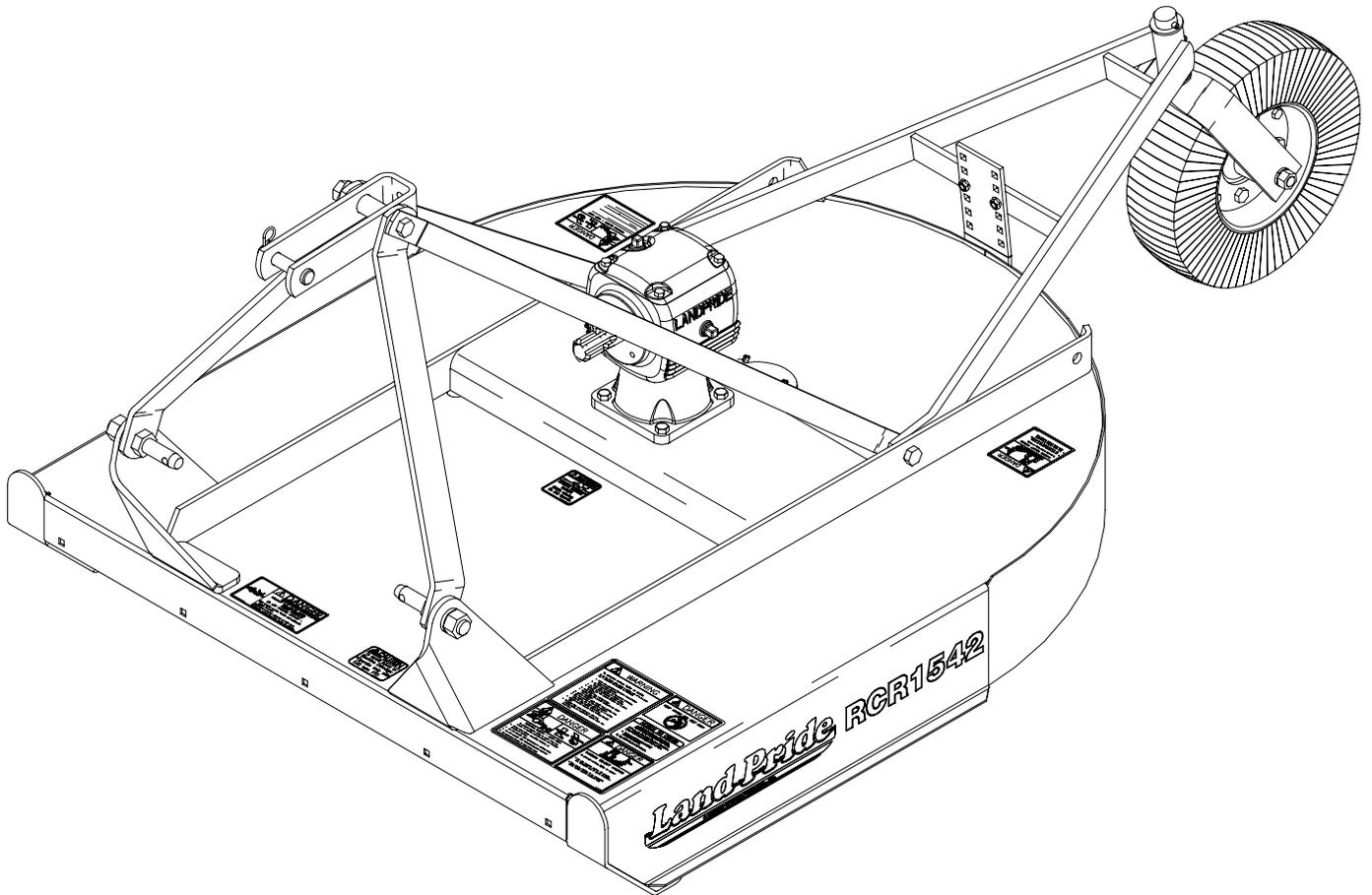


# Rotary Cutters

RCR1542, RCR1548, RCR1560 and RCR1572



19876

## **312-556M** **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!

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*Cover photo may show optional equipment not supplied with standard unit.*



<b>Important Safety Information</b> . . . . .	<b>1</b>	Nominal Cutting Height . . . . .	15
Safety at All Times . . . . .	1	Cutter Height Adjustment . . . . .	16
Look For The Safety Alert Symbol . . . . .	1	<b>Section 4: Maintenance and Lubrication</b>	<b>17</b>
Safety Labels . . . . .	4	Maintenance . . . . .	17
<b>Introduction</b> . . . . .	<b>7</b>	Service Cutting Blades . . . . .	17
Application . . . . .	7	Driveline Protection . . . . .	17
Using This Manual . . . . .	7	Clutch Run-In . . . . .	17
Terminology . . . . .	7	Clutch Disassembly . . . . .	18
Definitions . . . . .	7	Clutch Assembly . . . . .	18
Owner Assistance . . . . .	7	Storage . . . . .	18
Serial Number Plate . . . . .	7	Lubrication Points . . . . .	19
Further Assistance . . . . .	7	Gauge Wheel Spindle Tube . . . . .	19
<b>Section 1: Assembly and Set-Up</b> . . . . .	<b>8</b>	Gauge Wheel Hub . . . . .	19
Tractor Requirements . . . . .	8	Gearbox . . . . .	19
Dealer Assembly . . . . .	8	Driveline U-Joints . . . . .	20
Driveline Installation . . . . .	9	Driveline Shield Bearings . . . . .	20
3-Point Hook-Up . . . . .	9	Driveline Profiles . . . . .	20
PTO Hookup . . . . .	10	<b>Section 5: Specifications &amp; Capacities</b> . . . . .	<b>21</b>
Vent Plug Installation . . . . .	11	<b>Section 6: Features and Benefits</b> . . . . .	<b>22</b>
<b>Section 2: Options</b> . . . . .	<b>12</b>	<b>Section 7: Troubleshooting</b> . . . . .	<b>23</b>
Safety Guards . . . . .	12	<b>Section 8: Appendix</b> . . . . .	<b>24</b>
Rubber Guards (RCR1542 & RCR1548) . . . . .	12	Torque Values Chart . . . . .	24
Front Rubber Guard (RCR1560 & RCR1572) . . . . .	12	Warranty . . . . .	25
Rear Rubber Guard (RCR1560 & RCR1572) . . . . .	12		
Front Chain Guard (RCR1560 & RCR1572) . . . . .	13		
Rear Chain Guard (RCR1560 & RCR1572) . . . . .	13		
<b>Section 3: Operating Instructions</b> . . . . .	<b>14</b>		
Transporting . . . . .	14		
Operating Check List . . . . .	14		
Cutting Instructions . . . . .	14		
Leveling Procedure . . . . .	15		

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Printed in the United States of America.

## Important Safety Information

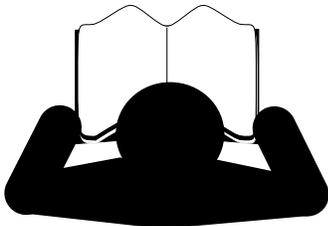
**These are common practices that may or may not be applicable to the products described in this manual.**

### Safety at All Times

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

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

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not stand between the tractor and implement during hitching.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- ▲ Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.



### Look For The Safety Alert Symbol

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

### Be Aware of Signal Words

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

#### DANGER

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

#### WARNING

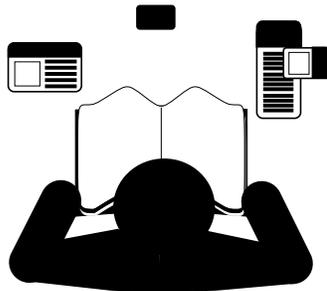
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

#### CAUTION

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

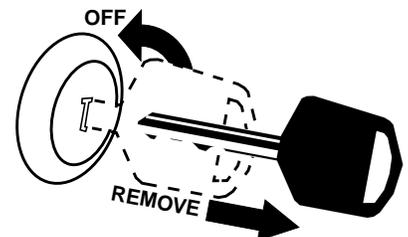
### For Your Protection

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



### Shutdown and Storage

- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

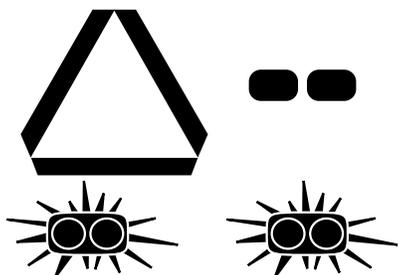


**Important Safety Information**

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

**Use Safety Lights and Devices**

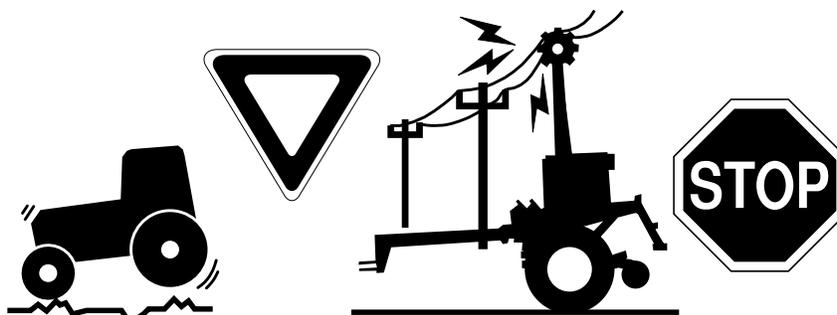
- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with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



**Transport Machinery Safely**

- ▲ Comply with state and local laws.
- ▲ Maximum transport speed for implement is 20 mph. **DO NOT EXCEED.** Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.

- ▲ Use the following maximum speed - tow load weight ratios as a guideline:
- ▲ **20 mph** when weight is less than or equal to the weight of tractor.
- ▲ **10 mph** when weight is double the weight of tractor.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of tractor.



**Use A Safety Chain**

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



**Practice Safe Maintenance**

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.

- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from implement before operation.

