

Count on it.

# Operator's Manual

# **Sports Field Edger**

Sand/Infield Pro 3040 and 5040 Traction Unit Model No. 08766—Serial No. 311000001 and Up

# Introduction

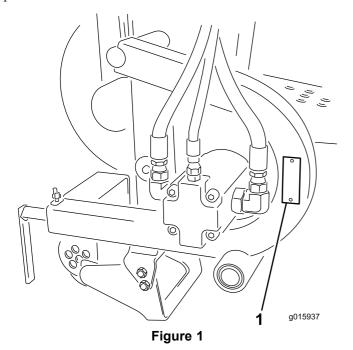
This product complies with all relevant European directives, for details please see the separate product specific Declaration of Conformity (DOC) sheet.

The Sports Field Edger kit is mounted to a Sand Pro and is intended to be used by professional, hired operators in commercial applications. It is primarily designed to create a clean-cut edge between grassy areas and unpaved barren areas.

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

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

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.



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 and the Sand Pro 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.

### 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.

- Using the machine demands attention. To prevent loss of control:
  - Operate only in daylight or when there is good artificial light.
  - Drive slowly and watch for holes or other hidden hazards.
  - 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.
- 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.
- 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.
- 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.

#### **Maintenance**

- 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.
- 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 attachment 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.



120-3450

- 1. Warning—read the *Operator's Manual*, keep bystanders a safe distance from the machine.
- Cutting hazard of hand and foot, edger—keep hands and feet away from moving parts, keep all guards and shields in place.

# Setup

#### **Loose Parts**

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

Procedure	Description	Qty.	Use	
	Small tee fitting	1		
4	Hydraulic cap	1	Update the hydraulics	
l I	Large hydraulic hose w/fittings	1		
	Small hydraulic hose	1		
	Cross tube assembly	1	Mount the cross tube assembly	
2	Screw (3/8 x 3 inch)	4		
2	Flat washer	4		
	Locknut (3/8 inch)	4		
9	Cutter head assembly	1	Install the cutter head assembly	
<u> </u>	Hitch pin	1	Install the cutter flead assembly	
A	Hose guide	1	Install the hose guide	
4	Flange nut	1		
5	No parts required	_	Route the hydraulic hoses	
6	No parts required	-	Check the hydraulic fluid	

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

Description	Qty.	Use
Parts catalog	1	Use to reference part numbers
Operator's Manual	1	Read before operating the machine
Certificate of conformity	1	Declaration of conformity

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

**Note:** To operate the Sports Field Edger, the traction unit must be equipped with the Rear Remote Hydraulics Kit, Model 08781. If the serial number of the Rear Remote Hydraulics Kit is prior to 310000001, you must update the Rear Remote Hydraulics. Proceed to Step 1 in Setup.



# **Updating the Rear Remote Hydraulics**

(For Rear Remote Hydraulics Kits with serial numbers prior to 310000001)

#### Parts needed for this procedure:

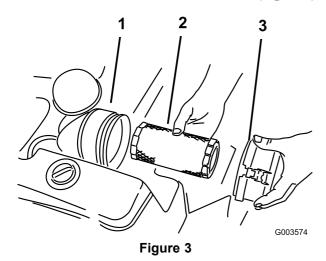
1	Small tee fitting
1	Hydraulic cap
1	Large hydraulic hose w/fittings
1	Small hydraulic hose

#### **Preparing the Machine**

Thoroughly clean the machine. All debris must be removed to ensure the new components will fit properly and that no dirt or debris gets into the hydraulic system.

#### Removing the Air Cleaner

- 1. Thoroughly clean the area around the air cleaner.
- 2. Loosen the radiator clamp around the hose and lower the clamp onto the hose.
- 3. Remove one of the bolts holding the air cleaner in place. Retain the bolt.
- 4. Remove the air cleaner cover and filter (Figure 3).



- Air cleaner canister
- Air filter

- Canister cover
- 5. Remove the hose from the air cleaner canister.
- 6. Open the air cleaner strap and pull it over the end of the canister where the filter was taken out (Figure 4).

