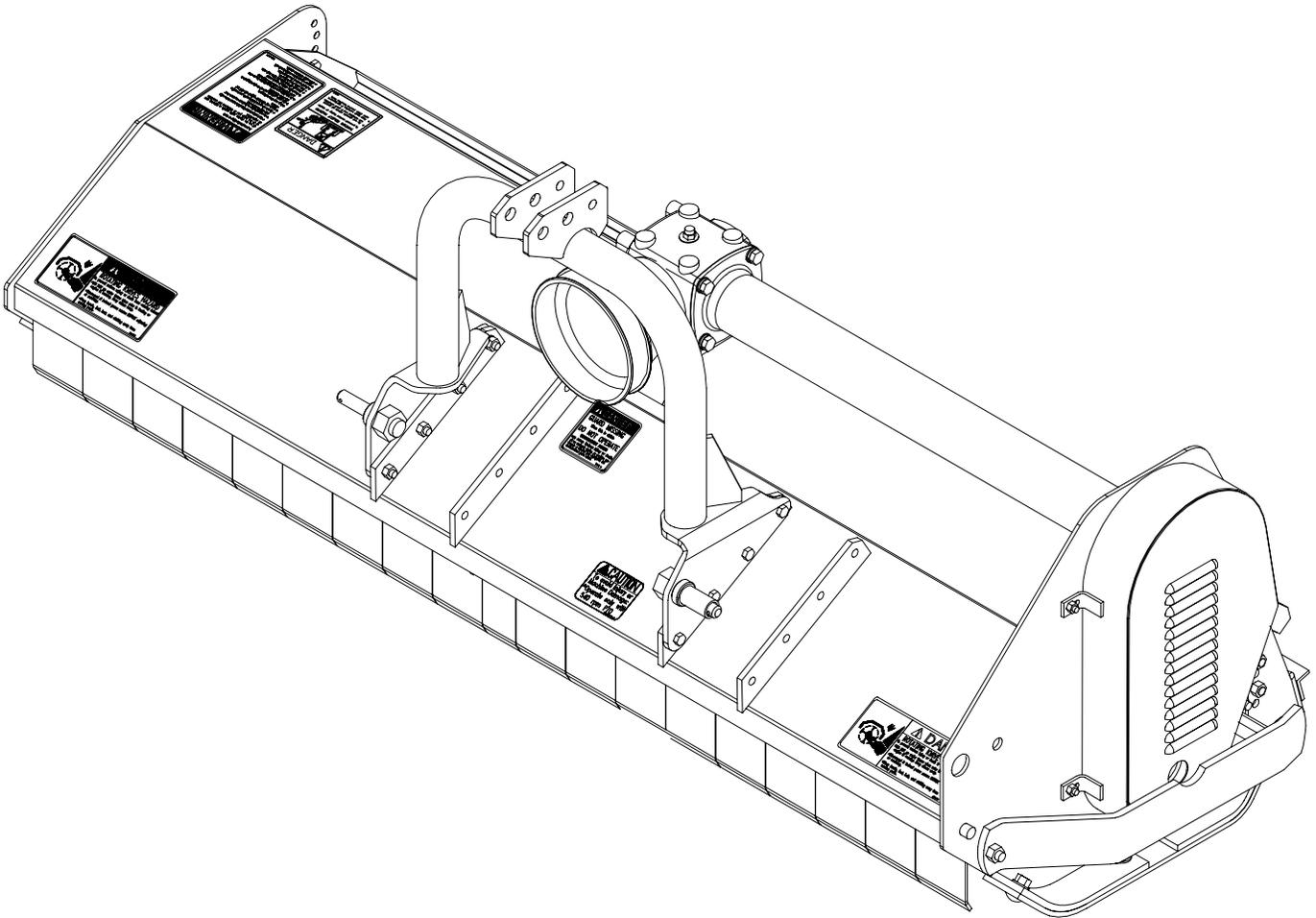


Flail Mowers

FM2060 & FM2072



17962

309-100M 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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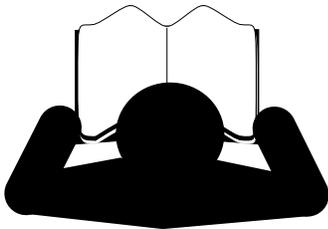
These are common practices that may or may not be applicable to the products described in this manual.

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



Look For The Safety Alert Symbol

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

Be Aware of Signal Words

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

DANGER

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

WARNING

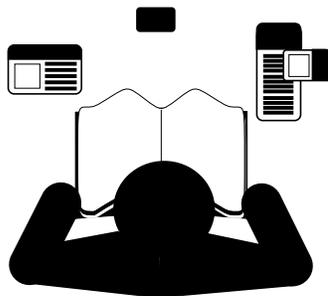
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION

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

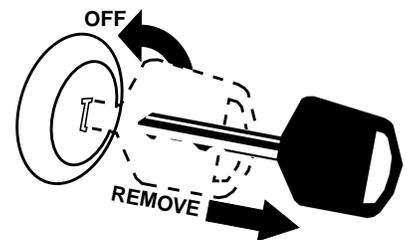
For Your Protection

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



Shutdown and Storage

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

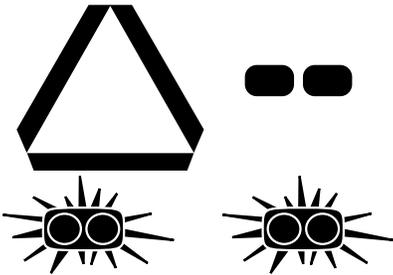


Important Safety Information

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

Use Safety Lights and Devices

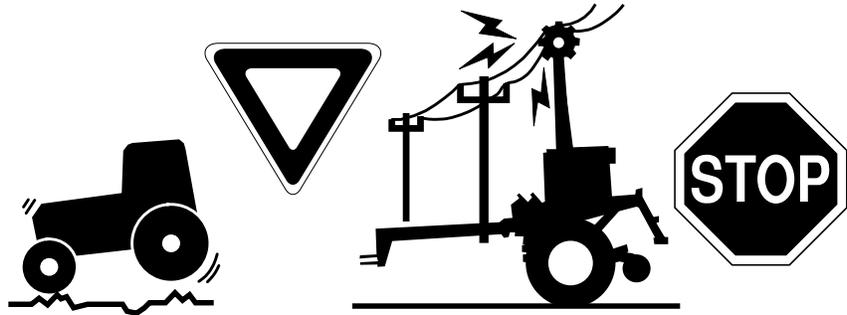
- ▲ Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with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



Transport Machinery Safely

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

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



Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.
- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- ▲ Remove buildup of grease, oil or debris.
- ▲ Remove all tools and unused parts from implement before operation.

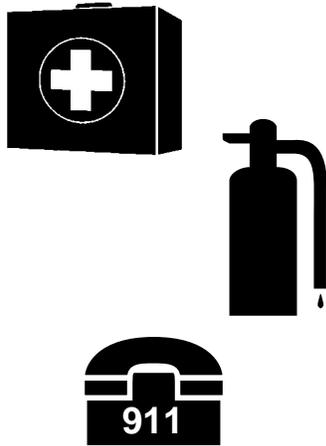


Important Safety Information

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

Prepare for Emergencies

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

**Wear Protective Equipment**

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

**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.



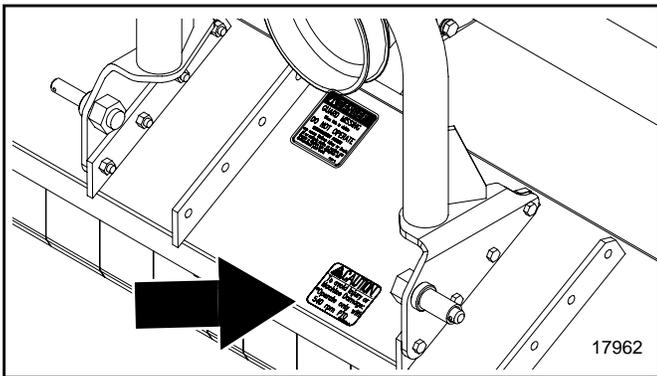
Important Safety Information

Safety Labels

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

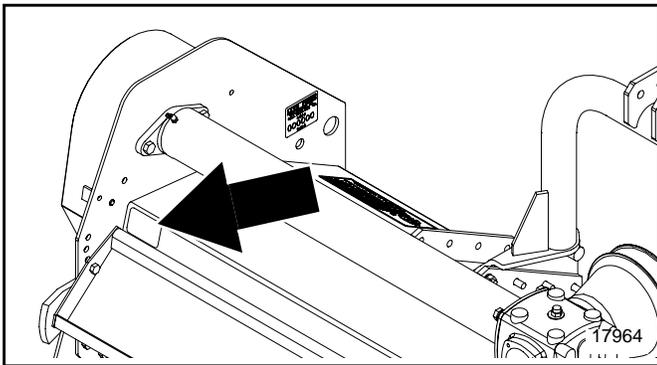
1. Keep all safety labels clean and legible.
2. Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Land Pride. When ordering new components 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.
 - a. Squeeze out air bubbles with the edge of a credit card.



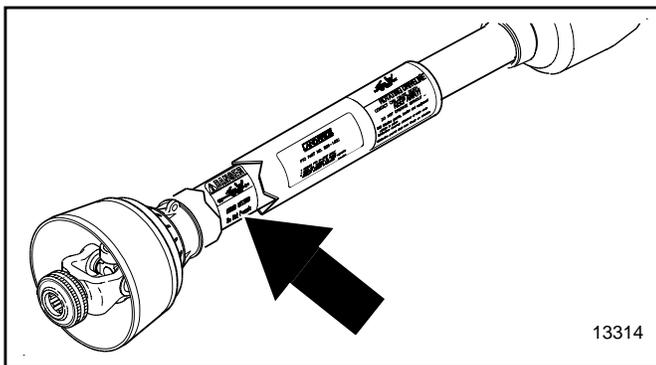
818-130C

Caution: To avoid injury



818-230C

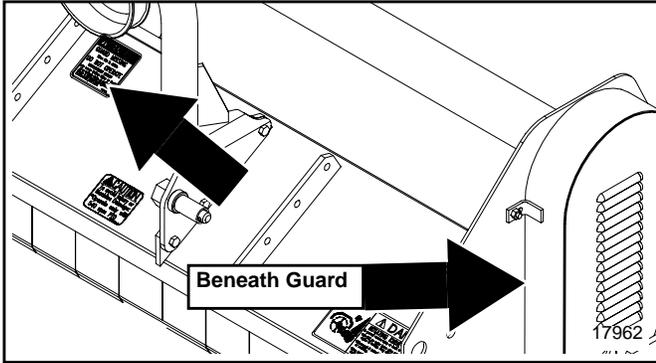
Red Reflector (Both Sides)



