

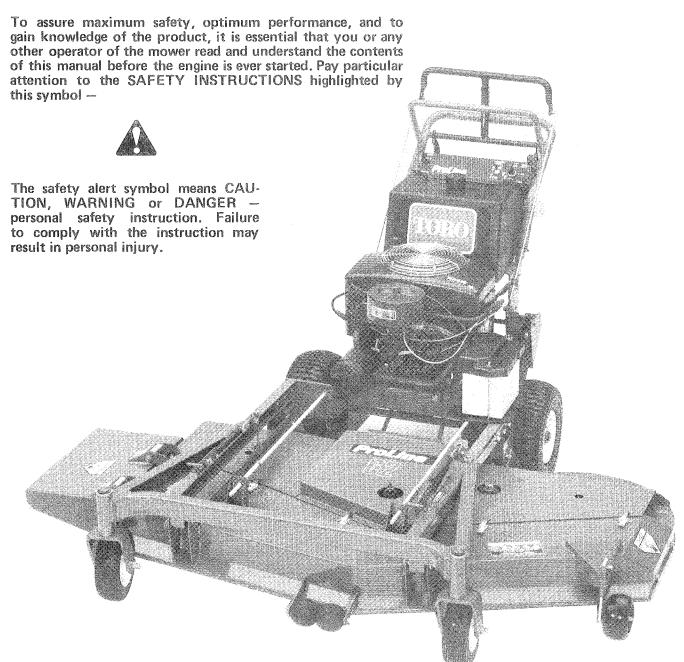
MODEL NO. 30162 - 00001 & UP

OPERATOR'S MANUAL

62" CUTTING DECK

FOR COMMERCIAL WALK MOWER





FOREWORD

The 62" cutting deck has advanced concepts in engineering, design and safety; and if maintained properly, will give excellent service.

Since it is a high-quality product, Toro is concerned about the future use of the machine and safety of the user. Therefore, read this manual to familiarize yourself with proper set-up, operation and maintenance instructions. The major sections of the manual are:

1. Safety Instructions

3. Before Operating

5. Maintenance

2. Set-up Instructions

4. Lubrication

Certain information in this manual is emphasized. DANGER, WARNING and CAUTION identify personal safety-related information. IMPORTANT identifies mechanical information demanding special attention. Be sure to read this directive because it deals with the possibility of damaging a part or parts of the machine. NOTE identifies general information worthy of special attention.

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SAFETY INSTRUCTIONS



This safety alert symbol means CAUTION, WARN-ING or DANGER — "personal safety instruction". Read and understand the instruction because it has to do with

safety. Failure to comply with the instruction may result in personal injury.

Improper use or maintenance of the machine can result in injury. To reduce the potential for injury, comply with the following safety instructions.

BEFORE OPERATING

1. Read and understand the contents of this Operator's Manual before operating the machine. Become familiar with all controls and know how to

stop quickly. A free replacement manual is available by sending complete Model and Serial Number to:

The Toro Company 8111 Lyndale Avenue South Minneapolis, Minnesota 55420

- 2. Do not allow children to operate the machine. Do not allow adults to operate the machine without proper instruction.
- 3. Before attempting to start engine, shift into neutral, move deck engagement switch into DIS-ENGAGE position and lock parking brake.
- 4. Remove all debris or other objects that might be picked up and thrown by the cutter blades. Keep all bystanders away from the mowing area.
- 5. Keep all shields and safety devices in place. If a shield, safety device or decal is defective or damaged, repair or replace it before operation is commenced. Also tighten any loose nuts, bolts and screws to assure machine is in safe operating condition.

SAFETY INSTRUCTIONS

- 6. Do not operate machine while wearing sandals, tennis shoes, sneakers or shorts. Also, do not wear loose fitting clothing which could get caught in moving parts. Always wear long pants and substantial shoes. Wearing safety glasses, safety shoes and a helmet is advisable and required by some local ordinances and insurance regulations.
- 7. Fill fuel tank with gasoline before starting the engine. Avoid spilling gasoline. Since gasoline is flammable, handle it carefully.
 - A. Use an approved gasoline container.
 - B. Do not fill tank while engine is hot or running.
 - C. Do not smoke while handling gasoline.
 - D. Fill fuel tank outdoors and up to about one inch (25 mm) from top of the tank, not the filler neck.
 - E. Wipe up any spilled gasoline.
- 8. Start engine when parking brake is set, blade is disengaged, and transmission is in neutral.

