Parallel Arm Rotary Cutter
RCP2660, RCPM2660, RCP3060 & RCPM3060

316-111M
Operator’s Manual

Read the Operator’s Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

Cover photo may show optional equipment not supplied with standard unit.
For an Operator’s Manual and Decal Kit in French Language, please see your Land Pride dealer.
Machine Identification
Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

If you, or the dealer, have added Options not originally ordered with the machine, or removed Options that were originally ordered, the weights and measurements are no longer accurate for your machine. Update the record by adding the machine weight and measurements provided in the Specifications & Capacities Section of this manual with the Option(s) weight and measurements.

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

Dealer Contact Information

Name: ____________________________
Street: ____________________________
City/State: _________________________
Telephone: _________________________
Email: ____________________________

California Proposition 65

⚠️ WARNING: Cancer and reproductive harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)
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Table of Contents continued on next page.
Listed below are common practices that may or may not be applicable to the products described in this manual.

**Safety at All Times**

Careful operation is your best assurance against an accident.

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

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

**Look for the Safety Alert Symbol**

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

**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.

**Be Aware of Signal Words**

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

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

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

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

**Tractor Shutdown & Storage**

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

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

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

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

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

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

Prepare for Emergencies

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

Use Personal Protective Equipment (PPE)

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

Avoid High Pressure Fluids Hazard

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

Use Safety Lights and Devices

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

Use Seat Belt and ROPS

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

Avoid Underground Utilities

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

Keep Riders Off Machinery

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

Your Parallel Arm Rotary Cutter comes equipped with all safety labels in place. They are 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**

PINCH POINT OR CRUSHING HAZARD

To prevent serious injury or death from pinching or crushing.

Stand clear from implement while:
- Folding
- Raising
- Unfolding
- Lowering

**818-045C**

Warning - Pinch Point Hazard
2-Places

**838-368C**

Warning - Pinch Point Hazard

**DANGER**

ROTATING DRIVELINE

CONTACT WILL CAUSE INJURY OR DEATH

KEEP AWAY!

DO NOT OPERATE WITHOUT:
- All driveline guards, tractor and equipment shields in place
- Drivelines securely attached at both ends
- Driveline guards that turn freely on driveline

**818-142C**

Danger - Rotating Driveline Hazard
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Important Safety Information

838-615C
2" x 9" Amber Reflector

838-614C
2" x 9" Red Reflector

838-614C
2" x 9" Red Reflector

818-230C
1 11/16 x 2 13/16" Red Reflector (2 places)
818-830C
Warning/Danger/Notice - Combination Safety Decal

818-556C
Danger - Thrown Object Hazard (3-Places)

818-555C
Danger - Rotating Blades Keep Away
Important Safety Information

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818-339C
Warning - High Pressure Fluid Hazard

818-391C
Warning - Tractor Roll Over Hazard

818-390C
Warning - Thrown Object Hazard

818-564C
Danger - Keep Away Rotating Blade Hazard
Important Safety Information

818-558C
Caution - General Safety Information

818-831C
Warning - High Pressure Fluid Hazard

316-362S
Socket mounted Slow Moving Vehicle Sign
Offered as an Accessory. See “Slow Moving Vehicle Sign (Accessory)” on page 41.
**Important Safety Information**

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**CAUTION**

To avoid drive system component damage:
- Operate only with 540 rpm PTO

---

**818-403C**

(Used only on RCP2660 & RCP3060 Series)
Caution - Operate only with 540 rpm power take-off

---

**CAUTION**

To avoid Injury or Machine Damage:
- Operate only with 1000 rpm PTO

---

**818-240C**

(Used only on RCPM2660 & RCPM3060 Series)
Important - Operate only with 1000 rpm power take-off

---

**IMPORTANT**

This valve must be open during operation or poor device will occur.

---

**818-388C**

Important - Valve must be open

---

**CAUTION**

To Avoid Injury or Machine Damage:
- Use only specified shear bolt for breakaway.
- Do not alter cartridge valves on breakaway.
Shear bolt P/N 802-B8GC (7/16 x 3 1/2 Grade 8)
Any alterations to shear bolt and/or cartridge valves for breakaway will deem warranty null and void on any areas affected by such action.

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**848-369C**

Caution: Avoid Injury or Machine Damage

---

11/2/18
Introduction

Important Safety Information

Land Pride welcomes you to the growing family of new product owners. This Parallel Arm 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 implement.

Application

The Hydraulic Parallel Arm Rotary Cutters are designed and built by Land Pride to provide excellent cutting performance on ditch banks and other sloping areas adjacent to right-of-ways, lakes, ponds, and streams. They are designed to work equally as well in and around areas of restricted access such as over or under fences, guardrails, low overhanging branches, tree limbs, and hedges. These units perform extremely well in tall grass cutting applications and will easily cut through standing brush up to two inches in diameter. An optional cutter head equipped with two forward and one rear gauge wheel is also available for customers who want to maintain a constant cutting height with minimal control lever manipulation.

The RCP2660 and RCPM2660 cutters are adapted for Category 2 or 3 three-point hitch mounting on 75 hp. minimum. tractors weighing 8,000 lbs. or more.

The RCP3060 and RCPM3060 cutters are adapted for Category 2 or 3 three-point hitch mounting on 95 hp. minimum. tractors weighing 12,000 lbs. or more.

The Hydraulic drive requires 540 rpm input power take-off speed for RCP2660 & RCP3060 models and 1000 rpm for RCPM2660 & RCPM3060 models. Depending upon hydraulic configuration, one, two, or four duplex hydraulic outlets are required on the tractor to operate the cutter’s parallel arms and deck angle.

See “Specifications & Capacities” on page 62 and “Features & Benefits” on page 64 for additional information and performance enhancing options.

Using This Manual

• This Operator’s Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.

• The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.

• To order a new Operator’s or Parts Manual, contact your authorized dealer. Manuals can also be downloaded, free-of-charge, from our website at www.landpride.com

Terminology

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

Definitions

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

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

Owner Assistance

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

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

Serial Number

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

Serial Number Plate Location

Figure 1

30033
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 any problems you have with your implement with your dealership service personnel so they can address the problem.

2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem, and request assistance.

3. For further assistance write to:

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

#### Horsepower
Tractor horsepower must be capable of controlling the Parallel Arm Rotary Cutter under all operating conditions. Smaller tractors must not be used.

- **RCP2660 & RCPM2660**
  - Horsepower Range: 75 minimum hp

- **RCP3060 & RCPM3060**
  - Horsepower Range: 95 minimum hp

#### Power Take-Off Speed
The RCP cutters require 540 rpm power take-off speed and the RCPM cutter requires 1000 rpm power take-off speed to operate the hydraulic pump(s) & motor. Required tractor horsepower to operate the pump(s) and motor is approximately 30 hp.

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

#### Hydraulic Outlets
The number of tractor hydraulic duplex outlets required is dependent upon how the Rotary Cutter is set-up.

- **Independent Control:**
  - One duplex outlet is required to operate the breakaway cylinder. A power take-off driven pump on the unit pumps hydraulic fluid from the reservoir to the parallel arm cylinders and deck pivot cylinder. The cylinders are solenoid activated with momentary push button switches at the control stick.

- **Solenoid Control:**
  - Two duplex outlets are required. One duplex outlet is required to operate the breakaway cylinder. The second duplex outlet operates the parallel arm cylinders and deck pivot cylinder. The cylinders are solenoid activated with momentary push button switches at the control stick. The second duplex outlet must be capable of continuous hydraulic fluid flow.

- **Tractor Control:**
  - Four duplex outlets are required to operate the parallel arm cylinders, deck pivot cylinder, and breakaway cylinder. Each cylinder is connected to a duplex outlet and activated with tractor control levers. Each duplex outlet must be capable of infinite variable flow control (turtle/rabbit control) with center detent “OFF” levers. If gauge wheels are included, “ARM 2” and “Deck Pivot” levers must be capable of being placed in float position.

### Weight

**WARNING**
To avoid serious injury or death:
Lightweight tractors with rear attached implements may need weights added to the front to maintain steering control. Consult your tractor Operator’s Manual to determine proper weight requirements and maximum weight limitations.

**IMPORTANT:** Extended parallel arms will pull the tractor’s front to the right. When necessary, add weight to the tractor front to stabilize it. Consult your tractor’s manual for allowable added weights.

- The tractor’s right rear wheel should be pressurized to the manufacturer’s highest recommended air pressure.

#### Absolute Minimum:
Tractor weight must be sufficient to control the Parallel Arm Rotary Cutter under all operating conditions. Tractors not meeting the absolute minimum weight listed below must not be used.

- **RCP2660 & RCPM2660**
  - Tractor absolute minimum weight: 8,000 lbs.
  - Tractor basic minimum weight: 8,500 lbs.

- **RCP3060 & RCPM3060**
  - Tractor absolute minimum weight: 12,000 lbs.
  - Tractor basic minimum weight: 13,500 lbs.

### Wheel Base

Refer to Figure 1-1 & Figure 1-2:

- The front gauge wheel and mount may interfere with the right rear tractor tire when deck is folded for transporting. This is especially true if the outside face of the tire is more than 47” away from the tractor center. Tractors equipped with dual wheels may need the outside right rear wheel removed. The RCP(M)3060 cutter requires a dual wheel on the left-hand side or wheel weights equal to the weight of a dual wheel.

- Rear wheel base must meet minimum requirements when measured from outside face to outside face of rear tractor tires. Smaller wheel bases must not be used.

- **RCP2660 & RCPM2660**
  - Rear Wheel Base: 74” minimum

- **RCP3060 & RCPM3060**
  - Rear Wheel Base: 95” minimum
Protective Equipment Requirements

Refer to Figure 1-1 & Figure 1-2:

The tractor **MUST** be equipped with protective equipment designed to shield the operator from thrown objects and tractor rollover. An enclosed tractor cab with a Roll Over Protective Structure (ROPS) may qualify. See the tractor’s manual to see if it qualifies.

Tractors with only a ROPS must have a protective shield added to the right-hand fender. A universal operator protective shield is available from Land Pride. Refer to page 42 for additional information and installation.

It is also recommended that a protective shield or screen be added to the right-hand side of the tractor engine cowling and radiator. This will help protect the tractor’s finish and radiator against thrown objects.
**Section 1: Assembly & Set-up**

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---

**Dealer Preparations**

This cutter has been assembled at the factory. However, some preparations will be necessary to attach the cutter to customer’s tractor.

- Make certain the intended tractor conforms to the “Tractor Requirements” on page 12.
- Review and check off Preparation Checklist below proceeding.
- “Section 1: Assembly & Set-up” instructions are standard and should be completed before continuing with “Section 2: Hydraulic Set-up Options”.

<table>
<thead>
<tr>
<th>Preparation Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper hitch pin is not included with unit. Determine customer’s tractor hitch type. (Cat II or Cat III). Buy required upper hitch pin locally or order a Land Pride hitch pin if customer’s tractor does not include the pin. See Land Pride’s upper hitch pin part numbers below.</td>
</tr>
<tr>
<td>805-079C - Upper Hitch Pin Cat II (1” dia. x 3 3/8” usable)</td>
</tr>
<tr>
<td>805-196C - Upper Hitch Pin Cat III (1 1/4” dia. x 3 3/8” usable)</td>
</tr>
<tr>
<td>Before operating this unit, 80-90 EP Gear Lube must be added to the gearbox &amp; motor as indicated in the “Maintenance &amp; Lubrication” section for “Speed Increaser Lubrication” on page 61 of this manual.</td>
</tr>
<tr>
<td>35 Gallons of Hydraulic Fluid is needed for the hydraulic reservoir. Use any high quality mineral based hydraulic fluid such as Mobilfluid 424 with a viscosity rating of 10W-30.</td>
</tr>
<tr>
<td>Additional hydraulic fluid (approx 2 gallons) for the tractor reservoir.</td>
</tr>
<tr>
<td>Miscellaneous assembly tools: hammer, tape measure, assortment of wrenches and sockets, and spirit level.</td>
</tr>
<tr>
<td>Quick disconnect adapters that match tractor’s duplex outlets. Quantity required depends on option selected: (4) If equipped with solenoid control box. (8) If not equipped with hose hook-up.</td>
</tr>
<tr>
<td>Possible need for forklift or hoist capable of lifting 2500 lbs.</td>
</tr>
<tr>
<td>Auxiliary tractor weights (depending on tractor size). See “Tractor Requirements” on page 12.</td>
</tr>
<tr>
<td>A minimum of two people available during assembly.</td>
</tr>
<tr>
<td>If a pin, bolt or other part has been removed, and you are unsure where it is used, use the Parts Manual to identify it. Be sure the part gets used in the correct location. By double checking while you assemble, you will lessen the chance of using a bolt incorrectly that may be needed later.</td>
</tr>
<tr>
<td>Safety decals are legible and undamaged from shipment.</td>
</tr>
<tr>
<td>Power take-off driveline and loose parts bag/box shipped with the cutter are present.</td>
</tr>
</tbody>
</table>

**Hook-up Rotary Cutter**

**WARNING**

To avoid serious injury or death:

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

**IMPORTANT:** The optional 3-Point Stabilizer Kit must be used with RCP2660 & RCPM2660 Parallel Arm Rotary Cutters when hooking-up to a M126GX, M135GX, M6-141, or M6-141 Kubota tractor. The Kubota tractor can be damaged if this kit is not used. See “Kubota 3-Point Stabilizer Kit” on page 44.

**IMPORTANT:** Hydraulic fluid must be added to the cutter hydraulic reservoir before operating the pump. Otherwise, the hydraulic pump will be damaged.

**IMPORTANT:** A quick hitch may be used except with Kubota tractors. Land Pride does not recommend using the Quick Hitch as it moves the cutter deck back about 5” and impedes operator visibility.

1. If hooking cutter to a M126GX, M135GX, M6-141, or M6-141 Kubota tractor, you must install “Kubota 3-Point Stabilizer Kit” on page 44 to the tractor and cutter mainframe.
2. Complete steps a-b below when hooking-up a cutter shipped from the factory with deck rotated up. Otherwise, skip to step 3.
   a. Make sure the transport safety chain is hooked to the deck before moving the cutter and before working around the cutter. Refer to “Transport Safety Chain” on page 18.
   b. With a fork lift or other lifting device, place the cutter on a flat level concrete surface.
3. There are three hitch categories represented in Figure 1-3 on page 15. Determine which one fits your tractor and arrange cutter hitch pins as shown for that category.

**Refer to Figure 1-4 on page 15:**

4. Slowly back tractor up to the Rotary Cutter while using tractor’s 3-point hydraulic controls to align lower hitch link holes with clevis holes on the cutter.
5. Place tractor gear selector in park and/or set brakes, shut engine off, and remove ignition key.
6. Aligned and positioned tractor’s lower hitch holes in the clevises. Attach the lower arms to the clevises with hitch pins and secure with linchpins.
Section 1: Assembly & Set-up

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7. Adjust top center link in or out to align center link hole with the cutter’s center hitch pin hole. Connect top center link to cutter hitch pin hole using customer supplied clevis pin and linchpin.

