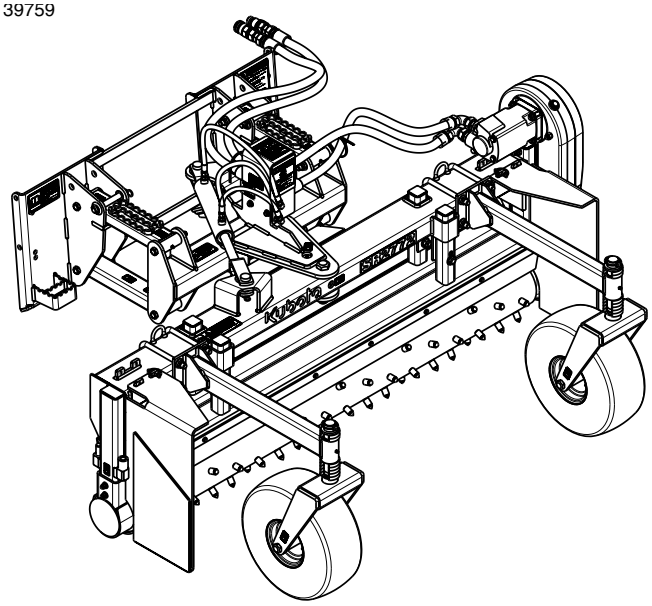
Table of Contents

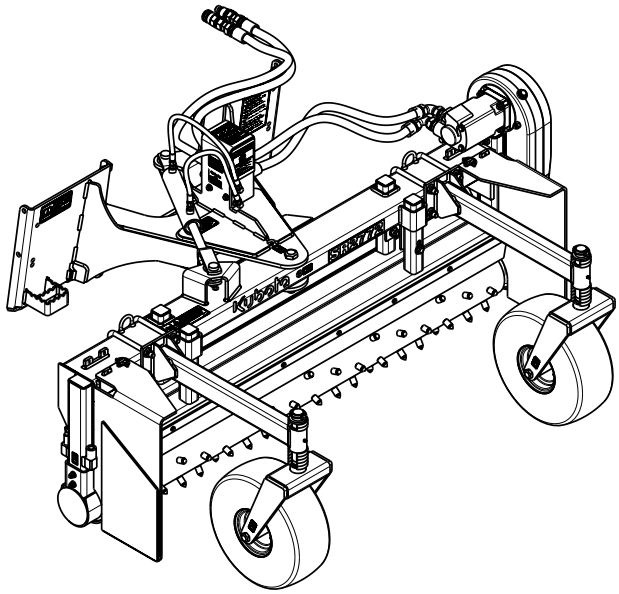
Powered Rakes

AP-SR2772, & AP-SR2790

39759



SR2772 With Float & Hydraulic Angling Option



SR2772 With Hydraulic Angling Option

321-120MK
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.

Printed 11/11/25

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: 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 11
Application 11
Using This Manual 11
Owner Assistance 11
Section 1: Assembly & Set-up 12
Skid Steer Requirements 12
Torque Requirements 12
Dealer Preparations 12
Gauge Wheel Assembly 13
Hydraulic Motor Hose Assembly 13
Hook-Up Powered Rake 14
Hydraulic Hose Hook-Up 14
Electrical Control Harness (Optional) 16
Control Harness With Deutsch 14 Pin Plug 16
Control Harness With Deutsch 2 Pin Plug 17
Control Harness With 2 Eyelets 18
Operational Check 18
Section 2: Operating Instructions 19
Operating Checklist 19
Safety Information 19
Skid Steer Shutdown Procedure 20
Transporting 20
Unhook Powered Rake 21
Operating Instructions 21
Running Operational Safety Check 21
Transport to Work Site 21
Side Plates 21
Lock or Unlock Parallel Arms (Optional) 21
Operating Speed 22
Level Powered Rake 22
Working Depth 22
Material Control Blades 22
Rake Angle 22
Final Inspection 22
Section 3: Adjustments 23
Gauge Wheel Depth 23
Angle/Float Hitch (Optional) 23
Material Control Blades 23
Rake Angle Options 24
Hydraulic Angle System 24
Manual Angling With A Ratchet Jack 24
Side Plate Positioning 25
Section 4: Optional Equipment 27
Intell-Attach System™ 27
Receiver/Cover Assembly 27
Tag/Bracket Assembly 27
Section 5: Maintenance & Lubrication 28
Maintenance 28
Drive Chain Inspection 28
Sprocket and Chain Replacement 28
Chaincase Skid Shoe Replacement 29
Change Chaincase Lubricant 29
Non-Drive Skid Shoe and Bearing 30
Gauge Wheel U-Bolts 30
Long-Term Storage 30
Lubrication Points 31
Non-Drive Roller End Bearing 31
Gauge Wheel Yoke Spindle 31
Gauge Wheel Axle 31
Angle Pivot 32
Parallel Arm Pivot Pins (Float Option) 32
Chaincase Lubricant 32
Section 6: Specifications & Capacities 34
Section 7: Features & Benefits 36
Section 8: Troubleshooting 37
Section 9: Torque Values Chart 38
Section 10: Warranty & Legal Disclaimer . . . 39

Printed in the United States of America.

See previous page for Table of Contents.

Parts Manual QR Locator

The QR (Quick Reference) code on the left will take you to the Parts Manual for this equipment. Download the appropriate app on your smart phone. Scan 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 / track loader 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 or track loader from the driver’s seat with steering levers and hydraulic controls in neutral.
- ▲ Operate skid steer or track loader and controls from the driver’s seat only.
- ▲ Never dismount from a moving skid steer / track loader or leave the machine unattended with the engine running.
- ▲ Do not allow anyone to stand between the attachment and skid steer or track loader 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.

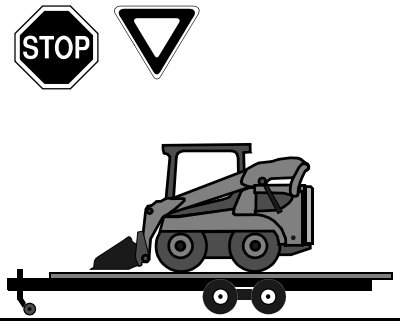
Listed below are common practices that may or may not be applicable to the products described in this manual.

Dig Safe - Avoid Underground Utilities

- ▲ USA: Call 811
  CAN:
  http://www.clickbeforeyoudig.com
- ▲ 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.

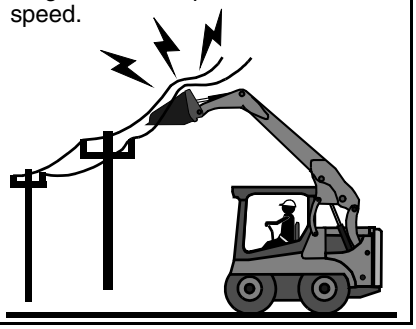
Towing Safely

- ▲ 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.



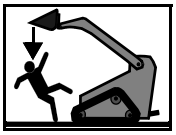
Tire Safety

- ▲ 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 of.
- ▲ Remove all tools and unused parts from the equipment before operation.

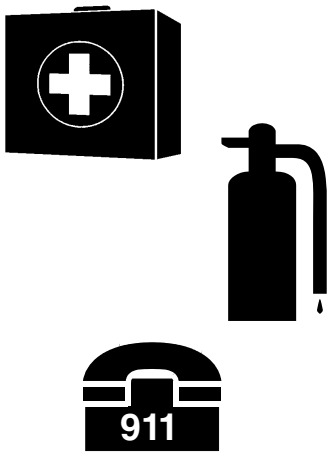





These are common practices that may or may not be applicable to the products described in this manual.

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)

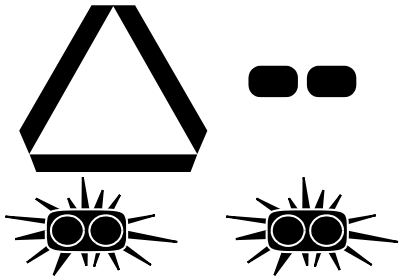
- ▲ Wear protective clothing and equipment appropriate for the job such as safety shoes, safety, glasses, hard hat, dust mask, and ear plugs.
- ▲ Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
- ▲ Prolonged exposure to loud noise can cause hearing impairment 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 the operator against serious injury or death from falling and/or machine overturn.

Keep Riders Off Machinery

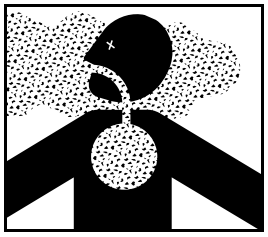
- ▲ Never carry riders on the power machine or attachment.
- ▲ Riders obstruct operator's view and interfere with the control of the power machine.
- ▲ Riders can be struck by objects or thrown from the equipment.
- ▲ Never use the power machine or attachment to lift or transport riders.

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.



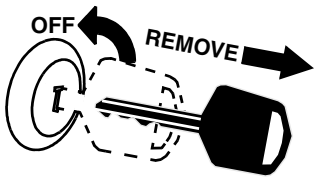
- ▲ Be aware of and follow OSHA (or other local, State, or Federal) guidelines for exposure to airborne crystalline silica.
- ▲ Know the work operations where exposure to crystalline silica may occur.
- ▲ Participate in air monitoring or training programs offered by the employer.
- ▲ Be aware of and 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.

Skid Steer / Track Loader 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 using the power-off switch or turn ignition key to stop. Do not remove key at this time.
- ▲ Relieve all hydraulic pressures.
  - If using a power-off switch, follow your machine Operator's Manual for instructions on how to release hydraulic pressure in the lines.
  - If using an ignition key, turn key to "RUN" and move joysticks to release hydraulic pressure in the lines. Finish by turning ignition key to off and removing it 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 or track loader.



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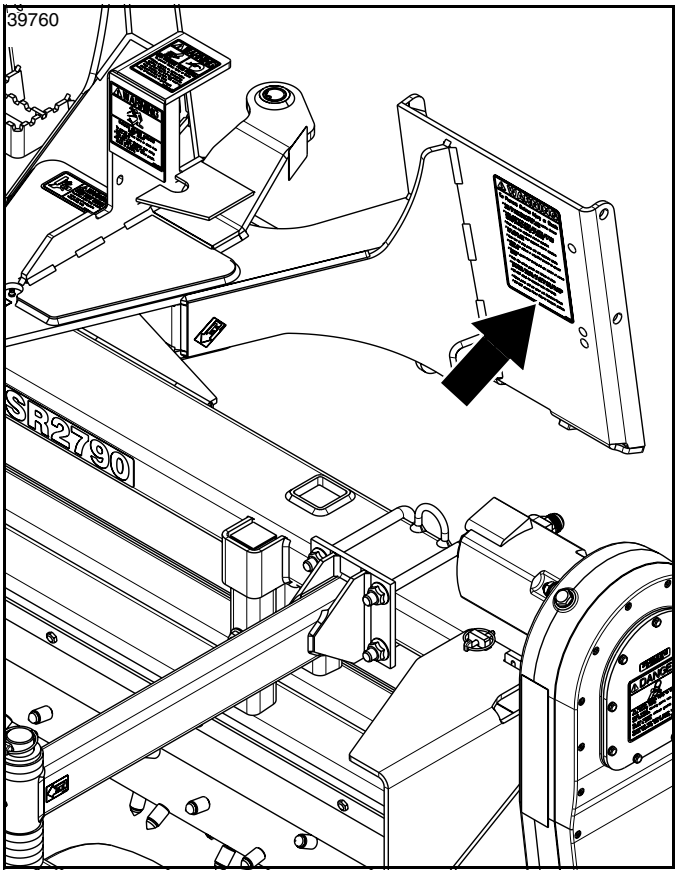
Safety Labels

Your Powered Rake 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 a similar type of straight edge.*



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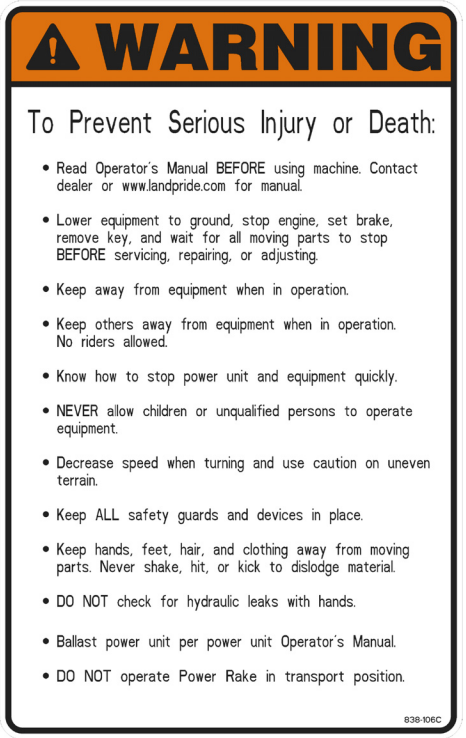
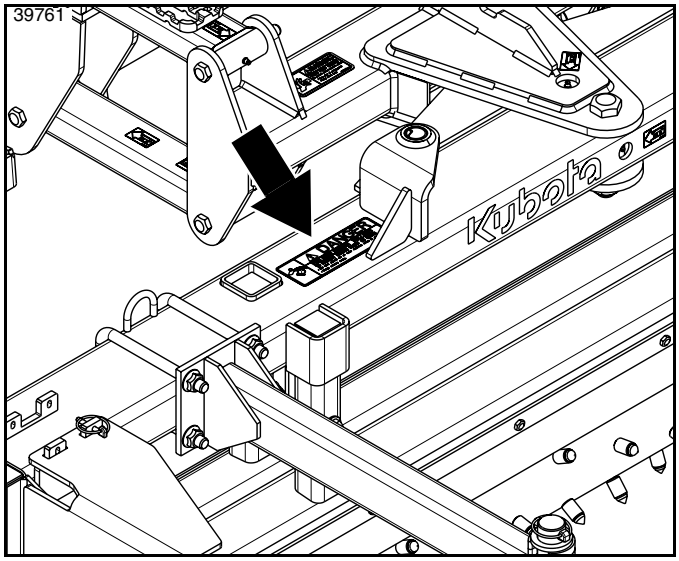
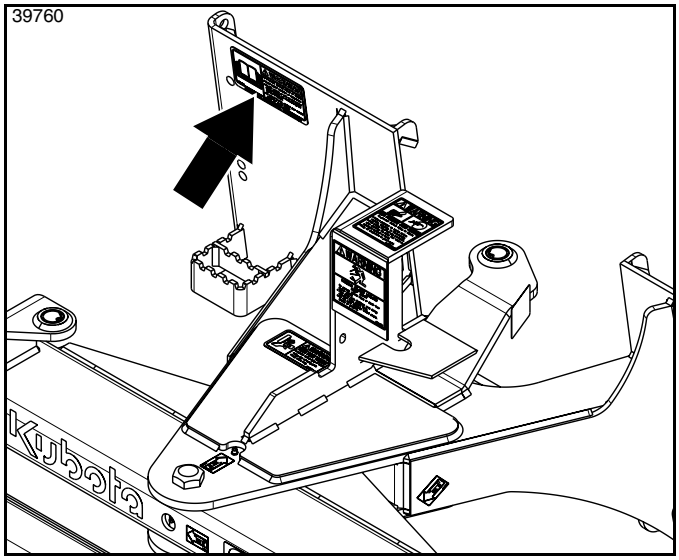


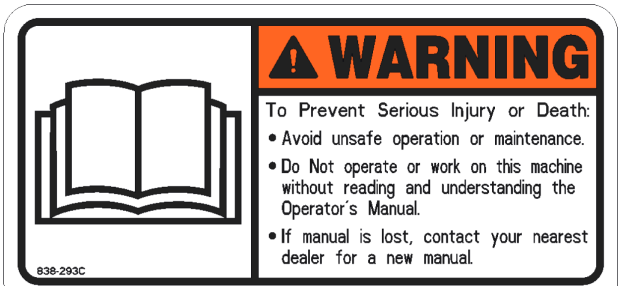
838-106C
Warning: Read Operator's Manual - General Safety
1 Place



