



Mauser ROPS Frame
LT3240 and T4240 Reel Mowers
 Model No. 02863

Installation Instructions

▲ 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.

Introduction

This manual provides instructions on how to assemble a ROPS to the LT3240, T4240, and R3240T traction units.

These instructions include instructions on safety, specifications, operations, assembly and maintenance. The instructions should be considered a part of the machine.

This equipment provides additional operator protection, particularly when the mower is to be used on slopes and provides limited safety protection in the event of a roll over.

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Safety

Safe Operating Practices

These instructions are in addition to those contained in the traction unit operators manual unless otherwise stated. Read and understand the operators manual before attempting to fit the ROPS.

Training

- Read the instructions carefully. Be familiar with the use of the equipment.
- Ensure that the specified torque settings are adhered to.
- The ROPS and its mountings must not be drilled, cut or altered in any way.

Preparation

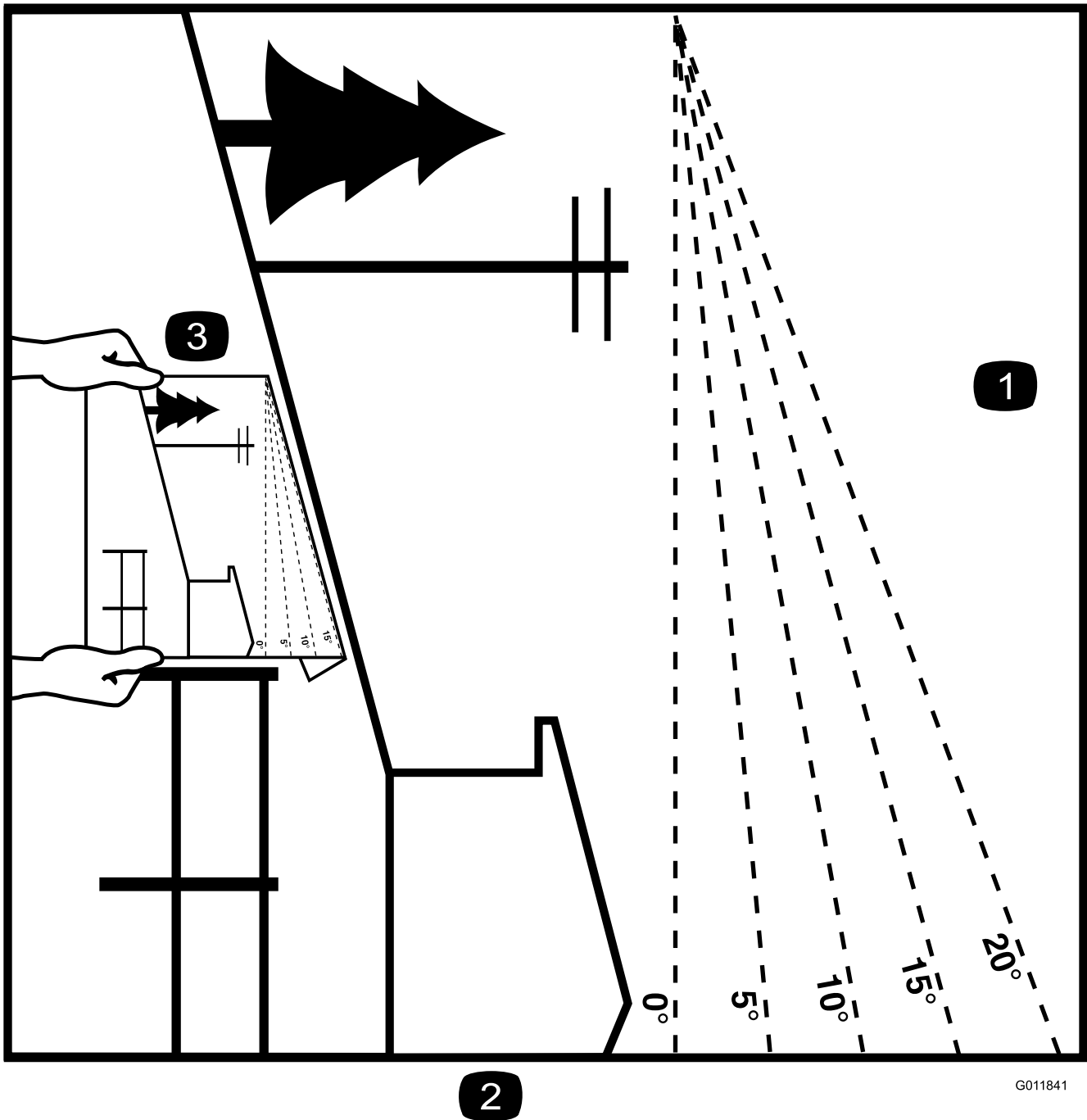
- Ensure that all lifting equipment is in good condition and has sufficient capacity to lift the item required as specified in this manual.
- Always ask for assistance when lifting heavy or awkward loads.
- Ensure that the seat belt is correctly fitted and in good condition. Always replace a damaged seat belt.
- Always make sure the folding ROPS is secured in its vertical operating position before use.

