



# 40in or 48in Recycler® Kit

## TURBO FORCE® Cutting Unit for Mid-Size Mowers

Model No. 110-2060

Model No. 110-2070

### Installation Instructions

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

## Safety

### Side Discharge or Mulch Grass

#### **⚠ WARNING**

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.

Procedure	Description	Qty.	Use
<b>1</b>	No parts required	–	Prepare the mower.
<b>2</b>	No parts required	–	Remove the existing blades.
<b>3</b>	No parts required	–	Remove the existing baffles.
<b>4</b>	Discharge plate Bolt (3/8 x 1 inch) Nut (3/8 inch)	1 2 2	Install the discharge plate.
<b>5</b>	Left baffle Center baffle Right baffle Bolt (3/8 x 7/8 inch) Flange nut (3/8 inch) Carriage bolt (3/8 x 3/4 inch)	1 1 1 8 9 1	Install the baffles.
<b>6</b>	Recycler blades	3	Install the new blades.

## 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.

## 2

### Removing the Existing Blades

#### No Parts Required

#### Procedure

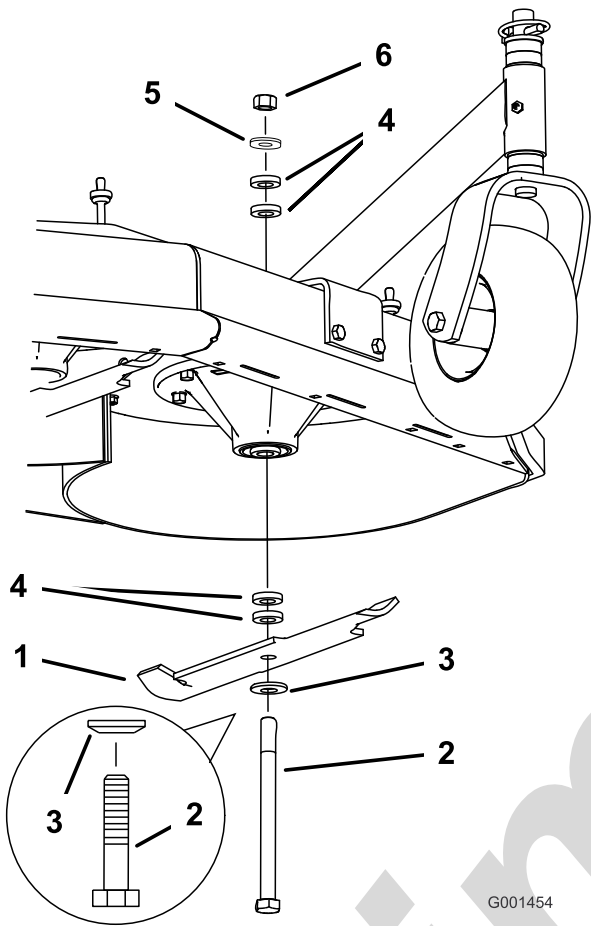
Remove the existing blades from the spindles (Figure 1 or Figure 2).

**Note:** Save the blades for use when in side discharging mode. Use the blade bolt and washer for installing the recycler blades in Step 4.

#### **▲ WARNING**

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

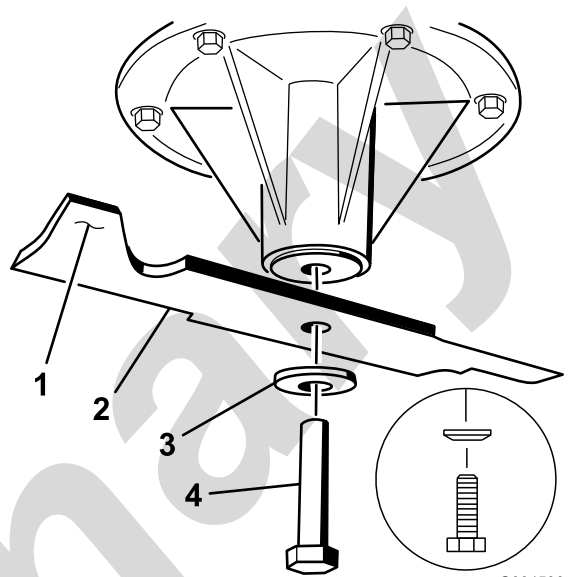
Wear gloves or wrap sharp edges of the blade with a rag.