818-540C

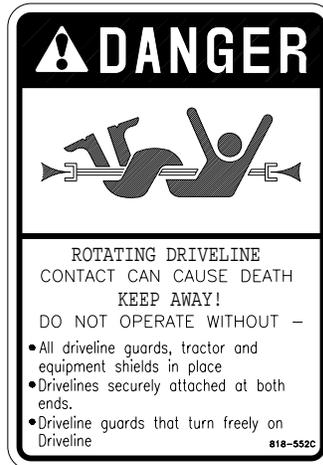
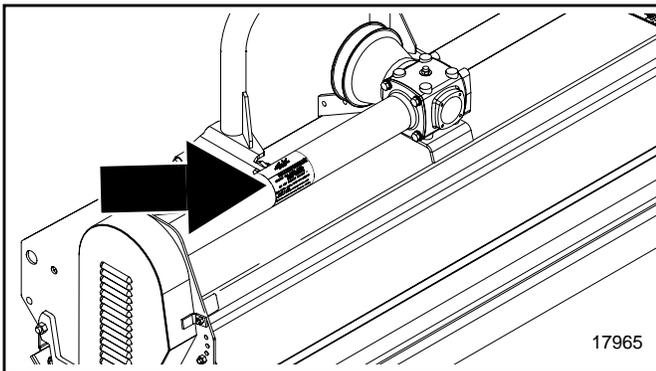
Danger: Guard Missing

Important Safety Information



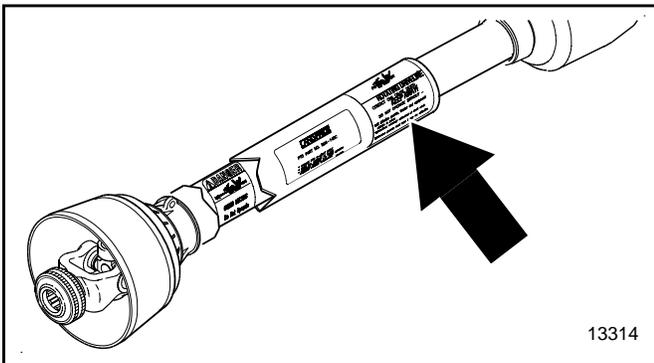
818-543C

Danger: Guard Missing



818-552C

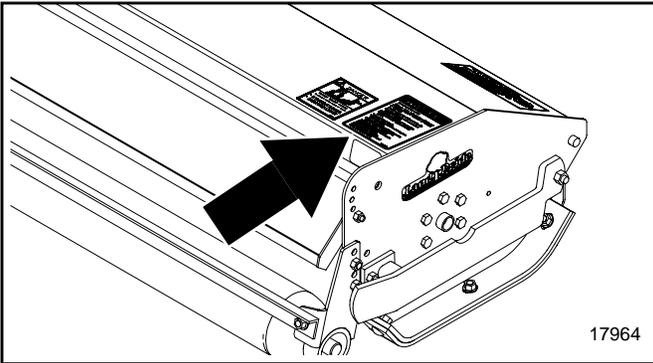
Danger: Rotating Driveline



818-552C

Danger: Rotating Driveline

Important Safety Information



WARNING

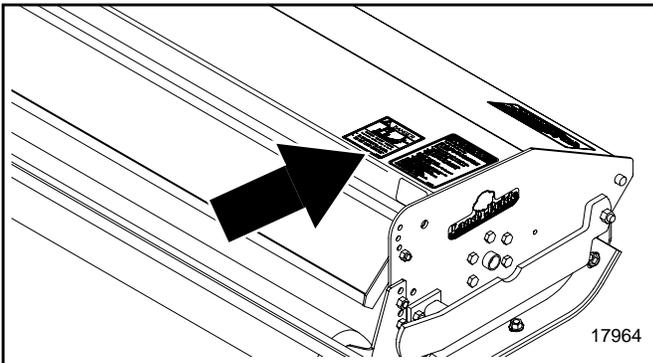
To prevent serious injury or death:

- 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

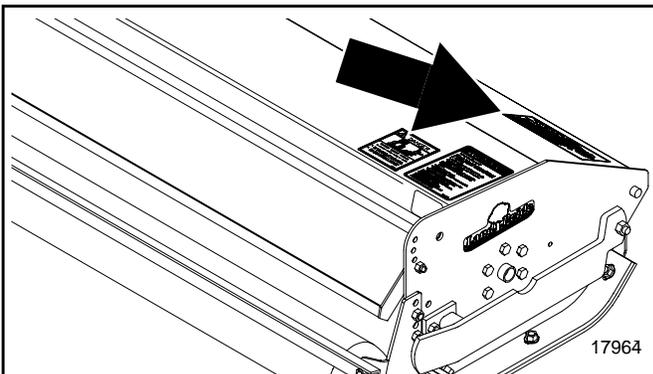
THROWN OBJECT HAZARD

To prevent serious injury or death from thrown object:

- Operate only with all guards installed and in good condition.
- Stop operation if bystanders come within several hundred feet.

818-556C

818-556C
Danger: Thrown Object



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

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 the machine.

Application

The medium duty FM2060 and FM2072 Series Flail Mowers are designed and built by to provide excellent cutting performance on gently sloping or slightly contoured grassy right-of ways, roadsides, ditches, pastures, nurseries, and smaller fields of light row crop debris, stalks, and residual agricultural trash. The 60" and 72" cutting widths and 3/4" to 4" cutting height and ability to cut weeds and brush up to 1" in diameter makes these flail mowers well suited for nursery and agricultural applications where grass, brush, pruning's, small saplings, and cotton residue are present. Either model equipped with fine cut 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, or right of ways.

