Form No. 3437-322 Rev A

TORO®

Count on it.

Operator's Manual

48in, 52in, or 60in Blower and Drive Kit

E-Z Vac™ Standard Bagger Zero-Turn-Radius Riding Mower

Model No. 78401—Serial No. 400000000 and Up
Model No. 78402—Serial No. 400000000 and Up
Model No. 78403—Serial No. 400000000 and Up
Model No. 78404—Serial No. 400000000 and Up
Model No. 78405—Serial No. 400000000 and Up
Model No. 78406—Serial No. 400000000 and Up

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

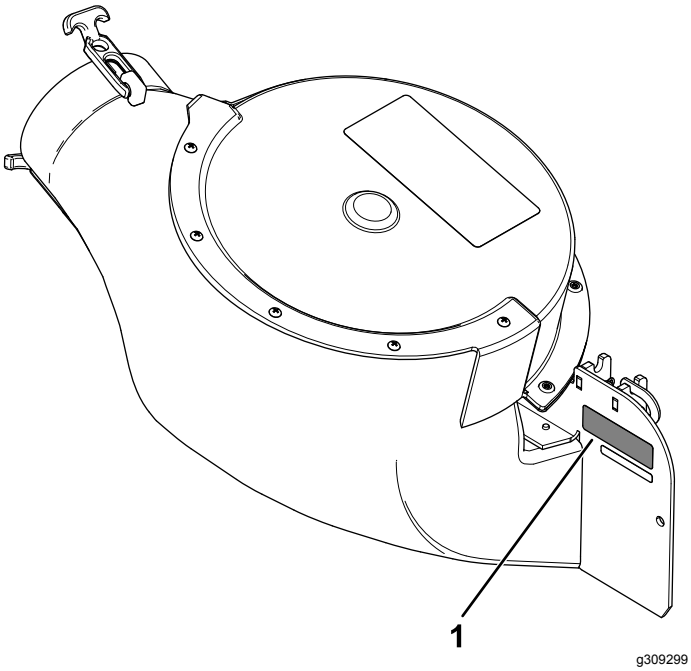
3437-322 A

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.

Visit www.Toro.com for product safety and operation training materials, 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.



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Figure 1

1. Blower 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.



g000502

Figure 2

Safety-alert symbol

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

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Safety

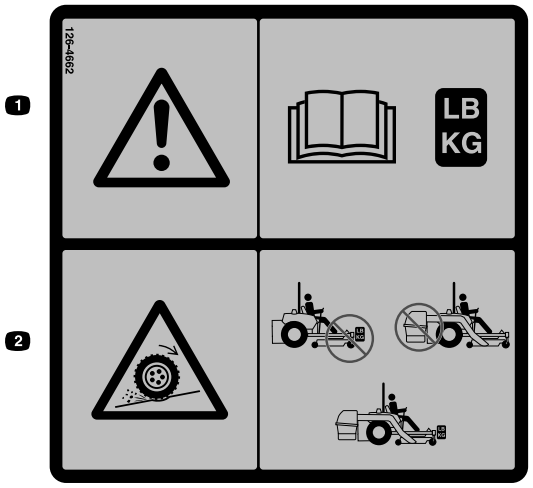
Safety and Instructional Decals

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 missing.



decal133-8061

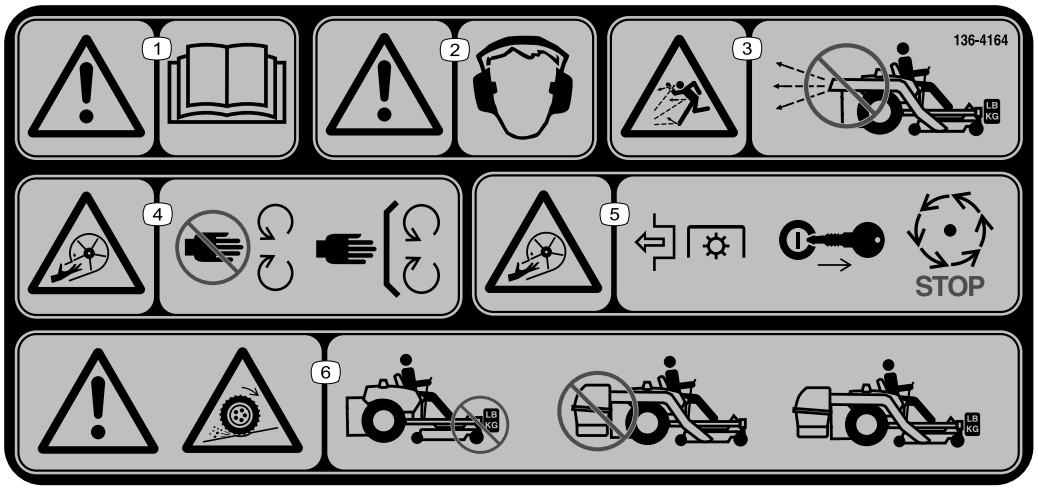
133-8061



decal126-4662

126-4662

1. Warning—read the *Operator's Manual* for the correct quantity of counterbalance weight(s).
2. Loss of traction and steering or reduced stability hazard—Ez Vac counterbalance weight(s) installed without the Ez Vac may cause loss of traction and steering control. The Ez Vac installed without the Ez Vac counterbalance weight(s) can cause reduced stability. Install weight(s) only when the Ez Vac is installed.