Rollover Protection System (ROPS) - Operation

- The ROPS is an integral and effective safety device.
- Keep the ROPS in the raised and locked position and use the seat belt when operating the machine.
- Lower the ROPS temporarily only when absolutely necessary. Pay particular attention when operating due to the additional weight towards the front of the machine and higher centre of gravity in the machine.
- Do not wear the seat belt when the ROPS is folded down.
- Be aware there is no rollover protection when a folded ROPS is in the down position.
- Be certain that the seat belt can be released quickly in the event of an emergency.
- Check the area to be mowed and never fold down a folding ROPS in areas where there are slopes, drop offs or water.
- Check carefully for overhead clearances (i.e. branches, doorways, electrical wires) before driving under any objects and do not contact them.
- Keep the ROPS in safe operating condition by periodically thoroughly inspecting for damage and keeping all mounting fasteners tight.

- Replace a damaged ROPS. Do not repair or revise.
- Do not remove the ROPS.
- Any alterations to a ROPS must be approved by the manufacturer.
- Care should be taken when using the mower on any slope where ground conditions are such that there may be a risk of the mower rolling over. The requirements of 89/355/EEC, as amended by 95/63/EEC 'Provision and Use of Work Equipment Directive' should be considered.
- Always seek professional advice from your local authorized dealer if, after studying this, you are unsure how to fit this kit.
- Stability angles given are maximum figures and are for guidance only. Particular conditions such as wet grass or uneven ground may not permit safe operation on the slope limit stated.
- Remember there is no such thing as a 'safe' slope. Travel on grass slopes requires particular care. To guard against overturning or loss of traction when travelling or mowing on a slope:
 - Exercise extreme care when changing direction on a slope.
 - Do not stop or start suddenly.
 - Engage drive slowly.
 - Keep machine speed low.
 - Avoid tight turns.
 - Stay alert for humps, hollows and other hidden hazards.
 - Keep away from sharp inclines and steep slopes.
 - A thorough risk assessment should be carried out by a competent person before travelling or mowing on a slope.
- Never park on a slope.

Slope Indicator



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Figure 1

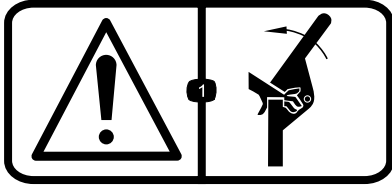
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1. The maximum slope you can safely operate the **R3240T is 14 degrees** and the **LT3240 or T4240 is 16 degrees**. Use the slope chart to determine the degree of slope of hills before operating. Fold along the appropriate line to match the recommended slope.
2. Align this edge with a vertical surface, a tree, building, fence pole, etc.
3. Example of how to compare slope with folded edge.

Safety and Instructional Decals



Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



111-0773

1. Warning—crushing of fingers, force applied from side.

Installation

Loose Parts

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

Description	Qty.	Use
Bolt, M12 x 40	4	Install the ROPS
Bolt, M12 x 50	2	
Washers, M12	12	
Nut, M12	6	
Bolt, M16 x 100	4	
Washer	6	
Nut, M16	2	
Hand nut	2	
Front hoop	1	Install the front hoop
Screw, M12 x 35	2	
Washer	6	
Nut, M12	4	
Seat belt assembly	1	Install the seat belt
Bolt, 7/16 x 1 inch	1	
Bolt, 7/16 x 1-1/4 inch	1	
Washer	5	
Nut, 7/16 inch	2	

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

Read and understand the assembly instructions before proceeding. Refer to the Operators and Spare Parts Manual.

