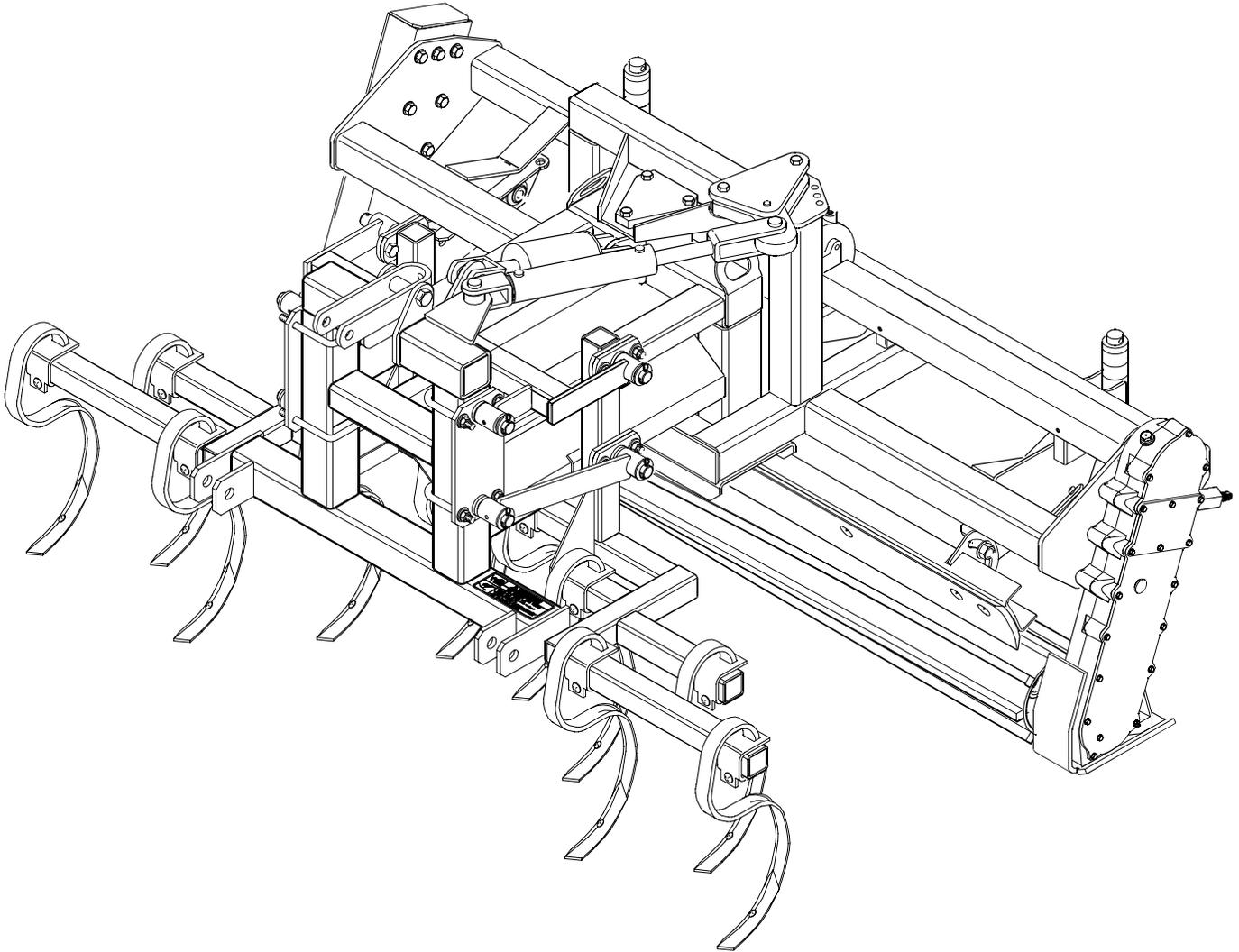


Powered Rakes

PR2572 & PR2596



10592

314-132M Operator's Manual



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

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



Important Safety Information	1	Section 4: Optional Equipment	16
Safety at All Times	1	Section 5: Maintenance & Lubrication . .	17
Look For The Safety Alert Symbol	1	Maintenance	17
Safety Labels	4	Storage	17
Introduction	7	Drive Chain Maintenance	17
Using This Manual	7	Sprocket and Chain Replacement	17
Terminology	7	Bottom and Top Seal Installation	18
Definitions	7	Friction Clutch PTO	18
Owner Assistance	7	2-Plate Slip Clutch	19
Serial Number Plate	7	Disassembly	19
Further Assistance	7	Assembly	19
Section 1: Assembly & Set-up	8	Lubrication Points	20
Tractor Requirements	8	Double Joint Zerk	20
Gauge Wheel and Frame Assembly	8	Driveline U-Joints	20
Tines and Tine Frame Assembly	9	Driveline Shaft	20
Shearing Hardware Assembly	11	Gearbox Gear Lube	20
Tine Lift Assembly	11	Pivot Bearings	21
Angling Assembly	11	Gauge Wheel Spindle	21
Tractor Hookup	11	Gauge Wheel	21
Driveline Installation	12	Drive Chain	21
Section 2: Operating Procedures	13	Tine Lift Arms	22
Transporting	13	Gauge Wheel Spindle	22
Operating Checklist	13	Section 6: Specifications & Capacities .	23
Operating Instructions	13	Section 7: Troubleshooting	24
Section 3: Adjustments	14	Section 8: Appendix	25
Setting Depth and Leveling	14	Torque Values Chart	25
Leveling Left-To-Right	14	Tire Inflation Chart	25
Leveling Front-To-Rear	14	Notes	26
Setting The Depth	14	Warranty	27
Drive Chain Adjustment	14		
Material Control Blade Adjustment	15		

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Important Safety Information

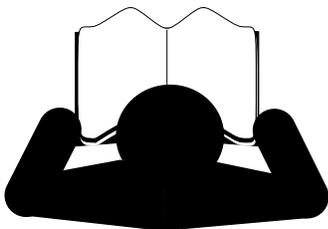
These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

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

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

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



Look For The Safety Alert Symbol

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

Be Aware of Signal Words

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

DANGER

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

WARNING

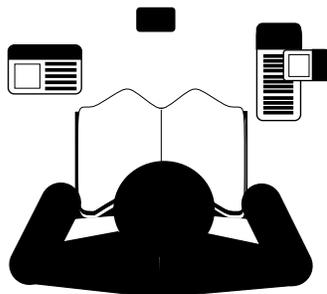
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION

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

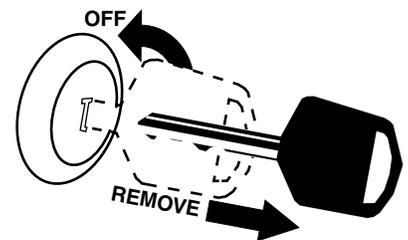
For Your Protection

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



Shutdown and Storage

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

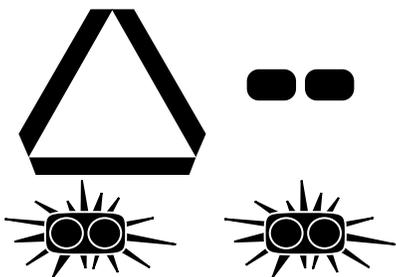


Important Safety Information

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

Use Safety Lights and Devices

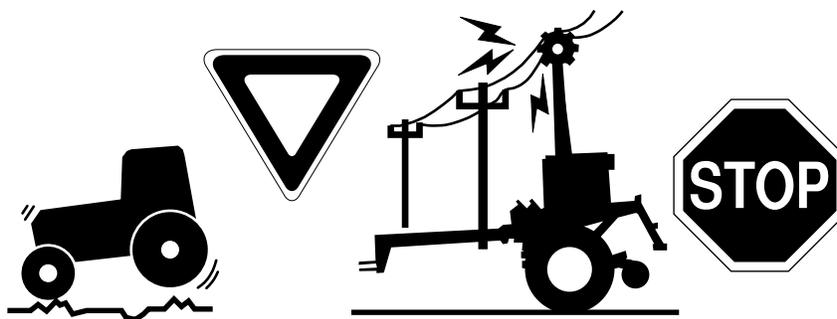
- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with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



Transport Machinery Safely

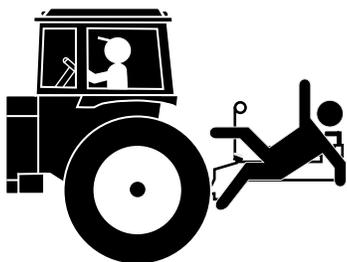
- ▲ Comply with state and local laws.
- ▲ Maximum transport speed for implement is 20 mph. **DO NOT EXCEED.** Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset.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

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



Keep Riders Off Machinery

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



Practice Safe Maintenance

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

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

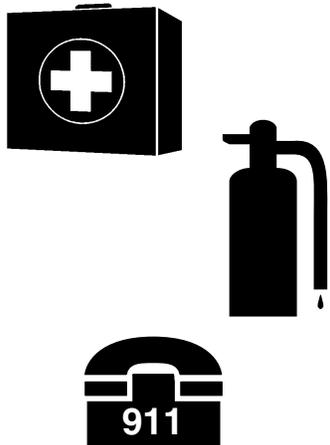


Important Safety Information

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

Prepare for Emergencies

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



Wear Protective Equipment

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



Tire Safety

- ▲ Tire changing can be dangerous and should be performed by trained personnel using the correct tools and equipment.
- ▲ 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.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.



Avoid High Pressure Fluids Hazard

- ▲ Escaping fluid under pressure can penetrate the skin causing serious injury.
- ▲ Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.



