years 6 & 7 Parts Only



Troubleshooting Chart

Problem	Cause	Solution
Oil seal leaking	Gearbox overfilled	Drain oil level with fill hole or to full mark on dipstick.
	Seals damaged	Replace seals.
	Grass or wire wrapped on shaft in seal area	Clean off wrapped material and check seal areas daily.
Driveline yoke or cross failing	Clutch is froze	Slip clutches per “Run-In” instructions under “Drivelines” on page 47.
	Shock load	Avoid hitting solid objects.
	Needs lubrication	Lubricate every 8 hours.
Slip clutches slip even with a light load	Scalping the ground	Raise cutting height.
	Clutch is not properly adjusted	Adjust clutch per instructions under “Drivelines” on page 47.
	Clutch plates are worn out	Replace clutch plates.
	Foreign object caught between clutch plates	Remove foreign object.
Bent driveline shaft (Note: Shaft should be repaired or replaced if bent)	Contacting frame	Reduce lift height in transport position.
	Contacting drawbar	Reposition drawbar.
	Contacting 3-point arms	Raise or remove 3-point arms.
	Bottoming out	Shorten driveline shaft.
	Binding up	Not lubricating enough.
Driveline shaft telescoping tube failing	Shock load	Avoid hitting solid objects.
Driveline shaft telescoping tube wearing	Needs lubrication	Lubricate every 8 hours of operation.
Blades Lock Up	Blades locked together (overlapped) when wing was raised to transport position	Use pry bar or other tool to separate cutting blades before lowering wing.
	Tractor has instant on power take-off	Engage power take-off at low rpm and then slowly increase engine speed to full power take-off speed. See “Engage Blades” on page 35.
	Tractor has instant off power take-off	Decrease engine speed slowly to an idle and then disengage power take-off. See “Disengage Blades” on page 35.
Blades wearing excessively	Cutting on sandy ground	Raise cutting height.
	Contacting ground frequently	Raise cutting height.
	Power take-off speed too high	Maintain power take-off speed by slowing down.
Blades coming loose	Re-using locknut	Use new locknut.
	Blades not tightened properly	Tighten blade hardware, refer to Cutter Blades in the “Maintenance and Lubrication” section on page 42.
	Over speeding power take-off	Operate cutter at proper power take-off speed.
Blades breaking	Hitting solid objects or ground	Avoid hitting solid objects & ground.
Loose blade carrier	Blade carrier hardware not tight	Tighten shaft nut to specified torque.
	Running loose in the past	Replace gearbox bearings and / or shaft.
Blade carrier bent	Hitting solid objects	Replace blade carrier & avoid hitting solid objects.
Excessive side skid wear	Soil abrasive	Adjust cutter height.
	Cutting too low	Raise cutting height.
Excessive vibration	Hitting solid objects	Inspect area before cutting. Do not hit solid objects.
	Driveline bent	Replace driveline or distribution shaft.
	Blade carrier bent	Replace blade carrier.
	Blade broken	Replace blade.
	Blade will not swing	Inspect and unlock blades.
	High torque start-up or hitting solid objects.	Disassemble and inspect driveline for incorrectly located needles or damaged bearing cap.
	Blades have unequal weight	Replace each pair of blades on affected carrier.
Wing cylinder movement too slow	Orifice is plugged	Remove elbow fitting and unplug orifice.

