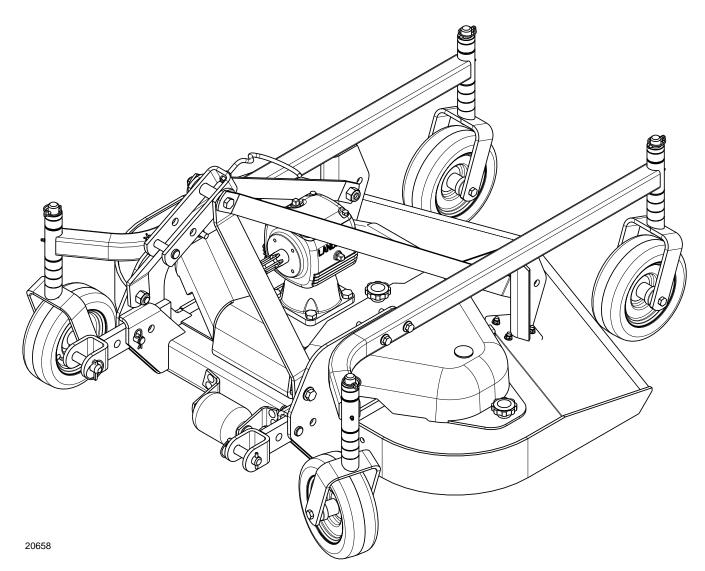
# **Grooming Mowers**

# FDR2572 & FDR2584





# *310-262M* Operator's Manual



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

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



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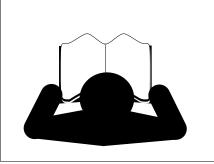
These are common practices that may or may not be applicable to the products described in this manual.

# Safety at All Times

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

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

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





# Look For The Safety Alert Symbol

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

#### Be Aware of Signal Words

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

#### **A** 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.

#### 

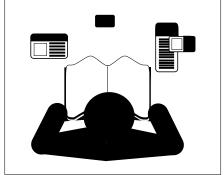
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

#### **A** 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

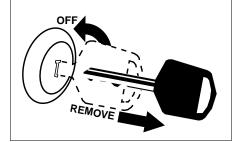
▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



1

#### Shutdown and Storage

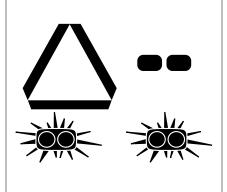
- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.



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



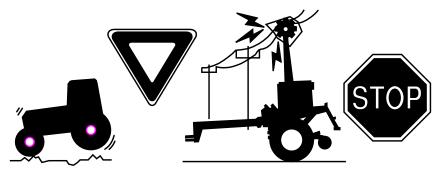
#### Transport Machinery Safely

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

▲ Use the following maximum speed - tow load weight ratios as a guideline:

**20 mph** when weight is less than or equal to the weight of tractor.

- **10 mph** when weight is double the weight of tractor.
- ▲ IMPORTANT: Do not tow a load that is more than double the weight of tractor.



#### Practice Safe Maintenance

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

performing maintenance.

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

#### Tractors With Cabs Tractors Equipped With ROPS

- ▲ There should be sufficient clearance for the operator when mounted to a tractor with a cab or that is equipped with ROPS.
- ▲ The ROPS may need to be extended or flipped around to obtain sufficient clearance.



#### 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.



#### 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.



# Wear Protective Equipment

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



## Keep Riders Off Machinery

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



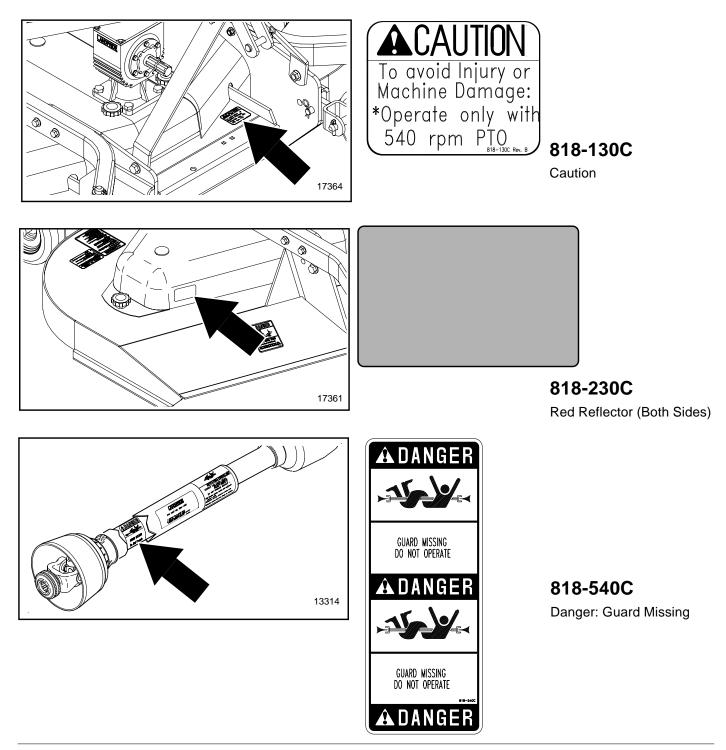
# Safety Labels

Your Grooming 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. Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer or visit our dealer locator at landpride.com.
- 3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified

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

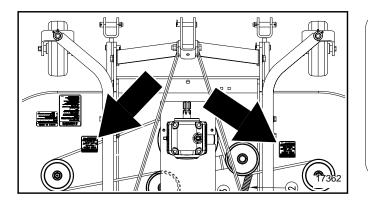
- 4. Refer to this section for proper label placement. To install new labels:
  - a. Clean the area the label is to be placed.
  - b. Spray soapy water on the surface where the label is to be placed.
  - c. Peel backing from label. Press firmly onto the surface.
  - d. Squeeze out air bubbles with the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



