

TORO®

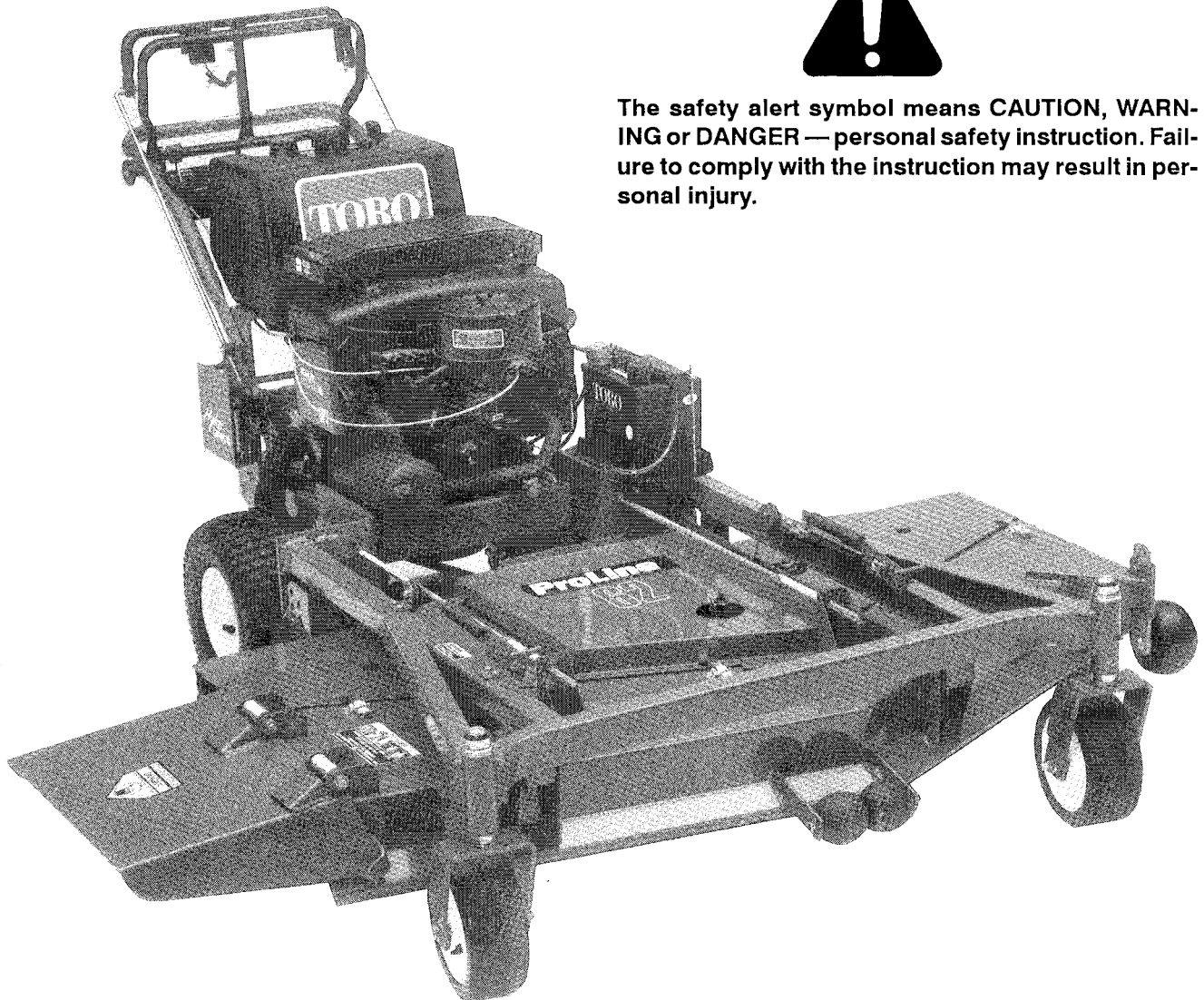
MODEL NO. 30162 - 390001 & UP

**OPERATOR'S
MANUAL****62" CUTTING DECK
FOR COMMERCIAL WALK MOWER****TORO**THIS UNIT CONFORMS
TO ANSI B71.4-1990

To assure maximum safety, optimum performance, and to gain knowledge of the product, it is essential that you or any other operator of the machine read and understand the contents of this manual before the engine is ever started. Pay particular attention to the **SAFETY INSTRUCTIONS** highlighted by this symbol —



The safety alert symbol means **CAUTION, WARNING or DANGER** — personal safety instruction. Failure to comply with the instruction may result in personal injury.



FOREWORD

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

Since this 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:

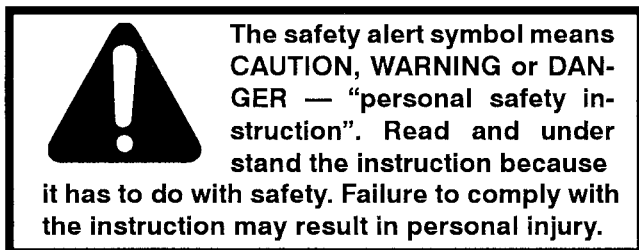
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|------------------------|---------------------|----------------|
| 1. Safety Instructions | 3. Before Operating | 5. Maintenance |
| 2. Set-up Instructions | 4. Lubrication | |

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



Improper use or maintenance of the machine can result in injury or death. To reduce the potential for injury or death, 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
Bloomington, Minnesota 55420-1196

2. Never allow children to operate the machine. Do not allow adults to operate machine without proper instruction. Only trained operators who have read this manual should operate this machine.

3. Never operate the machine when under the influence of drugs or alcohol.

4. Before attempting to start engine, shift into neutral and lock parking brake.

5. 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.