decal136-4164

136-4164

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

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	No parts required	–	Remove the existing belt cover, bracket, and discharge chute.
3	Blower-pulley assembly Belt-cover bracket Speed nut Carriage bolt (1/4 x 3/4 inch) Locknut (1/4 inch) Locknut (3/8 inch) Blower pulley Locknut (3/4 inch) Washer Pulley mount	1 1 1 2 2 3 1 1 1 1	Install the blower-pulley assembly.
4	Baffle Carriage bolt (5/16 x 7/8 inch) Flange nut (5/16 inch) Carriage bolt (3/8 x 7/8 inch) Flange nut (3/8 inch)	1 1 1 2 2	Install the baffle.
5	Blower assembly Blower belt Pivot pin Roll pin	1 1 1 1	Install the blower assembly.
6	Blower-belt cover Knob	1 1	Install the blower belt and belt cover.

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

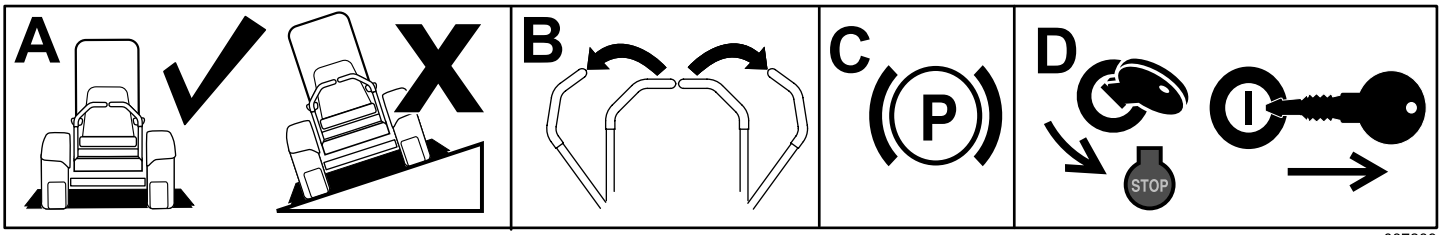
1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface.
2. Move the motion-control levers to the NEUTRAL-LOCK position.
3. Engage the parking brake.
4. Shut off the engine and remove the key.



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Figure 3

2

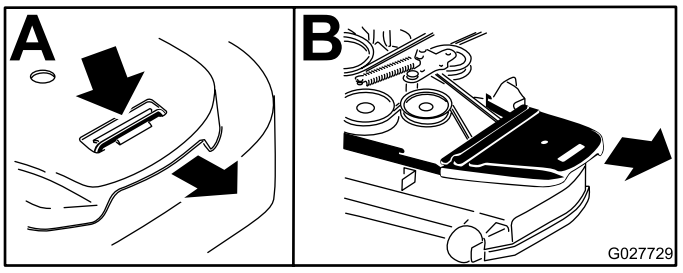
Removing the Existing Belt Cover, Bracket, and Discharge Chute

No Parts Required

Procedure

Note: Clean the area around the belt cover before removing it.

1. Lower the mower deck to the lowest height-of-cut position.
2. Remove the right belt cover (Figure 4).



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Figure 4

3. Remove the right belt-cover bracket, **2 washers (60-inch mower deck only)**, and 2 flange nuts from the mower deck (Figure 5).

   Note: Retain the hardware that you removed during this procedure so that it is available for changeover.

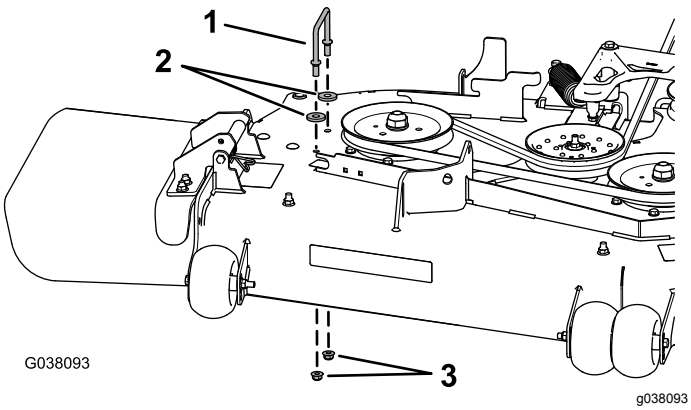


Figure 5

1. Right belt-cover bracket
2. Washers-only on 152 cm (60 inch) mower deck
3. Flange nuts

4. Remove the locknut, bolt, spring, and spacer securing the deflector to the pivot brackets (Figure 6).

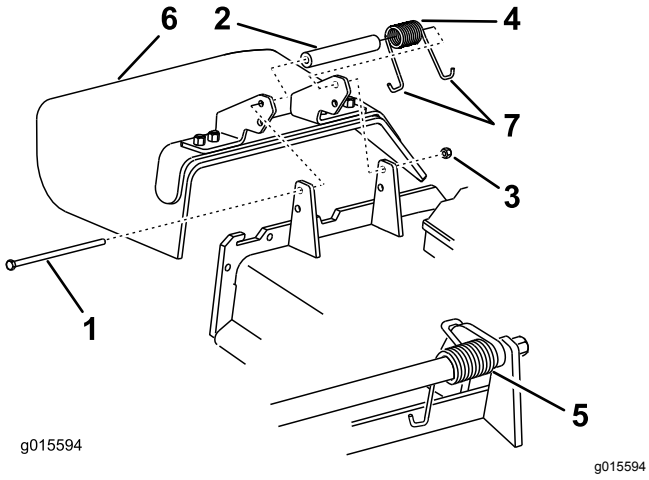


Figure 6

1. Bolt
2. Spacer
3. Locknut
4. Spring
5. Spring installed
6. Grass deflector
7. J-hook end of spring

5. Remove the grass deflector (Figure 6).

3

Installing the Blower-Pulley Assembly and Belt-Cover Bracket

Parts needed for this procedure:

1	Blower-pulley assembly
1	Belt-cover bracket
1	Speed nut
2	Carriage bolt (1/4 x 3/4 inch)
2	Locknut (1/4 inch)
3	Locknut (3/8 inch)
1	Blower pulley
1	Locknut (3/4 inch)
1	Washer
1	Pulley mount

Procedure

1. On the machine, remove the spring tension from the spring-loaded idler pulley; refer to Figure 7 or Figure 9.

   Note: For blower Models 78401, 78402, and 78403, use the spring-removal tool (Toro Part No. 92-5771) to remove the spring from the mower-deck post (Figure 8).

   Note: For blower Models 78404, 78405, and 78406, use a ratchet in the square hole in the idler arm to remove tension on the idler spring (Figure 9).

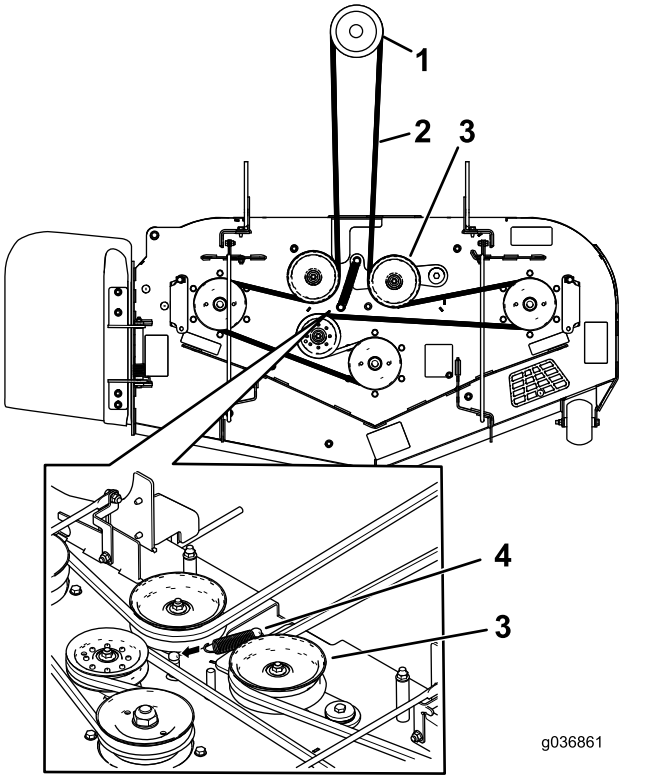


Figure 7

For Models 78401, 78402, and 78403

1. Clutch pulley
2. Mower belt
3. Spring-loaded idler pulley
4. Spring

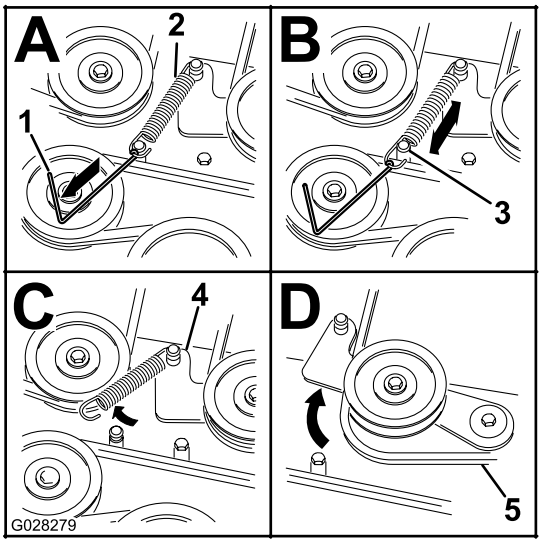


Figure 8

For Models 78401, 78402, and 78403

1. Spring-removal tool (Toro Part No. 92-5771)
2. Idler spring
3. Mower-deck post
4. Idler arm
5. Mower belt

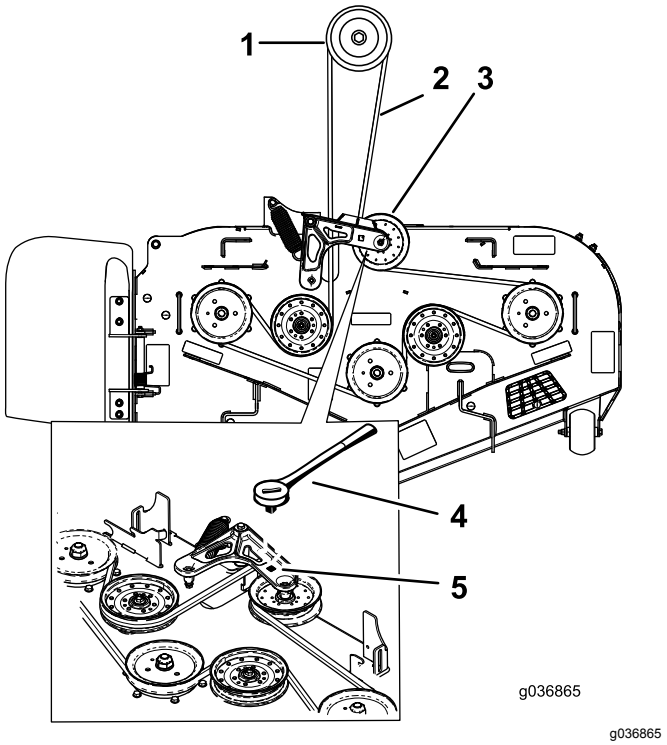


Figure 9

For Models 78404, 78405, and 78406

1. Clutch pulley
2. Mower belt
3. Spring-loaded idler pulley
4. Ratchet
5. Square hole in the idler arm for the ratchet

2. Remove the belt from the right mower-deck pulley.
3. Use a wrench (1-1/2 inches) to hold the spindle shaft, as you remove the locknut (3/4 inch) and washer from the spindle shaft (Figure 10).

