



Roll-Over Protection System

Workman® 1100/2100/e2000/MD/MDE/MDX/MDX-D Series and
Twister® Utility Vehicle

Model No. 07276

Model No. 07276R

Installation Instructions

Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Disconnect the controls on the seat base.
2	No parts required	–	Remove the seats and seat bases.
3	ROPS bar Bolts (3/8 inch) Nuts (3/8 inch)	1 10 10	Mount the seat belts and ROPS bar.
4	Nut (3/8 inch) Seat belt Bolt (3/8 inch) Seat belt ROPS anchor bracket Bolt (7/16 inch) Nut (7/16 inch) Seat belt anchor, right hand Seat belt anchor, left hand Seat belt lock assembly	8 2 8 2 4 4 1 1 2	Mount the seat belts to the machine.
5	No parts required	–	Remove the transmission spacer.



1

Disconnecting the Controls on the Seat Base

No Parts Required

Disconnecting the Controls on the Seat Base for the 1100/2100/MD/MDX/MDX-D and Twister Models

1. Remove the knob from the gear shift lever (Figure 1).

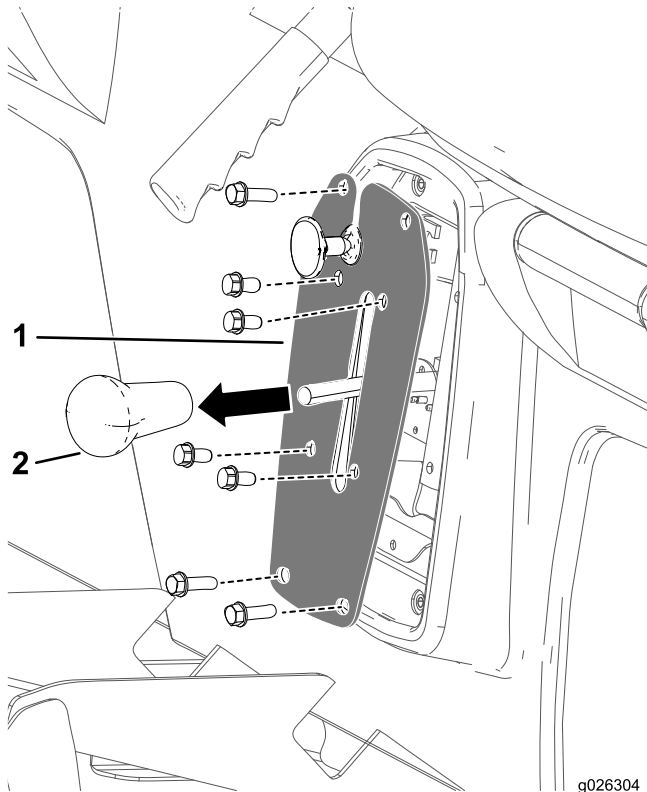


Figure 1

1. Gear shift lever knob
2. Shifter plate

2. Remove the 4 bolts securing the shifter plate to the shifter bracket (Figure 1).
3. Remove the 4 bolts securing the shifter plate to the seat base and remove the shifter plate (Figure 1).
4. Unplug the wire connector from the reverse switch inside the gear shift bracket.
5. Proceed to [2 Removing the Seats and Seat Bases \(page 3\)](#).

Disconnecting the Controls on the Seat Base for the 1110/2110/MD/MDE/MDX/MDX-D Models

1. Follow steps [1](#) through [4](#) above.
2. Remove the cotter pins and clevis pins securing the parking brake cables to the rear wheel brake levers (Figure 2).

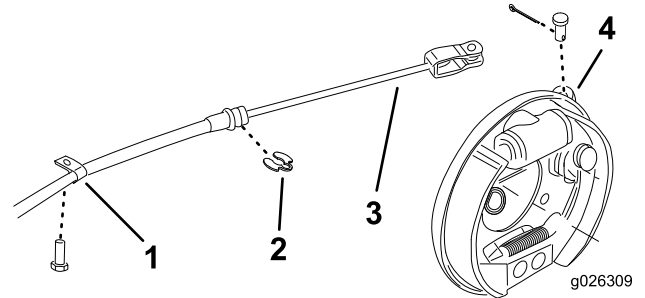


Figure 2

1. R-clip
2. C-clip
3. Parking brake cable
4. Brake lever

3. Remove the R-clamps and C-clips securing the brake cables to the frame (Figure 2).
4. Proceed to [2 Removing the Seats and Seat Bases \(page 3\)](#).