8. Make certain the lower 3-point arms are stabilized to prevent excessive side movement.

9. Return to tractor and slowly raise tractor 3-point hitch 1 to 2 inches. Stow jack stands in the raised position.

10. Slowly operate tractor’s 3-point arms up and down to check clearance between cutter components and tractor components. Move or remove tractor drawbar if it interferes with cutter.

11. Adjust tractor’s lower lift arms to level cutter from left to right.

12. Adjust center top-link to level cutter from front to rear.

13. Final deck leveling adjustments will be made later.

Driveline Installation

⚠️ DANGER ⚠️
To avoid serious injury or death:

- Do not engage power take-off while hooking-up or unhooking the driveline, or while someone is standing near the driveline. A person’s body and/or clothing can become entangled in the driveline.

- All guards and shields must be installed and in good working condition while operating the implement.

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

⚠️ WARNING ⚠️
To avoid serious injury or death:
Always shut tractor down using “Tractor Shutdown Procedure” provided in this manual before dismounting tractor.

⚠️ CAUTION ⚠️
To avoid minor or moderate injury:
Some tractors are equipped with two power take-off speeds. Be certain your tractor’s power take-off is set at the implement’s rated power take-off speed or equipment breakage may result. RC models are rated for 540 rpm and RCM models are rated for 1000 rpm.

**IMPORTANT:** Do not engage tractor PTO until driveline is fully connected and hydraulic fluid has been added to the cutter reservoir.

**IMPORTANT:** An additional driveline may be required if implement is attached to more than one tractor or if a Quick Hitch is used.
Shortening Driveline Shields & Shafts

Refer to Figure 1-5:

1. Start tractor and slowly engage 3-point controls to move lower arms until the power take-off shaft for the speed increaser is aligned and level with tractor power take-off shaft. Securely block cutter in this position.
2. Place tractor gear selector in park, shut tractor engine off or set park brake, and remove switch key.
3. Remove shaft protector from speed increaser shaft and discard.
4. Pull back on inner yoke locking collar and slide inner yoke of driveline over speed increaser shaft.
5. Release locking collar and continue to push inner yoke onto input shaft until locking collar snaps in place.
6. Fully collapse driveline by pushing tractor end of driveline against the speed increaser. If driveline will not collapse enough to install onto the tractor power take-off shaft, skip to “Check Driveline Collapsible Length” on page 17.
7. Pull back on outer yoke locking collar and slide outer yoke of driveline over tractor power take-off shaft.
8. Release locking collar and continue to push outer yoke onto the power take-off shaft until locking collar snaps in place.
9. Push/pull on driveline yokes to be certain they are securely fastened to the power take-off shaft and speed increaser input shaft.
10. If driveline yoke will not lock in place, skip to “Check Driveline Collapsible Length” below.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to “Lubrication Points” on page 59.

Check Driveline Collapsible Length

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

1. Make sure driveline is properly installed and level before checking driveline collapsible length. (Refer to “Driveline Installation” instructions on page 15.)

Refer to Figure 1-5:

2. With driveline level, measure (“B” dimension) back from universal joint shield to end of outer driveline shield as shown in Figure 1-5.
3. If measurement is 1” or more, skip to “Check Driveline Maximum Length” on page 17. If measurement is less than 1”, shorten driveline using instructions provided under “Shorten Driveline” on page 16.

Shorten Driveline

Refer to Figure 1-5:

Be sure to check driveline collapsed length first. If required, shorten driveline as follows:

1. Unhook driveline from tractor power take-off shaft. Pull outer and inner drivelines apart.
2. Reattach outer driveline to tractor power take-off shaft. Pull on inner and outer driveline yokes to be sure universal joints are properly secured.
3. Hold inner and outer drivelines parallel to each other:
   a. Measure 1” (“B” dimension) back from outer driveline universal joint shield and make a mark at this location on the inner driveline shield.
   b. Measure 1” (“B” dimension) back from the inner driveline universal joint shield and make a mark at this location on the outer driveline shield.
4. Remove driveline from tractor power take-off shaft and speed increaser shaft.
5. Measure from end of inner shield to scribed mark (“X” dimension). Cut off inner shield at the mark. Cut same amount off the inner shaft (“X1” dimension).
6. Measure from end of outer shield to scribed mark (“Y” dimension). Cut off outer shield at the mark. Cut same amount off the outer shaft (“Y1” dimension).
7. Remove all burrs and cuttings.
8. Continue with “Check Driveline Maximum Length” on page 17.
Check Driveline Maximum Length

Refer to Figure 1-6:
The driveline maximum allowable length must, when fully extended, have a minimum overlap of profile tubes by not less than 1/2 the free length with both inner and outer profile tubes being of equal length.

1. Apply multi-purpose grease to the inside of the outer shaft and reassemble the driveline.
2. Assemble the two driveline profiles together with just 1/2 overlapping of the profile tubes as shown. Once assembled, measure and record maximum allowable length here. ________

Check Driveline Interference

1. Make certain driveline yokes are properly attached. See steps 2 -10 on page 16.
2. Start tractor and raise Parallel Arm Rotary Cutter just enough to remove support blocks from under the cutter.
3. Slowly engage tractor hydraulic 3-point control lever to lower cutter while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.

Refer to Figure 1-7:

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

4. With power take-off off, raise implement fully up to make the following checks below. If driveline exceeds any of the limits listed, set tractor 3-point lift limiter at a height that will keep the driveline within its lift limits and to avoid premature driveline breakdown.
   • Driveline does not exceed 25° up.
   • Driveline does not exceed maximum allowable length recorded in step 2 under “Check Driveline Maximum Length”.

Install Stabilizer Turnbuckles

If installing Kubota stabilizer turnbuckles, first, level the deck and then install Kubota turnbuckles. Refer to “Deck Level Adjustments” on page 33 and “Attach Stabilizer Turnbuckles” on page 45.
Hydraulic Reservoir Oil Fill
Refer to Figure 1-8:
The Rotary Cutter is shipped without hydraulic fluid.
1. Park cutter on a level surface, set park brake, turn off ignition switch, and remove switch key.
2. Remove fill cap and dipstick from reservoir and add 35 gallons of Mobilfluid 424 to the hydraulic reservoir. Use care to ensure that dust or other foreign particles do not contaminate the fluid.
3. Wipe dipstick clean. Fully insert it and remove. Check oil level on dipstick. Fill with recommended oil to the full mark. Replace fill cap and dipstick.

Transport Safety Chain
Refer to Figure 1-8 & Figure 1-9:

⚠️ WARNING
To avoid serious injury or death:
Transport safety chain must remain hooked to the deck until ready to extend parallel arms and deck cylinder. Float Switch must be “OFF” until gauge wheels are resting on the ground.

The transport safety chain should always be hooked to the deck hook when cutter is folded up. Otherwise, the operating levers and/or push button switches could be bumped or hoses could burst allowing deck to fall and cause damage to cutter, tractor, and anyone nearby.

When unhooking the transport safety chain, make sure the arm and deck cylinders are retracted and if available, the Float Switch is set to “OFF”. Do not force safety chain off the deck hook. If safety chain does not remove easily, investigate the problem and correct before continuing. Once unhooked, store safety chain on the storage hook.
Breakaway Cylinder

Refer to Figure 1-10:
The breakaway cylinder protects the Rotary Cutter from damage when cutter deck or parallel arm contacts a solid object while moving forward. It does not protect the cutter while backing up. Always make certain the area behind the cutter is clear before backing up. See Breakaway Cylinder on page 46 for additional information.

**IMPORTANT:** A 1/2" bolt is installed for shipping purposes only. This **bolt must be remove** before connecting hydraulic hoses to the tractor.

1. Remove 1/2" shipping bolt from cutter before connecting hydraulic hoses. **DO NOT reinstall shipping bolt.**
2. Attach breakaway hoses to a single duplex outlet on the tractor as shown.

Weight Hanger Installation

Refer to Figure 1-11:
There are six different weight hangers that can be attached to the reservoir. One of the six must be installed for operation. See **"Bolt-on Weight Hangers"** on page 42 for detailed description of available weight hangers.

**NOTE:** Case/International Harvest weight hanger includes an L-shaped spacer. Be sure to locate this spacer between the weight hanger side plate and hydraulic reservoir tank in assembly.

1. Attach weight hanger (#1) to reservoir with fourteen 1/2"-13 x 1 1/4" GR5 cap screws (#3) and hex flange lock nuts (#3). Tighten lock nuts to the correct torque.
2. Attach manual storage container (#9) to the front side of the reservoir with two 1/4"-20 x 1 1/4" GR5 cap screws (#4), flat washers (#7), and hex nylock nuts (#6). Tighten nylock nuts to the correct torque.
3. Insert weight retainer pin (#2) through holes in weight hanger and secure with hairpin cotters (#8).
Gauge Wheels (Optional)
Refer to Figure 1-12:
The deck with gauge wheels is shipped from the factory completely assembled to the parallel arm with the exception of installing the rear ratchet jack and one gauge wheel.

NOTE: Installation of gauge wheel and ratchet jack is easier after the deck has been lowered. Therefore, it is best to install them just before making “Float Positioning Control Check” on page 23 for Tractor Control or just before making “Float Switch ON/OFF Push Button Check” on page 30 for Solenoid and Independent Control.

Ratchet Jack Installation
1. Check 5/8" hex flange lock nuts securing bolts (#3). They should be drawn up snug, not tight. A-frame (#2) should pivot freely on the two bolts.
2. Cut ties securing A-frame (#2) and rotate frame back to position it behind the deck as shown.
3. Attach ratchet jack (#8) to the cutter deck with 1" dia. clevis pins (#6). Secure clevis pins with hairpin cotters (#3).
4. Insert long handle in the rear ratchet jack and short handle in the front ratchet jack. Secure handles with cotter pins. Bend cotter pin legs to keep pins from falling out.

NOTE: After deck cutting height is set, it is recommended that the ratchet jack handles be removed and stored with the tractor and cutter to protect the deck finish.

Gauge Wheel Installation
1. Install 1 1/4" I.D. machine washer (#4) over yoke spindle (#1) as shown.
2. Insert yoke spindle (#1) into the front support frame.
3. Install second 1 1/4" I.D. machine washer (#4) over yoke spindle (#1).
4. Secure yoke spindle to frame with 5/16" dia. roll pin (#7).
Options

There are three basic Hydraulic Options for the Parallel Arm Rotary Cutter (Tractor Control, Solenoid Control and Independent Control). Each of the three basic options can be purchased with or without gauge wheels. A brief description of each follows:

Tractor Control

Refer to Figure 2-2 on page 23:

Four duplex outlets are required to operate “ARM 1”, “ARM 2”, “Deck Pivot”, and Breakaway cylinders. The duplex outlets must be capable of infinite variable flow control (turtle/rabbit control) and should have center detent “OFF” control levers for controlling the position of the parallel arm and deck pivot cylinders. If gauge wheels are included, “ARM 2” and “Deck Pivot” control levers must be capable of being placed in float position.

The hydraulic motor on the deck is powered by a hydraulic pump connected to the tractor’s power take-off shaft and is turned “ON” and “OFF” at the tractor’s power take-off shaft.

For detailed set-up instructions, see “Tractor Control” on page 22.

Solenoid Control

Refer to Figure 2-13 on page 29:

With this arrangement, the breakaway cylinder is coupled directly to a duplex outlet at the tractor and operated with the tractor’s hydraulic control lever.

The remaining three cylinders (“ARM 1”, “ARM 2” & “Deck Pivot”) are powered by one duplex outlet at the tractor with the control lever set for continuous hydraulic flow. A flow control valve mounted on the cutter frame regulates oil flow through the solenoid valve block. The three cylinders are solenoid activated from the tractor seat with momentary push buttons on the control stick.

If gauge wheels are mounted on the deck, the solenoid valve block must also include two float valves (poppet valves) so that “ARM 2” and “Deck Pivot” cylinders can float with the deck as it is carried by the gauge wheels.

The hydraulic motor on the deck is powered by a hydraulic motor pump connected to the tractor’s power take-off shaft and is turned “ON” and “OFF” at the tractor’s power take-off shaft.

For detailed set-up instructions, see “Solenoid Control” on page 24.

Independent Control

Refer to Figure 2-13 on page 29:

With this arrangement, the breakaway cylinder is coupled directly to a duplex outlet at the tractor and operated with the tractor’s hydraulic control lever.

The remaining three cylinders (“ARM 1”, “ARM 2”, and “Deck Pivot”) are powered by a cylinder pump mounted on the back of the motor pump. The cylinders are solenoid activated with momentary push buttons on the control stick.

The hydraulic motor on the deck is powered by a hydraulic motor pump connected to the tractor’s power take-off shaft. Because the power take-off shaft must run continuously to operate the cylinders, the motor is run with an “ON/OFF” push button switch on the control stick.

If gauge wheels are mounted on the deck, the solenoid valve block must also include two float valves (poppet valves) so that “ARM 2” and “Deck Pivot” cylinders can float with the deck as it is carried by the gauge wheels.

For detailed set-up instructions, see “Independent Control” on page 25.
Tractor Control

**NOTE:** The response time with solenoid and independent controlled cylinders is faster than tractor controlled cylinders. Therefore, the operator might want to consider going with solenoid controlled cylinders or independent controlled cylinders when frequent changes to deck positioning are required.

Hydraulic Hose Hook-up

Refer to Figure 2-1:

Three cylinders are connect to three duplex outlets on the tractor. Make sure these duplex outlets have infinite variable flow control. **Do Not** run tractor to make adjustments to hose hook-up. Adjustments will be made later during Console Control Lever Functional Checks on page 22.

1. Connect “ARM 1” hoses to a single duplex outlet on the tractor. This is best if connected to the control closest to the operator.
2. Connect “ARM 2” hoses to the control lever next to “ARM 1” lever. This control lever must be capable of being placed in float position when gauge wheels are included.
3. Connect “Deck Pivot” hoses to the control lever next to “ARM 2” lever. This control lever must be capable of being placed in float position when gauge wheels are included.

**NOTE:** The response time with solenoid and independent controlled cylinders is faster than tractor controlled cylinders. Therefore, the operator might want to consider going with solenoid controlled cylinders or independent controlled cylinders when frequent changes to deck positioning are required.

Hose Hook-up With Tractor Control Cylinders

**WARNING**

To avoid serious injury or death:

Hydraulic fluid under high pressure can penetrate the skin and/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. A doctor familiar with this type of injury must treat the injury within a few hours or gangrene may result. **DO NOT DELAY.**

The hoses on each outlet should be connected such that when the control lever is pushed forward, the arm (or deck) extends. Cycle hydraulic cylinders with tractor console controls to ensure they operate properly as follows:

**Pre-Operational Instructions**

1. Read and understand “Transport Safety Chain” on page 18 before continuing.
2. Remove transport safety chain from its latched position and place loose end on the storage hook.
3. Start tractor and adjust 3-point hitch until driveline is approximately level.
Control Lever Center Detent Position Check

Refer to Figure 2-2:

1. Operate tractor console control lever designated for “ARM 1” by pushing it forward briefly to see which way the inboard arm moves. It should extend outward. If “ARM 1” retracts, reverse hydraulic hoses at the duplex outlet (See Figure 2-1 on page 22).
2. Repeat this procedure for “ARM 2” and “Deck Pivot” cylinders.
3. After hose hook-up has been verified to be correct, purge hydraulic cylinders of air in the order below:
   a. Push on deck control lever to lower the deck down into a horizontal position.
   b. Push on “ARM 2” control lever until the outboard parallel arm is fully extend.
   c. Push on “ARM 1” control lever until the inboard parallel arm is fully extend.
   d. Repeat steps a to c in reverse order to retract all three cylinders.
   e. Cycle cylinders to full extension and retraction several times to make sure all air is purged.
4. Check hydraulic fluid level in your tractor’s reservoir. If low, add fluid to the tractor’s hydraulic system before proceeding. The cylinders and hoses will require approximately 1 3/4 gallons from tractor reservoir.

