Installation Instructions

Safety

Rollover Protection System (ROPS) Safety

- The ROPS is an integral safety device. Do not remove any of the ROPS components from the machine.
- Ensure that the seat belt is attached and that you can release it quickly in an emergency.
- Always wear your seat belt when the roll bar is installed.
- Check carefully for overhead objects before you drive under them, and do not contact them.
- Keep the roll bar in safe operating condition by thoroughly inspecting it periodically for damage and keeping all the mounting fasteners tight.
- Replace damaged ROPS components. Do not repair or alter them.
- Wheels dropping over edges, over steep banks, or into water can cause a rollover, which may result in serious injury or death.
- Do not wear the seat belt when the roll bar is not installed.
- In the event of a rollover, take the machine to an Authorized Service Dealer to inspect the ROPS.
- Use only Toro approved accessories and attachments for the ROPS.

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	Left ROPS mount Right ROPS mount Bolt (1/2 x 1-1/4 inches) Large washer Locknut (1/2 inch) Belt guard panel Rear guard panel Cable tie Narrow push rivet Wide push rivet	1 1 6 6 6 2 1 2 4 2	Install the ROPS mounts and guard panels.
3	Left seat belt bracket (MyRide machines only) Right seat belt bracket (MyRide machines only) Partial-thread bolt (3/8 x 2 inches) Small washer Locknut (3/8 inch) Left pod bracket Bumper Right pod bracket (MyRide machines only) Thread-forming screw (5/16 x 3/4 inch) Seat belt tongue assembly Seat belt buckle assembly Carriage screw (7/16 x 1 inch) Locknut (7/16 inch)	1 1 2 2 2 1 1 1 3 1 1 2 2	Install the pod brackets and seat belt brackets (MyRide-equipped machines only).
4	Seat belt tongue assembly Seat belt buckle assembly Carriage screw (7/16 x 1 inch) Locknut (7/16 inch) Seat belt bracket (machines without MyRide only) Bolt (3/8 x 1 inch) Locknut (3/8 inch) Left pod bracket Bumper Right pod bracket (machines without MyRide only) Thread-forming screw (5/16 x 3/4 inch) ROPS tube	1 1 2 2 2 4 4 1 1 1 4	Install the pod brackets and seat belt brackets (machines without MyRide only).
5	Bolt (3/8 x 2-1/2 inches) Locknut (3/8 inch) Suitcase weight (For machines with a bagger installed only) Bolt (3/8 x 3-3/4 inches)	2 2 4 2	Complete the installation.



Preparing the Machine

No Parts Required

Procedure

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

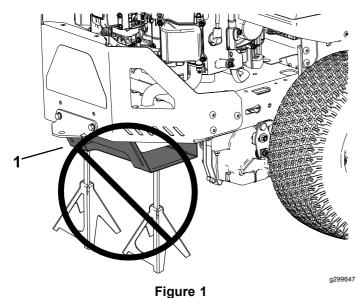
Note: You may discard all removed parts unless otherwise noted.

- 1. Park the machine on a level surface.
- Disengage the blade-control switch.
- 3. Move the motion-control levers outward to the NEUTRAL-LOCK position to engage the parking brake.
- 4. Shut off the engine and remove the key.
- 5. Raise the seat, refer to your machine *Operator's Manual*.
- 6. Raise the rear of the machine on jack stands; refer to your machine *Operator's Manual*.

A WARNING

Supporting the machine on the lower muffler shield (Figure 1) may damage the shield and cause the machine to fall, injuring you or bystanders.

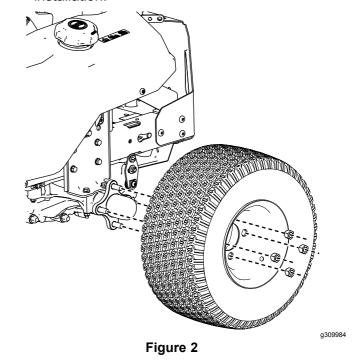
Do not use the lower muffler shield to support the machine.