Disconnecting the Controls on the Seat Base for the e2050 and MDE Models

1. Reach under the seat base and unplug the charger wiring harness connector (Figure 3).

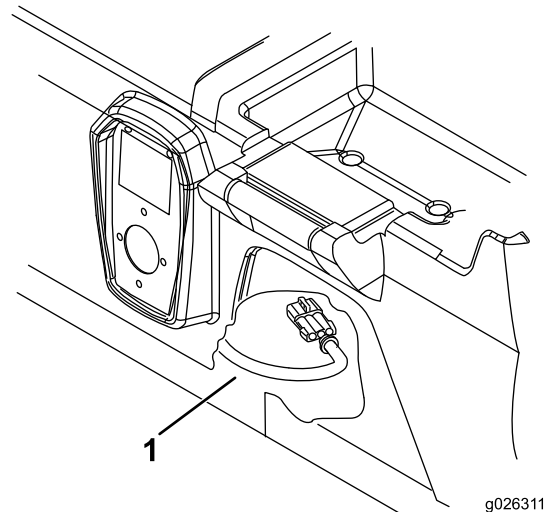


Figure 3

1. Charger wiring harness

2. Proceed to [2 Removing the Seats and Seat Bases \(page 3\)](#).

Disconnecting the Controls on the Seat Base for the 1100/2100/MD/MDE/MDX/MDX-D, e2060, and 2065 Models

1. Reach under the seat base and unplug the charger wire harness connector (Figure 3).
2. Remove the 2 bolts and washers securing the parking brake cover to the seat base (Figure 4).

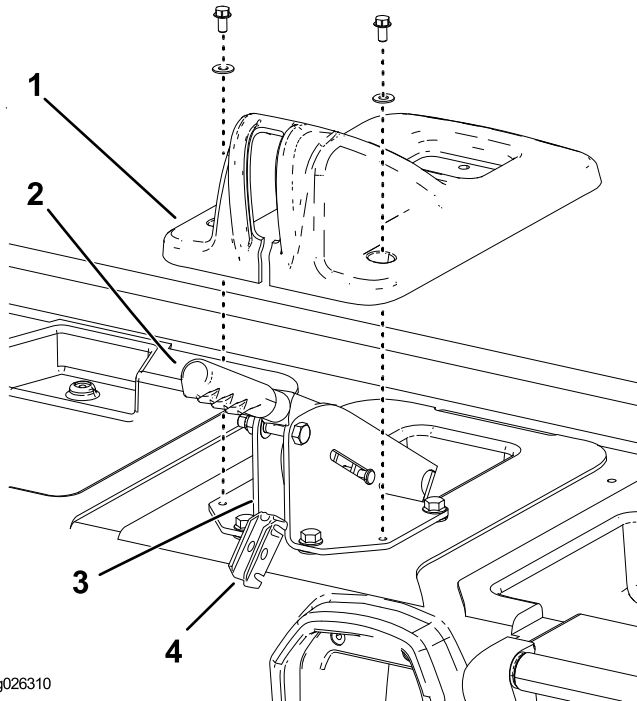


Figure 4

- | | |
|------------------------|----------------------------------|
| 1. Parking brake cover | 3. Brake lever support bracket |
| 2. Parking brake lever | 4. Brake cable equalizer bracket |

3. Lift the cover over the parking brake lever and off the seat base (Figure 4).
4. Remove the clevis pin securing the brake cable equalizer bracket to the rear of the brake lever support bracket (Figure 4).
5. Lift the equalizer bracket out of the support bracket and unhook the brake cables from it (Figure 4).
6. Remove the C-clips securing the brake cables to the rear of the brake lever support bracket (Figure 4).
7. Proceed to [2 Removing the Seats and Seat Bases](#) (page 3).

2

Removing the Seats and Seat Bases

No Parts Required

Procedure

Remove the 8 bolts securing the seat base to the floor plate and front frame and lift the seats and seat base from the machine (Figure 5).

