Form No. 3395-469 Rev A

TORO®

Count on it.

Operator's Manual

Pro Sweep Turf Sweeper

Model No. 07068—Serial No. 315000001 and Up

Register at www.Toro.com.
Original Instructions (EN)

CE

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

Electromagnetic Compatibility

Domestic: This device complies with FCC rules Part 15. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference that may be received, including interference that may cause undesirable operation.

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a FCC Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:Reorient the receiving antenna, relocate the remote control receiver with respect to the radio/TV antenna or plug the controller into a different outlet so that the controller and radio/TV are on different branch circuits.If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

FCC ID:OA3MRF24J40MC-BASE, OA3MRF24J40MA-HANDHELD

IC: 7693A-24J40MC-BASE, 7693A-24J40MA-HANDHELD

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

⚠ CAUTION

If a user makes changes or modifications not expressly approved by the party responsible for compliance, they could void the user's authority to operate the equipment.

Introduction

This machine is intended to be used by professional, hired operators in commercial applications. The primary function of the machine is to remove debris from large turf areas. The movable tongue provides an offset position for sweeping.

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.

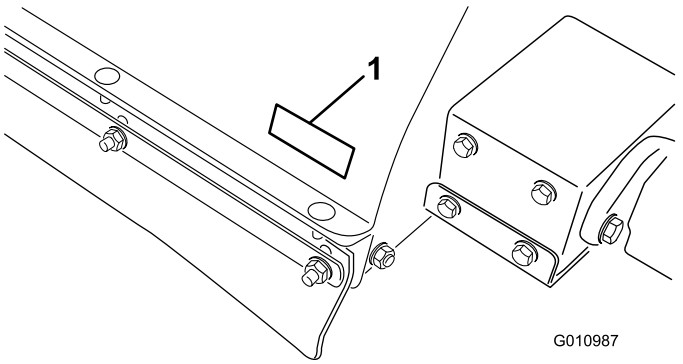


Figure 1

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.

Figure 2

1. Safety alert symbol

This manual uses 2 words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

8111 Lyndale Avenue South
Bloomington, MN 55420

Contact us at www.Toro.com.
Printed in the USA.

Contents

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.

The following instructions are from ANSI standard B71.4-2012.

Safe Operating Practices

Supervisor's Responsibilities

- Ensure the operators are thoroughly trained and familiar with the *Operator's Manual* and all decals on the machine.
- Establish your own special procedures and work rules for unusual operating conditions (e.g., slopes too steep for machine operation, adverse weather conditions, etc.).

Before Operating

- Read, understand and follow the instructions in the Operator's Manual and on the machine before starting. Become familiar with all controls and know how to stop quickly. A free replacement manual is available by contacting Toro directly at www.Toro.com.
- Never allow children to operate the machine. Never allow adults to operate the machine without proper instruction. Only trained operators who have read this manual should operate this machine.
- Never operate the machine while under the influence of drugs or alcohol.
- Become familiar with the controls and know how to stop the tow vehicle engine quickly.
- Keep all shields, safety devices, and decals in place. If a shield, safety device, or decal becomes damaged, malfunctioning, or illegible, repair or replace it before operation is commenced. Also tighten loose nuts and bolts to ensure machine is in safe operating condition.
- Always wear substantial shoes. Do not operate machine while wearing sandals, tennis shoes, or sneakers or when barefoot. Do not wear loose-fitting clothing that could get caught in moving parts and possibly cause injury. Wearing safety glasses, safety shoes, long pants, and a helmet is advisable and required by some local ordinances and insurance regulations.
- Do not alter this equipment in any manner which may cause hazardous conditions.
- Safety interlock switches are for the operators protection. Disconnected or malfunctioning safety interlock switches could allow the machine to operate in an unsafe manner and may cause personal injury
  - Do not disconnect the safety interlock switches.

- Check the operation of the switches daily to be sure the interlock system is operating correctly.
- If a switch is malfunctioning, replace it before operating the machine.

While Operating

- Rotating parts can cause serious personal injury. Keep hands and feet away from sweeper reel while machine is running. Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the machine with covers, shrouds, or guards removed.
- **Don't take an injury risk!** When a person or pet appears unexpectedly in or near the sweeping area, **stop sweeping**. Careless operation, combined with terrain angles, ricochets, or missing or damaged guards, can lead to thrown object injuries. Do not resume sweeping until area is cleared.
- Never carry passengers.
- Always look to the rear of machine before backing up and assure no one is behind the machine.
- Operator must be skilled and trained in how to drive on hillsides. Failure to use caution on slopes or hills may cause loss of control, possibly resulting in personal injury or death.
- When using a Workman as a tow vehicle, it is recommended to put 500 pounds of weight into the vehicle bed when operating on any slopes.
- 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.
- Tip over can cause serious injury or death.
  - Never operate on steep slopes.
  - Sweep slopes up and down, never across the face.
  - When going uphill or downhill, do not stop or start suddenly.
  - Stay alert for holes in the terrain or other hidden hazards. To avoid tipping or loss of control, do not drive close to a ditch, creek, or drop off.
  - Never transport the sweeper when the transport alarm is activated.
  - Never transport the sweeper when it is in the offset position.
  - If engine stalls or machine loses headway and cannot make it to the top of a slope, do not turn machine around. Always back slowly straight down the slope.
- Using the machine demands attention. Failure to operate machine safety may result in an accident, tip over of the machine, and possible serious injury or death. Drive carefully. To prevent tipping or loss of control:
  - Operate only in daylight or when there is good artificial light.
  - Drive slowly.
  - Watch for holes or other hazards.
  - Use care when backing machine.
  - Do not drive close to a sand trap, ditch, tall curb, creek, or other hazard.
  - Reduce speed when making sharp turns.
  - Avoid turning the sweeper on a hill side or embankment.
  - Avoid sudden stops and starts.
  - Do not go from reverse to forward or forward to reverse without first coming to a complete stop.
  - Do not attempt sharp turns or abrupt maneuvers or other unsafe driving actions that may cause loss of control.
  - Watch out for traffic when near or crossing roads. Always yield the right-of-way.

While Dumping

- The sweeper must be in the transport position (directly behind tow vehicle) before activating dump cycle.
- Dumping debris can cause serious injury. Stay clear of hopper while machine is backing up or dumping.
- Under rare circumstances wet, compressed grass clippings may generate heat. Always empty the hopper before storing the unit.
- Raising and lowering of hopper door could cause injury to bystanders or pets. Keep bystanders and pets a safe distance from hopper when operating to dump debris or when opening and closing hopper door.
- To avoid the risk of electrical shock, dump hopper only in area clear of overhead wires and other obstructions.
- Never dump hopper on a slope. Always dump hopper on level ground.
- Park machine on a level surface, empty hopper, lower hooper until roller is on the ground and block wheels before removing sweeper from tow vehicle.

Maintenance

- Hydraulic fluid escaping under pressure can penetrate skin and do serious damage. Keep body and hands away from pin hole leaks or nozzles that eject high pressure hydraulic fluid. Use cardboard or paper to find hydraulic leaks. 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.
- Perform only those maintenance instructions described in this manual. If major repairs are ever needed or assistance desired, contact an Authorized Toro Distributor.
- Make sure all hydraulic line connectors are tight, and all hydraulic hoses and lines are in good condition before applying pressure to the system.

- Performing maintenance on machine not properly supported with jack stands may cause machine to fall and could cause injury.
- To be sure of optimum performance and safety, always purchase genuine Toro replacement parts and accessories.

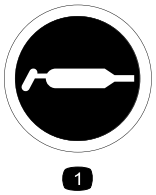
Replacement parts and accessories made by other manufacturers could be dangerous. Altering this machine in any manner may affect the machine's operation, performance, or durability, or its use may result in injury or death. Such use could void product warranty of The Toro Company.

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.

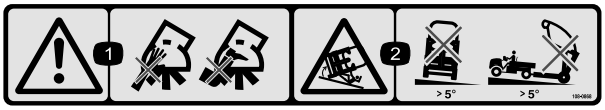
93-9899

1. Crushing hazard—install the cylinder lock.



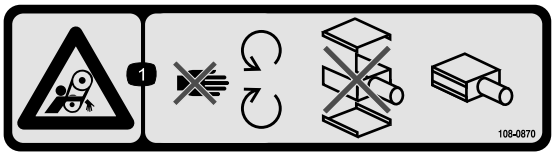
58-6520

1. Grease



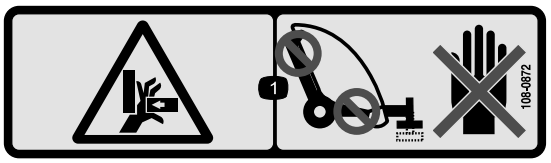
108–0868

1. Warning—keep hands and feet out of the sweeper brush.
2. Tipping hazard—do not operate with the sweeper in the raised position on slopes greater than 5 degrees.



108–0870

1. Entanglement hazard, belts—stay away from moving parts, keep all guards and shields in place; do not operate with covers removed.



108–0872

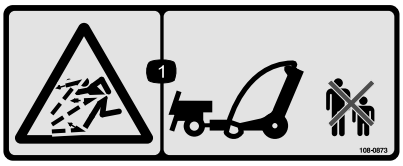
1. Crushing hazard of hand—keep hands away from pinch points.

93-9852

1. Warning—read the *Operator's Manual.*
2. Crushing hazard—install the cylinder lock.

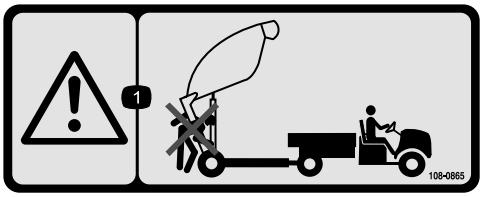
108–0862

1. Warning—read the *Operator's Manual*, do not operate this machine unless you are trained; keep bystanders a safe distance from the machine.
2. Entanglement hazard, belts—stay away from moving parts, keep all guards and shields in place; do not operate with covers removed.



108–0873

1. Thrown object hazard—keep bystanders a safe distance away.



108–0865

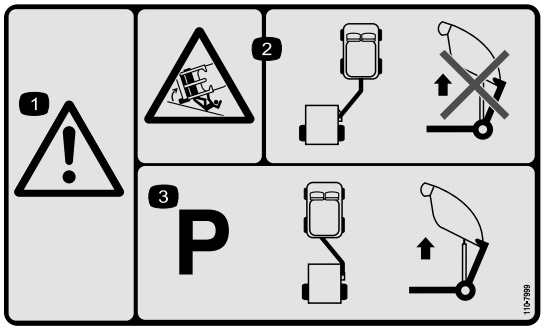
1. Warning—keep bystanders a safe distance from the machine when dumping sweeper.

