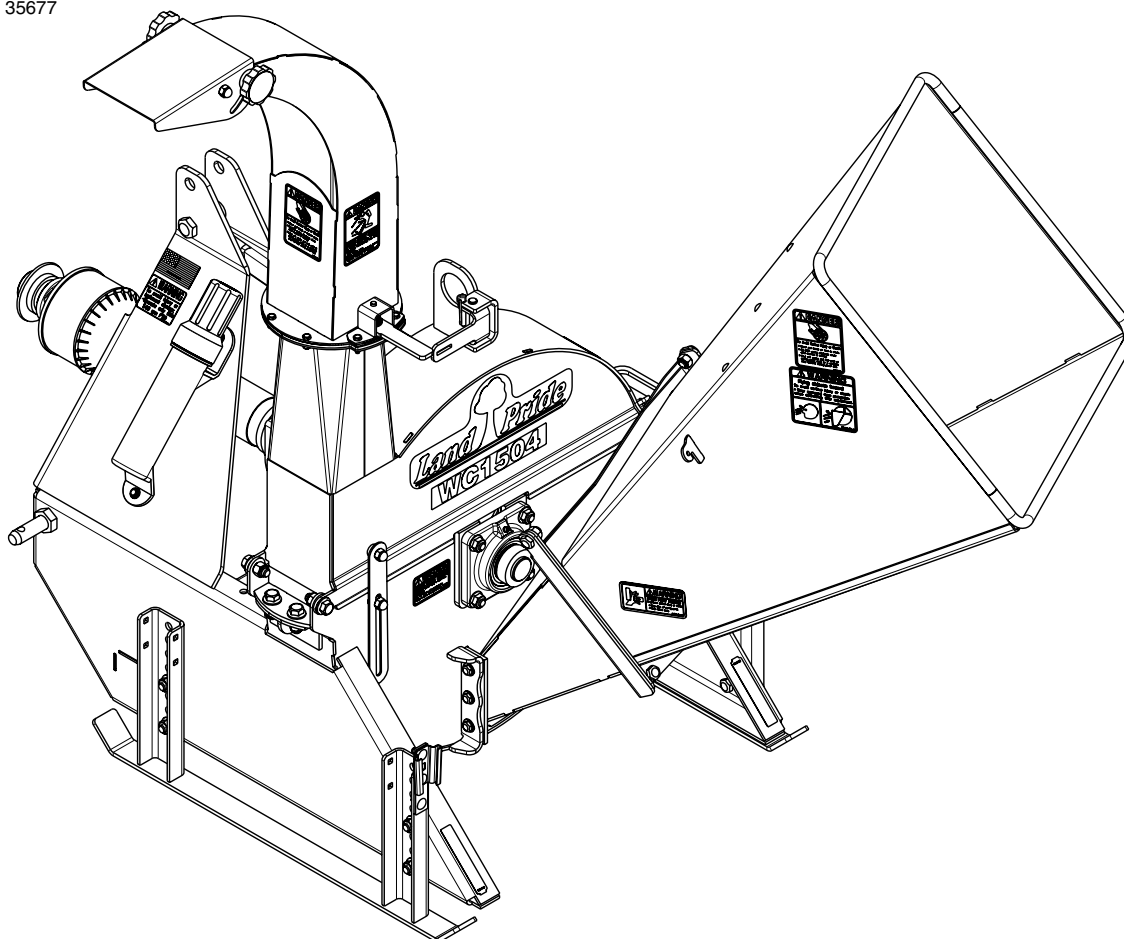


Wood Chipper

WC1504

35677



328-098M Operator's Manual



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

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

For an Operator's Manual and Decal Kit in French Language, please see your Land Pride dealer.





Machine Identification

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

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

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

Dealer Contact Information

Name: _____


Street: _____

City/State: _____

Telephone: _____

Email: _____

California Proposition 65

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



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Printed in the United States of America.



Table of Contents Continued

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 to the left will link you to available dealers for Land Pride 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 implement.

- ▲ Thoroughly read and understand the "Safety Label" section. Read all instructions noted on them.
- ▲ Do not operate the equipment while under the influence of drugs or alcohol, as they impair your ability to safely and properly operate the equipment.
- ▲ The operator should be familiar with all functions of the tractor and attached implement, and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields appropriate for the operation are in place and secured before operating the implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Start tractor from the driver's seat with hydraulic controls in neutral.
- ▲ Operate tractor and controls from the driver's seat only.
- ▲ Never dismount from a moving tractor or leave tractor unattended with engine running.
- ▲ Do not allow anyone to stand between the implement and tractor while backing up to the implement.
- ▲ 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.
- ▲ Do not turn tractor so tight as to cause hitched implement to ride up on the tractor's rear wheel.
- ▲ Store implement in a safe and secure area where children normally do not play. When needed, secure implement 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.

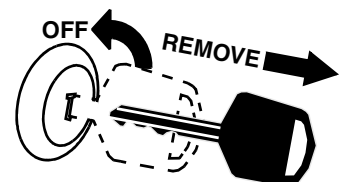
Safety Precautions for Children

Tragedy can occur if the operator is not alert to the presence of children. Children generally are attracted to implements and their work.

- ▲ Never assume children will remain where you last saw them.
- ▲ Keep children out of the work area and under the watchful eye of a responsible adult.
- ▲ Be alert and shut the implement and tractor down if children enter the work area.
- ▲ Never carry children on the tractor or implement. There is not a safe place for them to ride. They may fall off and be run over or interfere with the control of the power machine.
- ▲ Never allow children to operate the power machine, even under adult supervision.
- ▲ Never allow children to play on the power machine or implement.
- ▲ Use extra caution when backing up. Before the tractor starts to move, look down and behind to make sure the area is clear.

Tractor Shutdown & Storage

- ▲ If engaged, disengage power take-off.
- ▲ Park on solid, level ground and lower implement to ground or onto support blocks.
- ▲ Put tractor in park or set park brake.
- ▲ Turn off engine and remove ignition key to prevent unauthorized starting.
- ▲ Relieve all hydraulic pressure to auxiliary hydraulic lines.
- ▲ Wait for all components to stop before leaving operator's seat.
- ▲ Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.



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

Use A Safety Chain

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



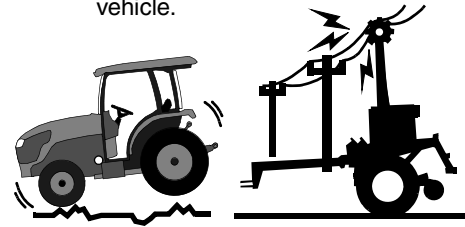
Towing Safely

- ▲ 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.
- ▲ Engage park brake when stopped on an incline.
- ▲ Maximum transport speed for an implement is 20 mph (32 km/h). **DO NOT EXCEED.**
- ▲ Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed. Sudden braking can cause a towed load to swerve and upset.
- ▲ Do not tow an implement that, when fully loaded, weighs more than 1.5 times the weight of towing vehicle.



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 implement when changing a wheel.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
- ▲ Make sure wheel bolts have been tightened to the specified torque.



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Refer to the Operator's Manual for additional information.
- ▲ Work on a level surface in a clean dry area that is well-lit.
- ▲ Lower implement to the ground and follow all shutdown procedures before leaving the operator's seat to perform maintenance.
- ▲ Do not work under any 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.

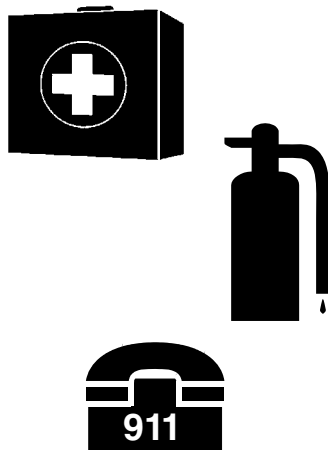
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Replace parts on this implement with genuine Land Pride parts only. Do not alter this implement in a way which will adversely affect its performance.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Always make sure any material and waste products from the repair and maintenance of the implement are properly collected and disposed.
- ▲ Remove all tools and unused parts from equipment before operation.
- ▲ Do not weld or torch on galvanized metal as it will release toxic fumes.



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

Prepare for Emergencies

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



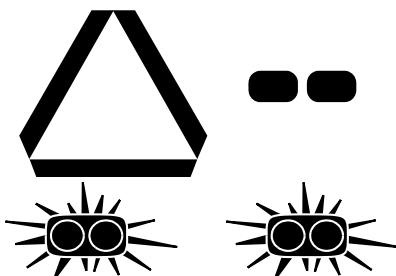
Avoid High Pressure Fluids

- ▲ 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 paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ **DO NOT DELAY.** If an accident occurs, seek immediate emergency medical care or gangrene may result.



Use Safety Lights and Devices

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



Use Seat Belt and ROPS

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



Keep Riders Off Machinery

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



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.





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Important Safety Information

Safety Labels

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

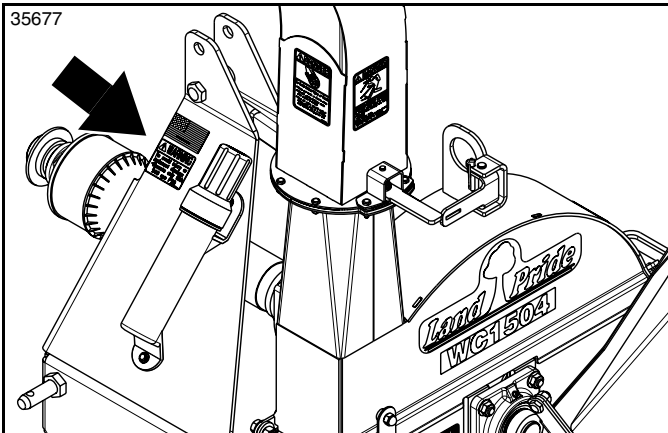
1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as

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

4. Refer to this section for proper label placement.

To install new labels:

- a. Clean surface area where label is to be placed.
- b. Spray soapy water onto the cleaned area.
- c. Peel backing from label and press label firmly onto the surface.
- d. Squeeze out air bubbles with edge of a credit card or with a similar type of straight edge.

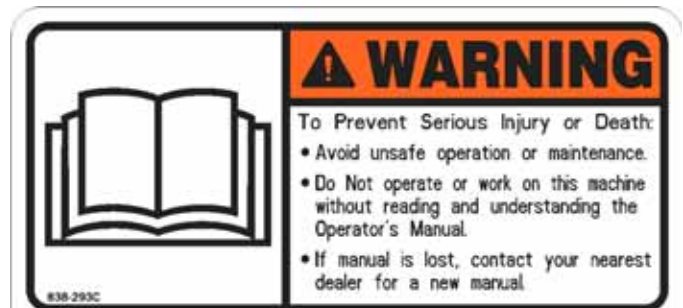
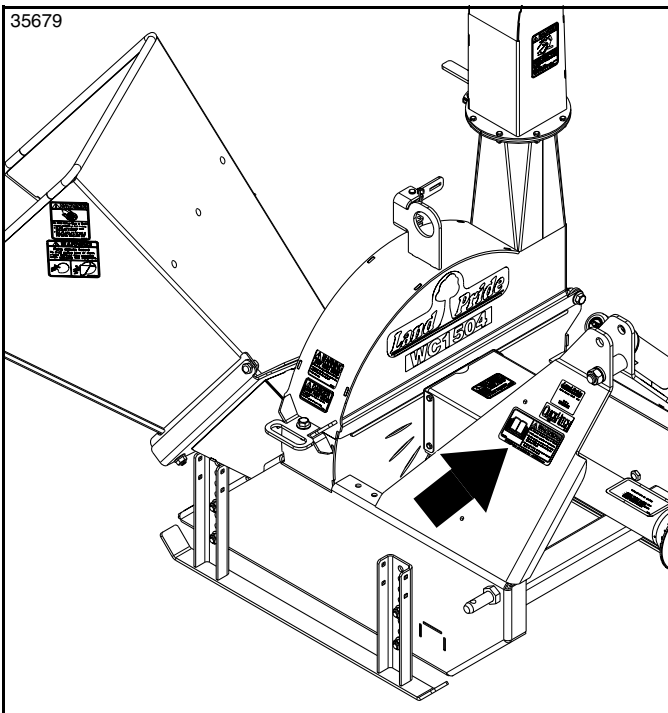


818-130C

Warning:

Operate only with 540 rpm Power Take-off Speed

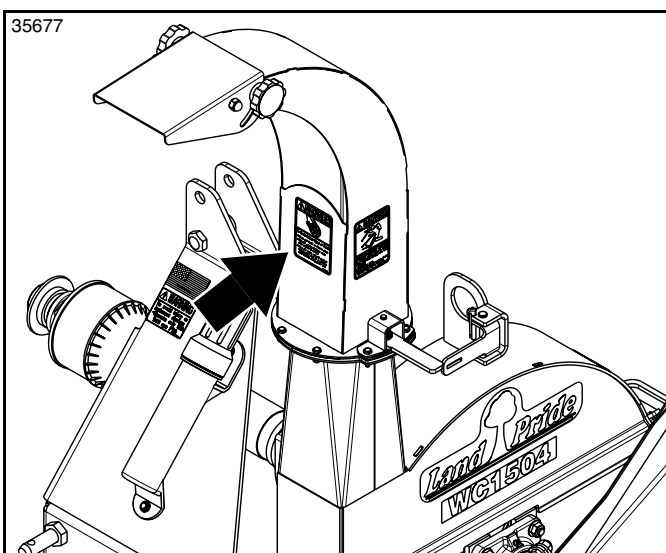
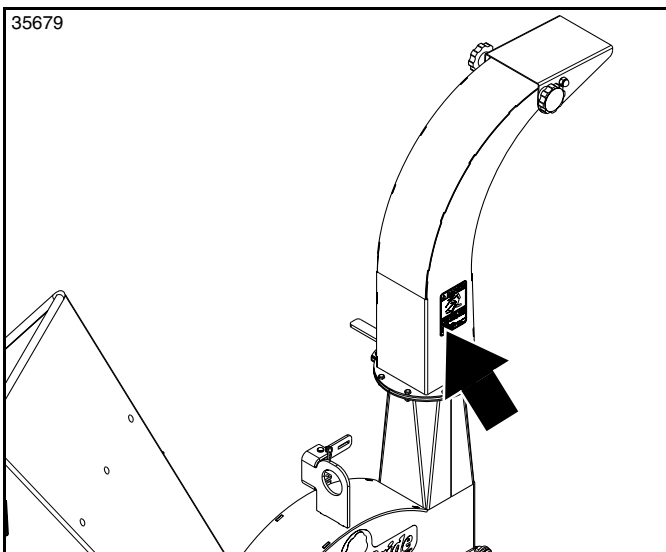
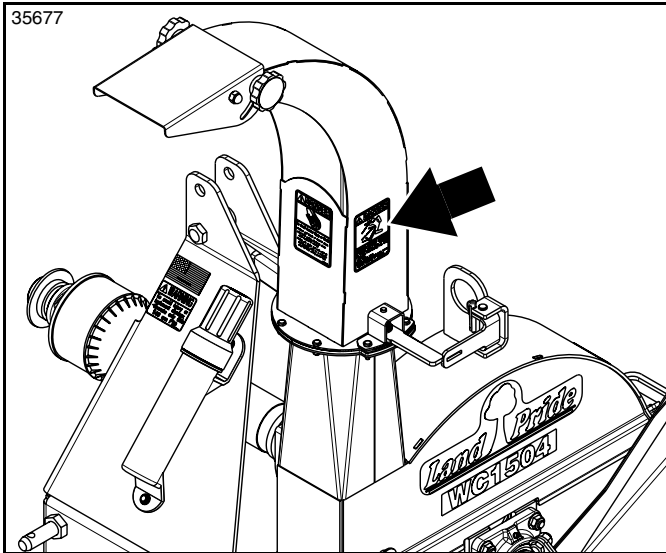
1 Place



