



# Roll Over Protection System (ROPS)

Navigator®

Kit No. 126-0369

For All Serial Nos.

## ⚠ WARNING

### CALIFORNIA Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

## Safety Alert Symbol

This Safety Alert Symbol (Figure 1) is used both in this instruction sheet and on the machine to identify important safety messages which must be followed to avoid accidents

This symbol means: **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Figure 1  
Safety Alert Symbol

The safety alert symbol appears above information which alerts you to unsafe actions or situations and will be followed by the word **DANGER**, **WARNING**, or **CAUTION**.

**DANGER:** White lettering / Red background. Indicates an imminently hazardous situation which, if not avoided, **Will** result in death or serious injury.

**WARNING:** Black lettering / Orange background. Indicates a potentially hazardous situation which, if not avoided, **Could** result in death or serious injury.

**CAUTION:** Black lettering / Yellow background. Indicates a potentially hazardous situation which, if not avoided, **May** result in minor or moderate injury.

This manual uses two other words to highlight information. **Important** calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

## ⚠ WARNING

While maintenance or adjustments are being made, someone could start the engine. Accidental starting of the engine could seriously injure you or other bystanders.

Remove the key from the ignition switch, engage parking brake, and pull the wire(s) off the spark plug(s) before you do any maintenance. Also push the wire(s) aside so it does not accidentally contact the spark plug(s).

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

**Note:** Park the unit on a level surface. Make sure all moving parts have stopped, parking brake is engaged, the key has been removed, and the spark plug wire has been disconnected. Allow unit to cool before starting these instructions.



# Loose Parts

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

Item	Part No.	Description	Qty
1	3296-29	Nut-Nyloc 5/16-18	4
2	3256-23	Washer-5/16 SAE	4
3	103-0384	Spacer	4
4	322-12	Screw-HH 5/16-18 x 2 1/2	4
5	103-4469	Kit-Seat Belt	1
5:2	3212-4	Screw-HH 7/16-20 x 1	2
5:3	3296-38	Nut-Nyloc 7/16-20	2
6	107-3069	Decal-Warning Folding ROPS	1
7	107-3155	Cotter-Hair Pin Double Loop	2
8	126-0070	Asm-Seat Frame W/Latch	1
8:2	75-5270	Spacer-Knob Seat	1
8:3	110-5831	Spring-Torsion	1
8:4	126-0522	Asm-Cable Grip	1
8:5	126-0358	Asm-Hook	1
8:6	323-8	Screw-HH 3/8-16 x 1 1/2	1

Item	Part No.	Description	Qty
8:7	3274-39	Screw-HSBH #10-24 x 5/8	2
8:8	3296-39	Nut-Nyloc 3/8-16	1
8:9	3296-2	Nut-Nyloc #10-24	2
9	109-2365	Bumper-Rubber	2
10	3296-73	Nut-Nyloc 1/4-20	2
11**	103-4553	Asm-ROPS Fold Pin	2
12	325-13	Screw-HH 1/2-13 x 3 1/4	2
13	32128-23	Nut-Hex 1/2-13 Side Lock	2
14	1-513435	Washer-Spring Disc 1/2	6
15	32128-49	Nut-Whizlock 1/2-13	6
16	325-5	Screw-HH 1/2-13 x 1 1/4	6
17*	—	Bar-Upper Roll Bar (U-Shaped)	1
18*	—	Leg-LH Roll Bar	1
19*	—	Leg-RH Roll Bar	1

\*Not serviced separately.

\*\*Includes ROPS fold pin plus hairpin (item #7) and lanyard. Rollover protection frame is serviced as a complete assembly only.

