



Z Master® Riding Mower

For 3000 Through 7000 Series Models

Setup Instructions

Setup

Loose Parts

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

Procedure	Description	Qty.	Use
1	Rear wheels (wooden crate only)	2	Remove the machine from a crate.
2	No parts required	–	Add fuel to the machine.
3	No parts required	–	Check the engine-oil level.
4	No parts required	–	Check the tire pressure.
5	No parts required	–	Check the wheel lug nut torque.
6	No parts required	–	Check the grass deflector.
7	J-bolt Wing nut Hold-down clamp	2 2 1	Install a battery (diesel machines only).
8	Clamp Wing nut (1/4 inch) Battery hold-down	1 2 2	Install a battery (gasoline machines only).
9	No parts required	–	Charge the battery.
10	Seat Seat plate (fixed seats only) Flange nuts (3/8 inch)—fixed seats only Spacers (3/8 inch)—fixed seats only Flange nuts (3/8 inch)—tilting seats only Long spacers (tilting, deluxe seats only) Short spacers (tilting, deluxe seats only)	1 1 8 4 4 2 4	Install the seat (international machines using gasoline only).
11	No parts required	–	Check the seat belt (international machines using gasoline only).
12	Right control lever Left control lever Bolt (3/8 x 1 inch)—2 are assembled Nut (3/8 inch)—2 are assembled	1 1 4 4	Install the motion-control levers (international machines using gasoline only).
13	Carriage bolt (3/8 x 1-1/2 inches) Flange locknut (3/8 inch)	1 1	Install the lift-assist pedal (international machines using gasoline only).



Procedure	Description	Qty.	Use
14	Air-cleaner cap	1	Install the air-cleaner cap (international machines using gasoline only).
	Hose clamp	1	
15	Rollover Protection System (ROPS) Kit	1	Install the ROPS (international machines using gasoline only).
16	Roll bar, right section	1	Install the ROPS (diesel machines only).
	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 inches)	2	
Flange nut (1/2 inch)	2		
17	No. 2 lithium or molybdenum grease. (Purchase separately.)	1 tube	Check the machine for grease.
18	No parts required	–	Remove the shipping straps (for machines with MyRide™ suspension system only).
19	No parts required	–	Check the machine before delivery to the customer (all machines).
20	Operator's Manual	1	Deliver the machine to the customer (all machines).
	Engine Owner's Manual	1	
	Registration card	1	
	Operator training material	1	
	Key	2	

1

Removing the Machine from a Crate

Parts needed for this procedure:

2	Rear wheels (wooden crate only)
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Removing a Machine from a Metal Crate

If you are removing the machine from a metal crate, refer to the *Dealer/Distributor Portal* for further information.

Removing the Machine from a Wooden Crate

1. Remove the screws holding the right angle retaining plate to the crate.

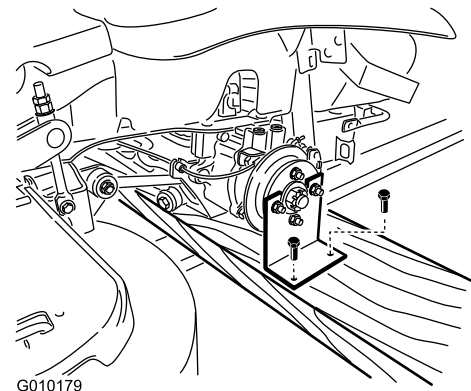
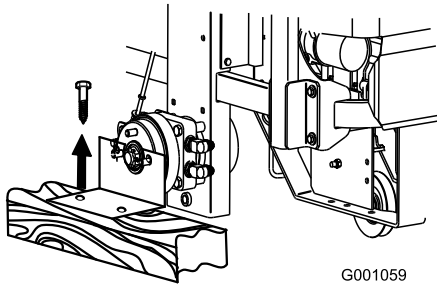