**Figure 1**

Fixed Deck Mower Shown

- |                  |                                   |
|------------------|-----------------------------------|
| 1. Blade         | 4. Spacer (fixed deck mower only) |
| 2. Blade bolt    | 5. Thin washer                    |
| 3. Curved washer | 6. Nut                            |



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**Figure 2**

GrandStand® Mower Shown

- |                       |                  |
|-----------------------|------------------|
| 1. Sail Area of Blade | 3. Curved washer |
| 2. Blade              | 4. Blade Bolt    |

# 3

## Removing the Existing Baffles

### No Parts Required

### Procedure

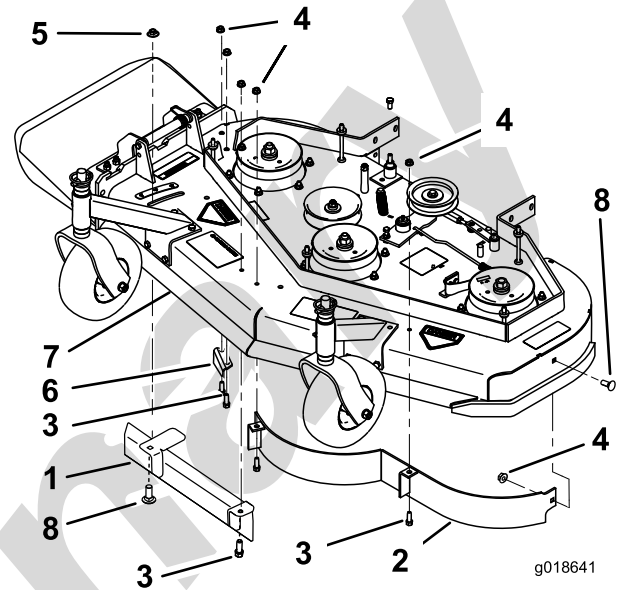
**Note:** In the steps below, the bolts are threaded into the mower deck. Remove the nuts first before removing bolts.

1. Remove the nuts and bolts holding the left front baffle in place (Figure 3 and Figure 4).

For 40 inch GrandStand mowers only, use the existing hardware used for the idler pulley pivot. Remove and retain the curved washer for side discharge mode.

2. Remove the nuts and bolts holding the discharge baffle in place (Figure 3 and Figure 4). Install the nuts and bolts to cover the holes after the baffle is removed.
3. Remove the large flanged nut and bolt or cam lock and washer by unscrewing it from the adjustable flow baffle (Figure 3).
4. Remove the nut and bolt holding the adjustable flow baffle in place (Figure 3).

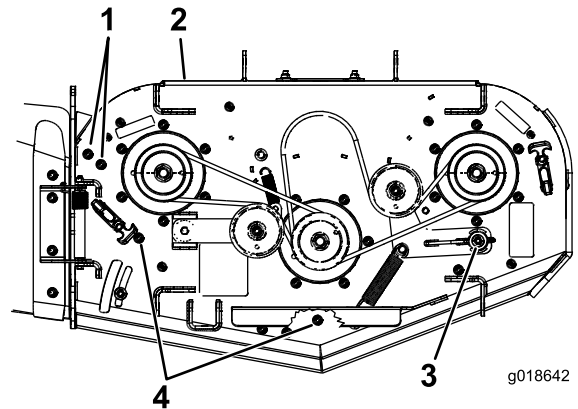
**Note:** Save the baffles and hardware for use when changing to side discharging mode.



**Figure 3**

Fixed Deck Mower Shown

- |                           |  |
|---------------------------|--|
| 1. Adjustable Flow Baffle | 5. Large flanged nut   |
| 2. Left front baffle      | 6. Discharge baffle, install the nuts and bolts after removing the discharge baffle to cover the holes |
| 3. Bolt                   | 7. Mower deck  |
| 4. Flange Nut             | 8. Carriage bolt   |



**Figure 4**

40 inch GrandStand mower shown

- |   |   |
|---|---|
| 1. To cover the holes, install the nut and bolt after removing the discharge baffle | 3. Idler pulley pivot, use existing hardware for recycler baffles (40 inch Grandstand mower only) (remove and retain the curved washer for side discharge mode) |
| 2. GrandStand mower deck  | 4. Remove and retain for conversion back to side discharge mode   |

# 4

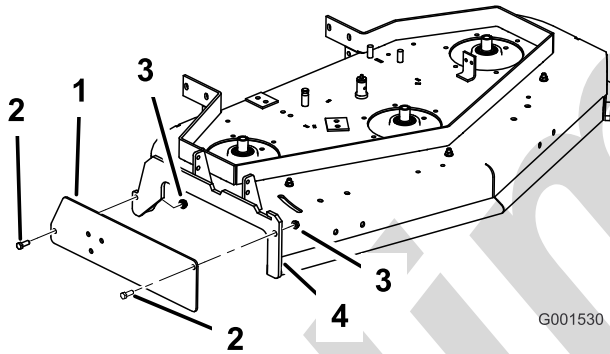
## Installing the Discharge Plate

### Parts needed for this procedure:

1	Discharge plate
2	Bolt (3/8 x 1 inch)
2	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 nuts (3/8 inch) (Figure 5).



