



## CE Kit

### E-Z Vac™ Twin Soft Bagger for Z Master® 2000 Series Mower

Model No. 119-9920

## Installation Instructions

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

**Note:** To create a CE bagger, install this kit on the Blower and Drive Kit model 78571, and with the E-Z Vac™ Twin Soft Bagger Kit model 78569.

# Installation

## Loose Parts

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

Procedure	Description	Qty.	Use
<b>1</b>	No parts required	–	Prepare the mower.
<b>2</b>	No parts required	–	Remove the discharge chute.
<b>3</b>	No parts required	–	Remove the OEM cover and bracket.
<b>4</b>	No parts required	–	Remove the blower kit parts.
<b>5</b>	CE pulley guard CE belt-cover bracket Carriage bolt (1/4 x 1) Hex-head bolt (3/8 x 1 inch) Clip nut	1 1 1 1 1	Install the CE deck bracket.
<b>6</b>	CE shaft guard CE forward guard CE tensioner guard	1 1 1	Install the upper CE guards.
<b>7</b>	CE lower guard Hex-head bolt (1/4 x 3/4 inch) Washer (1/4 x 5/8) Locknut (1/4 inch)	1 2 2 2	Install the lower CE Guard.
<b>8</b>	Hex-head bolt (1/4 x 3/4 inch) Washer (5/16 x 3/4 inch) Washer (1/4 x 1/2 inch) Retainer	1 1 1 1	Install the CE belt cover.



# 1

## Preparing the Mower

### No Parts Required

#### Procedure

1. Park the machine on a level surface, set the parking brake, and remove the ignition key.
2. Thoroughly clean mower deck. All debris must be removed to ensure the kit will fit properly.
3. Repair all bent or damaged areas and replace any missing parts.
4. Lower the mower deck to the lowest height-of-cut position; refer to the mower *Operator's Manual*.

# 2

## Remove the Discharge Chute

### No Parts Required

#### Removing the Discharge Chute

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

1. Remove the locknut, bolt, spacer, and spring that secure the side-discharge chute to the mower deck (Figure 1).

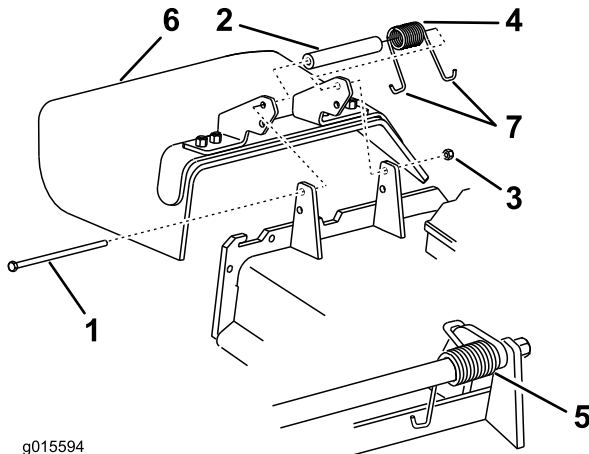


Figure 1

- |            |                         |
|------------|-------------------------|
| 1. Bolt    | 5. Spring installed     |
| 2. Spacer  | 6. Side-discharge chute |
| 3. Locknut | 7. J-hook end of spring |
| 4. Spring  |                         |

2. Remove the side discharge chute from the mower deck (Figure 1).

**Note:** Retain the chute and hardware for installation when operating the mower with the blower accessory removed.

# 3

## Removing the OEM Cover and Brackets

### No Parts Required

#### Remove the Belt Cover

If installed, remove the OEM belt cover as follows:

1. Rotate the bolt that secures the belt cover to the counterclockwise to loosen it (Figure 2).

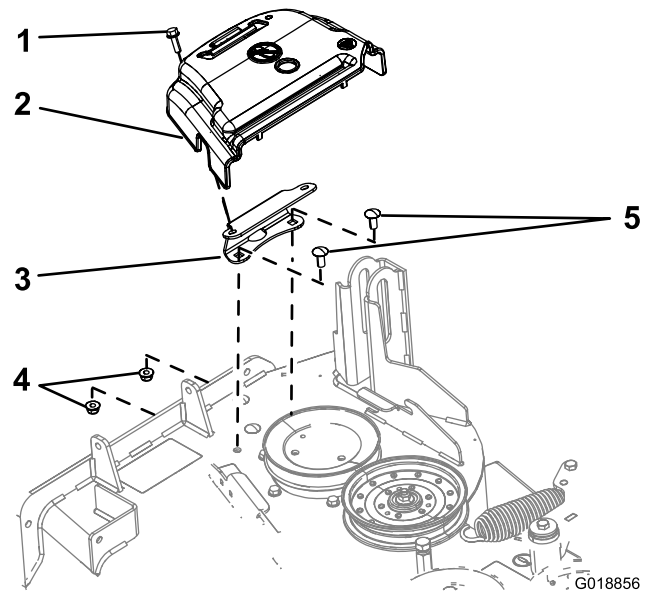


Figure 2

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| 1. Bolt (retained to the belt cover) | 4. Flange nut (3/8 inch)          |
| 2. Belt cover                        | 5. Carriage bolt (3/8 x 7/8 inch) |
| 3. Cover-mounting bracket            |                                   |

2. Remove the OEM belt cover and bolt from the mounting bracket (Figure 2).

**Note:** Retain the OEM belt cover and bolt for installation when operating the mower with the blower accessory removed.

## Remove the Cover Mounting Bracket

1. Remove the 2 bolts and 2 flange nuts that secure the cover mounting bracket to the deck (Figure 2).

**Note:** Retain a flange nut for installation of the CE kit; refer to Installing the CE Pulley Guard and Belt-cover Bracket (page 4).

2. Remove the bracket.

**Note:** Retain the OEM cover mounting bracket, bolts, and flange nut for installation when operating the mower with the blower accessory removed.

# 4

## Removing the Blower Kit Parts (If Installed)

### No Parts Required

### Removing the Belt Cover for the Blower

If the blower kit is installed on the machine, remove the belt cover installed from blower and drive kit as follows:

1. Remove the thumbscrew that secures the belt cover (Figure 3).

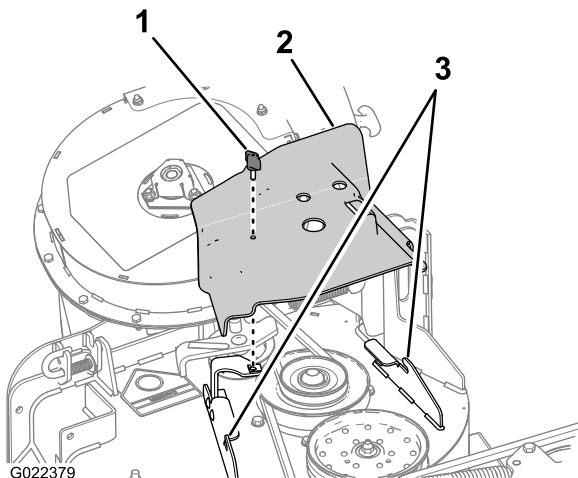


Figure 3

1. Thumbscrew
2. Belt cover
3. Deck flange hooks

2. Move the cover outward until the edge of the cover clears the hooks in the deck flanges (Figure 3).
3. Remove the cover from the deck.

**Note:** Discard the thumbscrew.

**Note:** Retain the belt cover for installation with the CE Kit; refer to 8 Installing the CE Belt Cover (page 8).

## Remove the Belt Cover Bracket

If the blower kit is installed on the machine, remove the belt cover bracket installed from the blower and drive kit as follows:

1. Remove the 2 carriage bolts (1/4 x 3/4 inch) and 2 locknuts (1/4 inch) that secures the belt cover bracket to the forward flange of the mower deck (Figure 2).

**Note:** Retain 1 carriage bolt and 2 lock nuts for installation with the CE Kit; refer to Installing the CE Pulley Guard and Belt-cover Bracket (page 4).