6. Do not operate unless all shields and safety devices are in place. If a shield, safety device or decal is illegible 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

7. 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.

8. 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.

WHILE OPERATING

9. Start engine only when parking brake is set, blade is disengaged, and transmission is in neutral.

10. Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.

11. 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.
- C. 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.

12. The grass deflector must always be installed and in lowest position on the side discharge cutting unit. Never operate mower without deflector or entire grass collector. This product is designed to drive objects into the ground where they lose energy quickly in grassy areas. However, don't take an injury risk!! When a person or pet appears unexpectedly in or near the mowing area, STOP MOWING. Careless operation, combined with terrain angles, ricochets, or improperly positioned guards, can lead to thrown object injuries. Do not resume mowing until area is cleared. If the cutting unit discharge area ever plugs, shut engine off before removing the obstruction.

13. Never raise the cutting unit while the blades are rotating.

14. If the cutting blades strike a solid object or the machine vibrates abnormally, shut the engine off. Remove spark plug wire from spark plug to prevent possibility of accidental starting. Check cutting unit and traction unit for damage and malfunctioning 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.

15. Cut grass slopes carefully. Do not start, stop, or turn suddenly.

16. 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.

17. To stop engine, shift to Neutral, move throttle to SLOW and turn ignition key to OFF. Wait for all parts to stop moving before leaving the operating position behind handle.

18. Before leaving the operator's position — behind handle or leaving mower unattended, shift transmission into NEUTRAL, apply parking brake (if so equipped), move deck engagement switch to OFF or release control bail and shut OFF engine.

MAINTENANCE

19. Disconnect spark plug wire from spark plug to prevent accidental starting of the engine when servicing, adjusting or storing the machine.

20. If traction unit and mower must be tipped to perform maintenance or an adjustment, drain gasoline from fuel tank and oil from crankcase.

21. When driving unit forward, always use upper "Forward" traction drive handle. When backing up, always use lower "Reverse" traction drive handle. (If equipped with upper and lower traction drive handles).

22. 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.

23. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.

24. 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.

25. 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.

26. 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.

27. Engine must be shut off before checking oil or adding oil to the crankcase.

28. Allow engine to cool before storing mower in any enclosure such as a garage or storage shed. Make sure the mower fuel tank is empty if machine is to be stored in excess of 30 days. Do not store mower near any open flame or where gasoline fumes may be ignited by a spark. Always store gasoline in a safety—approved, red metal container.

SAFETY INSTRUCTIONS

29. 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 ACCESSO-

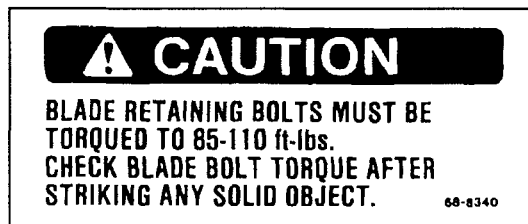
RIES MADE BY OTHER MANUFACTURERS. Look for the TORO logo to assure genuineness. Using unapproved replacement parts and accessories could void the warranty of The Toro Company.

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 below and in your parts catalog. Replacement can be ordered from your Authorized Toro Distributor.



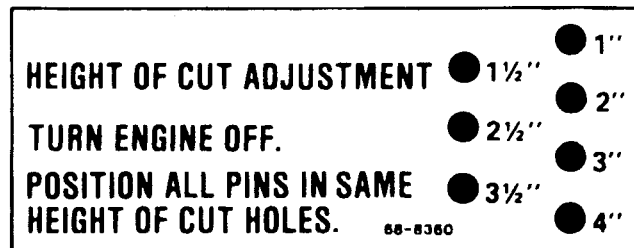
ON BOTH SIDES OF CUTTING UNIT
(Part No. 66-1340)



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



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



ON BOTH SIDES OF CUTTING UNIT
(Part No. 68-8360, Left Side)
(Part No. 79-0940, Right Side)



ON LEFT SIDE OF CUTTING DECK
(Part No. 54-9220)



UNDER DEFLECTOR
(Part No. 66-6380)



ON LEFT SIDE OF CUTTING DECK
(Part No. 43-8480)

SPECIFICATIONS

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" (55 mm) long.

Pneumatic Wheels: 8 in. (203 mm) dia. with greaseable 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
Castor Wheel Assembly	2	Mount to Carrier Frame.
Thrust Washer	8	
Spacer	4	
Retaining Ring	2	
Carrier Frame	1	Mount Carrier Frame to Traction Frame.
Flange Screws	6	
Flange Nuts	6	
Adjusting Shaft	2	Mount Adjusting Shafts.
Jam Nuts	4	
Washer	2	
Spring	2	
Bushing	2	
Washer	2	Secure Flotation Spring Cables to Cutting Deck
Hair Pin Cotter	2	
Operator's Manual	1	Read Before Operating Machine.
Parts Catalog	1	
Cushion Shim	3	Level Rubber Cushions on Cutting Deck

SET-UP INSTRUCTIONS

INSTALL CASTOR WHEELS (Fig. 1)

