

## Count on it.

# Operator's Manual

# **Verticutter**

# Reelmaster® 5010 Series Cutting Unit with 5in Reel

Model No. 03618—Serial No. 408000000 and Up Model No. 03619—Serial No. 408000000 and Up

This product complies with all relevant European directives. For details, please see the Declaration of Incorporation (DOI) at the back of this publication.

# Introduction

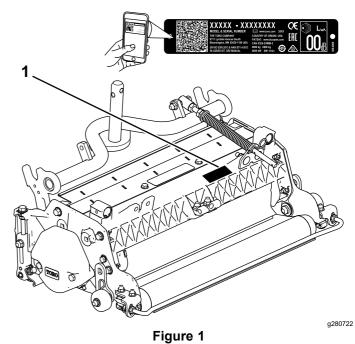
The verticutter kit is mounted on a ride-on machine and is intended to be used by professional, hired operators in commercial applications. It is primarily designed for verticutting grass on well-maintained lawns in parks, sports fields, and on commercial grounds. Using this product for purposes other than its intended use could prove dangerous to you and bystanders.

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.

Visit www.Toro.com for product safety and operation training materials, 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. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

Important: With your mobile device, you can scan the QR code on the serial number plate (if equipped) to access warranty, parts, and other product information.



Model and serial number location

Model No. \_\_\_\_\_

This manual identifies potential hazards and has safety messages identified by the safety-alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



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**Figure 2** Safety-alert symbol

This manual uses 2 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**

This machine has been designed in accordance with EN ISO 5395 and ANSI B71.4–2017.

# **General Safety**

This product is capable of amputating hands and feet. Always follow all safety instructions to avoid serious personal injury.

- Read and understand the contents of this Operator's Manual before starting the machine.
- Use your full attention while operating the machine. Do not engage in any activity that causes distractions; otherwise, injury or property damage may occur.
- Remove all debris or other objects that might be picked up and thrown by the blades of the cutting unit. Keep all bystanders away from the working area.
- Do not put your hands or feet near moving components of the machine.
- Do not operate the machine without all guards and other safety protective devices in place and functioning properly on the machine.
- · Keep clear of any discharge opening.
- Keep bystanders and children out of the operating area. Never allow children to operate the machine.
- Before you leave the operator's position, do the following:
  - Park the machine on a level surface.
  - Lower the cutting unit(s).
  - Disengage the drives.
  - Engage the parking brake (if equipped).
  - Shut off the engine and remove the key.
  - Wait for all movement to stop.
  - If the verticutter blades strike a solid object or the unit vibrates abnormally, stop and shut off the engine. Check the verticutter for damaged parts. Repair any damage before starting and operating the verticutter.
  - Ensure that the verticutters are in safe operating condition by keeping all hardware tight.

Improperly using or maintaining this machine can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety-alert symbol A, which means Caution, Warning, or Danger—personal safety instruction. Failure to comply with these instructions may result in personal injury or death.

# **Cutting Unit Safety**

- The cutting unit is only a complete machine when installed on a traction unit. Read the traction unit *Operator's Manual* carefully for complete instructions on the safe use of the machine.
- Stop the machine, remove the key (if equipped), and wait for all movement to stop before inspecting the attachment after striking an object or if there is an abnormal vibration in the machine. Make all necessary repairs before resuming operation.
- Keep all parts in good working condition and all hardware tightened. Replace all worn or damaged decals.
- Use only accessories, attachments, and replacement parts approved by Toro.

## **Blade Safety**

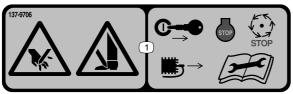
A worn or damaged blade can break, and a piece of the blade could be thrown toward you or bystanders, resulting in serious personal injury or death.

- Inspect the blade periodically for wear or damage.
- Use care when checking the blades. Wrap the blades or wear gloves, and use caution when servicing the blades. Only replace or sharpen the blades; never straighten or weld them.
- On multi-bladed machines, take care as rotating 1 blade can cause other blades to rotate.

# **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 missing.



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 Cutting hazard of the hand or foot—shut off the engine, remove the key or disconnect the spark plug, wait for all moving parts to stop, and read the *Operator's Manual* before performing maintenance.