Float Positioning Control Check

Refer to Figure 2-2:

Gauge wheels must be installed before setting tractor operator levers to float position. Install gauge wheels per “Gauge Wheels (Optional)” instructions on page 20.

To make this functional check, “ARM 1” and “ARM 2” must extended about half way. The Rotary Cutter deck should be resting on its gauge wheels.

1. Operate all three tractor console control levers and lower gauge wheels to ground level.
2. Set only “ARM 2” and “DECK” control levers in float position. Consult tractor manual if operator is unsure of where float position is for the tractor control levers.
3. Retract “ARM 1” control lever. “ARM 2” and “Deck Pivot” cylinders should float (change position) allowing deck gauge wheels to remain resting on the ground.
4. Return control levers to center detent position to regain full control of “ARM 2” and “Deck Pivot” pivot cylinders.

Flow Control (Turtle/Rabbit Adjustments)

Flow control adjustments are made in the Adjustment section. Refer to “Turtle/Rabbit Flow Control at the Tractor” on page 32 for detailed instructions.
Solenoid Control

Hydraulic oil is supplied to the solenoid valve from the tractor’s remote duplex outlets. Hydraulic cylinders for “ARM 1,” “ARM 2,” and “Deck Pivot” are plumbed to the solenoid valve and controlled from the tractor seat with an electrically operated control stick. The speed at which the cylinders extend and retract is controlled with a flow control valve mounted on the cutter frame.

Flow Control Valve Plumbing

The tractor duplex outlet connected to the solenoid valve block must be capable of continuous hydraulic flow. An auxiliary flow control valve on the cutter diverts excess oil flow back to the tractor to keep the oil cooler.

IMPORTANT: Damage to o-rings in the solenoid valve and hydraulic cylinders can occur if the oil is overheated. Refer to your tractor’s manual to make sure oil pressure and return hoses are configured to match your tractor’s rated hydraulic flow.

Tractors With 15 gpm & Below Hydraulic Flow (56.8 liters per minute and below)

Refer to Figure 2-3:
1. Pressure line #1 is plumbed to the lower port in the solenoid valve block and to the port labeled “CF” in the flow control valve.
2. Pressure line #2 is plumbed to the bottom port in the flow control valve port labeled “IN” with a Pioneer-quick disconnect coupler on the opposite end.
3. Return line #1 is plumbed to the upper port in the solenoid valve block and to the check valve in the tee at the flow control valve.
4. Return line #2 is plumbed to the tee at the flow control valve with a Pioneer-quick disconnect coupler on the opposite end.
5. Connect return line #2 and pressure line #2 to one of the tractor’s duplex outlets. Some tractors use quick couplers other than Pioneer couplers.

Tractors With 16 gpm & Above Hydraulic Flow (60.6 liters per minute and above)

Refer to Figure 2-4:
1. Return line #1 is plumbed to the upper port in the solenoid valve block with a Pioneer-quick disconnect coupler on the opposite end.
2. Pressure line #1 is plumbed to the lower port in the solenoid valve block and to the port labeled “CF” in the flow control valve.
3. Pressure line #2 is plumbed to the port in the bottom of the flow control valve labeled “IN” with a Pioneer-quick disconnect coupler on the opposite end.
4. Return line #2 is plumbed to the tee in the flow control valve and to either the tractor sump or deck motor return line. Fittings to plumb to tractor sump or motor return line are customer supplied.
5. The unused port on the tee at the flow control valve must be plugged.
6. Connect return line #1 and pressure line #2 to one of the tractor’s duplex outlets. Pioneer-quick disconnect hose couplings are supplied with each hose. Some tractors use other types of quick couplers.

Flow Control Valve Adjustments

Flow control valve adjustments are made after the electrical controls have been installed. Refer to “Hydraulic Flow Control” on page 32.

Skip to “Solenoid Valve Block Functions” on page 25.
Independent Control
With the Independent Control option, only the breakaway cylinder is operated by tractor hydraulics. All other hydraulics on the cutter are self contained using only the oil in the reservoir to run the cylinders and deck motor. Both, Independent and Solenoid Control options rely upon the solenoid valve block to control “ARM 1”, “ARM 2”, and “Deck Pivot” cylinders.

Refer to Figure 2-5:
1. Set flow control valve on the solenoid valve block to “OPEN” by turning flow control knob “COUNTER CLOCKWISE” until knob stops turning.

The Independent Control Option is designed to produce the correct volume flow of hydraulic oil to the hydraulic cylinders. The flow control valve shown in Figure 2-4 on page 24 is not needed.

Solenoid Valve Block Without Deck Float Capabilities
Figure 2-5

Solenoid Valve Block With Deck Float Capabilities
Figure 2-6

Solenoid Valve Block Functions
Refer to Figure 2-6:
A solenoid valve block is included on cutters with Independent Control and Solenoid Control. If Gauge Wheel Option is included, the solenoid valve block must have two poppet valves on top to allow the deck to float on its gauge wheels. See Figure 2-6 for illustration of poppet valves.
Control Sticks
There are four control stick arrangements. They are as follows:

- Solenoid Control Without Gauge Wheels.
- Solenoid Control With Gauge Wheels.
- Independent Control Without Gauge Wheels.
- Independent Control With Gauge Wheels.

See Figure 2-13 on page 29 for illustration of “ARM 1”, “ARM 2”, “Deck Pivot” & “Deck Motor.” The deck must be equipped with gauge wheels before “Deck Float” is included. “Deck Float” allows “ARM 2” and “Deck Pivot” cylinders to float with the gauge wheels as they roll over the ground surface. Make sure you have the correct control stick for your particular set-up.

Solenoid Control Without Gauge Wheels
Refer to Figure 2-7:
This control stick includes the following push buttons:

- Two momentary push buttons for moving “ARM 1”.
- Two momentary push buttons for moving “ARM 2”.
- Two momentary push buttons for “Deck Pivot”.

Solenoid Control With Gauge Wheels
Refer to Figure 2-8:
This control stick includes the following push buttons:

- Two momentary push buttons for moving “ARM 1”.
- Two momentary push buttons for moving “ARM 2”.
- Two momentary push buttons for “Deck Pivot”.
- One “ON/OFF” float switch for “Deck Float”.
- One LED light Indicating float switch is “ON”.

Independent Control Without Gauge Wheels
Refer to Figure 2-9:
This control stick includes the following push buttons:

- Two momentary push buttons for moving “ARM 1”.
- Two momentary push buttons for moving “ARM 2”.
- Two momentary push buttons for “Deck Pivot”.
- One “ON/OFF” lighted push button switch for controlling “Deck Motor”. Light is on when running.

Independent Control With Gauge Wheels
Refer to Figure 2-10:
This control stick includes the following push buttons:

- Two momentary push buttons for moving “ARM 1”.
- Two momentary push buttons for moving “ARM 2”.
- Two momentary push buttons for “Deck Pivot”.
- One “ON/OFF” lighted push button switch for controlling “Deck Motor”. Light is on when running.
- One “ON/OFF” lighted push button switch for “Deck Float”. Light is on when deck is floating.
Control Stick Hook-up

Refer to Figure 2-11:

**IMPORTANT:** The RCP is fully operational once the control stick is hooked-up. To protect the pump, make sure the reservoir is full of hydraulic oil and that the shut-off valve on the reservoir is turned “ON” before hooking-up the control stick.

Always disconnect power cable from the tractor battery or unplug the control switch from the solenoid control box and deck motor switch before turning “OFF” the shut off valve. Never turn “OFF” shut off valve when equipment is in operation.

Refer to Figure 2-12:

1. Route control cable from control stick to solenoid control box on the cutter and connect to mating pin connector.

2. **Independent Control Only:**
   a. Wrap deck motor cable around 2" square tubing once to keep cable from the driveline.
   b. Attach deck motor cable connector to deck motor switch connector.

3. Route power cable to the tractor’s power source or circuit breaker panel. A 10 Amp or larger fuse/circuit breaker source should be used.
   a. Connect red lead to a 12 VDC positive power source.
   b. Connect black lead to negative 12 VDC power source.

**IMPORTANT:** Connect power cable leads only to a 12 VDC power source. Connecting to 24 VDC or larger will damage electrical system.

Check tractor’s manual to verify how to make a 12 volt hook-up if tractor is equipped with dual 6 volt batteries. Arm and deck functions will be slow if hooked-up to the dual 6 volt batteries incorrectly.

**NOTE:** The control stick wiring includes a 10 amp fuse on the red power cable. If overheated, the fuse will open stopping all power to the controls. The fuse must be replaced before power will resume.

Refer to Figure 2-13 on page 29:

4. Find a suitable location to place control stick when not in use.
   a. A suitable location for the control stick is usually close to the operator’s right-hand side on the tractor fender or fender console. Exact location should be convenient for the operator.
   b. When in use, grip the control stick such that the push button switches are easy to access.
Control Stick Operation

Refer to Figure 2-13 on page 29:

ARM 1 Control

“ARM 1 OUT/IN” push button switches extends and retracts the inboard parallel arm. Pivot angle of the deck remains unchanged while operating these two switches. “ARM 1” push button switches are always functional and will operate with Float Switch turned “ON” or “OFF”:

1. Press and hold “ARM 1 OUT” push button to extend inboard arm. Release switch to stop movement.
2. Press and hold “ARM 1 IN” push button to retract inboard arm. Release switch to stop arm movement.

ARM 2 Control

“ARM 2 OUT/IN” push buttons extends and retracts the outboard parallel arm. Pivot angle of the deck remains unchanged while operating these two switches. “Deck Float” switch and LED light must be “OFF” before “ARM 2” switches will function.

1. Press and hold “ARM 2 OUT” push button to extend outboard arm. Release switch to stop movement.
2. Press and hold “ARM 2 IN” push button to retract outboard arm. Release switch to stop movement.

Deck Pivot Control

Operate “Deck Pivot UP/DOWN” push buttons to keep deck parallel to the ground. “Deck Float” switch and LED light must be “OFF” before “Deck Pivot” switches will function.

1. Press and hold “DECK UP” push button to pivot end of deck up. Release switch to stop movement.
2. Press and hold “DECK DOWN” push button to pivot end of deck down. Release switch to stop movement.

Deck Float Control

The control stick is equipped with a Float Switch and an LED light if the cutter deck is equipped with gauge wheels.

1. Press and release “Deck Float” push button to turn float function “ON” and to bypass “ARM 2” and “Deck Pivot” controls.
2. Press and release the push button again to turn float function “OFF” and to regain control of “ARM 2” and “Deck Pivot”.
3. Toggling the push button back and forth will turn float function “ON” & “OFF” repetitively. An LED light will illuminate only when the switch is “ON”.
4. “ARM 1” push buttons are not bypassed. “ARM 1 IN” can be pressed to move deck closer and “ARM 1 OUT” can be pressed to move deck farther away.

Float Switch “ON”:

When “ON”, the “Deck Float” switch allows the deck to be carried on the gauge wheels. “Deck UP/DOWN” and “ARM 2 OUT/IN” momentary push buttons are bypassed allowing the deck position to change with the terrain. Turn the “Deck Float” switch “ON” only when deck is equipped with gauge wheels and after the deck wheels are resting on the ground for cutting.

Float Switch “OFF”:

When “OFF”, the “Deck Float” switch allows the operator to control all six momentary push buttons individually (“ARM 1”, “ARM 2” & “Deck Pivot”).

Turn “Deck Float” switch “OFF”:

- When transporting the cutter.
- When encountering raised areas such as banks, stumps, rocks, or other protrusions that the gauge wheels cannot and/or should not roll over.
- When crossing ditches that will cause the deck to become high centered or gauge wheels to catch stopping forward travel.
- When the operator wants full control of cutter deck and parallel arms.

Deck Motor Control

The control stick will have a “Deck Motor ON/OFF” push button when parallel arm and deck pivot cylinders are independent controlled. This button will allow the operator to shut off the motor before raising the deck up. An LED light will illuminate if the motor is running.

1. Press and release the “Deck Motor” push button to turn the motor “ON”.
2. Press and release the push button again to turn the motor “OFF”.
3. Toggling the button back and forth in this fashion will turn the motor “ON” & “OFF” repetitively. An LED light will illuminates only when the switch is “ON”.

Control Stick Functional Checks
Refer to Figure 2-13:

IMPORTANT: Before engaging the tractor’s power take-off, make sure the reservoir is full of hydraulic oil, the shut-off valve is turned on and that the hydraulic plumbing is configured correctly for your tractor’s hydraulic flow rate. See “Flow Control Valve Plumbing” on page 24 for plumbing requirements.

Solenoid Control Option: The Tractor’s hydraulic control lever and power take-off shaft will need to be engaged to make control stick functional checks.

Independent Control Option: Only the Tractor’s power take-off shaft will need to be engaged to make control stick functional checks.

Momentary ON Push Button Checks

IMPORTANT: If included, make sure “Deck Float” and/or “Deck Motor” push buttons are “OFF”.

Cycle “ARM 1”, “ARM 2”, and “Deck Pivot” cylinders to ensure they operate properly as follows:

1. Read and understand hooking-up and unhooking “Transport Safety Chain” on page 18. Remove transport safety chain from the latched position and place loose end on storage hook.

2. Start tractor and adjust 3-point hitch until driveline is approximately level.

3. Extend and retract hydraulic cylinders as follows:

   Solenoid Control
   a. Do not engage power take-off for this check.
   b. Two hoses for operating “ARM 1”, “ARM 2”, and “Deck Pivot” cylinders are connected to a duplex outlet on the tractor. Lock control lever for that duplex outlet in either “Extend Position” or “Retract Position”.
   c. Refer to Figure 2-13: Press and hold push button labeled “ARM 1 OUT” momentary. The inboard parallel arm should start to extend outward. If it does not move, or moves in the wrong direction (retracts), you should do one of the following:
      • Change the position of the tractor control lever from automatic retract to automatic extend or vice-versa.
      • Reverse hoses at the duplex outlet.
      • Check hydraulic plumbing to and from the solenoid box to make sure hydraulic hoses are not plumbed in reversed order.
   d. Check hydraulic fluid level in your tractor’s reservoir. If low, add fluid to the system before continuing. The cylinders and hoses will require approximately 1 3/4 gallons from the tractor.
Refer to Figure 2-14:

Independent Control
a. Check Hydraulic Reservoir. Make sure it is full of hydraulic oil and shut-off valve is fully OPEN.
b. With tractor engine at an idle, engage power take-off and then increase engine speed to about half the cutter rated power take-off speed.
c. Refer to Figure 2-14: Press and hold push button switch labeled “ARM 1 OUT” (See Arrow) momentarily. The inboard parallel arm should start to extend outward. If it does not move or moves in the wrong direction (retracts), you should do one of the following:
   • Check hydraulic plumbing to and from the solenoid box to make sure hydraulic hoses are not plumbed in reversed order.
   • Check electrical layout to make sure wiring is correct.
4. After “ARM 1” has been verified to function correctly, purge hydraulic system of air as follows:
   a. Press and hold push button labeled “DECK DOWN” until deck is in the horizontal position.
   b. Press and hold push button labeled “ARM 2 OUT” until the outboard parallel arm is fully extend.
   c. Press and hold push button labeled “ARM 1 OUT” until the inboard parallel arm is fully extend.
   d. Repeat steps a to c in reverse order to retract all three cylinders.
   e. Cycle the cylinders to full extension and retraction several times to make sure all air is purged.