#### Land Pride

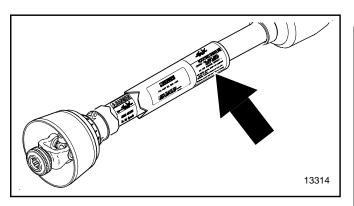
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## Important Safety Information



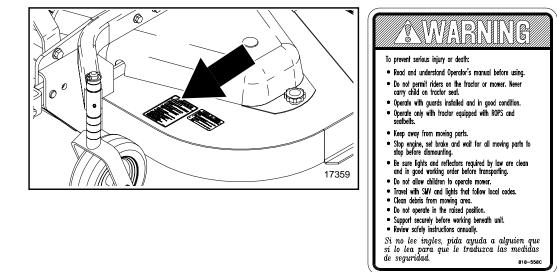


# **818-543C** Danger: Guard Missing



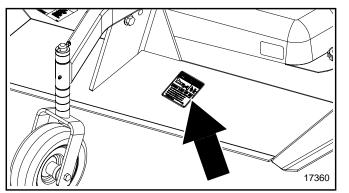


818-552C Danger: Rotating Driveline



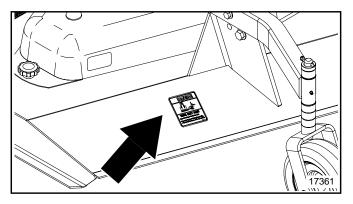
818-558C

Warning: General



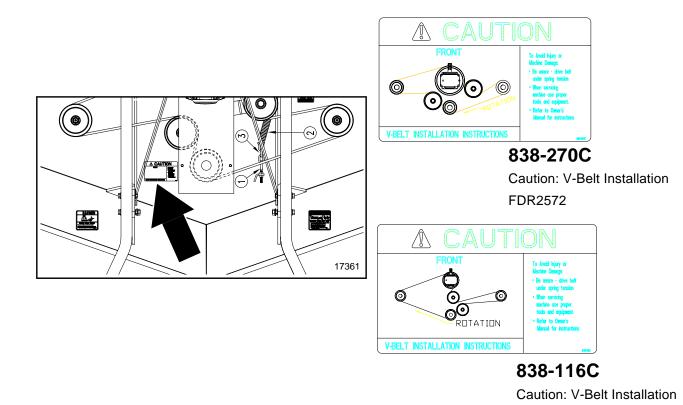








818-556C Danger: Thrown Object



FDR2584



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

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

# Application

Land Pride's 25 Series Rear Discharge Grooming Mower is an excellent choice for homeowners, campuses, parks and golf courses. They are adapted for category 1 threepoint hitch mounting on tractors in the 15 to 50hp range. They are also Quick Hitch adaptable. The tapered rear design eliminates the need for rear safety chains and greatly reduces the tendency to deposit unsightly clumps of damp grass. When weather conditions allow for regular and frequent mowing intervals the rear discharge feature allows for excellent cutting quality and a very well groomed finish. Clippings are evenly discharged close behind the mower avoiding streets, sidewalks and landscaping. The FDR25 Series also features a floating 3-point system to allow for excellent contour following capabilities over hilly and uneven terrain.

See "Section 6: Features and Benefits" on page 23 for additional information.

# **Using This Manual**

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

#### Terminology

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

#### Definitions

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

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

## **Owner Assistance**

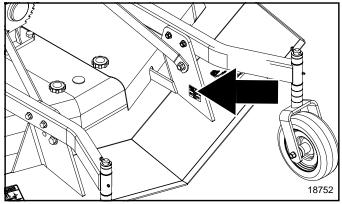
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

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

The parts on your Grooming Mower have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your mower require replacement parts go to your Land Pride Dealer.

#### Serial Number Plate

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



Serial Number Plate Location Figure 1

#### **Further Assistance**

Your dealer wants you to be satisfied with your new Grooming 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 he is aware of any problems you may have and that he has had the opportunity to assist you.
- 2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
- 3. For further assistance write to:

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

E-mail address lpservicedept@landpride.com



## **Dealer Preparations**

This Grooming Mower has been assembled at the factory. Some preparation will be necessary to attach the Grooming Mower to the customer's tractor. Ensure that the intended tractor conforms to the requirements stated under the heading "Tractor Requirements" below.

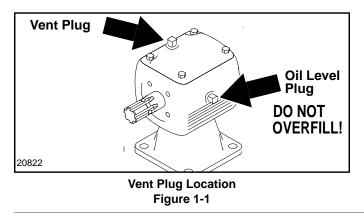
Pr	Preparation Checklist							
	Miscellaneous assembly tools: hammer, tape measure, hacksaw, spirit level and assortment of wrenches and sockets.							
	Possible need for forklift or hoist capable of lifting 2500 lbs.							
	Auxiliary tractor weights (depending on tractor size).							
	A minimum of two people available during assembly.							
	If a pin, bolt or other part has been removed, and you are unsure where it is used, use the Parts Manual to identify it. Be sure the part gets used in the correct location. By double checking while you assemble, you will lessen the chance of using a bolt incorrectly that may be needed later.							
	Safety decals are legible and undamaged from shipment.							
	PTO shaft and loose parts bag/box shipped with the Grooming Mower.							

# Vent Plug Installation

Refer to Figure 1-1:

**IMPORTANT:** Series FDR16 Grooming Mowers are shipped with a red plug in the gear box to prevent loss of oil during shipping and handling. This plug must be replaced with a vent plug before operating the mower.

A vent plug for the gearbox is included in a bag with the manual. See your nearest Land Pride Dealer if vent plug is missing. Remove temporary plug from top of splitter gearbox and replace with supplied vent plug with dipstick.



# **Tractor Requirements**

Tractor horse power rating should be between 15 & 50 PTO horsepower. Tractors outside this horsepower range must not be used.

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

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.

**NOTE:** Ballast may need to be added to your tractor to maintain steering control. Refer to your tractor's operator manual to determine if one needs additional ballast.

