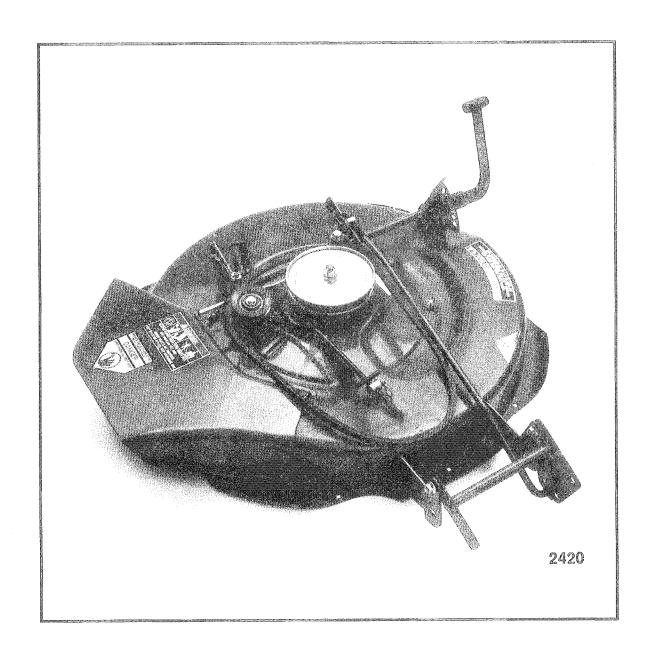


MODEL NO. 35-30SL03 - 2000001 & UP

OPERATOR'S MANUAL

WHEEL HORSE®
30 in. (76.2 cm) Side Discharge Mower



FOREWORD

Thank you for buying a high quality TORO product. To get the best performance from this product, operate and maintain it according to the instructions in this manual.

TORO also wants to stress the importance of safety. You and anyone else using or maintaining this product are strongly urged to read this manual, especially all the safety instructions.

Left and right side as refered to in this manual is viewed from behind the product looking in a forward direction.

DANGER, WARNING and CAUTION, used with the triangular safety alert symbol, highlight safety messages. Always read and understand these messages because they relate to personal injury and your safety.

IMPORTANT messages refer to mechanical information and the possibility of damaging a part or parts of the product.

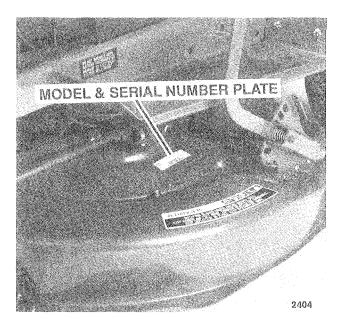
NOTE identifies general information worthy of special attention.

If you need help or have questions about your new TORO product, contact your local Authorized TORO Dealer. The Toro Dealer has a complete supply of replacement parts, a full line of accessories and a professional service staff to support you. Keep your Toro all Toro. Buy genuine Toro parts and accessories.

MODEL AND SERIAL NUMBER

A Model and Serial Number identifies your TORO Wheel Horse attachment. These numbers should always be referred to when consulting with your dealer or factory concerning service, replacement parts, or questions you may have. If plate is removed during repair operations it should always be replaced. For your reference, record numbers from Model and Serial Number plate.

Model Number:	WAS AND
Serial Number:	677 Control (SCO) Control (SCO



Model and Serial Number Location

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SAFETY OPERATING PRACTICES

This safety alert symbol means CAUTION 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 product. 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 product. Do not allow adults to operate the product without proper instruction.
- 3. 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.
- 4. 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 product is in safe operating condition.
- 5. Do not operate product 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.
- 6. 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.
- 7. Before attempting to start engine, engage parking brake, shift into neutral and disengage power to mower deck.
- 8. Start engine when parking brake is set, PTO 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 product demands attention, and to prevent loss of control:
- A. Operate product 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.
- 11. A mower 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 a mower product while the blades are rotating.
- 13. If mower 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 getting off seat or leaving mower unattended, shift transmission into NEUTRAL, apply parking brake, disengage PTO clutch and shut OFF engine.