Both models offer a Cat. 1 three-point hitch for tractors not to exceed 55 PTO horsepower. The three point hitches on both models offer centered mounting or offset capability 6" to the right making them even more desirable for cutting in and around trees with extremely low hanging branches. Both models also offer a Cat. 4 and 540rpm shielded driveline. The FM2060 and FM2072 Flail Mowers, with their horizontal cutting rotor design, also provide for greatly reduced potential of launching projectiles out from under the mower making them an excellent choice for state and municipal mowing applications.

See "Specifications & Capacities" on page 16 and "Features and Benefits" on page 17 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 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

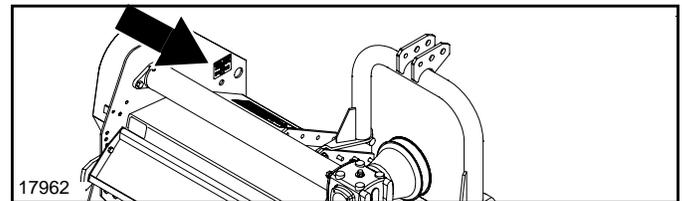
The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service.

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 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 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 your problems and that he has had the opportunity to assist you.
2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
3. For further assistance write to:

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

E-mail address
lp servicedept@landpride.com

Tractor Requirements

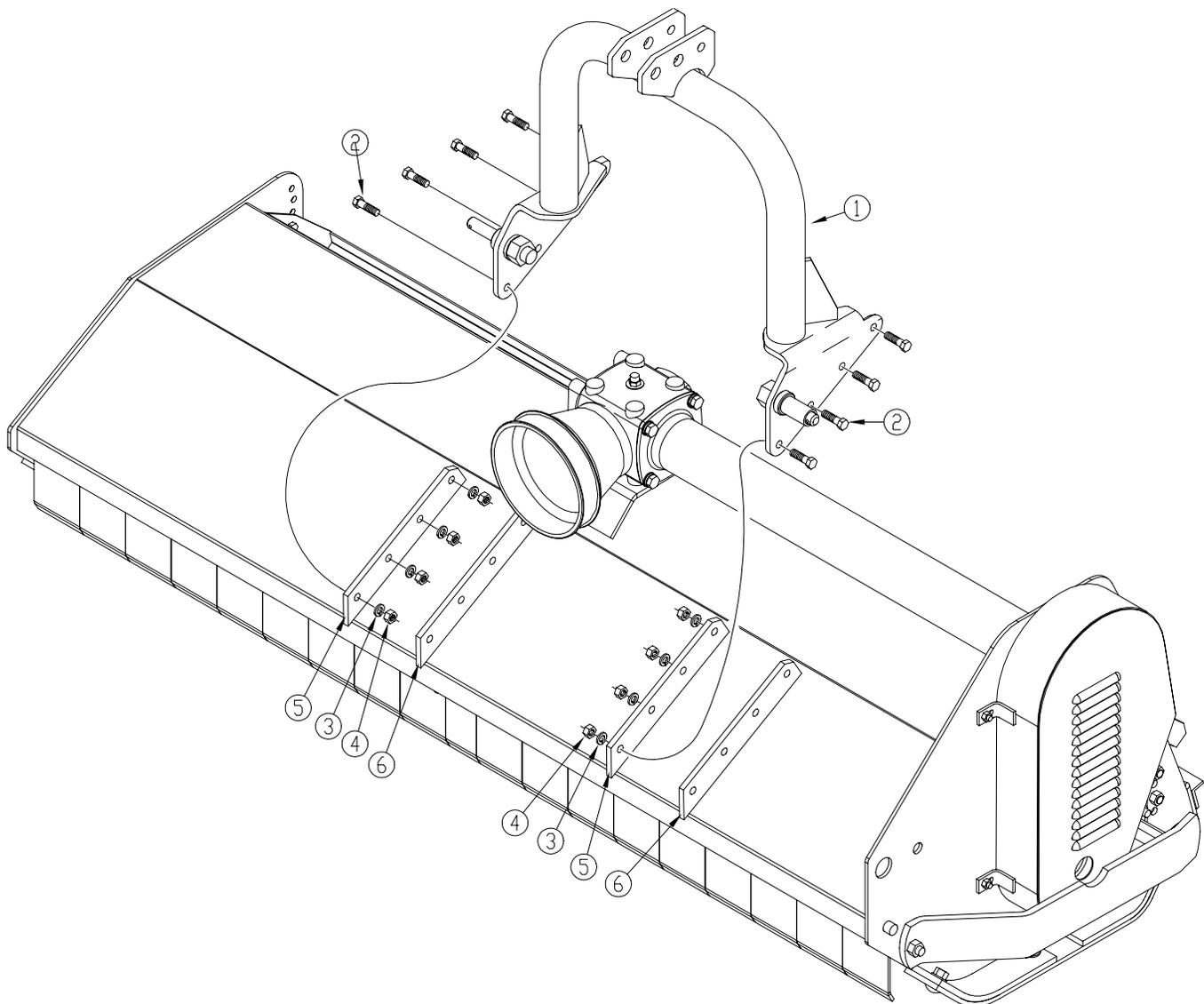
This mower is designed with a 3-Point category I hitch. Horse power rating of tractor should not exceed 40 PTO horse power for the Flail Mowers.

NOTE: In order to maintain steering control, ballast may need to be added to your tractor. To determine whether or not to add the ballast, refer to your tractor's operator manual.

Hitch Assembly

Refer to Figure 1-1:

4. The hitch is disassembled for ease in shipping.
5. Assemble the hitch (#1) to the flail mower and secure with the bolts (#2), lock washers (#3) and nuts (#4) as shown.
6. The hitch can be assembled in two different positions; (#5) and (#6) for either a left offset or right offset.
7. Tighten all hardware.