WHILE OPERATING

- 9. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.
- 10. Using the machine demands attention, and to prevent loss of control:
 - A. Mow only in daylight or when there is good artificial light.
 - B. Watch for holes or other hidden hazards.
 - Do not drive close to a sand trap, ditch, creek or other hazard.
 - D. Reduce speed when making sharp turns and when turning on hillsides.
- 11. The grass deflector must always be installed and in down position on the side discharge cutting unit. If the cutting unit discharge area ever plugs, shut engine off before removing the obstruction.
- 12. Never raise the cutting unit while the blades are rotating.
- 13. If the cutting blades strike a solid object or the machine vibrates abnormally, shut engine off. Remove high tension wire from spark plug to prevent possibility of accidental starting. Check cutting unit and traction unit for damage and defective parts. Repair any damage before restarting the engine and operating the cutting unit. Be sure blades are in good condition and blade bolts are tight.
- 14. Cut grass slopes carefully. Do not start, stop, or turn suddenly.

- 15. Do not touch engine or muffler while engine is running or soon after it is stopped. These areas could be hot enough to cause a burn.
- 16. Before leaving the operator's position behind handle or leaving mower unattended, shift transmission into NEUTRAL, apply parking brake, move deck engagement switch to OFF, and shut OFF engine.

MAINTENANCE

- 17. Disconnect high tension wire from spark plug to prevent accidental starting of the engine when servicing, adjusting or storing the machine.
- 18. If mower must be tipped to perform maintenance or an adjustment, drain gasoline from fuel tank and oil from crankcase.
- 19. When driving unit forward, always use upper "Forward" traction drive handle. When backing up, always use lower "Reverse" traction drive handle.
- 20. Perform only those maintenance instructions described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Toro ProLine Service Dealer.
- 21. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.
- 22. Be sure machine is in safe operating condition by keeping nuts, bolts and screws tight. Check the blade mounting bolts and nuts frequently to be sure they are tightened to specification.
- 23. If the engine must be running to perform a maintenance adjustment, keep hands, feet, clothing and other parts of the body away from the cutting unit blades and other moving parts.
- 24. Do not overspeed the engine by changing governor settings. To be sure of safety and accuracy, have an Authorized TORO ProLine Service Dealer check maximum engine speed with a tachometer.
- 25. Engine must be shut off before checking oil or adding oil to the crankcase.
- 26. To ensure optimum performance and safety, always purchase genuine TORO replacement parts and accessories to keep the Toro all TORO. NEVER USE "WILL-FIT" REPLACEMENT PARTS AND ACCESSORIES MADE BY OTHER MANUFACTURERS. Look for the TORO logo to assure genuineness. Using unapproved replacement parts and accessories could void the warranty of The Toro Company.

SAFETY AND INSTRUCTION DECALS



The following decals are installed on the machine. If any become damaged or illegible, replace it. The decal part number is listed in your parts catalog. Replacement can be ordered from your Authorized Toro Distributor.

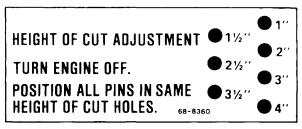


ON BOTH SIDES OF CUTTING UNIT (Part No. 66-1340)



BLADE RETAINING BOLTS MUST BE TOROUED TO 85-110 ft-lbs. CHECK BLADE BOLT TOROUE AFTER STRIKING ANY SOLID OBJECT.

> ON REAR OF CUTTING UNIT (Part No. 68-8340)



ON BOTH SIDES OF **CUTTING UNIT** (Part No. 68-8360)



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

68-8340

DO NOT OPERATE THIS UNIT UNLESS ALL SHIELDS ARE FIRMLY SECURED.

ON CENTER OF DECK, UNDER COVERS (Part No. 67-5360)

A WARNING

DEFLECTOR IS NOT IN PLACE DO NOT OPERATE. 66-6380

> **UNDER DEFLECTOR** (Part No. 66-6380)

SPECIFICATIONS

CUTTING UNIT

Width of Cut: 61-5/8 in. (1.56 m).

Height-of-Cut: Adjustable from 1" to 4" (25 to

102 mm) in 1/2" (13 mm) increments.

Cutter Blades: Three heat treated steel blades, each 3/16 in. (4.8 mm) thick and 21-1/2 in. (55 mm) long.

Pneumatic Wheels: 8 in. (203 mm) dia. with grease-

able roller bearings. (inflation 10-15 P.S.I.)

Weight: 306 lb. (139 Kg).

