



CE Kit

122 cm, 132 cm, or 152 cm Z Master® 4000 Series Riding Mower

Model No. 145-1261

Model No. 145-1262

Model No. 145-1263

Installation Instructions

Note: To create a CE bagger, install this kit on the Bagger Kit (Toro Model 78463).

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.



decal117-0923

117-0923

1. Warning—read the *Operator's Manual*; wear hearing protection.
2. Thrown object hazard—keep bystanders away.
3. Thrown object hazard, deflector shield—do not operate without the deflector, discharge cover, or grass collection system in place.
4. Cutting/dismemberment hazard, impeller—disengage the PTO, remove the key, and wait for all moving parts to stop.
5. Cutting/dismemberment hazard, impeller—stay away from moving parts; keep all guards and shields in place.



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 side discharge chute.
3	No parts required	–	Remove the OEM cover and brackets.
4	No parts required	–	Remove the belt cover for the blower (if installed).
5	CE pulley guard CE belt-cover bracket (if not previously installed) Hex-head bolt (1/4 x 1 inch) Carriage bolt (1/4 x 3/4 inch) Locknut (1/4 inch) Hex-head bolt (3/8 x 1 inch)—122 cm mower decks only Flange nut (3/8 inch)—122 cm mower decks only Clip nut Rear guard (122 cm mower decks only)	1 1 1 1 2 1 1 1 1	Install the CE pulley guards.
6	CE shaft guard CE forward guard CE tensioner guard	1 1 1	Install the upper CE guards.
7	CE lower guard Hex-head bolt (1/4 x 3/4 inch) Washer (1/4 inch) Locknut (1/4 inch)	1 2 2 2	Install the lower CE guard.
8	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.
9	Lower support rod Flange-head bolt (1/4 x 3/4 inch) Locknut (1/4 inch)	1 1 1	Install the new lower support rod.
10	Height-of-cut cover plate (122 cm decks) Height-of-cut cover plate (132 cm and 152 cm decks) Locknut (1/4 inch) Carriage bolt (1/4 x 3/4 inch)	2 2 2 2	Install the height-of-cut cover plates.
11	No parts required	–	Adjust the engine speed.

1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface.
2. Engage the parking brake.
3. Shut off the engine and remove the key.
4. Thoroughly clean the mower deck.

Note: You must remove all the debris to ensure that the kit will fit properly.

5. Repair all bent or damaged areas and replace any missing parts.
6. Lower the mower deck to the lowest height-of-cut position; refer to the mower *Operator's Manual*.

2

Removing the Existing Side Discharge Chute

No Parts Required

Procedure

Remove the bolt, spring, spacer, and locknut securing the discharge chute and remove the discharge chute ([Figure 1](#)).

Note: Retain the side discharge chute, bolt, spring, spacer, and locknut for installation if you operate the machine with the blower accessory removed.

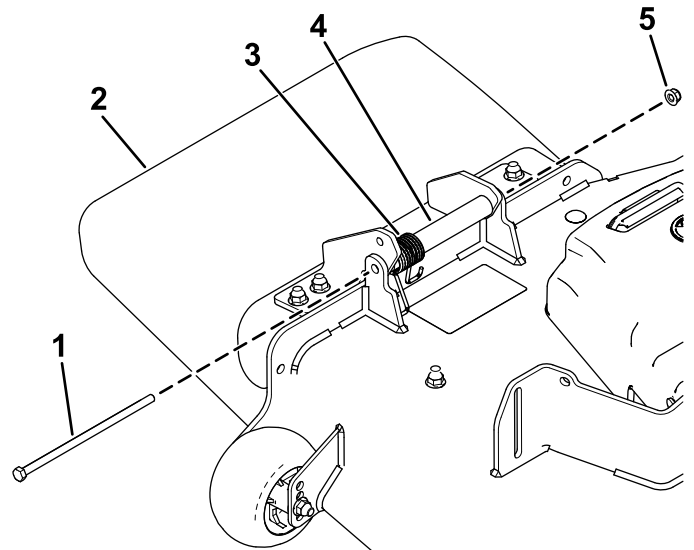


Figure 1

- | | |
|--------------------|------------|
| 1. Bolt | 4. Spacer |
| 2. Discharge chute | 5. Locknut |
| 3. Spring | |

g348922

3

Removing the OEM Cover and Brackets

No Parts Required

Removing the Belt Cover

If the OEM belt cover is installed, remove it as follows:

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

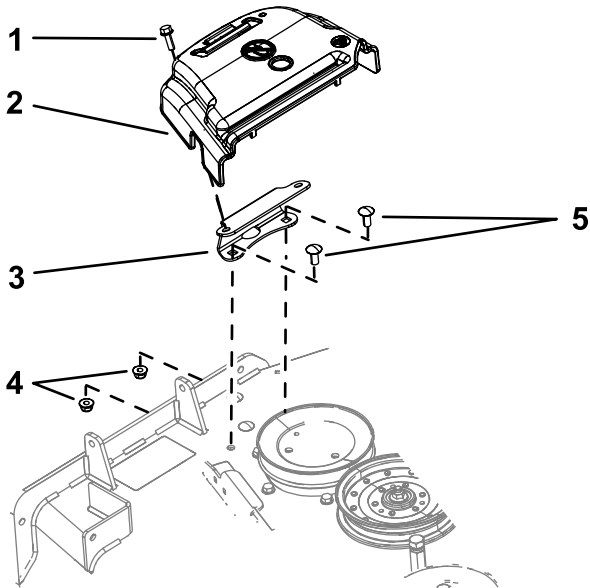


Figure 2

g203155

- | | |
|--------------------------------------|-----------------------------------|
| 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.

Removing the Cover Mounting Bracket

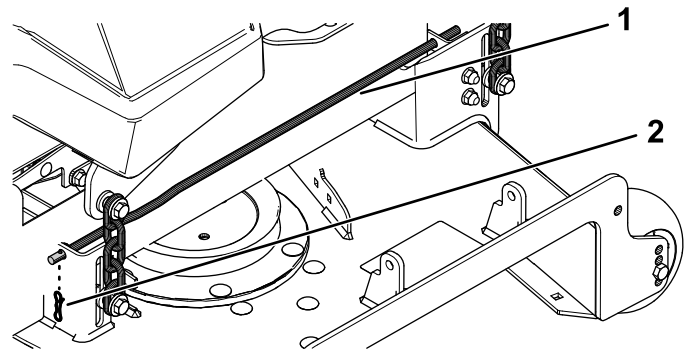
1. Remove the 2 bolts and 2 flange nuts that secure the cover mounting bracket to the deck (Figure 2).
2. Remove the bracket.

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

Removing the Existing Lower Support Rod

Remove the locking cotter pin from the existing lower support rod and remove it (Figure 3).

Note: Retain the locking cotter pin and lower support rod for installation if you operate the machine with the blower accessory removed.



g350950

Figure 3

1. Existing lower support rod
2. Locking cotter pin

4

Removing the Belt Cover for the Blower (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 4).

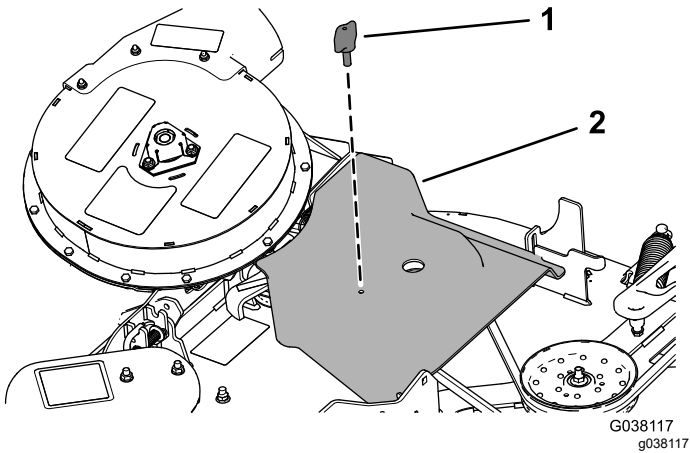


Figure 4

1. Thumbscrew
2. Belt cover

2. Move the cover outward until the edge of the cover clears the hooks in the deck flanges (Figure 4).

3. Remove the cover from the deck.

Note: Discard the thumbscrew.

