



Form No. 3388-972 Rev A

**Count on it.**

# Operator's Manual

## Debris Blower Groundsmaster® 7200/7210 Traction Unit

Model No. 30393—Serial No. 315000001 and Up





Figure 2

# Introduction

The debris blower is mounted to a ride-on machine which is intended to be used by professional, hired operators in commercial applications. It is primarily designed to use wind power to quickly clear large areas of unwanted debris on well-maintained lawns in parks, golf courses, sports fields, and on commercial grounds.

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](http://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. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

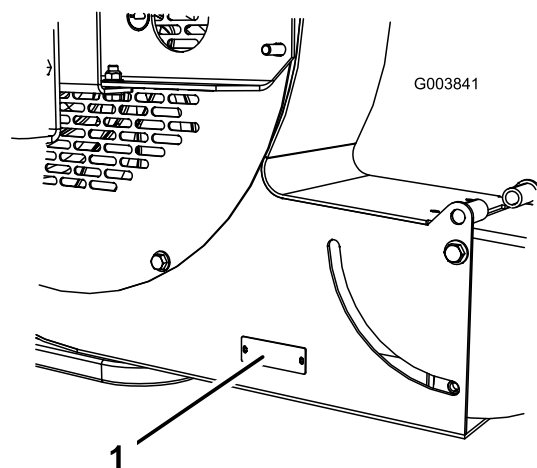


Figure 1

1. Model and serial number location

|                  |
|------------------|
| Model No. _____  |
| Serial 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.

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

Hazard control and accident prevention are dependent upon the awareness, concern, and proper training of the personnel involved in the operation, transport, maintenance, and storage of the machine. Improper use or maintenance of the machine can result in injury or death. To reduce the potential for injury or death, comply with the following safety instructions.

## Before Operating

- Read and understand the contents of this Operator's Manual before operating the machine. Become familiar with all of the controls and know how to stop quickly. A free replacement manual is available by sending the complete Model and Serial Number to The Toro® Company, 8111 Lyndale Avenue South, Bloomington, Minnesota 55420-1196.
  - Never allow children to operate the machine. Do not allow adults to operate machine without proper instruction. Only trained operators who have read this manual should operate this machine.
  - Never operate the machine when under the influence of drugs or alcohol.
  - Keep all bystanders away from the operating area.
  - Keep all shields and safety devices in place. If a shield, safety device, or decal is illegible or damaged, repair or replace it before operation is commenced. Also tighten any loose nuts, bolts, and screws to ensure that the machine is in safe operating condition.
  - Do not operate the machine while wearing sandals, tennis shoes, sneakers, or shorts. Also, do not wear loose fitting clothing which could get caught in moving parts. Always wear long pants and substantial shoes. Wearing safety glasses, safety shoes, and a helmet is advisable and required by some local ordinances and insurance regulations.
- 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.
- Stay away from the discharge opening when the machine is operating. Keep all bystanders away from the discharge opening and don't direct discharge toward bystanders.
  - Do not operate the machine under the influence of alcohol or drugs.
  - 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.
  - If the engine stalls or the machine loses headway and cannot make it to the top of a slope, do not turn the machine around. Always back slowly straight down the slope.
  - **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.
  - Do not touch the engine or muffler while the engine is running or soon after it is stopped. These areas could be hot enough to cause a burn.

## While Operating

- Do not run the engine in a confined area without adequate ventilation. Exhaust fumes are hazardous and could possibly be deadly.
  - The maximum seating capacity is one person. Never carry passengers.
  - Sit on the seat when starting the engine and operating the machine.
  - This product may exceed noise levels of 90 dB(A) at the operator position. Ear protectors are 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.
- 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.
  - To reduce a potential fire hazard, keep the engine free of excessive grease, grass, leaves, and accumulations of dirt. Never wash a warm engine or any electrical parts with water.
  - Be sure that the machine is in safe operating condition by keeping nuts, bolts, and screws tight. Check the fan shaft bearing mounting bolts and nuts frequently to be sure that they are tightened to specification.
  - Make sure that all hydraulic line connectors are tight and all hydraulic hoses and lines are in good condition before applying pressure to the system.
  - Keep your body and hands away from pin hole leaks in hydraulic lines that eject high pressure hydraulic fluid.

Use cardboard or paper to find hydraulic leaks. Hydraulic fluid escaping under pressure can penetrate skin and cause injury. Fluid accidentally injected into the skin 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 the system must be relieved by stopping the engine and lowering the blower to the ground.
- If the engine must be running to perform a maintenance adjustment, keep hands, feet, clothing, and other parts of the body away from the fan and other moving parts.
- Do not overspeed the engine by changing the governor settings. To be sure of safety and accuracy, have an

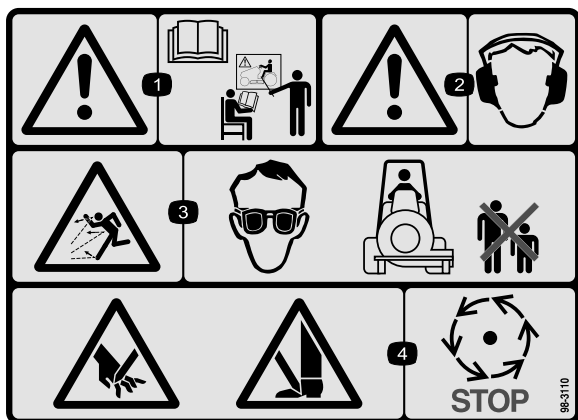
Authorized Toro Distributor check the maximum engine speed with a tachometer.