   Note: Set aside the locknut (3/4 inch) and washer for blower Models 78404, 78405, and 78406.

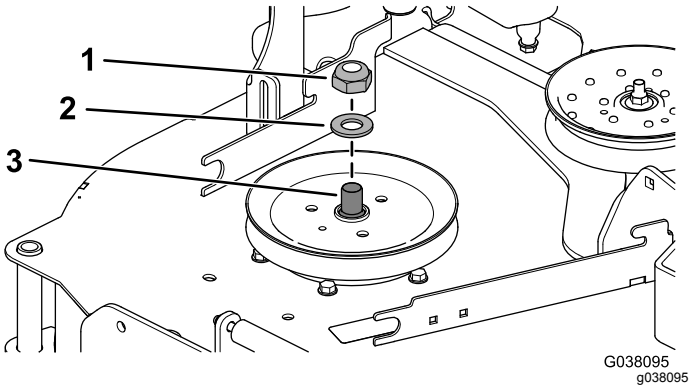


Figure 10

1. Locknut (3/4 inch)
2. Washer
3. Right spindle shaft

4. Use a wrench (1-1/2 inches) to hold the spindle shaft, as you install the double pulley onto the right spindle shaft.
   - For **blower Models 78401, 78402, and 78403**, perform the following procedure:
     A. Use the locknut (3/4 inch) and washer to secure the new double pulley onto the right spindle shaft (Figure 11).
     B. Torque the locknut (3/4 inch) to 176 to 217 N·m (130 to 160 ft-lb).

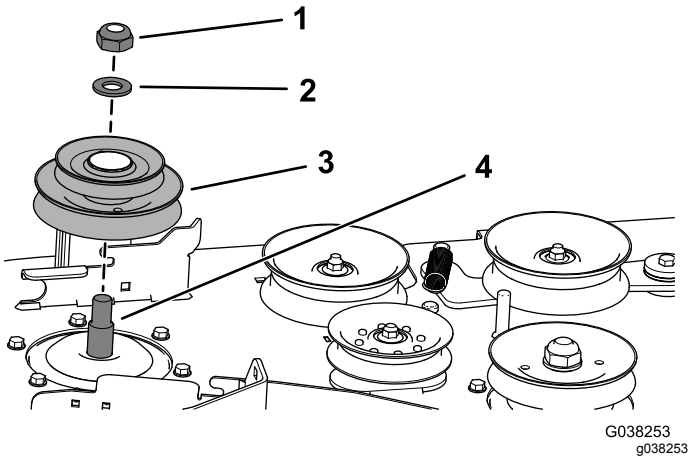


Figure 11

1. Locknut (3/4 inch)
2. Washer
3. Double pulley
4. Right spindle shaft

   - For **blower Models 78404, 78405, and 78406**, perform the following procedure:
     A. Insert the threaded studs on pulley mount through the holes in the deck pulley (Figure 12).
     B. Use the locknut (3/4 inch) and washer that you set aside earlier to secure the deck pulley to the spindle shaft (Figure 12).
     C. Torque the locknut (3/4 inch) to 176 to 217 N·m (130 to 160 ft-lb).
     D. Arrange the blower pulley onto the threaded studs and loosely install the locknut (Figure 12).
     E. Rotate the blower pulley clockwise until it stops.
     F. Torque the 3 locknuts to 18 N·m (13 ft-lb).