MAINTENANCE

- 17. Shut engine off and disconnect high tension wire from spark plug to prevent accidental starting of the engine when servicing, adjusting or storing the product.
- 18. If tractor and mower must be tipped to perform maintenance or an adjustment, drain gasoline from fuel tank and oil from crankcase.
- 19. Perform only those maintenance instructions described in this manual. If major repairs are ever needed or assistance is desired, contact your Authorized Toro Service Dealer.

- 20. To reduce potential fire hazard, keep the engine free of excessive grease, grass, leaves and accumulations of dirt.
- 21. 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.
- 22. 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.
 - 23. Do not overspeed the engine by changing gover-

nor settings. To be sure of safety and accuracy, have an Authorized Toro Service Dealer check maximum engine speed with a tachometer.

- 24. Engine must be shut off before checking oil or adding oil to the crankcase.
- 25. 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.

DECALS





PART NUMBER 54-9220



ROTATING BLADES UNDER ENTIRE MOWER DECK.

KEEP HANDS and FEET AWAY.

THROWN OBJECTS ARE DANGEROUS.

KEEP DEFLECTOR IN PLACE. KEEP BYSTANDERS AWAY.





OPERATION

⚠ DANGER **⚠**

Keep all shields and mower discharge chute in place. Never attempt to clear discharge areas or mower blades, or make any adjustments or repairs, without first disengaging PTO clutch and removing ignition key. Moving parts can cause serious bodily harm.

Discharge chute is a safety device that diverts grass and other foreign objects being discharged downward. We strongly recommend that the deflector be in the lowest position whenever the mower is used. Mower blades can throw debris a considerable distance with sufficient force to cause personal injury or damage to property. Never operate cutting unit with deflector removed from cutting unit or moved to open position. If the grass deflector is damaged, repair or replace the affected part(s) immediately.

Before mowing grass become familiar with cutting height, adjustments, PTO clutch engagement and disengagement, tractor ground speed, engine speed and making turns. In a vacant unattended paved area, adjust mower height and operate tractor and mower after carefully reading contents of this operating section.

ENGINE AND GROUND SPEED

For best performance operate engine at full throttle. Use transmission to set tractor speed between 2 and 3.5 mph (3.2 and 5.6 kph) depending on height, moisture content and density of turf to be mowed. Uneven cutting is often a result of excessive ground speed.

CUTTING GRASS

Average lawns are usually cut at a height between 2 and 3 inches (5 to 7.6 cm). Tall grass and weeds should be cut with mower in its highest position, making a second pass cutting to height desired. Always keep mower blades sharp.

Very tall grass can be cut without difficulty by using a little care. Set mower in its highest cutting position and enter area at a slow speed. If necessary, take a cut one half the width of mower, overlapping previously cut area on each pass. Then, with mower set to desired height, make a finish cut over entire area.

CUTTING CONDITIONS

Under some unusual mowing conditions, mower may leave a "streak" of uncut grass, which can be caused by any one of the following conditions:

- 1. Engine being operated at less than full throttle
- 2. Dull blades or underside of mower deck clogged with matted grass
- 3. Ground speed too high for conditions-adjust to 2 MPH (3. Kph), or less if necessary
- 4. Mower level adjustment
- 5. Incorrect tire pressures
- 6. Streaking only on turns indicates turns are being made to sharply

ADJUSTMENTS

⚠ CAUTION ⚠

Sharp edges of mower blades can cut you during blade maintenance or adjustment. Use suitable covering over cutting edges of blade to prevent bodily harm.

CUTTING HEIGHT

Cutting height is adjustable. Cutting height adjustment is made using height control lever at the left side of mower. Move lever up to raise mower. Move lever down to lower mower.

BLADE CLEARANCE

Mower blade-to-deck edge clearance adjustment must be checked and made if necessary before tractor is first operated, and at least once a season thereafter for efficient mowing. Proceed as follows:

Position mower blade front-to-rear and check that mower blade tips are 1/8" to 1/4" above bottom edge of mower deck. (Fig. 1).

Position mower blade side -to -side and again confirm that mower blade tips are 1/8" to 1/4" above bottom edge of mower deck.

