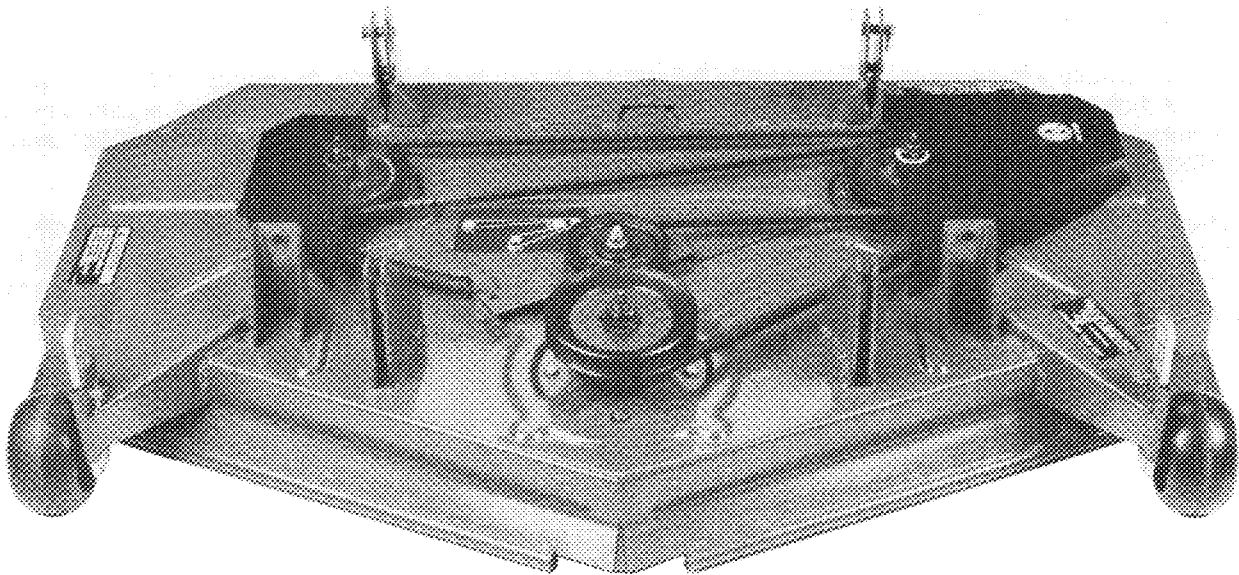


# Operating & Maintenance Instructions



48"  
Rear Discharge  
Cutting Deck

Model No. 55665



**Wheel Horse®**  
Tractors & Riding Mowers

# VEHICLE IDENTIFICATION NUMBER

Vehicle identification numbers are used to identify your new product. These numbers should always be referred to when consulting dealer or factory concerning service, parts, or other information you may require.

## Rider Identification Number

MOD. _____
SER. _____

## OWNER REGISTRATION AND WARRANTY

Service and warranty assurance is as important to Toro Wheel Horse as it is to you, the owner. To facilitate warranty service at an Authorized Toro Wheel Horse Dealer, Toro Wheel Horse requires factory registration. A registration card is supplied with each new rider and attachment. **Either you or your dealer must fill in required information and mail card to Toro Wheel Horse.**

Toro Wheel Horse Limited Warranty Statement is on a "hang tag" attached to each product. This statement describes what items are covered by the Toro Wheel Horse Limited Warranty, your rights and obligations, and procedure to follow to obtain warranty service. Please familiarize yourself with the warranty statement. **All of us at Toro Wheel Horse want you to be satisfied with your Toro Wheel Horse rider; please don't hesitate to contact us for assistance.**

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## PARTS MANUAL

A separate parts manual is available for your Toro Wheel Horse equipment. To obtain a parts manual, see ordering information at end of this publication.

**BE SURE TO INCLUDE VEHICLE IDENTIFICATION NUMBER OF EQUIPMENT.**

These symbols mark important instructions relating to your personal safety. To avoid possibility of injury, read and follow such instructions carefully.

**DANGER**      *This symbol warns of extreme immediate hazards which will result in severe personal injury or death if proper precautions are not taken.*

**CAUTION**      *This symbol warns of a hazard or unsafe practice which can result in personal injury or death if proper precautions are not taken.*

When manual refers to left or right side of vehicle, it means your left or right when sitting in driver's seat.

## SAFE OPERATION PRACTICES — RIDING VEHICLES

### GENERAL

1. This machine is capable of amputating hands and feet and can throw objects that can cause injury and damage. **KNOW** the controls and how to stop machine quickly. **READ THIS OPERATOR'S MANUAL** and instructions furnished with attachments. Read, understand, and obey all safety messages appearing on the machine and in the operator's manual. **LEARN** from your operator's manual and from careful **EXPERIENCE** how to operate your equipment correctly. Know your machine's limitations.
2. Keep hands, feet, hair and loose clothing away from attachment discharge area, underside of mower deck or any moving parts while engine is running.
3. The use of drugs or alcohol while operating any equipment will place your safety in peril. Do not attempt operation of this machine while taking drugs or medication or while drinking alcoholic beverages.
4. Only responsible persons with mature judgment and proper physical capabilities should be allowed to operate this machine, and only after instruction in the proper use of this equipment.
5. Do not allow children to operate machine.
6. Do not carry passengers.
7. The purpose of this machine is to perform work. This equipment is not intended for sport or recreation.
8. Do not mow when people or pets are around.
9. Clear work area of objects (wire, rocks, etc.) which might be picked up and thrown.
10. Take all possible precautions when leaving vehicle unattended, such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
11. Watch out for traffic when crossing or near roadways.

12. Machine and attachments should be stopped and inspected for damage after striking a foreign object. Damage should be repaired before restarting and operating equipment.

13. Do not change engine governor settings or over-speed engine.

14. Wear appropriate protective clothing when operating equipment. Long pants and substantial footwear, not barefoot or open sandals, are essential.

15. Do not operate equipment unless properly seated with feet on footrests or pedals.

16. Keep your eyes and mind on your machine, attachment and the working area. Do not let other interests distract you.

17. Safety switches are intended to stop or prevent starting of engine to help prevent accidents. **OPERATOR SHOULD TAKE PRECAUTIONS AND NOT RELY ENTIRELY ON SAFETY SWITCH(ES).**

18. Care should be used not to touch equipment or attachment parts which may be hot from operation. Muffler and nearby areas may exceed 150° F. Allow cooling to occur before attempting to maintain, adjust or service.

19. Use of stereo headphones, ear protection or other sound altering/dampening devices may limit your ability to hear warning sounds (horns, shouts, etc.).