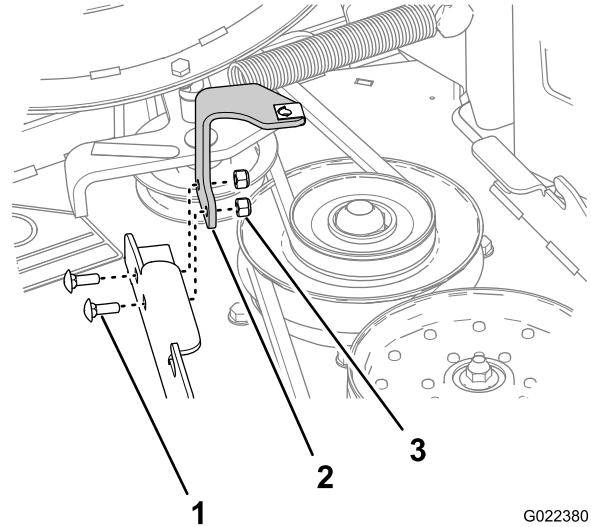


Figure 4

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

2. Remove the belt cover bracket from the mower deck (Figure 2).

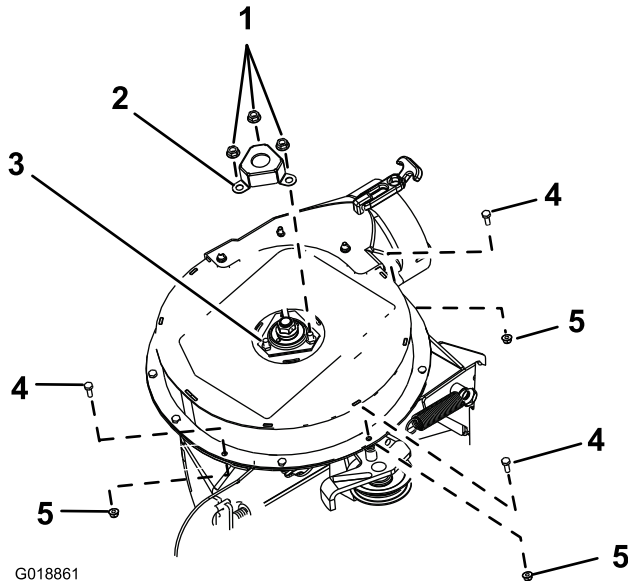
**Note:** Discard the belt cover bracket.

## Removing the OEM Shaft Cover and Hardware

1. Remove the 3 serrated nuts that secure the OEM shaft cover to the blower assembly (Figure 5).

**Note:** Do not loosen the bolts and nuts that secure the upper-bearing housing that are beneath the OEM shaft cover.

**Note:** Retain the serrated nuts for the CE shaft guard installation; refer to Installing the CE Shaft Guard (page 5).



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**Figure 5**

### Blower Shaft Cover and Hardware Removal

- |   |                                   |
|---|-----------------------------------|
| 1. Serrated nut (5/16 inch)             | 4. Hex-head bolt (1/4 x 3/4 inch) |
| 2. OEM shaft cover                      | 5. Locknut (1/4 inch)             |
| 3. Bolt and nut (upper bearing housing) |                                   |

2. Remove and discard the OEM shaft cover (Figure 5).
3. Remove the 3 hex-head bolts (1/4 x 3/4 inch) and 3 locknut (1/4 inch) from the blower housing as shown in Figure 5.

**Note:** Retain the bolts and nuts for the CE guard installation; refer to Installing the CE Upper Guards (page 5).

# 5

## Installing the CE Pulley Guard and Belt-cover Bracket

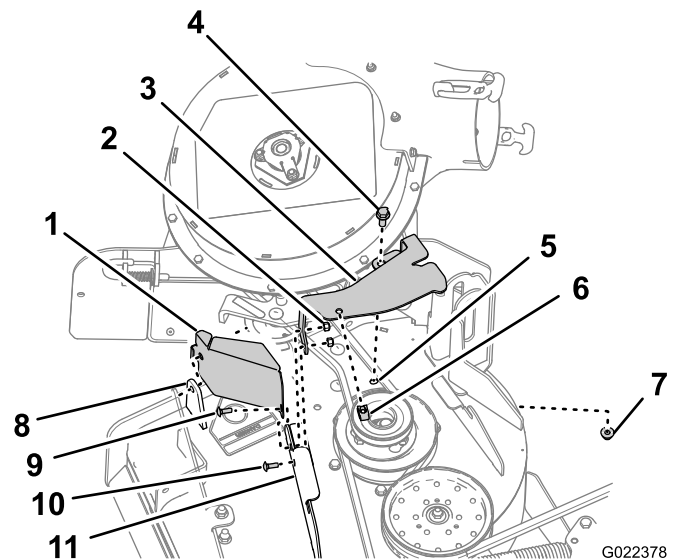
### Parts needed for this procedure:

1	CE pulley guard
1	CE belt-cover bracket
1	Carriage bolt (1/4 x 1)
1	Hex-head bolt (3/8 x 1 inch)
1	Clip nut

### Installing the CE Pulley Guard and Belt-cover Bracket

1. Align the holes of the CE pulley guard to the hole in the forward deflector bracket and the outboard hole in the forward deck flange (Figure 6).