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			
Flange Screws Flange Locknuts	6 6	Mount carrier. Frame to traction frame.			
Castor Wheel Assembly Thrust Washer Klip Ring Frame	2 8 2 1	Install in frame. Install on castor fork shafts. Install on top hole of castor shafts. Install on traction unit.			
Adjusting Shaft Jam Nuts Washer Spring Bushing	2 4 2 2 2	Mount Adjusting Shafts.			
Washer Hair Pin Cotter	2 2	Secure flotation spring cables to Cutting deck.			
Operator's Manual Registration Card	1 1				
Cushion Shim	3	Leveling rubber cushions on Cutting deck.			

SET-UP INSTRUCTIONS

INSTALL CASTOR WHEELS

1. Remove (4) clevis pins and hair pin cotters securing cutting unit to carrier frame. Remove carrier frame from cutting unit.

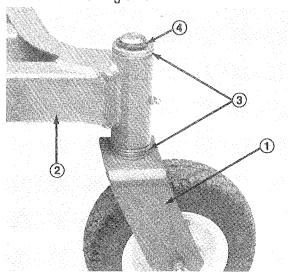


Figure 1

- 1. Castor wheel assembly
- 2. Frame
- 3. Thrust washers
- 4. Klip rings
- 2. Place two thrust washers on each castor wheel shaft (Fig. 1).
- 3. Insert shafts into carrier frame. Install two more thrust washers and secure with klip rings (Fig. 1).

MOUNT LIFT ARMS AND CARRIER FRAME TO TRACTION FRAME

1. Align lift arm mounting holes with mounting holes in traction frame. Secure each side with three flange screws and locknuts (Fig. 2). Bottom locknut to be positioned outside of frame. Torque fasteners to 60-80 ft.-lb. $(81-109 \text{ N}\cdot\text{m})$.

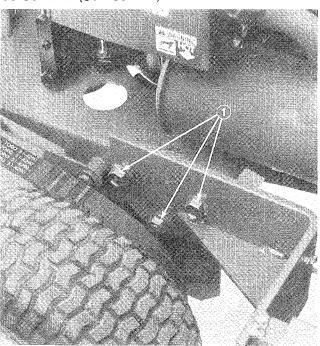


Figure 2

1. Flange screws and nuts

SET-UP INSTRUCTIONS

2. Slide carrier frame onto lift arms aligning mounting holes. Secure each side of carrier frame to lift arms with (3) 1/2 - 13 x 1-1/2" lg. capscrews. Torque capscrews to 70-80 ft-lb. (Fig. 3).

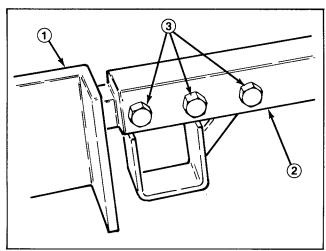


Figure 3

- 1. Lift arm
- 2. Carrier frame
- 3. Mounting capscrews
- 3. Mount cutting unit to carrier frame with (4) clevis pins and hair pin cotters (Fig. 7).

INSTALL DRIVE BELT

Note: To ease the installation of drive belt, belt cover may be removed.

1. Route belt around deck drive pulley and engine clutch pulley (Fig. 4). Make sure belt is between belt guides.

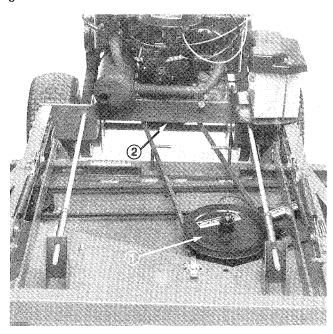


Figure 4

- 1. Drive pulley
- Clutch pulley
- 3. Belt guides

- 2. Thread (2) jam nuts on each adjusting shaft (approximately 9 inches) (Fig. 5).
- 3. Slide a washer, spring and bushing onto each adjusting shaft. Bushing to be positioned so flange end is against spring (Fig. 5).
- 4. Insert spring end of each adjusting shaft into hole in deck mounting bracket and other end of shaft into hole in carrier frame mounting tab. Small end of bushing to fit into hole in deck bracket (Fig. 5).
- 5. To tension belt, tighten front jam nut on each adjusting shaft until springs are compressed to a length of 5", measured between washer and bushing (Fig. 5). Secure rear jam nuts.

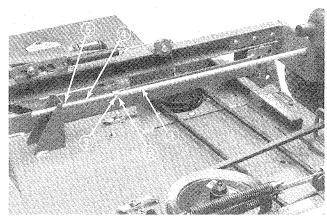


Figure 5

- Adjusting shaft
- 4. Spring
- Washer
- 5. Bushing
- Reinstall cover if previously removed.
- 7. Move traction adjustment bracket rearward into forward notch (Fig. 6).