### FUEL / FIRE PRECAUTIONS

20. Handle gasoline with care. It is highly flammable.

21. Use approved gasoline container. Place container out of reach of children.

22. Use gasoline only as a fuel — never as a cleaner.

23. Never remove fuel cap or add gasoline to a running or hot engine, or an engine that has not been allowed to cool for several minutes after running.

# SAFE OPERATING PRACTICES

24. Never fill fuel tank indoors. Wipe up spilled gasoline.
25. Open doors if engine is run in garage — exhaust fumes are dangerous. Do not run engine indoors.
26. Do not fill machine with gasoline while smoking or when near open flame or sparks.
27. Never store equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark.
28. Allow engine to cool before storing in any enclosure.
29. To reduce fire hazard, keep engine and attachments free of grass, leaves or excessive grease.
30. Battery acid is a poison and can cause burn. Avoid contact with skin, eyes and clothes and protect your face, eyes and clothing when working around the battery.
31. Battery gases can explode. Keep cigarette sparks and flames away from battery.

## EQUIPMENT USE AND OPERATION

32. It is recommended that first operation of equipment be done at a slow speed with attachment disengaged. Continue this practice until operator is thoroughly familiar with the controls and has developed operating skills.
33. Disengage all attachment clutches, set parking brake and shift into neutral before attempting to start engine.
34. Disengage power to attachment(s), set parking-brake and stop engine before leaving operator position.
35. Disengage power to attachment(s) and stop engine before making any repairs or adjustments.
36. Disengage power to attachment(s) when transporting or not in use.
37. Disengage attachment clutch before attempting to remove the mower from a hole or other obstruction.
38. Disengage power to attachment(s) before backing. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the machine.
39. LOOK behind machine to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing.
40. Always back up loading ramps and tilt bed trailers.
41. The parking brake is designed to hold tractor in place at rest, with engine off. Parking brake will not restrain tractor with engine running and transmission engaged.
42. Know the terrain on which you are operating your equipment. There are areas on which your equipment can not be safely operated.
43. Avoid operating equipment on hillsides, slopes or rough terrain. DO NOT operate machine on hill-sides or slopes exceeding 15° (27% grade). If safety is in doubt STAY OFF THE SLOPE.
44. Reduce speed and exercise extreme caution on slopes above 10° (18% grade) to prevent tipping or loss of control. Never mow uphill on these slopes — mow downhill only. If a steep hill must be ascended, back up the hill, and drive forward down the hill, keeping tractor in gear. If necessary to turn on hill, always turn downhill.
45. Mow up and down the face of slopes greater than 5° (9% grade), never across the face. Be especially cautious when changing directions on all slopes.
46. Operate your machine smoothly and at a ground speed slow enough to insure complete control at all times. Avoid erratic operation and excessive speed.
47. Sharp turns on any terrain may cause loss of control. Reduce speed and use caution when making sharp turns.
48. Do not stop or start suddenly when going uphill or downhill. Avoid uphill starts. If machine is stopped going up a slope, turn the attachment off and back slowly down the slope keeping the machine in gear. Do not stop or change gears (speed) on slopes.
49. Know the terrain on which you are working. Find hidden obstacles by walking through and inspecting the area prior to operating your equipment in that area. Plainly mark obstacles, such as rocks, ruts or holes and stay well clear of these obstacles when operating.
50. While operating, stay alert for holes, rocks or roots, which may cause damage to equipment or upset. Keep at least 3 ft. away from drop-offs, ditches, creeks, culverts, washouts and public highways.
51. Exercise care when mowing around a fixed object to prevent the equipment or attachment from striking the object. When mowing never deliberately run over any foreign object.
52. Areas wet with dew, rain or snow will be more slippery than when dry. Areas covered with loose gravel are more slippery than firm dry ground. Greater stopping distances are required in these slippery areas.
53. Learn to expect changes in operating conditions. Adding or removing attachments or weight to your equipment will make your machine perform differently. Rain, snow, loose gravel, wet grass, etc., change the tractive

## STABILITY / TIP OVER / TRACTION

# SAFE OPERATING PRACTICES

conditions of the terrain requiring changes in your operating technique, which may include a decision not to operate on that terrain.

**54.** Use care when pulling loads or using heavy equipment.

- A. Use only approved drawbar hitch points.
- B. Limit loads to those you can safely control.
- C. Do not turn sharply. Use care when backing.
- D. Use counterweight(s) or wheel weights when suggested in operator's manual.

## ATTACHMENT USE

**55.** When using attachments never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.

**56.** When using machine with mower:

- A. Mow only in daylight or in good artificial light.
- B. Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- C. Shut engine off when unclogging chute.
- D. Check blade mounting bolts for proper tightness at frequent intervals.

**57.** Keep hands and feet away from rotating blade(s) underneath mower deck. Never place foot on ground when mower is engaged or when mower is in motion.

**58.** DO NOT operate mower attachment without the chute deflector or complete bagger in place.

**59.** Exercise care while maneuvering with grass catcher. Front to rear stability may change.

**60.** When using machine with snowthrower and auger becomes plugged or jammed:

- A. Declutch snowthrower and stop tractor engine immediately.
- B. Disconnect spark plug wire(s).
- C. Clear snow from discharge chute if plugged.
- D. If auger is jammed, remove foreign object and repair any damage to snowthrower before continuing.
- E. Reconnect spark plug wire(s) and resume operation.

**61.** Never permit anyone to stand near snowthrower auger or discharge opening. Objects may be present in snow, which when thrown, could cause injury.

**62.** When using snow/dozer blades:

- A. Avoid hitting solid objects. This can damage blade and injure operator.
- B. Always travel at a safe, slow speed.

**63.** Keep all persons a safe distance away when operating tillers. Always disengage the PTO, lower the attachment and remove the ignition key before making any adjustments.

**64.** If tiller starts to push tractor, disengage PTO clutch immediately.

**65.** Use chains, counterweight(s) or wheel weights when suggested in the operator's manual.

## MAINTENANCE

**66.** Keep all nuts, bolts, fasteners and screws tight to be sure equipment is in safe working condition and check them frequently. Repair or replace worn, damaged, distorted or broken parts as needed.

**67.** Keep vehicle and attachments in good operating condition and keep safety devices in place and working.

**68.** Under normal usage, grass catcher bag material is subject to deterioration and wear. It should be checked frequently to determine need for bag replacement.

**69.** Use only genuine Wheel Horse replacement parts to assure that original standards are maintained.

**70.** Shields, deflectors, switches, blade controls and other safety devices must be in their proper position and functional.