▲ WARNING

PREVENT ACCIDENTS

It is essential to have a suitable lifting device with a safe capacity of 50 kg (110 lbs).

Installing the ROPS

1. Lower all cutting units/decks to the ground.
2. Apply the parking brake, switch off the engine and remove the ignition key.
3. Open the engine cover and remove the side screens.
4. Disconnect the battery cables from the battery, first the negative (-) then the positive (+).
5. Remove the plastic tool tray from the LH side of the platform (Figure 2).

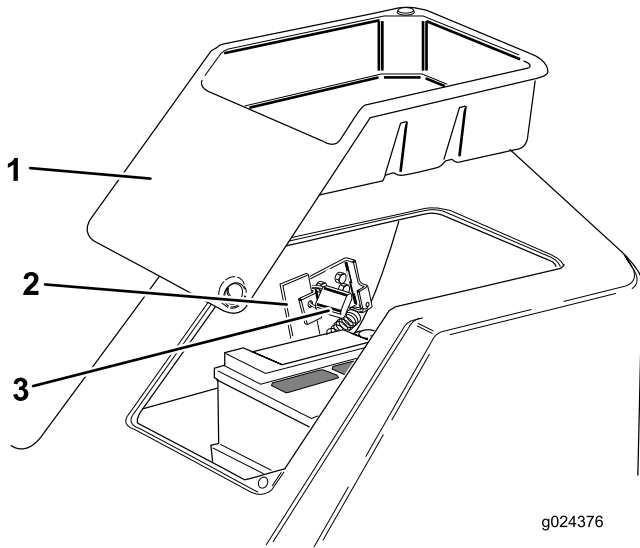


Figure 2

1. Tool tray
2. Locking latch handle
3. Pad lock

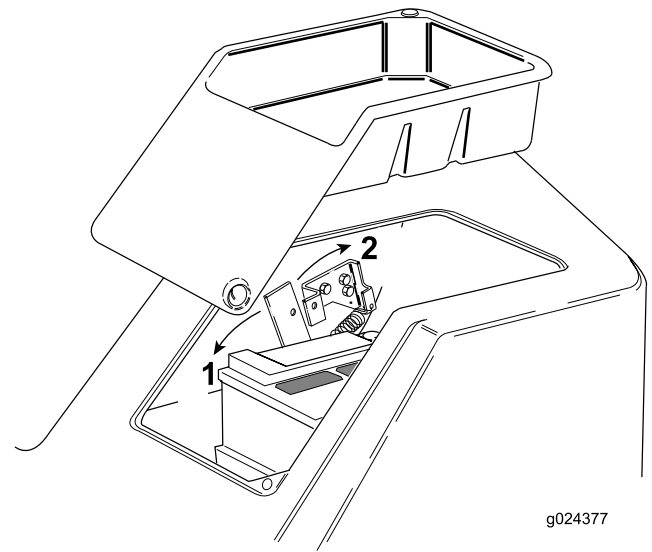


Figure 3

1. Unlocked
2. Locked

8. Raise the platform.
Note: The gas spring will provide assistance.
9. Remove the front fuel tank clamp bolts.
10. Using suitable lifting equipment, position the lower support onto the left and right sides of the machine while aligning the mounting holes.
11. Use the following chart and Figure 4 to determine the size and location of the fasteners used to secure each side of the lower ROPS support to the traction unit. Torque the bolts to 75 N-m (55 ft/lbs).

Hole Locations	Fasteners Used
Top (2 each side)	Bolt M12 x 40, (2) Washers M12 , Nut M12
Side-lower rear * (2 each side)	Bolt M12 x 40, (2) Washers M12 , Nut M12
Side-Upper middle (2 each side)	Bolt M12 x 50, (2) Washers M12 , Nut M12

* Position the bolts in the rear set of holes on the left side of the machine and in the front set of holes on the right side of the machine.

