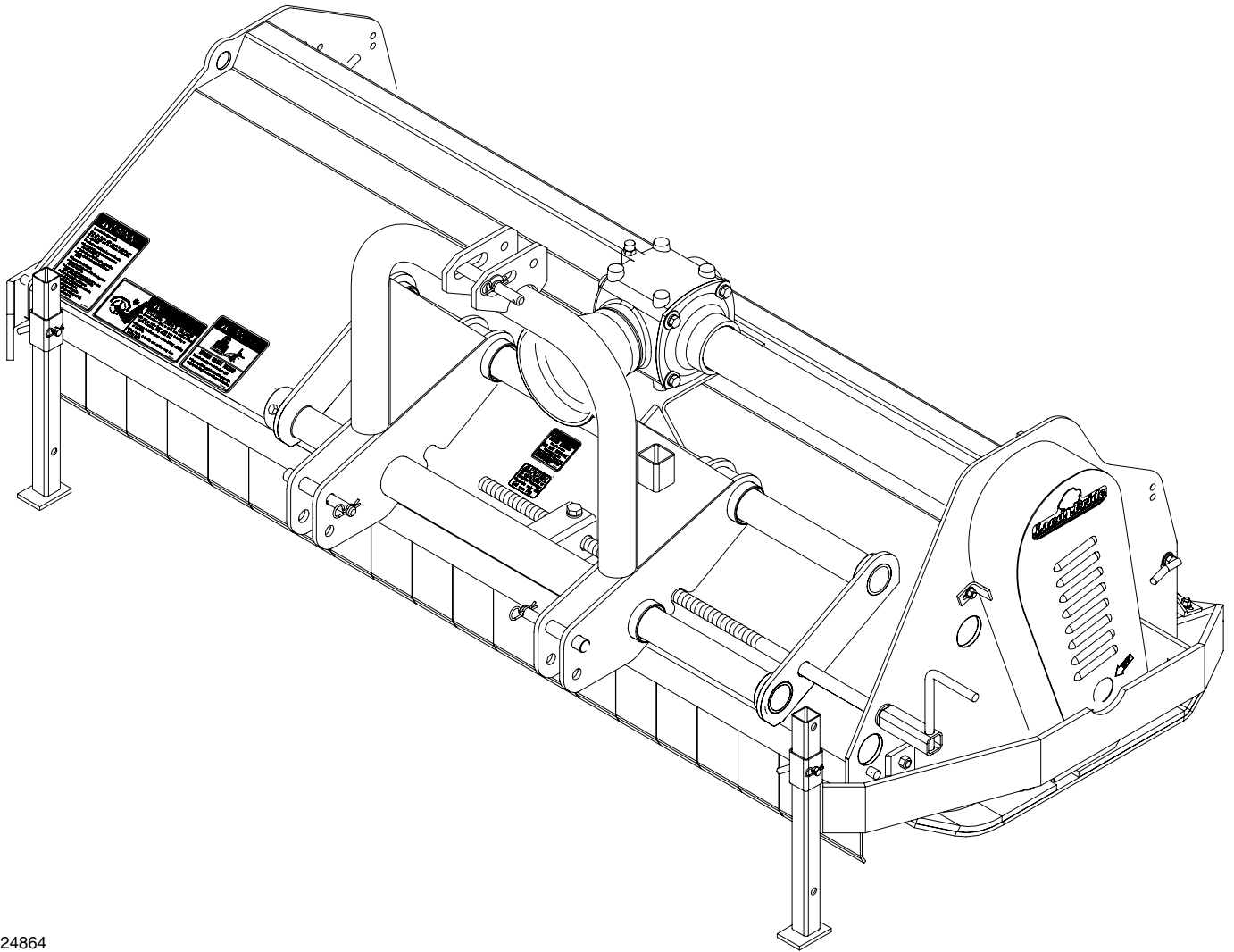


Flail Mowers

FM3188 & FM4188



24864

309-523M
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.

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 unit.
- ▲ Operate controls from the driver's seat only. Never operate controls from the ground.
- ▲ Make sure all guards and shields are in place and secured before operating implement.
- ▲ Keep all bystanders away from equipment and work area.
- ▲ 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

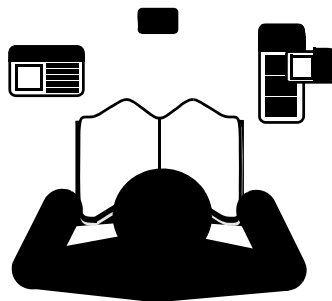
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

⚠ 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.

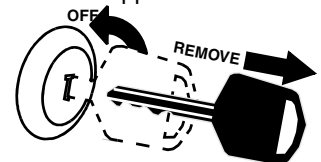
For Your Protection

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



Tractor Shutdown & Storage

- ▲ If engaged, disengage PTO.
- ▲ Lower attached implement to ground, 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.



Parts Manual QR Locator

The QR (Quick Reference) code on the 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.



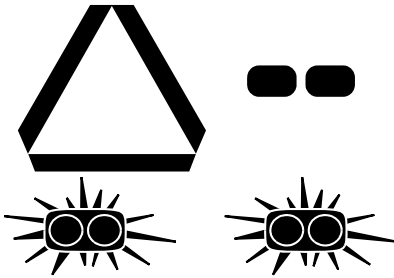
Dealer QR Locator

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.

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

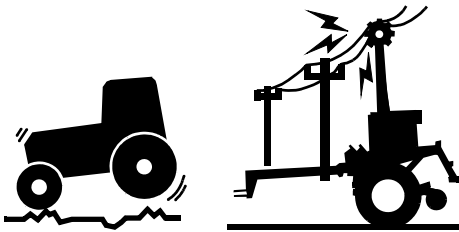
Use Safety Lights and Devices

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



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 parking 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.

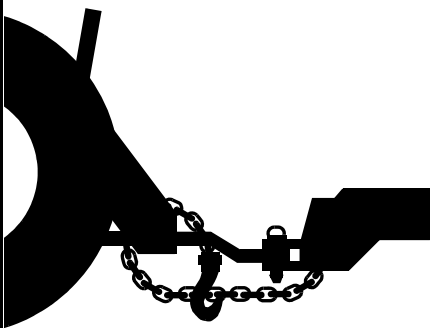
10 mph when weight of attached implement exceeds weight of machine towing implement but not more than double the weight.

- ▲ **IMPORTANT:** Do not tow a load that is more than double the weight of the machine towing the load.



Use A Safety Chain

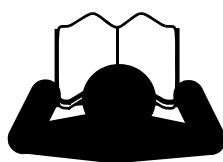
- ▲ A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only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



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.

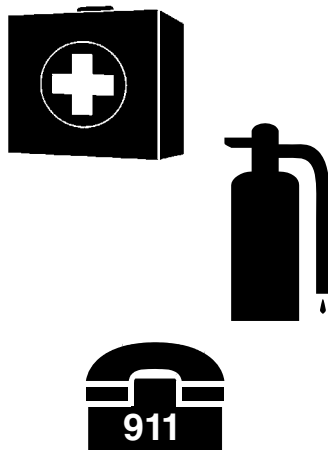
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make certain parts are in good condition & installed properly.
- ▲ Replace parts on this machine with genuine Land Pride parts only. Do not alter this machine in a way which will adversely affect its performance.
- ▲ Remove buildup of grease, oil, or debris.
- ▲ Remove all tools and unused parts from implement before operation.



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.



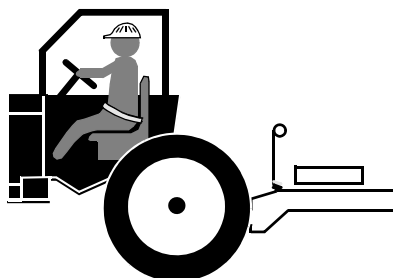
Tire Safety

- ▲ 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.



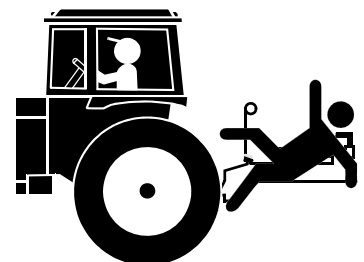
Use Seat Belt and ROPS

- ▲ Operate only tractors equipped with a Roll-Over Protective Structure (ROPS) and seat belt.
- ▲ Fasten seat belt snugly and securely to help protect against serious injury or death from falling and tractor 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.



Safety Labels

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

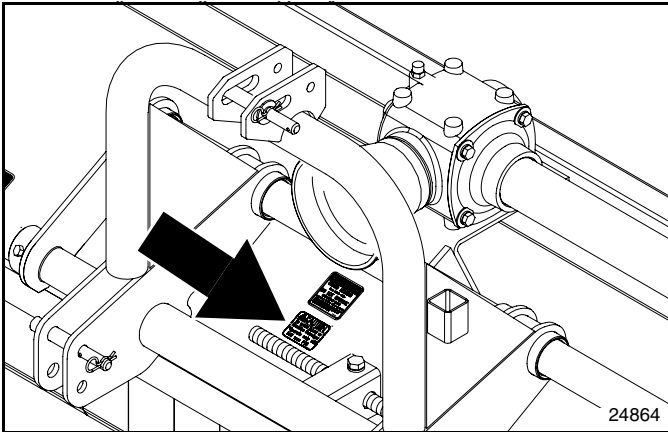
1. Keep all safety labels clean and legible.
2. Refer to this section for proper label placement. Replace all damaged or missing labels. Order new labels from your nearest Land Pride dealer. To find your nearest dealer, visit our dealer locator at www.landpride.com.
3. Some new equipment installed during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

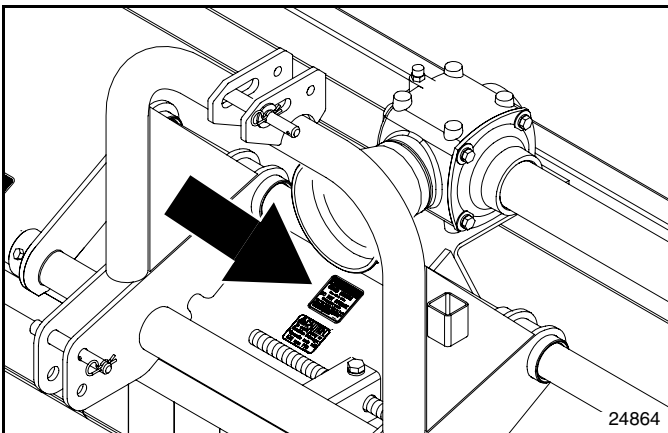
To install new labels:

- 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.