70977

818-254C
Danger: Entanglement Hazard
1 Place





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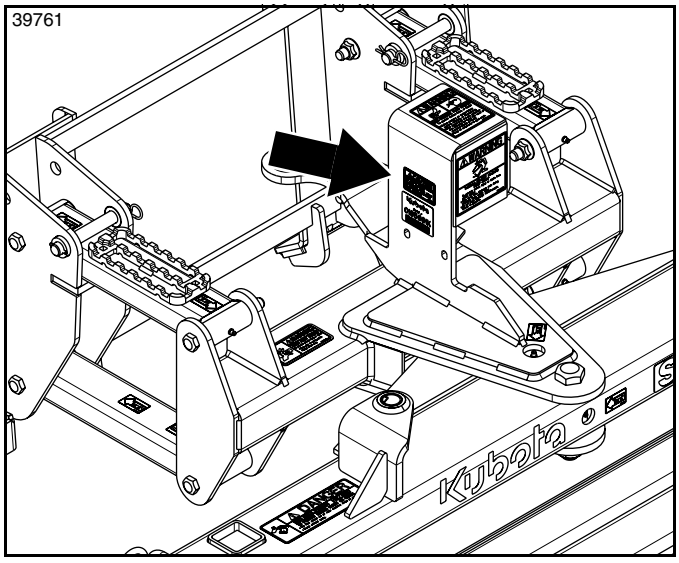
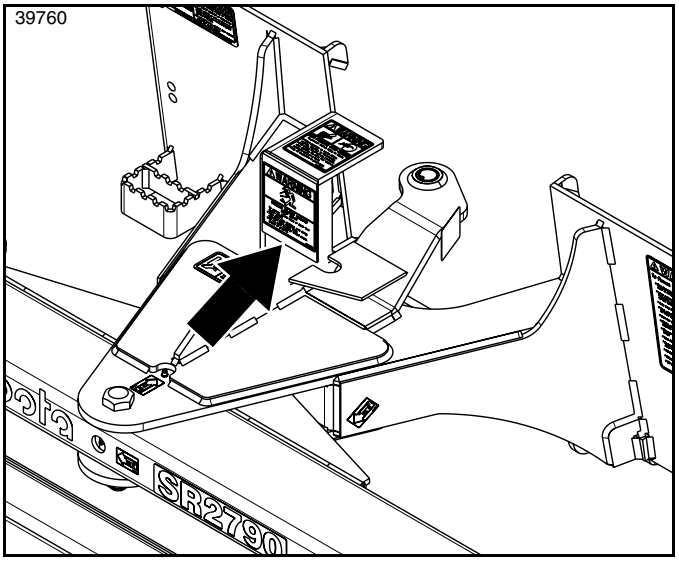
838-293C
Warning: Read Operator's Manual
1 Place



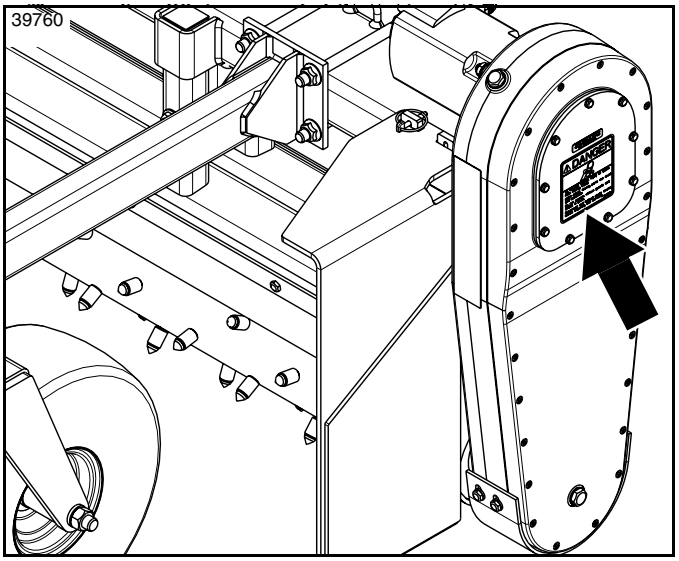
70325

858-235C
Caution: Rotation Hazard
1 Place



72926

838-107C
Warning: Thrown Object Hazard
1 Place



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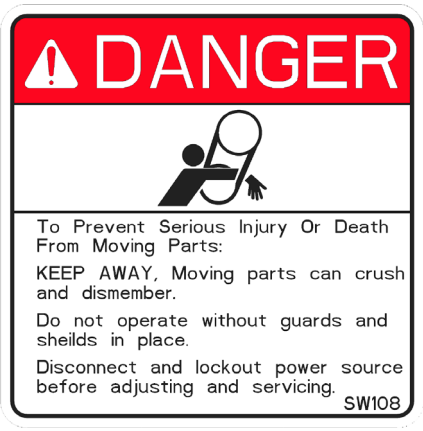
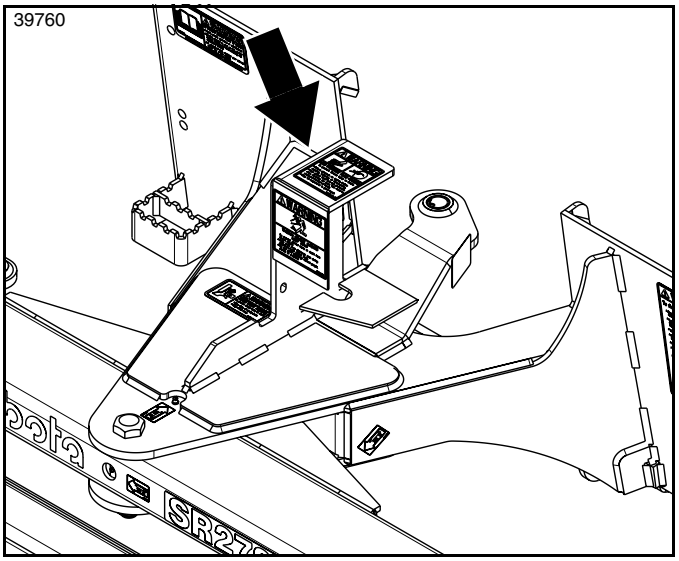
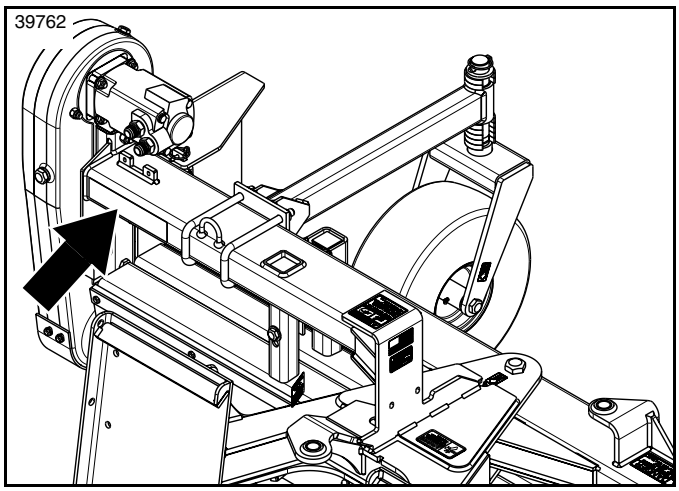


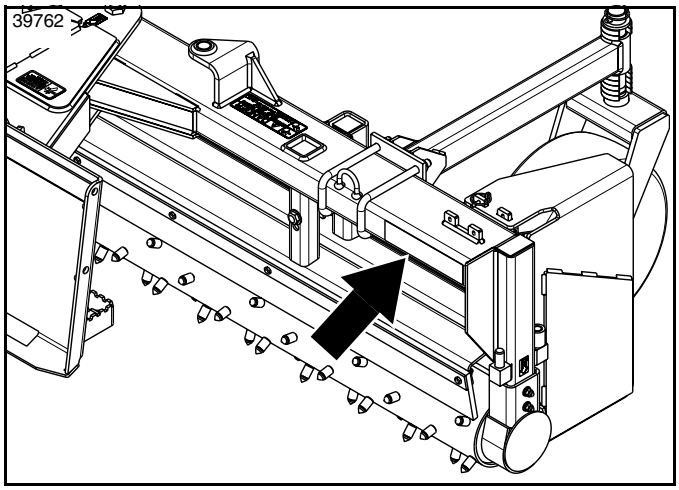
838-111C
Danger: Keep Away - Moving Parts Hazard
1 Place

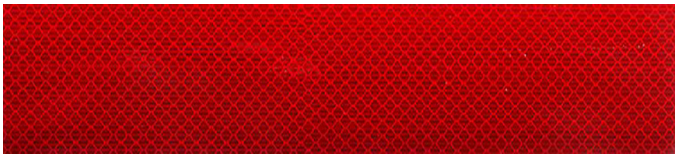


70372

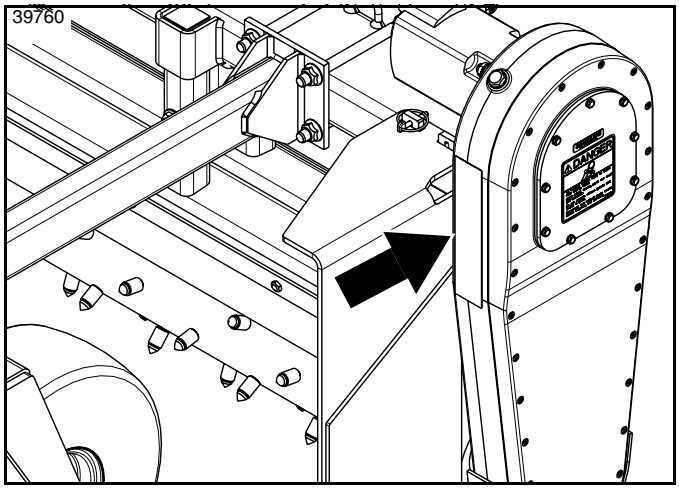
818-339C
Warning: High Pressure Fluid Hazard
1 Place

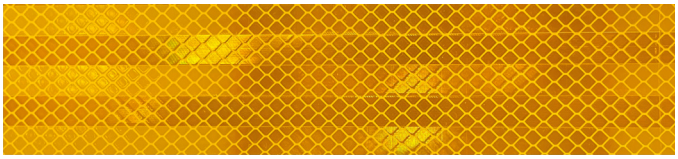






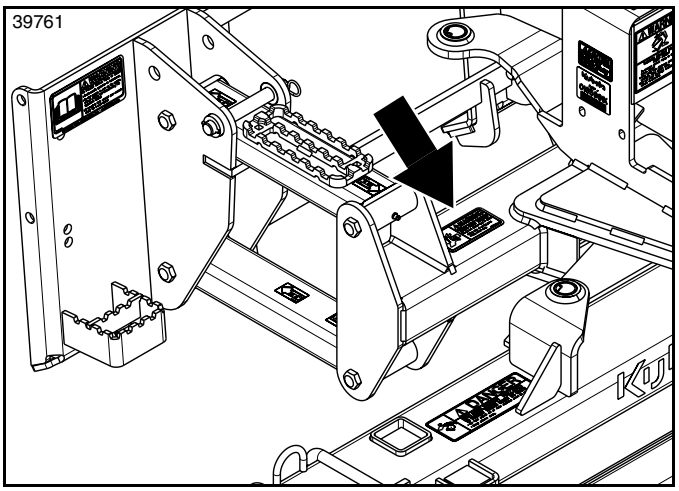
838-614C (SR2790 Only)
Red Reflector: 2" x 9"
2 Places



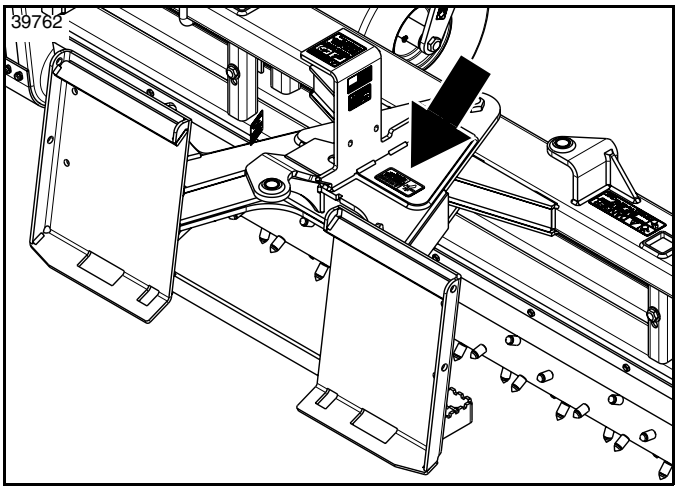


73138

838-615C (SR2790 Only)
Amber Reflector: 2" x 9"
1 Place



With Angle/Float Hitch Option



With Angle Hitch Option

70575

818-798C
SR27 With Angle/Float Hitch Options
Warning: Pinch Point Hazard
1 Place

Kubota welcomes you to the growing family of new product owners. This Powered Rake 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 attachment.

Application

Kubota's SR2772 and SR2790 Skid Steer Powered Rakes, with their carbide-tipped studded roller, adjustable and highly durable urethane material control blade, and 20 degree left and right angling will turn your skid steer loader into the perfect landscaping tool. These skid steer powered rakes are designed to grade, level, rake, and remove unwanted objects such as rocks, stones, clods, small roots, limbs, twigs, and other material of similar nature or size. They can also alleviate unwanted weed growth and prepare a seedbed for planting. These powered rakes are excellent tools to renovate and rejuvenate gravel and cinder driveways, storage lots, and warning tracks. They are also very effective at reconditioning earthen race tracks and arenas. The hydraulic driven roller rotates in both directions for traveling both forward and backward. Both models allow you to move dirt like a box scraper, windrow rocks like a rake and work soil like a pulverizer - all in one tool.

See **"Specifications & Capacities"** on page 34 and **"Features & Benefits"** on page 36 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 the direction the operator faces while sitting in the operator's seat looking forward unless otherwise stated.

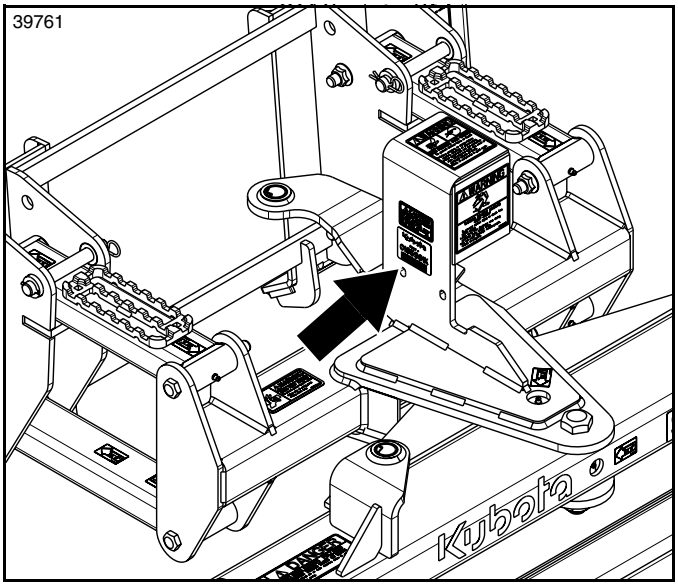
Owner Assistance

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 Powered Rake 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 attachment.

Serial Number

For quick reference and prompt service, record model and serial number on the inside cover page and again on the warranty page. Always provide model number and serial number when ordering parts and in all correspondence with your Kubota dealer. For location of your serial number plate, see Figures 1 & 2 on page 9.



