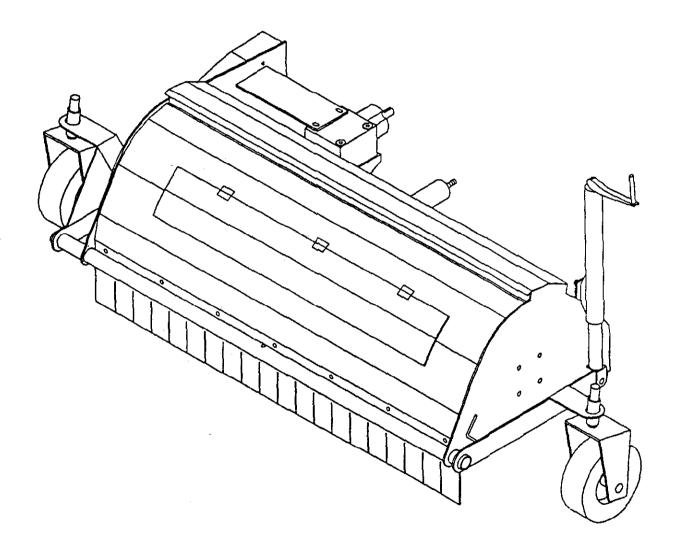


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MODEL NO. 44892 - 20101 & UP

OPERATOR'S MANUAL

PLUG PULVERIZER 2560



FOREWORD

Thank you for buying a high quality Toro turf care product. To get the best performance from this machine, 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 machine are strongly urged to read this manual, especially all the safety instructions.

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.

If you ever need help or have questions about your new Toro turf care product, contact your local Authorized Toro Distributor. The Toro Distributor 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.

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SAFETY INSTRUCTIONS



The safety alert symbol means CAUTION, WARNING 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.

BEFORE OPERATING

1. Read and understand the contents of this Operator's Manual before starting and operating the machine. Become familiar with all controls and know how to stop quickly. A replacement manual is available by sending complete Model and Serial Number to:

The Toro Company 100 Industrial Parkway Industrial Airport, Ks. 66031

- 2. Never allow children to operate the machine or adults to operate it without proper instructions.
- 3. Keep all shields, safety devices and decals in place. If a shield, safety device or decal is damaged, repair or replace it before operating the machine.
- 4. Make sure the work area is clear of objects which might be picked up and thrown by the finger reel.
- 5. Follow the general warning and caution instructions outlined in the tractor's operator manual pertaining to attachments.

- 6. Do not carry passengers on the machine, and keep everyone, especially children and pets, away from the areas of operation.
- 7. Check blades and fingers before each use. Replace any broken or missing fingers. Broken or missing fingers will cause the reel to be out of balance.

WHILE OPERATING

- 8. Never open clean out door while unit is engaged.
- 9. Stop engine and disengage PTO before opening clean out door.
- 10. Using the machine demands attention. To prevent loss of control:
 - A. Pulverize only in daylight or when there is good artificial light.
 - B. Watch for holes or other hidden hazards.
 - C. Do not drive close to sand traps, ditches, creeks or other hazards.
 - D. Reduce speed when making sharp turns. Avoid sudden stops and starts.
 - E. Before backing, look to the rear to be sure no one is behind the machine.
 - F. Watch out for traffic when near or crossing roads. Always yield the right of way.
- 11. Do not place hands or feet under or near finger reel while PTO is engaged.

SAFETY INSTRUCTIONS

- 12. If the reel strikes a solid object or vibrates abnormally, stop immediately, turn tractor engine off, wait for all motion to stop and inspect for damage. A damaged reel must be repaired or replaced before operation is continued.
- 13. Traverse slopes carefully. Do not start or stop suddenly when traveling uphill or downhill.
- 14. Operator must be skilled and trained in how to drive on hill sides. Failure to use caution on slopes or hills may cause loss of control and vehicle to tip or roll possibly resulting in injury or death.
- 15. DON'T TAKE AN INJURY RISK! When a person or pet appears unexpectedly in or near the area, STOP ENGINE. Do not resume until area is cleared.

MAINTENANCE



DANGER

SHARP BLADES INSIDE REEL BOX

SHARP BLADES CAN CAUSE PERSONAL INJURY

- Avoid contact with blades while cleaning or replacing rubber fingers.
- Stop engine and and disengage PTO before servicing.
- 16. Do not alter this equipment in any manner which may cause hazardous conditions.
- 17. Be sure entire machine is in good operating condition. Keep all nuts, bolts, and screws tight.



SAFETY AND INSTRUCTION DECALS

The following safety and instruction decals are installed on the plug pulverizer. If any become damaged or illegible, replace them. Decal part numbers are listed below and in your Parts Catalog. Order replacements from your Authorized Toro Distributor.



