# **Transport Frame TransPro 80 Tow-Behind Trailer**

Model No. 04238—Serial No. 402900001 and Up

**Installation Instructions** 

## **Safety**

## **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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1. The trailer tires should be inflated to 0.35 bar (5 psi); read the *Operator's Manual*.

A WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov. For more information, please visit www.ttcoCAProp65.com

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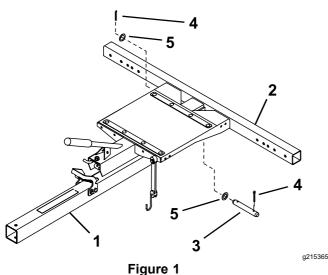
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## Installation

The Transpro 80 machine is intended for use with Greensmaster 800, 1000, 1010, 1600, 1610, 2000, and 2600 machines, as well as Flex 18, 21, 1800, 1820, 2100, 2120 machines, and eFlex 1800, 1820, 2100, 2120 Walk Greensmaster machines.

# Mounting the Tongue Assembly

- Insert the tongue assembly into the frame assembly while aligning the rear mounting holes (Figure 1).
- Secure the tongue assembly into the frame assembly with a clevis pin, 2 washers and 2 cotter pins (Figure 1).



- 1. Tongue assembly
- 2. Frame assembly
- Clevis pin
- Cotter pin
- 5. Washer

## Mounting the Axle and Ramp (Model 04245) or Rail (Models 04244 and 04247) Assemblies

 Refer to Figure 2 to determine which mounting holes that you should use to fit the width of your greensmower.

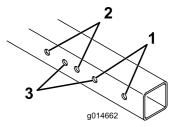


Figure 2

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- Greensmaster 1600, 2600, 1000 with groomer, and 2000 machines with groomer
- Greensmaster 800, Flex 18, Flex 1800, 1820, and eFlex 1800, and 1820 machines
- Greensmaster 1000, Flex 21, 2000, Flex 2100, 2120 and eFlex 2100, and 2120 machines

# Important: If your Greensmaster machine has a groomer attached, it will be mounted differently than above; refer to the following list:

- Greensmaster 1000/2000 or 2100 with groomer: The left side should be set to position #3 and the right side should be set to #1.
- Greensmaster 1800/eFlex 1800 with groomer: The left side should be set to position #2 and the right side should be set to #3.
- 2. Mount the axle assembly and a ramp assembly (Figure 3) or rail assembly (Figure 4) to each end of the frame with 2 bolts (3/8 x 3 inches), 4 washers, and 2 nuts.

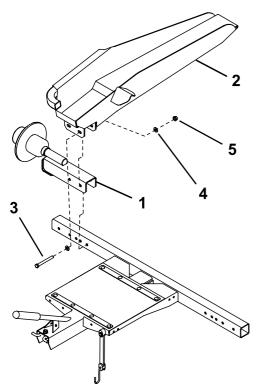


Figure 3

- 1. Axle assembly
- 2. Right ramp assembly
- 3. Bolt (3/8 x 3 inches)
- 4. Washer

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5. Nut

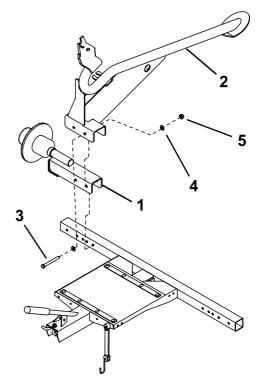


Figure 4

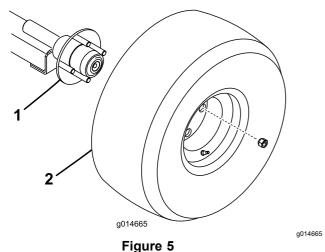
- 1. Axle assembly
- 2. Right rail assembly
- 3. Bolt (3/8 x 3 inches)
- 4. Washer

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5. Nut

# Mounting the Wheel Assemblies

- Mount a wheel assembly to each axle hub with 4 lug nuts (Figure 5). Tighten the nuts to 80 ft-lb (108 N·m).
- 2. Adjust the tire pressure to 5 psi (34 kPa).



