



Count on it.

Operator's Manual

48in Vac-Bagger

for TimeCutter® ZX Riding Mowers

Model No. 79167—Serial No. 260000001 and Up

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

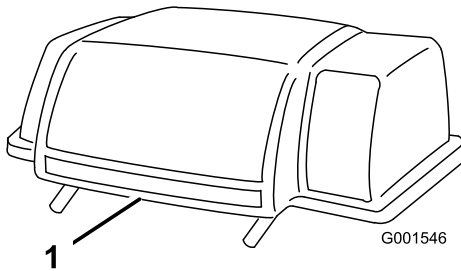


Figure 1

1. Model and serial number location

Model No. _____
Serial No. _____

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

1. Safety alert symbol

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

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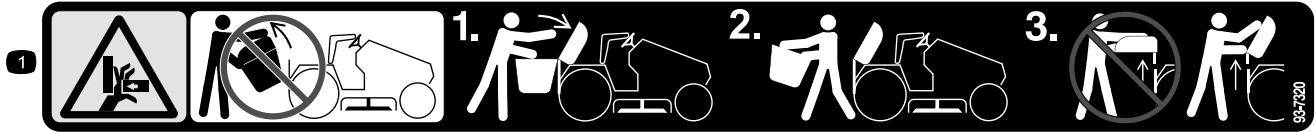
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Safety

Safety and Instructional Decals

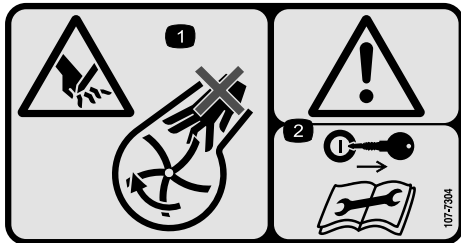


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



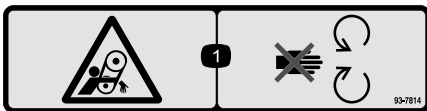
93-7320

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.



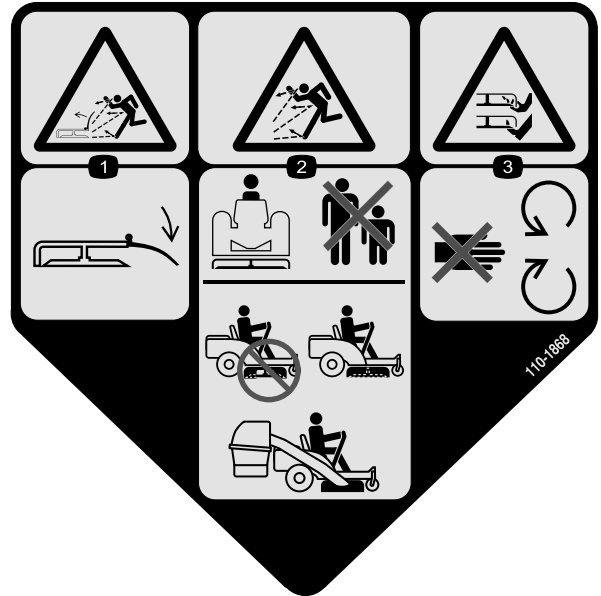
Molded into blower housing

1. Cutting hazard of hand—do not place your hand into the impeller housing.
2. Warning—remove the ignition key and read the instructions before servicing or performing maintenance.



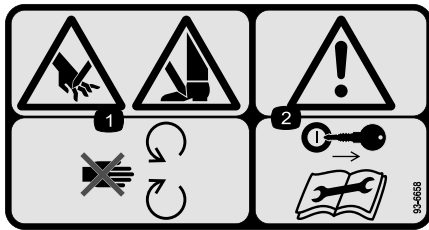
Molded into the blower belt cover

1. Entanglement hazard, belt—stay away from moving parts.



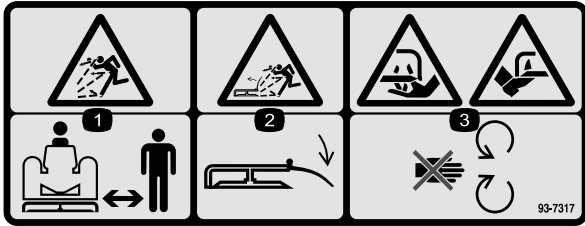
110-1868

1. Thrown object hazard, mower—keep the deflector in place.
2. Thrown object hazard—Keep bystanders a safe distance from the machine; Do not operate the without deflector or grass collection system in place.
3. Cutting/dismemberment of hand or foot—stay away from moving parts.



Molded into the blower belt cover

1. Cutting hazard of hand or foot—stay away from moving parts.
2. Warning—remove the ignition key and read the instructions before servicing or performing maintenance.



93-7317

1. Thrown object hazard—keep bystanders a safe distance from the machine.
2. Thrown object hazard, mower—keep the deflector in place.
3. Cutting/dismemberment of hand or foot—stay away from moving parts.



93-7329

1. Read the *Operator's Manual*.
2. The bag is not full.
3. The bag is full.

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Remove the discharge chute.
2	Baffle, 48 inch Carriage bolt, (5/16 x 3/4 inch) Washer, (5/16 inch) Locknut, (5/16 inch)	1 2 1 2	Install the grass baffle.
3	Pivot support Bolt (5/16 x 3/4 inch) Locknut (5/16 inch) Jam nut (3/8 inch) Washer (3/8 inch)	1 1 1 1 1	Install the blower pivot support.
4	Double pulley	1	Install the blower pulley.
5	Blower assembly Belt	1 1	Install the blower.
6	Belt cover bracket Screw (1/4 x 3/8 inch) Mower belt cover Screw (1/4 x 1/2 inch) Blower belt cover Bolt (1/4 x 5/8 inch) Locknut (1/4 inch)	1 3 1 2 1 2 2	Instal the belt covers.
7	Leveling bracket	1	Install the leveling bracket.
8	Bolt (1/4 x 3/4 inch) Locknut (1/4 inch)	2 2	Assemble the Bagger
9	Weight Bolt (3/8 x 1-1/2 inches)	1 4	Instal the weight.
10	Support rod Gusset Spacer Bolt (5/16 x 2 inches) Bolt (1/4 x 1-3/4 inch) Washer (9/32 inch) Lock nut (1/4 inch) Quick attach bracket Hairpin cotter Bagger plate Bolt (1/4 x 1 inch)	1 2 4 4 4 12 8 1 1 2 4	Install the bagger support assembly.
11	Bagger top Grass Bag	1 2	Install the bagger assembly.
12	Discharge chute	1	Mount the discharge tube

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

Note: The installation of this attachment requires the information found in the *Operator's Manual*; you should have the manual at hand to reference during the installation.

1

Removing the Discharge Chute

No Parts Required

Procedure

1. Remove the bolt and nut securing the discharge chute to the mower deck (Figure 3). Remove the discharge chute and spring assembly. Retain all parts for future installation.

