Form No. 3350-960 Rev D

TORO®

Count on it.

Operator's Manual

Combination Deck

for Versa Vac

Model No. 07082—Serial No. 240000001 and Up

To register your product or download an *Operator's Manual* or *Parts Catalog* at no charge, go to www.Toro.com.

Original Instructions (EN)

This product complies with all relevant European directives, for details please see the separate product specific Declaration of Conformity (DOC) sheet.

Introduction

The Combination Deck is to be used in conjunction with the Versa Vac. The machine is intended to be used by professional, hired operators in commercial applications. The primary function of the machine is to facilitat dethatching, renovation and debris removal from large turf areas in one pass.

Read this information carefully to learn how to operate and maintain your product properly and to avoid injury and product damage. You are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Write the numbers in the space provided.

Model No. _____

Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 1), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 1

1. Safety alert symbol

This manual uses 2 other words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

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Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert symbol, which means CAUTION, WARNING, or DANGER- "personal safety instruction." Failure to comply with the instruction may result in personal injury or death.

Safe Operating Practices

Training

- Read the operator's manual and other training material carefully. Be familiar with the controls, safety signs, and the proper use of the equipment. If the operator or mechanic can not read the language of this manual, it is the owner's responsibility to explain this material to them.
- Become familiar with the safe operation of the equipment, operator controls, and safety signs.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- Never let children or untrained people operate or service the equipment. Local regulations may restrict the age of the operator.
- The owner/user can prevent and is responsible for accidents or injuries occurring to himself or herself, other people, or property.

Preparation

- Evaluate the terrain to determine what accessories and attachments are needed to properly and safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Wear appropriate clothing including hard hat, safety glasses and ear protection. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Inspect the area where the equipment is to be used and remove all objects such as rocks, toys and wire which can be thrown by the machine.
- Use extra care when handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove fuel cap or add fuel with engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel or drain the machine indoors.
- Check that operator's presence controls, safety switches and shields are attached and functioning properly. Do not operate unless they are functioning properly.

Operation

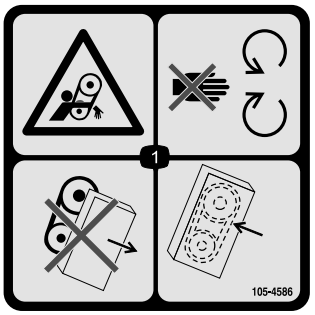
- This product may exceed noise levels of 85 dB(A) at the operator position. Hearing protection is recommended for prolonged exposure to reduce the potential of permanent hearing damage.
- Using the machine demands attention. To prevent loss of control:
  - Operate only in daylight or when there is good artificial light.
  - Drive slowly and watch for holes or other hidden hazards.
  - Do not drive close to a sand trap, ditch, creek, or other hazard.
  - Reduce your speed when making sharp turns and when turning on hillsides.
  - Avoid sudden starts and stops.
  - Before backing up, look to the rear and ensure that no one is behind the machine.
  - Watch out for traffic when near or crossing roads. Always yield the right-of-way.
- The rubber fingers and flails knifes pick up and propel debris and small objects in its path during operation. Always wear eye and head protection to avoid possible injury from flying objects, and keep children, pets, and bystanders well away from the area of operation.
- Never carry passengers on prime mover or allow anyone to ride in trailer.
- Do not step over P.T.O. shaft to get to other side of machine. Walk around trailer.
- Never get on or off prime mover with P.T.O. shaft engaged.
- Always stand to extreme right or left side of trailer when opening rear door.
- Do not take an injury risk! When a person or pet appears unexpectedly in or near the operating area, stop operation. Careless operation, combined with terrain angles, ricochets, or improperly positioned guards can lead to thrown object injuries. Do not resume operation until the area is cleared.
- Lightning can cause severe injury or death. If lightning is seen or thunder is heard in the area, do not operate the machine; seek shelter.