1. Place two thrust washers onto each castor wheel shaft.

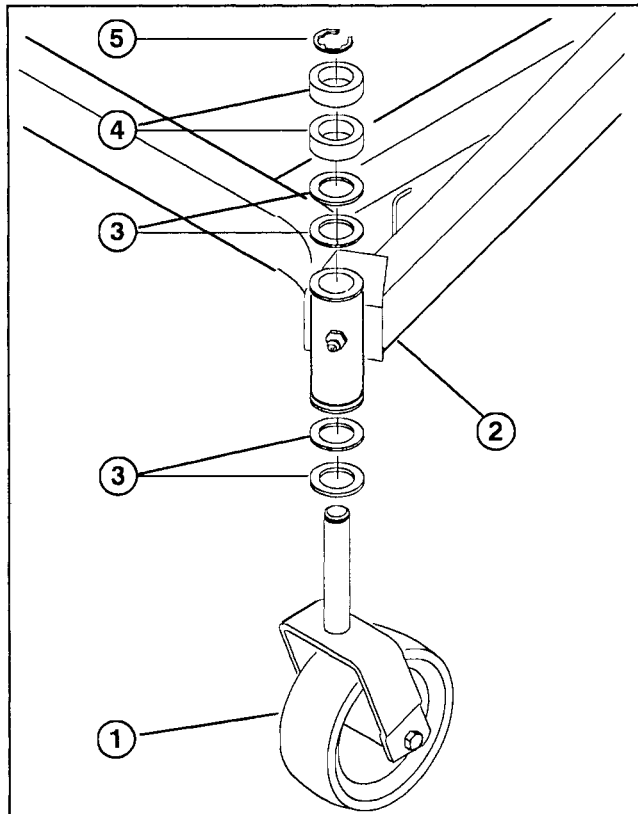


Figure 1

- | | |
|--------------------------|-------------------|
| 1. Castor wheel assembly | 4. Spacers |
| 2. Carrier frame | 5. Retaining ring |
| 3. Thrust washers | |

2. Insert shafts into carrier frame mounting tubes. Install two more thrust washers and two spacers onto each shaft and secure with retaining rings.

MOUNT CARRIER FRAME TO TRACTION FRAME (Fig. 2)

1. Align carrier frame mounting holes with mounting holes in traction frame. Secure each side with three flange screws and locknuts. Bottom locknut to be positioned outside of frame. Torque fasteners to 60–80 ft.-lb. (81–109 N•m).

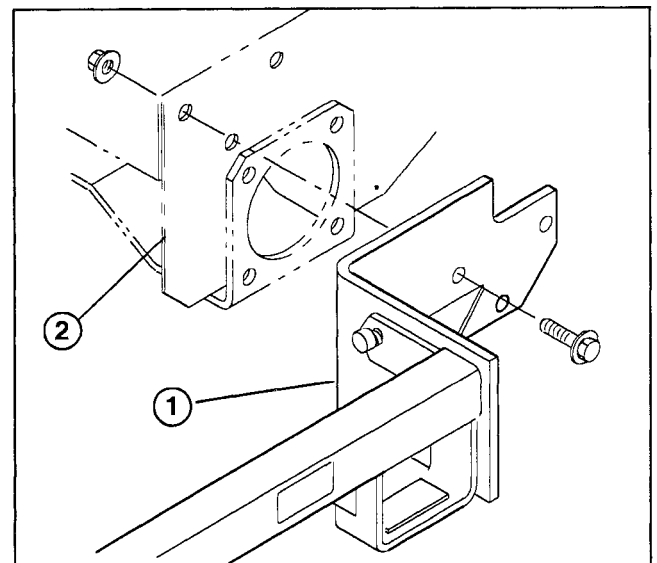


Figure 2

- | |
|-------------------|
| 1. Carrier frame |
| 2. Traction frame |

SET-UP INSTRUCTIONS

MOUNT CUTTING DECK (Fig. 6)

1. Position cutting deck under carrier frame.
2. Mount cutting unit to carrier frame with (4) clevis pins and hair pin cotters.

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

INSTALL DRIVE BELT (Fig. 3-5)

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. 3). Make sure belt is between belt guides.

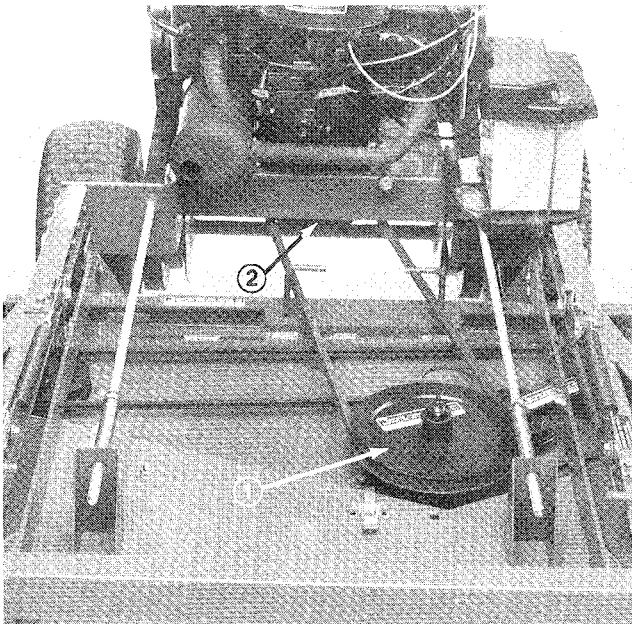


Figure 3

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

2. Thread (2) jam nuts on each adjusting shaft (approximately 9 inches) (Fig. 4).
3. Slide a washer, spring and bushing onto each adjusting shaft. Bushing to be positioned so flange end is against spring (Fig. 4).
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. 4).

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. 4). Secure rear jam nuts.