ADJUST SO BLADE TIPS ARE MINIMUM OF 1/8" ABOVE BOTTOM EDGE OF MOWER DECK

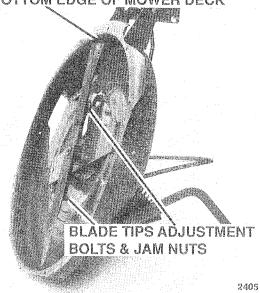


FIG. 1 Blade Clearance Adjustment

As necessary loosen jam nuts and adjust bolts on blade bar so that blade tips (both sides) are 1/8" to 1/4" above bottom edge of mower deck. Recheck above dimension with blade positioned front-to-rear and sideto side. Tighten jam nuts after adjustments are made.

MAINTENANCE

\triangle CAUTION \triangle

Sharp edges of mower blades can cut you during blade maintenance or adjustment. Use suitable covering over cutting edges of blade to prevent bodily harm.

IMPORTANT: Every time mower is installed, check for proper operation of PTO clutch and brake. Adjustment of PTO clutch is covered in tractor Operator's Manual.

LEVEL MOWER

Mower drive belt must be installed for accurate leveling of mower. Set mower height in middle cutting position. Park tractor on smooth level surface and check tires for proper inflation pressure (12PSI - .85Kg/cm²) before leveling mower.

Side-To-Side

Loosen left front mower leveling bolt so that bolt moves freely in slot (Figs. 5 & 7).

Loosen right hand mower hanger nut, turn eccentric screw in middle of adjustment and retighten nut (Fig. 2).

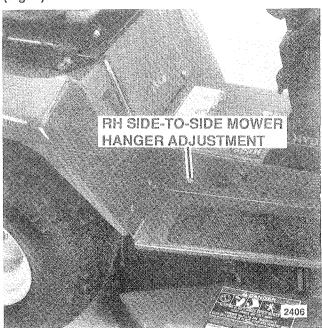


FIG. 2 Right Hand Mower Hanger Eccentric

Turn blade side-to side. Loosen, adjust and secure left hand mower hanger eccentric screw so that distance between right and left blade tip ends and surface is equal (Figs. 3 & 4). If equal distance on blade tips to surface can not be achieved, loosen, readjust and secure right hand mower hanger eccentric screw to get equal distance (Fig. 2).

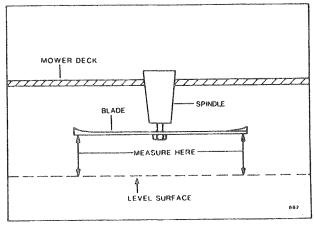


FIG. 3 Blade Level

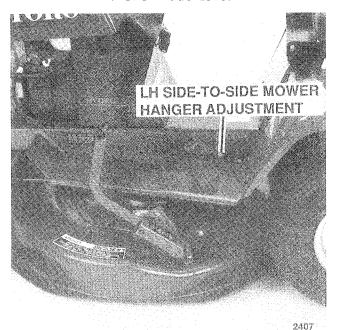


FIG. 4 Left Hand Mower Hanger Eccentric

After side-to-side level is achieved and left and right hanger eccentric nuts are tight, lightly shake left side of deck a few times to position left front attaching bolt in slot. Tighten left front attaching bolt (Figs. 5 & 7).

Front-To-Rear

Turn blade front-to-rear and adjust rod trunnion so that blade tips are equal distance from surface (Figs. 3 & 6). After equal distance is achieved, adjust trunnion counterclockwise one turn to slightly lower front of mower.

Up-Stop Adjustment

Loosen Up-Stop Bolt (Fig. 7). Set mower height in highest cutting position. Move up-stop bolt against front hitch and tighten.



FIG. 5 Left Front Leveling Bolt

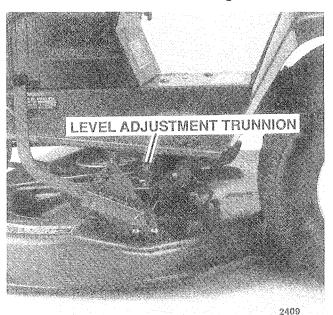


FIG. 6 Front-To-Rear Adjustment

MOWER REMOVAL

Set mower height adjustment in lowest notch on quadrant. Remove drive belt as described under "DRIVE BELT REMOVAL" Section of this manual.

Move left and right spring loaded front mounting pins to center of tractor and into lock position (Fig. 8). Lower front mount all the way down.

Remove left and right rear mower attaching hairpin cotters (Fig. 9).