**Note:** The CE pulley bracket wraps around the outboard edge of the deflector bracket



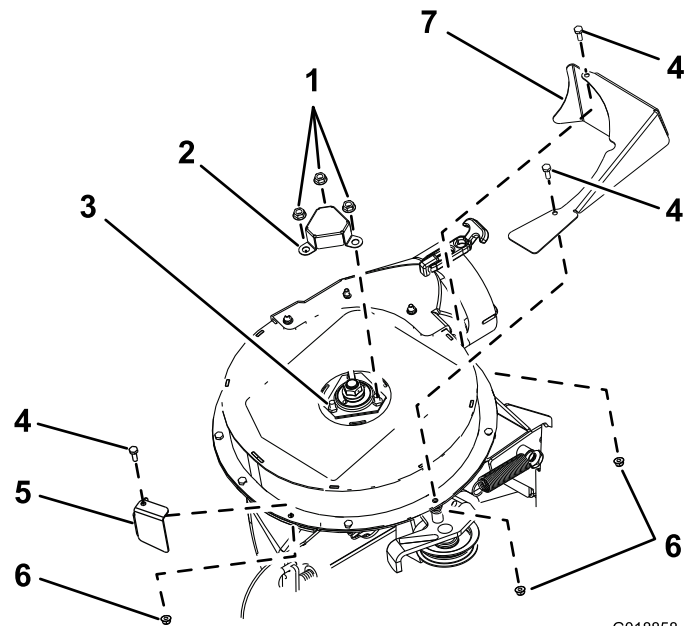
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**Figure 6**

- |   |  |
|---|--|
| 1. CE pulley guard                      | 7. Flange nut (3/8 inch, OEM)                  |
| 2. Locknut (1/4 inch, blower kit)       | 8. Deflector bracket (forward)                 |
| 3. CE belt-cover bracket                | 9. Hex-head bolt (1/4 x 1 inch, CE kit)        |
| 4. Hex-head bolt (3/8 x 1 inch, CE kit) | 10. Carriage bolt (1/4 x 3/4 inch, blower kit) |
| 5. Deck hole                            | 11. Deck flange (forward)                      |
| 6. Clip nut                             |  |

2. Align the CE belt-cover bracket to the holes at the rear side of the forward deck flange (Figure 6).

3. Secure the CE pulley guard and the belt cover bracket to the forward deck flange at the outboard hole with the carriage bolt (1/4 x 1 inch, CE kit) and the locknut (1/4 inch, blower kit) that you removed in step 1 of Remove the Belt Cover Bracket (page 3); refer to Figure 6.
4. Secure the belt cover bracket to the forward deck flange at the inboard hole with the a carriage bolt (1/4 x 3/4 inch, blower kit) and the locknut (1/4 inch, blower kit) that you removed in step 1 of Remove the Belt Cover Bracket (page 3); refer to Figure 6.
5. Align the hole in the rear flange of the CE belt-cover bracket with the hole in the deck where you removed the OEM belt cover bracket in step 1 of Remove the Cover Mounting Bracket (page 3); refer to Figure 6.
6. Secure the rear flange of the CE belt-cover bracket to the deck with a hex-head bolt (3/8 x 1 inch) and the flange nut (3/8 inch) that you removed in step 1 of Remove the Cover Mounting Bracket (page 3); refer to Figure 6.
7. Align the clip nut with the hole in the top of the CE belt-cover bracket, and push the clip nut onto the bracket (Figure 6).



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**Figure 7**

- |   |                       |
|---|-----------------------|
| 1. Serrated nut (5/16 inch)             | 5. CE forward guard   |
| 2. CE shaft guard                       | 6. Locknut (1/4 inch) |
| 3. Bolt and nut (upper bearing housing) | 7. CE tensioner guard |
| 4. Hex-head bolt (1/4 x 3/4 inch)       |                       |

2. Secure the CE shaft guard to the blower with the 3 serrated nuts that you removed in step 1 of Removing the OEM Shaft Cover and Hardware (page 4); refer to (Figure 7).