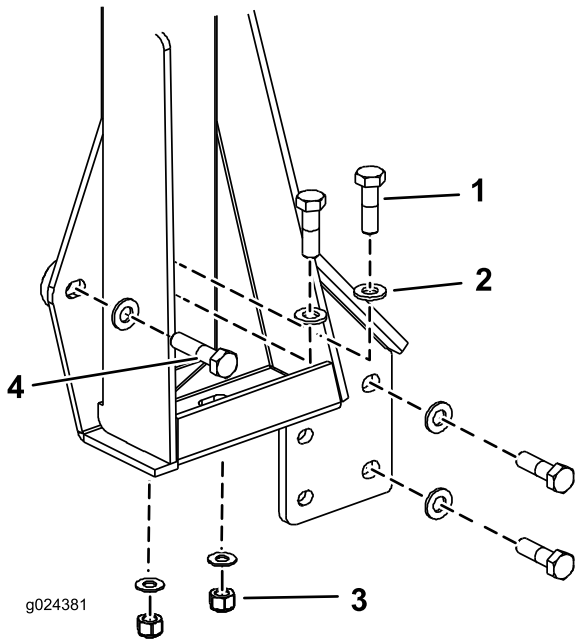


Figure 4

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|-------------------|------------------|
| 1. Bolt M12 x 40 | 3. Nut M12 |
| 2. Washer M12 (2) | 4. Bolt M12 x 50 |

12. Using suitable lifting equipment, raise the upper ROPS frame into mounting position on the lower support.
13. Secure each side of the upper ROPS frame to the lower support with a M16 x 100 bolt, (2) washers and a M16 nut (Figure 5). Torque the bolts to 190 N-m (140 ft/lbs). Ensure that the upper frame pivots freely through the range of movement.

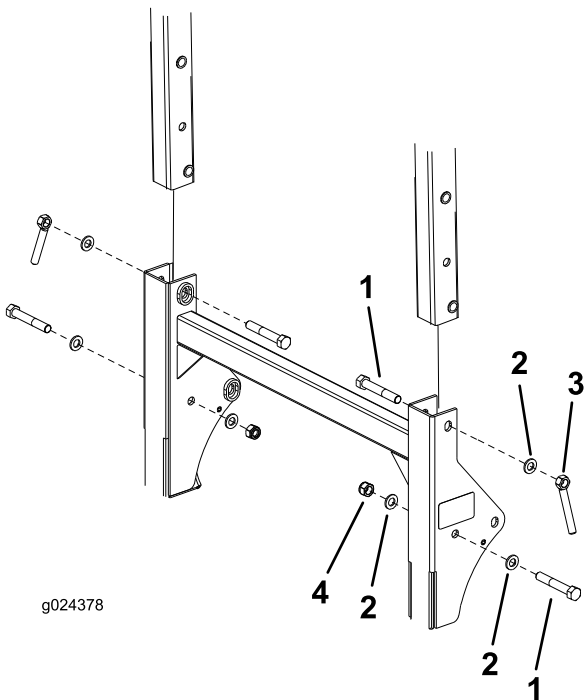


Figure 5

- | | |
|--------------------|-------------|
| 1. Bolt, M16 x 100 | 3. Hand nut |
| 2. Washer | 4. Nut, M16 |

14. Raise the upper ROPS frame into the upright position and secure each side with a M16 x 100 bolt, washer and hand nut (Figure 5).
15. Lower the platform.

Note: The gas spring will provide assistance.
16. Move the locking latch towards the front of the mower as the platform nears the fully lowered position. This will ensure that the latch hook clears the locking bar. Fully lower the platform and move the locking latch towards the rear of the machine until the latch hooks fully engage the locking bar.

Installing the Front Hoop

1. Remove the (4) M10 x 20 screws and nuts that secure the platform pivot bracket to the chassis. Take care not to disturb the position of the pivot bracket.
2. Install the front hoop to the front chassis with (2) M12 x 35 screws, (6) washers and (4) M12 nuts (Figure 6). Fully tighten all the fasteners.

