



Recycler® Kit
For Z334 Z Master® Mowers
Model No. 110-9960

Installation Instructions

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

Safety

Side Discharge or Mulch Grass



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 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 disengage the power take off (PTO) lever and turn the ignition key to off. Also remove the key and pull the wire off the spark plug(s).

Ensure the mower has the hinged grass deflector that disperses clippings to the side and down toward the turf, while in side discharge mode.

To mulch grass clippings, the baffles must be installed into the mower as shown in the following steps.

Installation

Loose Parts

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

Step	Description	Qty.	Use
1	No parts required	–	Prepare the mower.
2	No parts required	–	Remove the existing blades.
3	No parts required	–	Remove the existing baffles.
4	Discharge plate Bolt (3/8 x 1 inch) Flange nut (3/8 inch)	1 2 1	Install the discharge plate.
5	Left baffle Right baffle Angle support Bolt (3/8 x 3/4 inch) Flange nut (3/8 inch) Bolt (3/8 x 1 inch)	1 1 1 6 6 2	Install the baffles.
6	Recycler blades	2	Install the new blades.

Step

1

Preparing the Mower

No Parts Required

Procedure

1. Thoroughly clean mower deck. All debris must be removed to ensure baffles will fit properly against mower deck.
2. Repair all bent or damaged areas of mower deck and replace any missing parts.

Step

2

Removing the Existing Blades

No Parts Required

Procedure

Remove the existing blades from the spindles (Figure 1).

Note: Save the blades for use when in side discharging mode. Use the blade bolt and curved washer for installing the recycler blades.



A blade is sharp. Contact with sharp blade can cause serious personal injury.

Wear gloves or wrap sharp edges of the blade with a rag.

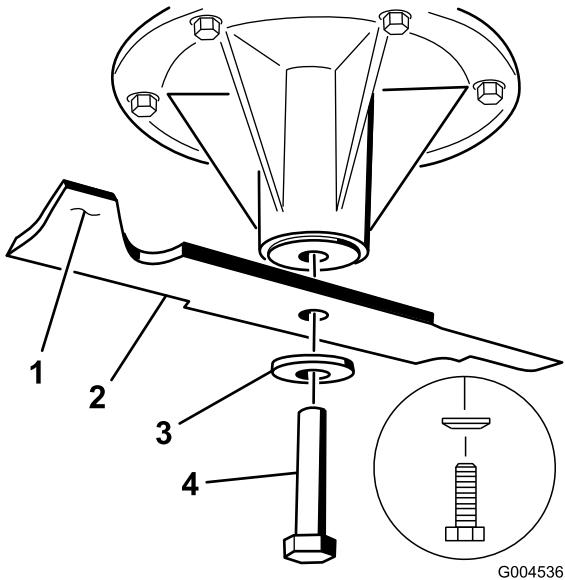


Figure 1

1. Sail area of blade
2. Blade
3. Curved washer
4. Blade bolt

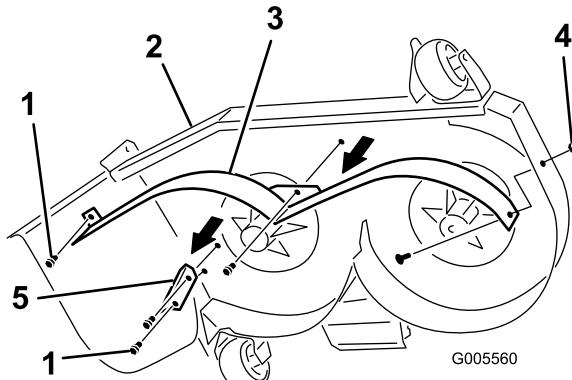


Figure 2

1. Bolt
2. Mower deck
3. Front baffle
4. Lock Nut
5. Discharge baffle

Step

3

Removing the Existing Baffles

No Parts Required

Procedure

Note: In the steps below, the bolts are threaded into the mower deck. Remove the nuts first before removing bolts.

1. Remove the mower belt covers from the mower deck.
2. Remove the bolts, washers and flange nuts holding the front baffle in place (Figure 2).
3. Remove the bolts and flange nuts holding the discharge baffle in place (Figure 2).

Note: Save the baffles and hardware for use when changing to side discharging mode.

Step
4

Installing the Discharge Plate

Parts needed for this step:

1	Discharge plate
2	Bolt (3/8 x 1 inch)
1	Flange nut (3/8 inch)

Procedure

Install the discharge plate to the outside of the mounting bracket with 2 bolts (3/8 x 1 inch) and 2 flange nuts (3/8 inch) (Figure 3).