**Figure 5**  
Fixed Deck Mower Shown

- |                    |                        |                   |                     |
|--------------------|------------------------|-------------------|---------------------|
| 1. Discharge plate | 2. Bolt (3/8 x 1 inch) | 3. Nut (3/8 inch) | 4. Mounting bracket |
|--------------------|------------------------|-------------------|---------------------|

# 5

## Installing the Baffles

### Parts needed for this procedure:

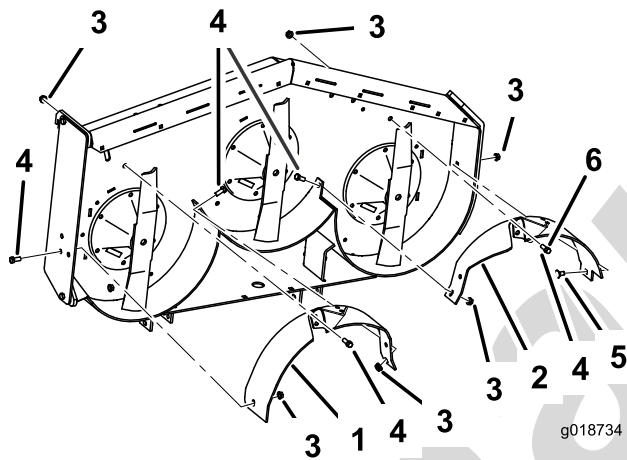
1	Left baffle
1	Center baffle
1	Right baffle
8	Bolt (3/8 x 7/8 inch)
9	Flange nut (3/8 inch)
1	Carriage bolt (3/8 x 3/4 inch)

### 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.

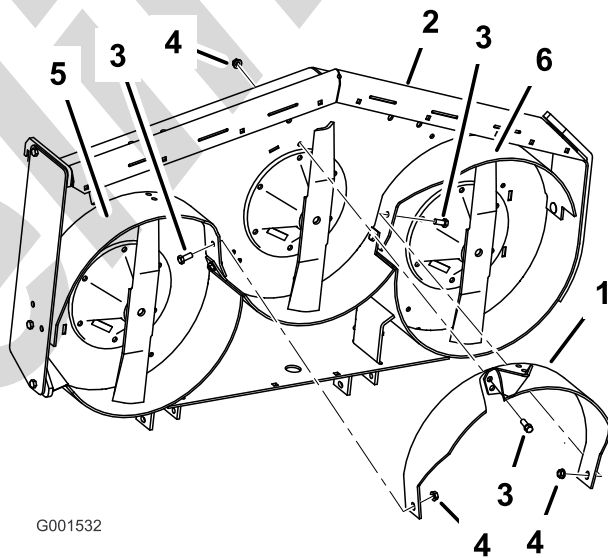
1. Install the right baffle into the mower.
2. Loosely install the right baffle to the mower deck with 2 bolts (3/8 x 7/8 inch) and 2 flange nuts (3/8 inch) (Figure 6).
3. Loosely install the right baffle to the discharge plate with 1 bolt (3/8 x 7/8 inch) and 1 flange nut (3/8 inch) (Figure 6).
4. Install the left baffle into the mower.
5. Loosely install the left baffle to the mower deck with 2 bolts (3/8 x 7/8 inch) and 2 flange nuts (3/8 inch) (Figure 6).
6. Loosely install the left baffle to the left sidewall of the mower deck with 1 carriage bolt (3/8 x 3/4 inch) and 1 flange nut (3/8 inch) (Figure 6).



**Figure 6**

- |                 |                          |   |
|-----------------|--------------------------|---|
| 1. Right baffle | 3. Flange nut (3/8 inch) | 5. Carriage bolt (3/8 x 3/4 inch)   |
| 2. Left baffle  | 4. Bolt (3/8 x 7/8 inch) | 6. Bolt for 40 inch GrandStand mowers.<br>This bolt is from the idler pulley arm. |

- |  |   |
|--|---|
| 7. Install the center baffle into the mower.   | 9. Loosely install the center baffle to the right baffle with 1 bolt (3/8 x 7/8 inch) and 1 flange nut (3/8 inch) (Figure 7).           |
| 8. Loosely install the center baffle to the left baffle with 1 bolt (3/8 x 7/8 inch) and 1 flange nut (3/8 inch) (Figure 7). | 10. Loosely install the center baffle to the top of the mower deck with 1 bolt (3/8 x 7/8 inch) and 1 flange nut (3/8 inch) (Figure 7). |