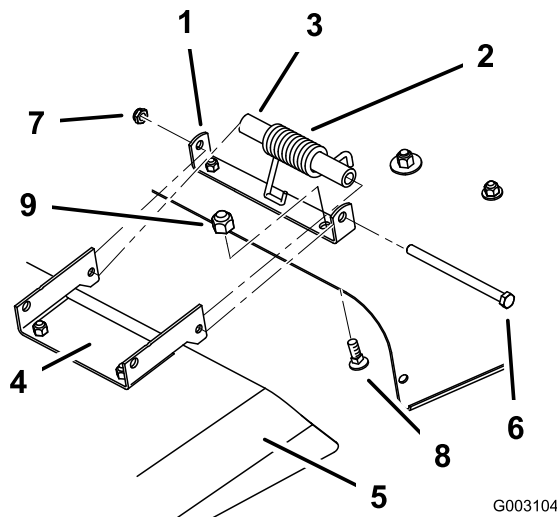


Figure 3

- | | |
|-----------------------------------|------------------------------------|
| 1. Mount bracket, discharge chute | 6. Bolt |
| 2. Spring, hooked ends down | 7. Locknut |
| 3. Spacer | 8. Carriage bolt (5/16 x 5/8 inch) |
| 4. Discharge chute, bracket | 9. Locknut (5/16 inch) |
| 5. Discharge chute | |

2. Remove the two carriage bolts and locknuts securing the mounting bracket to the mower (Figure 3). Remove the mounting bracket.
3. Install the two carriage bolts and locknuts into the open mower deck holes. Retain all parts for future installation.

2

Installing the Grass Baffle

Parts needed for this procedure:

1	Baffle, 48 inch
2	Carriage bolt, (5/16 x 3/4 inch)
1	Washer, (5/16 inch)
2	Locknut, (5/16 inch)

Procedure

Install the 48 inch grass baffle to the existing grass baffle with two carriage bolts (5/16 x 3/4 inch), washer (5/16 inch) and two locknuts (5/16 inch) as shown in Figure 4. Use the washer in the larger, upper hole when installing the 48 inch baffle to the existing baffle.

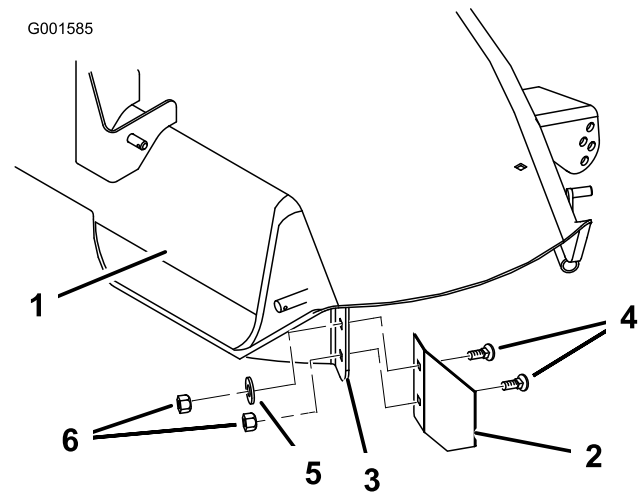


Figure 4

- | | |
|---------------------------|------------------------------------|
| 1. Mower deck | 4. Carriage bolt (5/16 x 3/4 inch) |
| 2. 48 inch baffle | 5. Washer (5/16 inch) |
| 3. Grass baffle, existing | 6. Locknut (5/16 inch) |

3

Installing the Blower Pivot Support

Parts needed for this procedure:

1	Pivot support
1	Bolt (5/16 x 3/4 inch)
1	Locknut (5/16 inch)
1	Jam nut (3/8 inch)
1	Washer (3/8 inch)

Procedure

1. Slide the pivot support over the threaded stud welded to the front of the mower near the discharge opening. Use the inside slot on the pivot support so that the pivot support is closest to the discharge opening (Figure 5).

Note: If necessary, remove any hardware in the mower deck interfering with the pivot support. Retain all hardware.

2. Align the pivot support parallel with the front curved edge of the mower deck and tight up against the top of the mower. (Figure 5).
3. Secure the pivot support to the mower with a bolt (5/16 x 3/4 inch) and a flange nut (5/16 inch) (Figure 5).
4. Place a jam nut (3/8 inch) and washer (3/8 inch) snug onto the stud. Do not overtighten the jam nut (Figure 5).
5. Remove the mower belt cover from the right side pulley (Figure 5).

Note: Save all parts and hardware for use when removing the blower.

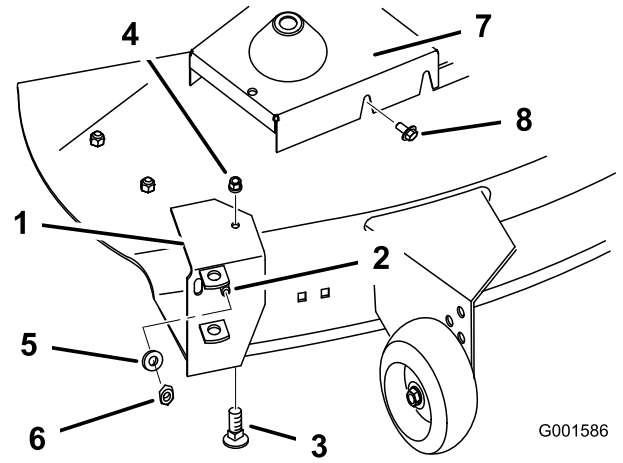


Figure 5

1. Pivot support
2. Threaded stud
3. Bolt (5/16 x 3/4 inch)
4. Flange nut (5/16 inch)
5. Washer (3/8 inch)
6. Jam nut (3/8 inch)
7. Mower belt cover
8. Fastener

4

Installing the Blower Pulley

Parts needed for this procedure:

1	Double pulley
---	---------------

Procedure

1. Pull on the mower idler assembly to release belt tension and remove the blade drive belt from the right side pulley; refer to the machine *Operator's Manual* for instructions.

Note: Block the blade with a piece of wood to stop it from turning while you remove the pulley nut. If the blade slips, hold the hex portion of the spindle with a wrench.

2. Remove the nut and lock washer from the right-hand blade spindle. Remove the single pulley.

Note: When the nut is removed the shaft is free to drop out of the spindle. Be sure to support the spindle and blade from the bottom side.

3. Slide the new double pulley onto the spindle shaft with the small pulley, facing up. Secure it with the previously removed 5/8 inch lock washer and nut (Figure 6).
4. Tighten the nut to 50-75 ft. lb. (68-101 N·m).

5. Install the existing mower belt onto the bottom pulley (Figure 6).
6. Pull on the mower idler assembly and install the existing mower belt by rotating it onto the idler pulley.

Note: Check that mower belt is properly located on the idler and pulleys.

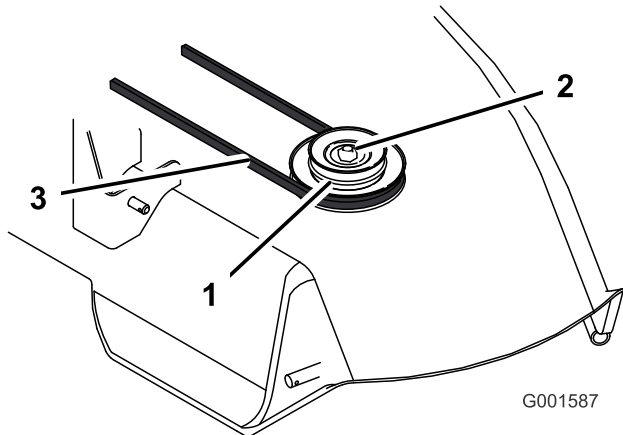


Figure 6

1. New double pulley, small pulley on top.
2. Lock washer and nut, 5/8 inch
3. Mower belt

5

Installing the Blower

Parts needed for this procedure:

1	Blower assembly
1	Belt

Procedure

1. Install the mower to the machine; refer to *Operator's Manual*.
2. Install the blower by lowering the pivot pin into the pivot support (Figure 7).

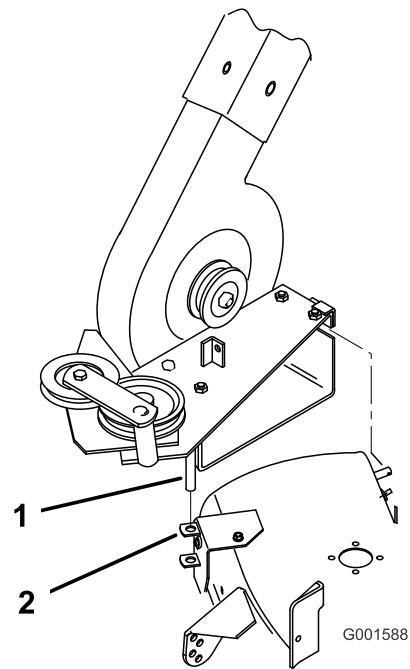


Figure 7

1. Pivot pin
2. Pivot support

3. Open the latch and swing the blower out away from the mower, install the blower belt around the idler and blower pulleys as shown Figure 8. Install the other end of the belt over the blower drive pulley on the mower spindle.

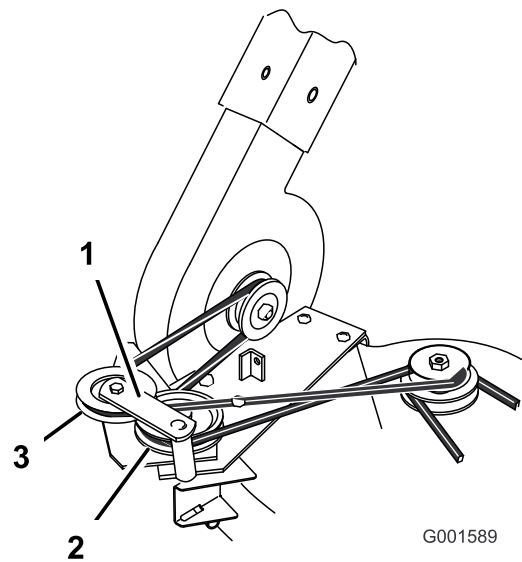


Figure 8

1. Idler pulley bracket and pulley
2. Top (wide) side of belt against bottom pulley
3. "V" side of belt into top pulley groove

4. With the belt installed, swing the blower toward the mower until the blower latch locks over the pin at the back of the mower (Figure 9).

Important: You may have to lift the blower slightly for the latch to close. Ensure that the latch operates *smoothly* and closes *completely*.

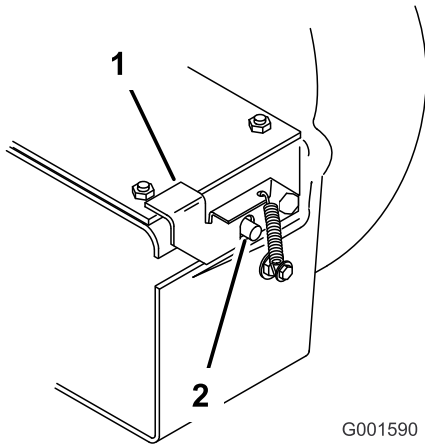


Figure 9

- 1. Blower latch
- 2. Pin

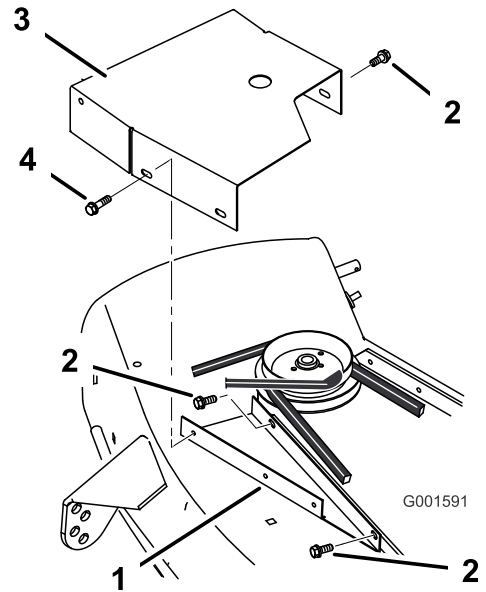


Figure 10

- 1. Belt cover bracket
- 2. Screw (1/4 x 3/8 inch)
- 3. Mower belt cover
- 4. Screw (1/4 x 1/2 inch)

3. Mount the blower belt cover using two (1/4 x 5/8 inch) bolts and two (1/4 inch) locknuts (Figure 11). Tighten the locknuts slightly so light drag is felt on the belt cover when it is tilted upward. The cover must close freely when assembled.

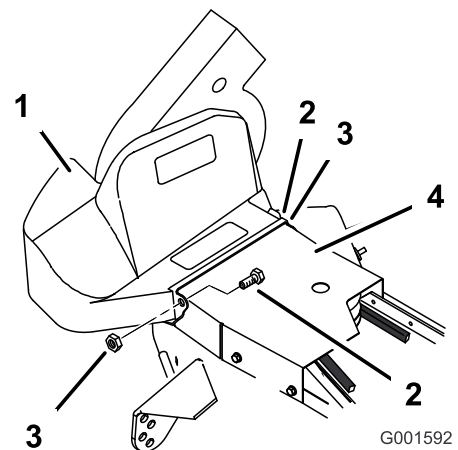


Figure 11

- 1. Blower belt cover
- 2. Bolt, 1/4 x 5/8 inch
- 3. Locknut, 1/4 inch
- 4. Mower belt cover

4. Adjust the mower belt cover by sliding it so the blower belt cover just touches the blower, but still opens freely. Tighten the mower belt cover mounting screws.

6

Installing the Belt Covers

Parts needed for this procedure:

1	Belt cover bracket
3	Screw (1/4 x 3/8 inch)
1	Mower belt cover
2	Screw (1/4 x 1/2 inch)
1	Blower belt cover
2	Bolt (1/4 x 5/8 inch)
2	Locknut (1/4 inch)

Procedure

1. Attach the belt cover bracket to the mower deck with two (1/4 x 3/8 inch) screws (Figure 10).
2. Attach the front of the mower belt cover loosely to the belt cover bracket with two (1/4 x 1/2 inch) screws. Attach the back of the mower belt cover loosely to the mower deck with a (1/4 x 3/8 inch) screw (Figure 10).

Note: Do not tighten the screws as adjustment must be made later.

7

Installing the Leveling Bracket

Parts needed for this procedure:

1	Leveling bracket
---	------------------

Procedure

1. Replace the left side mower leveling bracket (slotted) with a new leveling bracket (hole) as shown in Figure 12. Use the same leveling holes for the new bracket to keep the mower deck level. Secure it with the existing washers and hairpin cotters.

Note: Save the slotted leveling bracket for future side discharge operation.