- The engine must be shut off before checking the oil or adding oil to the crankcase.
- 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

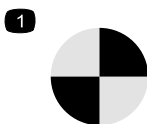


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



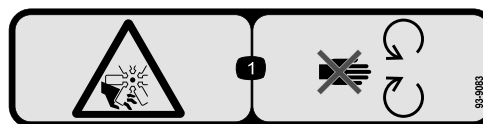
98-3110

1. Warning—read the *Operator's Manual* and receive training.
2. Warning—wear hearing protection.
3. Thrown object hazard—wear eye protection and keep bystanders a safe distance from the machine.
4. Cutting hazard of hand or foot—wait for moving parts to stop.



98-3111

1. Point of rotation



93-9083

1. Cutting/dismemberment hazard, fan—stay away from moving parts.



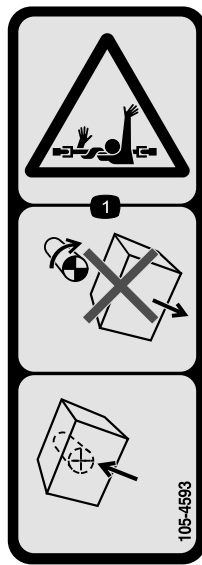
58-6520

1. Grease



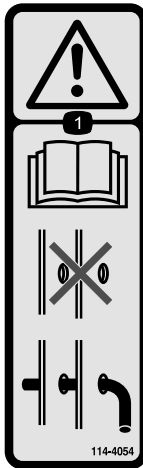
106-5517

1. Warning—do not touch the hot surface.



**105-4593**

1. Entanglement hazard, shaft—do not remove cover while parts are moving, keep all guards in place.
- 



**114-4054**

1. Warning—read the Operator's Manual, do not operate the machine without the cross pin in place.
-

# Setup

## Loose Parts

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

| Procedure | Description  | Qty.        | Use   |
|-----------|--|-------------|---|
| <b>1</b>  | No parts required  | –           | Mount the castor wheel.                       |
| <b>2</b>  | Debris blower assembly<br>Locking pin<br>Hair pin cotter | 1<br>1<br>1 | Mount the debris blower to the traction unit. |
| <b>3</b>  | No parts required  | –           | Adjust the link assembly.                     |
| <b>4</b>  | No parts required  | –           | Grease the blower.                            |
| <b>5</b>  | No parts required  | –           | Install the front weight.                     |

## Media and Additional Parts

| Description       | Qty. | Use  |
|-------------------|------|--|
| Operator's Manual | 1    | Review the manual before operating the machine.    |
| Parts Catalog     | 1    | Use the catalog to reference product part numbers. |

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

**Note:** To install and operate the debris blower, the traction unit must be equipped with the Rear Quick Attach System, Model 30377 and the Auxiliary Hydraulic Power Kit, Model 30380.

# 1

## Mounting the Castor Wheel

### No Parts Required

#### Procedure

1. Remove the tensioning cap from the castor wheel spindle shaft (Figure 3). Slide the spacer and one thrust washer off the spindle shaft. Leave one thrust washer on the shaft.

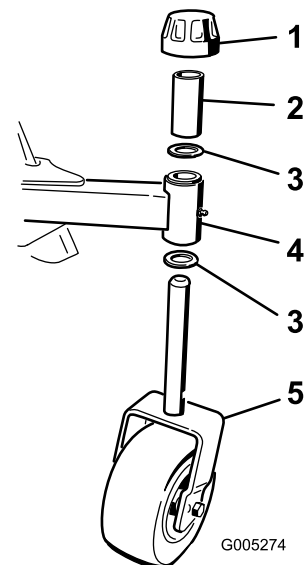


Figure 3

1. Tensioning cap
2. Spacer
3. Thrust washer (2)
4. Blower frame castor tube
5. Castor wheel

2. Push the castor spindle up through the bushings in the blower frame, insert another thrust washer onto the shaft, slide the spacer onto the spindle shaft and install the tensioning cap to secure the assembly (Figure 3).

3. Make sure the castor wheel assembly tire is inflated to 35 to 50 psi.

## 2

### Mounting the Debris Blower to the Traction Unit

#### Parts needed for this procedure:

|   |                        |
|---|------------------------|
| 1 | Debris blower assembly |
| 1 | Locking pin            |
| 1 | Hair pin cotter        |

#### Procedure

1. Remove any attachment from the rear of the machine.
2. Back the traction unit into position behind the attachment adapter.

**Note:** Make sure the locking lever (Figure 4) is pivoted to the left (unlocked position) as viewed from the rear of the machine.

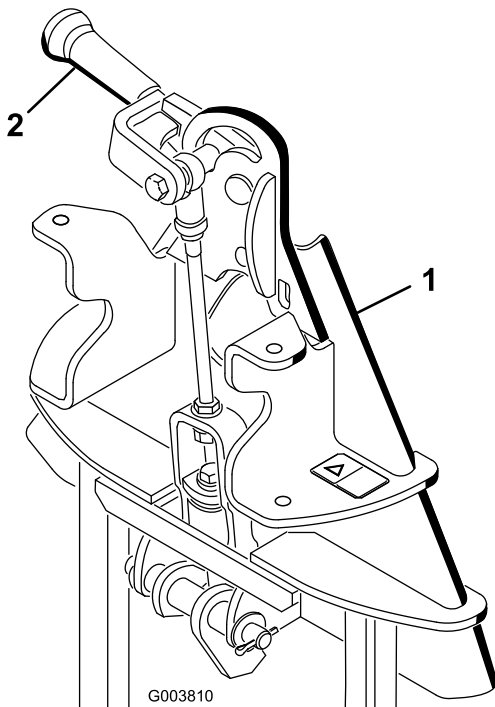


Figure 4

1. Attachment adapter
  2. Locking lever
- 
3. Raise the traction unit adapter into the attachment adapter.
  4. Pivot the locking lever to the right to lock the adapters together.

5. Insert the locking pin through the adapters and secure with a hairpin cotter (Figure 5).

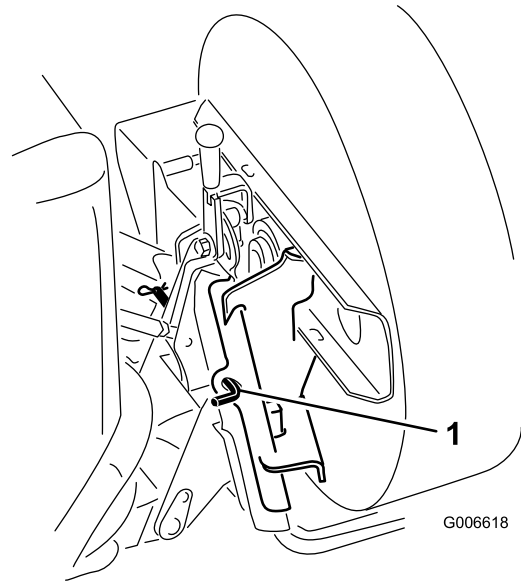


Figure 5

1. Locking pin

- 
6. Route the hoses through the hose support loop.
  7. Remove the dust plugs from the hydraulic couplers and make sure that the couplers are free of any dirt or contamination.
  8. Connect the attachment hydraulic hose couplers to the hydraulic couplers on the traction unit rear auxiliary hydraulic power kit.

**Important:** Whenever the hydraulic hose couplers are disconnected, make sure that the dust plugs are installed to prevent contamination from entering either hydraulic system.

## 3

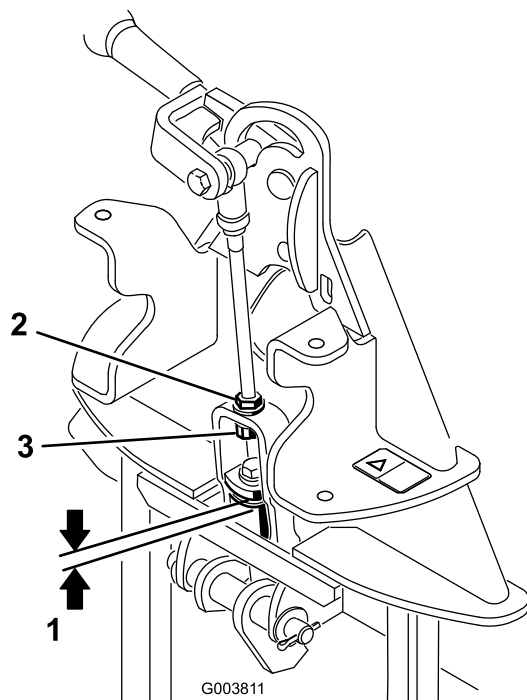
### Adjusting the Link Assembly

#### No Parts Required

#### Procedure

1. With the debris blower mounted and secured on the traction unit, raise the attachment.
2. Measure the gap between the top washer and the spacer in the link assembly on the attachment adapter as shown in Figure 6.