# Setup

#### **Loose Parts**

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

Procedure	Description	Qty.	Use
1	Verticutter	1	Inspect the verticutter.
2	Transport roller assembly Cotter pin	2 2	Install the transport rollers.
3	O-ring Straight grease fitting	1 1	Install the O-ring and the grease fitting.
4	Shoulder bolt	5	Install the shoulder bolt (RM5010–Hybrid only)
5	End-weight kit (sold separately)	1	Install the end-weight kit (Model 03618 only).
6	No parts required	_	Adjust the verticutter.
7	No parts required	_	Mount the verticutter reel.

#### **Media and Additional Parts**

Description	Qty.	Use
Operator's Manual	1	
Parts Catalog (not included)—refer to the included postcard for information on obtaining the Parts Catalog	_	Review the material and save it in an appropriate place.

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

1

# Inspecting the Verticutter

#### Parts needed for this procedure:

1	Verticutter

#### **Procedure**

After the verticutter is removed from the box, inspect the following:

- Check each end of the reel for grease. Grease should be visibly evident in the internal splines of the reel shaft.
- Ensure that all nuts and bolts are securely tightened.

 Make sure that the carrier frame suspension operates freely and does not bind when moved back and forth.

# Installing the Transport Rollers

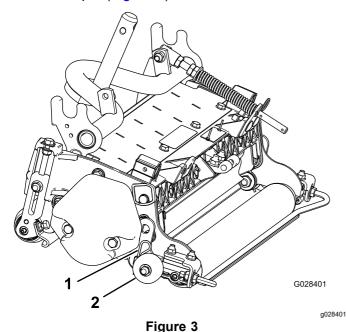
#### Parts needed for this procedure:

2	Transport roller assembly
2	Cotter pin

#### **Procedure**

1. Cotter pin

Secure a transport roller bracket to each side plate pin with a cotter pin (Figure 3).



**Note:** The roller should be positioned to the rear of the verticutter.

2. Transport roller assembly

# 3

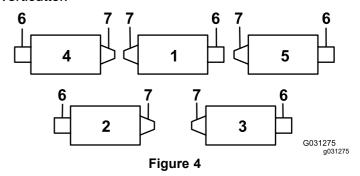
# Installing the O-ring and the Grease Fitting

#### Parts needed for this procedure:

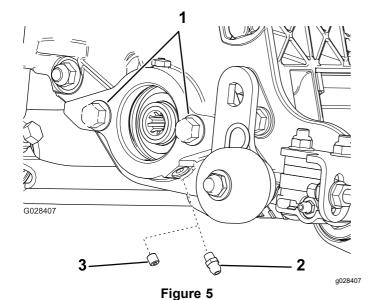
1	O-ring
1	Straight grease fitting

#### **Procedure**

Install the grease fitting on the reel-motor side of the verticutter. Refer to Figure 4 to determine the position of each reel motor based on the position of each verticutter.



- 1. Verticutter 1
- 2. Verticutter 2
- 3. Verticutter 3
- 4. Verticutter 4
- 5. Verticutter 5
- 6. Reel motor
- 7. Weight or other accessory (sold separately)
- 1. Remove and discard the setscrew on the reel-motor side-plate (Figure 5).



- 1. Cap screws
- 3. Setscrew (remove and discard)
- Straight grease fitting (install)
- 2. Install the straight grease fitting (Figure 5).
- 3. If there are no bolts on the reel-motor side-plate, install them (Figure 5).
- 4. Install the O-ring on the reel motor (Figure 6).

**Note:** The electric motor is shown; this step also applies to the hydraulic motor.

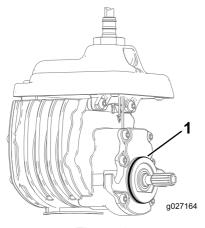


Figure 6

1. O-ring

4

# Installing the Shoulder Bolt (RM5010–Hybrid only)

Parts needed for this procedure:

5 Shoulder bolt

#### **Procedure**

For verticutters being mounted on a Reelmaster 5010-H, replace the shoulder bolt on the reel-motor side-plate (Figure 7) with the new shoulder bolt; otherwise, the electric reel will contact the existing bolt.