108–0861

1. Warning—read the *Operator's Manual*, do not operate this machine unless you are trained.
2. Crushing/dismemberment hazard of bystanders—do not carry passengers.
3. Electrical shock hazard, overhead power lines—watch for over head power lines.
4. Loss of control hazard—the maximum load at the sweeper is 1590 kg (3500 lb), at the hitch is 114 kg (250 lb), do not drive down slopes.
5. Warning—keep speeds below 24 kmh (15 mph).
6. Stored energy hazard, trailer—lower the sweeper, place it on blocks or jack stands, disconnect the sweeper, disconnect the hydraulics and wiring harness; do not drive the sweeper in the raised position.

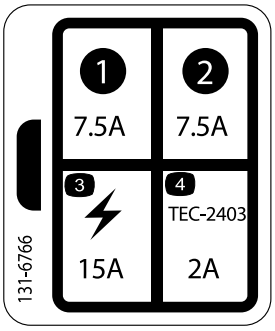
108–0863

1. Crushing hazard, falling object hazard—keep bystanders and vehicles a safe distance from the machine when the sweeper is raised.



110-7999

1. Warning
2. Tipping hazard—When the attachment is in the sweep position do not raise the attachment to dump.
3. The machine must be parked with the attachment in the tow position before raising the sweeper to dump.



131-6766

1. 7.5A
2. 7.5A
3. Electrical accessory—15A
4. TEC-2403—2A

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Requirements before using the vehicle.
2	No parts required	–	Remove the tongue and hydraulic cylinder from the shipping position.
3	Hitch tongue Hitch pin Bolt (3/8 x 1-1/4 inch) Nut (3/8-16) Large washer Large nut Square-head set screw	1 1 1 1 1 1 1	Install the hitch tongue
4	Rear-actuator tab Bolt (1/2 x 2 inch) Flat washer (.531 x .063) Locknut (1/2 inch) Bolt (3/8 x 1–1/4 inch) Pin assembly Flange nut (3/8 inch)	1 4 8 4 2 2 2	Install the hydraulic cylinder.
5	Power wiring harness Cable tie	1 2	Install the power wiring harness.
6	Hitch pin Hairpin cotter	1 1	Mount the sweeper to the tow vehicle.
7	Cable tie	8	Route and secure the hydraulic hoses and wiring harness.
8	No parts required	–	Connect the hydraulic hoses.
9	No parts required	–	Connect the harness.
10	Blade-mounting assembly Bolt (7/16 x 3-3/4 inch) Bolt (7/16 x 3-1/4 inch) Small washer (1/2 inch) Large washer Spacer Locknut (7/16 inch) Chain Bolt (3/8 x 1-1/4 inch) Flange nut (3/8 inch) Snap link	1 1 1 4 1 1 2 1 1 1 1	Mount the windrow blades.
11	Handheld remote Battery (AAA) Screws, small	1 4 6	Assemble the handheld remote.

Media and Additional Parts

Description	Qty.	Use
Operator's Manual	1	Read before operating the sweeper
Parts Catalog	1	Use to reference part numbers
CE Certificate	1	
Remote Control	1	Use to operate the sweeper

1

Requirements Before Using the Vehicle

No Parts Required

Procedure

- The Toro Pro Sweep can be towed by most utility tractors equipped with hydraulics producing 7 to 8 GPM @ 2000 p.s.i. and flotation tires for operation over golf greens. Ensure the tractor has adequate brakes and a drawbar hitch capacity to handle a 3500 lb. (1587 kg.) trailer. Refer to the tow vehicle *Operator's Manual* for towing instructions and precautions.
- The Workman vehicle must be equipped with the High-Flow Hydraulics Kit. Workman vehicles with serial numbers prior to 900000001, need the Heavy Duty Drawbar (Model 44212 or 44213) installed.

  Note: The 4WD Workman model is the best for hilly or bermed approaches to greens.

  Important: For older model Workman vehicles, do not attempt to pull the sweeper when loaded with material, with the standard Workman hitch. It is only rated to 1500 lbs. and may bend or damage the cross tube axle support or rear spring shackles. Always use the H.D. Drawbar Kit Model 44212 or H.D. Frame Drawbar Model 44213.

  Important: Do not attempt towing a loaded sweeper with a light utility vehicle or run-about. These machines do not have adequate brakes, suspension, or frame strength to handle the weight of the sweeper.
- Trailer brakes are recommended when using the sweeper in hilly terrain. When fully loaded, the sweeper may weigh as much as 1,588 kg (3,500 lb)(GVW). This weight is over the recommended towing and braking limit of most utility vehicles. A special trailer brake kit is available for direct installation with the Workman vehicle.

  Note: The trailer brake kit can be adapted to other vehicles with a 12 volt brake light source.

2

Removing the Hitch Tongue and Hydraulic Cylinder from the Shipping Position

No Parts Required

Procedure

Note: Have 2 people remove the hitch assembly.

1. Remove the pin assembly, bolt and nut securing the hydraulic cylinder and hoses to the hitch tongue for shipping. Also, cut the cable tie. Carefully lower the cylinder and hoses from the tongue. Retain the pin assembly and fasteners for re-use.
2. Remove the hair pin cotter and hitch pin securing the hitch tongue to the upper shipping bracket. The hitch tongue is very heavy, use caution when removing the tongue from the shipping brackets.
3. Pivot at the lower shipping pin and pivot the tounge down.
4. Remove the pin assembly, bolt and nut securing the hitch tongue to the lower shipping bracket.

   Note: The machine will shift upward at the lower pin shipping bracket.
5. Remove the fasteners securing the shipping brackets to the sweeper. Remove and discard the shipping brackets.

3

Installing the Hitch Tongue

Parts needed for this procedure:

1	Hitch tongue
1	Hitch pin
1	Bolt (3/8 x 1-1/4 inch)
1	Nut (3/8-16)
1	Large washer
1	Large nut
1	Square-head set screw

Procedure

Note: This procedure requires 2 people.

1. Insert the rear end of the hitch tongue between the mounting plates on the sweeper while aligning the mounting holes (Figure 3).

   Note: The hose guides are to be positioned on top of hitch tongue.

2. Insert the hitch pin through the mounting plates and the hitch tongue (Figure 3).
3. Secure the top of the hitch pin to the mounting plate with a bolt (3/8 x 1-1/4 inch) and a locknut (3/8 inch) (Figure 3).
4. Secure the bottom of the hitch pin with a large washer, large nut and square-head set screw (Figure 3).

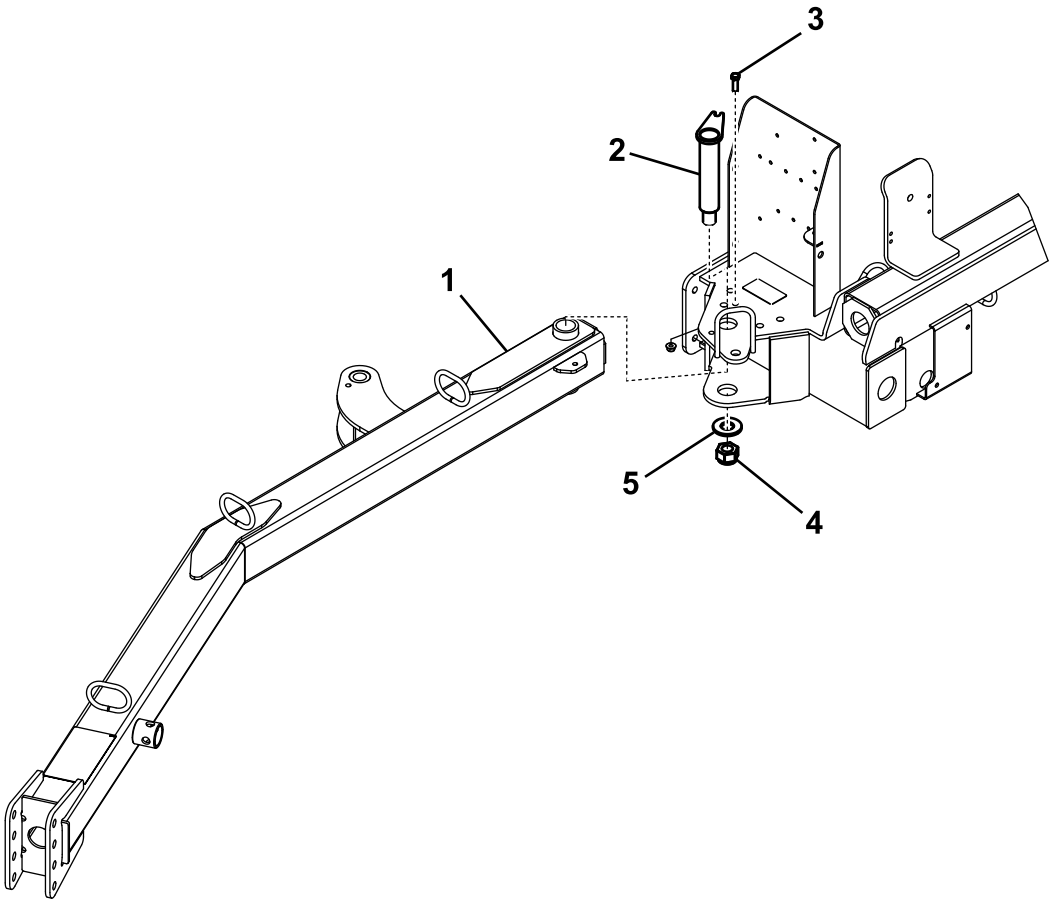


Figure 3

1. Hitch tongue
2. Hitch pin
3. Bolt (3/8 x 1–1/4 inch) and locknut (3/8 inch)
4. Large nut and square-head set screw
5. Large washer

5. Loosen the jam nuts securing the proximity switch to the frame and lower the switch until it is 2.6 to 4.0 mm (0.10 to 0.16 inch) from the sensing plate on the hitch tongue (Figure 4). Tighten the jam nuts to secure the adjustment.

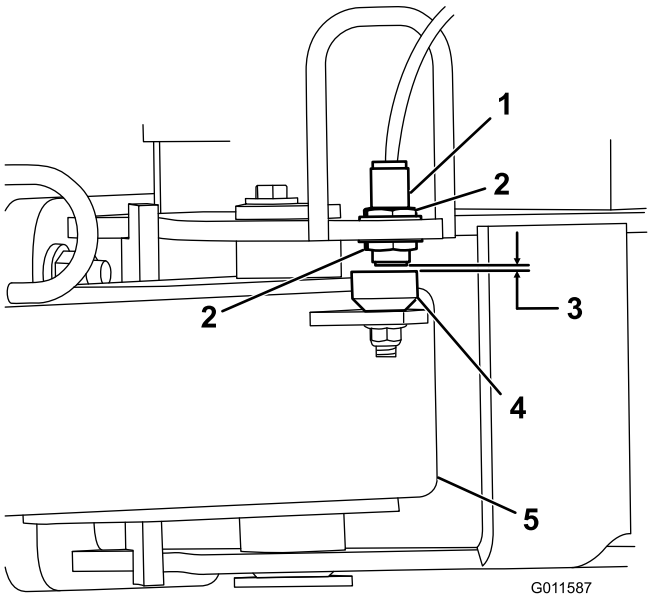


Figure 4

1. Proximity switch
2. Jam nut
3. 2.6 to 4.0 mm (0.10 to 0.16 inch)
4. Sensing plate
5. Hitch tongue

4

Installing the Hydraulic Cylinder

Parts needed for this procedure:

1	Rear-actuator tab
4	Bolt (1/2 x 2 inch)
8	Flat washer (.531 x .063)
4	Locknut (1/2 inch)
2	Bolt (3/8 x 1–1/4 inch)
2	Pin assembly
2	Flange nut (3/8 inch)

Procedure

1. Mount the rear actuator tab to the sweeper frame with 4 bolts (1/2 x 2 inch), 8 flat washers (.531 x .063), and 4 locknuts (1/2 inch). Position the components as shown in Figure 5.