1. Axle

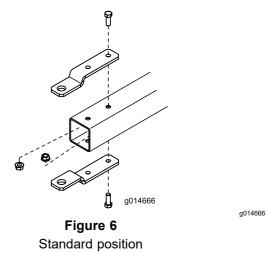
2. Wheel assembly

*Important:* Higher tire pressure may damage the machine.

# Mounting/Adjusting the Hitch Straps

The hitch straps are shipped mounted in the standard position (Figure 6).

*Important:* The trailer tongue must be parallel to the ground when it is aligned with the tow vehicle hitch.



Using 1 of the configurations shown in Figure 7 or Figure 8, adjust and secure the hitch straps to the trailer tongue.

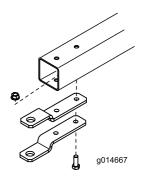
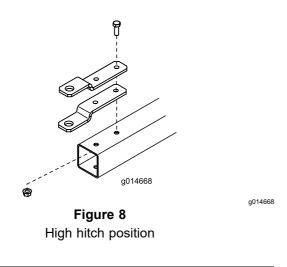


Figure 7
Low hitch position

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## **Mounting the Greensmower** Wheel Assemblies

### Models 04244 and 04247 only

**Note:** On Greensmaster 1000, 1010, and 2000 machines equipped with a groomer, remove the wheel shaft on the groomer end and purchase and install a new wheel shaft (Part No. 106-5385). Also, mount the rail assembly on the groomer end to the Greensmaster 1600 and 1610 hole locations (Figure 2).

**Note:** On Greensmaster 1800, 1820, 2100, and 2120 machines equipped with a groomer, remove the wheel shaft on the groomer end and purchase and install a new wheel shaft (Part No. 136-7287).

- Remove the existing standard transport wheels from the wheel shafts on the greensmower (if equipped).
- 2. On Greensmaster Flex 18 or 21 machines only, proceed as follows:
  - Remove the right side drum cover from the machine (Figure 9).

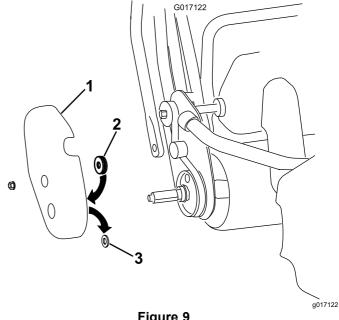
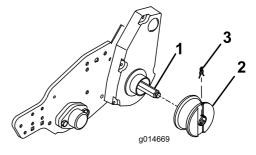


Figure 9

- Right side drum drive cover
- 3. Rubber grommet
- Felt seal
  - Remove and discard the rubber grommet from the axle hole in the drum cover (Figure
  - Affix the felt seal to the inside of the cover positioning it around the axle hole (Figure
  - Install the cover to the machine.
- Insert a wheel onto each shaft and secure with a wheel clip (Figure 10).

**Note:** Flex 1800, 1820, and 2100, 2120 series machines require a different wheel offset than all other Toro greensmowers. Read and follow the mounting instructions molded into the sides of the wheels.



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Figure 10 Left side shown

- 1. Wheel shaft
- 2. Wheel

3. Wheel clip

## **Loading the Trailer**

 While maintaining control of the trailer bed and holding onto the handle, press down on the latch assembly and the lift handle (Figure 11). Lower the trailer bed to the ground.

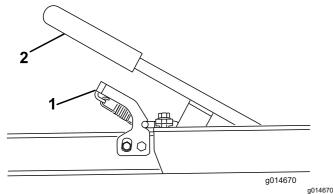


Figure 11

- 1. Latch assembly
- 2. Handle
- 2. On flat ramps, pivot the wheel rods upward (Figure 13) and on rail ramps, rotate the wheel rods parallel (open) to the ramp (Figure 14).
- Remove the basket from the greens mower, disengage the reel drive, and move the throttle to the slowest position. Slowly drive the greens mower onto the trailer until you contact the wheel stops (Figure 12).
- 4. If the rail wheels are not centered on the rails, loosen the fasteners securing the rails to the trailer and adjust the rail position so that the rail wheels are centered, then tighten the fasteners.
- 5. Shut off the engine and engage the parking brake.
- 6. Engage the wheel rods as follows:
  - On flat ramps, rotate the wheel rods downward over the greensmower transport wheels (Figure 13).
  - On rail ramps, lift the wheel rod and rotate it behind the greensmower transport wheels (Figure 14).

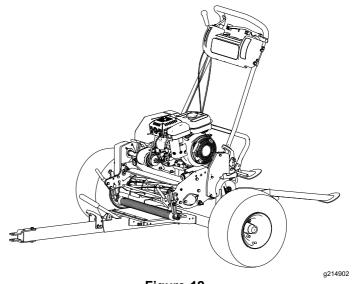


Figure 12
Greensmower loaded on a TransPro 80 with Rail Kit

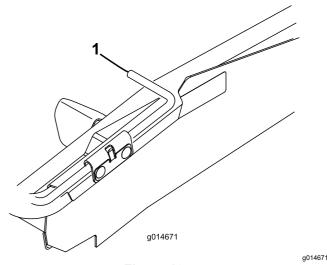


Figure 13

1. Wheel rod (shown in pivoted down position)

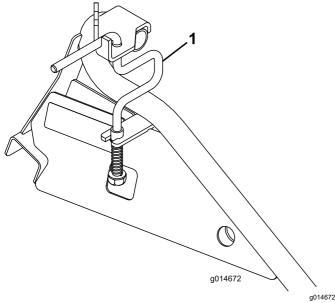


Figure 14

- 1. Wheel rod (shown in the closed position)
- 7. Push down on the handle until the trailer assembly locks into the latch assembly (Figure 11).
- For Flex Greensmaster machines, secure the front of the machine by hooking the bungee straps to the basket hoop.
  - For fixed-head Greensmaster machines, secure the front of the machine by hooking the bungee straps to the basket horns.
- Store the basket in the tow vehicle.

## **Operation**

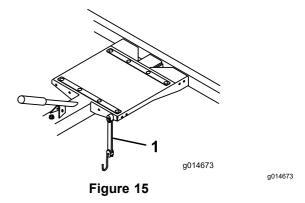
## **Operating Tips**

- The TransPro 80 trailer is intended for use with Greensmaster 800, 1000, 1600, 2000, 2600 machines, Flex 18, 21, 1800, 1820, 2100, 2120 machines, and eFlex 1800, 1820, 2100, 2120 walk Greensmaster machines. The towing of other products may damage the axles and transmissions that continue to rotate when towed.
- Use only a vehicle with the proper tow rating.
   The TransPro 80 trailer and 1 greensmower weigh approximately 400 lb (182 kg). Ensure that the tow vehicle has adequate braking and handling capacity by checking the recommendations of the vehicle manufacturer.
- Ensure that the trailer is properly connected to the tow vehicle before loading or unloading the greensmower to prevent sudden unintended tongue movement or flip up. Use a retention device on the hitch pin to secure the connection.

## *Important:* The trailer tongue should be parallel to the ground when you align it with the tow-vehicle hitch.

 During transport, use the bungee strap to secure the greens mower to the trailer (Figure 15). You can move the bungee strap to different mounting holes to accommodate different mowers.

**Note:** Secure the bungee strap to the grass basket horns or to the grass basket loop on eFlex/Flex 1800/2100 machines.