Maintenance and Storage

- Remove the key from the ignition switch to prevent accidental starting of the engine when servicing, adjusting, or storing the machine.
- Perform only those maintenance instructions described in this manual. If major repairs are ever needed or assistance is desired, contact an Authorized Toro Distributor.
- Be sure that the machine is in safe operating condition by keeping nuts, bolts, and screws tight. Check all bolts and nuts frequently to be sure that they are tightened to specification.
- Make sure all hydraulic line connectors are tight, and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- Keep body and hands away from pin hole leaks or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, not hands, to search for leaks. Hydraulic fluid escaping under pressure can have sufficient force to penetrate skin and do serious damage. If fluid is ejected into the skin, it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.
- Before disconnecting or performing any work on the hydraulic system, all pressure in system must be relieved by stopping engine and lowering implement to the ground.
- To ensure optimum performance and safety, always purchase genuine Toro replacement parts and accessories to keep the machine all Toro. Never use "will-fit" replacement parts and accessories made by other manufacturers. Look for the Toro logo to ensure genuineness. Using unapproved replacement parts and accessories could void the warranty.

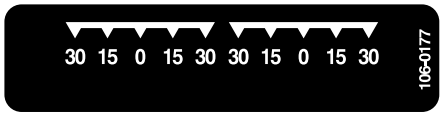
Safety and Instructional Decals

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



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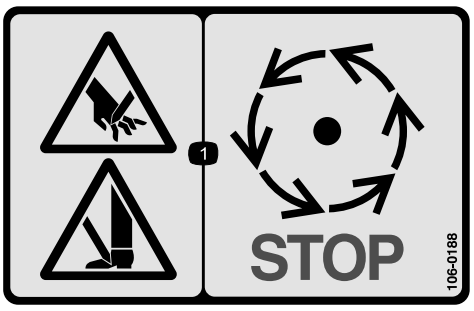
1. Entanglement hazard, belt—stay away from moving parts. Do not operate the machine with the shields or guards removed; keep the shields and guards in place.



106-0177



106-0178



106-0188

1. Cutting hazard of hand or foot—wait for moving parts to stop.

Setup

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	Tow arm Clevis pin Cotter pin	2 2 2	Mount the tow arms
2	Washer Hair pin cotter Clevis pin Hair pin cotter	2 2 2 2	Mount the combination deck
3	No parts required	–	Check tire pressure

Media and Additional Parts

Description	Qty.	Use
Parts Catalog Operator's Manual	1 1	Review the material and store in an appropriate place:

Note: Determine the left and right sides of the machine from the normal operating position.

1

Mounting the Tow Arms

Parts needed for this procedure:

2	Tow arm
2	Clevis pin
2	Cotter pin

Procedure

Mount the tow arms to the front of the deck with (2) clevis pins and cotter pins. Position the tow arms as shown in Figure 2.

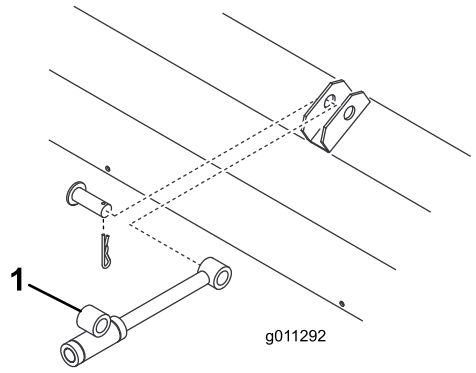


Figure 2

1. Tow arm

2

Mounting the Combination Deck

Parts needed for this procedure:

2	Washer
2	Hair pin cotter
2	Clevis pin
2	Hair pin cotter

Procedure

1. Roll the deck under the Versa Vac. Make sure the flail is positioned to the front.
2. Slide the tow arms onto the frame pins. Secure each tow arm to frame pin with a washer and hair pin cotter (Figure 3).