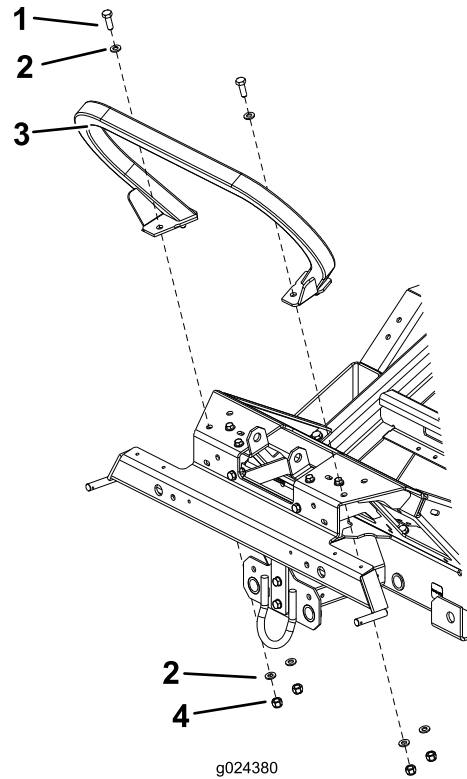


Figure 6

- | | |
|--------------------|---------------|
| 1. Screw, M12 x 35 | 3. Front hoop |
| 2. Washer | 4. Nut, M12 |

3. Connect the battery cables to the battery, first the positive cable (+) and then the negative cable (-).
4. Install the plastic tool tray to the LH side of the platform (Figure 2).

Installing the Seat Belt

1. Mount the latch side of the seat belt to the left side of the seat with a 7/16 x 1 inch bolt, (2) washers and a 7/16 inch nut (Figure 7).
2. Mount the latch plate side of the seat belt to the right side of the seat with a 7/16 x 1-1/4 inch bolt, (3) washers and a 7/16 inch nut (Figure 7).



Figure 7

1. Seat belt, latch side
2. Seat belt, catch side

-
3. Torque the bolts to 66-83 N-m (49-61 ft/lbs).

Product Overview

Specifications

Weight of ROPS frame: 84kg (185 lbs)

Product with 2 post ROPS	Total Max Height	Total Min Height
LT3240	2424 mm (95.4 inches)	1770 mm (69.6 inches)
T4240	2404 mm (94.6 inches)	1750 mm (68.8 inches)
R3240T	2404 mm (94.6 inches)	1750 mm (68.8 inches)

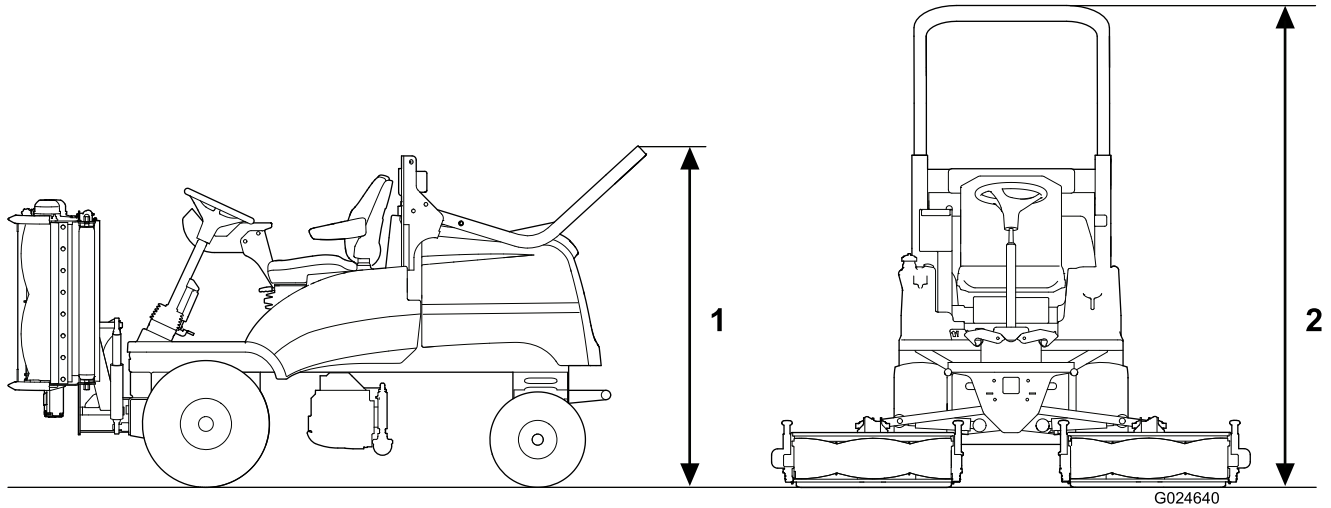


Figure 8

1. Minimum height

2. Maximum height

Operation

Raising and Lowering the ROPS

Note: The ROPS frame may be folded down to allow access into areas of restricted height.