838-293C

Warning: Read Operator's Manual

1 Place



70640

818-132C

Danger: Thrown Object Hazard

2 Place:s



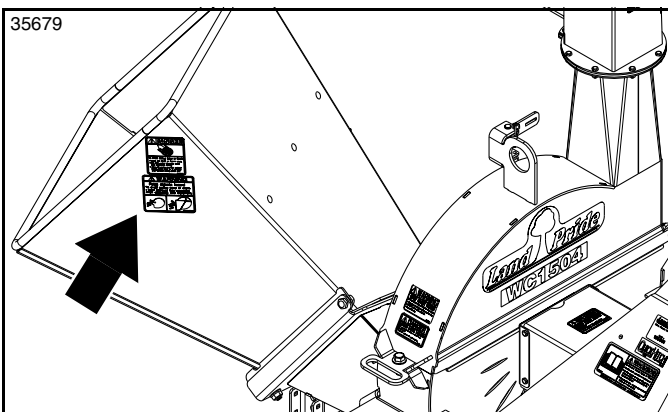
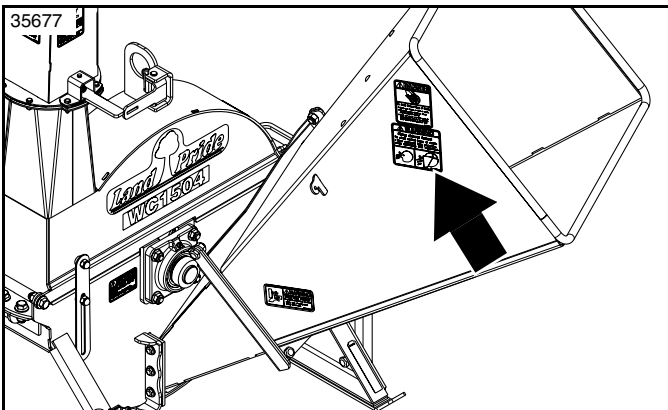
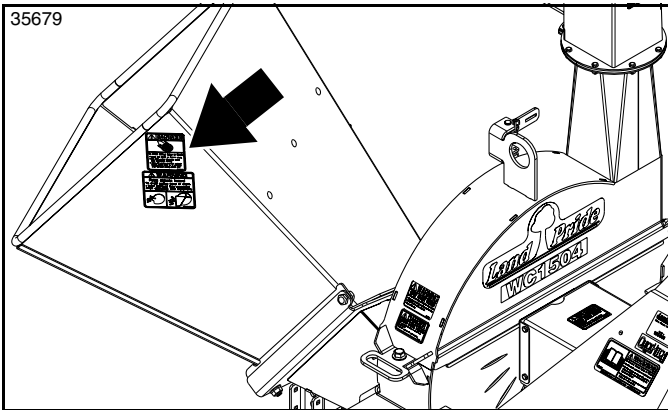
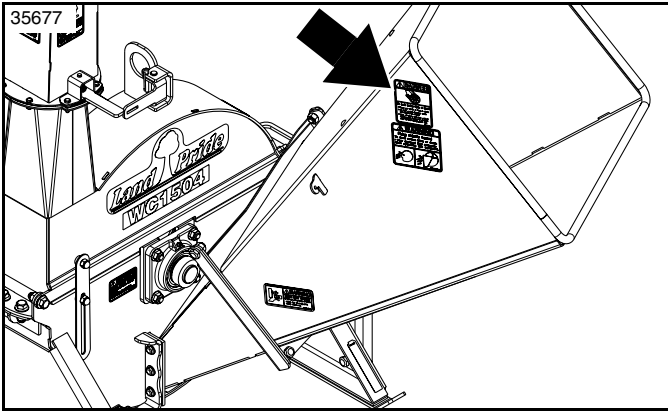
70639

848-840C

Danger: Entering Discharge Chute Hazard

1 Place

Important Safety Information



70639

848-840C

Danger: Entering Discharge Chute Hazard

2 Places

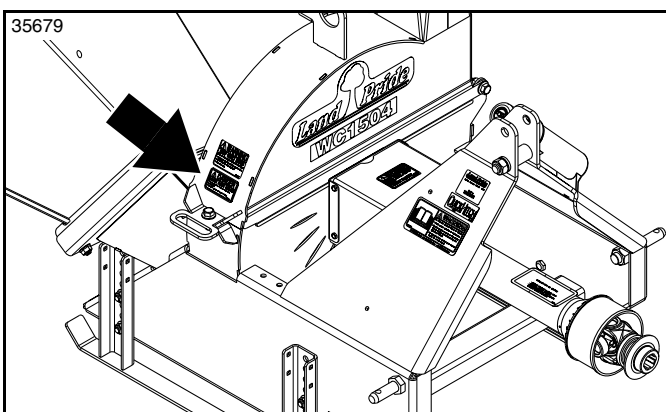
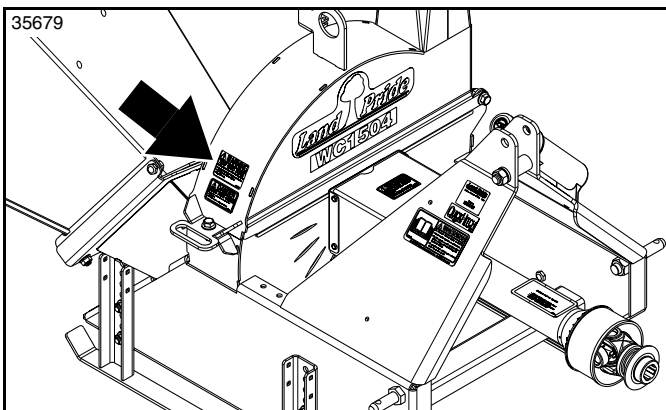
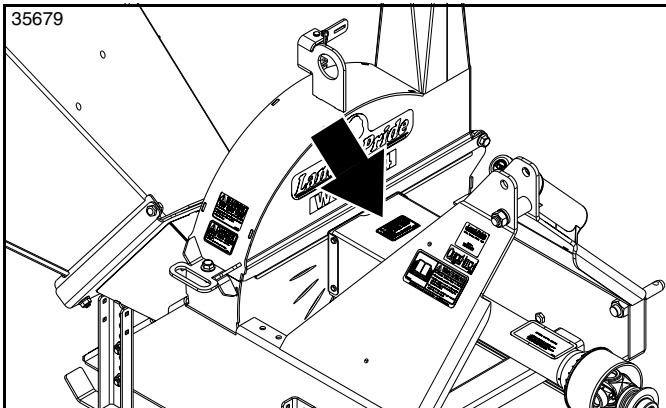
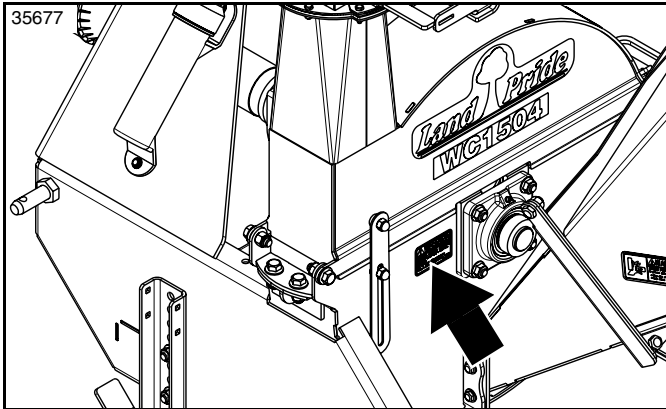


70876

858-190C

Warning: Flying Object Hazard

2 Places:



818-205C

Warning: Moving Parts Hazard
2 Places



838-093C

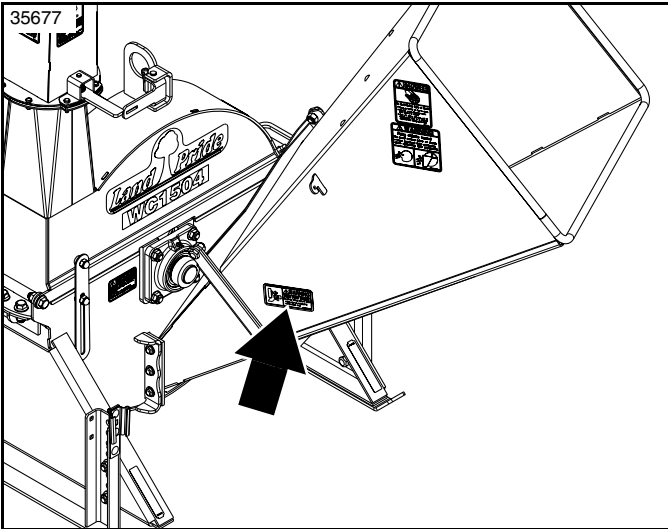
Warning: Sharp Object Hazard
1 Place



818-522C

Danger: Moving Parts Hazard:
1 Place

Important Safety Information

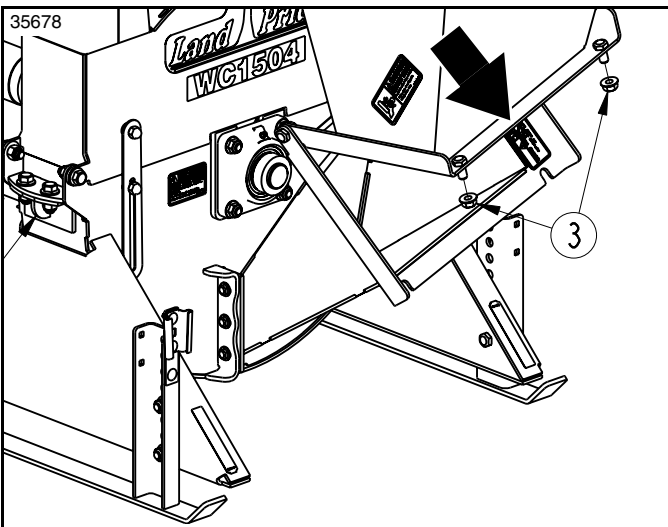


70369

818-798C

Warning: Pinch Point Hazard

1 Place:

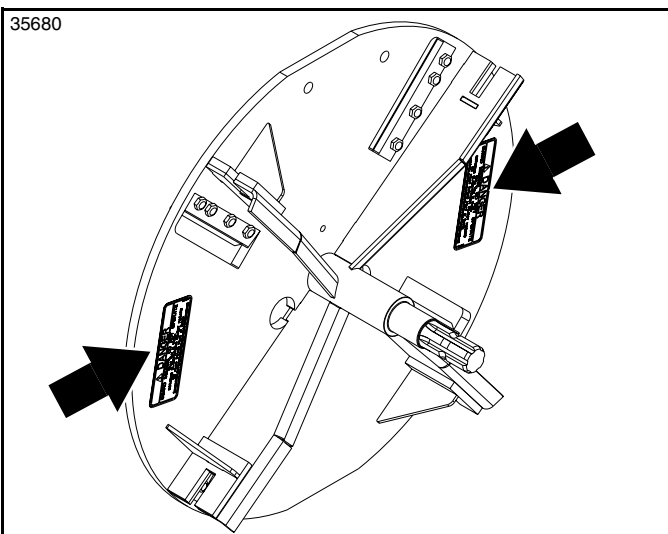


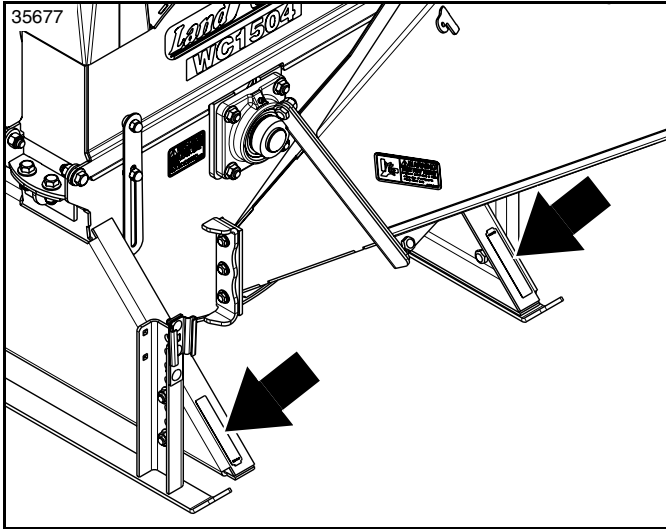
70252

848-088C

Danger: Guard Missing Hazard, Do Not Operate

3 Places

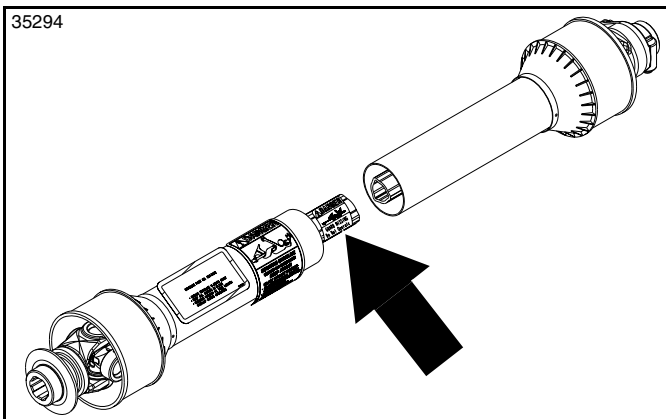




72518

818-335C

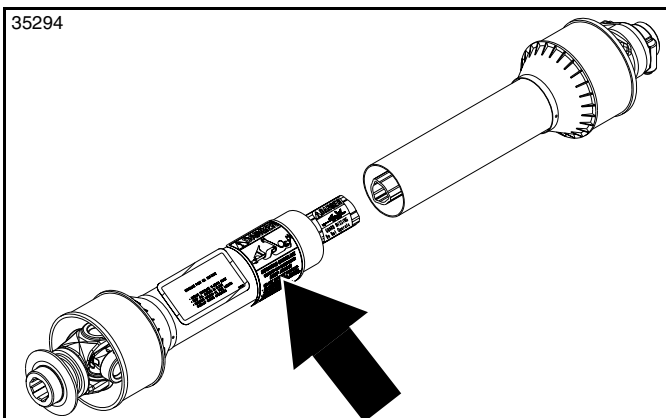
Red Reflector: 3/4" x 4 5/16"
2 Places



70374

818-540C

Danger: Guard Missing Hazard - DO NOT Operate
1 Place: On the driveline outer profile



70375

818-552C

Danger: Rotating Driveline - Keep Away
1 Place: On the driveline outer shield

Introduction

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

This Wood Chipper 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 machine.

Application

The Land Pride WC1504 Wood Chipper is designed and built by Land Pride to reduce unwanted tree limbs into useful landscape mulch typically found in flower beds, gardens or just about anything you want to help retain moisture or just to aid in decomposition. It has uses and applications in farming, ranching, nurseries, campuses, small acreage areas, and construction sites.

The WC1504 model is adapted for 3-Point Cat. I hitch on 20 to 50 hp (15-37 kW) (minimum 35 (26 kW) PTO hp for maximum capacity) for subcompact tractors with 540 power take-off speed. It should only be used with power units that meet hitch, weight, and hp requirements shown on pages 13 & 35. It features a self-feeding 4" (10.2 cm) cutting capacity, four reversible and replaceable hardened-steel Rotor knives, adjustable discharge chute, and direct drive to rotor knives. Support stands are also adjustable to better match your tractor.

See “**Specifications & Capacities**” on page 35 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 the operator 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.

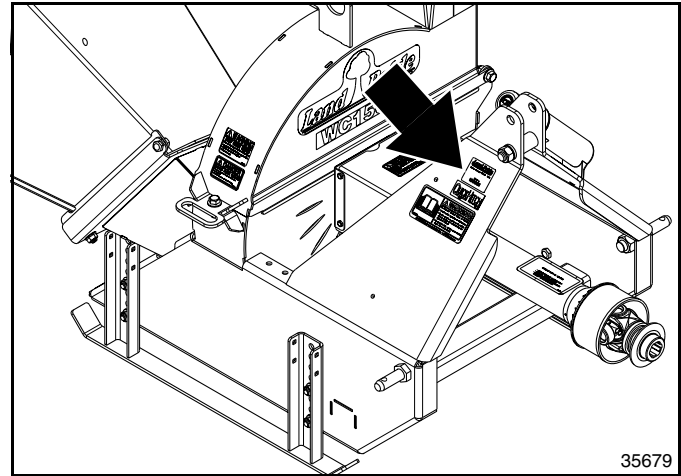
Owner Assistance

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

Serial Number

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



Serial Number Plate Location

Figure 1

Further Assistance

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

1. Discuss any problems you have with your implement with your dealership service personnel so they can address the problem.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the question/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
lpSERVICE@landpride.com

Section 1: Assembly & Set-up

Tractor Requirements

Tractor horsepower should be within the range noted below. Tractors outside the horsepower range must not be used. Must be using a minimum of 35 (26 kW) horsepower when operating at maximum capability. The lower 3-Point arms must be stabilized to prevent side-to-side movement. Most tractors have sway blocks or adjustable chains for this purpose.

Horsepower Range 20 to 50 hp (15-37 kW)
 min 35 (26 kW) PTO hp for max. capacity
 Power Take-Off Maximum 540 rpm
 Spline Shaft Requirement 1 3/8" - 6
 Hitch Type 3 - Point Cat. 1

WARNING

To avoid serious injury or death:

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

Dealer Preparations

Make sure that the intended tractor conforms to the "Tractor Requirements" stated above. Read and understand the Operator's Manual for this Wood Chipper. An understanding of how it works will aid in its assembly and setup.