## Installing the CE Upper Guards

1. Align the CE forward guard to the upper blower housing (Figure 7).
2. Secure the CE forward guard to the upper blower housing with a hex-head bolt (1/4 x 3/4 inch) and a locknut (1/4 inch) that you removed in step 3 of Removing the OEM Shaft Cover and Hardware (page 4); refer to Figure 7).
3. Align the CE tensioner guard to the upper blower housing (Figure 7).
4. Secure the CE tensioner guard to the upper blower housing with 2 hex-head bolt (1/4 x 3/4 inch) and 2 locknut (1/4 inch) that you removed in step 3 of Removing the OEM Shaft Cover and Hardware (page 4); refer to Figure 7.

# 6

## Installing the CE Upper Guards

### Parts needed for this procedure:

1	CE shaft guard
1	CE forward guard
1	CE tensioner guard

### Installing the CE Shaft Guard

1. Align the CE shaft guard to the 3 bolts and 3 nuts that secure the upper-bearing housing (Figure 7).

# 7

## Installing the CE Lower Guard

### Parts needed for this procedure:

1	CE lower guard
2	Hex-head bolt (1/4 x 3/4 inch)
2	Washer (1/4 x 5/8)
2	Locknut (1/4 inch)

### Remove the Blower

If installed remove the blower assembly from the mower deck as follows:

1. Pull the spring loaded idler pulley away from the fixed spring post, and remove the belt from the idler pulley (Figure 8).

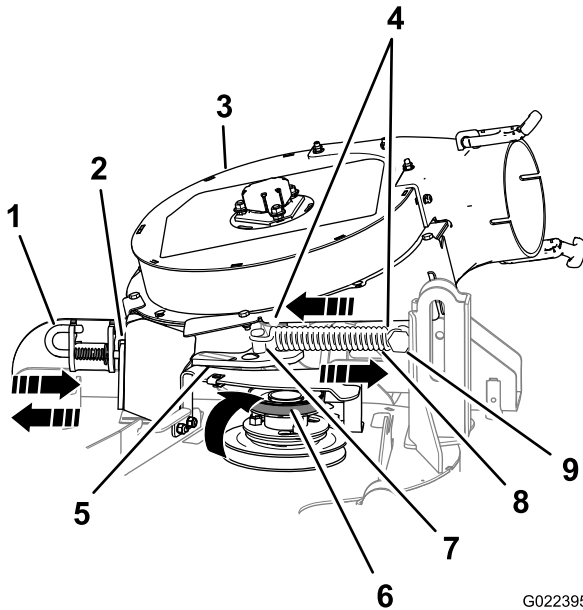
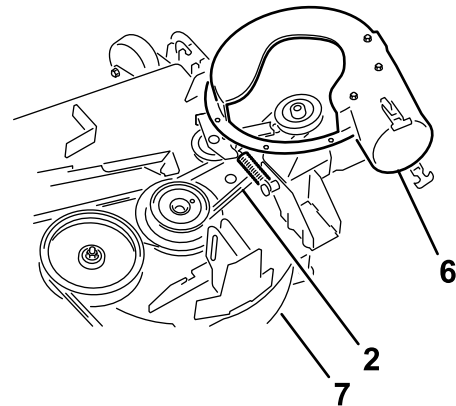
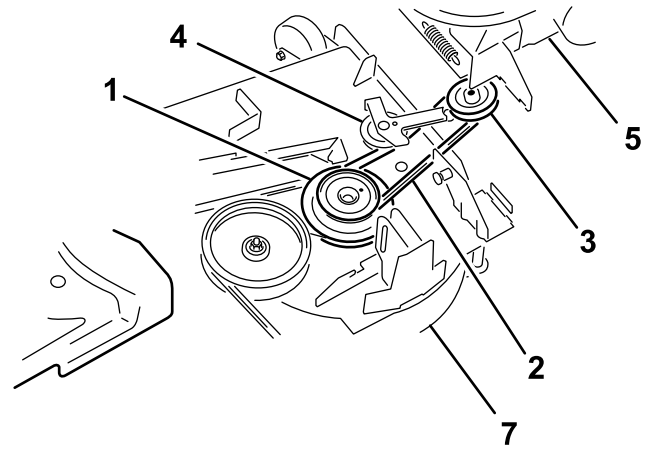


Figure 8

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- |                                 |                                       |
|---------------------------------|---------------------------------------|
| 1. Latch pin (locking position) | 6. Belt (aligned to the idler pulley) |
| 2. Chute bracket                | 7. Idler spring post                  |
| 3. Blower assembly              | 8. Spring                             |
| 4. Spring hook ends             | 9. Fixed spring post                  |
| 5. Idler pivot bracket          |                                       |

2. Move the idler pivot bracket toward the fixed spring post. remove the hook of the spring from the idler spring post (Figure 8).
3. Route the belt beneath the idler pulley (Figure 9).