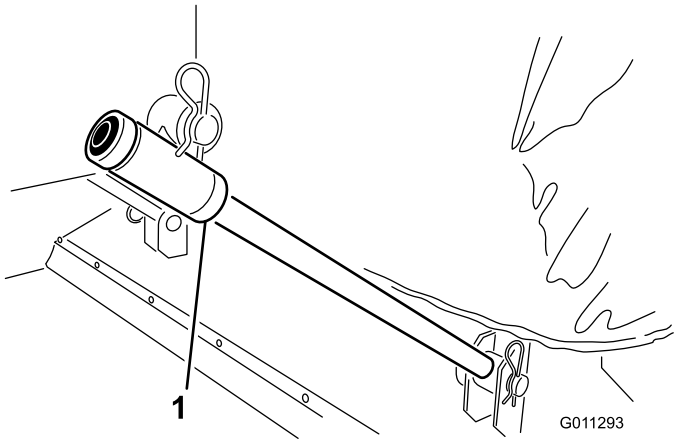


Figure 3

1. Tow arm

3. Connect each lift chain to a deck bracket with a clevis pin and hair pin cotter (Figure 4).

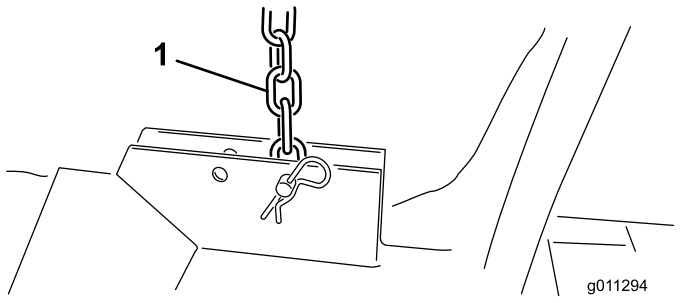


Figure 4

1. Lift chain

4. Install canvas ring around the lip on the Versa Vac and deck openings (Figure 5).

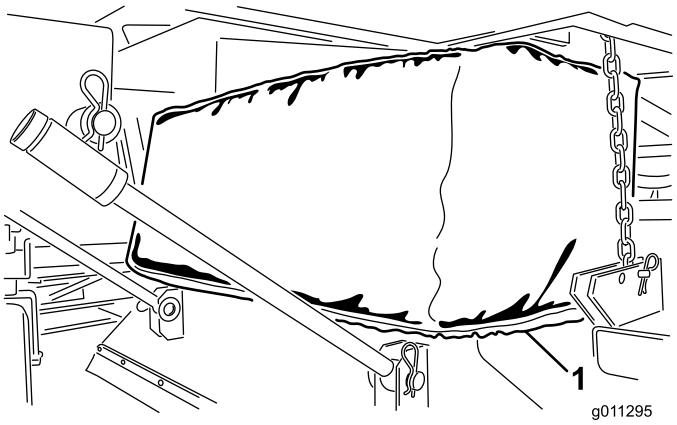


Figure 5

1. Canvas ring

5. Connect hydraulic motor hose quick couplers to the Versa Vac couplers as shown in Figure 6.

   Note: Verify rotation of fingers. Fingers should rotate clockwise (as viewed from motor end of deck).

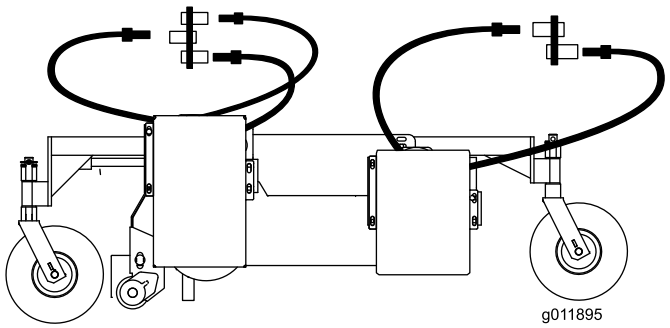


Figure 6

Note: If deck is not level when it is raised off the ground, reposition lift chain in another mounting hole in bracket.

3

Checking the Tire Pressure

No Parts Required

Procedure

The correct tire pressure for the castor wheels is 30 psi.

Product Overview

Specifications

Note: Specifications and design are subject to change without notice.