SR27 Series Serial Number Plate
Figure 1

Further Assistance

Your Kubota dealer wants you to be satisfied with your new Powered Rake. 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

Skid Steer Requirements

The Powered Rake is designed to fit on Skid Steer Loaders with the following minimum requirements:

SR2772

Hitch type . . . . Universal quick attach
SAE lift capacity . . . . 1200 lbs (544.3 kg)
Hydraulic requirements . . . .
. . . . . . 12 gpm (45.4 lpm) at 2250 psi (15.5 mPa)
Maximum hydraulic pressure. 3500 psi (24.1 mPa)

SR2790

Hitch type . . . . Universal quick attach
SAE lift capacity . . . . 1600 lbs (725.7 kg)
Hydraulic requirements . . . .
. . . . . . 15 gpm (56.8 lpm) at 2250 psi (15.5 mPa)
Maximum hydraulic pressure. 3500 psi (24.1 mPa)

WARNING

To avoid serious injury or death:

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 38 to determine correct torque values for common bolts.

Dealer Preparations

This Power Rake has been partially assembled at the factory. Some additional preparations will be necessary to finish assembling the attachment and to attach it to the customer's tractor. Make sure the intended tractor conforms to **"Skid Steer Requirements"** on this page.

An understanding of how this implement works will aid in final assembly and setup. Read and understand the Operator's Manual. Go through the **"Pre-Assembly Checklist"** on this page. To speed up the assembly task and make the job safer, have all needed parts and equipment readily at hand.

Pre-Assembly Checklist

✔	Check	Page
☐	Have a forklift or hoist with properly sized chains and safety stands capable of lifting and supporting the equipment on hand.	
☐	Have a minimum of 2 people on hand while assembling.	
☐	Make sure all major components and loose parts are shipped with the machine. Refer to this manual if unsure.	
☐	Make sure working parts move freely, bolts are tight and cotter pins are spread. Refer to this Operator's Manual.	
☐	Double check to make sure all fasteners and pins are installed correctly. Use the Parts Manual if unsure. **NOTE:** Small hardware shipped loose from the factory is contained in a bag. Larger parts are attached to the shipping crate. All factory assembled hardware should be installed in their correct location. Remember their location if removed. Keep removed parts separated.	
☐	Make sure all safety labels are correctly located and legible. Replace if damaged or missing.	Page 6
☐	Inspect roller chain. Make sure it is properly tension and aligned.	Page 28
☐	Make sure all grease fittings are in place and lubricated. Refer to Lubrication Points.	Page 31
☐	Check fluid level in the chaincase. Refer to the Maintenance and Lubrication section.	Page 32

Gauge Wheel Assembly

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

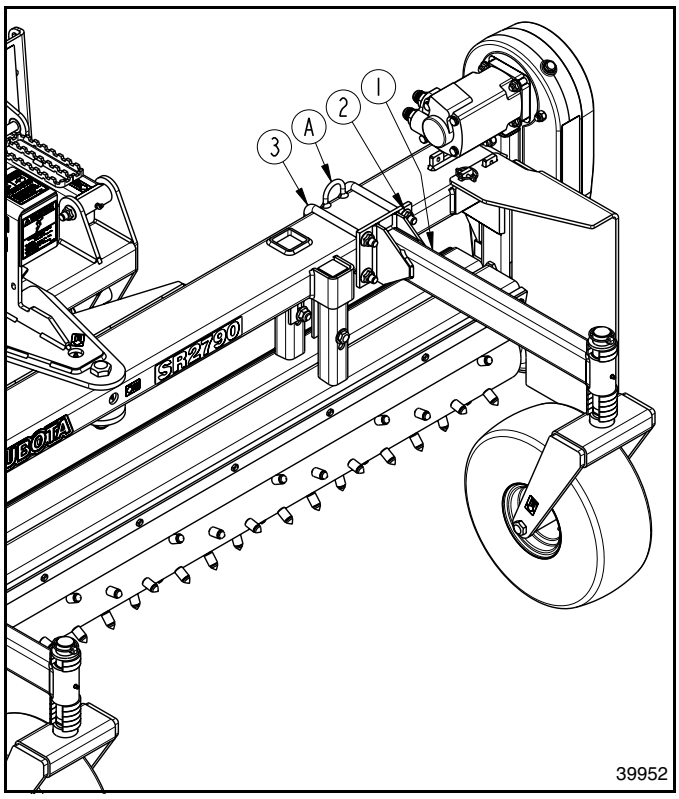
1. Attach gauge wheels (#1) to the rear frame with u-bolts (#3) and 5/8"-11 hex flange locknuts (#2) as shown. Make sure u-bolts straddle lifting lugs “A” on the SR2790 as shown in Figure 1-1.
2. Tighten hex whiz nuts (#2) to the correct torque for a grade 5 bolt.

Hydraulic Motor Hose Assembly

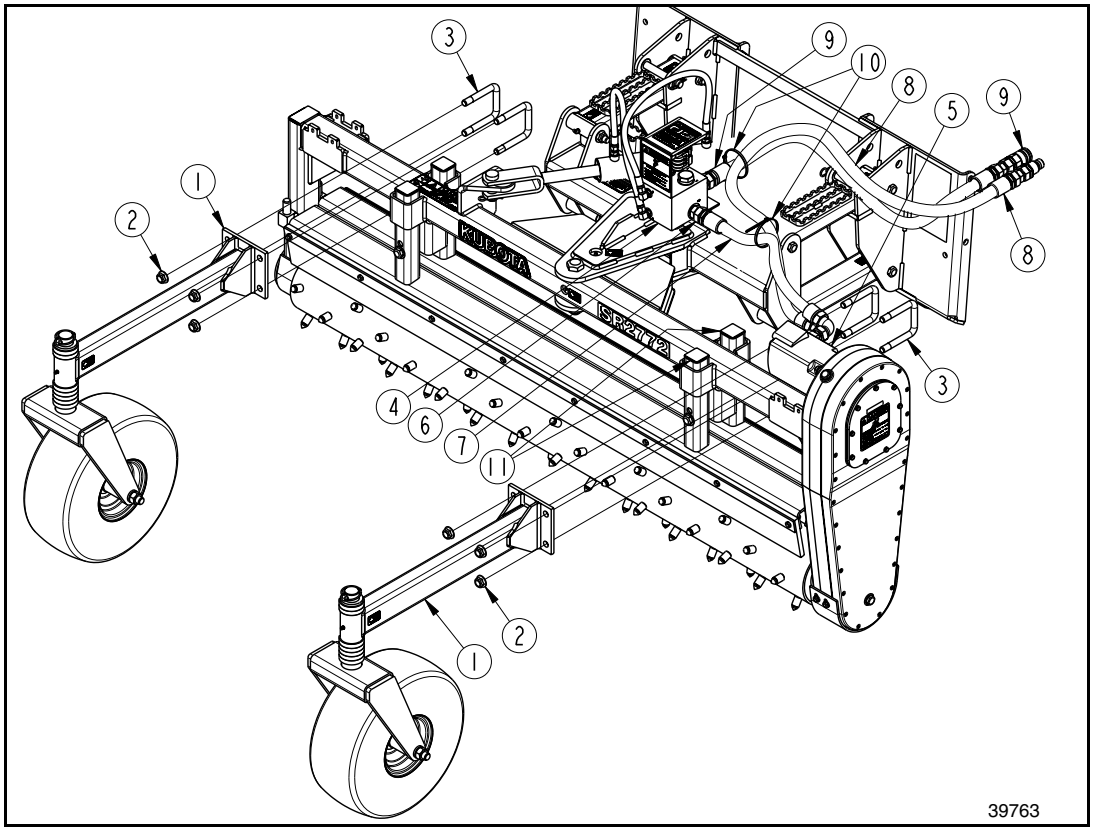
Refer to Figure 1-2:

Check hoses (#7 & #8) between bypass valve (#4) and hydraulic motor (#5). Hoses must arch up to prevent becoming entangled in hitch pivot points and material control adjustment tubes (#11). Do the following if hoses (#7 & #8) do not arch up:

1. Loosen hose (#7) from fitting (#6).
2. Rotate hose (#7) until it arches-up between bypass valve (#4) and hydraulic motor (#5).
3. Hold hose (#7) in this arched-up position and tighten hose end to fitting (#6).
4. If not completed, attach hose (#8) to hose (#7) with zip tie (#10) in the arched-up position to keep both hoses from becoming entangled in hitch pivot points.
5. If not completed, attach hose (#8) to hose (#9) with zip tie (#10) in the vicinity of bypass valve (#4).



SR-2790 Gauge Wheel Assembly
Figure 1-1



SR-2772 Gauge Wheel Assembly
Figure 1-2

Hook-Up Powered Rake

Refer to Figure 1-3 on page 15:

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.

WARNING

To avoid serious injury or death:

Check hitch fit-up frequently. An improper fit-up can result in the attachment falling from the loader hitch plate.

1. Check for and remove all debris in the skid steer universal quick attach hitch and rake hitch plate.
2. Raise lock pins on skid/loader mounting hitch plate.
3. Drive skid steer slowly up to and centered on the rake hitch making sure the universal quick attach hitch is parallel with rake hitch top angle bars.
4. Rotate top of skid steer tilt arms slightly forward.
5. Position top of skid steer universal quick attach hitch under the rake top angled bars. Slowly raise loader arms up until top of universal quick attach hitch is seated under the top angle bars.
6. Rotate top of skid steer universal quick attach hitch back until its hitch plate makes full contact with the rake hitch plate.
7. Shut skid steer down properly. Refer to **"Skid Steer Shutdown"** on page 18.
8. Lower lock pins on universal quick attach hitch. Make sure lock pins go through bottom slots in rake hitch plate and are in the locked down position.

Hydraulic Hose Hook-Up

Refer to Figure 1-3 on page 15:

WARNING

To avoid serious injury or death:

Make sure hydraulic hoses are properly routed without twists to prevent them from becoming stretched, pinched, or kinked. A damaged hydraulic hose can burst and leak hydraulic fluid.

- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulics. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*
- *Make sure hydraulic flow to the attachment does not exceed maximum rated flow listed in the specifications. Exceeding maximum flow will increase rotor speed and result in a thrown object hazard.*

IMPORTANT: Make sure coupler fittings are clean before making connections. Dirt can quickly damage the hydraulic system. Inspect couplers for corrosion, cracks and excessive wear. Replace couplers if any of these conditions exist.

IMPORTANT: Make sure hydraulic hoses are routed properly so they will not become pinched or kinked while operating. If necessary, loosen hoses at the fittings to relieve twisting and kinking. Tighten all connections before starting power equipment.

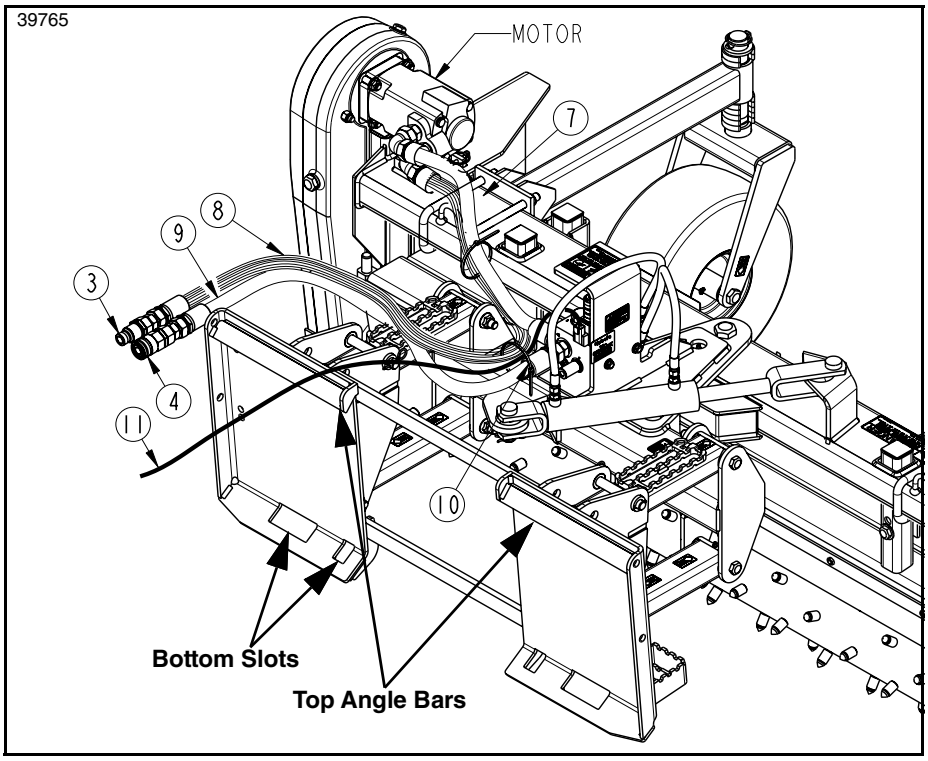
IMPORTANT: Collect and dispose of all oil spills and leaks in a safe manner that meets the local

Refer to Figure 1-3 on page 15:

Hydraulic hose hook-up should provide continuous hydraulic flow to the motor while raking. Hydraulic hose (#9) is pressurized and should be attached to the skid steer's hydraulic line that is under continuous pressure when controls are locked for continuous operation.

1. Shut skid steer down properly to dismount. Refer to Skid Steer Shutdown Procedure on page 20.
2. Relieve pressure to the auxiliary hydraulics.

IMPORTANT: Refer to your skid steer Operator's Manual to determine which quick connect coupler on your skid steer is under pressure while the skid steer is locked in continuous operation. Hydraulic hose (#8) should couple to this coupler.



SR27 Series Hook-Up Powered Rake
Figure 1-3

3. Clean quick connect couplers (#3 & #4) of dirt and then connect male and female couplers to the skid steer outlets. Make sure couplers have fully engaged. If they have not, check the following:
   a. Make sure couplers are same size and type.
   b. Make sure hydraulic pressure has been released.

NOTE: Do not use SVL or SSV hose stay when hooking-up the SR27 hydraulic hoses. Refer to Figure 1-4 on page 16 for correct hose routing.

4. Route hydraulic hoses (#8 & #9) through the most convenient path to access the skid steer power equipment couplers.
5. Connect couplings (#3 & #4) to the skid steer quick release couplers.
6. Continue with **"Electrical Control Harness (Optional)"** on page 16.

Kubota Hose Routing (SVL Shown)
Figure 1-4

Electrical Control Harness (Optional)

Kubota offers three electrical control wire harnesses for the purpose of operating the hydraulic angling cylinder. If not purchased with the Powered Rake, one may be purchased from your nearest Kubota dealer.

- Part No. 323-094A - - - - - - - - - - - - - - - - Wire harness with Deutsch 14 pin power plug.
  - Refer to **"Control Harness With Deutsch 14 Pin Plug"** below.
- Part No. 323-096A - - - - - - - - - - - - - - - - Switch and wire harness with Deutsch 2 pin power plug.
  - Refer to **"Control Harness With Deutsch 2 Pin Plug"** on page 17.
- Part No. 323-097A - - - - - - - - - - - - - - - - Switch and wire harness with eyelets for connecting to 12V power source.
  - Refer to **"Control Harness With 2 Eyelets"** on page 18.

Kubota offers two controllers for operating the Powered Rake when attached to a Kubota compact track loader or skid steer loader. See your nearest Kubota dealer to purchase one of their controllers.