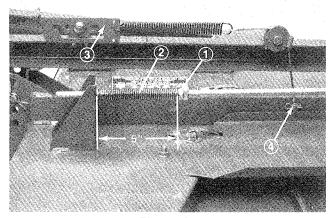


Figure 6

- 1. Front jam nut 2. Spring
- Tension adjustment bracket
- 4. Washer & hair pin cotter
- 8. Secure cable end to pin on deck support bar with a washer and hairpin cotter (Fig. 6). Repeat procedure on opposite side of deck.

BEFORE OPERATING

ADJUSTING HEIGHT-OF-CUT

The height-of-cut is adjustable from 1 to 4 inches (25 to 102 mm) in 1/2 inch (13 mm) increments by relocating four clevis pins in different hole locations to prevent any operating and cutting unit (Fig. 7).

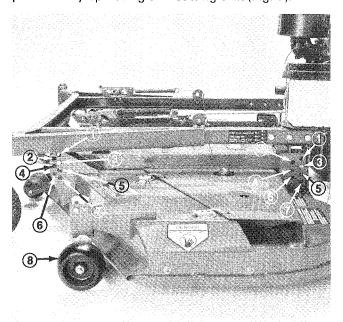


Figure 7

- 1. 1 in. (25 mm)
- 2. 1-1/2 in. (38 mm)
- 3. 2 in. (51 mm) 4. 2-1/2 in. (64 mm)
- 5. 3 in. (76 mm)
- 6. 3-1/2 in. (89 mm)
- 7. 4 in. (102 mm)
- 8. Gage wheel

Note: All four pins should be in identical hole locations to prevent any operating and cutting difficulties.

ADJUSTING ROLLERS

Note: If cutting unit is to be used in 1 in. (25 mm) or 1-1/2 in. (38 mm) height-of-cut setting, internal and external rear cutting unit rollers must be repositioned in the top bracket holes.

To adjust internal rollers:

- 1. Remove cotter pins from roller shafts.
- 2. Slide shafts out of lower bracket holes, align rollers with top holes and install shafts.
- 3. Install cotter pins to secure assemblies.

To adjust external rollers:

1. Remove capscrews and flange nuts securing roller bracket (Fig. 8) to deck.

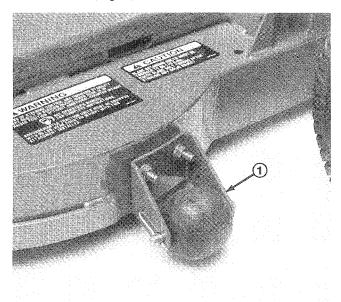


Figure 8

- 1. External roller
- 2. Move bracket to desired position and install capscrews and flangenuts.

ADJUST GAGE WHEEL

With cutting deck in desired height-of-cut setting, gage wheel is to be positioned so it is approximately 1/4" to 3/8" above the ground.

- 1. Remove hairpin cotter and clevis pin (Fig. 7) securing gage wheel to cutting deck.
- 2. Move gage wheel up or down to required setting and reinstall clevis pin and cotter pin.
- 3. Repsition gage wheel each time height-of-cut setting is changed.

OPERATING INSTRUCTIONS

GRASS DEFLECTOR



WARNING

The grass deflector (Fig. 9) is a safety device that diverts grass and other foreign objects being discharged downwardly. WE STRONGLY RECOM-MEND THAT THE DEFLECTOR BE IN ITS NORMAL OPERATING POSITION WHENEVER THE CUTTING UNIT IS ENGAGED. NEVER OPERATE CUT-TING UNIT WITH THE DEFLECTOR REMOVED FROM THE CUTTING UNIT OR TIED/BLOCKED IN A RAISED POSITION, SINCE THE BLADES COULD THEN THROW DEBRIS A CONSIDERABLE DISTANCE WITH SUFFICIENT FORCE TO CAUSE PER-SONAL INJURY OR DAMAGE TO PROPERTY. If the grass deflector is damaged, repair or replace the affected part(s).

NOTE

The deflector is spring loaded into its downward normal operating position, but the operator can temporarily swing it out of the way to facilitate loading in a trailer or when otherwise necessary.