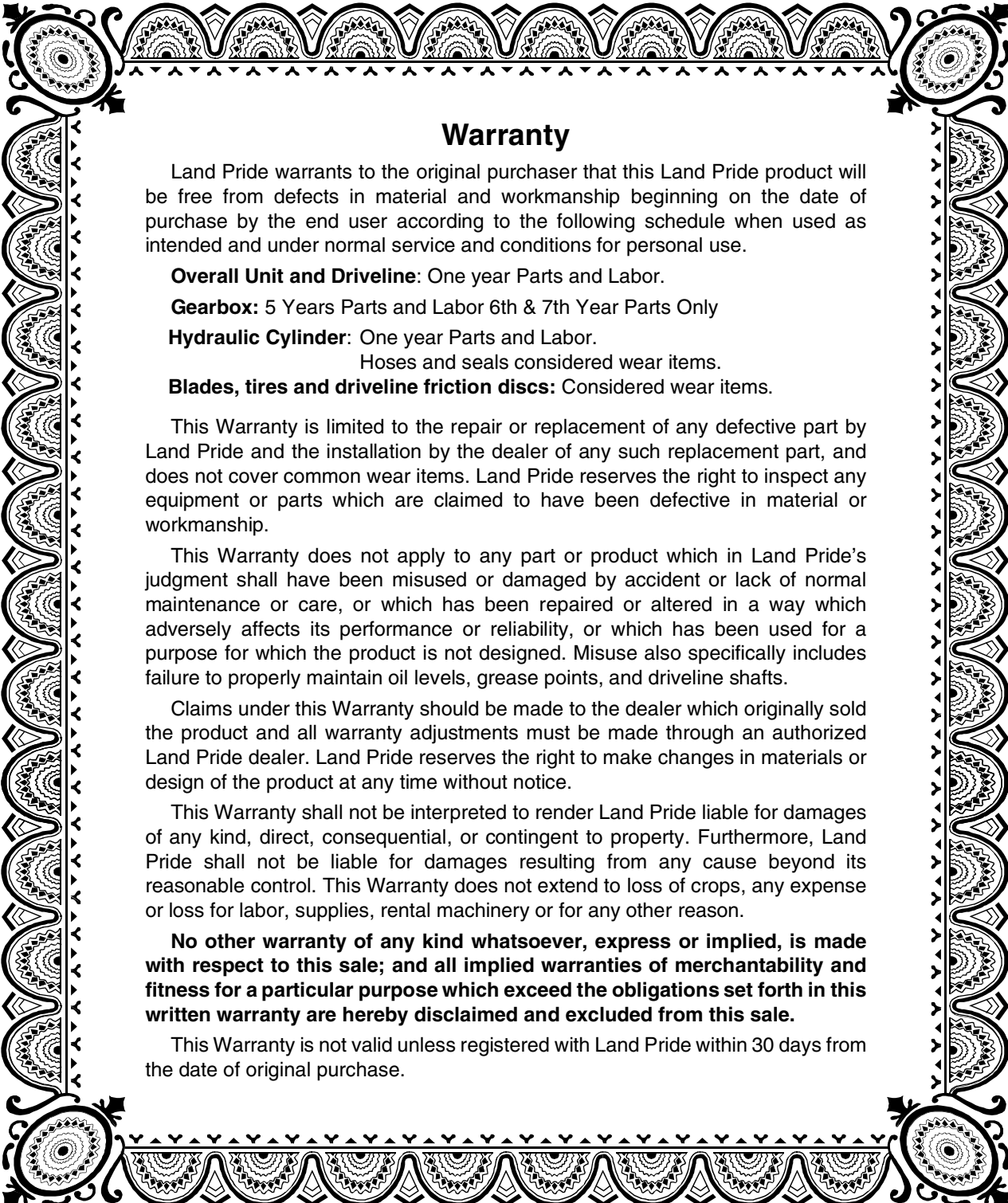
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Section 9: Torque & Tire Inflation Charts



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 Bolt locknut		450 ft-lbs (7320 Nm)											
Blade Carrier Hub Nut		550 ft-lbs (8947 Nm) minimum											
Wheel Hub Spindle Nut		80 ft-lbs (1301 Nm), back off and re-tighten to 50 ft-lbs (813 Nm), back off to insert cotter pin											
Wheel Lug Nuts		85 ft-lbs (1383 Nm)											

Tire Inflation Chart	
Tire Size	Inflation PSI
29"	40 (275.8 kPa)



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: 5 Years Parts and Labor 6th & 7th Year Parts Only

Hydraulic Cylinder: One year Parts and Labor.

Hoses and seals considered wear items.

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. 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.

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

Model Number _____

Serial Number _____



Corporate Office: P.O. Box 5060
Salina, Kansas 67402-5060 USA