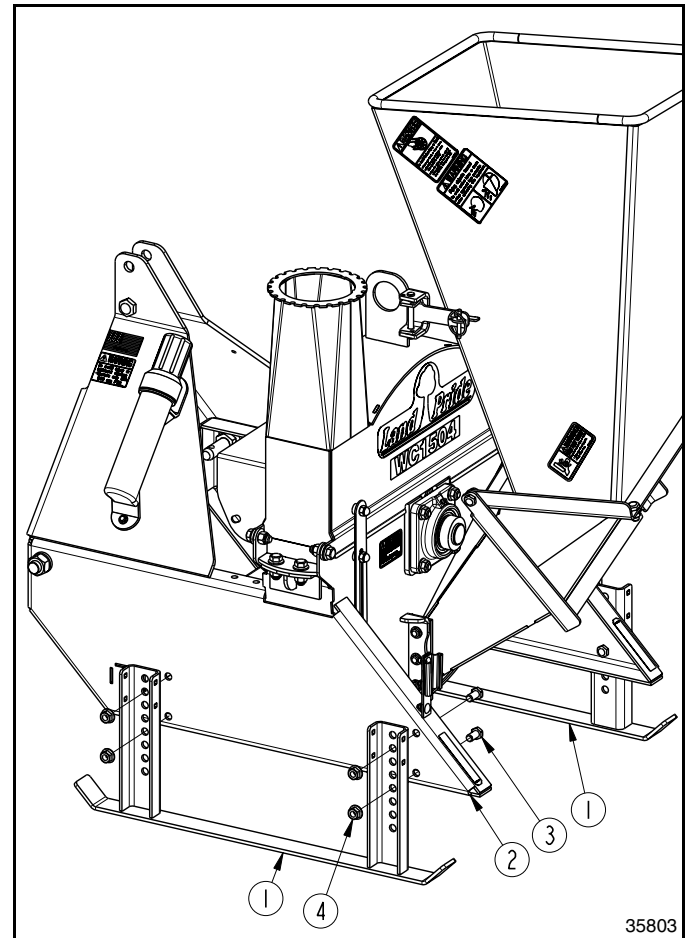
Go through the "Pre-Assembly Checklist" below before assembling the Wood Chipper. Speed up your assembly task and make the job safer by having all needed parts and equipment readily at hand.

Pre-Assembly Checklist

✓	Check	Ref.
<input type="checkbox"/>	Make sure miscellaneous assembly tools are on hand: Assortment of wrenches & sockets.	
<input type="checkbox"/>	Have a minimum of two people available during assembly.	
<input type="checkbox"/>	Check to see if ballast weights are needed. See specifications for weight of Wood Chipper.	Page 35
<input type="checkbox"/>	Make sure all major components, driveline, and loose parts are shipped with the machine. Refer to section on "Assembly and Set-up".	Pages 13-19
<input type="checkbox"/>	Make sure all fasteners & pins are installed in the correct location. Refer to the Parts Manual if unsure.	Parts Manual 328-098P
<input type="checkbox"/>	Make sure all bolts are tight and cotter pins are spread. Refer to "Torque Values Chart"	Page 38
<input type="checkbox"/>	Make sure all grease fittings are in place & lubricated. Refer to "Lubrication Points"	Page 33
<input type="checkbox"/>	Make sure all safety labels are correctly located and legible. Replace if damaged. Refer to section on "Safety Labels"	Pages 6-11

Torque Requirements

Refer to "Torque Values Chart" on page 38 to determine correct torque values for common bolts.



Skid Extensions
Figure 1-1

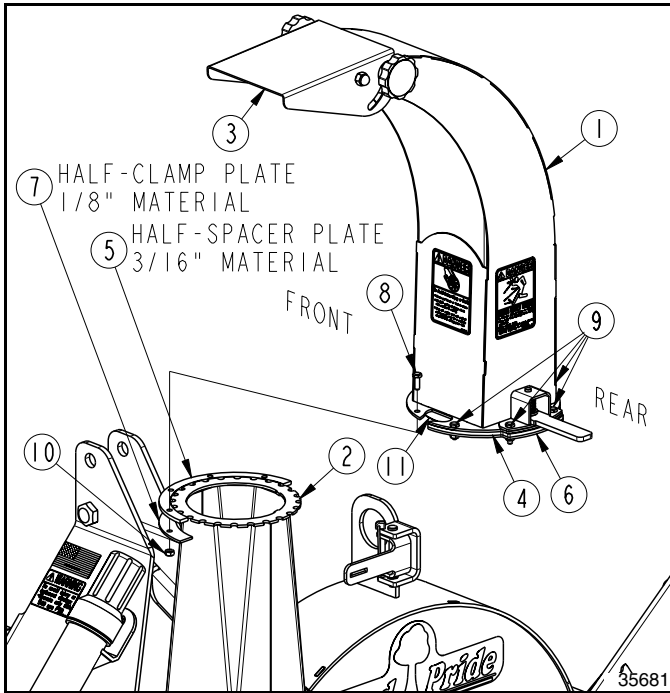
Skid Extensions

Refer to Figure 1-1:

1. Skid extensions (#1) are shipped bolted together. Unbolt skid extension and keep hardware for reuse.

NOTE: Skid extension height may need adjusting up or down when hooking chipper to tractor. A good starting point would be to attach the second hole from the top of each leg to the top holes in the chipper side panels as illustrated in Figure 1-1.

2. Attach skid extensions (#1) to side panels (#2) with existing 1/2"-13 x 1" GR5 bolts (#3) and hex flange locknuts (#4).
3. Tighten locknuts (#4) to the correct torque.



Discharge Chute Assembly
Figure 1-2

Discharge Chute

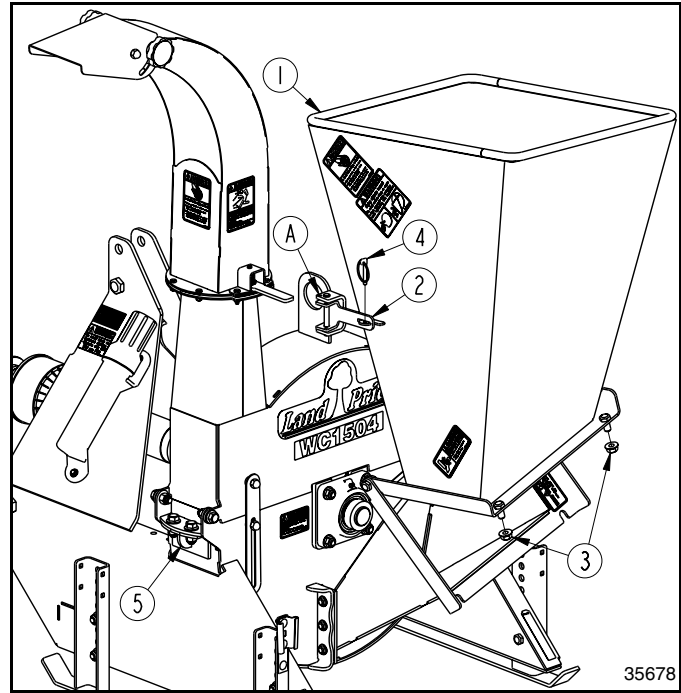
Refer to Figure 1-2:

NOTE: Half-clamp plate (#7) and half-spacer plate (#5) are shipped bolted to discharge spout (#1).

1. Loosen the four rear bolts (#9) by two or three turns. Do not remove bolts or nuts securing bolts.
2. Remove the four front bolts (#8), half-clamp plate (#7), and half-spacer plate (#5) from discharge spout (#1). Keep hardware for reuse.

IMPORTANT: Be careful not to damage plastic surface attached to underside of discharge chute while attaching chute to the chipper's notched plate.

3. Make sure bottom half-clamp plate (#4) is positioned against underside of notched plate (#2). Being careful not to damage plastic bearing (#11), slide front of discharge chute (#1) onto notched plate (#2) until discharge chute is centered over the notched plate.
4. Place half-spacer plate (#5) on top of half-clamp plate (#7) with bolt holes in alignment with each other.
5. Position bottom half-clamp plate (#9) against underside of notched plate (#2) as shown.
6. Bolt chute (#1) to half-spacer plate (#5) and half-clamp plate (#7) with the four removed 1/4"-20 x 3/4" GR5 cap screws (#8) and hex locknuts (#10).
7. Draw all eight hex locknuts (#10) up snug and then back each one off 1/2 turn.



4" Feed Chute Assembly
Figure 1-3

Feed Chute

Refer to Figure 1-3:

WARNING

To avoid serious injury or death:

Keep yourself and others clear of the feed chute hinged area while rotating the feed chute down. Body parts can be pinched or severed.

1. Remove nuts (#3) from bottom of feed chute (#1).
2. Hold feed chute (#1) up and pull linchpin (#4).
3. Rotate pivoting latch (#2) 90° clockwise and lower feed chute (#1) down.

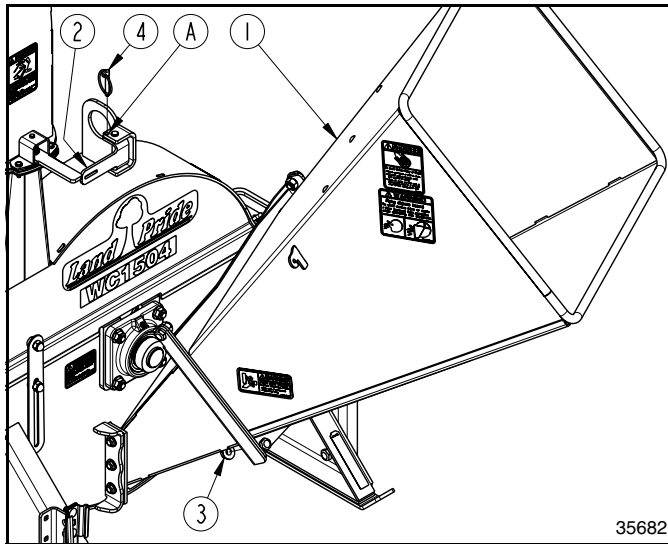
Refer to Figure 1-4 on page 15:

4. Insert linchpin (#4) in hole "A" to secure pivoting latching in its rotated position.
5. Check ledger clearance before continuing. Refer to "**Check Ledger Knife Clearance**" on page 26.
6. Secure feed chute (#1) with two 1/2"-13 hex whiz nuts (#3). Tighten nuts to the correct torque.

Inspect Twig Breaker Bar

The twig breaker bar (#5) should be inspected to make certain it is centered in the rotor fin slots. See "**Twig Breaker Bar**" on page 30 for detailed adjustment and maintenance instructions.

Section 1: Assembly & Set-up



4\" Feed Chute Assembly
Figure 1-4

Hitch Pin Set-up

Refer to Figure 1-5:

The Wood Chipper is shipped from the factory with hitch pins mounted on the inside. They will need to be turned around to fit the tractor's 3-Point hitch.

1. On the right-hand side, remove hex nut (#6) from hitch pin (#9).
2. Remove lock washer (#7) and hitch pin (#9) from inside the Wood Chipper housing.

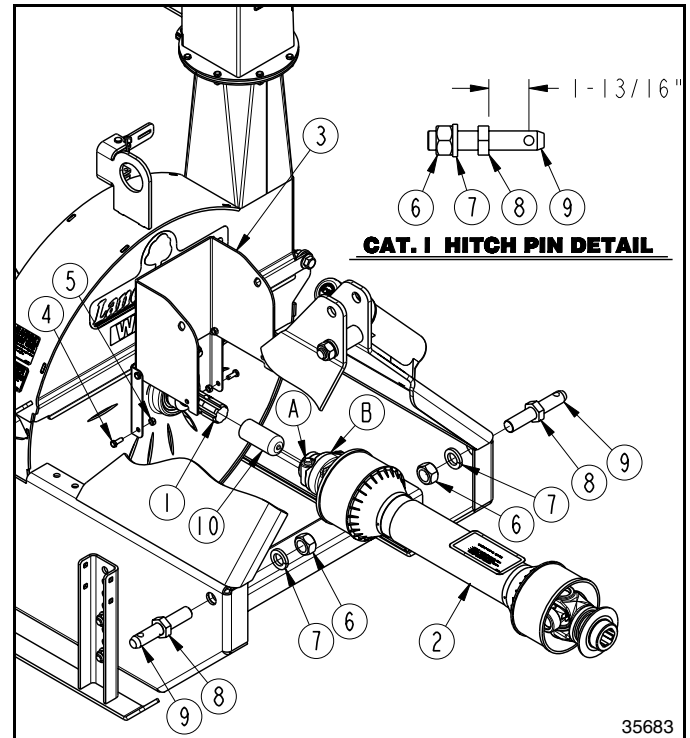
NOTE: Hitch pin (#9) is furnished with nut (#8) or with a solid collar where nut (#8) is shown.

3. If included, adjust nut (#8) on hitch pin (#9) to be 1 13/16" (4.6 cm) from face of nut to center of hitch pin hole. See CAT. I Hitch Pin Detail in Figure 1-5.
4. Reinsert hitch pin (#9) on the outside of the Wood Chipper housing as shown.
5. Install lock washer (#7) and hex nut (#6). Draw hex nut (#6) up snug.
6. Insert a drive punch in hitch pin hole and rotate hitch pin with drive punch until the hole is vertical.
7. Verify 1 13/16" (4.6 cm) is maintained from face of nut (#8) to center of hitch pin hole and then tighten hex nut (#6) to the correct torque.
8. Repeat steps 1-7 for the left-hand hitch pin.

Driveline Installation

Refer to Figure 1-5:

1. Remove lower locknuts (#5) and bolts (#4). Rotate drive shaft shield (#3) up.
2. Remove shaft protector (#10) from rotor shaft (#1).
3. On shear bolt end of driveline (#2), Push push-pins "A" & "B" in and hold while starting to slide universal joint onto rotor shaft (#1).



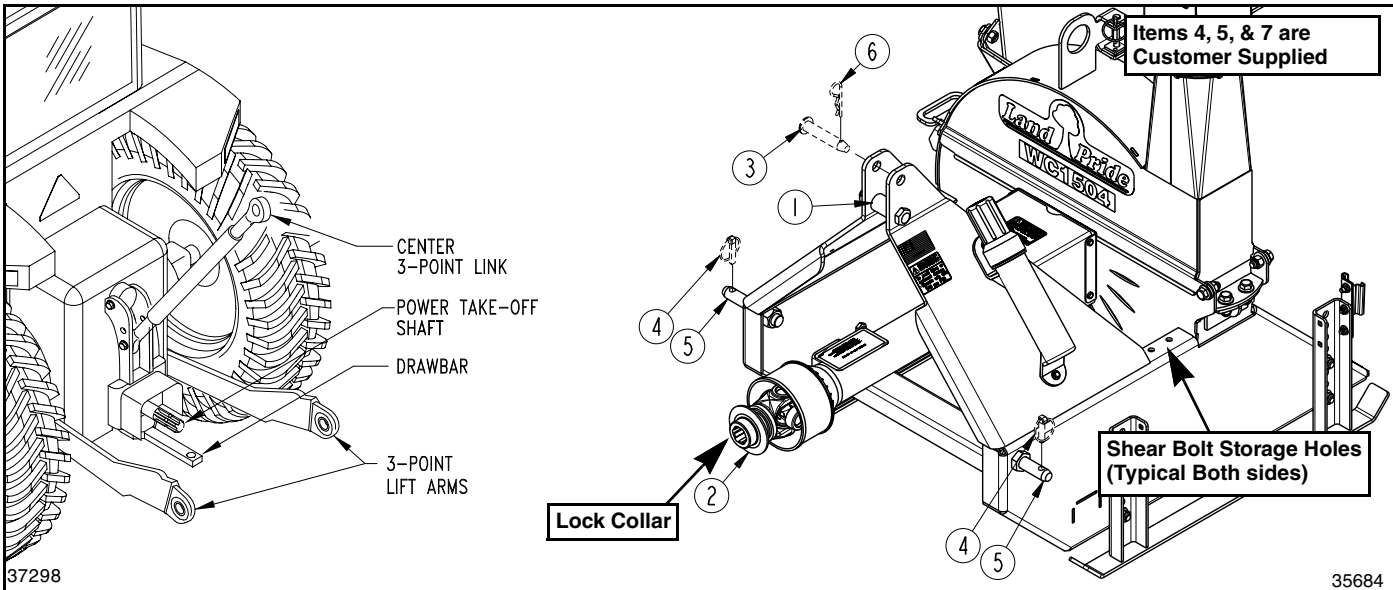
Driveline Assembly
Figure 1-5

4. After universal joint starts onto the rotor shaft, release push-pins and continue to slide universal joint on until push-pin releases and universal joint locks in place. Move driveline back and forth to ensure it is secured to the drive shaft.
5. Rotate drive shaft shield (#3) down and secure with bolts (#4) and locknuts (#5). Draw locknuts up snug.