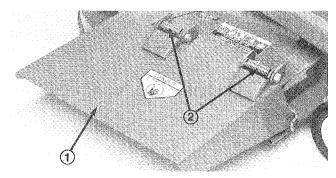


Figure 9

1. Grass deflector

2. Spring hinges

ADJUST FLOTATION SPRINGS

The cutting unit performs best when spring tension is adjusted so deck can easily float over the terrain, but still not bounce upward in uneven conditions. To adjust spring tension:

- 1. Check adjustment by operating the mower in an area similar to normal operating conditions.
- 2. If cutting unit tends to raise off turf, or bounces severely, stop the machine, engage parking brake, and stop the engine.
- 3. Raise height-of-cut to the 4" position or block the deck up to the highest position. Relieve spring tension by moving tension adjustment bracket rearward into forward notch.
- 4. Check each side of cutting deck to make sure they ride properly over turf.

LUBRICATION MAINTENANCE

GREASE BEARINGS AND BUSHINGS

The cutting unit must be lubricated regularly. If machine is operated under normal conditions, lubricate castor bearings, bushings and blade spindle bearings with No. 2 general purpose lithium grease or molybdenum base grease, after every 8 hours of operation or daily, whichever comes first (Fig. 10).

After every 50 hours of operation, apply a few drops of oil to flotation cable pulley bushings (Fig. 10).

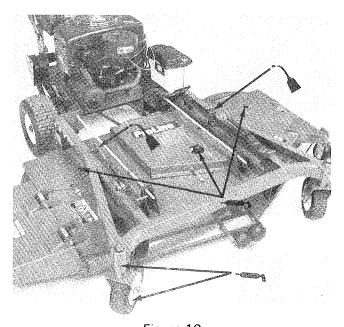
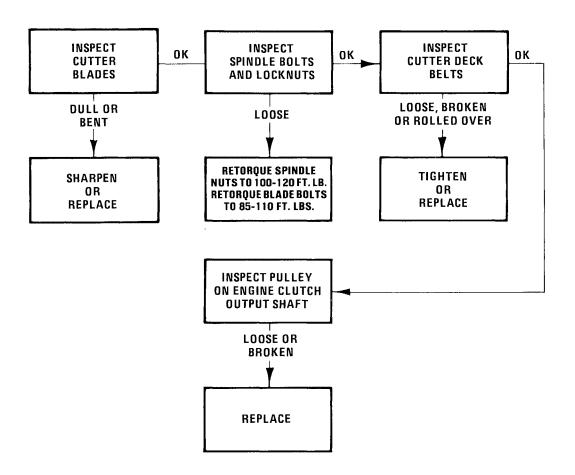


Figure 10

CUTTING UNIT MAINTENANCE TROUBLESHOOTING

UNIT WILL NOT CUT OR CUTS POORLY



CUTTING UNIT MAINTENANCE

SERVICING BUSHINGS IN CASTOR ARMS

The castor arms have bushings pressed into the top and bottom portion of the tube and after many hours of operation, the bushings will wear. To check the bushings, move castor fork back and forth and from side-to-side. If castor spindle is loose inside the bushings, bushings are worn and must be replaced.

- 1. Raise cutting unit so wheels are off floor and block it so it cannot fall accidentally.
- 2. Remove klip ring and thrust washers from top of castor spindle.
- 3. Pull castor spindle out of mounting tube. Allow thrust washers to remain on bottom of spindle.
- 4. Insert pin punch into top or bottom of mounting tube and drive bushing out of tube (Fig. 11).

Also drive other bushing out of tube. Clean inside of tubes to remove dirt.

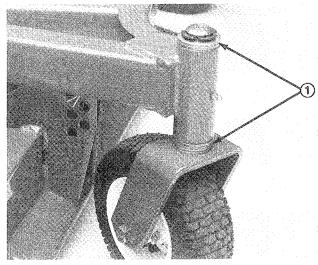


Figure 11

1. Bushings

- 5. Apply grease to inside and outside of new bushings. Using a hammer and flat plate, drive bushings into mounting tube.
- 6. Inspect castor spindle for wear and replace it if damaged.
- 7. Push castor spindle through bushings and mounting tube. Slide spacers onto spindle. Install klip ring through castor spindle to retain all parts in place.

IMPORTANT: When bushings are installed, the inside diameter may collapse slightly, and this may not allow castor spindle to be installed. If castor spindle does not slide through new bushings and mounting tube, ream both bushings to inside diameter of 1.126 inches (28.6 mm).

SERVICING CASTOR WHEEL AND BEARING.

The castor wheel rotates on a high-quality roller bearing and is supported by a spanner bushing. Even after many hours of use, provided that the bearing was kept well-lubricated, bearing wear will be minimal. However, failure to keep bearing lubricated will cause rapid wear. A wobbly castor wheel usually indicates a worn bearing.