Important Safety Information

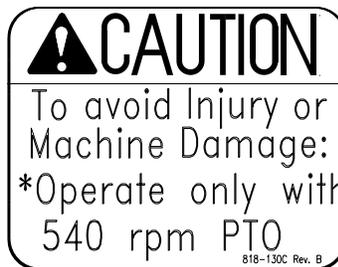
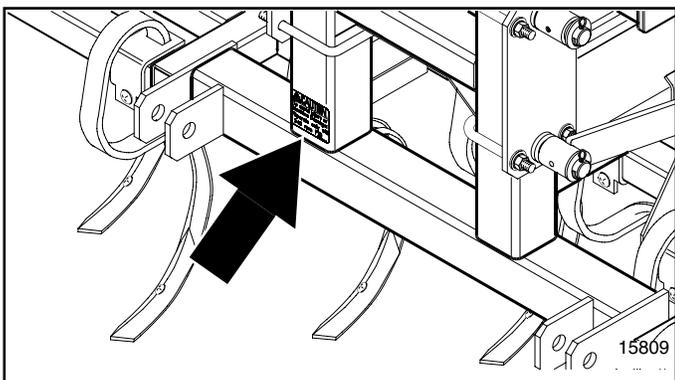
Safety Labels

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

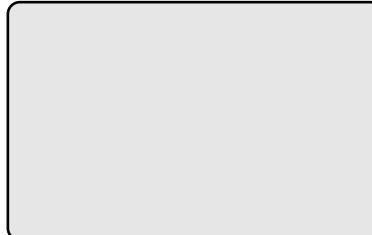
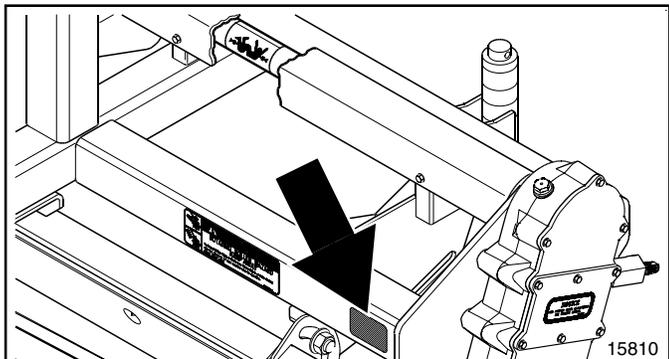
1. *Keep all safety labels clean and legible.*
2. *Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer or visit our dealer locator at landpride.com.*
3. *Some new equipment installed during repair requires safety labels to be affixed to the replaced component as*

specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.

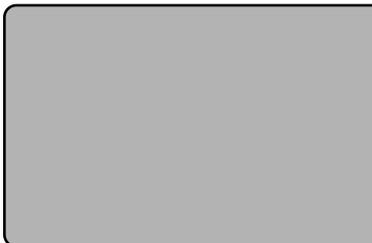
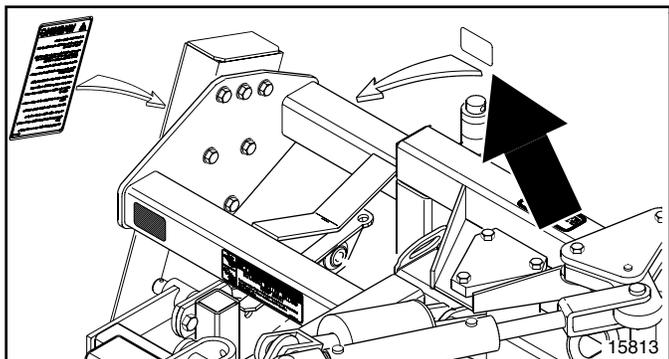
4. *Refer to this section for proper label placement.*
To install new labels:
 - a. *Clean the area the label is to be placed.*
 - b. *Spray soapy water on the surface where the label is to be placed.*
 - c. *Peel backing from label. Press firmly onto the surface.*
 - d. *Squeeze out air bubbles with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



818-130C
Caution: 540 RPM

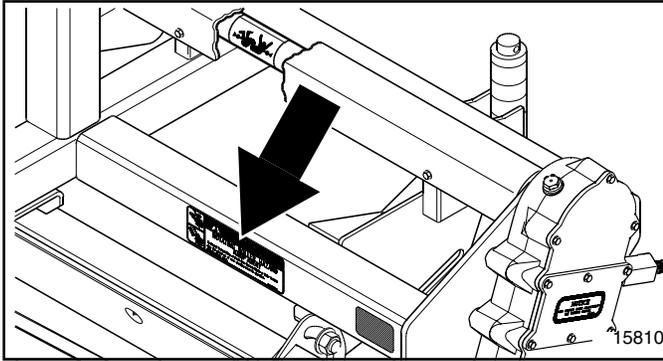


818-229C
Amber Reflector (Both Sides)



818-230C
Red Reflector (Both Sides)

Important Safety Information



DANGER

ROTATING ROLLER HAZARD

KEEP AWAY

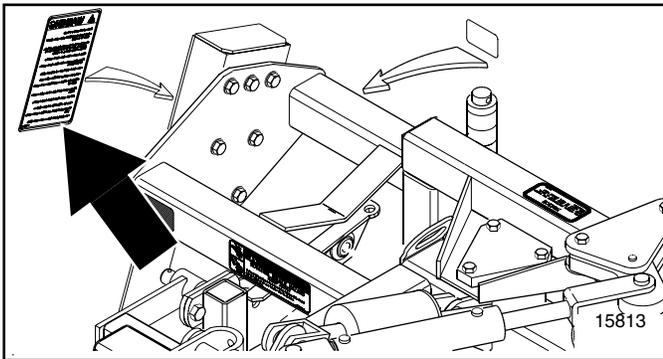
To Prevent Serious Injury or Death from Thrown Objects or Roller Contact:

- Do Not stand on or near machine when in operation.
- Keep others away.

818-254C Rev. B

818-254C

Danger: Rotating Roller Hazard (Both Sides)



WARNING

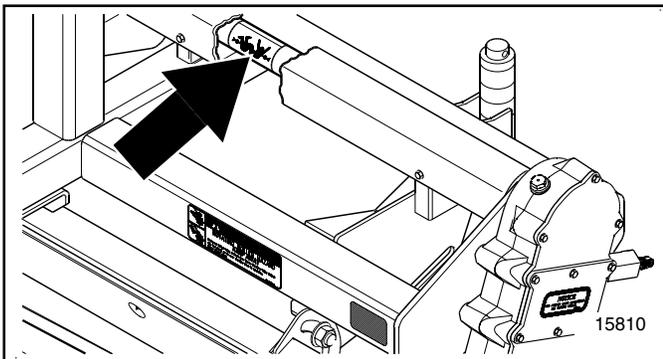
To prevent Serious Injury or Death:

- Read Owner's Manual BEFORE using machine. (Contact Dealer for manuals.)
- Lower Power Rake to the ground, stop engine, set brake, remove key, and wait for all moving parts to stop BEFORE servicing, repairing, or adjusting.
- Keep Away from Power Rake when in operation.
- Keep others away from Power Rake when in operation. No riders allowed.
- Know how to stop tractor and equipment quickly.
- Ballast power unit per tractor's owner's manual.
- NEVER allow children or unqualified persons to operate equipment.
- Decrease speed when turning and use caution on uneven terrain.
- DO NOT operate Power Rake in transport position.
- Keep ALL safety shields and devices in place.
- Keep hands, feet, hair, and clothing away from moving parts.
- Escaping hydraulic fluid can cause serious injury.

818-255C Rev. A

818-255C

Warning: General Safety



DANGER

GUARD MISSING
DO NOT OPERATE

DANGER

GUARD MISSING
DO NOT OPERATE

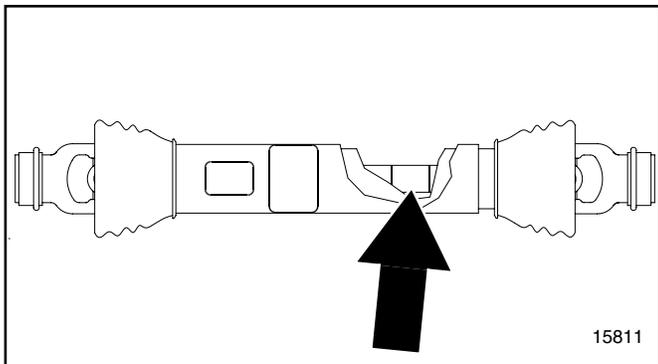
DANGER

818-540C

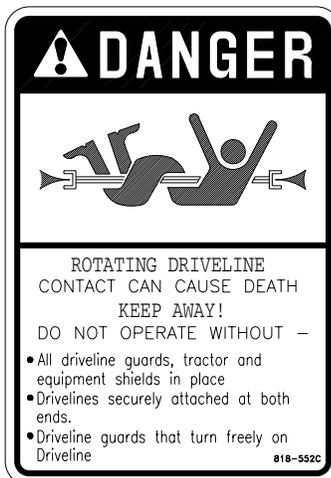
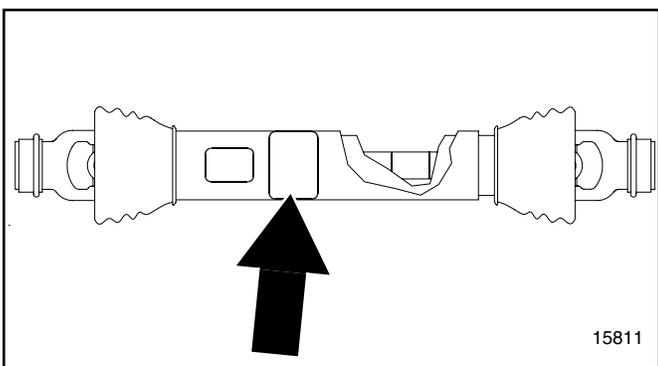
818-540C

Danger: Guard Missing

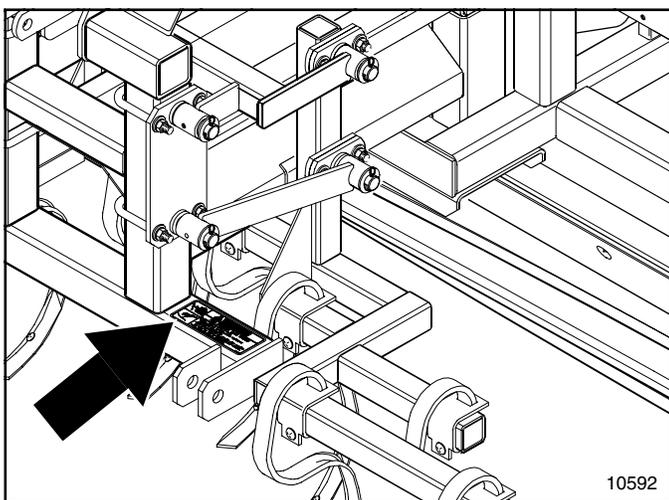
Important Safety Information



818-540C
 Danger: Guard Missing



818-552C
 Danger: Rotating Driveline



838-094C
 Warning: Hydraulic Pressure

Introduction

Land Pride welcomes you to the growing family of new product owners.