**Figure 7**

- |                  |                          |                 |
|------------------|--------------------------|-----------------|
| 1. Center baffle | 3. Bolt (3/8 x 7/8 inch) | 5. Right baffle |
| 2. Mower deck    | 4. Flange nut (3/8 inch) | 6. Left baffle  |

# 6

## Installing the New Blades

### Parts needed for this procedure:

3	Recycler blades
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### Procedure

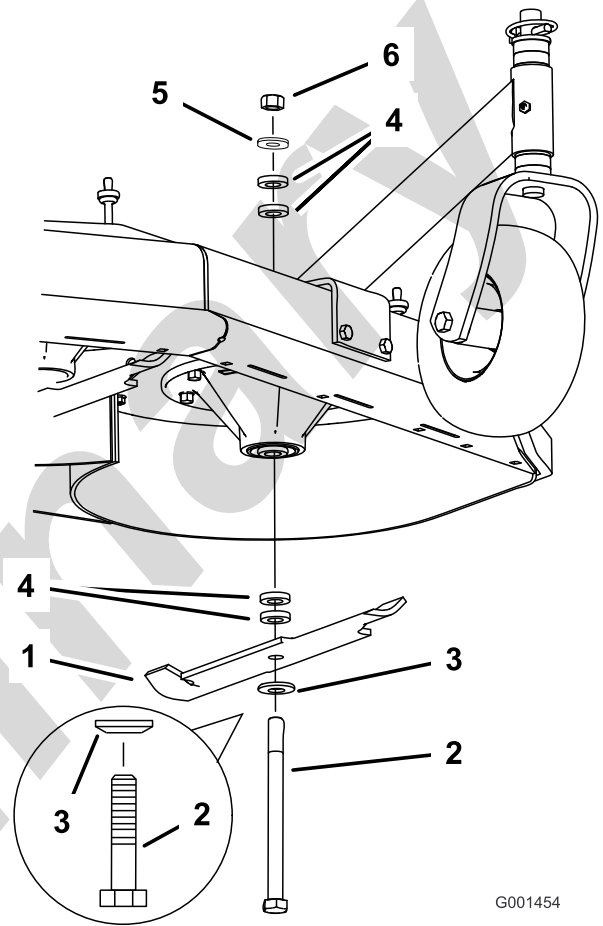
**Important:** The sail part of the blade (i.e., the turned up section) must face the inside of the mower (Figure 8).

1. For fixed deck mowers only, adjust the blades by using the 4 spacers (1/4 inch) on the blade spindle bolts; refer to the Operator's Manual.
2. Install the new blades to the spindles with washers and blade bolts that were previously removed (Figure 8 or Figure 9).
3. For fixed deck mowers only, tighten the blade bolt to 75-80 ft-lb (101-108 N-m)(Figure 8).
4. For GrandStand mowers and floating deck mowers, tighten the blade bolt to 85-110 ft-lb (115-150 N-m) (Figure 9).
5. Rotate the blades and ensure there is clearance between the blades and the baffles.
6. Tighten all bolts and nuts for the baffles.

### **⚠ WARNING**

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

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



**Figure 8**  
Fixed Deck Mower Shown

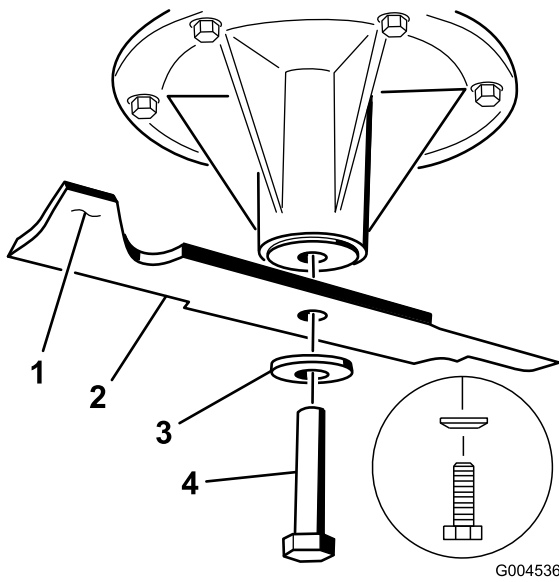
- |                  |                                   |
|------------------|-----------------------------------|
| 1. Blade         | 4. Spacer (fixed deck mower only) |
| 2. Blade bolt    | 5. Thin washer                    |
| 3. Curved washer | 6. Nut                            |

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



**Figure 9**

GrandStand® Mower Shown

- |                       |                  |
|-----------------------|------------------|
| 1. Sail Area of Blade | 3. Curved washer |
| 2. Blade              | 4. Blade Bolt    |

## Operation

### Selecting the Proper Height-of-Cut

Remove approximately one inch or no more than  $\frac{1}{3}$  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.

### 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.