1. Remove locknut from capscrew holding castor wheel assembly between castor fork (Fig. 8). Grasp castor wheel and slide capscrew out of fork.

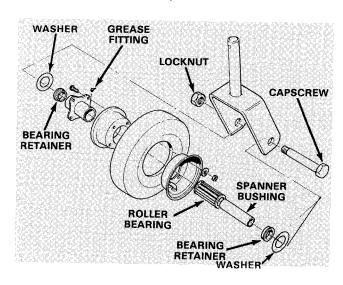


Figure 12

Note: Account for the two thrust washers (Fig. 8).

- 2. Tip wheel to the side and allow spanner bushing to fall out (Fig. 12).
- 3. Inspect bearing, spanner bushing and wheel for wear. Replace defective parts.

- 4. To reassemble parts, slide spanner bushing through hub.
- 5. Mount castor wheel assembly and washers between the fork and secure with capscrew and locknut. Tighten capscrew and locknut until spanner bushing and washers bottoms against inside of castor fork.
- 6. Pump grease through grease fitting on wheel (Fig. 12) until bearing is greased thoroughly.

CHECKING FOR BENT BLADE

- 1. Disconnect wire from spark plug.
- 2. Rotate blade until the ends face forward and backward (Fig. 13). Measure from inside of cutting unit to cutting edge at front of blade (Fig. 13), and remember this dimension.



Figure 13

3. 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.

REMOVING CUTTER BLADE

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. Disconnect wire from spark plug.
- 2. Grasp end of blade using a rag or thickly padded glove. Remove bladebolt, lockwasher, anti-scalp cup and blade from spindle shaft.
- 3. Install blade sail facing toward cutting unit with anti-scalp cup, lockwasher and bladebolt. Tighten to 85-110 ft-lb.

CHECKING SAIL AND SHARPENING CUTTER BLADE

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.

1. Examine cutting ends of the blade carefully, especially where the flat and curved parts of the blade meet (Fig. 14-1). 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. 14-3), replace the blade.

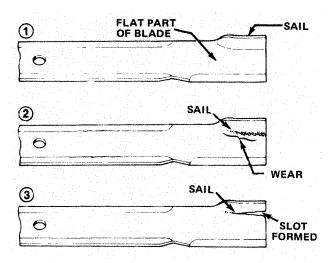
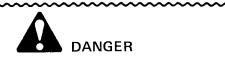


Figure 14



If blade is allowed to wear, a slot will form between the sail and flat part of the blade (Fig. 14-3). 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.

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. 15). The blade will remain balanced if same amount of metal is removed from both cutting edges.

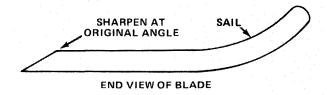


Figure 15

Note: Remove the blades and sharpen them on a grinder: refer to Removing Cutter Blade, steps 1 and 2, page 9. 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.

CORRECTING CUTTING UNIT MISMATCH

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

- 1. Check to make sure front height-of-cut pins are resting properly on frame cushions (Fig. 14).
- 2. Raise height-of-cut to the 3½" (89 mm) or 4 in. (102 mm) position (Fig. 18): refer to Adjusting Height-Of-Cut, page 6.
- 3. Rotate blades so tips line up with one another. Tips of the adjacent blades must be within 1/8 in. (3 mm) of each other. If tips are not within 1/8 in. (3 mm) of each other, proceed to step 7 and add shims between spindle housing and bottom of cutting unit.
- 4. Position all three blades in the "A" position (Fig. 11) and measure from level surface to the bottom of the tip end of each blade (Fig. 17).
- 5. Note measurement attained at "A", rotate blades to "B" position (Fig. 16), measure distance of all blades to level surface and note dimensions (Fig. 17).
- 6. Rotate blades to "C" position, measure and note distance measured (Fig. 16, 17).
- 7. Compare measurements at various positions. All dimensions must be equal within 1/4 in. (6 mm) from one another. The difference between dimensions must not exceed 1/4 in. (6 mm). If difference exceeds 1/4 in. (6 mm), proceed to step 8 and 9 and add shims between spindle housing and bottom of cutting unit.

