



Electric Hose Reel Kit Multi Pro 1750 Turf Sprayer

Model No. 41211—Serial No. 314000001 and Up

Operator's Manual

Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, 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 illustrates the location of the model and serial numbers on the product.

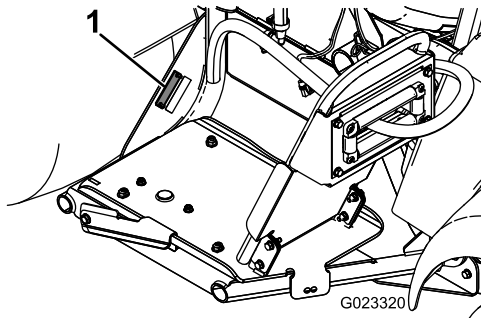


Figure 1

1. Model and serial number plate

Model No. _____

Serial No. _____

⚠ WARNING

CALIFORNIA

Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

Use of this product may cause exposure to chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

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

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

Important: Teflon tape is required for the installation of this kit. The tape is used to wrap threads of fittings before assembly. Threads should be wrapped starting at the base and traveling to the tip of fitting to ensure a waterproof seal.

Important: A non-petroleum based lubricant, such as vegetable oil, will be required for the installation of this kit.



Safety

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert symbol, which means **Caution, Warning, or Danger**—personal safety instruction. Failure to comply with the instruction may result in personal injury or death.

Read also the safety and operation instructions in the vehicle *Operator's Manual*.

- Do not aim the hand sprayer at any person or animal. Fluids under high pressure can penetrate skin and cause severe injury, possibly resulting in amputation or death. Hot liquids and chemicals can also cause burns or injury. If any part of the body comes in contact with the spray stream, immediately consult a physician familiar with injected fluid injuries.
- Do not place your hand or any other part of your body in front of the spray nozzle.
- Do not leave the equipment under pressure when you are not present.
- Do not use the hand sprayer if the hose, trigger lock, nozzle, or any other part is damaged or missing.
- Do not use the hand sprayer if there are any leaks in any hoses, fittings, or other components.
- Do not spray near power lines.
- Do not drive while spraying with a hand sprayer.
- Wear rubber gloves, safety goggles, and a full body protective suit when spraying chemicals with the hand sprayer.
- 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.

⚠ CAUTION

Chemicals are hazardous and can cause personal injury.

- **Read the directions on the chemical labels before handling the chemicals and follow all manufacturer recommendations and precautions.**
- **Keep chemicals away from your skin. Should contact occur, wash the affected area thoroughly with soap and clean water.**
- **Wear goggles and any other protective equipment recommended by the chemical manufacturer.**

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	Muffler shield Tailpipe shield L-shield Muffler clamp	1 1 1 3	Install the muffler shield.
3	Wiring harness Hose reel button Weatherproof nut Small R-clamp Flange nut (3/8) Carriage bolt Fusible link Power relay Push fastener	1 1 1 1 1 1 1 1 1	Install the wiring harness.
4	Hose-reel frame Bolt (5/16) Flange nut (5/16 inch) Swivel plate Hose reel Large carriage bolt Flange nut (3/8 inch) Handle Mud shield Spring clip Locknut Small carriage bolt Large R-clamp Spray gun bracket Spacer Self-tapping screws Thrust washer Snap ring	1 10 10 1 1 4 4 1 1 1 2 2 2 1 2 2 1 1	Mount the hose reel.
5	Control valve Long bolts Hose-reel supply hose Hose clamp Straight hosebarb Supply-hose valve	1 4 1 4 1 1	Install the control valve.
6	Long hose with fitting Spray gun Plastic hose clamp, small	1 1 1	Connect the spray hose.

1

Preparing the Machine

No Parts Required

Procedure

1. Ensure that the machine is empty of all fluids. If chemicals have been used in the machine, flush the system thoroughly with clean water; refer to your vehicle *Operator's Manual* for instructions.
2. Park the machine on a flat area, set the parking brake, stop the pump, stop the engine, and remove the ignition key.
3. Disconnect the negative battery terminal from the battery.