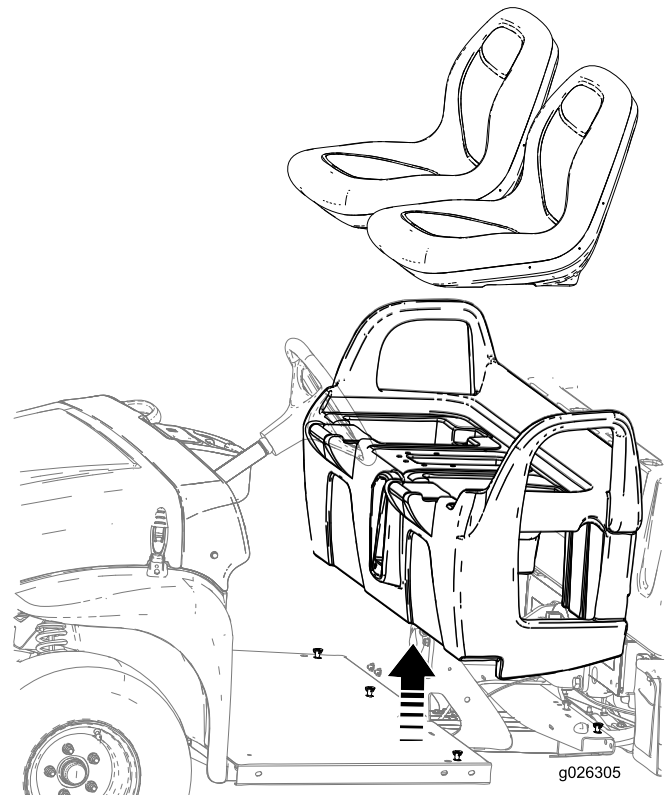


Figure 5

3

Mounting the ROPS bar

Parts needed for this procedure:

1	ROPS bar
10	Bolts (3/8 inch)
10	Nuts (3/8 inch)

Procedure

1. Position the ROPS onto the machine as shown in [Figure 6](#), aligning the mounting holes at the sides and rear.

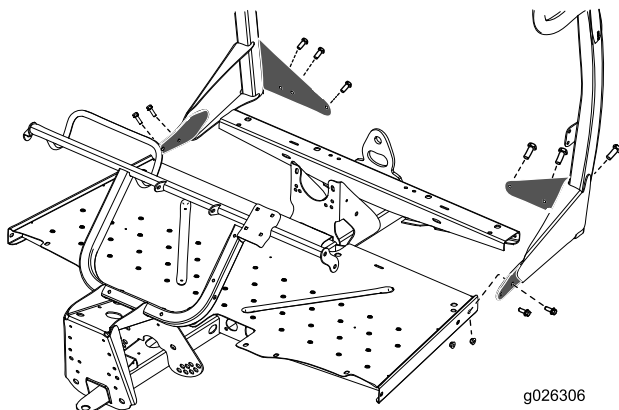


Figure 6

2. Secure the ROPS to the rear of the floor plate with 6 bolts (3/8 inch) and 6 nuts (3/8 inch).
3. Secure the ROPS to the sides of the floor plate with the remaining 4 bolts (3/8 inch) and 4 nuts (3/8 inch) ([Figure 6](#)).
4. Tighten all fasteners securely.

4

Mounting the Seat Belts to the Machine

Parts needed for this procedure:

8	Nut (3/8 inch)
2	Seat belt
8	Bolt (3/8 inch)
2	Seat belt ROPS anchor bracket
4	Bolt (7/16 inch)
4	Nut (7/16 inch)
1	Seat belt anchor, right hand
1	Seat belt anchor, left hand
2	Seat belt lock assembly

Procedure

1. Mount a seat belt anchor bracket to each ROPS tab with 2 bolts (3/8 inch) and 2 nuts (3/8 inch) (refer to [Figure 7](#)).

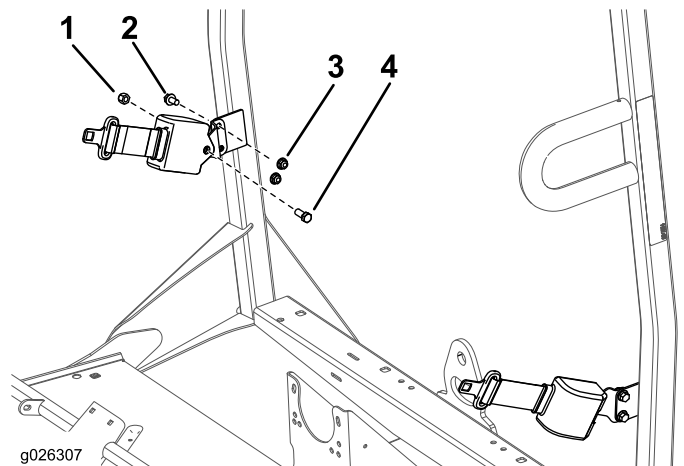


Figure 7

1. Nut (7/16 inch)
2. Bolt (3/8 inch)
3. Nut (3/8 inch)
4. Bolt (7/16 inch)

2. Mount the retractable end of each seat belt assembly to each seat belt anchor bracket with a bolt (7/16 inch) and nut (7/16 inch) ([Figure 7](#)).
3. Using the dimensions shown in [Figure 8](#), locate, mark, and drill 4 holes (3/8 inch) in the top of the frame channel.

