



# Roll-Over Protection System Kit

## 2010 and After Z500 Riding Mowers

Model No. 117-3879

### Installation Instructions

## Loose Parts

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

Procedure	Description	Qty.	Use
<b>1</b>	Roll bar, right section	1	Install the Rollover Protection System (ROPS).
	Roll bar, left section	1	
	Roll bar, center section	1	
	Bolt, (3/8 x 1 inch)	8	
	Curved washer	8	
	Flange nut, (3/8 inch)	8	
	Bolt, (1/2 x 3-1/4 inch)	2	
	Flange nut, (1/2 inch)	2	
<b>2</b>	Seat latch catch	1	Replace the seat latch catch.
	Bolt (5/16 x 3/4 inch)	2	
	Locknut (5/16 inch)	2	
<b>3</b>	Seat belt kit	1	Install the seat belt.
<b>4</b>	Seat frame	1	Install the new seat frame.
	Locknut (3/8 inch)	2	
	Bolt (3/8 x 5 inches)	2	

# 1

## Installing the Roll Over Protection System (ROPS)

### Parts needed for this procedure:

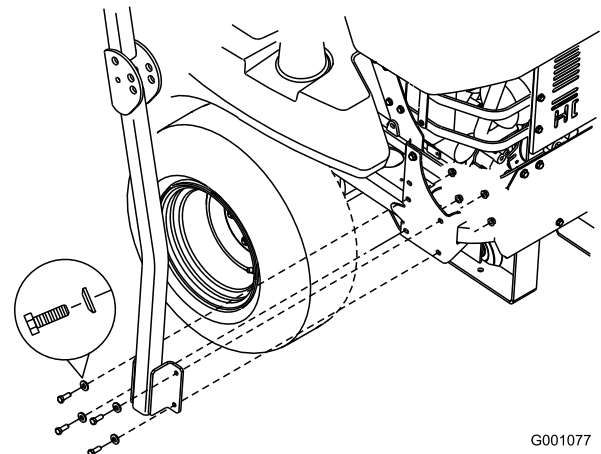
1	Roll bar, right section
1	Roll bar, left section
1	Roll bar, center section
8	Bolt, (3/8 x 1 inch)
8	Curved washer
8	Flange nut, (3/8 inch)
2	Bolt, (1/2 x 3-1/4 inch)
2	Flange nut, (1/2 inch)

## Procedure

1. Remove the existing ROPS from the machine frame and discard (Figure 1).

2. Loosely install the right and left roll bar section to the frame, with 8 bolts (3/8 x 1 inch), 8 curved washers, and 8 flange nuts (3/8 inch) (Figure 1).

**Note:** The curve washer cone must be installed toward the bolt head.

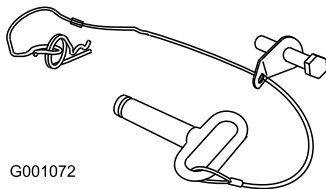


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Figure 1

3. Install the lanyard clips onto the long bolts (1/2 x 3-1/4 inch).

**Note:** Make sure the bent tab points toward the head of the bolt.

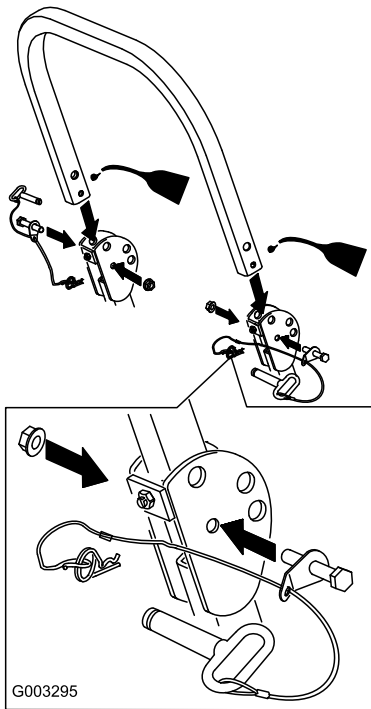


**Figure 2**

4. Lightly oil the ends of the center roll bar section.
5. Loosely install the center roll bar section using 2 bolts (1/2 x 3-1/4 inch) and 2 flange nuts (1/2 inch).