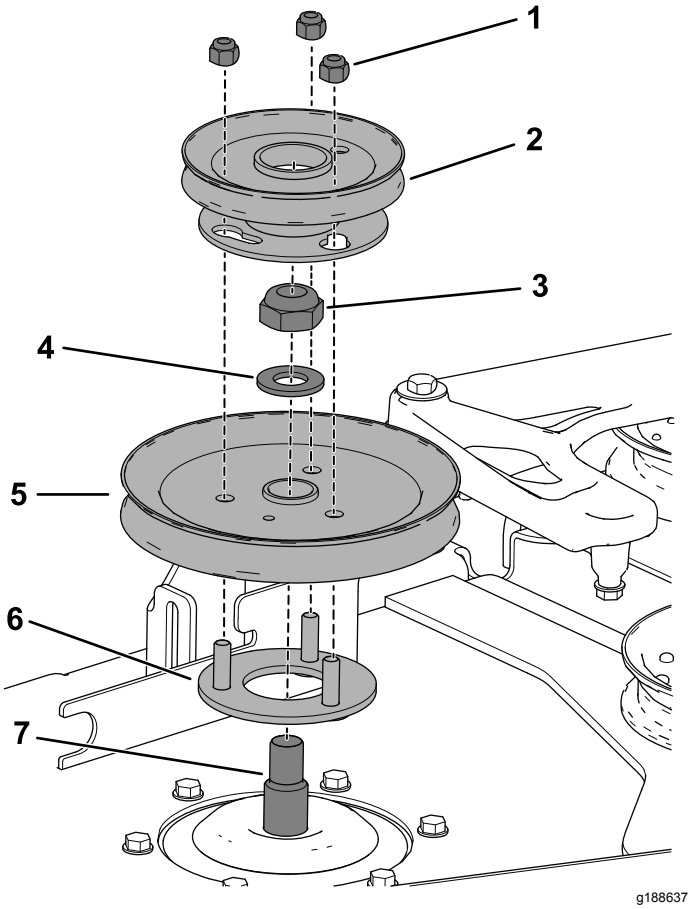


Figure 12

1. Locknut (3/8 inch)
2. Blower pulley
3. Locknut (3/4 inch)
4. Washer
5. Existing deck pulley
6. Pulley mount
7. Right spindle shaft

5. Ensure that the blade bolt is torqued to 115 to 149 N·m (85 to 110 ft-lb).

6. Install the mower belt around the lower pulley of the double pulley (Figure 13).

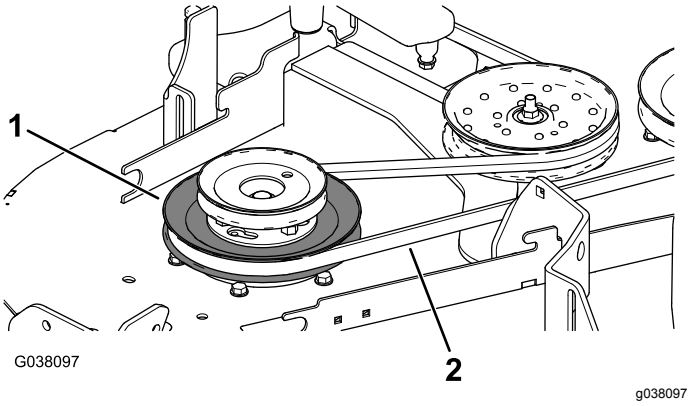


Figure 13

1. Lower pulley
2. Mower belt

7. Install the belt-cover bracket to the mower deck using 2 carriage bolts (1/4 x 3/4 inch) and 2 locknuts (1/4 inch) as shown in Figure 14.
8. Install the speed nut onto the belt-cover bracket (Figure 14).

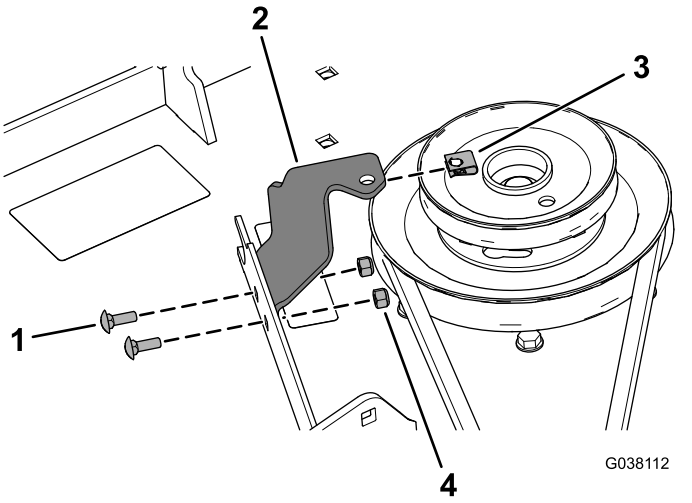


Figure 14

1. Carriage bolt (1/4 x 3/4 inch)
2. Belt-cover bracket
3. Speed nut
4. Locknut (1/4 inch)

9. Install the mower deck belt around the spring-loaded idler pulley (Figure 7 or Figure 9).
10. Use the spring-removal tool (Toro Part No. 92-5771) to attach the spring to the spring-loaded idler pulley.

4

Installing the Baffle

Parts needed for this procedure:

1	Baffle
1	Carriage bolt (5/16 x 7/8 inch)
1	Flange nut (5/16 inch)
2	Carriage bolt (3/8 x 7/8 inch)
2	Flange nut (3/8 inch)

Procedure

1. Remove the 2 existing flange nuts (3/8 inch) and 2 carriage bolts (3/8 x 7/8 inch) from the mower deck (Figure 15).

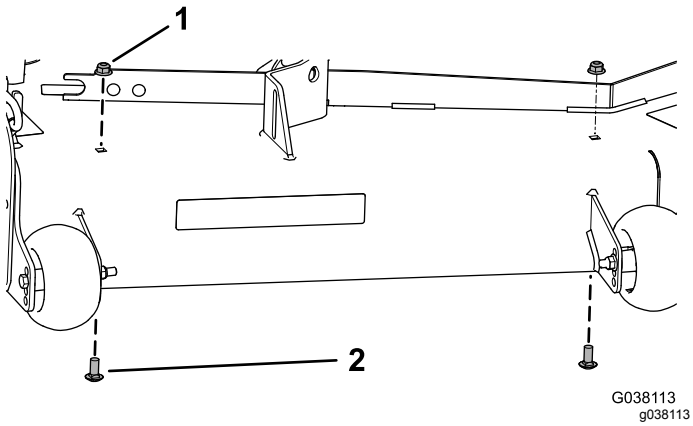


Figure 15

1. Flange nut (3/8 inch)
2. Carriage bolt (3/8 x 7/8 inch)

2. Install the baffle using the carriage bolt (5/16 x 7/8 inch), flange nut (5/16 inch), 2 carriage bolts (3/8 x 7/8 inch), and 2 flange nuts (3/8 inch) as shown in Figure 16.