Removing the OEM Shaft Cover and Hardware

1. Remove the 2 nuts and 2 washers that secure the OEM shaft cover to the blower assembly (Figure 5).

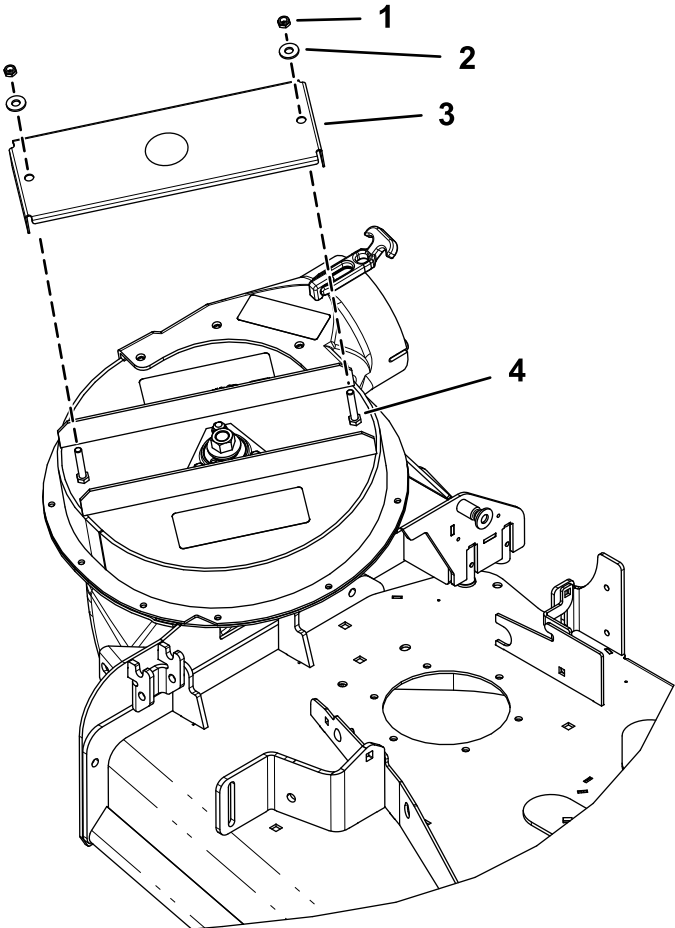


Figure 5

122 cm Mower Deck Shown

1. Nut
2. Washer
3. OEM shaft cover
4. Bolt

2. Remove and discard the OEM shaft cover (Figure 5).

5

Installing the CE Pulley Guards

Parts needed for this procedure:

1	CE pulley guard
1	CE belt-cover bracket (if not previously installed)
1	Hex-head bolt (1/4 x 1 inch)
1	Carriage bolt (1/4 x 3/4 inch)
2	Locknut (1/4 inch)
1	Hex-head bolt (3/8 x 1 inch)—122 cm mower decks only
1	Flange nut (3/8 inch)—122 cm mower decks only
1	Clip nut
1	Rear guard (122 cm mower decks only)

122 cm Mower Decks

- 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

- Align the CE belt-cover bracket (if not previously installed) to the holes at the rear side of the forward deck flange (Figure 6).
- Secure the CE pulley guard and the belt cover bracket to the forward deck flange at the outboard hole using 1 hex-head bolt (1/4 x 1 inch) and 1 locknut (1/4 inch) as shown in Figure 6.
- Secure the belt-cover bracket to the forward deck flange at the inboard hole using 1 carriage bolt (1/4 x 3/4 inch) and 1 locknut (1/4 inch) as shown in Figure 6.
- 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 [Removing the Cover Mounting Bracket \(page 4\)](#); refer to Figure 6.
- 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).
- Loosely install the rear guard to the mower deck using 1 hex-head bolt (3/8 x 1 inch) and 1 flange nut (3/8 inch) as shown in Figure 6.

Tighten the fasteners after you install the blower; refer to [Installing the Blower \(page 10\)](#).

Important: This step applies to 122 cm mower decks only.