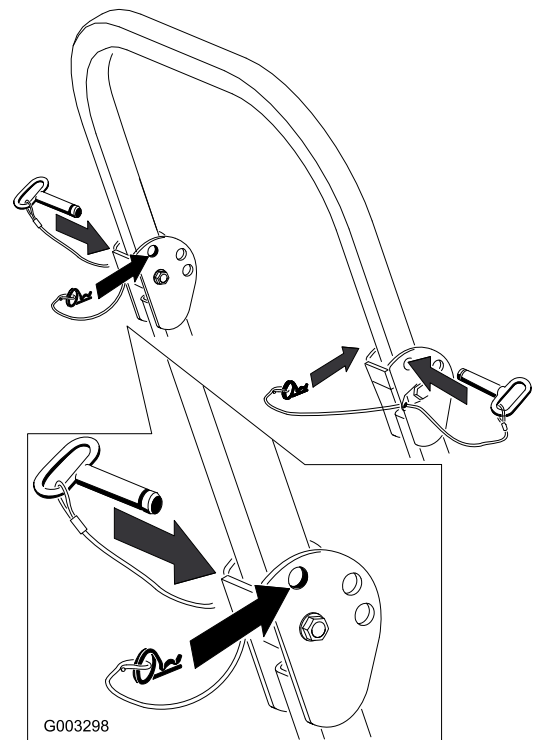
**Note:** Make sure the bolts are installed from the outside of the roll bar.

**Note:** Make sure the lanyard tab is installed as show and points forward.



**Figure 3**

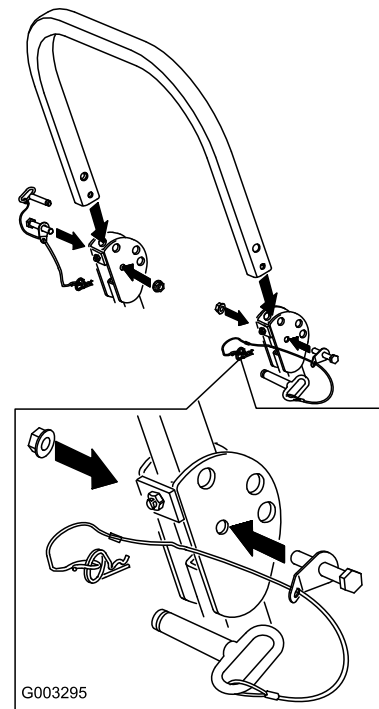
6. Raise the roll bar into the upright position and secure it with the pins and hairpin cotter pins fastened to the lanyards



**Figure 4**

7. Torque all lower fasteners, attached to the machine frame, to 30 ft-lb.
8. Tighten the center roll bar bolts (1/2 x 3-1/4 inch) so it rotates freely with some resistance.

**Note:** No more than one thread should be exposed outside the nut.



**Figure 5**

# 2

## Replacing the Seat Latch Catch

### Parts needed for this procedure:

1	Seat latch catch
2	Bolt (5/16 x 3/4 inch)
2	Locknut (5/16 inch)

### Procedure

1. Tilt the seat forward and remove the existing latch catch.
2. Install the new seat latch catch to the frame with 2 bolts (5/16 x 3/4 inch) and 2 locknuts (5/16 inch) as shown.