ON/OFF Push Button Checks
Refer to Figure 2-14:

IMPORTANT: Make sure “Deck Float” and/or “Deck Motor” push buttons are “OFF.”

1. Read and understand hooking-up and unhooking “Transport Safety Chain” on page 18. Remove transport safety chain from the latched position and place loose end on storage hook.
2. Start tractor and adjust 3-point hitch until driveline is approximately level.

IMPORTANT: See Figure 2-15: Maker sure reservoir shut-off valve is fully OPEN and reservoir tank is full of oil before engaging power take-off. Damage will occur to pump if shut-off valve is “CLOSED.”

Float Switch ON/OFF Push Button Check
Refer to Figure 2-14:

Gauge wheels must be installed before checking Float Switch operation. Install gauge wheels per instructions “Gauge Wheels (Optional)” on page 20.

Make this functional check with “ARM 1” and “ARM 2” approximately 3/4 extended and with the cutter deck resting on its gauge wheels.

1. Operate “DECK DOWN”, “ARM 2 OUT”, and “ARM 1 OUT” push button switches to lower gauge wheels to ground level.
2. Change Float Switch from “OFF” to “ON” LED light should be illuminated when Float switch is “ON.”

Independent & Solenoid Controlled Parallel Arm Movement (Continued)
Figure 2-14
Section 2: Hydraulic Set-up Options

3. Press and hold “DECK UP” push button for under two seconds. The deck cylinder should retract pivoting the deck up. Release “DECK Up” switch and deck should fall back onto its gauge wheels.

4. Press and hold “ARM 2 OUT” push button for under two seconds. “ARM 2” should extend raising the deck up. Release switch and the deck should fall back onto its gauge wheels.

5. For safety, return Float Switch to “OFF”. LED light should not be illuminated.

Deck Motor ON/OFF Push Button Check

**WARNING**

To avoid serious injury or death:

Hydraulic fluid under high pressure can penetrate the skin and/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. A doctor familiar with this type of injury must treat the injury within a few hours or gangrene may result. DO NOT DELAY.

**CAUTION**

To avoid minor or moderate injury:

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

4. Engage deck cutter blades as follows:

   **Solenoid Control**
   a. Set tractor speed at an idle and SLOWLY engage power take-off to start blade rotation. On initial start-up, blade position may cause deck to “vibrate”. After 2 to 3 revolutions, these vibrations should stop. If deck continues to vibrate, shut off power take-off.
   b. Raise cutter deck and check for locked blades (blades that are overlapped and locked together).
   c. Gradually increase engine rpm until output speed has reached cutter rated power take-off speed, either 540 rpm or 1000 rpm. The deck should not exhibit excessive vibration.

   **Independent Control**
   a. Make sure LED light for the “Deck Motor” push button is “OFF”. Set tractor speed at an idle and engage power take-off to start driveline rotation.
   b. Push “Deck Motor” button to start blade rotation.
   c. Slowly increase tractor engine speed up to full operating speed. On initial start-up, blade position may cause deck to “vibrate”. After 2 to 3 revolutions, these vibrations should stop. If deck continues to vibrate, push “Deck Motor” push button to stop blade rotation.
   d. Raise cutter deck and check for locked blades (blades that are overlapped and locked together).

Refer to Figure 2-15:

1. Move tractor and cutter to a remote location away from all other personnel to check motor pump and motor operation.
2. Check Hydraulic Reservoir shut-off valve. Make sure it is fully OPEN before engaging power take-off.
3. Position cutter deck just a few inches above ground or concrete surface.
Section 3: Adjustments

Hydraulic Flow Control
Independent Control is factory set to operate hydraulic cylinders at the correct speed. Tractor Control and Solenoid Control cylinders will require some flow control adjustments. To function properly, the cycle time for the hydraulic cylinders should be 5 seconds. This is set by adjusting the flow control valve(s) and then timing how long it takes for the cylinder to fully retract. The valve is adjusted correctly when retraction time is 5 seconds.

Flow Control Valve on the Rotary Cutter
Refer to Figure 3-1:

IMPORTANT: Oil overheating due to improper flow control can cause damage to the o-rings in the solenoid valve and hydraulic cylinders.

An auxiliary flow control valve is included with the Solenoid Control option. The flow control valve diverts excess oil back to the tractor keeping oil cooler and back pressure down.

Flow Control Valve for Solenoid Operated Cylinders
Figure 3-1

Refer to Figure 2-14 on page 30 & Figure 3-2:

1. Set Rotary Cutter in folded transport position. (All parallel arm and deck cylinders are fully retracted when in transport position.)
2. Press and hold “ARM 2 OUT” push button switch to fully raise outboard arm up. Release switch when cylinder is fully extended.
3. Press and hold “ARM 2 IN” push button switch and time how long it takes to cycle from fully extended to fully retracted.
4. Adjust flow control knob (See Figure 3-1) until cycle time is 5 seconds.

Turtle/Rabbit Flow Control at the Tractor
Refer to Figure 2-14 on page 30 & Figure 3-2:

NOTE: If your tractor does not have flow control (turtle/rabbit control) or if the tractor uses an open center hydraulic system, then the flow control valve kit #316-068K must be purchased. Check your tractor’s operator’s manual to determine your tractor’s set-up.

The tractor’s turtle/rabbit flow control valves are used when all hydraulic connections are connected directly to the tractor outlets.

1. Set cutter in folded transport position. (All parallel arm and deck cylinders are fully retracted when in transport position.)
2. Operate tractor “ARM 2” lever to raise outboard arm fully up as shown.
3. Operate tractor “ARM 2” lever to fully retract outboard arm and time how long it takes to cycle from fully extended to fully retracted.
4. Adjust turtle/rabbit control until cycle time is 5 seconds.
5. Repeat steps 2 and 3 for “ARM 1” and “Deck Pivot” cylinders.

If the cutter is having hydraulic overheating problems and the turtle/rabbit flow control valves have been set correctly, then check tractor operator’s manual for power beyond hook-up.
Deck Level Adjustments

Deck level adjustments should be made on a level surface large enough to cover the area under the tractor and deck with parallel arms fully extended.

Without Gauge Wheels

Refer to Figure 3-3:
1. Raise tractor 3-point hitch until power take-off driveline is approximately level.
2. Adjust arm cylinders so that the parallel arms are approximately 3/4 extended and deck cylinder so that the deck is 3 to 4 inches off the ground.
3. Continue adjusting deck cylinder until deck is level from left to right.
4. Extend “ARM 1” cylinder until skid shoes are 2 to 3 inches off the ground.
5. Place a level on the cutter deck to read forward/aft attitude.
6. Adjust center 3-point top-link so that the front of the cutter deck is slightly lower than the rear by approximately 1/2”.

With Gauge Wheels

Refer to Figure 1-12 on page 20 & Figure 3-3:
1. Make certain tractor control levers are set to center detent position and if available, Float Switch on the control stick is turned “OFF”.
2. Raise tractor 3-point hitch until driveline is approximately level.
3. Adjust arm cylinders so that parallel arms are approximately 3/4 extended and deck cylinder to raise gauge wheels 3 to 4 inches off the ground.
4. Continue adjusting deck cylinder until deck is level from left to right.
5. Extend “ARM 1” cylinder until gauge wheels are 1 to 2 inches off the ground.

6. Place a level on the cutter deck to read forward/aft attitude.

**IMPORTANT:** Gauge wheels should not touch ground while adjusting the center 3-point link. If needed, retract “ARM 1” slightly to raise gauge wheels off the ground.

7. (See Figure 3-3) Adjust center 3-point link (#3) so that the front of the cutter deck is slightly lower than the rear by 1/2”.

8. Adjust front gauge wheels to the approximate cutting height (Vertical distance from bottom of front gauge wheels to tip of front cutting blade).

9. Adjust rear gauge wheel to be the same distance off the ground as the front gauge wheels.

10. Switch “ARM 2” and “Deck Pivot” cylinders to float position. This will allow the cutter deck to be supported by the gauge wheels.
   a. Solenoid Control:
      Change Float Switch from “OFF” to “ON”.
   b. Tractor Control:
      Place “ARM 2” and “Deck Pivot” control levers in float position.

11. Recheck deck height at the front and rear. Make final adjustments to level the deck by changing the rear gauge wheel height until the deck rear is 1/2” higher than the deck front.

**NOTE:** Nominal cutting height is the distance from tip of front cutting blade to ground level.

12. Change nominal cutting height by raising or lowering the front and rear gauge wheels equally until the blade at the front is set at the correct height.

13. Recheck deck height at the front and rear. If needed, adjust rear gauge wheel until deck rear is 1/2” higher than deck front.
Operating Checklist
The RCP2660, RCPM2660, RCP3060 & RCPM3060 Series Parallel Arm Rotary Cutters are uniquely versatile and powerfully productive cutting implement in the hands of a knowledgeable, skilled, and responsible operator. These cutters are frequently operated on inclines in populated and high traffic areas. Therefore, it is absolutely essential that no one operates these cutters unless they are age 16 or older and 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 12
- Section 3: Adjustments, page 32
- Section 4: Operating Procedures, page 34
- Section 8: Maintenance & Lubrication, page 54

Make the following inspections after attaching cutter to the tractor. See hook-up instructions beginning on page 14. Make certain power take-off is disengaged and completely stopped.

1. Inspect tractor safety equipment to make sure it is in good working condition.
2. Carefully raise and lower implement with tractor 3-point controls to ensure drawbar, tires, and other equipment on the tractor do not contact the frame or driveline.
3. Lubricate Rotary Cutter as needed. Refer to “Lubrication Points” on page 59.
5. Check all guards and shields to make certain they are in good working condition and in place.
6. Check all hoses and wires to be sure that they will not contact driveline.
7. 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.
8. With power take-off disengaged and completely stopped, check cutting blades for sharpness.
9. Check the following with deck placed in transport position, power take-off disengaged and completely stopped, and transport safety chain is hooked to the deck hook. Wear your safety glasses.
   a. Check blades to be sure that they are not locked (overlapped) together.
   b. Check blades for sharpness.
   c. Ensure that both blade bolts and center blade carrier hub nuts are tight.
10. Check tractor safety equipment. Particularly check the ROPS (Roll Over Protective Structure) and the Operator Protective shield (optional, see page 42) to be sure both are in good working condition.

Transporting

⚠️ WARNING
To avoid serious injury or death:
- Transport on public roadways with your tractor’s SMV sign mounted on the back of the Parallel Arm Rotary Cutter. It is possible for the cutter to block viewing of the sign by approaching vehicles if mounted on the back of your tractor.
- The cutter is 10'-6" wide. Care should be taken when encountering oncoming traffic and obstructions. Making contact can result in equipment damage and serious injury or death. Reduce speed when turning and leave enough clearance to avoid contact with obstacles such as buildings, trees, and fences. Stop if in doubt about safe clearance. Resume traveling speed only after it is safe to proceed.
- Select a safe ground speed when transporting. Never travel at a speed which does not allow adequate control of steering and stopping, and never exceed 20 mph (32.2 km/h) with attached equipment. Rough terrain requires a slower speed.
- When traveling on roadways, travel in such a way that other vehicles may pass you safely. Use LED lights, clean reflectors, and a slow moving vehicle sign that is visible from the back to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.
- Always disengage tractor power take-off before transporting cutter to avoid injury from thrown objects or blade contact.
- Make sure transport safety chain is attached to the Rotary Cutter deck and Float Switch, if available, is “OFF” before transporting the cutter.

**IMPORTANT:** 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.

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

1. Disengage tractor power take-off.
2. If provided, set Float Switch to “OFF”. Make sure LED light is “OFF”.
3. Retract both parallel arms and position deck vertically with blades facing outboard (away from tractor).
4. Manually hook transport safety chain to deck hook as shown in Figure 1-9 on page 18.
Refer to Figure 4-1:

5. Relocate slow moving vehicle safety sign (#1) from back of tractor to mount (#2) on back of Parallel Arm Rotary Cutter. If needed, a slow moving vehicle sign can be purchased from your nearest Land Pride dealer. Refer to “Slow Moving Vehicle Sign (Accessory)” on page 41.

6. Raise hitch up to provide 8” - 12” clearance between deck and ground.

7. Always transport to the work site at a safe speed. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely. A slow moving vehicle sign should always be properly displayed when using public roads or right-of-ways.

8. Be sure to reduce tractor ground speed when turning; and leave enough clearance so the Rotary Cutter does not contact obstacles such as buildings, trees, or fences.

9. When traveling over rough or hilly terrain, shift tractor to a lower gear.

Basic Operating Instructions

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.

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

• Do not use cutter as a fan. Cutting blades are not properly designed or guarded for this use.

• 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:

• Operating instructions in this manual must be carefully read and fully understood. You are the tractor operator and are therefore responsible for the safe operation of this unit. All other persons must be cleared of the area. Cutting operations must be stopped when in the vicinity of other persons.

• Hydraulic fluid under high pressure can penetrate the skin and/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. A doctor familiar with this type of injury must treat the injury within a few hours or gangrene may result. DO NOT DELAY.

• Do not operate cutter under any terrain conditions that would place tractor at an angle subject to rollover either front-to-rear or left-to-right. Make sure adequate ballast weights are provided on both the front of tractor and left hand side of cutter to assure tractor stability.

• 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.

• Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.

• Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.

CAUTION

To avoid minor or moderate injury:

Some tractors are equipped with two power take-off speeds. Be certain your tractor’s power take-off is set at the implement’s rated power take-off speed or equipment breakage may result. RC models are rated for 340 rpm and RCM models are rated for 1000 rpm.

IMPORTANT: Avoid catching hydraulic hoses on brush, posts, tree limbs, and other protrusions that could damage and/or break them.

IMPORTANT: Control stick must be kept out of the rain during operation and when in storage. Never use high pressure wash to clean the control stick.
Section 4: Operating Procedures

1. After attaching cutter to the tractor, carefully raise and lower the unit to ensure that the drawbar, tires, and other equipment on the tractor do not contact cutter frame or driveline.