- Part No. V0511-97010 - - - - - - - - - - - - - SVL Electrical connector (2 functions)
- Part No. W/G S6699 - - - - - - - - - - - - - - - SVL Multifunction handle (7 functions)

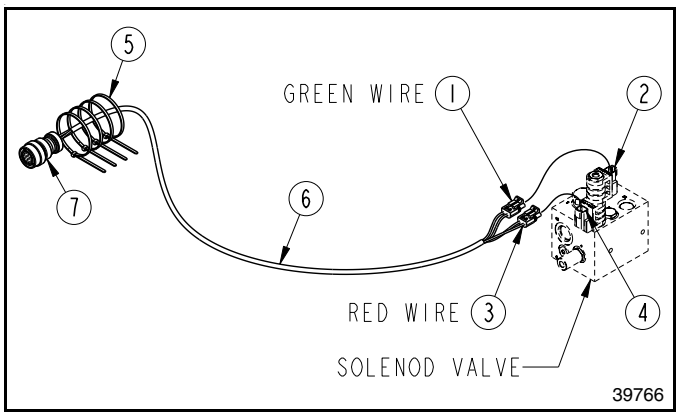
Control Harness With Deutsch 14 Pin Plug

Refer to Figure 1-5:

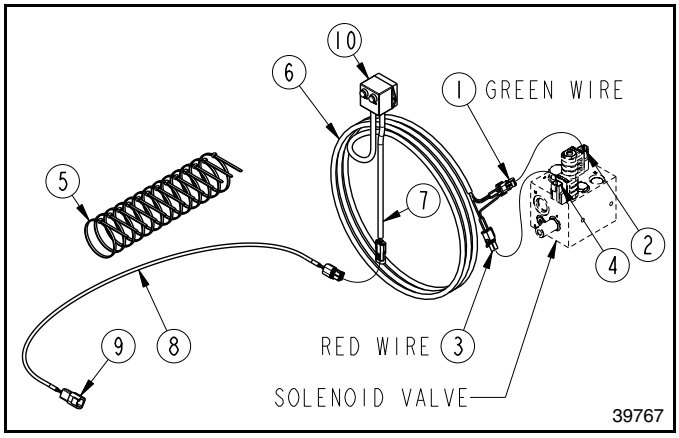
323-094ADEUTSCH HD30 14 PIN PLUG

If Skid Steer Loader is equipped with a Deutsch 14 Pin male connector, then push button control box can be eliminated and the Deutsch 14 pin plug and cable (#6) can be purchased to connect the solenoid directly to the Skid Steer Loader controls.

1. Connect red wire plug (#3) to bottom solenoid connector (#4).
2. Connect green wire plug (#1) to top solenoid connector (#2).
3. Attach Deutsch 14 pin plug (#7) to the skid steer's Deutsch 14 pin male plug.
4. Zip ties (#5) will be installed later.
5. Skip to **"Operational Check"** on page 18.



Deutsch 14 Pin Plug and Cable
Figure 1-5



Switch and Wire Harness For Kubota Skid Steer
Figure 1-6

Control Harness With Deutsch 2 Pin Plug

Refer to Figure 1-6:

323-096A . SWITCH and WIRE HARNESS DTP PLUG
This switch and wire harness is designed for attaching the Powered Rake to Kubota Skid Steers when a 14 pin Deutsch plug is not available and 2 pin Deutsch plug located behind the driver's seat is available. The 2 push button control switch (#10) can be placed approximately 9 ft (2.7 m) from the solenoid valve.

Refer to Figure 1-7:

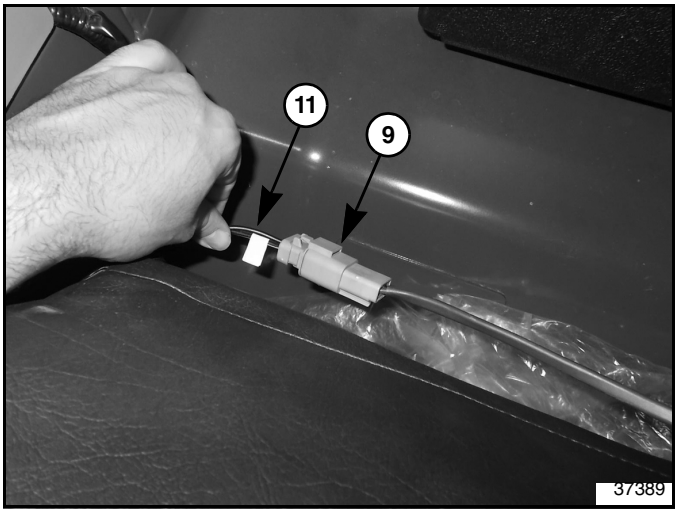
1. Attach Deutsch 2 pin plug (#9) to the Kubota male plug (#11) located behind the driver's seat.

Refer to Figure 1-8:

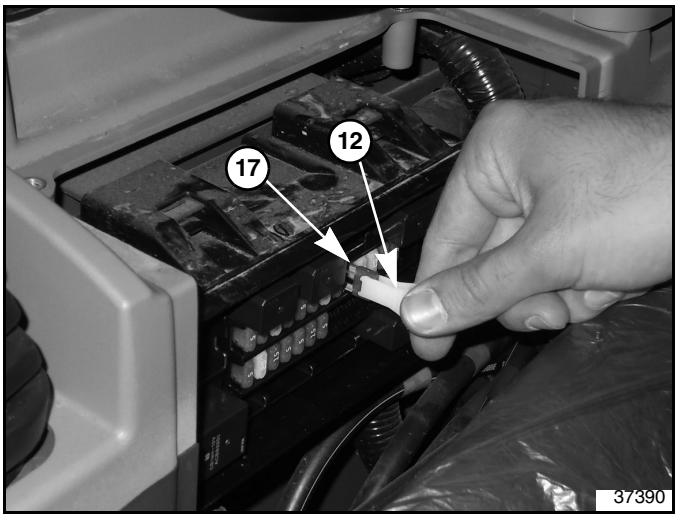
2. Fuse (#12) is supplied by customer. Install 10 amp fuse (#12) in Kubota's fuse box slot (#17) labeled "Electrical Outlet-2".

Refer to Figure 1-6:

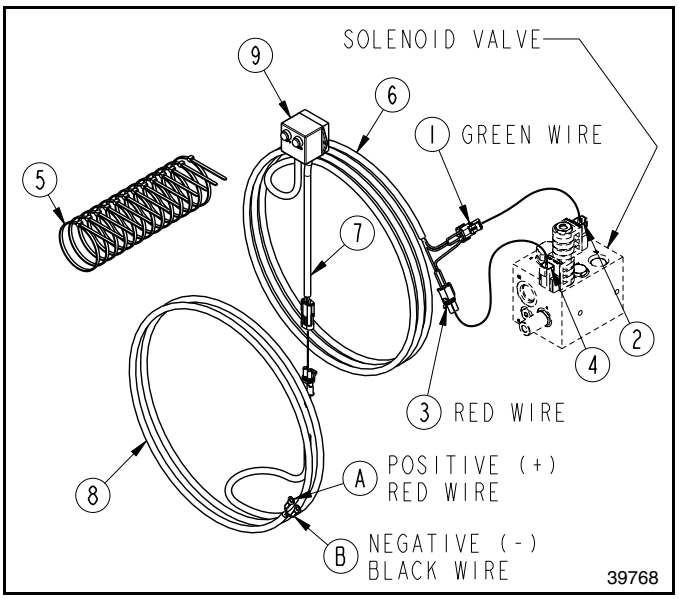
3. The push button control switch (#10) is mounted using the magnets on its back side. Locate and mount this switch in a convenient easy to reach location.
4. Connect power cord (#8) to control switch wire (#7).
5. Connect red wire plug (#3) to the bottom solenoid connector (#4).
6. Connect green wire plug (#1) to the top solenoid connector (#2).
7. Zip ties (#5) will be installed later.
8. Skip to **"Operational Check"** on page 18.



Kubota Power Connection (Located Behind Drive Seat)
Figure 1-7



Installation of 10 amp Fuse
Figure 1-8



Control Switch and Wire Harness With Eyelets
Figure 1-9

Control Harness With 2 Eyelets

323-097A . . . . . SWITCH and WIRE HARNESS
Refer to Figure 1-9:

This switch and wire harness is designed for attaching the Powered Rake to a skid steer without a 2 pin or 14 pin Deutsch plug. The 2 push button control switch (#9) can be placed approximately 9 ft (2.7 m) from the solenoid valve.

1. Disconnect negative (-) black ground wire from the skid steer's battery post (not shown).
2. Attach positive (+) red wire eyelet (A) to a 12 volt power source. Tighten fastener hardware.
3. Attach negative (-) black wire eyelet (B) to ground. Tighten fastener hardware.
4. Reconnect negative (-) black ground wire to the skid steer's battery. Tighten fastener hardware.
5. The push button control switch (#9) is mounted using magnets on the back. Locate and mount this switch in a convenient easy to reach location.
6. Connect power cord (#8) to control switch wire (#7).
7. Connect green wire plug (#1) to the top solenoid connector (#2).
8. Connect red wire plug (#3) to the bottom solenoid connector (#4).

NOTE: Additional zip ties may be needed to properly secure all wiring harness. Customer to supply and locate all additional zip ties.

9. Zip ties (#5) will be installed later.
10. Continue with **"Operational Check"** on this page.

Operational Check

Refer to Figure 1-9:

1. With hydraulics hooked-up, start skid steer and press buttons to angle rake.
2. If rake angles in opposite direction desired, switch plugs (#1 & #3) with solenoid connectors (#2 & #4).
3. If everything is working correctly, secure harness (#6) near the solenoid valve with zip tie (#5).
4. Make certain hydraulic hoses from skid steer to rake are kept away from all pinch points.
5. Tie hydraulic hoses and electrical cables together as needed with zip ties (#5).

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 Powered Rake. Therefore, it is absolutely essential that no one operates the Powered Rake 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 10
- **Section 2: Operating Instructions**, page 17
- **Section 3: Adjustments**, page 20
- **Section 4: Maintenance & Lubrication**, page 24

Perform the following inspections before using your Powered Rake.

Operating Checklist

✔	Check	Page
	Make sure all guards and shields are in place and secure. See "Important Safety Information".	1
	Inspect hydraulic hoses for wear, damage, and hydraulic leaks. Replace damaged and worn hoses with genuine Kubota parts.	3
	Check initially and periodically for proper chain tension. Refer to "Drive Chain Inspection".	24
	Check all grease fittings. to make sure they have been properly lubricated. Refer to "Lubrication".	27
	Check oil level in chaincase. Make certain oil plugs are properly replaced. Refer to "Chaincase" instructions.	28
	Check initially and periodically for loose bolts and pins. Refer to "Torque Values Chart".	34
	Check air pressure in gauge wheel tires. Refer to "Tire Inflation Chart".	34

Make the following inspections after attaching the Powered Rake to the skid steer. Make certain the rake is completely stopped before continuing.

1. Inspect skid steer safety equipment to make sure it is in good working condition.
2. Carefully raise and lower attachment with the Powered Rake set at the maximum angle to ensure that the tires and other equipment on the skid steer do not contact the rake.
3. Inspect hydraulic hoses for pinch points. Reposition hoses if needed. For correct hose set-up, see "Hydraulic Motor Hose Assembly" set-up instructions on Page 11.
4. 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 Kubota parts.

Safety Information

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.

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.*
- *Always shut power machine down following the "Shutdown Procedure" provided in this manual before leaving the operator's station.*
- *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.*
- *Hydraulic fluid under high pressure will penetrate the skin or eyes causing serious injury. Wear protective gloves and safety glasses or goggles when working with hydraulics. Use a piece of cardboard or wood, rather than hands, when searching for leaks. If an accident occurs, seek immediate emergency medical care or gangrene may result. DO NOT DELAY.*
- *Do not rotate front loader hitch plate fully down. Doing so can damage hydraulic hoses and cause high pressure fluid leaks. Fluid under pressure can penetrate the skin and/or eyes.*
- *Do not become entangled in the hydraulic hoses. Tripping over hoses while entering or exiting the operator station can cause serious injury or death.*
- *Make sure hydraulic flow to the attachment does not exceed maximum rated flow listed in the specifications. Exceeding maximum flow will increase rotor speed and result in a thrown object 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.*

⚠ CAUTION

To avoid minor or moderate injury:

Keep bystanders at least 20 feet (6 m) away when operating.

IMPORTANT: Do not allow hydraulic motor hoses to become pinched between rake frame and hitch plate pivot points. For set-up instructions, see “Hydraulic Motor Hose Assembly” on page 11.

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

IMPORTANT: Immediately shut down Powered Rake and skid steer when rake is not operating properly or needs adjustment. Follow all **“Skid Steer Shutdown”** procedures below before dismounting from the skid steer.

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 and relieve all hydraulic pressure by moving both joysticks.
5. Turn ignition key off and remove to prevent unauthorized starting.
6. If included, raise seat bar and move controls until both lock.
7. Wait for all components to come to a complete stop before leaving the operator’s seat.
8. Use steps, grab-handles and anti-slip surfaces when stepping on and off the skid steer or attachment.

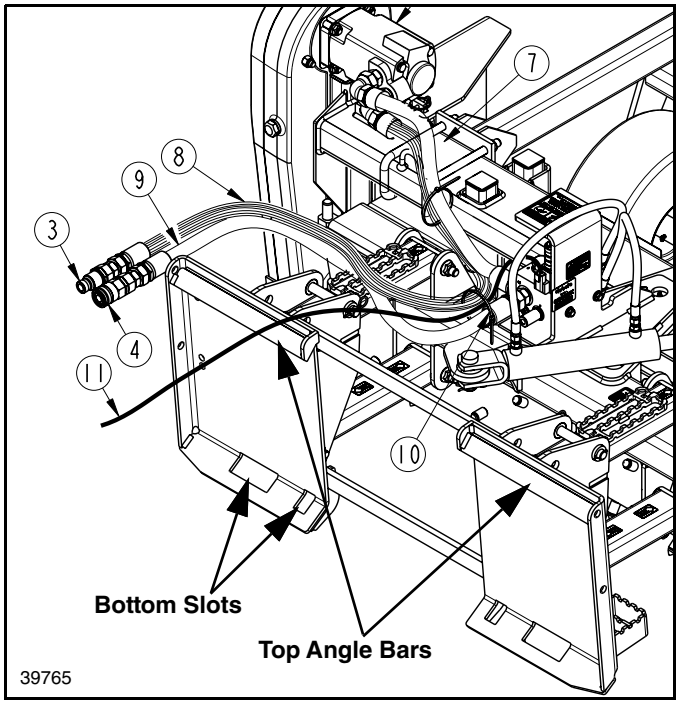
Transporting

⚠ 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.

1. 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.
2. Select a safe ground travel speed when transporting from one area to another.
3. 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.
4. Decrease transport speed when traveling over rough or hilly terrain.
5. When transporting skid steer on a trailer:
   - Use towing vehicle and trailer of adequate capacity.
   - 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.
   - Always drive up a ramp with heavy end uphill.



Unhook Powered Rake
Figure 2-1

Unhook Powered Rake

Refer to Figure 2-1:

1. Shut skid steer and Powered Rake down properly. Refer to Skid Steer Shutdown on page 18.
2. Disconnect quick release couplings (#3 & #4) from the skid steer. Coil hydraulic hoses (#8 & #9) and store them on the rake in a location where they will not become pinched or damaged while unhooking and hooking-up to the rake.
3. Unhook wire harness (#11) from the skid steer. Coil wire harness and store it on the rake in a location where it will not become pinched or damaged while unhooking and hooking-up to the rake.
4. Pull skid steer hitch lock handle(s) to remove pins from bottom slots in the rake hitch plate.
5. Return to the skid steer and raise rake off the ground approximately 6" (15.2 cm).
6. Rotate top of skid steer universal quick attach hitch forward 5-10 degrees and begin lowering rake down until front of rake is touching the ground.
7. Continue to slowly lower rake until the top angle bars and skid steer universal quick attach hitch have separated.
8. Carefully back skid steer away from the rake making sure the skid steer hitch plate is free from the rake hitch plate.