#### **Protective Equipment**

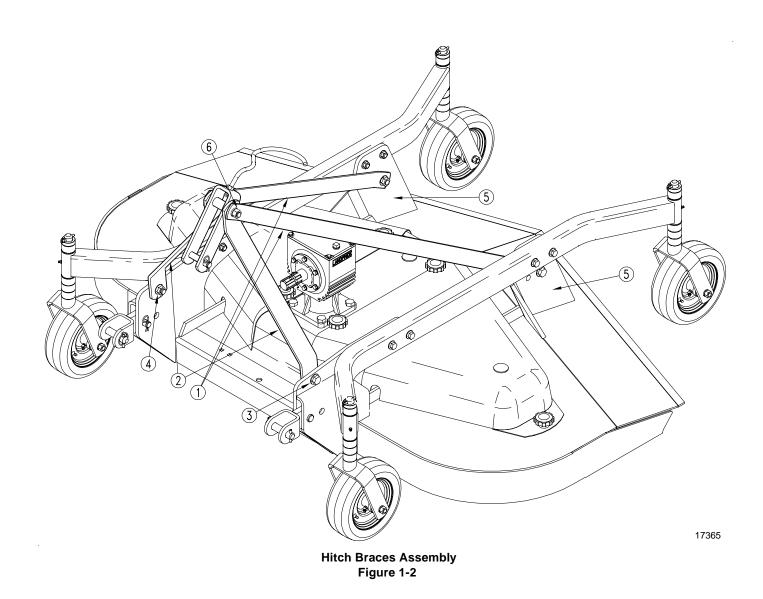
The tractor **MUST** be equipped with protective equipment designed to shield the operator from thrown objects and from tractor roll over. An enclosed tractor cab with a Roll Over Protective Structure (ROPS) may qualify. See tractor's manual for type of protection your tractor has.

# A-Frame

#### Refer to Figure 1-2:

- 1. There are flat washers placed between the rear braces (#1) and the rear hitch plates (#5) for shipping.
- 2. Remove the flat washers and reassemble the rear braces. Do not tighten bolt and nut at this time.
- 3. The lower holes of the A-Frame (#2) are bolted to the shipping crate with lag bolts for shipping.

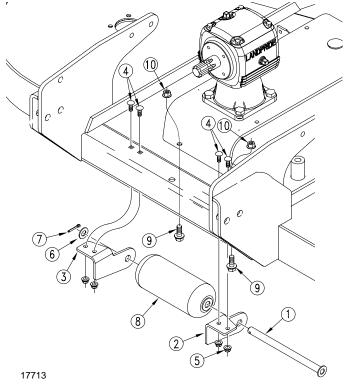
- 4. Remove the lag bolts from the A-Frame.
- 5. Loosen the 5/8" nut (#6). This will allow the hitch to be rotated into to position.
- Rotate the rear hitch braces (#1) up until the lower holes of the A-Frame (#2) line up with the top holes of the hitch plates on the deck. Secure with the 5/8" flange bolts (#3) and 5/8" flange nut (#4) already mounted in the holes of the front hitch plates.
- 7. Tighten all hardware in the rear hitch braces and A-Frame.



# **Front Roller**

#### Refer to Figure 1-3:

- Remove the front two 1/2"-13 x 1 1/2" GR5 hex flange serrated screws (#9) and reinsert from the bottom as shown. Secure with existing 1/2" whiz nuts (#10). Tighten nuts to 76 ft-lbs of torque.
- 2. Assemble brackets (#2) and (#3) to deck with carriage bolts (#4) and flange nuts (#5).
- Insert roller (#8) between brackets and install pin (#1) through brackets and roller. Secure with washer (#6) and cotter pin (#7).



Front Roller Assembly Figure 1-3

# **Tractor Hook-Up**

- 1. Be certain that tractor draw bar will not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is being raised for the first time.
- 2. Align lower link arms of tractor to hitch clevises on mower. Insert lower hitch pins into lower ball swivels and attach linch pins.
- 3. Attach tractor top link to upper floating hitch on mower with pin supplied. Secure with lock pin.
- 4. Adjust the tractor top link in or out to place the upper hitch pin vertically above the lower hitch pins as shown in Figure 1-4, to allow mower flotation.

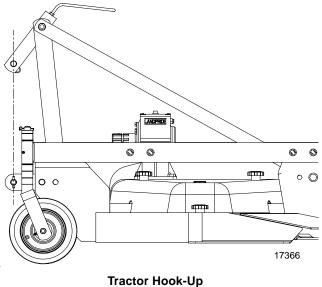


Figure 1-4

## Section 1: Assembly and Set-Up

# **Driveline Installation**

An additional driveline may be required if the Grooming Mower is used on more than one tractor especially if a quick hitch is used.

# 

Do not use a PTO adaptor with a quick hitch. A PTO adapter will increase strain on the tractor's PTO shaft resulting in possible damage the shaft and driveline.

# WARNING

Damaged drivelines can cause serious injury or death.

# 

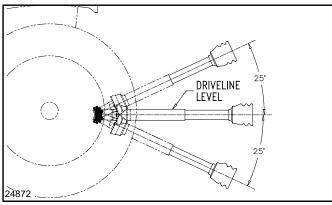
Tractor PTO shield and all Grooming Mower guards must be in place at all times during operation!

# 

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

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

**IMPORTANT:** Avoid premature driveline breakdown. A driveline that is operating **must not exceed** an angle of 25 degrees up or down while operating the 3-point lift. See Figure 1-5 below.



#### Maximum Allowable Driveline Movement Figure 1-5

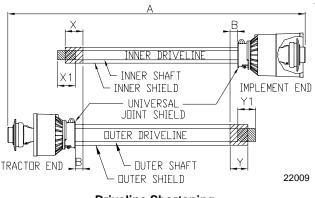
**IMPORTANT:** Always check driveline minimum length during initial setup, when connecting to a different tractor and when alternating between using a quick hitch and a standard 3-point hitch. More than one driveline may be required to fit all applications.