**Note:** The bent part of the latch catch needs to point downward.

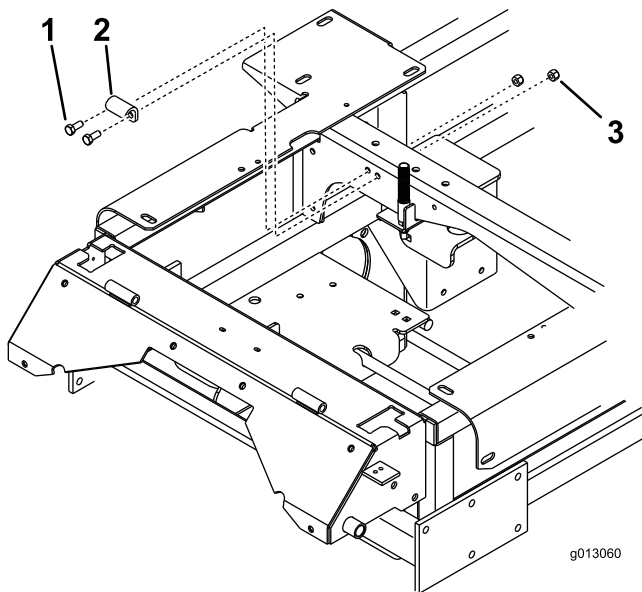


Figure 6

1. Bolt (5/16 x 3/4 inch)
2. Latch catch
3. Locknut (5/16 inch)

# 3

## Installing the Seat Belt

### Parts needed for this procedure:

1	Seat belt kit
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### Procedure

1. Tilt the seat forward and remove the existing seat belt receiver and retractable belt.
2. Install the receiver part of the seat belt to the seat frame with a supplied bolt.
3. Install the retractable belt to the seat with a supplied bolt.

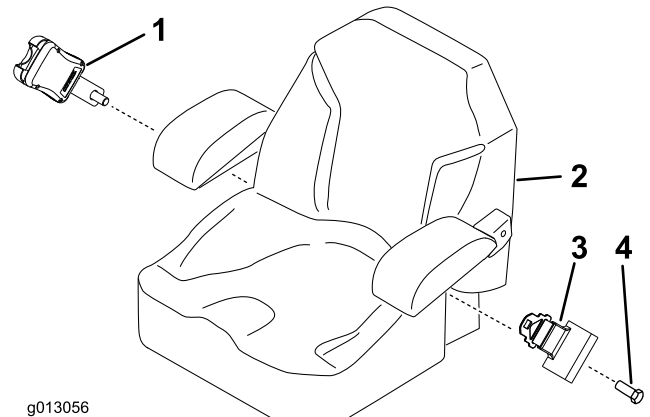


Figure 7

1. Receiver with supplied bolt
2. Seat
3. Retractable belt
4. Supplied bolt

# 4

## Installing the New Seat Frame

### Parts needed for this procedure:

1	Seat frame
2	Locknut (3/8 inch)
2	Bolt (3/8 x 5 inches)

### Procedure

1. Tilt the seat forward and remove the nut and bolt from the seat retaining rod (Figure 8).

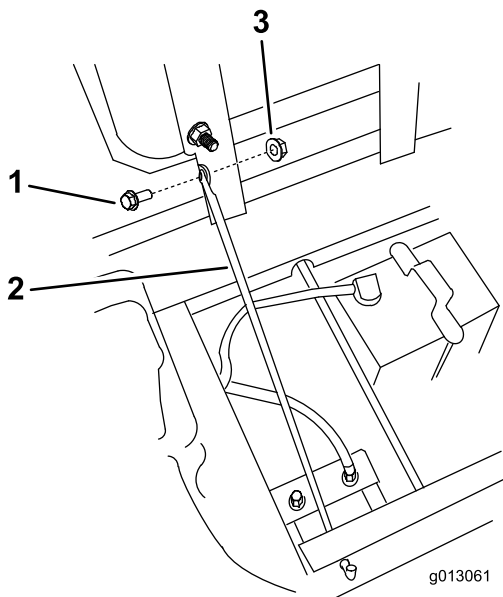


Figure 8

1. Bolt
2. Seat rod
3. Nut

2. If needed, attach the two connectors onto the seat switch.
3. Remove the 2 bolts (3/8 x 5 inches) and 2 locknuts (3/8 inch) at the front of the seat where it is hinged. Discard the locknuts and bolts.
4. Remove the seat assembly from the machine.
5. Remove the seat frame and spacers from the existing seat by removing the four locknuts (Figure 9). Discard the seat frame and keep the locknuts and spacers.
6. Place the spacers on the seat mounting frame with the bent ends up. **The slot in the spacer is installed to the front of the seat.**