**Note:** The gap between the washer and the shoulder should be 1.5 to 2.0 mm (0.060 to 0.080 inch).



**Figure 6**

- |  |                   |
|--|-------------------|
| 1. 1.5 to 2.0 mm (0.060 to 0.080 inch) | 3. Adjustment nut |
| 2. Jam nut                             |                   |

# 5

## Installing the Front Weight

**No Parts Required**

### Procedure

#### ⚠ CAUTION

When an attachment is not installed on the machine, loose weights must be removed. Never operate the machine with no attachment installed and front weights on the machine.

Use the following weight charts to determine the correct amount of front weight required for your machine.

# 4

## Greasing the Blower

**No Parts Required**

### Procedure

Before the Debris Blower is operated, it must be greased to assure proper lubrication. Refer to the Lubrication section of the manual. Failure to properly grease the unit will result in premature failure of critical parts.



| 72-inch width of cut                        |                                  |                                 |   |        |
|---|----------------------------------|---------------------------------|---|--------|
| Groundsmaster 7200/7210 with NO hard canopy |                                  |                                 |   |        |
| Attachment                                  | Additional front weight required | Weight part number(s)           | Weight description  | Qty    |
| Rear QAS and no attachment (Model 30377)    | 0 kg (0 lb)                      | n/a                             |   |        |
| QAS finish grader / box rake (Model 08754)  | 0 kg (0 lb)                      | n/a                             |   |        |
| Steel drag mat (Model 08757)                | 0 kg (0 lb)                      | n/a                             |   |        |
| Tooth rake (Model 08751)                    | 0 kg (0 lb)                      | n/a                             |   |        |
| Tooth rake with spring rake (Model 08752)   | 0 kg (0 lb)                      | n/a                             |   |        |
| Coco drag mat (Model 08758)                 | 30.4 kg (67 lb)                  | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>1 |
| QAS nail drag (Model 08761)                 | 30.4 kg (67 lb)                  | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>1 |
| QAS debris blower (Model 08759)             | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |
| Rahn groomer (allied product)               | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |

| 72-inch width of cut                       |                                  |                                   |   |        |
|--|----------------------------------|-----------------------------------|---|--------|
| Groundsmaster 7200/7210 with hard canopy   |                                  |                                   |   |        |
| Attachment                                 | Additional front weight required | Weight part number                | Weight description  | Qty    |
| Rear QAS and no attachment (Model 30377)   | 0 kg (0 lb)                      | n/a                               |   |        |
| QAS finish grader / box rake (Model 08754) | 11.3 kg (25 lb)                  | 114-4090 <b>or</b><br>Model 30375 | front weight bracket <b>or</b><br>Jack-Stand Kit              | 1<br>1 |
| Steel drag mat (Model 08757)               | 11.3 kg (25 lb)                  | 114-4090 <b>or</b><br>Model 30375 | front weight bracket <b>or</b><br>Jack-Stand Kit              | 1<br>1 |
| Tooth rake (Model 08751)                   | 11.3 kg (25 lb)                  | 114-4090 <b>or</b><br>Model 30375 | front weight bracket <b>or</b><br>Jack-Stand Kit              | 1<br>1 |
| Tooth rake with spring rake (Model 08752)  | 11.3 kg (25 lb)                  | 114-4090 <b>or</b><br>Model 30375 | front weight bracket <b>or</b><br>Jack-Stand Kit              | 1<br>1 |
| Coco drag mat (Model 08758)                | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096   | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |
| QAS nail drag (Model 08761)                | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096   | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |
| QAS debris blower (Model 08759)            | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096   | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Rahn groomer (allied product)              | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096   | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |

| 62-inch width of cut                        |                                  |                                 |   |        |
|---|----------------------------------|---------------------------------|---|--------|
| Groundsmaster 7200/7210 with NO hard canopy |                                  |                                 |   |        |
| Attachment                                  | Additional front weight required | Weight part number(s)           | Weight description  | Qty    |
| Rear QAS and no attachment (Model 30377)    | 30.4 kg (67 lb)                  | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>1 |
| QAS finish grader / box rake (Model 08754)  | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Steel drag mat (Model 08757)                | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Tooth rake (Model 08751)                    | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |
| Tooth rake with spring rake (Model 08752)   | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Coco drag mat (Model 08758)                 | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| QAS nail drag (Model 08761)                 | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| QAS debris blower (Model 08759)             | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Rahn groomer (allied product)               | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |

| 62-inch width of cut                       |                                  |                                 |   |        |
|--|----------------------------------|---------------------------------|---|--------|
| Groundsmaster 7200/7210 with hard canopy   |                                  |                                 |   |        |
| Attachment                                 | Additional front weight required | Weight part number              | Weight description  | Qty    |
| Rear QAS and no attachment (Model 30377)   | 49.4 kg (109 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>2 |
| QAS finish grader / box rake (Model 08754) | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Steel drag mat (Model 08757)               | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |
| Tooth rake (Model 08751)                   | 68.5 kg (151 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>3 |
| Tooth rake with spring rake (Model 08752)  | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |
| Coco drag mat (Model 08758)                | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |
| QAS nail drag (Model 08761)                | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |
| QAS debris blower (Model 08759)            | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |
| Rahn groomer (allied product)              | 87.5 kg (193 lb)                 | 114-4090 <b>and</b><br>114-4096 | front weight bracket <b>and</b><br>19 kg (42 lb) front weight | 1<br>4 |

# Product Overview

## Specifications

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

|            |                 |
|------------|-----------------|
| Net weight | 107 kg (235 lb) |
|------------|-----------------|

## Attachments/Accessories

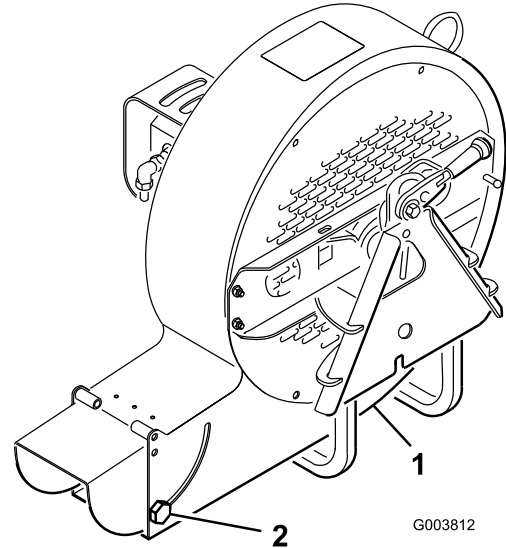
A selection of Toro approved attachments and accessories is available for use with the machine to enhance and expand its capabilities. Contact your Authorized Service Dealer or Distributor or go to [www.Toro.com](http://www.Toro.com) for a list of all approved attachments and accessories.

# Operation

## Adjusting the Discharge Opening

The discharge opening (Figure 7) is adjustable to increase or decrease air output velocity and volume. Decreasing the discharge opening size increases the velocity.

1. Loosen discharge opening deflector mounting screws (Figure 7).



**Figure 7**

1. Discharge opening deflector
2. Mounting screw

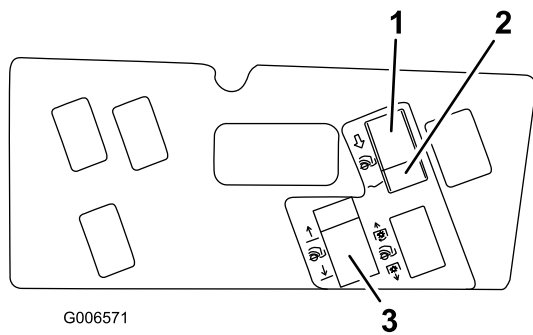
2. Pivot the deflector to the desired opening.
3. Tighten the mounting screws.

## Switch Operation

Lift/Lower switch (Figure 8) — Move switch to the Lift position to raise the attachment and to the Lower position to lower the attachment.

Float/Power-down Switch (Figure 8) — Moving the switch to the Float position allows the attachment to follow the contour of the ground. Moving the switch to the Power-down position adds weight from the machine to increase ground engagement force. Higher ground engagement force decreases the traction capacity of the machine.

**Important:** Only run the debris blower in the *Float* mode. Never run it in the *Power-down* mode, or damage to the blower will occur.



**Figure 8**

- |               |               |
|---------------|---------------|
| 1. Float      | 3. Lift/Lower |
| 2. Power-down |               |

## Operating Tips

### **⚠ WARNING**

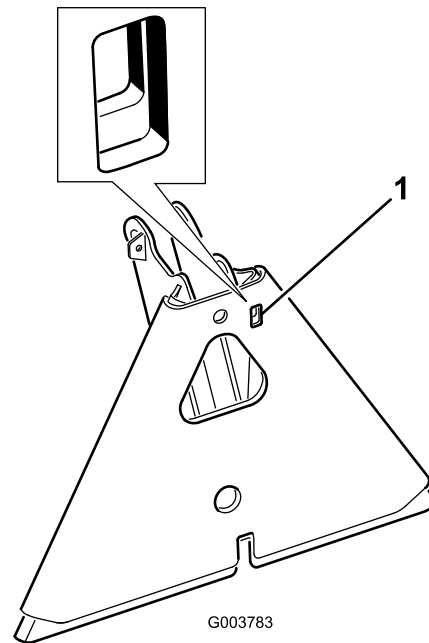
Discharged air has considerable force and could cause injury or loss of footing.

- Stay away from discharge opening when machine is operating.
- Keep bystanders away from discharge opening when machine is running.

Practice blowing material. It is advisable to blow the same direction the wind is blowing to prevent material from blowing back into the cleared area.

Do not climb curbs with the debris blower mounted to the machine. Always find a ramp.

**Note:** If the attachment adapter becomes stuck to the traction unit adapter, insert a prybar/screwdriver into the pry slot to disengage the parts (Figure 9).



**Figure 9**

1. Pry slot

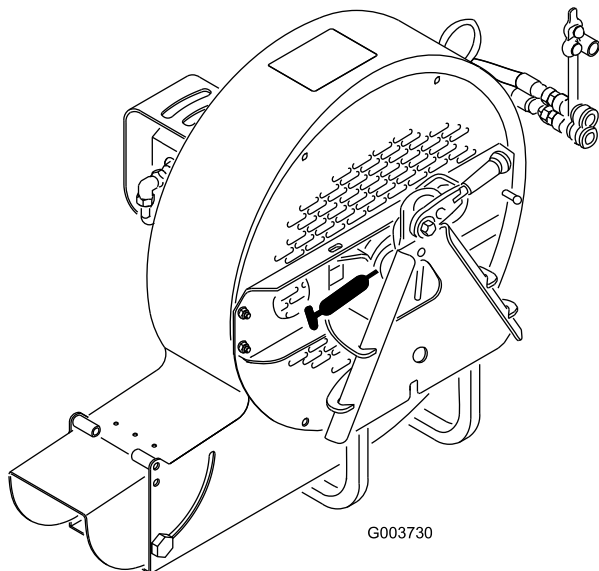
# Maintenance

## Lubrication

The debris blower has bearings and bushings that must be lubricated regularly. If the machine is operated under normal conditions, lubricate the bearings with #2 general-purpose, lithium-based grease after every 8 hours of operation or daily, whichever comes first. Lubricate the fittings immediately after every washing, regardless of the interval listed.

The lubrication points and quantities are as follows:

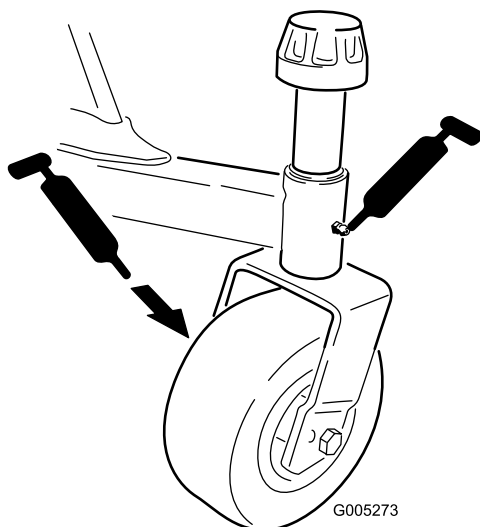
Fan shaft—2 (Figure 10)



**Figure 10**

Castor arm tube (Figure 11)

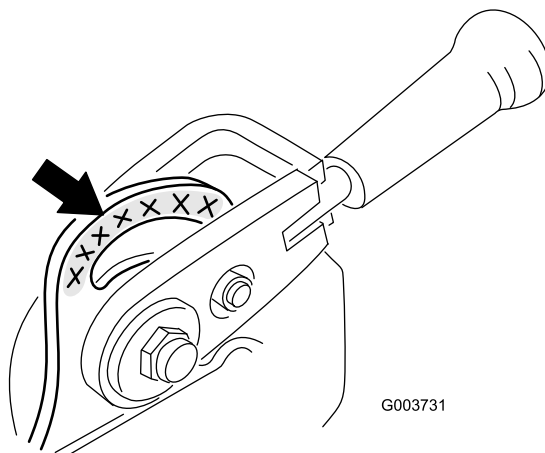
Castor wheel (Figure 11)



**Figure 11**

## Greasing the Attachment Adapter

If the locking lever on the attachment adapter does not pivot freely and easily, apply a light coat of grease to the area shown in Figure 12.

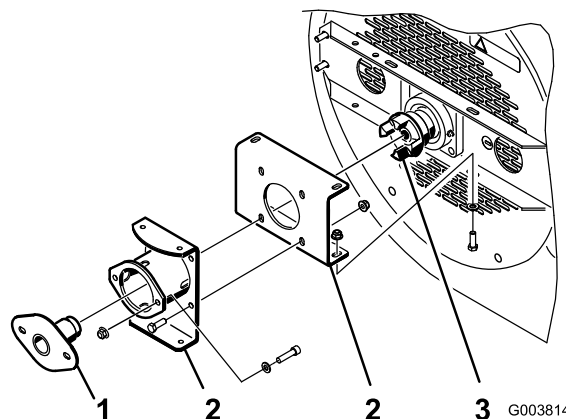


**Figure 12**

## Bearing Alignment

If the motor mounting brackets are ever removed, they must be realigned before the debris blower is operated. Refer to the Part Catalog for the Alignment Tool part number.