This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

The parts on your SR25 Series Powered Rake have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Powered Rake require replacement parts go to your Land Pride Dealer.

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 or printed from the Land Pride Service & Support Center by your dealer.

Terminology

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

Definitions

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

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

Owner Assistance

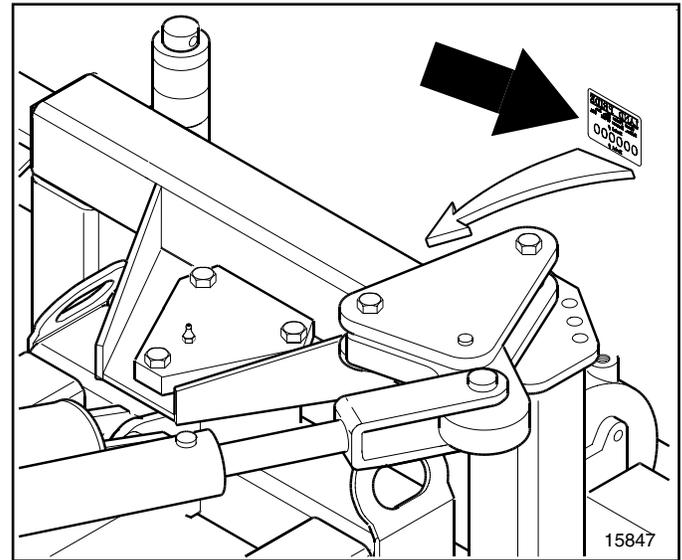
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the SR25 Series.

The parts on your SR25 Series Powered Rake have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Powered Rake require replacement parts go to your Land Pride Dealer.

Serial Number Plate

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



Serial Number Plate Location

Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new SR25 Series. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

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

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

E-mail address
lp servicedept@landpride.com

Section 1: Assembly & Set-up

Tractor Requirements

This powered rake is designed with a 3-Point category I hitch. Horse power rating of tractor should not exceed 50 PTO horse power on all PR2572 & PR2596 Powered Rakes.

IMPORTANT: In order to maintain steering control, ballast may have to be added to the front end of your tractor. To determine whether or not to add ballast, refer to your tractor operator's manual.

CAUTION

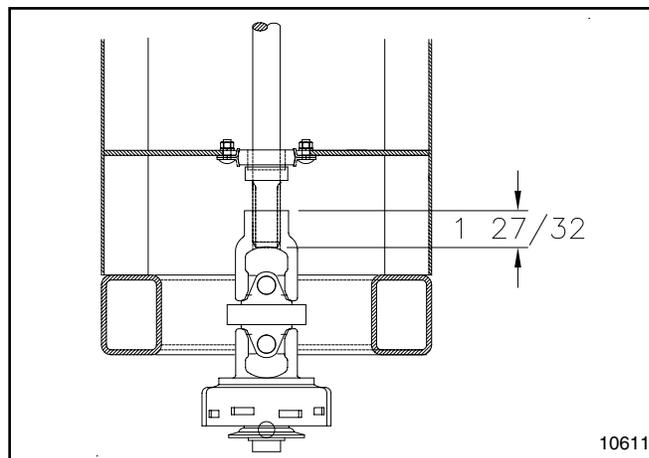
DO NOT OVER SPEED PTO OR MACHINE DAMAGE MAY RESULT. THIS POWERED RAKE IS DESIGNED TO BE USED WITH A TRACTOR USING A 540 RPM REAR PTO.

Gauge Wheel and Frame Assembly

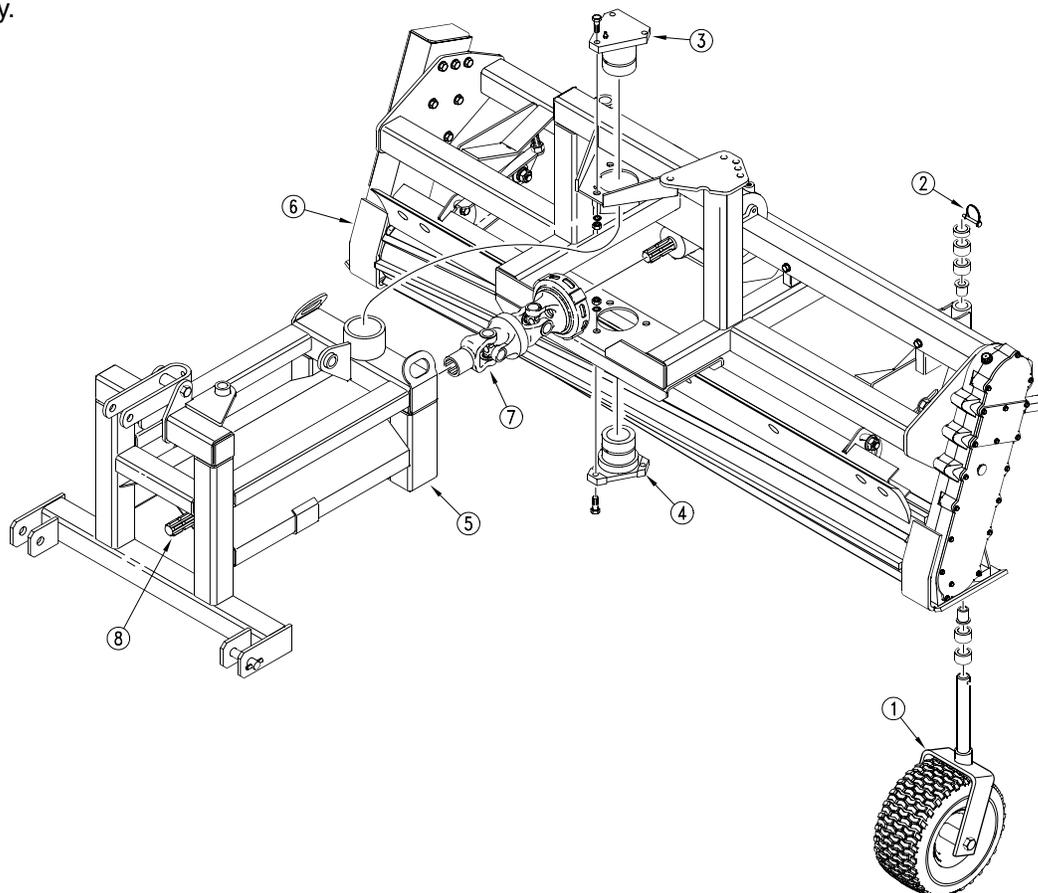
Refer to Figure 1-1:

1. Install the rear gauge wheels (#1) to the rear frame (#6) as shown. Secure with the wire pins (#2).
2. Remove the main pivot castings (#3) and (#4) from the rear frame (#6).
3. Install the front frame (#5) to the rear frame (#6) using the pivot castings that were removed previously.

4. Remove the friction clutch (#7) that is assembled to the front of the front frame drive shaft (#8). (It is assembled here for shipping only.) Assemble the friction clutch to the rear of the front frame drive shaft and gearbox as shown. Refer to Figure 1-2



**Friction Clutch Alignment
Figure 1-2**



**Gauge Wheel and Frame Assembly
Figure 1-1**

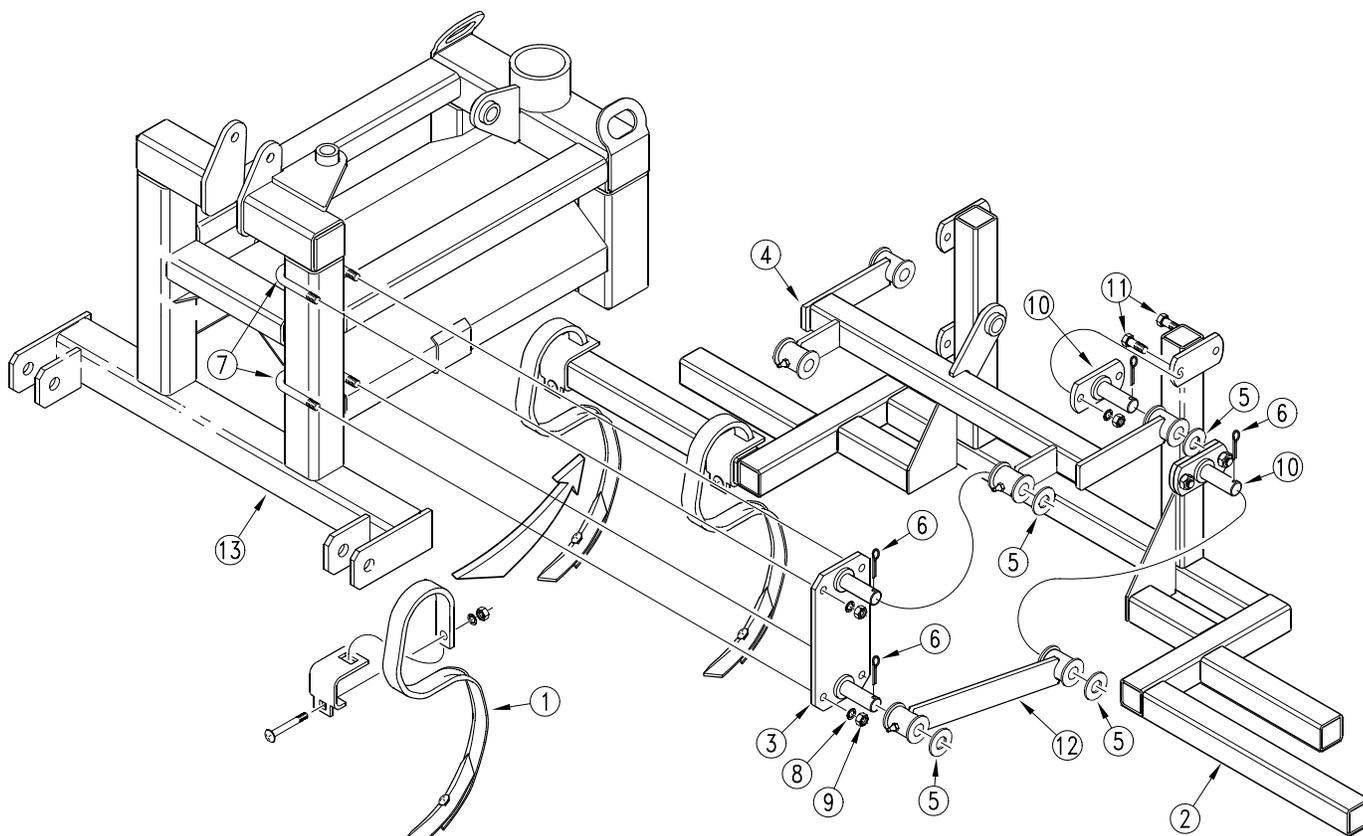
Section 1: Assembly & Set-up

Tines and Tine Frame Assembly

NOTE: If your powered rake is not equipped with the optional tine package then skip this assembly procedure.