2

Installing the Muffler Shield

Parts needed for this procedure:

1	Muffler shield
1	Tailpipe shield
1	L-shield
3	Muffler clamp

Procedure

For units with a serial number less than 314000499.

1. Using the existing muffler clamp, attach the front of the muffler shield to the muffler (Figure 2).

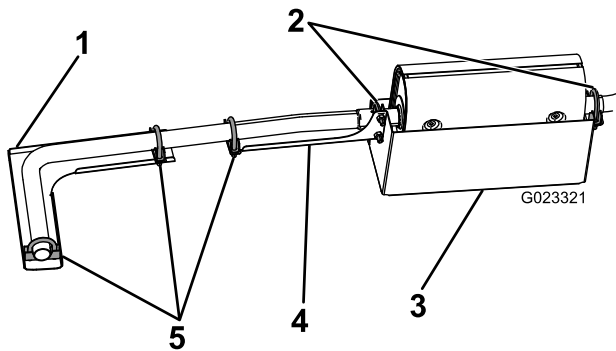


Figure 2

- | | |
|----------------------------|-----------------------|
| 1. L-shield | 4. Tailpipe shield |
| 2. Existing muffler clamps | 5. New muffler clamps |
| 3. Muffler shield | |

2. Using the existing muffler clamp, attach the rear of the muffler shield and the front of the tailpipe shield to the muffler (Figure 2).
3. Secure the rear of the tailpipe shield to the tailpipe with a muffler clamp.
4. Attach a muffler clamp to the end of the L-shield and slide the clamp over the end of the tailpipe (Figure 2).

Note: Keep the shields clear of the drive shaft.

5. Secure the other end of the L-shield to the tailpipe with a muffler clamp.

3

Installing the Wiring Harness

Parts needed for this procedure:

1	Wiring harness
1	Hose reel button
1	Weatherproof nut
1	Small R-clamp
1	Flange nut (3/8)
1	Carriage bolt
1	Fusible link
1	Power relay
1	Push fastener

Procedure

1. Remove the fasteners securing the front tank straps at the top of the tank.

Note: Retain all parts.

2. Install a carriage bolt to the lower inboard hole on the right tank strap.
3. Install the tank strap fasteners removed previously to secure the straps to the tank.

Note: Make sure the strap is secure to the tank. Do not overtighten it.

4. Secure an R-clamp to the carriage bolt using a flange nut (3/8 inch).
5. Route the hose reel end of the wiring harness through the R-clamp as shown in Figure 3.

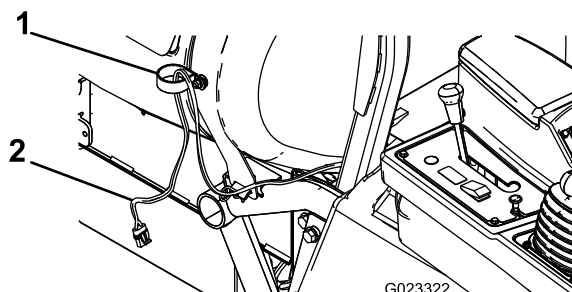


Figure 3

1. R-clamp
2. Wiring harness

6. Remove and retain the bolts securing the rear panel to the console arm.
7. Connect the hose reel button to the wiring harness, and install the button and weatherproof nut onto the rear console panel (Figure 4).