Deck Width (over all)	78 inches
Deck Height	20 inches
Net Weight	720 pounds

Attachments/Accessories

A selection of Toro approved attachments and accessories are available for use with the machine to enhance and expand its capabilities. Contact your Authorized Service Dealer or Distributor or go to www.Toro.com for a list of all approved attachments and accessories.

Operation

Note: Determine the left and right sides of the machine from the normal operating position.

Adjusting the Operating Height

The operating height of the Combination Deck is set at the factory for 1/2 inch high grass. The operating height is adjustable from 1/2 to 3 inches (13 to 76 mm) by repositioning the castor wheel spacers and relocating the capscrews that secure the castor beams to the height adjustment plates.

1. Remove the capscrews, washers and nuts securing a castor assembly beam to the height adjustment plates (Figure 7).

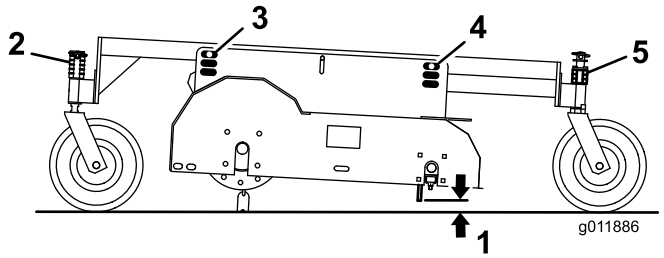


Figure 7

1. Grass height
2. Front castor
3. Front slots
4. Rear slots
5. Rear castor

2. Using the desired front and rear slots, as determined in Figure 8, secure the castor assembly beam to the height adjustment plates with the capscrews, washers and nuts previously removed. The washers are to be positioned outside of the height adjustment plates.

Front Caster	Height Of Cut	Back Caster
Deck set at the TOP slot in the front and the TOP slot in the back		
2 ea 1/2" Spacers	1/2" H-O-C	1 ea 1/2" Spacer
1 ea 1/2" Spacer	1" H-O-C	3 ea 1/2" Spacers
1 ea 1/4" Spacer	1 - 1/2" H-O-C	5 ea 1/2" Spacers
Deck set at the TOP slot in the front and the MIDDLE slot in the back		
1 ea 1/8" Spacer	2" H-O-C	4 ea 1/2" Spacers 1 ea 1/4" Spacers
Deck set at the TOP slot in the front and the BOTTOM slot in the back		
No Spacer	2-1/2" H-O-C	4 ea 1/2" Spacers
No Spacer	3" H-O-C	5 ea 1/2" Spacers 1 ea 1/4" Spacer

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Figure 8

3. Repeat the procedure on opposite side of the deck. Make sure both castor assemblies are mounted at the same height.
4. Remove the clevis pin from the spindle shaft (Figure 9).