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Figure 9

- |                         |   |
|-------------------------|---|
| 1. Drive pulley         | 5. Blower (housing repositioned for illustrative purposes)                |
| 2. Blower belt          | 6. Blower in position (housing portion removed for illustrative purposes) |
| 3. Blower pulley        | 7. Mower deck   |
| 4. Idler/tension pulley |   |

4. Remove the belt from drive pulley (Figure 9).
5. Move the blower latch pin to the open position and swing the blower outward (Figure 8).
6. Remove the blower and belt from the mower deck.

## Drilling the Mounting Holes for the CE Lower Guard

1. Align the lower CE lower guard to the blower-chute bracket as shown in Figure 10.

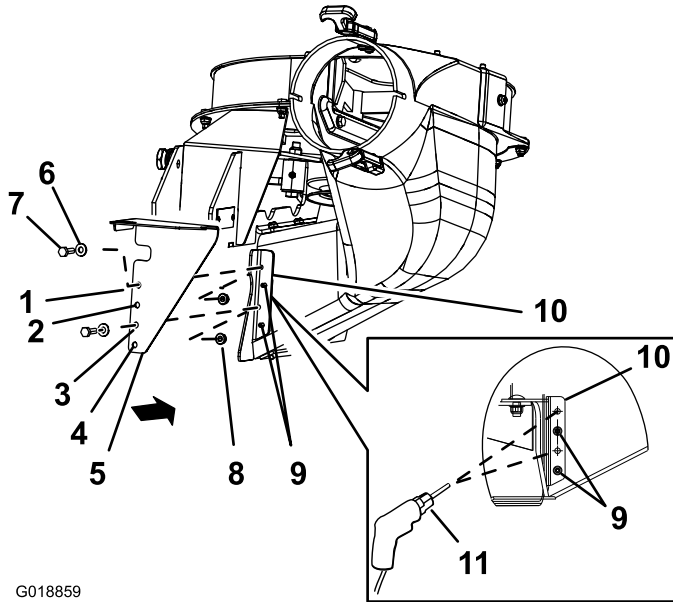


Figure 10

- |                   |                                   |
|-------------------|-----------------------------------|
| 1. Hole 1         | 7. Hex-head bolt (1/4 x 3/4 inch) |
| 2. Hole 2         | 8. Locknut (1/4 inch)             |
| 3. Hole 3         | 9. Rivet tails                    |
| 4. Hole 4         | 10. Blower-chute bracket          |
| 5. CE lower guard | 11. Drill bit 7 mm (0.277 inch)   |
| 6. Washer         |                                   |

2. Align hole 2 and hole 4 of the lower CE lower guard to the rivet tails protruding through the blower-chute bracket (Figure 10).

**Note:** Ensure that the flange of the CE lower guard (the flange with the holes) is flat against the blower-chute bracket.

3. Mark the outline of hole 1 and hole 3 of the CE lower guard on the blower-chute bracket, and remove the CE guard (Figure 10).
4. Locate the marks on the blower-chute bracket, and center-punch the locations.
5. Drill 7 mm (0.277 inch) holes in the blower-chute bracket at the 2 center-punch marks (Figure 10).

## Installing the CE Lower Guard

**Note:** Install the CE lower guard with the blower assembly removed from the mower deck; refer to the *48in E-Z Vac™ Blower and Drive Kit Installation Instructions*.

1. Align the CE lower guard to the blower-chute bracket (Figure 10).
2. Align hole 2 and hole 4 of the CE lower guard to the rivet tails protruding through the blower-chute bracket (Figure 10).
3. Secure the CE lower guard to the blower with 2 hex-head bolt (1/4 x 3/4 inch), 2 washers, and 2 locknut (1/4 inch) through hole 1 and hole 4 of the CE guard (Figure 10).