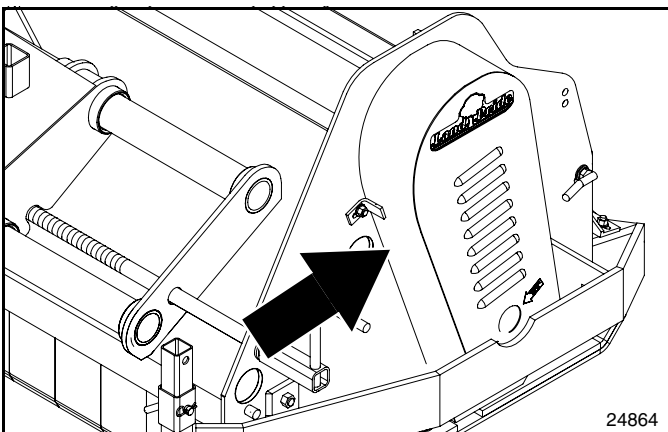
818-130C

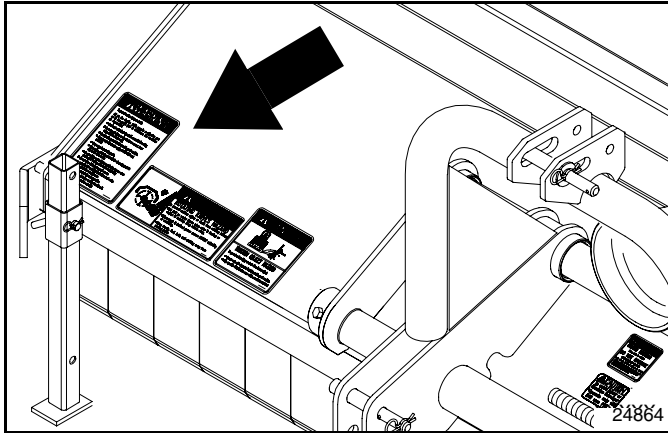
Caution: To avoid injury



818-543C

Danger: Guard Missing





WARNING

To prevent serious injury or death:

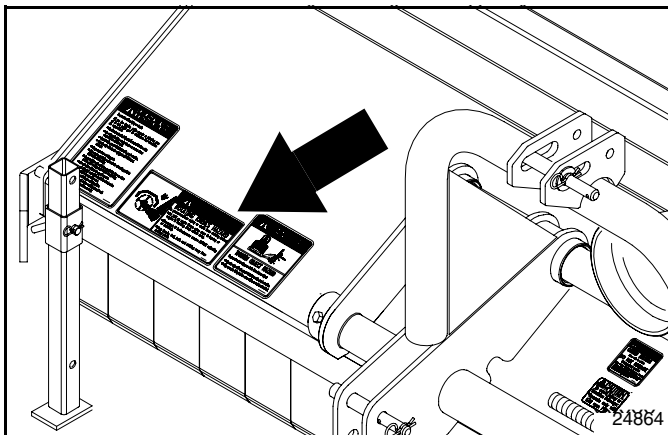
- Read and understand Operator's manual before using.
- Do not permit riders on the tractor or mower. Never carry child on tractor seat.
- Operate with guards installed and in good condition.
- Operate only with tractor equipped with ROPS and seatbelts.
- Keep away from moving parts.
- Stop engine, set brake and wait for all moving parts to stop before dismounting.
- Be sure lights and reflectors required by law are clean and in good working order before transporting.
- Do not allow children to operate mower.
- Travel with SMV and lights that follow local codes.
- Clean debris from mowing area.
- Do not operate in the raised position.
- Support securely before working beneath unit.
- Review safety instructions annually.

Si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad.

818-558C

818-558C

Warning: General



DANGER

ROTATING KNIVES HAZARD

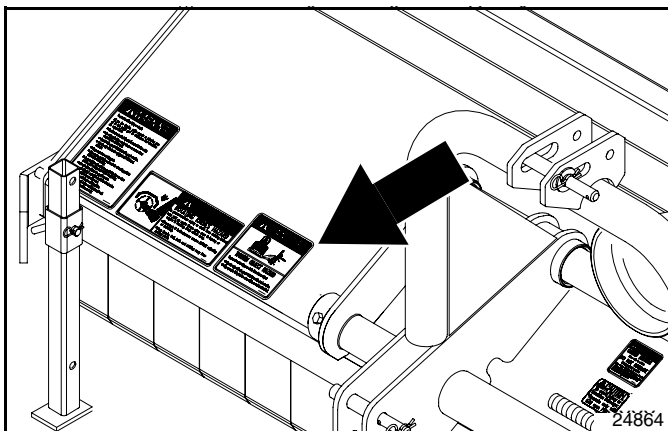
To prevent serious injury or death from rotating knives:

- DO NOT go under frame when rotor is turning or engine is running. Keep others away.
- Disconnect & lockout power source BEFORE adjusting or servicing.
- Keep hands, feet, hair, and clothing away from moving parts.

838-079C

838-079C

Danger: Rotating Knives
Both sides



DANGER

THROWN OBJECT HAZARD

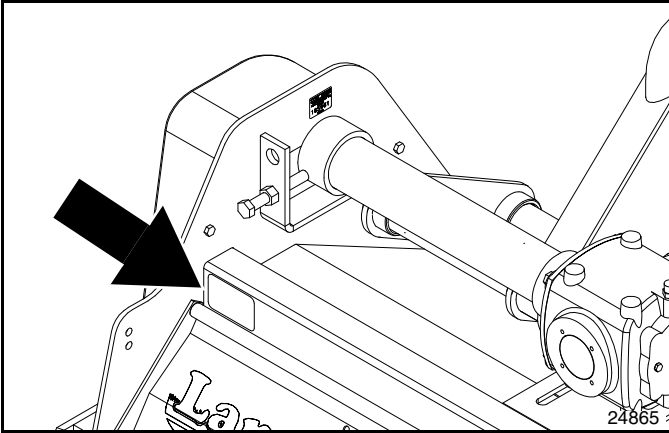
To prevent serious injury or death:

- * Do not operate unless all guards are installed and in good condition.
- * Stop blade rotation if bystanders come within several hundred feet.

818-556C

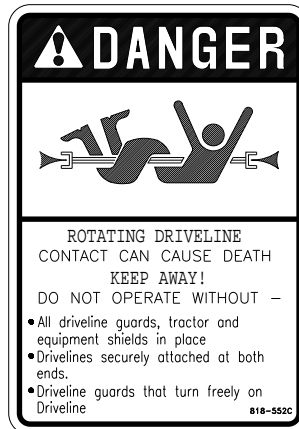
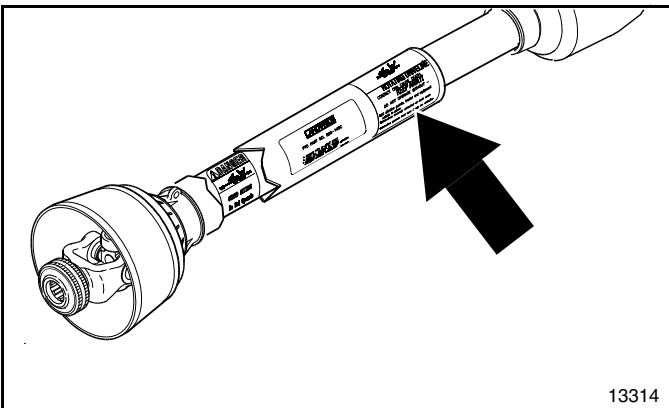
818-556C

Danger: Thrown Object



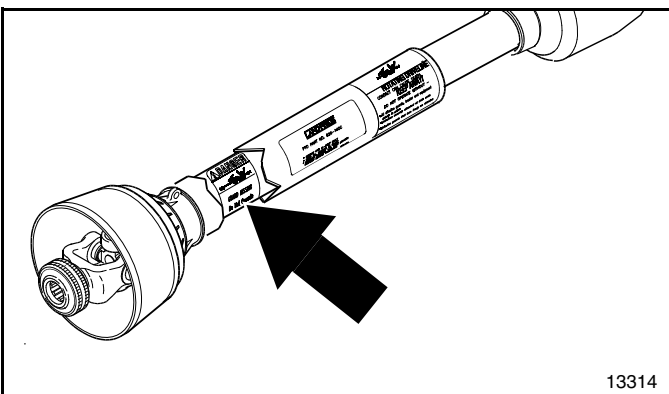
818-230C

Red Reflector (Both Sides)



818-552C

Danger: Rotating Driveline



818-540C

Danger: Guard Missing

Introduction

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

This Flail Mower 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 heavy duty FM3188 and FM4188 Series Flail Mowers are designed and built to provide excellent cutting performance on gently sloping or slightly contoured right-of ways, roadsides, ditches, pastures, nurseries, and smaller fields of row crop debris, stalks, and residual agricultural growth.

Both are capable of cutting 88" wide and 1/2" to 6" high. The three-point Cat. I hitch is designed to be used on tractors with a maximum 80 PTO horsepower. Their hitch is designed with a screw type crank adjustment for 7 3/4" offset capability to the left or right making this mower even more desirable for cutting in and around trees with extremely low hanging branches. Its horizontal rotor cutting design greatly reduces the potential of launching projectiles out from under the mower making it an excellent choice for state and municipal mowing applications. Both models are complete with a 540 rpm Cat. 4 driveline.

The FM3188 model equipped with fine cutting knives will perform extremely well cutting material up to 1" in diameter or provide a very respectable quality of cut for grooming yards, municipal parks, medians, and right of ways.

The FM4188 model equipped with cast and machined hammer knives and heavy duty brush rake teeth make this model well suited for nursery and agricultural applications where heavy grass, brush, prunings, saplings, small stumps, corn stocks, and other row crop debris are present. The rake teeth will gather and aggressively force material into the rotor hammer knives for a more complete pulverization.

See "**Specifications & Capacities**" on page 23 and "**Features & Benefits**" on page 24 for additional information and performance enhancing options.