⚠ WARNING

Prevent Accidents

While the ROPS frame is folded down it does not provide any protection in the event of a roll over and should not be considered as a Roll Over Protective Structure. Do not wear your seat belt when the ROPS is folded down.

1. Lower all cutting units, apply the parking brake and switch off the engine.
2. While holding the upper frame, remove the hand nuts, washers and retaining bolts from the pivot brackets (Figure 9).
3. Carefully lower the frame downwards until it rests on the stops.
4. Insert the retaining bolts in the lower holes and fully tighten the hand nuts to support the upper frame in its lowered position.
5. To raise the frame, follow these instructions in reverse order.

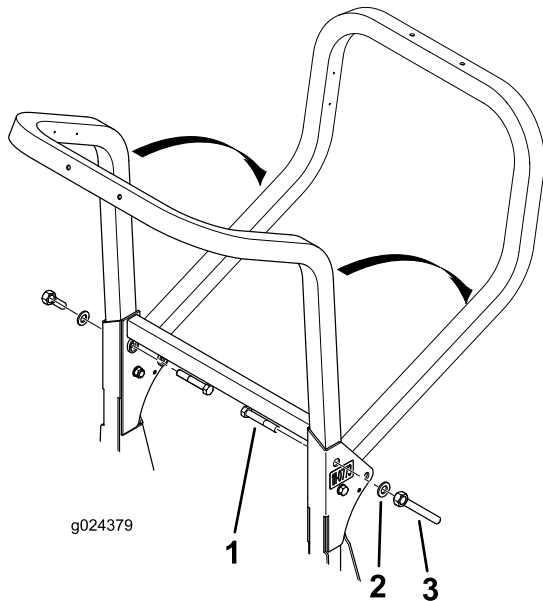


Figure 9

- | | |
|-------------------|-----------|
| 1. Retaining bolt | 3. Washer |
| 2. Hand nut | |

⚠ WARNING

Prevent Accidents

When in the raised position, both retaining bolt assemblies must be installed and fully tightened to ensure full ROPS protection

⚠ WARNING

Prevent Accidents

Be careful lowering and raising the ROPS frame to prevent entrapment of fingers between fixed part and pivot part of the structure

Maintenance

This equipment has been designed and constructed so that, in so far as is reasonably practical, they meet the safety requirements of the Machinery Directive 2006/42/EC, they will not endanger the safety and health of those working with them. This is, however, subject to the machine being properly used and maintained according to the conditions stated in these instructions and elsewhere, which have been found necessary as a result of the research and testing.

- Keep all nuts, bolts and screws correctly tightened, ensure that the equipment is in safe working condition.
- Replace worn or damaged parts/decals for safety.
- Ensure that the seat belt and mountings are in safe working order.

Declaration of Incorporation

The Toro Company, 8111 Lyndale Ave. South, Bloomington, MN, USA declares that the following unit(s) conform(s) to the directives listed, when installed in accordance with the accompanying instructions onto certain Toro models as indicated on the relevant Declarations of Conformity.

Model No.	Serial No.	Product Description	Invoice Description	General Description	Directive
02863	313000001 and Up	Mauser ROPS Frame	MAUSER ROPS FRAME	ROPS Frame	2006/42/EC, 79/622/EC

Relevant technical documentation has been compiled as required per Part B of Annex VII of 2006/42/EC.

We will undertake to transmit, in response to requests by national authorities, relevant information on this partly completed machinery. The method of transmission shall be electronic transmittal.

This machinery shall not be put into service until incorporated into approved Toro models as indicated on the associated Declaration of Conformity and in accordance with all instructions, whereby it can be declared in conformity with all relevant Directives.

Certified:



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Count on it.