2. Remove and stow transport safety chain before extending the arms or lowering the deck.

3. Adjust tractor lower 3-point arms such that driveline is approximately level.

4. If control stick is included, read and fully understand “Control Stick Functional Checks” on page 29.

5. Extend parallel arms and deck cylinder as follows:

   **Deck without gauge wheels:**
   a. Starting with “ARM 1”, extend parallel arms switching back-and-forth from “ARM 1” to “ARM 2” until both arms are positioned as needed.
   b. Extend “Deck Pivot” cylinder until deck is parallel to the ground.
   c. Adjust deck and parallel arms to locate cutter for best operator visibility. Normally, this is with arms extended out approximately 3/4 of full extension.

   **Deck with gauge wheels:**
   a. Make certain tractor control levers are set to center detent position and if available, Float Switch on the control stick is “OFF”.
   b. Starting with “ARM 1”, extend parallel arms switching back-and-forth from “ARM 1” to “ARM 2” until both arms are positioned as needed.
   c. Extend “Deck Pivot” cylinder until deck is resting on its gauge wheels.
   d. Switch “ARM 2” and “Deck Pivot” cylinders to float position.
   - **Independent & solenoid Control:**
     Change Float Switch from “OFF” to “ON”.
   - **Tractor Control:**
     Place “ARM 2” and “Deck Pivot” control levers in float position.
   e. Adjust ratchet jacks to raise or lower deck to desired cutting height. See also “Deck Level Adjustments” on page 33
   f. Adjust “ARM 1” to locate cutter for best operator visibility. Normally, this is with arms extended out approximately 3/4 of full extension.

6. Set tractor throttle to idle or slightly above idle and slowly engage power take-off. Start-up vibration is normal and should stop after a few revolutions of the blade carrier. Stop power take-off rotation if vibration continues. Wait for all components to come to a complete stop and then dismount from tractor to check for probable causes such as blades locked together.

7. Once cutter is running smoothly, increase power take-off speed to cutter rated speed. Stop power take-off immediately if vibration occurs during operation. Wait for the power take-off to come to a complete stop and then dismount from the tractor to check for probable causes.

8. Optimum ground speed will depend on density of material being cut, terrain, and operator skill. If in doubt, change gears to reduce tractor ground speed to a comfortable level.

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**IMPORTANT:** Your cutter is equipped with free swinging cutting blades to reduce shock loads. The blades can lock together in transport. Always check for locked blades before starting to cut.

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[Diagram: 7/16” Shear Bolt (P/N 802-885C) 3/8” Shear Bolt (P/N 802-781C) 1/32” Cap Clevis 7/16” Self-Locking Nut (P/N 803-229C) 3/8” Self-Locking Nut (P/N 803-209C)]
Breakaway Instructions

Refer to Figure 4-2:
The deck and parallel arms are designed to breakaway should the cutter head make contact with an immovable object or irregular terrain during forward travel. This “breakaway” feature will protect the cutter against structural damage by allowing the deck and parallel arms to pivot backwards.

Upon breakaway, the cutter head must be reset to original “home” position before normal cutting operations can resume.

IMPORTANT: Do not attempt to operate the cutter backing up. The breakaway mechanism will function correctly ONLY while the tractor is moving forward. Cutting while backing up may cause structural damage to the parallel arms and deck if cutter head strikes a solid or immovable object.

1. Raise arms and deck up to clear any obstacles located behind the cutter deck.
2. Slowly back cutter away from any obstacles that will interfere with pivoting unit back to “home” position.
3. Use tractor’s remote (breakaway cylinder) control to pivot unit back to “home” position.

Shear Bolt Replacement

Refer to Figure 4-2 on page 36:
The shear bolt located at the rod end of the breakaway cylinder may shear under the following conditions:

• After breakaway, the operator backs the tractor away from the obstruction, but encounters an additional obstruction or immovable object while backing up. Specifically, the operator did not raise the deck high enough to clear the object before backing up.
• The operator tried to reset the deck and parallel arms by backing the tractor into an obstruction rather than using the tractor’s remote cylinder control.
• The shear bolt has become fatigued after repeated breakaway and reset cycles.
• The shear bolt self-locking nut has been tightened against the clevis causing a pre-loaded stress on the bolt and the bolt to shear at a reduced breakaway force.

Replace shear bolt with correct replacement part (Land Pride Part No. 802-885C). A substitute shear bolt may result in damage to the parallel arms and/or main frame. A single replacement part is included with each cutter and is located on a bracket adjacent to the upper 3-point hitch.

IMPORTANT: Install self-locking nut onto shear bolt until nut is threaded to within approximately 1/32” of contact with clevis as shown in Figure 4-2.

Tractor Shutdown Procedure

The following are basic tractor shutdown procedures. Follow these procedures and any additional shutdown procedures provided in your tractor Operator’s Manual before leaving the operator’s seat.

1. Reduce engine speed and disengage power take-off if engaged.
2. Park tractor and implement on level, solid ground.
3. Lower implement to ground or onto non-concrete support blocks.

NOTE: 3-Point arms cannot be lowered if Kubota Stabilizer Kit is attached to the cutter and tractor.

4. Put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
5. Relieve all hydraulic pressure to auxiliary hydraulic lines.
6. Wait for all components to come to a complete stop before leaving the operator’s seat.
7. Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.

IMPORTANT: If parking tractor with attached cutter folded up, make sure transport safety chain is hooked to the deck and the float switch, if available, is in the “OFF” position.
Unhook Rotary Cutter

Initial Preparation

**IMPORTANT:** To help stabilize an unhooked cutter, the cutter deck must be rotated down and resting on the ground before unhooking the cutter.

1. See “Long-Term Storage” on page 58 before parking Parallel Arm Rotary Cutter for a long period.
2. Disengage power take-off, park on a flat, level, hard surface, and place gear selector in park or in neutral with park brake set.
3. Continue with step (a) below if Kubota Stabilizer Kit is installed. Otherwise skip to step 4.

Refer to Figure 5-4 on page 44:

a. Place jacks under the cutter’s 3-point mainframe and adjust jacks up until against the mainframe to keep it from falling while removing turnbuckles (#9A & #9B).

b. Remove hairpin cotters (#11) and bent pins (#10) from lower link mount (#1 & #2).

c. Rotate turnbuckles (#9A & #9B) out of the way.

d. Set aside bent pins (#10) and hairpin cotters (#11) for installation of turnbuckles (#9A & #9B) later.


5. Refer to Figure 4-4 on page 39: Extend/retract “ARM 1” and deck pivot cylinder until deck is parallel with the ground.

6. Lower 3-point arms until deck is several inches above ground.

7. Shut tractor down properly without changing height of the 3-point arms. Refer to “Tractor Shutdown Procedure” on this page.

8. Remove detent pins (#1) and lower park stands (#2) as needed to support cutter mainframe. Replace detent pins.

9. Restart tractor and lower 3-point arms until cutter mainframe is supported by the park stands (#2).

10. Adjust “ARM 1” and deck pivot cylinder as needed to place deck skid shoes or gauge wheels on the ground.

11. Shut tractor down properly before dismounting. Refer to “Tractor Shutdown Procedure” on this page.

Unhook Hydraulic Hoses

Refer to:
Figure 1-10 on page 19 & Figure 2-1 on page 22:

1. Move hydraulic control levers back and forth several times to relieve all hydraulic pressure in hydraulic hoses.

2. Disconnect all hydraulic hoses from tractor duplex outlets.

3. Wrap hydraulic hoses around Parallel Arm Rotary Cutter frame for storage and to keep dirt away from quick disconnect couplings.

Unhook Control Stick

Refer to Figure 2-12 on page 27:

1. Disconnect control stick from solenoid control box and deck motor switch if included.

2. Store control stick in a dry location.

Unhook Driveline

1. Pull back on driveline pull collar and hold while pulling driveline yoke from tractor power take-off shaft.

2. Collapse driveline by pushing tractor end of driveline towards the Parallel Arm Rotary Cutter.

3. Support collapsed driveline off the ground to keep dirt away from driveline pull collar and bearings.

Unhook 3-Point Hitch Arrangement

Refer to Figure 1-3 & Figure 1-4 on page 15:

1. If a Quick Hitch was used to hook-up the cutter, skip to “Unhook Quick Hitch Arrangement” below. Otherwise continue with step 2 below.

2. Remove top center hitch pin keeper and hitch pin. Place center 3-point link in tractor’s holding clip.

3. Remove linchpins and hitch pins from lower 3-point lift arms.

4. Restart tractor and drive forward several feet while making sure lower 3-point arms and Kubota stabilizer turnbuckles do not catch on implement.

5. Place gear selector in park or set park brake, shut tractor engine off, remove switch key, and dismount tractor.

6. Reinstall hitch pins, linchpins, and hair pin cotters in the Parallel Arm Rotary Cutter hitch for safe keeping.

7. Continue with step 8 if Kubota Stabilizer Kit was included. Otherwise, skip to “Relocate Slow Moving Vehicle Sign” on page 39.

8. Refer to Figure 5-4 on page 44: Remove hairpin cotters (#11), bent pins (#10), and turnbuckles (#9A & #9B) from axle mount (#6).

9. Replace bent pins (#10) and hairpin cotters (#11) in axle end of turnbuckles (#9A & #9B).

10. Attach turnbuckles (#9A & #9B) to the lower link mounts (#1 & #2) with lower bent pins (#10) and hairpin cotters (#11).
Unhook Quick Hitch Arrangement

**NOTE:** This arrangement does not apply to cutters utilizing the Kubota Stabilizer Kit.

1. Refer to Quick Hitch Operator’s Manual for unhooking instructions specific to your Quick Hitch.
2. Restart tractor and lower 3-point lift arms until auto-lock hooks are below implement hitch pins and upper hook is below implement upper hitch point.
3. Slowly drive tractor forward several feet while watching for interferences with the cutter and tractor.
4. Place gear selector in park or set park brake, lower 3-point arms down, shut tractor engine off, and remove switch key before dismounting tractor.

Relocate Slow Moving Vehicle Sign

Refer to Figure 4-3:

1. Remove slow moving vehicle sign (#1) from mounting bracket on the back of the Parallel Arm Rotary Cutter.
2. Reinsert slow moving vehicle sign in the mounting bracket on the back of your tractor.
General Operating Instructions

Upon arriving at the work site, shut-off tractor, set brakes, remove ignition key, and dismount to perform the following checks:

- Remove and safely store away transport safety chain.
- Verify that the driveline is approximately level. Adjust height of the lower 3-point arms if driveline is not level.
- Visually inspect cutter blades. Make certain they are not overlapped and locked together.

After performing the above checks, return to the tractor and start the engine. Extend cutter’s parallel arms out and position the deck flat on the ground. Adjust cylinder height of the parallel arm and cutting deck for good visibility and unobstructed performance. Set engine rpm at idle or slightly above and engage power take-off. Initial start-up vibration is normal and should smooth out after a few revolutions of the cutter blades unless the blades are locked. Shut off power take-off, raise the deck and inspect the blades if the deck continues to vibrate. Otherwise, increase tractor throttle power take-off speed to 540 rpm for RCP2660 and RCP3060 series cutters and 1000 rpm for RCPM2660 and RCPM3060 series cutters. Proceed forward at a mowing speed that is comfortable and will produce a quality controlled cut for ground conditions and material density.

The Rotary Cutter is designed with automatic breakaway arms that release when unit make contact with immovable objects or irregular terrain. Arms must be reset to “home position” after each breakaway before cutting operations can resume. See “Breakaway Instructions” on page 37. For additional information on performance enhancing options, see “Section 10: Features & Benefits” on page 64 and “Section 9: Specifications & Capacities” on page 62.

It requires patience, practice, and attention to detail to become an expert operator of your Land Pride Parallel Arm Rotary Cutter. The end result is well worth the effort.
Parallel Arm Rotary Cutter Options

There are four options available.

**Tractor Control Without Gauge Wheels:**
Cutting deck is supplied without gauge wheels. Four tractor duplex outlets are required to operate the parallel arm cylinders, deck cylinder, and breakaway cylinder. Tractor levers operate all cylinders.

**Tractor Control With Gauge Wheels:**
Cutting deck is supplied with gauge wheels for controlling deck height and deck pivot in lieu of utilizing control levers at all times. Four duplex outlets are required at the tractor to operate the parallel arm cylinders, deck cylinder, and breakaway cylinder. Tractor levers operate all cylinders. “ARM 2” and “Deck Pivot” control levers are set in float position when carrying the deck on its gauge wheels.

**Solenoid Control Without Gauge Wheels:**
Cutting deck is supplied without gauge wheels. Two duplex outlets are required to operate arm cylinders, deck cylinder, and breakaway cylinder. Arm and deck cylinders are solenoid activated with momentary push button switches at the control stick. Breakaway cylinder is controlled by tractor lever.

**Solenoid Control With Gauge Wheels:**
Cutting deck is supplied with gauge wheels for controlling deck height and deck pivot in lieu of utilizing momentary push button switches at all times. Two duplex outlets are required to operate parallel arm cylinders, deck cylinder and breakaway cylinder. Arm and deck cylinders are solenoid activated with momentary push button switches at the control stick. An “ON/OFF” push button Float Switch is included on the control stick to bypass “ARM 2” and “Deck Pivot” solenoids allowing the deck to float on its gauge wheels. Breakaway cylinder is controlled by tractor lever.

**Independent Control without Gauge Wheels:**
Cutting deck is supplied without gauge wheels. One duplex outlet is required to operate the breakaway cylinder. Arm cylinders and deck pivot cylinders are powered by a cylinder pump mounted on the back of the motor pump. The motor on the deck is powered by the motor pump connected to the tractor power take-off shaft. Arm and deck cylinders are solenoid activated with momentary push button switches at the control stick. An “ON/OFF” push button switch is included on the control stick to activate the motor on the deck.

**Independent Control with Gauge Wheels:**
Cutting deck is supplied with gauge wheels. One duplex outlet is required to operate the breakaway cylinder. Arm cylinders and deck pivot cylinders are powered by a cylinder pump mounted on the back of the motor pump. The motor is powered by the motor pump connected to the tractor power take-off shaft. Arm and deck cylinders are solenoid activated with momentary push button switches at the control stick. An “ON/OFF” push button switch is included on the control stick to bypass “ARM 2” and “Deck Pivot” solenoids allowing the deck to float on its gauge wheels. Also, an “ON/OFF” push button switch is included on the control stick to activate the motor on the deck.

**Slow Moving Vehicle Sign (Accessory)**

Refer to Figure 5-1:
Land Pride offers as an accessory the slow moving vehicle sign with attached mounting blade (#1) should your tractor not be equipped with a removable slow moving vehicle sign or should your slow moving vehicle sign not fit Land Pride’s mounting socket (#4). Mounting components (#2, #3, & #4) can be purchased from your nearest Land Pride dealer should you want to mount this sign on another piece of equipment.

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>316-362S</td>
<td>Slow Moving Vehicle Sign</td>
</tr>
<tr>
<td>2</td>
<td>802-092C</td>
<td>RHSNB 5/16-18X3/4 GR5</td>
</tr>
<tr>
<td>3</td>
<td>803-177C</td>
<td>NUT HEX FLG TP LK 5/16-18ZNYCR</td>
</tr>
<tr>
<td>4</td>
<td>890-401C</td>
<td>MOUNTING SOCKET</td>
</tr>
</tbody>
</table>

**Figure 5-1**

Slow Moving Vehicle Sign
Operator Protective Shield

An optional operator protective shield is available for use on tractors not equipped with cabs or other protective shielding. This shield is a “universal” type and is suitable for attachment to a conventional Roll Over Protective Structure (ROPS) that is already attached to the tractor. It is constructed of an extruded aluminum frame and glazed with 1/4” clear lexan polycarbonate.