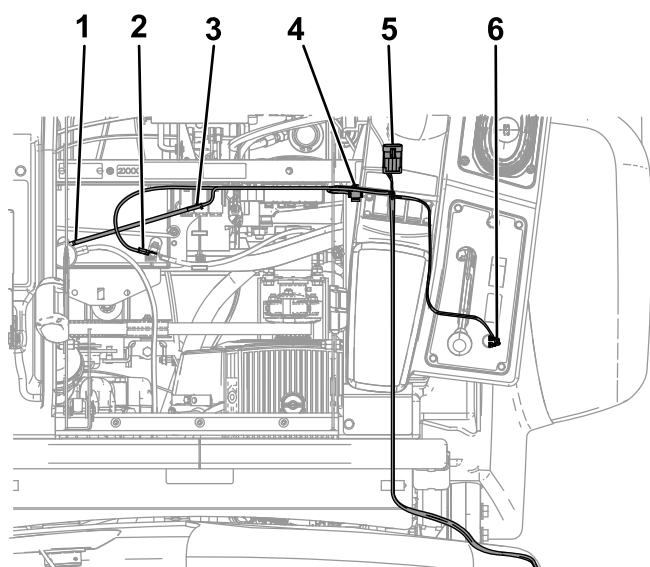


Figure 4

1. Positive (+) battery terminal
2. Negative (-) battery terminal
3. Fusible link
4. Power relay
5. Main wiring harness plug
6. Hose reel button connection

8. Secure the console panel to the console arm using the previously removed bolts.
9. Connect the nearby connector into the hose reel plug on the main wiring harness, located under the front portion of the control arm (Figure 4).
10. Plug the next connector into the power relay, and mount the relay to the outer hole on the frame near the existing relays.
11. Connect the fusible link to the red wire attached to the positive (+) battery terminal (Figure 4).
12. Connect the far end of the wiring harness to the fuse block ground (Figure 4).

4

Mounting the Hose Reel

Parts needed for this procedure:

1	Hose-reel frame
10	Bolt (5/16)
10	Flange nut (5/16 inch)
1	Swivel plate
1	Hose reel
4	Large carriage bolt
4	Flange nut (3/8 inch)
1	Handle
1	Mud shield
1	Spring clip
2	Locknut
2	Small carriage bolt
2	Large R-clamp
1	Spray gun bracket
2	Spacer
2	Self-tapping screws
1	Thrust washer
1	Snap ring

Procedure

1. Mount the hose-reel frame to the side of the machine using 4 bolts (5/16 inch) and 4 flange nuts (5/16 inch) as shown in Figure 5.

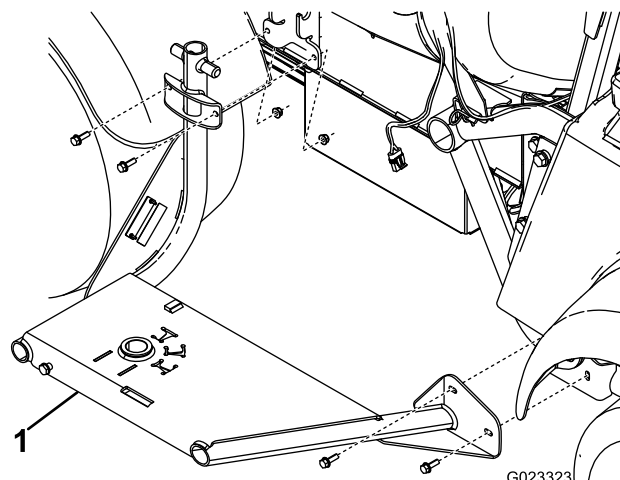


Figure 5

1. Hose-reel frame

2. Attach the swivel plate to the bottom of the hose reel using 4 carriage bolts and 4 flange nuts (3/8 inch) (Figure 6).