Tractor Shutdown Procedure

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

1. Reduce engine speed and disengage power take-off if engaged.
2. Park tractor and implement on level, solid ground.
3. Lower implement to ground or onto non-concrete support blocks.
4. Put tractor in park or set park brake, turn off engine, and remove ignition key to prevent unauthorized starting.
5. Relieve all hydraulic pressure to auxiliary hydraulic lines.
6. Wait for all components to come to a complete stop before leaving the operator's seat.
7. Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.



3-Point Hook-up
Figure 1-6

Tractor Hook-up

! DANGER

To avoid serious injury or death:

A crushing hazard exists while Connecting and disconnecting the implement. Keep people and animals away while backing-up to the implement or pulling away from the implement. Do not operate hydraulic controls while a person or animal is directly behind the power machine or near the implement.

! WARNING

To avoid serious injury or death:

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

NOTE: Land Pride's Quick Hitch can be attached to the tractor to provide Quick and easy 3-point hook-up and detachment. See your nearest Land Pride dealer to purchase a Quick-Hitch.

3-Point Hook-up

Refer to Figure 1-6:

1. Slowly back tractor up to Wood Chipper while using tractor's 3-Point hydraulic control lever to align lower lift arm hitch holes with hitch pins (#5)
2. Always disengage power take-off, engage tractor park brake, shut tractor engine off, and remove ignition key before dismounting from tractor.

NOTE: Clevis pin (#3), linchpins (#4), and hairpin cotter (#6) are supplied by customer.

3. Attach lower lift arms to hitch pins (#5). Secure hitch pins with customer supplied linchpins (#4).
4. Connect hitch hole in top center 3-Point link to upper clevis hitch with customer supplied 3/4" clevis pin (#3) and customer supplied hairpin cotter (#6).
5. Ensure that the lower hitch arms are stabilized to prevent excessive side movement.

Quick Hitch Hook-up

Refer to Figure 1-6:

1. Slowly back tractor up to Wood Chipper while using tractor's 3-Point hydraulic control lever to lower and align lower Quick Hitch hooks in-line with and below hitch pins (#5) and upper center hook in-line with and below bushing (#1).
2. If needed, adjust tractor's center 3-Point link to align upper Quick Hitch hook just under bushing (#1).
3. Raise Quick Hitch up to catch lower hitch pins (#5) in lower Quick Hitch hooks and upper bushing (#1) in upper center Quick Hitch hook.
4. Release Quick Hitch locking handles to secure Quick Hitch to hitch pins (#5).

Leveling the Wood Chipper

Refer to Figure 1-6:

1. From the tractor's seat, slowly operate 3-Point controls to raise skid extensions off the ground several inches.
2. Manually adjust either one or both of the tractor's lower 3-Point arm height adjustments to level the chipper from left to right. Some tractors have only a single adjusting crank.
3. Manually adjust length of center 3-Point link to level the Wood Chipper from front to back.



Section 1: Assembly & Set-up

Driveline Hook-up

DANGER

To avoid serious injury or death:

- Tractor power take-off shaft shield, driveline shields, and implement input shaft shield must be installed and in good working condition to avoid driveline entanglement and projectiles flying off of the driveline.
- Do not engage power take-off while connecting or disconnecting the driveline, or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline.
- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is engaged.
- All guards and shields must be installed and in good working condition while operating the implement.
- Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

WARNING

To avoid serious injury or death:

- Some tractors are equipped with two power take-off speeds. Be certain your tractor's power take-off shaft is set-up to operate at 540 rpm. Do not exceed 540 rpm power take-off speed. Excessive speed can damage drive/driven components and increase the risk of a thrown object hazard.
- Always follow "Tractor Shutdown Procedure" provided in this manual before dismounting the tractor.
- Check driveline when lowering implement to make sure it does not interfere with the tractor drawbar at maximum depth. If needed, shut tractor off and move or remove drawbar to prevent driveline damage.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "**Lubrication Points**" on page 33.

IMPORTANT: An additional driveline may be required if implement is attached to more than one tractor or if a Quick Hitch is used.

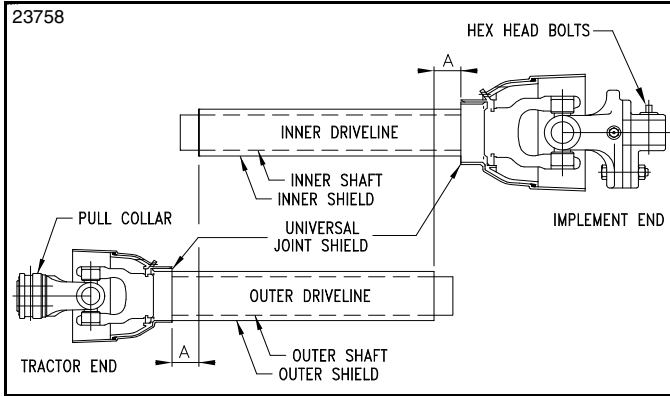
IMPORTANT: Skid extensions can be adjusted to make driveline work with various PTO heights and not interfere with chipper upper frame or Quick Hitch.

IMPORTANT: Check driveline minimum collapsible length before completing "**Driveline Hook-up**". Structural damage to the tractor and implement can occur if this check is not made. Refer to "**Check Driveline Collapsible Length**" on page 18.

1. If driveline collapsible length has not been checked, go to "**Check Driveline Collapsible Length**" on page 18. Otherwise, continue with step 2.
2. Park tractor and implement on a level surface.
3. Shut tractor down before dismounting. Refer to "**Tractor Shutdown Procedure**" on page 15.
4. If tractor drawbar interferes with the driveline during hook-up, disconnect driveline and move drawbar forward, to the side, or remove.
5. Collapse driveline (#5) by pushing tractor end of driveline toward the implement's input shaft.

Refer to Figure 1-6 on page 16:

6. Pull back on driveline pull collar (#5) and push yoke onto the tractor power take-off shaft. Release pull collar and continue to push driveline yoke forward until pull collar pops out and locks in place.
7. Pull on driveline yokes at the tractor and implement end to make sure they are secured to the tractor power take-off shaft and implement's gearbox shaft.
8. Continue with "**Check Driveline Interference**" on page 19.



Check Driveline Minimum Length
Figure 1-7

Check Driveline Collapsible Length

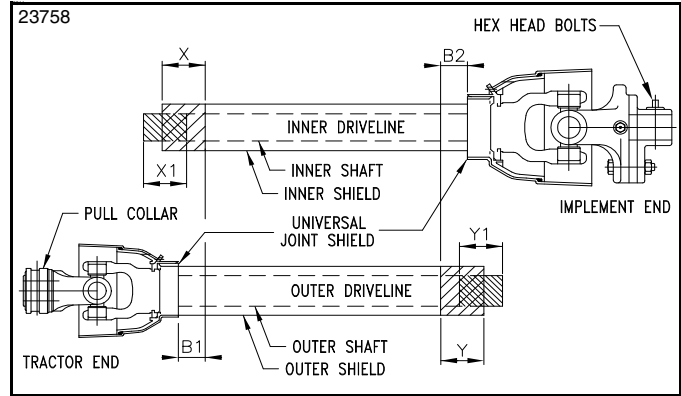
IMPORTANT: A driveline that is too long can bottom out causing structural damage to the tractor and implement. Always check driveline minimum length during initial setup, when connecting to a different tractor, and when alternating between using a quick hitch and a standard 3-point hitch. More than one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

IMPORTANT: The power take-off shaft and implement input shaft must be aligned and level with each other when checking driveline minimum length. A driveline that is too long can damage tractor and implement.

1. With the driveline attached only to the implement, remove outer driveline (tractor end) from inner driveline to separate the two profiles.
2. Park tractor and implement on a level surface.
3. Raise implement until the gearbox input shaft is level and in-line with the tractor's power take-off shaft.
4. Securely block implement at this height with solid, non-concrete supports to keep it from lowering.
5. With the implement resting on the support blocks, shut tractor down according to "**Tractor Shutdown Procedure**" on page 34.

Refer to Figure 1-7:

6. Attach outer driveline to the tractor's power take-off shaft. Refer to steps 6-7 under "**Driveline Hook-up**" on page 17.
7. Hold inner and outer drivelines parallel to each other as shown and measure distance "A".
 - If "A" is less than 1" (2.5 cm), continue with step 8.
 - If "A" is greater than or equal to 1" (2.5 cm), skip to "**Check Driveline Maximum Length**" on page 19.

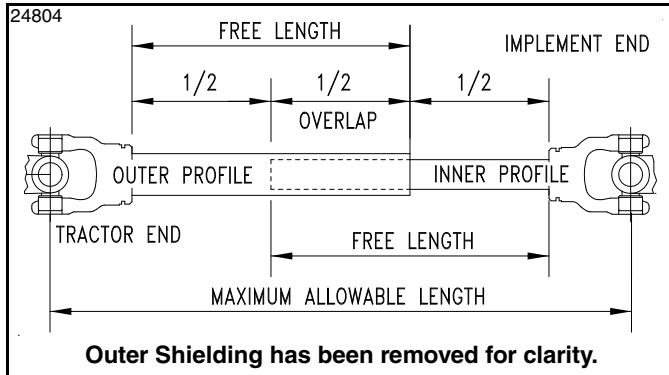


Driveline Shortening
Figure 1-8

Refer to Figure 1-8:

8. Shorten driveline as follows:
 - a. Measure 1" (2.5 cm) ("**B1**" dimension) back from outer driveline shield and make a mark at this location on the inner driveline shield.
 - b. Measure 1" (2.5 cm) ("**B2**" dimension) back from the inner driveline shield and make a mark at this location on the outer driveline shield.
9. Remove outer driveline from the tractor power take-off shaft and inner driveline from the implement's gearbox shaft.
10. Cut off non-yoke end of inner driveline as follows:
 - a. Measure from end of inner shield to scribed mark ("**X**" dimension) and record.
 - b. Cut off inner shield at the mark. Cut same amount off the inner shaft ("**X1**" dimension).
11. Cut off non-yoke end of outer driveline as follows:
 - a. Measure from end of outer shield to scribed mark ("**Y**" dimension) and record.
 - b. Cut off outer shield at the mark. Cut same amount off the outer shaft ("**Y1**" dimension).
12. Remove all burrs and cuttings.
13. Continue with "**Check Driveline Maximum Length**" on page 19.

Section 1: Assembly & Set-up



Driveline Maximum Extended Length
Figure 1-9

Check Driveline Maximum Length

Refer to Figure 1-9:

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

1. Make sure “**Check Driveline Collapsible Length**” on page 18 has been completed.
2. If attached, unhook the driveline from the tractor and implement.
3. If assembled, pull outer and inner driveline profiles apart.
4. Apply multi-purpose grease to the inside of the outer shaft and reassemble the driveline.
5. Assemble the two driveline profiles together with just 1/2 overlapping of the profile tubes as shown.
6. Measure driveline “Maximum Allowable Length” and record that length here _____.
7. Reattach driveline to the tractor power take-off shaft and implement input shaft. Refer to “**Driveline Installation**” on page 15 and “**Driveline Hook-up**” on page 17.
8. Continue with “**Check Driveline Interference**” below.

Check Driveline Interference

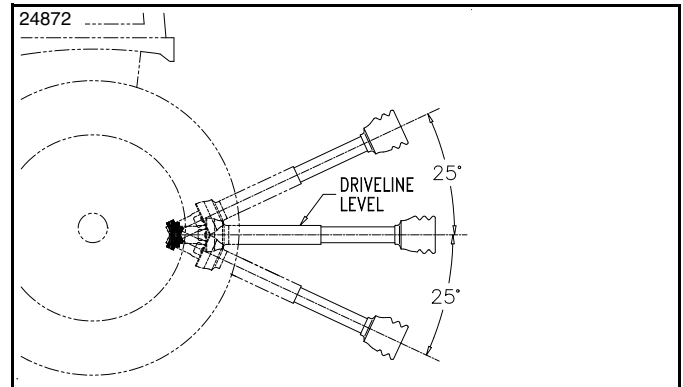
Refer to Figure 1-10:

**WARNING**

To avoid serious injury or death:

A rotating driveline must not exceed an angle of 25 degrees up or down, and never engage a driveline while at an angle exceeding 25 degrees up or down. The driveline can break and send flying projectiles.

1. Start tractor and raise implement slightly off the support blocks used to “**Check Driveline Collapsible Length**”. Drive forward until the implement is clear of the support blocks.



Maximum Driveline Movement During Operation
Figure 1-10

2. Slowly and carefully lower and raise the implement to ensure drawbar, tires, and other equipment on the tractor do not contact the implement's frame. If there is an interference:
 - a. Back implement over the support blocks and lower it onto the blocks.
 - b. Shut tractor down before dismounting. Refer to “**Tractor Shutdown Procedure**” on page 15
 - c. Move or remove drawbar if it interferes with the implement and make any other necessary corrections.
 - d. Repeat steps 1-2 to verify the implement does not interfere with the tractor.
3. Start tractor, raise implement fully up. Back implement over the support blocks. Do not lower implement onto the support blocks.
4. Without changing the 3-point lift height, shut tractor down using “**Tractor Shutdown Procedure**”.
5. Check to make sure driveline does not exceed any of the limits listed below:
 - Driveline does not exceed maximum length recorded in step 5 under “**Check Driveline Maximum Length**” on this page.
 - Driveline angle does not exceed 25° above horizontal.
6. If driveline exceeds maximum allowable length or 25 degrees up:
 - a. Adjust tractor 3-point lift limiter to the height that will keep the driveline within the recommended limits.
 - b. If the 3-point lift lever does not have a lift height limiter, make a mark with tape or other means to indicate maximum lift height.
7. Start tractor, raise implement slightly, and drive forward enough to clear the support blocks.
8. Lower implement to ground and shut tractor down using “**Tractor Shutdown Procedure**”.



Section 2: Operating Instructions

Start-up 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 Wood Chipper. Therefore, it is absolutely essential that no one operates the Wood Chipper 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**, pages 1 to 11
- **Section 1: Assembly & Set-up**, page 13
- **Section 2: Operating Instructions**, page 20
- **Section 3: Adjustments**, page 24
- **Section 4: Maintenance & Lubrication**, page 28

Perform the following inspections before using your Wood Chipper.

Operating Checklist

✓	Check	Page
	Be certain all guards and shields are in place and secured.	Operator's Manual
	Grease driveline shaft and all other grease fittings. Refer to "Lubrication Points".	Page 33
	Check bolts and nuts for tightness.	Page 38

Safety Instructions

DANGER

To avoid serious injury or death:

- Always disengage PTO, engage park brake, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before unplugging chutes, servicing, adjusting, cleaning and/or maintaining this machine.
- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is engaged.
- Work only in areas that are well ventilated. Never operate an engine in a closed area without venting the exhaust fumes. Exhaust fumes will cause asphyxiation and can lead to death.
- Make sure rotor housing is bolted shut and feed chute is properly attached before engaging PTO. Engaging power take-off with rotor exposed can cause serious injury or death.
- Never remove guards or shields with tractor engine running. Never start tractor with guards and shields removed. Doing so can result in serious injury or death.
- Do not engage power take-off while connecting or disconnecting the driveline, or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline.
- Tractor PTO shaft shield, rotor drive shaft shield, and driveline shields must be installed and in good working condition to avoid injury or death from driveline entanglement and parts flying off the driveline.
- Feed only wood products through the chipper. Chipping products other than wood can damage the driveline and rotor, cause back feed injuries, and create a thrown object hazard resulting in serious injury or death.
- Adjust discharge chute to direct material away from operator, people, animals, equipment, and buildings. The Wood Chipper can throw objects.
- Never cross the path of product being discharged from the chipper even when there is no product coming out the chute. Lodged pieces can shake loose and discharge suddenly.
- Make certain driveline yokes are securely fastened at each end. A loose yoke can work free allowing the driveline to rotate uncontrollably.
- Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and driveline. It will also defeat the purpose of the tractor's power take-off shield.

WARNING

To avoid serious injury or death:

- Do not force branches into the knives. Doing so can damage the machine and/or cause kickback leading to serious injury or death.
- Allow only persons to operate this implement who have fully read and comprehended this manual, and who are properly trained in the safe operation of this implement.
- Never carry riders on the implement or tractor. 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.
- Do not put metal, glass, rocks, or other unapproved objects into the Wood Chipper. Objects such as these can damage the Wood Chipper and discharge out the chute causing serious injury or death.
- Do not lift unit up with driveline engaged or operate unit in the raised position. The driveline can break and throw off flying projectiles that can cause bodily injury or death.
- Do not operate Wood Chipper with an out-of-balance rotor, damaged or worn knives. Internal parts can work loose or break at high speeds. Always replace all blades at the same time.
- Do not exceed this machine's ability to do the job or to do the job safely. If machine limits are in question, don't do the job.
- Do not use implement to lift objects; to pull objects such as fence posts, stumps, etc; or to push objects. The unit is not designed or guarded for these uses.