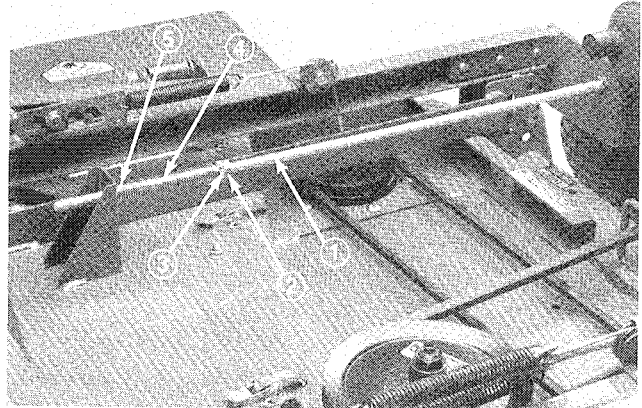


Figure 4

- | | |
|--------------------|------------|
| 1. Adjusting shaft | 4. Spring |
| 2. Jam nuts | 5. Bushing |
| 3. Washer | |

6. Reinstall cover if previously removed.
7. Move tension adjustment bracket rearward into forward notch (Fig. 5).

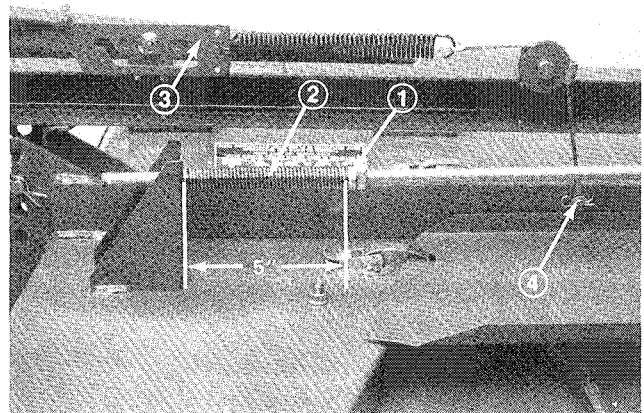


Figure 5

- | | |
|------------------|-------------------------------|
| 1. Front jam nut | 3. Tension adjustment bracket |
| 2. Spring | 4. Washer & hair pin cotter |

8. Secure cable end to pin on deck support bar with a washer and hairpin cotter (Fig. 5). Repeat procedure on opposite side of deck.

BEFORE OPERATING

ADJUSTING HEIGHT—OF—CUT (Fig. 6)

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 .

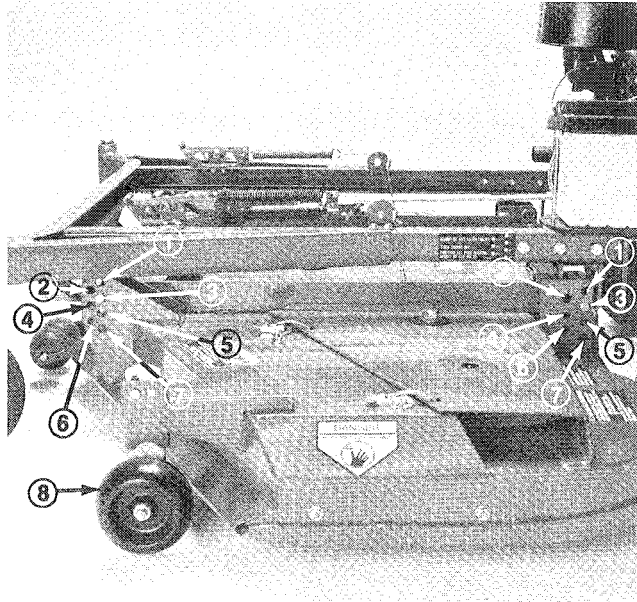


Figure 6

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 (Fig. 7)

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 to deck (Fig. 7).

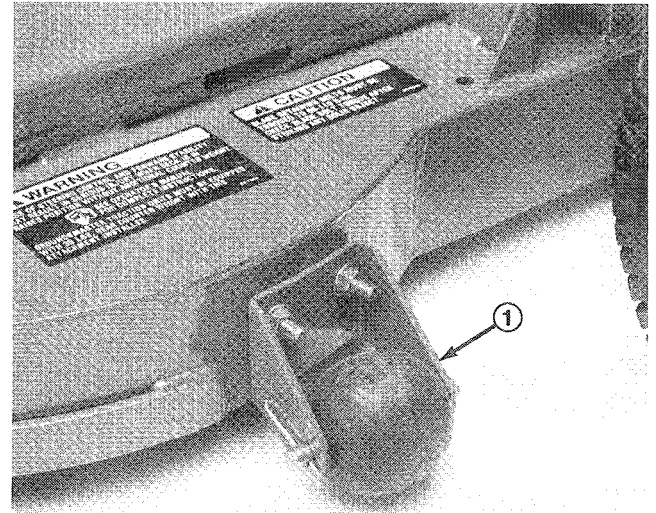


Figure 7

1. External roller

2. Move bracket to desired position and install capscrews and flange nuts.

ADJUST GAGE WHEEL (Fig. 6)

With cutting deck on a flat surface and height—of—cut in desired setting, gage wheel is to be positioned so it is 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 deck will follow the contour of the ground and 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 desired setting and reinstall clevis pin and cotter pin.
3. Reposition gage wheel each time height—of—cut setting is changed.

OPERATING INSTRUCTIONS

GRASS DEFLECTOR (Fig. 8)



WARNING

The grass deflector (Fig. 8) is a safety device that diverts grass and other foreign objects discharged downward. Without deflector mounted in place on the cutting and spring loaded hinges holding deflector in the down position, the blades could hurl grass and foreign objects out the discharge opening with enough force to cause injury or property damage. If the grass deflector or spring hinges are worn, broken or damaged, repair or replace the affected part(s). Do not operate cutting unit without deflector or entire grass collector mounted on the cutting unit. Always be sure the deflector chute is in the lowest possible position.

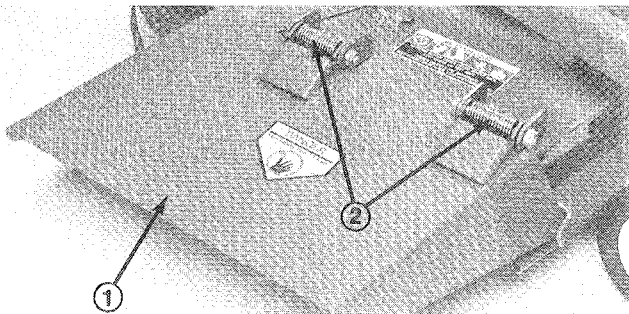


Figure 8
1. Grass deflector

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 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 it rides properly over turf.

