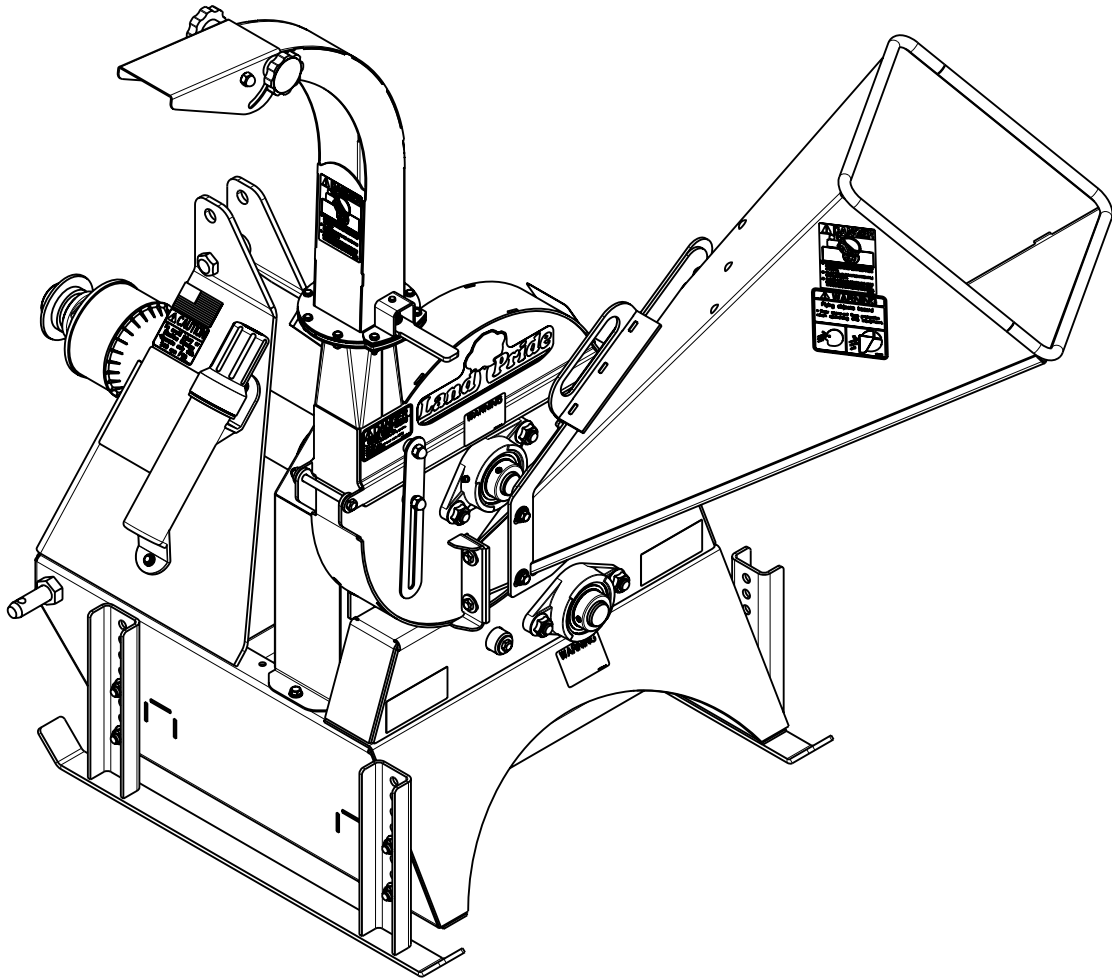


Wood Chipper

WC1503



35193

328-085M 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.

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Printed in the United States of America.

Important Safety Information

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

Safety at All Times

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

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

- ▲ The operator must not use drugs or alcohol as they can change the alertness or coordination of that person while operating equipment. The operator should, if taking over-the-counter drugs, seek medical advice on whether he/she can safely operate the equipment.
- ▲ Operator should be familiar with all functions of the tractor and attachments, and be able to handle emergencies quickly.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ Operator must start tractor and operate controls from the driver's seat only. Never from the ground.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor can cause serious injury or death.
- ▲ Do not allow anyone to stand between tractor and implement while backing up to implement.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Watch out for fences, trees, rocks, wires, etc., while operating and transporting implement.
- ▲ Turning tractor too tight may cause hitched machinery to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert Symbol



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

Be Aware of Signal Words

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

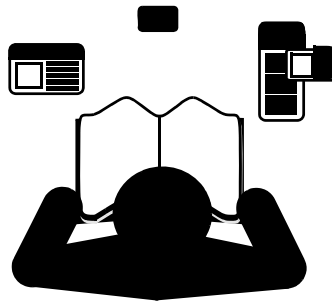
▲ DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

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

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

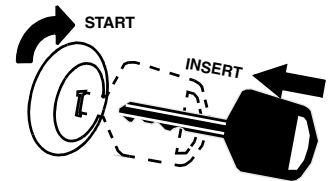
For Your Protection

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



Operate Equipment Safely

- ▲ Keep bystanders away from tractor and attached equipment during start-up and operation.
- ▲ Start tractor to operate equipment with tractor gear selector in park or in neutral and park brake set, PTO disengaged, and hydraulic controls in neutral.



Parts Manual QR Locator

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



Dealer QR Locator

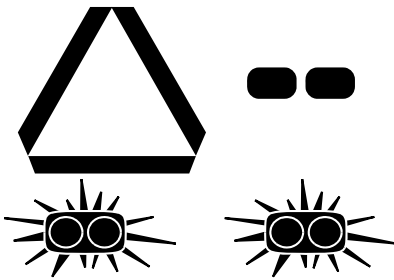
The QR code on the left will link you to available dealers for Land Pride products. Refer to Parts Manual QR Locator on this page for detailed instructions.

Important Safety Information

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

Use Safety Lights and Devices

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



Transport Machinery Safely

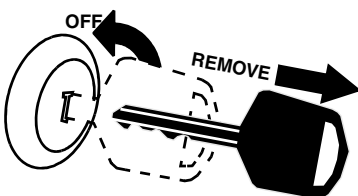
- ▲ Comply with state and local laws.
- ▲ Use towing vehicle and trailer of adequate size and capacity.
- ▲ Secure equipment towed on a trailer with tie downs and chains.
- ▲ Sudden braking can cause a trailer to swerve and upset. Reduce speed if trailer is not equipped with brakes.
- ▲ Avoid contact with any over head utility lines or electrically charged conductors.
- ▲ Engage park brake when stopped on an incline.
- ▲ Maximum transport speed for an attached implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed.
- ▲ As a guideline, use the following maximum speed weight ratios for an attached implement:
 - 20 mph** when weight of attached implement is less than or equal to the weight of machine towing the implement.
 - 10 mph** when weight of attached implement exceeds weight of machine towing implement but not more than double the weight.
- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the machine towing the load.



Tractor Shutdown & Storage

Before leaving operator's seat:

- ▲ If engaged, disengage PTO.
- ▲ Lower attached implement to ground or onto support blocks.
- ▲ Put tractor in park or set park brake, turn off engine, and remove switch key to prevent unauthorized starting.
- ▲ Wait for all components to come to a complete stop before leaving the operator's seat.
- ▲ Detach and store implement in an area where children normally do not play. Secure implement using blocks and supports.



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower attached implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool before working on it.
- ▲ Disconnect battery ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Replace parts on this machine with genuine Land Pride parts only. Do not alter this machine in a way which will adversely affect its performance.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Remove all tools and unused parts from implement before operation.

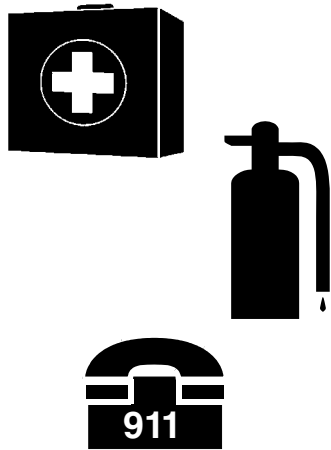


Important Safety Information

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

Prepare for Emergencies

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



Wear Protective Equipment

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



Avoid High Pressure Fluids Hazard

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



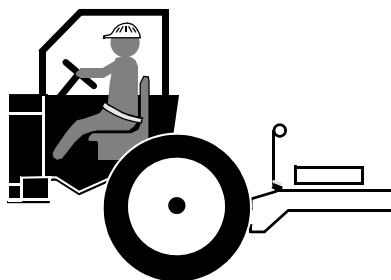
Tire Safety

- ▲ Tire changing can be dangerous and should be performed by trained personnel using the correct tools and equipment.
- ▲ When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- ▲ When removing and installing wheels, use wheel handling equipment adequate for the weight involved.



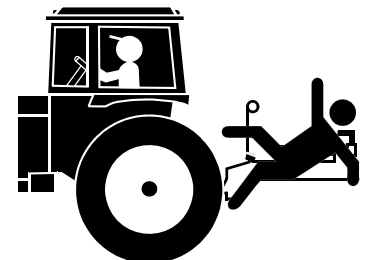
Use Seat Belt and ROPS

- ▲ Operate only tractors and skid steers equipped with a Roll-Over Protective Structure (ROPS) and seat belt.
- ▲ Keep folding ROPS in the "locked up" position at all times.
- ▲ Fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.
- ▲ Wear protective equipment such as a hard hat, safety shoes, safety glasses, and ear plugs.



Keep Riders Off Machinery

- ▲ Never carry riders or use machinery as a person lift.
- ▲ Riders obstruct operator's view.
- ▲ Riders could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.



Important Safety Information

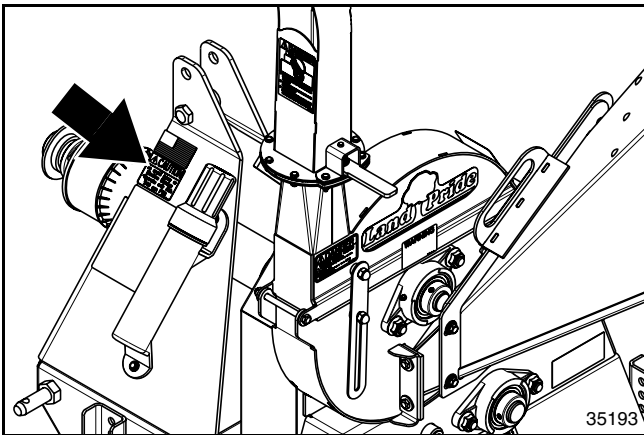
Safety Labels

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

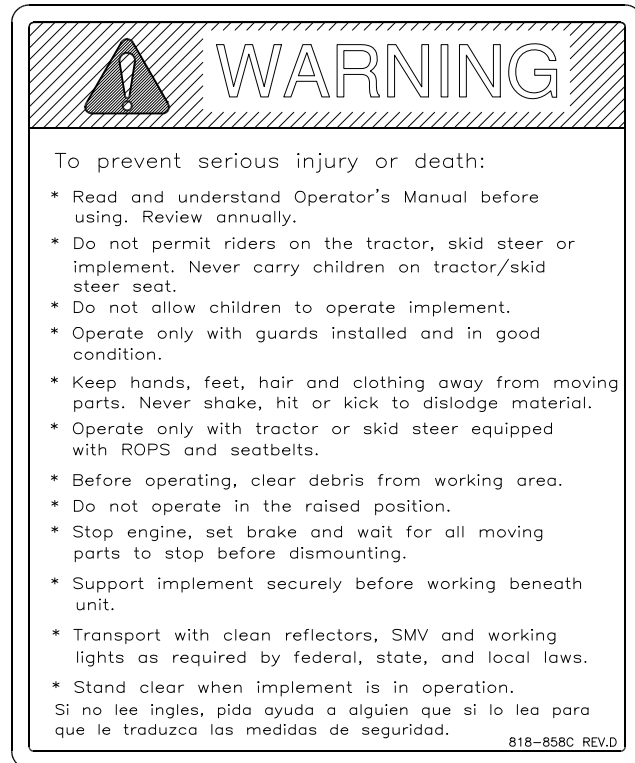
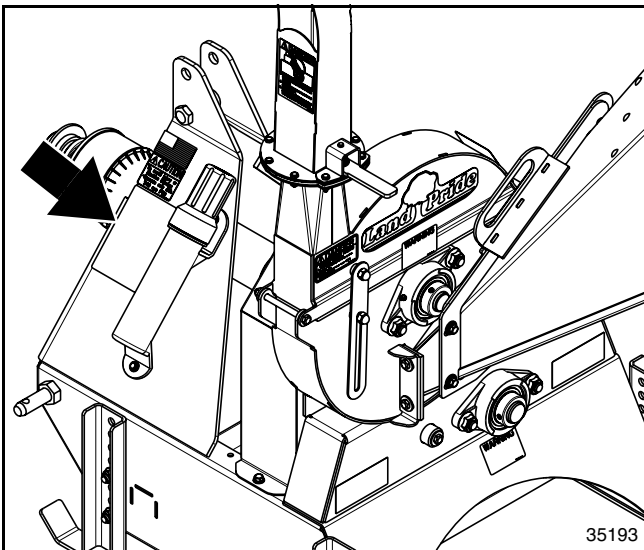
specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.

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.