## Installing the Blower

If you removed the blower in Remove the Blower (page 6), install the blower assembly to the mower deck as follows:

**Note:** Refer to the *48in, 52in, and 60in E-Z Vac™ Twin Soft Bagger Owner's Manual*.

1. Align the blower belt around the pulley of the blower (Figure 9).
2. Align the pivot pin on the blower with the pivot pin hole in the deck and lower the blower onto deck.
3. Open the blower latch pin, close the blower to the deck, and secure the latch pin to the chute bracket (Figure 8).

**Note:** Ensure that the latch pin extends through the hole in chute bracket and the CE pulley guard.

4. Temporarily route the belt beneath the idler pulley (Figure 9).
5. Route the belt around the drive pulley (Figure 9).
6. Move the idler/tension pulley toward the fixed spring post, and install the spring by aligning the spring hook on to the idler spring post (Figure 8).
7. Pull the spring loaded idler/tension pulley away from the fixed spring post, and route the belt around the idler pulley (Figure 9).

# 8

## Installing the CE Belt Cover

### Parts needed for this procedure:

1	Hex-head bolt (1/4 x 3/4 inch)
1	Washer (5/16 x 3/4 inch)
1	Washer (1/4 x 1/2 inch)
1	Retainer

### Installing the CE Belt Cover Bolt

1. Assemble the washer (5/16 x 3/4 inch) to the hex-head bolt (1/4 x 3/4 inch) as shown in Figure 11.

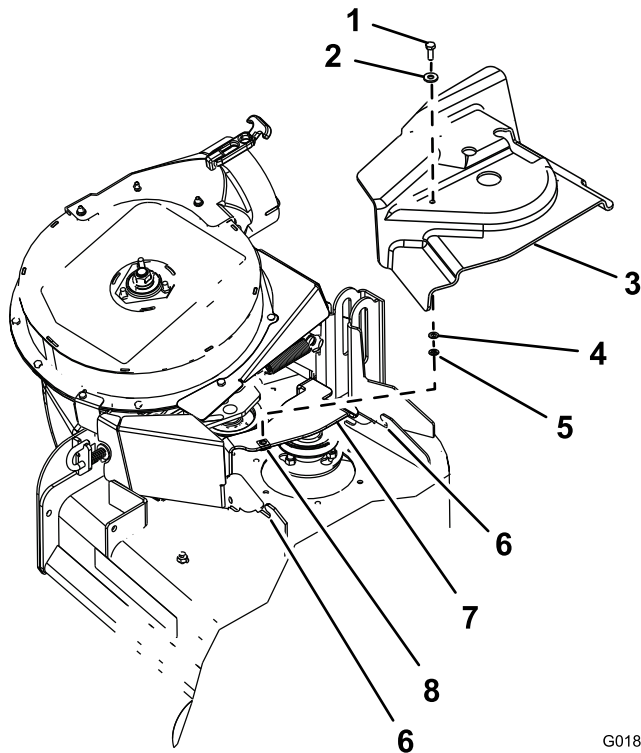


Figure 11

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- |                                   |                          |
|-----------------------------------|--------------------------|
| 1. Hex-head bolt (1/4 x 3/4 inch) | 5. Retainer              |
| 2. Washer (5/16 x 3/4 inch)       | 6. Deck bracket notch    |
| 3. Belt cover                     | 7. CE belt-cover bracket |
| 4. Washer (1/4 x 1/2 inch)        | 8. Clip nut              |

2. Insert the bolt and washer through the hole in the top of the belt cover from the OEM blower and drive kit (Figure 11).
3. From the bottom of the belt cover, assemble the washer (1/4 x 1/2 inch) and retainer over the hex-head bolt threads (Figure 11).

Ensure that the bolt head and washer are positioned flush with the upper surface of the belt cover and the washer and retainer are flush with the bottom surface of the cover.

### Installing the Belt Cover

1. Unlatch the blower and pull it out partially.
2. Align the belt cover with notches in the deck flanges (Figure 11).
3. Align the hex-head bolt in the cover with the clip nut on the belt-cover bracket.
4. Secure the belt cover to the cover bracket with the hex-head bolt (Figure 11).
5. Open the blower latch pin, close the blower to the deck, and secure the latch pin to the chute bracket.