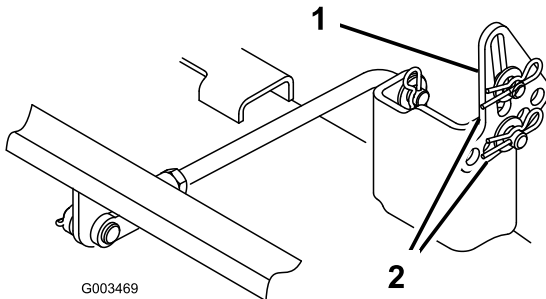


Figure 12

1. Hole leveling bracket
2. Washer and hairpin cotter

2. Check the mower level front-to-rear and side-to-side; refer to the *Operator's Manual* for instructions.

8

Assembling the Bagger

Parts needed for this procedure:

2	Bolt (1/4 x 3/4 inch)
2	Locknut (1/4 inch)

Procedure

If necessary, install the bagger frame to the cover. Attach the frame assembly to the bagger cover with two bolts (1/4 x 3/4 inch) and two locknuts (1/4 inch) (Figure 13).

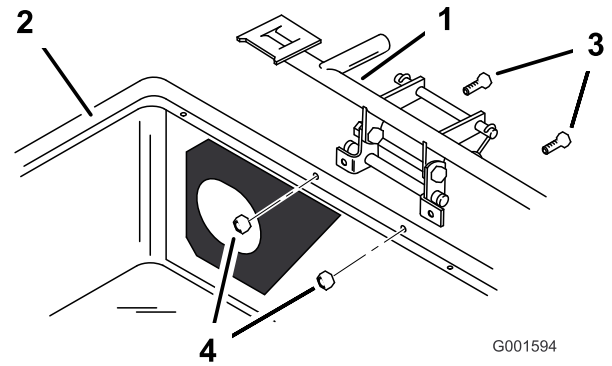


Figure 13

1. Frame assembly
2. Bagger cover
3. Bolt, 1/4 x 3/4 inch
4. Locknut (1/4 inch)

9

Installing the Weight

Parts needed for this procedure:

1	Weight
4	Bolt (3/8 x 1-1/2 inches)

Procedure



The bagger adds a lot of weight to the rear of the machine and may cause an unstable condition which could result in a loss of control.

Install the front weight.

Attach the weight to the front of the tractor with four screws (3/8 x 1-1/2 inches) Figure 14.

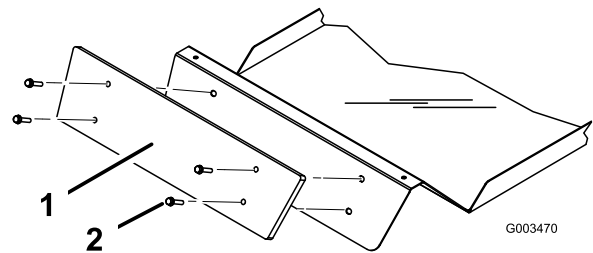


Figure 14

1. Front weight
2. Screw (3/8 x 1-1/2 inches)

10

Installing the Bagger Support Assembly

Parts needed for this procedure:

1	Support rod
2	Gusset
4	Spacer
4	Bolt (5/16 x 2 inches)
4	Bolt (1/4 x 1-3/4 inch)
12	Washer (9/32 inch)
8	Lock nut (1/4 inch)
1	Quick attach bracket
1	Hairpin cotter
2	Bagger plate
4	Bolt (1/4 x 1 inch)

Procedure

1. Remove the bolts, washers, and nuts holding the rear support rod to the tractor. Discard the bolts. Reuse the nut and washers.
2. Attach the support rod and gussets to the tractor with four bolts (5/16 x 2 inches) and four spacers and the washers and locknuts removed in the previous step (Figure 15).

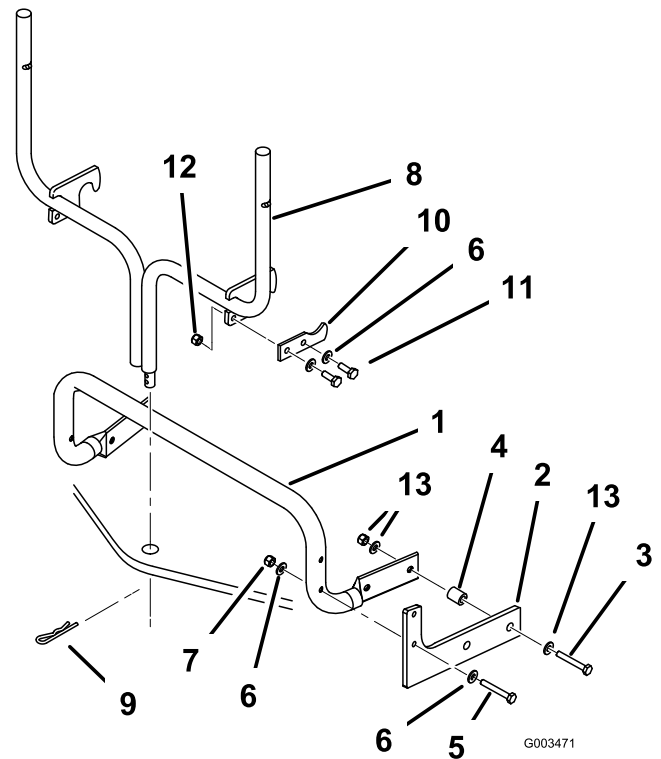


Figure 15

- | | |
|----------------------------|---------------------------|
| 1. Support rod | 8. Quick-attach bracket |
| 2. Gusset | 9. Hairpin cotter |
| 3. Bolt (5/16 x 2 inches) | 10. Bagger plate |
| 4. Spacer | 11. Bolt (1/4 x 3/4 inch) |
| 5. Bolt (1/4 x 1-3/4 inch) | 12. Lock nut (1/4 inch) |
| 6. Washer (1/4 inch) | 13. Existing hardware |
| 7. Lock nut (1/4 inch) | |
-
3. Secure the upper half of the gusset to the rear support rod with four bolts (1/4 x 1-3/4 inch), eight washers (1/4 inch), and four locknuts (1/4 inch) (Figure 15).
 4. Slide the bottom of the quick-attach bracket down into the hole in the hitch and hook the notches over the rear support rod (Figure 15)
 5. Slide the hairpin cotter through the hole at the bottom of the quick-attach bracket (Figure 15)
 6. Attach the bagger plates to the quick-attach bracket using four bolts (1/4 x 1-3/4 inch), four washers (1/4 inch), and four locknuts (1/4 inch) (Figure 15)

11

Installing the Bagger Assembly

Parts needed for this procedure:

1	Bagger top
2	Grass Bag

Procedure

1. Carefully lift the bagger top and slide it onto the quick attach bracket (Figure 16). The bagger top is easier to install if two people work together.

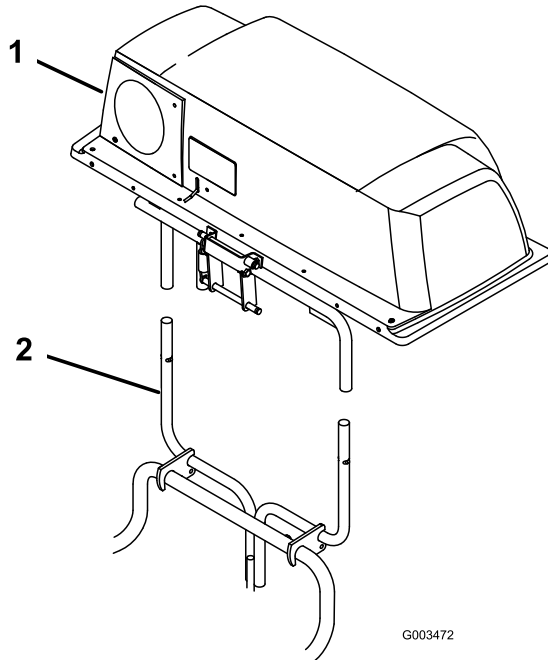


Figure 16

1. Bagger top
2. Quick attach bracket

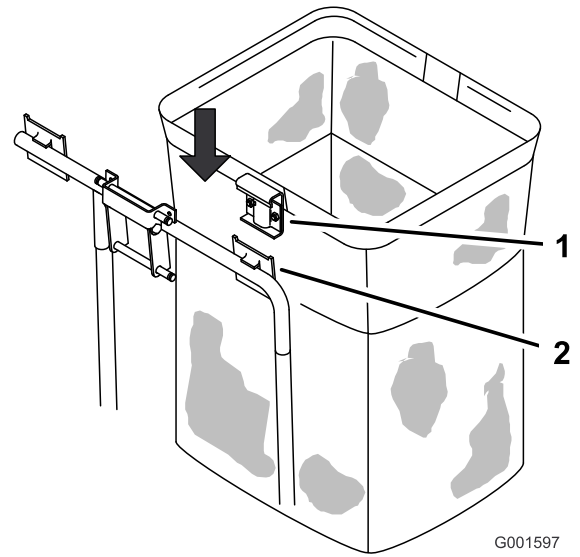


Figure 17

1. Bag frame hook
2. Retaining bracket

3. Lower the bagger top onto the bags. Then push down on both bag retainer handles until they lock on the bag frame (Figure 18).

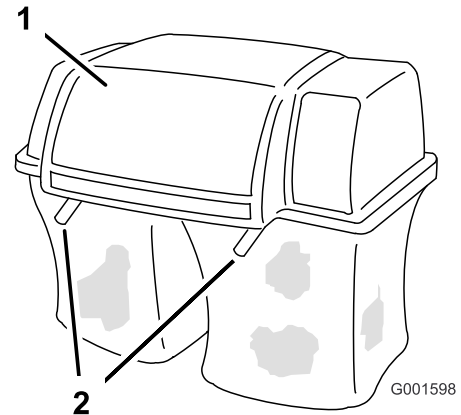


Figure 18

1. Bagger top
2. Bag retainer handles



If you remove the spring-loaded bagger top when it is closed (in the down position), the top may suddenly fly open and you or someone else may be bruised, pinched, or injured in another way.

Always open (raise) the bagger top before you remove or install it on the quick-attach bracket.

2. Install the bags by sliding the bag frame hooks onto the retaining brackets (Figure 17).

12

Mounting the Discharge Tube

Parts needed for this procedure:

1	Discharge chute
---	-----------------

Procedure

1. Insert the upper end of the discharge tube into the bagger top. Slide the lower end of the discharge

tube into the blower discharge extension opening (Figure 19).

- Hook the rubber latch onto the knob (Figure 19).

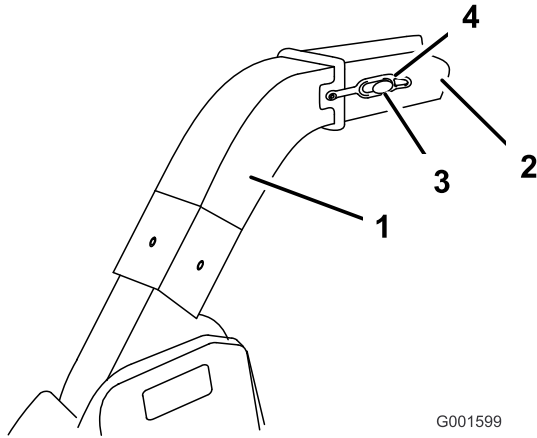


Figure 19

- | | |
|-------------------------------|-----------------|
| 1. Blower discharge extension | 3. Rubber latch |
| 2. Discharge tube | 4. Knob |

Operation

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



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.

Using the Full Bag Tester

As grass is cut and blown into the bags, the left bag fills first, then the right bag. If you overfill the bags, grass will eventually plug the discharge tube or elbow.

1. Stop the machine and apply the brake.
2. To check if both bags are full, periodically raise the full bag tester handle (Figure 20). If you feel resistance as you raise the handle, the bags must be emptied because they are full (Figure 20).

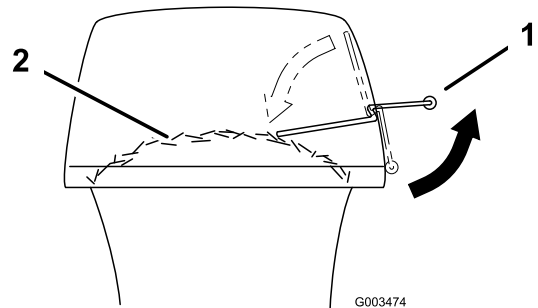


Figure 20

- | | |
|---------------------------|-------------|
| 1. Full bag tester handle | 2. Bag full |
|---------------------------|-------------|

Emptying the Grass Bags

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

1. Stop the mower, set the parking brake, and disengage the blade control switch (PTO). Stop the engine and remove the ignition key.
2. Pull up on both bag retainer handles until they unlock from the bag frame (Figure 21). Open (raise) the bagger top.

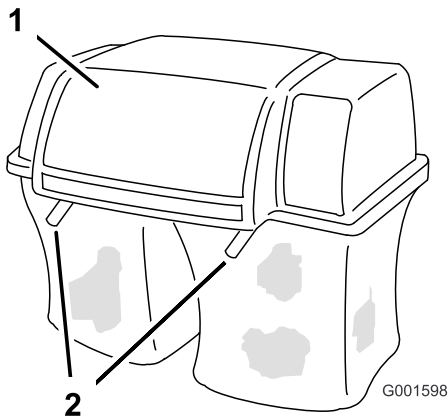


Figure 21

1. Bagger top
2. Bag retainer handles

3. 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.
4. Install the bags by sliding the bag frame hooks onto the retaining brackets (Figure 22).

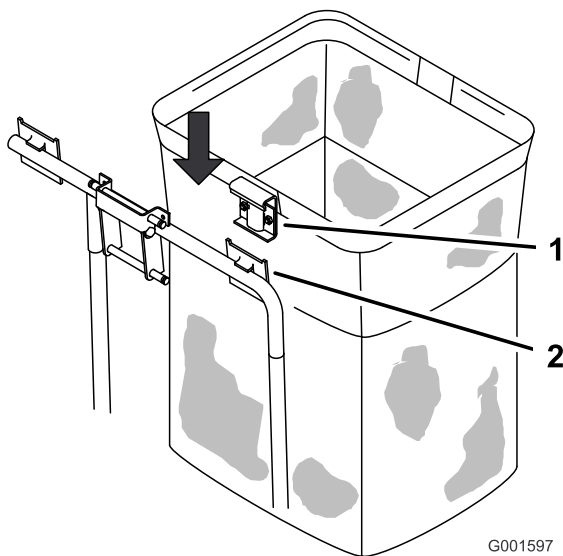


Figure 22

1. Bag frame hook
2. Retaining bracket

5. Lower the bagger top onto the bags. Then push down on both bag retainer handles until they lock on the bag frame.

Clearing Obstructions from the Bagger

1. Stop the mower, shift into neutral, set the parking brake, disengage the blade control switch, stop the engine, and remove the ignition key. Wait for all moving parts to stop.
2. Check the grass bags and empty them if they are full.
3. 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.
4. After you remove the obstruction, install the complete bagger system and resume operation.

Removing the Vac-Bagger



An uncovered discharge opening could allow the lawn mower to throw objects in the operator 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.

Removing the Discharge Tube

1. Unhook the rubber latch onto the knob (Figure 23).
2. Slide the lower end of the discharge tube out of the blower discharge extension opening (Figure 23). Pull the upper end of the discharge tube out of the bagger top.

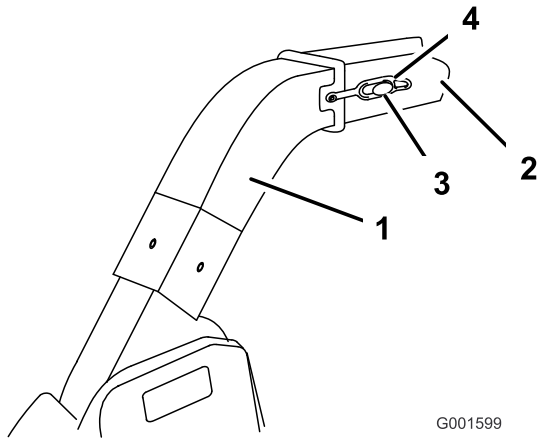


Figure 23

- | | |
|-------------------------------|-----------------|
| 1. Blower discharge extension | 3. Rubber latch |
| 2. Discharge tube | 4. Knob |

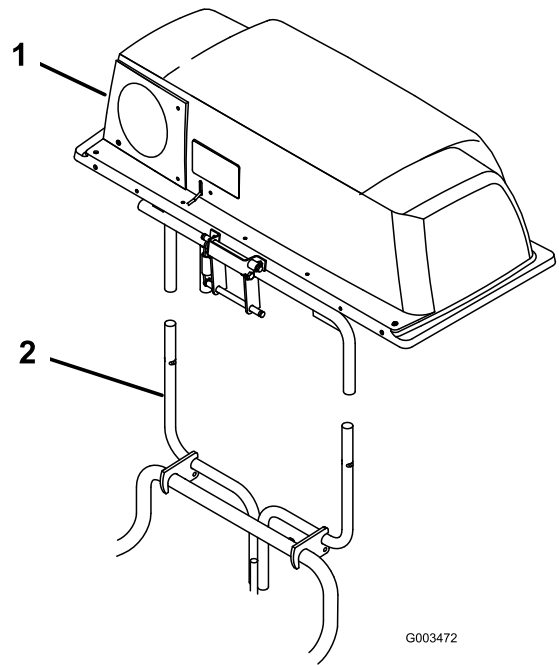


Figure 25

- | | |
|---------------|-------------------------|
| 1. Bagger top | 2. Quick attach bracket |
|---------------|-------------------------|

Removing the Bagger

1. Raise the bagger top and remove the grass bags from the bag frame (Figure 24).

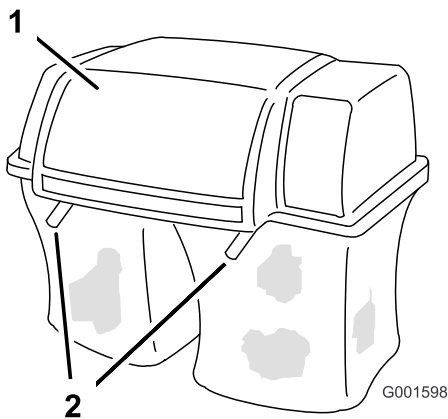


Figure 24

- | | |
|---------------|-------------------------|
| 1. Bagger top | 2. Bag retainer handles |
|---------------|-------------------------|

3. Remove the plates and fasteners from the quick-attach bracket (Figure 26).

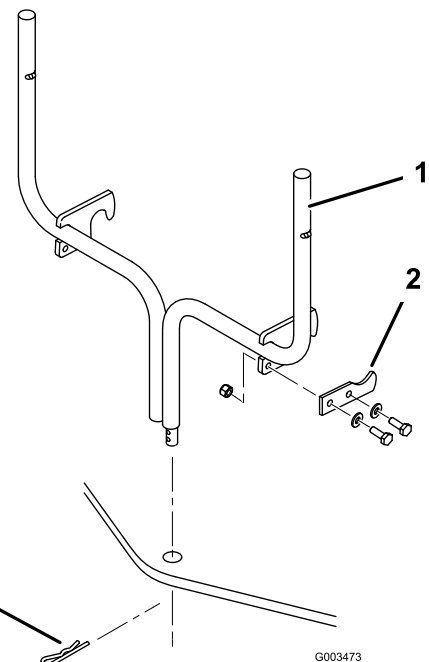


Figure 26

- | | |
|-------------------------|-------------------|
| 1. Quick-attach bracket | 3. Hairpin cotter |
| 2. Plate | |

4. Remove the hairpin cotter from the hole at the bottom of the quick-attach bracket (Figure 26).
5. Slide the bottom of the quick-attach bracket up out of the hole in the hitch (Figure 26).



If you remove the spring-loaded bagger top when it is closed (in the down position), the top may suddenly fly open and you or someone else may be bruised, pinched, or injured in another way.

Always open (raise) the bagger top before you remove or install it on the quick-attach bracket.

2. Carefully lift the bagger top and slide it off the quick attach bracket (Figure 25). The bagger top is easier to remove if two people work together.

Removing the Belt Covers

1. Remove the blower belt cover by removing two (1/4 inch) locknuts and (1/4 x 5/8 inch) bolts (Figure 27).

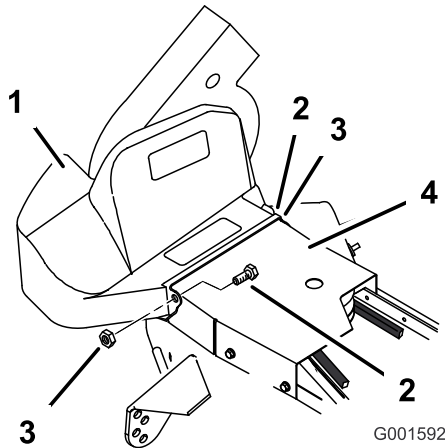


Figure 27

- | | |
|--------------------------|-----------------------|
| 1. Blower belt cover | 3. Locknut (1/4 inch) |
| 2. Bolt (1/4 x 5/8 inch) | 4. Mower belt cover |

2. Remove the mower belt cover and belt cover bracket from the right side pulley (Figure 28).

Note: Save all parts and hardware for use when installing blower.

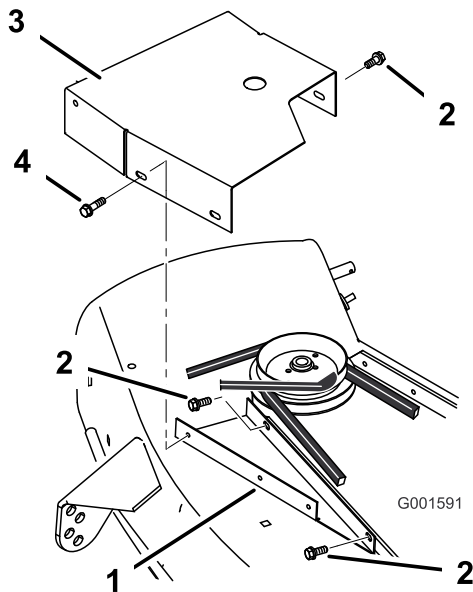


Figure 28

- | | |
|---------------------------|---------------------------|
| 1. Belt cover bracket | 3. Mower belt cover |
| 2. Screw (1/4 x 3/8 inch) | 4. Screw (1/4 x 1/2 inch) |

Removing the Blower from the Mower

1. Open the latch and swing the blower out away from the mower, remove the blower belt from the mower pulley (Figure 29).

