

# Striping Kit

## Zero-Turn-Radius Riding Mower with 54in/60in Cutting Unit

Model No. 147-8781

### Installation Instructions

# Installation

## Loose Parts

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

Description	Qty.	Use
No parts required	–	Prepare the machine.
Striping bracket	1	Install the striping kit.
Wiper	1	
Thread-forming bolt (5/16 x 1/2 inch)	2	
Speed nut	7	
Washer	7	
Bolt (1/4 x 3/4 inch)	7	
No parts required	–	Install the rear wheels.

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

## Preparing the Machine

### Gas Models Only

1. Park the machine on a level surface.
2. Disengage the blade-control switch.
3. Move the motion-control levers outward to the PARK position.
4. Shut off the machine and remove the key.
5. Wait for all moving parts to stop.
6. Allow machine components to cool.
7. Disconnect the spark-plug.

### Electric Models Only

1. Park the machine on a level surface.
2. Disengage the blade-control switch.
3. Move the motion-control levers outward to the NEUTRAL position.
4. Engage the parking brake.
5. Shut off the machine and remove the key.
6. Wait for all moving parts to stop.
7. Allow machine components to cool.

8. Remove the battery packs from the machine.

## Removing the Rear Wheels

1. Use jackstands to raise and support the machine; refer to the product *Operator's Manual*.
2. On each side of the machine, remove the 4 lug nuts that secure the rear wheel.

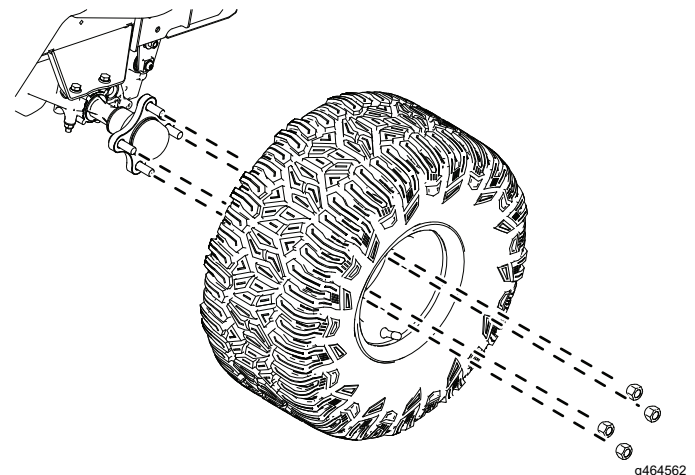


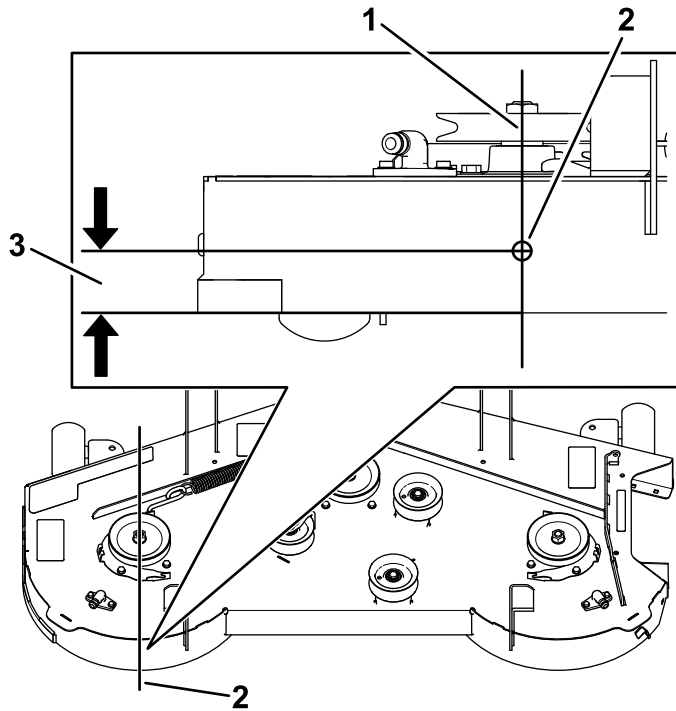
Figure 1

3. Remove the rear wheels.



# Installing the Striping Kit

1. Clean the back end of the mower deck.
2. At the most rear point of the left baffle curve, aligned with the spindle shaft, measure and mark 57 mm (2-1/4 inches) from the bottom.



**Figure 2**  
Toro® 54-inch TimeCutter® shown

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1. Aligned with the spindle shaft
  2. Mark and drill hole here.
  3. 57 mm (2-1/4 inches)
- 
3. Drill a hole at the marked location using a drill bit (9/32 inch) as shown in [Figure 2](#).