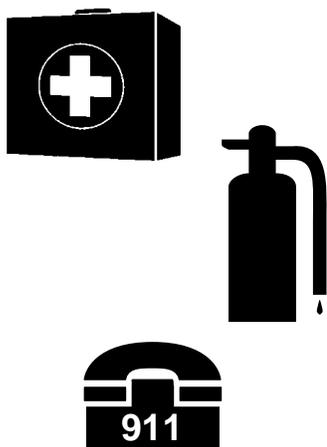


## Important Safety Information

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

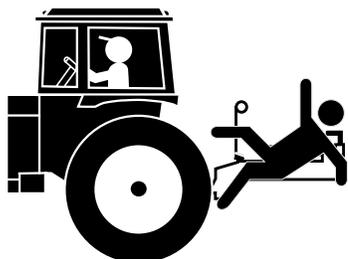
### Prepare for Emergencies

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



### Keep Riders Off Machinery

- ▲ Riders obstruct the operator's view they could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



### Wear Protective Equipment

- ▲ Protective clothing and equipment should be worn.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- ▲ Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.



### Avoid High Pressure Fluids Hazard

- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
- ▲ 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.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.



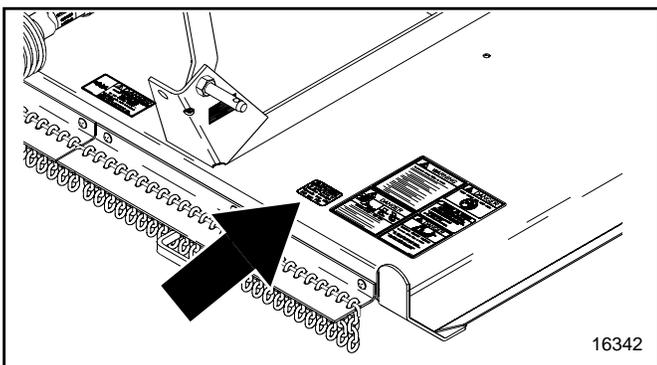
**Important Safety Information**

**Safety Labels**

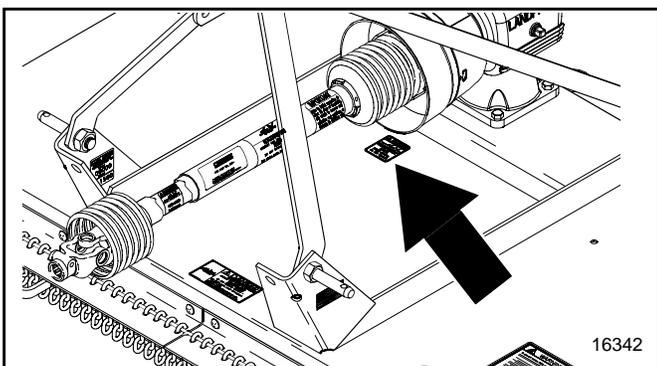
Your implement comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer.
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.

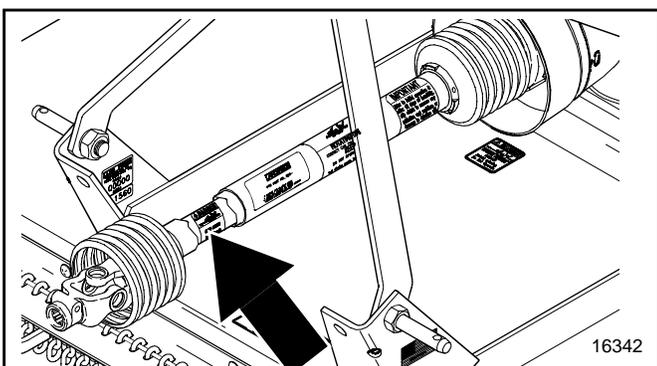
4. Refer to this section for proper label placement. To install new labels:
  - a. Clean the area the label is to be placed.
  - b. Spray soapy water on the surface where the label is to be placed.
  - c. Peel backing from label. Press firmly onto the surface.
  - d. Squeeze out air bubbles with the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



818-130C  
Caution 540 RPM

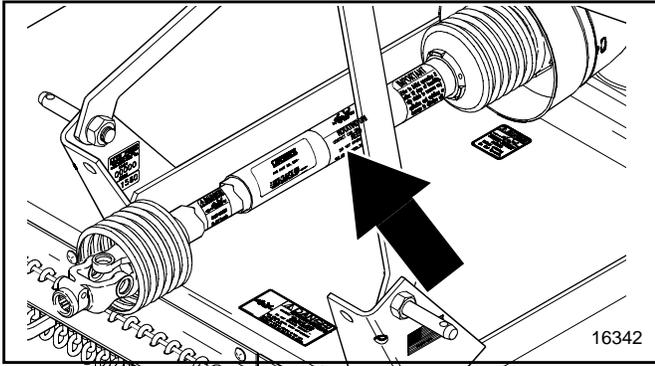


818-543C  
Danger PTO

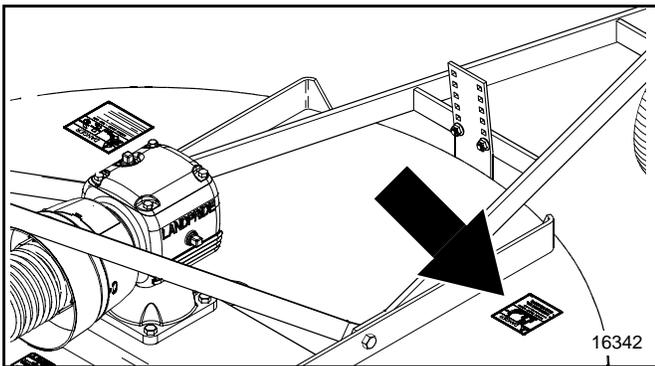


**818-540C**  
Danger Guard Missing

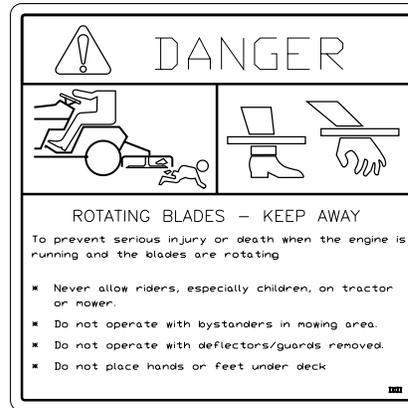
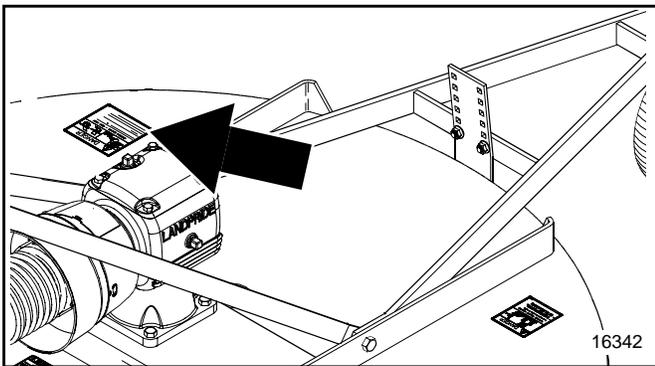
**Important Safety Information**



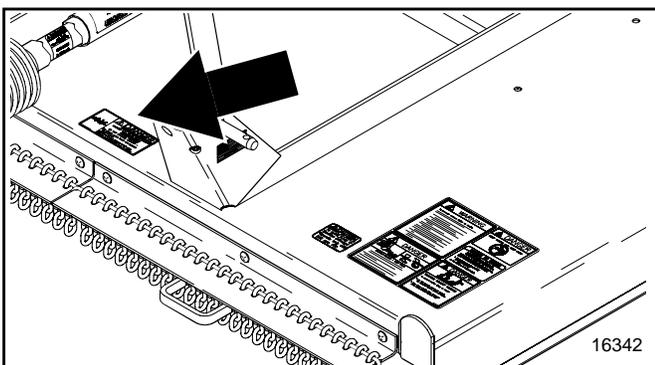
**818-552C**  
Danger PTO Driveline



**818-556C**  
Danger Thrown Object

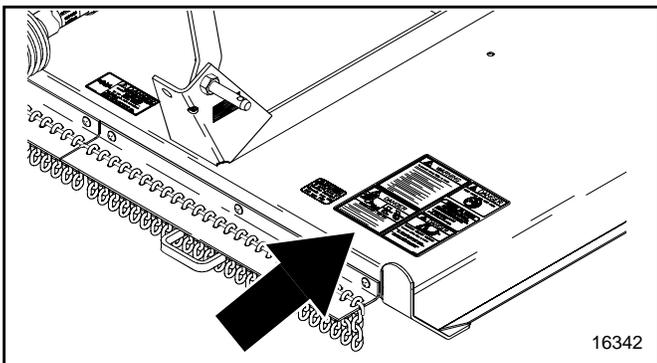


**818-564C**  
Chain Guard



**818-142C**  
Danger Driveline

Important Safety Information



<p><b>WARNING</b></p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> <li>Read the operator's manual before use.</li> <li>Do not operate until you are trained or instructed by a qualified person.</li> <li>Never carry children or other people on the machine.</li> <li>Do not drink alcohol or use drugs before operating the machine.</li> <li>Do not use the machine if you are tired, drowsy, or under the influence of alcohol or drugs.</li> <li>Do not use the machine if you are wearing a hat or any other loose clothing.</li> <li>Do not use the machine if you are wearing jewelry.</li> <li>Do not use the machine if you are wearing glasses.</li> <li>Do not use the machine if you are wearing a watch or any other jewelry.</li> <li>Do not use the machine if you are wearing a hat or any other loose clothing.</li> <li>Do not use the machine if you are wearing jewelry.</li> <li>Do not use the machine if you are wearing glasses.</li> <li>Do not use the machine if you are wearing a watch or any other jewelry.</li> </ul>	<p><b>DANGER</b></p> <p>KEEP HANDS AND FEET AWAY</p>
<p><b>DANGER</b></p> <p>ROTATING BLADES - KEEP AWAY</p> <p>To prevent serious injury or death, keep hands and feet away from the blades and rotating parts of the machine.</p> <ul style="list-style-type: none"> <li>Never allow children, especially children, on the machine.</li> <li>Do not operate with bystanders in the working area.</li> <li>Do not operate with bystanders in the working area.</li> <li>Do not operate with bystanders in the working area.</li> </ul>	<p><b>NOISE HAZARD</b></p> <p>Excessive noise can contribute to hearing loss. If it was not checked at the time of purchase, please contact your selling dealer of noise.</p> <ol style="list-style-type: none"> <li>Read and understand the OSHA hearing loss manual.</li> <li>Use hearing protection.</li> </ol>
<p><b>DANGER</b></p> <p>THROWN OBJECT HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> <li>Do not operate unless all guards are fastened and in good condition.</li> <li>Stop blade rotation if by a bystander.</li> </ul>	<p><b>DANGER</b></p> <p>THROWN OBJECT HAZARD</p> <p>To prevent serious injury or death:</p> <ul style="list-style-type: none"> <li>Do not operate unless all guards are fastened and in good condition.</li> <li>Stop blade rotation if by a bystander.</li> </ul>

818-830C  
Safety Combo

## 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 the Rotary Cutter.

## Application

Land Pride's RCR15 Series Rotary Cutters are ideal for clearing grass, weeds and light brush. These cutters offer fast, clean, dependable mowing and have been extensively tested to ensure operating safety. High blade tip speeds assure a clean cut in a variety of field conditions. The standard stump jumper slides over stumps, rocks and debris and safety guards keep you up and running. See "**Features and Benefits**", "**Section 5**" for additional information.