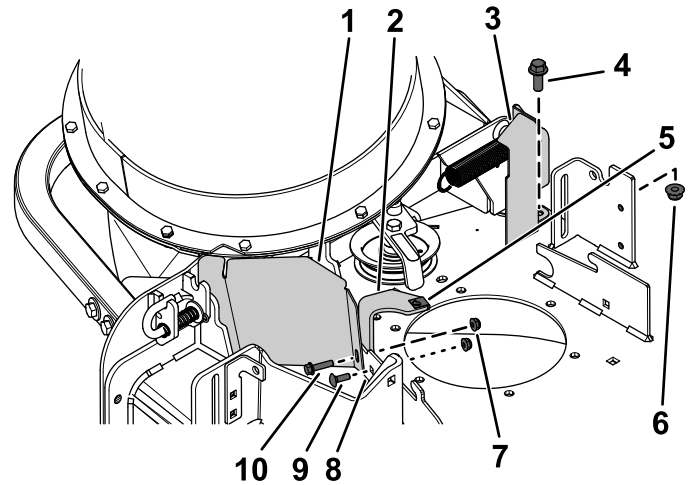


Figure 6

g351269

- | | |
|--|-------------------------------------|
| 1. CE pulley guard | 6. Flange nut (3/8 inch) |
| 2. Belt-cover bracket | 7. Locknut (1/4 inch) |
| 3. Rear guard (122 cm mower deck only) | 8. Deck flange (forward) |
| 4. Hex-head bolt (3/8 x 1 inch) | 9. Carriage bolt (1/4 x 3/4 inch) |
| 5. Clip nut | 10. Flange-head bolt (1/4 x 1 inch) |

132 cm and 152 cm Mower Decks

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 7).

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

2. Align the CE belt-cover bracket (if not previously installed) to the holes at the rear side of the forward deck flange (Figure 7).
3. Secure the CE pulley guard and the belt-cover bracket (if not previously installed) to the forward deck flange at the outboard hole using 1 hex-head bolt (1/4 x 1 inch) and 1 locknut (1/4 inch) as shown in Figure 7.
4. Secure the belt-cover bracket to the forward deck flange at the inboard hole using 1 carriage bolt (1/4 x 3/4 inch) and 1 locknut (1/4 inch) as shown in Figure 7.
5. 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 7).

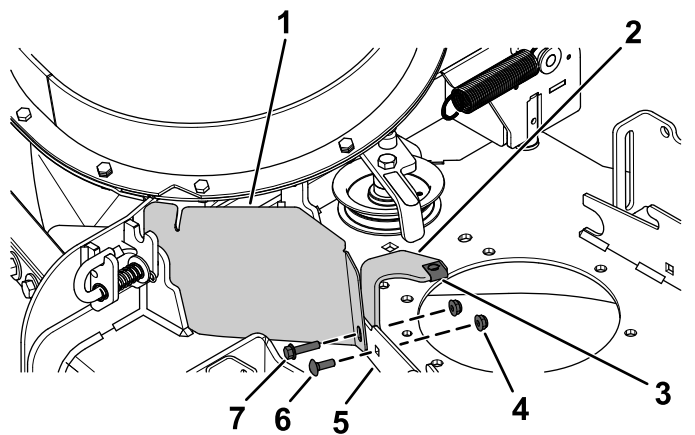


Figure 7

- | | |
|---|------------------------------------|
| 1. CE pulley guard | 5. Deck flange (forward) |
| 2. Belt-cover bracket (if not previously installed) | 6. Carriage bolt (1/4 x 3/4 inch) |
| 3. Clip nut | 7. Flange-head bolt (1/4 x 1 inch) |
| 4. Locknut (1/4 inch) | |