Using This Manual

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

Terminology

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

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

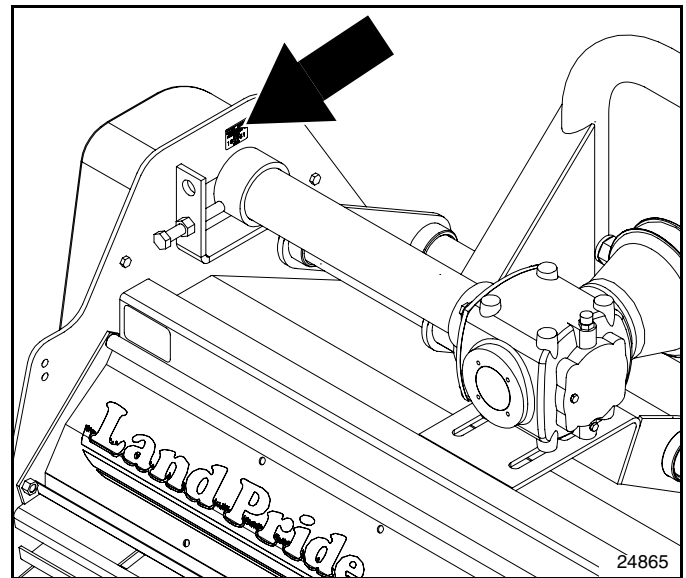
The Online Warranty Registration or Warranty Registration card should be completed by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

The parts on your Flail Mower 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 and serial number in the spaces provided above and again on warranty page 27. Always provide model 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 Flail Mower. 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

lpservicedept@landpride.com

Tractor Requirements

Tractor horsepower and hitch category should be within the range noted below. Tractors outside the horsepower range must not be used. The lower 3-Point arms must be stabilized to prevent side-to-side movement. Most tractors have sway blocks or adjustable chains for this purpose.

Horsepower Rating	35-80 HP
Hitch Type	3-Point Cat. I or Cat. II
Rear PTO Speed	540 RPM
Tractor Weight	See Important Note Below

IMPORTANT: Your tractor may require additional ballast to maintain steering control. Refer to your Tractor's Operators Manual and machine weights on page 23 to make this determination.

Torque Requirements

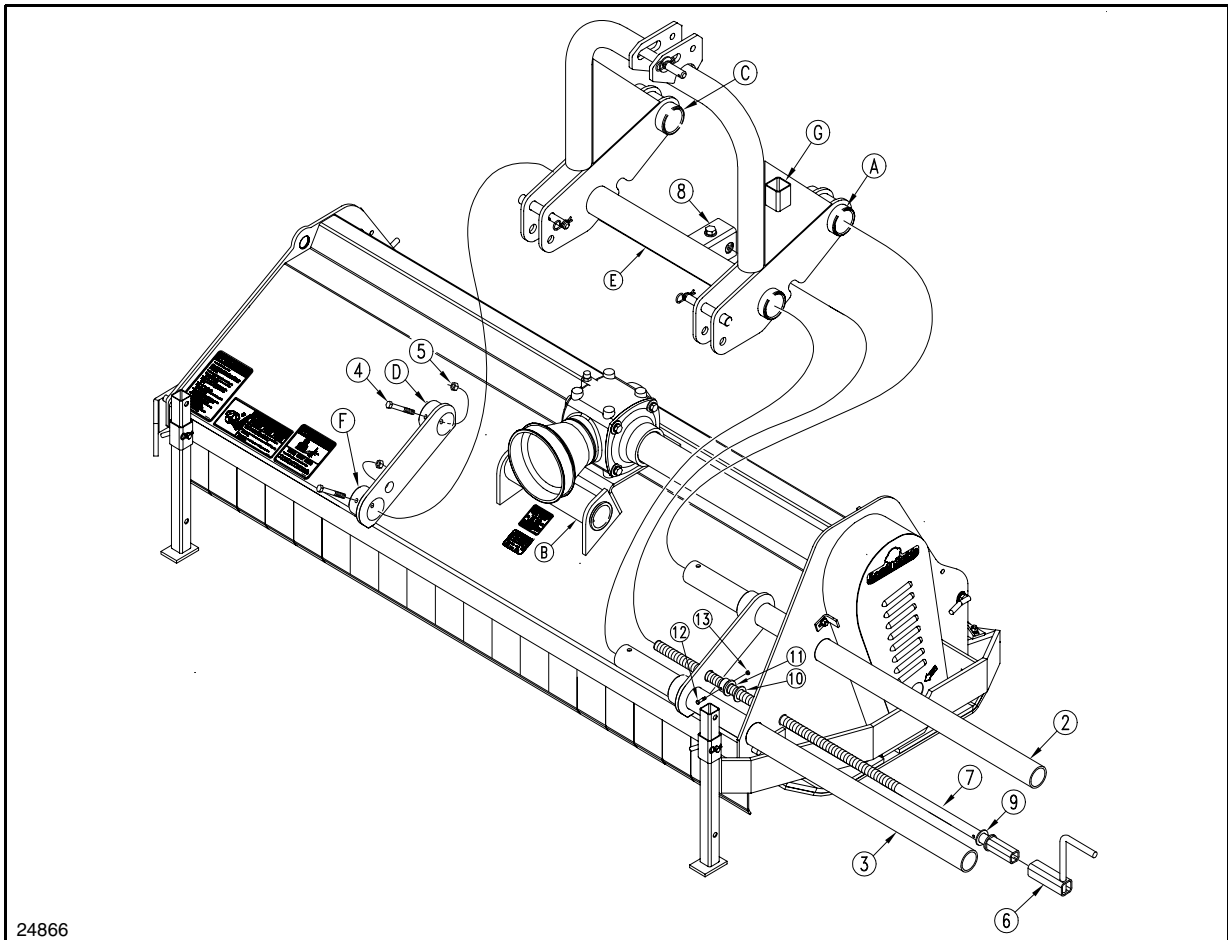
Refer to "Torque Values Chart for Common Bolt Sizes" on page 26 to determine correct torque values when tightening hardware.

Hitch Assembly

Refer to Figure 1-1:

The hitch is disassembled for ease in shipping.

1. Remove lock nuts (#5) and bolts (#4). Pull tubes (#2) and (#3) back as shown.
2. Remove lock nut (#13) and bolt (#12). Pull adjustment rod (#7) back as shown.
3. Assemble hitch (#1) to Flail Mower by inserting upper tube (#2) through hitch tube (A), spacer tube (B), hitch tube (C), and into retaining collar (D).
4. Secure upper tube with bolt (#4) and lock nut (#5).
5. Insert lower tube (#3) through lower hitch tube (E) and into retaining collar (F).
6. Secure lower tube with bolt (#4) and lock nut (#5).
7. With hand crank (#6), screw adjustment rod (#7) into adjustment block (#8) until washer (#9) is tight against the side panel.
8. Press washer (#10) against the side panel. Insert bolt (#12) through retaining collar (#11) and adjustment rod (#7). Secure with lock nut (#13).
9. Return hand crank (#6) to its carrying tube (G).
10. Tighten all hardware to the correct torque.



24866

**Hitch Assembly
Figure 1-1**

Tractor Hook-Up

Refer to Figure 1-2:

1. Be certain tractor draw bar does not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is raised for the first time.
2. Remove all three clevis hitch pins.
3. Align ball swivels in the tractor's lower 3-Point arms with pin holes in the mower's lower hitch clevises. Insert hitch pins and secure with hair pin cotter.
4. Align the top center link with the mower's center hitch clevis. Insert hitch pin and secure with hair pin cotter.
5. With tractor's 3-Point controls, lift mower up 1 to 2 inches and then raise jack stands fully up. Secure stands with jack pins and hair pin cotter.
6. Level mower by adjusting lower 3-Point arms and upper center link. Refer to "**Leveling the Mower**" on page 16.

Driveline Installation

DANGER

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

CAUTION

Tractor PTO shield and all mower guards must be in place at all times during operation!

CAUTION

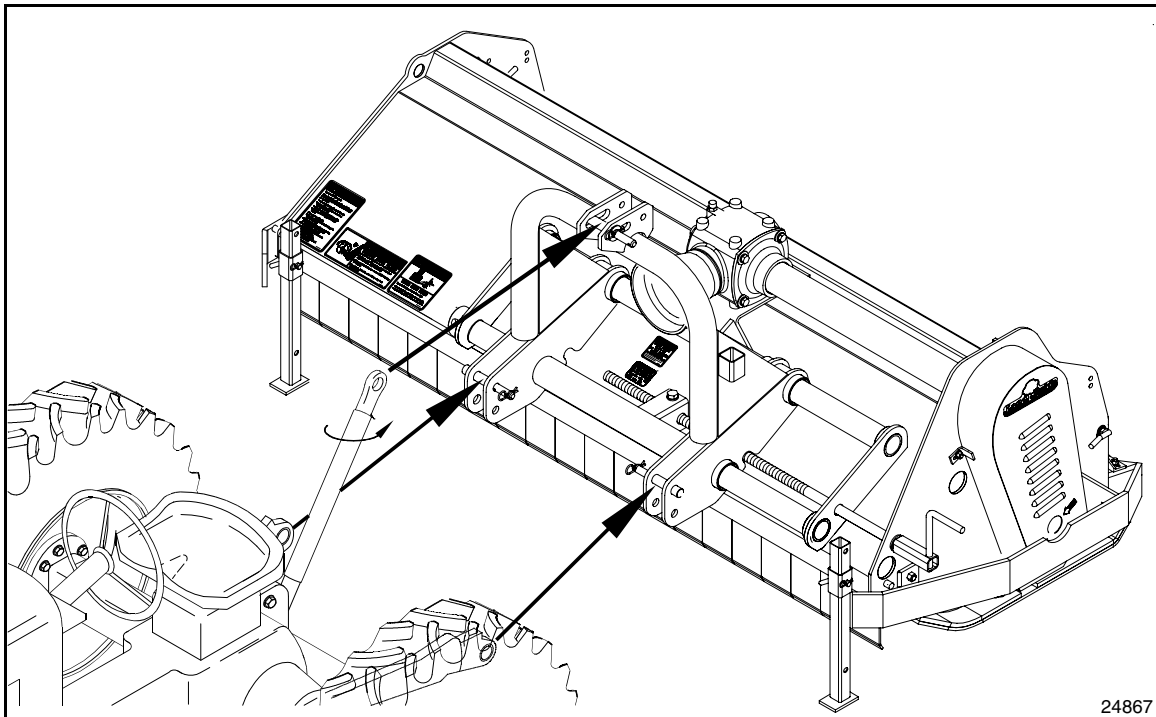
Always disengage PTO, engage parking brake, shut off tractor, and remove key before dismounting from tractor.