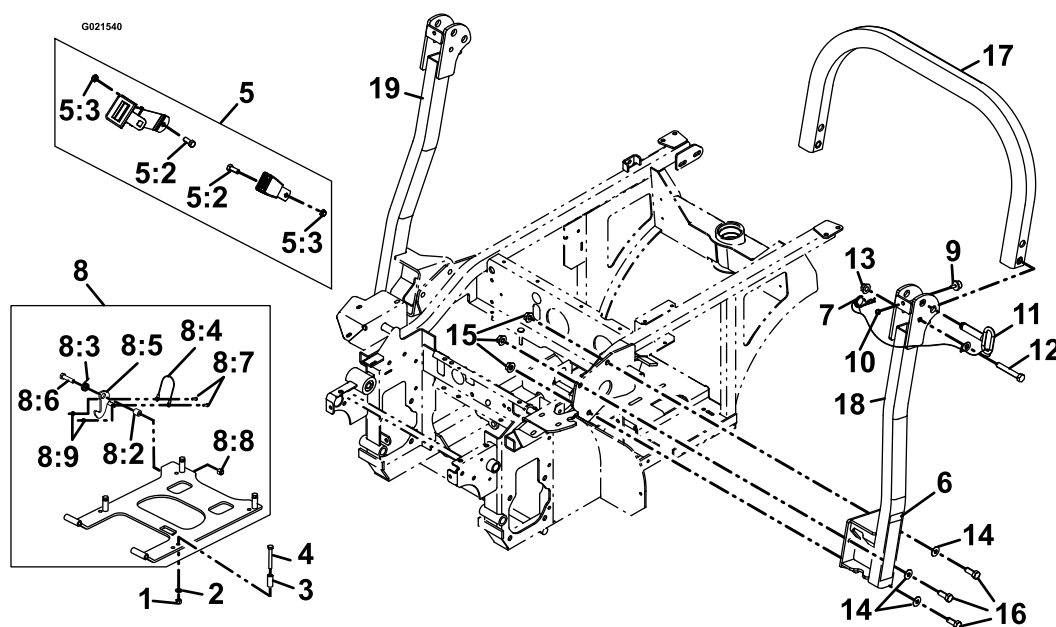
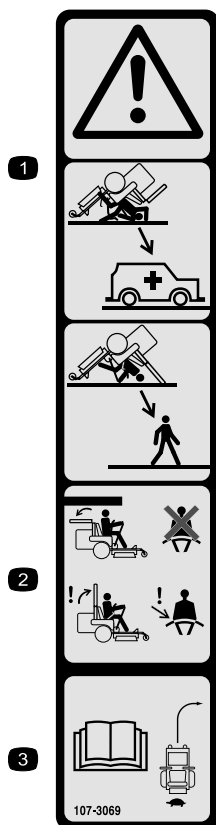


Figure 2

# Safety and Instructional Decals

- Keep all safety signs legible. Remove all grease, dirt and debris from safety signs and instructional labels.
- Replace all worn, damaged, or missing safety signs.
- When replacement components are installed, be sure that current safety signs are affixed to the replaced components.
- If an attachment or accessory has been installed, make sure current safety signs are visible.
- New safety signs may be obtained from your authorized Exmark equipment dealer or distributor or from Exmark Mfg. Co. Inc.
- Safety signs may be affixed by peeling off the backing to expose the adhesive surface. Apply only to a clean, dry surface. Smooth to remove any air bubbles.
- Familiarize yourself with the following safety signs and instruction labels. They are critical to the safe operation of your Exmark commercial mower.



1. Warning-there is no rollover protection when the roll bar is down.
2. To avoid injury or death from a rollover accident, keep the roll bar in the fully raised and locked position and wear the seat belt. Lower the roll bar only when absolutely necessary; do not wear the seat belt when the roll bar is down.
3. Read the Operator's manual; drive slowly and carefully.