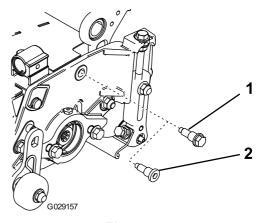


Figure 7

1. Old bolt

2. New shoulder bolt

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# Installing the End-Weight Kit (Model 03618 only)

#### Parts needed for this procedure:

1 End-weight kit (sold separately)

#### **Procedure**

Buy and install the end weight kit appropriate for the configuration of your machine (Figure 8).

- Weight Kit Model 03411 for electric reel motors
- Weight Kit Model 03412 for hydraulic reel motors

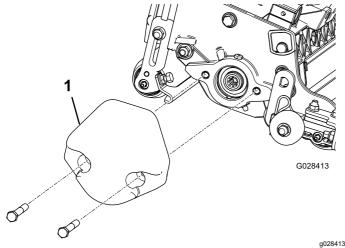


Figure 8

1. End weight (large weight shown)

The verticutters can be installed at any of the 5 locations on the traction unit. Figure 5 shows the orientation of the drive motor for each of the locations. For any of the locations requiring the motor to be mounted on the right end of the verticutter, install a counterweight on the left end of the verticutter. For the locations requiring the motor to be mounted on the left end, install a counterweight on the right end of the verticutter.

**Note:** For Model 03619, counterweights are shipped installed to the right end of the verticutters. The bolts on the left end are to be used for securing the motor.

# 6

# **Adjusting the Verticutter**

**No Parts Required** 

#### **Procedure**

Refer to Adjusting the Verticutter (page 9).



# Mounting the Verticutter Reel

No Parts Required

#### **Procedure**

Verticutter reels are mounted to the traction unit the same way reel cutting units are. Refer to the traction unit *Operator's Manual* for mounting instructions.

Install the reel motor and grease the side plate until excess grease oozes out of the relief valve; refer to Lubricating the Verticutter (page 12).

# **Product Overview**

# **Specifications**

Model	Net weight
03618	With no end weight:
	49.4 kg (109 lb)
	With small end weight (hydraulic motor):
	52.6 kg (116 lb)
	With large end weight (electric motor):
	55.8 kg (123 lb)
03619	59.9 kg (132 lb)

# **Operation**

## **Training Period**

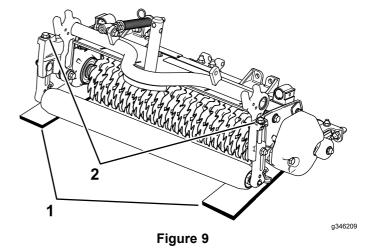
Before operating the verticutter reels, evaluate the performance of the reel at the desired setting. Operate in a clear, unused area to determine if the desired results will be achieved. Adjust as desired.

# **Adjusting the Verticutter**

## **Adjusting the Blade Depth**

**Note:** The maximum recommended blade penetration depths are as follows:

- Model 03618 is 3 mm (1/8 inch).
- Model 03619 is 6 mm (1/4 inch).
- 1. Place the verticutter reel on a level surface.
- 2. Place 2 gauge bars, which have the desired depth of blade penetration below the ground, under the front and rear rollers of the verticutter reel on each end of the reel (Figure 9).



1. Gauge bars

2. Adjusting bolts

**Note:** The verticutter blades must not touch the gauge bars.

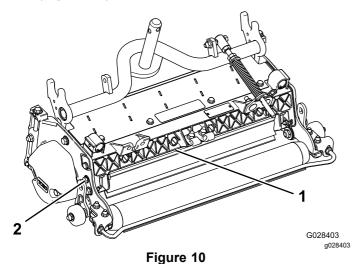
 Turn the adjusting bolt on each height-of-cut bracket (Figure 9) so that the verticutter blades come in contact with the level surface on both ends.

**Note:** As the verticutter blades wear, the diameter of the reel will decrease and the depth setting will change. Check the depth setting periodically to ensure that the desired setting is achieved.

## **Adjusting the Rear Grass Shield**

**Note:** When operating in turf conditions where there is excessive debris or thatch, open the rear discharge shield to help allow the debris to discharge from the reel.

1. Loosen the bolts on the pivot of the grass shield (Figure 10).



- 1. Rear grass shield
- 2. Pivot bolt
- 2. Rotate the grass shield to the desired setting, and tighten the bolts (Figure 10).