Note: The holes may already be in some frame channels.

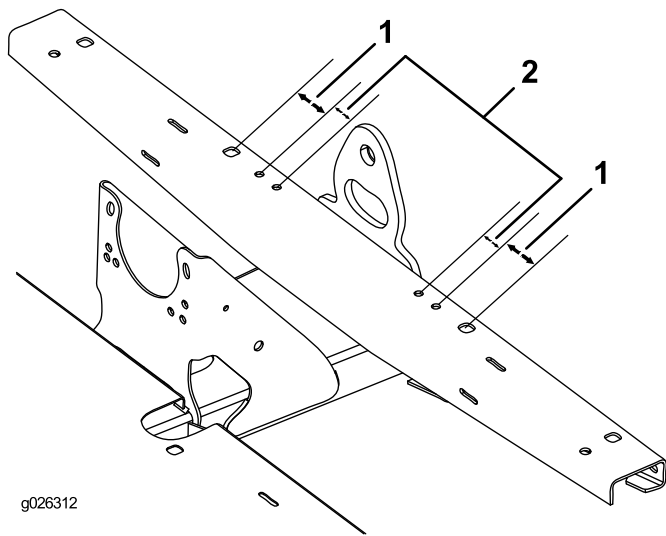


Figure 8

1. 54 mm (2 1/8 inch) 2. 32 mm (1 1/4 inch)

4. Secure the left and right seat belt anchor to the front frame with 4 bolts (3/8 inch) and 4 nuts (3/8 inch) (Figure 9).

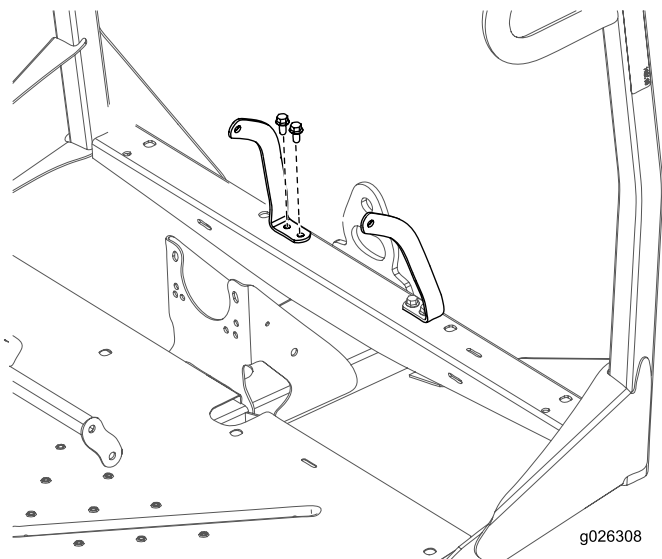


Figure 9

5. Using the dimensions shown in Figure 10, locate, mark, and drill 2 holes (1 inch) in the top of the seat base. Locate a hole on each side of the center compartment.

Note: Location marks for the holes may already be on some seat bases.

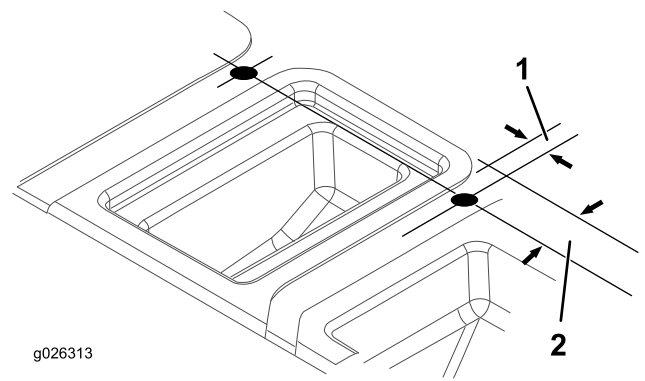


Figure 10

1. 21 mm (2.1 cm) 2. 51 mm (2 inch)

6. Set the seat base into the mounting position on the machine.
7. Insert the receiver end of each seat belt lock assembly into one of the newly drilled holes in the seat base (Figure 11).