6

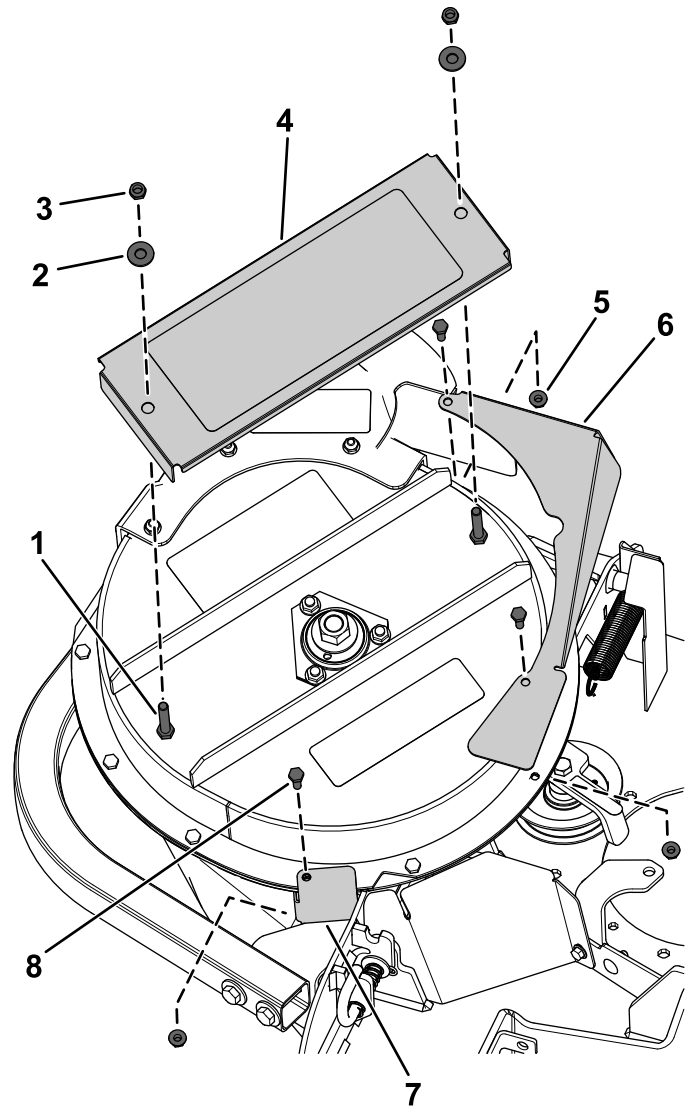
Installing the CE Upper Guards

Parts needed for this procedure:

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

Procedure

1. Remove the 3 locknuts (1/4 inch) from the blower assembly.
2. Secure the CE tensioner guard to the blower using the 2 hex-head bolts (1/4 x 3/4 inch) and previously removed 2 locknuts (1/4 inch) as shown in [Figure 8](#).
3. Secure the CE shaft guard using 2 locknuts (5/16 inch) and 2 washers ([Figure 8](#)).
4. Secure the CE forward guard using 1 hex-head bolt (1/4 x 3/4 inch) and previously removed locknut (1/4 inch) as shown in [Figure 8](#).



g351116

Figure 8

122 cm Mower Deck Shown

- | | |
|--|-----------------------------------|
| 1. Hex-head bolt (5/16 x 1-3/4 inches) | 5. Locknut (1/4 inch) |
| 2. Washer (3/8 inch) | 6. CE tensioner guard |
| 3. Locknut (5/16 inch) | 7. CE forward guard |
| 4. CE shaft guard | 8. Hex-head bolt (1/4 x 3/4 inch) |

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 inch)
2	Locknut (1/4 inch)

Removing the Blower

If the blower assembly is installed, remove it 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 9).

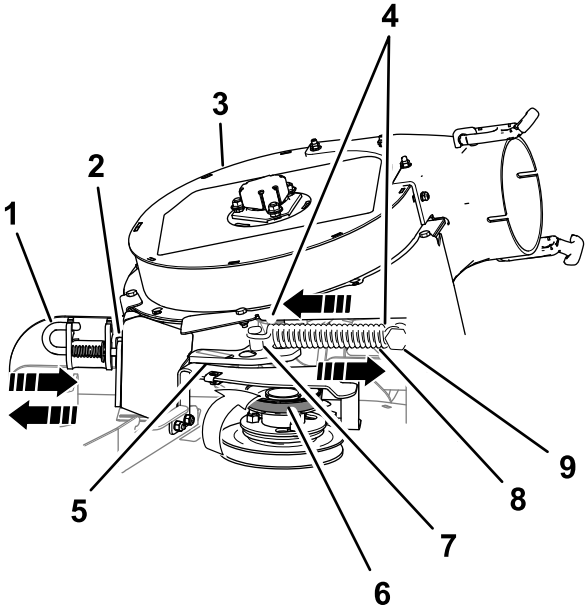


Figure 9

g203195

- | | |
|---------------------------------|---------------------------------------|
| 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 and remove the hook of the spring from the idler spring post (Figure 9).
3. Route the belt beneath the idler pulley (Figure 10).

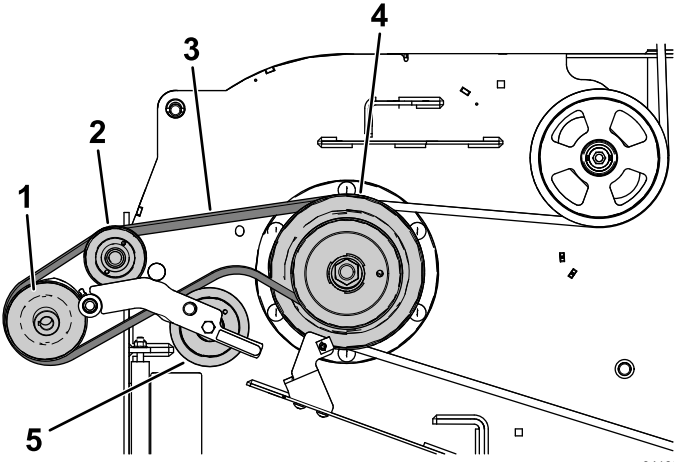


Figure 10

g341600

- | | |
|------------------|-------------------------|
| 1. Blower pulley | 4. Drive pulley |
| 2. Idler/pulley | 5. Idler/tension pulley |
| 3. Blower belt | |

4. Remove the belt from drive pulley (Figure 10).
5. Move the blower latch pin to the open position and swing the blower outward (Figure 9).
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 11](#).