IMPORTANT: An additional driveline may be required. See "**Check Driveline Collapsible Length**" on page 11 for additional information.

IMPORTANT: The driveline must be lubricated before putting it into service. Refer to "**Lubrication Points**" on page 21.

IMPORTANT: Some tractors are equipped with multispeed PTO ranges. Be certain your tractor's PTO is set for 540 rpm.

IMPORTANT: The tractor's PTO shaft and mower gearbox shaft must be aligned and level with each other during installation of driveline.



Tractor Hook-Up
Figure 1-2

Refer to Figure 1-3:

1. Park tractor on a level surface. Slowly engage tractor 3-Point lift lever to raise mower until gearbox shaft is in line (level) with tractor PTO shaft.
2. Support mower deck at this height with support jacks or blocks to keep mower from drifting down.
3. Place gear selector in park, set park brake, shut tractor off, and remove switch key.
4. Slide inner yoke (implement end) of driveline onto the gearbox. Secure driveline with yoke locking device.
5. Slide outer yoke of driveline over the tractor PTO shaft. Secure driveline with yoke locking device.
6. If driveline does not fit between tractor and gearbox, skip to instructions to **"Shorten Driveline Length"** on this page.
7. The driveline should now be moved back and forth to ensure both ends are secured to the tractor and mower PTO shafts. Reattach any end that is loose.

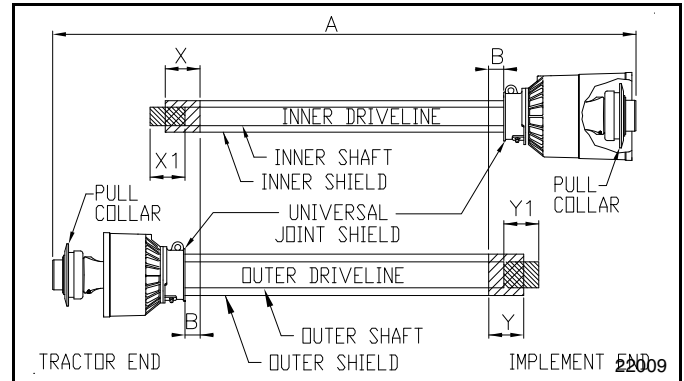
Check Driveline Collapsible Length

IMPORTANT: A driveline that is too long will bottom out causing structural damage to the tractor and mower. Always check driveline collapsible length during initial setup and when connecting to a different tractor. More than one driveline may be required to fit all applications.

1. Make sure driveline is properly installed and level before checking driveline collapsible length. (Refer to **"Driveline Installation"** on page 10 if needed.)

Refer to Figure 1-3:

2. With driveline level, measure 1" ("B" dimension) back from universal joint shield to end of outer driveline shield. If measurement is 1" or more, skip **"Check Driveline Extended Length"** on page 12. If measurement is less than 1", then continue with **"Shorten Driveline Length"** on this page.



**Driveline Shortening
Figure 1-3**

Shorten Driveline Length

Refer to Figure 1-3:

1. Un-hook 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. Check drive line extend length next.

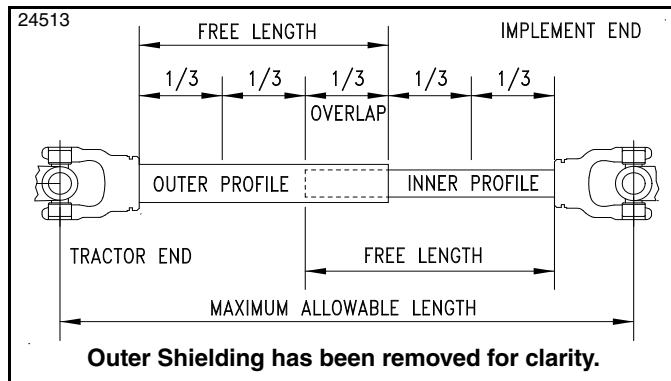
Check Driveline Extended Length

Refer to Figure 1-4:

Make sure driveline collapsible length is acceptable. If needed, refer to “**Check Driveline Collapsible Length**” on page 11 instructions on this page.

The driveline maximum allowable length must, when fully extended, have a minimum overlap of the profile tubes by not less than 1/3 the free length with both inner and outer profile tubes being of equal length.

1. Apply multi-purpose grease to the inside of the outer shaft and reassemble the driveline.
2. Assemble driveline profiles together with 1/3 overlapping of inner and outer profile tubes. Once assembled, measure and record the maximum allowable length shown below for future reference.



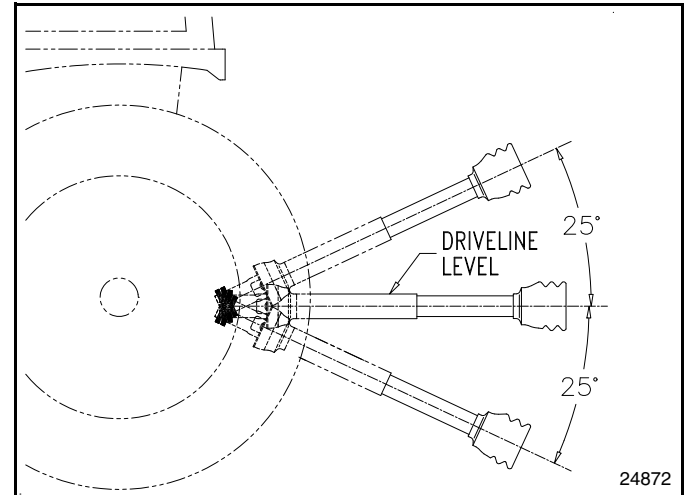
Driveline Maximum Extended Length
Figure 1-4

3. Attach inner driveline yoke to the mower gearbox shaft. Attach outer driveline yoke to the tractor's PTO shaft.
4. Move yoke ends of driveline back and forth to ensure they are secured to the tractor and mower shafts. Reattach any end that is loose.
5. Start tractor and raise Flail Mower just enough to remove blocks.
6. Slowly engage tractor hydraulic 3-Point control lever to lower Flail Mower. Check for sufficient drawbar clearance. Move drawbar ahead, aside or remove if required.
7. Raise and lower implement to find maximum extended driveline length. Check to make certain that the driveline overall length does not exceed the maximum recorded length in step 2.
8. If needed, set tractor 3-Point lift height to keep driveline from exceeding maximum allowable length.

Check Driveline Interference

Refer to Figure 1-5:

IMPORTANT: Avoid premature driveline breakdown. A driveline that is operating **must not exceed** an angle of 25° up or down while operating 3-Point lift. If needed, set tractor 3-Point lift height so that the driveline does not exceed 25° up.



Maximum PTO Driveline Movement During Operation
Figure 1-5

1. Slowly engage tractor hydraulic 3-Point control lever to lower mower while checking for sufficient drawbar clearance. Move drawbar ahead, aside, or remove if required.
2. Raise and lower implement to find maximum extended driveline length. Check to make certain the driveline does not exceed the maximum allowable length and 25° up or down.
3. If needed, set tractor 3-Point lift height to keep driveline from exceeding the maximum allowable length and 25° up.

Section 2: Operating Instructions

Startup 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 Flail Mower. Therefore, it is absolutely essential that no one operates the mower without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure the operator has read and paid particular attention to:

- **Important Safety Information**, page 1
- **Section 1: Assembly & Set-up**, page 9
- **Section 2: Operating Instructions**, page 13
- **Section 3: Adjustments**, page 15
- **Section 4: Maintenance & Lubrication**, page 18

Make sure the operator has completed the Operating Checklist below.

Operating Checklist

✓	Check	Ref.
	Read and follow all Safety Information carefully. Refer to "Important Safety Information".	Page 1
	Make sure all guards and shields are in place. Refer to "Important Safety Information".	Page 1
	Read and follow 3-Point hook-up & preparation instructions. Refer to "Assembly & Set-up".	Page 9
	Read and made all required adjustments. Refer to "Section 3: Adjustments".	Page 15
	Read and follow all operating procedures. Refer to "Section 2: Operating Instructions".	Page 13
	Read and follow all Maintenance Instructions. Refer to "Section 4: Maintenance & Lubrication".	Page 18
	Read and follow all Lubrication Instructions. Refer to "Lubrication Points".	Page 21
	Make sure all gearboxes are properly lubricated. Refer to Gearbox Lubrication lubrication.	Page 22
	Check mower initially and periodically for loose bolts and pins. Be sure all nuts and bolts are tight. Especially make sure mower blade bolts are tight. Refer to "Torque Values Chart".	Page 26

Tractor Shut Down Procedure

It is essential that the tractor be shut down as noted below before making any inspections, maintenance and/or repairs to the tractor and/or mower.

1. Park tractor on a level surface. **Don't work under or around an implement parked on a steep incline.**
2. Place tractor in park and set park brake.
3. Disengage PTO if operating.
4. Shut engine off and remove switch key.
5. Wait for PTO to come to a complete stop before dismounting tractor.
6. Wear safety glasses.

Transporting



CAUTION

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

NOTE: Always disengage PTO before raising mower to transport position.

1. When raising mower to transport position, be sure driveline does not contact tractor or mower. Adjust and set tractor's 3-Point lift height so that the driveline does not contact mower deck in the fully raised position.
2. Be sure to reduce tractor ground speed when turning, leaving enough clearance so that the mower 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 safely.
4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

Safety Information



DANGER

Do not engage tractor PTO while hooking-up and unhooking the 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

Flail Mowers have the ability to discharge objects at high speeds if guards and safety shields are not in place and closed.



DANGER

Gearbox and driveline shields must be secured in place when operating the mower to avoid injury or death from entanglement in rotating drivelines.



DANGER

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



DANGER

Never carry a person on the mower. A rider can fall or become entangled in the machine causing serious injury or death.

DANGER

Do not operate and/or travel across steep inclines where a tractor can roll-over resulting in serious injury or death. Consult your tractor's manual for acceptable inclines the tractor is capable of traveling across.

DANGER

Do not use mower to lift or carry objects. Lifting and/or carrying objects can result in damage to the mower, serious bodily injury, or death.

DANGER

Do not use mower as a working platform. The mower is not properly designed or guarded for this. Using the mower as a working platform can cause serious injury or death.

WARNING

Always disengage PTO, engage parking brake, shut tractor engine off, remove switch key, and wait for blades to come to a complete stop before dismounting from tractor.