**IMPORTANT:** It is necessary to aligning the tractor's PTO shaft level with the Grooming Mower's gearbox shaft when checking driveline minimum length. Too long a driveline can damage tractor, gearbox and driveline.

#### **Checking Driveline Minimum Length**

#### Refer to Figure 1-6:

- 1. Start tractor and slowly engage 3-point controls to move lower arms until the gearbox shaft is approximately level with the tractor's PTO shaft.
- 2. Slide inner yoke of driveline over the gearbox shaft and secure with locking collar.
- 3. Slide outer yoke of driveline over the tractor PTO shaft and secure with locking collar.



#### Driveline Shortening Figure 1-6

- 4. The driveline will require shortening if it does not fit between tractor and mower. Shorten driveline as follows:
  - a. Raise or lower 3-point lower arms until mower and tractor PTO shafts are approximately level with each other. Securely block Grooming Mower frame in this position.
  - b. Set tractor in park, shut tractor engine off, set park brake and remove switch key.
  - c. Pull driveline apart into two sections as shown in Figure 1-6. Attach outer driveline universal joint to the tractor PTO shaft. Attach inner driveline universal joint to the gearbox shaft. Pull on each driveline section to be sure universal joints are secured to the shafts.
  - d. Hold driveline sections parallel to each other to determine if they are too long. The inner and outer shields on each section should end approximately 1" short of reaching the universal joint shield on the adjacent section (see "B" dimension). If they are too long, measure 1" ("B" dimension) back from the universal joint shield and make a mark at this location on the inner and outer driveline shields.

- e. Cut off inner shield at mark ("X" dimension). Cut same amount off inner shaft ("X1" dimension). Repeat cut off procedure ("Y" & "Y1" dimensions) to cut outer driveline half.
- f. Remove all burrs and cuttings.
- 5. Apply multi-purpose grease to the inside of the outer driveline profile and reassemble the two profiles.
- 6. Attach inner driveline yoke to gearbox shaft and outer driveline yoke to tractor's PTO shaft.
- 7. The driveline should now be moved back and forth to insure that both ends are secured to the PTO shafts. Reattach any end that is loose.

**IMPORTANT:** The two supplied safety chains must be attached to outer and inner driveline yoke shields and to the mower deck and tractor to keep driveline shields from rotating.

- 8. Hook one driveline safety chain in the hole on the outer driveline yoke shield and the opposite end to the tractor.
- 9. Hook the second driveline safety chain in the hole on the inner driveline yoke shield and the opposite end to the mower.
- 10. Start tractor and raise mower just enough to remove support blocks used in step 4a on page 11.
- 11. Slowly engage tractor's 3-point controls to lower mower. Check for sufficient drawbar clearance. Move drawbar ahead, aside or remove if required.

## Section 2: Operating Instructions



# **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.

# **Operation Check**

It is absolutely essential that no one operates the Grooming Mower 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, page 1
- Section 1: Assembly and Set-Up, page 8
- Section 2: Operating Instructions, page 13
- Section 3: Adjustments, page 16
- Section 4: Maintenance and Lubrication, page 17

Make the following inspections after attaching the Grooming Mower to the tractor. See hook-up instructions beginning on page 10. Make certain PTO is disengaged and completely stopped before continuing.

- 1. Inspect tractor safety equipment to make sure it is in good working condition.
- 2. Complete the Operating Checklist below:

Op	Operating Checklist									
	Check	Reference								
	Check oil level in gearboxes.	Section 5 Page 21								
	Check that all plugs in gearbox have been replaced properly.	Section 5 Page 21								
	Check initially and periodically for loose bolts and pins. Be sure all nuts and bolts are tight. Especially make sure mower blades, bolts and nuts are tight.	Section 8 Page 25								
	Be certain all guards and shields are in place and in good condition.	Section 1 Page 1								
	Lubricate the mower as needed. Refer to "Maintenance and Lubrication".	Section 5 Page 20								

- 3. Carefully raise and lower the implement to ensure that the drawbar, tires, and other equipment on the tractor do not contact the frame or PTO driveline.
- 4. With the PTO disengaged and completely stopped, check the mower blades for sharpness. See "Service Mowing Blades" on page 17.

**IMPORTANT:** Do not exceed rated PTO speed of mower. Excessive engine speed will cause damage to the power train components.

**IMPORTANT:** Stop PTO rotation immediately if vibration occurs during operation. Wait for mower to come to a complete stop. Follow all tractor shut down procedures before dismounting from the tractor to check for probable causes.

5. Set tractor throttle to idle or slightly above idle and slowly engage the PTO. Once the Grooming Mower is running smoothly, increase tractor PTO speed to 540 rpm PTO speed. Stop PTO rotation immediately if vibration occurs at any time. Wait for the PTO to come to a complete stop and then dismount from the tractor to check for probable causes.

# Transporting



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.

**NOTE:** Always disengage PTO before raising the 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 hitch lift height so that the PTO shaft does not contact mower deck in the fully raised position.
- 2. Be sure to reduce tractor ground speed when turning; and leave enough clearance so 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 you safely. A slow moving vehicle sign should always be properly displayed when traveling on public roads or right-of ways.
- 4. Shift tractor to a lower gear when traveling over rough or hilly terrain.

# **Mowing Instructions**



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

# 

Do not over speed PTO or machine damage may result. Know what your tractor requirements are.

# 

Do not use deck as a fan. Cutting blades are not properly designed or guarded for this use. Using the deck as a fan can result in injury and/or death.

# 

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.

# 

When mowing in sandy soil areas, wear may occur to your mower blades caused from sand erosion. Frequent inspection should be made and blades replaced if damaged. Low lift blades are available from your Land Pride dealer.

1. Clear the area to be mowed of rocks, branches and other foreign objects that might be picked up and thrown by the mower blades.

**IMPORTANT:** Do not exceed rated PTO speed of mower. Excessive engine speed will cause damage to the power train components.