**Hitch Assembly
Figure 1-1**

17966

Section 1: Assembly and Set-up

Tractor Hook-Up

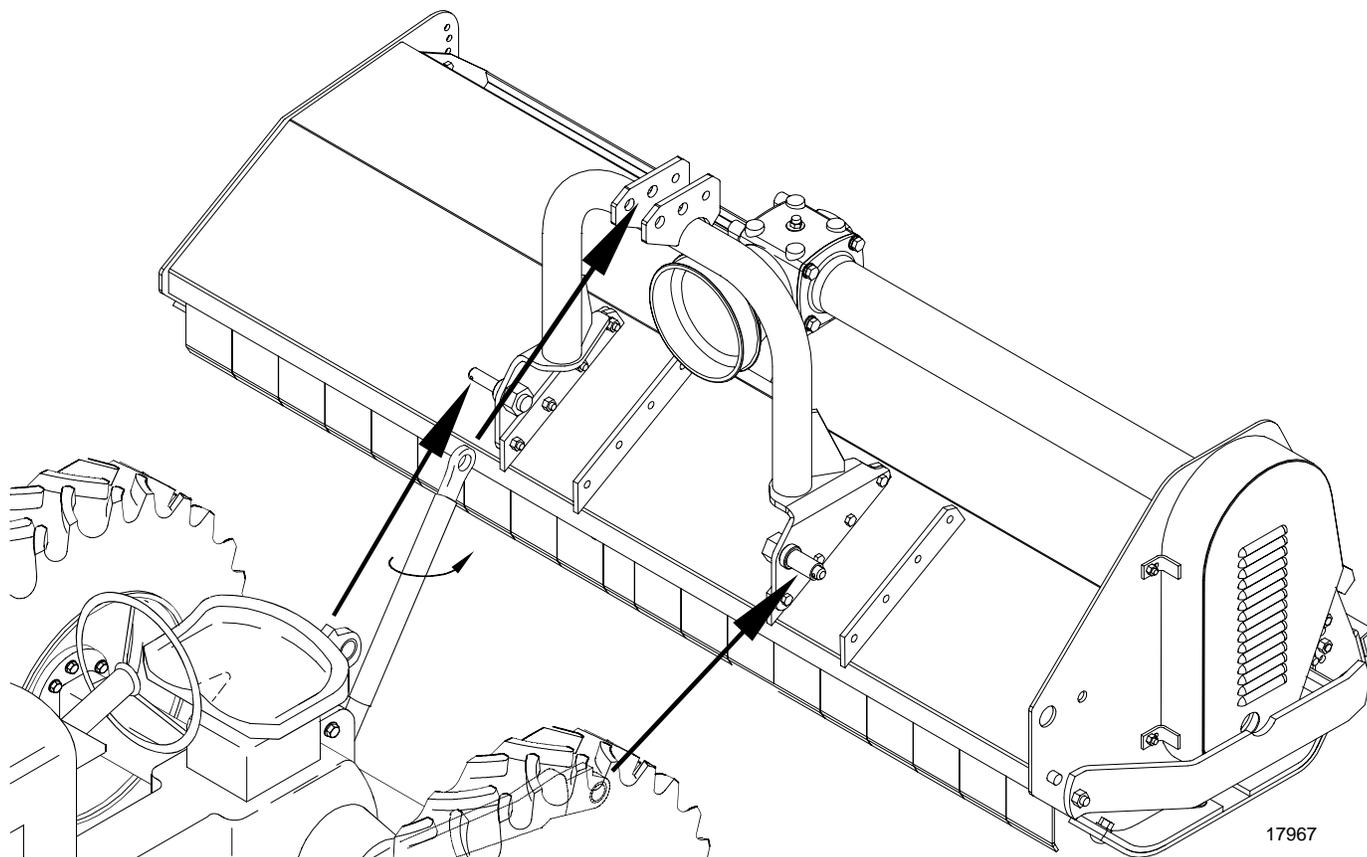
1. Be certain that tractor draw bar will not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is being raised for the first time.
2. Align lower link arms of tractor to hitch clevises on mower. Insert lower hitch pins into lower ball swivels 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 or slightly behind the lower hitch pins as shown in Figure 1-2, to allow mower flotation. The mower should be run with the back 15 degrees lower than the front.
4. Attach the chain from the driveline shield to one of the upper hitch braces to ensure that the shield does not rotate.
5. Should the driveline require shortening:
 - d. Hold the half-shafts next to each other in the shortest working position and mark them.
 - e. Shorten inner and outer guard tubes equally.
 - f. Shorten inner and outer sliding profiles by the same length as the guard tubes.
 - g. Proper overlap is a minimum of one-half the length of each tube, with both tubes being of equal length.
 - h. Round off all sharp edges and remove burrs. Grease sliding profiles.

Driveline Installation

1. Slide driveline end with extended safety cone over splined shaft of the gearbox and secure with attaching device.
2. Slide driveline over the tractor's splined PTO shaft and secure with locking device of driveline.
3. Driveline should now be moved back and forth to insure that it is secure on the PTO shaft of the tractor and mower gearbox.

 **CAUTION**

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



Tractor Hook-Up
Figure 1-2

Transporting

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

6. When raising the mower to the transport position, be sure that driveline does not contact tractor or mower. Adjust and set the tractor's 3-point hitch lift height so that the driveline does not contact mower deck in the fully raised position.
7. Be sure to reduce tractor ground speed when turning, leaving enough clearance so the mower does not contact obstacles such as buildings, trees or fences.
8. 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.
9. When traveling over rough or hilly terrain, shift tractor to a lower gear.