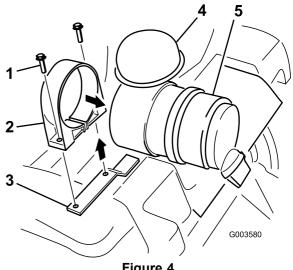
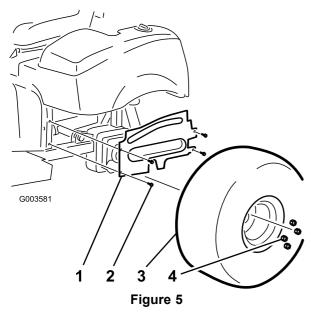


Figure 4

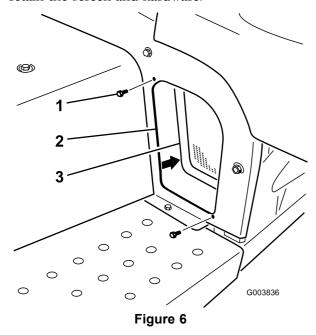
- 1. Bolt
- Air cleaner strap
- Machine frame
- 4. Cap
- 5. Air cleaner canister
- 7. Cover the hose or install a rag into it so that no dirt or debris gets into it while installing this kit.
- 8. Remove the other bolt holding the air cleaner strap to the machine frame. Retain the bolt.

#### Removing the Hydraulic Reservoir and **Shrouds**

- 1. Drain the hydraulic tank. Refer to the machine Operator's Manual.
- 2. Raise the rear of the machine off the ground and block up the rear of the machine. Refer to the machine Operator's Manual under Jacking the Machine.
- 3. Remove the left rear tire.
- 4. Remove the 4 flange-head screws securing the left-hand wheel shroud to the frame (Figure 5). Remove and retain the shroud and hardware.

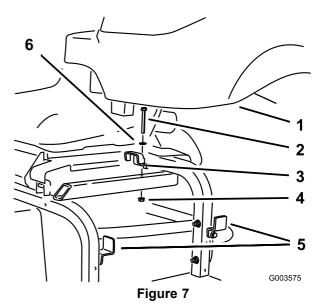


- 1. Left hand wheel shroud
- 2. Flange-head screws
- 3. Tire 4. Nut
- 5. Remove the 2 flange-head screws securing the left front screen to the frame (Figure 6). Remove and retain the screen and hardware.



- 1. Flange-head screws
- 2. Frame

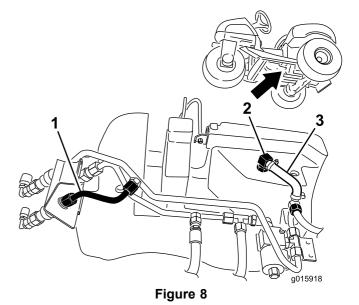
- Left front screen
- 6. Disconnect the hydraulic lines going to the tank.
- 7. Remove the top hydraulic tank bracket from the machine frame and loosen the two brackets on the side of the frame (Figure 7). Remove and retain the tank but discard the top bracket, bolt, washer and nut.



- 1. Hydraulic tank
- 2. Bolt
- 3. Top bracket
- 4. Nut
- 5. Side bracket
- 6. Washer

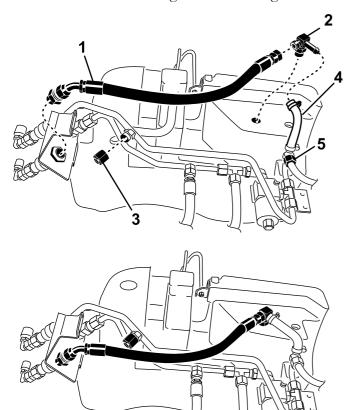
# Installing the New Hydraulic Components

1. Disconnect the short hydraulic line from the coupler fitting and the hydraulic line port (Figure 8).



- 1. Short hydraulic line
- 2. Small elbow fitting
- 3. Small molded hose
- 4. Small hydraulic tube
- 2. Remove the small molded hose by disconnecting it from the small elbow fitting in the hydraulic tank and the small hydraulic tube (Figure 8). Retain the clamps but discard the hose.
- 3. Remove the small elbow fitting from the hydraulic tank (Figure 8).

4. Install the new small tee fitting into the hydraulic tank. Position the fitting as shown in Figure 9.



- 1. Hose
- 2. Small tee fitting
- 3. Hydraulic cap
- 4. Small molded hose
- Small hydraulic tube
- 5. Connect the new small molded hose to the new tee fitting and the small hydraulic tube using the clamps previously removed (Figure 9).