## Using This Manual

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

## Terminology

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

## Definitions

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

**IMPORTANT:** A special point of information related to its preceding topic. Land Pride's intention is that this information should be read and noted before continuing.

## Owner Assistance

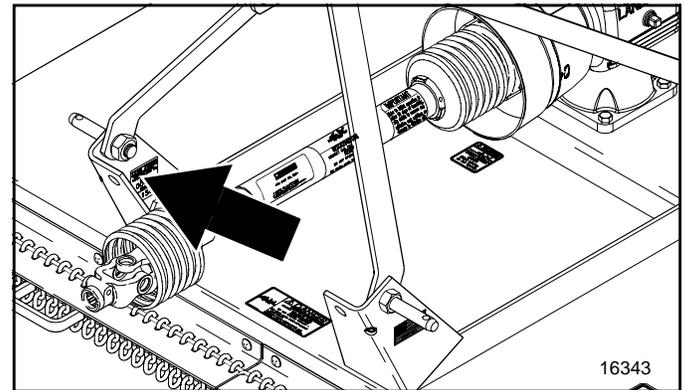
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the cutter.

The parts on your cutter have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your cutter require replacement parts go to your Land Pride Dealer.

## Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your Land Pride dealer. Be sure to include your serial and model numbers in correspondence also. Refer to Figure 1 for the location of your serial number plate.



Serial Number Plate Location

Figure 1

## Further Assistance

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

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

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

E-mail address  
[lp servicedept@landpride.com](mailto:lp servicedept@landpride.com)

Section 1: Assembly and Set-Up

**Tractor Requirements**

The RCR15 Series Rotary Cutters are designed for use with tractors that are equipped with a (540 RPM 1 3/8"-6 spline) rear power take-off (PTO).

The tractor must also provide for 3-point hitch attachment Category I. The tractors rated drawbar PTO horsepower on a 3 point to be no less than 20 hp and no more than 50hp.

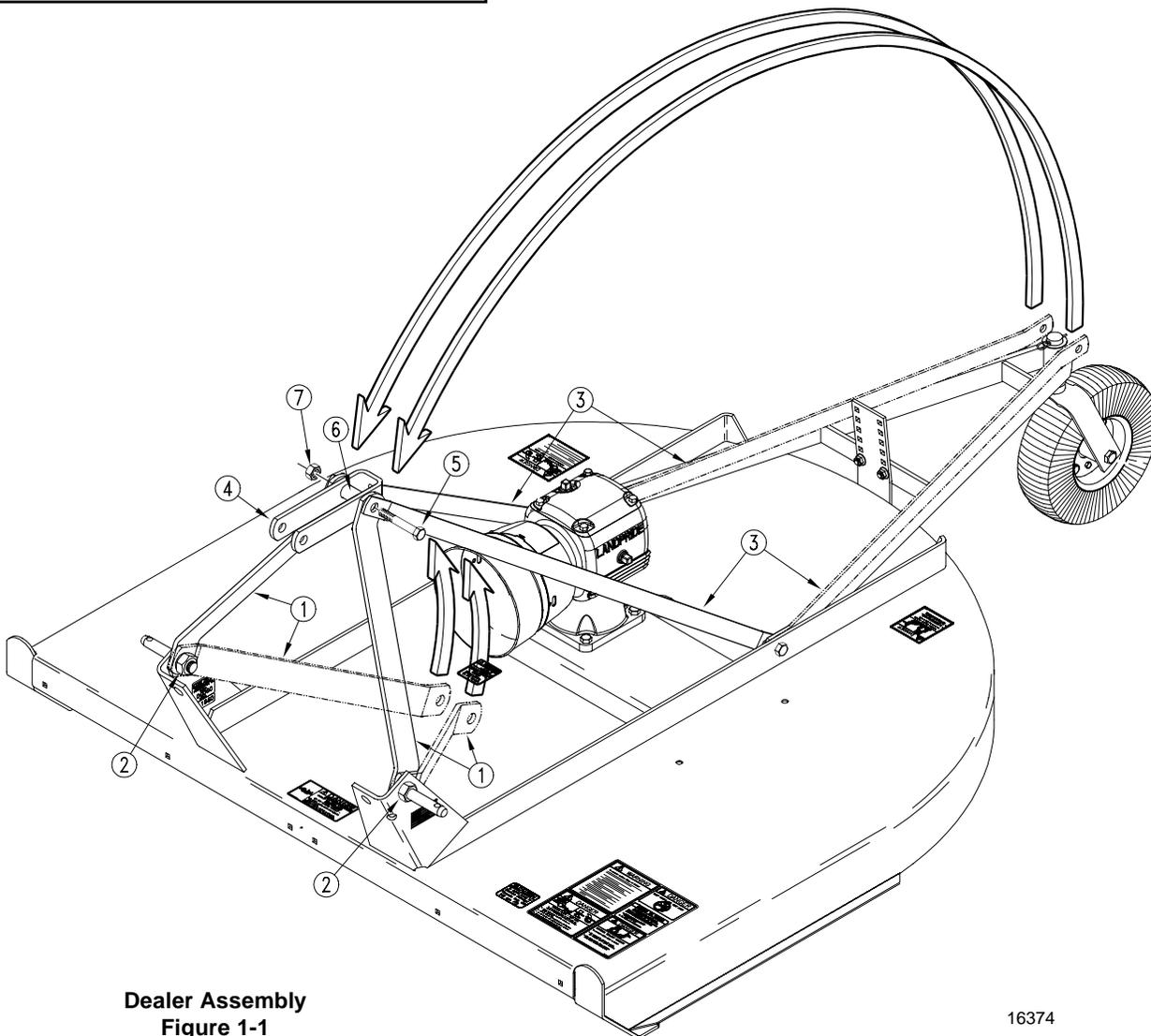
**NOTE:** In order to maintain steering control, ballast may need to be added to your tractor. To determine whether or not to add the ballast, refer to your tractor's operator manual.

**Refer to Figure 1-1:**

4. The A-frame braces (#1) are rotated down against the deck in shipment. Loosen the nuts (#2) and rotate the A-frame braces up as shown.
5. The rear braces (#3) are rotated back and are strapped to the gauge wheel mainframe. Undo the rear braces from the gauge wheel mainframe and rotate the braces up as shown. The rear braces (#3) should be to the the outside of the front A-frame braces (#1).
6. Place the top hitch spacer (#6) in the upper hitch (#4) and between the front A-frame braces.
7. Secure with the 5/8" x 5" long bolt and 5/8" lock nut.

**Dealer Assembly**

**NOTE:** Do not tighten hardware until assembly is complete. Refer to "**Torque Values Chart**" on page 24.



**Dealer Assembly  
Figure 1-1**

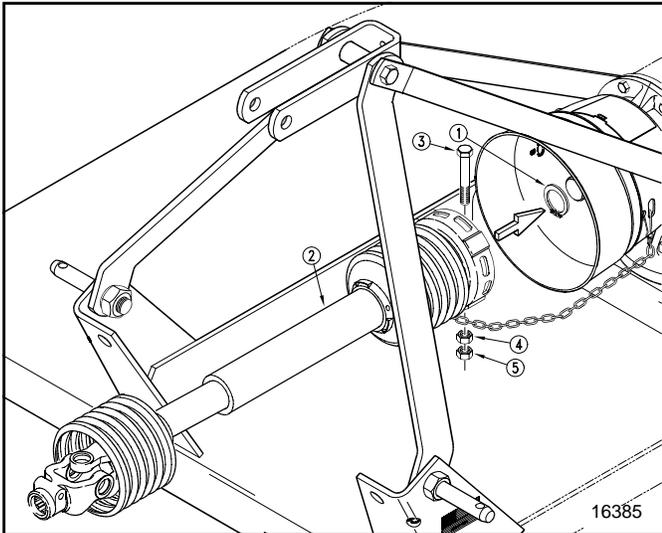
16374

## Section 1: Assembly and Set-Up

### Driveline Installation

Refer to Figure 1-2:

1. Remove the snap ring (#1) from the gearbox input shaft. Slide the driveline (#2) on to the gearbox shaft and replace the snap ring to the gearbox shaft. The snap ring is for extra security in case the shear bolt (#3) should break. Align the holes in the driveline with the hole in the gearbox input shaft and insert the 1/2" x 3 1/2" long bolt (#3) and secure with the 1/2" nut (#4) and 1/2" jam nut (#5).
2. Secure the chain on the driveline to the driveline cone to restrict outer shield from rotating.