CAUTION

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

Mowing Instructions

1. Clear the area to be mowed of objects and debris that might be picked up and thrown by the mower blades.
2. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.
3. Grass should be mowed frequently as shorter clippings deteriorate faster.
4. 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.



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.

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.

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

1. Check oil level in gearbox. Refer to "**Section 4: Maintenance and Lubrication**" on page 15.

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 the area to be mowed of rocks, branches and other foreign objects.
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.
9. At first begin mowing at a slow forward speed and shift up until the desired speed is achieved - maintaining 540 PTO rpm.
10. Mower knives will cut better at a faster blade speed than at reduced throttle.
11. After mowing the first 50 feet, stop and check to see that the mower is adjusted properly.
12. **Do not** make sharp turns or attempt to back up while mower is on the ground.
13. **Do not** engage PTO with mower in the fully raised position. **Do not** engage PTO at full throttle.

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 FM2060 or FM2072 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 tractors 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.

Section 2: Operating Instructions

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 and 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 cutter 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. Always be aware and extremely cautious when there are people, pets, livestock, and valuable property in your immediate operating vicinity.

Now you're prepared and well briefed so lets 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.

Dense growth will require more horsepower and will cause you to slow down especially if you are encountering material up to 1" in diameter. The fine cut knives on either unit 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. Land Pride flail mowers are very user friendly and easy to operate. With a little practice you should be operating your Land Pride Flail Mower like an expert in no time at all.

Leveling the Mower

NOTE: Tractor and mower should be on level ground.

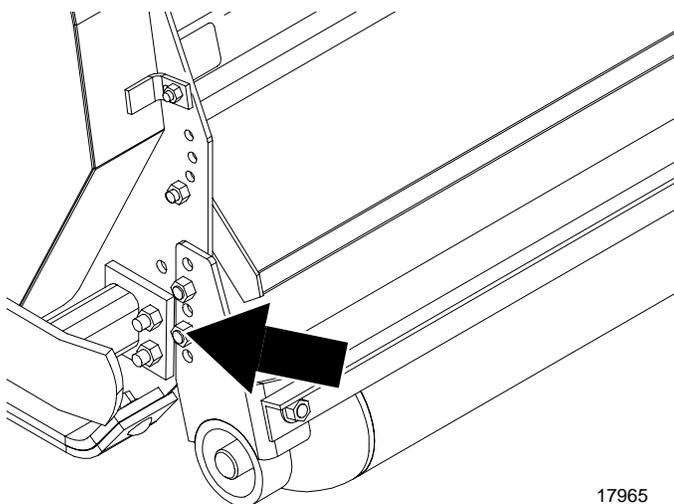
Leveling can be adjusted with the tractor's 3-point.

Cutting Height Adjustment

Refer to Figure 3-1:

The machines cutting height depends upon the position of the rear roller.

1. Remove the bolts that fix the roller on both sides.
2. Lift or lower both sides of the roller in equal measurements.
3. Replace the bolts and re-tighten.



17965

Cutting Height
Figure 3-1

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 or slightly behind the lower hitch pins. The mower should be run with the back 15 degrees lower than the front.

There is also two different positions for a left or right offset. Refer to Section 1: Assembly and Set-up "Hitch Assembly" Figure 1-1.



CAUTION

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

Belt Tension



CAUTION

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

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

1. To check tension apply approximately 22 pounds of pressure half way between the pulleys. There should be approximately 3/8" of deflection.
2. If there is excessive deflection the belts should be replaced. Refer to "Belt Installation" Figure 5-1.
3. Excessive tension on the belt may lead to premature failure of belt and drive components.



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.

Section 4: Maintenance and Lubrication

Maintenance

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



CAUTION

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.

- 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 12.
- Lubricate items as listed under *Lubrication*, this section, starting on page 14.
- 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 Knives

Knife Replacement

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

1. Remove bolt and nut.
2. Remove the old knife.
3. Replace the bolt. Tighten to the proper torque as listed in the *Torque Values Chart* in the “**Appendix**” section on page 19.

IMPORTANT: Replace knives with Land Pride knives only.

V-Belt Installation

Refer to Figure 5-1:

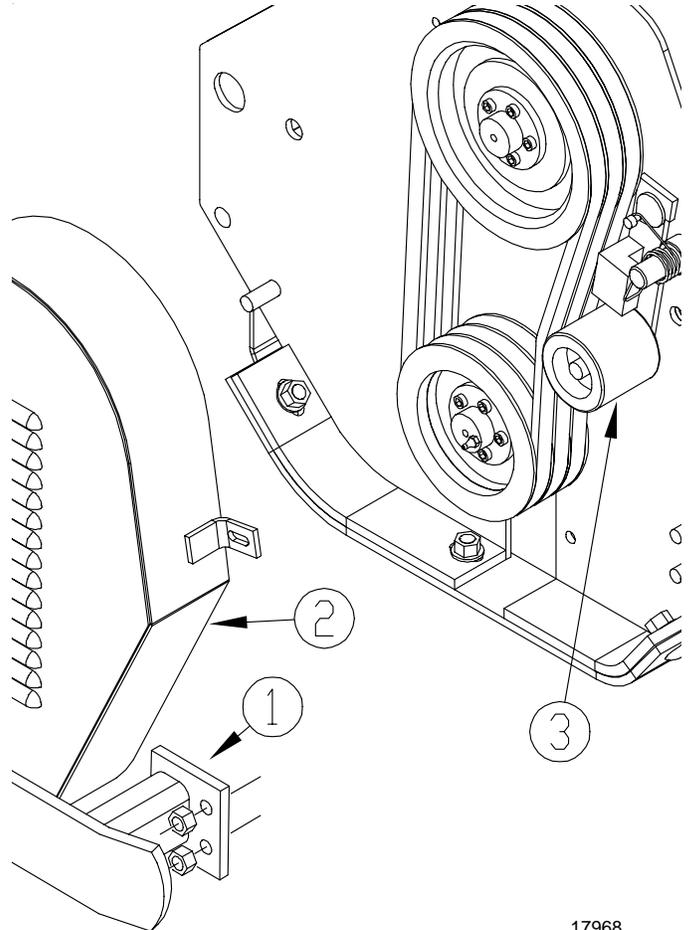


CAUTION

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

1. Remove the belt guard fender (#1) and belt cover (#2).
2. Disengage belt tension by removing the idler arm and roller (#3).
3. With tension relieved from belt remove old belt from pulleys.

4. Reinstall idler arm and roller (#3).
5. Reinstall belt guard (#2) and belt guard fender (#1)



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Belt Installation
Figure 5-1

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.

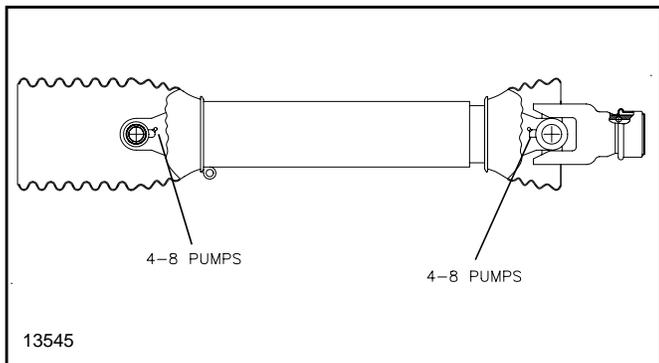
1. Clean as necessary.
2. Check the knives for wear and replace if necessary, see *Service Mowing Knives*, this section on.
3. Inspect the mower for loose, damaged or worn parts and adjust or replace as needed.
4. Lubricate as noted in the *Lubrication* portion of this section starting on page 14.
5. Store unit inside if possible for longer life.

Repaint parts where paint is worn or scratched to prevent rust. Ask your dealer for aerosol Land Pride Beige touch-up paint #821-011C.

Section 4: Maintenance and Lubrication

Lubrication

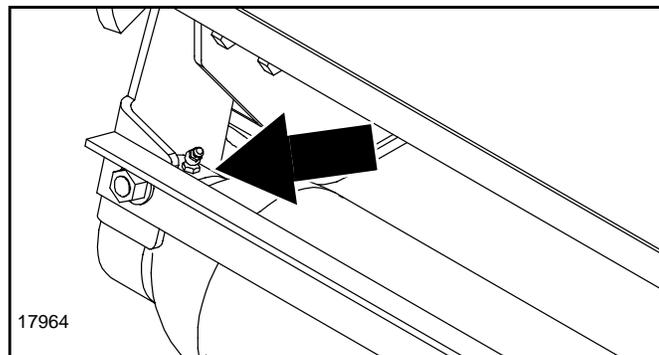
Lubrication Legend	 Multi-purpose spray lube	 Multi-purpose grease lube	 Multi-purpose oil lube	 Intervals in hours at which lubrication is required
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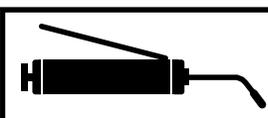


	
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Driveline Shaft U-Joints

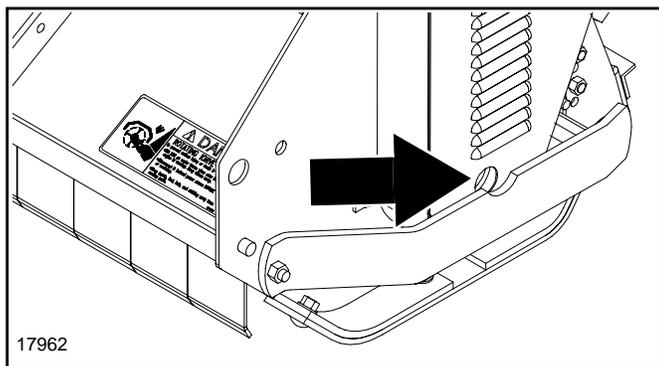
Type of Lubrication: Multi-purpose Grease

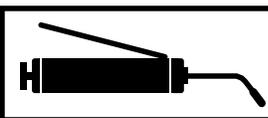


	
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Roller Bearing (Both Ends)

Type of Lubrication: Multi-purpose Grease

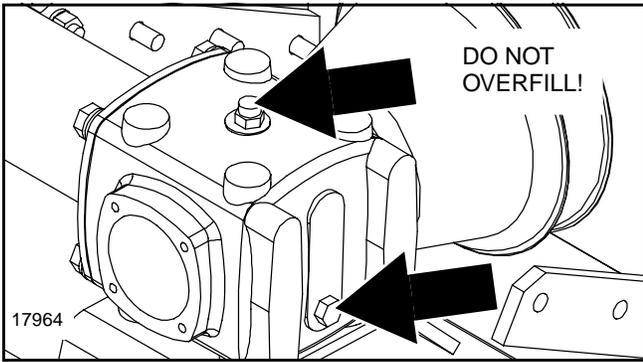


	
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Cutter Rotor Bearing (Both Ends)