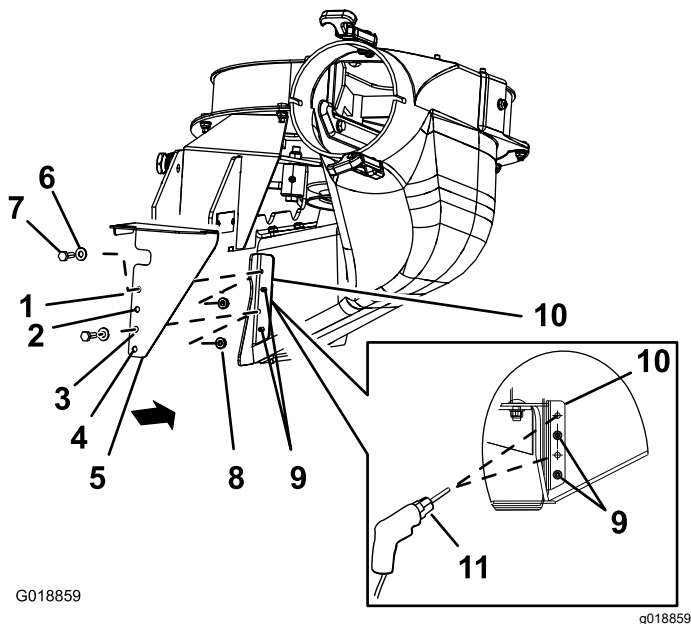


Figure 11

- | | |
|-------------------|-----------------------------------|
| 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 (0.28 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 11](#)).

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 11](#)).
4. Locate the marks on the blower-chute bracket, and center-punch the locations.
5. Drill 7 mm (0.28 inch) holes in the blower-chute bracket at the 2 center-punch marks ([Figure 11](#)).

Installing the CE Lower Guard

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

1. Align the CE lower guard to the blower-chute bracket ([Figure 11](#)).
2. Align hole 2 and hole 4 of the CE lower guard to the rivet tails protruding through the blower-chute bracket ([Figure 11](#)).
3. Secure the CE lower guard to the blower with 2 hex-head bolts (1/4 x 3/4 inch), 2 washers, and 2 locknuts (1/4 inch) through hole 1 and hole 4 of the CE guard ([Figure 11](#)).

Installing the Blower

If you removed the blower, install it to the mower deck as follows:

Note: Refer to the Bagger Kit (Toro Model 78463) manual.

1. Align the blower belt around the pulley of the blower ([Figure 10](#)).
2. Align the pivot pin on the blower with the pivot pin hole in the deck and lower the blower onto the deck.
3. Open the blower latch pin, close the blower to the deck, and secure the latch pin to the chute bracket ([Figure 9](#)).

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 10](#)).
5. Route the belt around the drive pulley ([Figure 10](#)).
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 9](#)).
7. Pull the spring loaded idler/tension pulley away from the fixed spring post, and route the belt around the idler pulley ([Figure 10](#)).

8

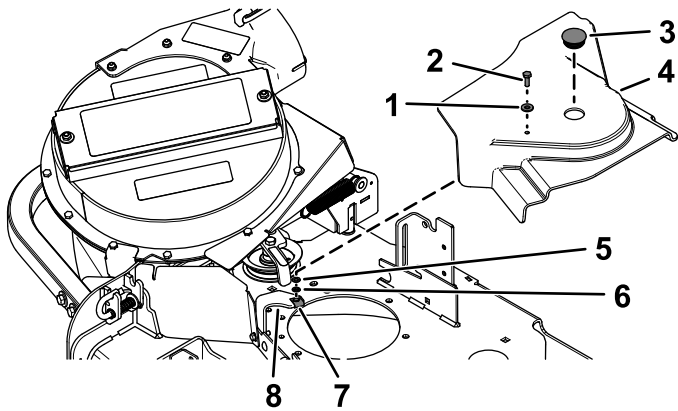
Installing the CE Belt Cover

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 12](#).



g351271

Figure 12

132 cm Mower Deck Shown

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

2. Insert the bolt and washer through the hole in the top of the belt cover from the OEM blower and drive kit ([Figure 12](#)).
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 12](#)).