WARNING

The FM3188 is designed to cut grass and brush up to 1" diameter and the FM4188 will cut up to 2" diameter brush. Using this mower for another type of work can damage the cutting components, drive components, mower frame, and tractor.

CAUTION

Do not over speed PTO or machine damage may result. This mower is designed to be used only with a tractor having a 540 RPM rear PTO.

Mowing Instructions

1. Clear area to be mowed of objects and debris that might be picked up and thrown by the mower blades. Do not use mower on stony ground.
2. Make the following machine checks before operating the mower.
 - All hook-up pins should be secured.
 - All shields should be in place and secured.
 - All bolts and nuts should be present and tight.
 - Make sure the knives are not be broken or loose.
3. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.
4. Grass should be mowed frequently as shorter clippings deteriorate faster.
5. If mowing extremely tall grass, it is best to raise cutting height and mow the area, then lower cutting height and mow a second time at the desired height.

Brush Rake Teeth

The FM4188 comes equipped with adjustable brush rake teeth. Adjust teeth closer to the ground to allow continued chopping of material into fine cuttings before final dispersal or raise teeth fully up to discharge material quickly. Refer to "**Brush Rake Teeth Adjustment**" on page 17.

Operating Instructions

Proper servicing and adjustments are the key to the long life of any machine. With careful and systematic inspection of the mower, costly maintenance, time, and repair can be avoided.

CAUTION

When mowing in sandy soil areas, wear may occur to the mower knives from sand erosion. Frequent inspection should be made and knives replaced if damaged.

Before beginning to mow, the following inspection and checks should be performed:

1. Check oil level in gearbox. Refer to "**Gearbox Lubrication**" on page 22.
2. Check that all plugs in gearbox have been replaced and tightened properly.
3. Be sure all mower knives, bolts, and nuts are tight.
4. Be certain all guards and shields are in place and secure.
5. Grease driveline shaft and all other grease fittings.
6. Clear area to be mowed of rocks, branches, and other foreign objects. Do not use mower on stony ground.
7. Lower mower to ground. Set tractor throttle at approximately 1/4 open. Engage PTO to start blades rotating.
8. Operate with 540 rpm PTO tractor. At first begin mowing at a slow forward speed and shift up until the desired speed is achieved maintaining 540 rpm PTO. The rotor knives will cut better at full blade speed than at reduced throttle.
9. After mowing the first 50 feet, stop and check to see that the mower is adjusted properly.
10. **Do not** make sharp turns or attempt to back up while mower is on the ground.
11. **Never** work close to or on steep slopes.
12. **Do not** engage PTO with mower in the fully raised position. **Do not** engage PTO at full throttle. **Do not** lift mower with PTO engage.
13. **Do not** allow anyone including yourself near the mower when it is operating.
14. Periodically check for foreign objects wrapped around the rotor shaft and remove them after disengaging PTO, turning off tractor, and removing ignition key.

Section 2: Operating Instructions

General Operating Instructions

Now that you have familiarized yourself with the Operator's Manual, completed the Operators Checklist, properly attached your Flail Mower to your tractor, made the right offset or center adjustments, and preset your cutting height, you're almost ready to begin using your Land Pride FM3188 or FM4188 Flail Mower.

It's now time to do a running operational safety check. If at any time during this safety check you detect a malfunction in either the mower or tractor shut the tractor off immediately, remove the 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, and the mower is resting on the ground. Start the tractor and then back the tractor throttle off till the engine is at low idle. With the tractor's rear hydraulic lift control lever, raise the mower to transport position making sure that the PTO shaft is not in a bind and does not come in contact with the mower frame. Lower the unit to cutting position and, with the tractor still at low idle, engage the PTO. If everything is running smoothly at this point increase the engine rpm until the tractor's engine reaches full PTO operating speed which will be 540 rpm. Slowly raise the cutter to transport height to make sure the driveline does not bind or chatter. Then return the engine to low idle, disengage PTO, and position the adjustable stops on the tractor's hydraulic lift lever control console so the cutter can be consistently returned to the same cutting and transport height.

You should now be ready to move to the cutting site to begin mowing. You should have inspected and should only be cutting in an area you are familiar with which is relatively free of debris and unseen objects. Never assume an area is clear. Extremely tall grass or brush should be cut twice to detect potential hazards. In the event you do strike an object, stop the tractor and mower immediately to inspect the rotor and make any necessary repairs before resuming operation. It pays to inspect a new area and to develop a plan before you cut.

Normal mowing speed will be between 2-5 mph and you will need to maintain tractor PTO speed to produce a clean cut so make a tractor gear and range selection that will maintain this combination. Generally the quality of cut or degree of debris pulverization will be better at lower ground speeds and cutting denser ground cover or heavier brush may create the need to slow down. Always cut downward on slopes and avoid crossing the face of steep slopes. Avoid sharp drops and cross diagonally through dips to prevent hanging up the tractor and mower. Slow down in turns and avoid sharp turns if at all possible. Remember to look back often.

Now you're prepared and well briefed so let's begin cutting. Reduce the tractor's engine rpm, make sure the mower is on the ground and in cutting position, engage the PTO, raise the engine rpm to the appropriate PTO speed, and begin mowing. Operators must plan ahead and choose a cutting route that allows safe turns. Try increasing or decreasing ground speed to determine the effect on quality of cut. With a little practice you will be pleased with what you and your Land Pride Flail Mower can do.

If you are cutting with an FM4188 and using the hammer knives and the standard brush rake teeth you will accumulate and force more material into the rotor for pulverization. This will require more horsepower and will cause you to slow down especially if you are encountering material up to 2" in diameter. The fine cutting knives on the FM3188 are much better suited for a finer quality of cut in grass cutting applications and in no case should fine cut blades be used for cutting material greater than 1" in diameter.

When you are done mowing, need to take a break, or just need to make a few adjustments to the mower, remember to always do the following. Reduce the tractor's engine rpm, disengage the PTO, stop on level ground, set the park brake, turn off the engine, and remove the key.

Section 3: Adjustments

CAUTION

Engage parking brake, shut off tractor, remove key, and disengage PTO before making any adjustments!

CAUTION

Secure mower with special supports if it is necessary to lift mower off the ground to make adjustments! If not supported, the mower could fall causing serious injury to those present.

Leveling the Mower

Level adjustments are made at the tractor's 3-Point lower arms and top center link.

1. Park tractor and Flail Mower on a flat level surface.
2. Slowly raise mower with the tractor's hydraulic 3-Point lift until the unit is about 1 to 2" above the ground.
3. Ensure that the lower arms are stabilized to prevent excessive side movement.
4. Place a spirit level on the top cover running from left to right and adjust one of the lower 3-Point arms up or down until the mower is level from left to right.
5. Adjust tractor's top center link to place the upper hitch pin vertically above or slightly behind the lower hitch pins.
6. Slowly operate the tractor's 3-Point hydraulic control up and down to check for clearance between the tires, frame, drawbar, etc.

Cutting Height Adjustment

Refer to Figure 3-1:

The machine's cutting height depends upon the position of the rear roller.

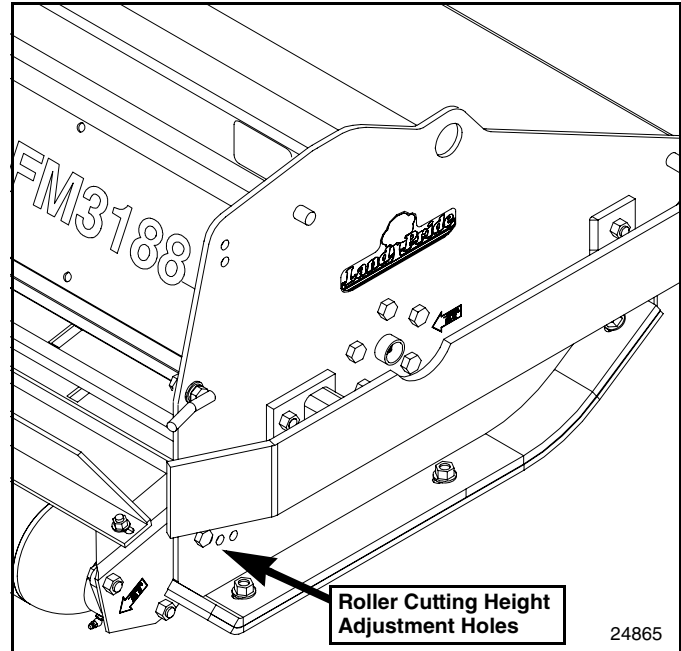
1. Remove bolts that fix the roller height on both sides.
2. Lift or lower both sides of roller in equal measurements.
3. Replace bolts and re-tighten to the proper torque.
4. Inspect knives to make sure they do not touch the ground. Knives that come in contact with the ground will wear quickly. If necessary, readjust cutting height to keep knives from touching the ground.

Hitch Adjustments

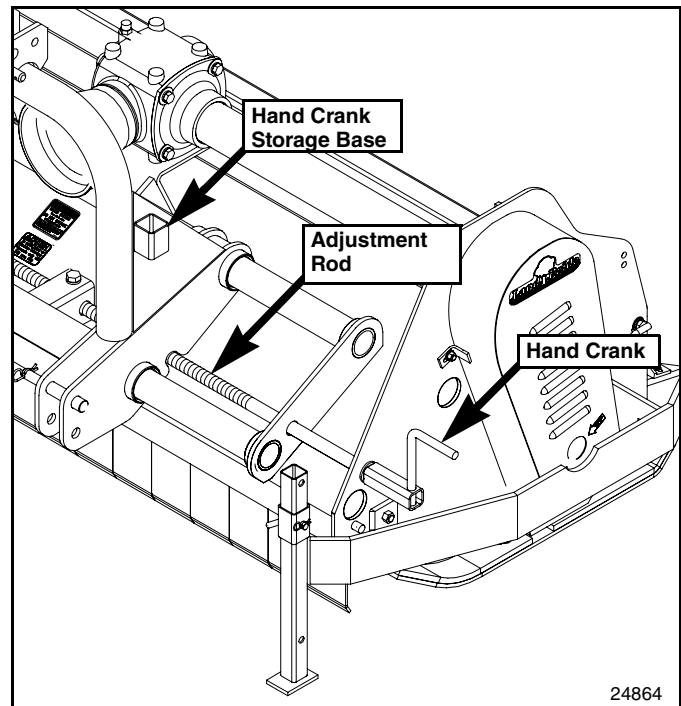
The 3-Point hitch system has been designed for front to back flotation when mowing on uneven terrain. Make certain the top center link is adjusted as outlined in step 5 under "Leveling the Mower" on this page.

Refer to Figure 3-2:

The hitch can also be adjusted from side to side by turning the adjustment rod with the hand crank. Always return hand crank to its storage base after use.



Cutting Height Adjustment
Figure 3-1



Hitch Adjustment
Figure 3-2

Section 3: Adjustments

Belt Tension Adjustment

CAUTION

Belt drive system under spring tension; use care to avoid bodily harm!

WARNING

Excessive tension on the belt may lead to premature failure of belt and drive components. Excessive tension on the belt may also lead to a safety hazard to the operator or bystanders.

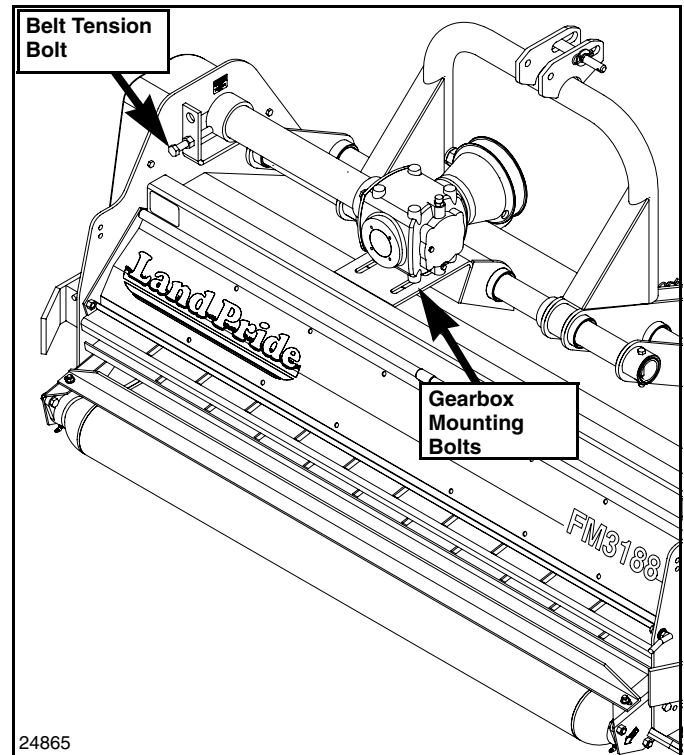
The Belt tension should be checked after the first 20 hours of use and every 40 hours thereafter.

Refer to Figure 3-3:

1. Check belt tension by applying approximately 22 pounds of pressure half way between the pulleys. The belt should deflect approximately 3/8".
2. Belt tension can be adjusted at the belt tension bolt. Turn belt tension bolt until desired belt tension is achieved.
3. Loosen gearbox mounting bolts and move gearbox until mower driveline is running straight (parallel) with the Flail Mower. Retighten mounting bolts to the correct torque.

IMPORTANT: Replace belts if they cannot be tensioned correctly. Refer to “V-Belt Installation” on page 19 when replacing belts.

IMPORTANT: Do not over tension belts. Excessive tension may lead to premature failure of belt and drive components.



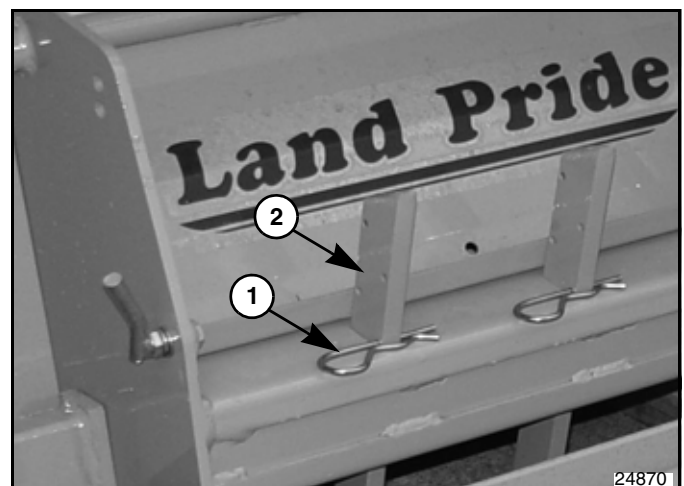
Belt Tension Adjustment
Figure 3-3

Brush Rake Teeth Adjustment

Refer to Figure 3-4:

The FM4188 comes equipped with adjustable brush rake teeth. The teeth allow continued cutting/chopping of material before final dispersal. The closer the teeth are located to the ground the more material they will accumulate for continued cutting/chopping. Adjust teeth as follows:

1. Remove hair pin cotter (#1) and raise or lower the rake tooth (#2) to a new hole location.
2. Replace hair pin cotter (#1) at this new location.
3. Repeat steps 1 & 2 for the remaining rake teeth.



Brush Rake Teeth Adjustment
Figure 3-4

Maintenance

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

Check all bolts after using the unit for several hours to be sure they are tight. Replace any worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride Dealer.

The parts on your Flail Mower have been specially designed and should only be replaced with genuine Land Pride parts. Do not alter the mower in a way which will adversely affect its performance.

CAUTION

For safety reasons, each maintenance operation must be performed with tractor PTO disengaged, mower lowered completely to ground, and tractor engine shut off with ignition key removed.

CAUTION

Do not alter Land Pride equipment or replace parts with other brands. Doing so can cause equipment to perform improperly and may lead to breakage that can cause bodily injury. Replace parts only with genuine Land Pride parts.

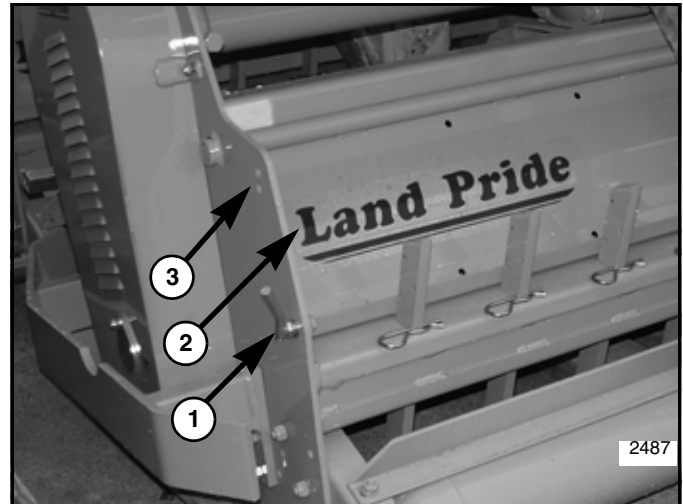
- After using the mower for several hours, check all bolts to be sure they are tight and check drive belt tension. Refer to **“Belt Tension Adjustment”** on page 17.
- Lubricate components as listed under **“Lubrication Points”** on page 21.
- Replace worn, damaged, or illegible safety labels by obtaining new labels from your Land Pride Dealer. See **“Safety Labels”** on page 4.

Trash Removal & Rotor Knife Access

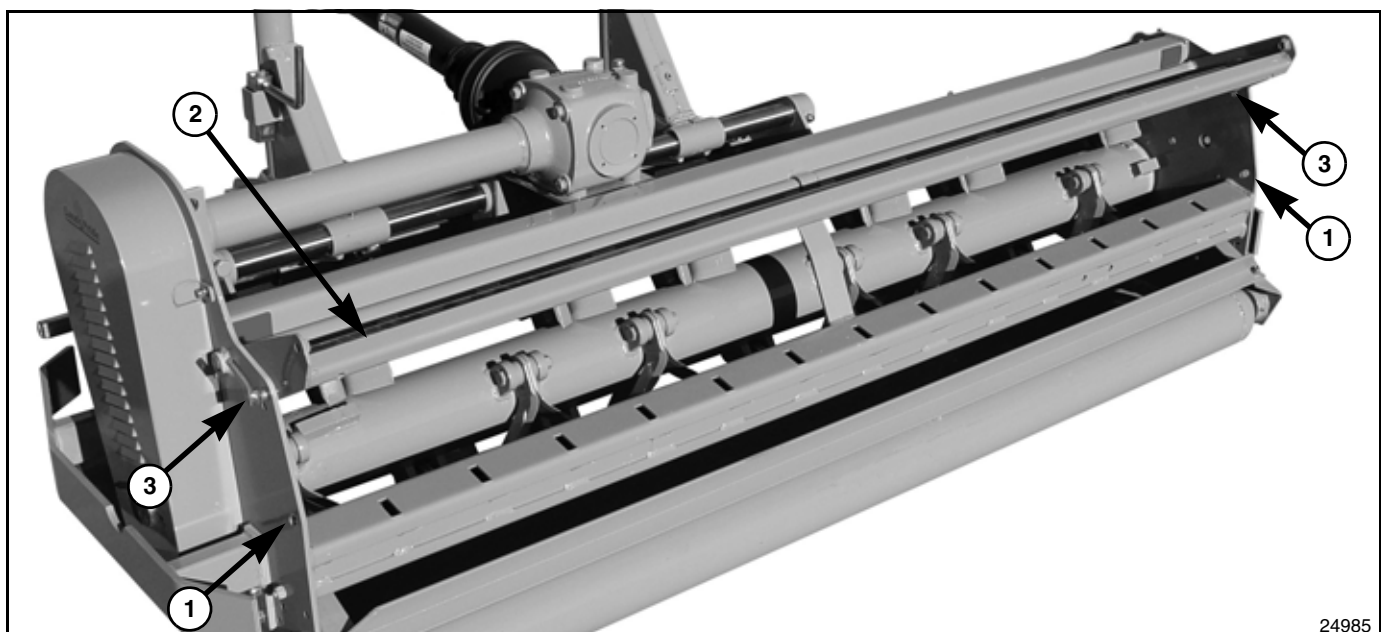
Refer to Figure 4-1 & Figure 4-2:

The rotor knives and trash accumulated around them can be accessed by opening the rear cover (#2).

1. Unscrew cover locking handles (#1) located on both sides.
2. Raise rear cover (#2) up as shown.
3. Replace locking handle in cover open location (#3) to secure cover in the up position.
4. Return cover to the closed position after servicing rotor knives and cleaning out trash.



Rotor Knife Access (Shown With Cover Closed)
Figure 4-1



Rotor Knife Access (Shown With Cover Open)
Figure 4-2

Rotor Knife Replacement

Frequently check rotor knives to make sure they are in good working condition and properly secured to the rotor. Replace worn or damaged knives with new knives.