Mounting hardware will permit attachment to ROPS having cross-section dimensions of 2” x 4”, 2” x 5”, and 2” x 6” or 2 1/2” x 4”, 2 1/2” x 5”, and 2 1/2” x 6”. Other sizes may require longer mounting bolts and/or custom flatbars. Installation requires that 4 mounting holes be drilled in the frame of the shield. No modification is made to the ROPS.

Operator Protective Shield Option ............. 316-063A

Protective Shield Installation

Refer to Figure 5-2:
1. Measure width and thickness of the tractor ROPS bar to determine if the clamping hardware supplied will be adequate.
2. Compare parts list and quantities with parts received. Report any missing or damaged items to your dealer.

NOTE: To determine the best location for the protective shield, the cutter should be connected to the tractor, parallel arms should be fully extended and the deck should be approximately horizontally level.

3. Carefully remove the shield from the shipping carton and temporarily position it on the inside surface of the ROPS bar. Locate shield forward/back and up/down to provide the best overall coverage for the tractor operator. Use a spirit level to level the shield before marking. Mark frame location with a pencil on each side of the ROPS bar; and mark vertical ROPS location on the shield frame.

4. Position protective shield (#5) on a flat work surface. Locate one of the flatbars (#4) next to the pencil marks to determine which set of holes will clear the vertical marks for the ROPS location. Mark hole location and drill two 1/4” diameter holes through the shield frame. Similarly mark and drill two additional holes for the lower clamp location.

5. Attach shield to the inside surface of the ROPS bar with 1/4” x 4” cap screw (#6), 1/4” flat washer (#3), 1/4” lock washer (#2), and 1/4” nut (#6).

Bolt-on Weight Hangers

Refer to Figure 5-3 on page 43:
A right-hand overturning torque load is present on the tractor when parallel arms are fully extended. Auxiliary weights should be added to the left rear tractor wheel to help offset this overturning load. In addition, 100 lb. suitcase type weights can be added to Land Pride’s weight hanger. The weight hanger is attached to the left side of the hydraulic reservoir.

One of the six optional “Bolt-on Weight Hangers” must be installed for operation. See “Bolt-on Weight Hangers” on page 42 for detailed descriptions.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight Hanger Assy, John Deere</td>
<td>316-230A</td>
</tr>
<tr>
<td>Weight Hanger Assy, Case</td>
<td>316-231A</td>
</tr>
<tr>
<td>Weight Hanger Assy, IH</td>
<td>316-232A</td>
</tr>
<tr>
<td>Weight Hanger Assy, Case/IH</td>
<td>316-233A</td>
</tr>
<tr>
<td>Weight Hanger Assy, New Holland</td>
<td>316-234A</td>
</tr>
<tr>
<td>Weight Hanger Assy, Kubota</td>
<td>316-276A</td>
</tr>
</tbody>
</table>

IMPORTANT: Adding weights to the reservoir can lighten the tractor’s front end. Front tractor weights and/or ballast to tires may be required to offset cutter and auxiliary weights. Consult your tractor’s manual to determine if additional ballast is needed.

IMPORTANT: Suitcase type weights illustrated with weight hangers are provided by the customer. Make sure the suitcase weights are the same brand name and match the weight hanger. Not all suitcase weights of the same brand name match Land Pride weight hangers designed for that brand.
Section 5: Optional Equipment

Table of Contents

Bolt-on Weight Hanger Part No. 316-276A
Use Only with illustrated Kubota suitcase weights

Bolt-on Weight Hanger Part No. 316-231A
Use only with illustrated Case suitcase weights

Bolt-on Weight Hanger Part No. 316-232A
Use only with illustrated IH suitcase weights

Bolt-on Weight Hanger Part No. 316-233A
Use only with illustrated Case/IH suitcase weights

Bolt-on Weight Hanger Part No. 316-234A
Use Only with illustrated New Holland suitcase weights

Bolt-on Weight Hanger Part No. 316-230A
Use only with illustrated John Deere suitcase weights

Bolt-on Weight Hangers
Figure 5-3
Section 5: Optional Equipment

Table of Contents

Kubota 3-Point Stabilizer Kit
Kubota 3-Point Stabilizer Kit . . . . . . . . . . . . . 316-325A

IMPORTANT: This optional stabilizer kit must be used with RCP2660 & RCPM2660 Parallel Arm Rotary Cutters attached to M126GX, M135GX, M6-131, or M6-141 Kubota tractors. The Kubota tractor can be damaged if this kit is not installed to assist stabilizing the unit.

IMPORTANT: Do not use a Quick Hitch with Kubota M126GX, M135GX, M6-131, or M6-141 tractors. This kit is not designed to work with the Quick Hitch.

Kubota 3-Point Stabilizer Kit For RCP(M)2660 Cutters only

Figure 5-4

Attach Lower Link Mounts

Refer to Figure 5-4:

6. If hooked to a tractor, unhook Parallel Arm Rotary Cutter from the tractor. Refer to “Unhook Rotary Cutter” on page 38.

7. On the left-hand side, remove linchpin (#15) and hitch pin (#14).

8. Attach left-hand lower link mount (#1) to the inside of clevis plate (#18) with 5/8”-11 x 2” GR5 bolts (#3), flat washers (#4), and lock nuts (#5). Draw lock nuts up snug, do not tighten at this time.

9. Insert hitch pin (#14) through clevis plate (#18), link mount (#1), spacer (#16), and bushing (#17). Bushing (#17) should be in clevis plate hole.

10. Secure hitch pin (#14) with linchpin (#15).

11. Tighten hex lock nuts (#5) to the correct torque.

12. Repeat steps 7-11 to attach right-hand lower link mount (#2) to the inside of clevis plate (#19).
**Section 5: Optional Equipment**

**Attach Upper Axle Mounts**

*Refer to Figure 5-4 on page 44 & Figure 5-5:*

1. Place axle mount (#6) on top of the left-hand axle housing with notch "A" in mount (#6) aligned with boss "A" on the axle housing and bolts (#8A & #8B) in notches (#8A & #8B) in the axle housing.
2. Clamp axle mount (#6) to the axle housing with four 5/8"-11 x 8" GR5 bolts (#8), lower axle mounting plate (#7), flat washers (#4), and lock nuts (#5).
3. Tighten lock nuts to the correct torque.
4. Repeat steps 1-3 to attach remaining axle mount (#6) on the right-hand side of the tractor.

**NOTE:** Jam nuts (#12) on turnbuckles (#9A & #9B) are easier to access if that end of the turnbuckles are attached to lower mounts (#1) as shown.

5. Attach non jam nut end of turnbuckle (#9A) to axle mount (#6) on the left-hand side with bent pin (#10). Secure bent pin with hairpin cotter (#11).
6. Repeat step 5 to attach turnbuckle (#9B) to axle mount (#6) on the right-hand side.
7. Support turnbuckles (#9A & #9B) up with bungee cords, rope or other means to hook-up the cutter to the tractor’s 3-point arms.
8. Remove existing customer supplied hairpin cotter (#21) and Cat. III hitch pin (#20).
9. Insert Cat. III to Cat. II adapters (#13) in the top center Cat. III hitch pin holes with flanges on the inside as shown.
10. Install a new Cat. II hitch pin (#20) and secure with a new hitch pin keeper. Customer to supply hitch pin and hitch pin keeper.

**Attach Stabilizer Turnbuckles**

*Refer to Figure 5-4 on page 44:*

**NOTE:** The Kubota tractor must be hooked-up the Parallel Arm Cutter, driveline installed, and cutter deck leveled before stabilizer turnbuckles can be installed. Once the turnbuckles are installed, the 3-point lower arms and upper center link can not be adjusted to level the cutter.

1. Attach Parallel Arm Cutter to the tractor and install the driveline. Refer to “Hook-up Rotary Cutter” on page 14 for detailed instructions.
2. Make certain the cutter deck has been leveled before installing the turnbuckles. Refer to “Deck Level Adjustments” on page 33.
3. Raise 3-point arms with the tractor control lever until driveline is horizontal.
4. Shut tractor down properly without changing the height of the tractor’s lower 3-point arms. Refer to “Tractor Shutdown Procedure” on page 37.
5. Place jacks under the cutter’s 3-point mainframe and adjust jacks up until against the mainframe to keep the 3-point lift system from falling while installing turnbuckles (#9A & #9B).
6. Loosen jam nut (#12) and adjust turnbuckle (#9A) until lower holes in turnbuckle clevis align with hole in lower left-hand link mount (#1). Do not tighten jam nut at this time.
7. Attach jam nut end (#12) of turnbuckle (#9A) to the lower left-hand link mount (#1) with bent pin (#10). Secure bent pin with hairpin cotter (#11).
8. Repeat steps 6 & 7 to attach turnbuckle (#9B) to right-hand lower link mount (#2).
9. Tighten right-hand stabilizer turnbuckle (#9B) until you can not tighten it any more.
10. Loosen left-hand stabilizer turnbuckle (#9A) as much as possible.
11. Tighten 1 1/2"-6 jam nuts (#12) against turnbuckles (#9A & #9B).
Breakaway Cylinder

CAUTION

To avoid minor or moderate injury:

The breakaway cylinder is designed to bypass hydraulic fluid under high pressure when cutter head or parallel arms strike an object during forward movement. **Do not** use a standard hydraulic cylinder for the breakaway cylinder or damage could occur to the unit.

The breakaway cylinder is used to prevent structural damage to the cutter head and parallel arms. If cutter head strikes an object during forward movement, the breakaway cylinder extends - allowing the parallel arms and cutter deck to freely pivot 90 degrees to the rear.

**IMPORTANT:** A 1/2" bolt is installed for shipping purposes only. This bolt must be remove before connecting the hydraulic hoses to the tractor.

The breakaway cylinder should be installed as shown in Figure 6-2. Make sure the rod end of the cylinder is mounted to the pivot lug as shown. Connect both hoses from cylinder to a remote duplex outlet on the tractor.

Pressure Shut Down Valve Operation

Refer to Figure 6-2:

Standard pressure shut down valves inherently leaks a small amount of oil allowing the deck to drift back during field operation. When needed, reset cutter deck forward using tractor control levers.

Optional pressure shut down valves are available that will greatly reduces the frequency of deck drift but they will require continuous force against the deck to move it back. **Deck does not pivot as freely as it does when using standard pressure shut down valves.**

See Land Pride’s Parts Manual No. 316-111P for ordering either the standard or optional pressure shut down valves. Order only genuine Land Parts from your local Land Pride dealer.

Tractor Control

Refer to Figure 6-1:

“ARM 1”, “ARM 2” and “Deck Pivot” cylinders are connected directly to the tractor’s remote duplex outlets as shown and are controlled by the tractor operator. See “Tractor Control” on page 22 for assembly and set-up instructions. See Figure 6-6 on page 48 for hydraulic plumbing of the deck motor.
Section 6: Hydraulic Plumbing

Solenoid Control
Refer to “Solenoid Control” on page 21 for assembly and set-up instructions.

Solenoid Plumbing
The flow control valve diverts excess oil back to the tractor. It is important to know the tractor’s rated flow:

- 15 Gallons per minute and under
- 16 Gallons per minute and above

Plumb the flow control valve accordingly. For a detailed description of plumbing, see “Flow Control Valve Plumbing” on page 24.

Flow Control Valve (15 gpm & Below)
Figure 6-3

Flow Control Valve (16 gpm & Above)
Figure 6-4

15 Gallons Per Minute and Under
Refer to Figure 6-3:
This arrangement requires a check valve between the tee and return line. Make certain the check valve is plumbed correctly so that oil can flow towards the tee fitting in the direction shown by the arrow. Make sure the lines connected between the tractor and flow control valve are set-up to flow oil in the direction shown by the arrows.

16 Gallons Per Minute and Above
Refer to Figure 6-4:
This arrangement requires a return to tractor sump line. Make certain all three lines connected to the tractor flow oil in the direction shown by the arrows.

Cylinder Plumbing (Solenoid Control)
Refer to Figure 6-5:
Make sure “ARM 1”, “ARM 2”, and “Deck Pivot” cylinders are plumbed to ports (SA, SB, SC, SD, SE, and SF) at the solenoid control box as shown.

Hydraulic Cylinder Plumbing for Solenoid Control Option
Figure 6-5
Deck Motor Plumbing (Solenoid control)

Refer to Figure 6-6:
The hydraulic motor on the deck is powered by a tractor driven power take-off motor pump receiving fluid from the 35 gallon reservoir. If cutter blades stall, an overpressure relief valve opens to return oil to the reservoir. All return oil is filtered of particulates before dumping into the reservoir. Case drain is not filtered. Make certain the hydraulic reservoir is full of oil and that the shut-off valve is fully open before engaging tractor power take-off.

Independent Control

Refer to “Independent Control” on page 21 for assembly and set-up instructions.

Cylinder Pump Plumbing

Refer to Figure 6-7:
The oil is delivered to the solenoid valve block by a tractor driven power take-off cylinder pump receiving fluid from the 35 gallon reservoir. Excess oil is diverted back to the reservoir through an overpressure relief valve. Return oil is filter of particulates before dumping back into the reservoir. Make certain the hydraulic reservoir shut-off valve is fully open before engaging power take-off.
Section 6: Hydraulic Plumbing

Hydraulic Cylinder Plumbing for Independent Control Option
Figure 6-8

Cylinder Plumbing (Independent Control)
Refer to Figure 6-8:
Make sure “ARM 1”, “ARM 2”, and “Deck Pivot” cylinder hoses are plumbed to ports (SA, SB, SC, SD, SE, and SF) at the solenoid valve block on the cutter frame as shown.

Deck Motor Plumbing (Independent Control)
Refer to Figure 6-9:
The hydraulic motor on the deck is powered by a tractor driven power take-off motor pump receiving fluid from a 35 gallon reservoir.

If cutter blades stall, an overpressure relief valve opens to provide a return path to the reservoir. A “Deck Motor” push button on the control stick is provided to allow the operator to turn the motor on or off from the tractor seat. Return oil is filter of particulates before dumping back into the reservoir. Case drain is not filtered. Make certain the hydraulic reservoir is full of oil and that the shut-off valve is fully open before engaging tractor power take-off.
Solenoid Control Option
Wiring Schematic Without Gauge Wheels
Refer to Figure 7-1:
Wiring Schematic With Gauge Wheels
Refer to Figure 7-2:

Wiring Schematic For Solenoid Control With Gauge Wheels
Figure 7-2
Independent Control Option
Wiring Schematic Without Gauge Wheels

Refer to Figure 7-3:

![Wiring Diagram](Image)

Wiring Schematic For Independent Control Without Gauge Wheels

Figure 7-3
Wiring Schematic With Gauge Wheels
Refer to Figure 7-4:

[Diagram of Wiring Schematic]

Wiring Schematic For Independent Control With Gauge Wheels
Figure 7-4
Maintenance
Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

Check all bolts after using the unit for several hours to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride dealer.