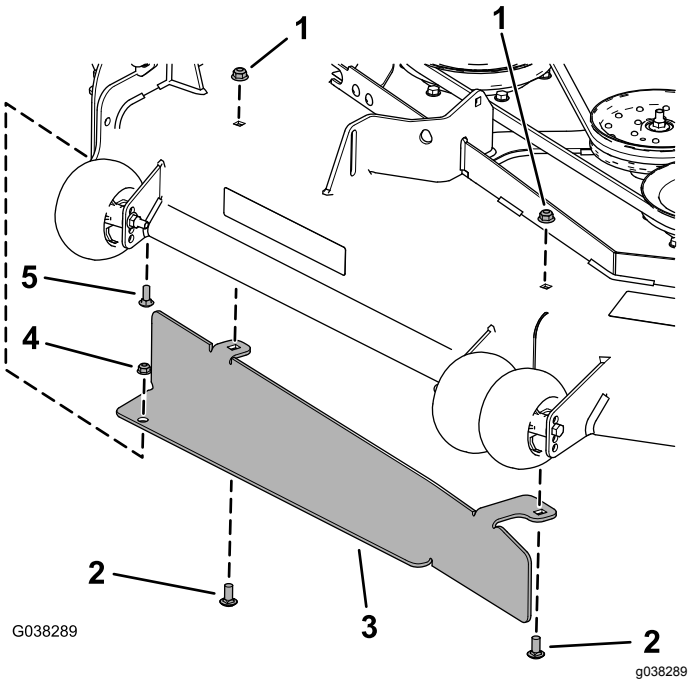


Figure 16

1. Flange nut (3/8 inch)
2. Carriage bolt (3/8 x 7/8 inch)
3. Baffle
4. Flange nut (5/16 inch)
5. Carriage bolt (5/16 x 7/8 inch)

5

Installing the Blower Assembly

Parts needed for this procedure:

1	Blower assembly
1	Blower belt
1	Pivot pin
1	Roll pin

Procedure

Verify that the pivot pin is secured on the blower assembly in the correct location (Figure 17).

- If you have a 48-inch or 52-inch mower deck, install the pivot pin in the front hole (Figure 17).
- If you have a 60-inch mower deck, install the pivot pin in the rear hole (Figure 17).

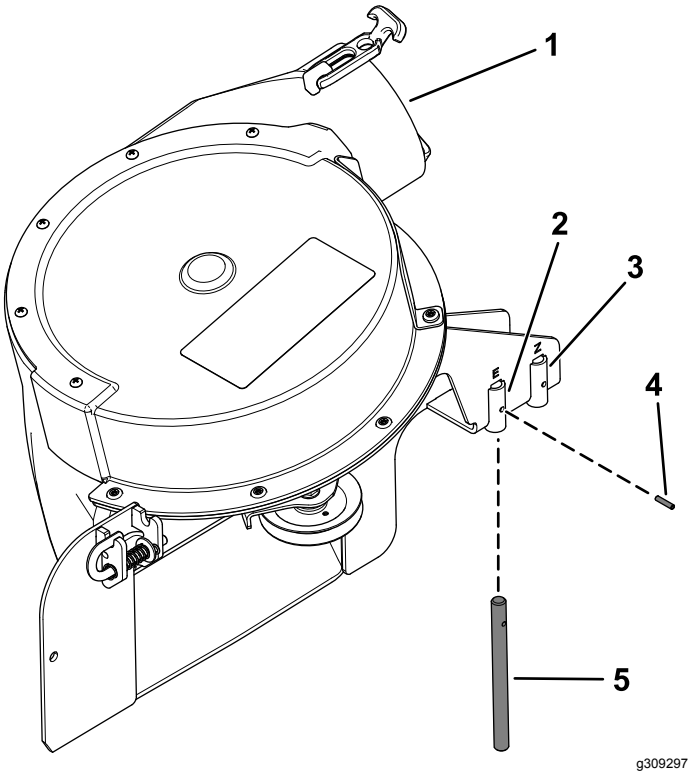


Figure 17

Blower for 48-inch and 52-inch mower deck shown

1. Blower assembly
2. Front hole (48-inch and 52-inch mower deck)
3. Rear hole (60-inch mower deck)
4. Pivot pin
5. Roll pin