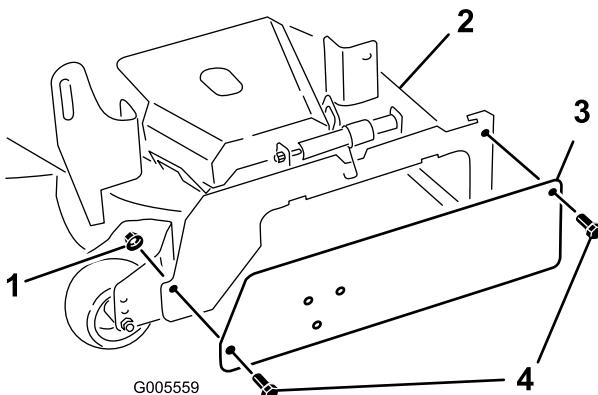


Figure 3

1. Flange nut (3/8 inch)
2. Mower deck
3. Discharge plate
4. Bolt (3/8 x 1 inch)

Step 5

Installing the Baffles

Parts needed for this step:

1	Left baffle
1	Right baffle
1	Angle support
6	Bolt (3/8 x 3/4 inch)
6	Flange nut (3/8 inch)
2	Bolt (3/8 x 1 inch)

Procedure

Note: All holes exist in the mower deck for installing the new baffles.

Note: Loosely install the baffles to align the baffles with all existing holes in the mower.

1. Loosely install the angle support to the left and right baffles with 2 carriage bolts (3/8 x 3/4 inch) and 2 flange nuts (3/8 inch) (Figure 4).
2. Loosely install the left and right baffle together with a carriage bolt (3/8 x 3/4 inch) and a flange nut (3/8 inch) (Figure 4).

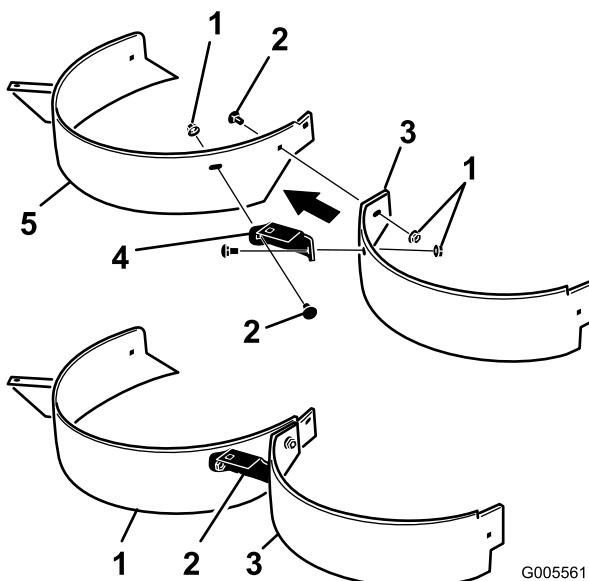


Figure 4

1. Flange nut (3/8 inch)
2. Bolt (3/8 x 1 inch)
3. Left baffle
4. Angle support
5. Right baffle

3. Position the baffles into the mower.
4. Loosely install the baffles to the top of the mower deck with 2 bolts (3/8 x 1 inch) (Figure 5).
5. Loosely install the baffles to the discharge plate with a bolt (3/8 x 3/4 inch) and a flange nut (3/8 inch) (Figure 5).
6. Loosely install the baffles to the side of the mower deck with a bolt (3/8 x 3/4 inch) and a flange nut (3/8 inch) (Figure 5).
7. Loosely install the baffles to the center of the mower deck with a bolt (3/8 x 3/4 inch) and a flange nut (3/8 inch) (Figure 5).
8. Tighten all fasteners.