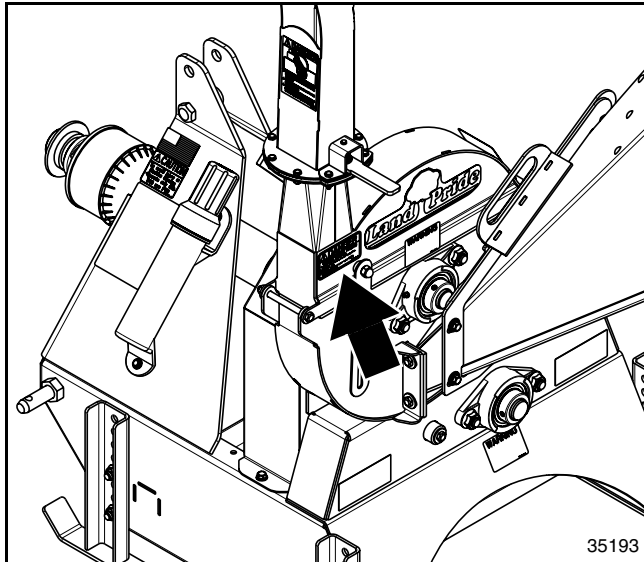
818-130C

Caution: 540 RPM Only



818-858C

Warning: General Warning



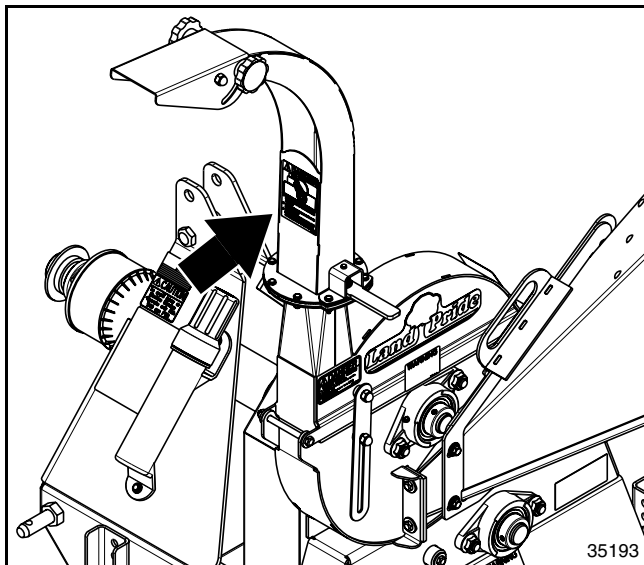
! DANGER
THROWN OBJECT HAZARD
 To prevent serious injury or death from thrown objects or knife contact:

- Stay away from discharge area during operation.
- Keep others away.
- Disconnect and lockout power source BEFORE adjusting or servicing.

818-132C Rev. D

818-132C

Danger: Thrown Object Hazard



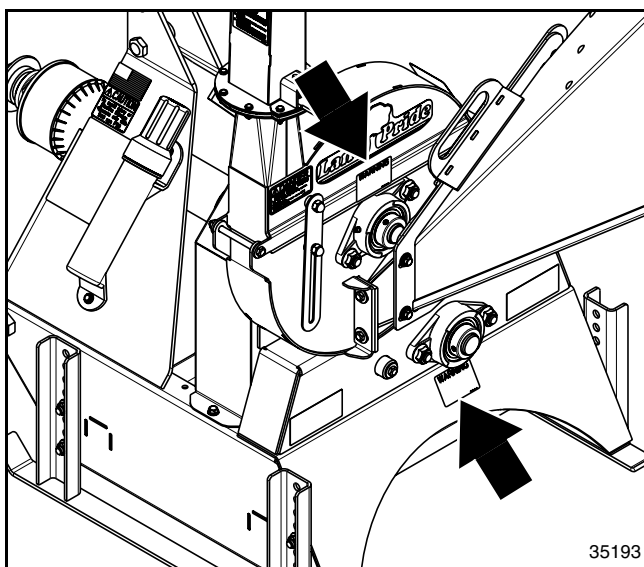
! DANGER

- NEVER PUT HANDS IN CHUTE. CONTACT WITH ROTATING PARTS CAN AMPUTATE FINGERS AND HANDS.
- DO NOT UNBLOCK DISCHARGE CHUTE WHILE ENGINE IS RUNNING.
- SHUT OFF ENGINE AND REMAIN CLEAR OF THE MACHINE UNTIL ALL MOVING PARTS COME TO A COMPLETE STOP BEFORE UNBLOCKING.

848-840C

848-840C

Danger: Rotating Blades



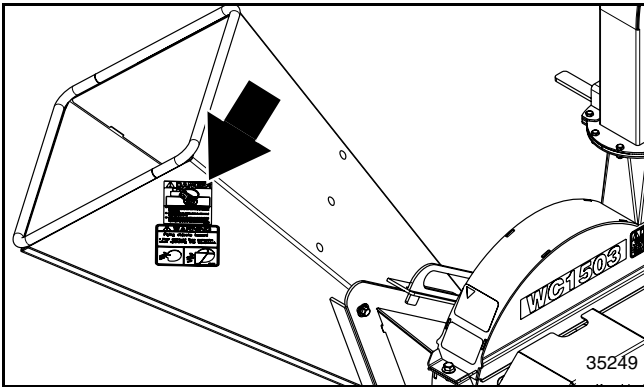
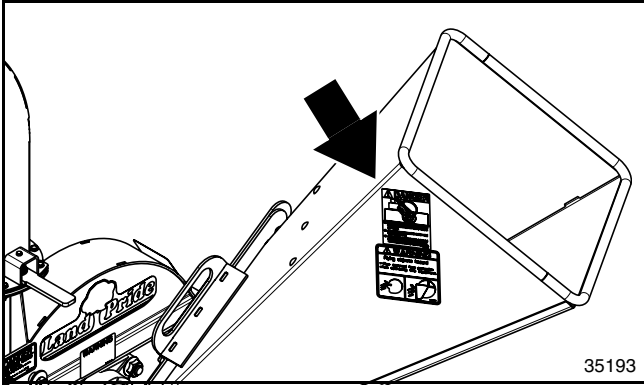
! WARNING
MOVING PARTS HAZARD
 To prevent serious injury or death from moving parts:

- Do not operate with guard missing
- Close & secure drive guard before starting

818-205C Rev. B

818-205C

Danger: Moving Parts Hazard



! DANGER

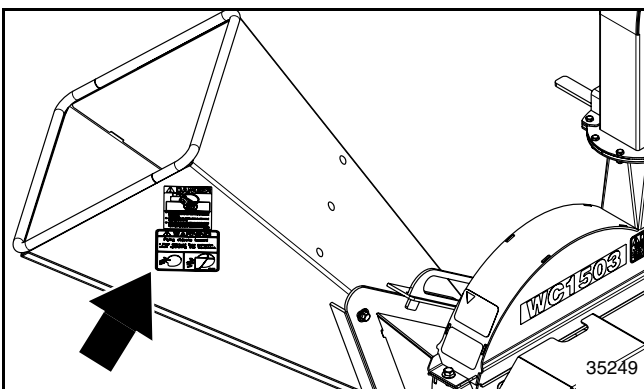
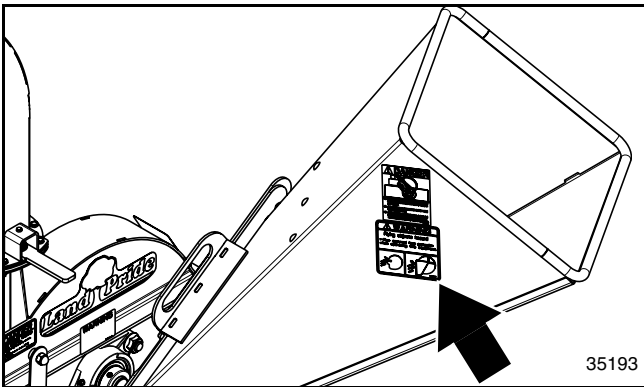
- NEVER PUT HANDS IN CHUTE. CONTACT WITH ROTATING PARTS CAN AMPUTATE FINGERS AND HANDS.
- DO NOT UNCLOG DISCHARGE CHUTE WHILE ENGINE IS RUNNING.
- SHUT OFF ENGINE AND REMAIN CLEAR OF THE MACHINE UNTIL ALL MOVING PARTS COME TO A COMPLETE STOP BEFORE UNCLOGGING.

848-840C

848-840C

Danger: Rotating Parts With Knives

Location: Both Sides of Feed Chute



! WARNING

Flying objects hazard

- Wear approved face protection when operating this equipment.

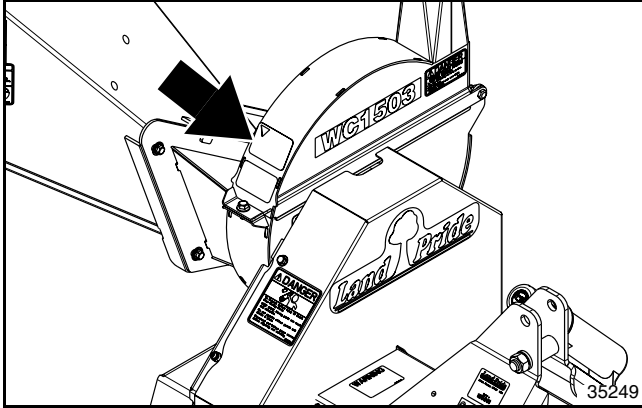
858-190C

858-190C

Warning: Flying Objects Hazard

Location: Both Sides of Feed Chute

Important Safety Information



WARNING

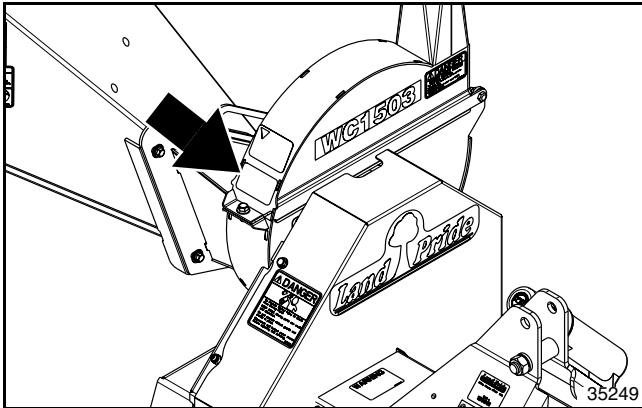
SHARP OBJECT HAZARD
To Prevent Serious Injury or Death from Sharp Objects:

- Keep hands, feet, hair, & clothing away from discs.
- DO NOT stand or climb on implement.
- Keep others away.

838-093C

838-093C

Danger: Sharp Object Hazard



DANGER

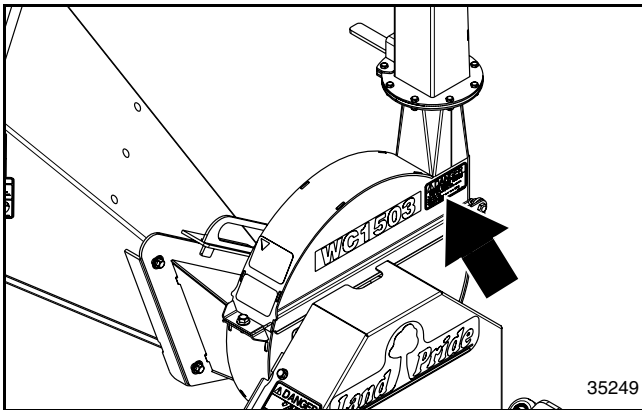
MOVING PARTS HAZARD
To prevent serious injury or death from moving parts.

- DO NOT operate with guard missing.

818-522C

818-522C

Danger: Moving Parts Hazard



DANGER

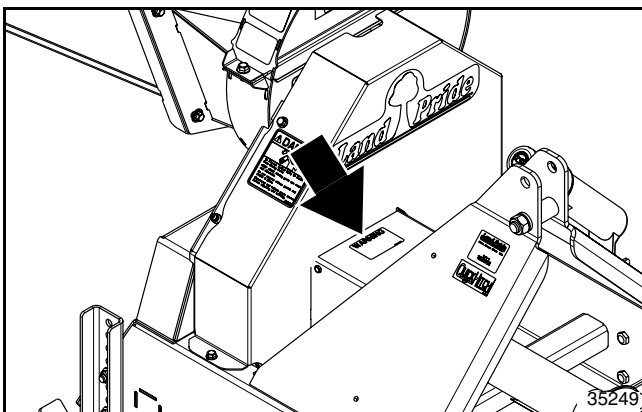
THROWN OBJECT HAZARD
To prevent serious injury or death from thrown objects or knife contact:

- Stay away from discharge area during operation.
- Keep others away.
- Disconnect and lockout power source BEFORE adjusting or servicing.

818-132C Rev. D

818-132C

Caution: Thrown Object Hazard



WARNING

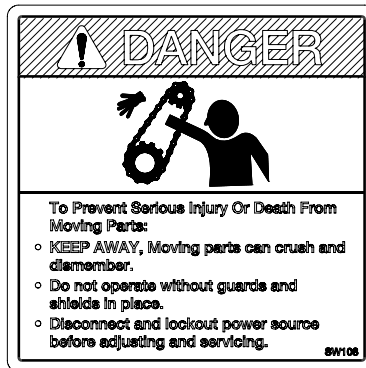
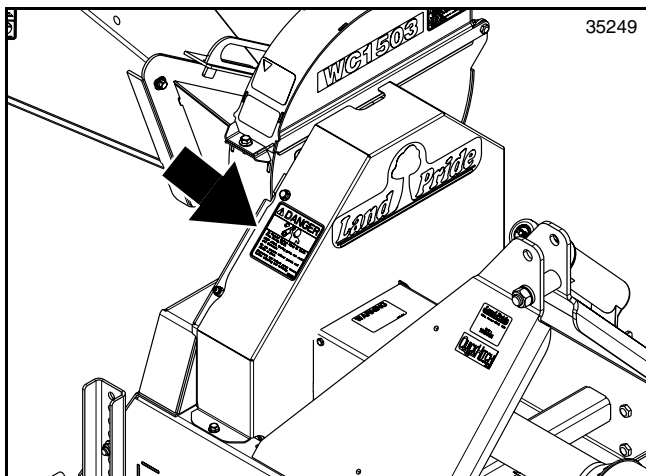
MOVING PARTS HAZARD
To prevent serious injury or death from moving parts:

- Do not operate with guard missing
- Close & secure drive guard before starting

818-205C Rev. B

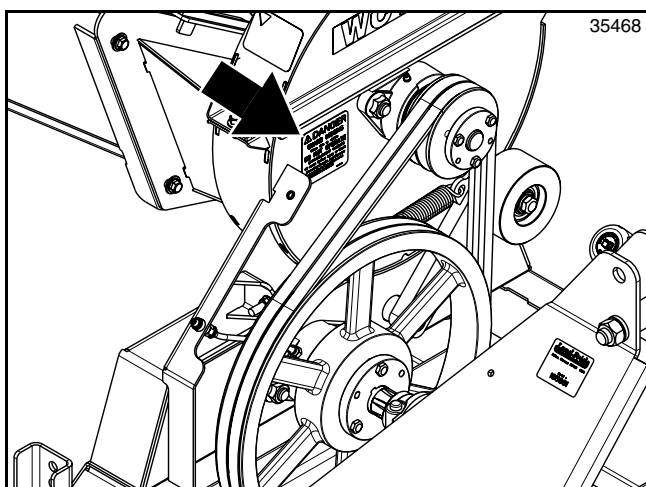
818-205C

Danger: Moving Parts Hazard



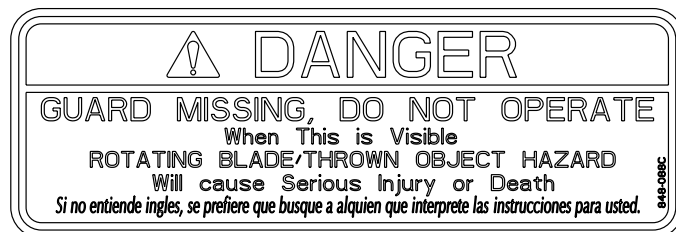
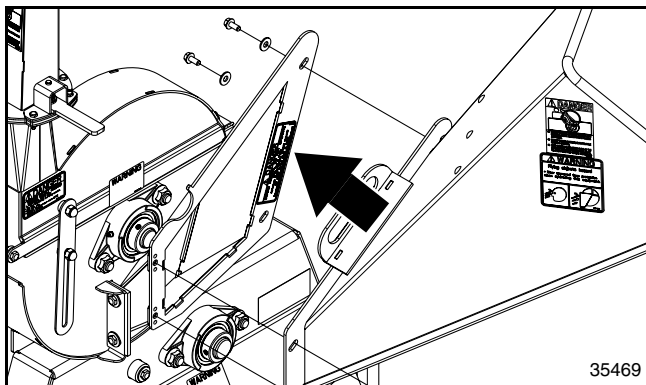
838-111C

Danger: Moving Parts



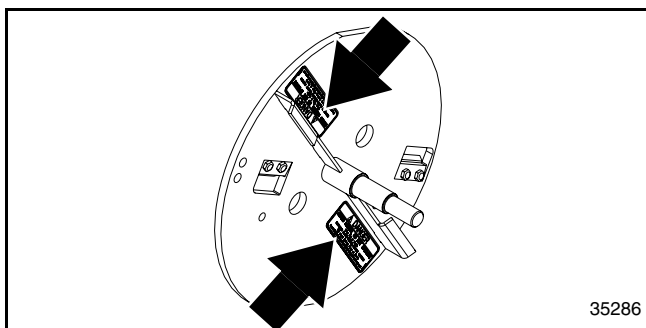
818-543C

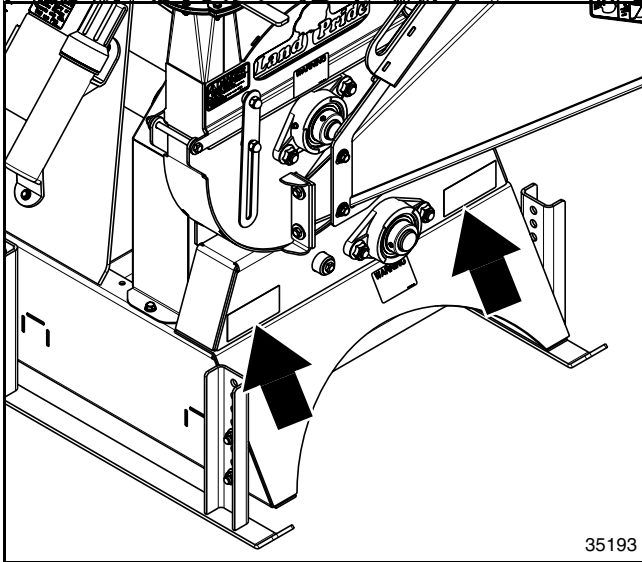
Danger: Guard Missing



848-088C

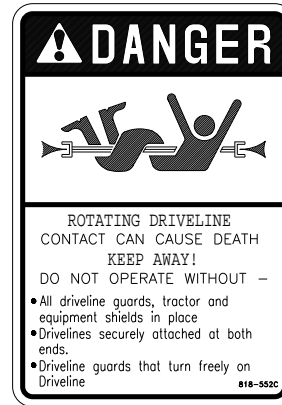
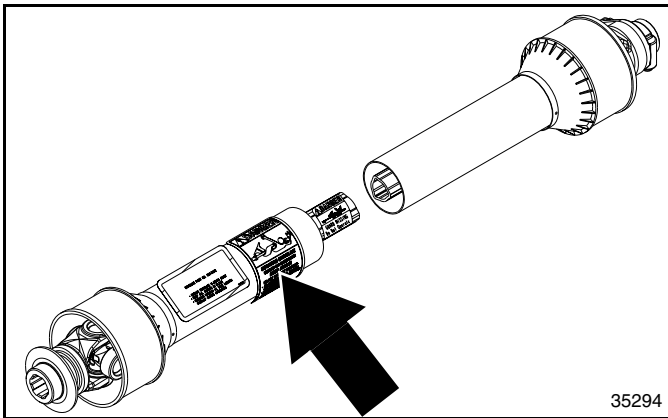
Danger: Guard Missing (3 Places)





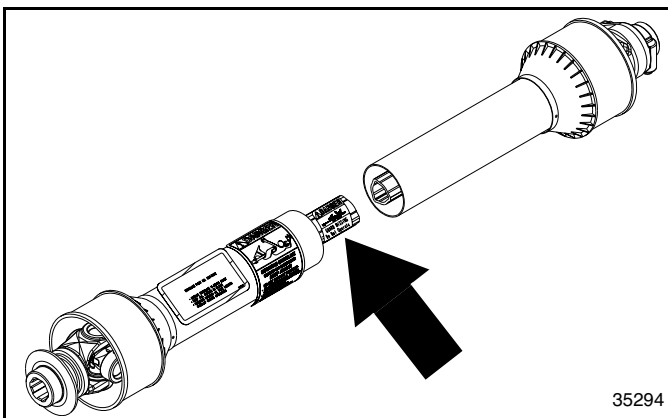
858-095C

2" x 4 1/2" Red Reflector (2 places)



818-552C

Danger: Rotating Driveline



818-540C

Danger: Guard Missing

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 WC1503 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, estates, residential sites, and construction sites.

The WC1503 model is adapted for 3-Point Cat. I hitch on 12 to 30 hp subcompact tractors with 540 PTO speed. It features a self-feeding 3" cutting capacity, four reversible and replaceable hardened-steel knives, adjustable discharge chute, and dual B-section drive belts. Support stands are also adjustable to better match your tractor.

See “**Specifications & Capacities**” on page 30 and “**Features & Benefits**” on page 31 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 facing the direction the machine will operate while in use unless otherwise stated.

Definitions

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

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

Owner Assistance

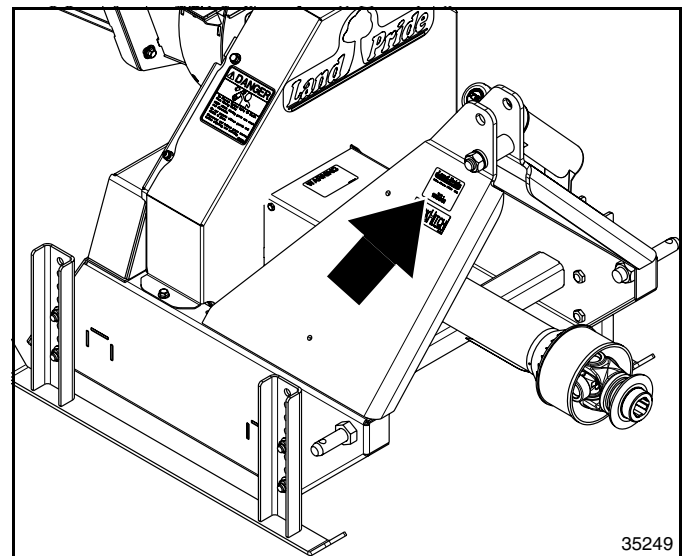
The Online Warranty Registration should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

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

Model No. _____ Serial No. _____

For quick reference and prompt service, record model number and serial number in the spaces provided above and again on warranty page 35. Always provide model number and serial number when ordering parts and in all correspondences with your Land Pride dealer. Refer to Figure 1 for location of your serial number plate.



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

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

E-mail address
lp servicedept@landpride.com

Section 1: Assembly & Set-Up

Tractor Requirements

Tractor horsepower rating is 12 to 30 hp. with a minimum of 25 hp when operating at maximum capacity. Tractors outside the horsepower range must not be used.

The rear power take-off (PTO) speed must be 540 RPM maximum and have a 1 3/8"-6 spline PTO shaft.

A 3-Point Category I hitch is required. 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.

WARNING

Ballast weights may be required to maintain steering control. Refer to your tractor's operator's manual to determine proper ballast requirements.

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.

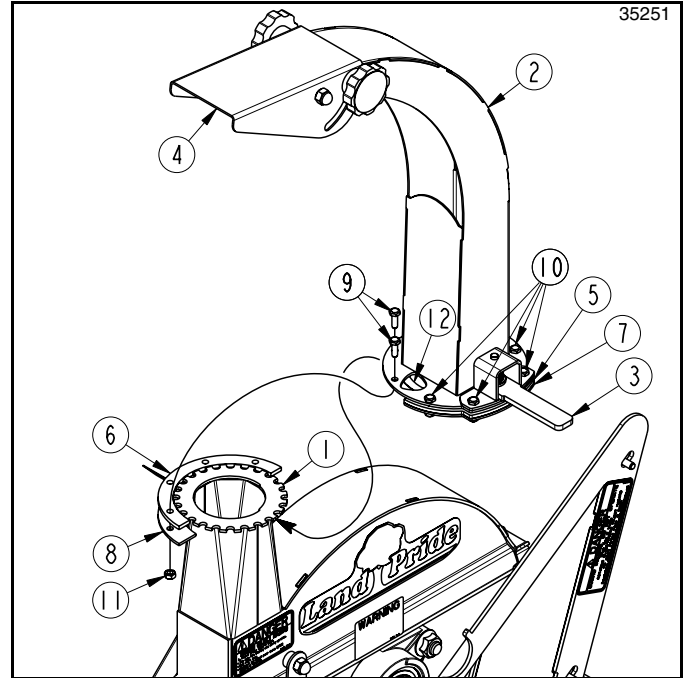
Go through the **Assembly Checklist** before assembling the Wood Chipper. Speed up your assembly task and make the job safer by having all needed parts and equipment readily at hand.

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 30
<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 11-15
<input type="checkbox"/>	Make sure all fasteners & pins are installed in the correct location. Refer to the Parts Manual if unsure.	Parts Manual 328-085P
<input type="checkbox"/>	Make sure all bolts are tight and cotter pins are spread. Refer to "Torque Values Chart"	Page 34
<input type="checkbox"/>	Make sure all grease fittings are in place & lubricated. Refer to "Lubrication Points"	Page 28
<input type="checkbox"/>	Make sure drive belts are aligned & tensioned. Refer to "V-Belt Take-up".	Page 22

Torque Requirements

Refer to "Torque Values Chart" on page 34 to determine correct torque values for common bolts.



Discharge Chute Assembly
Figure 1-1

Discharge Chute

Refer to Figure 1-1:

NOTE: Half-clamp plate (#8) and half-spacer plate (#6) are shipped bolted to discharge spout (#2).

- Loosen the four rear bolts (#10) by two or three turns. Do not remove bolts or nuts securing bolts.
- Remove the front four bolts (#9), half-clamp plate (#8), and half-spacer plate (#6) from discharge spout (#2). Keep hardware for reuse.

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

- Make sure bottom half-clamp plate (#7) is positioned against underside of notched plate (#1). Being careful not to damage plastic bearing (#12), slide front of discharge chute (#2) onto notched plate (#1) until discharge chute is centered over the notched plate.
- Place half-spacer plate (#6) on top of half-clamp plate (#8) with bolt holes in alignment with each other.
- Position bottom half-clamp plate (#8) against underside of notched plate (#1) as shown.
- Bolt chute (#2) to half-spacer plate (#6) and half-clamp plate (#8) with the four removed 1/4"-20 x 3/4" GR5 cap screws (#9) and hex lock nuts (#11).
- Draw all eight hex lock nuts (#11) up snug and then back each one off 1/2 turn.

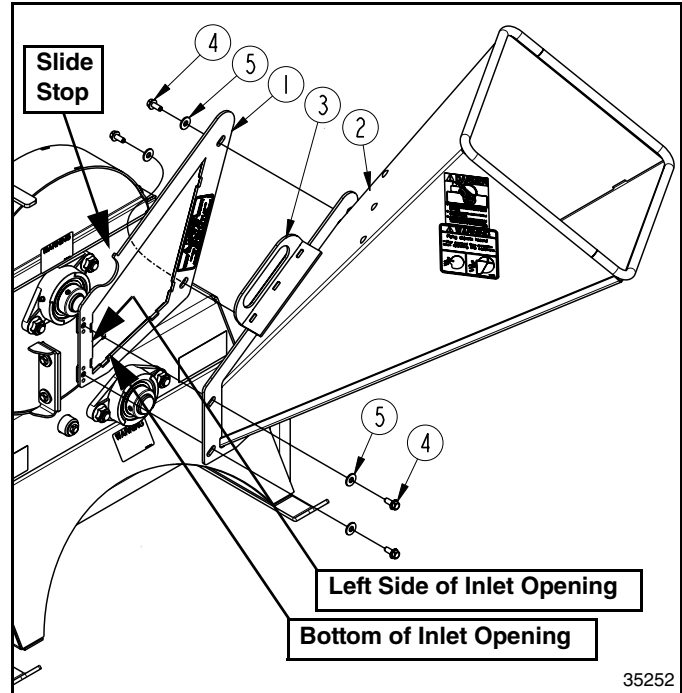
Section 1: Assembly & Set-Up

Feed Chute

Refer to Figure 1-2:

For product to feed smoothly into the Wood Chipper, feed chute (#2) must be attached to inlet flange (#1) with left inside surface of feed chute in line with or slightly to the right of the left side of inlet opening and the bottom inside surface of the feed chute must be in line with or slightly higher than the bottom of inlet opening.