1. Lower muffler shield

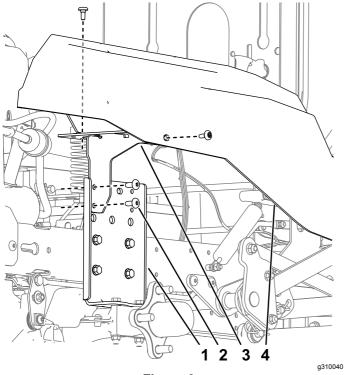
7. Remove the rear tires as shown in Figure 2

Note: Retain all wheel components for later installation.



8. Remove the pod brackets from the machine (Figure 3).

Note: Retain the shoulder screws removed from the sides of the pods for later installation.

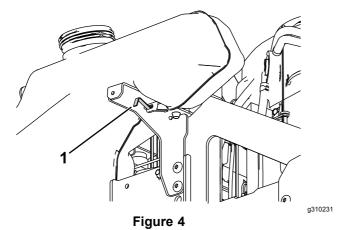


- Figure 3
- 1. Hydraulic mount plate
- 3. Pod support bracket

2. Screw

4. Pod

Note: Retain the fuel tank spring beneath that secures the fuel tank to the left pod bracket for later installation.



1. Fuel tank spring



Installing the ROPS Mounts and Guard Panels

Parts needed for this procedure:

1	Left ROPS mount
1	Right ROPS mount
6	Bolt (1/2 x 1-1/4 inches)
6	Large washer
6	Locknut (1/2 inch)
2	Belt guard panel
1	Rear guard panel
2	Cable tie
4	Narrow push rivet
2	Wide push rivet

Procedure

- Install the ROPS mounts to the machine frame behind the hydraulic mount plate as shown in (Figure 5).
- 2. Torque the bolts to 58 to 77 N·m (43 to 57 ft-lb).
- 3. Secure the tabs on the pods to the ROPS mount with narrow push rivets (Figure 5).
- 4. Install the teeth of the rear guard panel to the notches in the center frame and secure it with cable ties as shown in Figure 6.
- 5. Install the belt guard panels to the frame with push rivets as shown in Figure 6.

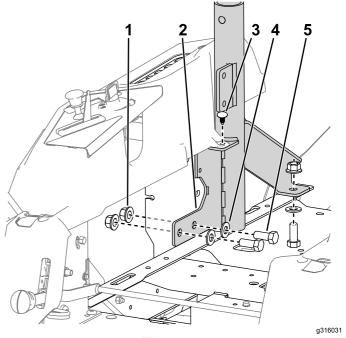
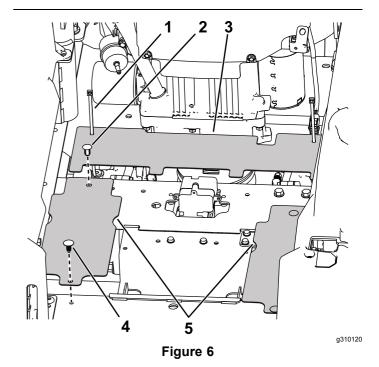


Figure 5
Right side shown

- 1. Locknut (1/2 inch)
- 2. Right ROPS mount
- 3. Narrow push rivet
- 4. Large washer
- 5. Bolt (1/2 x 1-1/4 inches)



- 1. Cable tie
- 2. Wide push rivet
- 3. Rear guard panel
- 4. Narrow push rivet
- 5. Belt guard panels



Installing the Pod Brackets and Seat Belt

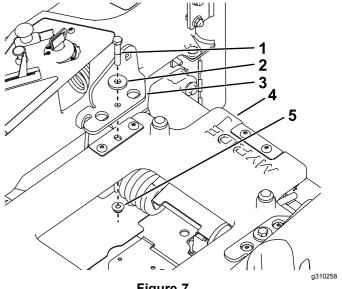
MyRide-Equipped Machines Only

Parts needed for this procedure:

1	Left seat belt bracket (MyRide machines only)
1	Right seat belt bracket (MyRide machines only)
2	Partial-thread bolt (3/8 x 2 inches)
2	Small washer
2	Locknut (3/8 inch)
1	Left pod bracket
1	Bumper
1	Right pod bracket (MyRide machines only)
3	Thread-forming screw (5/16 x 3/4 inch)
1	Seat belt tongue assembly
1	Seat belt buckle assembly
2	Carriage screw (7/16 x 1 inch)
2	Locknut (7/16 inch)

Procedure

Install the seat belt brackets to the seat platform with 2 partial-thread bolts (3/8 x 2 inches), 2 small washers, and 2 locknuts (3/8 inch) as shown in Figure 7.