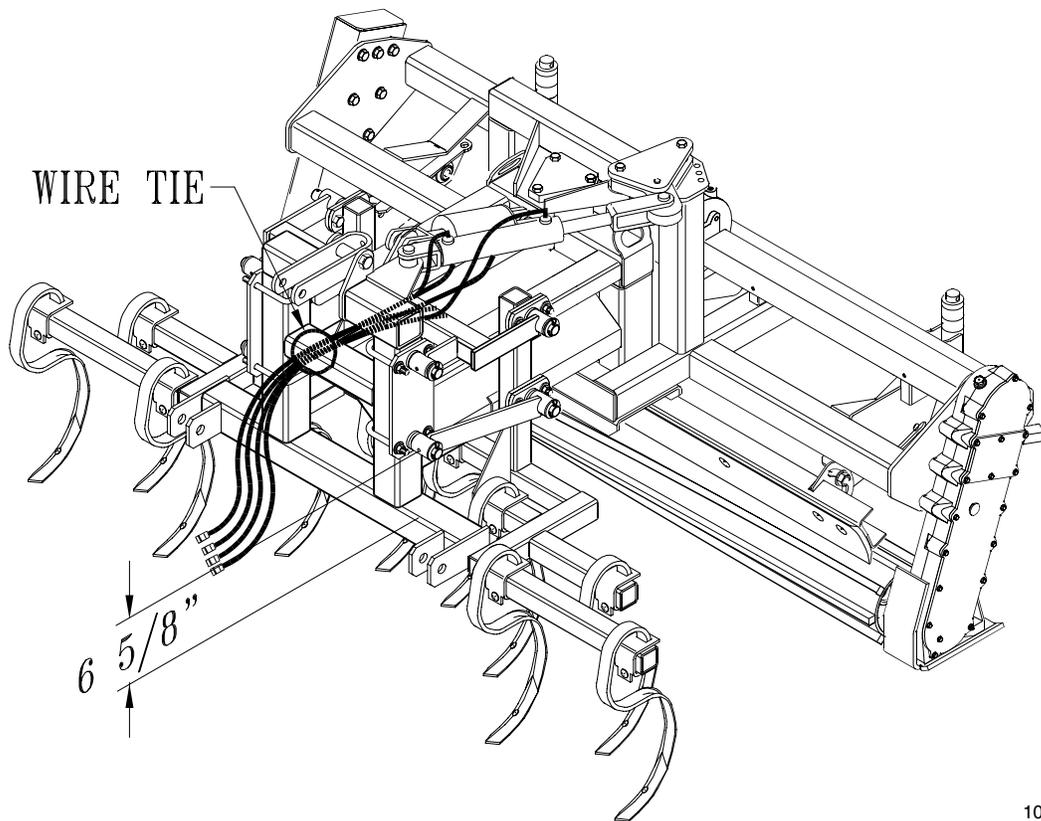
Refer to Figure 1-3:

1. Mount the tines (#1) to the tine frame (#2) as shown. For proper location and alignment of tines refer to Figure 1-5.
2. Attach the front tine mounts (#3) to the top tine lift arm (#4) and secure with 1" flatwashers (#5) and cotter pins (#6).
3. Mount the front tine mounts (#3) to the front frame (#13) with the 1/2" u-bolts (#7) 1/2" lockwashers (#8) and 1/2" nuts (#9). For proper alignment refer to Figure 1-4.
4. Attach two of the rear tine mounts (#10) to the top tine lift arm (#4) and secure with 1" flatwashers (#5) and cotter pins (#6).
5. Attach the other two rear tine mounts (#10) to the tine frame (#2) with 1/2" lockwashers (#8) and 1/2" nuts (#9).
6. Install the tine frame assembly from step #10 to the top tine lift arm (#4) using the 1/2" bolts (#11), 1/2" lockwashers (#8) and 1/2" nuts (#9).
7. Install the bottom tine lift arms (#12) to the tine frame (#2) and secure with the 1" flatwashers (#5) and cotter pins (#6).



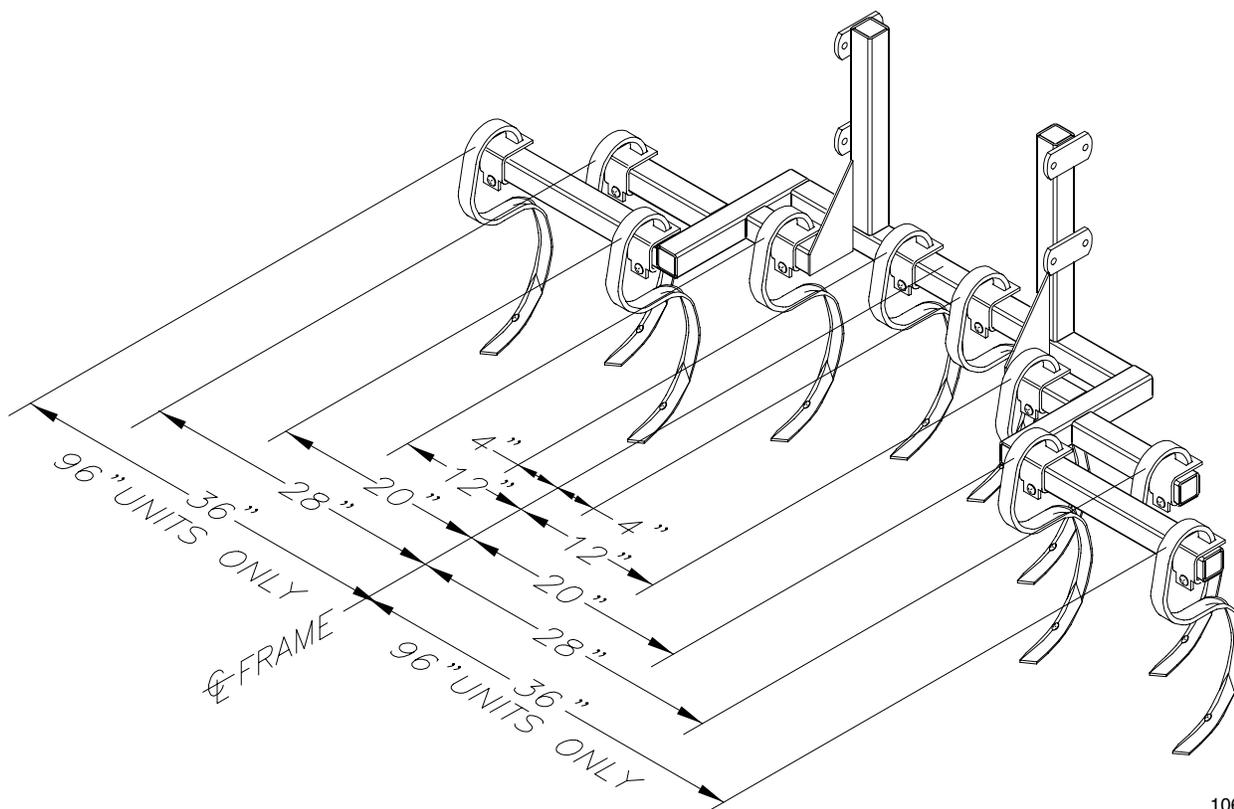
**Tines and Tine Frame Assembly
Figure 1-3**

Section 1: Assembly & Set-up



10666

Lift Arm Location and Hose Routing
Figure 1-4



10666

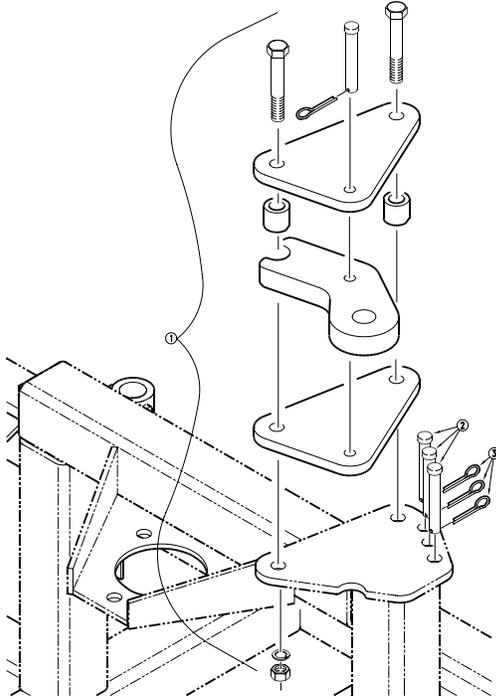
Tine Locations and Alignment
Figure 1-5

Section 1: Assembly & Set-up

Shearing Hardware Assembly

Refer to Figure 1-6:

Install shearing hardware bag (#1) as shown. Install the three extra pins (#2) into the three pin storage holes on the frame and secure with the cotter pins (#3).



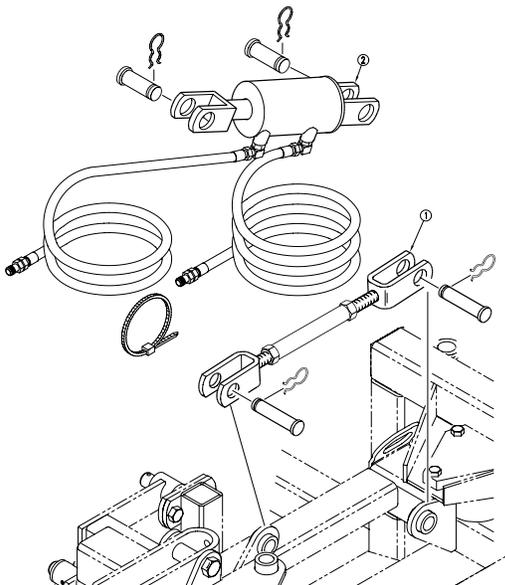
15827

Shearing Hardware Assembly
Figure 1-6

Tine Lift Assembly

Refer to Figure 1-7:

Install the tine lift turnbuckle assembly (#1) or the optional hydraulic cylinder (#2), as shown.