1. Straddle lift handle (#3) over the top edge of inlet flange (#1) and above slide stop.
2. Attach feed chute (#2) to inlet flange (#1) with 5/16"-18 x 3/4" GR5 hex flange screws (#4) and flat washers (#5). Screw hex flange screws up snug and then back-off flange screws 1 or 2 turns.
3. Slide feed chute (#2) along top edge of inlet flange (#1) until left inside surface of feed chute (#2) is in line with or slightly to the right of left side of inlet opening.
4. Check line up of bottom inside surface of feed chute (#2) with bottom of inlet opening. If inside surface of feed chute is lower than the inlet opening, then continue to slide feed chute (#2) along the top edge of inlet flange (#1) until bottom inside surface of feed chute (#2) is in line with or slightly higher than bottom of inlet opening.
5. Hold feed chute (#2) in this position and tighten hex flange screws (#4) to the correct torque.
6. Recheck alignment of feed chute (#2) with inlet opening (#1). If necessary, make any adjustments needed and retighten hex flange screws (#4) to the correct torque.



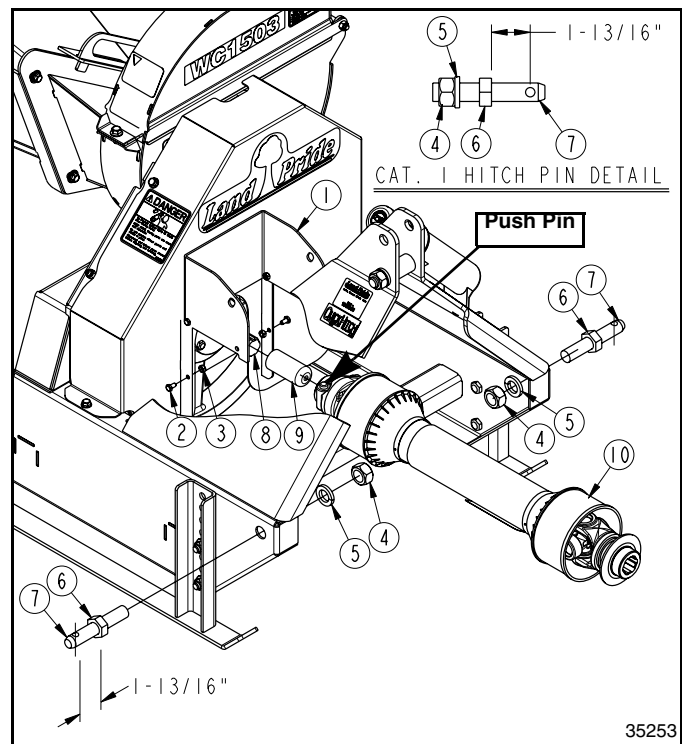
3" Feed Chute Assembly
Figure 1-2

Hitch Pin Set-Up

Refer to Figure 1-3:

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 (#4) from hitch pin (#7).
2. Remove lock washer (#5) and hitch pin (#7) from inside the Wood Chipper housing.
3. Adjust nut (#6) on hitch pin (#7) to be 1 13/16" from face of nut to center of hitch pin hole.
4. Reinsert hitch pin (#7) on the outside of the Wood Chipper housing as shown.
5. Install lock washer (#5) and hex nut (#4). Draw hex nut (#4) up snug.
6. Insert a drive punch in hitch pin hole and rotate hitch pin with the drive punch until the hole is vertical.
7. Verify 1 13/16" is maintained from face of nut (#6) to center of hitch pin hole and then tighten hex nut (#4) to the correct torque.
8. Repeat steps 1 thru 7 for the left-hand hitch pin.



Driveline Assembly
Figure 1-3

Section 1: Assembly & Set-Up

Driveline Hook-Up To Chipper

Refer to Figure 1-3 on page 12:

1. Remove lower lock nuts (#3) and bolts (#2). Rotate drive shaft shield (#1) up.
2. Remove shaft protector (#9) from drive shaft (#8).
3. On shear bolt end of driveline (#10), push push-pin in and hold while starting to slide universal joint onto drive shaft (#8).
4. After universal joint starts onto the drive shaft, release push-pin 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 (#1) down and secure with bolts (#2) and lock nuts (#3). Draw lock nuts up snug.

Tractor Hook-Up



DANGER

A Crushing Hazard exists when hooking-up equipment to a tractor. Do not allow anyone to stand between tractor and implement while backing-up to implement. Do not operate hydraulic 3-Point lift controls while someone is directly behind the tractor or near the implement.

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 1-4:

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 (#4)
2. Always disengage PTO, engage tractor park brake, shut tractor engine off, and remove switch key before dismantling from tractor.

NOTE: Clevis pin (#2), linchpins (#3), and hairpin cotter (#6) are supplied by the customer.

3. Attach lower lift arms to hitch pins (#4). Secure hitch pins with customer supplied linchpins (#3).
4. Connect top center link hitch hole to upper clevis hitch with customer supplied 3/4" clevis pin (#2) and customer supplied hairpin cotter (#6).
5. Ensure that the lower hitch arms are stabilized to prevent excessive side movement.

Quick Hitch Hook-Up

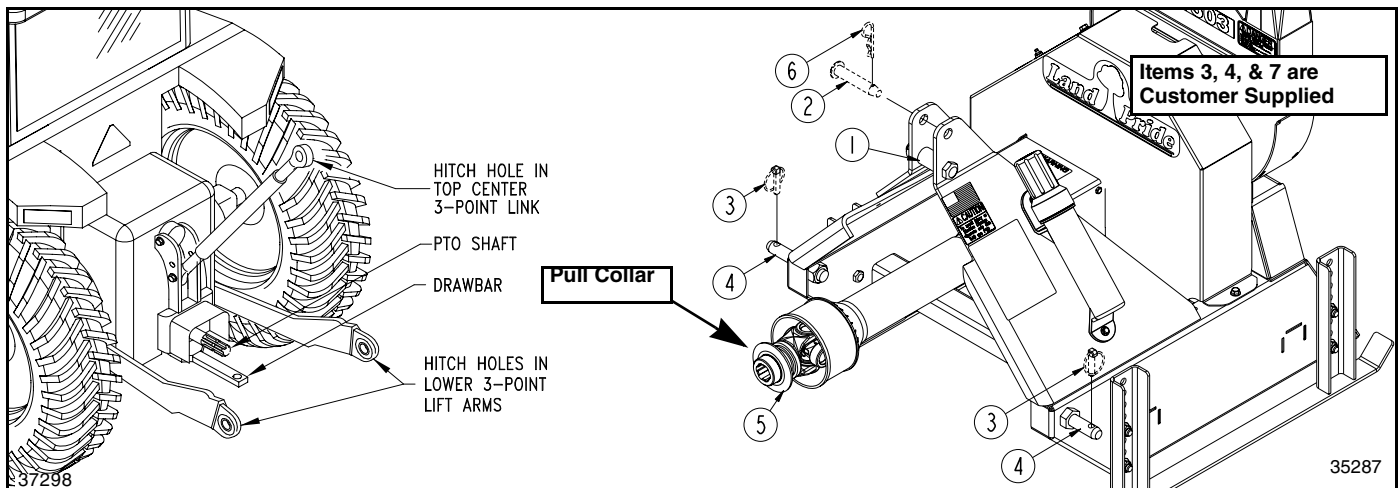
Refer to Figure 1-4:

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 (#4) and upper center hook in-line with and below bushing (#1).
2. If needed, adjust top center link to align upper center Quick Hitch hook just under bushing (#1).
3. Raise Quick Hitch up to catch lower hitch pins (#4) 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 (#4).

Leveling The Wood Chipper

Refer to Figure 1-4:

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.



**3-Point Hook-up
Figure 1-4**

Section 1: Assembly & Set-Up

Driveline Hook-up To Tractor

! DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

! DANGER

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before installing driveline.

! DANGER

All guards and shields must be installed and in good working condition at all times while operating the Wood Chipper.

! WARNING

Do not over speed PTO or machine damage may result. Some tractors are equipped with multispeed PTO ranges. Be certain your tractor's PTO is set for 540 rpm.

! WARNING

Do not use a PTO adapter. A PTO adapter will increase strain on the tractor's PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor's master shield and could cause bodily injury or death.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "**Lubrication Points**" on page 28.

IMPORTANT: The tractor's PTO shaft and chipper drive shaft must be aligned and level with each other during installation of driveline. This alignment is the shortest distance between the two shafts.

IMPORTANT: Depending on tractor PTO height, skid extensions can be adjusted to make driveline work with all tractor PTO heights and not interfere with chipper upper frame or Quick Hitch.

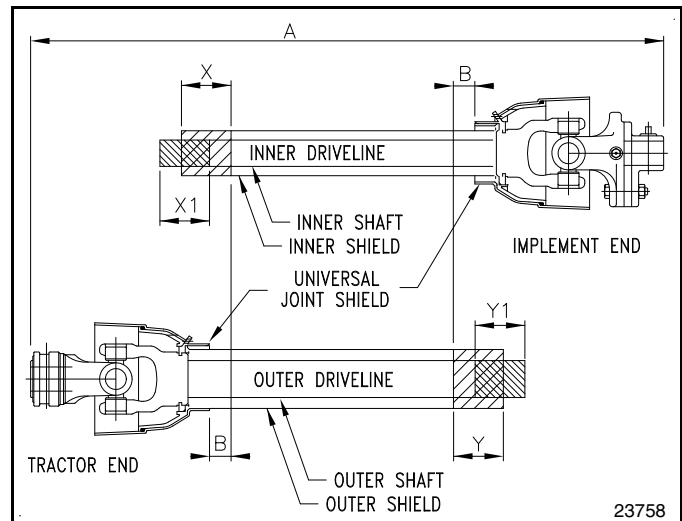
1. Park tractor on a level surface. Slowly engage tractor 3-Point lift lever to raise Wood Chipper until chipper drive shaft is in line (level) with tractor PTO shaft.
2. Support Wood Chipper at this height with support jacks, blocks, or skid extensions to keep chipper from drifting down. To adjust skid extensions, refer to "**Skid Extension Height**" on page 20.
3. Disengage PTO, place gear selector in park, set park brake, shut tractor off, remove switch key, and wait for all moving parts to come to a complete stop before installing driveline.

Refer to Figure 1-4 on page 13:

4. On the tractor end of driveline (#5), pull back on the pull collar and hold while starting to slide the universal joint onto the tractor's PTO shaft.

NOTE: If driveline is too long and will not go on PTO shaft, See "**Shorten Driveline Length**" on page 15.

5. Once on the PTO shaft, release pull collar and continue to slide universal joint on until pull collar releases and universal joint is locked to the PTO shaft.
 - a. Push and pull on driveline yokes to be sure they are securely fastened at both ends of driveline.



Driveline Shortening
Figure 1-5

Check Driveline Collapsible Length

IMPORTANT: A driveline that is too long can bottom out causing damage to tractor and chipper.

Always check driveline collapsed 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.

Refer to Figure 1-5:

1. Make sure driveline is properly installed and level from tractor PTO shaft to chipper input shaft before checking driveline collapsible length.
2. With driveline level, measure 1" ("**B**" dimension) back from universal joint shield to end of outer driveline shield as shown in Figure 1-5. If measurement is less than 1", then shorten driveline using the following instructions.

Section 1: Assembly & Set-Up

Shorten Driveline Length

Refer to Figure 1-5 on page 14:

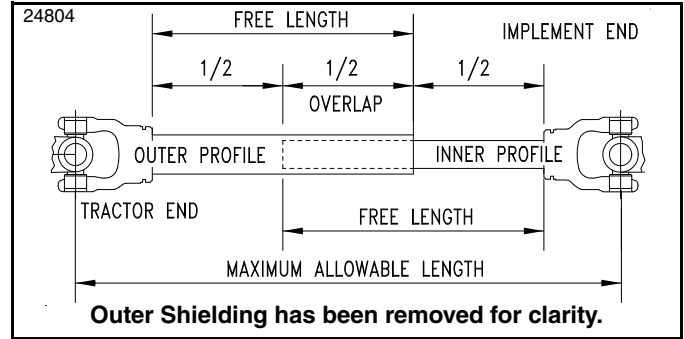
1. Unhook outer driveline from tractor PTO shaft and pull outer and inner drivelines apart.
2. Reattach outer driveline to tractor PTO shaft. Pull on inner and outer drivelines to be sure universal joints are properly secured.
3. Hold inner and outer drivelines parallel to each other:
 - a. Measure 1"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

Check Driveline Maximum Length

Refer to Figure 1-6:

Driveline maximum allowable length, when fully extended, must 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. Determine the maximum allowable length as follows:

1. Unhook driveline from tractor and Wood Chipper. Pull outer and inner drivelines apart.
2. Measure and record "Free Length" of inner and outer profiles as shown in Figure 1-6.
3. Apply multi-purpose grease to the inside of the outer profile and reassemble the two profiles.
4. Move driveline halves together until profile tubes overlap by 1/2 the "Free Length". For future reference, measure and record "Maximum Allowable Length" as shown in Figure 1-6.
Record Maximum Allowable Length here: _____
5. Reattach inner driveline yoke to gearbox shaft and outer driveline yoke to tractor's PTO shaft.
6. The driveline should now be moved back and forth to ensure that both ends are secured. Reattach any end that is loose.



Driveline Maximum Length
Figure 1-6

Check Driveline Interference

WARNING

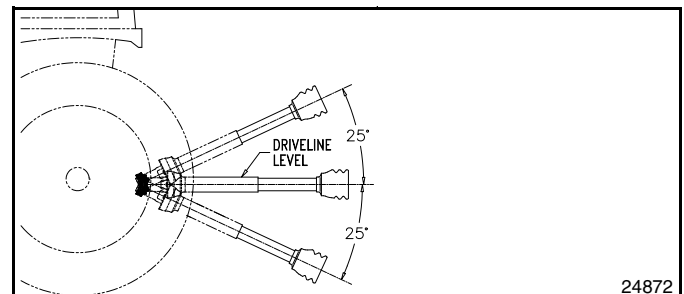
Do not operate in raised position. Lifting the Wood Chipper too high with driveline engaged can damage the driveline and cause flying projectiles causing serious bodily injury or death.

Refer to Figure 1-7:

1. Start tractor and slowly engage tractor hydraulic 3-Point control lever to raise and lower chipper while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.

IMPORTANT: To avoid premature driveline damage, a driveline that is operating **must not exceed** an angle of 25 degrees up or down.

