

MODEL NO. 03732 - 210000001 & UP MODEL NO. 03730 - 210000001 & UP

OPERATOR'S MANUAL

THATCHING REEL

(For REELMASTER® 450-D, 4500-D, 335-D & 3500-D)

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. Replacements can be ordered from your Authorized Toro Distributor.



Part No. 67-7960

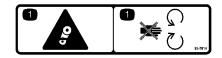


Part No. 85-6410



Part No. 93-6688 (for CE)

- Danger—read the operator's manual before performing maintenance.
- Cutting hazard to hands, fingers, and feet—stop the engine before going near rotating reels.



Part No. 93-7814 (for CE)

1. Entanglement hazard—stay away from moving parts.

LOOSE PARTS

DESCRIPTION	QTY	USE
Capscrew Spacer	2 2	Use to Mount Skids
Decals	2	Affix to Thatching Reel
Operator's Manual	1	
Parts catalog	1	
Shipment Trace Card	1	
Registration Card	1	

SPECIFICATIONS

Reel Diameter: 9 in. (23 cm).

Reel Width: 27 in. (68.5 cm) effective width of cut.

Depth of Penetration: Infinitely variable to a maximum depth of 1, 1/8" (28 mm)

depth of 1-1/8" (28 mm).

Construction: Welded steel frame with self-aligning ball bearings. Heavy duty, steel rear roller with tapered roller bearings is mounted in rubber bushings for quiet, vibration free, operation. Adjustable deflector shield.

Thick, hardened .1046" thick steel blades are spaced 11/4" apart.

Reel Adjustment: Quick adjustment and positive locking is provided by knob and locking type cone nut on roller adjusters. Gauge marks in 1/8" increments are provided for easy adjustments.

Drive: The reel drive motor turns a cog belt which drives the reel. Drive pulleys and belt are encased in a drive housing for safety and protection from contamination.

SET UP INSTRUCTIONS

Note: The thatching reels are mounted to the traction unit the same as the cutting units. Refer to Cutting Unit Operators Manual for mounting instructions. Make sure floatation kit lockout screw and nut are in the fixed position.

ADJUSTING THATCHING DEPTH

Method One - Fixed Skid

1. Remove bolt and locknut securing skid to roller bracket (Fig. 1).

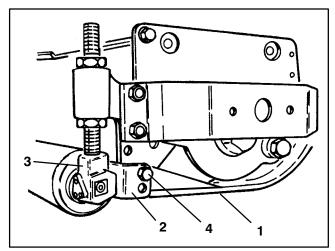


Figure 1

- 1. Skid
- 2. Roller bracket
- 3. Roller adjuster
- 4. Reposition in top hole (Adjustable skids only)
- 2. Remove (3) bolts and lockwashers securing roller bracket to roller adjuster (Fig. 1).
- **3.** Position spacer between skid and sideplate, aligning mounting holes as shown in Fig. 2.

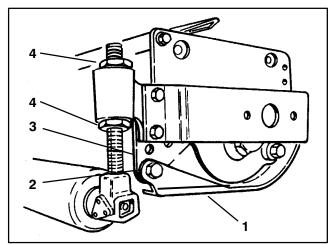


Figure 2

Skid
 Spacer

- 3. Sideplate
- 4. Cone nut
- **4.** Secure spacer and skid to sideplate with 1/2-13 x 11/4" capscrew. Bolt to be installed from outside of sideplate (Fig. 3).

5. Make sure front of skid is in highest position and mounting bolt is secure.

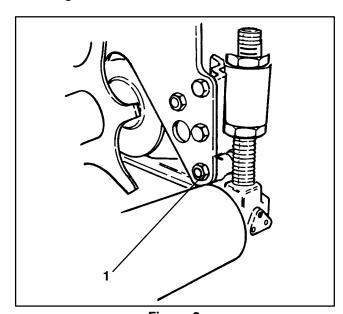


Figure 3

1. Skid mounting bolt & lock nut

- **6.** Loosen the cone nut on each roller adjuster and rotate top cone nut until desired thatching depth is attained (Fig. 2).
- **7.** Tighten cone nuts and recheck adjustments. Use gauge marks on roller adjusters to assure depth is equal.

Method Two - Adjustable Skid

- **1.** Remove bolt and locknut securing skid to roller bracket (Fig. 1).
- **2.** Pivot skid upward aligning it with top hole in roller bracket (Fig. 1).
- **3.** Loosen bolt securing front of skid to sideplate.
- **4.** Loosen the cone nut on each roller adjuster and rotate top cone nut until desired thatching depth is attained.
- **5.** Tighten cone nuts and recheck adjustment. Use gauge marks on roller adjuster to assure depth is equal.
- **6.** Level the skid to the sideplate and tighten fasteners at front and rear of skid.

ADJUSTING GRASS SHIELD

1. Pivot grass shield up or down until desired throw is attained.

Note: When using thatching reels it is recommended that roller scrapers, Toro part no. 59-6090, be installed.

OPERATION

TRAINING PERIOD

Before thatching with the thatching reels, The Toro Company suggests you find a clear area and practice starting, stopping, raising, lowering and thatching with the thatching reels. This training period will be beneficial to the operator in gaining confidence in the performance of the thatching reels.

Experiment with grass conditions to see that the grass shield is properly adjusted and is throwing grass and debris as desired. This training period will ensure that the proper adjustment of grass shields has been made.

Note: Care should be taken when making turns. At all times avoid sharp turns when using thatching reels. Lift inside wing cutting unit when making sharp turns.

BEFORE OPERATION OF THE THATCHING REELS

Survey turf to determine if there are any obstacles that

will be damaged or will result in damage to the thatching reels such as sprinkler heads and protruding objects.

Changes based on your local turf conditions may be required in order to gain the results you want to establish.

MAINTAIN A STRAIGHT LINE

Maintain a straight line by sighting off an object in the foreground. Try to minimize the amount of overlap to keep the thatching even.

OPERATING TIPS

- **1.** Maintain maximum reel speed to achieve optimum thatching.
- **2.** Vary ground speed depending on amount of thatch in turf.
- 3. Change blades when they are worn or bent.
- **4.** In extremely heavy thatch conditions, raise and latch one or both wing units and operate with center three units until thatch buildup has been reduced.

MAINTENANCE

LUBRICATION

There are (4) grease fittings on each thatching reel unit—one on the end of each roller and reel shaft. Each should be greased daily with #2 general purpose grease (Fig. 4).

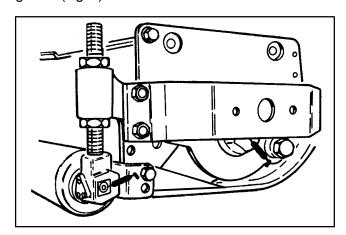


Figure 4

REMOVING THATCHING REEL

1. Remove the guards and skids from each end of unit. Also remove roller.

2. Remove (2) shoulder bolts, locknuts, and (1) Belleville washer securing bearing housing to right side of unit. Slide bearing housing off reel shaft (Fig. 5).

Note: When reassembling bearing housing, make sure washer is positioned on rear shoulder bolt.

- **3.** Remove (2) flange screws securing cover to drive housing and remove cover. Remove drive belt from housing (Fig. 6).
- **4.** Remove the reel capscrew, toothed washer, and pulley washer from reel shaft.
- **5.** Using a puller, remove the pulley from the shaft. Remove the woodruff key from the shaft.

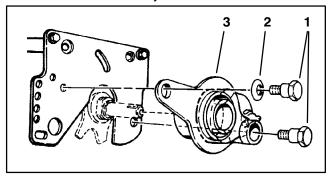
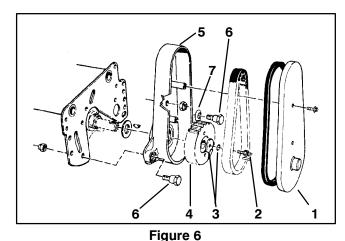


Figure 5

1. Shoulder bolts 2. Belleville washer 3. Bearing housing

MAINTENANCE



rigi

- 1. Drive housing cover
- 2. Reel capscrew
- 3. Washers
- 4. Pulley
- 5. Drive housing
 - 6. Shoulder bolt
 - 7. Belleville washer
- **6.** Remove the (2) shoulder bolts, locknuts, and (1) Belleville washer securing the drive housing to the sideplate. Remove the drive housing.

Note: When reassembling bearing housing, make sure washer is positioned on rear shoulder bolt.

7. Slide the reel shaft out the slots in sideplates.

8. Loosen set screw securing nut to left side of reel shaft. Remove nut (Fig. 7).

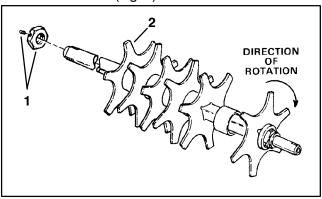


Figure 7

- 1. Setscrew and nut
- 2. Leading edge of blade
- 9. Remove spacers and worn blades from shaft.
- **10.** Reinstall spacers and new blades as shown in Fig. 7. Make sure blades are alternated properly and leading edge of each blade is correct for the direction of rotation.
- **11.** Apply never—seez to reel shaft ends before reinstalling.