- Figure 7
- 1. Partial-thread bolts (3/8 x 4. MyRide platform 2 inches)
- 2. Small washer
- 5. Locknut (3/8 inch)
- 3. Seat belt bracket
- 2. Install the bumper to the left pod bracket (Figure

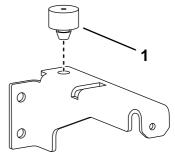
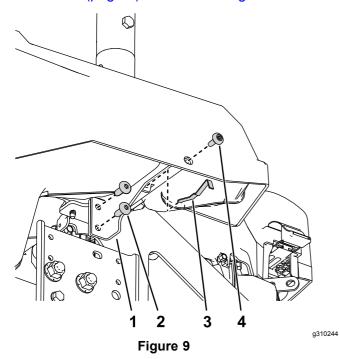


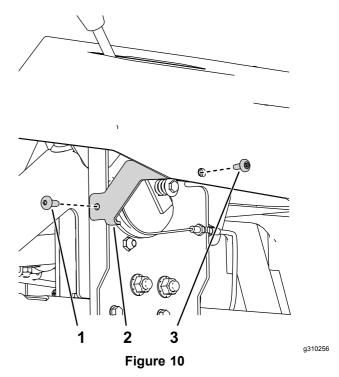
Figure 8

1. Bumper

3. Install the left pod bracket to the machine frame using 2 thread-forming screws (5/16 x 3/4 inch) and the parts removed in 1 Preparing the Machine (page 3) as shown in Figure 9.



- 1. Left pod bracket
- 2. Thread-forming screw (5/16 x 3/4 inch)
- 3. Fuel-tank spring
- 4. Shoulder bolt
- 4. Install new right pod bracket to the machine using a thread-forming screw (5/16 x 3/4 inch) and the shoulder bolt removed in 1 Preparing the Machine (page 3).

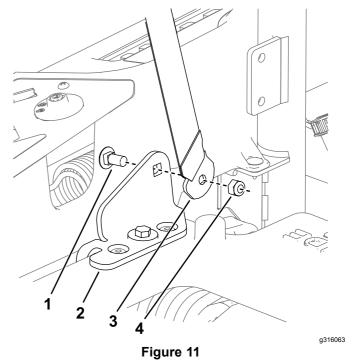


- 1. Thread-forming screw (5/16 x 3/4 inch)
 - Right pod bracket

as shown in Figure 11.

5. Install the seat belt buckle and tongue to the inside of the seat belt brackets with 2 carriage screws (7/16 x 1 inch) and 2 locknuts (7/16 inch)

3. Shoulder bolt



- . Carriage screws (7/16 x 1 inch)
- Seat belt tongue assembly (bracket bent toward the seat)
- Seat belt bracket
- 4. Locknut (7/16 x 1 inch)



Installing the Pod Brackets and Seat Belt

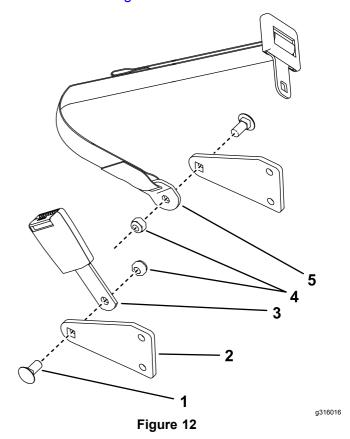
Machines without MyRide Only

Parts needed for this procedure:

1	Seat belt tongue assembly
1	Seat belt buckle assembly
2	Carriage screw (7/16 x 1 inch)
2	Locknut (7/16 inch)
2	Seat belt bracket (machines without MyRide only)
4	Bolt (3/8 x 1 inch)
4	Locknut (3/8 inch)
1	Left pod bracket
1	Bumper
1	Right pod bracket (machines without MyRide only)
4	Thread-forming screw (5/16 x 3/4 inch)

Procedure

1. Install the seat belt buckle and tongue to the inside of the seat belt brackets with 2 carriage screws (7/16 x 1 inch) and 2 locknuts (7/16 inch) as shown in Figure 12.