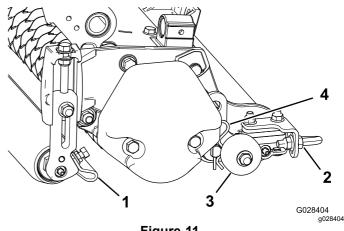
### **A** CAUTION

Do not open the rear shield so that it is higher than level to ground.

Thrown debris could cause personal injury.

## **Adjusting the Roller Scrapers**

1. Loosen the flange nuts that secure the roller scrapers (Figure 11).



- Figure 11
- Front roller scraper
- 3. Transport roller
- 2. Rear roller scraper
- 4. Cotter pin
- 2. Move the scraper rods in or out to attain 0.0 to 0.75 mm (0.0 to 0.03 inch) clearance between the scraper and roller.
- 3. Ensure that the scraper rod is parallel to the roller and to the level surface.
- 4. Tighten the flange nuts to lock the adjustment.

## **Adjusting the Transport Rollers**

Important: Before the verticutters are lowered to the shop floor or removed from the traction unit, lower the transport rollers (Figure 11) to protect the blades from hard surface contact.

- 1. Remove the cotter pin that secures the transport roller bracket to the side plate pin.
- 2. Position the transport roller as follows:
  - Lower the roller bracket before the verticutter is lowered to the shop floor.
  - Raise the roller bracket after the verticutter is raised to the operating position.
- 3. Secure the transport roller bracket to the side plate pin with the cotter pin.
- 4. Repeat the procedure on the opposite end of the verticutter.

# **Operating Tips**

- Operate the traction unit at full throttle, full reel speed (setting 9) and at the desired traction speed.
- The maximum recommended blade penetration depths are as follows:
  - Model 03618 is 3 mm (1/8 inch).
  - Model 03619 is 6 mm (1/4 inch).
- Power requirements to operate the verticutter reels will vary with turf and soil conditions. Travel speed may need to be reduced in some conditions.
- When operating in turf conditions where there is excessive debris or thatch, open the front and rear discharge shields to help allow the debris to discharge from the reel.

#### **A** CAUTION

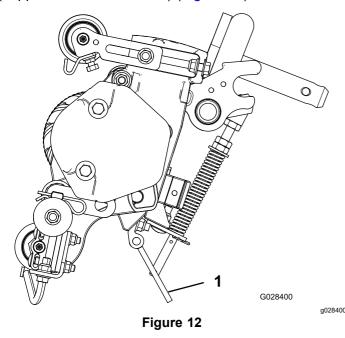
Thrown debris could cause personal injury.

Do not open the rear shield so that it is higher than level to the ground.

# **Maintenance**

# Using the Kickstand When Tipping the Cutting Unit

**Note:** Whenever the verticutter has to be tipped to expose the verticutter blades, use the kickstand (supplied with traction unit) (Figure 12).



1. Kickstand

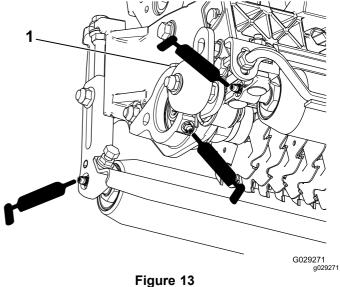
# **Lubricating the Verticutter**

Each verticutter has 5 grease fittings (Figure 13) that must be lubricated weekly with No. 2 lithium grease.

The lubrication points are the front roller (2), the rear roller (2), and the reel motor splines (1).

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

- 1. Wipe each grease fitting with a clean rag.
- 2. Apply grease until you see clean grease coming out of the roller seals and the bearing relief valve (Figure 13).



- ı ıgu
- . Relief valve
- Wipe any excess grease away.

# Removing the Verticutter Blades from the Shaft

- Secure the end of the verticutter shaft, which has only one washer and nut, in a vise.
- On other end of shaft, rotate the nut counter-clockwise and remove the nut.

#### **A** CAUTION

The blades are extremely sharp and may have burrs that will cut your hands.

Wear gloves and use caution when removing the blades from the shaft.

 Remove the small spacer(s), the washer (Model 03619 only), the blades, and the large spacers. Clean and lubricate the hex or square shaft with a light coating of grease for ease of assembly (Figure 15 or Figure 14).