TOP OF CLEAN OUT DOOR (Part No. 01-506-0390)



ON PTO GUARD (Part No. 01-506-0130)



ON BELT GUARD, PTO GUARD, PIVOT ARM, WHEEL PIVOT TUBE & WHEEL MOUNTS (Part No. 01-506-0550)



ALIGNED WITH HEIGHT ADJ. POINTER (Part No. 01-506-0180)



SHARP BLADES INSIDE REEL BOX
SHARP BLADES CAN CAUSE
PERSONAL INJURY
• AVOID CONTACT WITH BLADES
WHILE CLEANING OR RE-

PLACING RUBBER FINGERS.

STOP ENGINE AND DISENGAGE
PTO BEFORE SERVICING.



UNDER CLEAN OUT DOOR (Part No. 01-506-0380)



SERIOUS INJURY.

- DO NOT OPERATE MACHINE UNLESS ALL
GUARDS ARE IN PLACE.



ON BELT GUARD (Part No. 01-506-0040)

SPECIFICATIONS

Dimensions:

Height: 36"

Width: 88"

Length: 42"

Processing Swath: 60"

Pickup Fingers: Abrasive resistant, high

modulus rubber, 70 per unit

Processing Blades: Stationary for safety, blue

spring steel, 2" x 5", 34 per unit

Tires: Swivel Castors, 4.10 x 3.4 x 4, 30 PSI tire

pressure

Drive: PTO powered to gearbox, belt drive,

3 groove powerband belt

Bearings: Sealed and self aligning

Frame: 7 gage sides, 12 gage frame

Frame Grate: Heavy duty, aids in grinding plugs

Height Adjustment: Screw type jack with handle

for quick and easy adjustments

Lift: Hydraulic from tractor

Drag Mat: Flex steel mat 8" x 60"

SET UP INSTRUCTIONS

ATTACHING PULVERIZER TO 300 SERIES GROUNDSMASTER (Fig. 1)

A

WARNING

- Left hand push arm on Groundsmaster is spring loaded.
- Sudden release of the push arm could cause serious personal injury.
- Use a helper and a wooden block to hold push arm down during installation of accessory.
- Keep hands and face away from push arm when it is held and blocked in the downward position.
- 1. Remove cutting unit or other attachment from Groundsmaster. Refer to cutting unit or attachment operator's manual.
- 2. Remove the ball joints attached to both Groundsmaster push arms.
- 3. Have a helper push down on the left push arm; then insert a 2x 4 inch block of wood between the frame and top of the push arm.
- 4. Pull down the right push arm until it is level with the left push arm. Insert a 2 x 4 inch block of wood between the frame and top of the push arm. Try to keep both arms level as possible for easier installation.
- 5. Set the pulverizer in front of the Groundsmaster. Connect the PTO. Push it forward until the push arms hit against the stops on the pivot arm. Slide the PTO in as the unit is moved back.
- 6. Fasten the U-bolts securely on the right lift arm. Fasten the U-bolts finger tight on the left lift arm.

- NOTE: If Groundsmaster has serial number 70001 or below, a new male PTO half must be ordered through Toro.
- 7. Have a helper push down on the left push arm; then remove the 2 x 4 inch blocks of wood.
- 8. Allow the left lift arm to move creating a horizontal leveling effect of the pulverizer. Then tighten U-bolts securely.
- 9. Attach the right hand lift chain.
- 10. Using the lift mechanism on the Groundsmaster, lower the unit on a level surface.
- 11. Attach the left hand lift chain. Tighten the until the chain is snug.

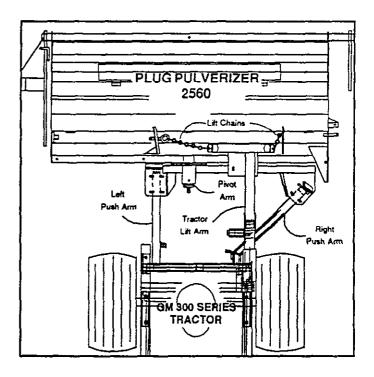


Figure 1

BEFORE OPERATING

CHECK GEAR BOX OIL

- 1. Remove the side plug.
- 2. Fill with a good quality 80/90 oil until it begins to seep out the side port.
- 3. If it is too full, drain out oil until it will no longer flow out that port.
- 4. Install plug.

CHECK TIRE PRESSURE

Maintain the tire pressure at 30 PSI.

CHECK BLADE BOLTS AND OTHER FASTENERS

Check blade bolts for tightness. Also, check all bolts and fasteners for tightness.

CONTROLS

REEL HEIGHT (Fig. 2)

The jack raises and lowers the finger reel. Always set the reel height so the fingers just touch the top of the turf to be pulverized. As the reel spins at full revolution, the fingers will elongate approximately 1/4". Test the unit in a small area before use.