**71.** Do not operate without muffler or tamper with the exhaust system. Damaged mufflers or spark arresters can create a fire hazard. Periodically inspect and replace if necessary.

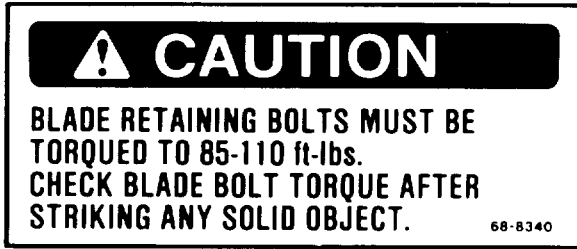
**72.** If equipment begins to vibrate abnormally, disengage power to attachments and stop engine at once. Repair any damage before starting or continuing operation.

**73.** Periodically inspect all shafts, levers, friction devices and other moving parts subject to wear. Make required adjustment or replace these parts if damaged, distorted or broken, or as soon as wear affects the normal operation of the vehicle or attachment. DO NOT operate equipment that is not functioning properly.

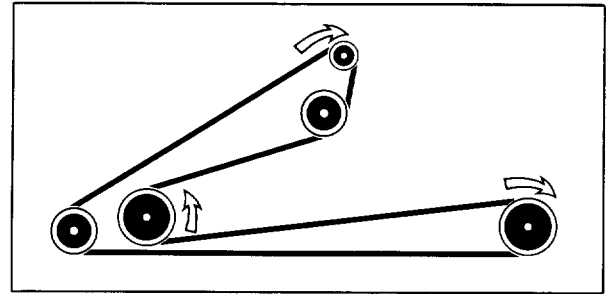
# SAFETY AND INSTRUCTION DECALS



The following decals are installed on the machine. If any become damaged or illegible, replace it. Replacement can be ordered from your Authorized Toro Dealer.



ON RIGHT SIDE OF CUTTING UNIT  
(Part No. 68-8340)



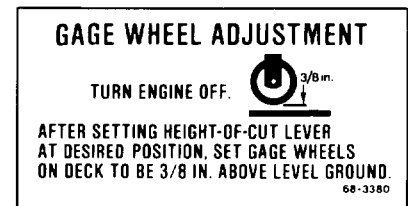
CENTER OF MOWER DECK  
(Part No. 72-7760)



UNDER BOTH SHIELDS  
(Part No. 68-3660)



ON BOTH SIDES  
OF CUTTING UNIT  
(Part No. 43-8480)



ON LEFT SIDE OF  
MOWER DECK  
(Part No. 68-3380)



ON BOTH SIDES OF CUTTING UNIT  
(Part No. 72-7890)

## SPECIFICATIONS

### CUTTING UNIT

**Height-of-Cut:** Adjustable from 1-1/2" to 4-1/2" in 1/2" increments.

**Cutter Blades:** Three heat treated steel blades, (2) 23 in. long and (1) 10-1/2 in. long.

**Width of Cut:** 48"

## LOOSE PARTS

**Note:** Use this chart as a checklist to assure all parts have been received. Without these parts, total set-up cannot be completed.

DESCRIPTION	QTY.	USE
Flotation Spring	1	Use when mounting deck.
Grass Shield	1	Mount to cutting deck and rider.
Hair Pin Cotter	2	
Belt	1	
Operator's Manual	1	Read before operating.
Registration Card	1	Fill out and return to Toro.

# SET-UP INSTRUCTIONS

## INSTALL FLOTATION SPRING (Fig. 1)

**Note:** The HMR 1600 Rider is set up at the factory to accommodate a 52" Cutting Deck. Therefore, when a 48" deck is to be installed, the red flotation spring, located on left side of rider, must be changed.

1. Remove (4) screws securing left fender to rider body.
2. Position the height-of-cut lever in the highest height setting.
3. Unhook the red flotation spring from left side of rider suspension and rider frame. Install new black spring (included with deck).
4. Reinstall fender with screws previously removed.

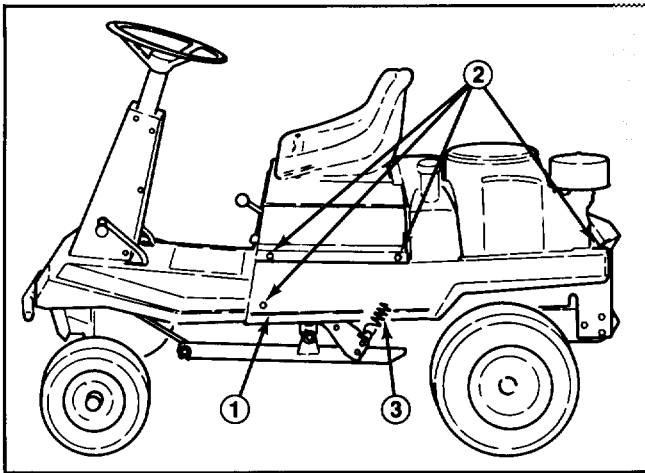


Figure 1

1. Left fender 2. Mounting screw 3. Flotation spring

## INSTALL CUTTING DECK (Fig. 2)

1. Remove (4) clevis pins and cotter pins from deck hanger brackets on cutting deck.
2. Insure height-of-cut lever is in the highest height setting.
3. Lock parking brake and slide deck under rider.
4. Position the cutting deck so the hanger bars bisect the deck hanger brackets on each side of deck. Lower the height-of-cut lever to its lowest height setting.



**CAUTION**

Suspension bars are spring loaded.  
Use caution when installing deck.

5. Route belt around deck pulley and engine pulley.
6. Starting with the front, pull down on each hanger bar while lifting deck enough to install the clevis pins into the bracket holes. Secure with cotter pins.