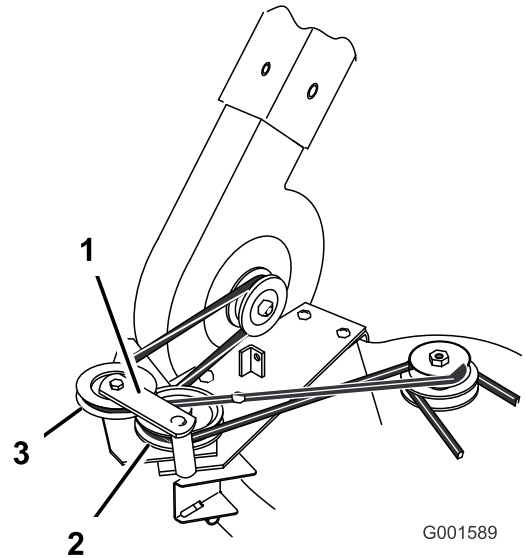


Figure 29

- | | |
|--|--|
| 1. Idler pulley bracket and pulley | 3. "V" side of belt into top pulley groove |
| 2. Top (wide) side of belt against bottom pulley | |

2. Remove the blower by lifting the pivot pin out of the pivot support (Figure 30).

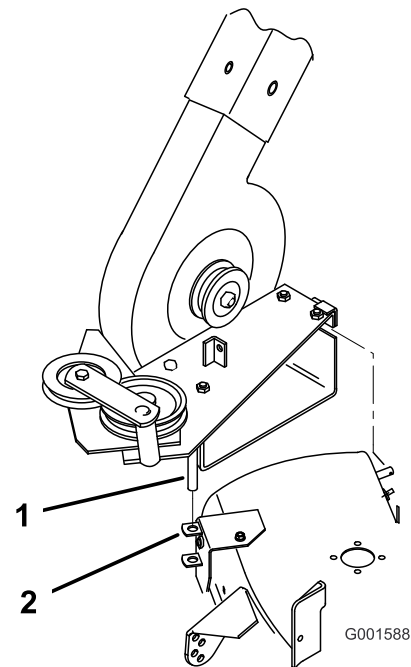


Figure 30

- | | |
|--------------|------------------|
| 1. Pivot pin | 2. Pivot support |
|--------------|------------------|

Removing the Blower Pulley from the Mower

1. Pull on mower idler assembly to release belt tension and remove blade drive belt from right side pulley (Figure 31).

Note: Block blade with a piece of wood to stop it from turning while you remove the pulley nut. If blade slips hold hex portion of spindle with a wrench.

2. Remove nut and lock washer from right hand blade spindle (Figure 31). Remove double pulley.

Note: When nut is removed the shaft is free to drop out of the spindle. Be sure to support the spindle and blade from the bottom side.

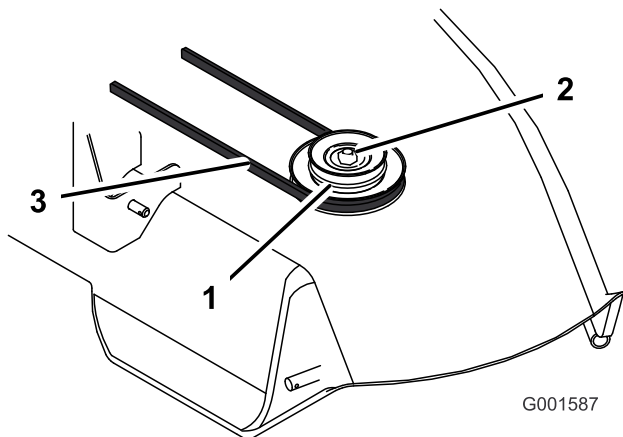


Figure 31

1. New double pulley, small
2. Lock washer and nut, 5/8 inch
3. Mower belt

3. Slide the single pulley onto the spindle shaft. Secure with previously removed lock washer and nut (Figure 32).
4. Tighten the nut to 50-75 ft. lb. (68-101 N·m).
5. Install the existing mower belt by rotating it onto the pulley (Figure 32).

Note: Check that mower belt is properly located on idler and pulleys.

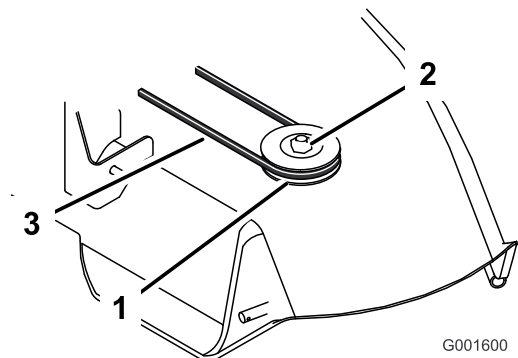


Figure 32

1. Single groove pulley
2. Lock washer and nut
3. Mower belt

Removing the Blower Pivot Support

1. Remove the pivot support and pivot bracket from the mower (Figure 33).

Note: Save all parts and hardware for use when installing blower.

2. Install the previously removed hardware in the open hole of the mower for safety (Figure 33).
3. Install the mower belt cover using existing hardware (Figure 33).

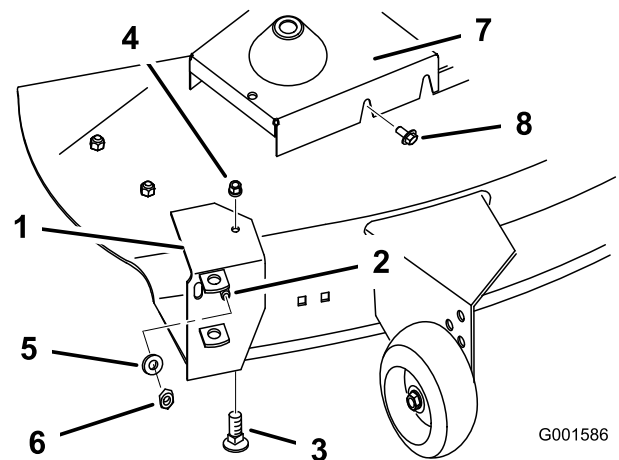


Figure 33

1. Pivot support
2. Threaded stud
3. Bolt (5/16 x 3/4 inch)
4. Flange nut (5/16 inch)
5. Washer (3/8 inch)
6. Jam nut (3/8 inch)
7. Mower belt cover
8. Fastener



Open holes in the mower expose you and others to thrown debris which could cause injury.

Never operate the mower without hardware mounted in all holes in the mower.

Removing the Grass Baffle

Remove the two carriage bolts (5/16 x 3/4 inch), one washer (5/16 inch) and two locknuts (5/16 inch), as shown in Figure 34, securing the 48 inch baffle to the existing grass baffle. Remove the 48 inch grass baffle.

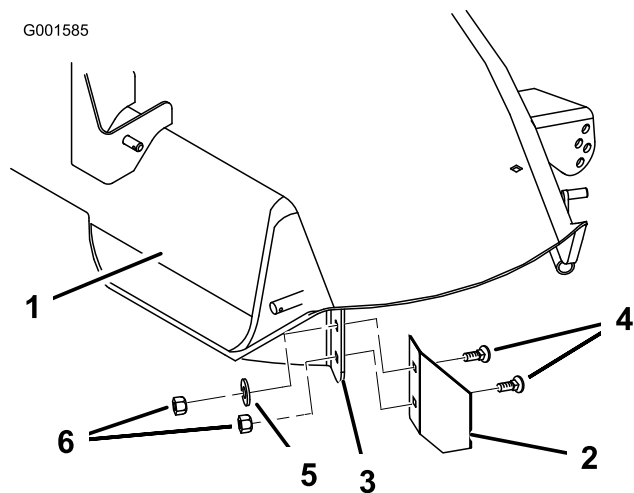


Figure 34

- | | |
|---------------------------|------------------------------------|
| 1. Mower deck | 4. Carriage bolt (5/16 x 3/4 inch) |
| 2. 48 inch baffle | 5. Washer (5/16 inch) |
| 3. Grass baffle, existing | 6. Locknut (5/16 inch) |

Install the Discharge Chute



Without the grass deflector, discharge cover, or complete grass catcher assembly mounted in place, you and others are exposed to blade contact and thrown debris. Contact with the rotating mower blade(s) and thrown debris will cause injury or death.

- Never remove the grass deflector from the mower because the grass deflector routes material down toward the turf. If the grass deflector is ever damaged, replace it immediately.
- Never put your hands or feet under the mower.
- Never try to clear the discharge area or mower blades unless you move the blade control switch (PTO) to Off and rotate the ignition key to Off. Also remove the key and pull the wire off of the spark plug(s).

1. Install the mounting bracket onto the mower with carriage bolts (5/16 x 5/8 inch) and locknuts (5/16 inch) as shown in Figure 35.
2. Install the discharge chute onto the mower (Figure 35) in between the mounting brackets.

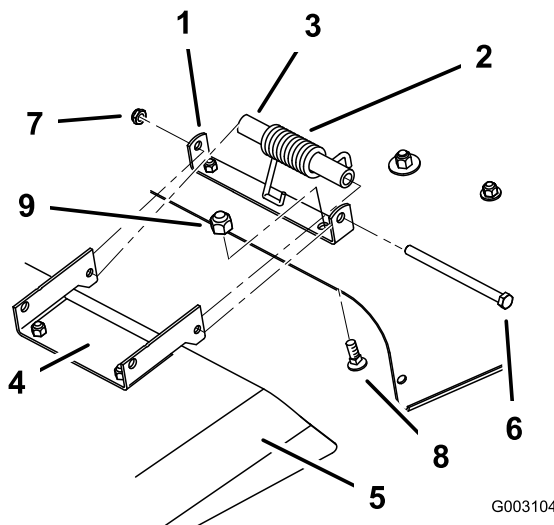


Figure 35

- | | |
|-----------------------------------|------------------------------------|
| 1. Mount bracket, discharge chute | 6. Bolt |
| 2. Spring, hooked ends down | 7. Locknut |
| 3. Spacer | 8. Carriage bolt (5/16 x 5/8 inch) |
| 4. Discharge chute, bracket | 9. Locknut (5/16 inch) |
| 5. Discharge chute | |

3. Align the discharge chute with the holes in the brackets and the spring and spacer in the space between the brackets and above the deflector (Figure 35).
4. Place the spring and spacer so that the hooked ends of the spring are pointing down, with one end contacting on the mower deck and the other over the deflector (Figure 35).
5. Secure the deflector to the mower bracket with the bolt. The bolt should pass through the grass deflector, spring, spacer, and brackets. Secure the assembly with the locknut (Figure 35).
6. Lift the discharge chute and check that it is spring loaded and pivots freely to the full down position.

Note: It may be helpful to press down near the end of the bolt with a 9/16 inch open end wrench to align the bolt with the second hole on the mower bracket and grass deflector.

Important: The discharge chute must be spring loaded in the down position. Lift the deflector up to test that it snaps to the full down position.

Mounting the Mower

1. Install the mower onto the machine; refer to *Operator's Manual* for instructions.
2. Replace the left side mower leveling bracket (hole) with the slotted leveling bracket (Figure 36). Secure it with the existing washers and hairpin cotters.

Note: Save the (hole) leveling bracket for use when the blower is installed.

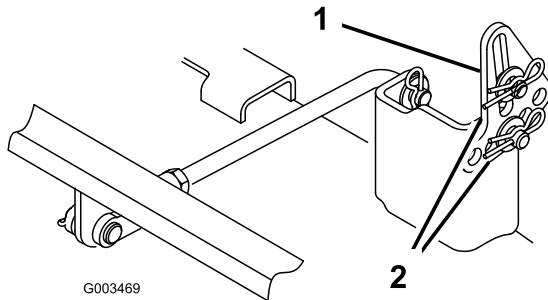


Figure 36

1. Hole leveling bracket
2. Washer and hairpin cotter

3. Check the mower level front-to-rear and side-to-side; refer to the *Operator's Manual* for instructions.

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.



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 switch. Then back down the hill using a slow speed.
- Do not change speeds or stop on slopes.

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 10 hours	<ul style="list-style-type: none">• Inspect the bagger
Before each use or daily	<ul style="list-style-type: none">• Clean the bagger
Before storage	<ul style="list-style-type: none">• Inspect the bagger• Clean the bagger



If you leave the key in the ignition switch, someone could accidentally 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.



Debris built up in the engine compartment, if not removed, could be ignited by a hot engine. A fire in the engine compartment could burn you and others and can damage property.

- Before using and while the engine is cool, check for debris in the engine compartment.
- Keep the machine free of grass, leaves, or other debris build-up.
- Clean up oil or fuel spillage and fuel soaked debris.
- Allow the machine to cool before storing.

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 the grass bags for deterioration.



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

- Frequently 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

Washing the grass bags is not recommended.

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

1. 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 automotive detergent to remove stubborn dirt.
2. Make sure you remove matted grass from all parts.
3. After washing, let all of the parts dry thoroughly. Do not wash the grass bags.

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:



Consumer
TimeCutter
ZX

The Toro Total Coverage Guarantee

A Three-Year Full Warranty (Limited Warranty for Commercial Use)

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to repair any Toro Product used for normal residential purposes* if defective in materials or workmanship. The following time periods apply from the date of purchase:

Products	Warranty Period
All TimeCutter ZX Mowers and Attachments	3 year full warranty
All Batteries	1 year full warranty

This warranty covers both the cost of parts and labor, and transportation within a fifteen mile radius of the servicing dealer. This warranty applies to all consumer TimeCutter ZX Mowers and their attachments.

* Normal residential purposes 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.

Limited Warranty for Commercial Use

Toro Consumer Products and attachments used for commercial, institutional, or rental use are warranted against defects in materials or workmanship for the following time periods from the date of purchase:

Products	Warranty Period
Air Cooled Gas Engines	90 day limited warranty
All other items	30 day limited warranty

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 Toro Authorized or Master 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 website at www.Toro.com. U.S. Customers may also call toll free: 866-216-6029 to use our 24-hour Toro dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer.

If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at:

Customer Care Department, Consumer Division
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
Toll Free: 866-216-6029 (U.S. customers)
Toll Free: 866-216-6030 (Canada customers)

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.

Items and Conditions Not Covered

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

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune-up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months.
- Pickup and delivery charges for distances beyond a fifteen mile radius from an Authorized Toro Service Dealer.

General Conditions

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

Repair by an Authorized Toro Service 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.

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 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. If all other remedies fail, you may contact us at Toro Warranty Company.