IMPORTANT: Make sure replacement knife is the same length as the others on the mower. This will keep the rotor rotation balanced.

IMPORTANT: Replace cutting knives with Land Pride fine cutting knives or hammer knives only.

FM3188 Cutting Knife Replacement

Refer to Figure 4-3:

The cutting knives have a cutting edge on both the leading and trailing edges. When the leading edge wears out, turn existing pair of knives around 180 degrees and reinstall. Replacement knives should be the same length as existing knives to maintain rotor balance.

1. Remove nylock nut (#1), bolt (#2), and spacers (#3).
2. Remove existing cutting knives (#4) or turn existing pair of knives around 180 degrees and reinstall.
3. Install cutting knife with existing bolt, spacers, and nylock nut.
4. Tighten nylock nut to proper torque.

FM4188 Hammer Knife Replacement

Refer to Figure 4-4:

Replacement knives should be the same length as existing knives to maintain rotor balance.

1. Remove nylock nut (#1) and bolt (#2).
2. Remove old hammer knife (#3) and install new knife with existing bolt and nylock nut.
3. Tighten nylock nut to proper torque.

V-Belt Installation

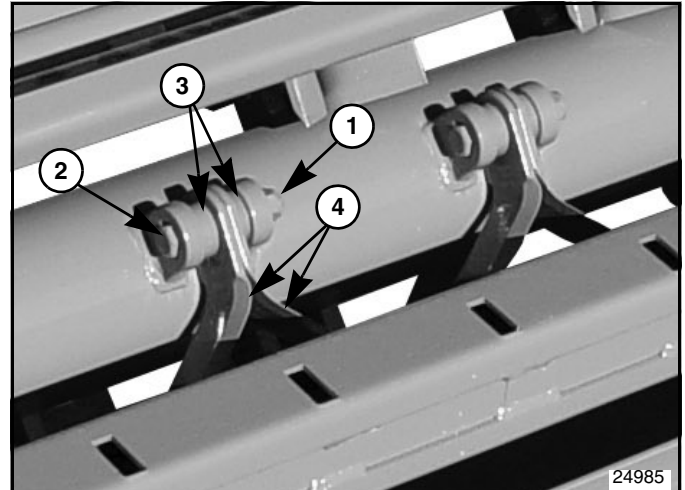
Refer to Figure 4-5:



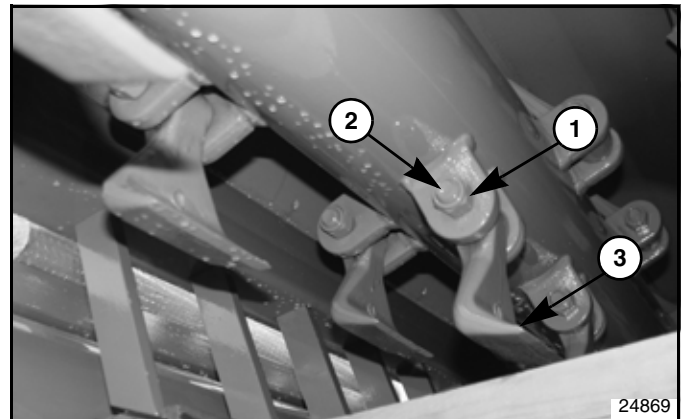
CAUTION

Belt drive system is under spring tension; use care to avoid bodily harm!

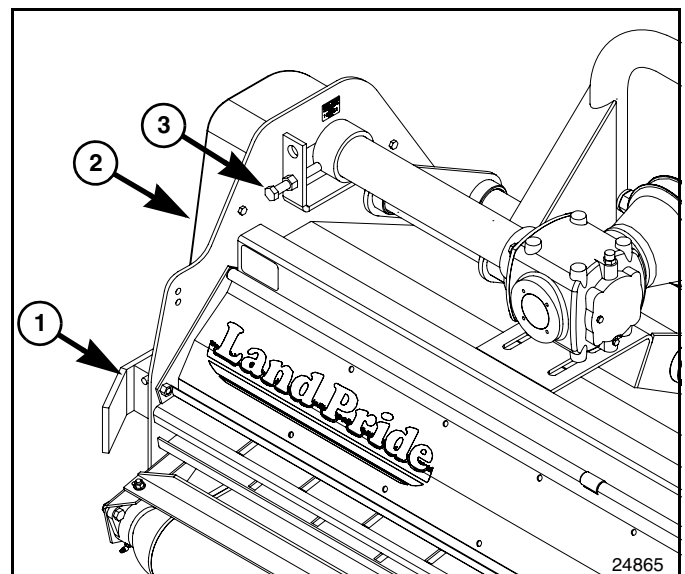
1. Remove belt guard fender (#1) and belt cover (#2).
2. Remove belt tension by loosening the belt tension bolt (#3) until belt can be removed.
3. Remove old belts from pulleys and install new belts.
4. Tighten belt tension bolt. See “**Belt Tension Adjustment**” on page 17.
5. Reinstall belt guard (#2) and belt guard fender (#1).
6. Tighten bolts to the proper torque.



Fine Cutting Knives (FM3188 Only)
Figure 4-3



Hammer Knives (FM4188 Only)
Figure 4-4



Belt Installation
Figure 4-5

Storage

It is good practice to clean off any dirt and grease that may have accumulated on the mower and to inspect and make necessary repairs before parking the unit at the end of the working season and for long periods. This will help ensure that the mower will be ready for field use the next time you hook-up to it.



DANGER

Always disconnect main driveline from tractor PTO and secure mower in the up position with solid supports before servicing underside of the mower.

1. Remove any dirt and grease that may have accumulated on the mower and moving parts. Scrape off compacted dirt from under the hood and then wash the surface thoroughly with a garden hose.
2. Check rotor knives and knife bolts for wear and replace if necessary. See “**Rotor Knife Replacement**” on page 19.
3. Inspect mower for loose, damaged, or worn parts and adjust or replace as needed.
4. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Land Pride aerosol touch-up paint #821-011C. It are also available in touch-up bottles with brush, quarts, and gallon sizes by adding TU, QT, or GL to the end of the aerosol part number.

Land Pride Aerosol Touch-up Paint

Part No.	Part Description
821-011C	PAINT LP BEIGE AEROSOL SPRAY CAN
821-002C	PAINT LP BLACK AEROSOL SPRAY CAN

5. Replace all damaged or missing decals.
6. A light coat of oil or grease may also be applied to areas where paint has worn off to minimize oxidation.
7. Lubricate as noted under “**Lubrication Points**” on page 21.
8. Store mower on a level surface in a clean, dry place. Inside storage will reduce maintenance and make for a longer mower life. Position the unit on a flat surface with jack stands lowered to a suitable 3-Point height. Ensure that the main frame is stable.
9. Store driveline end off the ground.

Lubrication Points

Lubrication
Legend



Multi-purpose
spray lube



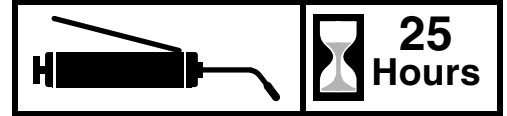
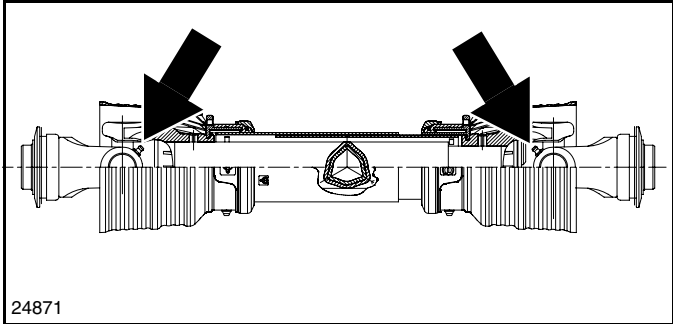
Multi-purpose
grease lube



Multi-purpose
oil lube



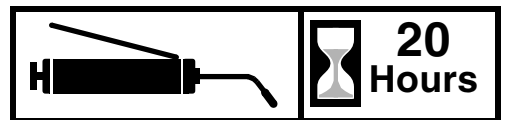
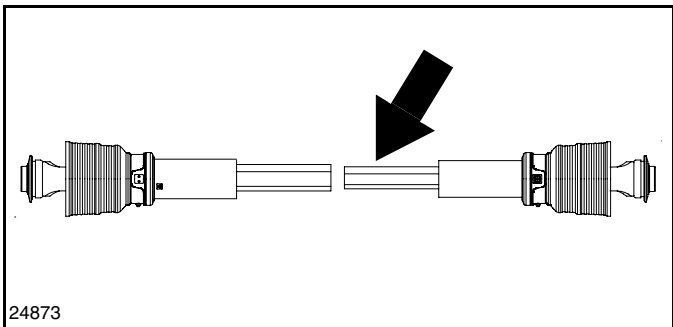
50
hrs
Intervals in hours at which
lubrication is required



Driveline Shaft U-Joints

Type of Lubrication: Multi-purpose Grease

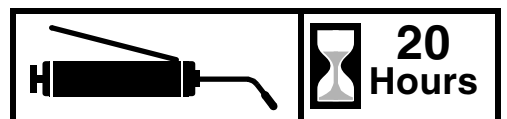
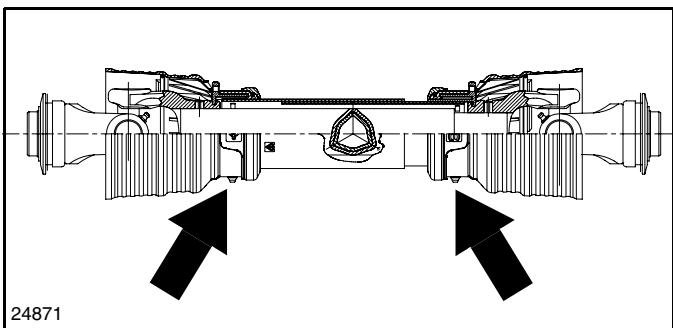
Quantity - 4 to 8 Pumps



Driveline Profiles

Type of Lubrication: Multi-purpose Grease

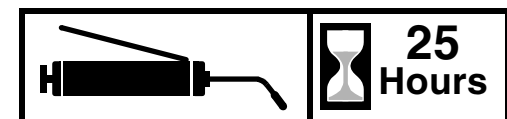
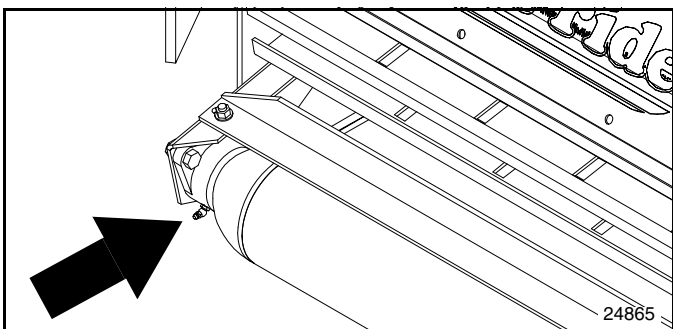
Quantity - Clean & coat inner profile tube of driveline with a light film of grease and then reassemble.