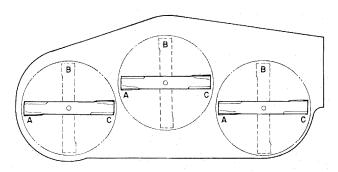


Figure 16

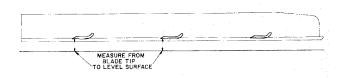


Figure 17

- 8. Remove capscrews, flatwashers, lockwashers and nuts from outer spindle in the area where shims must be added. To raise or lower the blade, add a shim, Part No. 3256-24, between spindle housing and bottom of cutting unit. Continue checking alignment of blades and adding shims until tips fo blades are within the required dimension.
- 9. Equalize side to side measurements as follows:
 - A. Cutting units usually operated at 1 to 2 in. (25 to 51 mm) height-of-cut should have the low side of the cutting unit raised. Remove the klip ring securing castor wheel on low end (Fig. 18) and remove castor assembly.

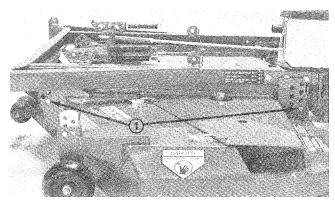


Figure 18

1. Highest H.O.C. setting

B. Transfer one thrust washer from top side of castor shaft to lower side, install castor assembly and compare blade height of all blades; refer to items 3 through 7. Continue adding thrust washers if height still does not meet requirements.

- C. If cutting unit is operated at 2 to 4 in. (51 to 102 mm) height-of-cut, lower the high side of cutting unit. Remove klip ring of castor at high end of unit and remove castor assembly (Fig. 18).
- D. Transfer one thrust washer from lower side of castor shaft to top side, install assembly and compare blade height of all blades; refer to items 3 through 7. Repeat procedure if height still does not meet requirements.
- E. If height is within specified dimension, install klip ring, set height-of-cut to proper height and resume operation.

REPLACING GRASS DEFLECTOR

1. Remove two capscrews, locknuts and springs securing deflector mounts to pivot brackets (Fig. 19).

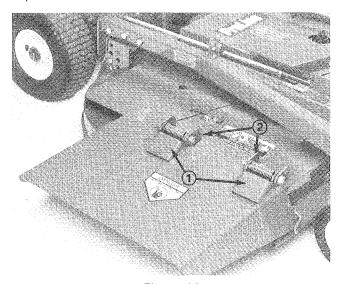


Figure 19

- Deflector mounts
 Pivot brackets
- 2. To remove the pivot brackets, remove carriage bolts and nuts (Fig. 19).
- 3. Reinstall pivot brackets on top of discharge opening with carrier bolts and nuts. Head of carriage bolts must be on inside of cutting unit.
- 4. Position deflector mounts on outside of pivot brackets and secure parts together with capscrews, locknuts and springs. Both locknuts must face each other. Tighten locknuts until they are flush against deflector pivots. Lift deflector and allow it to drop to check spring tension. Deflector must be held firmly in full downward position by spring tension. Correct if necessary.

ADJUSTING COVER LATCHES

If cutting unit covers fit loose, latch tension may be adjusted by loosening latch mounting screws, and sliding latches (slotted mounting holes in cutting unit) to proper position.

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. Initial tension on a new belt requires 25 to 30 ft-lb (34 to 40.7 N·m) of torque on the large nut, which applies force against the belt. As the belt wears and loosens, 20 to 25 ft-lb (27.2 to 34 N·m) of torque on the nut is required. If the idler is not adjusted to these specifications, adjustment is necessary.

- 1. Unhook latches securing center cover to top of cutting unit. Remove cover from cutting unit.
- 2. Loosen two nuts securing idler plate in place (Fig. 20). Using a socket and torque wrench, rotate the idler adjusting nut counterclockwise (left hand thread) (Fig. 19) until proper torque value is achieved.

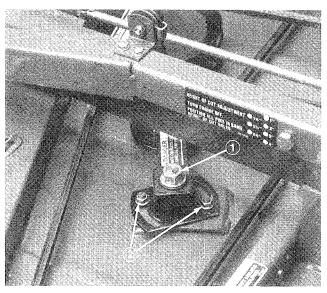


Figure 20

- 1. Idler adjusting nut 2. Nuts (2)
- Hold the torque against the belt and tighten the two nuts so idler plate is held securely in place (Fig. 20). Release the idler adjusting nut. Install cover and secure latches.

REPLACING DRIVE BELT

The blade drive belt, tensioned by the adjustable 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. Unhook latches securing covers to top of cutting unit. Remove covers.
- 2. Loosen jam nuts on each adjusting shaft and remove engine to deck drive belt (Fig. 20).