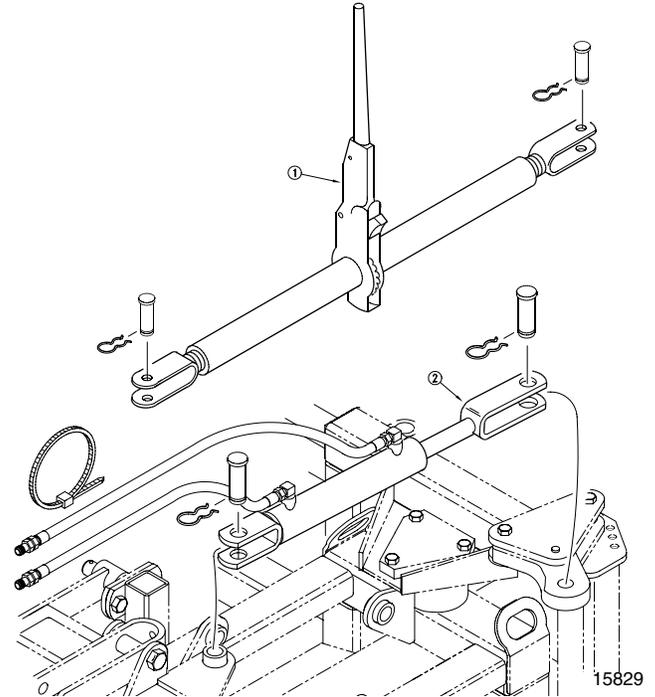
15828

Tine Lift Assembly
Figure 1-7

Angling Assembly

Refer to Figure 1-8:

Install the manual angling turnbuckle (#1) or the optional hydraulic cylinder (#2) as shown.

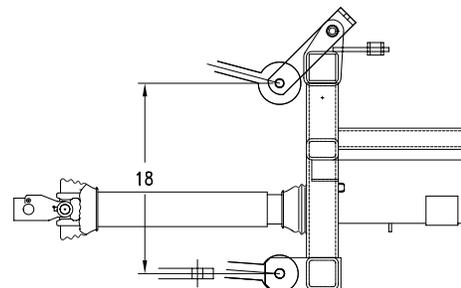


15829

Angling Assembly
Figure 1-8

Tractor Hookup

1. When using tractors with multi-speed PTO, be certain PTO is set for 540 RPM.
2. Back tractor up to powered rake until 3-Point links are aligned with lower hitch lugs on powered rake.
3. Secure the tractor's 3-Point lower links to the lower hitch lugs using 7/8" diameter hitch pins.
4. Secure the tractor's top link to the powered rake upper floating hitch using a 3/4" diameter hitch pin.
5. Level the powered rake by raising or lower the tractor's lower arms as necessary, then adjust the tractor's top link to place the upper hitch pin 18" vertically above the lower hitch pins as shown in Figure 1-9 to allow the powered rake to float.



11537

Tractor Hookup
Figure 1-9

Section 1: Assembly & Set-up

Driveline Installation

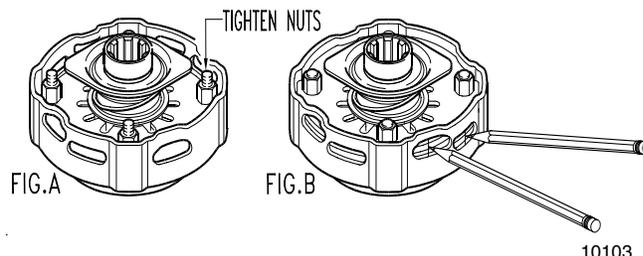
1. Slide the driveline over the splined shaft at the front of the powered rake and secure with the locking device of driveline.

IMPORTANT: The inner shield half hooks to the powered rake.

2. Slide the driveline over the tractor's splined PTO shaft and secure with the locking device of driveline.
3. Hook the safety chain on the driveline powered rake end around a tube on the front of the powered rake to prevent the shield from rotating.
4. The driveline should now be moved back and forth to insure that it is secure on the PTO shaft of the tractor and powered rake drive shaft.
5. Should the driveline require shortening:
6. Should the powershaft require shortening:
 - a. Hold the half-shafts next to each other in the shortest working position and mark them.
 - b. Shorten inner and outer guard tubes equally.
 - c. Shorten inner and outer sliding profiles by the same length as the guard tubes.
 - d. Proper overlap is a minimum of one-half the length of each tube, with both tubes being of equal length.
 - e. Round off all sharp edges and remove burrs. Grease sliding profiles.

Prior to initial operation and after long periods of inactivity, the Friction Clutch should be "run-in". Refer to

1. Tighten all 4 nuts uniformly until the spring load is low enough that the clutch slips freely with the PTO engaged.
2. Turn nuts fully back. Clutch is ready for use.



Friction Clutch "Run In"
Figure 1-10



DANGER

Hydraulic fluid under pressure can penetrate skin. Wear protective gloves and safety glasses or goggles when working with hydraulic systems. Use a piece of cardboard or wood rather than hands when searching for hydraulic leaks. If hydraulic fluid is injected into the skin, it must be treated by a doctor within a few hours or gangrene may result.

Section 2: Operating Procedures

Transporting

IMPORTANT: ALWAYS disengage PTO before raising the powered rake to transport position.

3. When raising the powered rake to the transport position, be sure that powershaft does not contact tractor or powered rake.
4. Be sure to reduce tractor ground speed when turning; and, leave enough clearance so the powered rake does not contact obstacles such as buildings, trees or fences.
5. Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
6. When traveling over rough or hilly terrain, shift tractor to a lower gear.



CAUTION

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

Operating Checklist

1. Check chain tension. Refer to "Drive Chain Adjustment" on page 14.
2. Check oil level in gearbox and chaincase. Refer to "**Lubrication**" on page 20 of this manual.
3. Check that all plugs have been replaced properly in the gearbox and chaincase.
4. Be sure all bolts and nuts are tight.
5. Be certain all guards and shields are in place and secure.
6. Grease PTO shaft and all other grease fittings. Refer to "**Lubrication**" on page 20.
7. Check air pressure in gauge wheel tires. It should be 14 psi.

Operating Instructions

1. Operate with 540 rpm PTO tractor.
2. **DO NOT** engage PTO at full throttle.
3. Raking should not be done in wet conditions as soil will stick between the bars on the roller and reduce the digging ability of the powered rake.
4. **DO NOT** make sharp turns or attempt to back up while powered rake is in the ground.
5. **DO NOT** engage PTO with machine in the fully raised position.
6. **DO NOT** drop the 3 point hitch. Lower the rock rake slowly to the ground.
7. After raking the first 50 feet, stop and check to see that the powered rake is adjusted properly.
8. The powered rake **must** be level front to rear and side to side for proper performance. See "**Setting Depth & Leveling**" on page 13 to level the powered rake.
9. Operating depth will depend on conditions but normally will be just skimming the surface to 1" deep. See "**Setting Depth & Leveling**" on page 13 to set the operating depth. Operating too shallow will allow rocks and trash to pass under the roller while operating too deep will cause dirt to flow over the material control blade or too much dirt will be carried out the end into the windrow.
10. Ground speed should be between 3 and 5 mph for normal conditions. Under extremely rocky conditions or when moving a large windrow ground speed may have to be reduced for satisfactory performance. In general the slower the ground speed the better job the powered rake does of separating the dirt from the rocks. If the ground speed is too fast then dirt will pass over the top of the material control blade or too much dirt will be carried out the end into the windrow.
11. Proper operating depth and ground speed are interrelated and performance of the powered rake will improve with operator experience.
12. Normal operating angle of the roller is all the way (20 degrees) left or right but may be varied depending on what the conditions call for.
13. Periodically check for foreign objects wrapped around the roller or stuck in between the bars on the roller and remove them after disengaging PTO, turning off tractor, and removing ignition key
14. The danish tine package option loosens rocks and trash below the surface of the ground. Normal operating depth is 1" to 4" deep when needed.

Section 3: Adjustments

Setting Depth and Leveling

IMPORTANT: It is very important that the powered rake be level front to rear and left to right for proper performance.

Leveling Left-To-Right

The powered rake **must** be level left to right for best performance. Left to right leveling should be performed on a flat surface such as a concrete slab.

1. Adjust the angle of the roller so it is at 0° or straight.
2. Check that the air pressure is 14 psi in both gauge wheel tires.
3. Move the gauge wheels all the way down. See “**Setting Depth**” page 13.
4. Block up under the front of the powered rake frame until the powered rake is level front to rear.
5. Measure from the bottom of the left hand end of the roller to the ground and from the right hand end of the roller to the ground. If these measurements are not equal then go on to step 6. If they are equal then the powered rake is level left to right.
6. Loosen the mounting bolts bolting the right hand roller leg to the frame and shim between the ground and the bottom of the right hand end of the roller until the right hand end is the same distance from the ground as the left hand end.
7. Retighten the mounting bolts and the powered rake is now level left to right.
8. Check the tractors lower 3-point lift arms to see if they are the same distance above the ground and adjust if necessary. Note: If these arms are not level then the powered rake will not operate level.

Leveling Front-To-Rear

The operating depth must be set before leveling the powered rake front to rear. See “**Setting The Depth**” above. Leveling the powered rake front to rear is done in the field by setting the down stop for the tractors lower 3 point arms at the point where the powered rake is level front to rear. It is **very** important for the powered rake to be level front to rear to eliminate gouging of the roller when the powered rake is angled. If the powered rake is too low in the front then the front portion of the roller will cut deeper than the rear portion when angled. If the

powered rake is too high in the front then the rear portion of the roller will cut deeper than the front portion of the roller when angled.

Setting The Depth

The powered rake must be level left to right before setting the depth. The operating depth is controlled by the gauge wheels and not the lower tractor 3 point lift arms. Move the gauge wheels up for greater depth or move them down for less depth.

1. Remove the bail pin, from the top of the gauge wheel castor pivot.
2. Remove the gauge wheel assemblies and swap the spacers, as necessary. Make sure both gauge wheels are set to the same depth.
3. Reinstall the gauge wheel assemblies into their mounts.
4. Reinstall the bail pin removed in step 1.
5. Re-level the powered rake front to rear. See “**Leveling Front To Rear**” below.

Drive Chain Adjustment



CAUTION

BEFORE any maintenance is performed, lower the power rake to the ground, stop tractor engine and remove the key. DO NOT attempt to make maintenance adjustments while tractor is running.