2. Raise and lower implement to find maximum extended driveline length. Check to make certain driveline does not exceed maximum allowable length and 25° up or down and maximum allowable length recorded in step 4 under "Check Driveline Maximum Length" on this page.
3. If needed, set tractor 3-Point lift height to keep driveline from exceeding the maximum allowable length and 25° up.



Maximum PTO Driveline Movement During Operation
Figure 1-7

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 without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- **Important Safety Information**, pages 1 to 6
- **Section 1: Assembly & Set-Up**, page 11
- **Section 2: Operating Instructions**, page 16
- **Section 3: Adjustments**, page 20
- **Section 4: Maintenance & Lubrication**, page 23

The following operating checks should be made before using the Wood Chipper.

Operating Checklist

✓	Check	Page
	Check V-belt tension. Refer to "V-Belt Take-up".	Page 22
	Check bolts and nuts for tightness.	Page 34
	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 28

Safety Instructions

! DANGER

The operator should be a person who is responsible, physically capable, and properly trained to operate this Wood Chipper. Anyone not properly trained and all children under the age of 16 should not operate this machine. Physical limitations of the elderly need to be recognized and taken into consideration when helping with the work.

! DANGER

Always disengage PTO, engage parking 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.

Also, disconnect driveline from tractor PTO before servicing driveline, rotor, and rotor knives. The PTO can be engaged if tractor is started causing serious injury or death.

! DANGER

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.

! DANGER

Make sure rotor housing is bolted shut and feed chute is properly attached before engaging PTO. Engaging PTO with rotor exposed can cause serious injuries or death.

! DANGER

Do not engage tractor PTO while hooking-up and unhooking driveline or while someone is standing near the driveline. A person's body and/or clothing can become entangled in the driveline resulting in serious injury or death.

! DANGER

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.

! DANGER

Do not operate Wood Chipper with a bent or broken driveline. Such a driveline can break apart while rotating at high speeds causing serious injury or death. Always remove Wood Chipper from service until damaged driveline is repaired or replaced.

! DANGER

Always keep hands, feet, hair, and clothing away from rotating parts. Don't wear clothing with pull strings such as hooded sweat shirts. A person's body and/or clothing can become entangled or sheared off by rotating parts resulting in serious injury or death.

! DANGER

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.

! WARNING

Do not force branches into the knives. Doing so can damage the machine and/or cause kickback leading to serious injuries or death.

! WARNING

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

! WARNING

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.

Section 2: Operating Instructions

 **WARNING**

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.

 **WARNING**

Do not use a PTO adapter. A PTO adapter will increase strain on the tractor's PTO shaft resulting in possible damage to shaft and driveline. It will also defeat the purpose of the tractor's master shield and could cause bodily injury or death.

 **WARNING**

Always make certain driveline yokes are securely fastened to the tractor PTO shaft and chipper drive shaft before engaging PTO. A loose driveline can slip off the end of a connected shaft while rotating and cause serious bodily injury or death.

 **WARNING**

Do not put metal, glass, rocks, or other unapproved objects into the Wood Chipper. Objects such as these can damage the machine and discharge out the chute causing serious injuries or death.

 **WARNING**

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.

 **WARNING**

Do not over speed PTO or machine damage may result. Some tractors are equipped with multispeed PTO ranges. Be certain your tractor's PTO is set for 540 rpm.

 **WARNING**

Do not operate Wood Chipper with an out-of-balance rotor, broken knives, or worn blade bolts. Rotor and blades can break loose at high speeds causing serious injury or death. Always replace all blades at the same time.

 **WARNING**

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.

 **WARNING**

Never allow children or others to ride on the tractor or chipper with unit running or not running. They can be seriously injured or killed.

 **WARNING**

Use Wood Chipper for its intended purpose only. Do not use Wood Chipper to lift or carry objects; to pull fence posts, stumps, or other objects; or to tow other equipment. Doing so can damage the unit, cause serious bodily injury, or death.

 **WARNING**

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.

 **WARNING**

Do not use Wood Chipper as a working platform. The chipper is not properly designed for this use. Using the machine for a working platform can cause serious injury or death.

 **WARNING**

Keep working area clear of debris to help prevent accidental tripping and falling.

 **WARNING**

Do not operate Wood Chipper parked sideways on sloping ground. Tractor and chipper can flip over.

 **WARNING**

The following protective gear should be worn when working around the Wood Chipper:

- Face and eye protection such as a full face shield to protect against flying debris ejecting out the feed chute.
- Hard hat for protecting the head.
- Hearing protection such as earmuffs or earplugs. Hearing loss from loud noises is cumulative over a lifetime and can never be recovered.
- Leather gloves to protect against blisters, cuts, and pokes.
- Protective clothing to protect against cuts, bruises, and pokes from tree limbs. Avoid wearing jewelry, loose clothing, clothing with pull strings, and long hair that can become entangled in product being feed into the chipper.
- Protective shoes with slip resistant soles.
- Respirator or filter mask to protect lungs and airway.

Section 2: Operating Instructions

Transporting

WARNING

Do not transport Wood Chipper with tractor PTO engaged. The chipper can discharge objects causing injury or death.

WARNING

Make sure SMV sign is visible on tractor from the rear and not blocked by the Wood Chipper.

WARNING

Never allow children or others to ride on the tractor or chipper with unit running or not running. They can be seriously injured or killed.

CAUTION

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

IMPORTANT: Always disengage PTO before raising Wood Chipper to transport position.

1. When raising Wood Chipper to transport, be sure that the driveline does not contact tractor, Quick Hitch, or chipper
2. Reduce tractor ground speed when turning and leave enough clearance so that the chipper does not contact obstacles such as buildings, trees, or fences.
3. 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.
4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

Detailed Operating Instructions

The WC1503 Wood Chipper is designed to cut wood products 3" 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.

IMPORTANT: Make sure operator has thoroughly read, fully understood, and is totally familiar with this Operator's Manual and all safety precautions within this manual before operating this machine.

1. Park tractor with Wood Chipper outside on a level solid surface that has room to discharge chips into a pile directed away from the operator, people, animals, tractor, equipment, and buildings.
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 20 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 20 for detailed instructions.
6. Rotate deflector chute to direct product being discharged closer or farther away. See "**Deflector Chute Angle**" on page 20 for detailed instructions.
7. With engine speed at a low idle, engage PTO 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 hopper 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 lightly 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 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 32.
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 PTO, shut tractor engine off and remove switch key before leaving the work area.
14. Disengage PTO if foreign material such as glass, metal, or rocks enters the chipper or if other emergencies arise. Shut tractor engine off, remove switch 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 unit from plugging.

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 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 WC1503 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 switch key, and make necessary repairs or adjustments before continuing on.

Make sure the tractor's park brake is engaged, the tractor's PTO 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 PTO 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 PTO. Once the unit is running, increase PTO speed to 540 RPM.

Dismount tractor and go to the rear to begin loading limbs and brush 3" 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 PTO, turn engine off, and remove the switch key.

Section 3: Adjustments

Adjustment Safety

DANGER

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before making any adjustments.

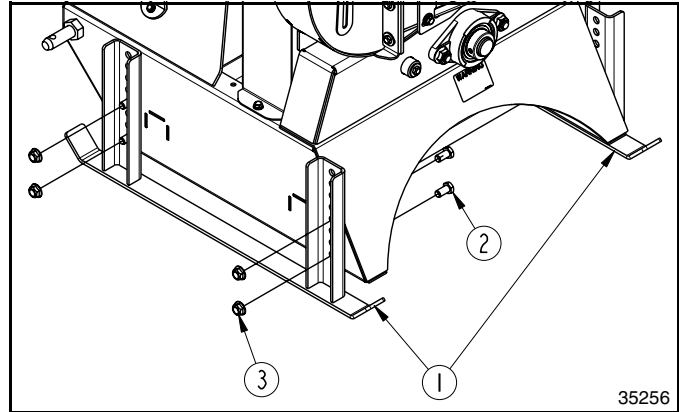
Skid Extension Height

Refer to Figure 3-1:

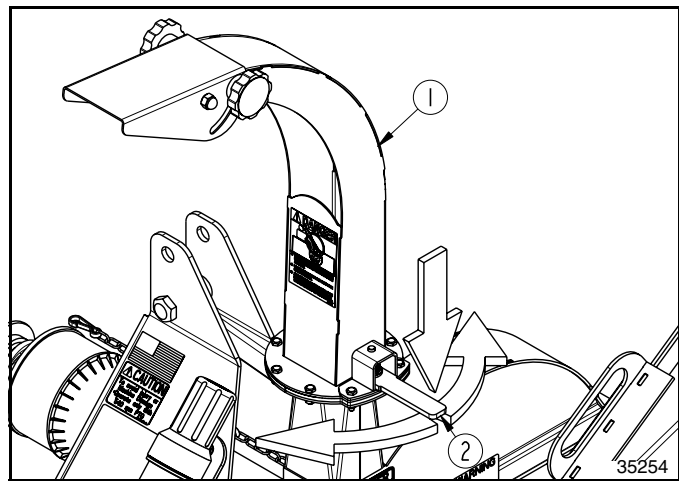
IMPORTANT: The Wood Chipper operates best and driveline u-joint life is increased if skid extensions are set at a height that will allow the unit to rest on the skid extension with driveline operating level or as close to level as possible.

NOTE: This effects loading height for wood.

1. Make sure PTO 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 the skid extensions (#1) to keep the chipper from drifting down while adjusting the skid extensions.
3. Lower Wood Chipper onto the support blocks, shut tractor engine off, and remove switch key.
4. Remove hex flange lock nuts (#3) and hex head cap screws (#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 lock nuts (#3). Tighten lock nuts to the correct torque.
6. Raise tractor 3-Point up and remove support blocks. Lower unit until resting on its skid extensions.



Adjust Skid Extension Height
Figure 3-1



Adjust Discharge Chute Angle
Figure 3-2

Discharge Chute Angle

Refer to Figure 3-2:

WARNING

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

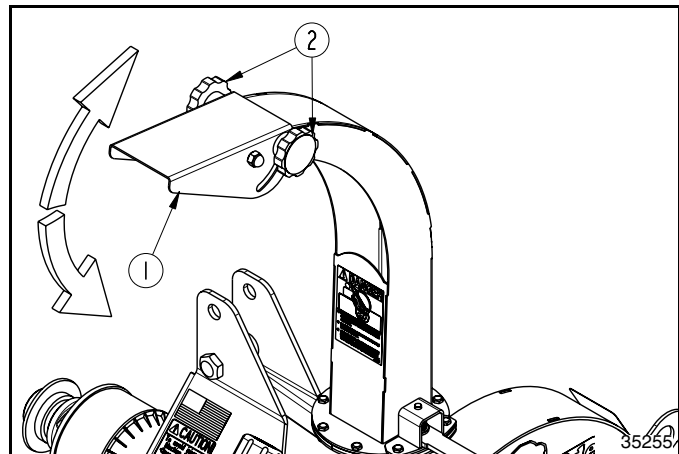
NOTE: Chute is limited to 270° rotation so as not to get into loading area.

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

Deflector Chute Angle

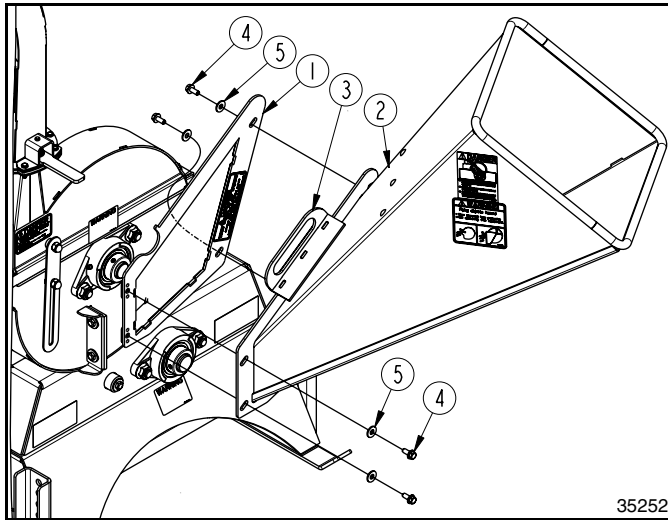
Refer to Figure 3-3:

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



Adjust Deflector Chute Angle
Figure 3-3

Section 3: Adjustments



Feed Chute Removal & Assembly
Figure 3-4

Check Knife Ledger Clearance



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

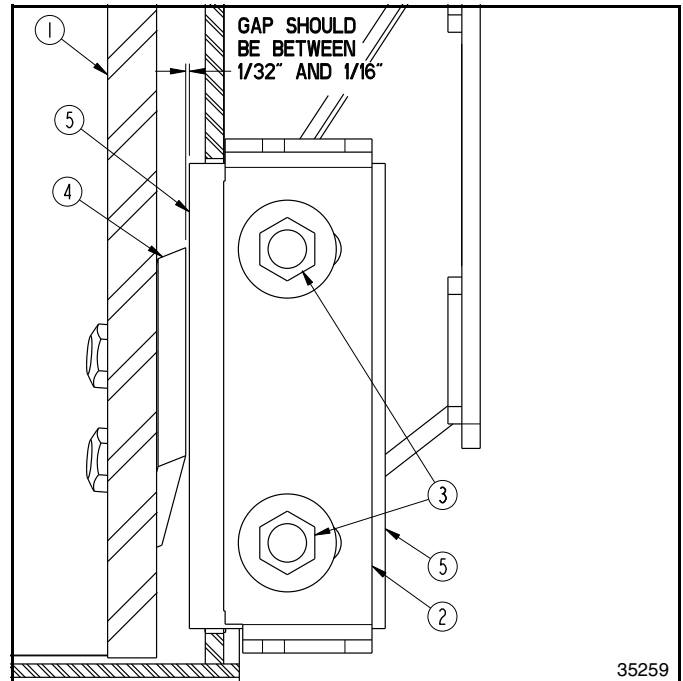
Refer to Figure 3-5:

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

1. Make certain gear selector is in park and park brake is set. Disengage PTO, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before working on this unit.
2. Disconnect driveline from tractor PTO shaft.