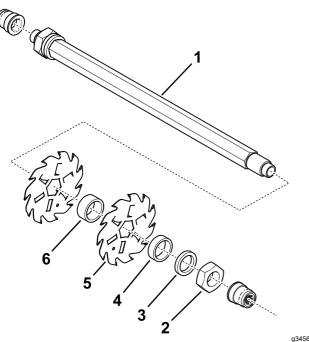


Figure 14 Model 03618

- 1. Shaft
- 2. Nut

- 4. Small spacer (1/2 inch)
- 5. Blade (25 for model 03618)
- 3. Small spacer (3/16 inch)
- 6. Large spacer (24 for model 03618)

Important: The order of disassembly is extremely important. Do not invert the verticutter reel blades when disassembling or reverse the order when assembling them. Note the index hole in each verticutter blade. The index hole is provided for assembly in order to obtain the proper helix for the verticutter reel.

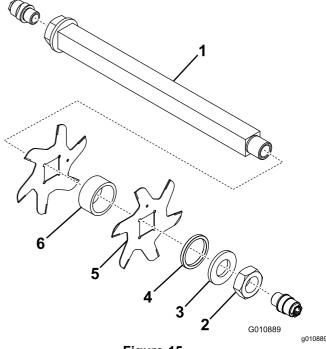


Figure 15 Model 03619

- Shaft
- 2. Nut
- 3. Washer

- 4. Small spacer
- 5. Blade (16 for Model 03619)
- 6. Large spacer (15 for Model 03619)

# Installing the Verticutter Blades

- 1. Assemble a blade (Figure 16).
- 2. Assemble a large spacer.
- Do not invert the reel blades when assembling them on the reel shaft.

**Note:** If you invert the blades, the blades in use (rounded) will mix with the sharp ends of the previously unused blades, resulting in unsatisfactory cutting performance.

4. Install the next blade clockwise so that the index reference hole (Figure 16) is not aligned with the first blade hole by one flat of the shaft.

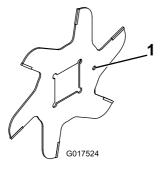


Figure 16

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- 1. Index reference hole
- 5. Continue to install spacers and blades in this manner until the full complement of blades have been installed.

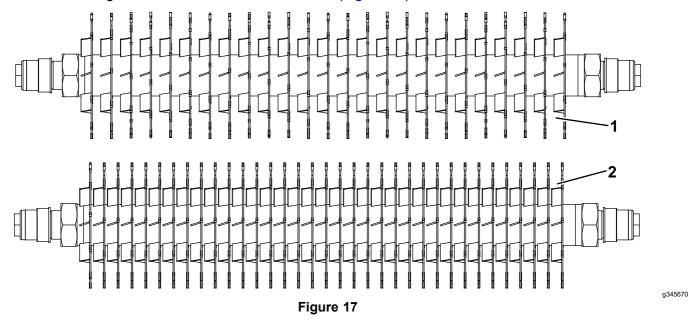
**Note:** When properly assembled, the blades will be staggered in such a manner as to appear like a helix.

- 6. Install the small spacer to the shaft.
- 7. Apply Blue Loctite 242 to the nut. Install the nut onto the shaft (machined side of the nut toward the spacer), and tighten it to 109 to 135 N-m (80 to 100 ft-lb).

# **Optional Blade Spacing**

## 0.50-Inch Blade Spacing for Model 03618

To change the configuration of the verticutter from the standard 0.75-inch spacing to the 0.50-inch spacing requires an additional 34 spacers, Part No. 17-1580 and an additional 10 carbide blades, Part No. 106-6355, or an additional 10 regular blades and Part No. 17-1590 (Figure 17).

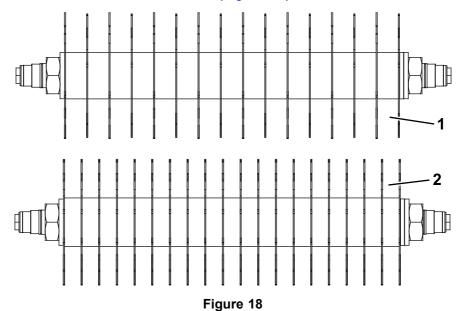


1. 0.75-inch blade spacing (default)

0.50-inch blade spacing

## 1.00-Inch Blade Spacing for Model 03619

To change the configuration of the verticutter from the standard 1.25-inch spacing to the 1.00-inch spacing requires 19 new spacers, Part No. 140-5532 and an additional 4 carbide blades, Part No. 106-8625, or an additional 4 regular blades and Part No. 93-3038-03 (Figure 18).