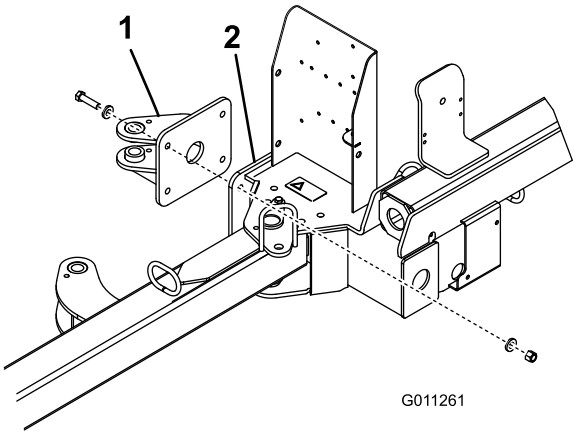


Figure 5

1. Rear actuator tab
2. Sweeper frame

2. Secure each end of the hydraulic cylinder to an actuator tab with a pin assembly, a bolt (3/8 x 1-1/4 inch), and a flange nut (3/8 inch) Figure 6).

   Note: Make sure that the rod end (working end) of the cylinder is attached to the front actuator tab.

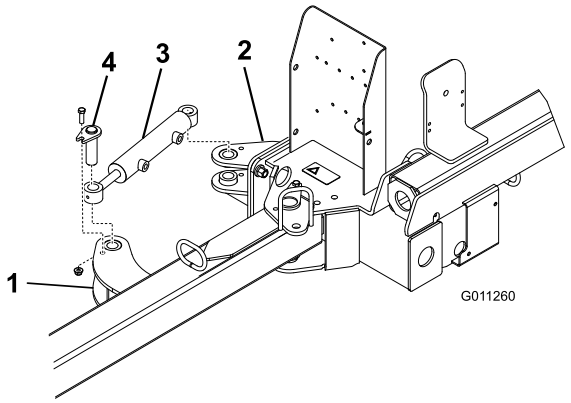


Figure 6

1. Front actuator tab
2. Rear actuator tab
3. Hydraulic cylinder
4. Pin assembly

5

Installing the Power Wiring Harness

Parts needed for this procedure:

1	Power wiring harness
2	Cable tie

Procedure

1. Disconnect the battery from the vehicle.
2. Attach the power wiring harness ring terminal to the ground bolt near the vehicle fuse block.
3. Plug the harness wire into the red wire on the back of the fuse block.

   Note: If the Workman vehicle does not have an open fuse slot, obtain and install a Toro accessory fuse block, Part no. 92–2641.
4. Route the wiring harness alongside the main vehicle wiring harness to the rear of the vehicle (Figure 7).

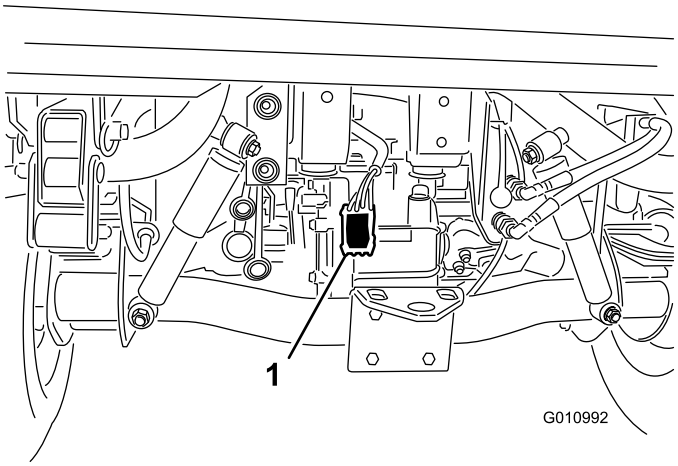


Figure 7

1. Power wiring harness

5. Secure the wiring harness to the vehicle in several places with cable ties. Keep the harness away from any hot or rotating components.

   Note: The harness is equipped with a connector for the optional brake control kit.
6. Connect the vehicle battery.

6

Mounting the Sweeper to the Tow Vehicle

Parts needed for this procedure:

1	Hitch pin
1	Hairpin cotter

Procedure

To ensure proper debris pickup, make sure that the sweeper frame is parallel with the ground.

1. Position the sweeper on a flat, level surface.
2. Back the tow vehicle up to the sweeper.
3. Remove the spring pin, rotate the jack down and install the spring pin (Figure 8).

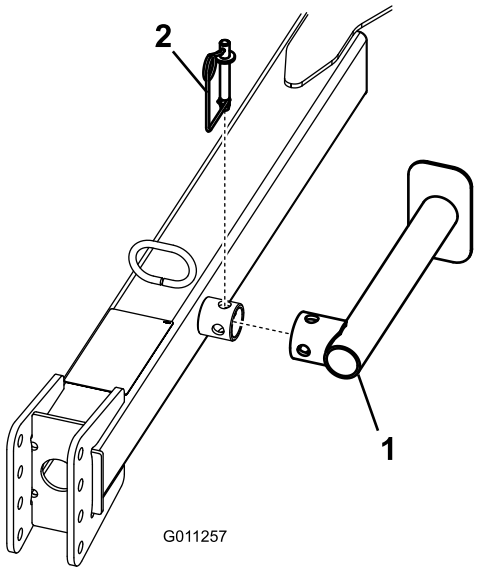


Figure 8

1. Jack
2. Spring pin

4. Jack up the hitch tongue until it is parallel to the ground.
5. Adjust the sweeper hitch clevis to the same level as tow vehicle hitch as follows:
   - Remove the bolts and locknuts securing the hitch clevis (Figure 9) to the hitch tongue.

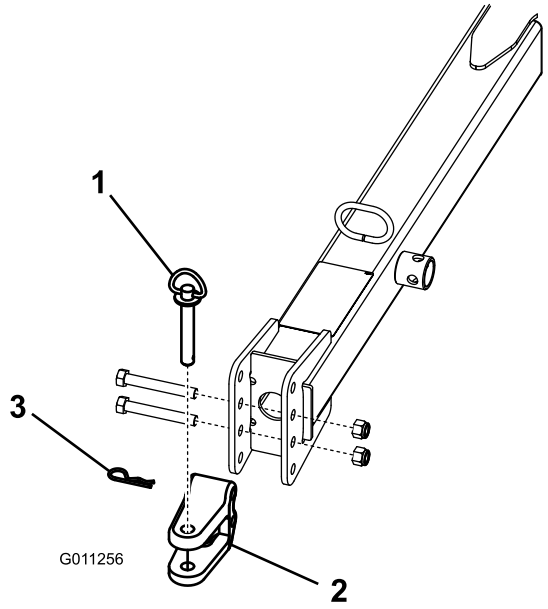


Figure 9

1. Hitch pin
2. Clevis
3. Hairpin cotter

- Raise or lower the hitch clevis to the position approximately level with the tow vehicle hitch.
- Secure the clevis to the hitch with the bolts and locknuts previously removed.

  Note: Make sure that the sweeper is parallel with the ground.

6. Connect the sweeper clevis hitch to the tow vehicle hitch with the hitch pin and hairpin cotter.
7. Remove the spring pin, rotate the jack and up to the storage position and install the spring pin.

7

Routing and Securing the Hydraulic Hoses and Wiring Harness

Parts needed for this procedure:

8	Cable tie

Procedure

1. Route the hydraulic hoses and wiring harness through the hose guides to the front of the hitch tongue (Figure 10).

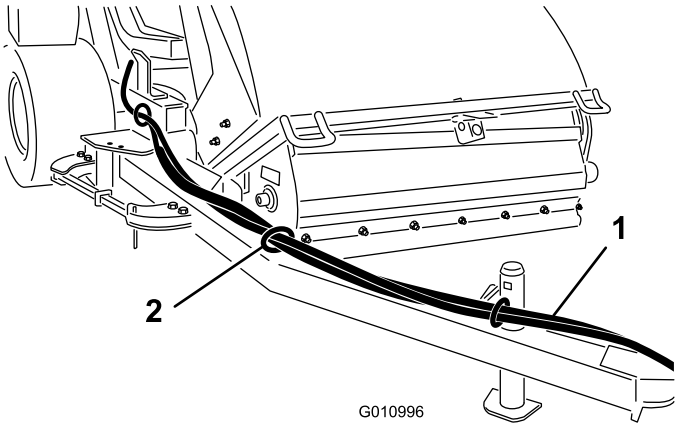


Figure 10

1. Hydraulic hoses and wiring harness
2. Hose guide

2. Secure the hydraulic hoses and wiring harness as shown in Figure 11 and Figure 12.

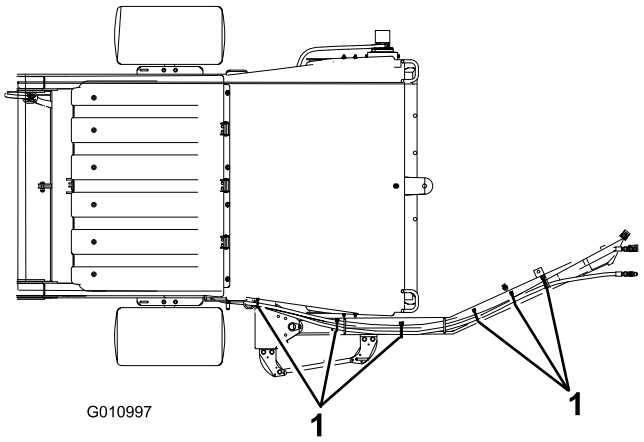


Figure 11
Front View

1. Cable tie (6)

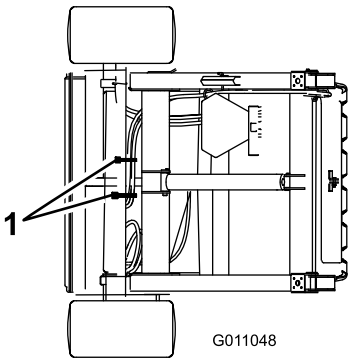


Figure 12
Rear View

1. Cable tie (2)

8

Connecting the Hydraulic Hoses

No Parts Required

Procedure

Connect the hydraulic hoses from the sweeper to the quick couplers on the tow vehicle (Figure 13).