Refer to Figure 3-4:

3. Remove hex flange screws (#4), washers (#5) and feed chute (#2) to access inlet opening.
4. Check gap between knife ledger and cutting knives as follows:
 - a. Refer to Figure 3-6 on page 22: Manually rotate rotor (#1) until cutting edge of knife (#4) is in alignment with knife ledger (#5).
 - b. Refer to Figure 3-5: Check gap between cutting knife and ledger with a 1/32" gauge and again with a 1/16" gauge.
 - If the 1/32" gauge will not fit between knife and ledger or if the gap between knife and ledger is larger than 1/16", then the ledger needs to be readjusted. See "Adjust Knife Ledger Clearance" on this page for instructions.
 - If the 1/32" gauge fits between ledger and knife and the 1/16" gauge fits snug or does not fit at all, then the gap is OK.



Cut Away View of Rotor (#4), Ledger (#5), and Knife (#4)
Figure 3-5

- c. Repeat steps 4.a. & 4.b. above to realign the second knife edge (#4) with ledger (#5). Go to step 5 below if second knife edge is OK.

5. Make sure rotor housing is clear of all tools and loose components that may have collected in the housing.

Refer to Figure 3-4:

6. Attach feed chute (#2) to inlet flange (#1) with existing hex flange screws (#4) and flat washers (#5). Tighten hex flange screws to the correct torque. See "Feed Chute" on page 12 for detailed installation instructions of feed chute.
7. Reconnect driveline to the tractor PTO shaft.

Adjust Knife Ledger Clearance

Refer to Figure 3-5 & Figure 3-6 on page 22:

See "Check Knife Ledger Clearance" on this page 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:



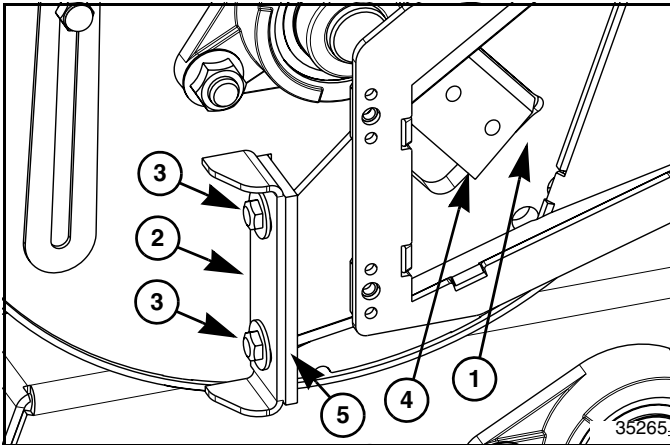
CAUTION
Ledger bolts must be tightened to the correct torque value provided under "Additional Torque Values" on page 34. Not doing so can damage the chipper and cause bodily injury.

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

1. Loosen hex bolts (#3).

Section 3: Adjustments

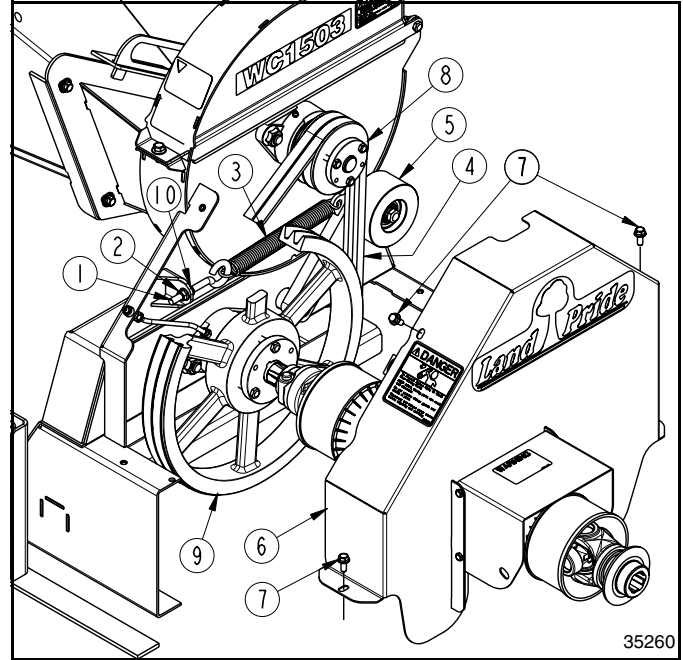
2. Place 1/32" to 1/16" shim between knife edge and knife ledger. Do not exceed 1/16" gap.
3. Adjust knife ledger against the shim. Hold ledger in this position to tighten bolts (#3) in step 4 below.
4. Tighten GR8 Ledger bolts (#3) to 35-40 ft-lbs. See **"Additional Torque Values"** on page 34 for more information.
5. Continue with step 4.c. under **"Check Knife Ledger Clearance"** on this page.



View of Rotor Knife (#4) With Feed Chute Removed
Figure 3-6

Refer to Figure 3-7

9. Replace belt guard (#6) with existing 5/16"-18 x 3/4" GR5 hex flange screws (#7). Tighten hex flange screws to the correct torque.
10. Reconnect driveline to tractor PTO shaft.



Remove Pulley Guard
Figure 3-7

V-Belt Take-up

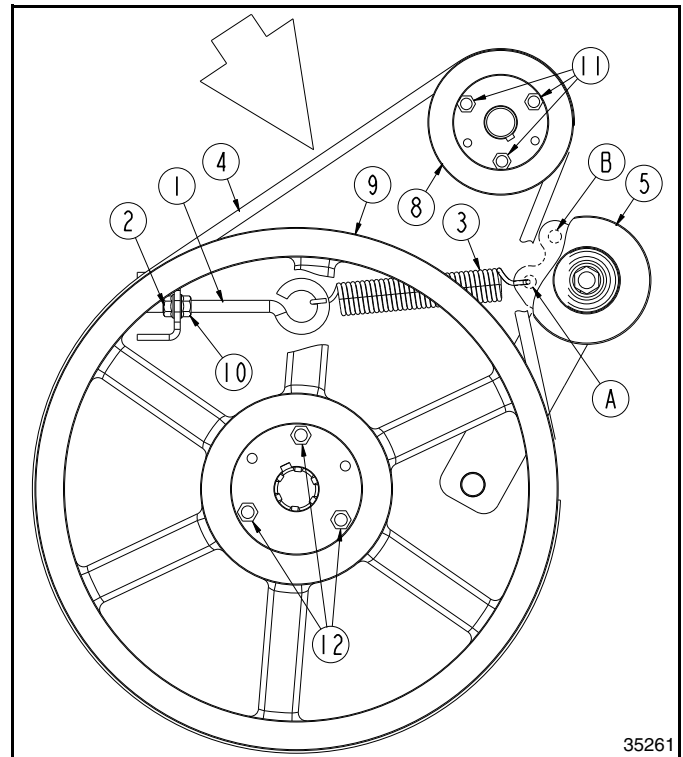
Refer to Figure 3-7

The V-belts transmit power to the rotor knives and should be adjusted if they are slipping under normal load. If V-belts are slipping under normal load, then make adjustments as follows.

1. Make certain gear selector is in park and park brake is set. Disengage PTO, shut tractor engine off, remove switch key and wait for all moving parts to stop completely before working on this.
2. Disconnect driveline from tractor PTO shaft.
3. Remove the three hex flange screws (#7) and belt guard (#6).

Refer to Figure 3-8

4. Push on the belt at mid-point between the two pulleys. The belt should deflect 1" with 10 lbs. of force. If belt needs tightened, go to step 5 below.
5. Tighten belt by loosening hex flange nut (#10) and screwing hex flange nut (#2) clockwise to pull on take-up spring (#3) and take-up pulley (#5).
6. If eyebolt (#1) runs out of threads before V-belts (#4) are properly tensioned, then loosen eye bolt until take-up spring (#3) can be moved from hole "A" to hole "B".
7. With take-up spring in hole "B" retighten eye bolt (#1) with hex flange nut (#2) until V-belts are properly tensioned.
8. Tighten hex flange nut (#10).



Adjust Belt Take-Up
Figure 3-8

Section 4: Maintenance & Lubrication

General Maintenance Information

Proper servicing and adjustment is the 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

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.

DANGER

Always secure Wood Chipper in the up position with solid supports before servicing underside of chipper. Never work under equipment supported by hydraulics. Hydraulics can drop equipment instantly if controls are actuated even when power to the hydraulics is shut off.

DANGER

Always disengage PTO, engage parking 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.

Also, disconnect driveline from tractor PTO before servicing driveline, rotor, and rotor knives. The PTO can be engaged if tractor is started causing serious injury or death.

WARNING

Do not operate Wood Chipper with an out-of-balance rotor. Rotor parts can work loose at high speeds resulting in flying parts that can cause serious injury or death.

WARNING

Frequently check all hardware to make certain it is tight. Operating Wood Chipper with loose pins, bolts, and nuts can cause equipment to not perform properly and may result in a serious breakdown that can cause bodily injury or death.

WARNING

Replace worn, damaged, or missing parts only with genuine Land Pride parts. Replacing parts with other brands can cause equipment to not perform properly and may lead to breakage that can cause bodily injury or death.

CAUTION

Do not alter the Wood Chipper in a way which will adversely affect its performance or reliability. Doing so can damage the Wood Chipper, cause personal injury and void the warranty.

Rotor Knives

WARNING

Do not operate Wood Chipper with knives that are bent, out of balance, dull, broken, or with worn mounting bolts. Such knives can break loose from the chipper at high speeds causing serious injury or death.

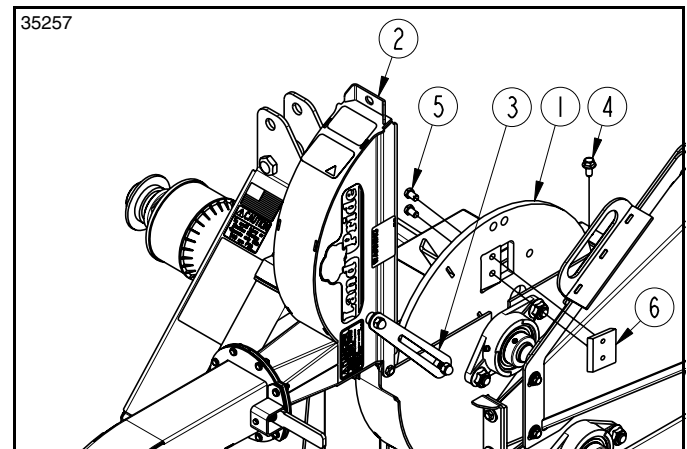
CAUTION

Knives are sharp. ALWAYS wear gloves and eye protection while inspecting, removing, sharpening, and replacing knives.

CAUTION

Knife bolts must be tightened to the correct torque value provided under “Additional Torque Values” on page 34. Not doing so can damage the chipper and cause bodily injury.

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 PTO, shut tractor engine off, remove switch key and wait for all moving parts to stop before working on this machine.
2. Disconnect driveline from tractor PTO 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 3/8"-16 x 3/4" hex flange serrated screw (#4). Tighten serrated screw to the correct torque.

Section 4: Maintenance & Lubrication

Rotor Knife Maintenance

Refer to Figure 4-1 on page 23:

1. Manually rotate one of the rotor knives to the top.
2. Unscrew bolts (#5) and remove rotor knife (#6).
3. Rotate the other knife to the top and remove it.
4. Examine bolts (#5) and blades (#6) for damaged threads and replace with Land Pride parts if needed.
5. Inspect knives for edge wear. Reverse knives if unused edge is still sharp, sharpen knives if both edges are worn, and replace knives if both edges have been ground back so far that the gap between the cutting edge and knife ledger is more than 1/16".

Reverse Knives

- a. Flip 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). See step 6 below for special torque instructions.

Resharpen Knives

Refer to Figure 4-2:

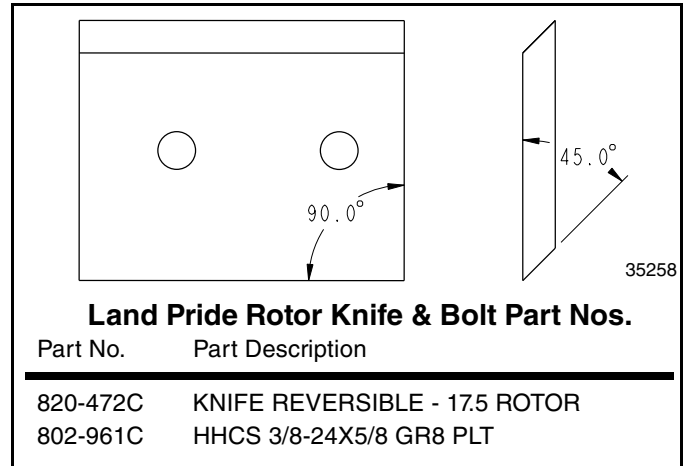
- a. Both knives should be sharpened at the same original angle of 45° and must both be sharpened at the same service time to maintain proper balance. Take the following precautions when sharpening knives.
 - Always grind blades to a sharp 45° edge.
 - Always grind cutting edge straight and square (90°) to the knife's side.
 - Always keep corners of cutting edges square, not rounded.
 - Do not sharpen back side of cutting edge.
 - Do not remove more material than necessary.
 - Do not heat and pound out a cutting edge.
 - Both blades should weigh the same.
- b. Reattach knives to rotor (#1) with existing 3/8"-24 x 5/8" GR8 bolts (#5). See step 6 below for special torque instructions.

Replace Knives With New Knives

Refer to Figure 4-1 on page 23:

- a. If rotor knives have been reinstalled and knife ledger cannot be adjusted to the proper clearance, then replaced knives with new knives. See "Check Knife Ledger Clearance" on page 21 for allowable clearance dimensions.
 - b. Reattach new knives to rotor (#1) with existing 3/8"-24 x 5/8" GR8 bolts (#5). See step 6 below for special torque instructions.
6. Tighten GR8 knife bolts (#5) to 35-40 ft-lbs. See "Additional Torque Values" on page 34 for more information.
 7. Adjust knife ledger to the proper clearance dimensions. For detailed adjustment instructions, see "Check Knife Ledger Clearance" on page 21.