Section 2: Operating Instructions

- Do not reach past rubber skirting inside feed chute. If needed, use a stick or branch to lightly push on product beyond the rubber skirting. Reaching beyond rubber skirting can result in serious injury or death.
- Do not use implement as a man lift or work platform. It is not properly designed or guarded for this use.
- Keep work area clear of debris to help prevent accidental tripping and falling.
- Do not operate Wood Chipper parked sideways on sloping ground. Tractor and chipper can flip over.
- Do not operate a broken or bent driveline. Such a driveline will break apart while rotating at high speeds. Always remove the implement from use until the damaged driveline can be repaired or replaced.
- Some tractors are equipped with two power take-off speeds. Be certain your tractor's power take-off shaft is set-up to operate at 540 rpm. Do not exceed 540 rpm power take-off speed. Excessive speed can damage drive/driven components and increase the risk of a thrown object hazard.
- Keep yourself and others clear of the feed chute hinged area while rotating the feed chute down. Body parts can be pinched or severed.

WARNING

To avoid serious injury or death: The following protective gear should be worn when working around the Wood Chipper.

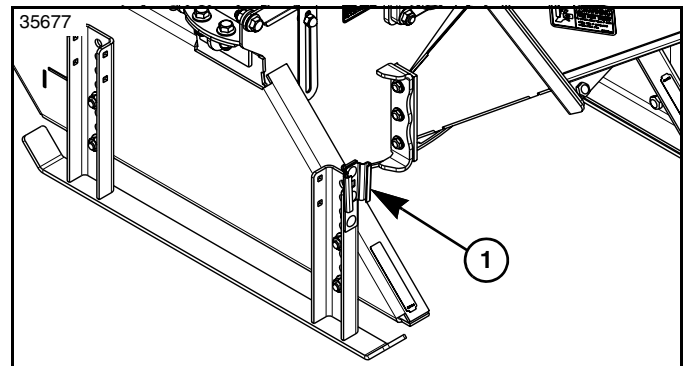
- Wear face and eye protection such as a full face shield to protect against flying debris ejecting out the feed chute.
- Wear a hard hat for protecting the head.
- Wear hearing protection such as earmuffs or earplugs. Hearing loss from loud noises is cumulative over a lifetime and can never be recovered.
- Wear leather gloves to protect against blisters, cuts, and pokes.
- Wear protective clothing to protect against cuts, bruises, and pokes from tree limbs.
- Wear protective shoes with slip resistant soles. Always be sure of your footing. Walk, never run.
- Wear a respirator or filter mask to protect lungs and airway.
- Keep long hair tucked in. Do not wear jewelry, loose fitting clothing, clothing with pull strings, or other articles that can become entangled in product fed into the chipper or rotating components.

Transporting

WARNING

To avoid serious injury or death:

- When traveling on public roads, use hazard lights, slow moving vehicle sign, clean reflectors, and other adequate devices to warn operators in other vehicles of your presence. If implement blocks visibility of slow moving vehicle sign, relocate sign so it is visible from the back at all times. Always comply with all federal, state, and local laws.
- Never carry riders on the implement or tractor. 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 disengage power take-off and wait for the driveline to stop rotating before raising the implement to the transport position.
- Do not transport Wood Chipper with tractor PTO engaged.

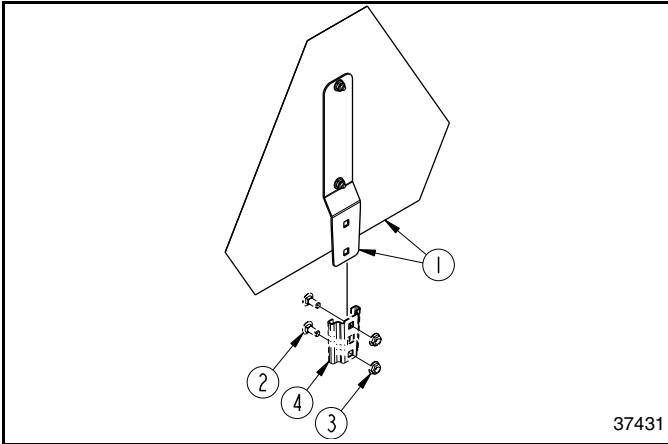


Mount For Slow Moving Vehicle Sign
Figure 2-1

Refer to Figure 2-1:

1. If the tractor's slow moving vehicle sign is not visible to operators in approaching vehicles from the back, then relocate the sign from the tractor to mounting bracket (#1) on the implement. If needed, a sign can be purchased from your nearest Land Pride dealer. Refer to "**Slow Moving Vehicle Sign (Accessory)**" on page 22.
2. When raising Wood Chipper to transport, be sure that the driveline does not contact tractor, Quick Hitch, or chipper.
3. Reduce tractor ground speed when turning and leave enough clearance so that the chipper does not contact obstacles such as buildings, trees, or fences.
4. 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.
5. Shift tractor to a lower gear when traveling over rough or hilly terrain.

Section 2: Operating Instructions



Slow Moving Vehicle Sign
Figure 2-2

Slow Moving Vehicle Sign (Accessory)

Refer to Figure 2-2:

Land Pride offers the slow moving vehicle sign (#1) as an accessory should your tractor not be equipped with a removable sign that fits Land Pride's SMV mounting socket (#4). Also, mounting components (#2, #3, & #4) can be purchased from your nearest Land Pride dealer should you want to mount this sign on other equipment.

Item	Part No.	Description
1	316-362S	SMV Sign
2	802-092C	RHSNB 5/16-18X3/4 GR5
3	803-177C	NUT HEX FLG TP LK 5/16-18ZNYCR
4	890-401C	SMV MOUNTING SOCKET

Detailed Operating Instructions

WARNING

To avoid serious injury or death: Allow only persons to operate this implement who have fully read and comprehended this manual, and who are properly trained in the safe operation of this implement.

The WC1504 Wood Chipper is designed to cut wood products 4" in size and smaller such as brush, branches, small trees, and lumber into small chips that can be quickly turned into mulch or just to aid in decomposition.

1. Park tractor with Wood Chipper outside on a level solid surface. Make sure there is room to discharge chips into a pile directed away from people, animals, tractor, equipment, buildings, and operator.
2. Set tractor engine speed at an idle, place tractor gear selector in park, and set park brakes.
3. Adjust skid extensions to support the Wood Chipper at a height that will allow the driveline to operate as level as possible. See "**Skid Extension Height**" on page 24 for detailed instructions.
4. Lower Wood Chipper slowly onto its skid extensions.

5. Rotate discharge chute to discharge product in the direction desired. See "**Discharge Chute Angle**" on page 25 for detailed instructions.
6. Rotate deflector chute to direct product being discharged closer or farther away. See "**Deflector Chute Angle**" on page 25 for detailed instructions.
7. With engine speed at a low idle, engage power take-off and then slowly increase engine speed to 540 rpm.
8. Untangle product before inserting it into the feed chute. Slowly slide one piece at a time into the feed chute toward the rotor knives.
9. To protect oneself, do not reach past the rubber skirt inside the feed chute. Instead use a stick or branch to lightly push on the product as needed.
10. If tractor engine starts to slow, stop pushing on the product. Once engine speed returns, continue push lightly on product but at a slower speed. **Do not force feed product into the chipper.**
11. Once Wood Chipper starts to self-feed, release product and allow rotor knives to pull product in at its own speed. If knives will not pull product in, then refer to "**Product self-feeds slowly or won't self-feed at all**" in the "**Troubleshooting**" chart on page 37.
12. Make any necessary corrections to the discharge chute angle and deflector chute to finalize direction and location of chip pile.
13. Never leave Wood Chipper with unit running. Always lower engine speed to an idle, disengage power take-off, shut tractor engine off and remove ignition key before leaving the work area.
14. Disengage power take-off if foreign material such as glass, metal, or rocks enters the chipper or if other emergencies arise. Shut tractor engine off, remove ignition key, and wait for moving parts to come to a complete stop before removing foreign material. Inspect and make repairs before putting machine back into service.

Helpful Operating Hints

The following hints will help keep the chipper running.

1. Be careful not to feed too much product at once, feed oversize product, feed wet product, or feed product too fast. Doing so can plug the Wood Chipper.
2. Alternate leafy material with a non leafy hardwood piece. Hard wood pieces help clean out leafy material. Keep alternating leafy material with hardwood pieces until leafy material is processed.
3. Let leafy branches dry for a couple weeks before chipping them. Dry leaves will process better.
4. Maintaining 1/32" gap between ledger bar and rotor knives will keep knives wiped off, prevent plugging, allow product to feed better, and keep wood chipping.



Section 2: Operating Instructions

General Operating Instructions

Now that you have familiarized yourself with the Operator's Manual, completed the Operator's Checklist, properly attached your Wood Chipper to your tractor and adjusted the angle of tilt correctly, you are almost ready to begin using your Land Pride WC1504 Wood Chipper.

It is now time to do a running operational safety check. If at any time during this safety check you detect a malfunction in either the Wood Chipper or tractor, shut tractor off immediately, remove ignition key, and make necessary repairs or adjustments before continuing on.

Make sure the tractor's park brake is engaged, the tractor's power take-off is disengaged, the Wood Chipper is resting on its skid extensions, and the driveline shaft is not in a bind. Start the tractor and then back the tractor throttle off until the engine is at low idle. With the tractor running at an idle speed, make sure that the rear 3-Point control arms will lower the Wood Chipper from transport to working position and back without putting the driveline into a bind. Lower the Wood Chipper down to ground and engage the power take-off drive shaft. Check to make sure everything is running smoothly. If not, safely shut the tractor down to make necessary corrections. If everything is in proper working condition, you are ready to move to the work site.

At the work site you should adjust the skid extensions to a height that will allow the driveline to operate as level as possible, rotate the discharge chute to direct product away from the operator, people, animals, equipment, and buildings. You should also adjust the deflector chute to control the distance product will be thrown.

You are now ready to begin turning wood into chips. Make sure the unit is setting on its skid extensions, tractor gear selection is in park, and park brakes are set. Set tractor engine rpm at a low idle and engage the power take-off. Once the unit is running, increase power take-off speed to 540 rpm. Dismount tractor and go to the rear to begin loading limbs and brush 4" (10 cm) and smaller into the feed chute one at a time. You should release your grip once the product starts to self-feed. Be careful not to reach past the rubber skirting in the feed chute. When necessary, you should use a stick or board to push on objects beyond the rubber skirting. You will immediately begin to see a generous stream of chips being rapidly ejected out of the discharge chute to a predetermined location. If the chip pile is not developing where you would like, then readjust discharge chute and deflector chute to redirect where the pile will build. With a little practice, you will gain the required experience you need to help you achieve the desired results you expect from your Land Pride WC1503 Wood Chipper.

Whether you are done chipping, need to take a break, or just need to make a few adjustments, always remember to reduce the tractor's engine rpm, disengage the power take-off, turn engine off, and remove the ignition key.

Unhook Wood Chipper

See "**Long Term Storage**" on page 32 before unhooking and storing the Wood Chipper for long periods or at the end of the season. Unhook Wood Chipper from tractor as follows:

1. See "**Long Term Storage**" on page 32 when storing unit for long periods or at the end of the season.
2. Shut tractor down properly before dismounting. Refer to "**Tractor Shutdown Procedure**" on page 15.

Refer to Figure 1-6 on page 16:

3. Pull back on driveline lock collar and hold while pulling driveline yoke from the tractor shaft.
4. If needed, adjust length of upper 3-Point center link until center hitch pin is loose and can be removed.
5. Remove center hairpin cotter and hitch pin from the chipper's upper center clevis.
6. Move 3-Point link out of the way and reinstall hitch pin and hairpin cotter in the chipper's upper center clevis for storage.
7. Remove linchpins from lower 3-Point hitch pins.
8. Move lower 3-Point arms out of the way and reinstall linchpins in chipper's lower hitch pins for storage.
9. Pull back on driveline lock collar and hold while pulling driveline yoke from the tractor shaft. If possible, support driveline from upper center hitch pin or on a support block to keep driveline out of the dirt.
10. If there is a slow moving vehicle sign mounted on the back of the chipper and if it belongs to the tractor, remove it from the chipper and insert it in the mounting bracket on the back of the tractor.

Section 3: Adjustments

Adjustment Safety

DANGER

To avoid serious injury or death:

Always disengage power take-off before lifting the implement.
Never operate implement in the raised position. Objects can be thrown at high speeds toward people or animals

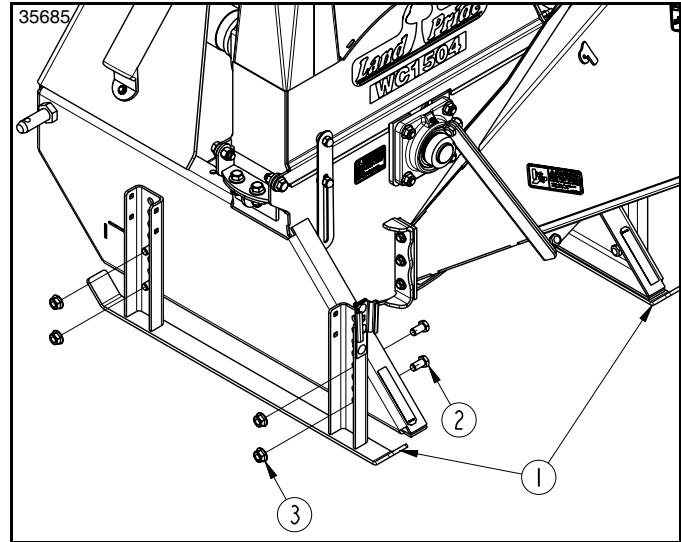
Skid Extension Height

Refer to Figure 3-1:

IMPORTANT: The Wood Chipper operates best if skid extensions are adjusted to support the unit with driveline operating near level. This setting will also increase the life of the driveline u-joints.

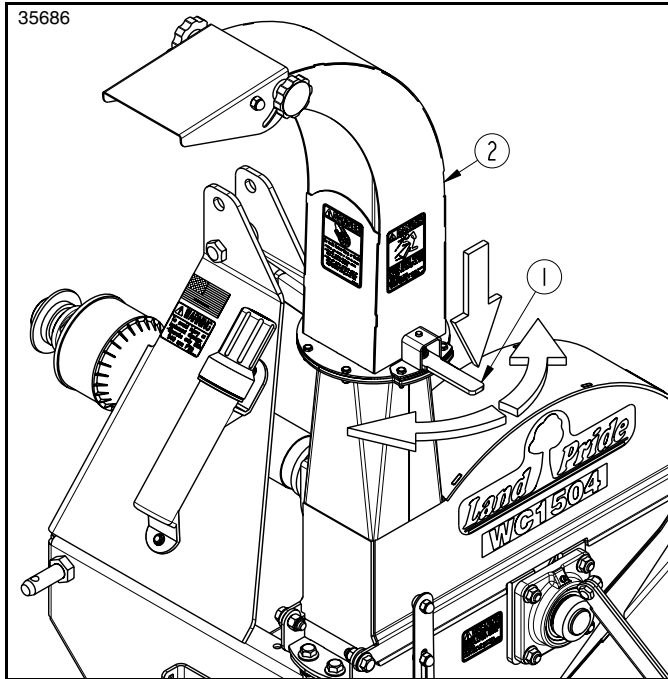
NOTE: This effects loading height for wood.

1. Make sure power take-off is disengaged, gear selector is in park, and park brake is set. Adjust tractor 3-Point up or down until driveline is close to level.
2. Place support blocks under the chipper but not under skid extensions (#1) to keep chipper from drifting down while adjusting skid extensions.
3. Lower Wood Chipper onto support blocks, shut tractor engine off, and remove ignition key.
4. Remove hex flange locknuts (#3) and bolts (#2).
5. Lower skid extensions (#1) to the ground and reinsert 1/2"-13 GR5 cap screws (#2). Secure cap screws with existing hex flange locknuts (#3). Tighten locknuts to the correct torque.
6. Raise tractor 3-Point up and remove support blocks.
7. Lower unit until it is resting on its skid extensions.