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 12](#)).
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 12](#)).
5. Install the plastic plug into the cover ([Figure 12](#)).
6. Open the blower latch pin, close the blower to the deck, and secure the latch pin to the chute bracket.

9

Installing the New Lower Support Rod

Parts needed for this procedure:

1	Lower support rod
1	Flange-head bolt (1/4 x 3/4 inch)
1	Locknut (1/4 inch)

Procedure

1. Thread the new lower support rod through the lower skirt opening.
2. Secure the rod using 1 flange-head bolt (1/4 x 3/4 inch) and 1 locknut (1/4 inch) as shown in [Figure 13](#).

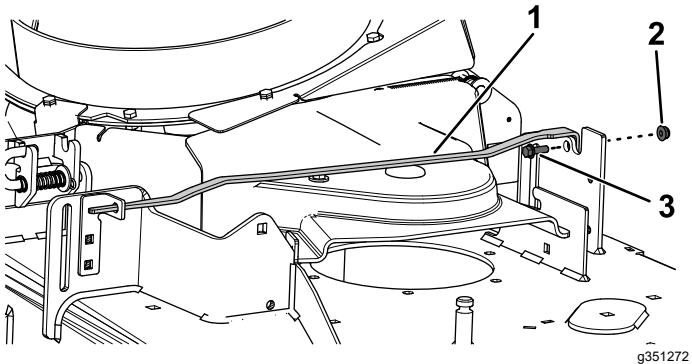


Figure 13

1. Lower support rod
2. Locknut (1/4 inch)
3. Flange-head bolt (1/4 x 3/4 inch)

10

Installing the Height-of-Cut Cover Plates

Parts needed for this procedure:

2	Height-of-cut cover plate (122 cm decks)
2	Height-of-cut cover plate (132 cm and 152 cm decks)
2	Locknut (1/4 inch)
2	Carriage bolt (1/4 x 3/4 inch)

122 cm Mower Decks

Secure the 2 height-of-cut cover plates to the 102 to 140 mm ranges of the height-of-cut bracket using 2 carriage bolts (1/4 x 3/4 inch) and 2 locknuts (1/4 inch) as shown in [Figure 14](#) and [Figure 15](#).

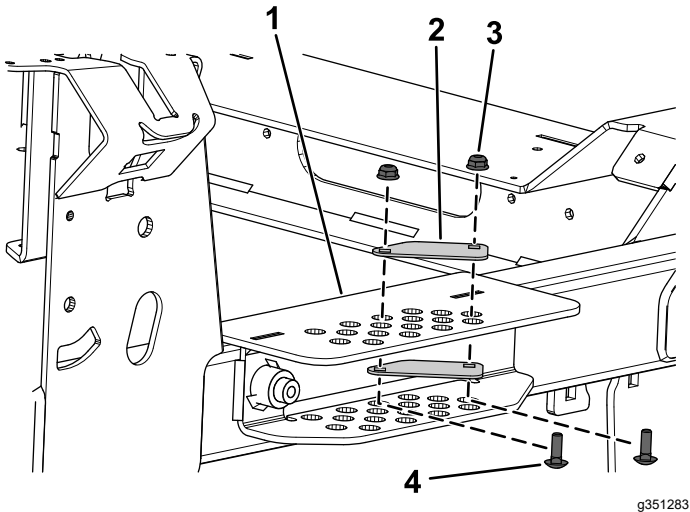


Figure 14

g351283

- 1. Height-of-cut bracket
- 2. Height-of-cut cover plate (122 cm decks)
- 3. Locknut (1/4 inch)
- 4. Carriage bolt (1/4 x 3/4 inch)

