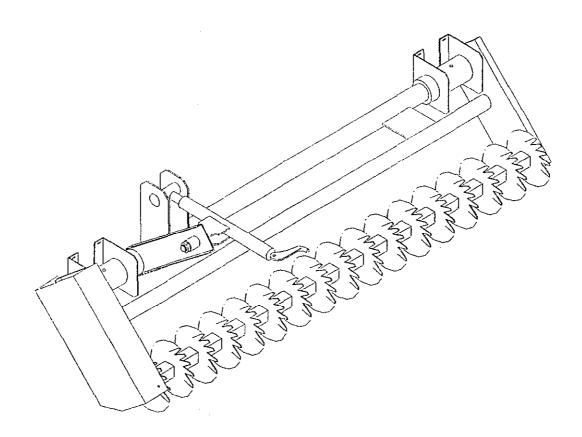


MODEL NO. 44015 - 70001 & UP

OPERATOR'S MANUAL

THATCHING REEL 87

ATTACHMENT FOR TURF SWEEPER 6500



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 INSTRUCTION



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 manual before starting and 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 AVE. SO. MINNEAPOLIS, MN 55420-1196

- 2. ALWAYS follow all safety precautions in the sweepers operator manual pertaining to operation of the sweeper.
- 3. Do not allow children to operate the machine. Do not allow adults to operate the machine without proper instruction.

- 4. Never operate the machine while under the influence of drugs or alcohol.
- 5. Keep all shields and safety devices in place. If a shield, safety device or decal becomes damaged, malfunctioning or illegible, repair or replace it before operation is commenced. Also tighten loose nuts, bolts to ensure machine is in safe operating condition.
- 6. Before each use, be sure all bolts and nuts are tight. Check the general condition of the blades.
- 7. Do notalter this equipment in any manner which may cause hazardous conditions.

WHILE OPERATING

8. Do not carry passengers on the sweeper and keep everyone away from the areas of operation.

MAINTENANCE

- 9. If major repairs are ever needed or assistance desired, contact an Authorized TORO Distributor.
- 10. Make sure machine is in safe operating condition by keeping nuts, bolts and screws tight.

SAFETY AND INSTRUCTION DECALS

The following safety and instruction decals are installed on the unit. Replace any decals that becomes damaged or illegible. Part numbers for decals are listed below and in your Parts Catalog. Order replacements from your Authorized Toro Distributor.



ON CHAIN GUARD (Part No. 01-506-0050)



EACH SIDE BLADE GUARD (Part No. 01-506-0340)

SPECIFICATIONS

THATCHING WIDTH:

60"

DRIVE CHAINS:

#80 chain

MOUNTING REQUIREMENTS:

Model 65 Sweeper

OPERATION: PTO powered, chain driven.

ROTATION DIRECTION:

Forward

RAISE/LOWER MECHANISM: Screw jack

BLADES:

(19) 12 pt., 12 ga. on 3" centers.

DIMENSIONS: Height - 20"

BEARINGS: All self-aligning, re-lube type.

Width - 69"

Length - 24"

SHIPPING WEIGHT:

310 lbs.

SET UP INSTRUCTIONS

NOTE: This unit is heavy and the blades are capable of causing serious injury. It is recommended that two men mount this unit and that caution be exercised during this mounting procedure.

1. Take note of the parts already assembled on your thatcher and familiarize yourself with the hardware and parts needed to complete the assembly of the thatcher.

2. (FIG. 1) With two or more men, lift the Blade Support to the Reel Housing assembly. As you line up the holes of the reel housing assembly with the support brackets, insert a screwdriver or other rod in the hole in order to hold it while bolts are inserted from the inside of the reel housing assembly. Before tightening down the bolts, push the two mounting brackets of the blade support toward the ends and at the same time center the thatcher on the reel housing assembly. Tighten down the (8) bolts. There should be little back and forth play in the blade support when it is positioned properly.

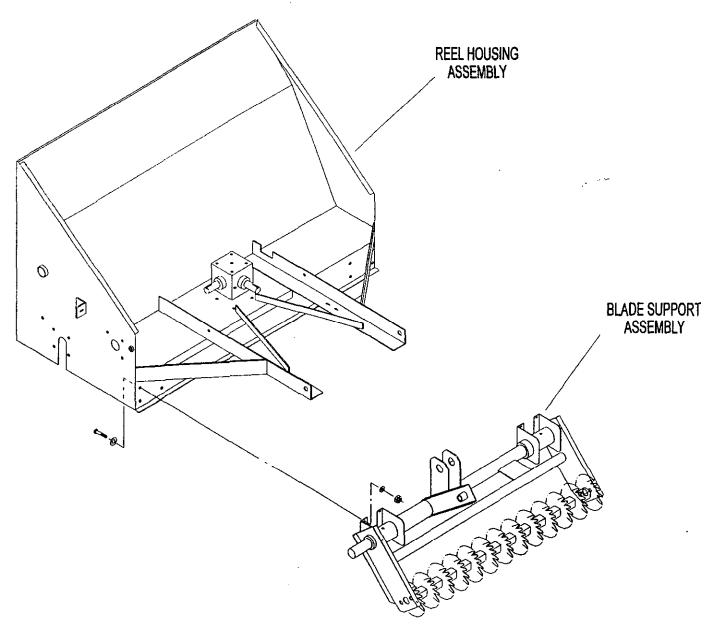
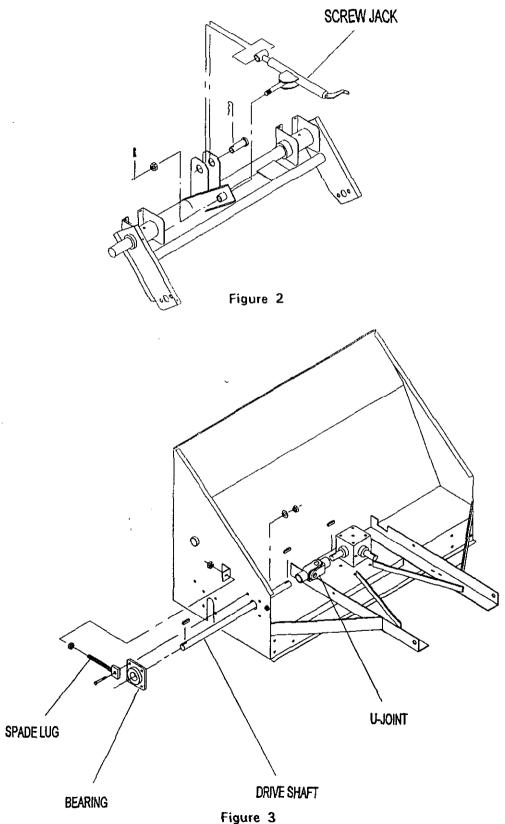


Figure 1

3. (FIG. 2) Install the Screw Jack assembly as shown in the illustration. A hole for the castle nut must be drilled for a cotter pin to secure its position.

4. (FIG. 3) Remove the gearbox guard and the existing PTO from the tractor. Attach the drive shaft, the U-joint and the bearing. The spade lug, is an adjustment for the bearing and will be adjusted later.



5. (FIG. 4) Assemble the gear train of the thatcher. Note the relative positions of the gears and chains. Item A (sprocket) has a grease zerk which must go to the outside. After the gears are placed on the shafts with the keys, a 3/16" hole must be drilled in the shafts to accommodate cotter pins (item B). Space machinery bushings out to the hole to keep the sprocket from moving outward.

6. (FIG. 3) CHAIN TENSION ADJUSTMENT: The chains are tightened/loosened by the use of (1) spade lug.

NOTE: DO NOT over tighten chain as this will cause excess wear on the gears.

DO NOT under tighten as this will cause excess wear on the chain.

When the chains are tightened properly, there should be a deflection between 1/8" to 1/4".

7. Lubricate the gears and chain as outlined in this manual.

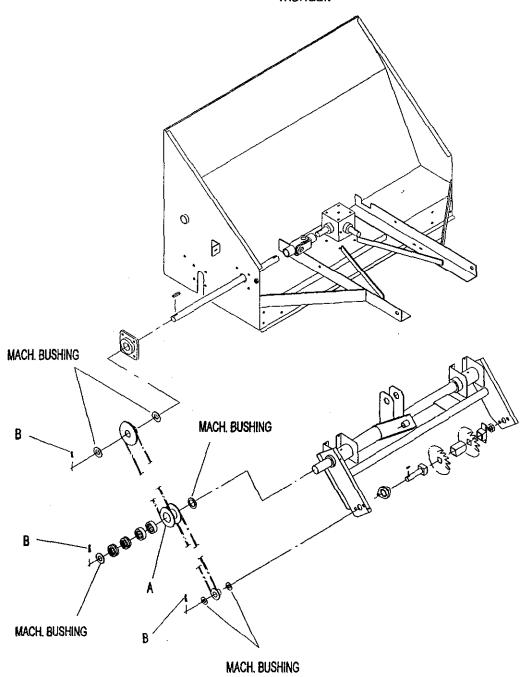


Figure 4

8. (FIG. 5) Attach the PTO extension shaft (item A) and U-joint (item B), along with the mounting angle (item C), bearing (item D) and the blade guard (item E) to the gearbox as shown in the illustrated parts. Hook up the tractor PTO to the PTO extension.

NOTE:Be sure that when raising the thatcher, the blades do not come in contact with the blade guard (item E).

Adjust the jack so the blades will stop short of the guard.

9. Test the operation of the unit in the raised position.

NOTE:Stop the operation of the thatcher if any load or unusual noises occur. Remedy the cause before resuming operation. If the problem can't be fixed, contact your nearest Authorized TORO Distributor for service.

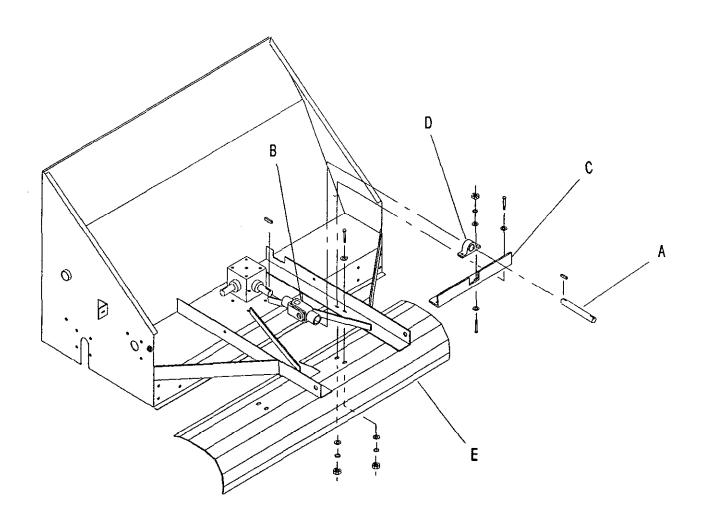


Figure 5

10. (FIG. 6) Install the thatcher guards according to the illustration, using the hardware shown.

Reinstall the gearbox guard. The unit should now be ready to field test.

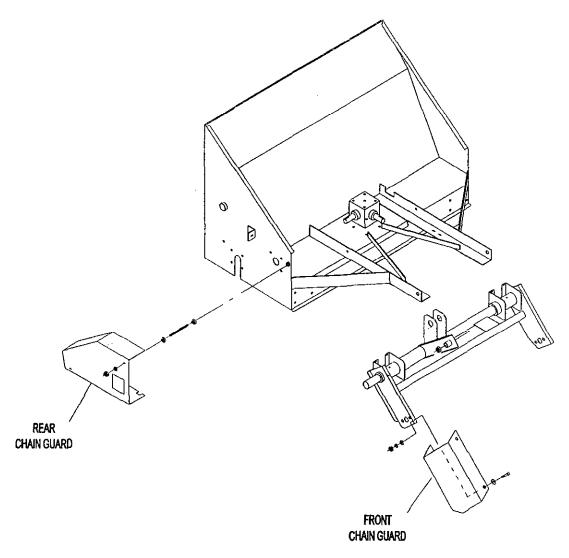


Figure 6

OPERATING INSTRUCTIONS

- 1. This unit is capable of thatching dead grass, debris, etc., or if lowered into the ground, aerating several inches deep.
- 2. In some soils and depending on the power source of the tractor, it may be possible to penetrate the soil as deep as 4 inches.
- 3. Choose a test patch of ground to experiment for the right depth to achieve satisfactory results.

LUBRICATION

BEARINGS

The thatcher has self sealing 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.

DRIVE CHAIN

1. Always maintain a heavy coat of grease on the drive chain.

STORAGE

- 1. Thoroughly clean the thatcher. The blade area should be free of dirt, leaves and debris.
- 2. Check the condition of the blades. Replace any worn or broken blades.
- 3. Check all fasteners for looseness: tighten as necessary.
- 4. Grease or oil all grease fittings and bearings. Wipe off excess lubricant.
- 5. Check the tension and condition of the drive chain. Adjust the tension if necessary and lightly coat the chain with grease.

PARTS ORDERING

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.

The Toro Commercial Products Two Year Limited Warranty

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The Toro Company warrants your 1996 or newer Toro Commercial Product ("Product") purchased after January 1, 1997, to be free from defects in materials or workmanship for the period of time listed below*. Where a warrantable condition exists, Toro will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

Warranty Duration: Two years or 1500 operational hours*, whichever occurs first.

*Product equipped with hour meter.

Owner Responsibilities:

As the Product owner, you are responsible for required maintenance and adjustments stated in your Owner's Manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

Instructions For Obtaining Warranty Service:

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department 8111 Lyndale Avenue South Minneapolis, MN, 55420-1196 Telephone: (612) 888-8801 Facsimile:(612) 887-8258 E-Mail: Commercial.Service@Toro.Com

Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items/conditions listed below are not covered by this warranty:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.
- Product failures which result from failure to perform required maintenance and/or adjustments are not covered.
- Product failures which result from operating the Product in an abusive, negligent or reckless manner are not covered.

- This warranty does not apply to parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, bedknives, tines, spark plugs, castor wheels, tires, filters, belts, etc.
- This warranty does not apply to failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- This warranty does not apply to normal "wear and tear" items.
 Normal "Wear and Tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

Other Legal Disclaimers:

The above remedy of product defects through repair by an authorized distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Except for the Emissions warranty referenced below, if applicable, 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.

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 Product or service during periods of malfunction or non-use.

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

Note to California residents: The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA), or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the California Emission Control Warranty Statement printed in your Owner's Manual or contained in the engine manufacturer's documentation for details.