Refer to Figure 3-1:

1. By removing the rubber plug (#1) and sticking your finger into hole, you can check chain tension. (Movement should not exceed 5/8" of deflection).
2. If further investigation of chain is warranted, remove chain idler access plate (#2) and gasket to check the chain visually.

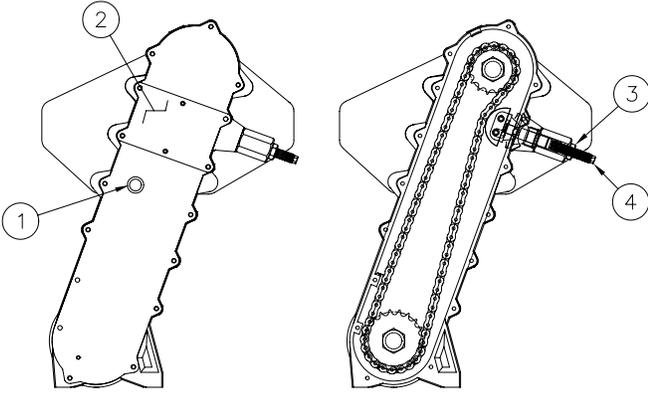
IMPORTANT: Care should be taken in removing gasket.

3. Adjustment of drive chain can be accomplished by loosening nut (#3) and screwing in stud (#4) to tighten chain or out to loosen chain. Retighten nut (#3) after adjustment is complete.

Section 3: Adjustments

IMPORTANT: Overtightening of chain may cause premature wear of sprockets and chain.

4. Visually check the amount of adjustment left in the idler. If the adjustment is almost gone then it is time to replace the drive chain and or the sprockets. See **“Drive Chain Replacement”** and **“Sprocket Replacement”** below.



WITH ALL COVERS

WITH ALL COVERS REMOVED

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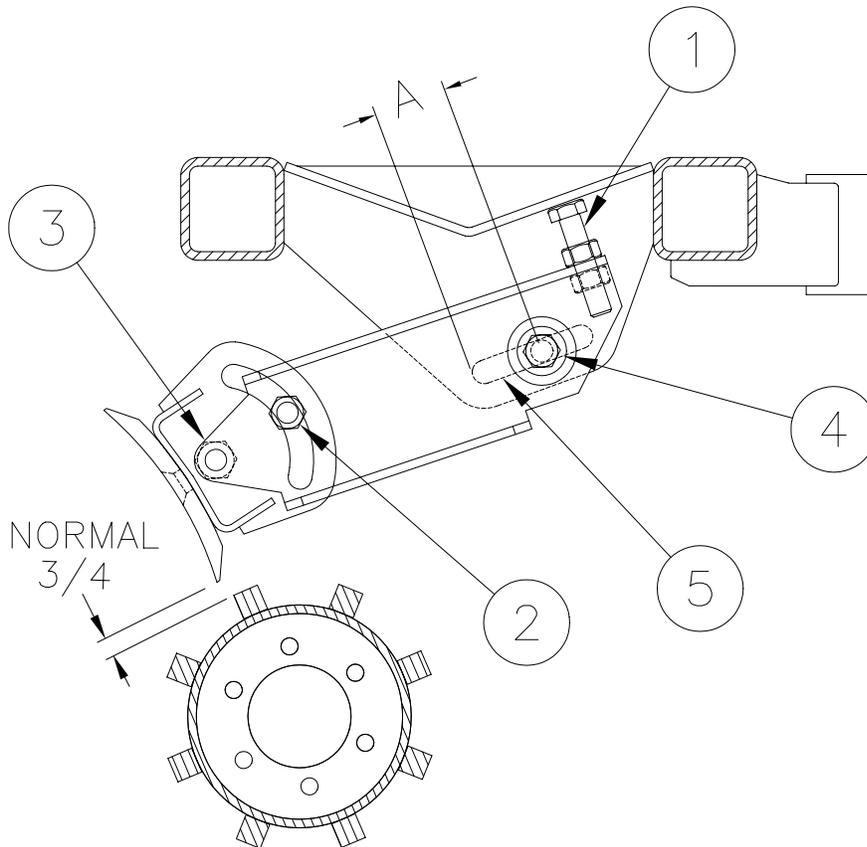
Drive Chain Adjustment
Figure 3-1

Material Control Blade Adjustment

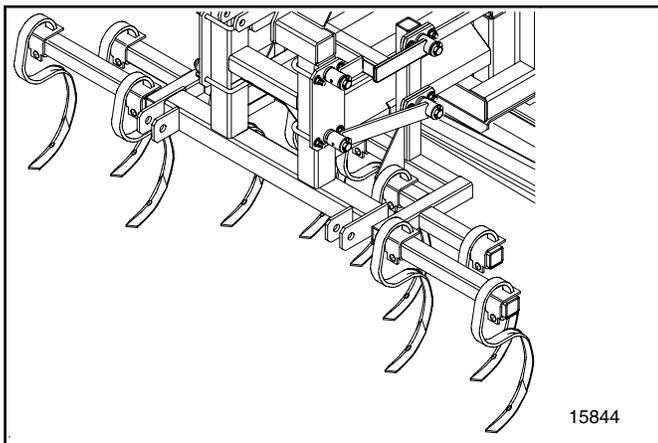
Refer to Figure 3-2:

The material control blade can be adjusted three ways:

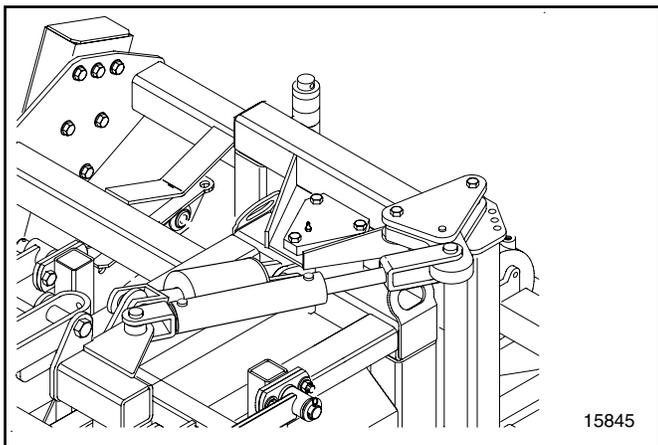
1. The gap between the bottom of the material control blade and the top of the roller can be adjusted by the adjuster bolt (#1). In general a wider gap will allow larger rocks to pass through and will allow the dirt to pass through faster for higher ground speeds. Make sure the gap is the same on both ends of the blade. Normal gap width is around 3/4”.
2. The pitch of the material control blade can be adjusted by loosening the bolt (#2) and bolt (#3) and pivoting the material control blade around the bolt (#3). Normally a line from the top edge of the material control blade to the bottom edge of the material control blade should intersect the center of the roller.
3. The material control blade can be adjusted front to rear by loosening the bolt (#4) and moving the material control blade front to rear in the slot (#5). Normally the dimension “A” should be close to 1 3/4”.



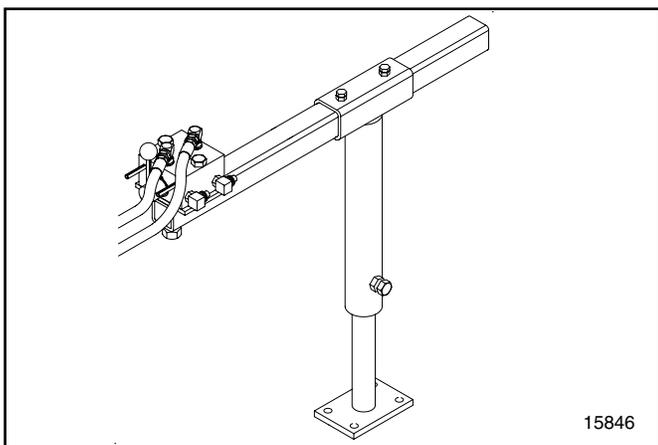
Material Control Blade Adjustment
Figure 3-2



TINE FRAME ASSY PR2572 314-044K
TINE FRAME ASSY PR2596 314-045K



HYDRAULIC TINE LIFT BUNDLE314-040L
MANUAL TINE LIFT BUNDLE314-041L
MANUAL ANGLING BUNDLE 314-128A
HYDRAULIC ANGLING BUNDLE 314-129A



HYDRAULIC DIVERTER KIT 314-072A

Section 5: Maintenance & Lubrication

Maintenance

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

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

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



CAUTION

BEFORE any maintenance is performed, lower the power rake to the ground, stop tractor engine and remove key. DO NOT attempt to make maintenance adjustments while tractor is running.

Storage

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

Check the roller cutting bars for wear and replace the roller if necessary.

Inspect the powered rake for loose, damaged or worn parts and adjust or replace if needed.

Lubricate as noted in “**Lubrication**” above.

Repaint parts where paint is worn or scratched to prevent rust.

Drain gearbox and chaincase oil. Drain oil in gearbox by removing the bottom drain plug on. Drain oil in chaincase by removing cover (#1) Figure 1-10. Be sure to refill gearbox and chaincase at this time.

Take the pressure off the hydraulics cylinders and hoses if the powered rake is equipped with the optional hydraulic angling or tine lift.

Apply a light coat of grease to all exposed hydraulic cylinder rods.

Store powered rake in a clean, dry place.

Drive Chain Maintenance

The operator should check periodically to make sure that the drive chain is tight. If adjustment is needed refer to “**Drive Chain Adjustment**” on page 14.

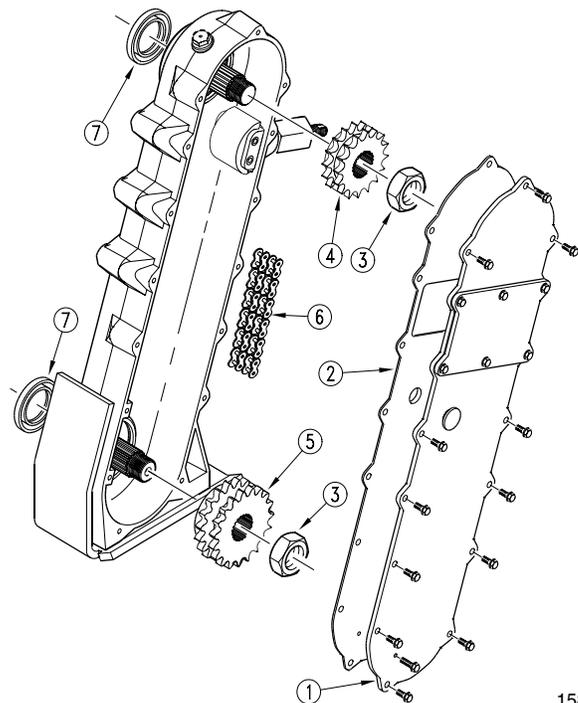
Sprocket and Chain Replacement

Refer to Figure 1-10:

1. Remove cover plate (#1) and gasket (#2). Care should be taken in removing gasket.

NOTE: Oil in chain case! Be prepared to capture oil when taking cover off.