Figure 1
Gasoline Machine Shown

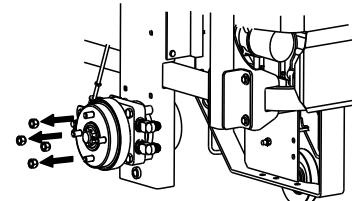
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Figure 2
Diesel Machine Shown

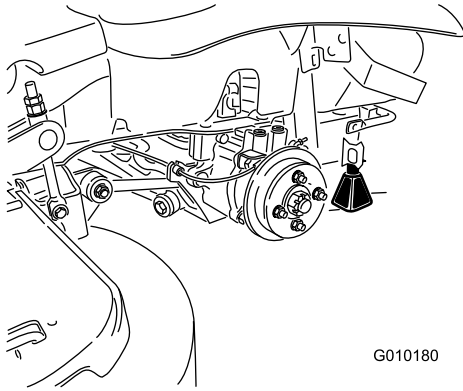


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Figure 5
Diesel Machine Shown

2. Raise the rear of the machine and support it with jack stands.

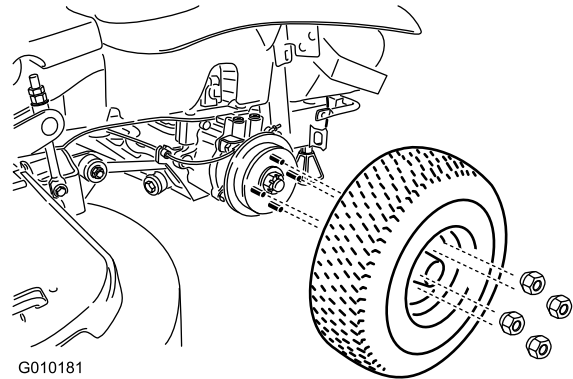


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Figure 3
Gasoline Machine Shown

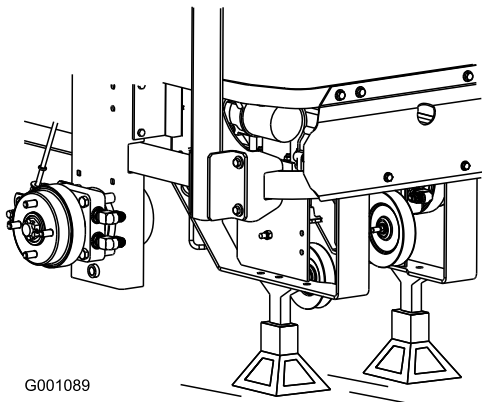
4. Mount the wheels with the valve stem to the outside and secure them with the wheel nuts previously removed.
5. Torque the wheel nuts to 128 N·m (95 ft-lb).
6. Remove the jack stands.



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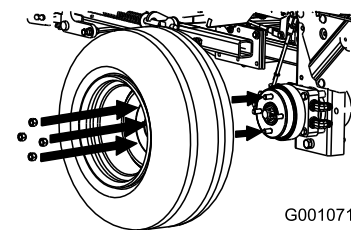
Figure 6
Gasoline Machine Shown



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Figure 4
Diesel Machine Shown



G001071

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Figure 7
Diesel Machine Shown

3. Remove the wheel nuts from both sides of the machine and remove the right angle retaining plate. Discard the screws and retaining plate.

2

Adding Fuel to the Machine

No Parts Required

Procedure

Add fuel to the machine before starting it. Refer to your *Operator's Manual* for the correct fuel and procedure.

3

Checking the Engine-Oil Level

No Parts Required

Procedure

Before you start the engine and use the machine, check the oil level in the engine crankcase; refer to the *Operator's Manual*.

4

Checking the Tire Pressure

No Parts Required

Procedure

Air pressure specification: 90 kPa (13 psi)

Note: Check the tire pressure before starting the machine. Refer to your *Operator's Manual* for the correct tire type, correct air pressure needed, and procedure.

5

Checking the Wheel Lug Nut Torque

No Parts Required

Procedure

Before you start the engine and use the machine, check the wheel lug nut torque; refer to Checking the Wheel Lug Nuts in the *Operator's Manual*

6

Checking the Grass Deflector

No Parts Required

Procedure

If there are plastic ties holding the grass deflector up, remove them and lower the deflector into place.

