Form No. 3376-309 Rev B

TORO®

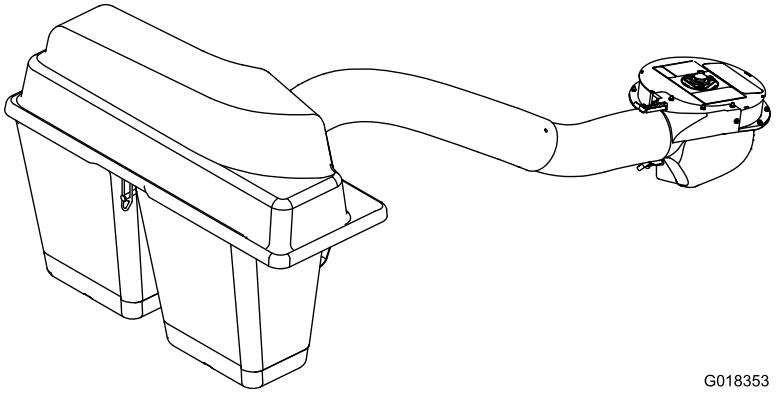
Count on it.

Operator's Manual

E-Z Vac™ Twin Bagger

TITAN Zero-Turn-Radius Riding Mower

Model No. 79330—Serial No. 313000001 and Up



G018353

This kit requires the simultaneous installation of other kits to function properly. Contact your Authorized Service Dealer to obtain the corresponding necessary parts. For more information, visit us at www.Toro.com.

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

3376-309 B

⚠ 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.

Introduction

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 and Figure 2 identifies the location of the model and serial numbers on the product. Write the numbers in the space provided.

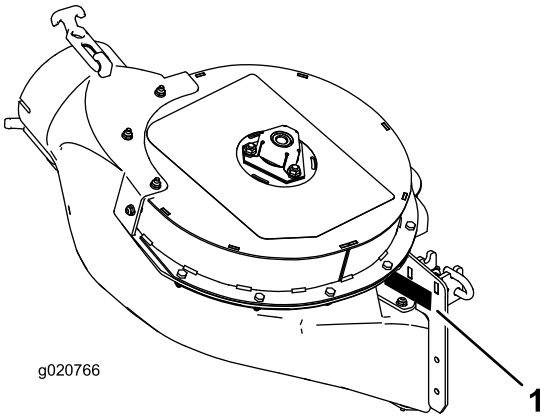


Figure 1

1. Blower model and serial number location

Model No. _____

Serial No. _____

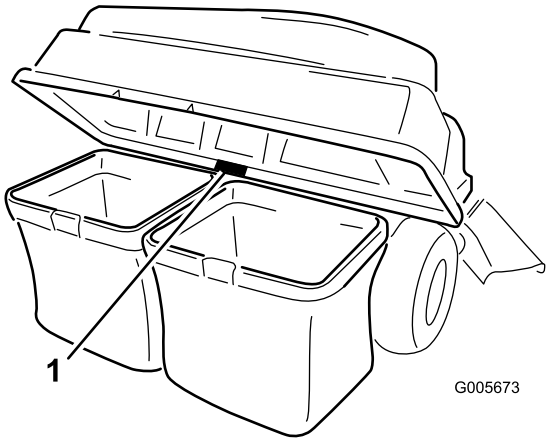


Figure 2

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 3), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.

Figure 3

1. Safety alert symbol

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

8111 Lyndale Avenue South
Bloomington, MN 55420

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

Contents

Introduction 2
Safety 3
Safety and Instructional Decals 4
Setup 6
1 Preparing the Mower 7
2 Installing the Bagger Frame 7
3 Installing the Hood Baffle 9
4 Installing the Hood and the Hood Rod 10
5 Installing the Blower Assembly 12
6 Installing the Blower Belt and Plastic Belt Cover 13
7 Installing the Discharge Tubes 14
8 Installing the Weight 15
Operation 17
Emptying the Grass Bags 17
Clearing Obstructions from the Bagger System 18
Removing the Bagger 18
Operating Tips 19
Maintenance 20
Recommended Maintenance Schedule(s) 20
Preparing for Maintenance 20
Cleaning the Hood Screen 20
Cleaning the Bagger and Bags 21
Inspecting the Blower Belt 21
Replacing the Blower Belt 21
Greasing the Idler Arm 21
Inspecting the Bagger 22
Inspecting the Mower Blades 22
Storage 22
Storing the Bagger Attachment 22
Troubleshooting 23

Safety

⚠ 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 hood, 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.**

⚠ WARNING

When the bagger is in operation, the blower is rotating and can cut off or injure hands and fingers.

- **Before adjusting, cleaning, repairing and inspecting the blower, and before unclogging the chute, turn off the engine and wait for all moving parts to stop. Remove the key.**
- **Use a stick, not your hands, to remove an obstruction from the blower and tube.**
- **Keep face, hands, feet, and any other part of your body or clothing away from concealed, moving, or rotating parts.**

⚠ WARNING

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.**

⚠ WARNING

Engines can become hot when they are operating. Severe burns can occur from contacting hot surfaces.

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

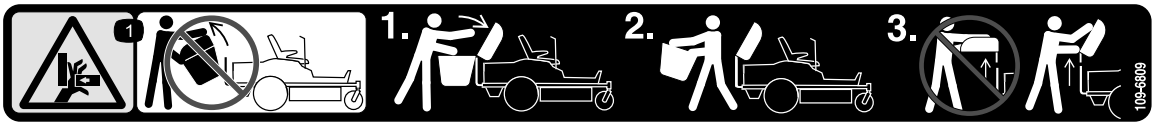
The following list contains safety information specific to Toro products and other safety information you must know.

- 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. 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, set the parking brake, 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, remove the weights and 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.
- Use a stick, not your hands, to remove an obstruction from the blower tube.
- 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.

Safety and Instructional Decals

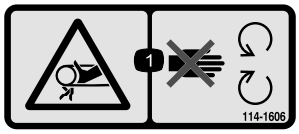
Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.

1-653558



109-6809

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



114-1606

1. Entanglement hazard, belt—keep all guards in place.

125–5502

1. Warning—read the *Operator's Manual*.
2. Warning—wear hearing protection.
3. Cutting/dismemberment hazard, impeller—keep away from moving parts; keep all guards and covers in place.
4. Cutting/dismemberment hazard, impeller—disengage the PTO, remove the ignition key, and wait for all moving parts to stop.
5. Thrown object hazard—do not run the blower without the entire collection system installed and latched.
6. Warning; loss of traction—do not operate only with counterbalance weights installed; do not operate only with E-Z Vac installed; only operate with both E-Z Vac and counterbalance weights installed.

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the mower.
2	Bagger frame support bracket Plate Self tapping bolts (5/16 x 3/4 inch) Bolt (5/16 x 2-1/2 inch) Lock nut (5/16 inch) Bagger frame Clevis pin (1/2 x 2-1/4 inch) Hair pin cotter pin Rod Washer Clevis pin (1/2 x 1-1/2 inch) Spacer plate	1 1 2 2 2 1 1 5 2 4 2 1	Install the bagger frame.
3	Bagger hood Baffle Hairpin cotter pin (small)	1 1 2	Install the hood baffle and hood rod.
4	Circular cotter pin Hood rod Hairpin cotter pin	1 1 1	Install the hood and the hood rod.
5	Blower assembly (from the Blower and Drive Kit) Spring (from the Blower and Drive Kit) Metal belt cover (from the Blower and Drive Kit)	1 1 1	Install the blower assembly.
6	Plastic belt cover (from the Blower and Drive Kit) Knobs (from the Blower and Drive Kit) Blower belt (from the Blower and Drive Kit)	1 2 1	Install the blower belt and plastic belt cover.
7	Upper tube Screw (1/4 x 3/4 inches) Washer (1/4 inch) Locknut (1/4 inch) Lower tube	1 2 2 2 1	Install the discharge tubes.
8	Weight Adhesive bumper Rod Washer (5/16 inch) Hairpin cotter pin	2 2 1 4 2	Install the weight.