8. Close upper rotor housing (#2). See step 5 under "Rotor Knife Access" on page 23.



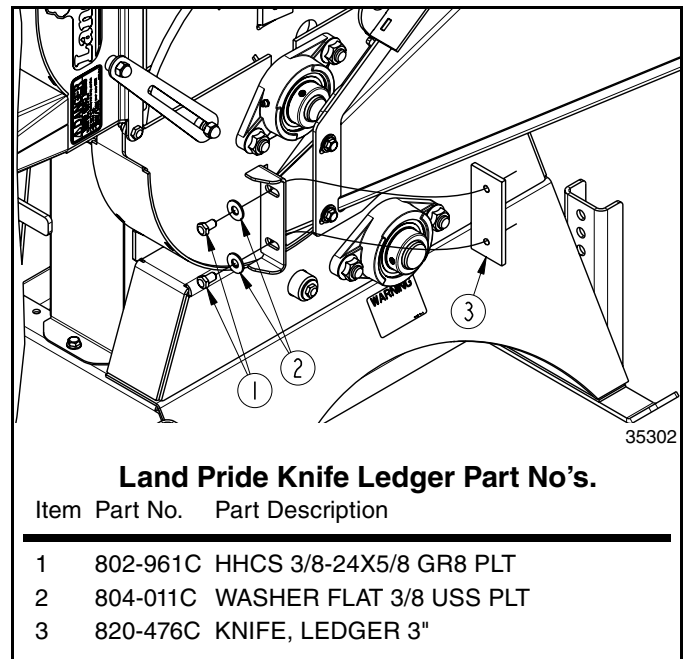
Sharpening Rotor Knives
Figure 4-2

Knife Ledger Maintenance

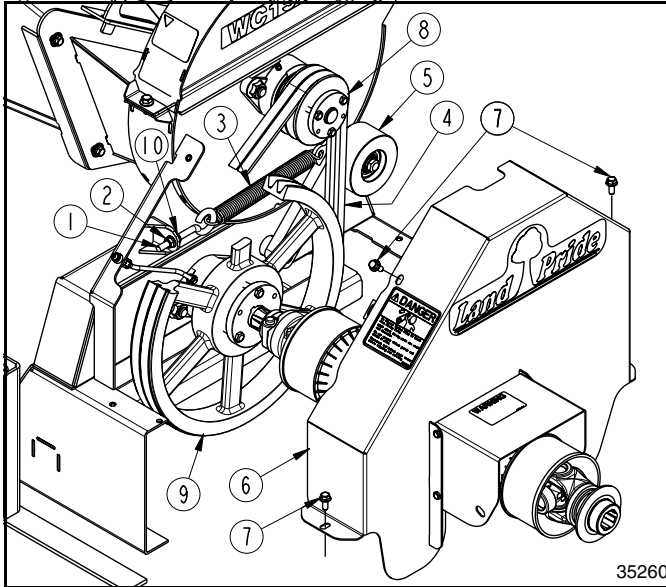
Refer to Figure 4-3:

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

1. Remove cap screws (#1), flat washers (#2), and knife ledger (#3).
2. Rotate knife ledger (#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 knife ledger to the correct clearance. See "Adjust Knife Ledger Clearance" on page 21.



Accessing Knife Ledger
Figure 4-3



V-Belt Replacement
Figure 4-4

V-Belt

Refer to Figure 4-4:

The operator should check periodically to make sure that V-belts (#4) are properly tensioned. If adjustment is required, refer to “**V-Belt Take-up**” on page 22. Replace V-belts in pairs when frayed, cracked, or broken.



CAUTION

The V-belts are under spring tension. Use care to avoid bodily harm during removal and installation of V-belts.

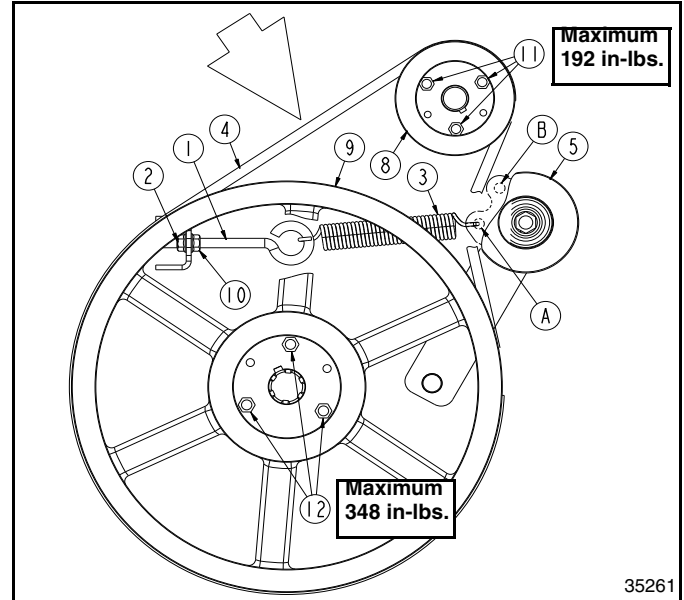
1. Place gear selector in park, set park brakes, disengage PTO, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before working on this machine.
2. Disconnect driveline from tractor PTO shaft.
3. Remove hex flange screws (#7) and belt guard (#6).

Refer to Figure 4-5:

4. Loosen hex nut (#2) until take-up idler (#5) is completely slack.
5. Remove belt from the smaller pulley (#8) first and then from the larger pulley (#9).
6. If spring (#3) is hooked in hole “B”, rehook spring in hole “A” before installing new V-belts.
7. Install new V-belts (#4) over the larger pulley (#9) first and then over the smaller pulley (#8).
8. Tighten take-up pulley (#5) until V-belts are properly tensioned. See “**V-Belt Take-up**” on page 22.

Refer to Figure 4-4:

9. Reattach belt guard (#6) with existing 5/16"-18 x 3/4" GR5 hex flange screws (#7). Tighten hex flange screws to the correct torque.
10. Connect driveline to tractor PTO shaft



Land Pride V-Belt Part No.

Part No.	Part Description
816-737C	V-BELT, B-SEC. 59 PL (PAIR)

Take-up Spring Hole Location
Figure 4-5

Torque Value of Pulley Hubs

Refer to Figure 4-5:

IMPORTANT: Do not over tighten pulley hub bolts. The hubs can break if overtightened. For recommended torque values, see Figure 4-5 above and “**Additional Torque Values**” on page 34.

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.

Land Pride Shear Bolt Part No.

Part No.	Part Description
165.000.505	CO BOLT & NUT M8X50 CL.8.8

Section 4: Maintenance & Lubrication

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" gap between ledger bar and knives will keep knives wiped off, prevent plugging, allow product to feed better, and keep wood chipping.

Plugged Chutes & Rotor

Refer to Figure 4-6:

Clear plugged chutes and rotor as follows:

1. Place gear selector in park, set park brakes, disengage PTO, shut tractor engine off, remove switch key, and wait for all moving parts to come to a complete stop before working on this machine.
2. Disconnect driveline from tractor PTO shaft.
3. Unplug feed chute, discharge chute and rotor as follows:

Unplug Feed Chute (#1)

- a. Be sure to complete steps 1 & 2 above.
- b. Pull all material out of feed chute. Make sure nothing is jammed between inlet opening and rotor at bottom of feed chute.

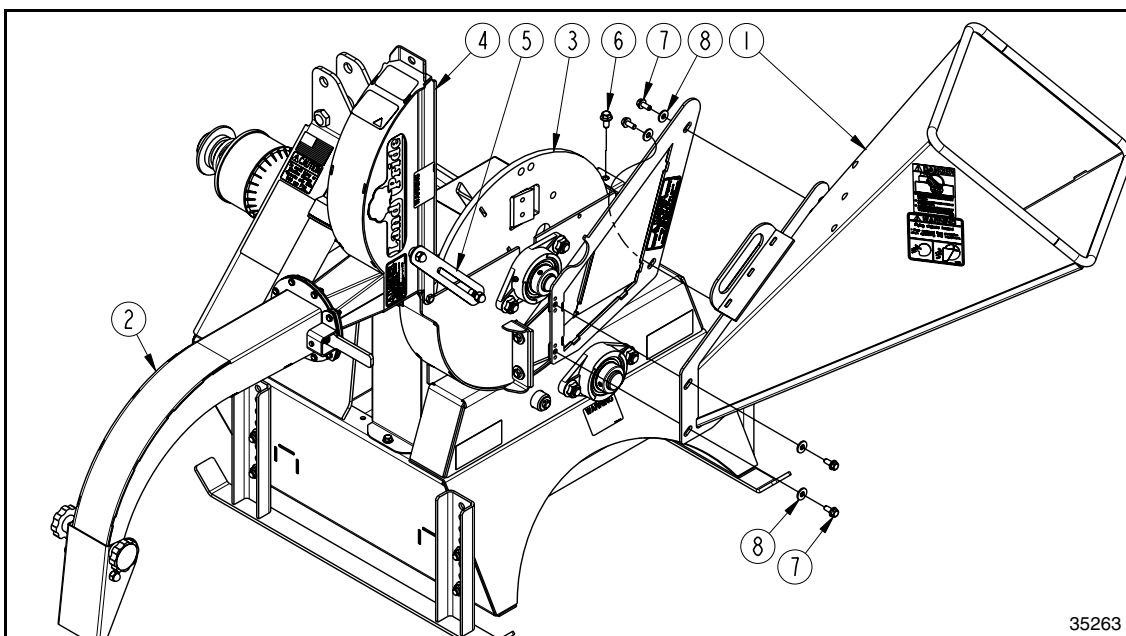
- c. Loosen product jammed at the bottom with a stick or board by prying it up and to the right.
- d. If prying on product does not free it, then access inlet opening by removing hex flange screws (#7), flat washers (#8), and feed chute (#1).
- e. Do not reattach feed chute (#1) until after checking rotor for a plugged situation.

Unplug Rotor (#3)

- a. Be sure to complete steps 1 & 2 on this page.
- b. Remove hex flange screw (#6).
- c. Rotate upper rotor housing (#4) 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 (#4) down and secure with existing 3/8"-16 hex flange serrated screw (#6). Tighten serrated screw to the correct torque.

Unplug Discharge Chute (#2)

- a. Be sure to complete steps 1 & 2 on this page.
 - b. Make certain discharge chute (#2) is clean. Pull material out of the discharge chute. If necessary, use a stick to unplug a jam.
4. Reattach feed chute (#1) with existing 5/16"-18 x 3/4" GR5 hex flange screws (#7) and flat washers (#8). Tighten hex flange screws to the correct torque. See "Feed Chute" on page 12 for detailed installation instructions of feed chute.
 5. Reattach driveline to tractor PTO shaft.



Accessing Rotor Knives
Figure 4-6

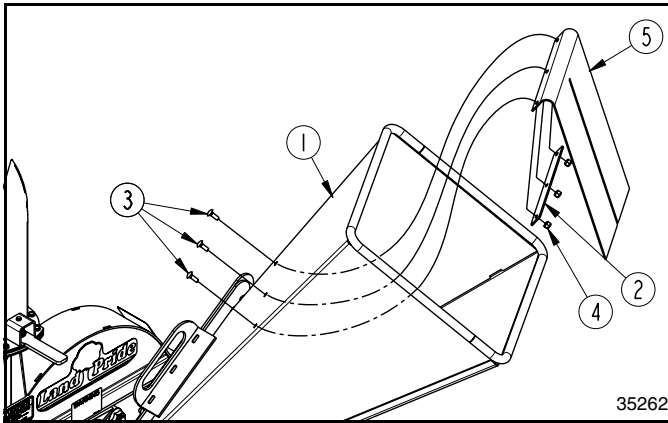
Section 4: Maintenance & Lubrication

Rubber Flap

Refer to Figure 4-7:

The rubber flap (#5) should be replaced if it is torn, damaged, or missing. It helps protect against objects flying back out of the hopper towards the operator.

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



Land Pride Rubber Flap Part No.	
Part No.	Part Description
816-699C	RUBBER FLAP

Take-up Spring Hole Location
Figure 4-7

Unhooking The Wood Chipper

See “Long Term Storage” on this page before unhooking and storing the Wood Chipper for a long time. Unhook Wood Chipper from tractor as follows:

1. Park on a level solid hard surface. Place tractor gear selector in park and set park brake.
2. Lower Wood Chipper onto level ground or onto blocks supporting unit just above ground.
3. Shut tractor engine off and remove switch key.
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. Disconnect driveline from tractor PTO shaft. If possible, support driveline from upper center hitch pin to keep driveline out of the dirt.

Long Term Storage

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

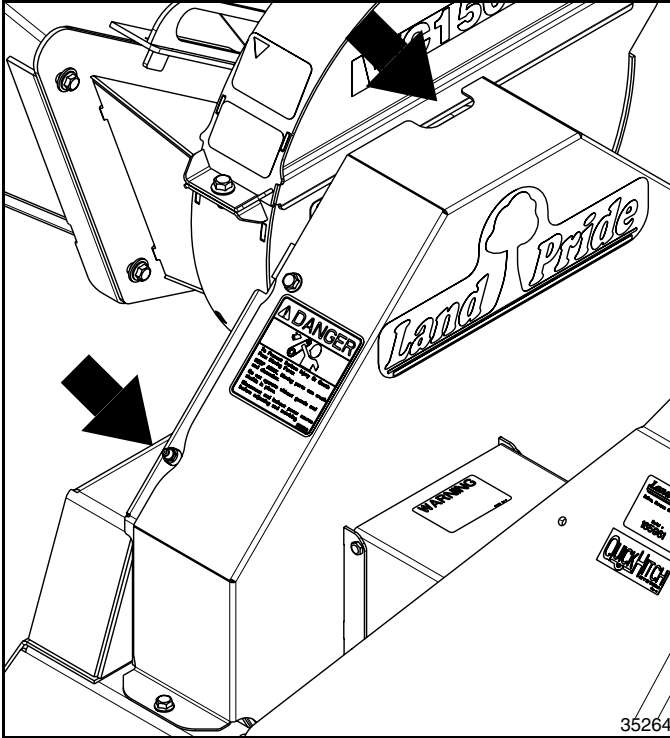
1. Clean off any dirt and grease that may have accumulated on the Wood Chipper and moving parts.
2. Inspect all rotating components for entangled material and remove.
3. Wash surfaces thoroughly with a garden hose or power washer.
4. After washing unit, run machine for several minutes to dry out the inside.
5. Check knives for wear. Rotate knives, sharpen worn knives, or replace with new knives.
6. Check knife ledger. Rotate knife ledger or replace knife ledger when required.
7. Inspect Wood Chipper for loose, damaged, or worn parts. Adjust and tighten loose parts or replace as needed.
8. 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
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-058C	PAINT GREEN AEROSOL SPRAY CAN
821-066C	PAINT ORANGE AEROSOL SPRAY CAN

9. Replace all damaged or missing guards and decals.
10. Lubricate as noted in “Lubrication Points” on page 28.
11. A light coat of oil or grease may be applied to the knives and to any exposed unpainted parts to minimize oxidation.
12. 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.
13. Unhook Wood Chipper from the tractor. See “Unhooking The Wood Chipper” on this page.

Lubrication Points

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



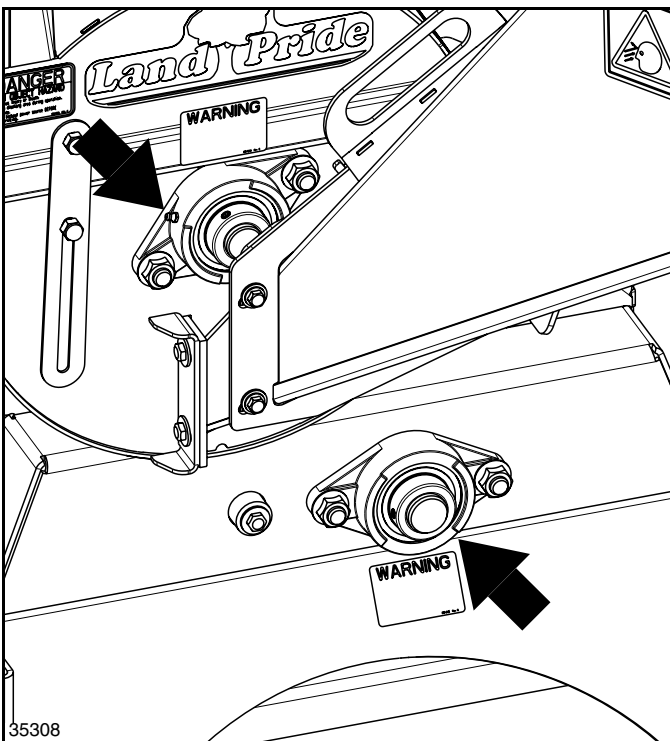
	25 Hours
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Front Flange Bearings

Zerks: Two

Type of Lubrication: Multi-purpose Grease

Quantity = As required



	25 Hours
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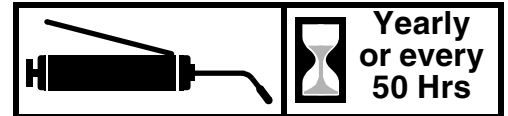
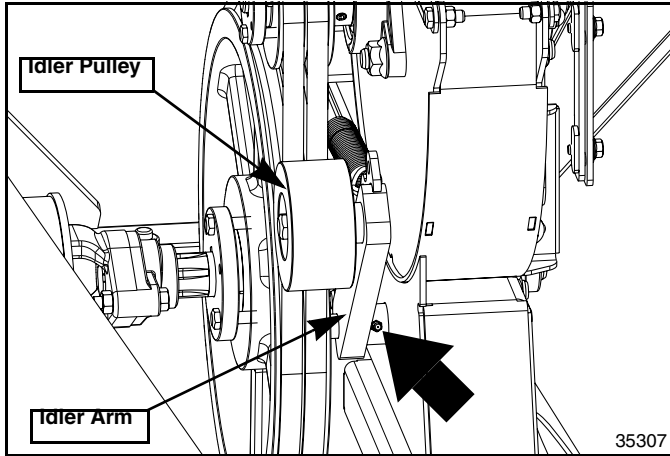
Rear Flange Bearings

Zerks: Two

Type of Lubrication: Multi-purpose Grease

Quantity = As required

Section 4: Maintenance & Lubrication



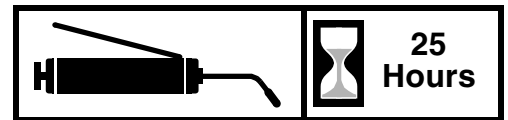
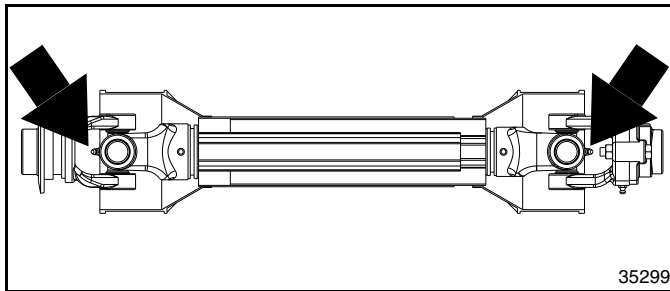
Pivot Tube for Idler Arm

Zerks: One (Remove Belt Guard to Access)

Frequency: Once a year or every 50 hours, whichever comes first.

Type of lubrication: Multi-purpose grease

Quantity of lubrication: = As required

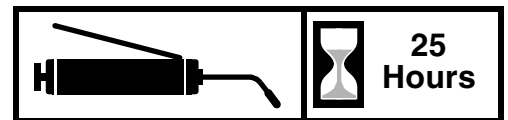
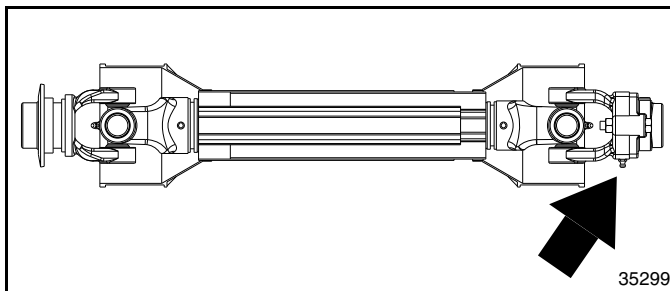


Driveline U-Joints

Zerks: Two (One on each end of driveline)

Type of lubrication: Multi-purpose grease

Quantity of lubrication: = As required

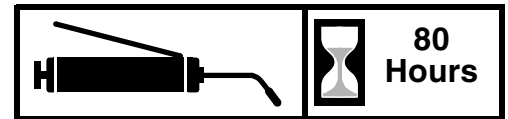
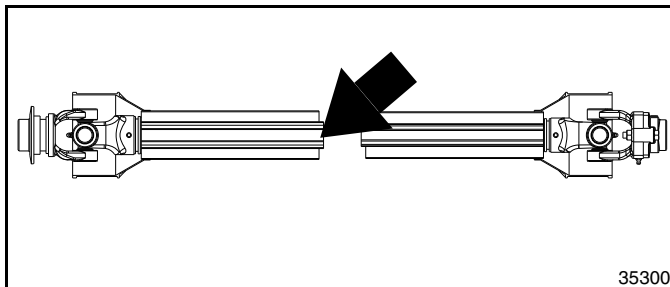


Shear Bolt Joint

Zerks: One on shear bolt end of driveline

Type of lubrication: Multi-purpose grease

Quantity = As required



Driveline Outer Shaft Profile

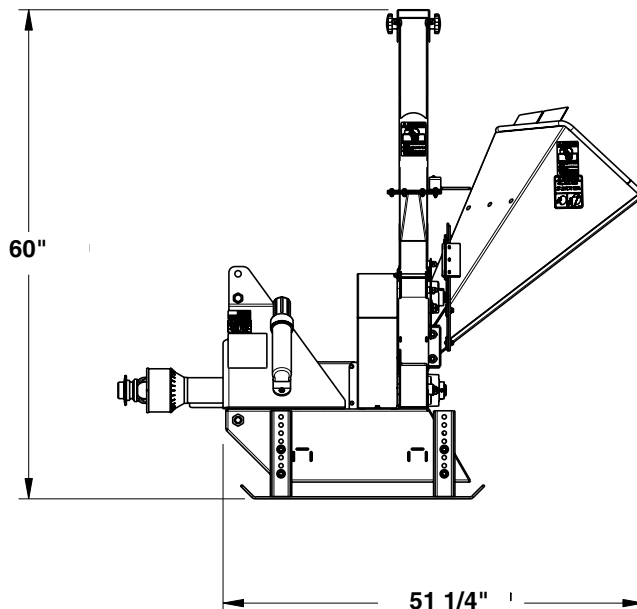
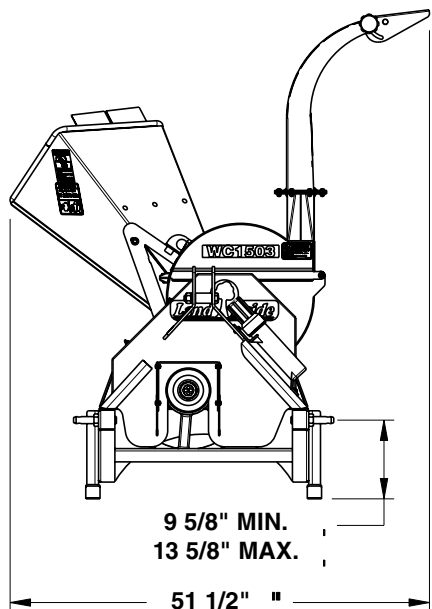
Where: Inside surfaces of outer shaft profile

Type of lubrication: Multi-purpose Grease

Quantity = As required

WC1503 Model

Specifications & Capacities	
HP Required	12 to 30 HP (Minimum 25 HP for maximum capacity)
Weight	369 lbs.
Hitch	Cat. 1 w/ Quick Hitch capabilities
Upper Hitch Plate Thickness	1/4"
Main Frame Thickness	3/16"
Rotor Housing Thickness	3/16"
PTO Speed	540 RPM
Driveline Category	Cat. 2 with shear bolt
Main Drive Pulley Diameter	16.35"
Rotor Pulley Diameter	4.5"
Belts	2 single B section
Belt Tensioners	Spring loaded with adjustment
Rotor Size	17.5"
Rotor Speed	1984 RPM
Chip Capacity	3"
Hopper Inlet Opening	14"x 15"
Chipper Inlet Opening	6" x 3"
Spout Discharge Opening	3 1/4" Square
Cutting Knife	Reversible and Replaceable
Number of Knives	2
Knife Size	2.5" x 2" x 1/4"
Knife Material	Hardened Steel (Specifically designed for chipping)
Feed System	Self-feed
Chip Chute Position	270 degrees
Feed Height Above Ground	35" (Without adjustable skids)
Feed Height Adjustment	6 Settings (Includes without adjustable skids)
Color	Orange, Green & Beige



35198



WC1503

Features	Benefits
Quick Hitch Adaptable	Quickly and easily attach chipper to tractor with one person.
1/4" Thick Cutting Knife	Rotor features 2 replaceable 1/4" hardened steel cutting edges.
Knives Can Be Rotated When One Cutting Edge Is Worn	Each knife has two cutting edges to extend knife life. When one edge is worn, rotate knife 180° to a new cutting edge. Less downtime required to sharpen knives.
Knives Are Replaceable	Can replace knives when all cutting edges are worn out.
Two V-Belts	Designed to handle shock loads.
Spring Loaded Adjustable Idler	Allows for constant and proper tension on belt.
2-Bolt Flanged Bearings	Improves bearing life.
Cat. II 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.
9,090 FPM Knife Speed	For cleaner cut and better discharge of wood chips.
Self-Feeding System	Product is pulled in by the sharp cutting knives with each pass of a 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	Knives are worn	Rotate, sharpen, or replace knives. See "Rotor Knives" on page 23.
	Tractor PTO speed is below 540 RPM	Set tractor PTO speed to 540 RPM.
	Knives are not sharpened at a 45° angle	Resharpener knives to the proper angle. See "Rotor Knives" on page 23.
	Plugged rotor and/or discharge chute	Clean discharge chute and rotor housing. See "Plugged Chutes & Rotor" on page 26.
Wood Chipper requires excessive power to operate, or stalls	Clearance between knife and knife ledger is too large	Readjust ledger. See "Check Knife Ledger Clearance" on page 21.
	Tractor horsepower is too low	Minimum 25 PTO HP is required when operating at maximum capacity.
	Knives are dull/worn	Rotate, sharpen, or replace knives. See "Rotor Knives" on page 23.
	Overloading feed chute with product	Load feed chute with less product.
	Loading feed chute with oversized product	Feed only product 3" in dia 2.5 meter 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 26.
	Discharge chute is plugged	Clean discharge chute. See "Plugged Chutes & Rotor" on page 26.
	Clearance between knife and knife ledger is too large	Readjust ledger. See "Check Knife Ledger Clearance" on page 21.
Rotor will not turn	Knife ledger is dull/worn	Rotate knife ledger or replace knife ledger. See "Knife Ledger Maintenance" on page 24.
	Driveline is not engaged	Engage driveline.
	Shear bolt in driveline is broken	Replace shear bolt. See "Shear Bolt Protection" on page 25
	V-belts are slipping	Tighten spring take-up idler. See "V-Belt Take-up" on page 22.
	V-belts are broken	Replace V-belts. See "V-Belt" on page 25.
	Take-up spring is loose from idler	Re-hook spring to idler & adjust.
Wood Chipper is vibrating excessively	Rotor housing is plugged	Clean rotor housing. See "Plugged Chutes & Rotor" on page 26.
	Loose knife	Tighten knife to rotor. See "Rotor Knives" on page 23.
	Broken or missing knife	Replace broken or missing knives in pairs. See "Rotor Knives" on page 23.
	Knives don't weigh the same	Re-sharpen the heavier knife to remove material from it until both knives are the same. See "Rotor Knives" on page 23.
	Debris & dirt lodged in rotor	Clean rotor. See "Plugged Chutes & Rotor" on page 26
Driveline Vibrates	Bent rotor	Inspect straightness of rotor and rotor shaft. Replace as rotor and/or rotor shaft if bent.
	Worn Universal Joint	Replace Universal Joint.

Section 7: Troubleshooting

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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.													
Additional Torque Values													
Knife & Ledger, 3/8"-24 x 5/8" GR8 Bolts							35 to 40 ft-lbs.						
Small Pulley Hub, 5/16"-18 UNC x 1" GR5 Bolts							192 in-lbs.						
Large Pulley Hub, 3/8"-16 UNC x 1 1/4" GR5 Bolts							348 in-lbs.						

Warranty

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

Overall Unit: One year Parts and Labor

Driveline: One year Parts and Labor

Rotor: One year Parts and Labor

Knives, Ledger, Rubber Flap, Belts, & 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 by the end user.

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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