2. Loosen chain tension. Refer to “**Drive Chain Adjustment**” page 14.
3. Remove nuts (#3), one on top and one on bottom.
4. Remove both sprockets (#4) and (#5) and chain (#6) altogether.
5. Install new chain and sprockets.
6. Reinstall nuts (#3).
7. Retighten chain tension. Refer to “**Drive Chain Adjustment**” on page 14.
8. Turn the roller several turns and observe the chain to make sure everything is working properly.
9. Reinstall cover plate (#1) and gasket (#2).
10. Check the oil level in the chain case. See “**Lubrication**” on page 21.



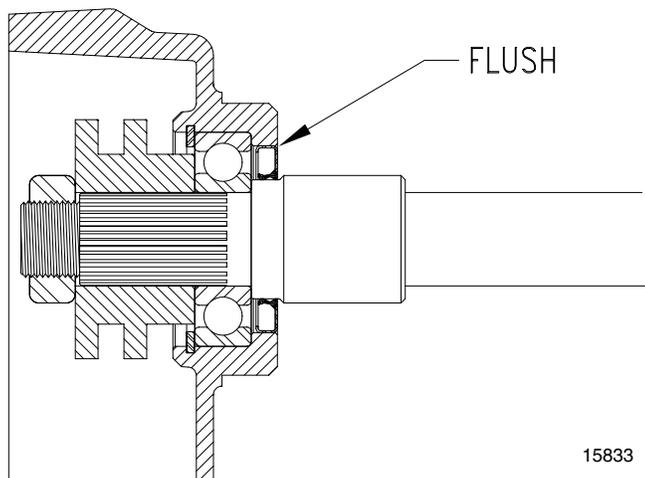
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Drive Sprocket and Drive Chain Replacement
Figure 5-1

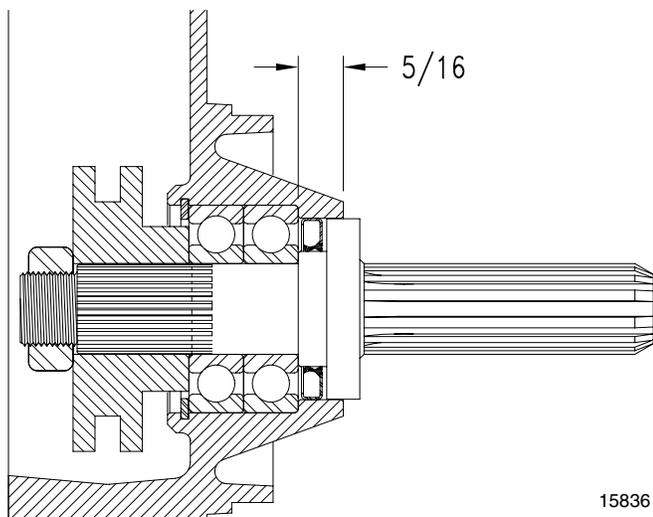
Section 5: Maintenance & Lubrication

Bottom and Top Seal Installation

If the bottom and top seals (#7) Figure 5-1 on page 17 need replacing refer to Figure 5-2 and Figure 5-3.



**Top Bearing Seal Location
Figure 5-2**



**Bottom Bearing Seal Location
Figure 5-3**

Friction Clutch PTO

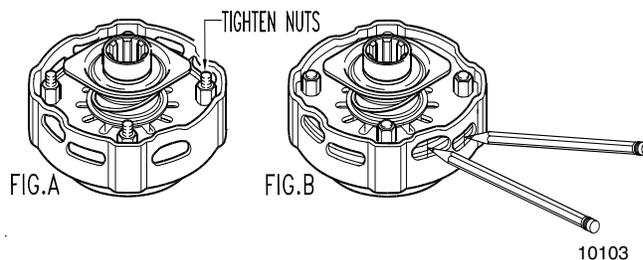
Refer to Figure 5-4:

Powered Rake drive components are protected from shock loads by a two plate friction clutch located between the gearbox and the drive shaft.

The clutch should slip during operation to protect the powered rake from excessive loads.

Prior to initial operation and after long periods of inactivity, the Friction Clutch should be “run-in”.

1. Tighten all 4 nuts uniformly until the spring load is low enough that the clutch slips freely with the PTO engaged.
2. Engage the PTO until the clutch rotates one revolution.
3. Turn nuts fully back. Clutch is ready for use.



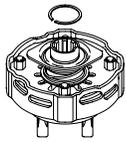
**Friction Clutch “Run In”
Figure 5-4**

Section 5: Maintenance & Lubrication

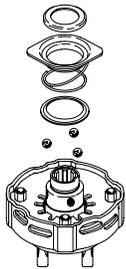
2-Plate Slip Clutch

NOTE: Before proceeding, secure the clutch firmly in a vise or other clamping device to prevent injury.

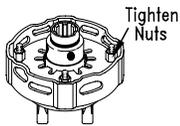
Disassembly



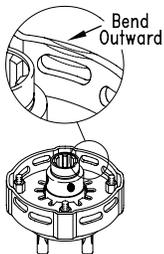
◀ **Step 1**
Remove snap ring.



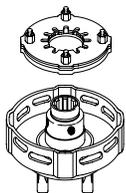
◀ **Step 2**
Remove backup ring, lock collar, compression spring, bottom backup ring, and balls.



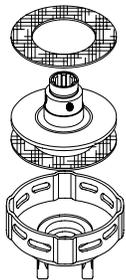
◀ **Step 3**
Tighten the four hex nuts uniformly until the clutch pack and hub are loose.



◀ **Step 4**
Bend all four retaining lugs out on the edge of the clutch housing.



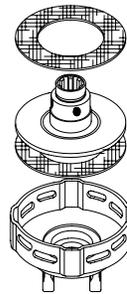
◀ **Step 5**
Remove the thrust plate with the Belleville Springs and lug rings to access friction disks and hub for inspection or service.



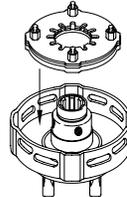
◀ **Step 6**
Inspect friction disks and hub.

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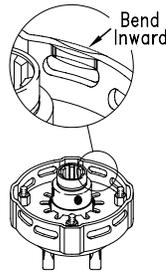
Assembly



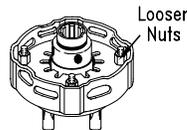
◀ **Step 1**
Place the hub and friction disks into the housing.



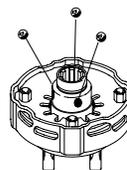
◀ **Step 2**
Compress the Belleville Springs to the pressure plate by tightening the four hex nuts and then placing the assembly into the clutch housing.



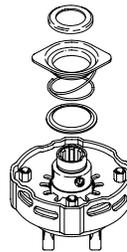
◀ **Step 3**
Bend the retaining lugs inward over the Belleville Spring edges to secure the spring before backing the four hex nuts off.



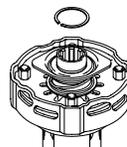
◀ **Step 4**
With the lugs bent in, loosen the four hex nuts completely to the end of the threaded studs.



◀ **Step 5**
Insert greased balls.



◀ **Step 6**
Install bottom backup ring, compression spring, lock collar, and top backup ring.



◀ **Step 7**
Install snap ring.

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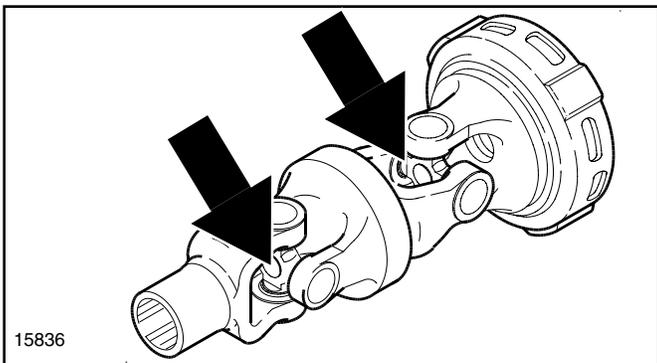
Section 5: Maintenance & Lubrication

Lubrication Legend



Intervals in hours at which lubrication is required

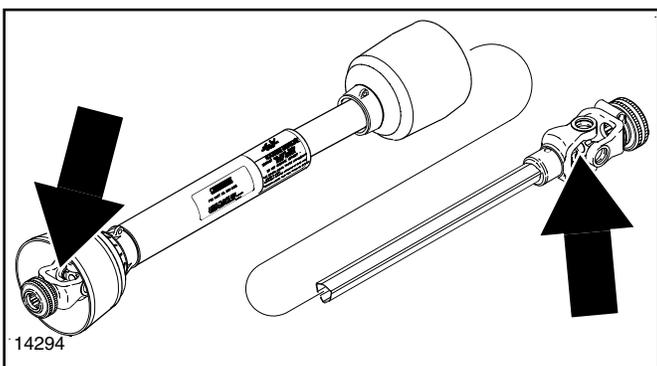
Lubrication Points



	As Required
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Double Joint Zerks

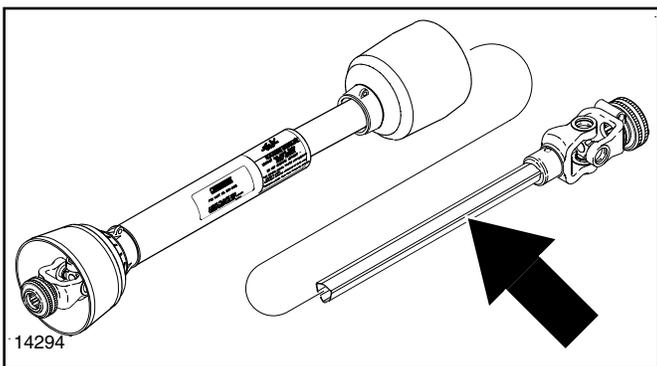
Type of Lubrication: Multi-Purpose Grease