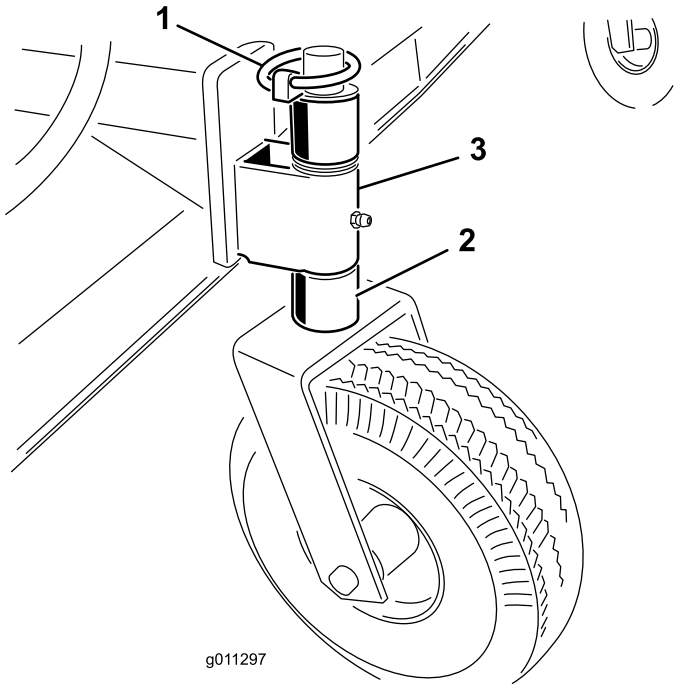


Figure 9

1. Clevis pin
2. Spacer
3. Caster arm

5. Remove or add "C" shaped spacers to the spindle shaft, below the castor arm, to get the desired height (Figure 8 & Figure 9).
6. Place all remaining spacers on the spindle shaft above the castor arm.
7. Install the clevis pin to secure the assembly.
8. Repeat the procedure on the remaining castors.

Operating Tips

- Before starting operation, survey area to determine the best direction to operate.
- Test performance of combination deck before operating on formal turf. Adjust operating height as desired.
- To maintain a straight line during, sight an object in the foreground.
- Always try to make a long, continuous run with a slight overlap on the return run.
- On turf areas, the deck will pick up twigs, clippings, leaves, pine needles and pine cones and small debris.

Important: Do not make sharp turns when using the combination deck as damage to turf may occur.

Important: Do not operate combination deck while rotor is turning and in the raised position.

Inspection And Cleanup After Operation

When operation has been completed, thoroughly clean and wash the deck. After cleaning, it is recommended that the machine be inspected for possible damage to all mechanical components. These procedures will assure that the machine will perform satisfactorily during next use.

Maintenance

Lubrication

The deck has 12 grease fittings that must be must be lubricated regularly. If the machine is operated under normal conditions, lubricate the 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.

The grease fitting locations and quantities are:

- Caster wheel (2 ea.) (Figure 10)

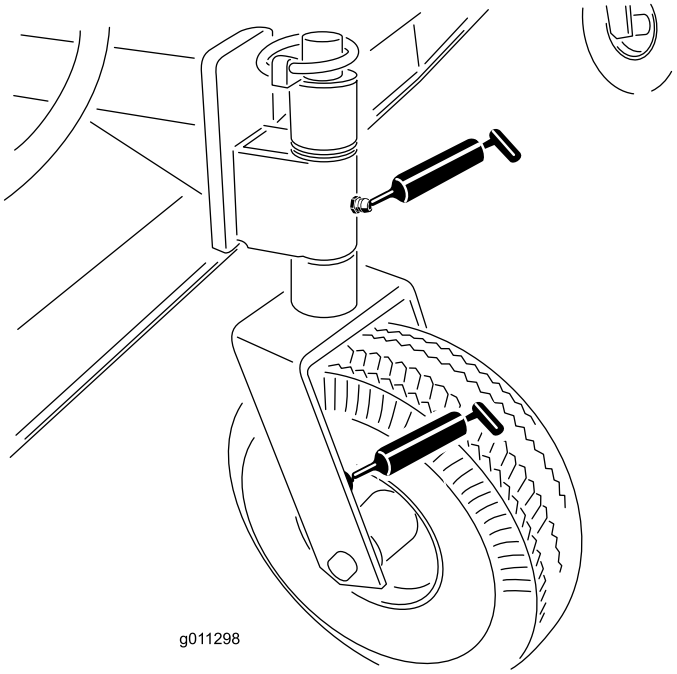


Figure 10

- Rotor bearings (4) (Figure 11)

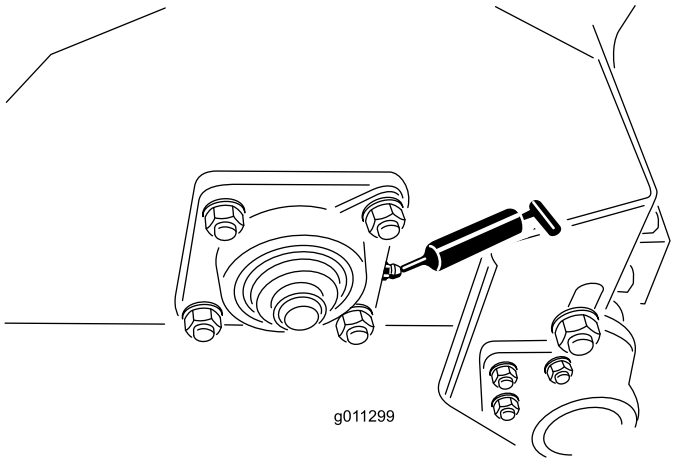


Figure 11

Important: Lubricating the deck immediately after washing helps purge water out of the bearings and increases bearing life.