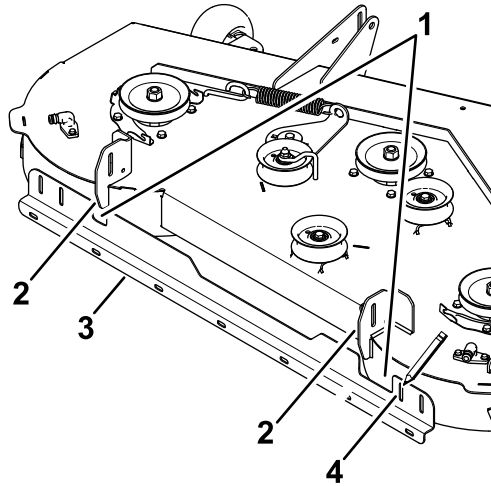
## **⚠ WARNING**

**Using a drill without proper eye protection may allow debris to enter the eye, causing injury.**

**When drilling, always wear eye protection.**

4. Using the bracket as a template, mark a hole in the right baffle curve:
  - For 54-inch models, use the inner slots in the bracket as reference points when drilling the hole ([Figure 3](#)).
  - For 60-inch models, use the outer slots in the bracket as reference points when drilling the hole ([Figure 4](#)).

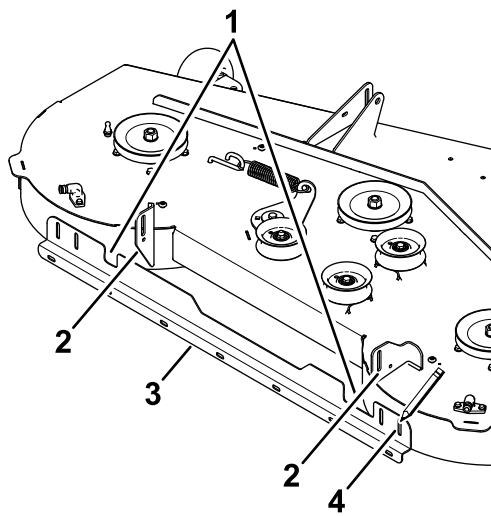
**Note:** Ensure that the notches in the bracket align with the rear hanger brackets to allow clearance when adjusting the wiper height.



**Figure 3**  
Toro 54-inch TimeCutter shown

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1. Notches
  2. Rear hanger bracket
  3. Bracket
  4. Mark and drill hole here.
- 

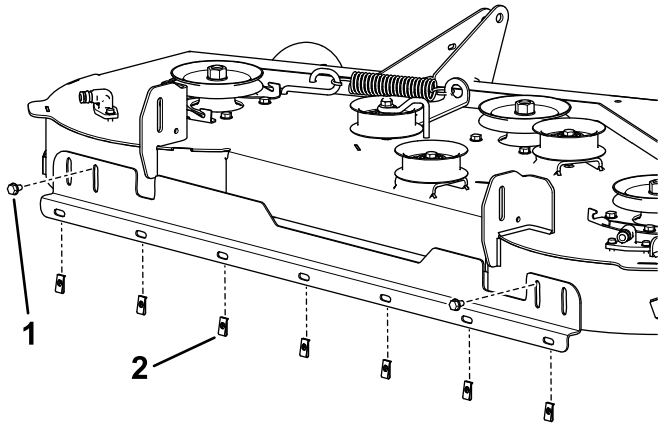


**Figure 4**  
Toro 60-inch TimeCutter shown

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1. Notches
  2. Rear hanger bracket
  3. Bracket
  4. Mark and drill hole here.
- 
5. Drill a hole in the right baffle curve using a drill bit (9/32 inch).

- Install the bracket to the holes using 2 thread-forming bolts (5/16 x 1/2 inch) as shown in [Figure 5](#).

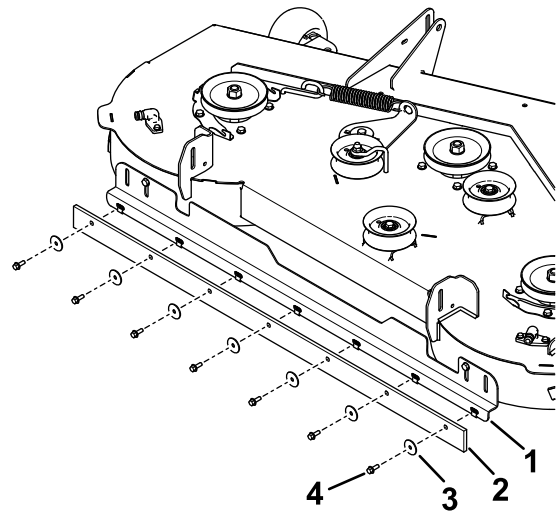


**Figure 5**

Toro 54-inch TimeCutter shown

- Thread-forming bolt (5/16 x 1/2 inch)
- Speed nut

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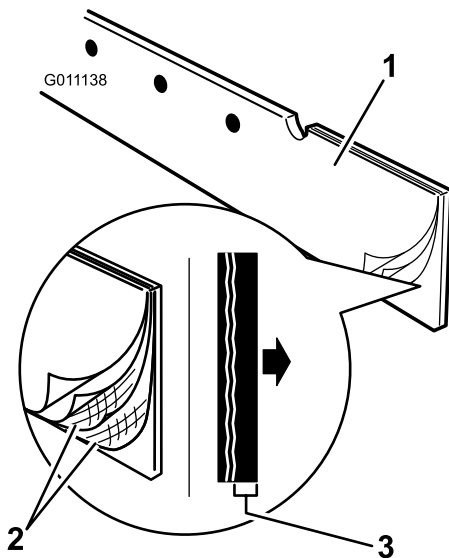
**Figure 7**

Toro 54-inch TimeCutter shown

- Bracket
- Wiper
- Washer
- Bolt (1/4 x 3/4 inch)

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- Install 7 speed nuts to the open holes in the bracket ([Figure 5](#)).
- Hold the wiper so that the rubber edge is toward the bracket and the fiber-reinforced part of the cross section is to the rear ([Figure 6](#)).



**Figure 6**

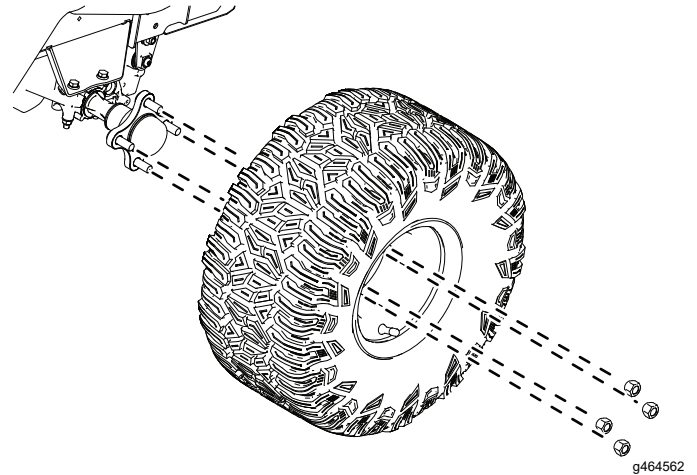
- Wiper
- Fiber reinforcement layers
- Rubber edge, facing forward

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- Install the wiper to the bracket using 7 bolts (1/4 x 3/4 inch) and 7 washers ([Figure 7](#)).

## Installing the Rear Wheels

- On each side of the machine, install the rear wheel and lug nuts that you previously removed.



**Figure 8**

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- Torque the lug nuts in a circular pattern to 52 to 66 N·m (70 to 90 ft-lb).

**Note:** After torquing the nuts, re-torque the first nut.

- Lower the machine.

# Operation

## Adjusting the Height

**Important:** Applying excessive downward pressure with the striping bar may damage turf and the striping kit.

**Important:** Raise the mower deck to the transport position when not in use to avoid damaging the wiper.

**Important:** Avoid obstacles that can damage the kit. Temporarily lift the deck to transport position when performing turns or moving in reverse.

For best results from normal striping, set the bottom edge of the wiper at 6.4 to 1.3 cm (1/4 to 1/2 inch) below the bottom of the deck.

Adjusting the position of the wiper adjusts the height of the striping bar. There are slotted sets of holes to raise or lower the wiper (Figure 9). The mower deck can also be lowered or raised to adjust the wiper height; however, this also affects the height of cut.

Avoid close trimming to reduce damage to landscaping and the striping bar. Replace the wiper yearly or more often as wear requires.