Operating Instructions

First completely familiarize yourself with the Operator's Manual. Then complete the Operator's checklist, properly attach the Powered Rake to your skid steer, and make the initial depth setting, level settings, and roller angle adjustments. If attachment is to be operated in reverse, make sure visibility to the rear of the power unit is appropriate for the attachment.

After completing the above, you will need to perform operational safety checks. Choose a work site and make any final adjustments before using your Kubota Powered Rake.

Running Operational Safety Check

It's now time for a running operational safety check. Make certain that the loader's park brake is engaged, auxiliary hydraulics are disengaged, and the Powered Rake is resting on the ground. Start the loader and back off engine rpm to approximately one-quarter throttle. Using the hydraulic lift control, lift the Powered Rake about 10" (25.4 cm) off the ground and then engage auxiliary hydraulics. Increase throttle speed if everything is running smoothly until you have reached full operating speed. Never engage the auxiliary hydraulics at full engine rpm. Damage to the rake could occur.

Transport to Work Site

To make final adjustments, choose a work site that is dry and allows you to make at least a 50 ft. (15.24 m) straight run. Raise Powered Rake 10" (25.4 cm) off the ground, disengage auxiliary hydraulics, release park brake, and travel to your starting point. Travel speed should be 3-5 mph (4.8-8.0 km/h) and rake height should be positioned for best road view.

Side Plates

Side plates are utilized to create a box blade effect when filling in low spots and depressions. This is usually done with the rake angle set at 0 degrees. When raking at an angle, return side plates to their storage location to prevent excessive side loading forces on the plates.

Lock or Unlock Parallel Arms (Optional)

If your have the optional Angle/Float Hitch, unlock parallel arms to permit them to float and allow the roller, with the aid of the caster gauge wheels, to follow the contour of the ground. Lock parallel arms to be able to apply down pressure on the roller when needed.

Operating Speed

Once at the site, idle the loader engine, engage auxiliary hydraulics, and then increase engine speed until the powered rake is at operating speed. Operating speed should not exceed maximum hydraulic flow requirements listed in specification table on page 30. Begin traveling forward while gently lowering the running Powered Rake to the ground. Make slight changes to the loader's ground speed as you travel forward to determine the desired ground finish. Generally, a slower speed results in a finer finish, while a higher speed results in a coarser finish. Excessive ground speed may result in dirt or material passing over the top of the material control blade or too much material being windrowed off to the side. Powered Rakes do not perform well in wet sticky soil and making sharp turns when in contact with the ground.

Level Powered Rake

The Powered Rake should also be set to operate level left to right. It has a tendency to go in deeper on the chaincase side (left side) because that is the heavier side. Compensate for this by changing the C-spacers on the right gauge wheel so that it is set to work ground approximately 1" (2.5 cm) deeper than the left gauge wheel.

Level rake frame from front to back by rotating the hitch plate with skid steer tilt arms.

Working Depth

Set working depth at the caster gauge wheels and not with the loader arms. Normally a 1" (2.5 cm) cultivation depth is considered ideal for a surface finish. Make adjustments to the working depth if too many rocks or excessive debris pass under the roller by changing the C-spacers on the gauge wheel spindles. Increase working depth by moving the spacers from below the support arms to above the support arms. Decrease working depth by moving the spacers from above the gauge wheel support arms to below the support arms. Apply down pressure on the rake roller when needed with the skid steer loader arms. Powered Rakes with the optional Angle/Float Hitch must have the arms locked to apply down pressure.

Material Control Blades

The hydraulic driven roller rotates in both directions for traveling both forward and backward. You can vary the effect on the surface finish by adjusting the front material control blade when traveling forward and rear material control blade when traveling backward.

The material control blade sifts out clods, rocks, and other debris as the soil passes over the top of the roller. Adjusting the blade down decreases the gap between blade and roller and will sift out more objects for a finer soil finish. Adjusting the blade up allows more clods, rocks, and debris to pass over the roller and produces a coarser soil finish.

Rake Angle

Normal operating rake angle is 15 degrees left or right. However, you may want to make adjustments to the rake angle to achieve varying effects on the surface finish. Set rake angle at 0 degrees to gather rocks and debris in front of the roller for the purpose of filling in low spots and depressions with rocks and debris.

Final Inspection

After you have traveled 50 feet (15.24 m), properly shut down the skid loader and Powered Rake to inspect the finish and determine what, if any, additional adjustments need to be made. Check for any foreign objects that may be wrapped around the roller or lodged between the studs.

Remember that the right finish is achieved through a combination of proper soil moisture conditions, operating depth, ground speed, material control blade opening and roller angle. Your Powered Raking capabilities will improve rapidly with experience.

Gauge Wheel Depth

Refer to Figure 3-1:

Move gauge wheels up or down to set working depth. Do not use skid steer to control roller height.

> **NOTE:** The gauge wheel on the chaincase side should be down approximately 1" (2.5 cm) more than the non-drive side to compensate for extra chaincase weight.
>
> **NOTE:** To remove lower spacers (#3) from gage wheel spindle (#1), rotate open end of spacer to align with notch (#2) and pull spacer from spindle.

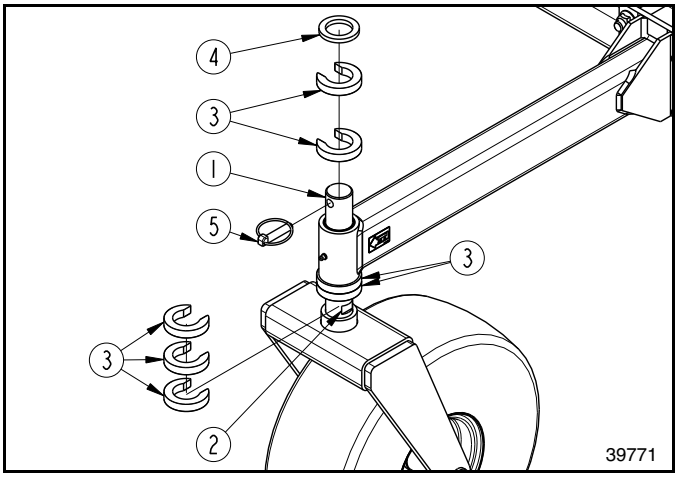
1. Remove linchpin (#5) and washer (#4).
2. Reposition spacers (#3) on spindle (#1) as follows:

   To Increase Working Depth

   Remove desired number of lower spacers (#3) from below the support arm and add to gauge wheel spindle (#1) above the support arm.

   To Decrease Working Depth

   Pull desired number of upper spacers (#3) from above the support arm and add to notch (#2) below the support arm.
3. Replace washer (#4) and secure with linchpins (#5).
4. Repeat above steps 1-3 for the other side.

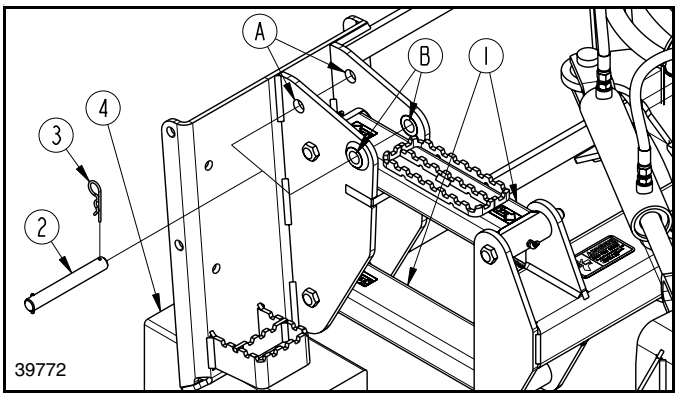


Gauge Wheel Depth Adjustment
Figure 3-1

Angle/Float Hitch (Optional)

Refer to Figure 3-2:

1. Shut skid steer down properly before dismounting. See **"Skid Steer Shutdown Procedure"** on page 20.
2. Place two solid support blocks on the ground in front of the rake hitch plate. Support blocks must be strong enough and high enough to support the roller and gauge wheels slightly off the ground with the rake hitch plate resting on the blocks.
3. Return to the skid steer. Start skid steer and raise Powered Rake up.
4. Drive forward until rake hitch plate is above support blocks (#4). Lower rake until its hitch plate is resting on the support blocks.
5. With hitch plate resting on support blocks (#4), shut skid steer down properly before dismounting.
6. Remove hairpin cotter (#3) from hitch pin (#2) on the right-hand side of the hitch plate.
7. Place pin (#2) in holes "A" to unlock parallel arms and in holes "B" to lock parallel arms. Secure pin (#2) with hairpin cotter (#3).
8. Repeat steps 6 & 7 for the left-hand side.

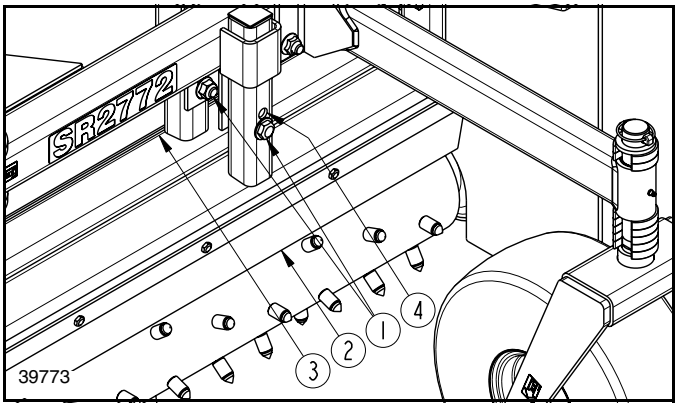


Float Hitch Adjustments
Figure 3-2

Material Control Blades

Refer to Figure 3-3:

Adjust gap opening of front material control blade (#2) or rear material control blade (#3) as follows:



Front and Rear Material Control Blade Adjustments
Figure 3-3

1. Loosening hex flange nuts (#1) for front material control blade (#2) or rear material control blade (#3).
2. Slide material control blade up or down to increase or decrease opening between blade and roller.
3. Tighten hex flange nuts (#1) to the correct torque.
4. If additional adjustment down is needed, move bolts (#1) up to hole (#4).

Rake Angle Options

The optional hydraulic system consisting of a directional valve and hydraulic cylinder that can be used to angle the rake 20° in either direction while sitting in the operator's seat. The valve allows 3 gpm (11.4 lpm) of oil to be routed from the auxiliary circuit of the skid steer loader to the hydraulic cylinder and is actuated by solenoids connected to a toggle switch in the cab.

An optional ratchet jack is available as an alternative to hydraulic angling. This ratchet jack can also be used to angle the rake manually 20° in either direction.

Hydraulic Angle System

Refer to Figure 3-4 & Figure 3-5:

The powered rake should always be operated with the roller rotating against the direction-of-travel. When traveling forward, the solenoid valve will divert oil flow to the angle cylinder and rotor motor in the correct proportions to allow both hydraulic components to continue operating while traveling. However, if raking while backing-up, the operator should stop traveling to angle the roller. This is because oil flow through the solenoid valve will not be proportioned correctly to keep the rotor motor running while diverting oil flow to angle the rake.

Refer to Figure 3-4:

Consult your Skid Steer Operator's Manual for instruction if using the 14 pin Deutsch control harness. Your skid steer manual should provide location of its control switch and how to operate the switch when angling the rake. If the rake angles in the opposite direction desired, switch plugs (#1 & #3) with solenoid connectors (#2 & #4).

Refer to Figure 3-5:

If using the Deutsch 2 pin wire harness or two eyelet wire harness, press button (#5) labeled "RIGHT" on the control box to angle the rake to the right and button (#6) labeled "LEFT" to angle the rake to the left. If the rake angles in opposite direction desired, switch plugs (#1 & #3) with solenoid connectors (#2 & #4).

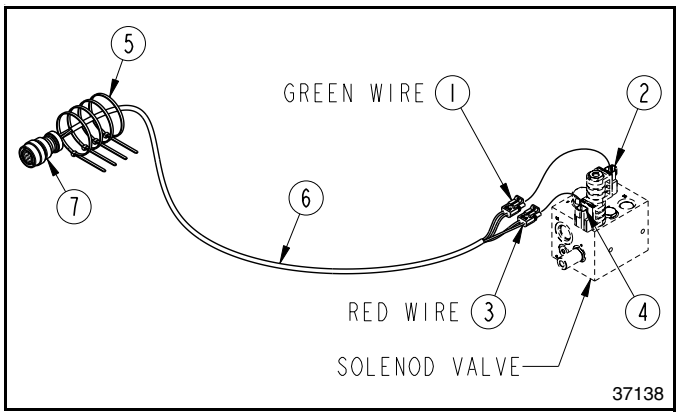
Manual Angling With A Ratchet Jack

Refer to Figure 3-6:

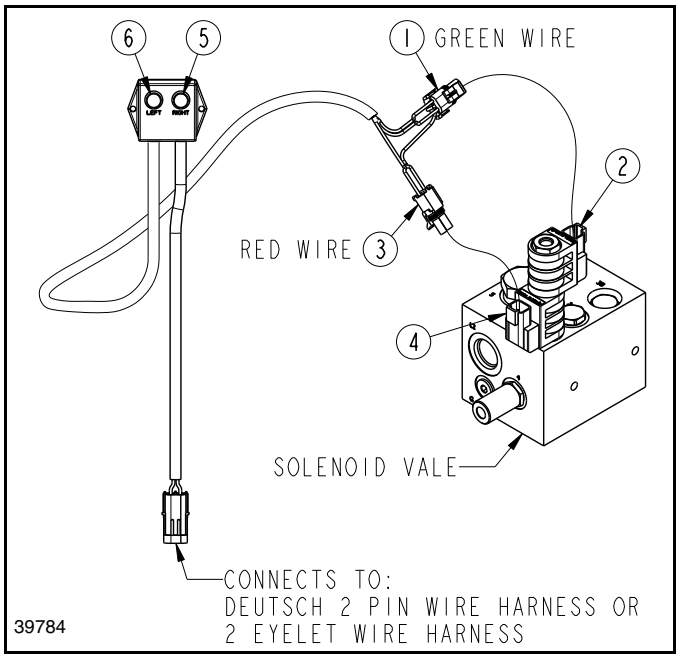
The ratchet jack is a more economical solution when the operator does not change rake angle often. The rake can be angled 20° in either direction with the ratchet jack

A Powered Rake equipped with a ratchet jack can be converted to the hydraulic angle system. See your nearest Kubota dealer should you want to convert to the hydraulic angling system.

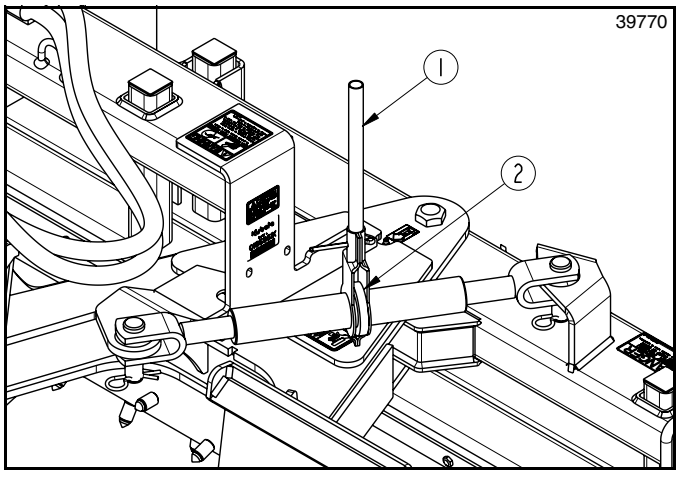
1. Shut skid steer down properly before dismounting. Refer to **"Skid Steer Shutdown Procedure"** on page 20.
2. Set ratchet lock (#2) and pump ratchet handle (#1) back and forth to angle the rake.
3. Reposition ratchet lock (#2) and pump ratchet handle (#1) back and forth to angle the rake in the opposite direction or to align the rake straight.



