

## 15 Cubic Foot Bagger Kit

## Groundsmaster® 3320 or 3280-D Series Traction Unit

Model No. 30356—Serial No. 315000001 and Up

Installation Instructions

## **A** 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.

This product complies with all relevant European directives. For details, please see the Declaration of Incorporation (DOI) at the back of this publication.

## **Safety**

- To maintain machine control and improve the stability
  of the machine, mount 34 kg (75 lb) of weight on the
  left, front wheel of the traction unit before using this
  kit. Refer to the traction unit Operator's Manual for any
  additional weight requirements.
- Stay away from the hopper and the hopper linkage during operation.
- Never operate the collection system with the hopper covers open.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check the components and replace them with manufacturer's recommended parts, when necessary.
- Stop the engine before removing the grass catcher or unclogging the chute.
- Before raising the hopper:
  - Ensure that the machine is on level ground.
  - Disengage the PTO.
  - Clear bystanders from the area around the hopper and the hopper linkage.
  - Check the overhead clearance.
- Do not dump the clippings over an embankment.
- Lower the hopper fully before driving the machine.
- The grass catcher can obstruct the view to the rear. Use extra care when operating the machine in reverse.
- If you remove the grass catcher, be sure to the install any discharge deflector or guard that you might have removed to install the grass catcher. Do not operate the mower without either the entire grass catcher or grass deflector in place.

- Before disconnecting or performing any work on the hydraulic system, relieve all the pressure in the system by stopping the engine and lowering the implement to the ground.
- Use extra care with grass catchers or other attachments.
   These can change the operating characteristics and the stability of the machine.
- Do not use a grass catcher on steep slopes. A heavy grass catcher could cause loss of control or overturn the machine.
- Slow down and use extra care on hillsides. Be sure to travel in the recommended direction on hillsides. Turf conditions can affect the stability of the machine. Use extreme caution while operating near drop-offs.
- Use care when loading or unloading the machine into a trailer or truck. If the machine is to be driven onto a truck or trailer with a full hopper, always move it in reverse up the ramp.
- Do not walk under the hopper or service the machine unless the hopper is fully raised and empty, with hydraulic lines disconnected at the quick couplers or the hopper fully lowered.
- Do not remove any hydraulic line unless the hopper is fully lowered or fully raised and empty.
- Ensure that all hydraulic line connectors are tight and that all hydraulic hoses and lines are in good condition before applying pressure to the system.
- Keep your body and hands away from pin-hole leaks or nozzles that eject hydraulic fluid under high pressure. Use paper or cardboard, not your hands, to search for leaks. Hydraulic fluid escaping under pressure can have sufficient force to penetrate the skin and do serious damage. If fluid is ejected into the skin, it must be surgically removed within a few hours by a doctor familiar with this form of injury or gangrene may result.



- If you ever need major repairs or desire assistance, contact an Authorized Toro Distributor.
- To ensure optimum performance and continued safety certification of the machine, use only genuine Toro

replacement parts and accessories. Replacement parts and accessories made by other manufacturers could be dangerous, and such use could void the product warranty.

## **Safety and Instructional Decals**

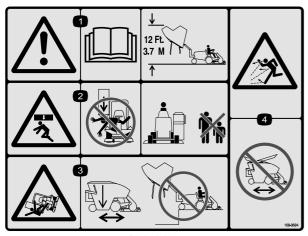


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



107-2931

- 1. Warning—read the Operator's Manual.
- 2. Crushing hazard—do not get under the hopper as it lowers and keep bystanders a safe distance from the machine.



108-9694

- 1. Warning—read the *Operator's Manual*; 3.7 m (12 ft) clearance is required for dumping.
- 2. Crushing hazard—do not get under the hopper as it lowers and keep bystanders a safe distance from the machine.
- Tipping hazard—keep the hopper lowered while moving the machine and do not dump the hopper over a drop-off or embankment.
- Thrown-object hazard—do not move the machine with the hopper open.

## Installation

## **Loose Parts**

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

	Control-valve assembly	1	
		· •	
	Control-valve handle	1	
	Control-valve-pivot lever	1	
	Socket-head screw (#10 x 1-1/4 inch)	1	
I	_ocknut (#10)	1	
<b>-</b>	Clevis pin	1	Mount the control valve.
	Cotter pin	1	
	Hydraulic hose	3	
	Bolt (1/4 x 2-3/4 inches)	3	
	Flange locknut (/4 inch)	3	
	rame assembly	1	
	_eft hopper-mounting bracket	1	
	Bolt (#10)	4	
	_ocknut (#10)	4	
	Bolt (5/16 x 1-1/4 inch)	4	
	Locknut (5/16 inch)	4	
	Right hopper-mounting bracket	1	
	•		
	Coupler bracket	1	
	Bolt (3/8 x 1 inch)	4	
	Lockwasher (3/8 inch)	2	
	_ocknut (3/8 inch)	2	
	Rear hopper-mounting bracket	1	Install the frame assembly.
	Strap	2	
	Bolt (1/2 x 1-1/4 inches)	2	
	Bolt (1/2 x 1-1/2 inches)	2	
	Bolt (1/2 x 3-1/2 inches)	2	
F	Flat washer (1/2 inch)	4	
	_ocknut (1/2 inch)	4	
	_ock washer (1/2 inch)	2	
[	Disconnect pin	1	
ι	ong, welded mounting pin	1	
	Short, welded mounting pin	1	
	Self-tapping screw (1/4 x 3/4 inch)	2	
	Hydraulic hoses	2	
F	Protective sleeve	1	
F	Retaining ring	1	
] 3   F	Retaining ring	1	Connect the hydraulic hoses.
	Dust plug	1	·
	Dust cap	1	
	Quick disconnect (nipple and coupler)	1	
	Hopper-stop assembly	1	
_	Bolt (1/2 x 4-1/2 inch)	2	Install the hopper stop assembly.
- I	_ocknut (1/2 inch)	2	
1	Wire harness	1	
	Cable ties	6	Connect the wire harness.

Procedure Description		Qty.	Use	
	Hopper assembly	1		
	Welded mounting pin	2		
	Hairpin cotter (for 1/2 inch shaft)	2	Install the beginning accomply.	
6	Hairpin cotter (for 1/4 inch shaft)	2	Install the hopper assembly.	
	Carriage bolt (5/16 x 1 inch)	2		
	Flange locknut (5/16 inch)	2		
	Top shield	1		
	Wide shield	1		
	Narrow shield	1		
7	Short flat	1	Install the front blowout shields.	
·	Short flat	1		
	Screw (#10 x 1 inch)	8		
	Flange nut (#10)	8		
	Wheel weight	1		
	Threaded rod	2		
8	Lock washer	4	Mount the wheel weight.	
	Flat washer	2		
	Hex nut	6		

## **Media and Additional Parts**

Description	Qty.	Use
Operator's Manual	1	Review these materials and store them in an appropriate
Parts Catalog	1	place.



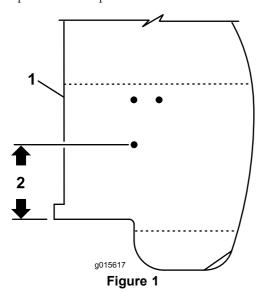
## **Mounting the Control Valve**

## Parts needed for this procedure:

1	Control-valve assembly	
1	Control-valve handle	
1	Control-valve-pivot lever	
1	Socket-head screw (#10 x 1-1/4 inch)	
1	Locknut (#10)	
1	Clevis pin	
1	Cotter pin	
3	Hydraulic hose	
3	Bolt (1/4 x 2-3/4 inches)	
3	Flange locknut (/4 inch)	

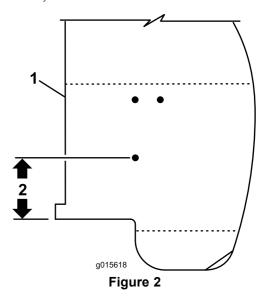
## **Procedure**

- 1. Remove the seat and the seat base from the machine.
- 2. Loosen the fuel tank mounting fasteners so that you can raise the fuel tank enough to gain access to the right fender.
- 3. Locate the 3 holes in the right fender.
  - If the rear hole is located 9.5 cm (3-3/4 inches) from the edge of the fender as shown in Figure 1, proceed to step 4.

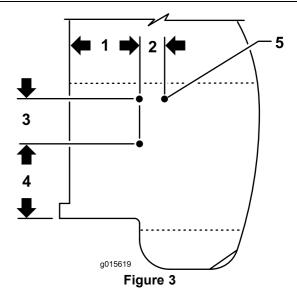


- 1. Right fender
- 2. 9.5 cm (3-3/4 inches)
- If the rear hole is located 7.0 cm (2-3/4 inches) from the edge of the fender as shown in Figure 2, relocate the holes. Use the dimensions in Figure 3

to locate, mark and drill 3 holes (8.7 mm or 11/32 inch) in the fender.



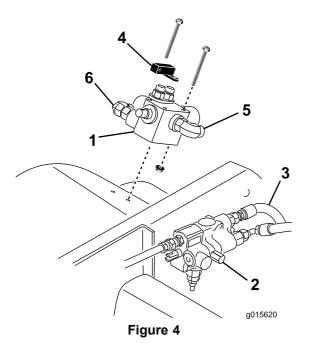
- 1. Right fender
- 2. 7.0 cm (2-3/4 inches)



- 1. 8.9 cm (3-1/2 inches)
- 4. 9.5 cm (3-3/4 inches)
- 2. 3.2 cm (1-1/4 inches)
- 8.7 mm (11/32 inch) diameter
- 3. 5.7 cm (2-1/4 inches)

## Steps 4 through 8 pertain only to traction units with serial numbers prior to 310999999.

4. Mount the control valve and the pivot lever to the right fender with 3 bolts (1/4 x 2–3/4 inch) and 1/4 flange locknuts as shown in Figure 4.



- 1. Control valve
- 2. Lift valve
- 3. Steering hose
- 4. Pivot lever
- 5. 90° fitting (operator side of valve)
- 6. 90° fitting (outer side of valve)
- 5. Place a drain pan under the lift valve (Figure 4).
- 6. Disconnect the steering hose (Figure 4), from the "P" port (upper rear port) of the lift valve.

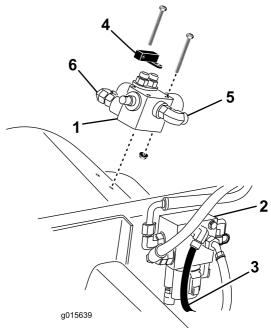
**Note:** The hose comes from the steering valve

**Note:** Make sure that the O-rings are lubricated with hydraulic oil and are in position before making any hydraulic connections.

- 7. Connect the steering hose (from the lift valve "P" port) to the 90° fitting on the operator side of the control valve (Figure 4).
- 8. Connect the hydraulic hose with a straight fitting and 45° fitting to the "P" port of the lift valve and to the 90° fitting on the outer side of the control valve (Figure 4).

Steps 9 through 13 pertain only to traction units with serial numbers 311000001 and up.

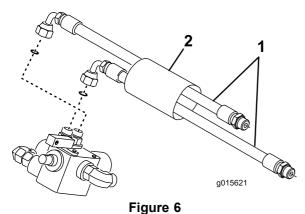
9. Mount the control valve and the pivot lever to the right fender with 3 bolts (1/4 x 2-3/4 inch) and 1/4 flange locknuts as shown in (Figure 5).



- Figure 5
- 1. Control valve
- 2. Lift manifold
- 3. Steering hose
- 4. Pivot lever
- 90° fitting (operator side of valve)
- 6. 90° fitting (outer side of valve)
- 10. Place a drain pan under the lift manifold (Figure 5).
- 11. Disconnect the steering hose (Figure 5) from the upper side port of the lift manifold (the hose comes from the steering valve).

**Note:** Make sure that the O-rings are lubricated with hydraulic oil and in position before making any hydraulic connections.

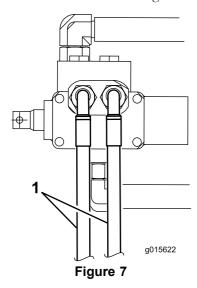
- 12. Connect the 30.5 cm (12 inch) hose to the disconnected steering hose and to the 90° fitting on the operator side of the control valve (Figure 5).
- 13. Connect the longer hydraulic hose with the straight fittings (included in kit), to the vacated port on the lift manifold and to the 90° fitting on the outer side of the control valve (Figure 5).
- 14. Connect the 2 hydraulic hose assemblies to the fittings on top of the control valve (Figure 6).



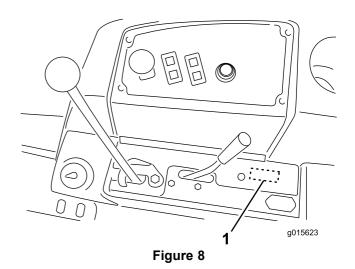
Hydraulic hoses

2. Protective sleeve

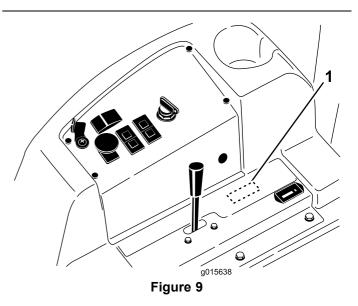
**Note:** Make sure that the 2 hydraulic hoses are oriented so that they point straight out the left side of the control valve as shown in Figure 7. This eliminates the chance of the hoses interfering with the fuel tank.



- 1. Hydraulic hoses
- 15. Install the protective sleeve over the hoses (Figure 6).Note: The remainder of the hose installation will be complete after you install the hopper frame.
- 16. Remove the drain pan from under the machine.
- 17. Remove the knock-out plug, under the decal in the lower control panel (Figure 8 and Figure 9).



1. Knock-out plug location



- 1. Knock-out plug
- 18. Mount the control-valve handle to the valve spool with a clevis pin and cotter pin.
- 19. Mount the pivot lever to the handle with a socket-head screw and a locknut (Figure 10).

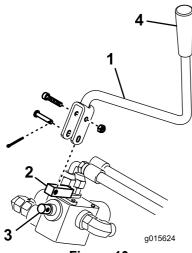


Figure 10

- 1. Control-valve handle
- 3. Valve spool
- 2. Pivot lever
- 4. Control knob
- 20. Install the control knob to the handle (Figure 10).
- 21. Install the fuel-tank fasteners.
- 22. Install the seat base and the seat.

# 2

## **Installing the Frame Assembly**

## Parts needed for this procedure:

1	Frame assembly	
1	Left hopper-mounting bracket	
4	Bolt (#10)	
4	Locknut (#10)	
4	Bolt (5/16 x 1-1/4 inch)	
4	Locknut (5/16 inch)	
1	Right hopper-mounting bracket	
1	Coupler bracket	
4	Bolt (3/8 x 1 inch)	
2	Lockwasher (3/8 inch)	
2	Locknut (3/8 inch)	
1	Rear hopper-mounting bracket	
2	Strap	
2	Bolt (1/2 x 1-1/4 inches)	
2	Bolt (1/2 x 1-1/2 inches)	
2	Bolt (1/2 x 3-1/2 inches)	
4	Flat washer (1/2 inch)	
4	Locknut (1/2 inch)	
2	Lock washer (1/2 inch)	
1	Disconnect pin	
1	Long, welded mounting pin	
1	Short, welded mounting pin	
2	Self-tapping screw (1/4 x 3/4 inch)	

## **Procedure**

1. Remove the hairpin cotter and pin securing the right side of the ROPS to the pivot bracket (Figure 11).

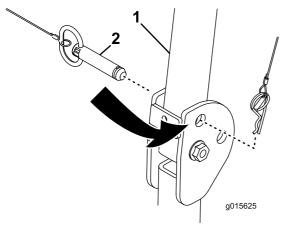


Figure 11

- 1. ROPS (right side)
- 2. Pin
- 2. Install the pin from the left side of the pivot bracket and secure it with the hairpin cotter.
- 3. Using the mounting holes in the left side of the frame, secure the left hopper mounting bracket to the frame with 4 bolts (5/16 x 1-1/4 inch) and locknuts (Figure 12).

**Note:** Fit the notch in the bracket around the hood latch.

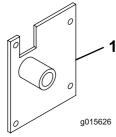


Figure 12

- 1. Left hopper-mounting bracket
- 4. Secure the top of the right hopper-mounting bracket to the right side of the machine with 2 bolts (3/8 x 1 inch) and 3/8 inch lock washers (Figure 13). The notch in the bracket is to fit around the hood latch.
- 5. Secure the bottom of the bracket and coupler bracket to the frame with 2 bolts (3/8 x 1 inch) and locknuts (Figure 13).

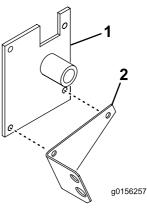


Figure 13

- Right hopper-mounting bracket
- 2. Coupler bracket

**Note:** On Models 30343 and 30344 with serial numbers 260000001 and up, remove the outside rear weight. Retain the mounting fasteners for future use.

6. Position the rear hopper bracket on the rear frame as shown in Figure 14 while aligning the 2 bottom mounting holes with the holes in the frame. Using the bracket as a guide, locate, mark, and drill the remaining 2 holes (9/16 inch) in the rear frame.

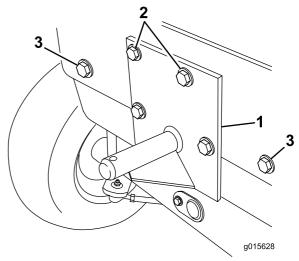


Figure 14

- Rear hopper-mounting bracket
- 3. Bolts (1/2 x 1-1/4 inch)
- Drill the holes for these bolts.
- 7. On Models 30343 and 30344 with serial numbers 260000001 and up, install 2 bolts (1/2 x 1-1/4 inch) (from the kit) and 2 previously removed sets of lock washers (1/2 inch) and flat washers (1/2 inch) in the outer frame holes to secure the inside weight (Figure 14).
- 8. On traction units with serial numbers 250000001 through 25999999, mount the top of the rear hopper-bracket to the frame using 2 bolts (1/2 x

1-1/4 inch), mounting strap, and 2 locknuts (1/2 inch) (Figure 14).

**Note:** Position the strap between the frame and the bracket.

9. On traction units with serial numbers 260000001 and up, mount the top of the rear hopper bracket to the frame using 2 bolts (1/2 x 3 inch), mounting strap, 2 flat washers (1/2 inch), and 2 locknuts (1/2 inch) as shown in Figure 14.

**Note:** Position the strap between the frame and the bracket.

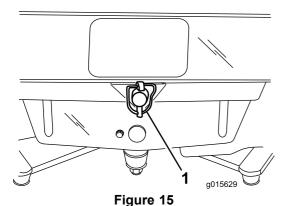
10. On traction units with serial numbers 250000001 through 25999999, mount the bottom of the bracket to the frame with 2 bolts (1/2 x 1-1/2 inch), mounting strap, 2 flat washers (1/2 inch), and 2 locknuts (1/2 inch).

**Note:** Position the strap between the frame and the bracket.

11. On traction units with serial numbers 260000001 and up, mount the bottom of the bracket to the frame with 2 bolts (1/2 x 1-1/2 inch), mounting strap, 2 flat washers (1/2 inch) and 2 lock washers (1/2 inch).

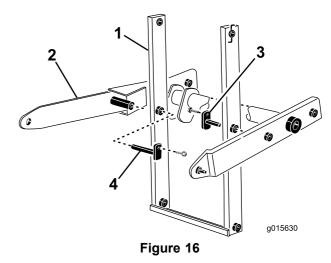
**Note:** Position the strap between the frame and the bracket.

- 12. From the rear of the machine, slide the front of the hopper frame onto the side-mounting-bracket pins and the rear of the frame over the rear bracket pin.
- 13. Secure the rear of the frame to the bracket pin with the disconnect pin (Figure 15).



1. Disconnect pin

14. Install the short and the long welded mounting pins through the arm assembly and the main-lift-arm assembly (Figure 16).



- 1. Arm assembly
- 3. Short pin (on left side)
- 2. Main-lift-arm assembly
- 4. Long pin (on right side)
- 15. Secure the pins with self-tapping screws (1/4 x 3/4 inch).



## Connecting the Hydraulic Hoses

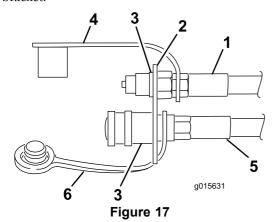
## Parts needed for this procedure:

2	Hydraulic hoses	
1	Protective sleeve	
1	Retaining ring	
1	Retaining ring	
1	Dust plug	
1	Dust cap	
1	Quick disconnect (nipple and coupler)	

#### **Procedure**

- 1. Slide the loop end of the dust plug over the end of hydraulic hose from front valve fitting.
- 2. Insert the female coupler through the bottom hole in the coupler bracket and secure with a retaining ring.
- 3. Secure the hose assembly to the female coupler (Figure 17).
- 4. Slide the loop end of the dust cap (Figure 17) over the end of the hydraulic hose coming from the rear valve fitting.
- 5. Install the male nipple to the hose end.
- 6. Insert the end of the hose through the top hole in the coupler bracket (Figure 17).

- 7. Secure the hose assembly to the bracket with a retaining ring.
- 8. Connect the appropriate hydraulic hose from the hopper assembly to the hoses installed to the coupler bracket.



- 1. Top hydraulic hose
- 2. Coupler bracket
- 3. Retaining ring
- 4. Dust cap
- 5. Bottom hydraulic hose
- 6. Dust plug



## Installing the Hopper-Stop Assembly

## Parts needed for this procedure:

I	1	Hopper-stop assembly	
I	2	Bolt (1/2 x 4-1/2 inch)	
I	2	Locknut (1/2 inch)	

## **Procedure**

1. Remove the 2 bolts and nuts securing the ROPS tube to the right side of the machine (Figure 18).

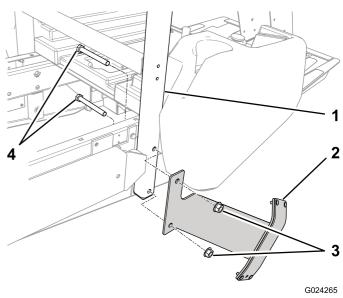


Figure 18

- 1. ROPS tube
- 3. Locknuts (1/2 inch)
- 2. Hopper-stop assembly
- 4. Bolts (1/2 x 4-1/2 inch)
- 2. Mount the hopper stop assembly to the outside of the ROPS tube with 2 bolts (1/2 x 4-1/2 inch) and locknuts (1/2 inch) as shown in Figure 18.

**Note:** Ensure that you position the hopper stop with the pad surface forward of the ROPS tube.



## **Connecting the Wire Harness**

### Parts needed for this procedure:

1	Wire harness
6	Cable ties

### **Procedure**

- Unplug the wire harness connector from the seat switch.
- 2. Plug the tee end of the hopper-switch harness into the seat switch and the seat-switch harness.
- 3. Route the harness to the hopper switch mounted to the frame tube (Figure 19) and plug the harness into the switch.

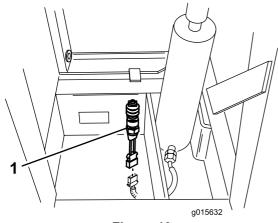


Figure 19

1. Hopper switch



## Installing the Hopper Assembly

## Parts needed for this procedure:

1	Hopper assembly
2	Welded mounting pin
2	Hairpin cotter (for 1/2 inch shaft)
2	Hairpin cotter (for 1/4 inch shaft)
2	Carriage bolt (5/16 x 1 inch)
2	Flange locknut (5/16 inch)

## **Procedure**

- 1. Remove the tie straps securing the tie rods to the hopper arms.
- 2. Install 2 carriage bolts (5/16 x 1 inch) and flange nuts in the holes in the hopper arm where tie straps previously were.
- 3. Slide the hopper assembly (hopper cover to rear) into the side frame while aligning the mounting holes in hopper with the holes in frame (Figure 20).

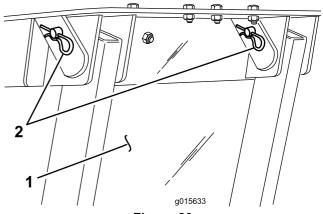
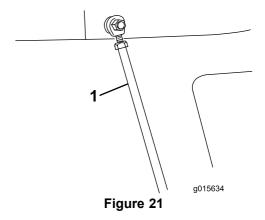


Figure 20

- 1. Hopper assembly
- 2. Mounting pins
- 4. Secure the hopper to the frame with 2 welded mounting pins and hairpin cotters (Figure 20).
- 5. Secure the hopper tie rods to the frame with hairpin cotters (Figure 21).



- 1. Hopper tie rod
- 6. Adjust the tie rods up or down to ensure that the hopper is level with the machine and it does not contact the machine during operation.



## Installing the Front Blowout Shields

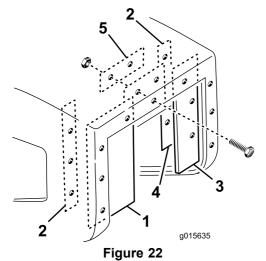
### Parts needed for this procedure:

1	Top shield	
1	Wide shield	
1	Narrow shield	
1	Short flat	
1	Short flat	
8	Screw (#10 x 1 inch)	
8	Flange nut (#10)	

## Using the Hopper with a 52-inch Deck

**Note:** The following instructions are as viewed from the front of the machine.

1. Secure the wide shield to the left inside lip of the hopper opening with a long flat, 3 screws (#10 x 1 inch), and 3 flange nuts (#10) as shown in Figure 22.



- . Wide shield
- 2. Long flat
- 3. Narrow shield
- 4. Narrow shield
- Short flat
- 2. Secure the narrow shield to the right inside lip of the hopper opening with a long flat, 3 screws (#10 x 1 inch) and 3 flange nuts (#10) as shown in Figure 22.
- 3. Secure the top shield to the upper inside lip of the hopper opening with a short flat, 2 screws (#10 x 1 inch) and 2 flange nuts (#10) as shown in Figure 22.

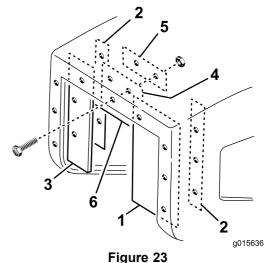
**Note:** Use the 2 mounting holes on the right side of the opening only.

## Using the Hopper with a 60- or 62-inch Deck

**Note:** The following instructions are as viewed from the front of the machine.

- 1. Secure the wide shield to the right inside lip of the hopper opening with a long flat, 3 screws (#10 x 1 inch) and flange nuts (#10) as shown in Figure 23.
- 2. Secure the narrow shield to the left inside lip of the hopper opening with a long flat, 3 screws (#10 x 1 inch) and flange nuts (#10) as shown in Figure 23.
- 3. Cut 1-1/2 inches of material off the bottom edge of the top shield.
- 4. Secure the top shield to the upper inside lip of hopper opening with a short flat, 2 screws (#10 x 1 inch) and 2 flange nuts (#10–24) as shown in Figure 23.

**Note:** Use the 2 mounting holes on the left side of the opening only.



- . .94..0
- Wide shield
- 2. Long flat
- 3. Narrow shield
- 4. Narrow shield
- 5. Short flat
- 6. Cut off 1-1/2 inches



## Mounting the Wheel Weight

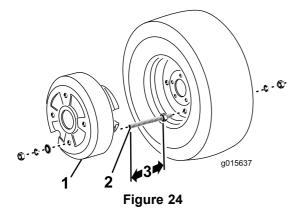
### Parts needed for this procedure:

1	Wheel weight	
2	Threaded rod	
4	Lock washer	
2	Flat washer	
6	Hex nut	

## **Procedure**

**Note:** Refer to the traction unit *Operator's Manual* for the requirements for the left-side weight.

- Measure the depth of the wheel rim by measuring the distance from the hole to the outside edge of the rim.
- Add 3-7/8 inches to the measurement in step 1. This becomes dimension "A" in Figure 24.



- 1. Wheel weight
  - 3. "A" dimension
- 2. Threaded rod
- Thread a hex nut onto each threaded rod to the "A" dimension.
- Insert the threaded rods through 2 opposite holes in the rim and secure them in place with lockwashers (1/2)inch) and hex nuts (Figure 24).
- Place the wheel weight over the ends of the threaded rods and secure in place with the flat washers, lock washers, and hex nuts (Figure 24).

**Note:** Do not overtighten the hex nuts or damage to the plastic housing of the weight may occur.

**Note:** If there is excess thread protruding from the nuts or inside of wheel, cut it off with a hacksaw. The threaded rod must not contact any parts of the machine while the wheel is rotating.

**Important:** Refer to the weight chart in the traction unit Operator's Manual for additional weight requirements

**Note:** When the hopper is used with a 62-inch deck (Model 30551) and blower kit (Model 30506) on a Groundsmaster 3280-D or a Groundsmaster 3320, you must use the wheel weight kit (11-0440). Secure both weights to the left wheel using 4 bolts  $(1/2-13 \times 4-1/2)$ inch) (Toro Part Number 325-18) and the 4 nuts (1/2 inch) included in the kit. The supplied wheel weight will contact the rear castor wheel on the deck, if it is installed.

## Operation

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

## **Before Operating the Hopper**

- Start the engine.
- Raise and lower the hopper several times by moving the control-valve lever forward to lower the hopper and moving the lever rearward to raise the hopper.
- Check the operation of the interlock switch as follows:
  - Raise the hopper and engage the PTO switch while the engine is running. The engine should stop within 2 seconds. If the engine stops, the switch is operating correctly; proceed to next step. If the engine does not stop, there is a malfunction in the interlock system.
  - Raise the hopper and press the traction pedal while the engine is running and the PTO lever is disengaged. The engine should stop within 2 seconds. If the engine stops, the switch is operating correctly; continue operation. If the engine does not stop, there is a malfunction in the interlock system.
- Stop the engine.
- Check for hydraulic leaks.
- Check the level of hydraulic fluid in the front axle and replenish it as necessary. Refer to the traction unit Operator's Manual for specifications.

## Operating the Hopper

## For a 52-, 60-, or 62-inch Blower Kit

Move the control-valve lever forward to lower the hopper; move the lever rearward to raise the hopper.

## **Operating Tips**

## **A** DANGER

An uncovered discharge opening will allow objects to be thrown at you or bystanders. Also, contact with the cutting-unit blades could occur. Thrown objects or blade contact can cause serious personal injury.

- Never operate the machine without the grass collector or deflector in place.
- Never place your hands or feet in or near a chute, blower, or cutting unit.

For the best performance, regulate the traction pedal to keep the engine speed high and constant. A good rule to follow is to decrease the ground speed as the load on the cutting blade increases; and increase the ground speed as the load on the blade decreases. This allows the engine, which is working with the transmission, to sense the proper ground speed while maintaining high blade-tip speed necessary for good quality-of-cut, vacuuming action, and throwing grass into the hopper. If the blower speed drops too low, plugging may result. Refer to the cutting unit and traction units *Operator's Manual* for the operation of each.

**Important:** Use care to avoid a collision between the hopper and any stationary objects. Always trim with the left side of the cutting unit.

- Inflate all the tires on the traction unit to 124 to 137 kPa (18 to 20 psi).
- This grass collector is designed for use in wet or dry conditions. Do not collect extremely long grass as the hopper will fill too quickly.
- When collecting wet, heavy grass, some clippings may not be thrown completely through the chute. The hole in the bottom of the chute allows these clippings to drop out without plugging the chute. When this happens, reduce the ground speed.
- The bumper, which protects the blower housing, doesn't extend far enough to prevent the chance of the hopper or hopper frame from striking a stationary object. Stay far enough away from obstructions to avoid collisions. Trim with the left side of the cutting unit only.
- While operating the bagger, check frequently for excessive clippings left on the turf or uncut grass. If those conditions occur, the blower or cutting unit may be plugged. Stop the machine, disengage the PTO, set the brake, and stop the engine. Check for obstructions in the chute, blower or cutting unit. Clear any obstruction using a stick or similar tool. Check the tension on the blower belt. If the belt is slipping, adjust it.
- The grass-collector hopper is designed to exhaust air beside the chute. This allows the hopper to fill completely without decreasing performance. Grass will fall through

the opening in the front of the hopper when hopper is full. Immediately disengage the power take off and empty the hopper.