Rotate locks forward, lift up on rear of deck and release rear mower mounts from tractor hangers

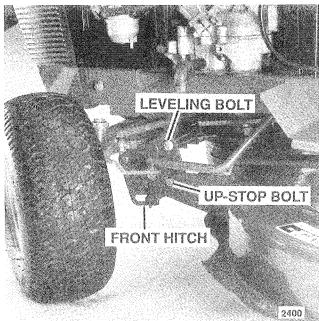


FIG. 7 Up-Stop Bolt

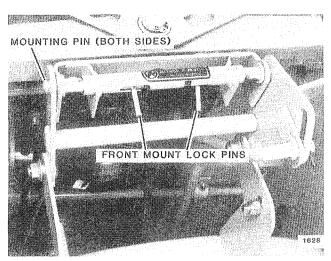


FIG. 8 Mower Front Mount

(Fig. 10). Reinstall hairpin cotters in locks.

Turn front wheels all the way right. Slide mower out from under left side of tractor (Fig. 11).

MOWER INSTALLATION

IMPORTANT: Before installation, check that all mower blade bolts are tight: Blade Bolt Torque Is 100 ft. lbs. (140 Nm).

Set mower height adjustment in bottom hole of quadrant. Position mower at left side of tractor and turn front wheels all the way right (Fig. 11).

Remove hairpin cotters from left and right rear mounts,

swing locks forward and slide mower under tractor (Fig. 10). Lift rear of mower, install mounting brackets on tractor hangers, position locks on hangers and retain with hairpin cotters (Fig. 9).

Straighten front wheels, move left and right spring loaded front mounting lock pins to center of tractor and into lock position. Raise mower front mount, align mounting holes and release spring loaded pins (Fig. 8). Make sure pins seat in front hitch all the way.

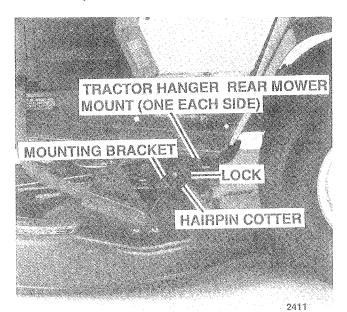


FIG. 9 Rear Mounts Installed

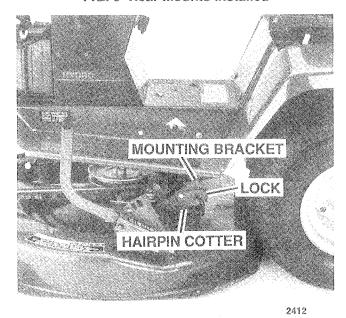


FIG. 10 Rear Mounts Removed

INSTALL DISCHARGE CHUTE

If discharge chute was removed for grass collector use, discharge chute must be reinstalled for mower operation without grass collector. Locate discharge chute, three flat washers and three wing nuts (Fig 12). Install discharge chute on carriage bolts and secure using flat washers and wing nuts.

⚠ DANGER ⚠

Keep all shields and mower discharge chute in place. Never attempt to clear discharge areas or mower blades, or make any adjustments or repairs, without first disengaging PTO clutch and removing ignition key. Moving parts can cause serious bodily harm.

Discharge chute is a safety device that diverts grass and other foreign objects being discharged downward. We strongly recommend that the deflector be in the lowest position whenever the mower is used. Mower blades can throw debris a considerable distance with sufficient force to cause personal injury or damage to property. Never operate cutting unit with deflector removed from cutting unit or moved to open position. If the grass deflector is damaged, repair or replace the affected part(s) immediately.



FIG. 11 Slide Mower Under Tractor

INSTALL DRIVE BELT

Be sure to purchase genuine TORO belts for replacement purposes as these belts are designed specifically for each application.

Position drive belt on PTO mower spindle and idler pulleys (Fig. 13). Pull on rod handle and install drive belt

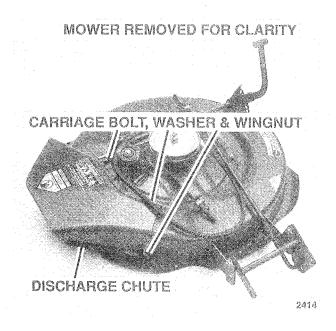


FIG. 12 Install Discharge Chute

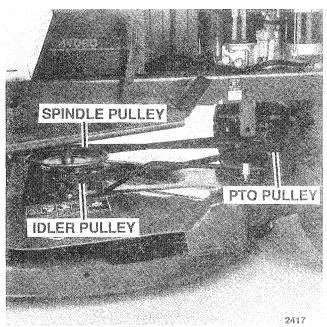


FIG. 13 Position Drive Belt

on PTO clutch pulley and trunnion on tractor frame bracket with hairpin cotter (Fig. 14). Adjust belt tension as described under "DRIVE BELT ADJUSTMENT" section in this manual.