1. Align the pivot pin on the blower with the pivot-pin hole in the mower deck (Figure 18).

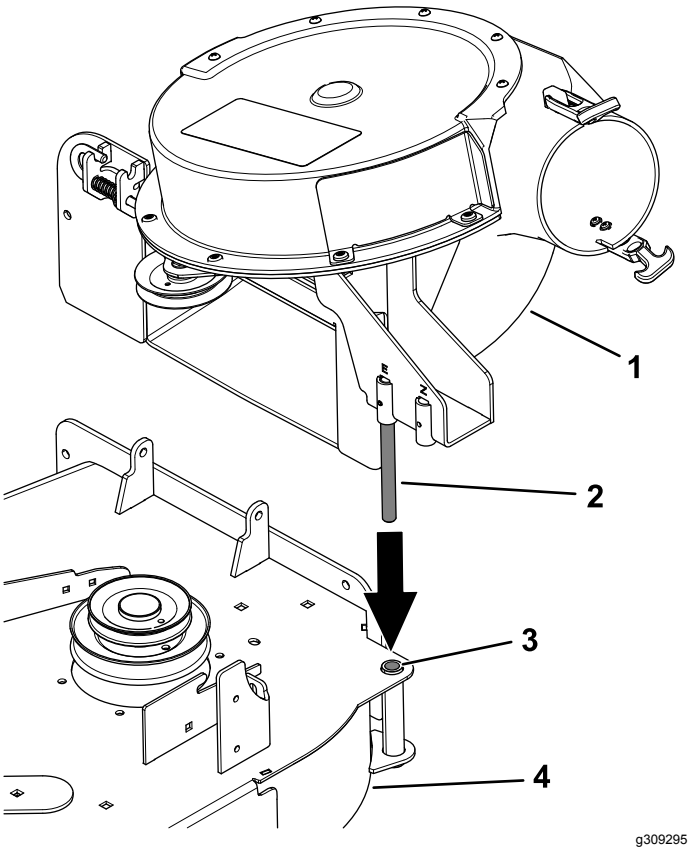


Figure 18

1. Blower assembly
2. Blower-pivot pin
3. Pivot hole
4. Deck

2. Install the belt around the pulleys inside the blower (Figure 19).

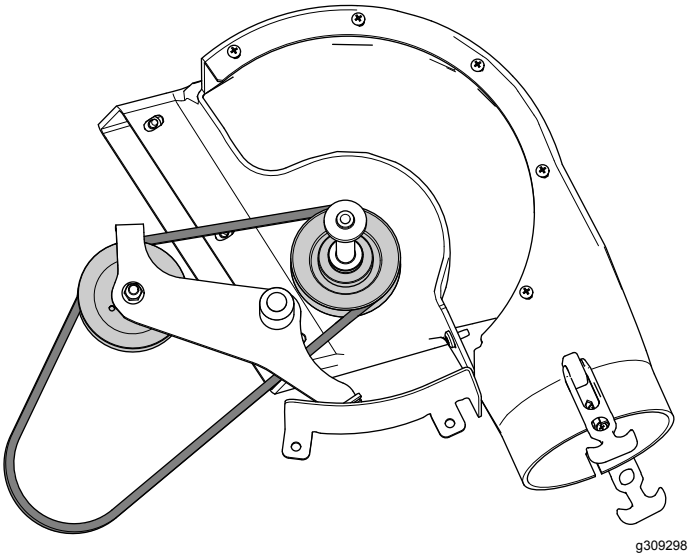


Figure 19

3. Lower the blower and slide the pivot pin into the pivot hole (Figure 18).

   Note: Ensure that the belt remains positioned in the blower pulley.

4. Move the latch pin from the locking position to the open position (Figure 20).

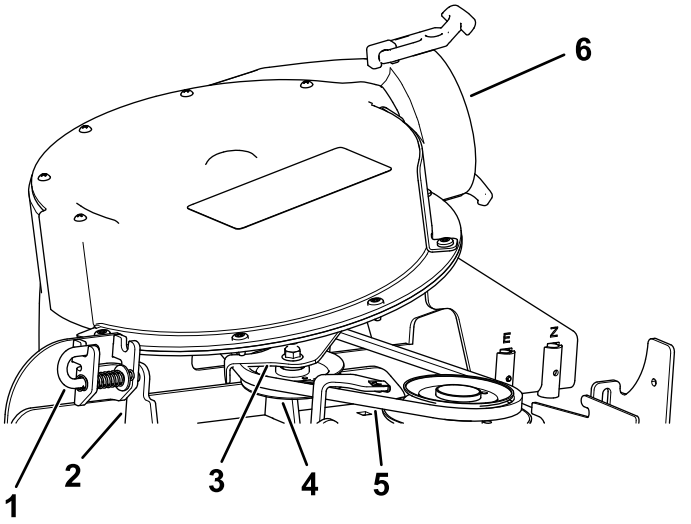


Figure 20

1. Latch pin
2. Chute bracket
3. Idler-pivot bracket
4. Idler pulley
5. Belt (beneath the idler pulley)
6. Blower assembly

5. Close the blower assembly and align the latch pin with the hole in the chute bracket (Figure 20).
6. Move the latch pin to the locking position.

   Note: Ensure that the latch pin extends through the hole in the chute bracket.

   Note: Ensure that the latch firmly holds the blower assembly against the mower deck, but you can release it by hand.