1

Preparing the Mower

No Parts Required

Procedure

Perform the following procedure to prepare the mower for attaching the blower and bagger kit.

1. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
2. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Repair all bent or damaged areas of the mower deck and replace any missing parts.
4. Clean the mower of any debris on the deck or rear part of the mower to ease installation.

2

Installing the Bagger Frame

Parts needed for this procedure:

1	Bagger frame support bracket
1	Plate
2	Self tapping bolts (5/16 x 3/4 inch)
2	Bolt (5/16 x 2-1/2 inch)
2	Lock nut (5/16 inch)
1	Bagger frame
1	Clevis pin (1/2 x 2-1/4 inch)
5	Hair pin cotter pin
2	Rod
4	Washer
2	Clevis pin (1/2 x 1-1/2 inch)
1	Spacer plate

Procedure

1. Remove the existing self tapping bolts in the bottom of the machine frame (Figure 5). Discard the bolts.
2. Install the support spacer plate and the support bracket to the machine frame as shown in Figure 4. Secure the plate and bracket to the frame using two bolts (5/16 x 2-1/2 inch) and two lock nuts (5/16 inch).

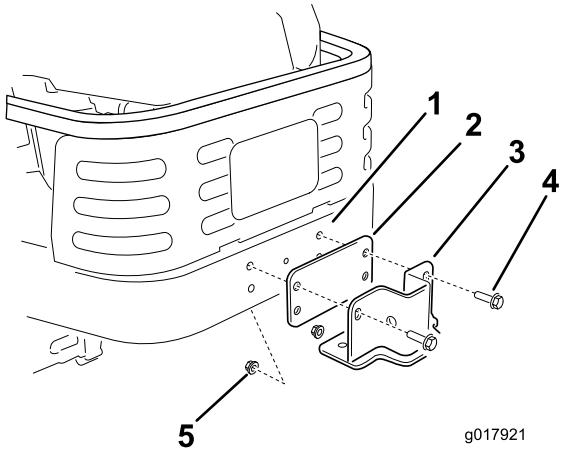


Figure 4

1. Machine frame
2. Plate
3. Support bracket
4. Bolt (5/16 x 2-1/2 inch)
5. Lock nut (5/16 inch)

3. Secure the support bracket to the bottom of the machine frame from below using 2 new self-tapping screws (5/16 x 3/4 inch) as shown in Figure 5.

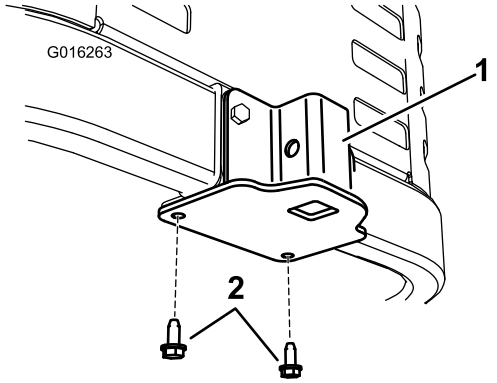


Figure 5

1. Support bracket
2. Self-tapping bolts (5/16 x 3/4 inch)

4. Remove the fasteners securing the existing rectangular spacer plate from the top of the engine frame and remove the plate, if so equipped.
5. Install the new spacer plate as shown in Figure 6 using the fasteners removed previously.
6. Install the bagger frame to the support bracket. Secure the bagger frame with a clevis pin (1/2 x 2-1/4 inch) and hairpin cotter pin (Figure 6).

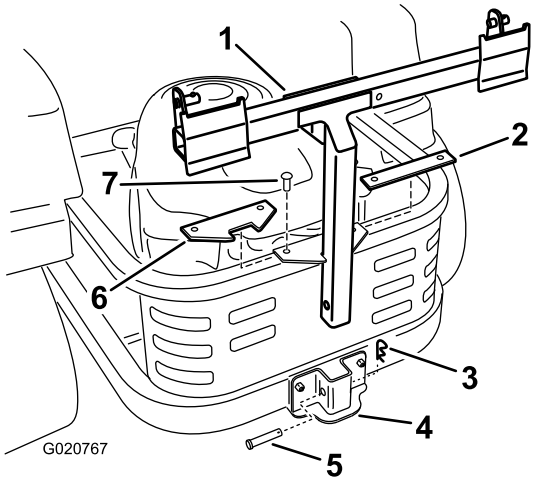


Figure 6

1. Bagger frame
2. Remove the existing rectangular spacer plate (if so equipped)
3. Hair pin
4. Support bracket
5. Clevis pin (1/2 x 2-1/4 inch)
6. New spacer plate
7. Existing fasteners

7. Install two support rods, one to each side of the bagger frame. Locate the existing bracket between the rear drive wheel and frame (Figure 7).

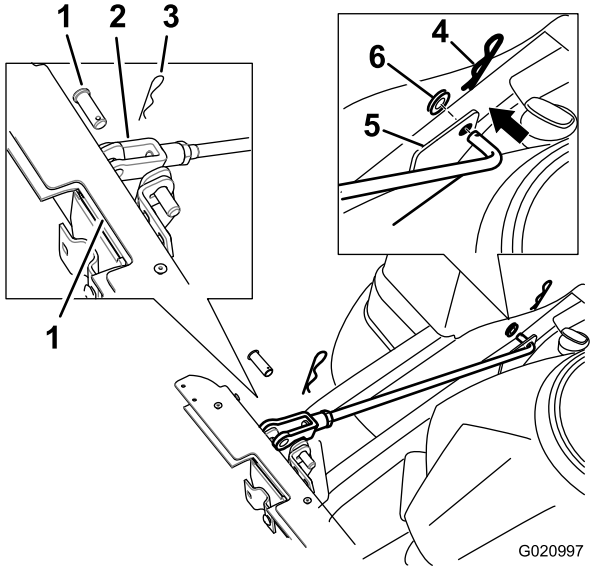


Figure 7
Left side shown

1. Bagger frame
2. Clevis end
3. Clevis pin (1/2 x 1-1/2 inch)
4. Hair pin
5. Bracket on frame
6. Washer

8. Insert the bent ends of the rod into the bagger frame as shown in Figure 7. Secure the end of the rod with a washer and hairpin cotter pin.

9. Adjust the support rods so that bagger frame is held secure to the machine frame and sits in the notch of the angle spacer plate installed previously. Repeat these steps for each support rod:
   A. Loosen the jam nut at the base of the clevis end of the rod.
   B. Rotate the clevis end of the rod to adjust the rod to the desired length.
   C. Align the holes in the clevis end with the hole in the bagger frame at the attachment point.
   D. Secure the clevis end of the rods to the bagger frame using a clevis pin and hairpin cotter pin(Figure 7).
   E. Tighten the jam nut.
10. With both rods installed and attached, check the bagger frame for play. The bagger frame should be held tight to the machine frame. If necessary, repeat the previous step to secure the bagger frame.

3

Installing the Hood Baffle

Parts needed for this procedure:

1	Bagger hood
1	Baffle
2	Hairpin cotter pin (small)

Procedure

1. Locate the baffle slots in the front and back side walls of the bagger hood, and the mounting tabs on the hood baffle (Figure 8).