**Adjust Skid Extension Height
Figure 3-1**

Section 3: Adjustments



Adjust Discharge Chute Angle
Figure 3-2

Discharge Chute Angle

Refer to Figure 3-2:



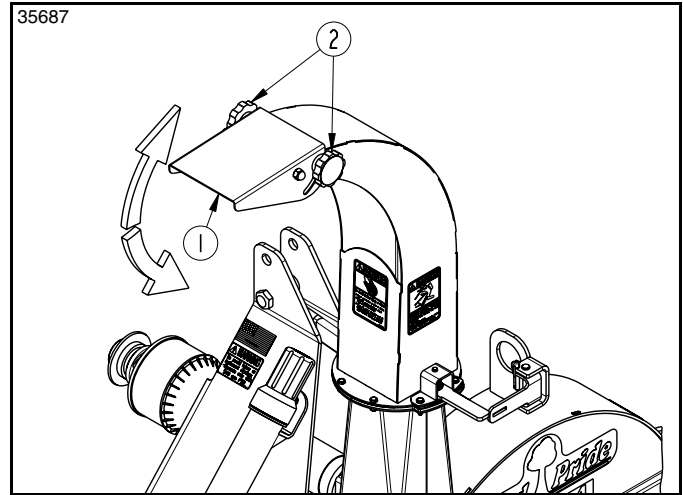
DANGER

To avoid serious injury or death:

Adjust discharge chute to direct material away from operator, people, animals, equipment, and buildings. The Wood Chipper can throw objects.

NOTE: Chute is limited to 270° rotation so as not to get into loading area.

1. Push down on rotation chute lock lever (#1) and hold.
2. Rotate discharge chute (#2) in small increments until desired angle of discharge is achieved.
3. Release lock lever (#1). Make sure lever has locked into position and chute cannot rotate.

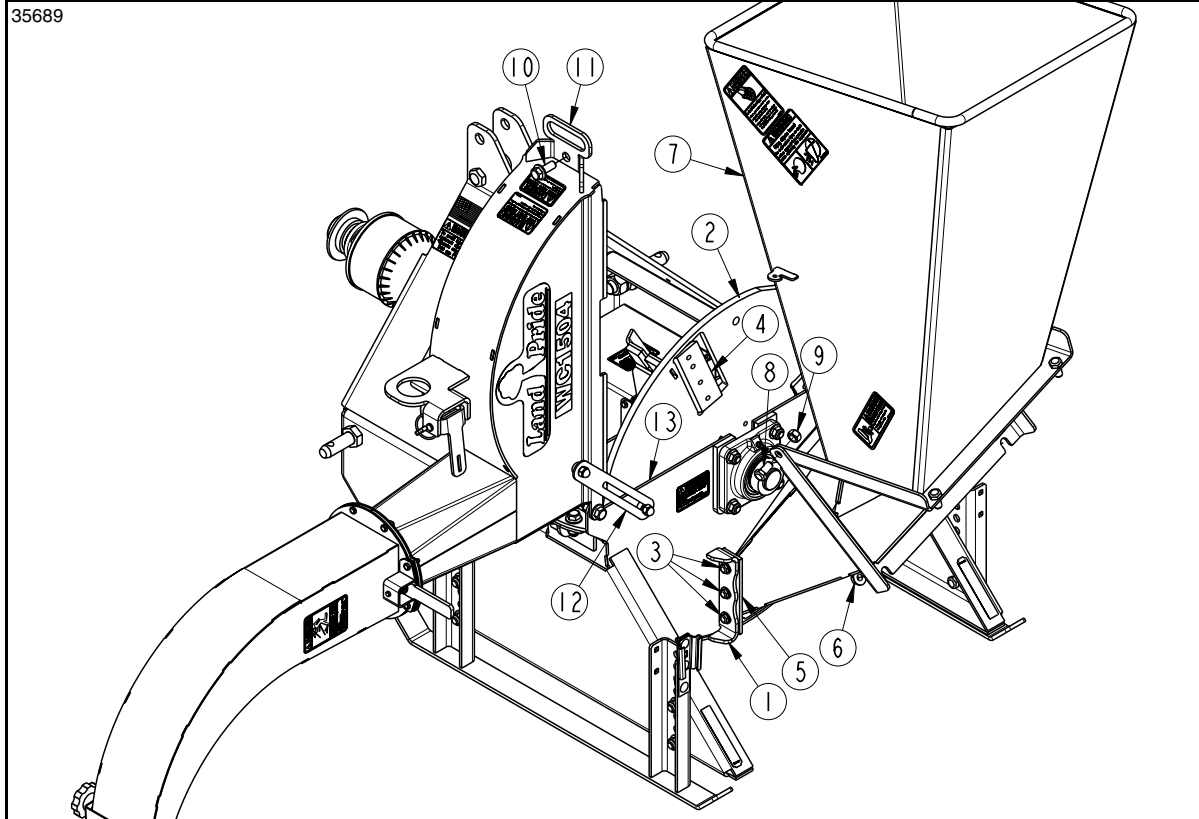


Adjust Deflector Chute Angle
Figure 3-3

Deflector Chute Angle

Refer to Figure 3-3:

1. Loosen hand knobs (#2) and rotate deflector chute (#1) up or down to the desired angle.
2. Tighten hand knobs (#2).



View of Rotor Knife (#4) and Ledger Knife (#5)

Figure 3-4

Check Ledger Knife Clearance

CAUTION

To avoid minor or moderate injury:

Knives and ledgers are sharp. ALWAYS wear gloves and eye protection while inspecting and adjusting ledger clearance.

IMPORTANT: It is best to have two people available to check ledger knife clearance; or have in place a way other than the pivot latch to securely support the feed chute rotate up; or remove the feed chute from the chipper lower frame.

NOTE: Two 3/4" wrenches, one 9/16" wrench, one 1/32" gauge, one 1/16" gauge, and one flashlight are needed to check and adjust ledger knife.

Refer to Figure 3-4:

The knives (#4) cut best if knife ledger (#5) is adjusted with a 1/32" to 1/16" (0.8 to 2 mm) gap between cutting edge of knives and knife ledger. The larger the gap, the faster the product will self-feed. Do not exceed 1/16" (2mm) gap.

1. Make certain gear selector is in park and park brake is set. Disengage power take-off, shut tractor engine off, remove ignition key, and wait for all moving parts to come to a complete stop before working on this unit.
2. Disconnect driveline from tractor power take-off shaft.
3. Remove hex flange serrated bolt (#10) and rotate upper rotor housing (#11) up until locking strap (#12) supports the housing. (Do not drop housing.)
4. Remove hex whiz nuts (#6) and rotate feed chute (#7) up. Support feed chute in the rotated up position using one of three methods listed below:
 - Have someone hold the feed chute rotated up.
 - Support the feed chute rotated up by securing it to the 3-Point hitch or securely supporting the chute rotated up with a support block.
 - Remove locknuts (#9), bolts (#8), and feed chute (#7) from the chipper's lower housing.
5. Check gap between ledger knife (#5) and rotor knives (#4) as follows:
 - a. Manually rotate rotor (#2) until cutting edge of rotor knife (#4) is in line with top inside edge of lower rotor housing (#13).
 - b. Measure and record distance between rotor knife (#4) and lower rotor housing (#13).
 - c. Repeat steps 5a & 5b for the other 3 rotor knives.
 - d. Select the rotor knife (#4) closest to the inside wall of rotor housing (#13) and rotate that rotor knife to be in line with ledger knife (#5).

Section 3: Adjustments

- e. **Refer to Figure 3-5:** Check gap between selected rotor knife (#4) and ledger knife (#5). The gap should be between 1/32" (0.8 mm) and 1/16" (2 mm) and should be equal distance along the full length of the ledger knife.
- f. If gap is smaller than 1/32" (0.8 mm) or larger than 1/16" (2 mm), then readjust the ledger knife. See **"Adjust Ledger Knife"** on page 27 for detailed instructions.
6. Manually rotate rotor (#2) one full turn to recheck all rotor knives (#4). Make sure all rotor knives do not come in contact with the ledger knife (#5). If any rotor knife makes contact with the ledger knife, then readjust ledger knife to clear that rotor knife by 1/32" to 1/16" (0.8 to 2 mm).
7. Remove any tool or loose component that may have collected inside the rotor housing.
8. Rotate upper rotor housing (#11) closed and secure with 1/2"-13 x 1 1/4" GR 8 flange serrated bolt (#4). Tighten serrated bolt to the correct torque.

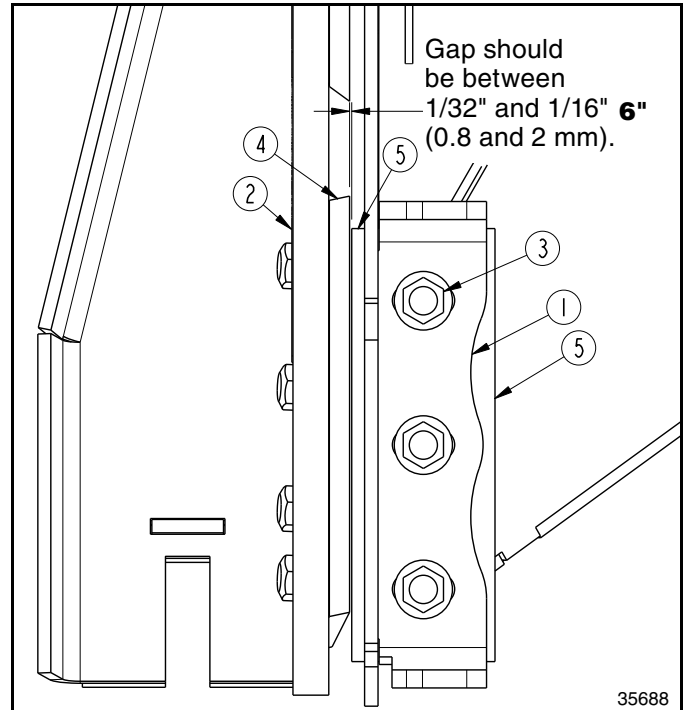
Refer to Figure 3-4 on page 26:

WARNING

To avoid serious injury or death:

Keep yourself and others clear of the feed chute hinged area while rotating the feed chute down. Body parts can be pinched or severed.

9. If removed, reattach feed chute (#7) to lower frame with 1/2" x 1" bolts (#8) and locknuts (#9). Draw locknuts up snug and then back off one-half turn.
10. Secure feed chute (#7) with two 1/2"-13 hex whiz nuts (#6). Tighten hex whiz nuts to the correct torque.
11. Connect driveline to the tractor power take-off shaft.



Cut Away View of Rotor, Ledger Knife, and Rotor Knife
Figure 3-5

Adjust Ledger Knife

Refer to Figure 3-5 & Figure 3-4 on page 26:

See **"Check Ledger Knife Clearance"** on page 26 to determine if gap between knife and knife ledger is OK. If gap between knife and knife ledger is not OK, then adjust knife ledger as follows:

WARNING

To avoid serious injury or death:

*Ledger bolts must be tightened to the correct torque value. Not doing so can damage the chipper and cause bodily injury. Torque values for the ledger bolts are provided under **"Additional Torque Values"** on page 38.*

NOTE: Credit card can be used to set gap. Tolerances in manufacturing vary due to weld pull. Set closest rotor knife to ledger with 1/32" shim and lock ledger in place. Rotate rotor and check all other rotor knives for clearance.

1. Loosen hex bolts (#3).
2. Place 1/32" to 1/16" (0.8 to 2 mm) shim between knife edge and knife ledger. Do not exceed 1/16" gap.
3. Adjust knife ledger against the shim. Hold ledger in this position to tighten bolts (#3) in step 4 below.
4. Tighten GR8 Ledger bolts (#3) to 35-40 ft-lbs (47-54 Nm). See **"Additional Torque Values"** on page 38.
5. Continue with step 6 under **"Check Ledger Knife Clearance"** on page 26.

Section 4: Maintenance & Lubrication

General Maintenance Information

Proper servicing and adjustments are key to the long life of any implement. With careful inspection and routine maintenance, you can avoid costly downtime and repair.

Check all bolts and pins after using the unit for several hours and on a regular basis thereafter to ensure they are tight and secured. Lubricate components on schedule. Replace worn, damaged, or illegible safety labels by obtaining them from your Land Pride dealer.

DANGER

To avoid serious injury or death:

- Work only in areas that are well ventilated. Never operate an engine in a closed area without venting the exhaust fumes. Exhaust fumes will cause asphyxiation and can lead to 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.
- Always disengage power take-off before lifting the implement. Never operate implement in the raised position. Objects can be thrown at high speeds toward people or animals.
- Always disconnect driveline from the tractor before servicing the drivetrain and components powered by the drivetrain. A person can become entangled in the drivetrain if the tractor is started and the power take-off is engaged.

WARNING

To avoid serious injury or death:

- Make sure controls are all in the neutral position or park before starting the power machine.
- Do not operate Wood Chipper with an out-of-balance rotor, damaged or worn knives. Internal parts can work loose or break at high speeds. Always replace all blades at the same time.
- Perform scheduled maintenance. Check for loose hardware, missing parts, broken parts, structural cracks, and excessive wear. Make repairs before putting the implement back into service.
- Do not alter implement or replace parts on the implement with other brands. Other brands may not fit properly or meet OEM (Original Equipment Manufacturer) specifications. They can weaken the integrity and impair the safety, function, performance, and life of the implement. Replace parts only with genuine OEM parts.

Rotor Knives

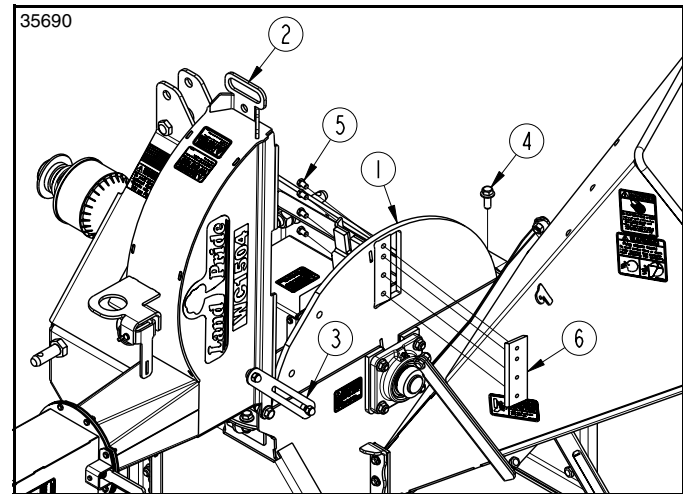
WARNING

To avoid serious injury or death:

- Do not operate Wood Chipper with an out-of-balance rotor, damaged or worn knives. Internal parts can work loose or break at high speeds. Always replace all blades at the same time.

- Wear eye protection and gloves while inspecting, removing, sharpening, and replacing knives.
- Knife bolts must be tightened to the correct torque value. Not doing so can damage the chipper and cause bodily injury. Torque values for the knife bolts are provided under “Additional Torque Values” on page 38

IMPORTANT: Replace knives with genuine Land Pride knives only. All knives must be replaced at the same time. Not replacing knives at the same time will result in an out-of-balance condition that can contribute to premature bearing breakdown and create structural cracks in the chipper housing.



Accessing Rotor Knives
Figure 4-1

Rotor Knife Access

Refer to Figure 4-1:

1. Make certain gear selector is in park and park brake is set. Disengage power take-off, shut tractor engine off, remove ignition key and wait for all moving parts to stop before working on this machine.
2. Disconnect driveline from tractor power take-off shaft.
3. Remove hex flange screw (#4).
4. Rotate upper rotor housing (#2) up until locking strap (#3) supports the housing. (Do not drop.)
5. When finished servicing rotor knives, rotate upper rotor housing down and secure with existing 1/2"-13 x 1 1/4" GR 8 hex flange serrated screw (#4). Tighten serrated screw to the correct torque.

Rotor Knife Maintenance

Refer to Figure 4-1:

1. Manually rotate one of the rotor knives to the top.
2. Unscrew bolts (#5) and remove rotor knife (#6).
3. Rotate the remaining rotor knives to the top and remove them.
4. Examine bolts (#5) and rotor knives (#6) for damage and replace with Land Pride parts if needed.

Section 4: Maintenance & Lubrication

5. Inspect knives (#6) for wear. Reverse knives if unused cutting edge is still sharp, sharpen knives when both edges are dull, and replace knives if both edges gap more than 1/16" (2 mm) between the cutting edge and knife ledger.

Reverse Rotor Knives

- a. Flip rotor knives over so that the sharp edges are leading in rotation and reattach them with existing 3/8"-24 x 5/8" GR8 bolts (#5). Continue with steps 6-8 on this page.