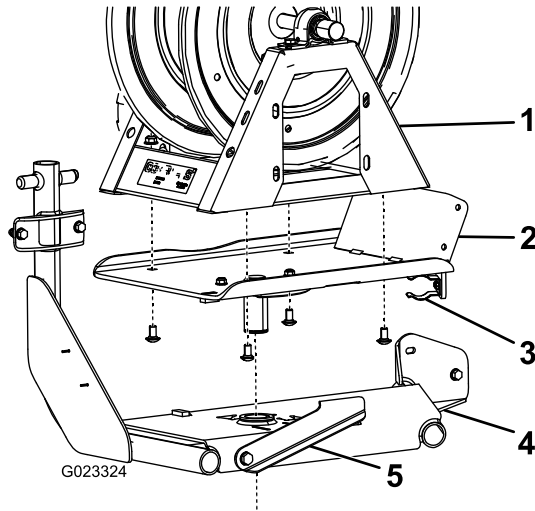


Figure 6

1. Hose reel
2. Swivel plate
3. Spring clip
4. Hose reel frame
5. Swivel lock

3. Drop the swivel plate into the hole on the hose-reel frame (Figure 6).

Note: Move the swivel lock to the left for ease of installation.

4. On the underside of the hose reel frame, attach the thrust washer and snap ring to the post on the swivel plate (Figure 7).

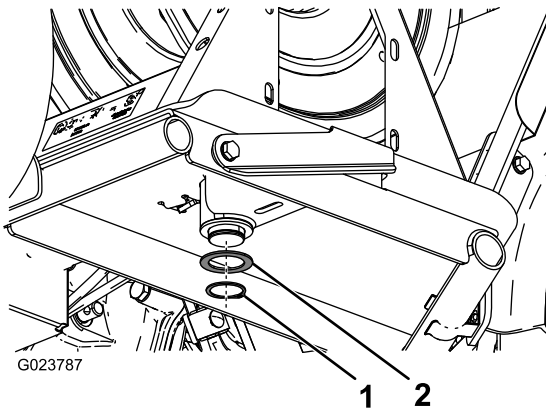


Figure 7

1. Snap ring
2. Thrust washer

5. Loosely mount the handle to the swivel plate with 4 bolts (5/16 inch) (Figure 8).

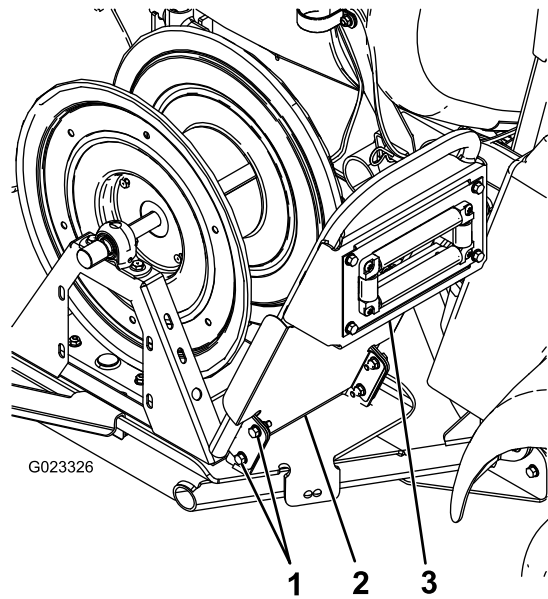


Figure 8

1. Bolts (5/16)
2. Mud shield
3. Handle

6. Attach the mud shield and handle to the swivel plate using the bolts installed in step 5 and 4 flange nuts (5/16 inch) (Figure 8).
7. Secure the top of the mud shield to the handle using 2 self-tapping screws (Figure 9).