# Using the Rollover Protection System

**Important:** The roll bar is an integral and effective safety device. **Keep the roll bar in the raised and locked position when operating the mower. Lower the roll bar temporarily only when absolutely necessary.**

## ⚠ WARNING

**There is no rollover protection when the roll bar is down. Wheels dropping over edges, ditches, steep banks, or water can cause rollovers, which may result in serious injury, death or drowning.**

- **Do Not** remove the ROPS.
  - **Keep the roll bar in the raised and locked position and use seat belt.**
  - **Lower the roll bar only when absolutely necessary.**
  - **Do Not** wear seat belt when the roll bar is down.
  - **Drive slowly and carefully.**
  - **Raise the roll bar as soon as clearance permits.**
  - Be certain that the seat belt can be released quickly in the event of an emergency.
  - Check carefully for overhead clearances (i.e. branches, doorways, and electrical wires) before driving under any objects and **Do Not** contact them.
  - Check rollover protection system (roll bar) pins  
**Service Interval: Daily**
    - Make sure latch pin and hair pin are fully installed and lanyard is in good condition.
    - Check that the seat latch closes and latches securely.
    - Check the operation and condition of seat belt. If seat belt webbing is worn or frayed replace immediately (Part Number 103-4469).
- Important:** Always use the seat belt with the roll bar in the operate (raised) position. Ensure that the rear part of the seat is secured with the seat latch.
- In the event of a rollover, take the unit to an Authorized Service Dealer to have the ROPS inspected.
  - Replace a damaged ROPS. **Do Not** repair or revise.
  - Any accessories, alterations, or attachments added to the ROPS must be approved by Exmark.

# Installation Instructions

## 1. Disconnecting PTO Linkage

Disconnect PTO linkage from PTO engagement lever and from PTO toggle link to gain clear access to the mounting plate on the frame. Save the hardware.

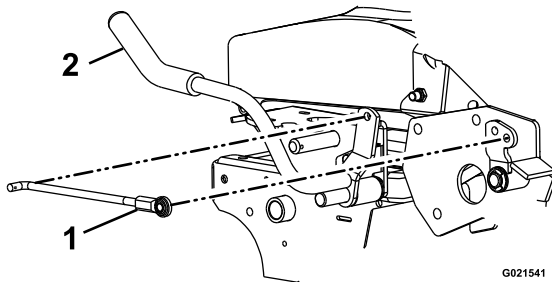


Figure 3

1. Engagement lever
2. Toggle link

## 2. Installing Roll Over Protection System (ROPS)

Using six 1/2-13 x 1 1/4 inch hex capscrews, spring disc washers and 1/2-13 inch whizlock nuts, loosely install the RH and LH roll bar legs.

**Note:** Be sure the spring disc washer cone is installed towards the head of all capscrews.

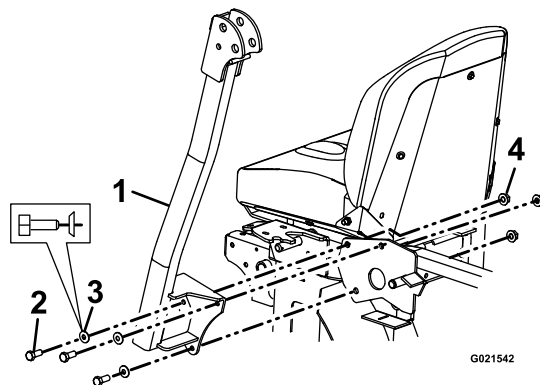


Figure 4

1. LH roll bar leg
2. 1/2-13 x 1 1/4 inch hex capscrews
3. Spring disc washer
4. 1/2 inch whizlock nut

## 3. Upper U-shaped Roll Bar Installation

1. Locate the latch pin assemblies (pin and hairpin connected with a lanyard).
2. Install one 1/2-13 x 3 1/4 inch bolt in the washer on the lanyard of each pin assembly.