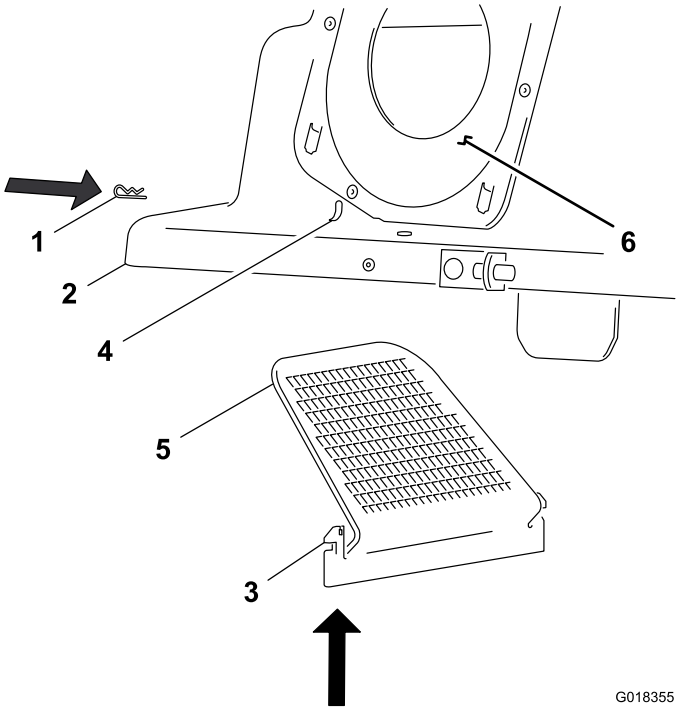


Figure 8

Hood, Baffle, and Hairpin

1. Hairpin cotter pin (small)
2. Bagger Hood
3. Baffle-mounting tab
4. Baffle slot
5. Baffle
6. Duct seal

2. Position the hood so that the duct seal is on your left, as illustrated in Figure 8.
3. Align the baffle so that the screened area is up and angled left (Figure 8).
4. Insert the baffle up into the hood from the bottom (Figure 8).
5. Align the baffle-mounting tabs with the baffle slots in the hood, and push the mounting tabs up and through the slots (Figure 8).
6. Secure the baffle to the hood by inserting the hairpins into the holes in the baffle-mounting tabs as shown in Figure 9.

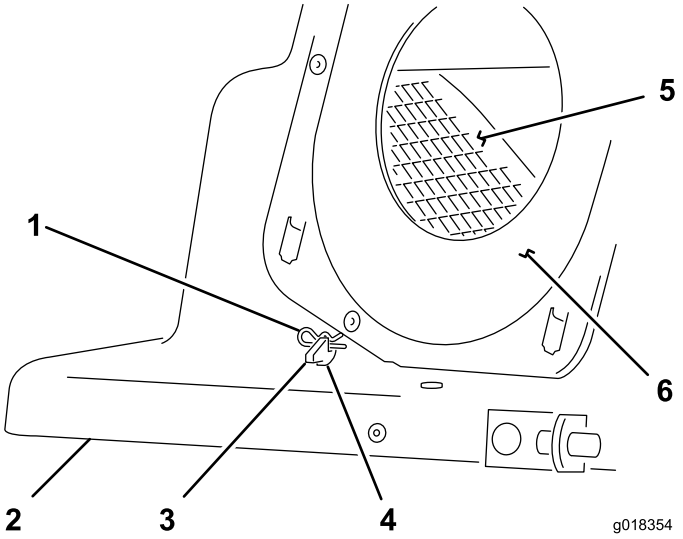


Figure 9

Bagger Hood Assembly

1. Hairpin cotter pin
2. Bagger Hood
3. Baffle-mounting tab
4. Baffle slot
5. Baffle
6. Duct seal

4

Installing the Hood and the Hood Rod

Parts needed for this procedure:

1	Circular cotter pin
1	Hood rod
1	Hairpin cotter pin

Procedure

Note: The bagger hood is easier to install when two people work together.

1. Install the hood rod to the bagger frame with a hairpin cotter pin. Install the hairpin cotter pin from the bottom (Figure 10).

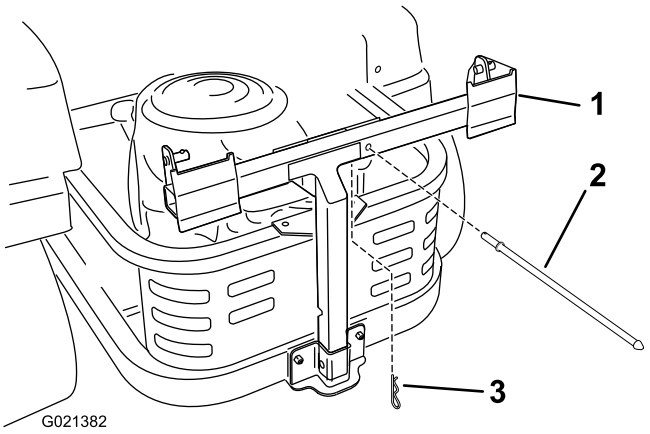


Figure 10

1. Bagger frame
2. Hood rod
3. Hairpin cotter pin (install from the bottom)

2. Install the bagger hood to the bagger frame.
3. Slide the brackets over the posts in the bagger frame and install the circular cotter pin into the hole in the right hand post (Figure 11).
4. Rotate the bagger hood down to the operating position.

   Note: To remove the circular cotter pin, continue to rotate it in the same direction as installed.

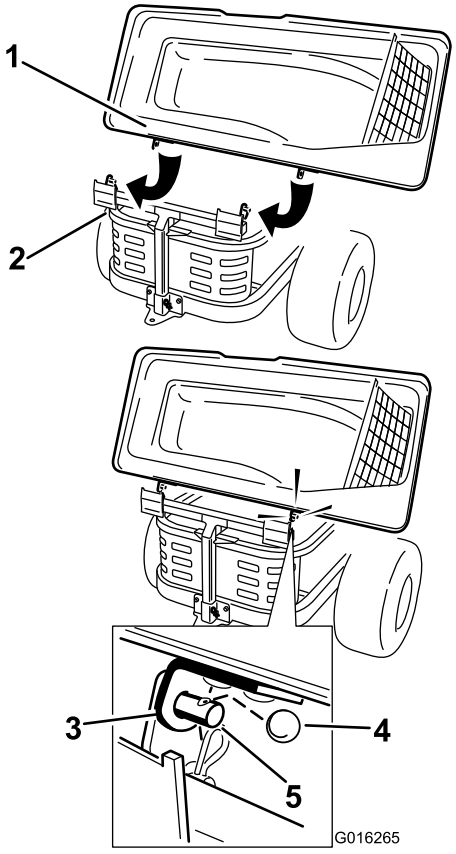


Figure 11

1. Bagger hood
2. Bagger frame
3. Bracket, bagger hood
4. Circular cotter pin
5. Post

5. Lift the bagger hood and install the bags by sliding the bag frame hooks onto the retaining brackets (Figure 12).

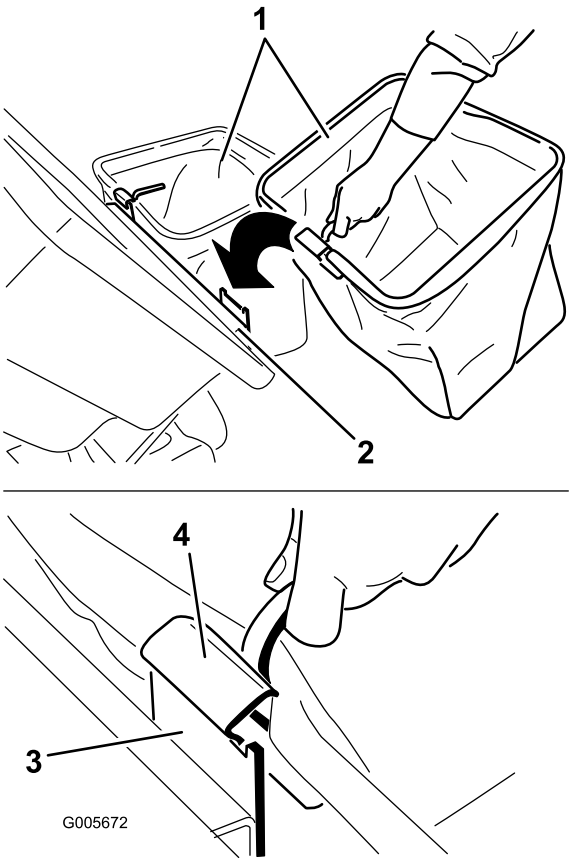


Figure 12

1. Bag
2. Bagger frame
3. Retaining bracket
4. Bag frame hook

6. Lower the bagger hood onto the bag (Figure 13).

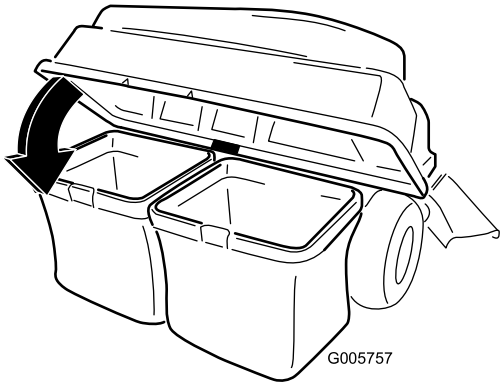


Figure 13

7. Align the hole in the rubber hood latch with the hood rod (Figure 14).
8. Push the hood latch over the end of the hood rod as shown in Figure 14.

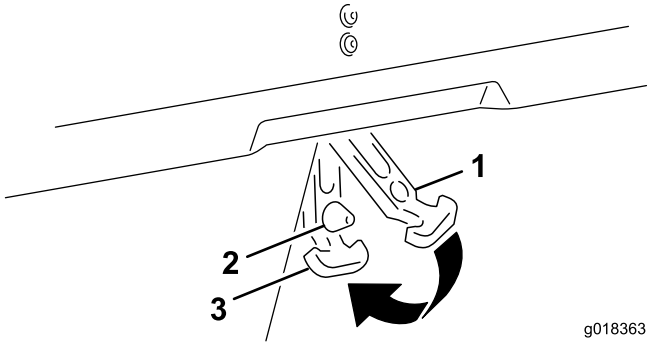


Figure 14

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

5

Installing the Blower Assembly

Parts needed for this procedure:

1	Blower assembly (from the Blower and Drive Kit)
1	Spring (from the Blower and Drive Kit)
1	Metal belt cover (from the Blower and Drive Kit)

Procedure

⚠ WARNING

An uncovered discharge opening could allow the lawn mower to throw objects in the operator's or bystander's direction and result in serious injury. Also, contact with the blade could occur.

- **Never operate the lawn mower unless you install a cover plate, a mulch plate, or a grass chute and catcher.**
- **Make sure that the grass deflector is installed when you remove the grass chute and catcher.**

Important: Install the side-discharge chute when you remove the bagger and blower.

Important: Save all the hardware and the side-discharge chute.

1. If necessary, install the belt onto the blower pulley (Figure 18).
2. Lower the blower and slide the pivot hole onto the pivot pin (Figure 15).

   Note: Ensure that the belt remains positioned in the blower pulley and the rubber flap on the blower remains on the outside of the mower deck (Figure 15).

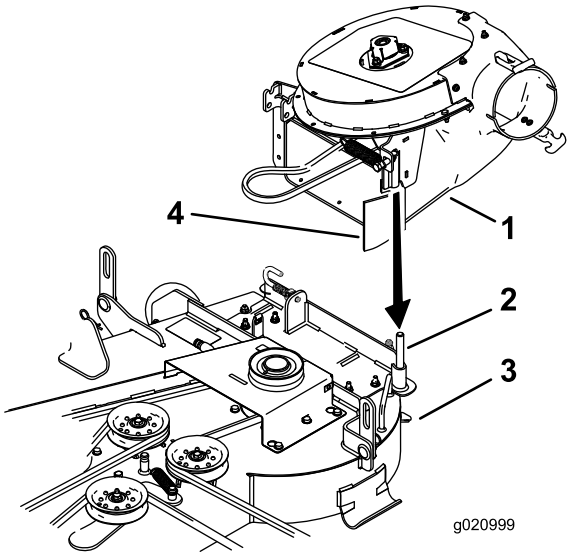


Figure 15

1. Blower assembly
2. Pivot pin
3. Mower deck
4. Rubber flap

3. Move the latch pin from the locking position to the open position (Figure 16).
4. Close the blower assembly and align the latch pin with the hole in the blower support.
5. Move the latch pin to the locking position (Figure 16).

   Note: Ensure that the latch pin extends through the hole in blower support (Figure 16).

   Note: Ensure that the latch firmly holds the blower assembly against the mower deck, but can be released by hand.

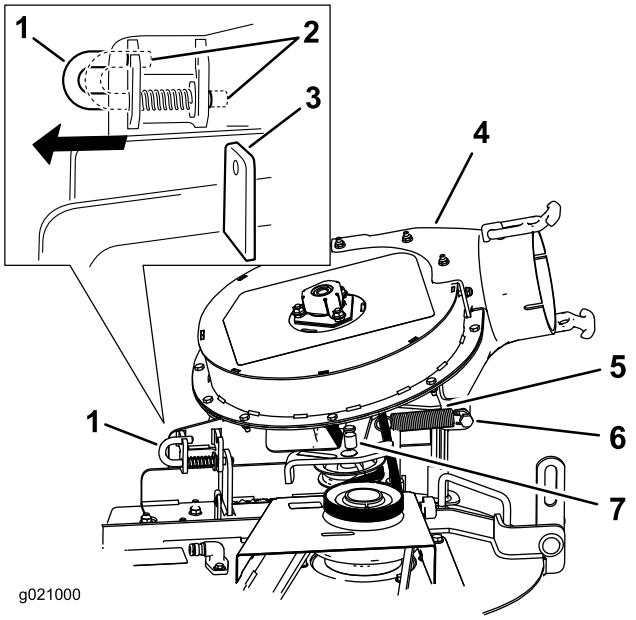


Figure 16

1. Latch pin (open position)
2. Latch pin (locking position)
3. Blower support
4. Blower assembly
5. Spring
6. Shoulder bolt
7. Idler pulley post

6

Installing the Blower Belt and Plastic Belt Cover

Parts needed for this procedure:

1	Plastic belt cover (from the Blower and Drive Kit)
2	Knobs (from the Blower and Drive Kit)
1	Blower belt (from the Blower and Drive Kit)

Procedure

1. If needed, install the belt around the blower pulley (Figure 17 and Figure 18). Refer to 5 Installing the Blower Assembly (page 12).

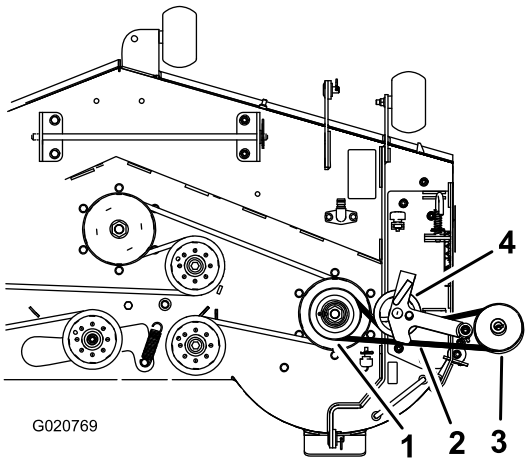


Figure 17

Blower Belt Routing

1. Drive pulley
2. Blower belt
3. Blower pulley
4. Idler/tension pulley

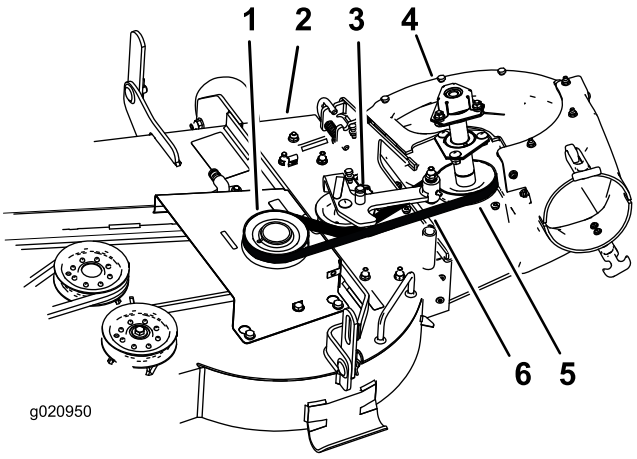


Figure 18

Blower Belt Routing

1. Drive pulley
2. Mower deck
3. Idler/tension pulley
4. Blower in position (housing portion removed for illustrative purposes)
5. Blower pulley
6. Blower belt

2. Ensure that the belt remains aligned to the blower pulley while you are installing the blower assembly.
3. Route the belt around the drive pulley as illustrated in Figure 17 and Figure 18.
4. Temporarily route the belt beneath the idler pulley (Figure 18).
5. Install the spring on to the idler pulley post (Figure 16).
6. Install the spring on to the shoulder bolt (Figure 16).
7. Pull the spring loaded idler pulley away from the fixed spring post, and route the belt around the mower deck pulley (Figure 18).

Note: Ensure the belt is routed around the blower pulley correctly.

8. Align the plastic belt cover over the drive pulley and belt.
9. Secure the plastic belt cover to the blower support and the metal belt cover with 2 knobs (Figure 19).

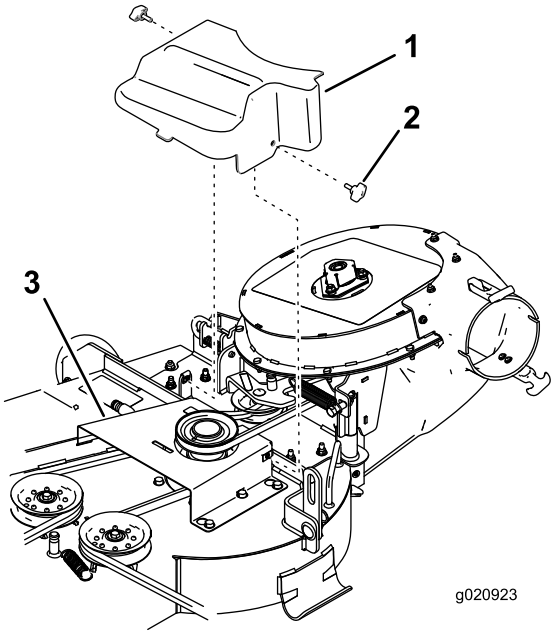


Figure 19

1. Plastic belt cover
2. Knob
3. Metal belt cover installed

7

Installing the Discharge Tubes

Parts needed for this procedure:

1	Upper tube
2	Screw (1/4 x 3/4 inches)
2	Washer (1/4 inch)
2	Locknut (1/4 inch)
1	Lower tube

Procedure

Important: Make sure that the mower deck is in the lowest height-of-cut position before installing the discharge tubes.

Note: Remember to install the grass deflector when you remove the bagger from the mower.

1. Disengage the PTO and set the parking brake.
2. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Lower the mower deck to the lowest height-of-cut position.
4. Remove the bags for viewing the tube under the hood.
5. Lower and latch the hood.
6. Use both latches to attach the lower tube to the blower assembly (Figure 20).

   Note: Ensure the notch in the lower tube is at the bottom when installed (Figure 22).

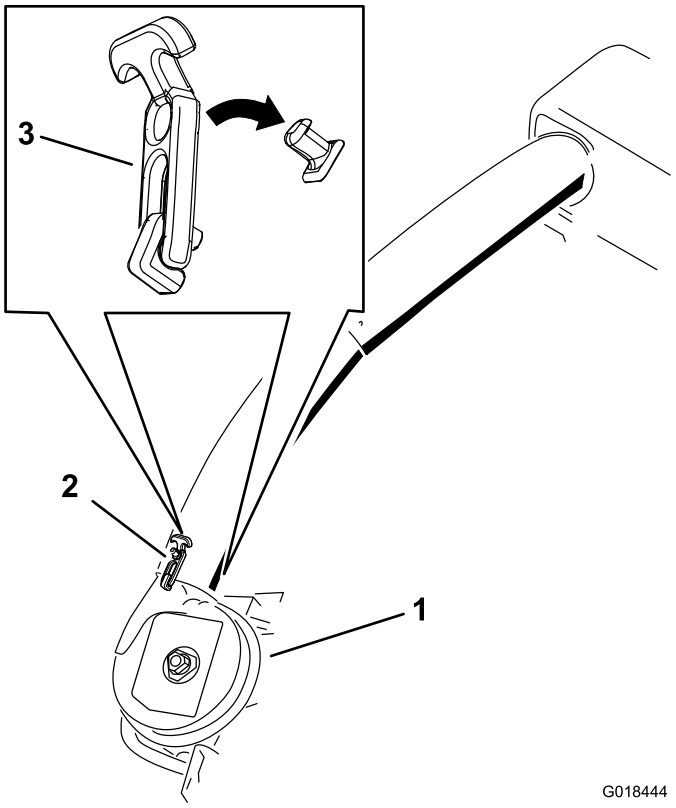


Figure 20
Lower Discharge Tube Latch

1. Blower assembly
2. Upper latch
3. Latch

7. Make note of where the two bolts in the upper tube are installed.

   Note: The hole near the molded arrowheads will not be used.

8. Remove the two bolts in the lower end of the upper tube. Use the 2 holes as a template for the lower tube. Retain the hardware.
9. Insert the upper end (no holes) of the upper tube through the tube seal in the hood by pushing the tube in until the tube contacts the inside of the hood,
10. Pull the upper tube out slightly so that the seal extends outward and over the lower tube (Figure 21).

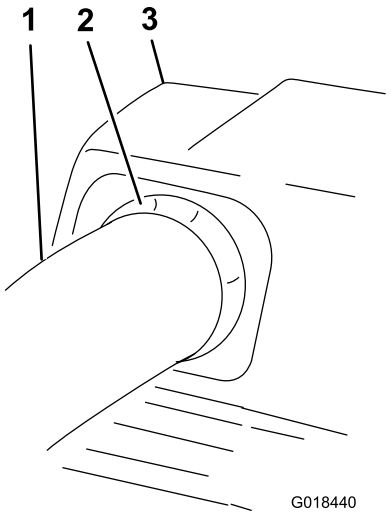


Figure 21

1. Upper tube
2. Rubber seal protruding out
3. Bagger hood

11. Align the upper tube holes to match the dimples on the surface of the lower tube.

    Note: Ensure the side profile looks similar to what is shown in Figure 22.