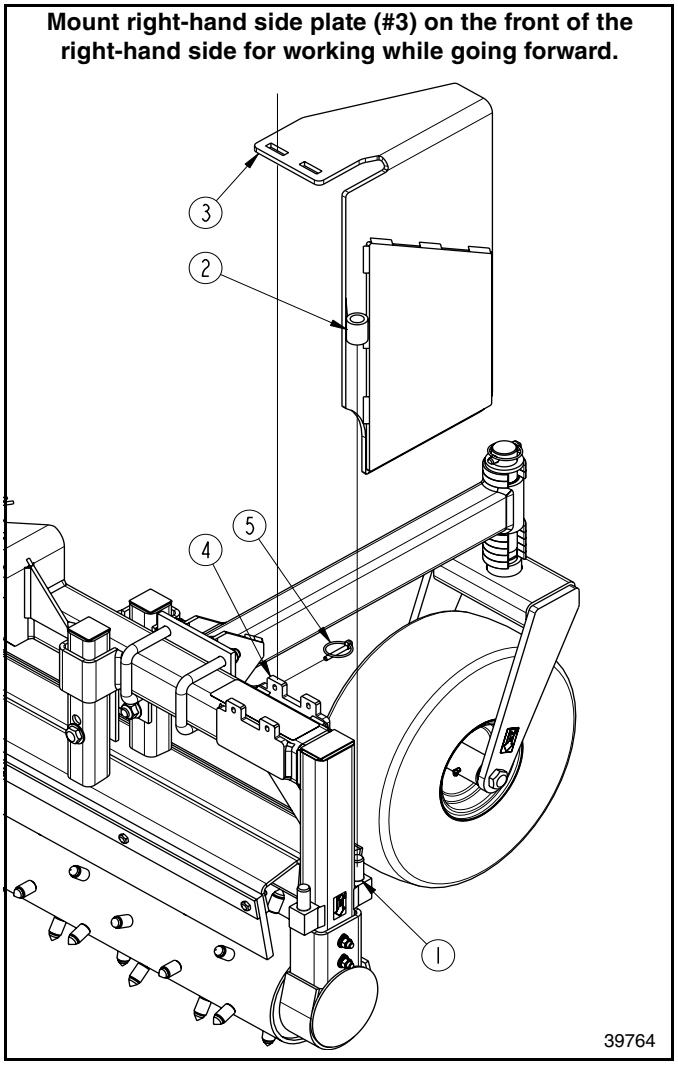
Deutsch 14 Pin Plug & Cable
Figure 3-4



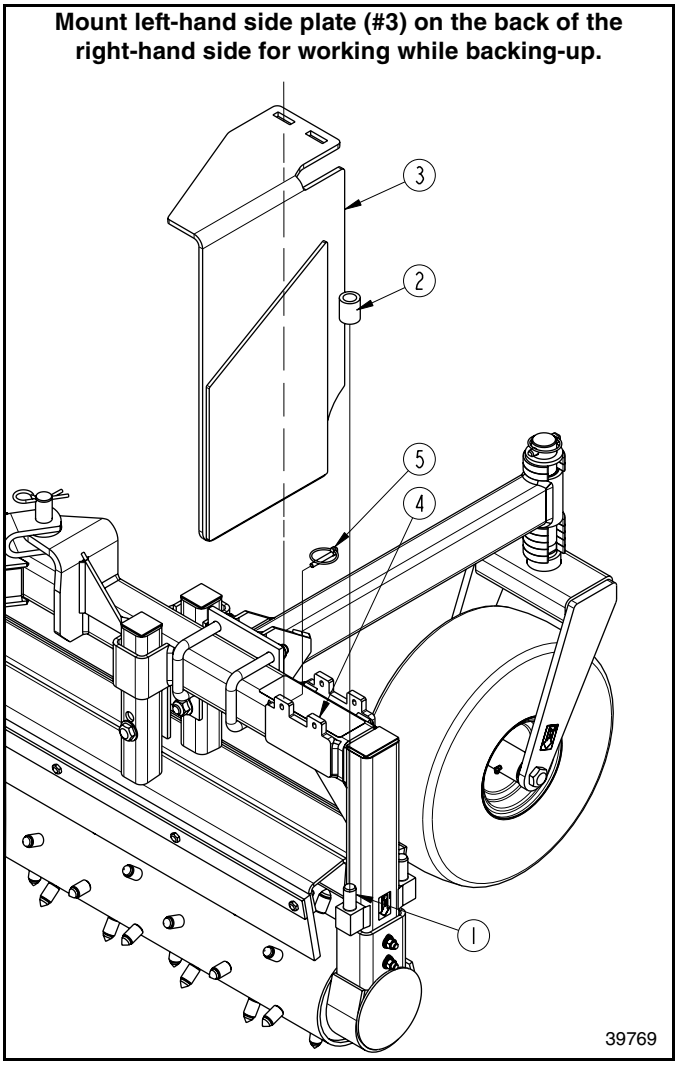
Push Button Switch Box & Solenoid Valve
Figure 3-5



Ratchet Jack Operation
Figure 3-6



Working Position of Side Plates Traveling Forward (Right-Hand Side Shown)
Figure 3-7



Working Position of Side Plates Traveling Backward (Right-Hand Side Shown)
Figure 3-8

Side Plate Positioning

Side plates are utilized to gather and keep rocks and debris in front of the roller for the purpose of distributing material over low areas while traveling forward.

Working Position Traveling Forward

Refer to Figure 3-7:

The side plates are attached on the front side to mounting tabs (#4) and pins (#1) for gathering and distributing material while traveling forward.

1. Remove linchpin (#5) and side plates (#3).
2. Install right-hand side plate (#3) on the rake's right front mounting tabs (#4) and guide (#2) over front mounting pin (#1).
3. Secure side plate (#3) with linchpin (#5).
4. Repeat steps 1 & 3 to install the left-hand side plate.

Working Position Traveling Backwards

The side plates are attached on the back side to mounting tabs (#4) and pins (#1) for gathering and distributing material while traveling backwards.

Refer to Figure 3-8:

1. Remove linchpins (#5) and side plates (#3).
2. Install left-hand side plate (#3) on the rake's right-rear mounting tabs (#4) and guide (#2) over rear mounting pin (#1).
3. Secure side plate (#3) with linchpin (#5).
4. Repeat steps 1 & 3 to install the right-hand side plate on the back of the left-hand side of the rake.

Storage Position of Side Plates

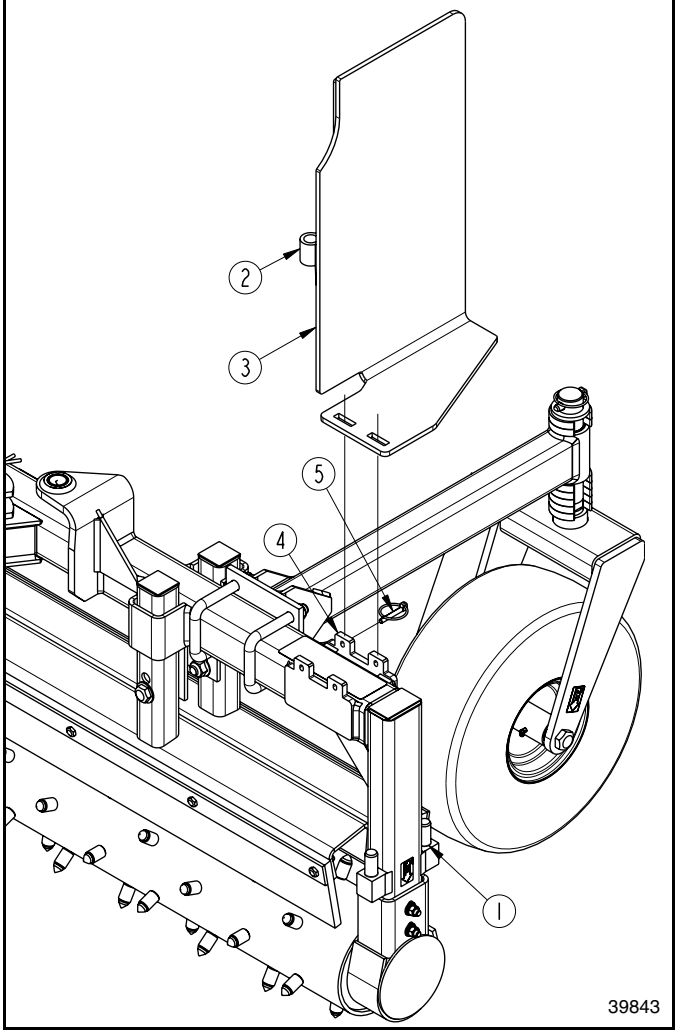
The side plates can be removed and mounted on top of the rake for storage. This is often done to complete final raking.

Refer to Figure 3-9:

Store side plates on the top of the rake frame as follows:

1. On the right-hand side, remove linchpin (#5) and side plate (#3).
2. Flip side plate (#3) upside down and install over front mounting tabs (#4) as shown.
3. Secure side plate (#3) with linchpin (#5).
4. Repeat steps 1-3 to store left-hand side plate over front mounting tabs (#4) on the left-hand side.

Store side plates (#3) mounted upside down on the top as shown



Working Position of Side Plates Traveling Backward (Right-Hand Side Shown)
Figure 3-9

Intell-Attach System™

The Intell-Attach System allows the Kubota power unit with a closed cab, hydraulic hitch, high-flow, and Telematics to intelligently recognize a Kubota by Land Pride Attachment when equipped with an Intell-Attach receiver and tag. Real time feedback between the attachment and SVL 97-3 helps the operator maximize performance and speed machine set-up.

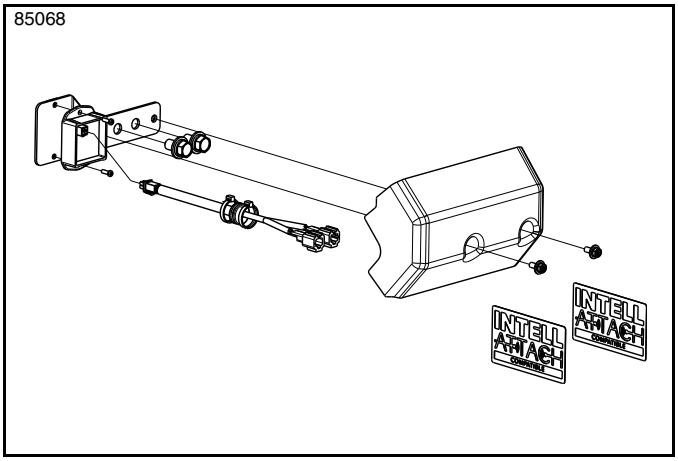
The Intell-Attach System automatically adjusts the AUX flow. This auto adjust feature prohibits high-flow when connecting to an attachment requiring standard flow.

Receiver/Cover Assembly

Refer to Figure 4-1:

The receiver is mounted on the track loader and once programmed, the communication between the receiver and tag automatically recognizes the capabilities of the attachment and adjusts the power unit to match.

RECEIVER/COVER ASM 701-256A



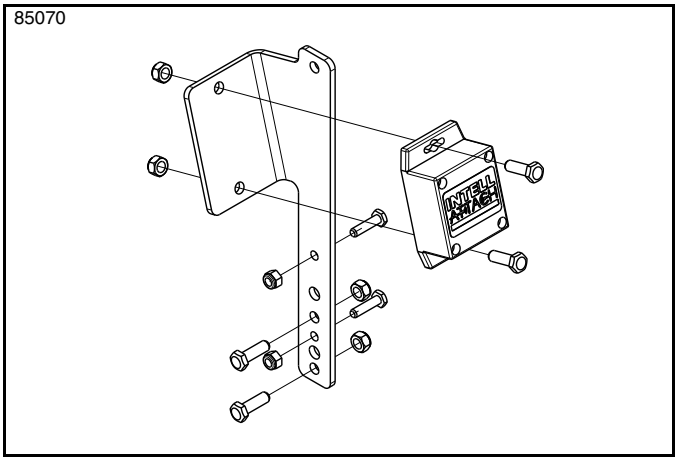
Receiver/Cover Assembly
Figure 4-1

Tag/Bracket Assembly

Refer to Figure 4-2:

The tag is mounted on the attachment and communicates using Bluetooth® wireless technology to communicate with the receiver on the track loader.

TAG/BRACKET ASM #1 . . . . . .701-253A



Tag/Bracket Assembly
Figure 4-2

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 Powered Rake 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:

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:

- *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.*
- *Allow only persons to perform maintenance on this attachment who have been properly trained in the safe operation of this attachment.*
- *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 result in the attachment falling from the loader hitch plate.*
- *Check hydraulic hoses and fittings frequently for leaks or damage. Fluid escaping under pressure can penetrate skin. Large leaks can drop the attachment.*
- *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.*

IMPORTANT: If chaincase and/or sprocket shafts are disassembled, it may be necessary to shim between the chaincase and frame tube during reassembly to properly realign the sprocket shafts. Shim Pack **314-254A** may be purchased from your nearest Kubota dealer for this purpose.

Drive Chain Inspection

Refer to Figure 5-1 on page 29:

The operator should check chain tightness after initial run-in and periodically thereafter to make sure that the drive chain is tensioned correctly.

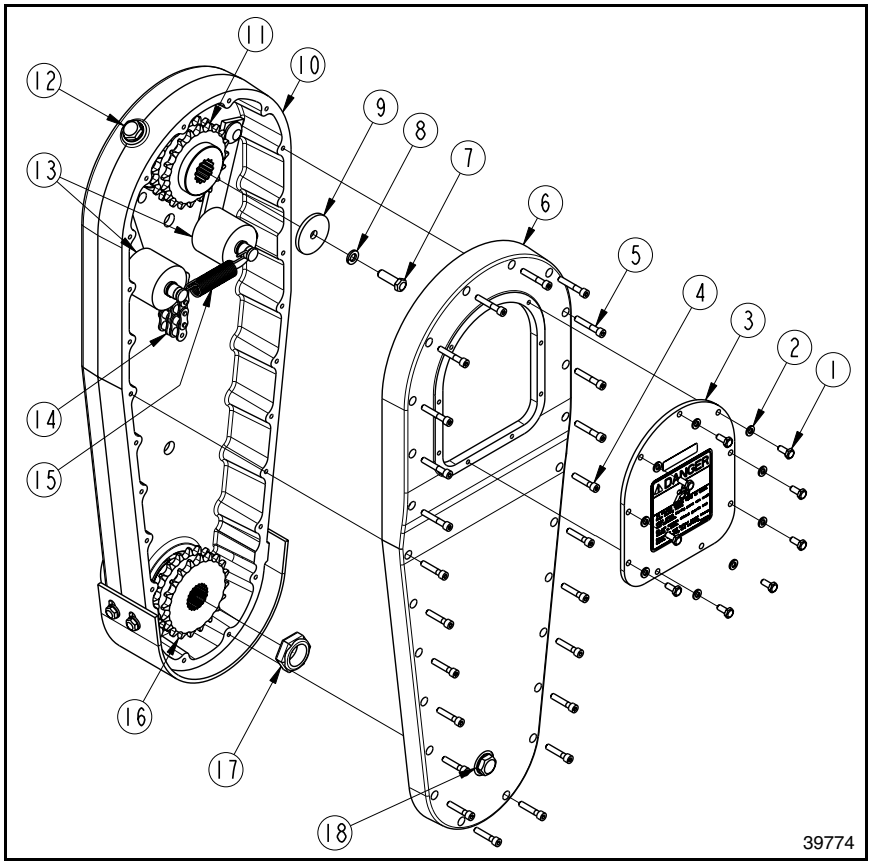
1. Check chain tension by removing hex bolts (#1), lock washers (#2), and access cover (#3) from chaincase main cover (#6).
2. Inspect double chain (#14) for tightness and excess wear. Replace worn out chain. See **"Sprocket and Chain Replacement"** on page 28.
3. If chain should become loose, either spring (#15) or double chain (#14) needs to be replaced. See **"Sprocket and Chain Replacement"** on page 28.
4. Apply 1/8" (3 mm) bead of sealant (Part No. 821-049C) to the main cover (#6) where its surface makes contact with access cover (#3). Install access cover (#3) and secure with lock washers (#2) and 1/4"-20 x 5/8" GR5 hex bolts (#1). Torque hex bolts to the correct torque.