**IMPORTANT:** Stop PTO rotation immediately if vibration occurs during operation. Wait for mower to come to a complete stop. Follow all tractor shut down procedures before dismounting from the tractor to check for probable causes.

- 2. Lower mower to ground. Set tractor throttle at idle. Engage PTO to start blades rotating.
- 3. Operate with 540 rpm PTO tractor. Mower blades will cut better at a 540 RPM than at reduced throttle.
- 4. At first, begin mowing in a low gear and shift up until the desired speed is achieved - maintain 540 PTO rpm regardless of gear selection.
- 5. After mowing the first 50 feet, stop and check to see that the mower is adjusted properly.
- 6. **Do not** make sharp turns or attempt to back up while mower is on the ground.

- 7. **Do not** engage PTO with mower in the fully raised position. **Do not** engage or disengage PTO at full throttle.
- 8. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.
- 9. Grass should be mowed frequently as shorter clippings deteriorate faster.
- 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.
- 11. Periodically check for foreign objects wrapped around the Grooming Mower blades. Remove foreign objects only after following **"Tractor Shut Down Procedure" on page 13**.

## **Un-hooking the Mower**

The following steps should be done when un-hooking the Grooming Mower from the tractor.

- 1. Park on a level solid surface.
- 2. Shut tractor engine off and engage parking brake.
- 3. Lower deck to level ground or onto blocks supporting the deck just above ground level.
- 4. Follow all tractor shut down procedures outlined on page 13 before dismounting from the tractor.
- 5. Unhitch Grooming Mower from tractor.
- 6. See **"Storage" on page 19** if mower is not going to be used for a long time.

#### Section 2: Operating Instructions

# **General Operating Instructions**

By now you should have thoroughly read your Grooming Mower Operator's Manual, properly attached your Land Pride FDR25 to your tractor, and reviewed the operating checklist. You should have also inspected the area where you intend to mow and cleared it of safety hazards and foreign objects. If you have not yet completed all of these functions, it is an absolute must that you do so now before proceeding.

Now that you are properly briefed and prepared its time to start the tractor and move to your starting point. When transporting to your mowing site, select a safe ground transport speed. When traveling on roadways, transport in such a manner that faster moving vehicles can easily see you and pass you safely. When traveling over rough and hilly terrain, reduce your speed, avoid quick or sharp steering corrections. Take extra care to insure that the mower doesn't come into contact with obstacles such as trees, buildings or fences.

When you have arrived at the mowing site, start the tractor, raise the deck to make sure that everything is properly attached and that the driveline is not in a bind or in contact with the mounting frame. Also make sure the tractor tires aren't in contact with the deck. With the deck still in the raised position, proceed to your starting point and lower your deck to the ground in mowing position. Reduce your tractor engine rpm to idle and engage the PTO. Gradually raise the tractor engine rpm to achieve the 540-rpm PTO speed. Now begin mowing at a ground speed of approximately 4-5mph.

The proper mowing speed will ultimately be determined by ground conditions, desired finish, common sense, and good safe mowing practices by the operator.

Grass is best cut when it is dry. Mowing in wet grass can cause plugging resulting in grass clumps behind the mower. Grass should be mowed frequently as shorter clippings deteriorate faster. When mowing in tall grass it is best to raise the cutting height, mow the area, then lower the cutting height, and mow a second time.

After mowing approximately 50 ft., stop the tractor, disengage the PTO, set the brake, turn off the engine, remove the key, and dismount the tractor to see if the mower is adjusted properly. If you need to dismount the tractor on a hill or incline to inspect, adjust, or park the mower for any reason, place wheel chocks under the rear tires for added safety. Once you have made necessary adjustments, you may continue mowing. Do not engage the PTO at high engine rpm and avoid making sharp turns if at all possible. If anyone approaches while you are mowing, disengage the PTO and stop the tractor.

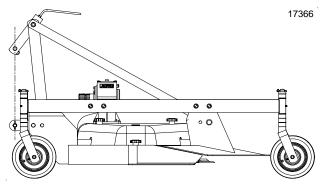
With a little practice and experience you will become very good at operating your Land Pride FDR25 Rear Discharge Grooming Mower. Always remember that there is no substitute for proper maintenance and good safe operating practices. See "Features and Benefits" section or "Product Specifications" for additional information and performance enhancing options.



# Leveling the Mower

NOTE: Tractor and mower should be on level

- 1. Set lower hitches and upper floating hitch, as shown below in Figure 3-1.
- 2. Start tractor and raise mower, watching that tractor draw bar (if not removed) does not interfere with mower.
- 3. Slowly lower the mower until gauge wheels touch the ground and the lower mower 3-point hitch bars are parallel to the ground in floating position. Set tractor 3-point stop.
- 4. Set park brake and turn off tractor. Remove key from ignition.
- 5. Rotate blades parallel to direction of travel.
- 6. Measure the clearance from the cutting edge to the ground at front and rear of the blade. This measurement should be equal or have the blade at the front of the mower not more than 1/2" lower than the blade at the rear of the mower.



3-Point Hitch Figure 3-1

## **Cutting Height Adjustment**

- 1. Using the tractor, raise the mower off the ground and support under it with secure blocking so not to let the mower drift down during maintenance.
- Holding wheel and yoke assembly up, remove quicklock pin from top of gauge wheel spindle. Position full length spacers and half spacer as required. All spacers on top of spindle tube allows for approximately 3/4" cutting height. Adjustments range from 3/4" to a maximum of 5-1/4" in 1/2" increments. Refer to "Leveling the Mower" at the top of this page.

# **3-Point Hitch Adjustments**

The 3-point hitch system on this mower has been designed for front to back flotation when mowing on uneven terrain. Adjust the tractor's top link to place the upper hitch pin vertically above the lower hitch pins as shown in Figure 3-1.