- Bungee strap
- The TransPro 80 trailer adds extra towing weight to the vehicle. Drive the vehicle safely.
  - Do not drive on highway or public roads.
  - Always slow the tow vehicle when approaching and while making a turn.
  - Always slow the tow vehicle when driving in unfamiliar areas or over rough terrain.
  - Always slow the tow vehicle gradually when changing direction of travel or preparing to stop.
  - When turning or driving on slopes, always slow the tow vehicle, then turn to prevent loss of control and possible upset.
  - Do not make sudden or sharp turns. Do not suddenly change direction of travel on an incline, ramp, grade, slope or similar surface.
  - The maximum towing speed is 15 mph (24 kmh). Always adjust the tow vehicle speed to allow for existing ground conditions, such as wet slick surfaces, loose sand or gravel and/or low visibility conditions, such as dim or bright lighting, fog, mist or rain.
  - Be especially careful when driving a heavily loaded vehicle down an incline or slope. Drive the vehicle up and down the face of the slopes, inclines or grades whenever possible. *Do not* drive across the face if at all possible. There is a risk of upsetting the vehicle, which can result in serious injury or death.

- Before backing up, look to the rear and ensure that no one is behind you. Back up slowly and watch the trailer movement closely.
- Use extreme caution and slow speed when backing up the trailer and tow vehicle.
- Watch out for traffic when near or crossing roads.
   Always yield the right of way to pedestrians and other vehicles
- If the trailer begins to vibrate abnormally, stop immediately. Shut off the tow vehicle engine. Repair all damage before towing.
- Before servicing or making any adjustments to the trailer, do the following:
  - Stop the tow vehicle and engage the parking brake.
  - Shut off the tow vehicle engine and remove the key.
- While the TransPro 80 trailer is disconnected from tow vehicle:
  - Store the trailer on level ground.
  - Chock the wheels to prevent the trailer from moving.
- Keep all nuts, bolts and other fasteners tightened securely. Replace any parts removed during servicing or adjustments.
- To ensure optimum performance and continued safety of this product, always use genuine Toro replacement parts. Replacement parts and accessories made by other manufacturers may affect the product's operation, performance or durability. Such use could also void the warranty.

## **Maintenance**

## Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
After the first 10 hours	Check the torque of the wheel lug nuts.
Yearly	<ul><li>Service the wheel hub and inspect for damage.</li><li>Lubricate the wheel hub assembly.</li></ul>

## **Servicing the Wheel Hub**

Service Interval: Yearly

- 1. Raise the trailer on jack stands.
- Remove the 4 lug nuts securing the wheel to the wheel hub and remove the wheel.
- 3. Remove the dust cap from the wheel hub (Figure 16).
- 4. Remove the cotter pin and retainer locknut (Figure 16).
- 5. Remove the hub nut, spindle washer and hub assembly from the axle (Figure 16).
- Inspect all of the hub assembly parts, including the bearings, bearing cups, and oil seal.
   Replace any damaged parts.

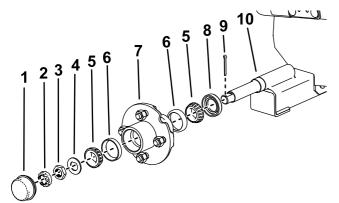


Figure 16

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- 1. Dust cap
- 2. Retainer locknut
- 3. Hub nut
- 4. Spindle washer
- 5. Roller bearing
- 6. Bearing cup
- 7. Hub assembly
- 8. Oil seal
- 9. Cotter pin
- 10. Axle assembly

## **Lubricating the Wheel Hub Assembly**

Service Interval: Yearly

- 1. Wipe away the existing grease from the bearings, bearing cups, and hub assembly with a clean, dry rag.
- Pack the bearing cups and interior surfaces of the hub assembly with high-temperature grease so that the bearings roller faces are completely coated.
- 3. Install the bearing cups and bearings to the hub assembly as shown in Figure 16.
- 4. Clean up any excess grease from the outside of the hub assembly.