Inner Tube Bearings

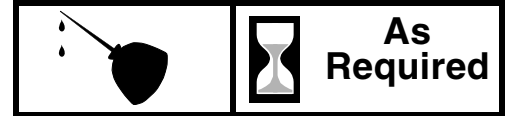
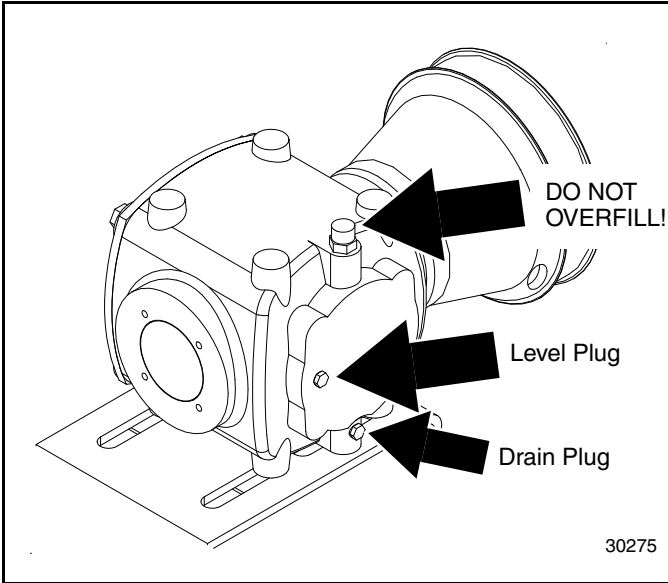
Type of Lubrication: Multi-purpose Grease

Quantity - As Required



Roller Bearing (Both Ends)

Type of Lubrication: Multi-purpose Grease



Gearbox Lubrication

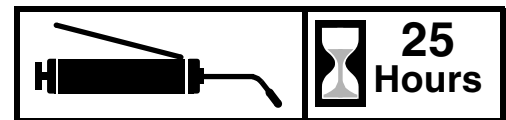
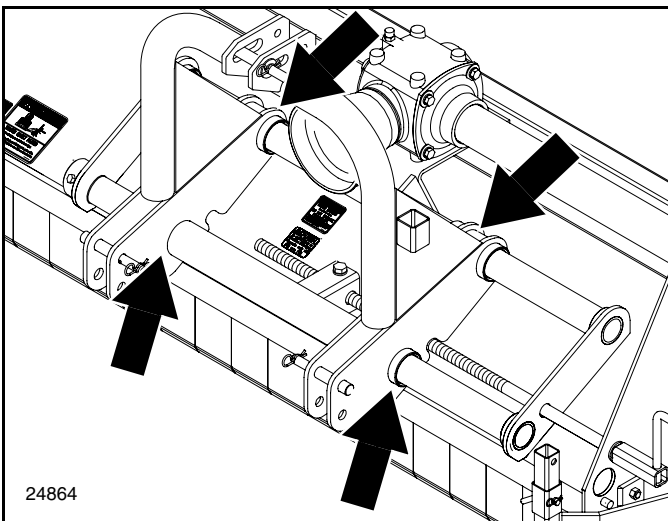
Type of Lubrication: SAE EP 90W Gear Lube

Check oil level in gearbox by removing the plug located on the right-hand side. Oil should be level with bottom of plug hole. Add oil if necessary by removing top fill plug and level plug. Add oil until it flows from level plug hole. Reinstall plugs and tighten.

Do not overfill!

Should your gearbox require service, take it to your Land Pride dealer.

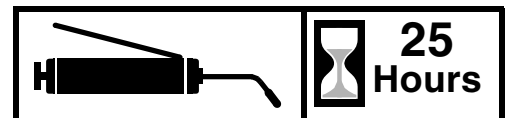
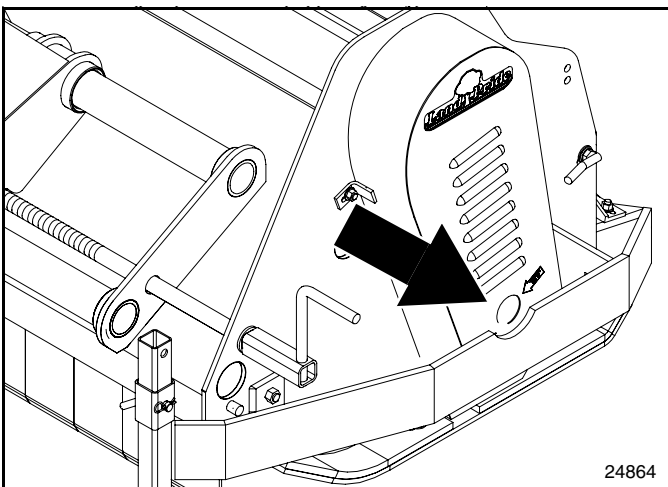
IMPORTANT: The mower should be level when checking oil in gearbox!



3-Point Hitch Slide

4- Places

Type of Lubrication: Multi-purpose Grease



Cutter Rotor Bearing (Both Ends)

Type of Lubrication: Multi-purpose Grease


FM31 & FM41 Series Flail Mowers







Description	Specifications & Capacities	
Model Numbers	FM3188	FM4188
Cutting Width	88"	88"
Overall Width	96"	96"
Height	45"	
Depth	43"	
Approximate Machine Weight	1300 lbs.	1323 lbs.
Cutting Capacity	1"	2"
Cutting Height	1/2 - 6"	
Deck Material Thickness	3/16"	
Knives	Fine Cut Knives	Hammer Knives
Rotor Shaft Speed	2140 RPM	
Rotor Diameter	5 1/2"	
Rotor Rotation	Reverse	
Knife Tip Speed	9805 fpm	
Number of Knives	48 Fine cutting knives	24 Cast & machined hammer knives
Hitch Type	Cat. I and II offset hitch	
Offset Hitch	7 3/4" Left & Right, Manual Screw-Type	
PTO Speed	540 RPM	
Driveline	Cat. 4	
Belt Type	(4) - "SPB" Section belts	
Gearbox Type	540 RPM with internal over-running Clutch	
Gearbox Rating	80 HP	
Gearbox Lubrication	SAE EP 90W	
Gearbox Oil Capacity	3.3 pints	
Rear Roller Diameter	5 1/2"	
Brush Rake Teeth	NA	13 each

FM31 & FM41 Series Flail Mowers

Features	Benefits
88" Cutting width	A good cutting width for many applications.
35-80 HP Gearbox Rating	Fits a large array of consumer, municipality, and landscape of tractors.
3-Point screw type hitch can be offset 7 3/4" Left & right	Easily offset the hitch for a closer cut alongside buildings, fences, roadsides, and for getting under tree limbs.
ACME threads on offset	ACME threads are deeper allowing for easy screwing adjustment.
One year gearbox warranty	The gearbox is designed tough to withstand the rigors of flail mowing.
540 RPM cast iron gearbox with over-running clutch	Enables the rotor to free swing to a stop when the tractor PTO has been turned off.
1/2" – 6" Cutting height	Variable cutting heights for many uses. Lowest cutting height allows for scalping in grasses such as Bermuda prior to overseeding.
1" Cutting capacity (31 Series) 2" Cutting capacity (41 Series)	Cut saplings when used in a rough setting. 41 Series is good for chopping up tree trimmings.
Fine cutting knives (31 Series)	Heavy enough to cut 1" material, yet fine enough to groom a yard.
Cast & machined hammer knives (41 Series)	Cast and machined hammers are just right for chopping up prunings up to 2" thick, but will also groom grass in a very acceptable manner.
Brush rake teeth (41 Series Only)	The adjustable brush rake teeth continually push prunings into the knife path for repeated chopping action.
5 1/2" Rotor diameter	Large rotor is able to take rough conditions.
Reverse rotor rotation	Brings the cut material up and over which allows it to be dispersed more evenly.
High knife tip speed	Knife tip speed of 9,805 fpm for cleaner cut.
Cat. 4 driveline	Heavy-duty driveline matches up with HP range as well as potential conditions.
4 - "SPB" Section belts	"SPB" Section belts have more surface to pulley contact and fits deeper in the groove.
3/16" Deck thickness	Allows the mower to handle rough conditions.
Baffles on top inside of deck	Keeps cut material from clumping together, ensuring an even distribution of clippings.
Height adjusting roller	Rear height adjusting roller with greaseable bearings and tapered ends to prevent gouging during turns.
Standard scrapers on rear height adjusting roller	Keeps roller clean for consistent cutting height.
Hinged rear gate	Can be opened for easier discharge in heavy conditions, or left closed for greater mulching capabilities.

Troubleshooting Chart

Problem	Solution
 CAUTION Do not try to clean rear discharge area when mower is running. Bodily harm may occur!	
Belt slipping	Unplug and clean mower deck.
	Remove belt guard shields and clean sheaves.
	Replace belt
Patches of uncut grass	Mow at full throttle (540 PTO rpm), check PTO speed, and tractor engine.
	Shift transmission to a lower gear.
	Tighten belts.
	Replace missing knives or hammers.
Excessive vibration	Replace knives or hammers
	Replace drive belt.
	Replace pulleys or align.
	Remove belt guard shields & clean debris from belt area & sheaves.
Gearbox noisy	Check lubricant level.
Knives scalping grass	Raise cutting height by adjusting roller.
	Change mowing pattern.
	Reduce speed turns.
Uneven cut	Shift to a lower gear.
	Level mower.
	Replace missing knives or hammers
Tractor loaded down by mower	Mow at full throttle (540 PTO rpm).
	Shift to a lower gear.
	Clean mower.

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

Warranty

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

Overall Unit and Driveline: One year Parts and Labor

Gearbox: One year on all components.

Blades and Belts: 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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