1. Wipe each grease fitting with a clean rag.
2. Wipe excess grease away.

Adjusting the Drive Belts

Make sure belts are properly tensioned to ensure proper operation of the machine and unnecessary wear. Check belt frequently.

Note: Check/adjust the belt tension after the first 20 hours of operation.

1. Remove the fasteners securing the drive shield to the deck frame (Figure 12). Remove the shields.

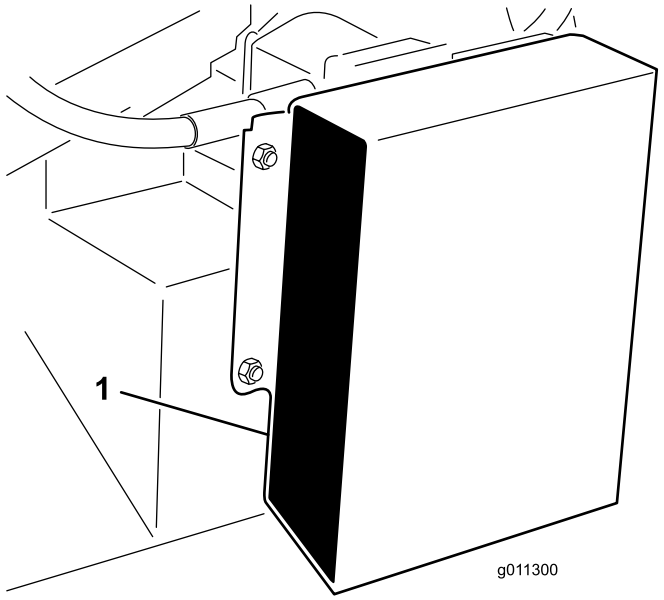


Figure 12

1. Drive shield

2. On the back side of the frame, loosen the capscrew securing the belt tensioner to the frame (Figure 13).

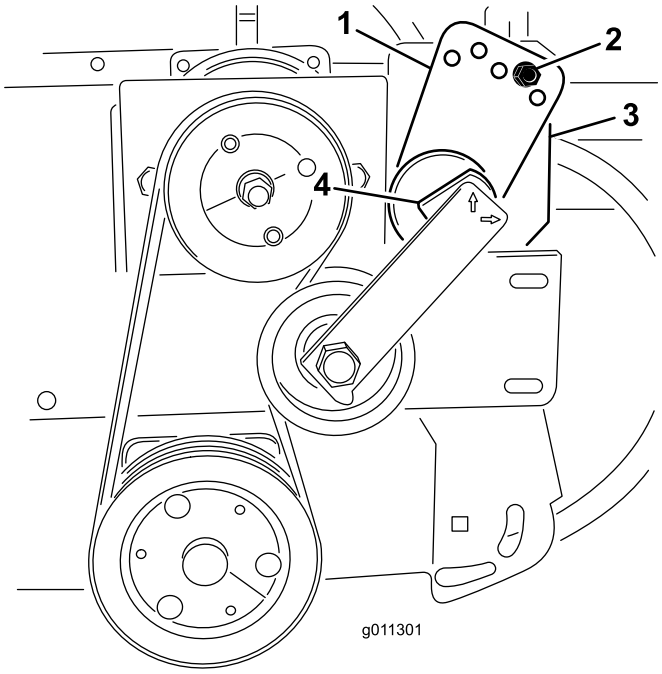


Figure 13

1. Tensioner guide
2. Capscrew & nut
3. Capscrew (back of frame)
4. Tensioner

3. Remove capscrew and nut securing tensioner guide to drive mount (Figure 13). Belt tension will be released when capscrew is removed.
4. Position a large wrench on tensioner. Rotate tensioner clockwise until decal arrow is aligned with 15 degrees on tensioner tube.
5. Insert capscrew into aligned guide holes and secure with nut. If holes are not exactly aligned, rotate guide to the next higher hole until aligned.
6. Tighten capscrew, on back side of frame to lock tensioner.
7. Install the motor shield with the fasteners previously removed.