# 

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

# **Belt Tension**

Refer to Figure 3-2:

# 

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

- To check tension apply force at arrow A with a tension tester and deflect the belt 1/4". The force required to get this deflection should range from 7 to 10 lbs.
- To adjust belt tension, adjust eyebolt (#1), as necessary. This adjustment will increase or decrease the tension on spring (#2). If more tension is needed than the eyebolt can adjust take the tension spring (#2) to next link in the tension chain (#3).
- 3. 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. Not enough tension on the belt may lead to premature failure of the belt due to excessive slipping.

# 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.

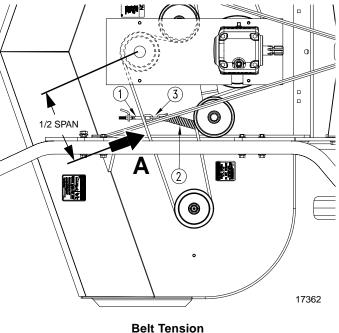


Figure 3-2

Section 4: Maintenance and Lubrication



## Maintenance



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

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

- After using the mower for several hours, check all bolts to be sure they are tight and check the tension of the drive belt. Refer to *Belt Tension* in the "**Adjustments**" section on page 16.
- Lubricate items as listed under *Lubrication*, this section, starting on page 20.
- Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer. Information about labels is located under *Safety Labels* in the "**Important Safety Information**" section starting on page 1.

# **Service Mowing Blades**

#### Blade Inspection

#### Refer to Figure 4-1:

Blade Wear: As blades wear and are sharpened, the blade performance will be reduced.

# 

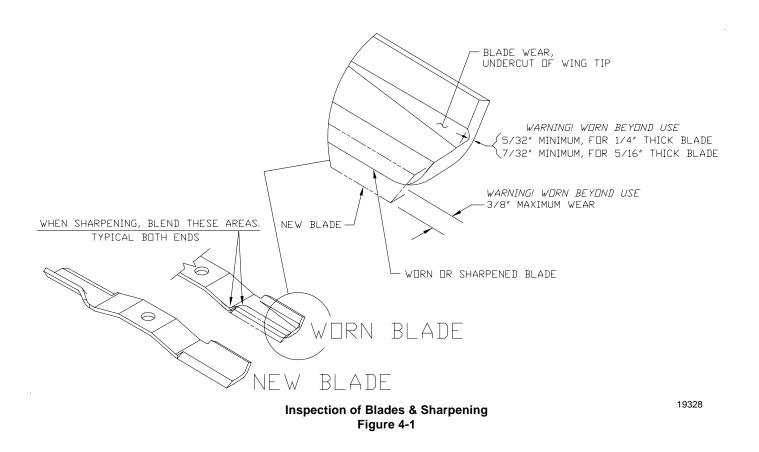
*Bent, Deformed or Split Blades: Should be removed from unit and discarded. DO NOT attempt to straighten for reuse.* 

# 

DO NOT attempt to modify blade, such as hard surfacing, heat or cold treating and/or by any other method.

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DO NOT try to straighten a blade that is bent. Never weld a broken or cracked blade. ALWAYS replace with a new Land Pride blade to assure safety.



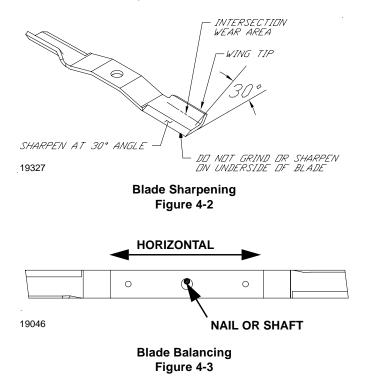
#### **Blade Sharpening or Replacement**

**IMPORTANT:** Replace blades with Land Pride blades only.

# 

ALWAYS wear eye protection and gloves when sharpening a blade.

- 1. If the blade cutting edge is dull or nicked, it should be replaced or sharpened. Remove blades for replacing or sharpening by grasping the end of the blade using a rag or a thick, padded glove, while loosening and removing the bolt/bolts that mount the blade.
- 2. Clean blade, blade washer and mounting surface of all debris before replacing or sharpening. Grind cutting edge at the same bevel as the original. See Figure 4-2. Sharpen only the top of the cutting edge to maintain sharpness.



**NOTE:** Care should be taken in order not to remove any more material than necessary to sharpen blade.

3. Check blade balance by positioning the blade horizontally on a nail or shaft through the center hole. See Figure 4-3. If either end of the blade rotates downward, grind (remove) metal on that end until the blade will balance. The blade is properly balanced when neither end drops. Balance of a blade is generally maintained by removing an equal amount of material from each end of the blade when sharpening. **IMPORTANT:** Always install blade with the cutting edge facing direction of rotation.

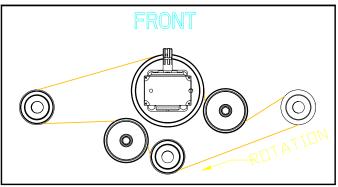
4. Mount blade with wing tips pointing up towards bottom of deck. Reinstall blade, blade washer and bolt. Care should be taken when installing blade bolt not to get it cross threaded. Do not exceed 55 ft.-lbs. of torque on bolt.

## **V-Belt Installation**

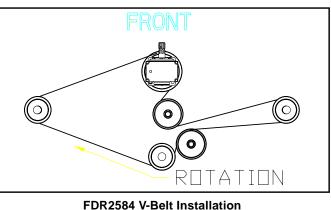
#### Refer to Figure 4-4 and Figure 4-5:

These illustrations are also on the labels located on the top of the mower decks.

- 1. Remove right and left hand belt covers.
- 2. Disengage belt tension by loosening eyebolt (#1) and removing spring (#2) from the tension-chain link (#3).
- 3. With tension relieved from belt, remove old belt from pulleys.
- 4. To install a new belt, be sure the belt is positioned in all the pulley grooves. Engage belt tension by assembling the tension spring back on the eyebolt and tightening the eyebolt to apply tension to new belt. Check the belt tension, refer to Figure 3-2 on page 16.
- 5. Reinstall all belt covers and secure in place with hardware.