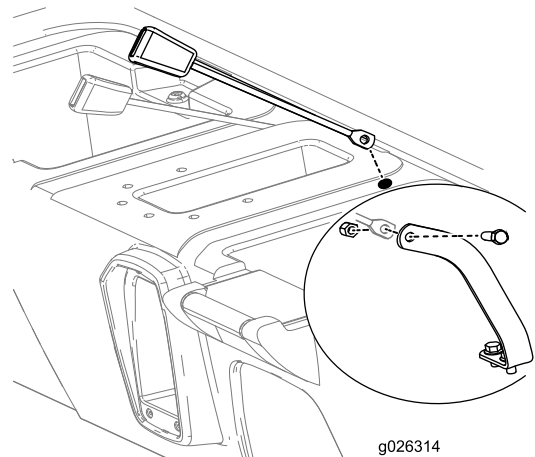


Figure 11

8. While lifting the rear of the seat base to gain access, mount the receiver end of each seat belt assembly to each seat belt anchor with a bolt (7/16 inch) and locknut (7/16 inch) as shown in Figure 11.
9. Secure the seat base to the floor plate and front frame.
10. Install all the components that were previously disconnected from the seat base (refer to 1 Disconnecting the Controls on the Seat Base (page 2)).
11. Check the operation of the components and adjust, as required, per the instructions in the *Operator's Manual*.
12. Adjust the front suspension; refer to the vehicle *Operator's Manual*.

5

Removing the Clutch Spacer (MD, dated 2013 or above, MDX serial numbers 310000001 and up, and MDX-D models only)

No Parts Required

Procedure

It is possible to increase the ground speed when a ROPS is installed.

1. Remove the bolts securing the primary clutch cover as shown in [Figure 12](#) and [Figure 13](#).

Important: Use caution when removing the clutch cover; the spring is under compression.

Important: Take note of the X orientation on the clutch covers and clutch assemblies.

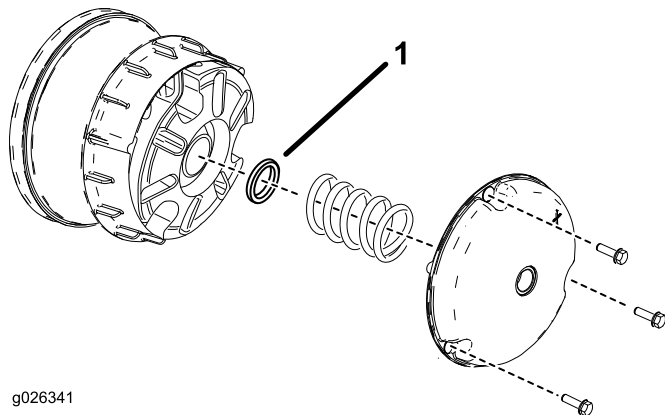


Figure 12

MD (dated 2013 or above) & MDX Models

1. Clutch spacer

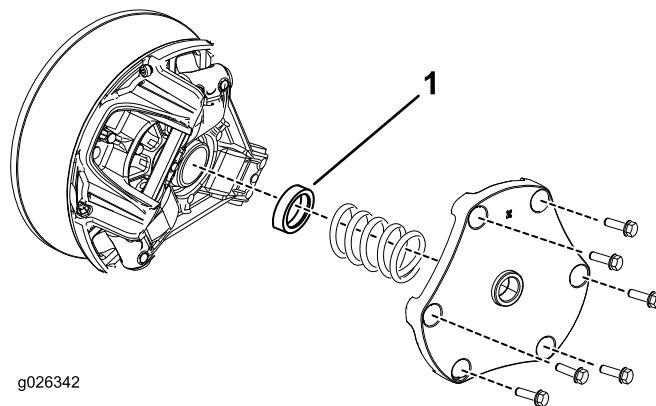


Figure 13
MDX-D Models

1. Clutch Spacer

2. Remove the spring and discard the spacer (refer to [Figure 12](#) and [Figure 13](#))

3. Install the spring and clutch cover.

Important: Ensure that the X is placed back in the original location.

4. Torque the bolts to 179 to 228 N-m (132 to 168 in-lbs) for the MD or MDX models, 142 to 163 N-m (105 to 120 in-lbs) for the MDX-D models.

Notes:



Count on it.