7. Install the seat to the new seat frame with the four locknuts and spacers previously removed.

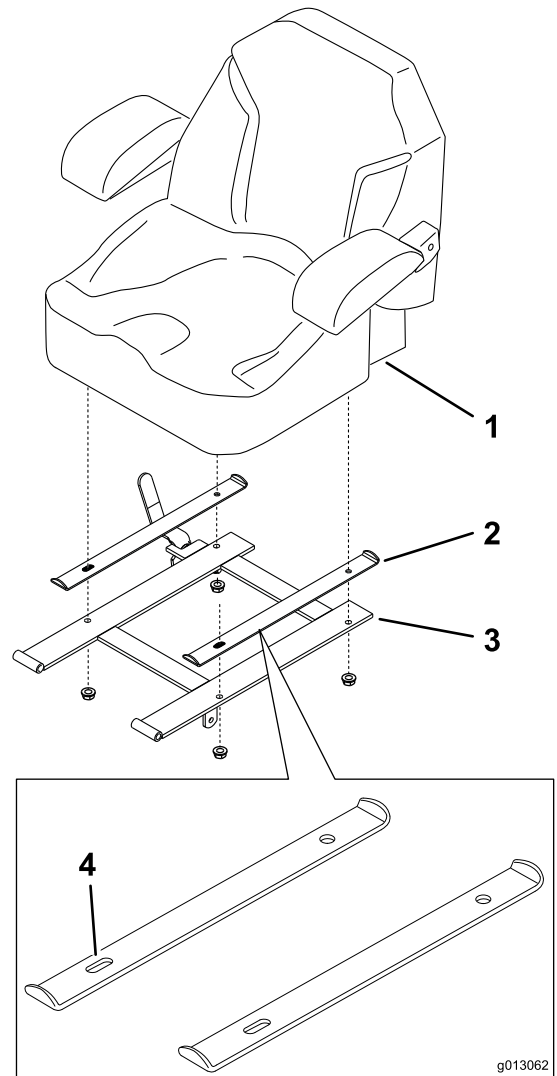
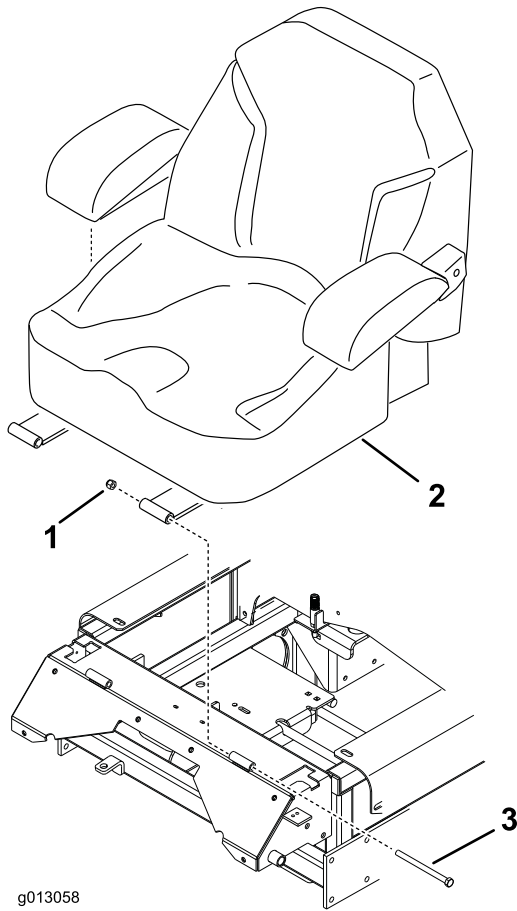


Figure 9

1. Seat
2. Seat spacer
3. Seat frame
4. Ensure the slot is installed towards the front

8. Install the seat at the hinges with 2 bolts (3/8 x 5 inches) and 2 locknuts (3/8 inch) (Figure 10).



**Figure 10**

- 1. Nut
- 2. Seat
- 3. Bolt

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9. Install the seat retaining rod with the nut and bolt previously removed (Figure 8).

**Note:** Do not over tighten the nut and bolt to allow the retaining rod to pivot.

10. If needed, attach the two connectors onto the seat switch.

**Notes:**

**Notes:**



**Count on it.**