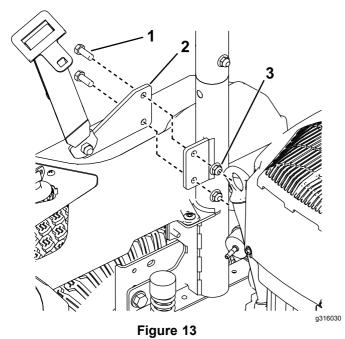


- 1. Carriage screw (7/16 x 1 inch)
- 4. Locknuts (7/16 inch)
- 2. Seat belt bracket
- 5. Tongue assembly

3. Buckle

2. Install the seat belt brackets to the outside of the ROPS mounts (Figure 13).

Note: Install the seat belt buckle assembly with the bent bracket toward the seat.

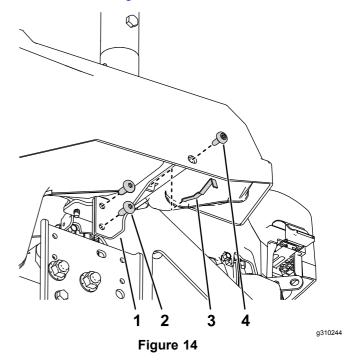


- 1. Bolt (3/8 x 1 inch)
- 3. Locknut (3/8 inch)
- 2. Seat belt bracket
- 3. Install the right pod bracket to the machine frame using 2 thread-forming screws (5/16 x 3/4 inch) and the parts removed in 1 Preparing the Machine (page 3) as shown in Figure 3.

Right side shown

4. Install the bumper to the left pod bracket (Figure 8).

5. Install the left pod bracket to the machine frame using 2 thread-forming screws (5/16 x 3/4 inch) as shown in Figure 13.



- 1. Left pod bracket
- 2. Thread-forming screw (5/16 x 3/4 inch)
- 3. Fuel-tank spring
- 4. Shoulder bolt



Completing the Installation

Parts needed for this procedure:

1	ROPS tube
2	Bolt (3/8 x 2-1/2 inches)
2	Locknut (3/8 inch)
4	Suitcase weight (For machines with a bagger installed only)
2	Bolt (3/8 x 3-3/4 inches)

Procedure

- 1. Install the rear tires as shown in Figure 2.
- Lower the machine; refer to your machine Operator's Manual.
- 3. Lower the seat.
- With the ROPS tube angle toward the rear of the machine, install the ROPS tube to the ROPS mounts with 2 bolts (3/8 x 2-1/2 inches) and 2 locknuts (3/8 inch) as shown in Figure 15.
- For machines with a bagger installed only: Install the included additional suitcase weights to the machine using 2 bolts (3/8 x 3-3/4 inches) as necessary according to the table below (Figure 16).

Type of Deck	Total Weights Required	
42-inch stamped deck	11	
42-inch fabricated deck	10	
50-inch fabricated deck	8	
54-inch fabricated deck	6	
60-inch fabricated deck	6	

Note: The weight brackets will hold up to 8 suitcase weights between the front edge of the bracket and the machine; any additional weights must be mounted to the front of the weight brackets.

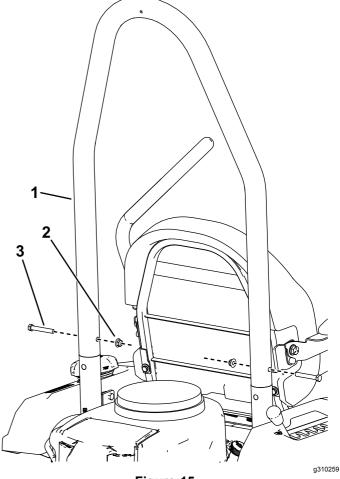
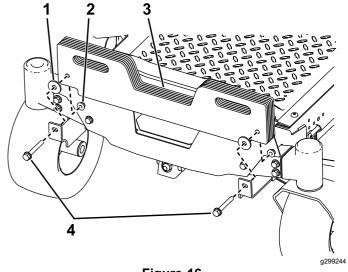


Figure 15

- 1. ROPS tube
- 3. Bolt (3/8 x 2-1/2 inches)
- Locknut (3/8 inch)



- Figure 16
- 1. Washer
- 2. Locknut

- 3. Suitcase weight
- 4. Bolt (3/8 x 3-3/4 inches)

Notes:

