# **32in Bagger Zero-Turn-Radius Riding Mower**

Model No. 79387

**Operator's Manual** 

**Important:** This kit requires the simultaneous installation of other kits to function properly. Lever steer units require a front weight kit and a mounting kit. Steering wheel units require a mounting kit. Contact your Authorized Service Dealer to obtain the corresponding necessary parts.

## **Safety**

#### **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.

#### **A** DANGER

The engine can become hot when it is operating. Severe burns can occur from contacting hot surfaces.

Allow the engine, especially the muffler, to cool before touching.

#### **A** DANGER

Debris, such as leaves, grass, or brush can catch fire. A fire in the engine area can cause personal injury and property damage.

- Keep the engine and muffler area free of debris accumulation.
- Take care when opening the bagger cover to keep debris from falling onto the engine and muffler area.
- Allow the machine to cool before storing it.

#### **A** CAUTION

Operating the machine without the weight attachment (where required) may cause an unstable condition which could result in a loss of control.

Contact your Authorized Service Dealer to determine if a weight attachment is appropriate for your machine.

The following list contains safety information specific to Toro products and other safety information you must know.

- Become familiar with the safe operation of the equipment, with the operator controls, and safety signs.
- Use extra care with grass catchers or other attachments.
  These can change the operating characteristics and the stability of the machine.
- Follow the manufacturer's recommendations for adding or removing wheel weights or counterweights to improve stability.
- 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 machine's stability. Use extreme caution while operating near drop-offs.
- Keep all movement on slopes slow and gradual. Do not make sudden changes in speed, directions or turning.
- The grass catcher can obstruct the view to the rear. Use extra care when operating in reverse.
- Use care when loading or unloading the machine into a trailer or truck.
- Never operate with the discharge deflector raised, removed or altered, unless using a grass catcher.
- Keep hands and feet away from moving parts. Do not make adjustments with the engine running.
- Stop on level ground, disengage drives, chock or block wheels, shut off engine before leaving the operator's position for any reason including emptying the grass catcher or unclogging the chute.
- If you remove the grass catcher, be sure to install any discharge deflector or guard that might have been removed to install the grass catcher. Do not operate the mower without either the entire grass catcher or the grass deflector in place.
- Stop the engine before removing the grass catcher or unclogging the chute.

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- Do not leave grass in grass catcher for extended periods of time.
- Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.

## **Towing Safety**

- Do not attach towed equipment except at the hitch point.
- Follow the attachment manufacturer's recommendation for weight limits for towed equipment and towing on slopes.
- Never allow children or others in or on towed equipment.
- On slopes, the weight of the towed equipment may cause loss of traction and loss of control. Reduce towed weight and slow down.

- Stopping distance increases with the weight of the towed load. Travel slowly and allow extra distance to stop.
- Make wide turns to keep the attachment clear of the machine.

## Hauling

- Use care when loading or unloading the machine into a trailer or a truck.
- Use full-width ramps for loading the machine into a trailer or a truck.
- Tie the machine down securely using straps, chains, cable, or ropes. Both the front and the rear straps should be directed down and outward from the machine.

## **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.



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Crushing hazard of hand—do not remove the whole bagger from the machine; open the bagger top and then remove the bagger from the bagger. Do not remove the bagger top when it is closed; open the bagger top and then remove it.

# Setup

### **Loose Parts**

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

Procedure	Description		Use	
1	Bagger top	1	Assemble the bagger top.	
I	Bagger screen	1	Assemble the bagger top.	
	Hood rod	1	Install the bagger top.	
_	Hairpin cotter pin	1		
	Grass Bag	2		
	Upper bagger tube	1		
0	Cut off baffle	1		
3	Chute	1	Install the chute.	
4	No parts required	_	Connect with the discharge tube.	
5	Deck ring	4		
	Bolt (5/16 x 3/4 inch)	8	Install the deck ring	
	Lock nut (5/16 inch)	8		
6	Hi-Lift blade	1	Install the blade.	

## **Assembling the Bagger Top**

#### Parts needed for this procedure:

1	Bagger top
1	Bagger screen

#### **Procedure**

Turn the bagger top over. Install the screen as shown in Figure 1 so it slopes down toward the collection bags. Make sure the screens snap into place and the tabs engage the bagger top.

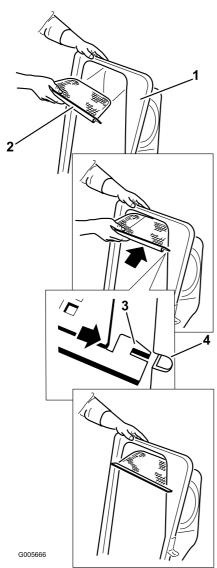


Figure 1

- 1. Bagger top
- 2. Screen

- 3. Screen tab
- 4. Slot in bagger top

# 2

## **Installing the Bagger Top**

#### Parts needed for this procedure:

1	Hood rod
1	Hairpin cotter pin
2	Grass Bag
1	Upper bagger tube

#### **Procedure**

1. Install the hood rod to the bagger frame with a hairpin cotter pin. Install the hairpin cotter pin from the bottom (Figure 2).

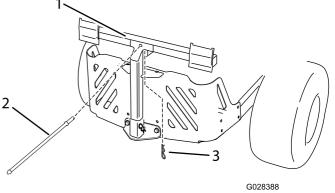
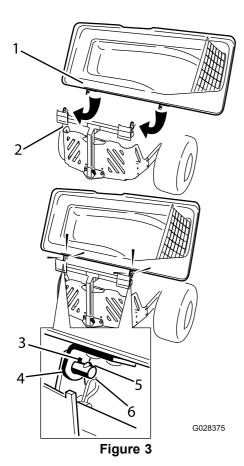


Figure 2

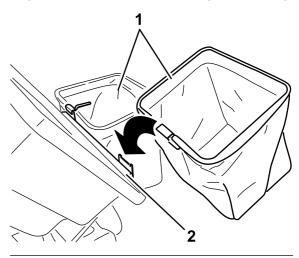
- 1. Bagger frame
- 3. Hairpin cotter pin (install from the bottom)
- 2. Hood rod
- 2. Install the bagger top to the bagger frame. Rotate the bagger top to align the key holes in the bagger top brackets with the keys in the posts on the bagger frame (Figure 3). Slide the brackets over the posts and rotate the bagger top down to the operating position.

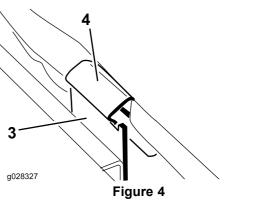
**Note:** The bagger top is easier to install if two people work together.



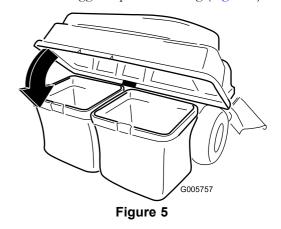
- 1. Bagger top
- 2. Bagger frame
- 3. Key hole
- 4. Bracket, bagger top
- 5. Key
- 6. Post

3. Lift the bagger top and install the bags by sliding the bag frame hooks onto the retaining brackets (Figure 4).



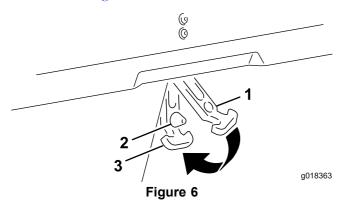


- 1. Bag
- 2. Bagger frame
- 3. Retaining bracket
- 4. Bag frame hook
- 4. Lower the bagger top onto the bag (Figure 5).



- 5. Install the upper bagger tube. Insert the curved end into the opening in the bagger top. Make sure the flared end with the retention post is pointing down and forward in preparation to be mated with the Finishing Kit.
- 6. Align the hole in the rubber hood latch with the hood rod (Figure 6).

7. Push the hood latch over the end of the hood rod as shown in Figure 6.



- 1. Rubber hood latch
- 3. Latched position
- 2. Hood rod end



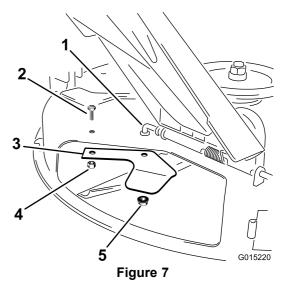
## **Installing the Chute**

#### Parts needed for this procedure:

1	Cut off baffle
1	Chute

#### **Procedure**

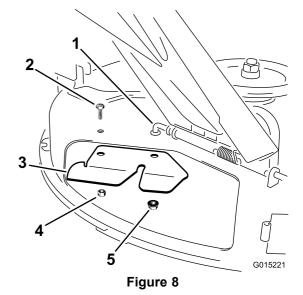
- Lift up the grass deflector and locate the existing cutoff baffle
- 2. Remove the lock nuts and bolt securing the cutoff baffle to the underside of the deck (Figure 7). Retain all fasteners.



- 1. Pivot rod
- 4. Nut (5/16 inch)

2. Bolt

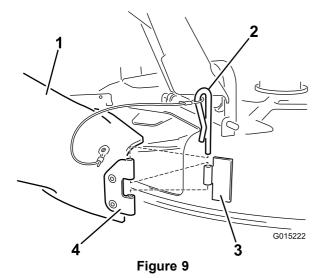
- 5. Lock nut
- 3. Cutoff baffle (existing)
- 3. Install the new cutoff baffle to the underside of the deck (Figure 8). Secure it with the fasteners removed previously.



- 1. Pivot rod
- 4. Nut (5/16 inch)

2. Bolt

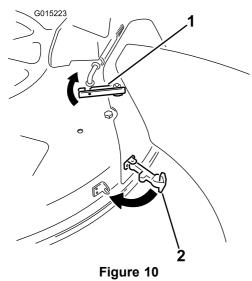
- 5. Lock nut
- 3. Cutoff baffle (bagger)
- 4. Locate the chute in loose parts. Align the holes in the hinge on the chute with the hinge on the deck (Figure 9). Secure the chute to the deck using the hairpin on the lanyard connected to the chute.



- Chute
- 2. Lanyard hairpin
- 3. Hinge, on deck
- 4. Hinge, on chute
- 5. Pivot the chute back and toward the deck so chute is flush with the mower deck.

**Note:** As the chute mates with the deck, make sure the upper latch is out of the way of the pivot rod.

On the top of the chute, engage the upper latch around pivot rod of the deflector assembly as shown in Figure



- Upper latch
- 2. Flexible latch
- 7. Secure the chute to the deck. Hook the flexible latch on the chute to the retaining clasp welded on the mower deck to the rear of the opening (Figure 10).

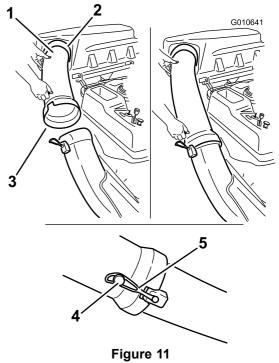


## **Attaching the Discharge Tube**

#### **No Parts Required**

#### **Procedure**

1. Slide the curved end of the discharge tube into the opening in the bagger top (Figure 11).



- 1. Discharge tube, curved end
- Opening in bagger top
- Rubber strap
- Discharge tube, flared end
- Slide the flared end of the discharge tube over the end of the chute. Move the rubber retaining strap on the chute snaps over the peg on the discharge tube to secure it (Figure 11).



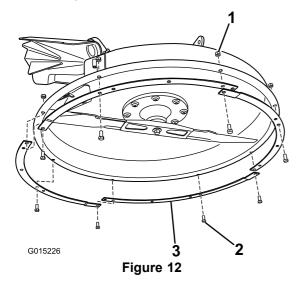
## Installing the Deck Ring

#### Parts needed for this procedure:

4	Deck ring
8	Bolt (5/16 x 3/4 inch)
8	Lock nut (5/16 inch)

#### **Procedure**

 Install the interlocking deck rings to the bottom of the mower (Figure 12).



- 1. Lock nut (5/16 inch)
- 3. Deck ring
- 2. Bolt (5/16 x 3/4 inch)
- 2. Secure the rings to the deck using 8 bolts (5/16 x 3/4 inch) and 8 lock nuts (5/16 inch).



## Installing the Blade

#### Parts needed for this procedure:

1 Hi-Lift blade

#### **Procedure**

 Remove the existing mower blade installed on your deck. Refer to the Removing the Blades section in the Operator's Manual for more information. 2. Install the Hi-Lift mower blade located in loose parts. Refer to the Installing the Blades section in the *Operator's Manual* for more information.

## **Operation**

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

#### **A WARNING**

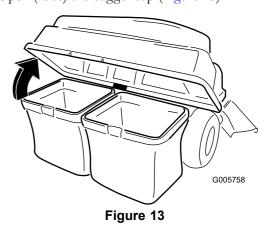
To avoid personal injury, follow these procedures:

- Become familiar with all operating and safety instructions in the *Operator's Manual* for the mower before using this attachment.
- Never remove the discharge tube, bags, bagger top, or the chute while the engine is running.
- Always shut the engine off and wait for all moving parts to stop before clearing an obstruction from the bagging system.
- Never do maintenance or repairs while the engine is running.

## **Emptying the Grass Bags**

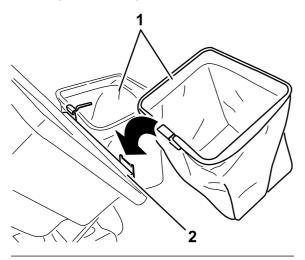
Be careful when lifting or handling a grass bag that is full. To empty the grass bags:

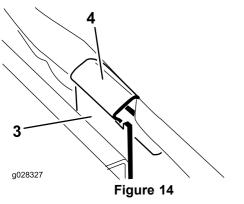
- 1. Park the machine on a level surface and disengage the blade control switch.
- 2. Stop the engine, remove the key, set the parking brake and wait for all moving parts to stop before leaving the operating position.
- 3. Open (raise) the bagger top (Figure 13).



4. Compress debris into the bags. With both hands, lift up on the bag and unhook it from the retaining bracket. Empty the bag. Repeat the procedure for the other bag.

5. Install the bags by sliding the bag frame hooks onto the retaining brackets (Figure 14).





- 1. Bag
- 2. Bagger frame
- Retaining bracket
- Bag frame hook
- 6. Lower the bagger top onto the bags.

# Clearing Obstructions from the Bagger

- 1. Park the machine on a level surface and disengage the blade control switch.
- Move the motion control levers outward to the neutral lock position, stop the engine, remove the key, set the parking brake and wait for all moving parts to stop before leaving the operating position.
- 3. Check the grass bags and empty them if they are full.
- 4. Remove and separate the discharge tube and chute from the bagger top and mower. Using a stick or similar object, carefully remove and clear the obstruction from the mower, discharge tube, chute, and the bagger top.
- 5. After you remove the obstruction, install the complete bagger system and resume operation.

### Removing the Bagger

#### **A** CAUTION

Failing to remove the front bagger weights from lever steer models and operating the machine without the bagger attachment may cause an unstable condition which could result in a loss of control.

- Always remove the front weights (where required) when removing the bagger attachment.
- Never operate the machine without the bagger attachment and the front weights (where required) still installed.

The bagger can be removed by repeating the Setup sections from all installed bagger related kits in reverse order. If weights are in stalled, always remove the front bagger weights when removing the bagger attachments.

**Note:** It is only necessary to remove the cutoff baffle when installing a mulching kit.

## **Transporting the Machine**

Use a heavy-duty trailer or truck to transport the machine. Ensure that the trailer or truck has all necessary brakes, lighting, and marking as required by law. Please carefully read all the safety instructions. Knowing this information could help you, your family, pets, or bystanders avoid injury.

#### **A WARNING**

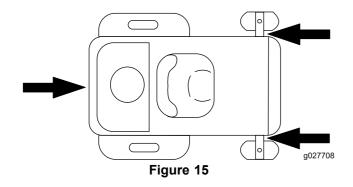
Driving on the street or roadway without turn signals, lights, reflective markings, or a slow moving vehicle emblem is dangerous and can lead to accidents causing personal injury.

Do not drive machine on a public street or roadway.

To transport the machine:

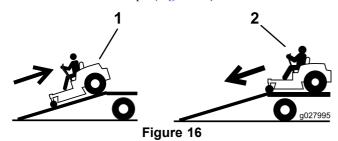
- 1. If using a trailer, connect it to the towing vehicle and connect the safety chains.
- 2. If applicable, connect the trailer brakes.
- 3. Load the machine onto the trailer or truck.
- 4. Stop the engine, remove the key, set the brake, and close the fuel valve.
- 5. Tie down the machine near the front caster wheels and the rear bumper (Figure 15).

**Note:** Avoid the steering components when tying down the machine at the front caster wheels.



## **Loading the Machine**

Use extreme caution when loading or unloading machines onto a trailer or a truck. Use a full-width ramp that is wider than the machine for this procedure. Back up ramps and drive forward down ramps (Figure 16).



- 1. Back up ramps
- 2. Drive forward down ramps

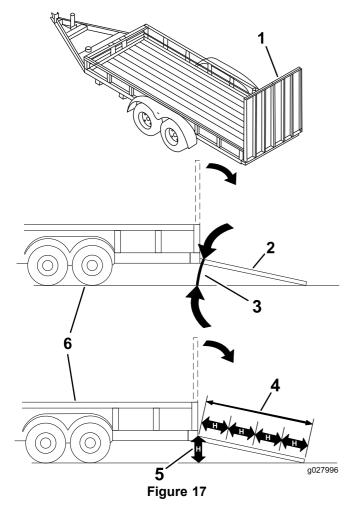
## **Important**: Do not use narrow individual ramps for each side of the machine.

Ensure the ramp is long enough so that the angle with the ground does not exceed 15 degrees (Figure 17). On flat ground, this requires a ramp to be at least four times (4X) as long as the height of the trailer or truck bed to the ground. A steeper angle may cause mower components to get caught as the unit moves from the ramp to the trailer or truck. Steeper angles may also cause the machine to tip or lose control. If loading on or near a slope, position the trailer or truck so that it is on the down side of the slope and the ramp extends up the slope. This will minimize the ramp angle.

#### **A WARNING**

Loading a machine onto a trailer or truck increases the possibility of tip-over and could cause serious injury or death.

- Use extreme caution when operating a machine on a ramp.
- Use only a full-width ramp; do not use individual ramps for each side of the machine.
- Do not exceed a 15-degree angle between the ramp and the ground or between the ramp and the trailer or truck.
- Ensure the length of ramp is at least four times (4X) as long as the height of the trailer or truck bed to the ground. This will ensure that ramp angle does not exceed 15 degrees on flat ground.
- Back up ramps and drive forward down ramps.
- Avoid sudden acceleration or deceleration while driving the machine on a ramp as this could cause a loss of control or a tip-over situation.



- 1. Full-width ramp in stowed position
- Side view of full-width ramp in loading position
- 3. Not greater than 15 degrees
- Ramp is at least four times (4X) as long as the height of the trailer or truck bed to the ground
- 5. H= height of the trailer or truck bed to the ground
- 6. Trailer

## **Operating Tips**

#### **Bagging Tips**

#### **Size**

Remember that the mower is longer and wider with this attachment installed. By turning too sharply in confined places you may damage the attachment.

#### **Trimming**

Always trim with the left side of the mower. Do not trim with the right side of the mower because you could damage the bagger's chute and discharge tube.

#### **Cutting Height**

Do not set the mower cutting height too low because long grass surrounding the mower can prevent air from getting under the mower and entering the bagging system. If enough air doesn't get under the mower, the bagging system will plug.

#### **Cutting Frequency**

Cut the grass often, especially when it grows rapidly. You will have to cut your grass twice if it gets excessively long.

#### **Cutting Technique**

For best lawn appearance, be sure to slightly overlap the mower into the previously cut area. This helps reduce the load on the engine and reduces the chance of plugging the chute and discharge tube.

#### **Bagging Speed**

Most often you will bag with the mower throttle in the Fast position and drive at a normal ground speed. However, in extremely dry and dusty grass, you may want to slightly reduce the throttle speed and increase the ground speed of the mower. The bagging system may plug if you drive too fast and the engine speed gets too slow. On hills it may be necessary to slow the mower ground speed. This helps maintain the engine speed and bagging efficiency. Mow downhill whenever possible.

#### **A** CAUTION

As the bagger fills, extra weight is added to the back of the machine. If you stop and start suddenly on hills, you may lose steering control or the machine may tip.

- Do not start or stop suddenly when going uphill or downhill. Avoid uphill starts.
- If you do stop the machine when going uphill, disengage the blade control. Then back down the hill using a slow speed.
- Do not change speeds or stop on slopes.
- Never operate lever steer models without the bagger attachment and the front weights still installed. Steering wheel units do not require front weights.

#### **Bagging Long Grass**

Excessively long grass is heavy and may not be propelled completely into the grass bags. If this happens, the discharge tube and chute may plug. To avoid plugging the bagging system, mow the grass at a high height of cut, then lower the mower to your normal cutting height and repeat the bagging process.

#### **Bagging Wet Grass**

Always try to cut grass when it is dry because your lawn will have a neat appearance. If you must cut wet grass, use the conventional side discharge feature of the mower. Several hours later, when the clippings are dry, install the complete bagger attachment and vacuum up the grass clippings.

#### Signs of Plugging

As you are bagging, a small amount of grass clippings normally blow out the front of the mower. An excessive amount of clippings blowing out indicates that the bags are full or the system is plugged.

## **Maintenance**

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

## Recommended Maintenance Schedule(s)

Maintenance Service Interval	Maintenance Procedure
After the first 10 hours	Inspect the bagger
Before each use or daily	Clean the bagger
Before storage	<ul><li>Inspect the bagger</li><li>Clean the bagger</li></ul>

#### **A** CAUTION

If you leave the key in the ignition switch, someone could accidently start the engine and seriously injure you or other bystanders.

Remove the key from the ignition and disconnect the wire from the spark plug before you do any maintenance. Set the wire aside so that it does not accidentally contact the spark plug.

#### **A** DANGER

The engine can become hot when it is operating. Severe burns can occur from contacting hot surfaces.

Allow the engine, especially the muffler, to cool before touching.

#### **A** DANGER

Debris, such as leaves, grass, or brush can catch fire. A fire in the engine area can cause personal injury and property damage.

- Keep the engine and muffler area free of debris accumulation.
- Take care when opening the bagger cover to keep debris from falling onto the engine and muffler area.
- Allow the machine to cool before storing it.

# Inspecting the Bagger Attachment

**Service Interval:** After the first 10 hours

Before storage

Inspect the bagger attachment after the first 10 hours of operation, and monthly thereafter.

- 1. Check the chute, discharge tube, and the bagger top. Replace these parts if they are cracked or broken.
- 2. Tighten all nuts, bolts, and screws.
- 3. Inspect all fasteners and latches; replace any missing or damaged.
- 4. Inspect the grass bags for deterioration.

#### **A WARNING**

You or bystanders could be severely injured by flying debris or thrown objects that may pass through torn, worn, or deteriorated grass bags.

- Check the grass bags for holes, rips, wear, and other deterioration.
- Do not wash the grass bags.
- If the bag has deteriorated, install new grass bags supplied by the manufacturer of this bagger attachment.

### Inspecting the Mower Blades

Inspect the mower blades regularly and whenever a blade strikes a foreign object.

If the blades are badly worn or damaged, install new blades. Refer to your mower or mower *Operator's Manual* for complete blade maintenance.

## **Caring for the Grass Bags**

To prevent rapid deterioration of the bag material, store the bags where they will dry completely after each use.

# Cleaning the Bagger Attachment

Service Interval: Before each use or daily

Before storage

- After each use, remove and wash the inside and outside of the bagger top, discharge tube, chute, and the underside of the mower, using water sprayed from a garden hose. Use a mild detergent to remove stubborn dirt.
- 2. Make sure you remove matted grass from all parts.
- 3. Flush the grass bags with water using garden hose to remove any debris.
- 4. After washing, let all of the parts dry thoroughly.

## **Storage**

## **Storing the Bagger Attachment**

- 1. Clean the bagger attachment; refer to Cleaning the Bagger Attachment.
- 2. Inspect the bagger attachment for damage; refer to Inspecting the Bagger Attachment.
- 3. Make sure the grass bags are empty and thoroughly dry.
- 4. Store the bagger in a clean, dry place, out of direct sunlight. This protects the plastic parts and extends the life of the bagger. If you must store the bagger outside, cover it with a weatherproof cover.

## **Notes:**