FDR2572 V-Belt Installation Figure 4-4



FDR2584 V-Belt Installation Figure 4-5

#### Section 4: Maintenance and Lubrication

# Storage

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

- Clean off any dirt or grease that may have accumulated on the Grooming Mower and moving parts. Scrape off compacted dirt from the bottom of the deck and then wash the surface thoroughly with a garden hose. A coating of oil may also be applied to the lower deck area to minimize oxidation.
- 2. Check the blades for wear and replace if necessary, see Service Mowing Blades, this section on page 17.
- 3. Inspect the mower for loose, damaged or worn parts and adjust or replace as needed.
- 4. Lubricate as noted in the *Lubrication* portion of this section starting on page 20.
- 5. Store the Grooming Mower in a clean, dry place. The deck should be positioned on a flat surface. Ensure that the deck is stable.
- 6. Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for Aerosol Land Pride touch-up paint.

#### Land Pride Touch-up Paint

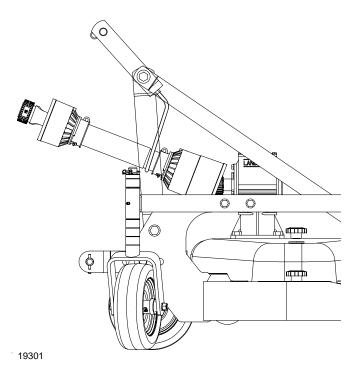
Part No. Part Description

		-
821-011C 821-002C	PAINT LP BEIGE SPRAY CAN	
821-002C	PAINT GP BLACK SPRAY CAN	

#### **Driveline Storage**

#### Refer to Figure 4-6:

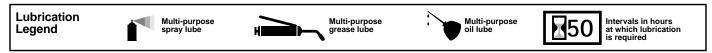
The FDR25 series mowers are equipped with a driveline hanger so that the drivelines can be stored up off the ground.

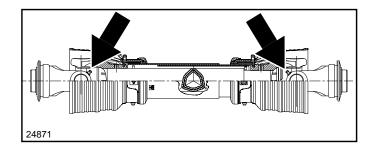


Driveline Storage Figure 4-6

Section 4: Maintenance and Lubrication

# Lubrication

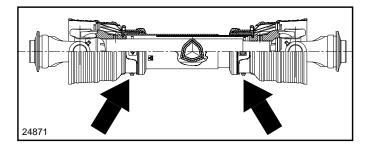






## **Driveline Shaft U-Joints**

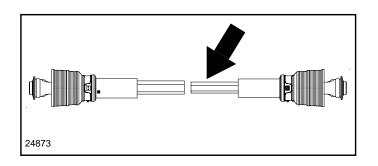
Type of Lubrication: Multi-purpose Grease Quantity - 4 to 8 Pumps





## Inner Tube Bearings

Type of Lubrication: Multi-purpose Grease Quantity - As Required

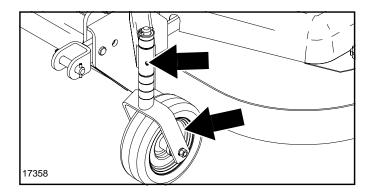




## **Driveline Profiles**

Type of Lubrication: Multi-purpose Grease

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

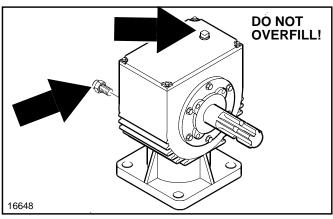




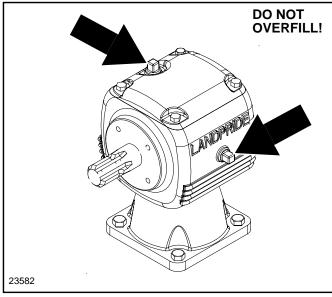
Wheel Support Bushings & Wheel Bearings

Type of Lubrication: Multi-purpose Grease

Section 4: Maintenance and Lubrication







Type 2



**IMPORTANT:** Do not overfill! Level mower and wait for gearbox oil to cool before checking. A mower that is not level or a gearbox with hot oil will not show correct oil level on the dipstick.

#### Gearbox (Type 1)

Type of Lubrication: Gear Lube EP 80-90W

Check the oil level in the gearbox by either removing the dipstick on top of the gearbox or by removing the bottom plug at the rear of the box on the right hand side. Add oil if necessary by removing the top dipstick.

Do not overfill! Should your gearbox require service, take it to your Land Pride dealer.

# Gearbox (Type 2)

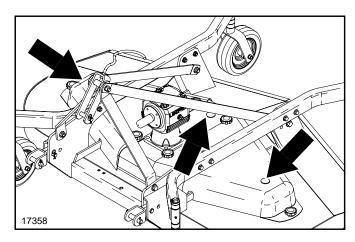
Unscrew top vent plug in gearbox to remove dipstick. Wipe oil from dipstick and screw it back in without tightening. Unscrew dipstick and check oil level mark. If low, fill through top plug hole in gearbox with EP 80-90W oil until oil reaches full mark on the dipstick. Reinstall vent plug with dipstick and tighten.

Take your gearbox to a Land Pride dealer if it requires service.

Type of Lubrication: Gear Lube EP 80-90W

Quantity = Fill until oil reaches full mark on dipstick.

**IMPORTANT:** The Type 2 gear box is shipped with the gearbox vent plug and dipstick packaged in the Operator's Manual bag and should have been installed in the gearbox by your Land Pride dealer. Please see your Land Pride dealer if the vent plug with dipstick was not included.