Figure 9

- 6. Install the hydraulic cap to the hydraulic line port (Figure 9).
- 7. Loosely install the new hydraulic hose to the coupler fitting and the small tee fitting (Figure 9).

#### **Install the Hydraulic Tank**

- 1. Install the existing hoses back onto the hydraulic tank.
- 2. Install the hydraulic tank to the frame and tighten the side brackets previously loosened.

#### **Tightening all Connections**

**Note:** Make sure the hoses and hydraulic lines are routed away from and to do not rub against any sharp, hot, or moving components.

- 1. When all hydraulic lines and hoses are installed, tighten all of the connections.
- 2. Use a backup wrench on all tank fittings.

#### Install the Screen, Shrouds and Tire

- 1. Install the left front screen to the frame.
- 2. Install the front shroud to the frame with 4 flange-head screws.
- 3. Install the 4 flange-head screws securing the left-hand wheel shroud to the frame.
- 4. Install the left rear tire
- 5. Lower the machine onto the ground.
- 6. Install the rear hitch shield.
- 7. Install the air cleaner assembly.
- 8. Fill the reservoir with the appropriate hydraulic fluid until the level reaches the necked down area on the dipstick.

**Note:** Do not overfill.

2

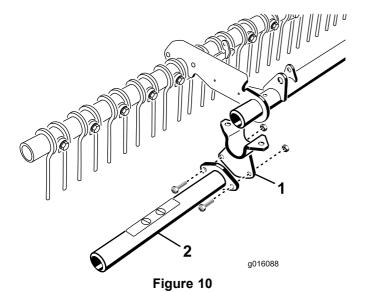
# Mounting the Cross Tube Assembly

#### Parts needed for this procedure:

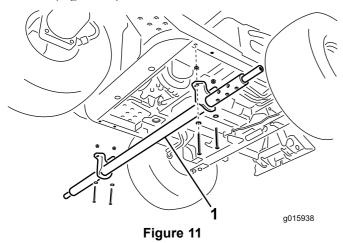
1	Cross tube assembly
4	Screw (3/8 x 3 inch)
4	Flat washer
4	Locknut (3/8 inch)

#### **Procedure**

**Note:** If the Sand Pro is equipped with the mid-mount tool system, remove the fasteners securing the saddle bracket and foot guards (if so equipped) to each side of the machine. Remove and discard the saddle brackets, foot guards and fasteners (Figure 10). Support the mid-mount tool system to prevent it from lowering.



- 1. Saddle bracket
- 2. Foot guard
- 1. From the left side of the machine, slide the cross tube assembly under the machine, aligning the mounting bracket holes with the holes in each frame tube (Figure 11).



- 1. Cross tube assembly
- 2. Secure the cross tube mounting brackets to the frame tubes with 4 screws (3/8 x 3 inch), flat washers, and locknuts (3/8 inch) (Figure 11).



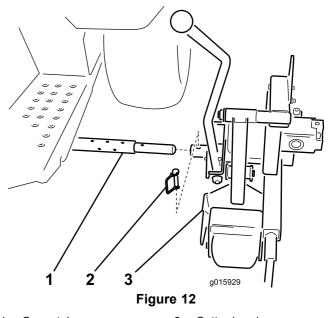
# Installing the Cutter Head Assembly

#### Parts needed for this procedure:

1	Cutter head assembly
1	Hitch pin

#### **Procedure**

1. Slide the cutter head pivot tube onto the cross tube (Figure 12).



- Cross tube
  Hitch pin
- 3. Cutter head
- 2. Secure the cutter head to the cross tube with the hitch pin (Figure 12).



# Installing the Hose Guide

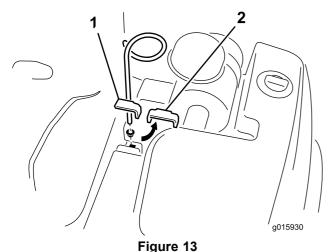
#### Parts needed for this procedure:

1	Hose guide
1	Flange nut

#### **Procedure**

 Remove the bolt, washer and nut securing the top hydraulic tank clamp to the frame (Figure 13).
 Remove and discard the clamp, bolt, washer and nut.