**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:
- Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.
- Buildup of debris around moving components and gearboxes is a fire hazard. Keep rotating parts and gearboxes free from debris to avoid serious injury and property damage.
- Improper oil level can cause bearing failure and be a fire hazard. Maintain proper gearbox oil level to avoid serious injury and property damage.

**Rotary Cutter Blades**

**DANGER**
To avoid serious injury or death:
Always disconnect driveline from power take-off shaft before servicing underside of cutter. The tractor can be started with power take-off engaged.

**WARNING**
To avoid serious injury or death:
- Do not operate cutter with blades that are out-of-balance, bent, excessively worn, excessively nicked, or with blade bolts that are excessively worn. Such blades can break loose at high speeds.
- Do not attempt to straighten a bent blade or weld on a blade. Do not attempt to modify a blade such as hard surfacing, heat treating, cold treating, or by any other method. Always replace blades with new Land Pride blades to assure safety.

**Inspection**
Inspect cutting blades before each use. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, bent, worn, or excessively nicked. Small nicks can be ground out.

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

1. Place tractor gear selector in park and/or set brakes, shut engine off and remove ignition key.
2. Disconnect main driveline from tractor power take-off and secure cutter deck in the up position with solid supports before servicing underside of cutter.

Refer to Figure 8-1 on page 55:

3. Remove access cover (#6) and rotate blade bolt (#1) until in alignment with access hole “A”
4. Inspect cutting blades. Make certain they are properly installed and are in good working condition. Replace any blade that is damaged, bent, worn, or excessively nicked. Small nicks can be ground out when sharpened.
5. 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. difference. Unbalanced blades will cause excessive vibration which can damage gearbox bearings and create structural cracks.

Refer to Figure 8-2 on page 55:

6. Carefully check cutting edges of blades in relation to blade carrier rotation to ensure correct blade placement. Blade Rotation is clockwise with cutting edge leading. Airfoil (lift) must be oriented towards the top of the deck.
Refer to Figure 8-1:

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

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

7. Insert blade bolt (#1) through blade (#5), dish pan (#4), and flat washer (#2). Secure blade with a **new locknut** (#3) and torque to 450 ft-lbs.

8. Replace access cover (#5) and secure with flat washers (#7), lock washers (#8), and wing nuts (#9). Tighten wing nuts until lock washers are flattened.

9. If replacing dishpan (#4), castle nut (#10) on gearbox output shaft should be torqued to 550 ft-lbs, minimum and secured with cotter pin (#11) with both legs bent opposite directions around the nut.
**Skid Shoes**

**WARNING**

To avoid serious injury or death:

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

Inspect skid shoes at the beginning of each cutting season. Check all skid shoes weekly for wear and replace if necessary. Original material thickness is 1/4". They should be replaced when the material thickness is less than 1/8" at any point. They are interchangeable from left to right.

Order only genuine Land Pride parts from your local Land Pride dealer.

**Refer to Figure 8-3:**

Replace wing skid shoes as follows:

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

---

**Solenoid Valve Block**

*Refer to Figure 8-4:*

**IMPORTANT:** Do not exert more than 3 ft. lbs. of torque on the hex nut securing the solenoid armature. Remember, 3 ft. lbs. is slightly more than finger tight! Over tightening this nut will distort hollow armature shaft and may result in valve break down.

The 1/2" hex nut on the end of the solenoid armature shaft must be removed to remove a solenoid valve from the valve block. Use care when removing and replacing this nut. Do not tighten nut with more than 3 ft. lbs. of torque.

See your nearest Land Pride dealer to purchase new solenoid valves and/or seal kits.
Hydraulic Hose Replacement

Refer to Figure 8-5:

Replacement hydraulic hoses should be measured and marked before installing to the parallel arm. Install each hose with the mark located on the parallel arm in the positions shown.

Tractor Maintenance

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

Use a clean cloth to wipe hose ends before attaching them to your tractor. Replace filter element for your tractor's hydraulic system at the prescribed intervals. These simple maintenances will go a long way to prevent the occurrence of solenoid valve and hydraulic cylinder problems on the Parallel Arm Rotary Cutter.
Long-Term Storage

Refer to Figure 8-6:

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

1. Store control stick in a clean dry location. Do not leave it out in the rain. Clean control stick with a damp rag. Do not submerge control stick in water or clean with high pressure wash.

2. Clean off any dirt or grease that may have accumulated on the deck, deck motor, and on any of the moving parts. Scrape off compacted dirt from the bottom of the deck and then wash the surface thoroughly with a garden hose.

3. Check blades and blade bolts for wear and replace if necessary. See “Rotary Cutter Blades” on page 54.

4. Inspect for loose, damaged, or worn parts and adjust or replace as needed.

5. Lubricate as noted in “Section 8: Maintenance & Lubrication” on page 54.

6. A coating of oil may also be applied to the lower deck area and to any exposed hydraulic cylinder rods to minimize oxidation.

7. Store the cutter in a clean dry place with deck positioned on a flat surface.

8. Retracted parallel arms, raise deck up and hook transport safety chain to the deck hook.

9. Remove hitch pins (#1), lower jack stands (#2) to a suitable 3-point height. Replace hitch pins (#1).

10. Ensure that the main frame is stable. Use auxiliary supports or posts if necessary to prevent the possibility of the unit tipping over.

11. Replace all damaged or missing decals.

12. Follow all unhooking instructions on page 38 when disconnecting tractor from the Parallel Arm Rotary Cutter.

Repaint parts where paint is worn or scratched to prevent rust. Aerosol Buckskin touch-up paint is available from your Land Pride dealer.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>821-011C</td>
<td>PAINT LP BEIGE SPRAY CAN</td>
</tr>
<tr>
<td>821-070C</td>
<td>PAINT GP GLOSS BLACK SPRAY CAN</td>
</tr>
</tbody>
</table>
# Lubrication Points

<table>
<thead>
<tr>
<th>Lubrication Legend</th>
<th>10 Hours</th>
<th>50 Hrs</th>
<th>Intervals in hours at which lubrication is required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-purpose spray lube</td>
<td>Multi-purpose grease lube</td>
<td>Multi-purpose oil lube</td>
<td></td>
</tr>
</tbody>
</table>

### Parallel Arm
- 9 - Zerks on one side (Typical both sides)
- Type of Lubrication: Multi-purpose Grease

### Deck Pivot
- 3 - Zerks
- Type of Lubrication: Multi-purpose Grease

### Parallel Arm Pivot
- 1 - Zerk
- Type of Lubrication: Multi-purpose Grease
Section 8: Maintenance & Lubrication

### Driveline Yokes

- **2 - Zerks**
- **Type of Lubrication:** Multi-purpose Grease
- **Quantity:** As Required

### Driveline Profile

- **2 - Zerks**
- **Type of Lubrication:** Multi-purpose Grease

### Gauge Wheel Yoke and Wheel Bearing

- **2 - Zerks per wheel (3-wheels)**
- **Type of Lubrication:** Multi-purpose Grease

### Ratchet Jack

- **2 - Zerks per jack (2-jacks)**
- **Type of Lubrication:** Multi-purpose Grease
- **Quantity:** As Required
Motor Spindle Hub Lubrication

Refer to Figure 8-7:

The motor spindle hub (#1), has two cavity plugs (#2) located on one side of the housing.

**NOTE:** To check fluid level, ports (#2) in motor spindle hub must point to the right side of the deck.

1. Disengage driveline.
2. Position cutter deck in transport position and secure with deck safety chain.
3. Set tractor park brake, shut engine off and remove switch key before continuing.
4. Remove one of the cavity plugs (#2) to check fluid level. Fluid level should be within 1/2” from top of port opening.
5. Add 80-90 weight gearlube as required. Full capacity of motor housing is approximately 1/3 pint.
6. Install cavity plug and tighten.

Hydraulic Reservoir Lubrication

Refer to Figure 8-8:

The hydraulic reservoir has an effective capacity of 35 gallons. A dipstick located on the fill cap indicates correct reservoir fluid level. Disengage driveline and shut tractor engine off before checking fluid level. Add hydraulic fluid as needed to fill to full mark on dipstick.

A filter mounted on the hydraulic reservoir is used to clean the return hydraulic fluid to the reservoir tank. Replace filter element every 2 years with a conventional 10 micron filter.

Speed Increaser Lubrication

Refer to Figure 8-9:

The speed increaser is mounted between the driveline and hydraulic pump. It is used to increase power take-off speed from 540 rpm or 1000 rpm to approximately 2000 rpm at the pump.

Check oil level by removing level plug located on the gearbox side. Oil level should be level with bottom of plug hole. Add oil if low through the breather/fill cap opening.

Change oil after the first 100 working hours. Make successive changes every 1500 hours thereafter or every year, whichever comes first. Drain old oil through the drain plug hole located at the bottom. Be sure to reinstall drain plug and tighten before filling gearbox. Fill gearbox with 80-90W EP gearlube. Reinstall level plug and tighten. Replace breather/fill cap.
## Specifications & Capacities

### RCP(M)2660 & RCP(M)3060 Series (Parallel Arm)

<table>
<thead>
<tr>
<th>Specifications &amp; Capacities</th>
<th>RCP2660</th>
<th>RCPM2660</th>
<th>RCP3060</th>
<th>RCPM3060</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Nos.</strong></td>
<td>RCP2660</td>
<td>RCPM2660</td>
<td>RCP3060</td>
<td>RCPM3060</td>
</tr>
<tr>
<td><strong>Power Take-Off Input Speed</strong></td>
<td>540 rpm</td>
<td>1000 rpm</td>
<td>540 rpm</td>
<td>1000 rpm</td>
</tr>
<tr>
<td><strong>Deck Motor rpm @ Power Take-Off Speed</strong></td>
<td>1000 rpm @ 540 power take-off</td>
<td>1000 rpm @ 1000 power take-off</td>
<td>1000 rpm @ 540 power take-off</td>
<td>1000 rpm @ 1000 power take-off</td>
</tr>
<tr>
<td><strong>Minimum Tractor Horsepower</strong></td>
<td>75 hp</td>
<td>95 hp</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Base Tractor Weight</strong></td>
<td>8,000 Lbs. without added weights</td>
<td>12,000 Lbs. without added weights</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weight (No fluid and without gauge wheels)</strong></td>
<td>1,690 lbs</td>
<td>2,225 lbs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cutting Width</strong></td>
<td>58&quot;</td>
<td>58&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall Width (Fully Extended)</strong></td>
<td>19'-9&quot;</td>
<td>22'-11&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transport Width</strong></td>
<td>10' (without gauge wheels)</td>
<td>10' (without gauge wheels)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Minimum Cutting Height (Deck Level)</strong></td>
<td>2&quot;</td>
<td>2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Horizontal Reach from Center Tractor</strong></td>
<td>15'-6&quot; (186&quot;)</td>
<td>18'-10&quot; (226&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Vertical Reach (Above Horizontal)</strong></td>
<td>11'-5&quot; (137&quot;)</td>
<td>13'-5&quot; (161&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Vertical Reach (Below Horizontal)</strong></td>
<td>9'-1&quot; (109&quot;)</td>
<td>11'-0&quot; (132&quot;)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deck Rotating Arc</strong></td>
<td>180 Degrees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blade Tip Speed</strong></td>
<td>15,000 fm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blade Size</strong></td>
<td>1/2&quot; x 4&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blade Rotation</strong></td>
<td>Clockwise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Blade Bolt</strong></td>
<td>1 1/2&quot; With keyway; nut</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dispan</strong></td>
<td>3/16&quot; X 21&quot; Round, dish shaped</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cutting Capacity</strong></td>
<td>2&quot; Max.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Deck Thickness</strong></td>
<td>10 GA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Speed In increaser Fluid Capacity</strong></td>
<td>1 Pint</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Speed In creaser Fluid</strong></td>
<td>80-90W EP Gearlube</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydraulic Fluid</strong></td>
<td>Mobilfluid 424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reservoir Capacity and Filter</strong></td>
<td>35 Gallons / Conventional 10 Micron Filter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hydraulic Fluid Flow Rate</strong></td>
<td>Approximately 15 gpm or 56.8 L/min.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overload Protection</strong></td>
<td>Hydraulic relief valve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Breakaway Protection</strong></td>
<td>Hydraulic Cylinder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Driveline</strong></td>
<td>ASAE Category 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hitch</strong></td>
<td>3-Point Cat. 2 &amp; 3 with clevis style lower hitch, Quick Hitch adaptable except with M126GX, M135GX, or M6-141 Kubota tractors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skid Shoes</strong></td>
<td>1/4&quot; Reversible</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gauge Wheel Option
- **Gauge Wheels**: Three 13 x 5.00 - 6 Semi-solid smooth tires with greaseable caged roller bearings.
- **Height Adjustment**: Two Ratchet jacks

### Hydraulic Control Options
- Tractor Control With or Without Deck Float
- Solenoid Control With or Without Deck Float
- Independent Control With or Without Deck Float

### Optional & Accessory Equipment
- **Operator Protective shield**: Extruded aluminum frame and glazed with 1/4" clear lexan polycarbonate
- **Kubota 3-Point Stabilizer Kit**: Available / Not available
- **Slow Moving Vehicle Sign**: Slow moving decal on galvanized steel back sign and plated or galvanized mount.