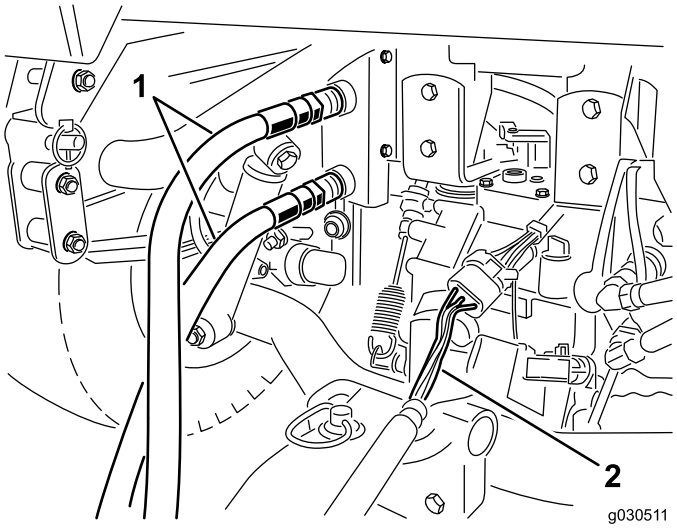


Figure 13

1. Hydraulic hoses
2. Harness'

Important: Make sure that the brush rotates in the proper direction (when viewed from the motor end, the brush should rotate clockwise). If the brush is rotating counterclockwise, reverse the hydraulic hose connections.

Note: Mark the high-pressure hose with a cable tie to identify the correct hose installation (Figure 14).

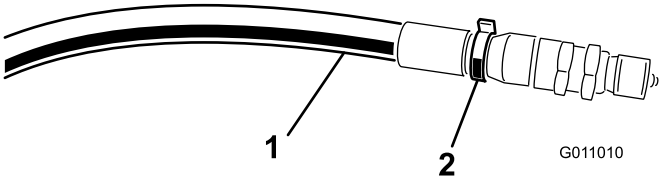


Figure 14

1. High pressure hose
2. Cable tie

9

Connecting the Harness

No Parts Required

Procedure

Connect the harness from the sweeper to the power harness on the tow vehicle (Figure 13).

Note: Ensure the harness cannot get pinched in the hitch and ensure the harness is not on top of or around the hitch pin.

10

Mounting the Windrow Blades

Parts needed for this procedure:

1	Blade-mounting assembly
1	Bolt (7/16 x 3-3/4 inch)
1	Bolt (7/16 x 3-1/4 inch)
4	Small washer (1/2 inch)
1	Large washer
1	Spacer
2	Locknut (7/16 inch)
1	Chain
1	Bolt (3/8 x 1-1/4 inch)
1	Flange nut (3/8 inch)
1	Snap link

Procedure

1. Secure the blade mounting assembly to the left end of the sweeper frame with a bolt (7/16 x 3-1/4 inch) bolt, 2 small washers, a large washer, and a locknut (7/16 inch).

   Note: Position components as shown in Figure 15.
2. Secure the windrow blade to the mounting assembly with a bolt (7/16 x 3-1/4 inch), 2 flatwashers, a spacer and a locknut (7/16 inch). Assemble the components as shown in Figure 15.

   Note: Position the longer end of the blade away from the sweeper.
3. Secure the chain to the blade mounting assembly with a bolt (3/8 x 1-1/4 inch) and a flange nut (3/8 inch) (Figure 15).

4. Secure the other end of the chain to the slot in the frame with the snap link (Figure 15).

   Note: There should be some slack in the chain when connected.

5. Grease the fitting on the blade mounting assembly and on the windrow blade hub with No. 2 lithium grease.

Note: When the windrow is not required, unhook the chain from the snap link, pivot the windrow assembly upward, and hook the chain at the raised level.

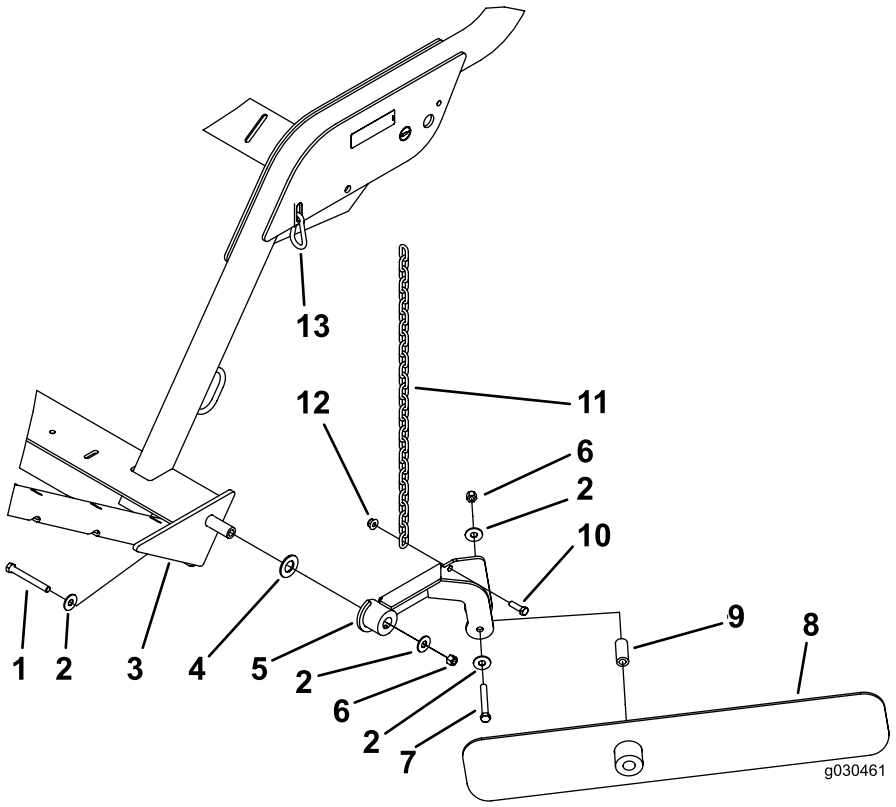


Figure 15

1. Bolt (7/16 x 3-3/4 inches)
2. Small washer (1/2 inch)
3. Sweeper frame
4. Large washer
5. Blade-mount assembly
6. Lock nut (7/16 inch)
7. Bolt (7/16 x 3-1/4 inches)
8. Windrow blade
9. Spacer
10. Bolt (3/8 x 1-1/4 inches)
11. Chain
12. Flange nut (3/8 inch)
13. Snap link

11

Assembling the Handheld Remote

Parts needed for this procedure:

1	Handheld remote
4	Battery (AAA)
6	Screws, small

Procedure

1. Remove the rubber bands securing the remote halves together, and remove the back cover.
2. Plug each battery into a terminal cradle observing proper polarity (Figure 16).

   Note: If the batteries are improperly installed, the unit will not be damaged, but it will fail to operate. The cradle is embossed with polarity markings for each terminal.

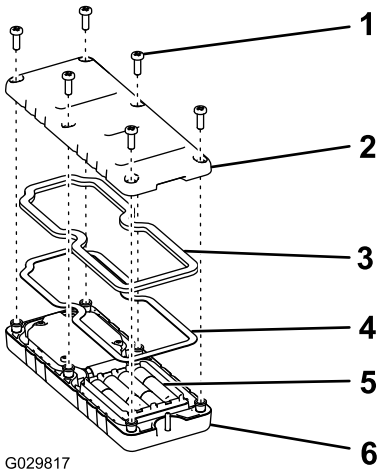


Figure 16

1. Screw
2. Cover
3. Seal
4. Steel gasket
5. Batteries
6. Handheld remote

3. Ensure that the steel gasket and rubber seal are seated in the channel in the remote and set the back cover in place (Figure 16).
4. Secure the cover with 6 screws (Figure 16) and torque them to 1.5 to 1.7 N-m (13 to 15 in-lb).

   Note: Do not over tighten the screws.

Product Overview

Controls

Hopper Dump Button

To dump the hopper, press the hopper dump button 2 times (Figure 17).

Important: The sweeper must be directly behind the tow vehicle and in transport height before the dump sequence can be activated.

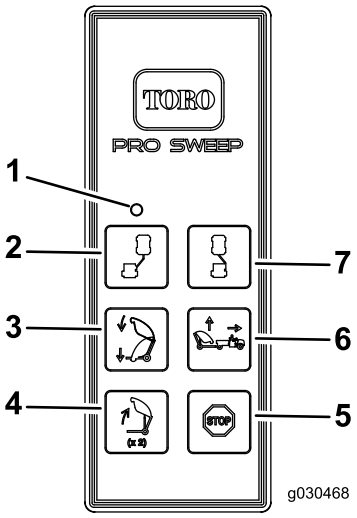


Figure 17

1. LED light
2. Off-set left
3. Sweeper down
4. Hopper dump
5. Stop
6. Sweeper up
7. Off-set right

Sweeper Down Button

To lower the hopper, press the sweeper down button (Figure 17). The hopper can be lowered when it is at any of the following positions:

- Hopper dump height
- Transport height
- Turn around height

Note: When lowering the hopper from the dump position, the lower hopper function can be stopped at any time by releasing the sweeper-down button.

Note: With the sweeper in the transport or turn-around positions, the lower hopper function can be stopped at any time by pressing the sweeper up button.

Sweeper Up Button—Standard Mode

To raise the sweeper in standard mode, press the sweeper-up button. The hopper will stop at the pre-defined height (Figure 17).

- Transport height (home position) is 13–1/4 to 15–1/4 inches.
- Turn around height (off-set position) is 8–1/2 to 10–1/2 inches.

Sweeper Up Button—Optional Mode

This mode allows the operator to adjust the sweeper to any desired height and it stops at the pre-defined heights.

Note: Refer to Switching the Sweeper-Up Mode (page 25) to switch to the optional mode.

To raise the sweeper in optional mode, press and hold the sweeper-up button until the hopper reaches the desired height or stops at the pre-defined height (Figure 17).

- Transport height (home position) is 13–1/4 to 15–1/4 inches.
- Turn around height (off-set position) is 8–1/2 to 10–1/2 inches.

Off-Set Left Button

To off-set the sweeper to the left, press and hold the off-set left button (Figure 17). Releasing the button will stop the movement to the left.

Off-Set Right Button

To off-set the sweeper to the right, press and hold the off-set right button (Figure 17). Releasing the button will stop the movement to the right.

Stop Button

Pressing the stop button will disable any active function.

Note: There is approximately a 3 second delay.

Diagnostic Light

The diagnostic light (Figure 18) is located on the front cover and indicates machine fault codes. After you turn the key to the RUN position, the diagnostic light will illuminate for 5 seconds, turn off for 5 seconds, and then begin flashing 3 times a second until you push a button on the handheld remote. If the light turns on for 5 seconds and then starts blinking 10 times a second (with or without a 5 second pause) there is a fault with the machine; refer to Checking Fault Codes (page 31).

Note: The diagnostic light illuminates when a button is pushed on the handheld remote.