Replacing the Finger Belts

1. Loosen nuts and washers securing finger pinchers to rotor (Figure 14).
2. Remove old belt fingers.
3. Install new belt fingers. Belt fingers to extend from finger pinchers approximately 4 inches.
4. Tighten nuts securing assembly.

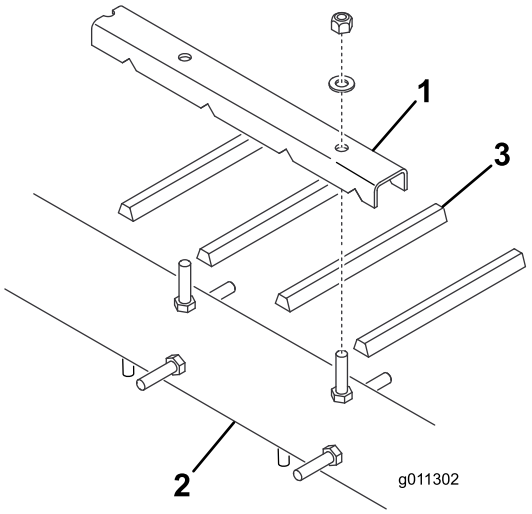


Figure 14

1. Finger pincher
2. Rotor
3. Belt finger

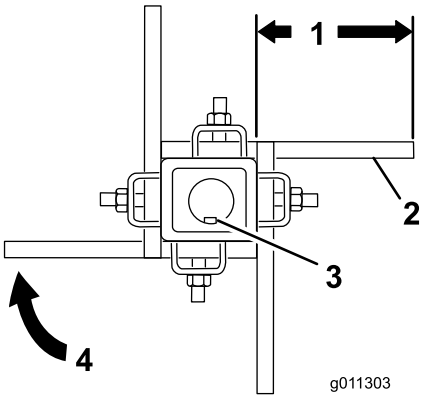


Figure 15

1. 3.63 inches
2. Flat side to belt
3. Keyed shaft
4. Brush rotation

Replacing the Flail Knives

When flail knife edges become curved from wear, they should be reversed or replaced.

1. Remove roll pin securing mounting pin to flail rotor (Figure 16).
2. Slide mounting pin from rotor allowing removal of flail knives and spacers (Figure 16).
3. Inspect spacers and mounting pins for wear and replace as necessary.
4. Assemble the flail knives (Figure 16) as follows:
   - Starting at end of rotor, assemble a spacer and a flail knife with hanger, then three more spacers. Continue pattern until pin is full. Secure mounting pin to rotor with roll pin.

     Note: Count the rotor flange as a spacer.

- Rotate rotor 90 degrees and continue assembly of next section. Each section contains 4 knives, 4 knife hangers and 10 spacers.
- After completing full length of rotor, repeat procedure on opposite side of rotor (180 degrees) from initial assembly.