## **Bearing in Blade Spindle Hubs**

Type of Lubrication: Multi-purpose Grease

# Section 5: Specifications & Capacities



FDR25 Rear Discharge Series								
	FDR2572	FDR2584						
Maximum HP - Engine	50 HP							
Cutting Width	72"	84"						
Overall Width	77"	89"						
Height	3	4"						
Length	69"	75"						
Weight	718#	812#						
Cutting Height	3/4" - 5 1/4" (1.	/2" increments)						
Deck Material Thickness	3/-	16"						
Blades-3 Medium lift Optional blades Low Lift, High Lift or Mulching	1/4" x 2 1/2" x 25" Heat Treated Alloy Steel	1/4" x 2 1/2" x 29" Heat Treated Alloy Steel						
Blade Overlap	1 1	1/4"						
Blade Spindles	Grea	sable						
Blade Tip Speed	18,130 FPM	17,210 FPM						
Hitch	Categ	gory 1						
Gauge Wheels	3 1/4" x 10" Solid Rubber	4" x 11" Semi Solid						
Caster Wheel Spindle	1" Diameter with C	Greasable Bushing						
Drive Train	Gea 1:2.83 Cast Iror	540 RPM PTO Gearbox 1:2.83 Ratio Cast Iron Housing Spring Loaded Single V-Belt Heavy-duty w/ quick coupler						
Driveline	Heavy-duty w							
Front Roller	Opti	Optional						

#### Section 6: Features and Benefits



## **FDR25 Series Rear Discharge Mowers**

Features	Benefits					
2 Key widths	72" and 84"					
Gearbox HP rating	15 - 50 HP					
Rear discharge	The wide, even dispersal of grass leaves a fine thin layer directly behind the mower, vs. a possible windrow to the side. Keeps grass from blowing in unwanted areas. Easier to mow around objects.					
Deflectors	Built-in to throw material and debris down.					
Clevis type lower hitch points	Allows for easy hook-up by being able to remove pins and back into clevises.					
Floating 3-point	Top and bottom hitch points float up and down which allows the mower to float over uneven terrain.					
5/16" Rolled front on deck	Heavy front takes abuse.					
Frame-over-deck design	Frames takes stress out of deck by supporting it.					
3/16" Deck thickness	Heavy deck material to aid in overall strength and longevity. Reinforced spindle mounts.					
Lower hitch points adjust in and out	Accommodates many tractor configurations by adjusting in and out.					
FDR2572 Only - Solid rubber tires with roller bearings	Solid rubber tires on the FDR2572 are sandwiched between the rim halves, bolted in and can't go flat. Roller bearings allow for a long life.					
FDR2584 Only - Semi solid tires with roller bearings	Semi solid tires on the FDR2584 offer premium flotation. Roller bearings allow for a long life. Semi solid tires offer shock absorption.					
Choices of blades	Low, medium, high-lift, or mulching blades are available to match customer needs and specific applications.					
High blade tip speed	72" = 18,130 fpmFor cleaner cutting and better dispersion of clippings.84" = 17,210 fpm					
1 3/8" Machined blade spindle with ball bearings and cast iron housing.	Machined spindle for balanced performance and accuracy, ball bearings for smooth and quiet running, cast iron housing for added protection and durability.					
Top greasing spindles	Assures top bearing gets grease. No shields to remove.					
Single B-section Kevlar belt	Simple one belt design. Kevlar material adds additional strength.					
Vacuum formed ABS belt guards	No scratching, no rattling.					
Non-aligned gauge wheels	Rear wheels don't track behind the front wheels to reduce laying grass over.					
Spring loaded adjustable idler	r Allows for constant and proper tension on belt. Better than adjusting gearbox for belt tension.					
Quick Hitch Compatible	Compatible with Land Pride Quick Hitch for easy attachment and removal increases productivity.					



Problem	Solution					
Rear discharge area plugged	Check installation of belt.					
	Wait until grass dries.					
	Raise cutting height of mower and cut grass twice.					
	Mow at full throttle (540 PTO rpm), check PTO speed and tractor engine.					
	Shift transmission to a lower gear.					
Do not try to clean rear discharge area v	vhen mower is running. Bodily harm may occur!					
Belt slipping	Unplug and clean mower deck.					
	Remove belt guard shields and clean sheaves.					
	Tighten spring take-up eyebolt.					
	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 spring take-up eyebolt.					
	Sharpen and balance or replace blade.					
Excessive vibration	Replace blades.					
	Replace drive belt.					
	Replace pulleys or align.					
	Remove belt guard shields & clean debris from belt area & sheaves.					
Gearbox noisy	Check lubricant level.					
Blades scalping grass	Raise cutting height by adjusting wheels.					
	Change mowing pattern.					
	Reduce speed turns.					
Uneven cut	Shift to a lower gear.					
	Level mower.					
	Sharpen blades & balance or replace.					
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 Head Identification Bolt Head Identification												
Bolt Size (Inches) in-tpi <sup>1</sup>	Gri Gri	ade 2		$\frac{1}{10000000000000000000000000000000000$	Gi N . n	ade 8	Bolt Size (Metric) mm x	Cla	5.8 ss 5.8		8.8 ass 8.8 n ft-lb	Clas	<b>0.9</b> ss 10.9
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" - 12	750	555	1680	1240	2730	2010							
1 3/8" - 6	3/8" - 6 890 655 1990 1470 3230 2380 <sup>1</sup> in-tpi = nominal thread dia.in inches-threads per inch												
1 3/8" - 12	3/8" - 12 1010 745 2270 1670 3680 2710 <sup>2</sup> N⋅m = newton-meters												
1 1/2" - 6	1 1/2" - 6 1180 870 2640 1950 4290 3160 <sup>3</sup> ft-lb= foot pounds												
1 1/2" - 12	1330	980	2970	2190	4820	3560	<sup>4</sup> mm x pitch =	nomina	al thread	dia. in	millimete	rs x thr	ead pitch
Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.													

Notes

# 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 Drivelines: One year Parts and Labor

Gearbox: (S/N 329841+) 5 years on Parts and Labor

(S/N 329840-) 1 year on Parts and labor

Belts, blades, friction discs in slip-clutch and tires: Considered wear items

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

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

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

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

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

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



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