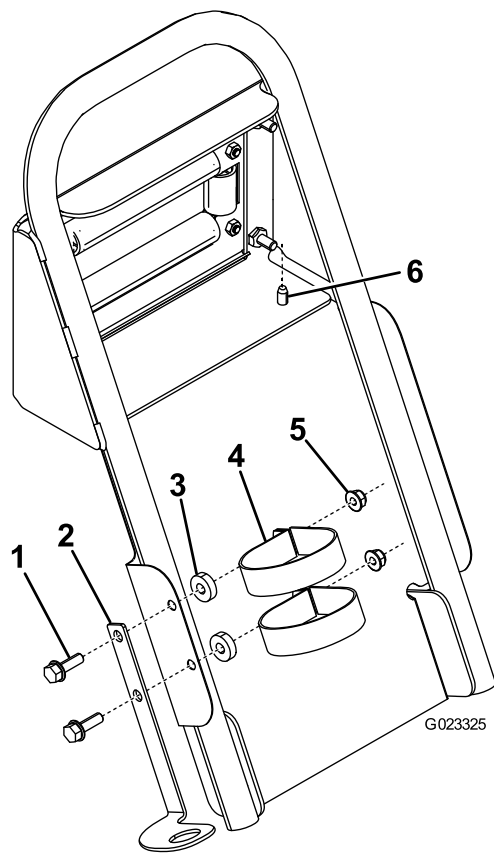


Figure 9

1. Bolt (5/16 inch)
2. Spray gun bracket
3. Spacer
4. Large R-clamp
5. Flange nut (5/16 inch)
6. Self-tapping screw

8. Attach the spray gun holder to the mud shield as shown in Figure 9.
9. Connect the wiring harness to the hose reel.

5

Installing the Control Valve

Parts needed for this procedure:

1	Control valve
4	Long bolts
1	Hose-reel supply hose
4	Hose clamp
1	Straight hosebarb
1	Supply-hose valve

Procedure

1. Remove the 4 long bolts securing the pressure-gauge port to the boom valves and discard them (Figure 10). Retain the flat washers and nuts.

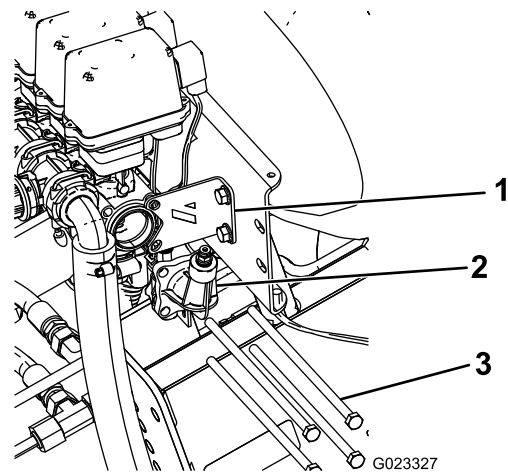


Figure 10

1. Pressure-gauge port
2. Long bolt

2. Remove and retain the 2 bolts and nuts securing the stabilizing bracket to the valve assembly (Figure 10).
3. Install the O-ring, the new control valve, and the previously removed pressure-gauge port, and stabilizing bracket using 4 long bolts; refer to Figure 11.

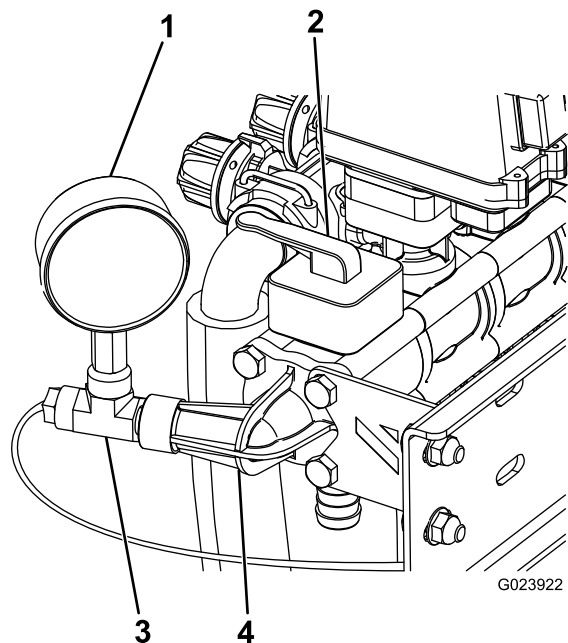


Figure 11

1. Control valve
2. T-fitting
3. Pressure-gauge port

4. Connect the hose-reel supply hose to the control valve using a hose clamp.
5. Secure the straight hosebarb to the open end of the hose-reel supply hose with a hose clamp.
6. Route the hose-reel supply hose as shown in Figure 12 and attach it to the hose reel with a hose clamp.