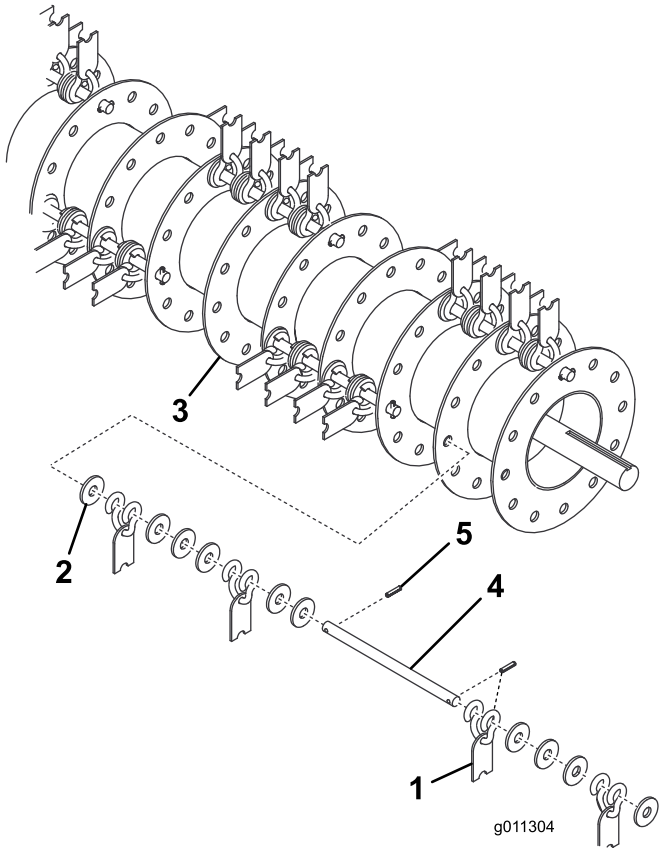


Figure 16

1. Flail knife
2. Spacer
3. Rotor flange
4. Mounting pin
5. Roll pin

Notes:

Notes:

Toro General Commercial Products Warranty

A Two-Year Limited Warranty

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly warrant your Toro Commercial Product ("Product") to be free from defects in materials or workmanship for two years or 1500 operational hours*, whichever occurs first. This warranty is applicable to all products with the exception of Aerators (refer to separate warranty statements for these products). Where a warrantable condition exists, we 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.

** Product equipped with hour meter*

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
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
952-888-8801 or 800-952-2740
E-mail: commercial.warranty@toro.com

Owner Responsibilities

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

Items and Conditions Not Covered

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. This warranty does not cover the following:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, or modified non-Toro branded accessories and products. A separate waranty may be provided by the manufacturer of these items.
- Product failures which result from failure to perform recomended maintenance and/or adjustments. Failure to properly maintain your Toro product per the Recommended Maintenance listed in the *Operator's Manual* can result in claims for warranty being denied.
- Product failures which result from operating the Product in an abusive, negligent or reckless manner.
- 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, brake pads and linings, clutch linings, blades, reels, rollers and bearings (sealed or greasable), bed knives, aerator crankshaft and stomper arm bearings, tines, spark plugs, castor wheels and bearings, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Conditions considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, fertilizers, water, or chemicals, etc.
- Normal noise, vibration, wear and tear, and deterioration.
- 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.

Parts

Parts scheduled for replacement as required maintenance are warranted for the period of time up to the scheduled replacement time for that part. Parts replaced under this warranty are covered for the duration of the original product warranty and become the property of Toro. Toro will make the final decision whether to repair any existing part or assembly or replace it. Toro may use remanufactured parts for warranty repairs.

Note Regarding Deep Cycle Battery Warranty:

Deep cycle batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and aintenance techniques can extend or reduce total battery life. As the batteries in this product are consumed, the amount of useful work between charging intervals will slowly decrease until the battery is completely worn out. Replacement of worn out batteries, due to normal consumption, is the responsibility of the product owner. Battery replacement may be required during the normal product warranty period at owner's expense.

Maintenance is at Owner's Expense

Engine tune-up, lubrication cleaning and polishing, replacement of filters, coolant, and completing recommended maintenance are some of the normal services Toro products require that are at the owner's expense.

General Conditions

Repair by an Authorized Toro Distributor or Dealer is your sole remedy under this warranty.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connetion 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. 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 this express warranty.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations 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.

Note regarding engine warranty:

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) and/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 Engine Emission Control Warranty Statement supplied with your product or contained in the engine manufacturer's documentation for details.

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.

Part No. 374-0031 Rev. E