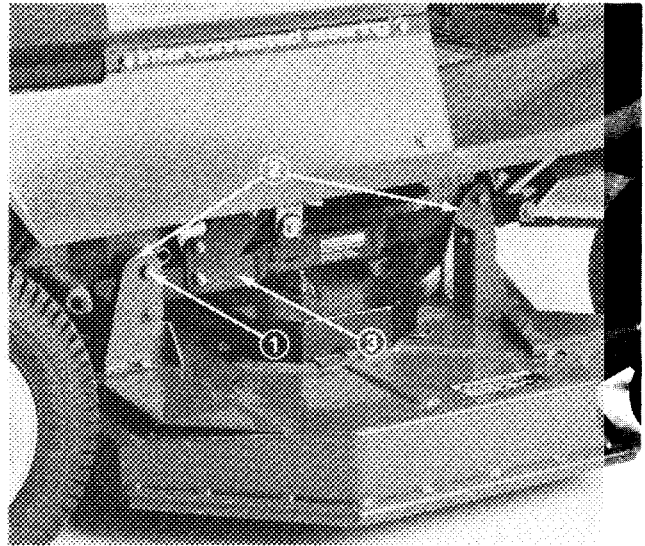


Figure 2

1. Clevis pin & cotter pin  
2. Hanger bracket  
3. Hanger bar

## INSTALL DECK TENSION RODS (Fig. 3 & 4)

**Note:** Deck tension rods and mounting parts are shipped with rider.

1. Thread (2) jam nuts onto each deck tension rod (Fig. 3).

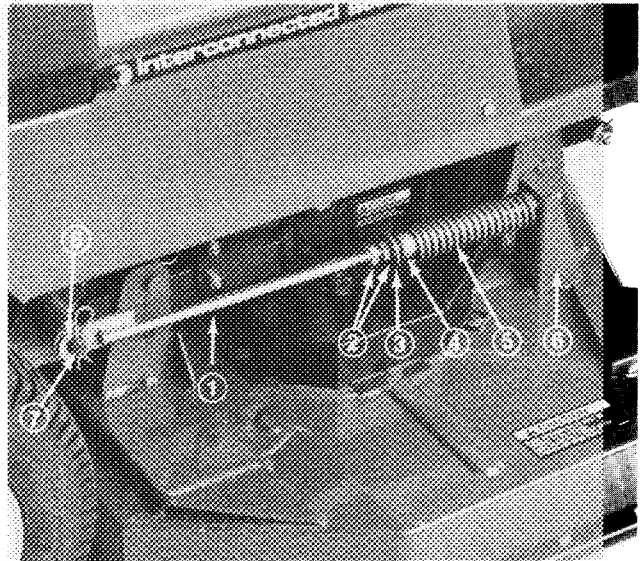


Figure 3

1. Deck tension rod 5. Spring  
2. Jam nuts 6. Deck bracket  
3. Washer 7. Rider post  
4. Spacer 8. Washer & hair pin cotter

# SET-UP INSTRUCTIONS

2. Slide washer, spacer and spring onto deck tension rod.

3. Insert front end of rod into bracket on deck and rear end onto post on rider frame. Secure rear end on post with a washer and cotter pin (Fig. 3).

**Note:** Rear end of rod to be positioned on post with welded bracket on inside of rod as shown in Fig. 3.

4. To tension belt, tighten front jam nuts on deck tension rods equally until springs are compressed to a length  $3/16$ " longer than spacers inside of springs. Secure rear jamnuts.

**Note:** Check position of tension rods. Both rods are to extend equally through deck brackets within  $1/4$ " per side in order to prevent binding on hanger bars. If an adjustment is required, readjust jam nuts to equalize rods.

## INSTALL GRASS SHIELD

1. Insert front of grass shield onto mounting pins on rear of cutting deck (Fig. 4). Secure shield to deck pins with (2) hair pin cotters.

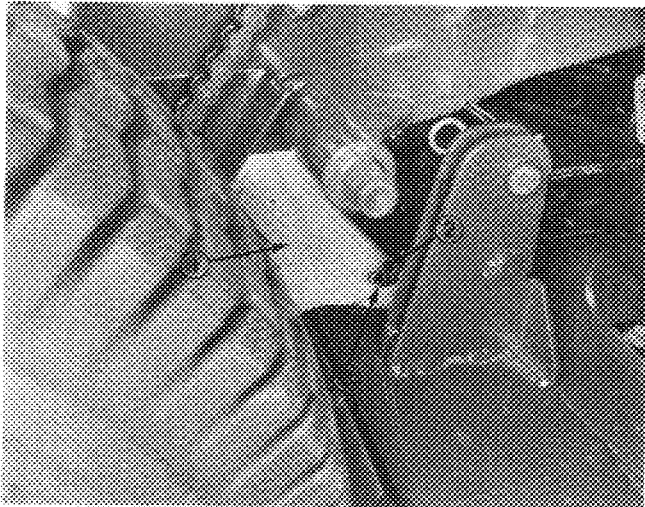


Figure 4

1. Grass shield
2. Mounting pin (2)
3. Hair pin cotter (2)

2. Secure rear of grass shield to outer ends of rear axle by snapping straps (Fig. 5).

**Note:** Make sure both snaps on each side are fastened.

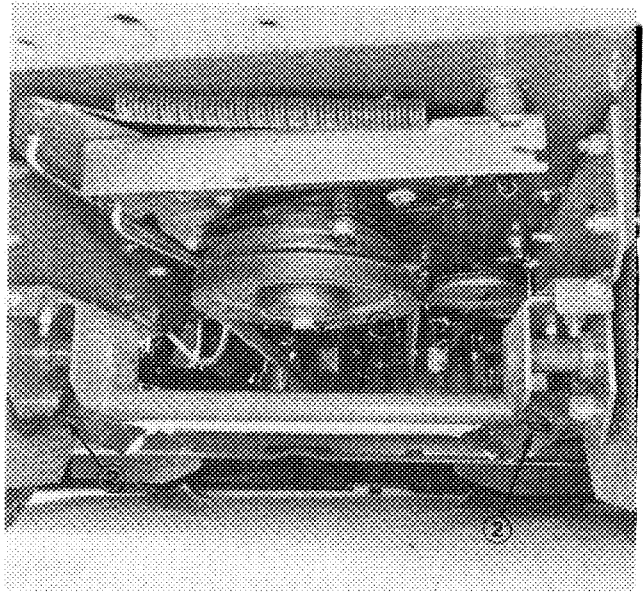


Figure 5

1. Rear axle
2. Snapped grass shield straps

## LEVEL CUTTING DECK

Refer to Leveling Cutting Deck, steps 9 and 10, pages 12 & 13.

# BEFORE OPERATING

## ADJUSTING HEIGHT-OF-CUT (Fig. 6)

The height-of-cut may be set in one of seven positions from approximately 1-1/2 - 4-1/2 inches.

Deck Lever Selection	Height-of-Cut Setting (Approx.)
1	1-1/2 in.
2	2 in.
3	2-1/2 in.
4	3 in.
5	3-1/2 in.
6	4 in.
T (TRANSPORT)	4-1/2 in.

1. Assure the deck engagement switch is in DIS-ENGAGE position.
2. Move height-of-cut control on rider into desired setting for high or low cutting.