LUBRICATION

GREASE BEARINGS AND BUSHINGS (Fig. 9)

The cutting unit must be lubricated regularly. If machine is operated under normal conditions, lubricate castor bearings and bushings with No. 2 general purpose lithium base grease or molybdenum base grease, after every 8 hours of operation or daily, whichever comes first. All other bearings and bushings must be lubricated after every 50 hours of operation.

1. The cutting unit has bearings and bushings that must be lubricated, and these lubrication points are: castor spindle bushings, castor wheel bearings and blade spindle bearings.
2. After every 50 hours of operation, apply a few drops of oil to flotation cable pulley bushings.

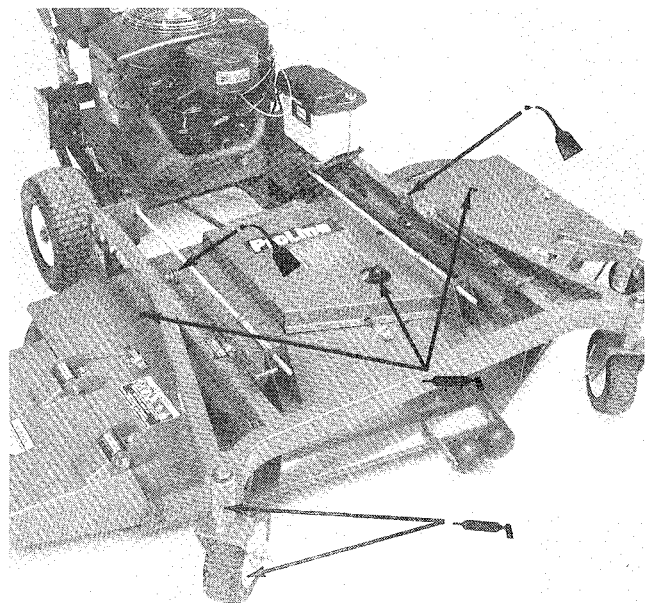
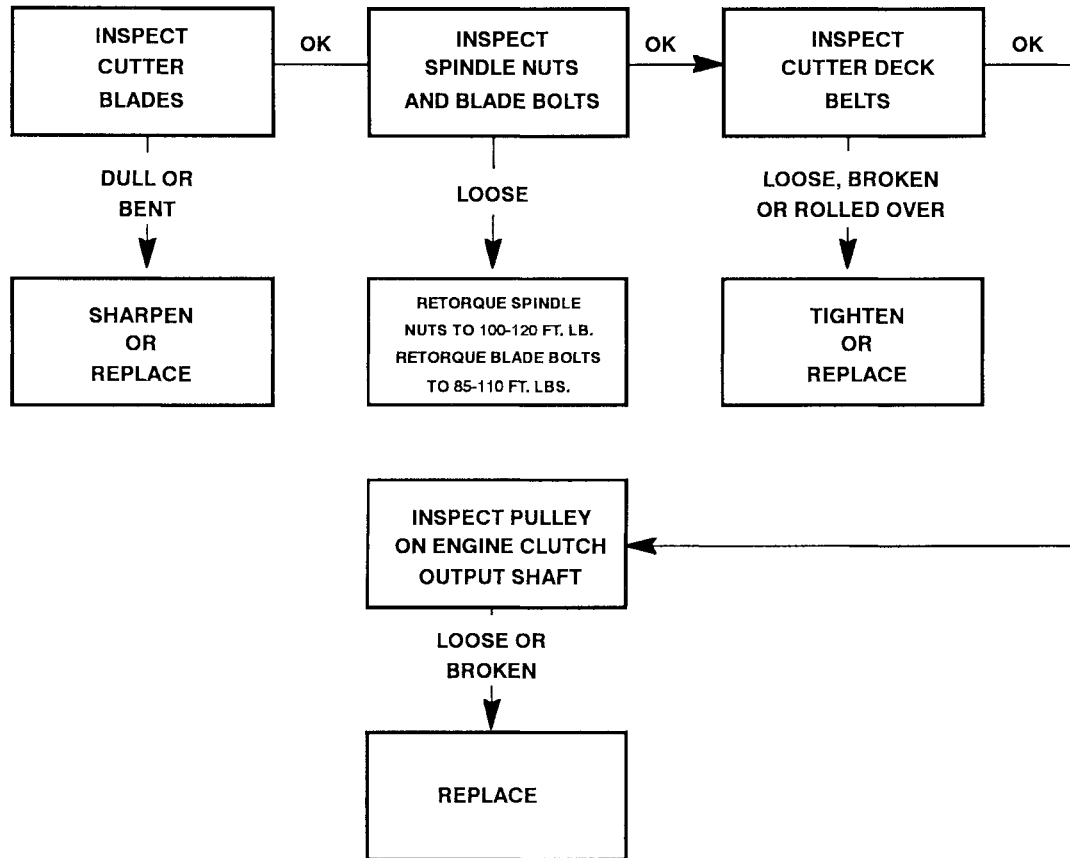


Figure 9

MAINTENANCE TROUBLE SHOOTING

UNIT WILL NOT CUT OR CUTS POORLY



CUTTING UNIT MAINTENANCE

SERVICING BUSHINGS IN CASTOR ARMS (Fig.10)

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 cannot accidentally fall.
2. Remove retaining ring, spacers 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. Also drive other bushing out of tube. Clean inside of mounting tube to remove any dirt.