6

Installing the Blower Belt and Blower-Belt Coverl

Parts needed for this procedure:

1	Blower-belt cover
1	Knob

Procedure

1. Pull back the spring-loaded idler pulley and route the blower belt around the drive pulley (Figure 21).

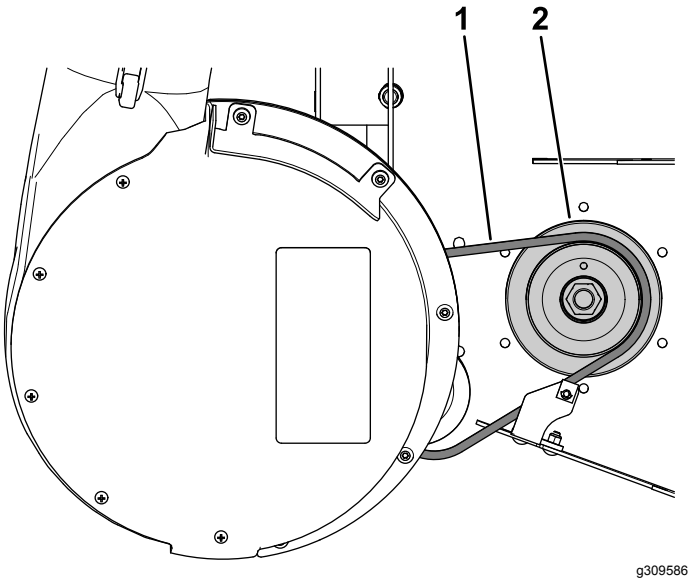


Figure 21

1. Blower belt
2. Drive pulley

2. Install the blower-belt cover over the blower belt and secure the blower-belt cover with the knob (Figure 22).

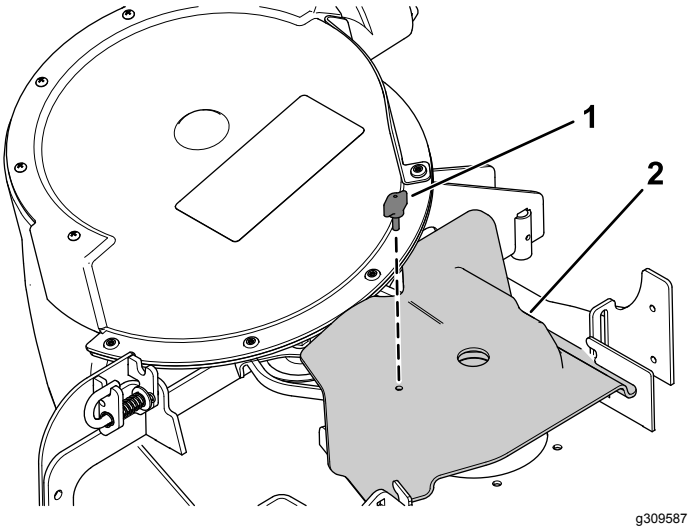


Figure 22

1. Knob
2. Belt cover

California Proposition 65 Warning Information

What is this warning?

You may see a product for sale that has a warning label like the following:



WARNING: Cancer and Reproductive Harm—www.p65Warnings.ca.gov.

What is Prop 65?

Prop 65 applies to any company operating in California, selling products in California, or manufacturing products that may be sold in or brought into California. It mandates that the Governor of California maintain and publish a list of chemicals known to cause cancer, birth defects, and/or other reproductive harm. The list, which is updated annually, includes hundreds of chemicals found in many everyday items. The purpose of Prop 65 is to inform the public about exposure to these chemicals.

Prop 65 does not ban the sale of products containing these chemicals but instead requires warnings on any product, product packaging, or literature with the product. Moreover, a Prop 65 warning does not mean that a product is in violation of any product safety standards or requirements. In fact, the California government has clarified that a Prop 65 warning "is not the same as a regulatory decision that a product is 'safe' or 'unsafe.'" Many of these chemicals have been used in everyday products for years without documented harm. For more information, go to https://oag.ca.gov/prop65/faqs-view-all.

A Prop 65 warning means that a company has either (1) evaluated the exposure and has concluded that it exceeds the "no significant risk level"; or (2) has chosen to provide a warning based on its understanding about the presence of a listed chemical without attempting to evaluate the exposure.

Does this law apply everywhere?

Prop 65 warnings are required under California law only. These warnings are seen throughout California in a wide range of settings, including but not limited to restaurants, grocery stores, hotels, schools, and hospitals, and on a wide variety of products. Additionally, some online and mail order retailers provide Prop 65 warnings on their websites or in catalogs.

How do the California warnings compare to federal limits?

Prop 65 standards are often more stringent than federal and international standards. There are various substances that require a Prop 65 warning at levels that are far lower than federal action limits. For example, the Prop 65 standard for warnings for lead is 0.5 µg/day, which is well below the federal and international standards.

Why don't all similar products carry the warning?

- Products sold in California require Prop 65 labelling while similar products sold elsewhere do not.
- A company involved in a Prop 65 lawsuit reaching a settlement may be required to use Prop 65 warnings for its products, but other companies making similar products may have no such requirement.
- The enforcement of Prop 65 is inconsistent.
- Companies may elect not to provide warnings because they conclude that they are not required to do so under Prop 65; a lack of warnings for a product does not mean that the product is free of listed chemicals at similar levels.

Why does Toro include this warning?

Toro has chosen to provide consumers with as much information as possible so that they can make informed decisions about the products they buy and use. Toro provides warnings in certain cases based on its knowledge of the presence of one or more listed chemicals without evaluating the level of exposure, as not all the listed chemicals provide exposure limit requirements. While the exposure from Toro products may be negligible or well within the "no significant risk" range, out of an abundance of caution, Toro has elected to provide the Prop 65 warnings. Moreover, if Toro does not provide these warnings, it could be sued by the State of California or by private parties seeking to enforce Prop 65 and subject to substantial penalties.



Count on it.