Running the fingers too low will cause premature wear and result in turf damage. If pulverizing on turf that is cut extremely low or high, the wheel spacers can be repositioned so the fingers just touch the top of the turf. Seethe Reel Height Leveling and Adjusting (page 11).

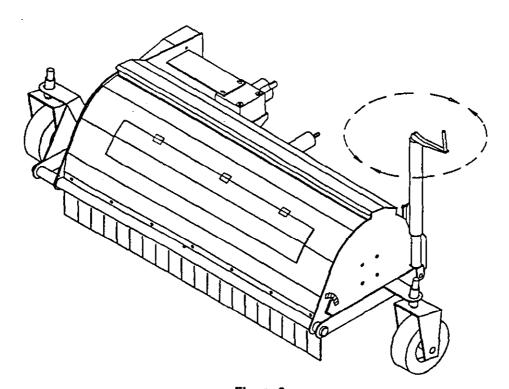


Figure 2

OPERATING INSTRUCTIONS



DANGER

THROWN OBJECTS CAN CAUSE SERIOUS INJURY

- Never open clean out door while unit is engaged.
- Stop engine and disengage PTO before opening clean out door.

SET REEL HEIGHT

1. Transport the pulverizer to the area to be worked.



CAUTION

Disengage the PTO before setting reel height.

- 2. Completely lower the unit. Adjust the screw jack so the fingers just touch the top of the turf.
- 3. With the engine at IDLE position, engage the PTO.
- 4. Increase to 3/4 or full throttle.

5. Always make gradual turns. Sharp turns may damage the turf and/or drag mat.

OPERATING CHARACTERISTICS

IMPORTANT: Always raise the unit off the turf when making turns. Failure to do so will result in broken fingers.

When turning, the plug material remains stationary while the fingers turn with the unit. If left in the lower position when turning the fingers contact the plug material and will bend into the path of the blades. Raise the unit enough to clear the plugs when turning.

Do not run the reels in one spot because you will damage the turf grass.

When operating in wet or moist grass, check the unit several times daily for build up of materials. Keep the accumulation of dirt cleaned off the grate, finger bar and blades.

The recommended running position is set so the fingers just touch the top of the turf. As the reel spins at full revolution, the fingers will elongate approximately 1/4". Running the fingers too low will cause premature wear and result in turf damage. Test the unit in a small area before use.

LUBRICATION

BEARINGS (Fig. 3)

The pulverizer has three bearings that must be lubricated with a No. 2 Lithium based grease.

IMPORTANT Lubricate the bearings to maintain a slight leakage on the seals. Too much grease can cause overheating.

WHEELS (Fig. 3)

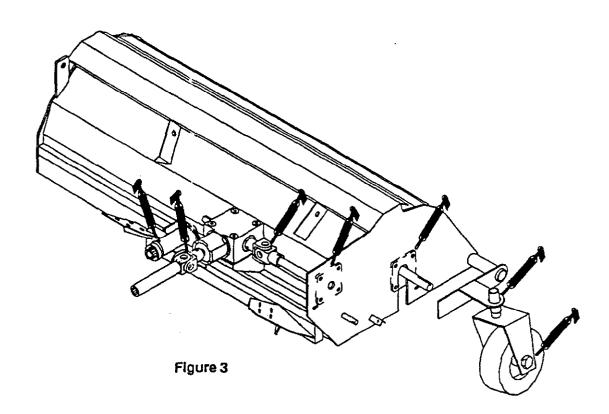
Under normal conditions, grease the wheels every 50 hours of use. Use No. 2 Lithium based grease.

GEARBOX

Check the oil level in the gearbox every 40 hours. Fill when needed. Remove the side plug. Fill with a good quality 80/90 oil until it begins to seep out the side port. If it's too full, drain out oil until it will no longer flow out that port. Replace plug.

GREASE FITTINGS (Fig. 3)

There are four grease fittings on the pulverizer. Check weekly and grease with No. 2 Lithium based grease.



MAINTENANCE



DANGER

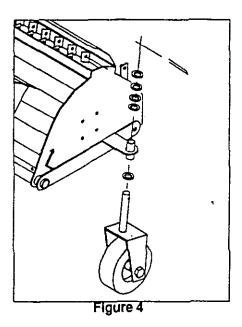
SHARP BLADES INSIDE REEL BOX

SHARP BLADES CAN CAUSE PERSONAL INJURY

- Avoid contact with blades while cleaning or replacing rubber fingers.
- Stop engine and and disengage PTO before servicing.

REEL HEIGHT AND LEVELING (Fig. 4)

IMPORTANT: Broken or missing fingers cause the reel to vibrate and prematurely wear. Replace all broken or missing fingers.