	As Required
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Driveline U-Joints

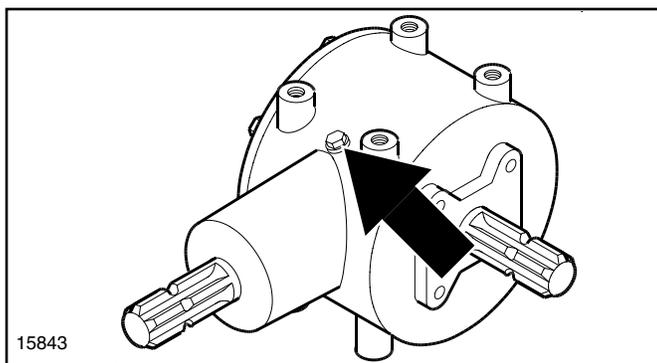
Type of Lubrication: Multi-Purpose Grease



	As Required
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Driveline Shaft

Type of Lubrication: Multi-Purpose Grease

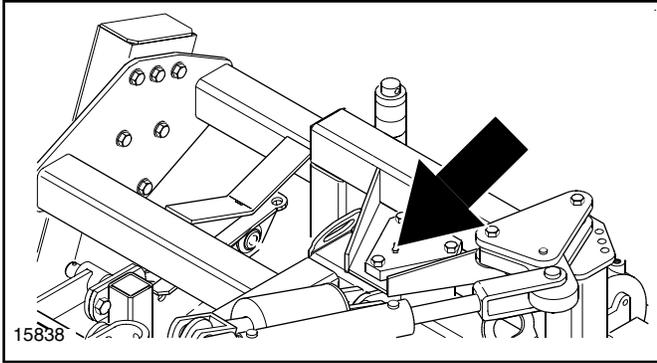


	50 Hours
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Gearbox Gear Lube

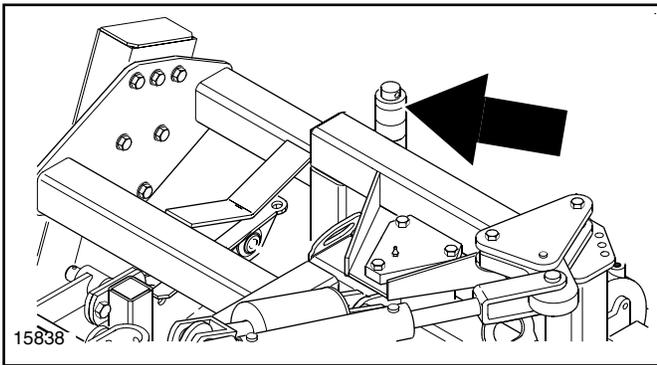
Type of Lubrication: SAE 90

Section 5: Maintenance & Lubrication



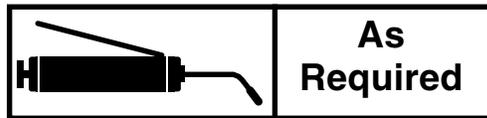
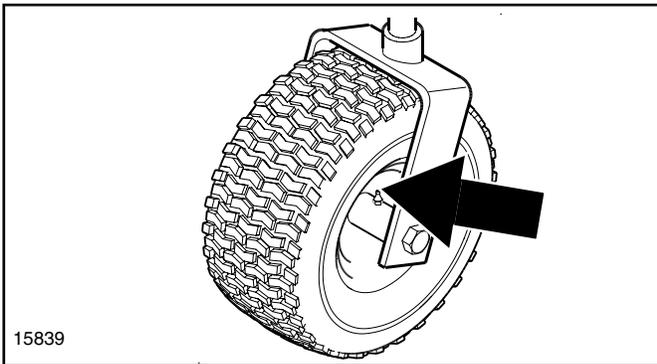
Pivot Bearings

Type of Lubrication: Multi-Purpose Grease



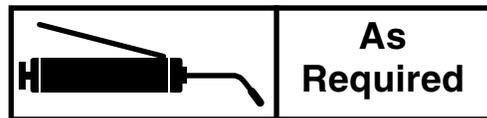
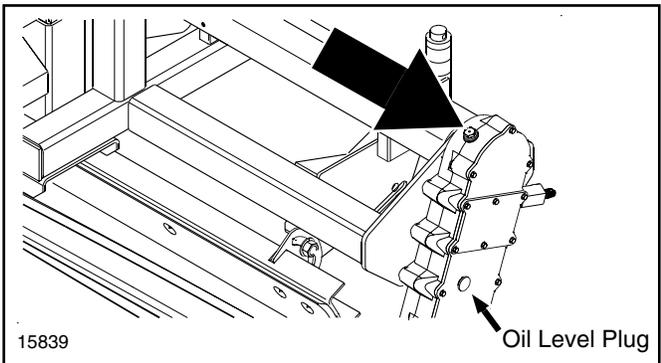
Gauge Wheel Spindle

Type of Lubrication: Multi-Purpose Grease



Gauge Wheel

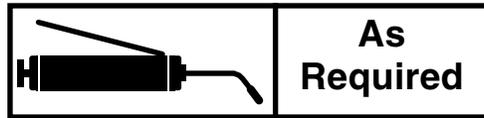
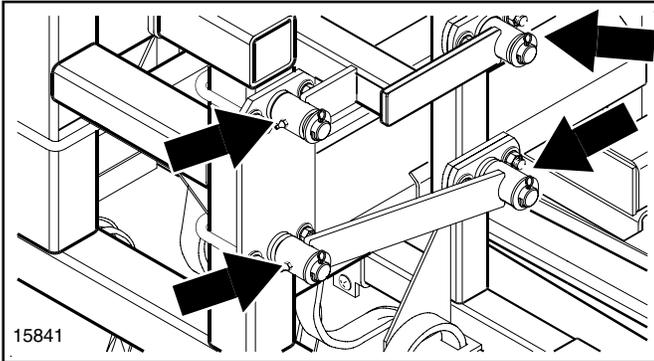
Type of Lubrication: Multi-Purpose Grease



Drive Chain

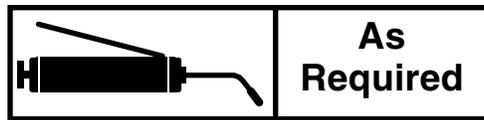
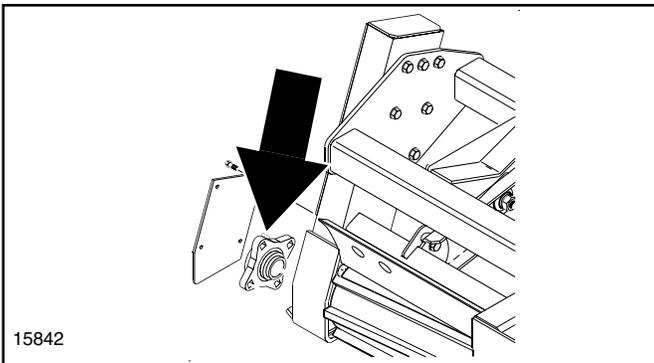
Type of Lubrication: Multi-Purpose Grease

Section 5: Maintenance & Lubrication



Tine Lift Arms

Type of Lubrication: Multi-Purpose Grease



Gauge Wheel Spindle

Type of Lubrication: Multi-Purpose Grease

Section 6: Specifications & Capacities

PR2572 & PR2596 Powered Rake		
	PR2572	PR2596
Hitch	Cat. 1 W/ Floating Top Clevis	
Non-Angled Width	83"	107"
Non-Angled Working Width	72"	96"
Non-Angled Length	85" Wheels outboard 63" Wheel inboard	
Overall Height	44"	
Machine Weight*	1,240 pounds*	1,400 pounds*
Minimum HP Required	Approximately 20 PTO	Approximately 35 PTO
Maximum HP Required	50 PTO	
Gearbox	Cast iron - 540 RPM	
PTO	Cat. 3 W/ Slide Collar Connection	
Driveline	Constant Velocity Double U-Joint W/ Belleville washer Slip-Clutch	
Angle Adjustment	20 degrees left or right Heavy duty cast iron pivot Hydraulic or manual ratchet with shear pin	
Material Control Blade	1/2" x 6" Heat Treated Bevelled - Adjustable - Floating - Reversible	
Roller Tube	1/4" Wall - 6 1/2" Diameter - 8 Each 3/4" Bars	
Depth Control	2 Each 6.5" x 13" Air Tires W/ sealant Roller bearings and Spacer height adjustment	
Roller RPM	227 RPM	
Drive Chain	#50 -2 Enclosed in oil bath	
Danish Tines	3 Ranks - 8" Spacing - Hydraulic or Manual	

* With Optional Tine Package, Hydraulic Tine Lift Option and Hydraulic Angling Option.

Problem	Solution
Machine makes intermittent clicking noise	Replace drive chain & or sprockets
	Replace damaged gear
	Replace drive chain
PTO vibrates	Replace universal joint
	Lower machine and readjust tractor lift stop
Gearbox noise is noticeable and constant	Allow time for break-in
	Add oil
	Replace gears
Oil leaking from gearbox	Replace seals or gaskets
	Drain to proper level
Roller will not turn	Engage PTO
	Repair drive chain
	Reduce load to powered rake
Operating depth insufficient	Raise gauge wheels
	Increase tractor RPM
	Replace roller
	Clear roller
	Clean roller
Roller gouging on the end	Level powered rake
	Set gauge wheel depth
	Correct air pressure
	Adjust tractor lower 3-point arms
Too much dirt going into the wind row 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
	Adjust pitch
	Adjust material control blade
Powered rake not following ground contours	Adjust the tractor top link
Roller balling up with soil	Wait until soil dries
Powered Rake bumping on ground	Clean roller
Rear Frame pivoting uncontrolled	Replace shear pin



Section 8: Appendix

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

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

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

Tire Inflation Chart	
Tire Size	Inflation PSI
13 x 6.5 6- Ply	14

Section 8: Appendix

Notes

Section 8: Appendix

Warranty

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

Overall Unit and Driveline: One year Parts and Labor

Gearbox: Five years Parts and Labor.

Hydraulic Cylinder: One year Parts and Labor.

Hoses and seals: Considered wear items.

Driveline Slip-Clutch Friction discs: Considered wear items.

Roller: Considered wear item.

This Warranty is limited to the replacement of any defective part by Land Pride and the installation by the dealer of any such replacement part, and does not cover common wear items. 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 purchase by the end user.



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