1. 1.25-inch blade spacing (default)

2. 1.00-inch blade spacing

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# Servicing the Roller

The Roller Rebuild Kit (Part No. 114-5430) and the Roller Rebuild Tool Kit (Part No. 115-0803) (Figure 19) are available for servicing the roller. The Roller Rebuild Kit includes all the bearings, bearing nuts,

inner seals, and outer seals to rebuild a roller. The Roller Rebuild Tool Kit includes all the tools and the installation instructions required to rebuild a roller with the roller rebuild kit. Refer to your parts catalog or contact your authorized Toro distributor for assistance.

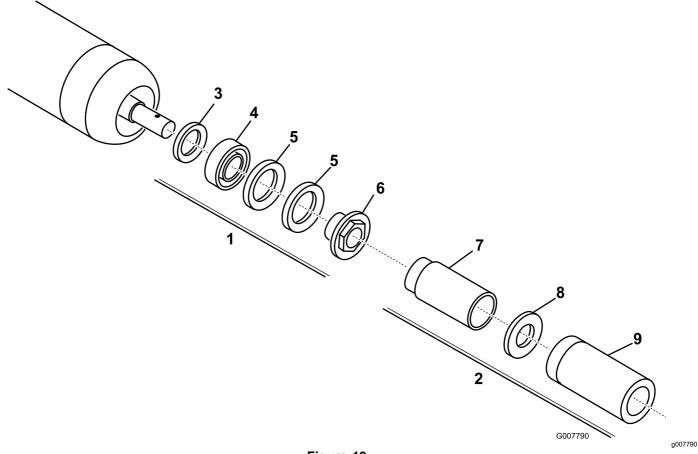


Figure 19

- 1. Roller Rebuild Kit (Part No. 114-5430)
- 2. Roller Rebuild Tool kit (Part No. 115-0803)
- 3. Inner seal
- 4. Bearing
- Outer seal

- 6. Bearing nut
- 7. Inner seal tool
- 8. Washer
- 9. Bearing/outer-seal tool

## **Declaration of Incorporation**

The Toro Company, 8111 Lyndale Ave. South, Bloomington, MN, USA declares that the following unit(s) conform(s) to the directives listed, when installed in accordance with the accompanying instructions onto certain Toro models as indicated on the relevant Declarations of Conformity.

Model No.	Serial No.	Product Description	Invoice Description	General Description	Directive
03618	408000000 and Up	Verticutter	22IN 5IN VERTICUTTER [5010 HYBRID]	Verticutter	2006/42/EC
03619	408000000 and Up	Verticutter	22IN 7IN VERTICUTTER [5010 HYBRID]	Verticutter	2006/42/EC

Relevant technical documentation has been compiled as required per Part B of Annex VII of 2006/42/EC.

We will undertake to transmit, in response to requests by national authorities, relevant information on this partly completed machinery. The method of transmission shall be electronic transmittal.

This machinery shall not be put into service until incorporated into approved Toro models as indicated on the associated Declaration of Conformity and in accordance with all instructions, whereby it can be declared in conformity with all relevant Directives.

Certified:

Tom Langworthy
Engineering Director

8111 Lyndale Ave. South Bloomington, MN 55420, USA

Jon Jongrafy

September 30, 2022

Authorized Representative:

Marcel Dutrieux Manager European Product Integrity Toro Europe NV Nijverheidsstraat 5 2260 Oevel Belgium

## **UK Declaration of Incorporation**

The Toro Company, 8111 Lyndale Ave. South, Bloomington, MN, USA declares that the following unit(s) conform(s) to the directives listed, when installed in accordance with the accompanying instructions onto certain Toro models as indicated on the relevant Declarations of Conformity.

Model No.	Serial No.	Product Description	Invoice Description	General Description	Regulation
03618	408000000 and Up	Verticutter	22IN 5IN VERTICUTTER [5010 HYBRID]	Verticutter	S.I. 2008 No. 1597
03619	408000000 and Up	Verticutter	22IN 7IN VERTICUTTER [5010 HYBRID]	Verticutter	S.I. 2008 No. 1597

Relevant technical documentation has been compiled as required per Schedule 10 of S.I. 2008 No. 1597.