Sprocket and Chain Replacement

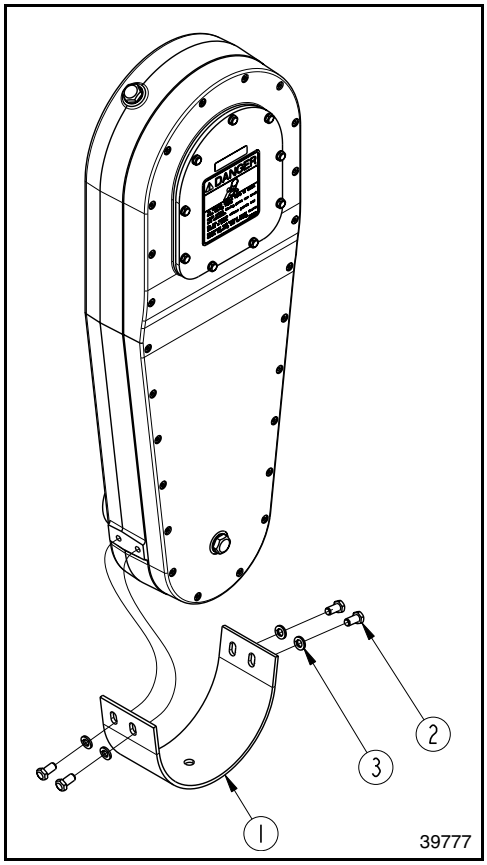
Refer to Figure 5-1 on page 29:

NOTE: Oil in chaincase! Be prepared to capture oil when taking off main cover (#6).

1. Place an oil catch pan under the chaincase.
1. Remove 1 1/4" long hex socket cap screws (#4) and 1 1/2" long hex socket cap screws (#5).
2. Remove main cover plate (#6).
3. Loosen chain tension by removing spring (#15) from idler arms (#13).
4. Remove roller chain (#14). Inspect roller chain for wear and replace if needed.
5. If top sprocket (#11) needs replacing, remove bolt (#7), lock washer (#8), special flat washer (#9), and sprocket (#11).
6. Install new sprocket (#11) on hydraulic motor output shaft. Secure sprocket with special flat washer (#9), lock washer (#8), and 3/8"-16 GR5 bolt (#7). Tighten bolt to the correct torque.
7. If bottom sprocket (#16) needs replacing, remove nut (#17) and sprocket (#16).
8. Install new sprocket (#16) on roller input shaft and secure with 1 1/8"-12 nylon insert jam nut (#17). Tighten nut to the correct torque.
9. Install new/existing double roller chain (#14) making sure it is over sprocket (#11), under sprocket (#16), and between the two idler rollers (#13).
10. Install spring (#15) by attaching it to both ends of idler arms (#13).
11. Turn rake roller several turns and observe chain to make sure everything is working properly.



Drive Chain Adjustment
Figure 5-1



Chaincase Skid Shoe Replacement
Figure 5-2

12. Clean seal contact edges and apply 1/8" (3 mm) bead of sealant (Part No. 821-049C) on the chaincase edge where main cover (#6) contacts chaincase (#10).
13. Install main cover (#6) with 1/4" -20 x 1 1/4" GR2 hex socket cap screws (#4) and 1/4" -20 x 1 1/2" GR2 hex socket cap screws (#5). Tighten hex socket cap screws to the correct torque.
14. Remove fill plug (#12) and oil level plug (#18).
15. Fill chaincase with recommended lubrication. Refer to **"Chaincase Lubricant"** on page 32.
16. Install and tighten oil plugs (#12 & #18).

Chaincase Skid Shoe Replacement

Refer to Figure 5-2:

NOTE: Skid shoe protects chaincase from wear. Inspect skid shoe frequently and replace as needed.

1. Replace chaincase skid shoe (#1) by removing four 3/8" x 3/4" hex head bolts (#2) and lock washers (#3).
2. Replace worn skid shoe with new shoe.
3. Secure skid shoe (#1) with 3/8" lock washers (#3) and 3/8" x 3/4" GR5 hex head bolts (#2).
4. Torque hex bolts to the correct torque.

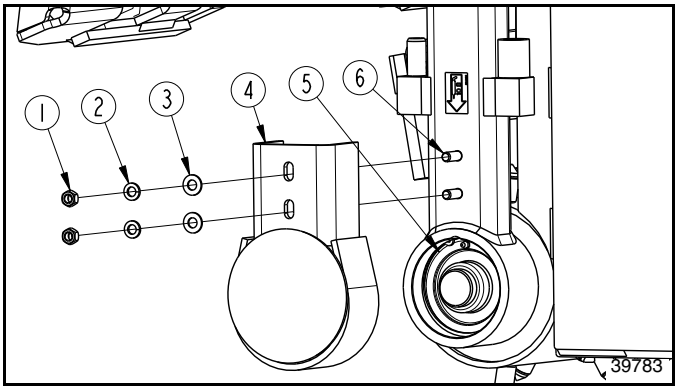
Change Chaincase Lubricant

Refer to Figure 5-1:

Change lubricant every 800 hours or seasonally, whichever comes first.

NOTE: Lubricant in chaincase! Be prepared to capture lubricant when taking off main cover (#6).

1. Place an oil catch pan under the chaincase.
2. Remove 1 1/4" long hex socket cap screws (#4) and 1 1/2" long hex socket cap screws (#5).
3. Remove main cover plate (#6) to drain oil.
4. Clean seal contact edges and apply 1/8" (3 mm) bead of sealant (Part No. 821-049C) on the chaincase edge where main cover (#6) contacts chaincase (#10).
5. Install main cover (#6) with 1/4" -20 x 1 1/4" GR2 hex socket cap screws (#4) and 1/4" -20 x 1 1/2" GR2 hex socket cap screws (#5). Tighten hex socket cap screws to the correct torque.
6. Remove fill plug (#12) and oil level plug (#18).
7. Fill chaincase with recommended lubrication. Refer to **"Chaincase Lubricant"** on page 32.
8. Install and tighten oil plugs (#12 & #18).



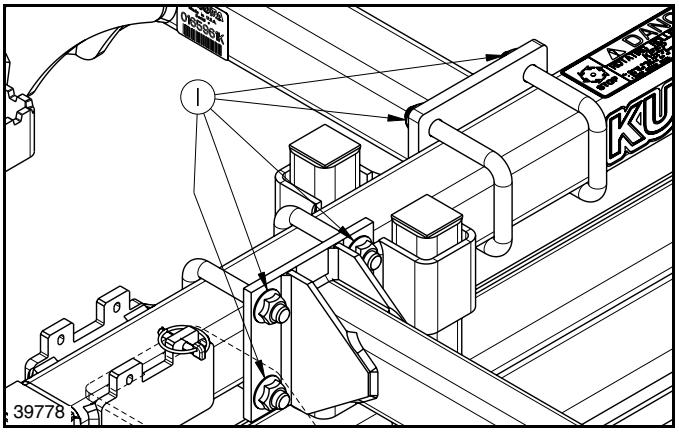
Non-Drive Skid Shoe and Rotor Bearing
Figure 5-3

Non-Drive Skid Shoe and Bearing

Refer to Figure 5-3:

NOTE: The non-drive skid shoe helps keep rotor bearing out of dirt. Inspect skid shoe bottom and end cover for wear and replace as needed.

1. Remove hex nut (#1), lock washer (#2), flat washer (#3), and skid shoe (#4).
2. Lubricate bearing (#5). Refer to **"Non-Drive Roller End Bearing"** on page 31 for type of lubrication and frequency.
3. Inspect skid shoe and end cover (#4) for wear. Replace skid shoe (#4) as needed to keep dirt away from bearing.
4. Replace existing/new skid shoe (#4) with existing 3/8"-16 x 3" hex head bolts (#6), flat washers (#3), lock washers (#2), and hex nuts (#1). Tighten hex nuts to the correct torque.



Gauge Wheel U-Bolts
Figure 5-4

Gauge Wheel U-Bolts

Refer to Figure 5-4:

Torque all gauge wheel u-bolt nuts (#1) to 76 ft-lb (103 Nm) after the first day of use and every 100 hours thereafter.

Long-Term Storage

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

DANGER

To avoid serious injury or death:

Always 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.

1. Clean off any dirt and grease that may have accumulated on the rake and moving parts. Scrape off compacted dirt from the roller and then wash surface thoroughly with a garden hose.
2. Check the roller spikes for wear and replace roller and/or spikes if necessary.
3. Inspect the Powered Rake for parts out of adjustment, loose, and damaged or worn.
   - Make required adjustments.
   - Tighten all loose hardware.
   - Replace damaged and worn parts as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your Kubota dealer for touch-up paint. Paint is available in aerosol can, quarts, and gallon sizes. See chart below.

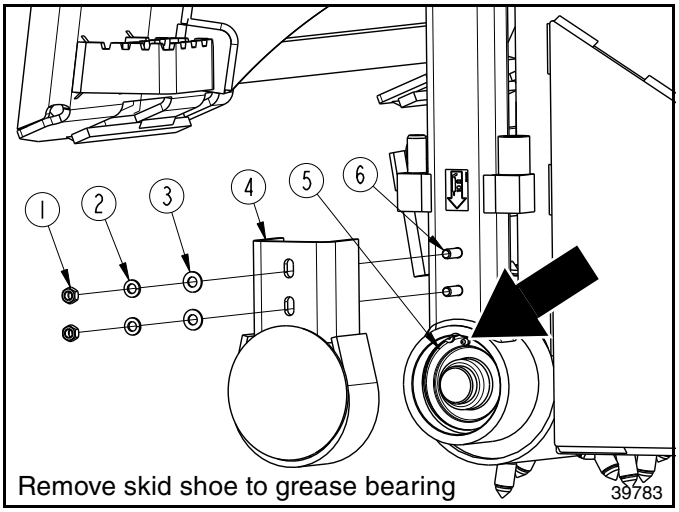
Touch-Up Paint

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. Lubricate as noted in **"Lubrication Points"** on page 31.
7. A light coat of oil or grease may be applied to the roller and to any exposed hydraulic cylinder rods to minimize oxidation.
8. When needed, Change oil in the chaincase. See **"Change Chaincase Lubricant"** on page 29.
9. Store Powered Rake on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer rake life.

Lubrication Points

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



Remove skid shoe to grease bearing 39783

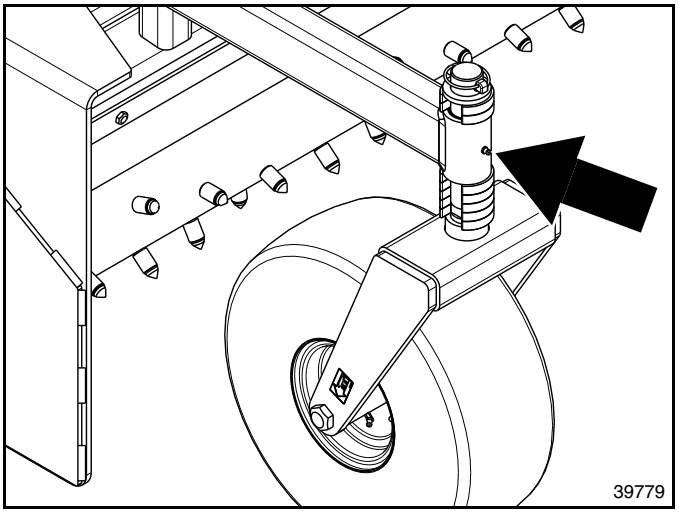
10 Hours

Non-Drive Roller End Bearing

1 - Zerk (Behind skid shoe cover)

Type of Lubrication: Multi-Purpose Grease
(Remove Skid Shoe to grease. Refer to **"Non-Drive Skid Shoe and Bearing"** on page 30)

Quantity: Add grease until grease begins to emerge.


39779

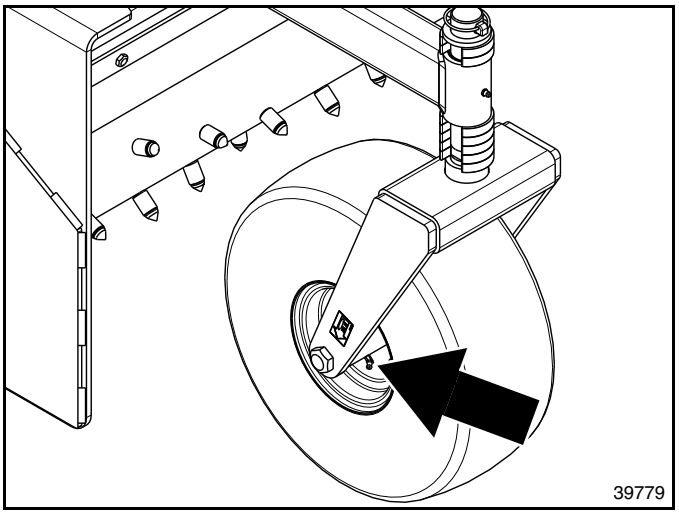
25 Hours

Gauge Wheel Yoke Spindle

2 - Zerks (One zerk per gauge wheel)

Type of Lubrication: Multi-Purpose Grease

Quantity: Add grease until grease begins to emerge.


39779

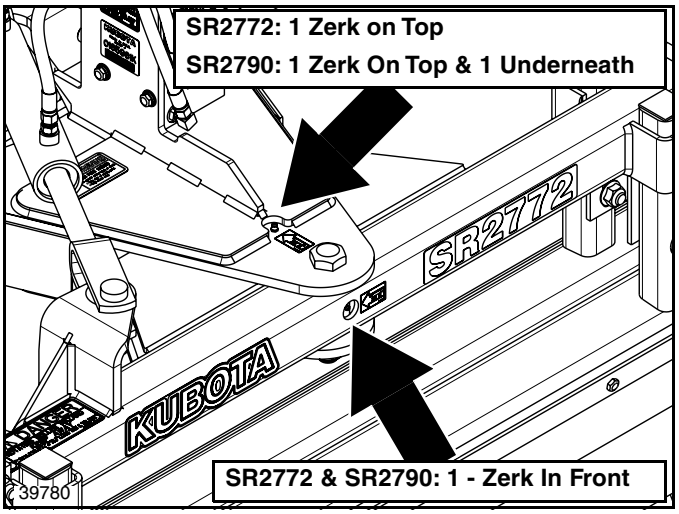
25 Hours

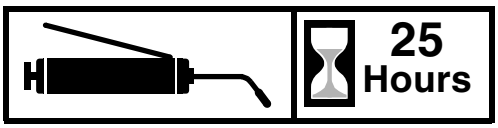
Gauge Wheel Axle

2 - Zerks (One zerk per gauge wheel)

Type of Lubrication: Multi-Purpose Grease

Quantity: Add grease until grease begins to emerge.