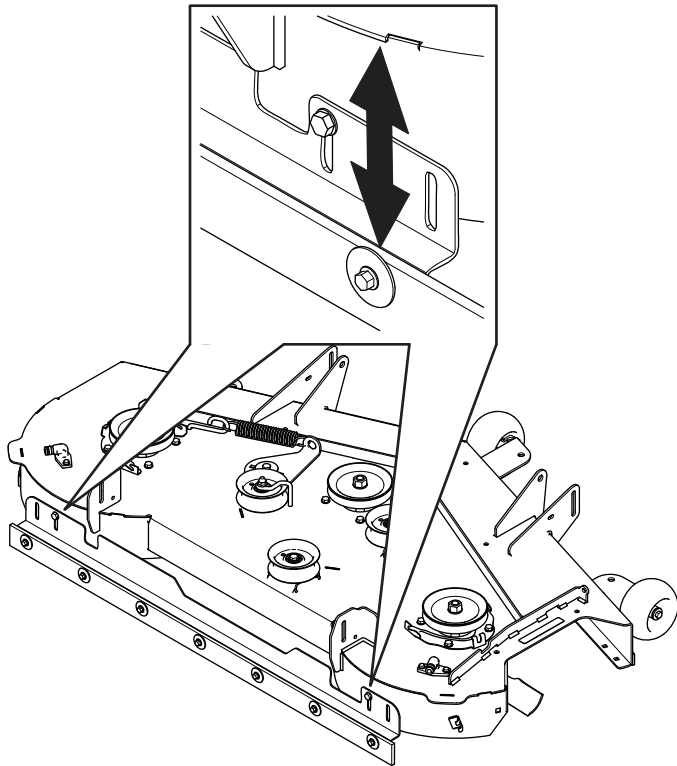


Figure 9

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# Operating Tips

## Achieving Distinctive Striping

### Grass Condition and Type

- Limp grass where wheel tracks are very visible and cool-season grass types found in northern areas will usually produce more striping contrast.
- Stiff grass where wheel tracks are less visible and warm-season grass types found in southern areas will usually produce less striping contrast.
- Transition zone grasses found in the narrow belt region can produce more striping contrast in some areas and some portions of the growing season, while producing less striping contrast in other areas or portions of the season.
- Some grass types produce better striping contrast when mowing short. Other grass types or moisture content of the grass can provide better contrast when mowing at a long/tall height of cut. Experiment with what works best in your situation.

### Sun Position

This is how the light is reflected on the grass.

- Mowing patterns that generally run east-west will have a greater contrast than north-south patterns.
- The striping pattern contrast is less visible around noon and more visible in mornings and afternoons.

### Viewing Position

The grass that is bent toward you will appear darker, and the grass that is bent away from you will appear lighter.

- Mowing patterns that generally are parallel to a road will have greater contrast when viewed approaching or leaving the property. The contrast of striping will be less visible when looking across the mowing direction.
- If the property has a focal point or a viewing location, mowing in a pattern that is generally to and from the observation point can be beneficial.

### Lawn Condition

- Large flat areas usually provide better striping contrast than on slopes or areas with a lot of trimming and edging.
- Mowing in morning dew can produce good striping contrast.
- Double-cut mowing and mowing a second pass at a 1.3 cm (1/2 inch) lower height of cut can produce good striping contrast.

## Mowing Mode

- Side dispersal of clippings can hide striping and reduce the contrast effect.
- Bagging can display heavy wheel tracks and reduce the effect of striping.
- Mulching will often display excellent contrast and enhance the effect of striping.

## Landscape

- The mowing area size has an effect on the final appearance. Large areas can look better when mowed with a large mower. Small areas may not look right when cut with a large mower.
- Large areas with occasional trees or other obstructions will often look best when the mowing pattern appears to go through the obstruction. For example, it can look best for a pattern to match and continue on the far side of a small pond. A different cross cut pattern on the far side of a pond may not be visible.
- Some areas look best with long straight lines of striping mowing pattern aligned with a property edge. Some areas look best with a diamond pattern, where neither straight line is aligned with the property edge. Properties with rolling hillsides or ponds can look best with a flowing curves striping pattern. A distinctive feature (e.g. a small pond) can be highlighted and enhanced by a radial pattern or by a ring pattern.

## Training the Lawn for Striping

- On a new property during weeks 1 and 2, you may need to follow the exact same pattern and direction in the same wheel tracks. This will begin training the grass to bend in the desired direction.
- On week 3, use a cross-grain striping pattern.
- On weeks 4 and 5, repeat the original pattern. After you establish the primary striping-pattern grain, you may alternate the pattern each week to establish a checkerboard or a plaid style of mowing pattern.
- Do not mow in the exact same pattern every week. This will cause compaction in wheel tracks and may produce ruts or depressions along the wheel tracks.

## Turning While Using the Striping Kit

- Raise the deck when turning. Striping is generally not enhanced by end turns.
- Raising the deck will reduce blending ends of the pattern.

## Driving the Machine to Different Cutting Areas

- Raise the deck and drive along a previous cut path to transport from one area of the property to another section.
- Driving across the pattern can disturb the pattern.

## Following All General Mowing Common Practices

- Mow the perimeter to establish a boundary.
- When side discharging, direct the clippings away from walks, drives, flower beds, buildings, and vehicles. If the discharge throws clippings a long distance, mow additional passes to avoid unwanted cleanup of clippings.
- Avoid excessive trimming. Driving back and forth or frequent forward and reverse maneuvers around an obstacle will compress the grass and disturb the professional appearance of a nice job.
- Follow all safe mowing practices as described in the *Operator's Manual*. Do not let the striping pattern cause you to mow into a hazardous situation.

**Notes:**

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