Note: If you have a button depressed on the handheld remote when you start the machine, the light will not flash 3 times a second after it turns off for 5 seconds.

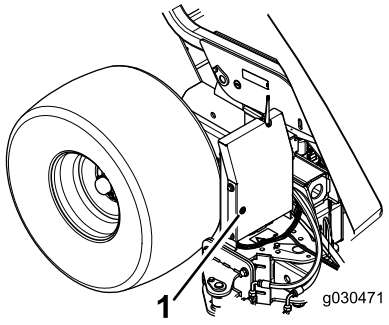


Figure 18

1. Diagnostic light

Specifications

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

Dimensions and Weights

Width	221 cm (87 inches)
Height	202 cm (79-1/2 inches)
Dump height clearance	173 cm (68 inches)
Length	Hopper lowered - 173 cm (68 inches) Hopper raised - 229-249 cm (90-98 inches)
Empty weight	680 kg (1500 lb)
Gross vehicle weight (GVW)	1588 kg (3500 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 for a list of all approved attachments and accessories.

Operation

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

Operating the Sweeper

The primary function of the machine is to sweep up debris from large turf areas.

The sweeper is operated by using the remote control. Refer to Controls (page 17) for the proper use of the control buttons.

Positon the sweeper in the following heights when transporting and turning:

- Transport height (home position) is 33.7 to 38.7 cm (13–1/4 to 15–1/4 inches).
- Turn around height (offset position) is 21.6 to 26.7 cm (8–1/2 to 10–1/2 inches).

⚠ WARNING

Rotating parts can cause serious personal injury.

- **Keep hands and feet away from the sweeper reel while the machine is running.**
- **Keep hands, feet, hair, and clothing away from all moving parts to prevent injury.**
- **Never operate the machine with covers, shrouds, or guards removed.**

Adjusting the Brush Height

Adjust the sweeper so the brush tips slightly touch the surface but do not penetrate the turf. If the brush tips do penetrate the turf, improper debris pickup could result.

Refer to the charts below for the recommended sweeper settings.

Condition	Roller/Brush Adjustment	Front Flap Adjustment	Notes
Greens/Tee Boxes	2 to 4 notches from bottom	6 to 13 mm (1/4 to 1/2 inch) from ground	Brush should be slightly engaged in the turf
Fairways	3 to 5 notches from bottom	13 to 25 mm (1/2 to 1 inch) from ground	Brush should be engaged into the top 1/3 of the grass height
Sports fields	5 to 7 notches from bottom	25 to 76 mm (1 to 3 inches) from ground	Brush should be engaged into the top 1/3 of the grass height
Leaves	5 to 9 notches from bottom	Remove front panel	Brush should be engaged into the top 1/3 of the grass height

A	B		C
Open Slots	Tab Up	Tab Down	
0	5.500		6.000
		5.625	6.125
1	5.750		6.250
		5.875	6.375
2	6.000		6.500
		6.125	6.625
3	6.250		6.750
		6.375	6.875
4	6.500		7.000
		6.625	7.125
5	6.750		7.250
		6.875	7.375
6	7.000		7.500
		7.125	7.625
7	7.250		7.750
		7.375	7.875
8	7.500		8.000
		7.625	8.125
9	7.750		8.250
		7.875	8.375
10	8.000		8.500
		8.125	8.625
11	8.250		8.750
		8.375	8.875
12	8.500		9.000
		8.625	9.125
13	8.750		9.250
		8.875	9.375

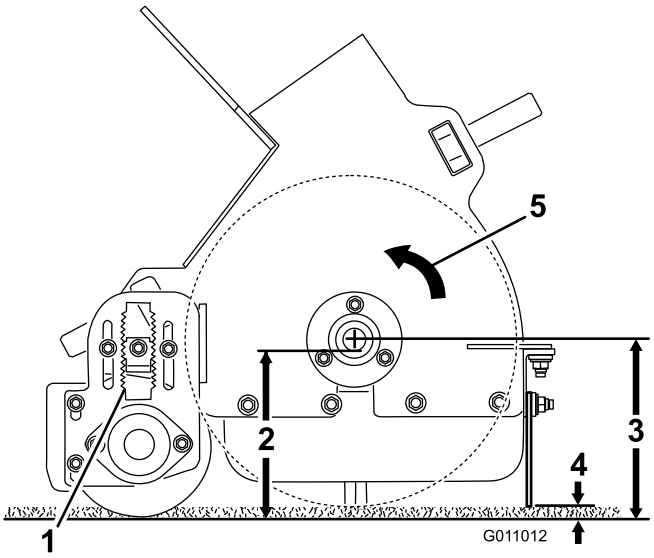


Figure 19

1. “A”
2. “B”
3. “C”
4. 6 to 13 mm (1/4 to 1/2 inch)
5. Brush direction

---

1. Position the sweeper on a level surface.
2. Raise the hopper and install the hopper safety support. Refer to Using the Hopper Safety Support (page 23).
3. Loosen the locknut on the height adjustment key (Figure 20) so it can be pulled out approximately 13 mm (1/2 inch).

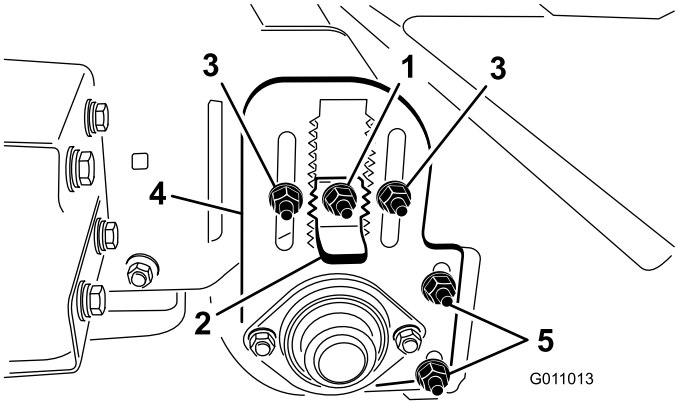


Figure 20

1. Locknut
2. Height-adjusting key
3. Roller-height adjusting nuts
4. Roller-height adjusting plat
5. Roller-scraper adjusting nuts

---

4. Loosen the roller-height adjustment locknuts (Figure 20).
5. Pull out the height-adjustor key and move the rear roller up or down by sliding the roller-height adjusting plate to the desired height (Figure 20).
6. Tighten the locknuts securing the adjustment.
7. Repeat the procedure on the opposite end of the brush. Make sure that the adjustments are the same.

Adjusting the Roller Scraper

Check and ensure the roller scraper (Figure 20) is adjusted with a 2 mm (1/16 inch) clearance between the scraper and the roller. Loosen the roller scraper adjusting nuts, position roller as desired and tighten the nuts.

Adjusting the Front Flap Height

For best debris pickup results, adjust the front flap (Figure 21) with a 6 mm to 13 mm (1/4 inch to 1/2 inch) clearance between the bottom of the flap and surface.

Note: Raising the front flap all the way or removing the front flap may be required when picking up larger debris or if debris is to be picked up in long grass.

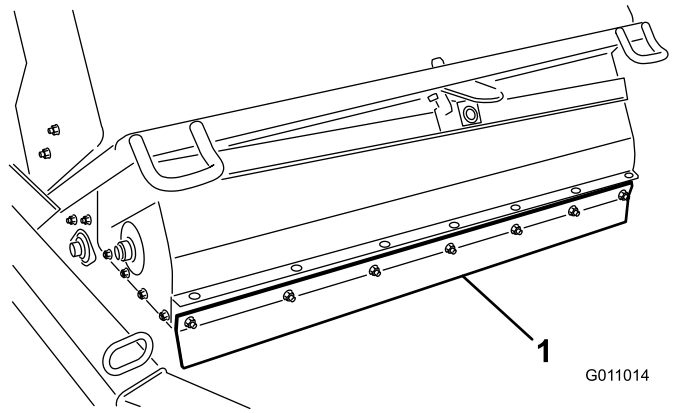


Figure 21

1. Front flap

1. Loosen the nuts securing the metal strap and the front flap to the brush housing (Figure 22).

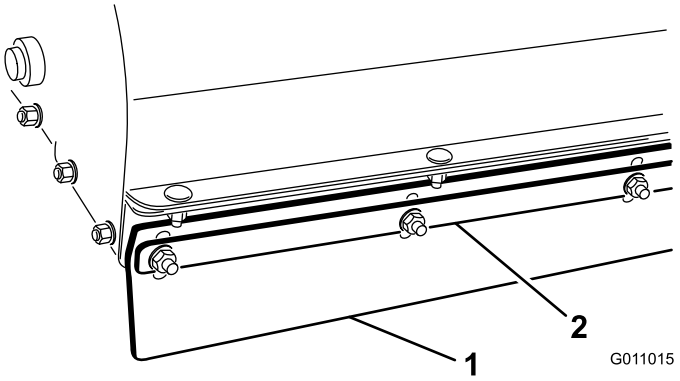


Figure 22

1. Front flap
2. Metal strap

2. Adjust the front flap to the desired operating height and tighten the nuts.

Checking the Tire Pressure

Check the tire pressure daily to ensure they are inflated properly.

Correct tire air pressure: 86.2 kPa (12-1/2 psi.)

Maximum tire air presssure: of 124 kPa (18 psi)

Note: The valve stem is located on the back side of the rim.

Checking the Wheel Lug Nut Torque

⚠ WARNING

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

Check and torque the wheel lug nuts to 95-122 N-m (70-90 ft-lb).

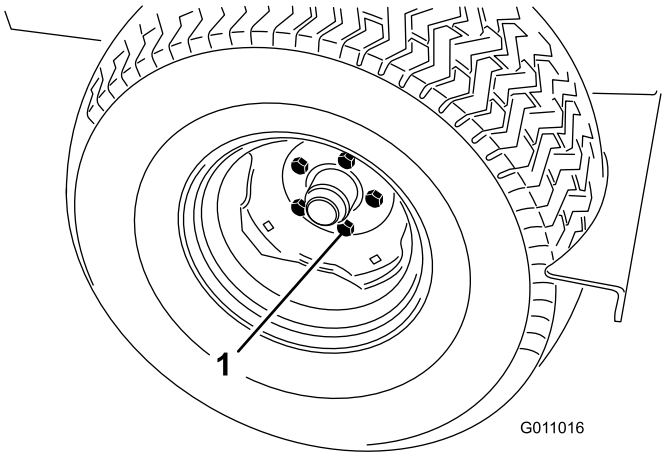


Figure 23

1. Lug nut

Activating the Controller

The controller (Figure 24) is activated as soon as you plug the sweeper harness into the vehicle power harness.

- On Workman models with serial numbers prior to 899999999, the harness will have power.
- On Workman models with serial numbers 900000001 and up, turn the ignition key to the RUN position to power the harness.