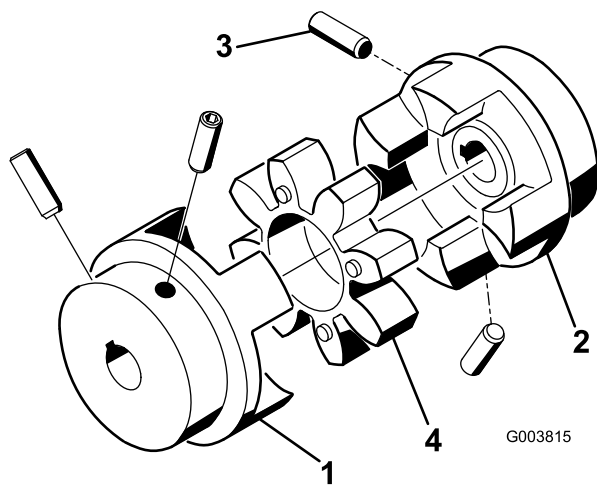
1. Make sure that the mounting brackets are installed to the blower housing but the bolts and nuts are loose (Figure 13).



**Figure 13**

1. Alignment tool
2. Mounting bracket
3. Fan coupler

2. Insert the bearing alignment tool through the mounting brackets and into the fan coupler (Figure 13). Make sure that the spider coupler (Figure 14) is not in the coupler.



**Figure 14**

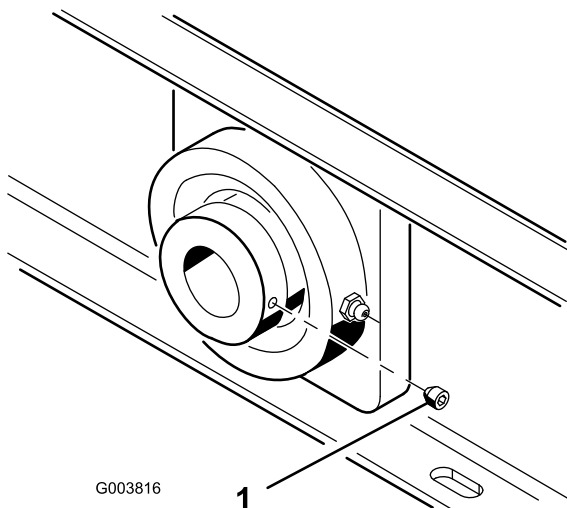
- |                  |                       |
|------------------|-----------------------|
| 1. Motor coupler | 3. Set screw (2 each) |
| 2. Fan coupler   | 4. Coupler spider     |

3. Tighten the capscrews and the nuts securing the mounting brackets together and to the blower housing.
4. Remove the alignment tool and finish assembly.

## Torquing Fasteners

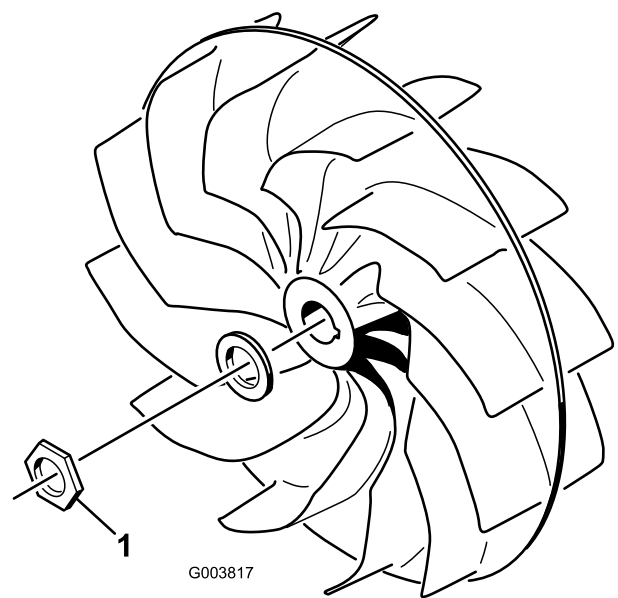
If the blower is ever disassembled, the following fasteners must be torqued as specified. Also, apply Loctite 242 to the threads before installing.

- The set screws securing the motor and fan shaft couplers (Figure 14) must be torqued to 58 to 82 in-lb.
- The fan shaft bearing set screws (Figure 15) must be torqued to 58 to 82 in-lb.



**Figure 15**

1. Set screw



**Figure 16**

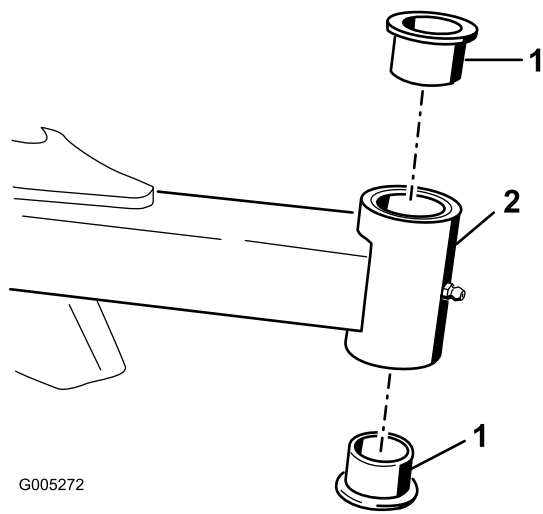
1. Fan mounting nut

## Servicing the Castor Arm Bushings

The castor arms have bushings pressed into the top and bottom of the tube and after many hours of operation, the bushings will wear. To check the bushings, move the castor fork back and forth and from side to side. If the castor spindle is loose inside the bushings, the bushings are worn and must be replaced.