⚠ WARNING

An uncovered discharge opening could allow the machine to throw objects in the operator's or bystander's direction and result in serious injury or death. Also, contact with the blade could occur.

Never operate the lawn mower unless you install a cover plate, a mulch plate, grass deflector or bagger.

1. Ensure that 1 end of the spring is installed behind the deck edge before installing the bolt as shown in [Figure 8](#).
2. Place the other end of the spring around the grass deflector ([Figure 8](#)).

Important: The grass deflector must be free to rotate with downward tension. Lift the deflector up to the fully open position and ensure that it rotates freely, without binding into the fully down position.

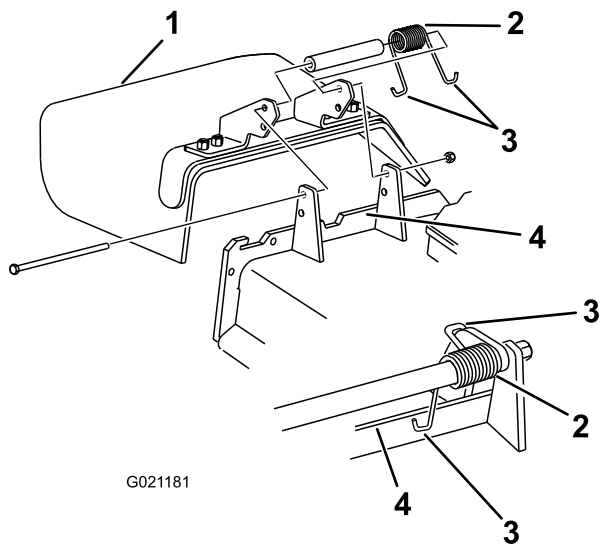


Figure 8

- | | |
|--------------------|----------------------|
| 1. Grass deflector | 3. End of the spring |
| 2. Spring | 4. Deck edge |

8

Installing a Battery Gasoline Machines Only

Parts needed for this procedure:

1	Clamp
2	Wing nut (1/4 inch)
2	Battery hold-down

Procedure

Important: This procedure applies only to machines that do not come with a battery installed.

- Purchase a 12V battery.
Models with a 29 hp engine and below require a battery with a minimum of 260 CCA.
Models with a 30 hp engine and higher require a battery with a minimum of 340 CCA.
- Locate the battery-mounting hardware and install it into the machine. Refer to Installing the Battery in the *Operator's Manual*.

7

Installing a Battery Diesel Machines Only

Parts needed for this procedure:

2	J-bolt
2	Wing nut
1	Hold-down clamp

Procedure

Important: This procedure only applies to machines that do not come with a battery installed.

Purchase a 12V battery and install it into the machine. The engine requires a minimum of 540 CCA.

Use the hardware included to install the new battery. Refer to Installing the Battery in the *Operator's Manual*.

9

Charging the Battery

No Parts Required

Procedure

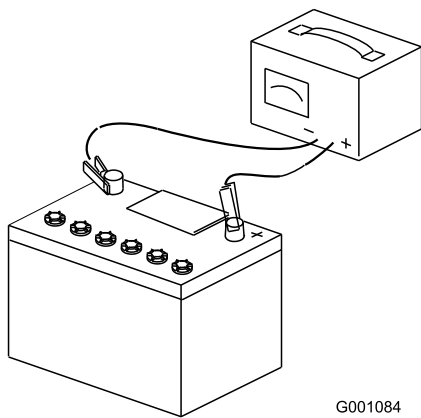
⚠ WARNING

Charging the battery produces gasses that can explode and cause serious injury.

- Keep cigarettes, sparks and flames away from the battery.
- Make sure the ignition switch is off.
- Ventilate when charging or using the battery in an enclosed space.

Important: Do not run the machine with the battery disconnected; electrical damage may occur to the engine.