DRIVE BELT ADJUSTMENT

Relocate spacers to inside or outside of idler block so that 1/2 to 1 inch (1.3 to 2.5cm) of rod extends past tractor frame bracket (Fig. 15).

DRIVE BELT REMOVAL

Stop engine and remove spark plug wire. Lower

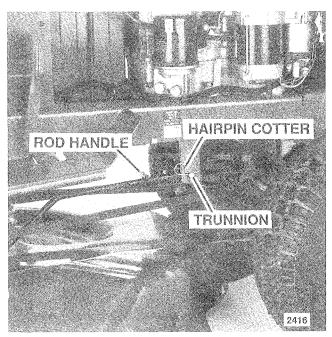


FIG. 14 Drive Belt

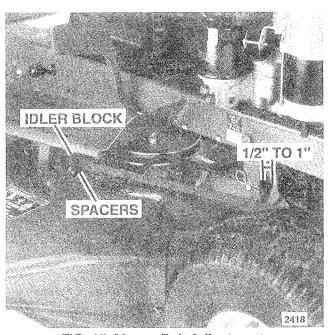


FIG. 15 Mower Belt Adjustment

mower all the way down. Remove hairpin cotter, pull on rod handle and remove trunnion from tractor frame bracket (Fig. 14).

Remove belt from PTO clutch and mower pulleys.

BLADE MAINTENANCE

To obtain optimum mowing results, mower blade should be kept sharp and well balanced. To sharpen blade, remove mower from tractor as described under "MOWER REMOVAL." section of this Manual. Remove blade attaching bolts and remove blade from mower (Fig. 16).

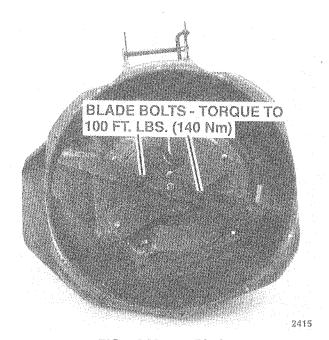


FIG. 16 Mower Blade

File or grind blade evenly. Take care to retain angle of original cutting edge. Blade balance can be checked on a blade balancer, available at most hardware stores. Reinstall blade with lift area (turned up section) facing mower deck. Tighten blade attaching bolts to a torque of 100 ft. lbs. (140 Nm).

Check blade for deck clearance as described under "BLADE CLEARANCE" section of this manual.

Reinstall mower on tractor as described under "IN-STALL MOWER" section of this manual.

LUBRICATION

Following service intervals are considered MAXIMUM under normal conditions. Increase frequency under extremely dirty or dusty conditions.

Oil recommendations:

Pivoting	Ams	25	hrs.
Pivoting	Levers	25	hrs.

Grease Recommendations:

Spin	dle	 	25	hrs.
ldler	Pivot	 	25	hrs.

LUBRICATING CHART

Lubricate pivoting arms and levers after every 25 hours of operation with light machine oil applied to wear surfaces.

Spindle bearing and idler pivot point requires lubrication at 25 operating hours intervals (Fig. 17). Use #2 multi-purpose lithium grease. Four to six pumps of a hand operated grease gun will normally fill spindle after 25 hours of operation. One to two pumps will fill idler pivot. Stop pumping if resistance is felt.

UNDERSIDE CLEANING

It is of vital importance to clean underside of mower deck frequently. Accumulation of matted clippings seriously impairs mower's ability to "lift" grass blades into cutting position and discharge clippings evenly.

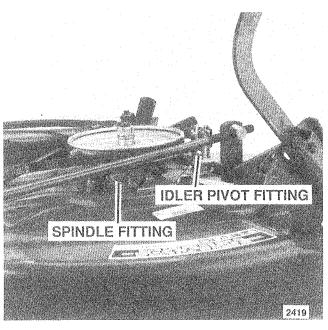


FIG. 17 Lube Fittings

Matted grass clogging underside of mower is often times a cause of uneven cutting. Remove mower from tractor to clean underside.