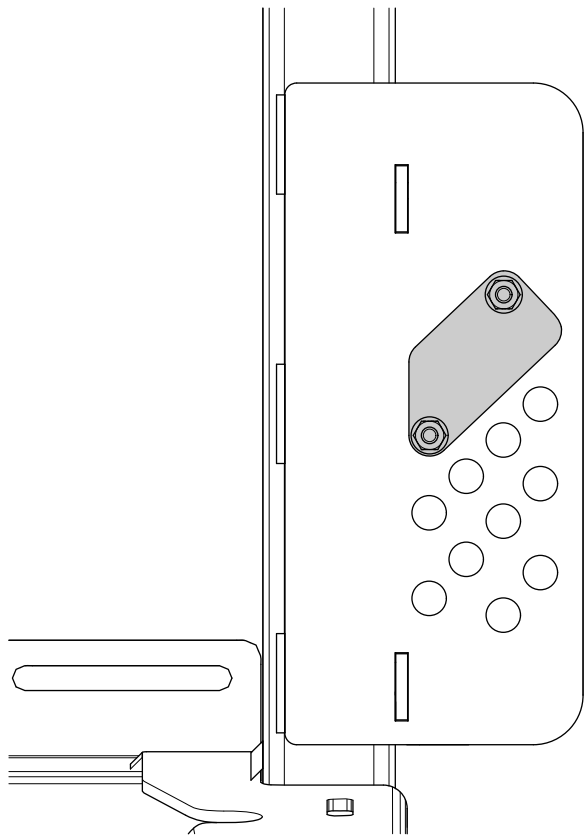
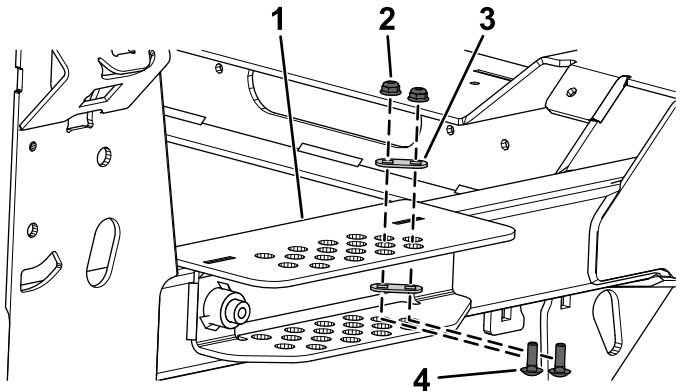


Figure 15
Installed View

g351823

132 cm and 152 cm Mower Decks

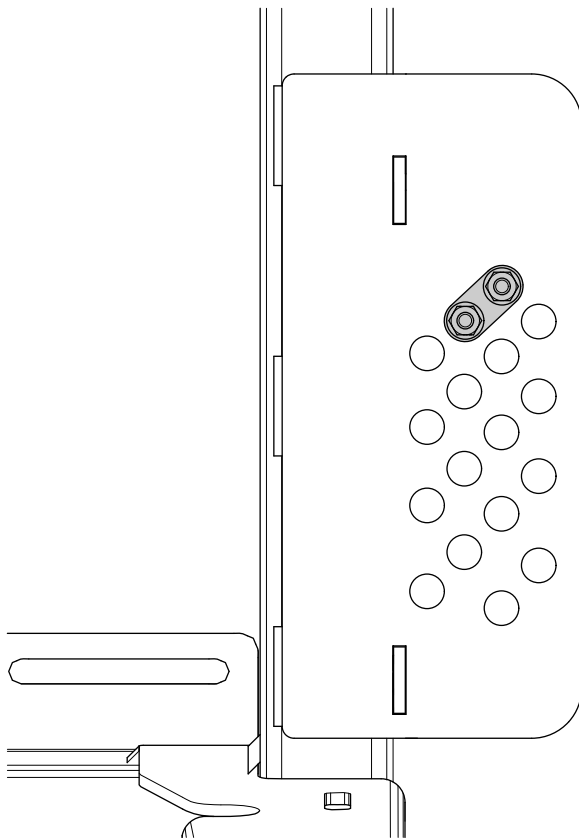
Secure the 2 height-of-cut cover plates to the 133 mm and 140 mm ranges of the height-of-cut bracket using 2 carriage bolts (1/4 x 3/4 inch) and 2 locknuts (1/4 inch) as shown in [Figure 16](#) and [Figure 17](#).



g351284

Figure 16

- | | |
|--------------------------|--|
| 1. Height-of-cut bracket | 3. Height-of-cut cover plate
(132 cm and 152 cm
decks) |
| 2. Locknut (1/4 inch) | 4. Carriage bolt (1/4 x 3/4
inch) |



g351824

Figure 17
Installed View

11

Adjusting the Engine Speed

No Parts Required

Procedure

1. Locate your mower and bagger combination on the *Declaration of Conformity*.
2. Set the engine speed (rpm) listed in the corresponding column in the *Declaration of Conformity*.



Count on it.