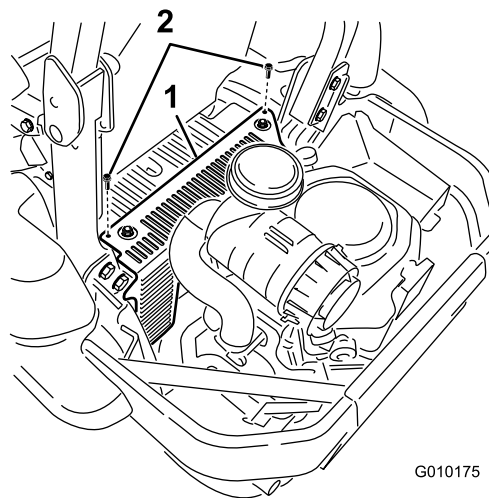
Charge the battery; refer to the *Operator's Manual* for instructions.



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Figure 9

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Figure 10

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1. Hydraulic-unit shroud
2. Bolts

10

Installing the Seat

International Machines Using Gasoline Only

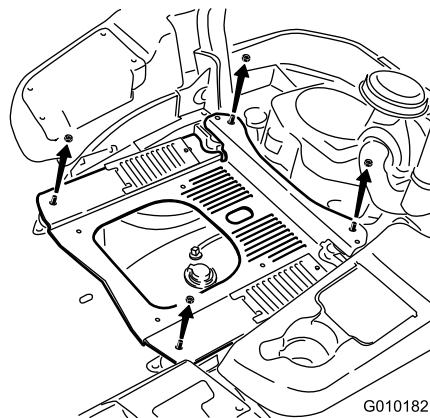
Parts needed for this procedure:

1	Seat
1	Seat plate (fixed seats only)
8	Flange nuts (3/8 inch)—fixed seats only
4	Spacers (3/8 inch)—fixed seats only
4	Flange nuts (3/8 inch)—tilting seats only
2	Long spacers (tilting, deluxe seats only)
4	Short spacers (tilting, deluxe seats only)

Installing the Seat on Models with a Fixed Seat

1. Remove the hydraulic-unit shroud from the machine.

2. Remove the 4 nuts holding the seat plate to the machine. Discard these nuts, they are used for shipping only.



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Figure 11

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3. Secure the seat plate to the seat with 4 spacers and 4 flange nuts (3/8 inch).

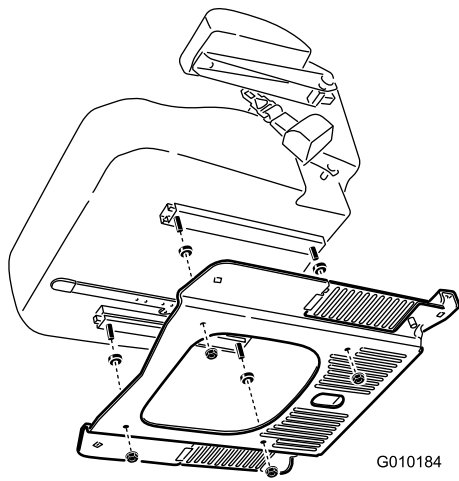


Figure 12

4. Plug the harness connector into the seat switch located under the seat towards the front.
5. Install the seat to the machine frame with 4 flange nuts (3/8 inch).