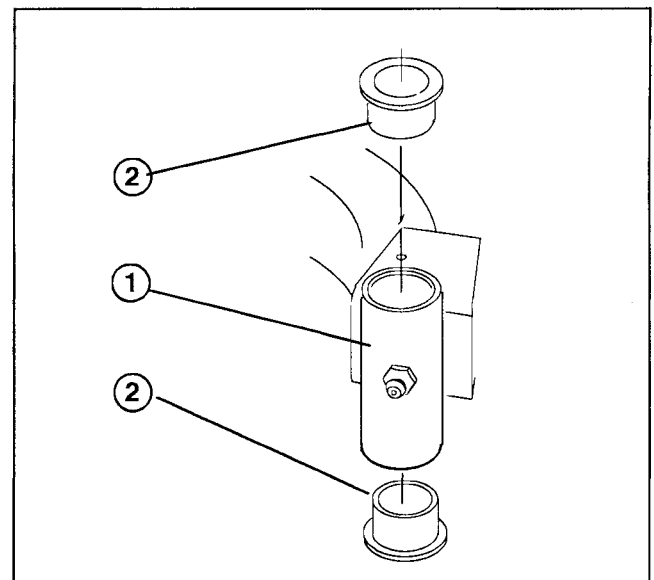


Figure 10

1. Mounting tube
2. Bushings

MAINTENANCE

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 if damaged.
7. Push castor spindle through bushings and mounting tube. Slide thrust washers and spacers onto spindle and secure with retaining ring.

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 (Fig. 11)

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 wheel bolt holding castor wheel assembly between castor fork. Grasp castor wheel and slide wheel bolt out of fork.
2. Pull spanner bushing out of wheel hub.

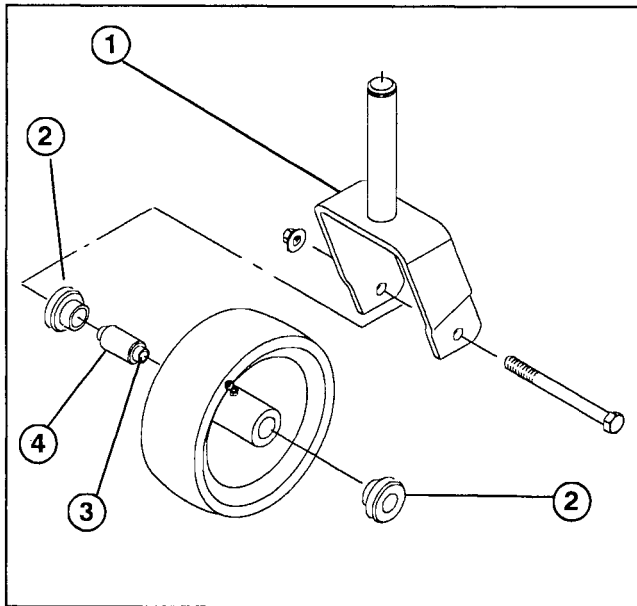


Figure 11

1. Castor fork
2. Bushing
3. Spanner bushing
4. Roller bearing

3. Remove one bushing from wheel hub and allow bearing to fall out. Remove bushing from opposite side of wheel hub.

4. Check the bearing, spanner and inside of wheel hub for wear. Replace defective parts.
5. To assemble the castor wheel, push bushing into wheel hub. Slide bearing into wheel hub. Push other bushing into open end of wheel hub to captivate the bearing inside the wheel hub.
6. Carefully slide spanner through the bushings and the wheel hub.
7. Install castor wheel assembly between castor fork and secure in place with wheel bolt and locknut.
8. Lubricate castor wheel bearing through grease fitting, using No. 2 general purpose lithium base grease.

CHECKING FOR BENT BLADE (Fig. 12)

1. Disconnect wire from spark plug.
2. Rotate blade until the ends face forward and backward. Measure from inside of cutting unit to cutting edge at front of blade (Fig. 12), and remember this dimension.

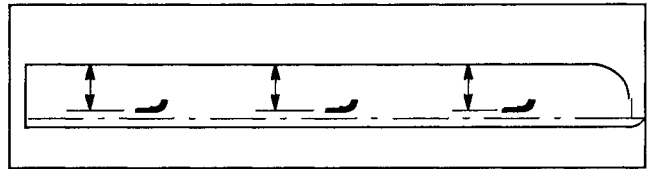


Figure 12

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.

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 blade bolt, lockwasher, anti-scalp cup and blade from spindle shaft.

MAINTENANCE

3. Install blade—sail facing toward cutting unit with anti-scalp cup, lockwasher and blade bolt. Tighten to 85–110 ft-lb.

CHECKING SAIL AND SHARPENING CUTTER BLADE (Fig. 13 & 14)

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 edge 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. 13–A). 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. 13–B), replace the blade.

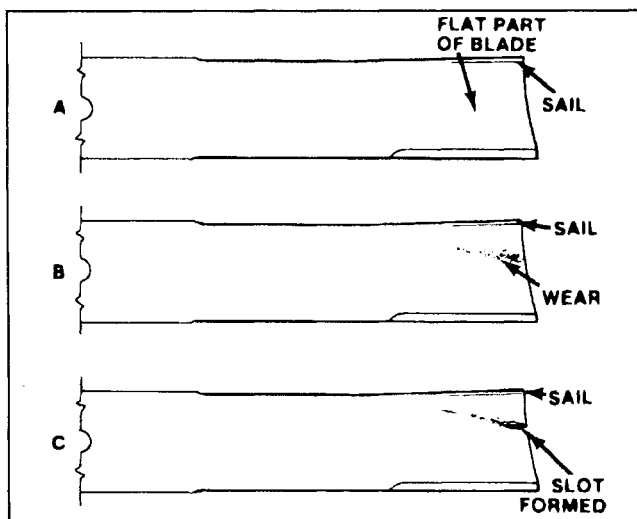


Figure 13

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



DANGER

If blade is allowed to wear, a slot will form between the sail and flat part of the blade (Fig. 13–C). 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.