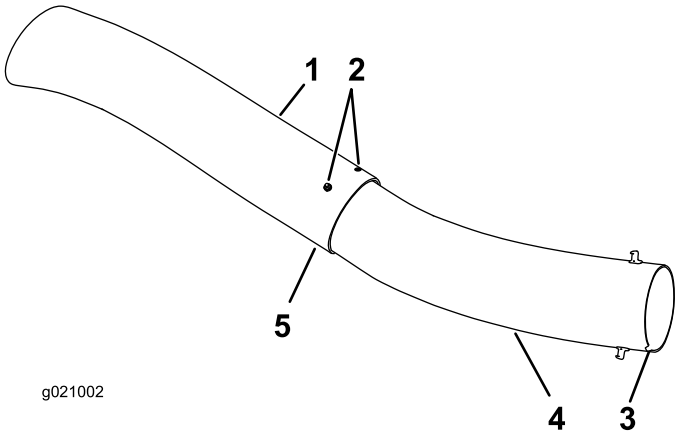


Figure 22

1. Upper tube
2. Existing hole (bolt removed)
3. Notch at the bottom of tube when installed
4. Lower tube
5. Do not use open hole near the molded arrowheads

12. Using the existing holes in the upper tube as a template, drill 2 holes, a 1/4 inch (6.5 mm) diameter, through the dimples on the lower tube (Figure 23).

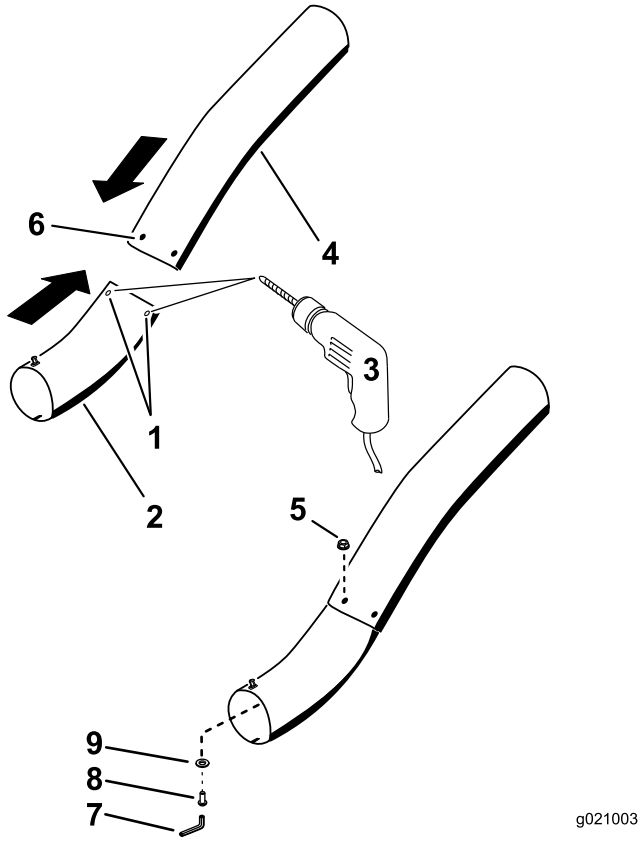


Figure 23

Drilling Lower Discharge Tube

1. Dimples
2. Lower tube
3. Drill 1/4 inch (6.5 mm) diameter hole
4. Upper tube
5. Locknut (1/4 inch)
6. Upper-tube, existing holes
7. Hex key tool
8. Washer (1/4 inch)
9. Screw (1/4 x 3/4 inch)

13. Remove the upper and lower tubes from the machine.
14. Slide the tubes together and align the holes.
15. Install the washers (1/4 inch) onto the bolts (Figure 23).
16. Using a hex key tool, install the screws (1/4 x 3/4 inch) and washers (1/4 inch) from the inside of the lower tube and through the existing holes in the upper tube (Figure 23).
17. Secure the tubes together with the nuts (1/4 inch) (Figure 23).
18. Insert the upper discharge tube through the tube seal in the hood.
19. Pull the upper tube out slightly so that the seal extends outward and over the blower assembly (Figure 21).
20. Use both latches to attach the lower tube to the blower assembly (Figure 20).

8

Installing the Weight

Parts needed for this procedure:

2	Weight
2	Adhesive bumper
1	Rod
4	Washer (5/16 inch)
2	Hairpin cotter pin

Procedure

1. Install an adhesive bumper to the weight (Figure 1).

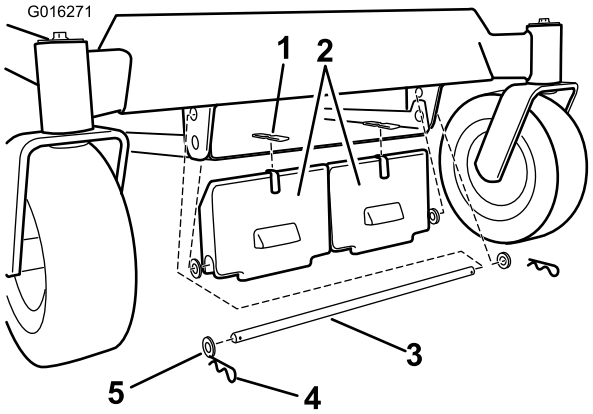


Figure 24

1. Adhesive bumper
2. Front weight
3. Rod
4. Hair pin
5. Washer

Note: On Titan MX machines and the 60 inch ZX machine, disconnect the front deck pan from the frame to allow installation of the weights. Ensure the pan is installed once the weights are secured.

2. Install the weight to the front of the machine frame. Secure the weight with a rod, four washers, and two hairpins as shown in Figure 24.

Note: When installing the front weight allow it to rest on the front lip of the underside of the machine frame as shown Figure 25. This will suspend the weight while you secure it to the machine. Use care not to dislodge the weight when installing the supporting rod.

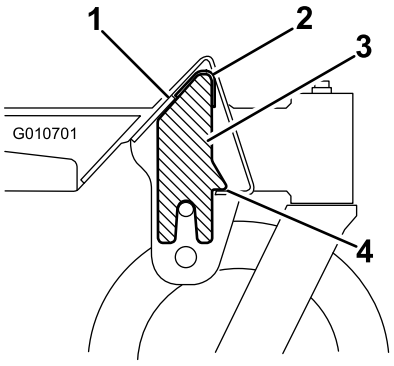


Figure 25

1. Cutaway of the front of the machine frame
2. Bumper
3. Weight
4. Rest the weight here during install

Important: Whenever you remove the bagger attachment, remember to remove the front weight to return the proper stability to the machine.

Operation

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

⚠ 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 hood, 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. 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. Open (raise) the bagger hood (Figure 26).

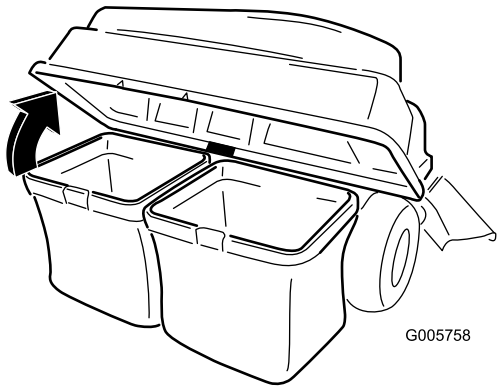


Figure 26

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 27).