Type of Lubrication: Multi-purpose Grease

Section 4: Maintenance and Lubrication



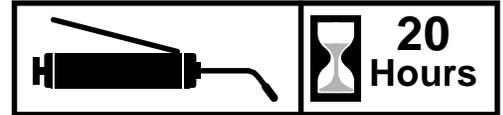
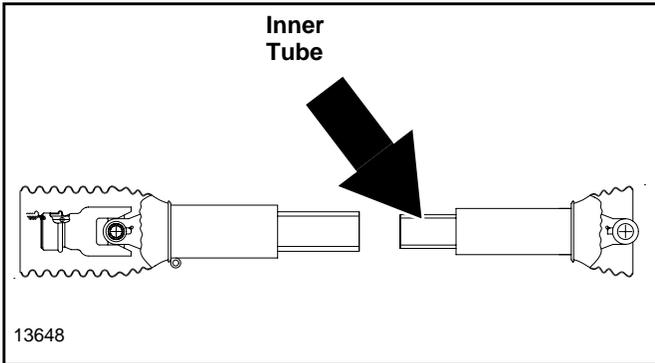
Gearbox

Type of Lubrication: SAE 90W Gear Lube

Check the oil level in the gearbox by removing the plug at the side of the box on the right hand side. If oil should flow from the plug hole there is enough oil. Add oil if necessary by removing the top plug.

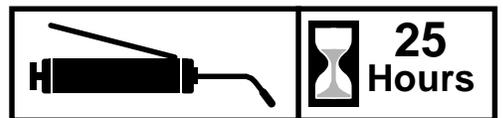
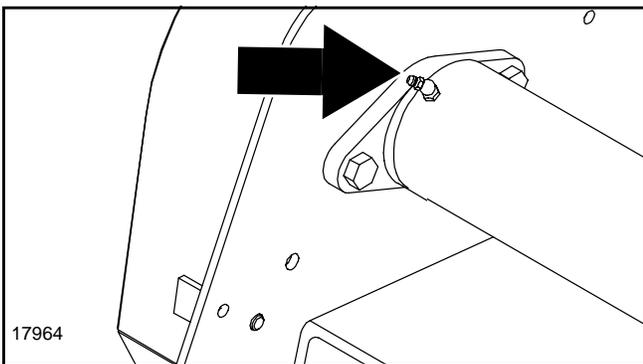
Do not overfill! Should your gearbox require service, take it to your LAND PRIDE dealer.

NOTE: Mower should be level when checking oil in gearbox!



Driveline Profiles

Type of Lubrication: Multi-purpose Grease



Extension Shaft Bearing

Type of Lubrication: Multi-purpose Grease



FM2060 & FM2072 Series Flail Mowers		
	FM2060	FM2072
Cutting Width	60"	72"
Overall Width	68"	80"
Height	37"	
Depth	28"	
Weight	616 lbs.	660 lbs.
Cutting Height	3/4" - 4"	
Cutting Capacity	1"	
Deck Material Thickness	11 gauge	
Knives	Fine cut	
Rotor Shaft Speed	1980 RPM	
Rotor Diameter	4 1/4"	
Rotor Rotation	Reverse	
Knife Tip Speed	8705 fpm	
Number of Knives	60	72
Hitch Type	Category I	
Offset Hitch	6 1/4"	
PTO Speed	540 RPM	
Driveline	Cat 4 w/Over-running Clutch	
Gearbox Rating	55 HP	
Drive Belts	(2) - "B" Section Belts	
Rear Roller Diameter	5 1/2"	

Section 6: Features and Benefits

FM20 Series

Features	Benefits
Key widths	60", 72"
6 1/4" Right, centered offset hitch	The two position hitch for offsetting the mower allows closer cutting along buildings, fences or roadsides.
Gearbox HP rating	25 - 55 HP to fit a large array of tractors
3/4" – 4" Cutting height	Low cutting height allows for scalping in grasses such as Bermuda prior to overseeding.
Gearbox Warranty	One year on all components
1" Cutting capacity	Can cut small saplings.
4 1/4" Rotor diameter	Large rotor diameter protects against obstructions.
Reverse rotor rotation	Reverse rotation brings the cut grass up and over the rotor for a cleaner discharge.
Cat. 4 driveline with over-running clutch	Upon disengaging the PTO, the over-running clutch allows the driveline to quit turning, while the clutch yoke, gearbox and rotor shaft slow down by their own inertia.
3 - "B" Section belts	"B" Section belts fit snug in the sheaves, and the multiple belts ensure positive transfer of power.
3 Fine cut knives per hanger	Helps eliminate the peak and valley cut left with many fine cut blade arrangements.
High knife tip speed	Knife tip speed of 8,705 fpm for cleaner cut.
Adjustable rear panel	Rear panel adjusts to allow stronger discharge of material. Also aids in cleaning underside of deck.
Baffles on the top inside of the deck	Keeps the 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.
Scrapers	Standard scrapers on rear height adjusting roller.

Problem	Solution
 CAUTION <i>Do not try to clean rear discharge area when mower is running. Bodily harm may occur!</i>	
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.
Excessive vibration	Replace knives
	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.
Tractor loaded down by mower	Mow at full throttle (540 PTO rpm).
	Shift to a lower gear.
	Clean mower.



Section 8: Appendix

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

¹ in-tpi = nominal thread diameter in inches-threads per in.
² N · m = newton-meters
³ ft-lb= foot pounds
⁴ mm x pitch = nominal thread diameter in millimeters x thread 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 Driveline: One year Parts and Labor

Gearbox: One year on all components.

Belts and Blades: 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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