Note: If the Tank Cleanse Rinse Kit is installed, route the hose behind the rinse pump.

6

Connecting the Spray Hose

Parts needed for this procedure:

1	Long hose with fitting
1	Spray gun
1	Plastic hose clamp, small

Procedure

1. Wrap Teflon® tape around the threads of the hose fitting on the long hose, and install the fitting into the connecting tube on the reel (Figure 14).

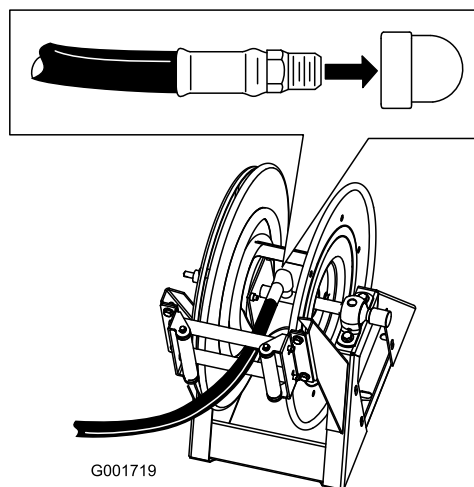


Figure 14

2. Connect the free end of the long hose to the fitting on the spray gun (Figure 15).

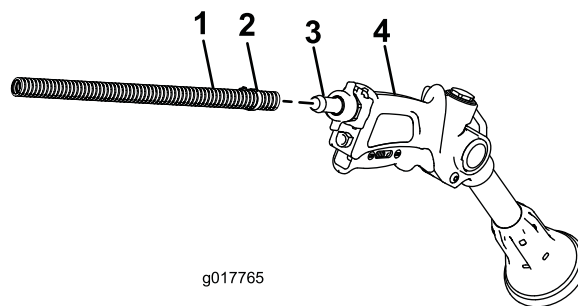


Figure 15

1. Hose
2. Hose clamp
3. Barb
4. Spray gun

3. Secure the end of the hose with a small hose clamp.
4. Connect the negative battery wire to the battery.

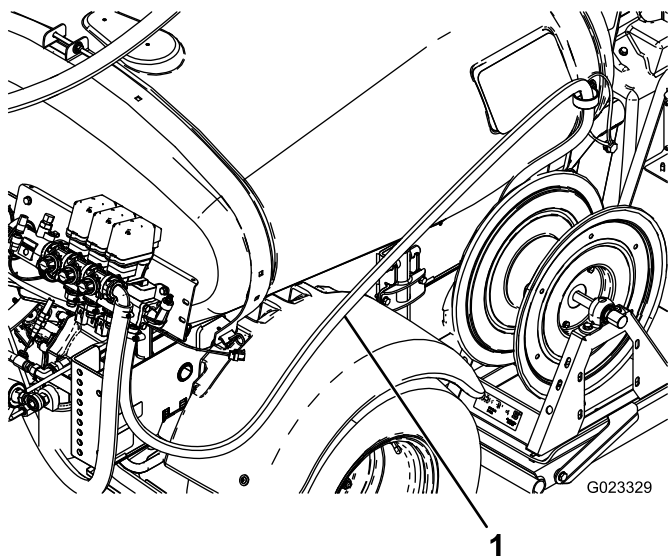


Figure 12

1. Hose-reel supply hose

7. Cable tie the wiring harness to the supply hose using 2 cable ties.
8. From the top of the tank-supply hose, measure down 13 cm (5 inches) and cut the hose.
9. Connect the 2 hose ends to the supply hose valve using 2 hose clamps (Figure 13).