#### Installing the Wheel Hub Assembly

- 1. Install the oil seal, hub assembly, and spindle washer as shown in Figure 16.
- Tighten the hub nut while turning the wheel hub assembly to seat the bearings and remove all end play.
- 3. While turning the wheel hub assembly, torque the hub nut to 8.5 to 20.3 N⋅m (75 to 180 in-lb).
- 4. Loosen the hub nut until it does not contact the washer and the hub has end play.
- 5. Tighten the hub nut to 1.7 to 2.3 N·m (15 to 20 in-lb) while rotating the hub.
- Place the retainer locknut over the hub nut so that the cotter pin hole is aligned with a slot on the retainer locknut.
- 7. Install a new cotter pin through the slot in the retainer locknut and the axle and bend both legs to secure the pin.
- 8. Secure the hub cap.

# **Checking the Torque of the Wheel Lug Nuts**

Service Interval: After the first 10 hours

Check the torque of the wheel lug nuts at the service interval and each time you install the wheels.

#### **A WARNING**

Failure to maintain proper torque could result in failure or loss of wheel and could result in personal injury.

Torque the wheel lug nuts to 108 N·m (80 ft-lb).

## **Notes:**

## **Notes:**

#### **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.

#### **California Proposition 65 Warning Information**

#### What is this warning?

You may see a product for sale that has a warning label like the following:



**WARNING:** Cancer and Reproductive Harm—www.p65Warnings.ca.gov.

#### What is Prop 65?

Prop 65 applies to any company operating in California, selling products in California, or manufacturing products that may be sold in or brought into California. It mandates that the Governor of California maintain and publish a list of chemicals known to cause cancer, birth defects, and/or other reproductive harm. The list, which is updated annually, includes hundreds of chemicals found in many everyday items. The purpose of Prop 65 is to inform the public about exposure to these chemicals.

Prop 65 does not ban the sale of products containing these chemicals but instead requires warnings on any product, product packaging, or literature with the product. Moreover, a Prop 65 warning does not mean that a product is in violation of any product safety standards or requirements. In fact, the California government has clarified that a Prop 65 warning "is not the same as a regulatory decision that a product is 'safe' or 'unsafe.'" Many of these chemicals have been used in everyday products for years without documented harm. For more information, go to https://oag.ca.gov/prop65/faqs-view-all.

A Prop 65 warning means that a company has either (1) evaluated the exposure and has concluded that it exceeds the "no significant risk level"; or (2) has chosen to provide a warning based on its understanding about the presence of a listed chemical without attempting to evaluate the exposure.

#### Does this law apply everywhere?

Prop 65 warnings are required under California law only. These warnings are seen throughout California in a wide range of settings, including but not limited to restaurants, grocery stores, hotels, schools, and hospitals, and on a wide variety of products. Additionally, some online and mail order retailers provide Prop 65 warnings on their websites or in catalogs.

#### How do the California warnings compare to federal limits?

Prop 65 standards are often more stringent than federal and international standards. There are various substances that require a Prop 65 warning at levels that are far lower than federal action limits. For example, the Prop 65 standard for warnings for lead is 0.5 μg/day, which is well below the federal and international standards.

#### Why don't all similar products carry the warning?

- Products sold in California require Prop 65 labelling while similar products sold elsewhere do not.
- A company involved in a Prop 65 lawsuit reaching a settlement may be required to use Prop 65 warnings for its products, but other companies
  making similar products may have no such requirement.
- The enforcement of Prop 65 is inconsistent.
- Companies may elect not to provide warnings because they conclude that they are not required to do so under Prop 65; a lack of warnings for a
  product does not mean that the product is free of listed chemicals at similar levels.

#### Why does Toro include this warning?

Toro has chosen to provide consumers with as much information as possible so that they can make informed decisions about the products they buy and use. Toro provides warnings in certain cases based on its knowledge of the presence of one or more listed chemicals without evaluating the level of exposure, as not all the listed chemicals provide exposure limit requirements. While the exposure from Toro products may be negligible or well within the "no significant risk" range, out of an abundance of caution, Toro has elected to provide the Prop 65 warnings. Moreover, if Toro does not provide these warnings, it could be sued by the State of California or by private parties seeking to enforce Prop 65 and subject to substantial penalties.

#### 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.