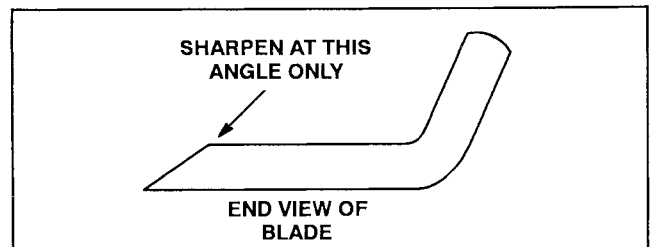


Figure 14

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

CORRECTING CUTTING UNIT MISMATCH (Fig. 15– 17)

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.
2. Raise height—of—cut to the 3–1/2" or 4 in. position: refer to Adjusting Height—Of—Cut.
3. Rotate 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 7 and add shims between spindle housing and bottom of cutting unit.
4. Position all three blades in the "A" position (Fig. 15) and measure from level surface to the bottom of the tip end of each blade (Fig. 16).

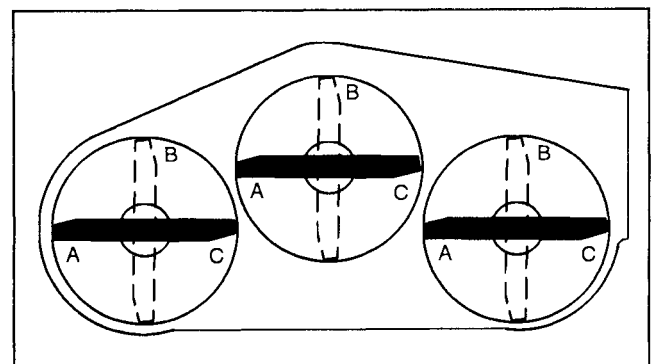


Figure 15

MAINTENANCE

5. Note measurement attained at "A", rotate blades to "B" position (Fig. 15), measure distance of all blades to level surface and note dimensions (Fig. 16).

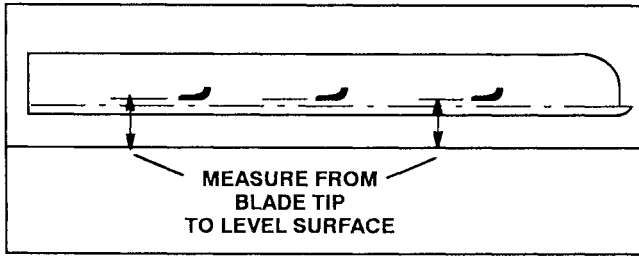


Figure 16

6. Rotate blades to "C" position, measure and note distance measured (Fig. 15, 16).
7. Compare measurements at various positions. The difference between dimensions must not exceed 1/4 in. . 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 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 of blades are within the required dimension.
9. Equalize side-to-side measurements as follows:
- A.** Cutting units usually operated at 1 to 2 in. height-of-cut should have the low side of the cutting unit raised. Remove the retaining ring securing castor wheel on low end (Fig. 17) and remove castor assembly.

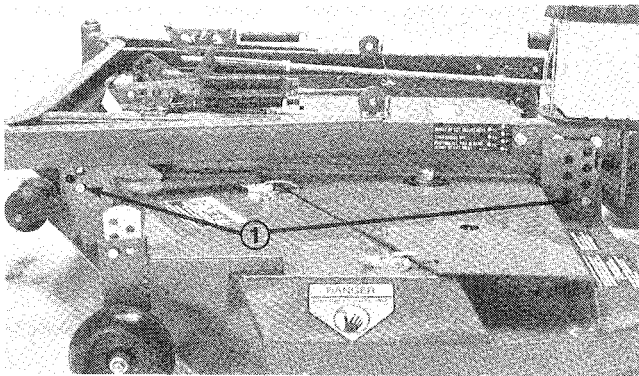


Figure 17

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. height-of-cut, lower the high side of cutting unit. Re-

move retaining ring of castor at high end of unit and remove castor assembly (Fig. 17).

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 retaining ring, set height-of-cut to proper height and resume operation.

REPLACING GRASS DEFLECTOR (Fig. 18)

1. Remove two capscrews, locknuts and springs securing deflector mounts to pivot brackets.

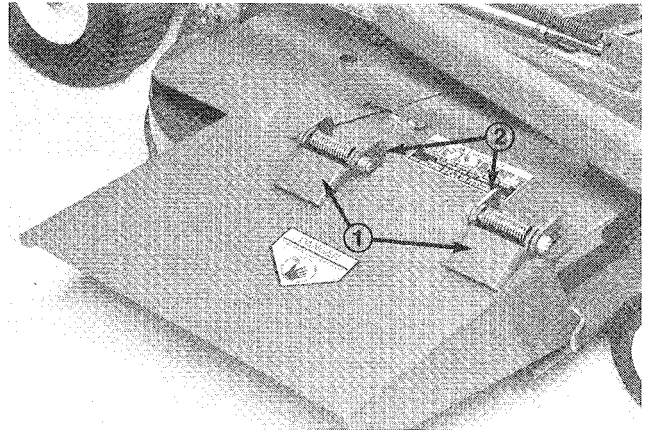


Figure 18

- 1. Deflector mounts**
2. Pivot brackets

- 2.** To remove the pivot brackets, remove carriage bolts and nuts.
- 3.** Reinstall pivot brackets on top of discharge opening with carriage 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.