- 1. To pulverize properly the finger reel needs to be level horizontally across. If not, it can be leveled with the spacers on the wheel yoke. All the original spacers have to remain on the unit but can be rearranged for leveling purposes. The height of the reel can also be changed for a more defined height: such as low or high turf conditions.
 - A. The unit must be attached to the Groundsmaster before attempting to level. There must also be a flat and level surface to work on.

- B. Raise the pulverizer off the ground.
- C. Remove the cotter pin on the wheel voke shaft.
- D. Drop the wheel shaft and spacers from the tube.
- E. Rearrange the spacers as needed. All the original spacers have to remain on the unit but can be rearranged from top to bottom.
- F. Install the cotter pin. Arrange spacers the same on the other wheel shaft assembly.
 - G. Lower the unit to ground position. Measure the height of the fingers from each end to check for levelness. Change any spacers if needed.

ADJUSTING BELT DRIVE (Fig. 5)

Make sure belt is properly tensioned to assure correct operation of unit and unnecessary wear.

- 1. To adjust tension:
 - A. Remove the belt guard.
 - B. Check the tension by applying 5 lb. of force midway between the pulleys. The belt deflects 1/4".
 - C. If tension is incorrect, the idler arm may be adjusted by turning the nuts on the spring rod. Adjust the idler pulley against belt until proper deflection is achieved.
 - D. Install the belt guard.

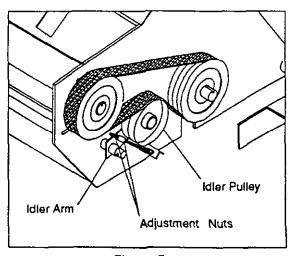


Figure 5



TROUBLESHOOTING

CONDITION	CAUSE	CORRECTION
EXCESSIVE VIBRATION	Check for missing fingers.	Replace missing or broken fingers.
	Check bearings on the reel shait. If they are excessively hot, they probab- ly are damaged.	Replace bearings.
	Check PTO shaft for straightness. Check ends of PTO, they may be damaged.	Replace PTO or any damaged parts.
	Debris wrapped around reel.	Remove any debris off the reel and grate.
	Reels could be bent or out of balance.	Replace the reel.
UNIT NOT BREAKING UP PLUGS	Check to see if grate is clogged.	Clean all materials off grate.
	Check for missing fingers.	Replace any missing fingers.
	Finger reel height may be too low or too high.	Adjust height. See Reel Height Leveling.
	Check tension and condition of belt.	Replace or adjust belt tension. (See Adjusting Belt Drive.)
EXCESSIVE BROKEN FINGERS	Check rotation of reel. The fingers need to clear the path of the blades.	 Move the reel shaft to center the fingers between the blades.
	 Examine location of broken fingers on the turf. If fingers are in places where unit was turned, the fingers are run- ning into blades. 	 Raise the unit off the turf when making turns. See Operating Characteristics.

STORAGE

- 1. Thoroughly clean the grate, finger bar and blades.
- 2. Inflate tires to 30 PSI.
- 3. Replace any broken or damaged fingers.
- 4. Check the condition of the blades. They can be rotated 180degrees for longer life. Check tightness of blade bolts. Tighten any loose hardware.
- 5. Lubricate all grease fittings. Wipe off any excess lubricant.
- 6. Tighten all fasteners.
- 7. Inspect the condition and tension of the belt. Repair as needed.
- 8. Check the gearbox oil. (See Lubrication; Gearbox).

IDENTIFICATION AND ORDERING

MODEL AND SERIAL NUMBER

The PLUG PULVERIZER 2560 has two identification numbers: a model number and serial number. The two numbers are stamped on a plate which is located on the main frame. In any correspondence concerning the PLUG PULVERIZER 2560, supply model and serial numbers to be sure that the 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

Date	Hours Used	Oil Change	Lubrication	Tire Pressure	Drive Belt	Seasonal Storage	
							
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MAINTENANCE CHART

Date	Hours Used	Oil Change	Lubrication	Tire Pressure	Drive Belt	Seasonal Storage		
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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 costs of parts and labor are included, but the customer pays the transportation costs on walk rotary mowers with cutting 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 Distributor or Commercial Dealer (the Yellow Pages of your telephone directory is a good reference source).
- The TORO Distributor or Commercial Dealer will advise you on the arrangements that can be made to inspect and repair your product.
- The TORO Distributor or Commercial 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 Commercial Products Service Department 100 Industrial Parkway Industrial Airport, Ks. 66031

The above remedy of the product defects through repair by an Authorized TORO Distributor or Commercial 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 of 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 Commercial Dealer or Distributor using Toro approved replacement parts.

Repairs or attempted repairs by anyone other than an Authorized TORO Distributor or Commercial 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

Gustomers 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.