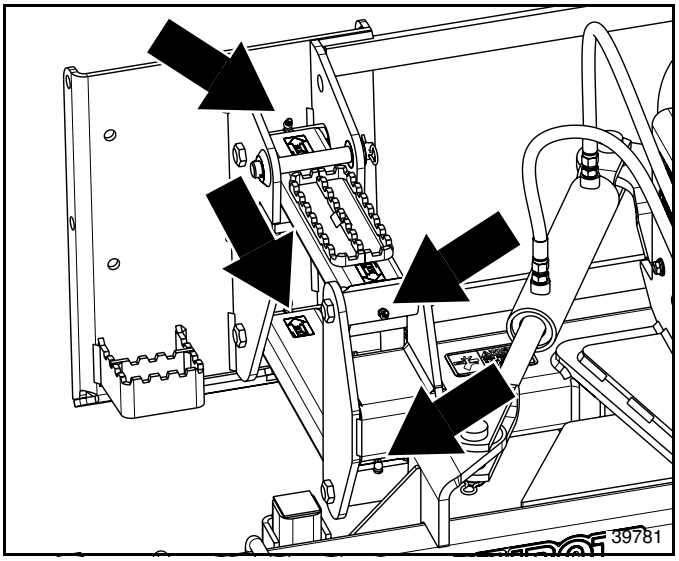


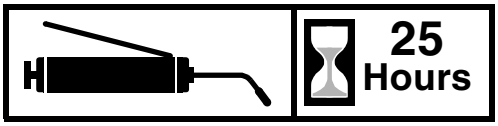
Angle Pivot

SR2772: 2 - Zerks (1 on top and 1 in front)
SR2790: 3 - Zerks (1 on top, 1 underneath, & 1 in front)

Type of Lubrication: Multi-Purpose Grease

Quantity: Add grease until grease begins to emerge.



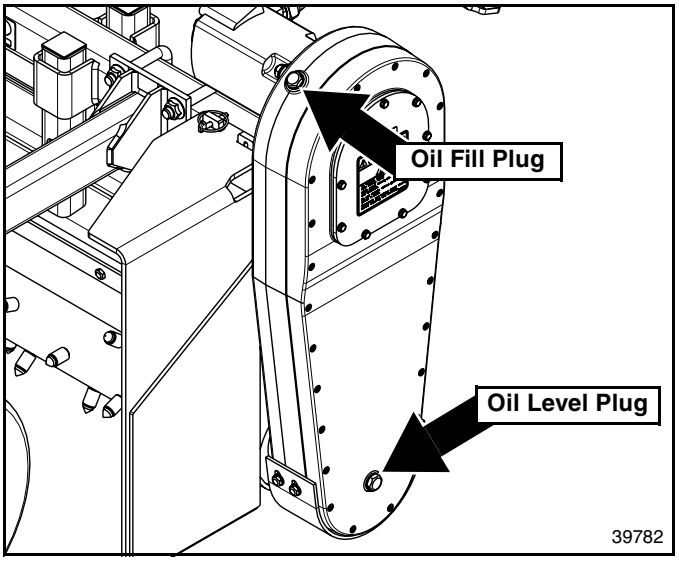


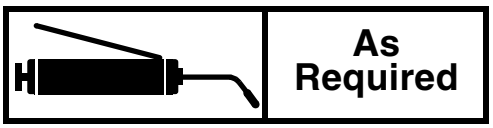
Parallel Arm Pivot Pins (Float Option)

8 - Zerks

Type of Lubrication: Multi-Purpose Grease

Quantity: Add grease until grease begins to emerge.





Chaincase Lubricant

IMPORTANT: Check lubricant level in the chaincase after the machine has run long enough to heat the lubricant to a fluid state. Level the machine and remove lower level plug. Heated lubricant should reach the bottom of the plug hole. If needed, add recommended lubricant through the level hole or fill hole. Tighten all removed plugs when done.

Type of Lubrication:
Shell Gadus S2 V220 00 flowable grease or equivalent
Land Pride #821-086C, 32oz. (.95 L) bottle

Check gear lube level daily. Change gear lube every 800 hours or seasonally, whichever comes first. Refer to **"Change Chaincase Lubricant"** on page 29.

Quantity when empty: 40 0z (1,18 L)
Quantity when low: Flowable grease should reach bottom of level plug hole when in the liquid state.

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SR27 Series Skid Steer Powered Rakes

Specifications & Capacities		
Model Numbers	**SR2772**	**SR2790**
Hydraulic flow requirements	12 - 24 gpm (45.4 - 90.8 lpm)	15 - 24 gpm (56.8 - 90.8 lpm)
Hydraulic pressure range	2250 to 3500 psi (15.51 to 24.13 MPa)	2250 to 3500 psi (15.51 to 24.13 MPa)
Non-angled working width	72" (1.83 m)	90" (2.29 m)
Angled working width	67 5/8" (1.72 m)	84 1/2" (2.15 m)
Overall angled width	77 1/2" (1.97 m)	94 1/2" (2.40 m)
Weight without options: With float **Without float**	1,005 lbs (455.9 kg) 988 lbs (448.1 kg)	1,119 lbs (507.6 kg) 1,102 lbs (499.9 kg)
Direction of travel	Bi-directional	
Material control blade	2 each - 1/2" x 5" (1.3 cm x 12.7 cm) urethane	
Spike roller	9 3/8" (23.8 cm) Dia. with 3/4" x 1 1/2" (1.9 cm x 3.8 cm) carbide tipped studs	
Roller speed	Variable from 200 - 350 rpm	
Roller side bearings	Roller Bearings	
Drive chain	#50 Double continuous roller chain, high tensile, enclosed in oil bath	
Side plates	Standard, Removable with Storage Rack	
Gauge wheels / depth control	2 Each 16.5" x 6.5" air tires w/ sealant and 3/4" (19 mm) roller bearings and spacer height adjustment	
Skid shoes	Replaceable	
Chaincase Lubrication type **Lubrication capacity**	Shell Gadus S2 V2200 00 flowable grease or equivalent 40 oz (1.18 L)	
Options		
Hitch Angle hitch **Angle/float hitch**	Available Available	
Angle actuator for Hydraulically **angling 20° left & right Manually**	2” x 8” Cylinder with solenoid valve ratchet jack	
Wire harness for Kit #323-094A **solenoid hook-up Kit #323-096A** **Kit #323-097A**	14 Pin Connect 2 Pin connect with 2 button switch Battery connect with 2 button switch	

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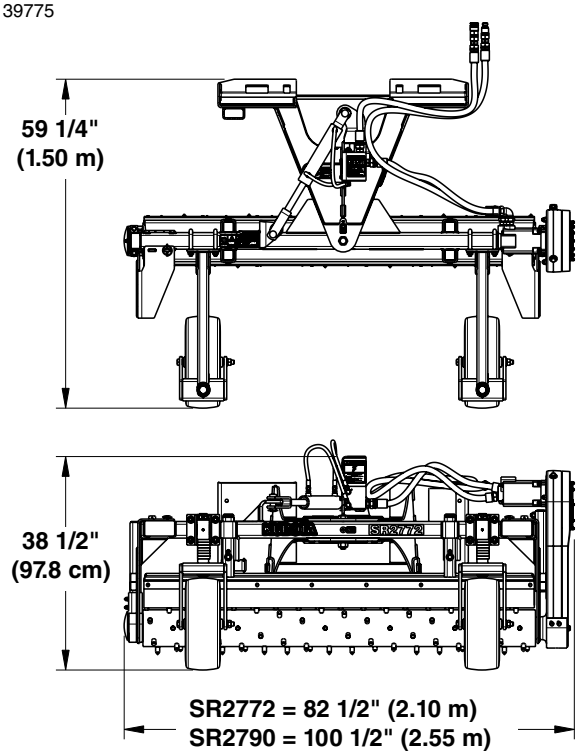
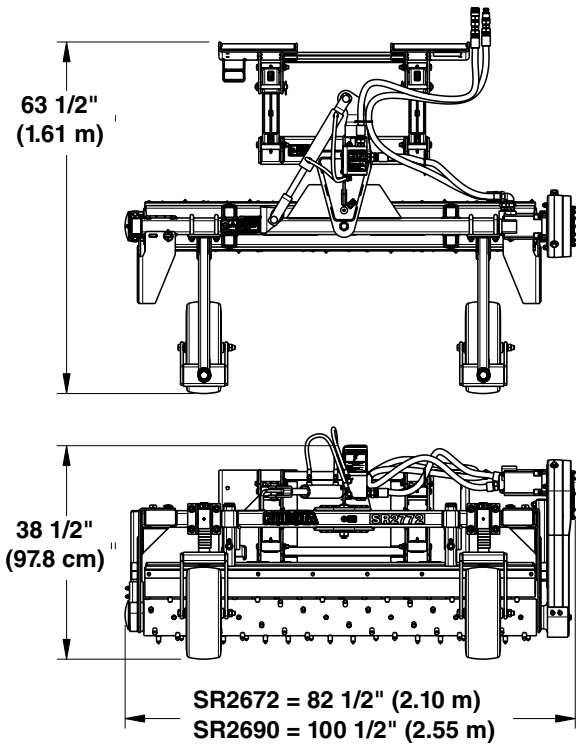


With Angle Hitch Option



With Angle/Float Hitch Option

SR27 Series Skid Steer Powered Rakes

Features	Benefits
Universal quick attach hitch	Hitch fits with new and late model skid steers.
72" (1.83 m) & 90" (2.29 m) Working width	Will cover tracks of different skid steers.
Hitch options: Angle hitch only	Economical to purchase. Angling windrows large rocks and debris to one side for easy collection. Non-floating hitch allows down pressure to be applied while raking.
Angle/float hitch	Has all the benefits of the angle hitch plus the parallel arms, when placed in float, allows the gauge wheels and rake to float with the contour of the ground.
Angle options: Hydraulic actuator	Allows operator to change rake angle from the seat.
Manual actuator	Priced right for operators who seldom change rake angle.
Hydraulic motor 12.5 & 15 cu. in. displacement (204.8 & 245.8 cc)	Able to handle high torque loads in heavy conditions.
Wire harness Options:	
14 pin connect	Connects to a Deutsch 14 pin outlet plug usually located on the loader arm.
2 pin connect with switch	Connects to a Deutsch 2 pin outlet plug located behind the driver's seat.
Battery connect with switch	Connects to the skid steer battery.
72" (1.83 m) = 3" x 3" x 1/4" Tube frame 90" (2.29 m) = 6" x 3" x 1/4" Tube frame	Superior in strength.
Angling adjustment: 20 degrees left & right	Angling allows proper flow of material wanting to be windrowed to allow for easy collection of large rocks and debris.
3/4" x 1 1/2" Carbide tipped stud roller	Carbide tipped studs are very tough, used in the mining industry, this offers a long life to the studs. Studs can be replaced one at a time.
16.5" x 6.5" Gauge wheels with sealant	Easy to adjust vertically to set working depth. Has tall and wide tires that keep turning in fluffy soil. Sealant helps seal against punctures.
Side plates with storage	Side plates can be used to hold dirt to aid in filling low spots. Easily store the side plates on the Powered Rake so that they are always with the Rake when needed.
Two material control blades	Material control blades determine what size of material to let pass through the roller and what size to move out. Two blades allow for forward and reverse rotation of the roller.
Bi-directional roller	Enables more complete finish and control.
Variable roller speed (200 to 350 rpms)	Variable roller speed is controlled by the skid steer hydraulics and can be used in tight areas to lessen the possibility of flying debris.
#50 Double continuous roller chain	Double chain can take the fluctuation loads from the roller due to varying ground conditions.
Cast Iron chaincase housing	Strong enough to protect chain in harsh conditions.
Drive chain enclosed in oil bath	A small amount of oil keeps the chain and sprockets lubricated to keep abrasion to a minimum.
Replaceable skid shoes	Skid shoes protect larger and vital parts of the unit. As they wear due to soil contact, they can easily be replaced.

Troubleshooting Chart

Problem	Cause
Machine makes intermittent clicking noise	Check for damaged sprocket and replace if necessary.
	Check for worn drive chain and replace if necessary.
Rake angles wrong direction when pushing control box buttons	Refer to Figure 1-6 on page 17. Switch plugs (#1 & #3) with solenoid wires (#2 & #3).
Roller will not turn	Hydraulic valve on skid steer loader not engaged.
	Relief valve setting on skid steer loader not properly adjusted. See skid steer loader manual.
	Worn, damaged, insufficient, or inadequate hydraulic pump.
	Insufficient oil in system.
	Worn or damaged housing.
	Air in hydraulic hoses.
	Broken hose.
	Loose or damaged hoses.
	Obstruction between roller and material control blade.
	Drive chain is off.
	Loose or damaged connections.
Operating depth insufficient	Raise gauge wheels.
	Increase skid steer rpm.
	Clean roller.
Roller gouging on the end	The gauge wheel on chaincase side should be approximately 1" lower than the non-drive side gauge wheel for consistent leveling.
	Set gauge wheel depth.
	Correct air pressure in gauge wheels.
Too much dirt going into the windrow or dirt going over the top of the material control blade	Reduce ground speed.
	Raise material control blade.
	Lower gauge wheels.
Too many rocks passing between material control blade and the roller	Lower material control blade.
Roller balling up with soil	Wait until soil dries.
Powered Rake bumping on ground	Clean roller.
	Increase roller speed if roller is turning slow. Decrease roller speed if roller is turning fast.
Roller angling opposite of switch	Move wire on top solenoid to bottom solenoid and wire on bottom solenoid to top solenoid.

Torque Values Chart for Common Bolt Sizes

Bolt Size (inches)	Bolt Head Identification Grade 2		Grade 5		Grade 8	
in-tpi [1]	N · m [2]	ft-lb [3]	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12
1/4" - 28	8.5	6	13	10	18	14
5/16" - 18	15	11	24	17	33	25
5/16" - 24	17	13	26	19	37	27
3/8" - 16	27	20	42	31	59	44
3/8" - 24	31	22	47	35	67	49
7/16" - 14	43	32	67	49	95	70
7/16" - 20	49	36	75	55	105	78
1/2" - 13	66	49	105	76	145	105
1/2" - 20	75	55	115	85	165	120
9/16" - 12	95	70	150	110	210	155
9/16" - 18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" - 18	150	110	230	170	325	240
3/4" - 10	235	170	360	265	510	375
3/4" - 16	260	190	405	295	570	420
7/8" - 9	225	165	585	430	820	605
7/8" - 14	250	185	640	475	905	670
1" - 8	340	250	875	645	1230	910
1" - 12	370	275	955	705	1350	995
1-1/8" - 7	480	355	1080	795	1750	1290
1-1/8" - 12	540	395	1210	890	1960	1440
1-1/4" - 7	680	500	1520	1120	2460	1820
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

Bolt Size (Metric)	Bolt Head Identification 5.8 Class 5.8		8.8 Class 8.8		10.9 Class 10.9	
mm x pitch [4]	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
M 5 X 0.8	4	3	6	5	9	7
M 6 X 1	7	5	11	8	15	11
M 8 X 1.25	17	12	26	19	36	27
M 8 X 1	18	13	28	21	39	29
M10 X 1.5	33	24	52	38	72	53
M10 X 1.25	35	26	53	39	76	56
M12 X 1.75	58	42	91	67	125	93
M12 X 1.5	60	44	95	70	130	97
M12 X 1	90	66	105	77	145	105
M14 X 2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	215	160
M16 X 2	145	105	225	165	315	230
M16 X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24 X 3	480	355	760	560	1050	780
M24 X 2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30 X 2	1060	785	1680	1240	2320	1710
M36 X 3.5	1730	1270	2650	1950	3660	2700
M36 X 2	1880	1380	2960	2190	4100	3220

[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)

Tire Inflation Chart

Tire Size	PSI
16.5 x 6.5 2- Ply	32

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

Hydraulic Motor: Two years Parts and Labor

Hydraulic Cylinder: One year Parts and Labor

Roller: Considered a wear item

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

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

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

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

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

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

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

Model Number _____ **Serial Number** _____

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