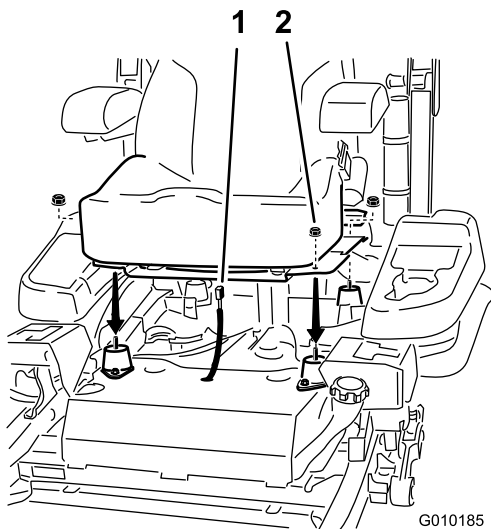


Figure 13

1. Harness connector
2. Flange nuts

Installing the Seat on Models with a Tilting Seat

1. Tilt the seat frame up.
2. For deluxe seats only, install the spacers as shown in [Figure 14](#).

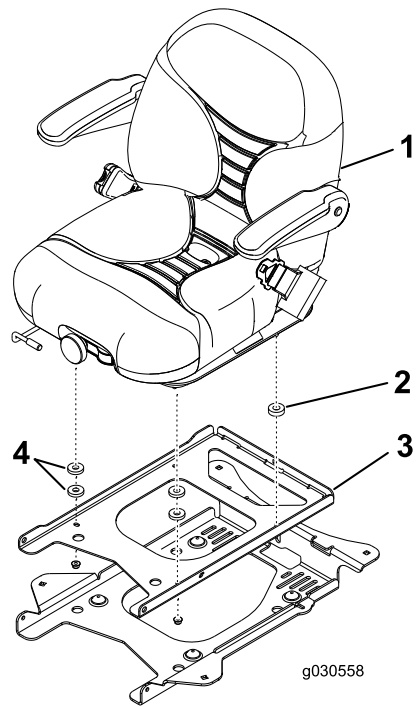


Figure 14

For machines with a deluxe seat only

- | | |
|----------------|------------------|
| 1. Deluxe seat | 3. Seat frame |
| 2. Long spacer | 4. Short spacers |

3. Install the seat to the seat frame with 4 flange nuts (3/8 inch) as shown in [Figure 15](#).
4. Plug the harness connector into the seat switch located under the seat toward the front.

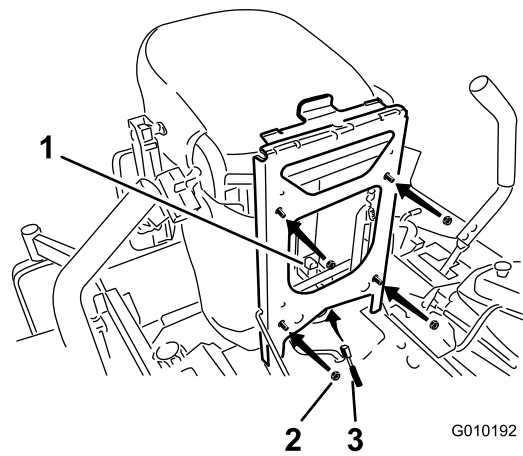


Figure 15

- | | |
|----------------|----------------------|
| 1. Seat switch | 3. Harness connector |
| 2. Flange nuts | |

11

Checking the Seat Belt

International Machines Using Gasoline Only

No Parts Required

Procedure

Important: Ensure the bolt torque is set between 67 to 83 N·m (49 to 61 ft-lb).

Check the seat belt angle and the seat belt bolt torque before operating.

1. Check the angle of the seat belt compared to the bottom of the seat. The angle needs to be 47 degrees (Figure 16).
2. If needed, set the seat belt to the correct angle.
3. Check and set the bolt torque between 67 to 83 N·m (49 to 61 ft-lb).

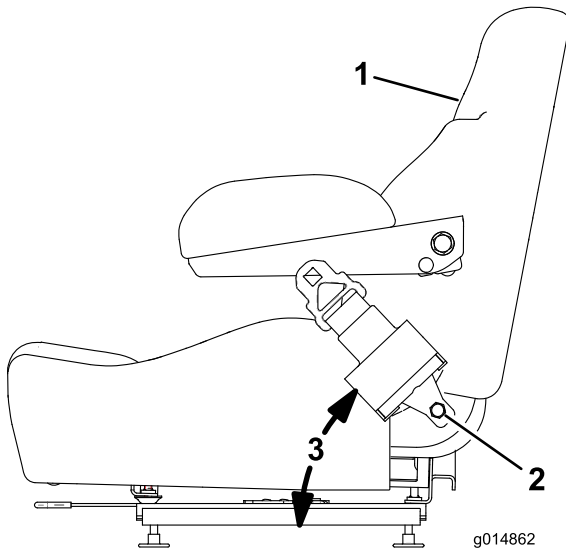


Figure 16

1. Side of seat
2. Seat belt bolt, set torque between 67 to 83 N·m (49 to 61 ft-lb).
3. 47 degrees

12

Installing the Motion-Control Levers

International Machines Using Gasoline Only

Parts needed for this procedure:

1	Right control lever
1	Left control lever
4	Bolt (3/8 x 1 inch)—2 are assembled
4	Nut (3/8 inch)—2 are assembled

Procedure

1. Rotate the motion-control levers to the upright position.
2. Loosely install the control levers on the inside of the posts using the 4 bolts and 4 nuts.

Note: Install the control levers in the top and middle holes for the high position or the middle and bottom holes for the low position.

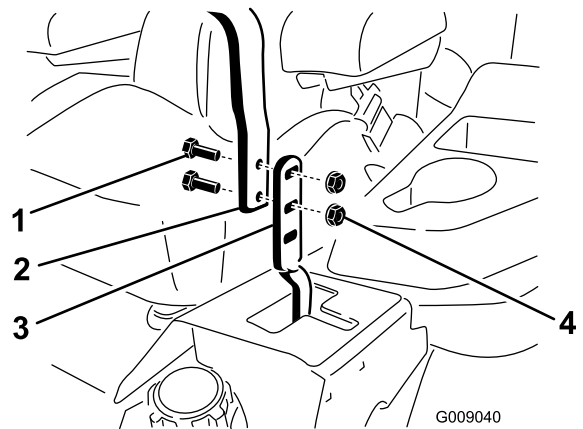


Figure 17

1. Bolt (3/8 x 1 inch)
2. Handle
3. Control lever
4. Nut (3/8 inch)

3. Raise the levers and align them together in the NEUTRAL position and tighten the bolts.

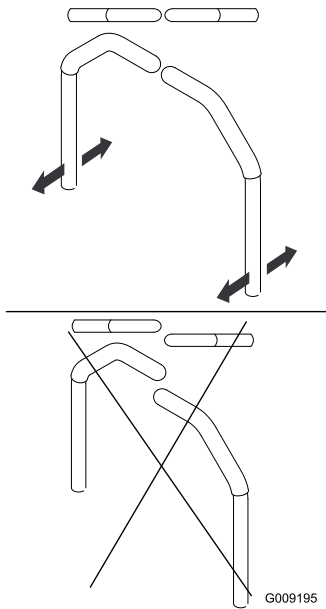


Figure 18

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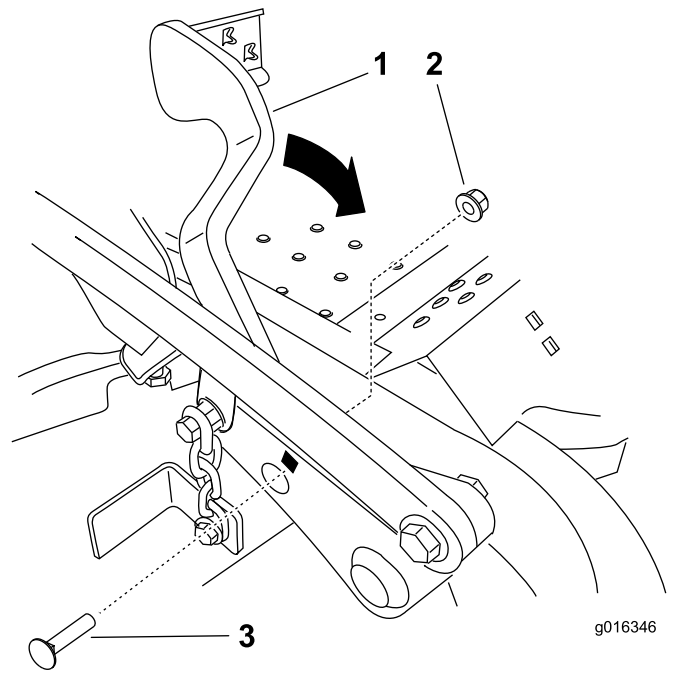


Figure 19

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Note: If the machine is not properly tracking, refer to Adjusting the Tracking in your *Operator's Manual*.