Driveline Installation  
Figure 1-2

### 3-Point Hook-Up

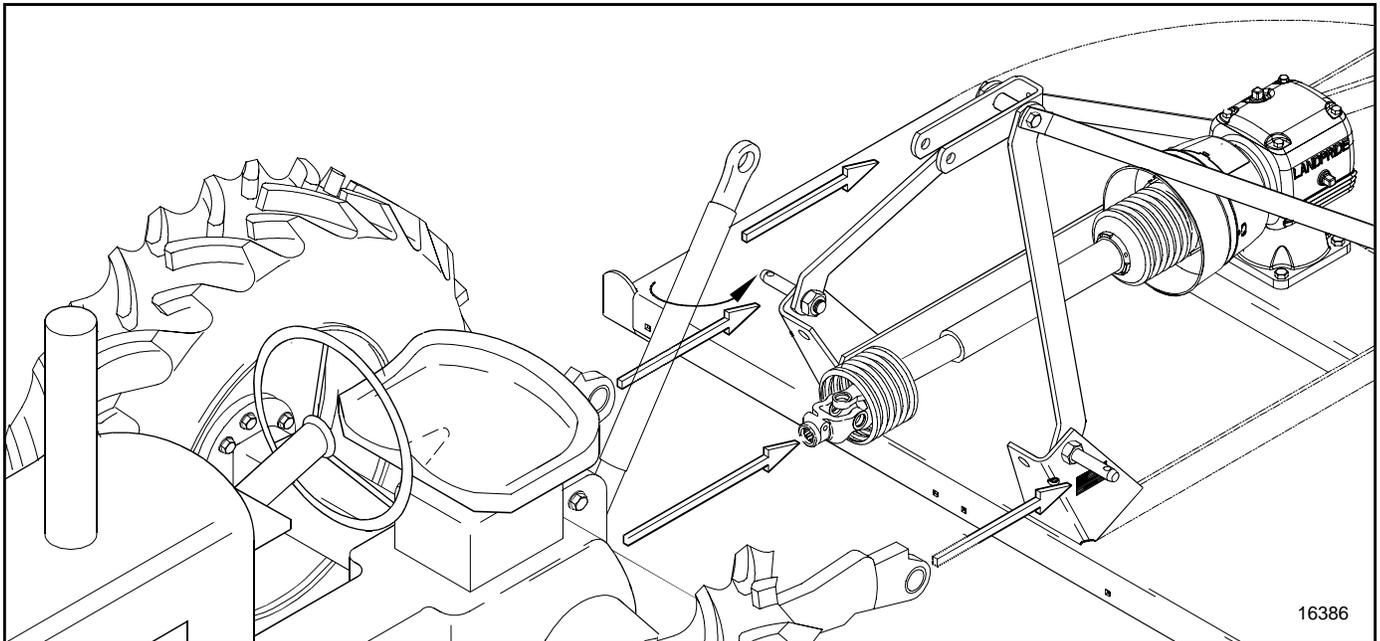
Refer to Figure 1-3:



#### DANGER

*Tractor hook-up can be hazardous to your health or that of your helper. Do not allow anyone to stand between the \_\_\_\_\_ and the tractor during hook-up operations. Do not operate the hydraulic 3-point lift controls while someone is directly behind the tractor.*

1. Slowly back the tractor up to the cutter and use the tractor's 3-point hydraulic control to adjust the lower link arms up or down to match the height of the cutter hitch pins.
2. Slide the the lower link arms hitch link holes onto the cutter hitch pins.
3. Install a linch pin or other fastener (supplied by customer) through the hitch pin hole to lock the lower links into position.
4. Connect the top link to the upper pivot hitch using the 3/4" clevis pin supplied.



Tractor Hook-Up  
Figure 1-3

## Section 1: Assembly and Set-Up

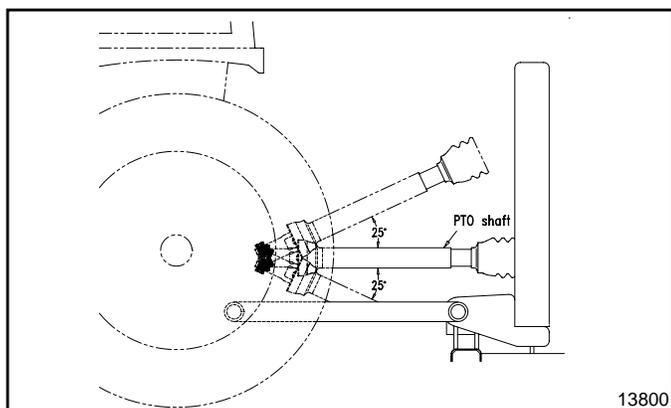
### PTO Hookup

If the cutter is to be used on more than one tractor, an additional PTO shaft may be required - especially if a quick hitch is used.

#### CAUTION

Do not use a PTO adaptor with a quick hitch. A PTO adaptor will increase the strain on the tractor's PTO shaft and can damage the PTO shaft and mower driveline.

**IMPORTANT:** Avoid premature driveline breakdown. A driveline that is operating **must not exceed** an angle of 25 degrees up or down while operating the 3-point lift. See Figure 1-4 below.



**Maximum PTO driveline Movement During Operation**  
Figure 1-4

**IMPORTANT:** Do not attempt to operate a 540 RPM driveline at 1,000 RPM or a 1,000 RPM driveline at 540 RPM. Many tractors provide both 540 and 1,000 RPM PTO speeds. Check your tractor's manual to determine its capabilities.

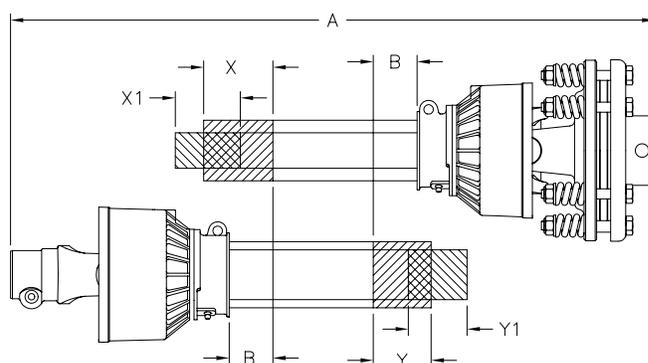
**IMPORTANT:** The PTO driveline may be too long for some tractors. If the cutter is used on more than one tractor, an additional PTO driveline may be required.

**IMPORTANT:** Aligning the tractor's PTO shaft level with the cutter's PTO shaft is necessary when checking to see if the driveline will fit correctly between tractor and cutter.

#### Refer to Figure 1-5

1. Start tractor and slowly engage tractor's hydraulic 3-point to lift the lower arms until the cutter's driveline shaft is approximately level with tractor's PTO shaft.
2. Slide outer yoke end of driveline over the tractor's PTO shaft and secure with the locking collar. Skip to step 4 if driveline fits between tractor and cutter.

3. The driveline will require shortening if it is too long to fit between the tractor and cutter. Shorten driveline as follows:
  - a. Raise 3-point lower arms until cutter and tractor PTO shafts are approximately level with each other. Securely block cutter frame in this position. Set tractor in park, shut tractor engine off, set park brake and remove switch key.
  - b. Pull driveline apart into two sections as shown in Figure 1-5. Attach the outer driveline universal joint to the tractor PTO shaft and inner driveline universal joint to the cutter gearbox shaft. Pull on each driveline section to be sure the universal joints are secured to the shafts.
  - c. Hold the driveline sections parallel to each other to determine if they are too long. The inner and outer shields on each section should end approximately 1" short of reaching the universal joint shield on the adjacent section (see "B" dimension). If they are too long, measure 1" ("B" dimension) back from the universal joint shield and make a mark at this location on the inner and outer driveline shields.
  - d. Cut off the inner shield at the mark ("X" dimension). Cut the same amount off the inner shaft ("X1" dimension). Repeat cut off procedure ("Y" & "Y1" dimensions) to the outer driveline half.
  - e. Remove all burrs and cuttings.
  - f. Apply multi-purpose grease to the inside of the outer shaft and reassemble the driveline.
  - g. Attach inner driveline yoke end to the cutter gearbox input shaft.
  - h. Attach outer driveline yoke end to the tractor's PTO shaft.



**Driveline Shortening**  
Figure 1-5

4. The driveline should now be moved back and forth to insure that both ends are secured to the tractor and cutter PTO shafts. Reattach any end that is loose.

### Section 1: Assembly and Set-Up

---

**IMPORTANT:** A small chain is supplied with the driveline. This chain must be attached to the inner driveline shield and to the cutter to restrict shield rotation.

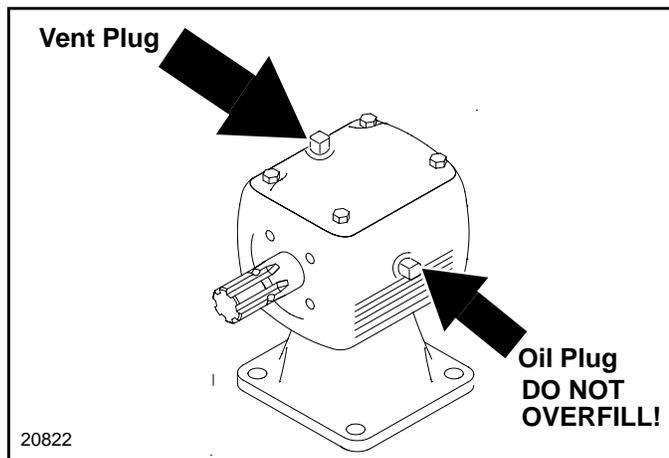
5. Hook driveline safety chain in the hole in the inner driveline guard. Attach the other end to the cutter's main frame.
6. Start tractor and raise cutter just enough to remove blocks used to support the deck in step 3a.
7. Slowly engage the tractor's hydraulic 3-point to lower the cutter. Check for sufficient drawbar clearance. Move drawbar ahead, aside or remove if required.

### Vent Plug Installation

Refer to Figure 1-1:

**IMPORTANT:** Series RCR15 Grooming Mowers are shipped with a red plug in the gear box to prevent loss of oil during shipping and handling. This plug must be replaced with a vent plug before operating the cutter.

A vent plug for the gearbox is included in a bag with the manual. See your nearest Land Pride Dealer if vent plug is missing. Remove temporary red plug from top of splitter gearbox and replace with supplied vent plug.



Vent Plug Location  
Figure 1-1

Section 2: Options

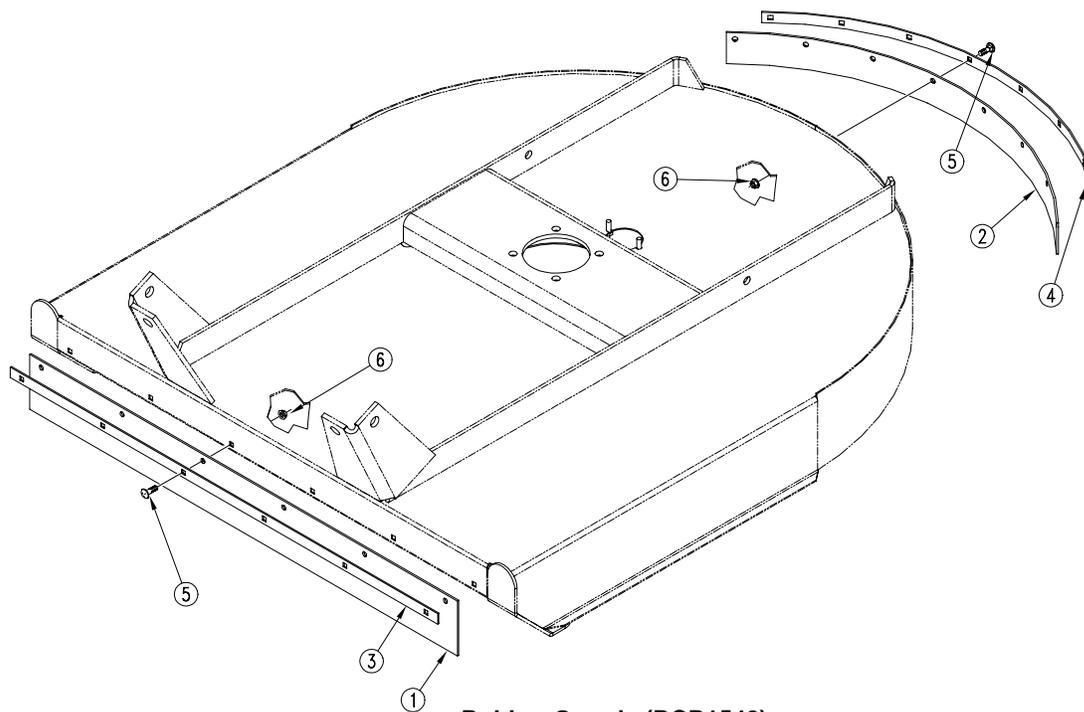
Safety Guards



Rotary cutters have the ability to discharge objects at high speeds; therefore, the use of front and rear safety shields is strongly recommended when cutting along highways or in an area where people may be present.

Rubber Guards (RCR1542 & RCR1548)

Install front rubber guard (#1), rear rubber guard (#2) and front and rear straps (#3) and (#4) as shown in Figure 2-5, with 3/8" x 1" long carriage bolts (#5), and 3/8" x 8" flange nuts (#6). Tighten all nuts and bolts to torque as indicated in the "Torque Values Chart" on page 24.



Rubber Guards (RCR1548)  
Figure 2-1

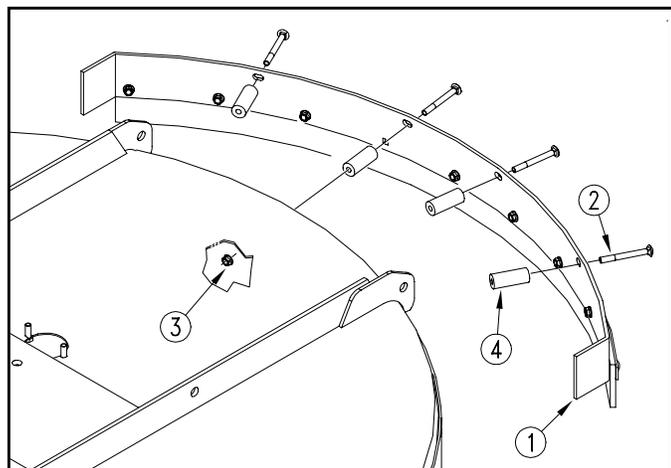
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Front Rubber Guard (RCR1560 & RCR1572)

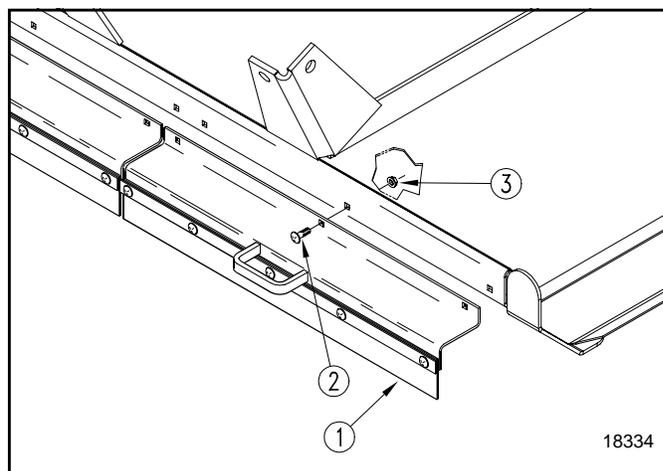
Install each segment of the front rubber guards (#1) as shown in Figure 2-2, with 3/8" x 1" long carriage bolts (#2), and 3/8" flange nuts (#3). Tighten all nuts and bolts to torque as indicated in the "Torque Values Chart" on page 24.

Rear Rubber Guard (RCR1560 & RCR1572)

Install rear rubber guard (#1) as shown in Figure 2-3, with 3/8" x 3 1/2" long carriage bolts (#2), 3/8" flange nuts (#3) and spacers (#4). Tighten all nuts and bolts to torque as indicated in the "Torque Values Chart" on page 24.



Rear Rubber Guard (RCR1560 & RCR1572)  
Figure 2-2



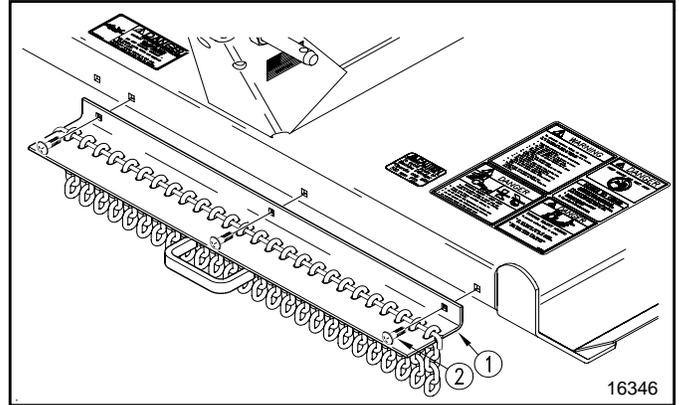
Front Rubber Guard (RCR1560 & RCR1572)  
Figure 2-3

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**Section 2: Options**

**Front Chain Guard (RCR1560 & RCR1572)**

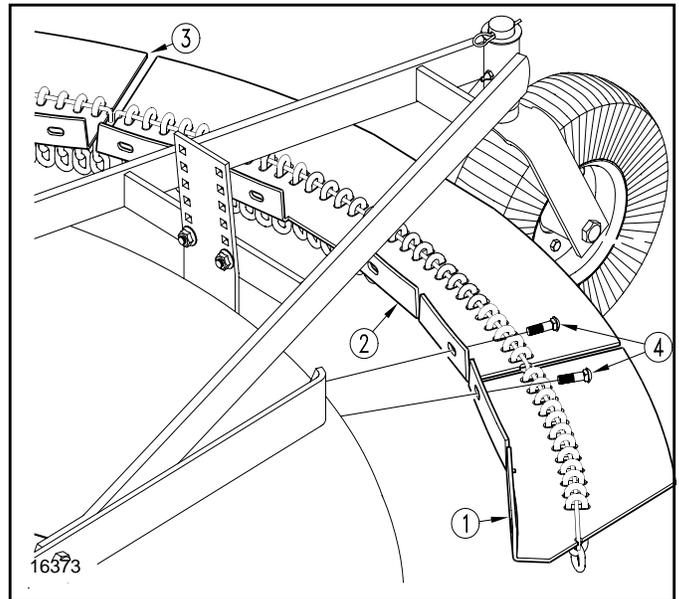
Install each segment of the front chain guards (#1) as shown in Figure 2-4, with 3/8" x 1" long carriage bolts (#2), and 3/8" flange nuts. Tighten all nuts and bolts to torque as indicated in the "Torque Values Chart" on page 24.



**Front Chain Guard  
Figure 2-4**

**Rear Chain Guard (RCR1560 & RCR1572)**

Install the rear chain guard (#1) as shown in Figure 2-5, with 3/8" x 1" long carriage bolts (#2), and 3/8" flange nuts. Tighten all nuts and bolts to torque as indicated in the "Torque Values Chart" on page 24.



**Rear Chain Guard  
Figure 2-5**

**Section 3: Operating Instructions**

**Transporting**

**CAUTION**

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

**IMPORTANT:** Always disengage the tractor's PTO before raising the cutter to transport position.

8. When raising the cutter to the transport position be sure that driveline does not contact tractor or cutter.
9. 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.
10. Limit transport speed to 20 mph. Transport only with a farm tractor of sufficient size and horsepower. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
11. When traveling over rough or hilly terrain, shift tractor to a lower gear.

**Operating Check List**

In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of equipment. Before beginning to cut, the following inspection should be performed.

**Operating Checklist**

	Check	Reference
<input type="checkbox"/>	<b>"Important Safety Information"</b> in this Manual.	Section 1 page 1
<input type="checkbox"/>	Check oil level in gearboxes.	Section 4 Page 19
<input type="checkbox"/>	Check that all plugs in gearbox have been replaced properly.	Section 4 Page 19
<input type="checkbox"/>	Be sure nuts and bolts are tight.	Section 1
<input type="checkbox"/>	Be certain all guards and shields are in place.	Section 1 page 1
<input type="checkbox"/>	Lubricate the cutter as needed. Refer to <b>"Maintenance and Lubrication"</b> .	Section 4 Page 19

**DANGER**

To prevent personal injury caused by thrown objects, the use of front & rear safety guards is strongly recommended! To avoid injury or death from entanglement in rotating drivelines, the drive gearbox shields must be in place and secure when operating.

**CAUTION**

Damage may occur if exceeding the rated cutting capacity of the cutter!

**CAUTION**

Do not over speed PTO or machine damage may result. This cutter is designed to be used with the tractors having a 540 RPM rear PTO. Know what your tractor requirements are.

**Cutting Instructions**

1. Your cutter is equipped with free swinging cutting blades to reduce shock loads to the cutter if striking obstacles.
2. Start the machine slowly; do not use full throttle. Allow 10 seconds for cutter blades to become aligned properly before going to full power.
3. The ground speed depends on two things: the density of the material being cut, and the size of the tractor. Never run fast enough to overload the tractor.
4. It is important to maintain correct RPM PTO speed. Loss of PTO speed will allow the blades to hinge back and result in ragged, uneven cutting.
5. This cutter was designed to cut grass and brush 1" maximum diameter in right-of-ways, pastures and for shredding row crop residues.

**Section 3: Operating Instructions**

**Leveling Procedure**

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

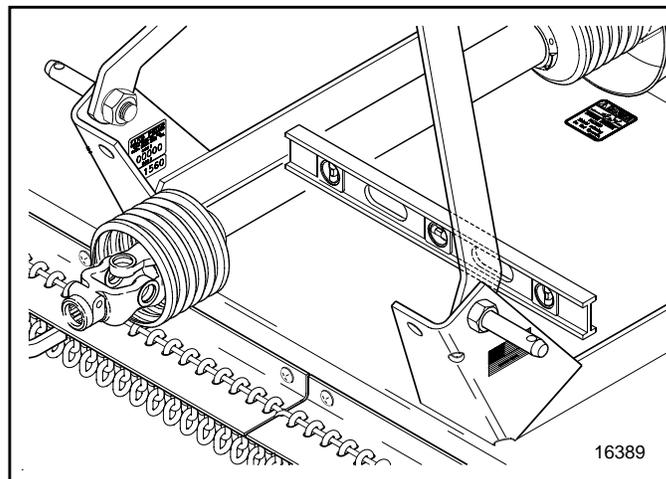
- i. Deck level from left to right
- j. Tractor top link length
- k. Tractor lower link height
- l. Tailwheel height

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

- a. Pliable tape measure
- b. Spirit or carpenters level
- c. Open end or hex end wrench or socket set
- d. Protective gloves

Having completed, the " **Tractor Hookup**", locate the tractor on a flat, level surface.

1. Use the tractor's hydraulic 3-point control to lower the cutter until the tailwheel contacts ground surface.
2. Place a level or other suitable leveling device on the front of the cutter deck as shown in Figure 3-1. Adjust either one or both of the tractors lower link height adjustments to level the deck from left to right. Some tractors have only a single adjusting crank.
3. Similarly, place a level on either of the main deck.



**Deck Leveling**  
**Figure 3-1**

**! DANGER**

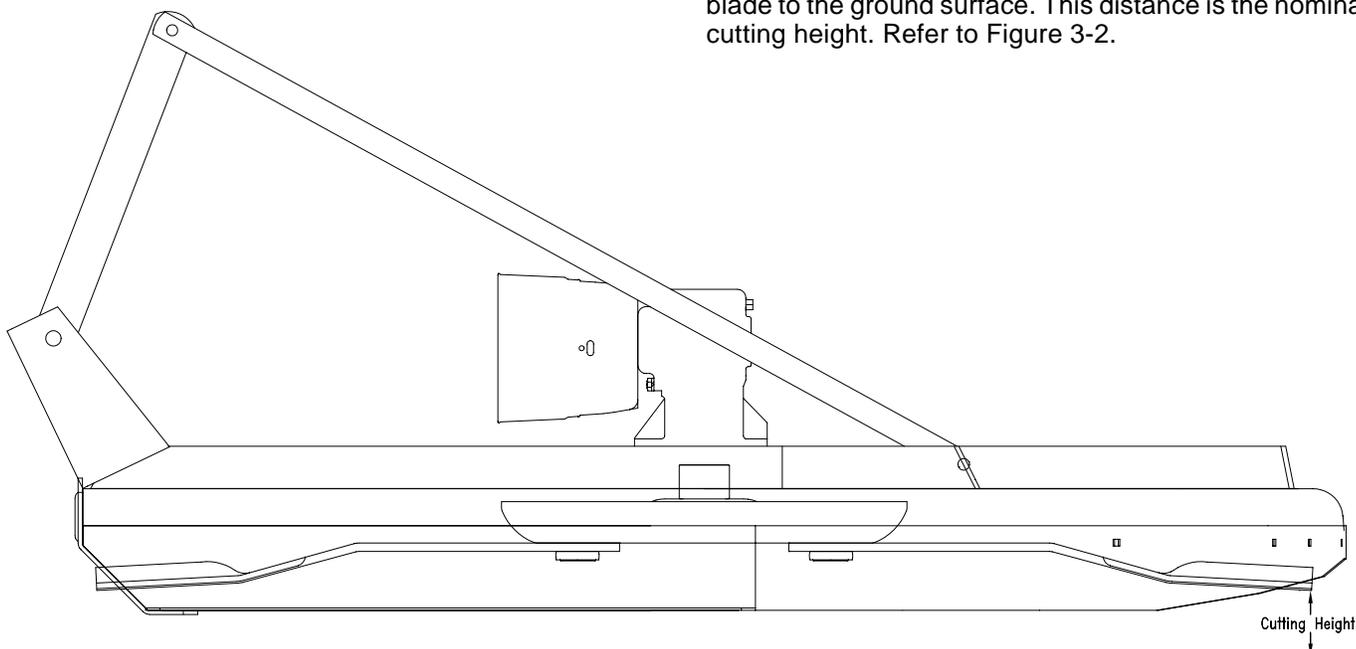
*Engage parking brake, disengage PTO, shut off tractor and remove key before proceeding. Ensure that all moving parts have come to a complete stop before dismounting from the tractor.*

**! CAUTION**

*Wear a pair of gloves when performing this operation. Go to the back of the cutter and carefully rotate each blade to the position shown in Figure 3-2. Avoid direct contact with the cutting edge of the blade.*

**Nominal Cutting Height**

Measure the distance from the end (cutting tip) of the blade to the ground surface. This distance is the nominal cutting height. Refer to Figure 3-2.



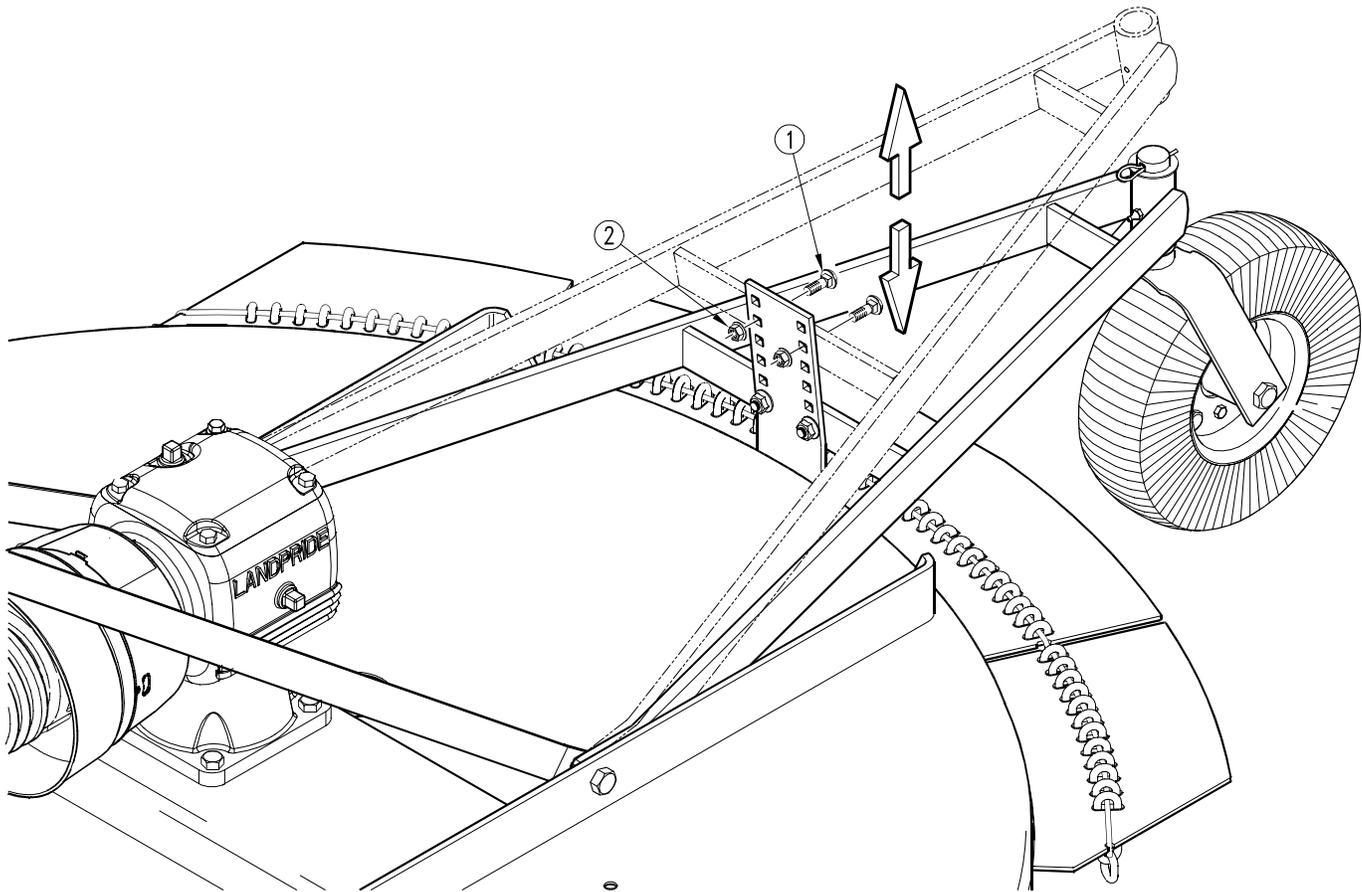
**Cutting Height**  
**Figure 3-2**

## Section 3: Operating Instructions

### Cutter Height Adjustment

Refer to Figure 3-3:

1. If the cutting height is too high or too low, the gauge wheel must be adjusted as follows:
  - e. Use the tractor's 3-point hydraulic control to lift the cutter such that the gauge wheel clears the ground.
  - f. Remove the existing hardware; 3/8" -16 x 1" long carriage bolt (#1) and 3/8" flange nut (#2).
  - g. Adjust the gauge wheel up or down to the desired cutting height and replace the hardware.



3-Point Cutter Height Adjustment  
Figure 3-3

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**Section 4: Maintenance and Lubrication**

**Maintenance**

Proper servicing and adjustment can increase the life of any implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

After using your cutter for several hours, check all bolts to be sure they are tight.

Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer.

**Service Cutting Blades**

2. 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.

**NOTE:** Care should be taken in order not to remove any more material than necessary when sharpening blades.

3. Both blades should weigh the same after sharpening.
4. When replacing or sharpening the cutter blades, examine bolts for excessive wear and replace if necessary. To replace blades:
  - h. Order blade bolt Land Pride part # 802-277C.
  - i. Torque blade bolt lock nut to 450 ft. pounds. An extended cheater bar may be required to achieve proper torque.

**IMPORTANT:** Replace blades with genuine Land Pride blades only. Blades must be ordered and replaced in pairs.

If replacing dishpan, nut on gearbox output shaft should be torqued to 450 foot/pounds and cotter pin installed in nut with legs securely bent around nut.

**Driveline Protection**

**CAUTION**

*Engage parking brake, disengage PTO, shut off tractor, and remove key before making any of the following adjustments.*

Cutter drive components are protected from shock loads by either a two plate friction clutch or a shear bolt. Avoid shear bolt failure by engaging the PTO slowly at low engine rpm. See your Land Pride Dealer when replacing shear bolts.

**Shear Bolt, Nut & Jam Nut Part Numbers**

Part No.	Part Description
802-264C	HHCS 1/2-13X3 1/2 GR2
803-020C	NUT HEX 1/2-13 PLT
803-036C	NUT HEX JAM 1/2-13 PLT

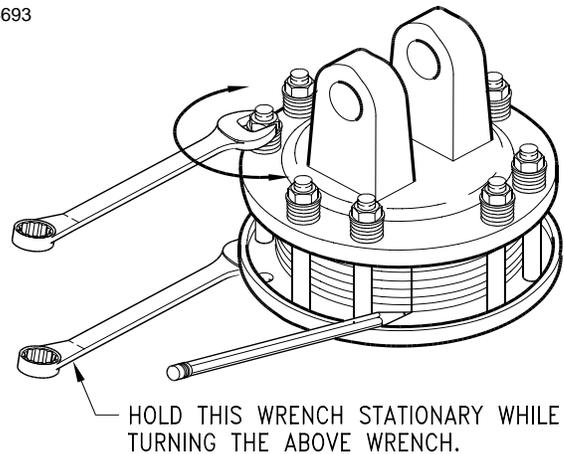
**Clutch Run-In**

Friction clutches should be “run-in” prior to initial operation and after long periods of inactivity. To prevent driveline and gearbox damage, repeat “Run-In” instructions at the beginning of each season and when moisture and/or condensation seizes the inner friction plates.

**Refer to Figure 4-1:**

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 the hex end of the retainer bolt in order to count the exact number of revolutions.
3. Start the tractor and engage the driveline drive for 2-3 seconds to permit slippage of the clutch surfaces. Disengage the driveline, then re-engage a second time for 2-3 seconds. Disengage driveline, shut off tractor and remove key. Wait for all components to stop before dismounting from tractor.

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**Clutch Run-In  
Figure 4-1**

4. Inspect the 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* to disassemble clutch.
5. Tighten each of the 8 spring retainer nuts on the clutch housing exactly 2 revolutions to restore the clutch to the original setting pressure.
6. The clutch should be checked during the first hour of tilling and periodically each week. An additional set of scribe marks can be added to check for slippage. See *Clutch Assembly* to adjust for proper spring length.

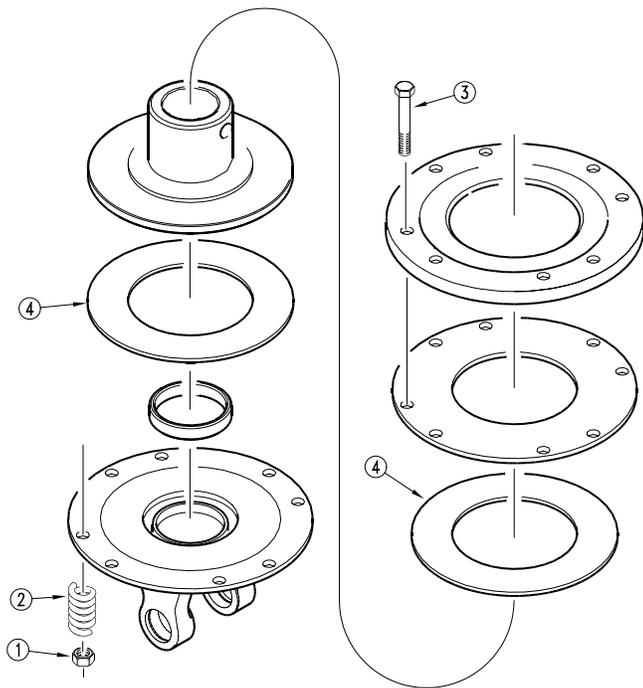
## Section 4: Maintenance and Lubrication

### Clutch Disassembly

If the clutch run-in procedure, (see "Clutch Run-In" on page 17), indicated that one or more of the friction disks did not slip, the clutch must be disassembled to separate the friction discs.

#### Refer to Figure 4-2:

To disassemble the clutch, first remove the spring retainer nuts (#1), springs (#2) and bolts (#3) from the assembly. Each friction disc (#4) must then be separated from the metal surface adjacent to it. Inspect all parts for excessive wear and condition. Clean all parts that do not require replacement.



19783

**Clutch Disassembly**  
Figure 4-2

### 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" and should be replaced if the thickness falls below 3/32". If the 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.

### Clutch Assembly

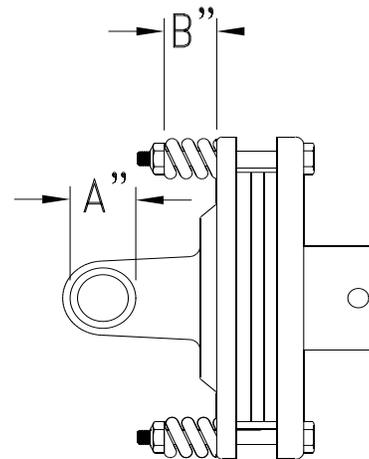
#### Refer to Figure 4-2:

Reassemble each friction disk (#4) next to the metal plate it was separated from. Make certain the bushing is positioned as shown. 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 4-3:

Progressively tighten each spring retainer nut until correct spring length "B" is reached.

- B = 1.010" to 1.000"



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**Clutch Adjustment**  
Figure 4-3

### Storage

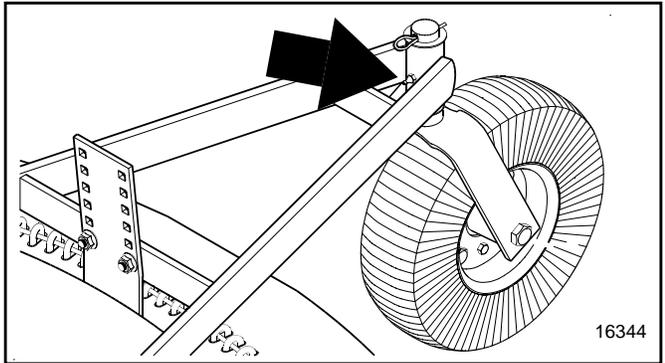
At the end of the working season or when the cutter will not be used for a long period, it is good practice to clean off any dirt or grease that may have accumulated on any of the moving parts.

1. Clean the cutter as necessary.
2. Check the blades for wear and replace if necessary, see "Service Cutting Blades" on page 17.
3. Inspect the cutter for loose, damaged or worn parts and adjust or replace as needed.
4. Lubricate as noted in "Lubrication Points" on page 19.
5. Store the cutter inside if possible for longer cutter life.
6. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride Beige touch-up paint #821-011C.

Section 4: Maintenance and Lubrication

Lubrication Points

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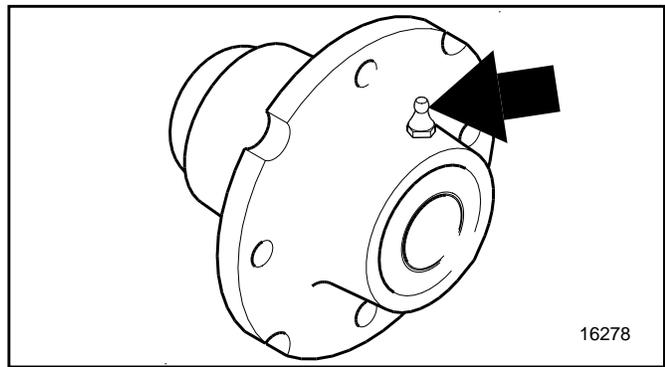


	
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**Gauge Wheel Spindle Tube**

Type of Lubrication: Grease

Quantity = 6 pumps



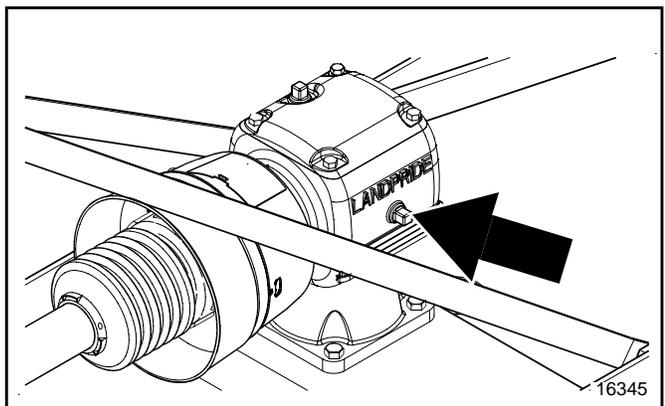
	
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**Gauge Wheel Hub**

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

Type of Lubrication: Multipurpose Grease

Quantity = Until grease purges from the relief hole



	
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**Gearbox**

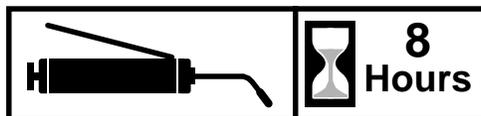
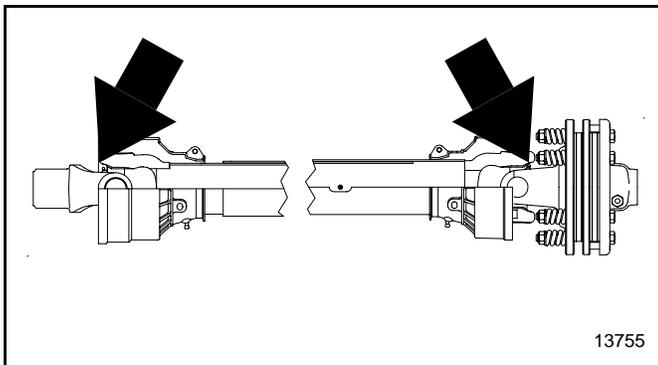
Check oil level in the gearbox by removing the side plug in the gearbox case. If the oil level is low, remove the top plug in the gearbox case and fill with EP90 oil until oil flows from the side port of gearbox case. Reinstall plugs and tighten.

**NOTE:** Do not overfill! Cutter should be level when checking oil.

Type of Lubrication: EP90 Oil

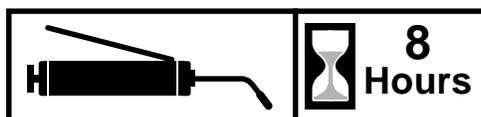
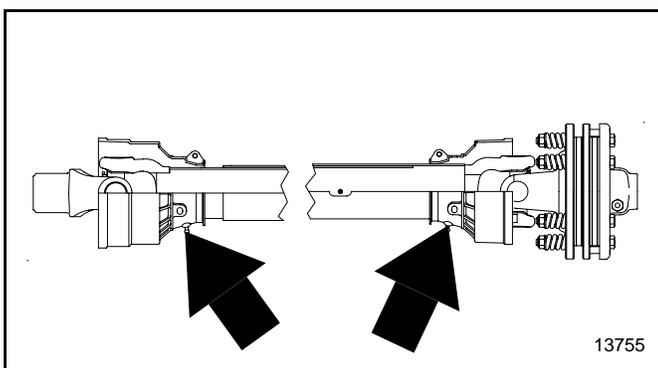
Quantity = fill until oil flows from the side port of gearbox case.

**Section 4: Maintenance and Lubrication**



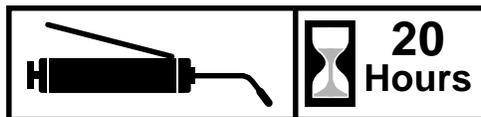
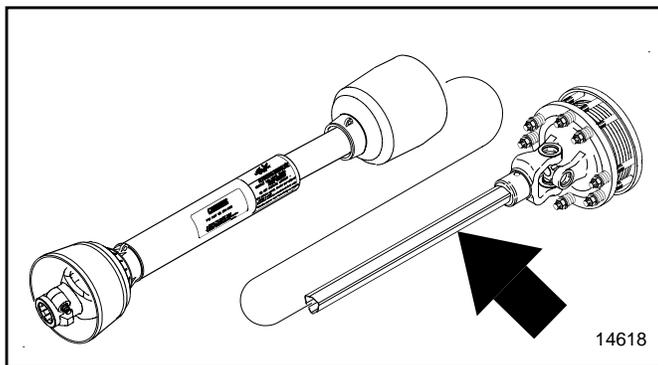
**Driveline U-Joints**

Type of Lubrication: Grease  
 Quantity = 6 pumps



**Driveline Shield Bearings**

Type of Lubrication: Grease  
 Quantity = 6 pumps



**Driveline Profiles**

Quantity = Clean & coat the inner tube of the driveline with a light film of grease and then reassemble.



Section 5: Specifications & Capacities

<b>RCR15 Series Rotary Cutters</b>				
	<b>RCR1542</b>	<b>RCR1548</b>	<b>RCR1560</b>	<b>RCR1572</b>
<b>Hitch</b>	Category I			
<b>Working Width</b>	42"	45 1/2"	57"	69"
<b>Overall Width</b>	47 1/2"	50"	62"	74"
<b>Overall Length (Including Tailwheel)</b>	86"	90"	96"	108"
<b>Machine Weight (with Front Guard)</b>	432#	475#	495#	614#
<b>Blade Tip Speed</b>	11,459 fpm	13,090 fpm	16,363 fpm	14,874 fpm
<b>Deck Material Thickness</b>	12 Gauge			
<b>Gearbox Rating</b>	30 HP		40 HP	
<b>Horsepower Rating</b>	15-50		20-50	25-50
<b>Cutting Height</b>	1 3/4" - 11 1/2"		1" - 9"	1" - 9"
<b>Cutting Capacity</b>	Grass			
<b>Safety Guards</b>	Rubber (front) or Chain (front or rear)			
<b>Skids</b>	1/4" X 2" Weld on			
<b>Deck Height (Bottom of Deck to Bottom of Skid Shoe)</b>	7 1/4"			
<b>Blades</b>	1/2" x 3" Heat Treated Alloy Steel Free-Swinging Blades			
<b>Stump Jumper</b>	Round Pan 10 ga. x 24"	Round Pan 10 ga. x 24"	Round Pan 10 ga. x 24"	Round Pan 10 ga. x 24"
<b>Driveline</b>	ASAE Category 3			
<b>Driveline Safety Protection</b>	Standard 1/2" Center Shearbolt protection Optional - Center Bolt 2 plate Slip Clutch			
<b>Gearbox (Speed up beveled gears)</b>	540 rpm PTO Driven Gearbox 1:1.93 Cast Iron Housing	540 rpm PTO Driven Gearbox 1:1.47 Cast Iron Housing		
<b>Tailwheel</b>	4" x 8" x 15" Laminated Tire, cast iron hub Optional - 4" x 16" Solid Rubber Tire			

## RCR15 Series Single Deck Rotary Cutters

Features	Benefits
<b>Tractor HP range</b>	15- 50hp
<b>Cutting widths</b>	42" and 48"
<b>Floating top link</b>	Permits deck to follow the terrain for an even cut. Two hole position to allow greater lift leverage for smaller tractors.
<b>Clevis Hitch</b>	Cat I, 3-point hitch with floating link for easy hook-up.
<b>Fully welded deck</b>	Robotic welded. Adds additional strength.
<b>Round back design</b>	Helps discharge grass better than enclosed or partially enclosed cutters.
<b>High blade tip speed</b>	Ensures clean cut. 42" = 11,459 fpm 48" = 13,090 fpm
<b>Rubber guards (front and rear)</b>	Protect against flying debris.
<b>Full length skid shoes</b>	Provides sidewall reinforcement and full protection to bottom of sidewall.
<b>Cat. 3 driveline with shear- bolt</b>	Shear bolt offers maximum driveline protection.
<b>Cat. 3 driveline with 2-plate slip-clutch</b>	Slip-clutch driveline offers convenience for continual work.
<b>Laminated tailwheel</b>	Laminated material is long lasting in rough conditions.
<b>Solid rubber tailwheel</b>	Can't go flat.
<b>Heavy-duty spindle on tailwheel</b>	Tailwheels take a beating, 1 1/4" spindle gives the strength to protect tailwheel assembly.
<b>Cutting Height</b>	1" - 9" cutting height for wide range of cutting conditions.
<b>10 Gauge stump jumper</b>	Allows cutter to slide over obstructions protecting the gearbox output shaft.
<b>Splined bladebar hub</b>	Allows for tight positive fit of stump jumper and blade bar to gearbox output shaft.
<b>Surpassed rugged industry standards</b>	All Land Pride Cutters have been designed and tested and meet rigorous voluntary testing procedures specified by ANSI.
<b>2 Year gearbox warranty</b>	Shows our confidence in the gearbox integrity.

## Section 7: Troubleshooting

Problem	Cause	Solution
<b>Oil seal leaking</b>	Gearbox overfilled	Drain to side plug hole
	Seals damaged	Replace seals
	Grass or wire wrapped on shaft in seal area	check seal areas daily
<b>Driveline yoke or cross failing</b>	Shock load	Avoid hitting solid objects
	Needs lubrication	Lubricate every 8 hours
<b>Driveline clutch slipping</b>	Scalping the ground	Raise cutting height
	Cutting too fast	Reduce travel speed
	PTO being engaged too fast at high engine rpm	Slowly engage PTO at low engine rpm
	Cutting over solid objects	Avoid solid objects
<b>Bent Driveline (NOTE: driveline should be repaired or replaced if bent)</b>	Contacting frame	Reduce lift height in transport position
	Contacting drawbar	Reposition drawbar
	Bottoming out	Shorten driveline
<b>Driveline telescoping tube failing</b>	Shock load	Avoid hitting solid objects
<b>Driveline telescoping tube wearing</b>	Needs lubrication	Lubricate every 20 hours
<b>Blades wearing excessively</b>	Cutting on sandy ground	Raise cutting height
	Contacting ground frequently	Raise cutting height
<b>Blades breaking</b>	Hitting solid objects	Avoid hitting solid objects
	Blades hitting each other	Blade carriers need to be timed
<b>Blades coming loose</b>	Blades not tightened properly	Tighten blade hardware (refer to "Servicing Cutter Blades" on page 17)
	Improper deck attitude	Lower front of deck, see page 14
<b>Blade carrier becomes loose</b>	Running loose in the past	Replace gearbox output shaft and blade carrier
	Blade carrier hardware not tight enough	Tighten to specified torque
<b>Blade bolt holes worn</b>	Blade hardware running loose	Replace blades and blade bolts if worn
<b>Blade carrier bent</b>	Hitting solid objects	Avoid hitting solid objects and replace blade carrier
<b>Excessive side skid wear</b>	Cutting height not level	Adjust cutter height
	Soil abrasive	Adjust cutter height
	Cutting too low	Adjust cutter height
<b>Tail wheel support failing</b>	Lowering too fast	Adjust rate of drop
	Hitting objects when turning	Reduce speed on turns
<b>Excessive vibration</b>	Driveline bent	Replace driveline
	Blades loose	Tighten blade bolts
	Blade carrier bent	Replace blade carrier
	Blade broken	Replace blade
	Blade will not swing	Remove and inspect blade
	Blades have unequal weight	Replace both blades



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

<sup>1</sup> in-tpi = nominal thread diameter in inches-threads per  
<sup>2</sup> N·m = newton-meters  
<sup>3</sup> ft-lb= foot pounds  
<sup>4</sup> mm x pitch = nominal thread diameter in millimeters x

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.

**Section 8: Appendix**

## Warranty

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

**Overall Unit:** One year Parts and Labor

**Gearbox:** (S/N 379869+) 5 years on Parts & Labor

**Blades, tires and driveline friction discs:** Considered wear items

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. Land Pride reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Land Pride's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. Land Pride reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Land Pride liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Land Pride shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

**No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.**

This Warranty is not valid unless registered with Land Pride within 30 days from the date of purchase by the end user.



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