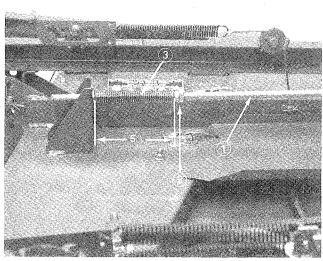


Figure 21

- 1. Adjusting shaft
- 2. Jam nuts
- 3. Spring
- 3. Loosen two nuts securing idler plate in place (Fig. 22) and remove old belt from pulleys.

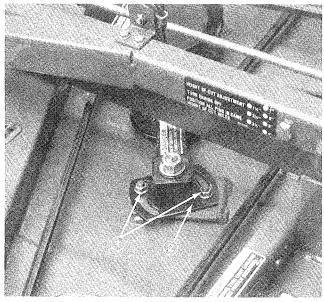


Figure 22

- 1. Idler plate
- 2. Nuts

- 4. Install new belt around spindle pulleys and idler pulley (Fig. 23).
- 5. Using a torque wrench, adjust tension of idler pulley against the belt: refer to Adjusting Idler Pulley, page 17.
- 6. Install belt to drive and clutch pulley (Fig. 21).
- 7. Tighten jam nuts on adjusting shafts until springs are compressed to a length of 5", measured between washer and bushing.
- 8. Reinstall covers and secure latches.

IDENTIFICATION AND ORDERING

MODEL AND SERIAL NUMBERS

The cutting unit has two identification numbers: a model number and a serial number. These numbers are stamped into a plate. The cutting unit identification plate is located behind the right front caster wheel (Fig. 23). In any correspondence concerning the cutting unit, supply the model and serial numbers to assure correct information and replacement parts are obtained.

To order replacement parts from an authorized TORO ProLine Service Dealer, supply the following information:

- 1. Model and serial numbers of the cutting unit.
- 2. Part number, description and quantity of parts desired.

Note: Do not order by reference number if a parts catalog is being used; use the part number.

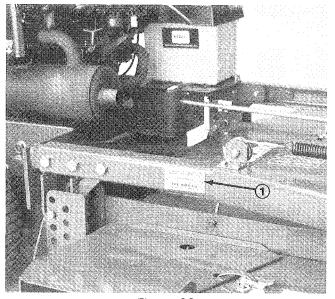


Figure 23

1. Model and serial number

MAINTENANCE RECORD

Date	Hours Used					
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The Toro Promise

A ONE YEAR LIMITED WARRANTY

The Toro Company promises to repair your TORO Product if defective in materials or workmanship. The following time periods from the date of purchase apply:

Commercial Products 1 Year

The cost of parts and labor are included, but the customer pays the transportation costs on walk rotary mowers with cutting unit widths of less than 25".

If you feel your TORO product is defective and wish to rely on The Toro Promise, the following procedure is recommended:

- Contact your Authorized TORO ProLine Service Dealer (the Yellow Pages of your telephone directory is a good reference source).
- The TORO ProLine Service Dealer will advise you on the arrangements that can be made to inspect and repair your product.
- The TORO ProLine Service Dealer will inspect the product and advise you whether the product is defective and, if so, make all repairs necessary to correct the defect without an extra charge to you.

If for any reason you are dissatisfied with the distributor's analysis of the defect or the service performed, you may contact us.

Write:

TORO Consumer Products Service Department 8111 Lyndale Avenue South Minneapolis, Minnesota 55420

The above remedy of product defects through repair by an Authorized TORO ProLine Service Dealer is the purchaser's sole remedy for any defect.

THERE IS NO OTHER EXPRESS WARRANTY. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO THE DURATION OF THE EXPRESS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This Warranty applies only to parts or components which are defective and does not cover repairs necessary due to normal wear, misuse, accidents, or lack or proper maintenance. Regular, routine maintenance of the unit to keep it in proper condition is the responsibility of the owner.

All warranty repairs reimbursable under the Toro Promise must be performed by an Authorized TORO ProLine Service Dealer using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO ProLine Service Dealer are not reimbursable under the Toro Promise. In addition, these unauthorized repair attempts may result in additional malfunctions, the correction of which is not covered by warranty.

THE TORO COMPANY IS NOT LIABLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE USE OF THE PRODUCT INCLUDING ANY COST OR EXPENSE OF PROVIDING SUBSTITUTE EQUIPMENT OR SERVICE DURING PERIODS OF MALFUNCTION OR NON-USE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

COUNTRIES OTHER THAN THE UNITED STATES OR CANADA

Customers who have purchased TORO products exported from the United States or Canada should contact their TORO Distributor (Dealer) to obtain guarantee policies for your country, province or state. If for any reason

you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the TORO importer. If all other remedies fail, you may contact us at The Toro Company.