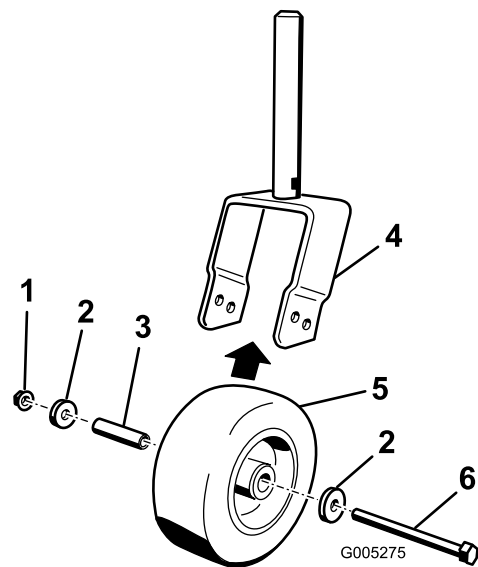
1. Raise the debris blower so that the wheels are off of the floor. Block the blower so that it cannot accidentally fall.
2. Remove the tensioning cap, spacer, and thrust washer from the top of the castor spindle.
3. Pull the castor spindle out of the mounting tube. Allow the thrust washer and spacer to remain on the bottom of the spindle.
4. Insert a pin punch into the top or bottom of the mounting tube and drive the bushing out of the tube (Figure 17). Also, drive the other bushing out of the tube. Clean the inside of the tubes to remove dirt.

- The fan mounting nut (Figure 16) must be torqued to 500 ft-lb.



**Figure 17**

1. Bushings                      2. Castor arm tube



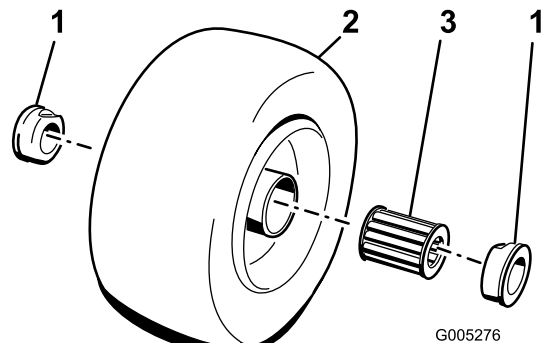
**Figure 18**

1. Locknut                      4. Castor fork  
2. Washer                      5. Castor wheel  
3. Tire spanner                6. Bolt

## Servicing the Castor Wheels and Bearings

1. Remove the locknut from the bolt holding the castor wheel assembly and washers between the castor fork (Figure 18). Grasp the castor wheel and slide the bolt out of the fork. Remove the tire spanner from inside the wheel assembly.

2. Remove one of the outer bearings from the wheel hub and allow the inner bearing to fall out (Figure 19). Remove the bearing from the opposite side of the wheel hub.



**Figure 19**

1. Bearing (outer)                3. Bearing (inner)  
2. Wheel assembly

3. Check the bearings (inner and outer), tire spanner, and inside of the wheel hub for wear. Replace any damaged parts.
4. To assemble the castor wheel, push a outer bearing into the wheel hub. When installing the bearings, press on the outer race of the bearing.
5. Slide the inner bearing into the wheel hub. Push the other bearing into the open end of the wheel hub to captivate the bearing spacer inside the wheel hub.
6. Insert the tire spanner into the wheel assembly.
7. Install the castor wheel assembly and washers between the castor fork and secure it in place with the bolt and locknut.

**Notes:**



**Notes:**

**Notes:**

# 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                 |
|-----------|------------------|---------------------|-------------------------------|---------------------|---------------------------|
| 30393     | 315000001 and Up | Debris Blower       | DEBRIS BLOWER-GM<br>7200/7210 | Debris Blower       | 2006/42/EC,<br>2000/14/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:



David Klis  
Sr. Engineering Manager  
8111 Lyndale Ave. South  
Bloomington, MN 55420, USA  
September 26, 2013

EU Technical Contact:

Peter Tetteroo  
Toro Europe NV  
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Belgium

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Fax 0032 14 581911



# Toro General Commercial Product 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 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  
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 warranty may be provided by the manufacturer of these items.
- Product failures which result from failure to perform recommended 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, 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 fuels, coolants, lubricants, additives, fertilizers, water, or chemicals, etc.
- 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, 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.

### 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. Battery replacement may be required during the normal product warranty period at owner's expense. Note: (Lithium-Ion battery only): A Lithium-Ion battery has a part only prorated warranty beginning year 3 through year 5 based on the time in service and kilowatt hours used. Refer to the *Operator's Manual* for additional information.

### 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 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 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.