**Note:** The hydraulic tank clamp may have been removed in a previous step.



- 1. Hose guide
- 2. Hydraulic tank clamp
- 2. Install the hose guide with the supplied flange nut. Position the hose guide as shown in Figure 13.



# **Routing the Hydraulic Hoses**

#### No Parts Required

#### **Procedure**

1. Route the hydraulic hoses through the hose guide and to the rear of the machine (Figure 14).

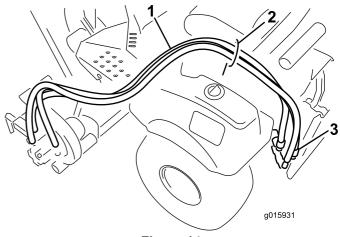


Figure 14

- 1. Hydraulic hoses
- 3. Rear remote connectors
- 2. Hose guide
- 2. Connect the hoses to the rear remote connectors (Figure 14).

**Note:** The hoses can be connected to either of the connectors.

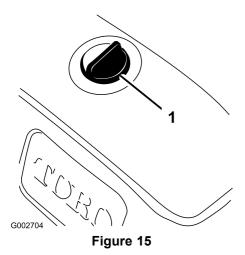


## **Checking the Hydraulic Fluid**

#### **No Parts Required**

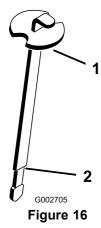
#### **Procedure**

- 1. Park the machine on a level surface.
- 2. Stop the machine, move the throttle control to the Slow position and rotate the ignition key to Off, and remove the key from the switch to prevent accidental starting.
- 3. Clean the area around the hydraulic oil reservoir cap to prevent debris from entering the tank (Figure 15).



- 1. Oil reservoir cap
- Remove the cap from the reservoir
- 5. Remove the dipstick from filler neck and wipe it with a clean rag.
- 6. Insert the dipstick into the filler neck; then remove it and check the level of the fluid.

**Note:** The fluid level should be up to the mark (necked down area) on the dipstick (Figure 16).



1. Dipstick

2. Full mark

7. If the fluid level is low, slowly fill the reservoir with the appropriate hydraulic fluid until the level reaches the necked down area on the dipstick.

**Note:** Do not overfill.

8. Install the reservoir cap.

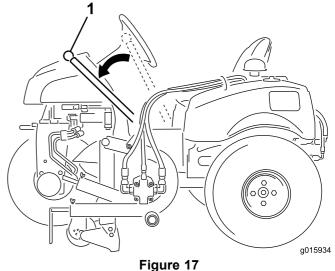
**Note:** To prevent system contamination, clean the top of the hydraulic oil containers before puncturing. Ensure that the pour spout and funnel are clean.

# **Product Overview**

#### **Controls**

#### Handle

The handle is used to raise and lower the edger (Figure 17).



1. Handle

#### **Alignment Guide**

Loosen the adjustment screw and move the alignment guide to the desired position (Figure 18).

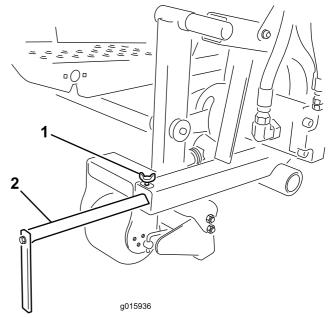


Figure 18

1. Adjustment screw

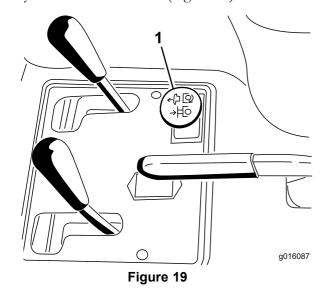
2. Alignment guide

# **Operation**

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

## **Operating the Edger**

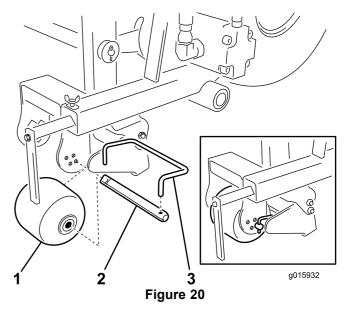
- 1. Start the engine.
- 2. Press outward on the handle and lower the edger blade to the ground (Figure 17).
- 3. Engage the blade by pulling up on the Remote Hydraulics control knob (Figure 19).