GENERAL CARE AND STORAGE

Top of mower deck should be washed with a garden hose after each use. A mild detergent may be used to remove stubborn dirt. After washing, allow mower to dry, then start tractor and engage mower for approximately one minute to remove excess water from belts and pulleys.

Touch up painted surfaces with a fresh coat of paint, available from your authorized TORO dealer in aerosol cans.

Store mower in a clean, dry place or protect it with a weather-proof cover when stored outdoors.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY
Mower will not cut or cuts poorly.	Engine not running at full throttle.	Run engine at full throttle. Dealer check engine RPM at full throttle.
	Ground speed too fast for conditions.	Reduce ground speed to 2MPH (3.2 Kph), or less if necessary.
	Grass too tall or wet.	Raise mower and reduce cutting width.
	Dull blade.	Sharpen blade.
	Incorrect blade adjustment.	Adjust blade end to bottom of deck clearance.
	Bent blade.	Replace blade.
	Underside of mower clogged.	Remove mower and clean deck.
	Incorrect mower level adjustment.	Level mower.
	Incorrect tire pressures.	Adjust tire pressures to 12 PSI (.85Kg/cm²).
	Loose, broken or rolled over drive belt.	Tighten or replace drive belt.
	PTO pulley on engine output shaft loose or broken.	Repair or tighten PTO clutch.
Mower leaves a "Streak" of uncut grass.	Ground speed too fast for conditions.	Reduce ground speed to 2MPH (3.2 Kph), or less if necessary.
	Grass too tall or wet.	Raise mower and reduce cutting width.
	Turning to sharp.	Reduce turning radius.
	Dull blade.	Sharpen blade.
	Incorrect blade adjustment.	Adjust blade end to bottom of deck clearance.
	Bent blade.	Replace blade.
	Incorrect mower level adjustment.	Level mower.
	Incorrect tire pressures.	Adjust tire pressures to 12 PSI (.85Kg/cm²).



THE TORO TOTAL COVERAGE GUARANTEE

A Full Two-Year Warranty (Limited Warranty for Commercial Use)

What Is Covered By This Express Warranty?

The Toro Company promises to repair any TORO Product used for residential purposes if defective in materials or workmanship for a period of two years from the date of purchase. The cost of parts and labor are included, but the customer pays the transportation costs.

Transportation within a 15 mile radius of the servicing dealer is covered under this warranty for two-stage snowthrowers, walk behind debris equipment and all TORO Wheel Horse riding products. Walk power mowers, single stage snowthrowers, and other products not specifically covered, are excluded from the transportation coverage provided by this warranty.

What Products Are Covered By This Warranty?

This warranty applies to all gasoline powered Consumer Products (including TORO Wheel Horse riding products). Wide area walk behind mowers, ProLine 118, and 21" Commercial mowers without blade stop controls are covered by separate warranty statements.

How About Commercial Use?

TORO Consumer Products used for commercial, institutional or rental use are covered by a limited warranty for the following time periods from the date of purchase:

Products

Warranty Period

 300 through 700 Series Tractors (except 612–Z) and 1600 HMR

Chassis 1 year limited warranty Engine 2 year limited warranty

- 21" Commercial Duty Walk Mower with blade stop controls . . 1 year limited warranty
- 200 Series Tractors, Rear Engine Riders, 612–Z, 1200 HMR
 3.0 and 3.5 HP Edgers Straight Shaft Trimmers, and Backpack Blowers . . . 90 day limited warranty
- All Others 45 day limited warranty

How Do You Get Warranty Service?

Should you feel your TORO product contains a defect in material or workmanship, contact the dealer who sold you the product or any Authorized TORO Service Dealer or TORO Master Service Dealer. The Yellow Pages of your telephone directory is a good reference source. The 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 the Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO Service Dealer, please feel free to contact us at the following address:

> Toro Customer Service Department 8111 Lyndale Avenue South Minneapolis, MN 55420 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 the TORO Starting Guarantee on GTS Engines. 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 an Authorized TORO Service Dealer (covered products only).

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

Repair by an Authorized 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.