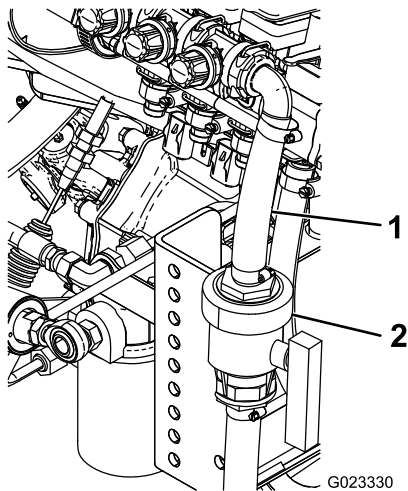


Figure 13

1. Tank-supply hose
2. Supply-hose valve

5. Press the hose wind button, and carefully guide the hose onto the reel moving the hose from side to side to evenly distribute the hose.

⚠ CAUTION

Hands, loose clothing, long hair, and jewelry could get caught in the hose and reel while rewinding and cause injury.

- Keep your hands clear of the reel and hose while it is rewinding.
- Do not wear loose clothing or jewelry and tie up long hair.

Operation

⚠ WARNING

Fluid under pressure can penetrate skin and cause injury.

- Keep your body and hands away from nozzles that eject high-pressure fluid.
- Do not aim the sprayer at any person or animal.
- Make sure that all fluid hoses and lines are in good condition and that all connections and fittings are tight before applying pressure to the system.
- Use cardboard or paper to find leaks.
- Safely relieve all pressure in the system before performing any work on it.
- Get immediate medical help if fluid is injected into skin.
- Hot liquids and chemicals can cause burns or other harm.

Important: You must always empty and clean the sprayer immediately after each use. Failure to do so may cause the chemicals to dry or thicken in the lines, clogging the pump and other components.

Clean the spray system after **each** spraying session. To properly clean the spray system:

- Use 3 separate rinses.
- Use a minimum of 50 gallons for each rinse.
- Use the cleaners and neutralizers as recommended by the chemical manufacturers.
- Use pure clean water (no cleaners or neutralizers) for the **last** rinse.

Switching from Boom Spray Mode to Hand Spray Mode

1. Stop the machine, turn the booms off, and set the parking brake.

⚠ WARNING

Driving while using the hand sprayer can cause loss of control, resulting in injury or death. Do not operate the hand sprayer while driving.

2. At the back of the machine, ensure that the trigger lock on the spray gun is locked.
3. Flip the lever on the control valve to the Open position.
4. At the operating position, turn the pump on.
5. Switch the master boom to the On position.

6. Set the engine to the desired rpm, then engage the neutral engine speed lock.

Important: Do not use a pressure setting higher than 1034 kPa (150 psi) with the hand sprayer.

routine (refer to your sprayer *Operator's Manual*). Failure to properly clean the spray gun may degrade the performance and reliability of the hose reel kit and spray gun.

7. Use the rate switch to set the desired kPa (psi).

Spraying with the Hand Sprayer

1. Pull out the desired amount of hose from the reel.

Important: Do not pull the hose with the spray gun. Always hold the hose and pull on it directly. Pulling on the hose with the gun may break the fitting on the gun or damage the hose.

2. Release the trigger lock.
3. Direct the spray gun nozzle at the area to be sprayed and pull the trigger.
4. Release the trigger and set the trigger lock when you are finished.

Switching from Hand Spray Mode to Boom Spray Mode

1. Press the rewind button on the hose reel until only a few feet of hose is out of the reel.

Note: The hose-reel rewind button can only be used when the supervisor key on the sprayer console is in the Unlocked position.

CAUTION

Hands, loose clothing, long hair, and jewelry could get caught in the hose and reel while rewinding and cause injury.

- Keep your hands clear of the reel and hose while it is rewinding.
 - Do not wear loose clothing or jewelry and tie up long hair.
2. Flip the lever on the control valve to the Closed position.
 3. Direct the spray gun nozzle at an area where it is safe to spray, release the trigger lock, and pull the trigger until all remaining fluid is out of the hose, then set the trigger lock.
 4. Return the spray gun to the holder on the back of the reel.
 5. Return the engine to idle speed.
 6. Stop the pump.

Important: Ensure that you flush the spray gun with fresh clean water during your daily cleaning

Notes:



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:

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.