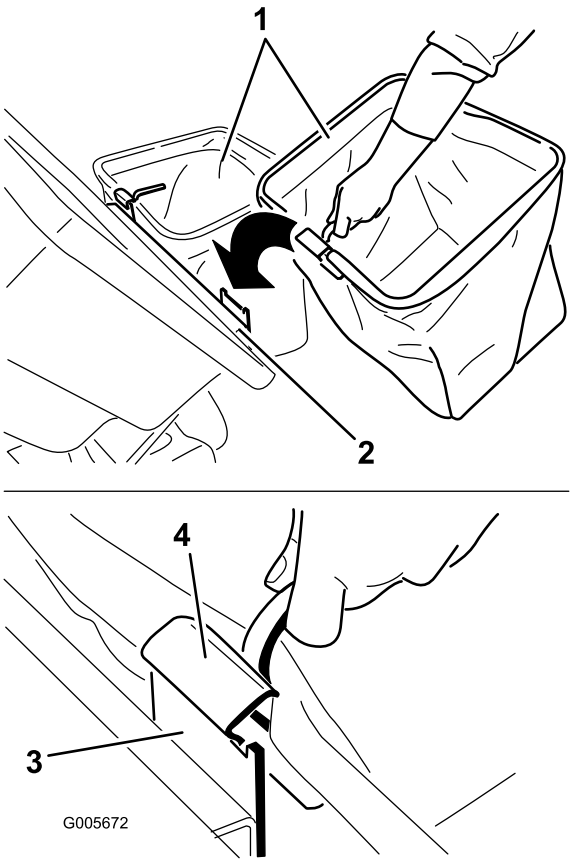


Figure 27

1. Bag
2. Bagger frame
3. Retaining bracket
4. Bag frame hook

6. Lower the bagger hood onto the bags.

Clearing Obstructions from the Bagger System

⚠ WARNING

When the bagger is in operation, the blower is rotating and can cut off or injure hands and fingers.

- **Before adjusting, cleaning, repairing and inspecting the blower, and before unclogging the chute, turn off the engine and wait for all moving parts to stop. Remove the key.**
- **Use a stick, not your hands, to remove an obstruction from the blower and tube.**
- **Keep face, hands, feet, and any other part of your body or clothing away from concealed, moving, or rotating parts.**

1. Disengage the PTO and set the parking brake.
2. Turn off the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Empty the bags.
4. Unlatch the lower tube.
5. Remove the tubes from the bagger.
6. Use a stick or similar object, not your hands, to remove and clear the obstruction from the tube assembly.

   Note: In most cases, you can shake the debris out of the tubes.
7. If the blower assembly is plugged, remove the plastic belt cover, unlatch the bagger blower assembly, remove the belt, and swing it open.
8. Use a stick or similar object, not your hands, to remove and clear the obstruction from the blower assembly.
9. After you remove the obstruction, install the complete bagger system and resume operation.

Removing the Bagger

⚠ WARNING

Components around engine will be hot if the machine has been running. Touching hot components can cause burns.

- **Do not touch engine components when hot.**
- **Allow engine to cool before removing the bagger.**

⚠ CAUTION

Failing to remove the front bagger weights 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 when removing the bagger attachment.

Remove the bagger by repeating the setup sections from the *Installation Instructions* and *Operator's Manual* in reverse order. Always remove the front baffles and front weights when removing the bagger attachments.

Important: Install the side-discharge chute when you remove the bagger and blower.

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

Operating Tips

Tips for Bagging

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.

⚠ 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 the machine without the bagger attachment and the front weights still installed.**

Bagging Long Grass

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 8 hours	• Inspect the blower belt. • Inspect the bagger.
After each use	• Clean the hood screen. • Clean the bagger.
Every 25 hours	• Inspect the blower belt.
Every 50 hours	• Grease the idler arm.
Every 100 hours	• Inspect the bagger.

⚠ WARNING

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.

⚠ WARNING

Engines can become hot when they are operating. Severe burns can occur from contacting hot surfaces.

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

⚠ WARNING

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.**

Preparing for Maintenance

Do the following steps before preforming maintenance on the machine:

1. Park the machine on a level surface.
2. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
3. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
4. Clean the mower of any debris on the deck or rear part of the mower to ease maintenance.

Cleaning the Hood Screen

Service Interval: After each use

1. Disengage the power take off (PTO) and set the parking brake.
2. Turn off the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Open the bagger hood.
4. Clean the debris from the screen.
5. Close the bagger hood.

Cleaning the Bagger and Bags

Service Interval: After each use

1. Wash the inside and outside of the bagger hood, bags, tube, and the underside of the mower.

   Note: Use a mild automotive detergent to remove dirt.

2. Make sure that you remove matted grass from all parts.
3. After washing all parts, let them dry thoroughly.

Note: With all parts installed, start and run the machine for a minute to assist in drying.

Inspecting the Blower Belt

Service Interval: After the first 8 hours

Every 25 hours

Check belts for cracks, frayed edges, burn marks or any other damage. Replace damaged belts.

Replacing the Blower Belt

1. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
2. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Remove the plastic belt cover.
4. Pull back on the spring-loaded idler pulley to relieve the belt tension (Figure 28).

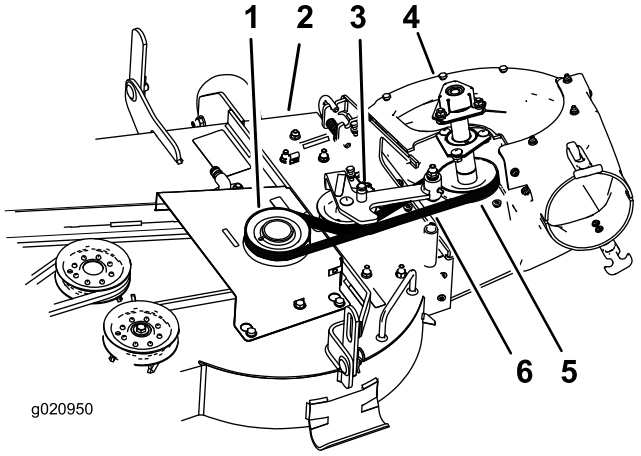


Figure 28

1. Drive pulley
2. Mower deck
3. Idler/tension pulley
4. Blower in position (housing portion removed for illustrative purposes)
5. Blower pulley
6. Blower belt

5. Remove the existing bagger belt from the mower-deck pulley.
6. Remove the blower from the mower deck.
7. Remove the existing bagger belt from the blower pulleys.
8. Install the new belt around the blower pulleys (Figure 28).
9. Install the blower onto the blower support.
10. Install the new belt around the mower-deck pulley (Figure 28).
11. Install the spring onto the idler pulley post (Figure 29).
12. Stretch and install the spring onto the shoulder bolt (Figure 29).

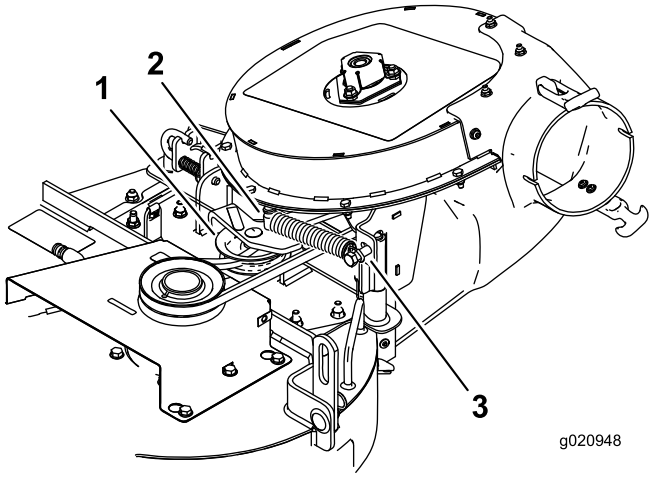


Figure 29

1. Spring-loaded idler pulley
2. Idler pulley post
3. Shoulder bolt

13. Pull back on the spring loaded idler pulley and install the belt onto the spring loaded idler pulley (Figure 28).

Greasing the Idler Arm

Service Interval: Every 50 hours

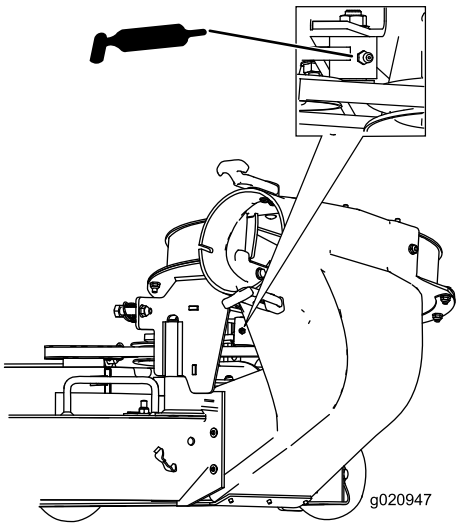


Figure 30

Inspecting the Bagger

Service Interval: Every 100 hours

After the first 8 hours

1. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
2. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
3. Check the upper tube, lower tube, bagger hood, and the blower assembly.

   Note: Replace these parts if they are cracked or broken.
4. Check the bags, bagger frame, and screen.

   Note: Replace any parts that are cracked or broken.
5. Tighten all nuts bolts and screws.

Inspecting the Mower Blades

1. Inspect the mower blades regularly and whenever a blade strikes a foreign object.
2. If blades are badly worn or damaged, install new blades. Refer to your machine *Operator's Manual* for complete blade maintenance.

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.

Troubleshooting

Problem	Possible Cause	Corrective Action
Abnormal vibration.	1. Cutting blade(s) is/are bent or unbalanced. 2. Blade-mounting bolt is loose. 3. Loose blower pulley or pulley assembly. 4. Worn bagger belt. 5. Blower fan blade(s) is/are bent or unbalanced.	1. Install new cutting blade(s). 2. Tighten the blade-mounting bolt. 3. Tighten the appropriate pulley. 4. Replace the belt. 5. Contact an Authorized Service Dealer.
Reduced bagging performance.	1. Low engine speed. 2. Plugged screen in bagger hood. 3. Loose bagger belt. 4. A plugged tube or blower. 5. Full bags.	1. Always operate the engine at full throttle. 2. Remove debris, leaves or grass clippings from the screen. 3. Replace the bagger belt. 4. Locate and remove plugged debris. 5. Empty the hopper.
Blower and tubes plug too frequently.	1. Bags are too full. 2. Low engine speed. 3. Grass is too wet. 4. Grass is too long. 5. Plugged screen in hood. 6. Ground speed is too fast. 7. Worn bagger belt.	1. Dump more frequently. 2. Always operate the engine at full throttle. 3. Cut grass when it is dry. 4. Cut no more than 51-76 mm (2-3 inches) or 1/3 of the grass height, which ever is less. 5. Remove debris, leaves or grass clippings from the screen. 6. Drive slower at full throttle. 7. Replace belt.
Debris blowout.	1. Bags are too full. 2. Ground speed is too fast. 3. Mower deck is not leveled.	1. Dump more frequently. 2. Drive the machine at slow ground speed while operating the engine at full throttle. 3. See the machine *Operator's Manual* for leveling the mower deck.
Blower impeller does not spin freely.	1. Plugged blower. 2. Impeller not aligned.	1. Remove debris, leaves or grass clippings from the blower impeller. 2. Contact an Authorized Service Dealer.

TimeCutter
and
TITAN
Mowers

The Toro Total Coverage Warranty

Limited Warranty (see warranty periods below)

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to the original purchaser to repair the Toro Products listed below if defective in materials or workmanship.

The following time periods apply from the date of purchase by the original owner:

Products	Warranty Period
TimeCutter and MX Mowers	Residential use[2] – 3 years
• Engines[1] — Residential use	Kawasaki – 3 years Kohler – 3 years Toro – 3 years
TimeCutter and MX Mowers	Commercial use 30 days
• Engines[1] — Commercial use	Kawasaki – 3 years Kohler – 90 days Toro – 90 days
TITAN Mowers – Residential or Commercial use	3 years or 240 hours[3]
• Engines[1] — Residential or Commercial use	Kawasaki – 3 years Kohler – 2 years
• Frame	Lifetime (original owner only)[4]
TITAN MX Mowers – Residential or Commercial use	3 years or 400 hours[3]
• Engines[1] — Residential or Commercial use	Kawasaki – 3 years Kohler – 2 years
• Frame	Lifetime (original owner only)[4]
All Mowers	
• Attachments	1 year
• Battery	90 days Parts and Labor 1 year Parts only
• Belts and Tires	90 days

[1]Some engines used on Toro Products are warranted by the engine manufacturer.

[2]Residential use means use of the product on the same lot as your home. Use at more than one location is considered commercial use and the commercial use warranty would apply.

[3]Whichever occurs first.

[4]Lifetime Frame Warranty - If the main frame, consisting of the parts welded together to form the tractor structure that other components such as the engine are secured to, cracks or breaks in normal use, it will be repaired or replaced, at Toro's option, under warranty at no cost for parts and labor. Frame failure due to misuse or abuse and failure or repair required due to rust or corrosion are not covered.

This warranty includes the cost of parts and labor, but you must pay transportation costs.

Warranty may be denied if the hour meter is disconnected, altered, or shows signs of being tampered with.

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the *Operator's Manual*. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Authorized Toro Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, refer to the *Yellow Pages* of your telephone directory (look under “Lawn Mowers”) or access our web site at www.Toro.com. You may also call the numbers listed in item #3 to use the 24-hour Toro Dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer. The dealer will diagnose the problem and determine if it is covered under warranty.
3. If for any reason you are dissatisfied with the Service Dealer’s analysis or with the assistance provided, contact us at:

   Customer Care Department, RLC Division
   Toro Warranty Company
   8111 Lyndale Avenue South
   Bloomington, MN 55420-1196
   Toll free at 866-216-6029 (U.S. customers)
   Toll free at 866-216-6030 (Canadian customers)

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage and engine warranty coverage on some products. This express warranty does not cover the following:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, oil changes, spark plugs, air filters, blade sharpening/worn blade on mowers, cable/linkage adjustments, or brake and clutch adjustments
- Components failing due to normal wear
- Any product or part which has been altered or misused and requires replacement or repair due to accidents or lack of proper maintenance
- Repairs necessary due to improper battery care, failure to use fresh fuel (less than one month old), or failure to properly prepare the unit prior to any period of non-use over one month
- Pickup and delivery charges
- Operational misuse, neglect, or accidents
- Repairs or attempted repairs by anyone other than an Authorized Toro Service Dealer

General Conditions

All repairs covered by these warranties must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts.

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.

All implied warranties of merchantability (that the product is fit for ordinary use) and fitness for use (that the product is fit for a particular purpose) are limited to the duration of the 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.

Countries Other than the United States or Canada

Customers who have purchased Toro products outside the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.

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