**Note:** Make sure the bent tab in the washer points toward the head of the bolt as shown [Figure 5](#).

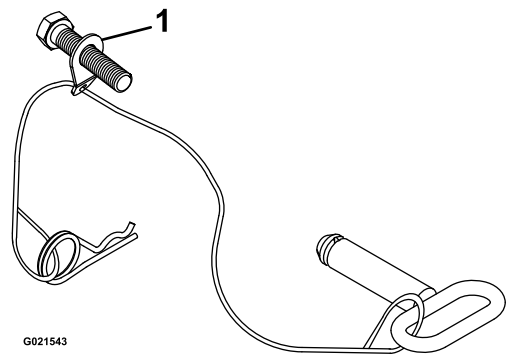


Figure 5

1. Bent tab

3. Lightly oil the inside surfaces of the ear-shaped plates at the upper end of the lower roll bar tubes as shown in [Figure 6](#).

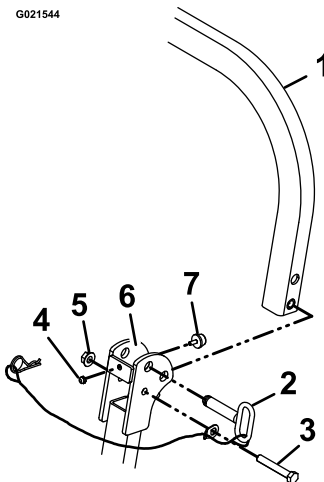


Figure 6

1. Upper u-shaped roll bar
2. Latch pin assembly
3. 1/2-13 x 3 1/4 inch capscrew
4. 1/4-20 inch nyloc nut
5. 1/2-13 hex flange lock nut
6. Apply oil to inside surface
7. Bumper

4. Locate the upper u-shaped section of the roll bar. Install the upper roll bar section using one 1/2-13 x 3 1/4 inch capscrew and one 1/2-13 inch hex flange lock nut on each side (see [Figure 6](#)). Do Not overtighten. Make sure the upper roll bar can pivot freely.

**Note:** Make sure the capscrew and nuts are installed with the nut to the inside of the roll bar.

**Note:** Make sure the tab on the lanyard washer is installed as shown and points toward the front of the unit.

**Note:** The oval handles of the latch pins must be located to the outside of the unit.

5. Raise the roll bar into the upright position and secure with the latch pin assemblies on each side. Install latch pin from outer surface of the roll bar assembly and secure with the hairpin to the inside.
6. Torque all lower roll bar hardware attached to the machine frame to 75-85 ft-lb (102-115 N-m).
7. Re-install PTO linkage through LH roll bar leg with hardware that was retained in section 1.

#### Disconnecting PTO Linkage.

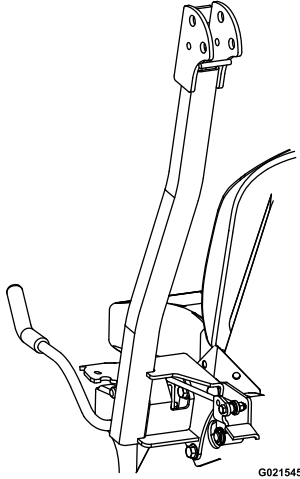


Figure 7

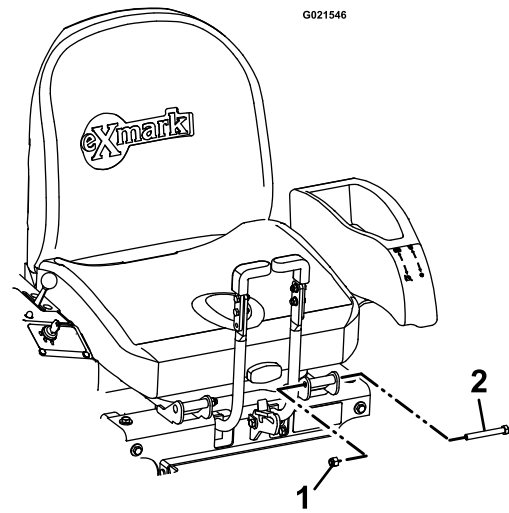


Figure 8

1. Bolt
2. Locknut

4. Remove the seat assembly from the machine.
5. Remove the seat and rubber isolators from the existing seat frame by removing the four whizlock nuts. Discard the seat frame and the rubber isolators. The bottom seat cushion will have to be removed in order to gain access to the isolator nuts. The seat cushion is retained by two small screws.

## 4. Removing the Existing Seat Frame

1. If unit is equipped with a suspension seat, remove the seat, suspension system, and adapters together from the seat frame. Complete steps 2 through 4, then go to section 5. **Installing the New Seat Frame**. Save the hardware.
2. Remove the nut and bolt from the seat hold-up linkage. Save the hardware.
3. Remove the two bolts and two locknuts at the front of the seat where it is hinged. See Figure 8. Save the hardware.

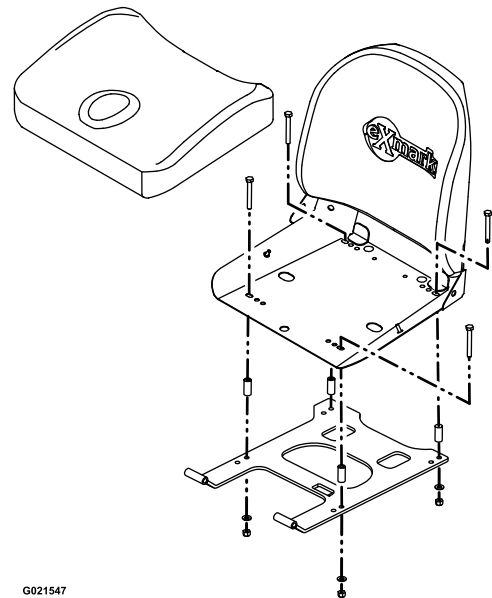


Figure 9

## 5. Installing the New Seat Frame

Install the seat to the new seat frame with hardware provided. If unit is equipped with a suspension seat, install the seat, suspension system, and adapters to the new seat frame with the saved hardware.

## 6. Installing the Seat Belt

1. Remove the two small screws that retain the bottom seat cushion. Remove the seat cushion.
2. Install the receiver part of the seat belt between the cushion and the metal seat frame with a 7/16-20 x 1 inch bolt and a 7/16 inch nyloc nut.

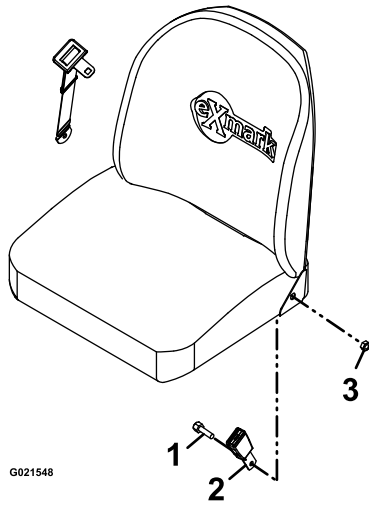


Figure 10

- |                          |                        |
|--------------------------|------------------------|
| 1. 7/16-20 x 1 inch bolt | 3. 7/16 inch nyloc nut |
| 2. Receiver              |                        |

- 
3. Install the long seat belt strap between the cushion and metal seat frame with a 7/16-20 x 1 inch bolt and a 7/16 inch nyloc nut.
  4. Reinstall the bottom seat cushion.

## 7. Reinstalling the Seat onto the Mower

1. Install the seat assembly onto the mower at the hinges with the two bolts and two locknuts that were removed in step 3 of section 4. **Removing the Existing Seat Frame.**
2. Attach the hold-up linkage with the nut and bolt removed in step 2 of section 4. **Removing the Existing Seat Frame.**

## 8. Check the Seat Frame Latch

If the seat frame latch does not seem to latch easily, check that the seat mounting deck is as far rearward as possible. Loosen the five bolts that secure the seat deck to the tractor frame (three on top, two in front). Hit the front of the seat mounting deck at the mounting bolt location with a rubber or plastic mallet. Tighten the two front bolts securely and then tighten the three bolts on top.