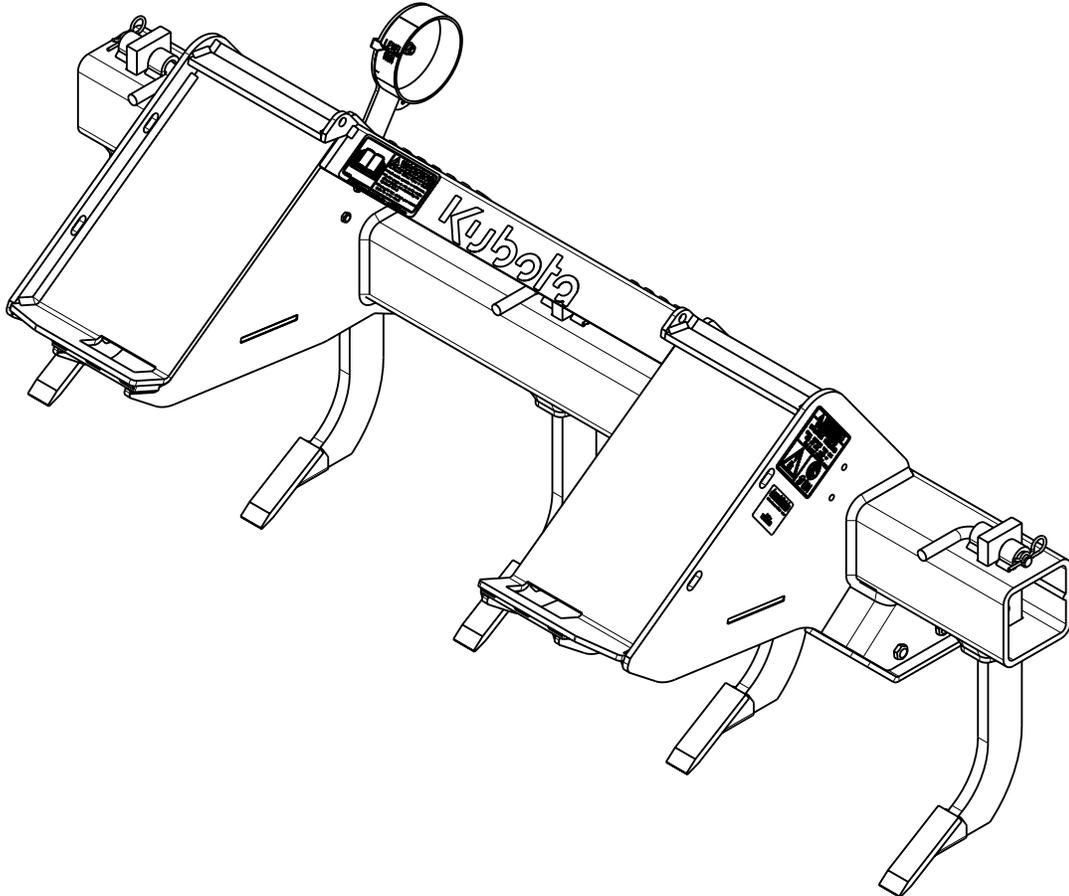


Ripper

AP-RP30

70765



302-347MK 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 Kubota dealer.

Kubota®

Machine Identification

Record your machine details in the log below. If you replace this manual, be sure to transfer this information to the new manual.

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

Model Number	
Serial Number	
Machine Height	
Machine Length	
Machine Width	
Machine Weight	
Delivery Date	
First Operation	
Accessories	<hr/> <hr/> <hr/>

Dealer Contact Information

Name: _____

Street: _____

City/State: _____

Telephone: _____

Email: _____

California Proposition 65

 **WARNING:** Handling passenger or off-highway motor vehicle parts can expose you to chemicals such as phthalates and lead, which can cause cancer and reproductive harm. To minimize exposure, service the vehicle in a well-ventilated area, wear gloves, and wash your hands. For more information see www.P65Warnings.ca.gov/motor-vehicle-parts.

Important Safety Information	1
Safety at All Times	1
Look for the Safety Alert Symbol	1
Safety Labels	6
Introduction	8
Application	8
Using This Manual	8
Owner Assistance	8
Section 1: Assembly & Set-up	9
Skid Steer Requirements	9
Torque Requirements	9
Before You Start	9
Skid Steer Shutdown Procedure	9
Hook-Up Ripper	9
Check Equipment Clearances	11
Unhook Ripper	11
Section 2: Operating Instructions	12
Operating Checklist	12
General Safety Information	12
Level Indicator	13
Transporting	14
General Operating Instructions	14
Section 3: Adjustments	15
Shank Removal and Installation	15
Shank Removal	15
Shank Installation	15
Shank Depth Adjustment	16
Section 4: Maintenance	17
Maintenance	17
Shank Tip Replacement	17
Remove Shank Tip	18
Install Shank Tip	18
Skid Shoe Replacement	18
Level Indicator Maintenance	18
Long-Term Storage	19
Section 5: Specifications & Capacities	24
Section 6: Features & Benefits	24
Section 7: Troubleshooting	24
Section 8: Torque Values Chart	24
Section 9: Warranty & Legal Disclaimer	24

© Copyright 2023 All rights Reserved

Kubota provides this publication "as is" without warranty of any kind, either expressed or implied. While every precaution has been taken in the preparation of this manual, Kubota assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. Kubota reserves the right to revise and improve its products as it sees fit. This publication describes the state of this product at the time of its publication, and may not reflect the product in the future.

Kubota is a registered trademark.

All other brands and product names are trademarks or registered trademarks of their respective holders.

Printed in the United States of America.

See previous page for Table of Contents.



Parts Manual QR Locator

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



Dealer QR Locator

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

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

Safety at All Times

Careful operation is your best assurance against an accident.

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

- ▲ 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 your ability to safely and properly operate the equipment.
- ▲ Operator should be familiar with all functions of the skid steer and attachment and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields appropriate for the operation are in place and secured before operating the attachment.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Start skid steer from the driver’s seat with steering levers and hydraulic controls in neutral.
- ▲ Operate skid steer and controls from the driver’s seat only.
- ▲ Never dismount from a moving skid steer or leave the skid steer unattended with the engine running.
- ▲ Do not allow anyone to stand between the attachment and skid steer while connecting to the attachment.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ While transporting and operating equipment, watch out for objects overhead and along the sides such as fences, trees, buildings, wires, etc.
- ▲ Store attachment 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 and extra precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. Hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

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

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

Be Aware of Special Notices

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

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

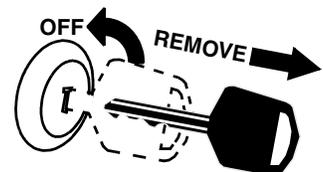
Safety Precautions for Children

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to attachments 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 attachment and skid steer/track loader down if children enter the work area.
- ▲ Never carry children on the power machine or attachment. 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 attachment.
- ▲ Use extra caution when backing up. Before the power machine starts to move, look down and behind to make sure the area is clear.

Skid Steer Shutdown And Storage

- ▲ Reduce engine speed and shut-off all power to the attachment.
- ▲ Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.
- ▲ Turn off engine. Do not remove ignition key at this time.
- ▲ Turn ignition key to the “RUN” position. Relieve all hydraulic pressure by moving both joysticks.
- ▲ Turn ignition key to Off and remove to prevent unauthorized starting.
- ▲ If included, raise seat bar and move controls until both lock.
- ▲ 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 skid steer.



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

Dig Safe - Avoid Underground Utilities

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

Towing 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 chocks, tie downs, and chains.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the vehicle towing the load.
- ▲ Sudden braking can cause a towed trailer to swerve unexpectedly. Reduce speed if trailer is not equipped with brakes.

Transport Safely

- ▲ Comply with federal, state, and local laws.
- ▲ Avoid contact with any overhead utility lines or electrically charged conductors.
- ▲ Always drive with attachment on the end of the loader arms low to the ground.
- ▲ Follow recommendations in the power machine Operator's Manual when driving uphill or downhill and when parking on an incline.
- ▲ Never travel at a speed which does not allow adequate control of the load, steering, and stopping. Some rough terrains require a slower speed.

Tire Safety

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

Practice Safe Maintenance

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

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

Prepare for Emergencies

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

Wear Personal Protective Equipment (PPE)

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

Avoid High Pressure Fluids

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

Use Safety Lights and Devices

- ▲ A slow moving power machine can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads.
- ▲ For tractors and other agriculture equipment, a Slow Moving Vehicle (SMV) sign is required when traveling on public roads.

Use Seat Belt and ROPS

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

Keep Riders Off Machinery

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

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

Avoid Crystalline Silica (Quartz) Dust

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

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



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

Handle Chemicals Properly

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

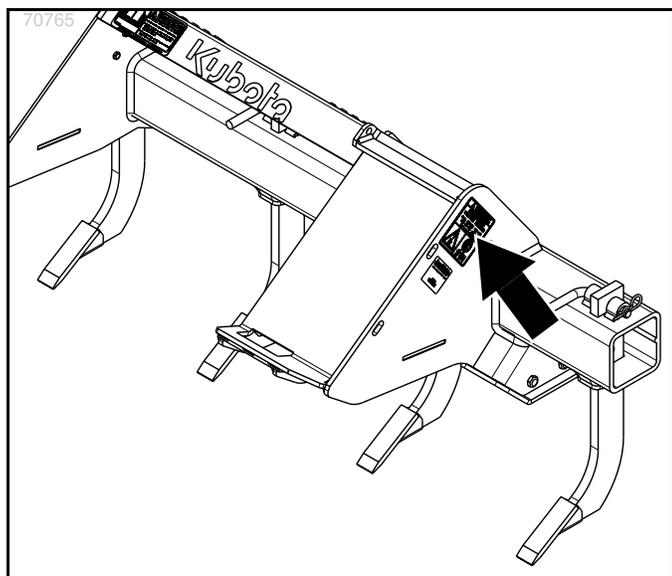
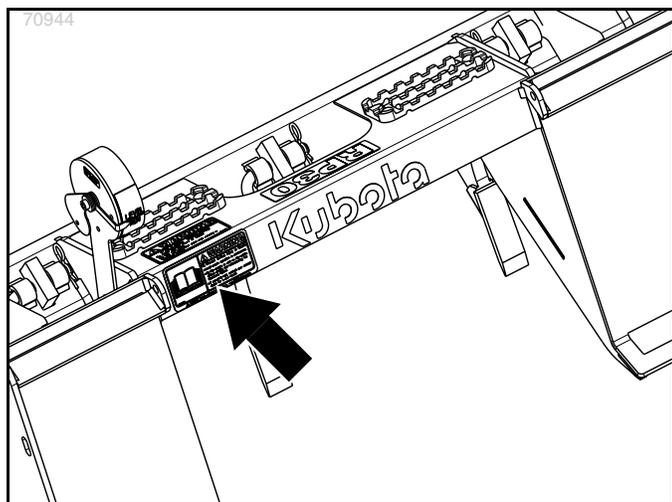


This page left blank intentionally.

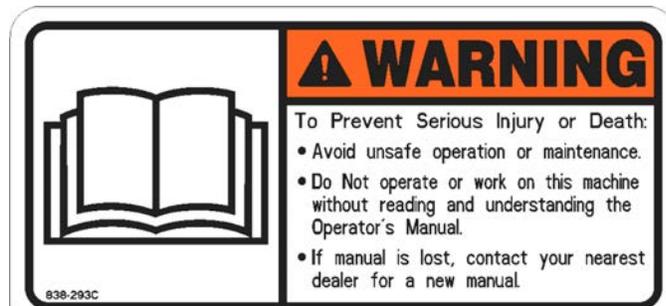
Safety Labels

Your Ripper comes equipped with all safety labels in place. They are designed to help you safely operate your attachment. 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 Kubota 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 Kubota. 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.



838-293C

Warning: Read Operator's Manual

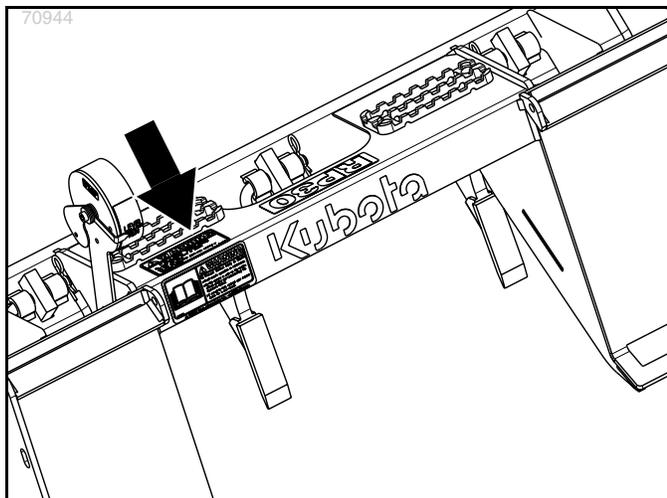
1 Place: As Shown



858-237C

Warning: Underground Utilities Hazard

1 Place: As Shown



844-069C

Warning: Falling Hazard

1 Place: As Shown

Introduction

Kubota welcomes you to the growing family of new product owners. This Ripper has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this product.

Application

The RP30 Ripper is designed and built by Kubota with uses and applications for housing and road construction projects. Contractors and landscapers can rip or loosen dirt, sand, and tailings at varying depths.

The unit is designed with heavy reinforced quick attach mounting plates for attaching to skid steers or track loaders in the 65 to 95 horsepower range. The five adjustable hardened steel shanks with easy to replace digging tips are spaced every 15 3/4" and provide a maximum 78 3/4" working width. The shanks adjust vertically in 2" increments from 2" to 8" below the skid shoes.

See “**Specifications & Capacities**” on page 24 and “**Features & Benefits**” on page 24 for additional information and performance enhancing options.

Using This Manual

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

Terminology

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

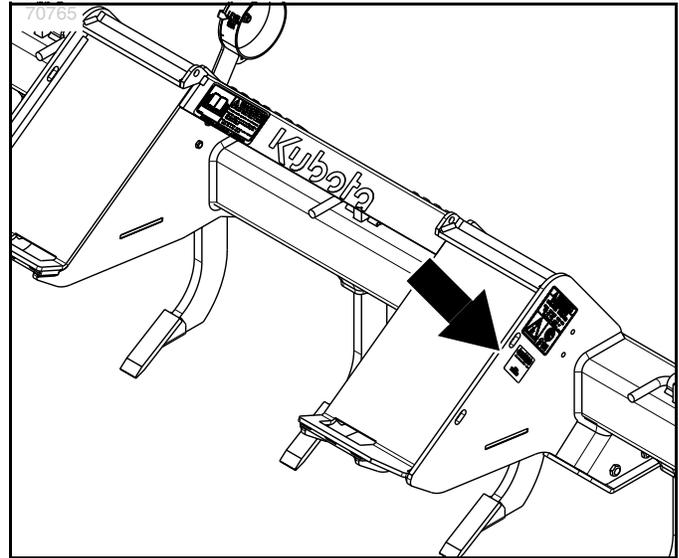
Owner Assistance

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 Ripper have been specially designed by Kubota/Land Pride and should only be replaced with genuine Kubota parts. Contact a Kubota dealer if customer service or repair parts are required. Your Kubota dealer has trained personnel, repair parts, and equipment needed to service this 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 Kubota dealer. For location of your serial number plate, see Figure 1.



Serial Number Plate Location

Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new attachment. 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 attachment with your dealership service personnel so they can address the problem.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the question/problem, and request assistance.
3. For further assistance write to:

**Kubota by Land Pride
Service Department**

**1525 East North Street
P.O. Box 5060
Salina, Ks. 67402-5060**

E-mail address
lpSERVICE@landpride.com

Section 1: Assembly & Set-up

Skid Steer Requirements

The Ripper is designed to attach to skid steers and track loaders within the following requirements:

- Horsepower Rating 65 to 95 hp
- Hitch type Skid steer quick attach, ISO 24410
- Skid steer weight See Warning below
- Rear-view mirror Recommended

WARNING

To avoid serious injury or death:

- Consult your power machine Operator’s Manual for operating capacity, lifting capacity, and operating specifications. Exceeding rated capacities and specifications can result in loss of control, roll-over or other serious hazard.
- Power machines outside the listed horsepower range must not be used. Higher horsepower machines can damage the attachment. Under horsepower machines make the job more difficult.
- Lightweight power machines may need weight added to the rear to maintain steering control and prevent forward and/or side tipping. Consult your power machine Operator’s Manual to determine proper weight requirements and maximum limitations.

Torque Requirements

Refer to “**Torque Values Chart**” on page 23 to determine correct torque values when tightening hardware.

Before You Start

Refer to **Figure 1-1** on page 10:

WARNING

To avoid serious injury or death:

Allow only persons to operate this attachment who have fully read and comprehended this manual, and who have been properly trained in the safe operation of this attachment. Serious injury or death can result from failure to read, understand, and follow instructions provided in this manual.

Make sure the intended skid steer conforms to the “**Skid Steer Requirements**” stated above. Read and understand the Operator’s Manual for your Ripper. An understanding of how it works will aid in setup.

The Ripper is shipped from the factory fully assembled. It will need to be removed from its shipping crate and inspected for damage, missing parts, and to make sure all parts and fasteners are installed in the correct locations. Check level indicator (#1) to make sure it is fully functional.

Go through the “**Pre-Assembly Checklist**” on this page before setting-up the Ripper. Speed up your task and make the job safer by having all needed parts and equipment readily at hand.

Pre-Assembly Checklist

✓	Check	Reference
<input type="checkbox"/>	Have a fork lift or loader with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
<input type="checkbox"/>	Have a minimum of two people available during assembly.	
<input type="checkbox"/>	Make sure all major components and loose parts are shipped with the attachment.	Operator’s Manual
<input type="checkbox"/>	Double check to make sure all parts, fasteners and pins are installed in the correct location to lessen the chance of using a bolt incorrectly, Refer to the Parts Manual if unsure. NOTE: All assembled hardware from the factory has been installed in the correct location. Remember location of a part or fastener if removed. Keep parts separated.	Operator’s Manual 302-347MK Parts Manual 302-347PK
<input type="checkbox"/>	Make sure working parts move freely, bolts are tight & cotter pins are spread.	Operator’s Manual
<input type="checkbox"/>	Make sure all safety labels are correctly located and legible. Replace if damaged.	Page 6

Skid Steer Shutdown Procedure

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

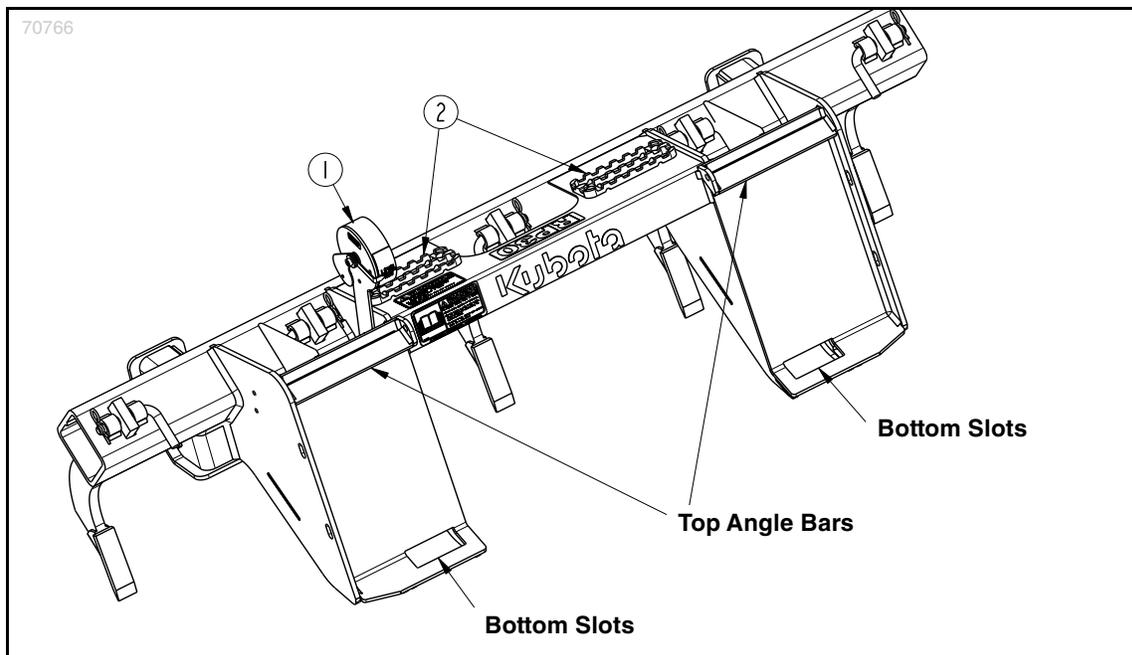
1. Reduce engine speed and shut-off all power to the attachment.
2. Park on solid, level ground and lower attachment until it is flat on the ground or on non-concrete support blocks.
3. Turn off engine. Do not remove ignition key at this time.
4. Turn ignition key to the “RUN” position. Relieve all hydraulic pressure by moving both joysticks.
5. If included, raise seat bar and move controls until both lock.
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 skid steer or attachment.

Hook-Up Ripper

DANGER

To avoid serious injury or death:

A crushing hazard exists when connecting and disconnecting the attachment. Do not allow anyone to stand between attachment and power machine while approaching or backing away from the attachment. Do not operate hydraulic controls while someone is near the power machine and/or attachment.



Hook-Up Ripper
Figure 1-1

WARNING

To avoid serious injury or death:

- Use steps, grab-handles, and anti-slip surfaces on the power machine and attachment to get on and off the power machine. Using unapproved stepping surfaces and/or handholds can result in a falling hazard.
- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

Refer to Figure 1-1:

1. Check loader and Ripper hitch plates before hooking-up the Ripper. Make sure all hitch components are in good working condition before putting them into service:
 - a. Check for and remove any debris in the front loader and Ripper hitch plates.
 - b. Check for structural cracks in the hitch plates. Repair or replace hitch plates as needed.
 - c. Check hitch components. Repair or replace any part that is excessively worn, bent, broken, or missing.
 - d. Check operation of lock pins in the loader hitch plate. Lock pins must move freely and extend fully into the bottom slots in the Ripper hitch plate.
2. If lock mechanism is mechanical, raise lock handles on the loader hitch fully up.
3. Use anti-slip steps (#2) on the Ripper and anti-slip steps and grab handles on the skid steer when stepping on and off the skid steer.

4. Start skid steer.
5. If lock mechanism is hydraulic, use auxiliary hydraulic controls to raise lock pins fully up.
6. Drive loader slowly to the Ripper while making sure the loader hitch is parallel with the top angle bars on the Ripper.
7. Tilt top of loader hitch plate forward.
8. Place top of loader hitch plate under the top angle bars on the Ripper and slowly raise loader arms until loader hitch plate is seated under the top angle bars.
9. Tilt top of loader hitch plate back until face of loader hitch plate makes full contact with the Ripper hitch plates and the ripper teeth are slightly off the ground.
10. Engage lock mechanism:

Hydraulic Lock Mechanism:

- a. Engage hitch locking mechanism hydraulically to extend lock pins through bottom slots in Ripper hitch plate.

Mechanical Lock Mechanism:

- a. Shut skid steer down before dismounting using “**Skid Steer Shutdown Procedure**” on page 9.
 - b. Push lock handles down to drive lock pins through bottom slots in the Ripper hitch plate. Make sure handles lock down.
 - c. Return to the power machine and lower the Ripper until loader arms are fully down and tilt top of hitch plate forward until ripper teeth are resting on the ground.
11. Shut skid steer down before dismounting using “**Skid Steer Shutdown Procedure**” on page 9.

Section 1: Assembly & Set-up

Check Equipment Clearances



DANGER

To avoid serious injury or death:

Keep attachment and/or loader arms away from overhead electrical power lines. Place an orange warning sign under overhead lines indicating type of danger above.



WARNING

To avoid serious injury or death:

- Use steps, grab-handles, and anti-slip surfaces on the power machine and attachment to get on and off the power machine. Using unapproved stepping surfaces and/or handholds can result in a falling hazard.
- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.

It is important to check clearance between the Ripper and skid steer by carefully going through the Ripper's full range of motions before putting it into operation.

1. Before starting the skid steer, check hitch hook-up. The attachment can fall from the loader hitch plate if not properly connected.
 - a. Make sure loader hitch is fully seated under the Ripper's top angle bar.
 - b. Make sure loader hitch plate is against the Ripper hitch plate.
 - c. Make sure lock handles or hydraulic locks are locked with lock pins fully seated in the bottom slots.
 - d. Make sure there are no structural cracks in the hitch plates. Structural cracks weaken the hitch plate and can result in dropping the attachment.
 - e. Make sure there are no bent plates preventing full and complete hook-up to the loader hitch plate.
2. Adjust shanks fully down (8" below skid shoes). For detailed instructions, refer to "**Shank Depth Adjustment**" on page 16.
3. Start skid steer, and raise Ripper approximately 36" off the ground.
4. If necessary, have someone stand safely nearby that can motion for the operator to stop if a problem develops while completing steps 5-6 below.
5. Rotate top of loader hitch plate fully forward and lower loader arms all the way down. Continue checking by raising the loader arms fully up.
6. With loader arms fully up, rotate top of loader hitch plate fully back and lower loader arms fully down.
7. Shut skid steer down using "**Skid Steer Shutdown Procedure**" on page 9.

Unhook Ripper

Refer to Figure 1-1 on page 10:



DANGER

To avoid serious injury or death:

- A crushing hazard exists when connecting and disconnecting the attachment. Do not allow anyone to stand between attachment and power machine while approaching or backing away from the attachment. Do not operate hydraulic controls while someone is near the power machine and/or attachment.
- Do not let children play on or around the attachment including when stored. Children and/or attachment can fall.



WARNING

To avoid serious injury or death:

- Use steps, grab-handles, and anti-slip surfaces on the power machine and attachment to get on and off the power machine. Using unapproved stepping surfaces and/or handholds can result in a falling hazard.
 - Always store attachment in a secure position so that it will not fall over.
1. See "**Long-Term Storage**" on page 19 if storing Ripper for long periods or for the season.
 2. Park skid steer and Ripper on a solid, level ground.
 3. Rotate loader hitch plate to vertical position and lower loader arms fully down.
 4. Rotate top of loader hitch plate forward until shank tips are resting on the ground.
 5. If lock handles are hydraulic, raise lock pins to remove them from the hitch plate bottom slots. Skip to step 9.
 6. If lock handles are mechanical, Shut skid steer down before dismounting to raise lock handles. Refer to "**Skid Steer Shutdown Procedure**" on page 9.
 7. Pull lock handles on the loader hitch plate up to remove lock pins from the attachment's bottom slots.
 8. Return to the skid steer and start its engine.
 9. Tilt top of loader hitch plate forward until the Ripper's hitch plate is resting on the ground and loader hitch plate is below the attachment's top angle bars.
 10. Back skid steer slowly away from the Ripper while making sure the loader hitch plate and loader arms do not interfere with the Ripper.

Section 2: Operating Instructions

Operating Checklist

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the Ripper. Therefore, it is absolutely essential that no one operates the Ripper unless they have read, fully understood, and are totally familiar with the Operator’s Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, page 1
- **Section 1: Assembly & Set-up**, page 9
- **Section 2: Operating Instructions**, page 12
- **Section 3: Adjustments**, page 15
- **Section 4: Maintenance**, page 17

Perform the following inspections before using your Ripper.

Operating Checklist

✓	Check	Page
	Inspect skid steer safety equipment to make sure it is in good working condition.	Skid Steer Manual
	Check hitch hook-up. Make sure loader hitch is properly attached. Refer to “Hook-Up Ripper”.	9
	Check clearances between attachment and skid steer. Refer to “Check Equipment Clearances”.	11
	Required maintenance has been completed. See “Section 4: Maintenance”.	17
	Shanks are adjusted to the correct depth. Refer to “Shank Depth Adjustment”.	16
	Check initially and periodically for loose bolts and pins. Refer to “Torque Values Chart”.	24

General Safety Information

DANGER

To avoid serious injury or death:

- Do not allow bystanders or animals to be near the attachment, loader arms, or power machine during operation. Stop operation if bystanders are too close. They can be hit by thrown or falling objects, become entangled, crushed, ran over, etc.
- 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 the hydraulics is off.
- Keep attachment and/or loader arms away from overhead electrical power lines. Place an orange warning sign under overhead lines indicating type of danger above.
- Do not drive close to ditches, retaining walls, drop-offs, water, etc. Rollover due to a cave-in or mishap could result.
- Do not drive up to anyone or an animal in front of a fixed object such as a wall or bench. Never assume that the power machine will stop in time.

- Do not let children play on or around the attachment including when stored. Children and/or attachment can fall.
- Keep attachment and/or loader arms away from overhead electrical power lines. Place an orange warning sign under overhead lines indicating type of danger above.

WARNING

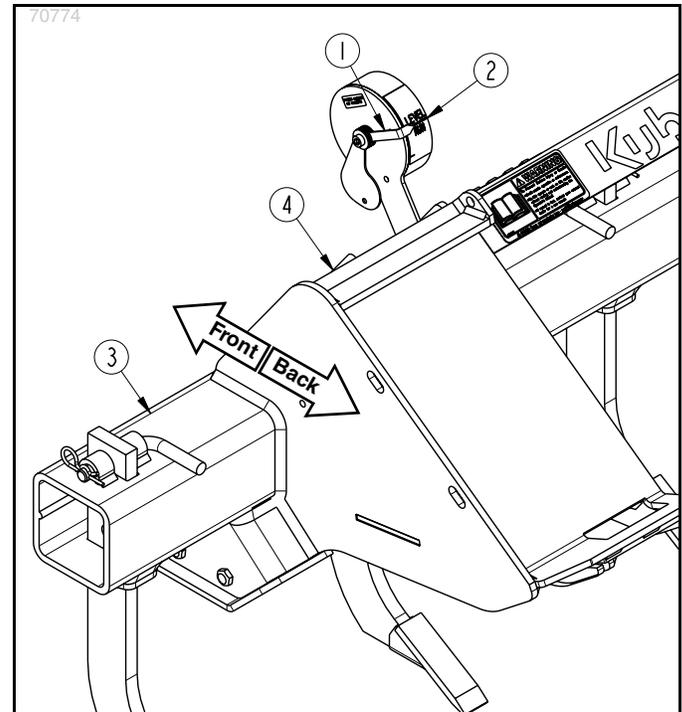
To avoid serious injury or death:

- Never carry riders on the attachment or power machine. Riders can obstruct the operator’s view, interfere with controls, be pinched by moving components, become entangled in rotating components, struck by objects, thrown about, fall off and be run over, etc.
- Never make contact with underground utilities such as electrical power lines, gas lines, phone lines, etc. They can cause serious injury or death from electrocution, explosion, or fire. Always call 811 (USA) or local utility companies before digging so that they can mark the location of underground services in the area. For contact information, see Dig Safe in the “Important Safety Information” starting on page 1.
- Do not alter attachment or replace parts on the attachment 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 attachment. Replace parts only with genuine OEM parts.
- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.
- Use steps, grab-handles, and anti-slip surfaces on the power machine and attachment to get on and off the power machine. Using unapproved stepping surfaces and/or handholds can result in a falling hazard.
- Allow only persons to operate this attachment who have fully read and comprehended this manual, and who have been properly trained in the safe operation of this attachment. Serious injury or death can result from failure to read, understand, and follow instructions provided in this manual.
- Operate only power machines equipped with a certified Roll-Over Protective Structure (ROPS) and seat belt. Fasten seat belt snugly and securely to help protect against serious injury or death from machine overturn.
- Make sure safety labels are in their proper location and are in good condition before operating the attached implement. Read and obey all instructions on the labels.
- Do not abuse equipment. Incorrect use of the attachment can damage equipment structurally and cause serious injury or death.
- Do not use this attachment as a lifting device for people or as a work platform. It is not properly designed or guarded for this use.

Section 2: Operating Instructions

- Make sure controls are all in neutral position or park before starting the power machine.
- Avoid hitting obstructions above or below ground. Flag any area known to contain hidden obstructions before working the ground. Slow down and be ready to stop quickly when in doubt as to what lies below ground. Always wear the seat belt when operating the skid steer to protect against being jolted by obstructions.
- The Ripper is not recommended for asphalt or concrete. Damage to the unit could occur and/or the operator could be jolted.
- Do not use this attachment to pull and/or pry fence posts, stumps, roots, rocks, or other objects out of the ground. It is not properly designed or guarded for this use.
- Do not use this attachment to lift the front or back of the power machine off the ground. Doing so can damage the attachment, power machine, and/or cause serious injury or death.
- Do not use this attachment to lift, carry, push or tow other equipment or objects. It is not properly designed or guarded for this use. The operator could lose control resulting in equipment damage and/or tipping hazard.
- Avoid exposure to dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica.

IMPORTANT: Do not operate traveling forward with loader arms in float. Front of skid steer will raise up causing the shanks to break.



Level Indicator
Figure 2-1

Level Indicator

Refer to Figure 2-1:

The Ripper operates best when shank tube (#3) is level from front to back. Use the level indicator to keep the unit level and shanks vertical. If the shank tube is lower at the front, the shanks will not suck into the ground properly. If the shank tube is lower at the back, the shanks will dig more aggressively, drive up horsepower requirements, and increase risk of shank breakage.

IMPORTANT: Operate shanks vertically. Shanks operating at an angle can result in broken shanks.

1. Watch weighted indicator (#1) on the level indicator as the Ripper begins to dig into the ground.
 - If weighted indicator (#1) goes above level line (#2), tilt top of hitch plate (#4) slightly forward.
 - If weighted indicator falls below level line (#2), tilt top of hitch plate (#4) slightly back.
2. Once the ripper has reached full working depth, check level indicator frequently to keep the Ripper level throughout the operation.
3. If weighted indicator (#1) bounces a lot and is hard to read, slow travel speed enough to stop the weighted indicator from bouncing.

Transporting



WARNING

To avoid serious injury or death:

- When traveling on public roadways, travel in such a way that faster moving vehicles may pass safely. Use hazard 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 transport loads low to the ground to maintain stability of the skid steer/tractor.
 - Lightweight power machines may need weight added to the rear to maintain steering control and prevent forward and/or side tipping. Consult your power machine Operator's Manual to determine proper weight requirements and maximum limitations.
1. Select a safe ground travel speed when transporting from one area to another.
 2. When traveling on public 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 traveling on public roads or right-of ways.
 3. Be sure to reduce ground speed when turning. Leave enough clearance to keep the attachment from making contact with obstacles such as buildings, trees or fences.
 4. Decrease transport speed when traveling over rough or hilly terrain.
 5. When transporting a skid steer on a trailer:
 - Use towing vehicle and trailer of adequate capacity.
 - Always drive up a ramp with heavy end uphill.
 - Engage skid steer park brake and remove ignition switch key once it is loaded.
 - Secure Skid Steer Loader and attachment using tie downs and chains.

General Operating Instructions

By now, you should have thoroughly read your Operator's Manual and properly installed your Ripper to your skid steer. Before you begin operating the Ripper, you should visually survey the work site to make sure it is safe and free of foreign objects. Also, make certain that all irrigation heads, utility outlets, and other obstacles are properly marked.

Make certain you are not working over underground wiring, pipes, or other obstructions. If there is doubt, contact your local utility services so that they may mark the location of all underground utilities in the area. Be sure to ask how close you can work to the marks or flags they positioned.

If attachment is to be operated in reverse, make sure visibility to the rear of the power unit is appropriate for the attachment.

If you have not already completed the checks above, please stop and do the above checks and preparations before you begin ripping. This is necessary for your safety and for the safety of others.

Now that you are properly briefed, your Ripper is properly installed, and you have properly checked out your work site, it is time to begin ripping. When transporting or traveling to and from the work site, make sure that the Ripper is not in contact with the ground. Select a safe speed and transport to your work site in such a manner that those faster moving vehicles can pass you safely. Employ a slow moving vehicle sign if you are using a public road or right-of-way.

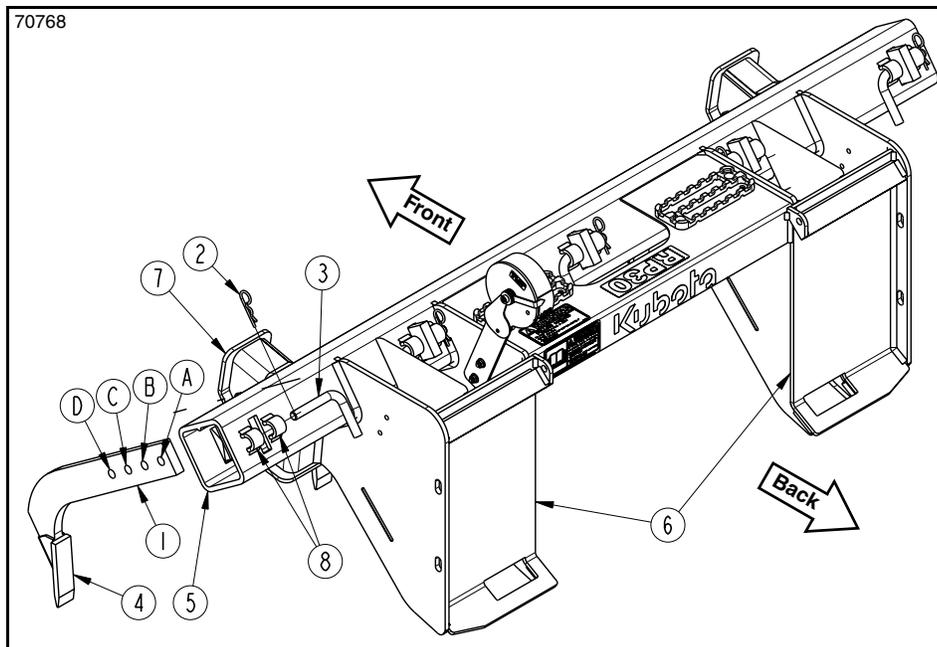
Once you have safely arrived at your work site, stop and adjust the shanks to the preferred depth. Begin ripping by lowering the shanks into the ground while traveling in the direction the shank tips are pointing. The shanks will have reached their adjusted depth once the skid shoes are on the ground.

You should be able to loosen soil at the depth the shanks are set and still maintain traveling momentum. If the ground is too hard, the skid steer may lose momentum. When this happens, you may need to set the shanks at a shallower depth on your first pass and lower the shanks in increments on each succeeding pass until you have reached maximum depth.

Never rip while making turns. Instead, raise the unit out of the ground before turning. Turning with shanks in the ground can break the shanks.

With a little practice, you should consistently achieve the desired results. Always keep safety uppermost in your mind. Remember to always lower the loader arms and shut the power machine down following "**Skid Steer Shutdown Procedure**" on page 9 before dismounting the skid steer.

See "**Specifications**" on page 24 and "**Features and Benefits**" on page 24 for additional information.



Remove & Install Shanks

Figure 3-1

Shank Removal and Installation

Refer to **Figure 3-1**:

Shanks may be installed with all shank tips pointing backward as shown to work ground while backing up or with all shank tips pointing forward (not shown) to work ground while traveling forward. Most operators prefer shank tips facing backward as shown to avoid traveling over worked ground.

DANGER

To avoid serious injury or death:

- Make adjustments to the shanks after the attachment has been properly attached to a power machine and lowered to the ground. Never work around equipment supported by hydraulics. Hydraulics can release and drop equipment even when power to the hydraulics is shut off.
- 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 the hydraulics is off.

WARNING

To avoid serious injury or death:

- Always shut power machine down using the “Shutdown Procedure” provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.
- Always keep your body extremities out from under the shanks while adjusting them. It is possible for the shanks to fall causing injury to your feet and/or legs.

Shank Removal

1. Attach Ripper to a power machine. Park Ripper and power machine on a solid, level surface.
2. Lower loader arms fully down and rotate top of hitch plate back until hitch plates (#6) are vertical.
3. Shut power machine down before dismounting. Refer to “**Skid Steer Shutdown Procedure**” on page 9.
4. At all times, keep body extremities out from under the shanks (#1). The top of the loader hitch plate can rotate forward allowing the front of the attachment to rotate down.
5. Remove hairpin cotter (#2) and shank lock pin (#3).
6. Remove shank (#1) from shank tube (#5).

Shank Installation

1. The Ripper must be attached to a power machine with loader arms fully down and hitch plates vertical. If unattached, reattach it before continuing.
2. With shank tip (#4) pointing in the operator’s preferred direction, insert shank (#1) through shank tube (#5) until preferred shank hole (A, B, C, or D) aligns with lock pin (#3). If unsure which shank hole to use, See “**Shank Depth Adjustment**” on page 16.
3. Secure shank by inserting lock pin (#3) through shank retainers (#8) and shank hole (A, B, C, or D). Secure lock pin (#3) with hairpin cotter (#2).

Section 3: Adjustments

Shank Depth Adjustment

DANGER

To avoid serious injury or death:

Make adjustments to the shanks after the attachment has been properly attached to a power machine and lowered to the ground. Never work around equipment supported by hydraulics. Hydraulics can release and drop equipment even when power to the hydraulics is shut off.

WARNING

To avoid serious injury or death:

- Always shut power machine down using the “Shutdown Procedure” provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.
- Always keep your body extremities out from under the shanks while adjusting them. It is possible for the shanks to fall causing injury to your feet and/or legs.