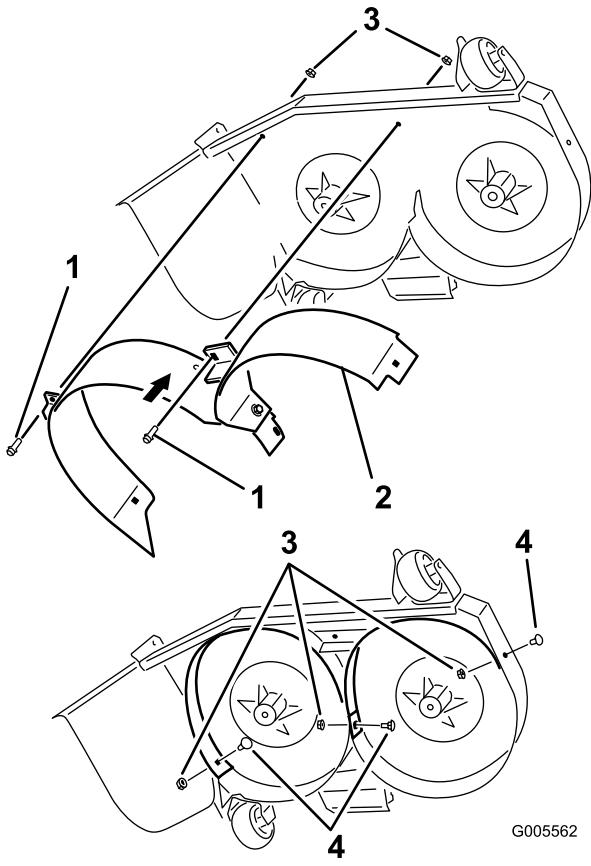


Figure 5

1. Bolt (3/8 x 1 inch)
2. Baffles
3. Flange nut (3/8 inch)
4. Bolt (3/8 x 3/4 inch)

Step

6

Installing the New Blades

Parts needed for this step:

2 Recycler blades

Procedure

Important: The sail part of the blade (i.e., the turned up section) must face the inside of the mower (Figure 6).



A blade is sharp. Contact with sharp blade can cause serious personal injury.

Wear gloves or wrap sharp edges of the blade with a rag.

1. Place the blade onto the spindle shaft (Figure 6).
2. Install the spring disk and blade bolt. The spring disk cone must be installed toward the bolt head (Figure 6). Torque the blade bolt to 85-110 ft-lb (115-150 N•m).

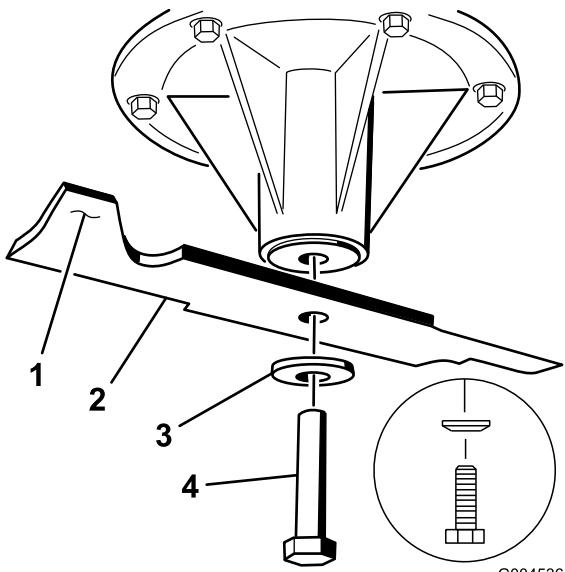


Figure 6

1. Sail Area of Blade	4. Blade Bolt
2. Blade	5. Cone Towards Bolt Head
3. Spring Disk	

3. Carefully rotate each blade to verify there is a 1/16 inch (1.6 mm) gap between the end of the blade and the baffles. If a blade contacts a baffle, loosen the fasteners and position the baffles to increase clearance between the end of the blade and baffle.
4. Tighten the fasteners and check for blade clearance again.

Operation

Selecting the Proper Height-of-Cut

Remove approximately one inch or no more than 1/3 of the grass blade when cutting. In exceptionally lush and dense grass you may need to raise the height-of-cut setting or convert to side discharge or bagging operations.

If residue is allowed to build up in the mower housing, cutting performance will decrease.

Mowing in Extreme Conditions

Air is required to cut and recut grass clippings in the mower housing, so do not set the height-of-cut too low or totally surround the housing by uncut grass. Always try to have one side of the mower housing free from uncut grass, allowing air to be drawn into the housing. When making an initial cut through the center of an uncut area, operate the machine slower and back up if the mower starts to clog.

Mowing at Proper Intervals

Under most normal conditions you will need to mow every 4–5 days. However, grass grows at different rates at different times. Thus, in order to maintain the same height-of-cut, which is a good practice, you'll need to cut more frequently in early spring; as the grass growth rate slows in mid summer, cut only every 8–10 days. If you are unable to mow for an extended period due to weather conditions or other reasons, convert to side discharge or bagging options or mow first with the height-of-cut at a high level; then mow again 2–3 days later with a lower height setting.

Mowing with Sharp Blades

A sharp blade cuts cleanly and without tearing or shredding the grass. A dull blade will tear and shred the grass. Tearing and shredding causes the grass to turn brown at the edges which impairs growth and increases susceptibility to disease.

After Operating

To ensure optimum performance, clean the underside of the mower housing after each use.



Count on it.