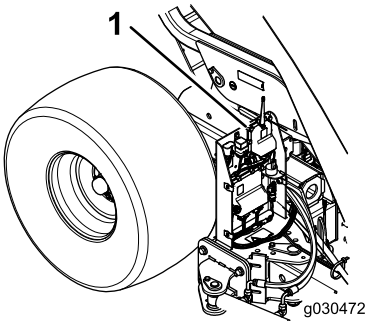


Figure 24

1. Controller

Using the Controller Time Out

The sweeper is equipped with a time-out feature for the control module. The time-out feature is activated after 2-1/2 hours of continuous remote transmitter **inactivity**.

- When in the time-out mode the remote transmitter will not control any function.
- To wake the controller in time-out mode:
  - On Workman models with serial numbers prior to 899999999, unplug and plug the sweeper harness into the vehicle power harness.
  - On Workman models with serial numbers 900000001 and up, turn the ignition key to the OFF position and back to the RUN position.
- To avoid controller time-out during operation, use the remote transmitter to off-set the sweeper at least every 2-1/2 hours.

Using the Hopper Safety Support

Whenever you work under the raised hopper, ensure that the hopper safety support is installed onto the extended lift cylinder.

1. Raise the hopper until the lift cylinder is extended.
2. Remove the hairpin cotter and pin securing the safety support to the storage bracket on the sweeper frame (Figure 25). Remove the safety support.

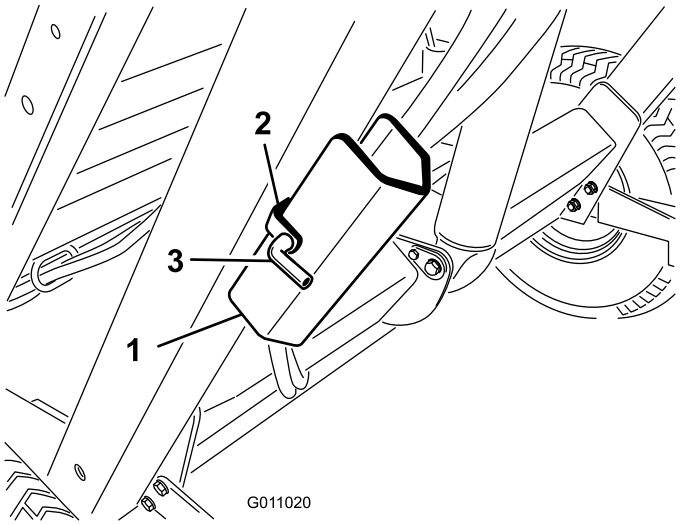


Figure 25

1. Hopper-safety support
2. Storage bracket
3. Pin

3. Insert the hopper-safety support onto the cylinder rod, making sure the support end rests against the cylinder barrel and the cylinder rod end (Figure 26).

   Note: Secure the hopper safety support to the cylinder rod with the hair pin cotter and pin.

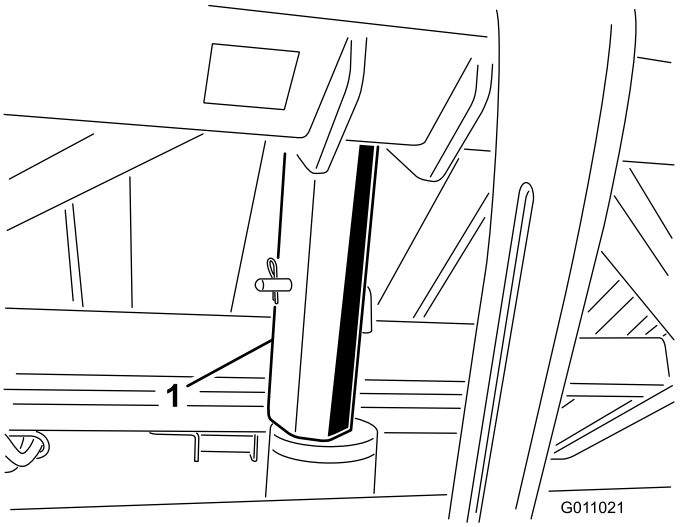


Figure 26

1. Safety support

4. To store the safety support, remove the safety support from the cylinder and secure it to the storage bracket on the sweeper frame.
5. Always install or remove the safety support from behind the hopper.
6. Do not try to lower the hopper with the safety support on the cylinder.

Checking the Interlock System

⚠ CAUTION

Safety interlock switches are for the operator's protection. Disconnected or malfunctioning safety interlock switches could allow the machine to operate in an unsafe manner and may cause personal injury.

- **Do not disconnect the safety interlock switches.**
- **Check operation of the switches daily to be sure the interlock system is operating correctly.**
- **If a switch is malfunctioning, replace it before operating the machine.**

The purpose of the safety interlock system is as follows:

- Prevents the brush from rotating when the hopper is in the raised position.
- Prevents the hopper from being dumped when the sweeper is in the offset position.
- Audible alarm will sound when dumping the hopper. Do not move the tow vehicle when dumping the hopper.

Operating Tips

- Before starting to sweep, survey the area to determine the best direction to sweep.

Note: To maintain a straight line when sweeping, sight an object in the foreground.

- Always try to make a long, continuous run with a slight overlap on the return run.
- On turf areas, the brush will pick up turf cores, twigs, clippings, leaves, pine needles and cones, and small debris.
- The sweeper also grooms the turf. The brush combs through and lifts the grass for a uniform cut when mowed. As it cleans, the light scarifying action increases water and pesticide penetration, thus reducing the need for renovation.

Important: Do not make sharp turns when using the sweeper as damage to the turf may occur.

- When the hopper is full, the sweeper will no longer pickup as efficiently, leaving or throwing material back on to the ground.

⚠ DANGER

Tip over can cause serious injury or death.

- **Never operate the machine on steep slopes.**
- **Sweep slopes up and down, never across the face.**
- **When going uphill or downhill, do not stop or start suddenly.**
- **Stay alert for holes in the terrain or other hidden hazards. To avoid tipping or loss of control, do not drive close to a ditch, creek or drop off.**
- **If machine stops going uphill, disengage reels and back slowly downhill. Do not attempt to turn.**

Dumping the Hopper

⚠ DANGER

Tip over or electrical shock could cause serious injury or death.

- **Never dump the hopper on a slope. Always dump the hopper on level ground.**
- **Dump only in an area clear of overhead wires and other obstructions.**

Important: Make sure that the sweeper is secured to the tow vehicle hitch with the hitch pin and the clevis pin during the dumping operation.

Important: Ensure that the sweeper is directly behind the tow vehicle and in transport height before the dump sequence can be activated.

To activate the dump sequence:

1. Place the machine on a level surface and make sure that it is in the transport position before dumping.
2. Press the hopper-dump button for one second, release the button for one second, and press the hopper-dump button again (Figure 27).

Note: The sweeper will not respond if the hopper-dump button is pressed too quickly.

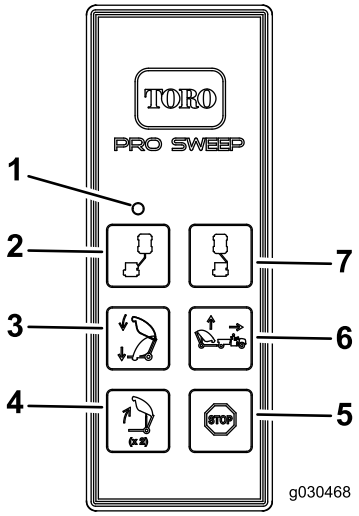


Figure 27

1. LED light
2. Offset left
3. Sweeper down
4. Hopper dump
5. Stop
6. Sweeper up
7. Offset right

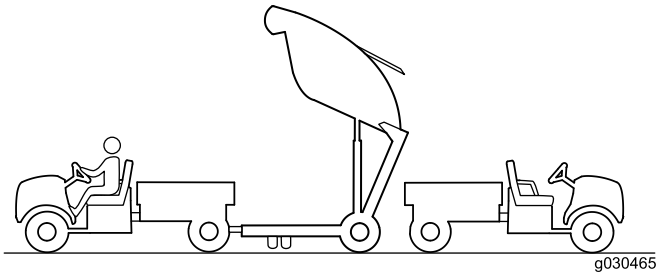


Figure 28

⚠ CAUTION

Dumping the hopper can cause injury to bystanders or pets.

Keep bystanders and pets a safe distance from the hopper when dumping the hopper.

Lowering the Hopper

To lower the hopper, press the sweeper down button.

Note: Ensure the hopper is in the down position before starting to use the sweeper.

Inspecting and Cleaning the Machine

When sweeping has been completed, thoroughly clean and wash the machine. Air dry the hopper. After cleaning, inspect the machine for possible damage to mechanical components. Performing these procedures ensures that the machine will perform satisfactorily during the next sweeping operation.

Transporting the Sweeper

- Never transport the sweeper when the transport alarm and the light are activated.
- When transporting the sweeper, use the tie-downs to secure the front of the machine (Figure 29) and the axle (Figure 30) to secure the rear of the machine to the trailer.

  Note: Transporting the sweeper without using the tie-downs could damage the machine.

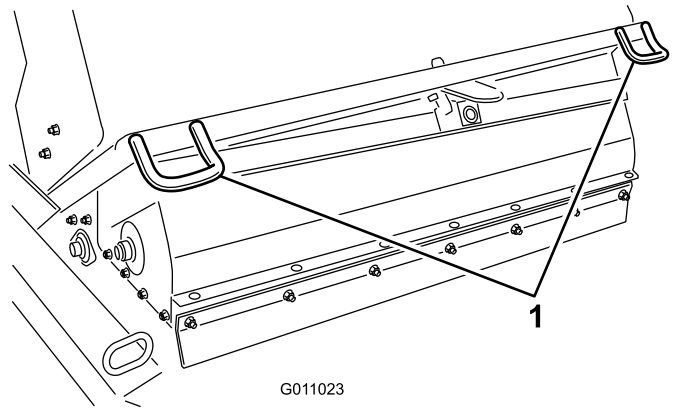


Figure 29

1. Front tie-downs

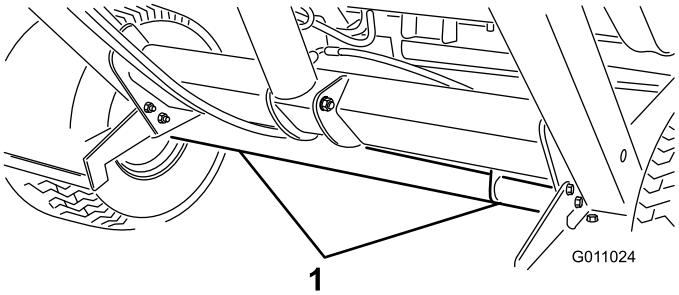


Figure 30

1. Rear tie-down locations

Operating the Machine in Cold Weather

The Workman high flow hydraulics oil must reach a operating temperature of 82 degrees C (180 degrees F) for proper operation of the floating sweeper head.

Switching the Sweeper-Up Mode

The sweeper-up button has 2 possible modes; standard and optional.