Resharpen Rotor Knives

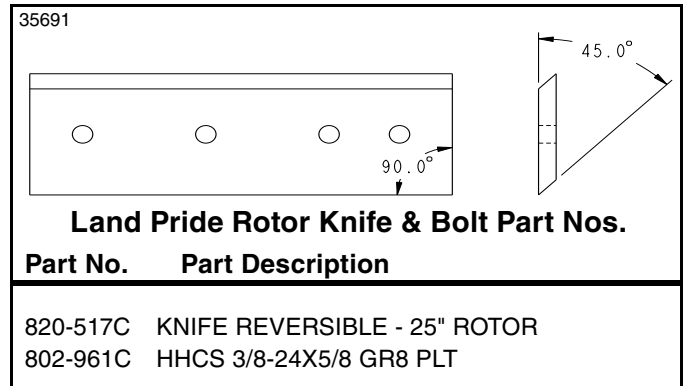
Refer to Figure 4-2:

- a. Both knives must be sharpened at the same original angle of 45° and at the same service time to maintain proper balance. Take the following precautions when sharpening rotor knives.
 - Always grind rotor knives to a sharp 45° edge.
 - Always grind cutting edge straight and square (90°) to the rotor knife's side.
 - Always keep corners of cutting edges square.
 - Do not sharpen back side of cutting edge.
 - Do not remove more material than necessary.
 - Do not heat and pound out a cutting edge.
 - All rotor knives should weigh the same.
- b. **Refer to Figure 4-1 on page 28:** Reattach rotor knives (#6) to rotor (#1) with 3/8" bolts (#5). Continue with steps 6-8 on this page.

Replace Rotor Knives With New Knives

Refer to Figure 4-1 on page 28:

- a. If rotor knives have been reinstalled and ledger knife cannot be adjusted to the proper clearance, then replaced rotor knives with new knives. See **"Check Ledger Knife Clearance"** on page 26 for allowable clearance dimensions.
- b. Reattach new rotor knives to rotor (#1) with 3/8" bolts (#5). Continue with steps 6-8 below.
6. Tighten rotor knife bolts (#5) to 35-40 ft-lbs (47-54 Nm). See **"Additional Torque Values"** on page 38 for more information.
7. Adjust ledger knife to the proper clearance dimensions. For detailed adjustment instructions, see **"Check Ledger Knife Clearance"** on page 26.
8. Close upper rotor housing (#2). See step 5 under **"Rotor Knife Access"** on page 28.



Sharpening Rotor Knives
Figure 4-2

Ledger Knife Maintenance

Refer to Figure 4-3:

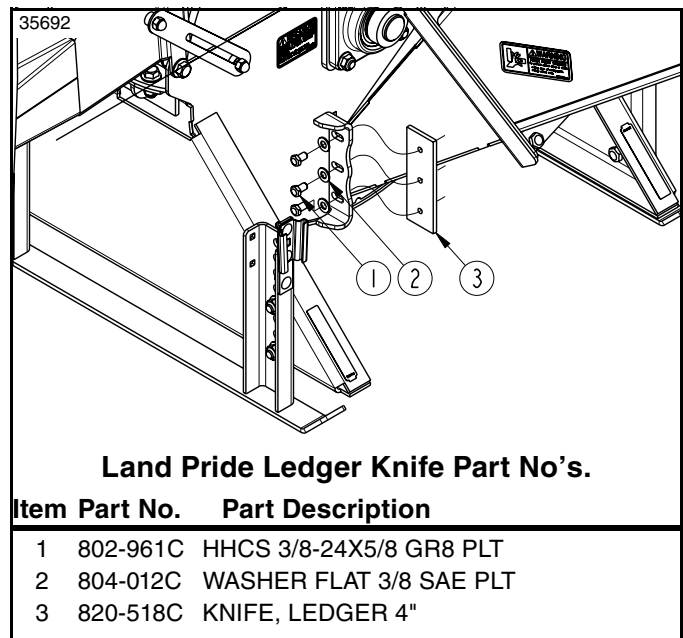


To avoid minor or moderate injury:

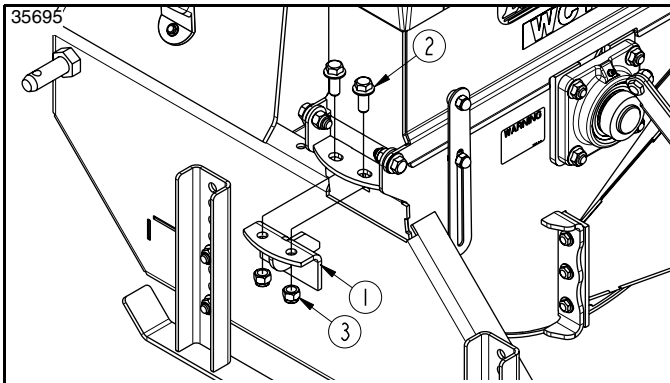
Knives and ledgers are sharp. ALWAYS wear gloves and eye protection while inspecting and adjusting ledger clearance.

The ledger knife has four sharp edges. When an edge becomes worn and dull or rounded, rotate ledger knife to a new sharp edge.

1. Remove cap screws (#1), flat washers (#2), and ledger knife (#3).
2. Rotate ledger knife (#3) to a new cutting edge and reinstall with existing 3/8"-24 x 5/8" GR8 cap screws (#1) and flat washers (#2).
3. Adjust ledger knife to the correct clearance. See **"Adjust Ledger Knife"** on page 27.



Accessing Ledger Knife
Figure 4-3



Land Pride Breaker Bar Part No's.

Item	Part No.	Part Description
1	328-092H	TWIG BREAKER BAR
2	802-083C	HFSS 1/2-13X1 1/4 GR8
3	802-147C	HHCS 3/8-16X3 1/2 GR5

**Twig Breaker Bar
Figure 4-4**

Twig Breaker Bar

Refer to Figure 4-4:

The twig breaker bar (#1) does not require any special maintenance and should last a long time. Replace twig breaker bar if it becomes damaged or worn thin.

1. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 15.
2. Disconnect driveline from the tractor.
3. Remove nuts (#3), bolts (#2), and twig breaker bar (#1).
4. Examine condition of twig breaker bar (#1) and replace if breaker bar is bent, broken, worn thin, or has structural cracks.
5. Attach existing or new twig breaker bar (#1) with 1/2" x 1 1/4" hex flange serrated bolts (#2) and nylock nuts (#3). Do not tighten nuts at this time.

Refer to Figure 4-7 on page 31:

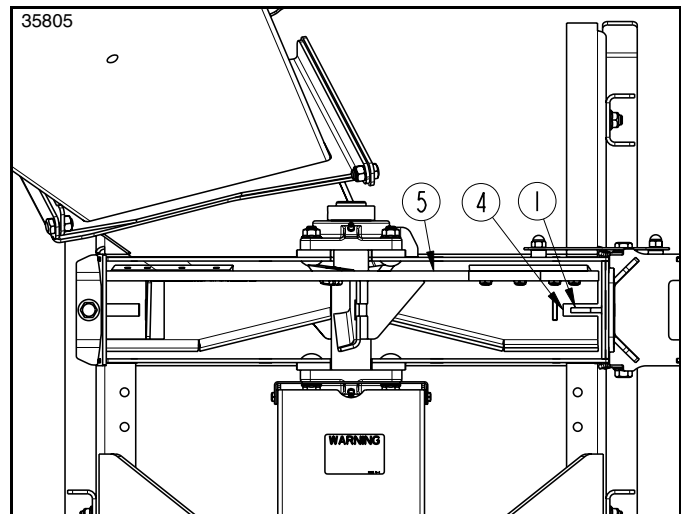
6. Remove bolt (#6) and rotate upper rotor housing (#2) up until locking strap (#5) supports the housing.

Refer to Figure 4-5:

7. Adjust twig breaker bar (#1) until it is centered in rotor fin slot (#4).
8. Manually rotate rotor (#5) one full turn to make sure twig breaker bar is centered as much as possible on all four rotor fin slots (#4).
9. Tighten 1/2"-13 GR8 bolts (#2) to the correct torque.

Refer to Figure 4-7 on page 31:

10. Rotate upper rotor housing (#2) down and secure with existing 3/8"-16 hex flange serrated screw (#6). Tighten serrated screw to the correct torque.
11. Reattach driveline to tractor power take-off shaft.



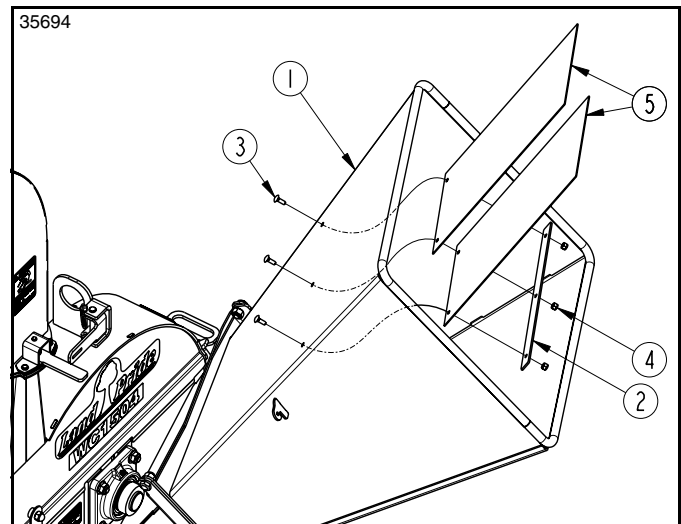
**Adjust Twig Breaker Bar (Top View)
Figure 4-5**

Rubber Flaps

Refer to Figure 4-6:

The rubber flaps (#5) should be replaced if torn, damaged, or missing. They warn the operator not to extend body parts beyond the flaps and help protect against objects flying out of the hopper towards the operator.

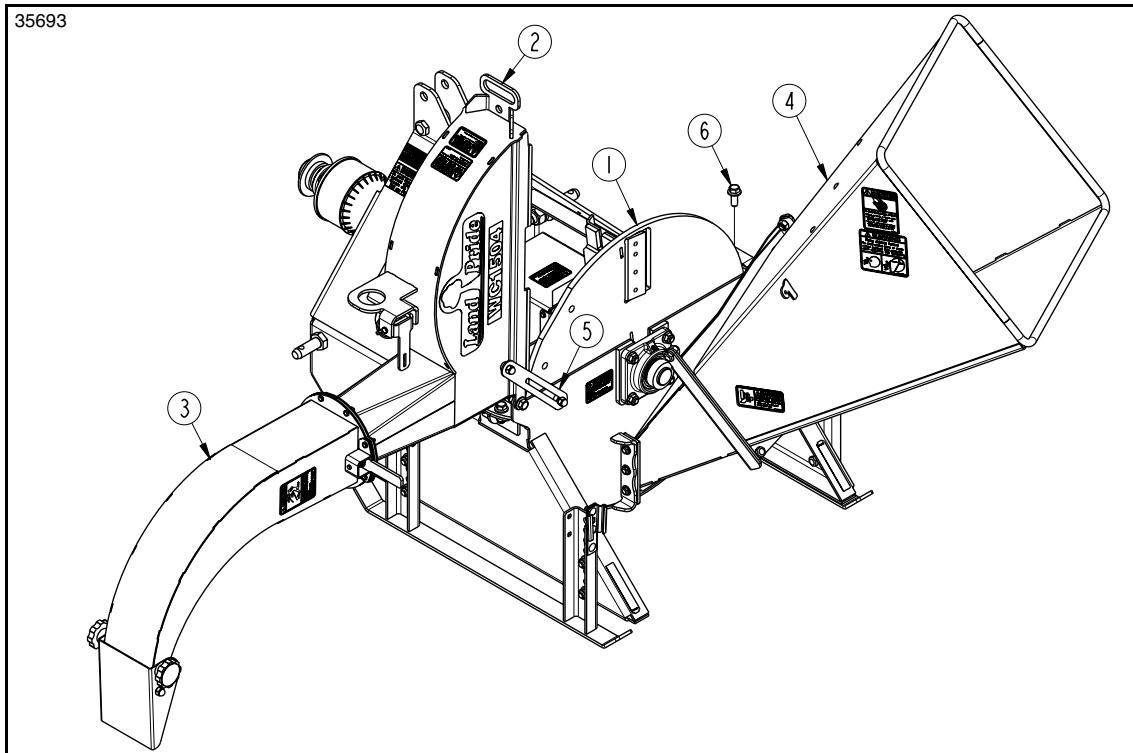
1. Unscrew hex nylock nuts (#4) and remove holddown strap (#2), carriage bolts (#3), and rubber flaps (#5).
2. Install new rubber flaps with existing 1/4"-20 x 3/4" GR5 carriage bolts (#3), holddown strap (#2), and hex nylock nuts (#4) as shown. Tighten nylock nuts to the correct torque.



Land Pride Rubber Flap Part No.

Item	Part No.	Part Description
5	816-774C	RUBBER FLAP 4" (2 Required)

**Take-up Spring Hole Location
Figure 4-6**



Accessing Rotor Knives

Figure 4-7

Helpful Operating Hints

The following hints will help protect against a plugged discharge chute, plugged rotor housing, sheared driveline bolt, and help keep the chipper running.

- Be careful not to feed too much product at once, feed oversize product, feed wet product, or feed product too fast. Doing so can plug the Wood Chipper.
- Alternate leafy material with a non leafy hardwood piece. Hard wood pieces help clean out leafy material. Keep alternating leafy material with hardwood pieces until leafy material is processed.
- Let leafy branches dry for a couple weeks before chipping them. Dry leaves will process better.
- Maintaining 1/32" (0.8 mm) gap between ledger knife and rotor knives will keep rotor knives wiped off, prevent plugging, allow product to feed better, and keep wood chipping.

Plugged Chutes & Rotor

Refer to Figure 4-7:

Clear plugged chutes and rotor as follows:

1. Shut tractor down properly before dismounting. Refer to **"Tractor Shutdown Procedure"** on page 15.
2. Disconnect driveline from tractor power take-off shaft.
3. Unplug feed chute, discharge chute, and rotor as follows:

Unplug Feed Chute (#4)

- a. Be sure to complete steps 1 & 2 on this page.
- b. Pull all material out of feed chute. Make sure nothing is jammed between inlet opening and rotor at bottom of feed chute.
- c. Loosen product jammed at the bottom with a stick or board by prying it up and to the right.
- d. If prying on product does not free it, then access rotor housing. See **"Unplug Rotor (#1)"** below for detailed instructions.

Unplug Rotor (#1)

- a. Be sure to complete steps 1 & 2 on this page.
- b. Remove hex flange screw (#6).
- c. Rotate upper rotor housing (#2) up until locking strap (#5) supports the housing.
- d. Clean rotor housing of debris.
- e. Manually rotate rotor to make sure all debris is removed and rotor is not jammed.
- f. Rotate rotor housing (#2) down and secure with existing 3/8"-16 hex flange serrated screw (#6). Tighten serrated screw to the correct torque.

Unplug Discharge Chute (#3)

- a. Be sure to complete steps 1 & 2 on this page.
 - b. Make certain discharge chute (#3) is clean. Pull all material out of the discharge chute. If necessary, use a stick to unplug a jam.
4. Reattach driveline to tractor power take-off shaft.



Shear Bolt Protection

The driveline is equipped with a shear bolt to help protect the machine from an overload such as product being fed too fast, rotor knives jamming against a very hard object, plugged rotor housing, and high speed start-ups.

Always determine the cause of the problem and fix it before putting the chipper back into service. See your Land Pride dealer when replacing shear bolts.

Shear bolt storage holes are located on frame rails on either side. See Figure 1-6 on page 16.

Land Pride Shear Bolt Part No.	
Part No.	Part Description
165.000.507	CO BOLT & NUT M10 x 60 CL.8.8

Long Term Storage

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

1. Clean off any dirt and grease that may have accumulated on the Wood Chipper and moving parts.
2. Inspect all rotating components for entangled material and remove.
3. Wash surfaces thoroughly with a garden hose or power washer.
4. After washing unit, run machine for several minutes to dry out the inside.
5. Check rotor knives for wear. Rotate rotor knives, sharpen worn knives, or replace with new rotor knives.
6. Check ledger knife. Rotate ledger knife or replace ledger knife when required.
7. Check twig breaker bar. Replace breaker bar if it is bent, broken, worn thin, or has structural cracks.

8. Inspect Wood Chipper for loose, damaged, or worn parts. Adjust and tighten loose parts and replace as needed.
9. Repaint parts where paint is worn or scratched to prevent rust. Ask your Land Pride dealer for aerosol touch-up paint. They are also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.

Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE SPRAY CAN
821-058C	PAINT GREEN SPRAY CAN
821-066C	PAINT ORANGE SPRAY CAN
821-070C	PAINT GP GLOSS BLACK SPRAY CAN

10. Replace all damaged or missing guards and decals.
11. Lubricate as noted in “**Lubrication Points**” on page 33.
12. A light coat of oil or grease may be applied to the rotor knives, ledger knives, and to any exposed unpainted parts to minimize oxidation.
13. Store Wood Chipper on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer Wood Chipper life. Tarp Wood Chipper if stored outside.
14. Unhook Wood Chipper from the tractor. See “**Unhook Wood Chipper**” on page 23.