- 1. Remote hydraulics control knob
- 4. Slowly move forward, not traveling faster than 1 to 2 mph.
- 5. To stop the edging operation:
  - Press outward on the handle and raise the edger blade to the transport position (Figure 17).
  - Disengage the blade by pushing down on the Remote Hydraulics control knob (Figure 19).

# Adjusting the Edger Blade Depth

- 1. Move the throttle control to the Slow position and rotate the ignition key to Off and remove the key from the switch to prevent accidental starting.
- 2. Raise the edger to the transport position.
- 3. Remove the scraper rod from the roller shaft (Figure 20).



- 1. Roller
- Roller shaft
- Scraper rod
- 4. Remove the roller shaft from the roller (Figure 20).
- 5. Move the roller to the desired depth and install the shaft. Start at the low setting 1/2 to 1-1/2 inches.

**Note:** Moving the roller down will raise the cutting depth.

6. Lock the roller in position with the scraper rod.

## **Using the Alignment Guide**

The alignment guide is used to keep the edger in a straight line by sight or when following a string line.

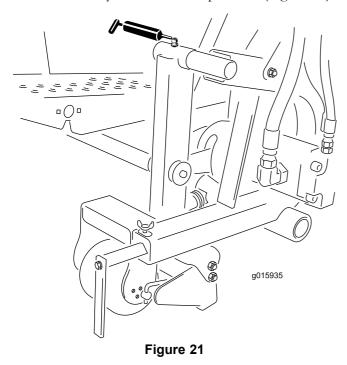
- 1. Loosen the screw and adjust the alignment guide for or aft to the desired position (Figure 18).
- 2. Align the guide with the string or line desired to be edged.
- 3. Tighten the screw.

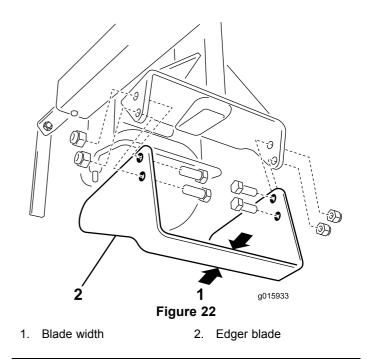
# **Maintenance**

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

#### Lubrication

The edger cutter head has a grease fitting that must be lubricated with No. 2 General Purpose Lithium Base Grease after every 100 hours of operation (Figure 21).





4. Install the new blade with the screws and nuts previously removed.

# **Changing the Edger Blade**

Check the edger blade frequently and replace the blade when the blade width is reduced to 1-1/4 inches (Figure 22).

- 1. Stop the machine, move the throttle control to the Slow position and rotate the ignition key to Off, and remove the key from the switch to prevent accidental starting.
- 2. Raise the edger to the transport position.
- 3. Remove the 4 screws and nuts that secure the blade to the cutter arm (Figure 22).

# **Storage**

- Thoroughly wash the machine with a garden hose-without a nozzle-so that excessive water pressure will not cause contamination and damage to the seals and bearing
- Check all fasteners for looseness; tighten as necessary.
- Grease the fitting. Wipe off any excess lubricant
- Check the edger blade and replace as required.



#### The Toro Total Coverage Guarantee

A 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:

Commercial Products Service Department Toro Warranty Company 8111 Lyndale Avenue South Bloomington, MN 55420-1196 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, brakes pads and linings, clutch linings, blades, reels, bed knives, tines, spark plugs, castor wheels, tires, filters, belts, and certain sprayer components such as diaphragms, nozzles, and check valves, etc.
- Failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, fertilizers, water, or chemicals, etc.

- Normal noise, vibration, wear and tear, and deterioration.
- Normal "wear and tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

#### **Parts**

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

#### **Note Regarding Deep Cycle Battery Warranty:**

Deep cycle batteries have a specified total number of kilowatt-hours they can deliver during their lifetime. Operating, recharging, and 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.

#### Maintenance is at Owner's Expense

Engine tune-up, lubrication cleaning and polishing, replacement of Items and Conditions Not Covered 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 printed in your *Operator's Manual* 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. If all other remedies fail, you may contact us at Toro Warranty Company.