The standard mode allows the operator to raise the sweeper to the pre-defined heights with a single button push. Refer to Sweeper Up Button—Standard Mode (page 17)

The optional mode allows the operator to adjust the sweeper to any desired height and it stops at the pre-defined heights. Refer to Sweeper Up Button—Optional Mode (page 17).

Use the following to switch the sweeper to the optional mode:

1. Remove the cover off the control module.
2. Unplug the 2 wire connections from the pigtail connector show in Figure 31.
3. Plug the 2 wire connections into the existing pigtail connector tethered to the wiring harness.
4. Install the cover onto the control module.

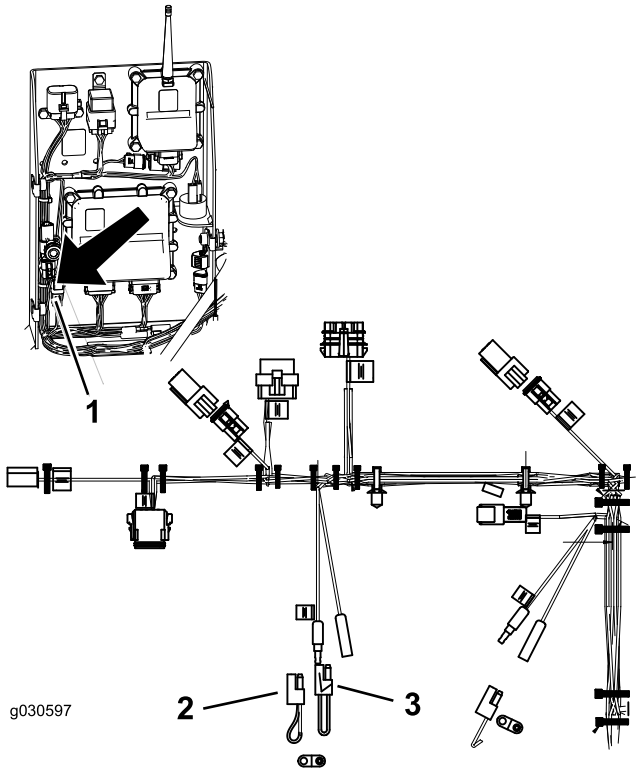


Figure 31

1. Location of pigtails
2. Optional-mode pigtail—tethered to the wiring hareness
3. Standard-mode pigtail

Note: To return to standard mode, install the original pigtail connector.

Maintenance

Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
After the first 10 hours	• Torque the wheel lug nuts
Every 25 hours	• Clean the reel drive area.
Every 50 hours	• Grease the sweeper.
Every 100 hours	• Inspect the condition of the tires. • Replace the brush.
Every 200 hours	• Torque the wheel lug nuts • Replace the front flap.
Every 600 hours	• Inspect the hopper for damage.

Daily Maintenance Checklist

Duplicate this page for routine use.

Maintenance Check Item	For the week of: Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Check the safety interlock operation.							
Check for unusual operating noises.							
Check the tire pressure							
Check hydraulic hoses for damage							
Check for fluid leaks							
Check control operation.							
Check hopper.							
Clean wrapped material from brush.							
Check brush wear.[1]							
Lubricate all the grease fittings[2]							
Touch-up any damaged paint							

[1]= .Replace if missing or broken

[2]= Immediately after **every** washing, regardless of the interval listed

Notation for Areas of Concern

Inspection performed by:		
Item	**Date**	**Information**

Lubrication

Service Interval: Every 50 hours

The sweeper has 11 grease fittings that require lubrication with No. 2 lithium grease. If the machine is operated under normal conditions, lubricate all bearings and bushings immediately after every washing. Lubricate the bearings and bushings daily when operating conditions are extremely dusty and dirty. Dusty and dirty operating conditions could cause dirt to get into the bearings and bushings, resulting in accelerated wear.

1. Lubricate the following grease fittings:
   - Hopper pivot (upper) (2) (Figure 32).
   - Brush pivot (2) (Figure 33).
   - Lift cylinder (2) (Figure 34).
   - Hopper pivot (lower) (2) (Figure 35).
   - Hitch tongue pivot (1) (Figure 36).
   - Windrow blade mount (Figure 37).
   - Windrow blade hub (Figure 37).
2. Wipe grease fittings clean so thatforeign matter cannot be forced into the bearing or bushing.
3. Pump grease into the bearing or bushing.
4. Wipe up excess grease.

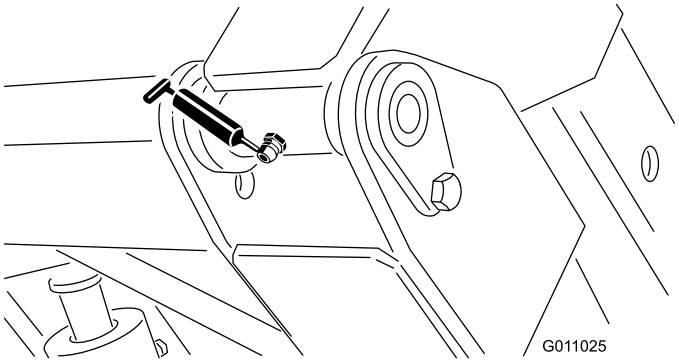


Figure 32

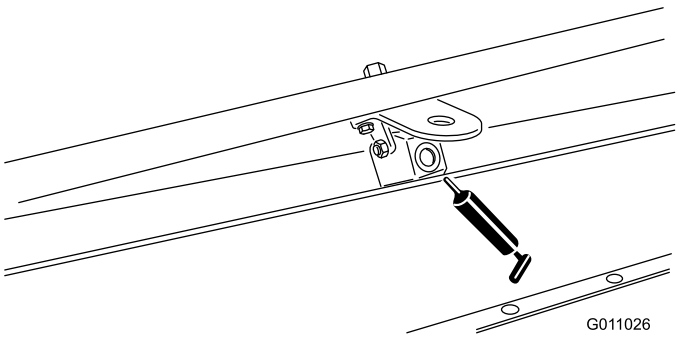


Figure 33

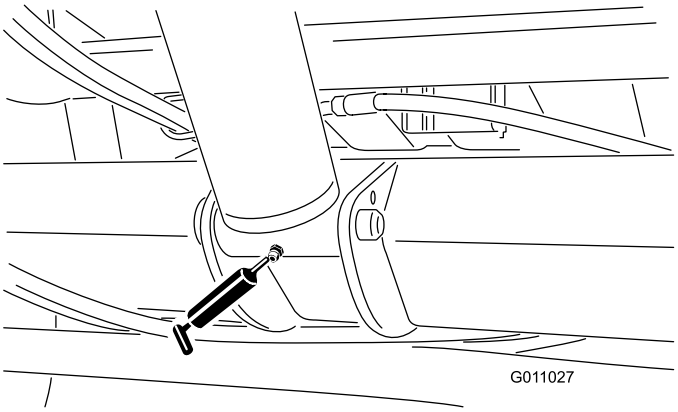


Figure 34

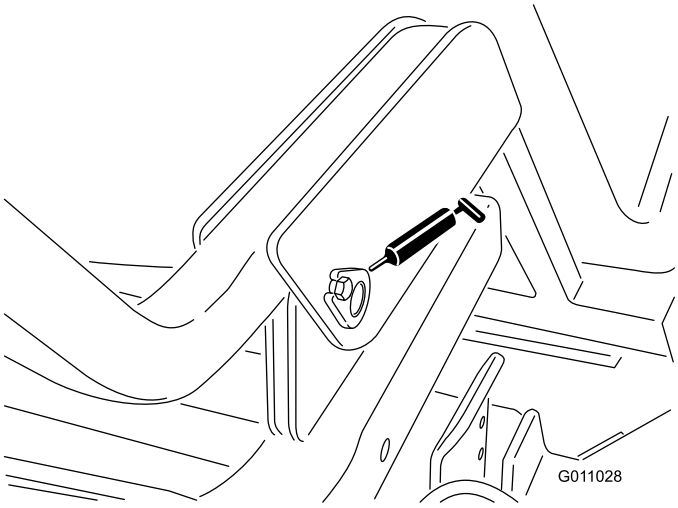


Figure 35

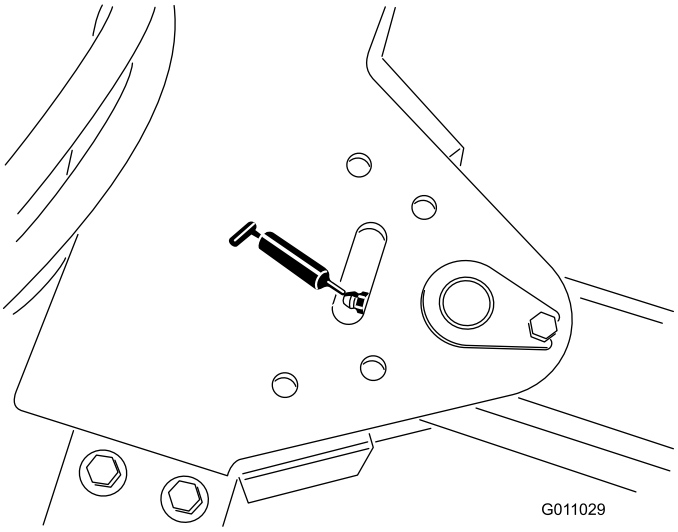


Figure 36

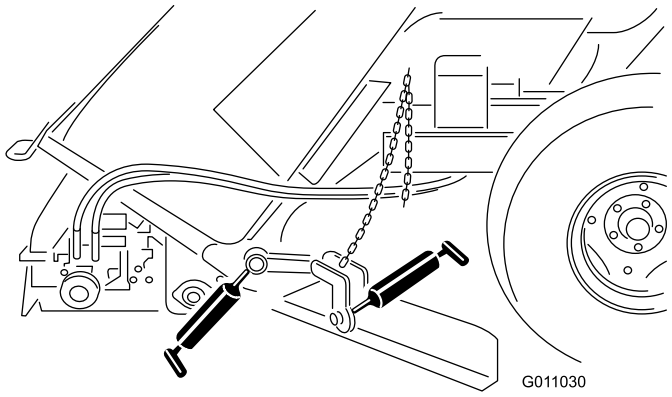


Figure 37

Associate the Remote Control and the Base Unit

Important: Make sure to read the entire procedure before attempting the association process.

The remote control must establish communications with the base unit before the system can be used. The remote control is associated to the system base unit before leaving the factory. This is done using the associate procedure. In situations where it is necessary to re-establish remote control-to-base unit communications (example: introducing a new or spare remote control to an existing base unit), the following associate procedure must be performed.

Note: Associating the remote control to a different base unit will disassociate that remote control from the original base unit.

1. Remove power from the base unit.
2. Stand near the base unit in unobstructed, clear line-of-sight with the remote control in hand.
3. Simultaneously press and hold the OFF-SET LEFT and OFF-SET RIGHT buttons. The LED will blink about once per second.
4. Continue to hold both buttons until the LED begins blinking about twice per second.
5. Release the buttons.
6. Press and hold the OFF-SET LEFT button. The LED will blink about twice per second.
7. Continue holding the OFF-SET LEFT button and turn the key start to the RUN position. The LED will turn solid if the procedure is successful.