• Cut the grass often, especially when the turf growth is rapid. If you desire shorter turf, cut the grass again. Overlap the swaths to produce an even cutting pattern.

**Important:** When transporting the machine, set the hopper in the down position with the rear cover latched over the large cover.

## Removing the Hopper and Frame

- 1. Stop the machine, disengage the PTO, set the brake, and stop the engine.
- 2. Move the hopper-control-valve lever forward and reverse a few times to release the pressure in the hydraulic system.
- 3. Disconnect the quick couplers on the hydraulic line.
- 4. Remove the 2 hairpin cotters securing the tie rods to the frame.
- 5. Remove the 2 welded mounting pins and hairpin cotters securing the hopper to the frame.
- 6. Remove the hopper from the frame.
- 7. Disconnect the wire harness from the switch on the hopper frame or seat and remove it from the traction unit.

**Note:** Keep the harness with the hopper.

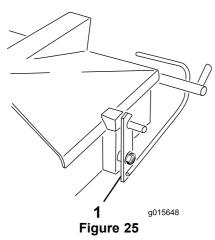
**Note:** The hopper frame is heavy. Support the frame when removing it or have a helper assist you.

- 8. Remove the disconnect pin securing the rear of the frame to the machine.
- 9. Slide the frame off the machine.
- 10. To prevent the contamination of the hydraulic lines, connect the hopper lines together.
- 11. Insert the dust caps over the hydraulic fittings on the machine.

## **Maintenance**

## Adjusting the Rear-Cover Latch

Adjust the latch assembly (Figure 25) up or down if the cover does not seal properly or if it does not latch when you use operate it.



1. Latch assembly

## **A** CAUTION

A raised hopper may not stay in the raised position. Working under an unsupported, raised hopper may result in a serious personal injury.

Never work on the hopper unless it is in the lowered position.

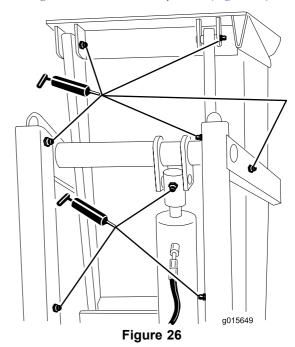
## **General Practices**

- Keep the machine clean, checking that the engine is free of dirt and chaff. Ensure that all fasteners are tight. Check the deflectors, baffles, and shields for wear and replace them as needed.
- Remove the grass clippings from the hopper, chute, blower, and cutting unit after each use. Wash the underside of the cutting unit daily. An excessive buildup of clippings will impair the performance of the collection system.
- Refer to the operator's manuals for the traction unit and the cutting units for the service requirements of each.

## Lubrication

Service Interval: Every 25 hours

Grease the cylinder and all pivot points with No. 2 lithium grease. There are 8 grease fittings at the various pivot points and 1 fitting on each end of the cylinder (Figure 26).



## **Notes:**

## **Declaration of Incorporation**

Model No.	Serial No.	Product Description	Invoice Description	General Description	Directive
30356	315000001 and Up	15 Cubic Foot Bagger Kit, Groundsmaster	15 CU. FT. HOPPER KIT-GM3280D	15 Cubic Foot Bagger Kit	2006/42/EC, 2000/14/EC

Relevant technical documentation has been compiled as required per Part B of Annex VII of 2006/42/EC.

We will undertake to transmit, in response to requests by national authorities, relevant information on this partly completed machinery. The method of transmission shall be electronic transmittal.

This machinery shall not be put into service until incorporated into approved Toro models as indicated on the associated Declaration of Conformity and in accordance with all instructions, whereby it can be declared in conformity with all relevant Directives.

Certified:

EU Technical Contact:

Marc Vermeiren Toro Europe NV B-2260 Oevel-Westerloo Belgium

Tel. 0032 14 562960 Fax 0032 14 581911

David Klis Sr. Engineering Manager 8111 Lyndale Ave. South Bloomington, MN 55420, USA July 31, 2015

David S. Klin

### International Distributor List

Distributor:	Country:	Phone Number:	Distributor:	Country:	Phone Number:
Agrolanc Kft	Hungary	36 27 539 640	Maguiver 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<sub>®</sub>

## **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.

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