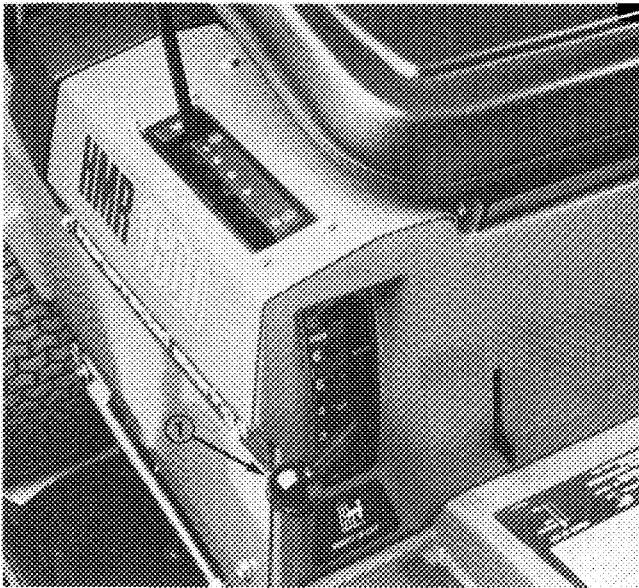


Figure 6

1. Height-of-cut control lever

## ADJUST GAGE WHEELS (Fig. 7)

With rider on a flat surface, tires inflated to 14 psi and height-of-cut in desired setting, gage wheels are to be positioned so they are approximately 1/4" to 3/8" above the ground.

**IMPORTANT:** It is important that gage wheels be adjusted each time height-of-cut is changed, so that the deck will follow the contour of the ground and does not scalp the turf.

1. Remove hairpin cotter and clevis pin securing gage wheel to cutting deck.
2. Move gage wheel up or down to required setting and reinstall clevis pin and cotter pin.
3. Reposition gage wheels each time height-of-cut setting is changed.

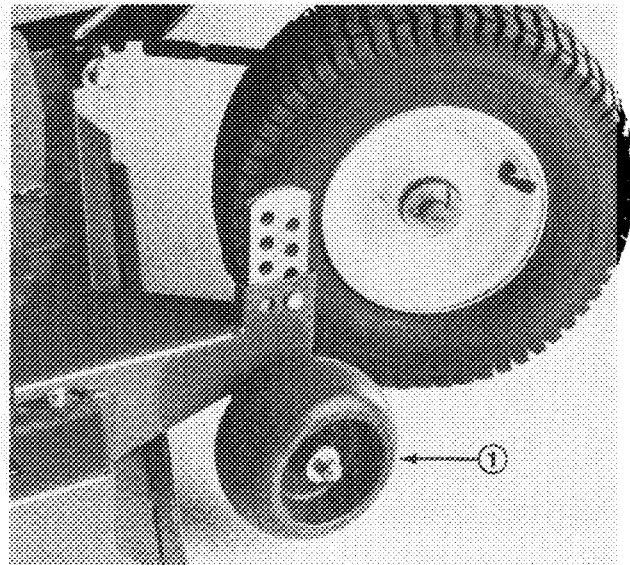


Figure 7

1. Gage wheel

# LUBRICATION MAINTENANCE

## GREASE BLADE SPINDLE BEARINGS (Fig. 8)

After every 25 hours of operation, the cutting unit must be removed and blade spindles greased with No. 2 General Purpose Lithium Grease. Lubricate bearings more frequently when conditions are dusty and dirty.

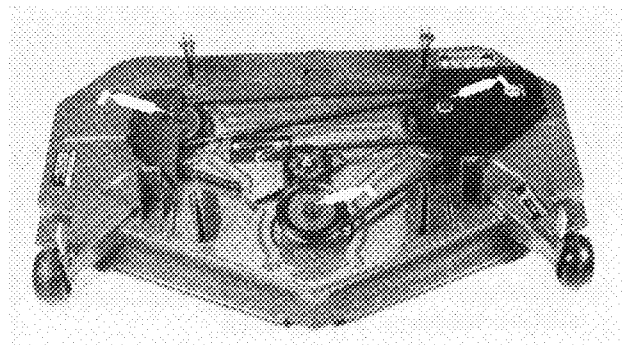
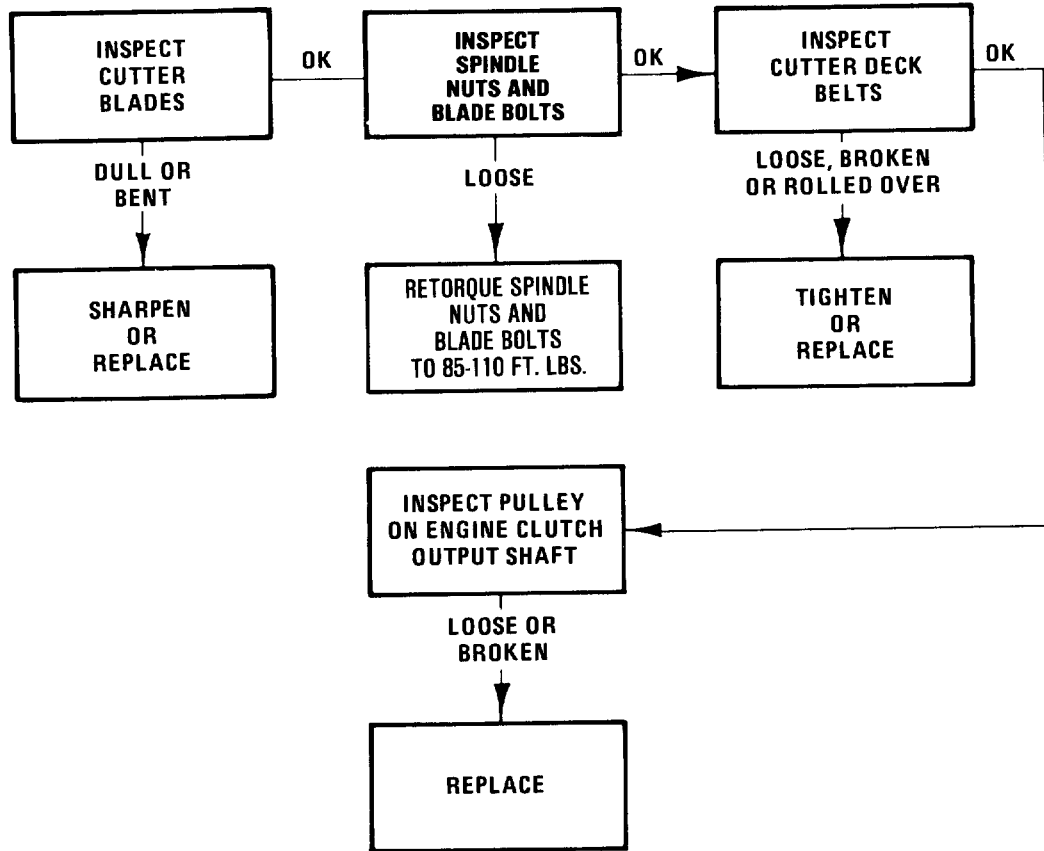


Figure 8

# CUTTING UNIT MAINTENANCE TROUBLESHOOTING

## UNIT WILL NOT CUT OR CUTS POORLY



## CUTTING UNIT MAINTENANCE

### REMOVING CUTTING DECK (Fig. 9)

1. Set height-of-cut lever in lowest position.
2. Remove washer and cotter pin securing rear of each tension rod to rider post and disconnect rod. Use caution — spring is under tension.
3. Note right and left rods, so they can be reinstalled on the same side.
4. Remove (2) cotter pins and clevis pins securing front deck hangers to hanger bars and lower front of deck to ground.

5. Push deck rearward until it slides off back of lift bars. Raise height-of-cut lever to highest position and slide deck out from under rider.

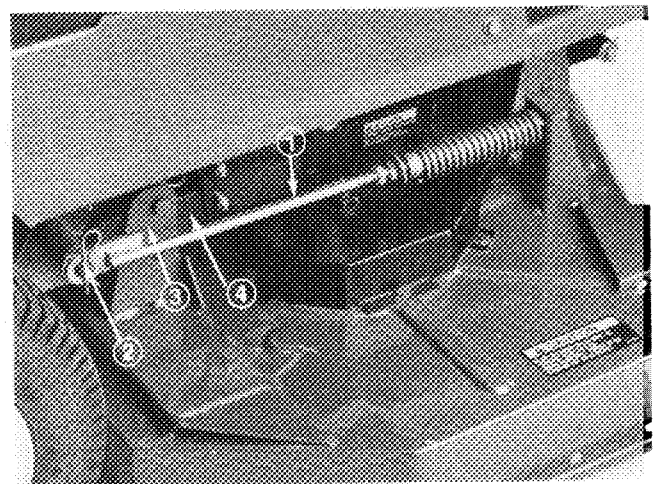


Figure 9

1. Deck tension rod
2. Washer & cotter pin
3. Rear deck hangers
4. Lift bar



### CAUTION

Suspension bars are spring loaded. Use caution when removing deck.

# CUTTING UNIT MAINTENANCE

## CLEANING MOWER HOUSING

To assure a good quality of cut and proper deck operation, underside of mower housing, inside discharge area and top of housing must be kept clean. Whenever the mower housing is removed, clean deck with a scraper and hose. Remove covers and clean around pulleys and belts.

## REMOVING CUTTER BLADE (Fig. 10)

The blade must be replaced if a solid object is hit, the blade is out-of-balance or if the blade is bent. Always use genuine TORO replacement blades to be sure of safety and optimum performance. Never use replacement blades made by other manufacturers because they could be dangerous.



### WARNING

Do not try to straighten a blade that is bent, and never weld a broken or cracked blade. Always use a new blade to assure safety.

1. Grasp end of blade using a rag or thickly padded glove. Remove bladebolt, lockwasher, and blade from spindle shaft.

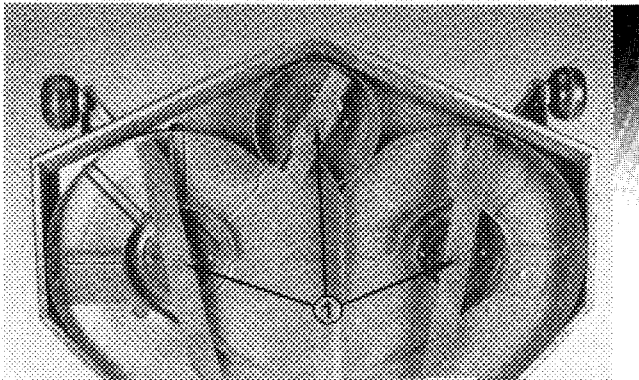


Figure 10

1. Lockwasher and blade bolt

2. Install blade — sail facing up toward cutting unit — with lockwasher and bladebolt. Tighten to 85-110 ft-lb.

**IMPORTANT:** When removing or installing blades, make sure blades are not reversed because they rotate in opposite directions and will not cut properly.

## CHECKING FOR BENT BLADE (Fig. 11)

1. Rotate blade until the ends face forward and backward. Measure from inside of cutting unit to

cutting edge at front of blade, and remember this dimension.

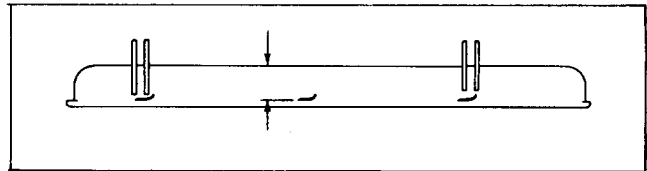


Figure 11

2. Rotate opposite end of blade forward. Measure between the cutting unit and cutting edge of blade at the same position as in step 1. The difference between dimensions obtained in steps 1 and 2 must not exceed 1/8 of an inch (3 mm). If dimension exceeds 1/8 of an inch (3 mm), replace the blade because it is bent: refer to Removing Cutter Blade, page 10.

## CHECKING SAIL AND SHARPENING CUTTER BLADE (Fig. 12 & 13)

Two areas must be considered when checking and servicing the cutter blade: one area is the sail, the other is the cutting edge. Both cutting edges and the sail, which is the turned up metal opposite the cutting edge, contribute to a good quality-of-cut. The sail is important because it pulls grass up straight, thereby producing an even cut. However, the sail will gradually wear down during operation, and this condition is normal. As the sail wears down, the quality-of-cut will degrade somewhat, although the cutting edges are sharp. The cutting edges of the blade must be sharp so the grass is cut rather than torn. A dull cutting edge is evident when tips of the grass appear brown and shredded. Sharpen the cutting edges to correct this condition.



### DANGER

If blade is allowed to wear, a slot will form between the sail and flat part of the blade (Fig. 12). Eventually a piece of the blade may break off and be thrown from under the housing, possibly resulting in serious injury to yourself or bystander.

1. Examine cutting ends of the blade carefully, especially where the flat and curved parts of the blade meet (Fig. 12-1). Since sand and abrasive material can wear away the metal that connects the flat and curved parts of the blade, check the blade before using the mower. If wear is noticed (Fig. 12-2), replace the blade.

# CUTTING UNIT MAINTENANCE

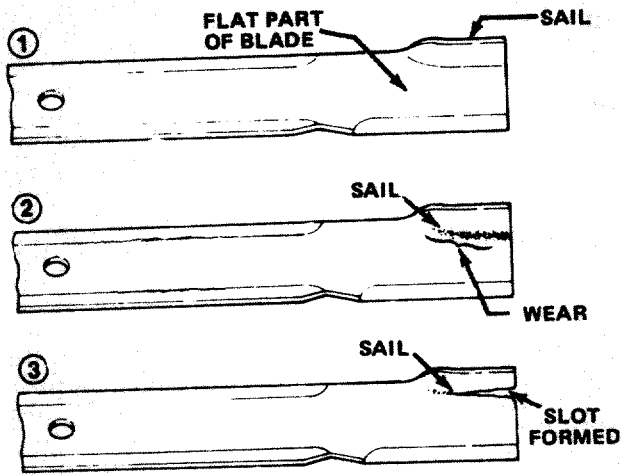


Figure 12

2. Inspect cutting edges of all blades. Sharpen the cutting edges if they are dull or nicked. Sharpen only the top of the cutting edge and maintain the original cutting angle to make sure of sharpness (Fig. 13). The blade will remain balanced if same amount of metal is removed from both cutting edges.

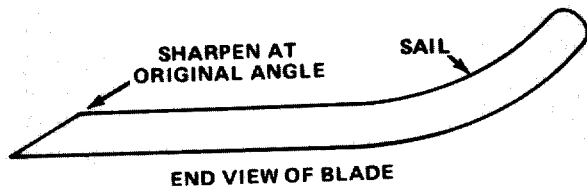


Figure 13

**Note:** Remove the blades and sharpen them on a grinder: refer to Removing Cutter Blade, steps 1 and 2, page 11. After sharpening the cutting edges, reinstall blade with anti-scalp cup, lockwasher and bladebolt. Blade sails must be on top of blade. Tighten to 85-110 ft-lb.

## LEVELING CUTTING DECK

If one cutter blade cuts lower than the others, correct as follows:

1. Check to make sure front and rear tires are inflated to 14 psi.
2. Raise height-of-cut to the 3-1/2" or 4 in. position: refer to Adjusting Height-of-cut, page 7.
3. Rotate outside blades (longer blades) so tips line up with one another. Tips of the adjacent blades must be within 1/8 in. of each other. If tips are not within 1/8 in. of each other, proceed to step 4 and add shims between spindle housing and bottom of cutting unit.

4. Position outside blades in the "A" position (Fig. 14) and measure from level surface to the bottom of the tip end of each blade (Fig. 15).

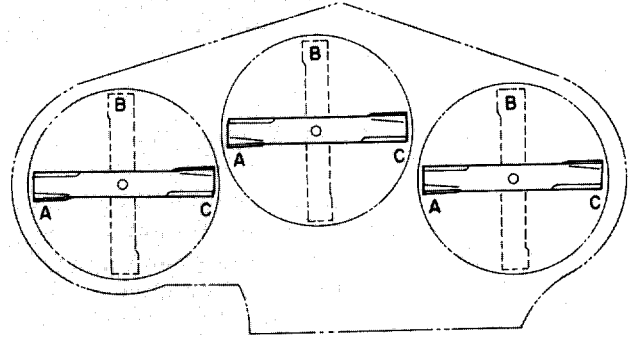


Figure 14

5. Note measurement attained at "A", rotate blades to "B" position (Fig. 14), measure distance of all blades to level surface and note dimensions (Fig. 15).
6. Rotate blades to "C" position, measure and note distance measures (Fig. 14, 15).

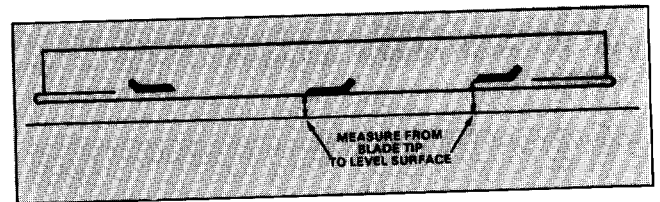


Figure 15

7. Compare measurements at various positions. All dimensions must be equal within 1/4 in. from one another. If difference exceeds 1/4 in., proceed to step 8 and 9 and add shims between spindle housing and bottom of cutting unit.

8. Remove bolts and nuts from outer spindle in the area where shims must be added. To raise or lower the blade, add or remove a shim, Part No. 3256-24 between spindle housing and bottom of cutting unit. Continue checking alignment of blades and adding shims until tips of blades are within the required dimension.

9. Position center blade in all three positions (A, B & C) and check measurement from level surface to bottom of blade tip. The lowest tip of center blade must be within 3/16" (5 mm) maximum of the lowest tip of outside blades.

10. Equalize side to side measurements as follows:

- A. Set height-of-cut lever in No. 3 position and make sure all tires are inflated to 14 psi.
- B. Measure the blade tip height at outermost

# CUTTING UNIT MAINTENANCE

end of each outer blade. Rotate each blade 180° and measure the blade tip height of opposite end of blade. Position lowest end of each blade in outermost position.

- C. Compare outermost blade tip heights. Measurements should be within 3/16 inch of one another.
- D. If blade tip heights are not within 3/16 inch, level cutting unit by adjusting height-of-cut link connected to right hand lift bar as follows:
- E. Block up deck and remove cotter pin and washer securing link to lift bar (Fig. 16).

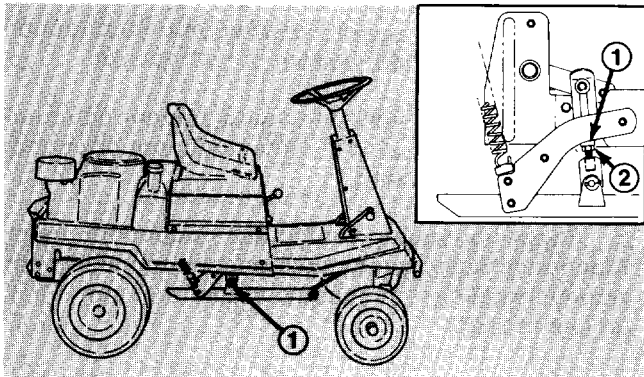


Figure 16

- 1. H.O.C. link
- 2. Jam nut

- F. Loosen jam nut on link and rotate link to adjust up or down.
  - G. Tighten jam nut, reinstall link to lift bar with washer and cotter pin.
  - H. Recheck adjustment.
10. To adjust cutting deck front to back.
- A. Set height-of-cut lever in No. 3 position and make sure all tires are inflated to 14 psi.
  - B. Measure blade tip height with tip of blade in farthest forward position. Rotate blade 180° and measure same blade tip in rearward position.
  - C. Front measurement should be 1/8" to 3/8" lower than rear measurement. If an adjustment is required proceed to step D.
  - D. Block up deck, remove cotter pin and washer from one of the front link yokes (Fig. 17).
  - E. Loosen jam nut and rotate front link yoke to adjust up or down.
  - F. Reinstall yoke, tighten jam nut and repeat procedure on opposite side.

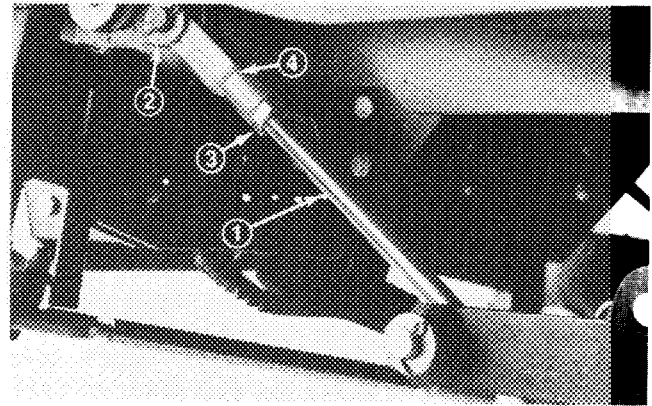


Figure 17

- 1. Front link
- 2. Washer & cotter pin
- 3. Jam nut
- 4. Yoke

- G. Make sure both links are adjusted the same number of turns.
- H. Recheck adjustment.

## ADJUSTING IDLER PULLEY

The idler pulley applies force against the belt so power can be transmitted to the blade pulleys. If the idler is not tensioned against the belt with sufficient force, maximum power will not be transmitted to the pulleys.

- 1. Remove cutting deck, refer to Removing Cutting Deck, page 10.
- 2. Remove nut securing spring anchor to capscrew in housing (Fig. 18). Lift anchor off capscrew and pull to increase belt tension. Correct belt tension is achieved when approximately 30-40 lbs. of force is applied to spring.

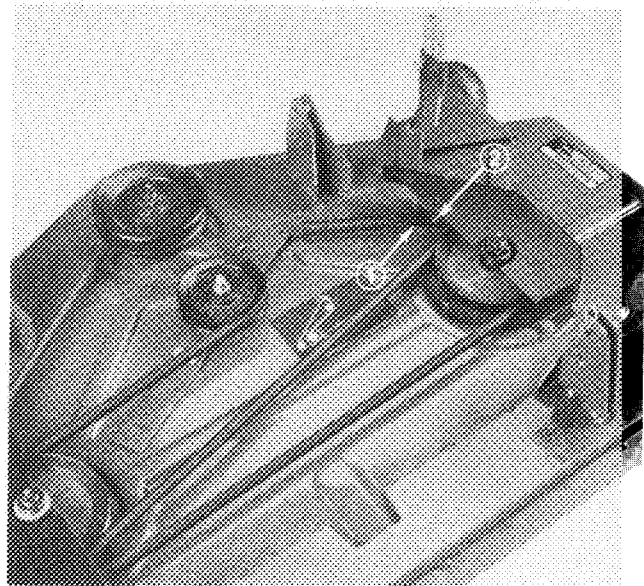


Figure 18

- 1. Spring anchor
- 2. Nut

# CUTTING UNIT MAINTENANCE

3. Reinstall spring anchor on capscrew in appropriate mounting hole and install nut.
4. Reinstall cutting deck.

## REPLACING DRIVE BELT

The blade drive belt, tensioned by the spring loaded idler, is very durable. However, after many hours of use, the belt will show signs of wear. Signs of a worn belt are: squealing when belt is rotating, blades slipping when cutting grass, frayed edges, burn marks and cracks. Replace the belt if any of these conditions are evident.

1. Remove cutting deck, refer to Removing Cutting Deck, page 10.
2. Remove mounting screws securing left and right covers to top of cutting unit.
3. Remove nut securing spring anchor to capscrew in housing (Fig. 18). Lift anchor off capscrew and allow belt to relax.
4. Remove worn belt from pulleys.
5. Install new belt around spindle pulleys and idler pulley (Fig. 19).

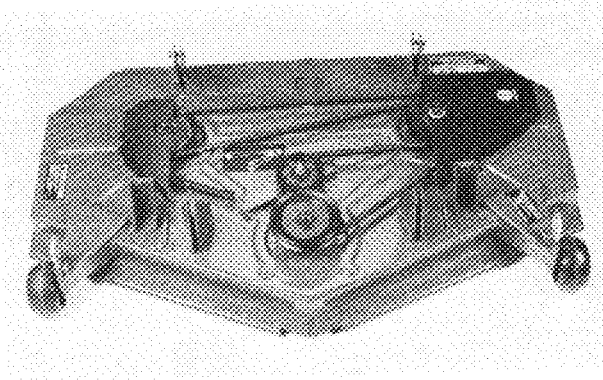


Figure 19

6. Readjust belt tension; refer to Adjusting Idler Pulley, page 13.
7. Reinstall cutting deck to rider, refer to Installing Cutting Deck, page 7.

## REPLACING SPINDLE PULLEY

1. Remove drive belts, refer to Replacing Drive Belt page 14.
2. Remove locknut retaining spindle pulley on spindle shaft. Slide pulley off shaft, which will allow spindle shaft to be removed from spindle housing.
3. Remove capscrews and nuts holding spindle housing assembly against cutting unit. Slide spindle housing assembly out bottom of cutting unit.
4. If spindle shaft will be replaced, remove blade bolt securing blade to spindle. Otherwise, the blade may be left on spindle shaft.
5. Reposition spacer and bearing in spindle housing. Make sure bearings are positioned open side toward spindle housing and hole in spacer is aligned with groove in shaft.
6. Reinstall spindle in spindle housing. Make sure bearings and spacers are properly positioned on shaft.
7. Slide pulley and end of spindle assembly through hole in cutting unit. Mount spindle assembly in place with capscrews and nuts.
8. Push pulley onto spindle shaft, and retain parts together with locknut. Tighten nut to 85-110 ft-lb. and rotate spindle shaft to be sure shaft rotates freely.
9. Grease bearing with Mobilux No. 2 or general purpose Lithium base grease until grease is visible at lower or upper seal.
10. Reinstall belts and covers.

A separate parts manual for your Toro Wheel Horse product can be obtained by completing the attached form below. You will receive an invoice with manual.

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