   Note: This could take up to 20 seconds.
8. Release the OFF-SET LEFT button.

   The system is ready for use with that particular remote control.

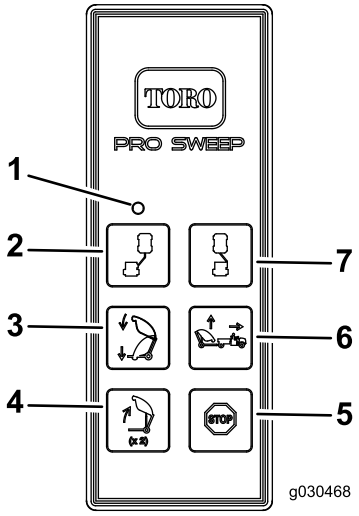


Figure 38

1. LED light
2. Off-set left
3. Sweeper down
4. Hopper dump
5. Stop
6. Sweeper up
7. Off-set right

Replacing the Remote Batteries

The handheld remote is powered by 4 AAA batteries. When installing batteries, observe proper polarity as marked on the inside of the compartment to avoid damaging the unit.

1. Remove the 6 screws from the back of the remote and remove the cover (Figure 39).

   Note: If possible, leave the rubber seal and steel gasket in the channel when removing the cover and batteries.

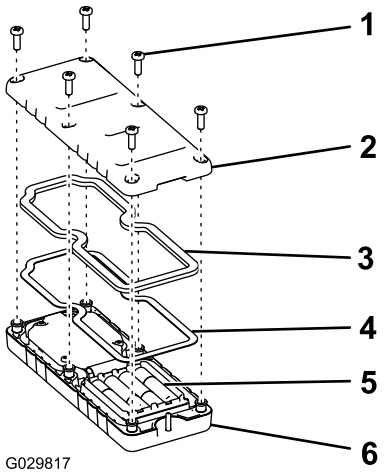


Figure 39

1. Screw
2. Cover
3. Seal
4. Steel gasket
5. Batteries
6. Handheld remote

2. Remove the discharged batteries and properly dispose in accordance with local regulations.

3. Plug each fresh battery into a terminal cradle observing proper polarity.

   Note: If the batteries are improperly installed, the unit will not be damaged, but it will fail to operate.

4. If you accidentally removed the rubber seal and the steel gasket, replace them carefully into the channel in the handheld remote.

5. Replace the cover and secure it with the 6 screws removed previously (Figure 39) and torque them to 1.5 to 1.7 N-m (13 to 15 in-lb).

   Note: Do not over-tighten the screws.

Storage

1. Thoroughly clean the sweeper so it is free of dirt, leaves and debris.
2. Check the tire pressure. Refer to Checking the Tire Pressure (page 22).
3. Check all fasteners. Tighten as necessary.
4. Grease all grease fittings. Wipe off excess lubricant.
5. Check the condition of the brush. Replace as required.

Troubleshooting

Condition	Possible Causes	Corrective Action
The sweeper is not picking up debris.	The brush is damaged. The brush height is too high. The Front flap height is too low or too high.	Replace brush. Adjust brush height. See Brush Height Adjustment. Adjust front flap height. See Front Flap Adjustment
The sweeper has excessive vibration.	Check the bearings on the brush shaft. If they are excessively hot, check the bearings for damage. Foreign materials are wrapped around brush.	Replace any damaged bearings. Clean off any foreign objects.
The diagnostic light on the sweeper does not illuminate when pressing a remote button.	There is frequency interference.	Associate the remote control to the base unit. Refer to Associate the Remote Control and the Base Unit (page 29).

Checking Fault Codes

If the diagnostic light indicates that there is a system fault (refer to (page)), check the fault codes to determine what is wrong with the machine.

Entering Diagnostic Mode and Checking the Codes

1. Turn the key to the RUN position.
2. Disconnect the power by separating the vehicle harness from the sweeper harness.
3. Remove the front cover.
4. Pull the tethered cap off the 2 diagnostic, shunt connectors (Figure 40, A).
5. Connect the diagnostic, shunt connectors together (Figure 40, B).

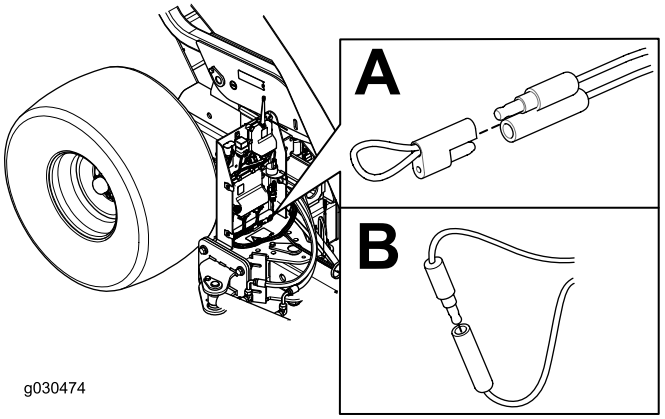


Figure 40

6. Connect the vehicle and sweeper wire harness together to power the sweeper.
7. Count the number of flashes to determine the fault code, then consult the following table:

   Note: If there are multiple faults, both faults will flash, then a long pause, then the flash sequences will repeat.

Code	LED Flash Pattern	Behavior	Details
Machine Specific Faults			
11	Blink once, pause, blink once, long pause, then repeat	Lost communication with BASE.	Connector not plugged in; locate the loose or disconnected harness connector and connect it.
			Something wrong in the wiring; contact your Toro Distributor.
			BASE is bad; contact your Toro Distributor.
12	Blink once, pause, blink twice, long pause, then repeat	Version incompatibility of the BASE and/or HH	Wrong software (install the correct software from TORODIAG); contact your Toro Distributor.
13	Blink once, pause, blink 3 times, long pause, then repeat	Wrong HH—not implemented on RevA	Wrong product association (i.e. trying to update software on a MH–400 with a ProPass handheld)

8. Install the front cover.

Resetting the Fault Codes

After solving the problem, disconnect and reconnect the diagnostic connectors. The diagnostic light will flash continuously once per second.

Exiting Diagnostic Mode

1. Turn the key to the RUN position.
2. Disconnect the power by separating the vehicle harness from the sweeper harness.
3. Disconnect the diagnostic, shunt connectors.
4. Push the tethered cap onto the 2 diagnostic, shunt connectors.
5. Connect the vehicle and sweeper wiring harness together to power the sweeper.

Notes:

International Distributor List

Distributor:	Country:	Phone Number:	Distributor:	Country:	Phone Number:
Agrolanc Kft	Hungary	36 27 539 640	Maquiver S.A.	Colombia	57 1 236 4079
Balama Prima Engineering Equip.	Hong Kong	852 2155 2163	Maruyama Mfg. Co. Inc.	Japan	81 3 3252 2285
B-Ray Corporation	Korea	82 32 551 2076	Mountfield a.s.	Czech Republic	420 255 704 220
Casco Sales Company	Puerto Rico	787 788 8383	Mountfield a.s.	Slovakia	420 255 704 220
Ceres S.A.	Costa Rica	506 239 1138	Munditol S.A.	Argentina	54 11 4 821 9999
CSSC Turf Equipment (pvt) Ltd.	Sri Lanka	94 11 2746100	Norma Garden	Russia	7 495 411 61 20
Cyril Johnston & Co.	Northern Ireland	44 2890 813 121	Oslinger Turf Equipment SA	Ecuador	593 4 239 6970
Cyril Johnston & Co.	Republic of Ireland	44 2890 813 121	Oy Hako Ground and Garden Ab	Finland	358 987 00733
Equiver	Mexico	52 55 539 95444	Parkland Products Ltd.	New Zealand	64 3 34 93760
Femco S.A.	Guatemala	502 442 3277	Perfetto	Poland	48 61 8 208 416
ForGarder OU	Estonia	372 384 6060	Pratoverde SRL.	Italy	39 049 9128 128
G.Y.K. Company Ltd.	Japan	81 726 325 861	Prochaska & Cie	Austria	43 1 278 5100
Geomechaniki of Athens	Greece	30 10 935 0054	RT Cohen 2004 Ltd.	Israel	972 986 17979
Golf international Turizm	Turkey	90 216 336 5993	Riversa	Spain	34 9 52 83 7500
Guandong Golden Star	China	86 20 876 51338	Lely Turfcare	Denmark	45 66 109 200
Hako Ground and Garden	Sweden	46 35 10 0000	Solvert S.A.S.	France	33 1 30 81 77 00
Hako Ground and Garden	Norway	47 22 90 7760	Spypros Stavrinides Limited	Cyprus	357 22 434131
Hayter Limited (U.K.)	United Kingdom	44 1279 723 444	Surge Systems India Limited	India	91 1 292299901
Hydroturf Int. Co Dubai	United Arab Emirates	97 14 347 9479	T-Markt Logistics Ltd.	Hungary	36 26 525 500
Hydroturf Egypt LLC	Egypt	202 519 4308	Toro Australia	Australia	61 3 9580 7355
Irrimac	Portugal	351 21 238 8260	Toro Europe NV	Belgium	32 14 562 960
Irrigation Products Int'l Pvt Ltd.	India	0091 44 2449 4387	Valtech	Morocco	212 5 3766 3636
Jean Heybroek b.v.	Netherlands	31 30 639 4611	Victus Emak	Poland	48 61 823 8369

European Privacy Notice

The Information Toro Collects
Toro Warranty Company (Toro) respects your privacy. In order to process your warranty claim and contact you in the event of a product recall, we ask you to share certain personal information with us, either directly or through your local Toro company or dealer.

The Toro warranty system is hosted on servers located within the United States where privacy law may not provide the same protection as applies in your country.

BY SHARING YOUR PERSONAL INFORMATION WITH US, YOU ARE CONSENTING TO THE PROCESSING OF YOUR PERSONAL INFORMATION AS DESCRIBED IN THIS PRIVACY NOTICE.

The Way Toro Uses Information
Toro may use your personal information to process warranty claims, to contact you in the event of a product recall and for any other purpose which we tell you about. Toro may share your information with Toro's affiliates, dealers or other business partners in connection with any of these activities. We will not sell your personal information to any other company. We reserve the right to disclose personal information in order to comply with applicable laws and with requests by the appropriate authorities, to operate our systems properly or for our own protection or that of other users.

Retention of your Personal Information
We will keep your personal information as long as we need it for the purposes for which it was originally collected or for other legitimate purposes (such as regulatory compliance), or as required by applicable law.

Toro's Commitment to Security of Your Personal Information
We take reasonable precautions in order to protect the security of your personal information. We also take steps to maintain the accuracy and current status of personal information.

Access and Correction of your Personal Information
If you would like to review or correct your personal information, please contact us by email at legal@toro.com.

Australian Consumer Law

Australian customers will find details relating to the Australian Consumer Law either inside the box or at your local Toro Dealer.

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.

374-0253 Rev C