Lubrication Points

Lubrication Legend



Multi-purpose
spray lube



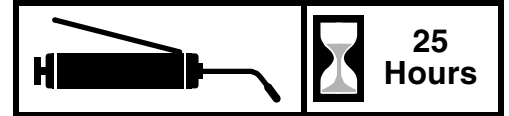
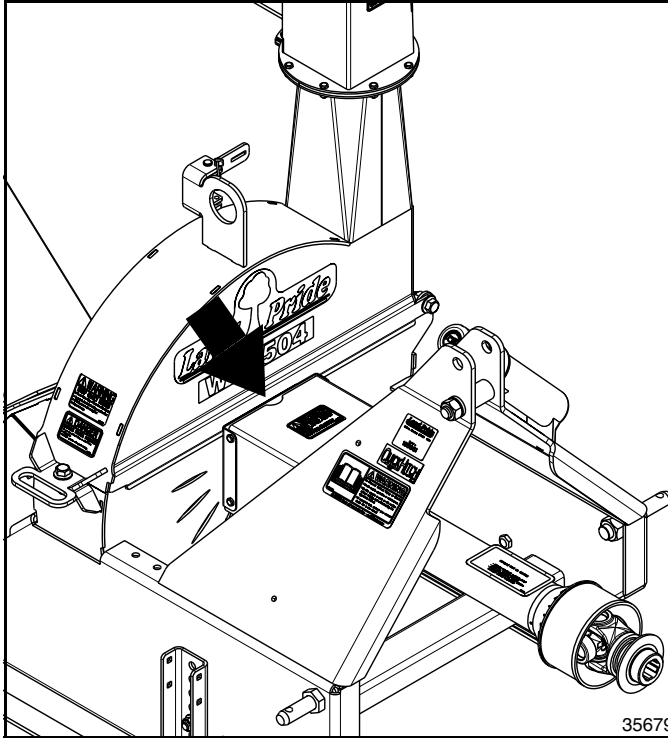
Multi-purpose
grease lube



Multi-purpose
oil lube



Intervals in hours at which
lubrication is required

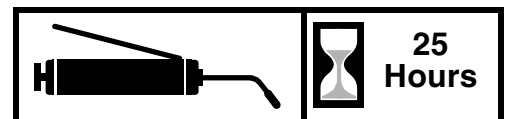
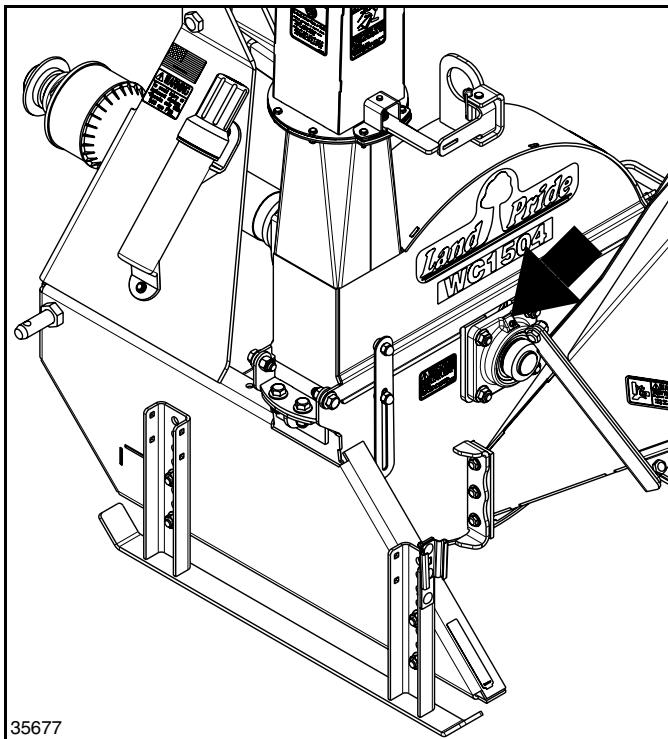


Front Flange Bearing

Zerks: One

Type of Lubrication: Multi-purpose Grease

Quantity = As required

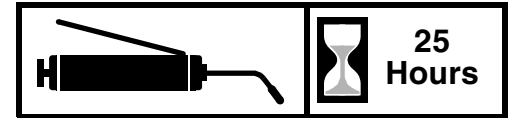
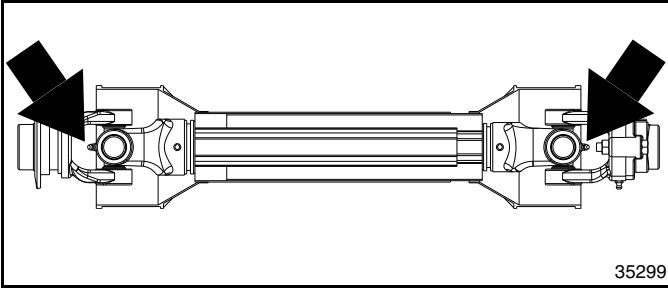


Rear Flange Bearing

Zerks: One

Type of Lubrication: Multi-purpose Grease

Quantity = As required

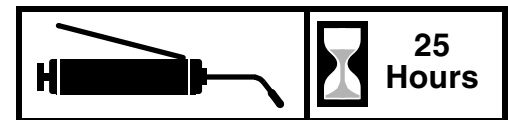
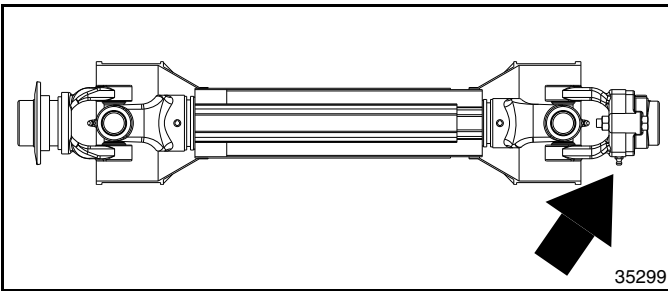


Driveline U-Joints

Zerks: Two (One on each end of driveline)

Type of lubrication: Multi-purpose grease

Quantity of lubrication: = As required

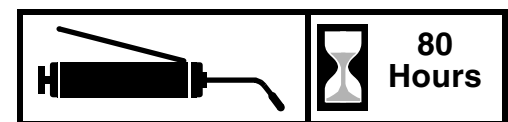
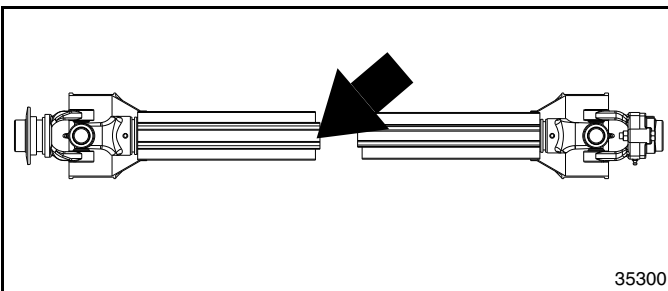


Shear Bolt Joint

Zerks: One on shear bolt end of driveline

Type of lubrication: Multi-purpose grease

Quantity = As required



Driveline Outer Shaft Profile

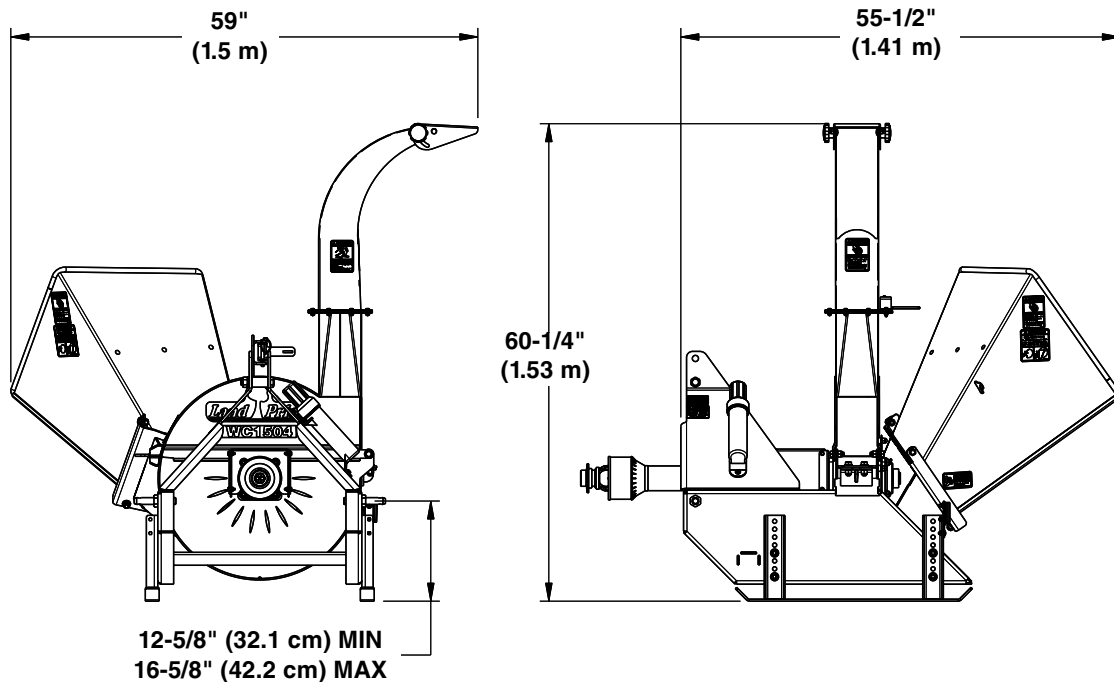
Where: Inside surfaces of outer shaft profile

Type of lubrication: Multi-purpose Grease

Quantity = As required

WC1504 Model

Specifications & Capacities		
Horsepower Required	hp (kW)	20 to 50 (14.9 to 37.3) Minimum 35 (26.1) for maximum capacity
Weight	lbs (kg)	450 (204.1)
Hitch		Cat. I w/ Quick Hitch capabilities
Upper Hitch Plate Thickness	in (mm)	5/16 (8)
Main Frame Thickness	in (mm)	3/16 (5)
Rotor Housing Thickness	in (mm)	3/16 (5)
Driveline Category		Cat. 4 with shear bolt
Power Take-off Speed		540 rpm
Rotor Speed		540 rpm (Direct Drive)
Rotor Size	in (cm)	25 (63.5)
Chip Capacity	in (cm)	4 (10.2)
Hopper Inlet Opening	in (cm)	20 x 20 (50.8 x 50.8)
Chipper Inlet Opening	in (cm)	10 x 4 (25.4 x 10.2)
Spout Discharge Opening	in (cm)	5 1/4 (13.3) Square
Rotor Knife		Reversible and Replaceable
Number of Rotor Knives		4
Rotor Knife Size	in (cm)	6 x 2 x 1/4 (15.2 x 5.1 x 0.6)
Rotor Knife Material		Hardened Steel (Specifically designed for chipping)
Feed System		Self-feed
Feed Height Above Ground	in (cm)	24 to 30" (61 to 76.2) With adjustable stands
Feed Height Adjustment		6 Settings (Includes without adjustable skids)
Chip Chute Position		270 degrees
Discharge Height	in (m)	58 to 64 (1.47 to 1.63)
Color		Orange, Green & Beige



35696



WC1504







Features	Benefits
Quick Hitch Adaptable	Quickly and easily attach chipper to tractor with one person.
1/4" (6 mm) Thick Rotor Knife	Rotor features 4 replaceable 1/4" (6 mm) hardened steel cutting edges.
Rotor Knives Can Be Rotated When One Cutting Edge Is Worn	Each rotor knife has two cutting edges to extend rotor knife life. When one edge is worn, rotate rotor knife 180° to a new cutting edge. Less downtime required to sharpen rotor knives.
Rotor Knives Are Replaceable	Can replace rotor knives when all cutting edges are worn out.
4-Bolt Flanged Bearings	Improves bearing life.
Cat. 4 Shear-Bolt Driveline	Shear-bolt protects the unit when obstructions are encountered.
Skid Extension Supports	Allows the unit to sit on the ground while keeping the driveline near level. Extends life of driveline u-joints.
Adjustable Rotating Discharge Chute With Rotation Stops	Directs direction wood chips will be discharged. Chute rotate stops keep the chute from discharging chips toward the operator feeding product toward the feed chute.
Adjustable Deflector Chute	Helps control the distance wood chips will be discharged away from the Wood Chipper.
Self-Feeding System	Product is pulled in by the sharp cutting edges with each pass of a rotor knife. Operator can be retrieving the next object to load while the unit is chipping the last limb loaded into the feed chute.



Troubleshooting

Problem	Cause	Solution
Product self-feeds slowly or won't self-feed at all	Rotor knives are worn	Rotate, sharpen, or replace rotor knives. See "Rotor Knives" on page 28.
	Tractor power take-off speed is below 540 rpm	Set tractor power take-off speed to 540 rpm.
	Rotor knives are not sharpened at a 45° angle	Resharpener rotor knives to the proper angle. See "Rotor Knives" on page 28.
	Plugged rotor and/or discharge chute	Clean discharge chute and rotor housing. See "Plugged Chutes & Rotor" on page 31.
	Clearance between rotor knife and ledger knife is too large	Readjust ledger. See "Check Ledger Knife Clearance" on page 26.
Wood Chipper requires excessive power to operate, or stalls	Tractor horsepower is too low	Minimum 35 power take-off hp is required when operating at maximum capacity.
	Rotor knives are dull/worn	Rotate, sharpen, or replace rotor knives. See "Rotor Knives" on page 28.
	Overloading feed chute with product	Load feed chute with less product.
	Loading feed chute with oversized product	Feed only product 4" in diameter or smaller.
	Product is too green or wet and sticks to the internal surfaces.	Feed only dry product or alternate between dry and green product to help keep internal surfaces clean.
	Rotor housing is plugged	Clean rotor housing. See "Plugged Chutes & Rotor" on page 31.
	Discharge chute is plugged	Clean discharge chute. See "Plugged Chutes & Rotor" on page 31.
	Clearance between rotor knife and ledger knife is too large	Readjust ledger. See "Check Ledger Knife Clearance" on page 26.
	Ledger knife is dull/worn	Rotate ledger knife or replace ledger knife. See "Ledger Knife Maintenance" on page 29.
Rotor will not turn	Driveline is not engaged	Engage driveline.
	Shear bolt in driveline is broken	Replace shear bolt. See "Shear Bolt Protection" on page 32.
	Rotor housing is plugged	Clean rotor housing. See "Plugged Chutes & Rotor" on page 31.
	Rotor is plugged at the twig breaker bar.	Clean Rotor around the twig breaker bar. See "Twig Breaker Bar" on page 30.
	Bent twig breaker bar	Replace twig breaker bar. See "Twig Breaker Bar" on page 30.
Wood Chipper is vibrating excessively	Loose rotor knife	Tighten rotor knife to rotor. See "Rotor Knives" on page 28.
	Broken or missing rotor knife	Replace broken or missing rotor knives in pairs. See "Rotor Knives" on page 28.
	Rotor knives don't weigh the same	Re-sharpen the heavier rotor knife to remove material from it until all rotor knives are the same. See "Rotor Knives" on page 28.
	Debris & dirt lodged in rotor	Clean rotor. See "Plugged Chutes & Rotor" on page 31
	Bent rotor	Inspect straightness of rotor and rotor shaft. Replace as rotor and/or rotor shaft if bent.
	Bent twig breaker bar making contact with rotor.	Replace twig breaker bar. See "Twig Breaker Bar" on page 30.
Driveline Vibrates	Worn Universal Joint	Replace Universal Joint.



Torque Values Chart for Common Bolt Sizes													
Bolt Size (inches)	Bolt Head Identification						Bolt Size (Metric)	Bolt Head Identification					
	 Grade 2	 Grade 5	 Grade 8	 Class 5.8	 Class 8.8	 Class 10.9							
in-tpi ¹	N · m ²	ft-lb ³	N · m	ft-lb	N · m	ft-lb	mm x pitch ⁴	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1-1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1-1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1-1/4" - 12	750	555	1680	1240	2730	2010	¹ 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						
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							
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)													
Additional Torque Values													
Rotor knife & Ledger, 3/8"-24 x 5/8" GR8 Bolts						35 to 40 ft-lbs (47 to 54 Nm)							



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

Driveline: One year Parts and Labor

Rotor: One year Parts and Labor

Rotor Knives, Ledger Knife, Rubber Flap, & Shear Bolt: Considered wear items

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

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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www.landpride.com