We will undertake to transmit, in response to requests by national authorities, relevant information on this partly completed machinery. The method of transmission shall be electronic transmittal.

This machinery shall not be put into service until incorporated into approved Toro models as indicated on the associated Declaration of Conformity and in accordance with all instructions, whereby it can be declared in conformity with all relevant Regulations.

This declaration has been issued under the sole responsibility of the manufacturer. The object of the declaration is in conformity with relevant UK legislation.

Authorized Representative:

Marcel Dutrieux Manager European Product Integrity Toro U.K. Limited Spellbrook Lane West Bishop's Stortford CM23 4BU United Kingdom

Tom Langworthy Engineering Director 8111 Lyndale Ave. South Bloomington, MN 55420, USA September 30, 2022

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#### **EEA/UK Privacy Notice**

#### Toro's Use of Your Personal Information

The Toro Company ("Toro") respects your privacy. When you purchase our products, we may collect certain personal information about you, either directly from you or through your local Toro company or dealer. Toro uses this information to fulfil contractual obligations - such as to register your warranty, process your warranty claim or to contact you in the event of a product recall - and for legitimate business purposes - such as to gauge customer satisfaction, improve our products or provide you with product information which may be of interest. Toro may share your information with our subsidiaries, affiliates, dealers or other business partners in connection these activities. We may also disclose personal information when required by law or in connection with the sale, purchase or merger of a business. We will never sell your personal information to any other company for marketing purposes.

#### Retention of your Personal Information

Toro will keep your personal information as long as it is relevant for the above purposes and in accordance with legal requirements. For more information about applicable retention periods please contact legal@toro.com.

#### **Toro's Commitment to Security**

Your personal information may be processed in the US or another country which may have less strict data protection laws than your country of residence. Whenever we transfer your information outside of your country of residence, we will take legally required steps to ensure that appropriate safeguards are in place to protect your information and to make sure it is treated securely.

#### **Access and Correction**

You may have the right to correct or review your personal data, or object to or restrict the processing of your data. To do so, please contact us by email at legal@toro.com. If you have concerns about the way in which Toro has handled your information, we encourage you to raise this directly with us. Please note that European residents have the right to complain to your Data Protection Authority.

#### The Toro Warranty



Two-Year or 1,500 Hours Limited Warranty

#### **Conditions and Products Covered**

The Toro Company warrants your Toro Commercial product ("Product") to be free from defects in materials or workmanship for 2 years or 1,500 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 diagnostics, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser. \* Product equipped with an 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 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*. Repairs for product issues caused by failure to perform required maintenance and adjustments are not covered under this warranty.

#### **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.
- Product failures which result from failure to perform recommended maintenance and/or adjustments.
- Product failures which result from operating the Product in an abusive, negligent, or reckless manner.
- Parts consumed through use that are not 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,
  spark plugs, castor wheels and bearings, tires, filters, belts, and certain
  sprayer components such as diaphragms, nozzles, flow meters, and
  check valves.
- Failures caused by outside influence, including, but not limited to, weather, storage practices, contamination, use of unapproved fuels, coolants, lubricants, additives, fertilizers, water, or chemicals.
- Failure or performance issues due to the use of fuels (e.g. gasoline, diesel, or biodiesel) that do not conform to their respective industry standards.
- 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.

#### **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.

#### **Deep Cycle and Lithium-Ion Battery Warranty**

Deep cycle and Lithium-Ion batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and maintenance 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. Note: (Lithium-Ion battery only): Refer to the battery warranty for additional information.

# Lifetime Crankshaft Warranty (ProStripe 02657 Model Only)

The Prostripe which is fitted with a genuine Toro Friction Disc and Crank-Safe Blade Brake Clutch (integrated Blade Brake Clutch (BBC) + Friction Disc assembly) as original equipment and used by the original purchaser in accordance with recommended operating and maintenance procedures, are covered by a Lifetime Warranty against engine crankshaft bending. Machines fitted with friction washers, Blade Brake Clutch (BBC) units and other such devices are not covered by the Lifetime Crankshaft Warranty.

#### 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.

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. 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 Emissions 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.

#### **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 your Authorized Toro Service Center.