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For alternate fluids, search on the web for "Mobilfluid 424" or go to [www.mobil.com](http://www.mobil.com).
Overall Dimensions

FOLDED TRANSPORT POSITION

FULLY EXTENDED FIELD POSITION

RCP(M)2660 = 67”
RCP(M)3060 = 84”
RCP(M)2660 = 10’-1” (121”)
RCP(M)3060 = 10’-1” (121”)
RCP(M)2660 = 19’-9” (237”)
RCP(M)3060 = 22’-11” (275”)

22005
### RCP(M)26 & RCP(M)30 Series (Parallel Arm)

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tractor hp Range</strong></td>
<td>Designed for 75 minimum hp tractor with minimum weight of 8,000 lbs.</td>
</tr>
<tr>
<td>RCP(M)2660</td>
<td>Designed for 95 minimum hp tractor with minimum weight of 12,000 lbs.</td>
</tr>
<tr>
<td>RCP(M)3060</td>
<td></td>
</tr>
<tr>
<td><strong>Gearbox hp Rating</strong></td>
<td>150 hp</td>
</tr>
<tr>
<td><strong>3 Point Design</strong></td>
<td>Does not tie up a tractor. Three point hook up is easy to hook up and remove from tractor.</td>
</tr>
<tr>
<td><strong>Cutter Deck Visibility</strong></td>
<td>Visibility of the cutter deck is captured from the operator’s seat. Easy to see operation. Operator does not have to look behind.</td>
</tr>
<tr>
<td><strong>Factory Assembled</strong></td>
<td>Arrives ready for the customer, saves time and money. (Excluding fluids and hydraulic valve)</td>
</tr>
<tr>
<td><strong>Grease Ports</strong></td>
<td>All grease ports are easily accessible for servicing.</td>
</tr>
<tr>
<td><strong>10' Transport Width</strong></td>
<td>Folds up close to the tractor. No weight brackets or decks hanging away from the tractor. Typically, not much wider than the tractor, which means safer transporting.</td>
</tr>
<tr>
<td><strong>Parallel Arm Design</strong></td>
<td>Three cylinders used in a parallel arm design allows any cylinder to be adjusted without changing the position of the others. Means less positioning.</td>
</tr>
<tr>
<td><strong>Long Horizontal Reach</strong></td>
<td>Good access for reaching vegetation far away from the tractor.</td>
</tr>
<tr>
<td>RCP(M)2660</td>
<td>Better access for reaching vegetation far away from the tractor.</td>
</tr>
<tr>
<td>RCP(M)3060</td>
<td></td>
</tr>
<tr>
<td><strong>Above Grade Vertical Reach</strong></td>
<td>Good access for reaching up embankments and cutting low over hanging limbs.</td>
</tr>
<tr>
<td>RCP(M)2660</td>
<td>Better access for reaching up embankments and cutting low over hanging limbs.</td>
</tr>
<tr>
<td>RCP(M)3060</td>
<td></td>
</tr>
<tr>
<td><strong>Below Grade Reach</strong></td>
<td>Good access for reaching down embankments.</td>
</tr>
<tr>
<td>RCP(M)2660</td>
<td>Better access for reaching down embankments.</td>
</tr>
<tr>
<td>RCP(M)3060</td>
<td></td>
</tr>
<tr>
<td><strong>180 Degree Operating Tilt Arc</strong></td>
<td>Cutter head can be positioned to reach different angles.</td>
</tr>
<tr>
<td><strong>Cat. 2 &amp; 3; 540 or 1000 rpm</strong></td>
<td>Fits a wide variety of tractors.</td>
</tr>
<tr>
<td><strong>35 Gallon Oil Reservoir</strong></td>
<td>Large reservoir maintains optimum fluid temperatures and also serves as counterweight.</td>
</tr>
<tr>
<td><strong>2” Cutting Capacity</strong></td>
<td>Ideal for trimming brush.</td>
</tr>
<tr>
<td><strong>High Blade Tip Speed</strong></td>
<td>15,000 fm tip speed means cleaner cutting.</td>
</tr>
<tr>
<td><strong>Two Parking Stands</strong></td>
<td>Easy and level storage, makes it easy for hooking to tractor.</td>
</tr>
<tr>
<td><strong>In-line Filter</strong></td>
<td>Cleans hydraulic fluid before it re-enters the reservoir.</td>
</tr>
<tr>
<td><strong>Shut-off Valve</strong></td>
<td>Permits maintenance with minimum oil loss.</td>
</tr>
<tr>
<td><strong>Built-in Auxiliary Weight Rack on Left Side</strong></td>
<td>Suitcase weights can be added to left side for balance. Able to choose the weight bracket to match various types of suitcase weights.</td>
</tr>
<tr>
<td><strong>Oil Pressure Gauge</strong></td>
<td>Easily monitor oil pressure for optimum performance of unit</td>
</tr>
<tr>
<td><strong>Hydraulic Breakaway</strong></td>
<td>Allows the parallel arms to pivot backwards to avoid obstacles and to protect cutter deck and parallel arms. Parallel arms are pivoted back to normal operating position with the hydraulic breakaway cylinder.</td>
</tr>
<tr>
<td><strong>Flow Control Valve</strong></td>
<td>Compensates for various tractor hydraulic systems so proper hydraulic fluid pressure can be maintained. (Used only with solenoid control Option.)</td>
</tr>
<tr>
<td><strong>Solenoid Controlled Cylinders</strong></td>
<td>Allows cutter to be used on tractors with only two hydraulic duplex outlets. Response time is faster than tractor controls making it an excellent choice when frequent changes to deck position. (Used only on Solenoid Control and Independent Control Options)</td>
</tr>
<tr>
<td><strong>Gauge Wheels Option</strong></td>
<td>Deck floats on gauge wheels eliminating frequent deck positioning and vigilant watch for changes in ground contour under the tractor and deck.</td>
</tr>
<tr>
<td><strong>Independent Control Option (Self-Contained Hydraulics)</strong></td>
<td>Self contained hydraulic system eliminates the tractor/RCP hydraulic incompatibility. This option uses the RCP hydraulic system to operate the cutter. Tractor needs one set of hydraulics to operate the breakaway cylinder.</td>
</tr>
<tr>
<td><strong>Kubota 3-Point Stabilizer Kit</strong></td>
<td>Makes the RCP2660 Parallel Arm Rotary Cutter a match fit for Kubota tractor model numbers M126GX, M135GX, M6-141, and M6-141.</td>
</tr>
<tr>
<td><strong>Slow Moving Vehicle Mounting Socket (Standard)</strong></td>
<td>Mounting socket receives most slow moving vehicle signs equipped with a mounting blade for ease of attachment and removal when transporting on a truck or trailer.</td>
</tr>
<tr>
<td><strong>Slow Moving Vehicle Sign (Accessory)</strong></td>
<td>Slow moving vehicle sign is offered as an accessory when the tractor’s slow moving vehicle sign and mounting blade does not fit the cutter’s standard mounting socket.</td>
</tr>
</tbody>
</table>
## Troubleshooting Chart

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Oil Seal Leaking</td>
<td>Return line from motor has been pinched or is collapsed</td>
<td>Replace lower seal of motor. Check motor return hose for kinks.</td>
</tr>
<tr>
<td>Spindle Hub Seal Leaking</td>
<td>Return line from motor has been pinched or is collapsed</td>
<td>Replace lower seal of motor and Spindle Hub output shaft seal. Check motor return hose for kinks.</td>
</tr>
<tr>
<td>Driveline is bent. (NOTE: Power take-off tractor hitch shaft should be repaired or replaced if bent)</td>
<td>Contacting drawbar or Bottoming out</td>
<td>Reposition drawbar/Replace power take-off tubes and cut to correct length.</td>
</tr>
<tr>
<td>Blades wearing excessively</td>
<td>Cutting on sandy ground</td>
<td>Raise cutting height.</td>
</tr>
<tr>
<td></td>
<td>Contacting ground frequently</td>
<td>Raise cutting height.</td>
</tr>
<tr>
<td>Blades coming loose</td>
<td>Insufficient shimming</td>
<td>Add shimming. See text.</td>
</tr>
<tr>
<td></td>
<td>Blade bolts not tightened properly</td>
<td>Torque blade bolt nuts to 600 ft lbs.</td>
</tr>
<tr>
<td>Blades breaking</td>
<td>Hitting solid objects</td>
<td>Thoroughly check the cutting area BEFORE beginning to cut. Be alert during cutting.</td>
</tr>
<tr>
<td>Loose Blade Carrier</td>
<td>Worn Spindle Hub bearings.</td>
<td>Replace Spindle Hub bearings and/or shaft.</td>
</tr>
<tr>
<td></td>
<td>Shaft nut loose</td>
<td>Tighten Spindle Hub shaft nut to 450 ft lbs.</td>
</tr>
<tr>
<td>Blade Carrier bent</td>
<td>Hitting solid objects</td>
<td>Replace / Be alert, avoid solid objects.</td>
</tr>
<tr>
<td>Excessive skid shoe wear</td>
<td>Cutting height not level or blade missing</td>
<td>Adjust deck height or replace.</td>
</tr>
<tr>
<td></td>
<td>Soil abrasive</td>
<td>Raise cutting height.</td>
</tr>
<tr>
<td></td>
<td>Cutting too low</td>
<td>Raise cutting height.</td>
</tr>
<tr>
<td>Excessive vibration</td>
<td>Locked blades</td>
<td>Inspect and unlock blades.</td>
</tr>
<tr>
<td></td>
<td>Blades have unequal weight</td>
<td>Replace blades as a PAIR.</td>
</tr>
<tr>
<td></td>
<td>driveline is bent</td>
<td>Straighten or replace driveline.</td>
</tr>
<tr>
<td></td>
<td>Blade carrier bent</td>
<td>Replace/straightenbladecarrier.</td>
</tr>
<tr>
<td></td>
<td>Power take-off cross not centered with yoke</td>
<td>Disassemble and inspect for incorrectly located needles or damaged bearing cap.</td>
</tr>
<tr>
<td>Deck Cylinder will not extend and/or retract</td>
<td>Orifice elbow on rod end is plugged</td>
<td>Clean orifice fitting.</td>
</tr>
<tr>
<td></td>
<td>Broken/disconnected wire on solenoid</td>
<td>Check wiring on cartridge valve solenoids.</td>
</tr>
<tr>
<td>Deck Cylinder will not retract</td>
<td>Cylinder rod is bent</td>
<td>Replace cylinder.</td>
</tr>
<tr>
<td>Arm/Deck Cylinder(s) will not extend and/or retract</td>
<td>Electric solenoid valve is sticking/dirty.</td>
<td>Remove solenoid valve and clean or replace.</td>
</tr>
<tr>
<td></td>
<td>Tractor hydraulic fluid level is too low.</td>
<td>Add fluid to tractor reservoir.</td>
</tr>
<tr>
<td>Electrical control push button switches do not work</td>
<td>10 AMP Fuse broken.</td>
<td>Replace 10 AMP fuse</td>
</tr>
<tr>
<td></td>
<td>Circular Plastic connector is not connected to receptacle.</td>
<td>Connect remote cable to solenoid control valve.</td>
</tr>
<tr>
<td></td>
<td>No power to control stick connections.</td>
<td>Check battery or power</td>
</tr>
<tr>
<td></td>
<td>Tractor spool valve not engaged (open).</td>
<td>Lock tractor control valve open.</td>
</tr>
<tr>
<td></td>
<td>Flow Control Valve not adjusted properly for open/closed center tractor</td>
<td>Adjust flow control valve</td>
</tr>
<tr>
<td></td>
<td>Hoses not connected to proper duplex outlet on tractor</td>
<td>Connect hoses to proper tractor outlet.</td>
</tr>
<tr>
<td></td>
<td>Defective solenoid on cartridge valve assy.</td>
<td>Replace solenoid.</td>
</tr>
<tr>
<td></td>
<td>Solenoid valves is sticking.</td>
<td>Remove/clean/replace solenoid valve.</td>
</tr>
</tbody>
</table>
### Torque Values Chart for Common Bolt Sizes

<table>
<thead>
<tr>
<th>Bolt Size (inches)</th>
<th>Grade 2</th>
<th>Grade 5</th>
<th>Grade 8</th>
<th>Bolt Size (Metric)</th>
<th>Grade 5.8</th>
<th>Grade 8.8</th>
<th>Grade 10.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>in-tpi 1</td>
<td>N · m 2</td>
<td>ft-lb 3</td>
<td>N · m 2</td>
<td>ft-lb</td>
<td>N · m 2</td>
<td>ft-lb</td>
<td>mm x pitch 4</td>
</tr>
<tr>
<td>1/4&quot; - 20</td>
<td>7.4</td>
<td>5.6</td>
<td>11</td>
<td>8</td>
<td>16</td>
<td>12</td>
<td>M 5 X 0.8</td>
</tr>
<tr>
<td>1/4&quot; - 28</td>
<td>8.5</td>
<td>6</td>
<td>13</td>
<td>10</td>
<td>18</td>
<td>14</td>
<td>M 6 X 1</td>
</tr>
<tr>
<td>5/16&quot; - 18</td>
<td>15</td>
<td>11</td>
<td>24</td>
<td>17</td>
<td>33</td>
<td>25</td>
<td>M 8 X 1.25</td>
</tr>
<tr>
<td>5/16&quot; - 24</td>
<td>17</td>
<td>13</td>
<td>26</td>
<td>19</td>
<td>37</td>
<td>27</td>
<td>M 8 X 1</td>
</tr>
<tr>
<td>3/8&quot; - 16</td>
<td>27</td>
<td>20</td>
<td>42</td>
<td>31</td>
<td>59</td>
<td>44</td>
<td>M10 X 1.5</td>
</tr>
<tr>
<td>3/8&quot; - 24</td>
<td>31</td>
<td>22</td>
<td>47</td>
<td>35</td>
<td>67</td>
<td>49</td>
<td>M10 X 0.75</td>
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<td>7/16&quot; - 14</td>
<td>43</td>
<td>32</td>
<td>67</td>
<td>49</td>
<td>95</td>
<td>70</td>
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<td>7/16&quot; - 20</td>
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<td>36</td>
<td>75</td>
<td>55</td>
<td>105</td>
<td>78</td>
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<td>1/2&quot; - 13</td>
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<td>105</td>
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<td>1/2&quot; - 20</td>
<td>75</td>
<td>55</td>
<td>115</td>
<td>85</td>
<td>165</td>
<td>120</td>
<td>M14 X 2</td>
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<td>9/16&quot; - 12</td>
<td>95</td>
<td>70</td>
<td>150</td>
<td>110</td>
<td>210</td>
<td>155</td>
<td>M14 X 1.5</td>
</tr>
<tr>
<td>9/16&quot; - 20</td>
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<td>79</td>
<td>165</td>
<td>120</td>
<td>235</td>
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<td>97</td>
<td>205</td>
<td>150</td>
<td>285</td>
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<td>110</td>
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<td>170</td>
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<td>265</td>
<td>510</td>
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<td>295</td>
<td>570</td>
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<td>640</td>
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<td>670</td>
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<td>1&quot; - 8</td>
<td>340</td>
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<td>875</td>
<td>645</td>
<td>1230</td>
<td>910</td>
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<tr>
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<td>370</td>
<td>275</td>
<td>955</td>
<td>705</td>
<td>1350</td>
<td>995</td>
<td>M30 X 2</td>
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<td>355</td>
<td>1080</td>
<td>795</td>
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<td>1290</td>
<td>M36 X 3.5</td>
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<tr>
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<td>540</td>
<td>395</td>
<td>1210</td>
<td>890</td>
<td>1960</td>
<td>1440</td>
<td>M36 X 2</td>
</tr>
</tbody>
</table>
| 1-1/4" - 7 | 680 | 500 | 1520 | 1120 | 2460 | 1820 | 1 in-tpi = nominal thread diameter in inches-threads per inch
| 1-1/4" - 12 | 750 | 555 | 1680 | 1240 | 2730 | 2010 | 2 N·m = newton-meters
| 1-3/8" - 6 | 890 | 655 | 1990 | 1470 | 3230 | 2380 | 3 ft-lb = foot pounds
| 1-3/8" - 12 | 1010 | 745 | 2270 | 1670 | 3680 | 2710 | 4 mm x pitch = nominal thread diameter in millimeters x thread pitch
| 1-1/2" - 6 | 1180 | 870 | 2640 | 1950 | 4290 | 3160 | Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.
| 1-1/2" - 12 | 1330 | 980 | 2970 | 2190 | 4820 | 3560 | Additional Torque Values
| Blade Bolt Locknut | 450 ft-lbs.
| Blade Carrier Hub Nut | 450 ft-lbs.
Warranty

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

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

**Hydraulic Cylinder:** One year Parts and Labor.

Hoses and seals are considered wear items.

**Hydraulic Motor:** Two years Parts and Labor.

**Solenoid Control Valves:** One year Parts and Labor.

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

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

Claims under this Warranty 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.

**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 ____________________