Refer to Figure 3-2:

1. Attach Ripper to a power machine. Park Ripper and power machine on a solid, level surface.
2. Lower loader arms fully down and rotate top of hitch plate back until hitch plates (#6) are vertical.
3. Shut power machine down before dismounting. Refer to “Skid Steer Shutdown Procedure” on page 9.
4. Keep body extremities out from under all shanks. Hold shank (#1) in position while removing hairpin cotter (#2) and shank lock pin (#3).
5. Adjust shank (#1) up or down in increments of 2" below skid shoe (#7). See table below for varying depth settings.

Shank Depth

Refer To:	Pin Hole	Depth Setting
Figure 3-2	1st hole: A	8"
Figure 3-3	2nd hole: B	6"
Figure 3-4	3rd hole: C	4"
Figure 3-5	4th hole: D	2"

6. Reinsert shank lock pin (#3) and secure in place with hairpin cotter (#2).
7. Repeat steps 4-6 above for the remaining shanks.

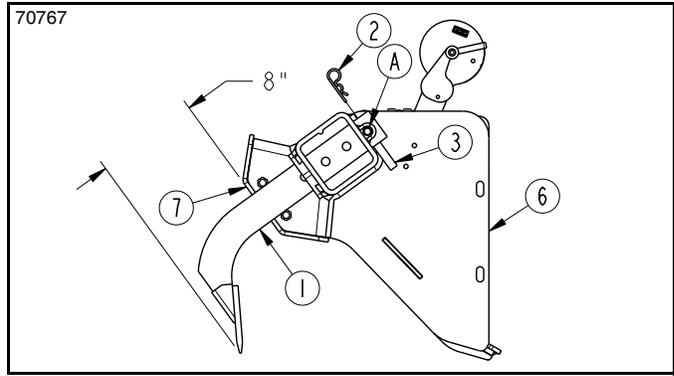


Figure 3-2

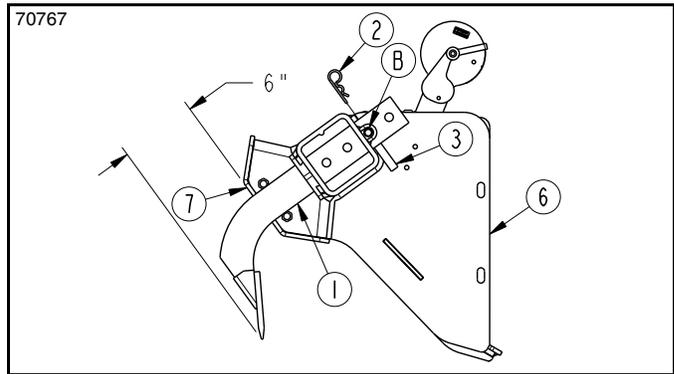


Figure 3-3

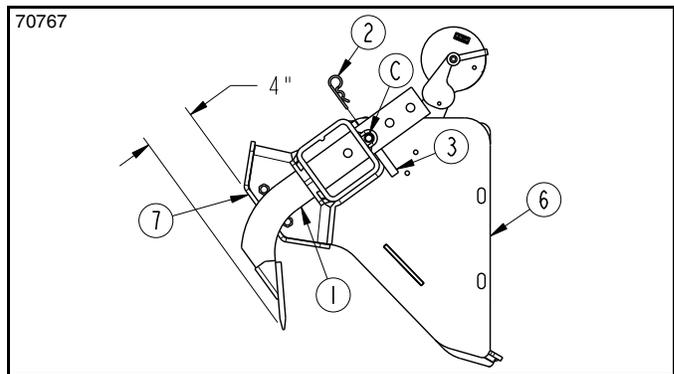


Figure 3-4

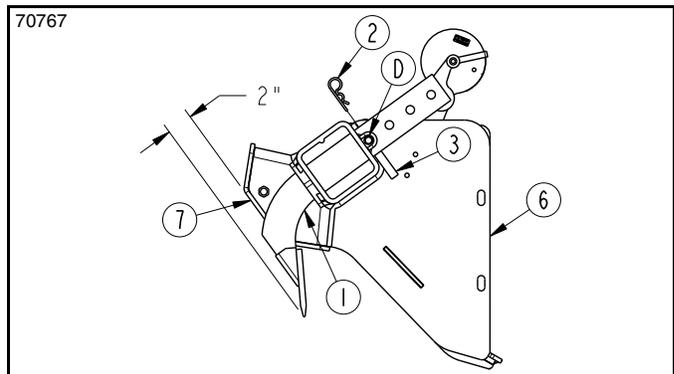


Figure 3-5

Section 4: Maintenance

Maintenance

Proper servicing and adjustment are key to the long life of any attachment. With careful and systematic inspection, you can avoid costly maintenance, time, and repair.

After using your Ripper for several hours, check all bolts to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Kubota dealer.

! DANGER

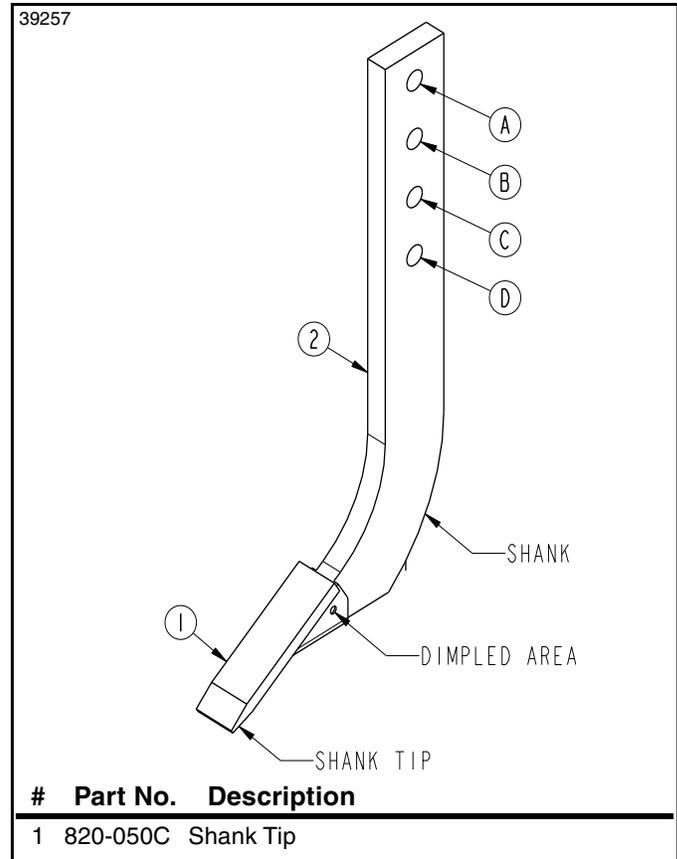
To avoid serious injury or death:

- Make adjustments to the attachment after it has been properly attached to a power machine and secured with solid supports in the up position. Never work around or under equipment supported by hydraulics. Hydraulics can drop equipment instantly if controls are actuated or if hydraulic lines burst even when power to hydraulics is shut off.
- 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 the hydraulics is off.

! WARNING

To avoid serious injury or death:

- Allow only persons to operate this attachment who have fully read and comprehended this manual, and who have been properly trained in the safe operation of this attachment. Serious injury or death can result from failure to read, understand, and follow instructions provided in this manual.
- Make sure controls are all in the neutral position or park before starting the power machine.
- Always shut power machine down using the “Shutdown Procedure” provided in this manual before servicing, adjusting, cleaning, or maintaining the attachment.
- Check hitch fit-up frequently. An improper fit-up can cause the attachment to come loose from the loader hitch plate and fall.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the attachment back into service.
- Do not alter attachment or replace parts on the attachment 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 attachment. Replace parts only with genuine OEM parts.



Shank Tip Maintenance
Figure 4-1

Shank Tip Replacement

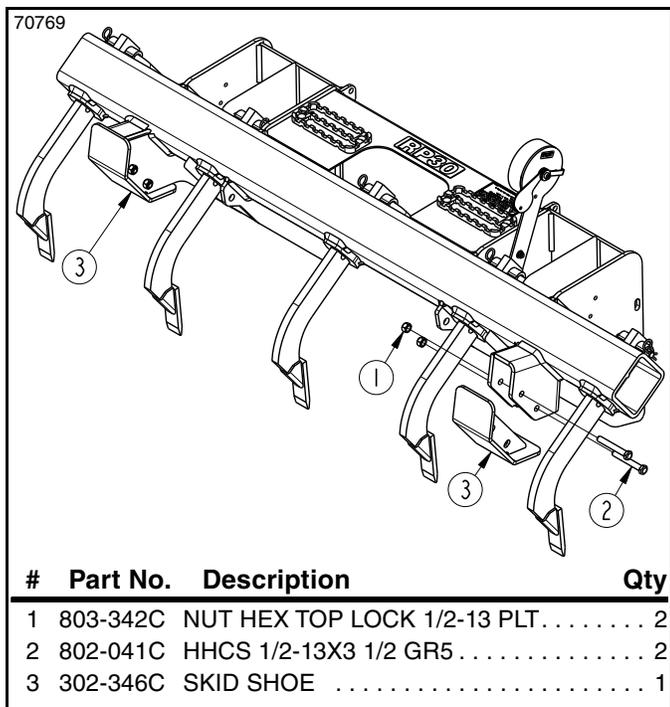
Refer to Figure 4-1:

Remove Shank Tip

1. Remove shank (#2) from the Ripper. Refer to “Shank Removal” on page 15.
2. Heat shank tip (#1) in the dimpled area on both sides.
3. Knock heated shank tip (#1) off with a blunt punch.

Install Shank Tip

1. Only use Kubota/Land Pride shank tips (#1).
2. Slide new shank tip (#1) onto the existing shank (#2).
3. Dimple both side of new shank tip (#1) as shown with a punch.
4. Continue with “Shank Installation” on page 15.



Skid Shoe Maintenance
Figure 4-2

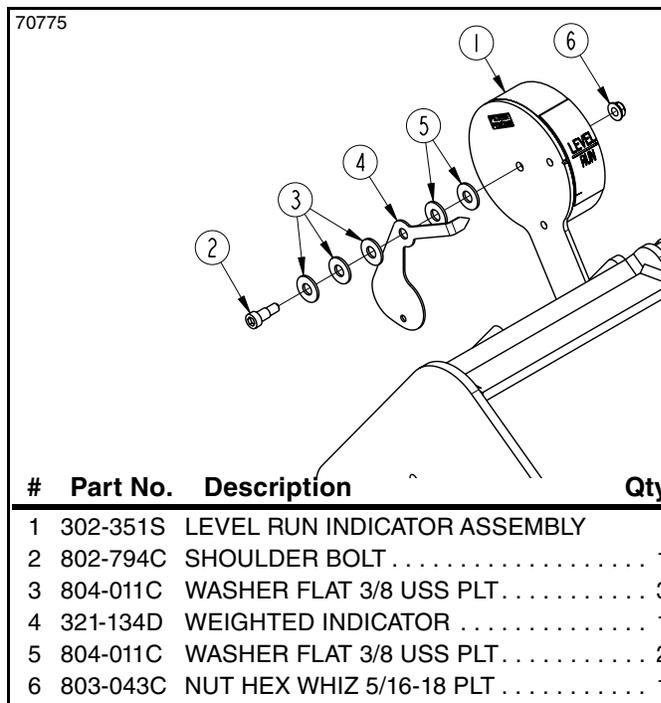
Skid Shoe Replacement

Refer to Figure 4-2:

1. Park skid steer and attachment on a solid, level surface.
2. Lower loader arms fully down and rotate top of hitch plate back until hitch plates are vertical.
3. Tilt top of hitch plate forward to rest shank tips on the ground.
4. Shut power machine down before dismounting. Refer to “Skid Steer Shutdown Procedure” on page 9.
5. Remove locknuts (#1), hex bolts (#2), and skid shoes (#3).

IMPORTANT: A top locknut that has been removed can lose its thread locking properties. Reusing a used locknut can result in a skid shoe falling off. Always use new locknuts when installing new skid shoes.

6. Replace existing skid shoes and locknuts with new components.
7. Attach new skid shoes (#3) to the Ripper with existing hex head bolts (#2) and new locknuts (#1). Tighten locknuts to the correct torque for 1/2"-13 GR5 bolt.



Level Indicator Maintenance
Figure 4-3

Level Indicator Maintenance

Refer to Figure 4-3:

Overhanging tree limbs, trash, and other interferences can bend the weighted indicator (#4) or level run indicator (#1). Dirt and/or trash can accumulate between the weighted indicator (#4) and washers (#3 & #5). Any of the above can cause the weighted indicator to quit working. Disassemble level run indicator to clean, straighten, or replace components.

NOTE: Quantity of flat washers (#3) can vary from 2 to 3. The 3rd washer was omitted at the factory if it prevented the weighted indicator from rotating.

1. Remove hex whiz nut (#6), shoulder bolt (#2), 3-flat washers (#3), weighted indicator (#4) and 2-flat washers (#5).
2. Inspect and clean dirt and trash from flat washers (#3 & #5) and weighted indicator (#4).
3. Straighten weighted indicator (#4) if bent.
4. Replace any component that cannot be cleaned or properly straightened.
5. Reattach weighted indicator (#4) to level indicator (#1) as follows:
 - a. Insert shoulder bolt (#2) through washers (#3), weighted indicator (#4), washers (#5), and hole in level indicator (#1).
 - b. Secure bolt in place with hex whiz nut (#6). Tighten whiz nut to the correct torque for a 5/16"-18 GR5 bolt.

Section 4: Maintenance

Long-Term Storage

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



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 the hydraulics is off.



WARNING

To avoid serious injury or death:

Do not alter attachment or replace parts on the attachment 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 attachment. Replace parts only with genuine OEM parts.

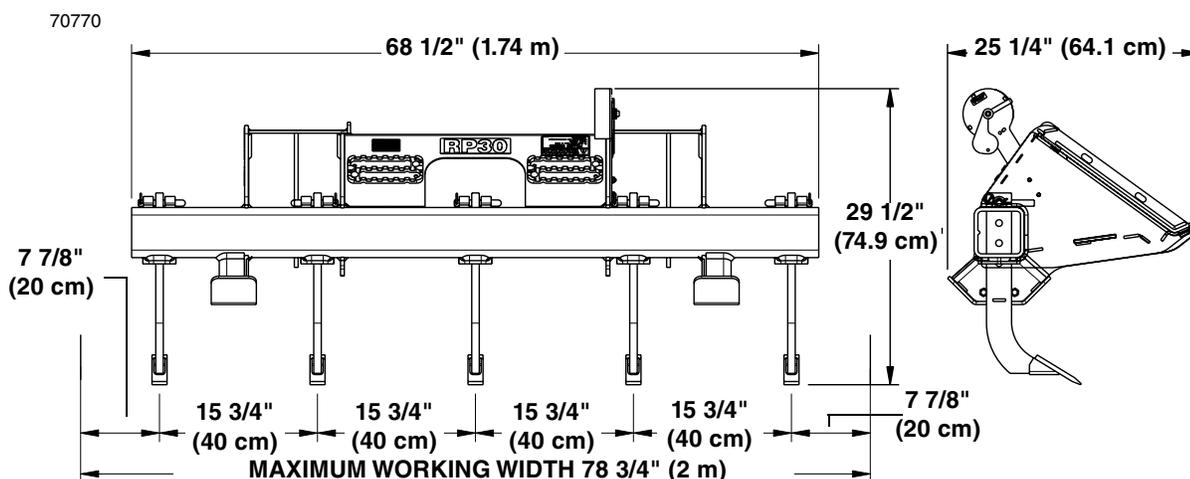
1. Clean off any dirt and grease that may have accumulated on the Ripper. Scrape off compacted dirt and then wash surface thoroughly with a garden hose.
2. Check shank tips for wear and replace if necessary. Refer to **“Shank Tip Replacement”** on page 17.
3. Inspect for parts out of adjustment, loose, damaged, or excessively worn.
 - Make required adjustments.
 - Tighten all loose hardware.
 - Replace missing, damaged, and worn parts as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your Kubota/Land Pride dealer for touch-up paint. Paint is available in aerosol can, quarts, and gallon sizes. See chart below.

Touch-Up Paint	
Part No.	Part Description
821-070C	Gloss black enamel spray can
821-070CTU	Gloss black enamel bottle with brush
821-070CQT	Gloss black enamel quart
821-070CGL	Gloss black enamel gallon

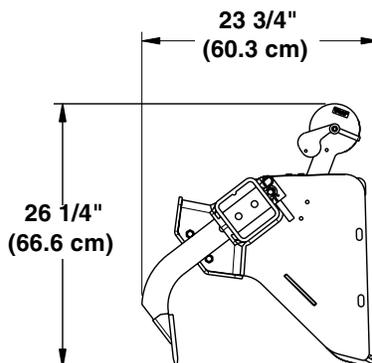
5. Replace all damaged or missing decals.
6. A light coat of oil or grease may be applied to unpainted areas to minimize oxidation.
7. Store Ripper on a level surface in a clean, dry place where children do not play. Inside storage will reduce maintenance and make for a longer Ripper life.

RP30 Ripper

Specifications & Capacities		RP30 Ripper
Ripper overall width	in (m)	68 1/2 (1.74)
Maximum working width	in (m)	78 3/4 (2)
Approximate weight	lbs (kg)	363 (164.7)
Horsepower rating	hp (kW)	65 to 95 (48.5 to 70.8)
Hitch type		Skid steer quick attach, meets ISO 24410
Number of Shanks		5
Number of shank adjustments	in (cm)	Quantity of 4 - 2 (5.1), 4 (10.2), 6 (15.2) and 8 (20.3) deep
Skid shoe construction	in (mm)	Bolt-on 5/16 (8) steel plate.
Shank tube construction	in (cm)	5 x 5 (12.7 x 12.7) Square tube with reinforcement plate around bottom of shank opening.
Level Indicator (Patent Pending)		Weighted indicator to indicate when unit is level.



Overall Dimensions With Unit Level (Working Position)



Overall Dimensions of End View with Unit Parked

RP30 Ripper

Features	Benefits
Universal Quick Attach Hitch	Ripper fits most skid steers and track loader hitches.
Reinforced hitch plate	Designed to stand-up against heavy shock loads.
Heavy shank tube with 1" thick steel surrounding the shanks at the bottom of the square tube.	Shank mounting tube is designed to handle heavy shock loads.
Heavy-duty bolt-on skid shoes	Designed for long life. Bolt-on makes them easy to replace.
Heat-treated steel shanks	Wear resistant and won't bend.
Bent shank pin with hairpin keeper	Makes adjusting shank depth and removing shanks easy and tool less.
Four ripping depths (2", 4", 6" & 8")	Provides a wide range of ripping depth.
Replaceable shank tip	Can be replaced if damaged or worn without having to replace entire shank.
Patent Pending Level Indicator	Provides visual indication of Ripper levelness throughout the operation. Operator can adjust Ripper levelness on the go.

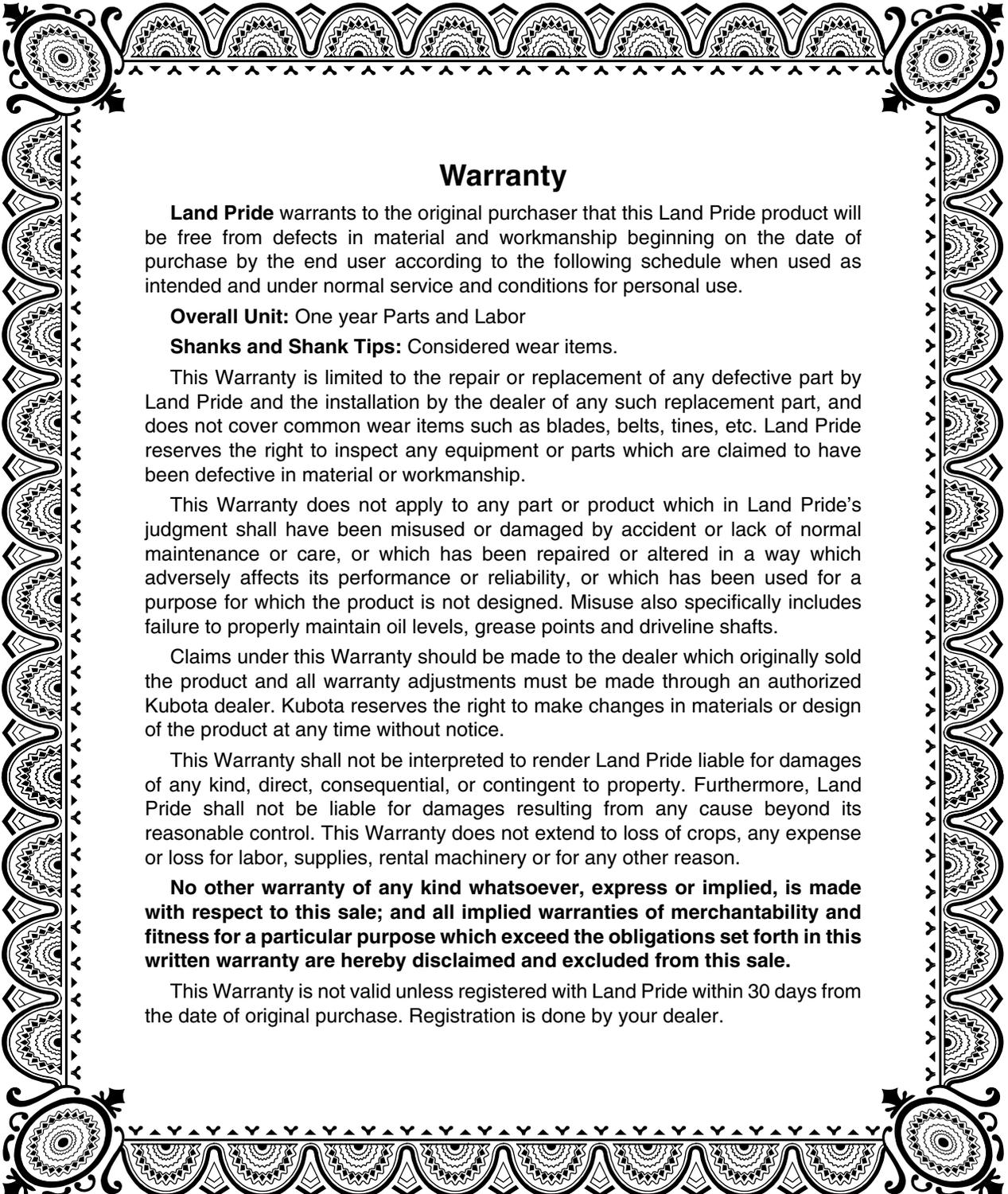
Troubleshooting Chart

Problem	Cause	Solution
Broken shank	Turning with shanks in the ground.	Replace broken shanks. Raise shanks out of the ground before turning.
	Not operating shanks vertically. Shanks operating at an angle can break.	Replace broken shanks. Operate shanks vertically. Use level indicator to help keep shanks vertical.
Shank tip will not go into the ground	Shank tip is worn.	Replace shank tip.
	Ripper is not level front to back.	Use level indicator to keep shanks vertical and Ripper level.
Level indicator is not working	Level indicator is bent.	Straighten level indicator. Replace weighted indicator if needed.
	Pivot bolt, washers, and/or weighted indicator is rusting.	Replace rusty components.
	Pivot components are jammed with trash and dirt.	Clean pivot components of trash and dirt.
Worn shank	Normal use.	Replace worn shanks.

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

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

Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.
 All locknuts or lubricated fasteners: Use 75% of torque value. (i.e. 1/2"-13 GR5 = 76 ft-lb; 75% of 76 or .75 x 76 = 57 ft-lb)



Warranty

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

Overall Unit: One year Parts and Labor

Shanks and Shank Tips: Considered wear items.

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

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

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

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

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

This Warranty is not valid unless registered with Land Pride within 30 days from the date of original purchase. Registration is done by your dealer.

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

Model Number _____ **Serial Number** _____

Legal Disclaimer

Kubota Corporation notes that specifications and technical information are subject to change without notice and Kubota does not represent or warrant that the information in this publication is completely accurate or current; however, Kubota used reasonable efforts to set forth and include accurate and up to date information in this publication. Kubota disclaims all representations and warranties, whether express or implied, including, but not limited to, warranties of merchantability and fitness for a particular purpose and Kubota shall not be liable for any damages, whether compensatory, direct, indirect, incidental, special, or consequential, arising out of or in connection with the use of this publication, or in the information therein.

The Product(s) described in this Publication are designed and manufactured only for the country in which they are initially wholesaled by Kubota. Kubota does not provide parts, warranty or service for any Product which is re-sold or retailed in any country other than the country for which the Product(s) were designed or manufactured.

Kubota®

Kubota HP: <https://www.kubota.com/network/index.html>