MAINTENANCE

ADJUSTING IDLER PULLEY (Fig. 19)

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 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. Using a socket and torque wrench, rotate the idler adjusting nut counterclockwise (left hand thread) until proper torque value is achieved.

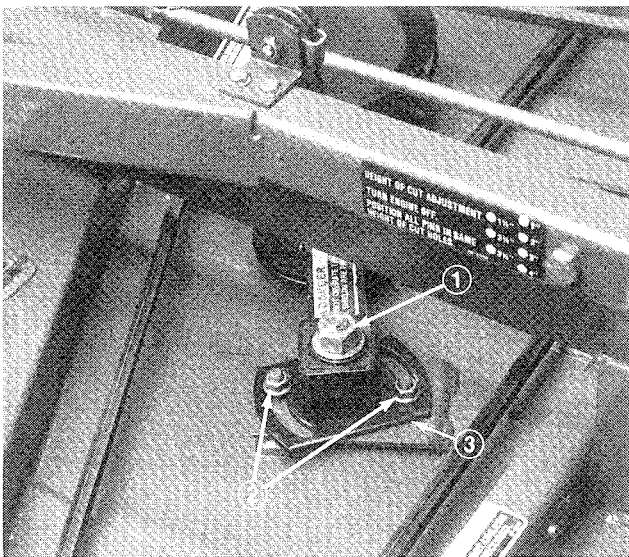


Figure 19

1. Idler adjusting nut
2. Nuts (2)
3. Idler plate

3. Hold the torque against the belt and tighten the two nuts so idler plate is held securely in place. Release the idler adjusting nut. Install cover and secure latches.

REPLACING DRIVE BELT (Fig. 19 & 20)

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.

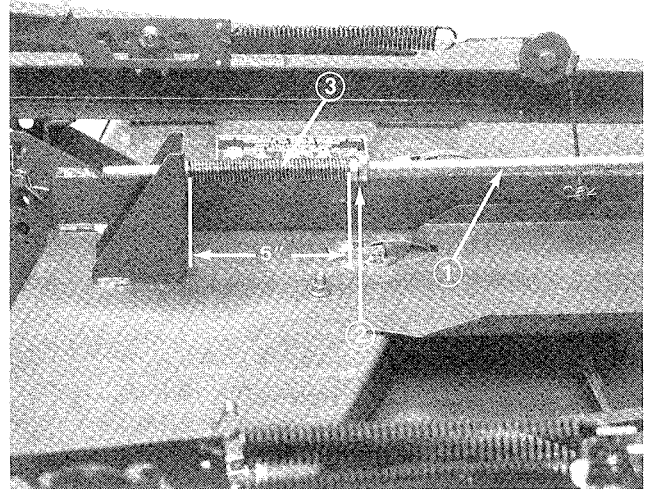


Figure 20

1. Adjusting shaft
2. Jam nuts
3. Spring

3. Loosen two nuts securing idler plate in place and remove old belt from spindle pulleys.
4. Install new belt around spindle pulleys and idler pulley.
5. Using a torque wrench, adjust tension of idler pulley against the belt: refer to Adjusting Idler Pulley.
6. Install belt to drive and clutch pulley.
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 deck has two identification numbers: a model number and a serial number. The two numbers are stamped into a plate which is located on carrier frame behind the right front castor wheel. In any correspondence concerning the mower, supply the model and serial numbers to assure that correct information and replacement parts are obtained.

To order replacement parts from an authorized TORO Distributor, supply the following information:

1. Model and serial numbers of the machine.
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.

MAINTENANCE CHART

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MAINTENANCE CHART

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ProLine
Products

THE TORO TOTAL COVERAGE GUARANTEE

A One Year Limited Warranty
(A Full Two—Year Warranty for Residential Use)

What Is Covered By This Express Warranty?

The Toro Company promises to repair any TORO ProLine product used for commercial, institutional, or rental purposes if defective in materials or workmanship for a period of one year from the date of purchase. The cost of parts and labor are included as well as transportation within a 15 mile radius of a TORO ProLine Service Dealer.

What Products Are Covered By This Warranty?

ProLine products covered by this warranty include the ProLine 118, 220, 616, 620, 724 riding products and wide area walk behind mowers and their cutting decks and accessories.

How About Residential Use?

TORO ProLine products used for residential use are covered by a full two—year warranty.

How Do You Get Warranty Service?

Should you feel your TORO ProLine product contains a defect in materials or workmanship, contact the dealer who sold you the product or any TORO ProLine Service Dealer. The Yellow Pages of your telephone directory is a good reference source; look under TORO Commercial Service Dealers. The Service Dealer will either arrange service at his/her dealership or recommend another authorized Service Dealer who may be more convenient. You may need proof of purchase (copy of registration card, sales receipt, etc.) for warranty validation.

If for any reason you are dissatisfied with a Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO ProLine Service Dealer, please feel free to contact us at the following address:

Toro Customer Service Department
8111 Lyndale Avenue South
Bloomington, MN 55420—1196
612—888—8801

What Must You Do To Keep The Warranty In Effect?

You must maintain your TORO Product by following the maintenance procedures described in the operator's manual. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

What Does This Warranty Not Cover? and

How Does Your State Law Relate To This Warranty?

There is no other express warranty except as described above. This express warranty does not cover:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune—up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non—use over three months.
- Pickup and delivery charges for distances beyond a 15 mile radius from a TORO ProLine Service Dealer.

All repairs covered by this warranty must be performed by a TORO Service Dealer using Toro approved replacement parts.

Repair by a TORO Service Dealer is your sole remedy under this warranty.

The Toro Company is not liable for indirect, incidental or consequential damages in connection with the use of the TORO Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non—use pending completion of repairs under this warranty. Some states do not allow exclusions of incidental or consequential damages, so the above 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.