- 1. Lift-assist pedal
- 2. Flange locknut (3/8 inch)
- 3. Carriage bolt (3/8 x 1-1/2 inches)

13

Installing the Lift-Assist Pedal

International Machines Using Gasoline Only

Parts needed for this procedure:

1	Carriage bolt (3/8 x 1-1/2 inches)
1	Flange locknut (3/8 inch)

Procedure

1. If needed, loosen the existing bolt and nut for the lift-assist pedal.
2. Rotate the lift-assist pedal to the correct position and install the carriage bolt (3/8 x 1-1/2 inches) and locknut (3/8 inch) as shown in [Figure 19](#).

Tighten both bolts.

14

Installing the Air-Cleaner Cap

International Machines Using Gasoline Only

Parts needed for this procedure:

1	Air-cleaner cap
1	Hose clamp

Procedure

Note: Not all the machines come with a heavy duty air cleaner. This procedure applies only to the models that have a heavy duty air cleaner.

1. Remove the plastic plug or tape covering the air cleaner.

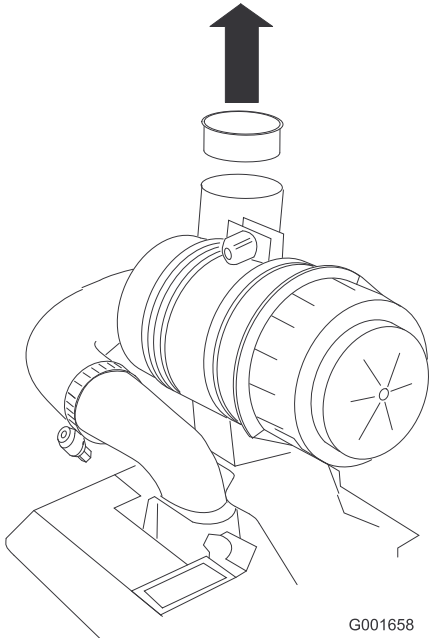


Figure 20

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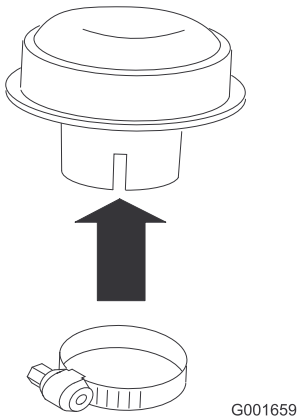


Figure 21

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3. Install the air-cleaner cap onto the air cleaner and secure it with the hose clamp.

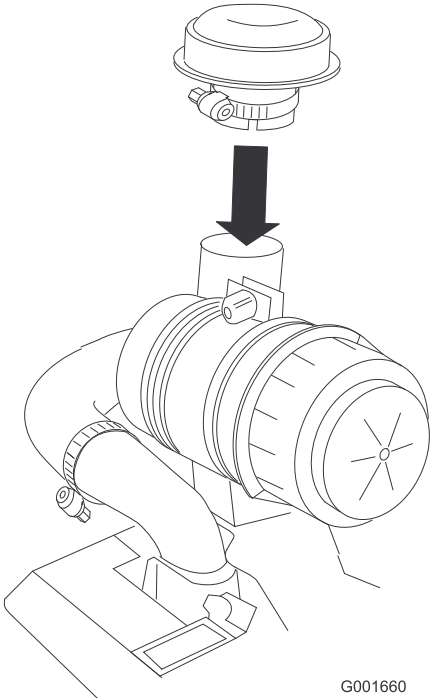


Figure 22

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2. Install the hose clamp onto the air-cleaner cap.

15

Installing the ROPS

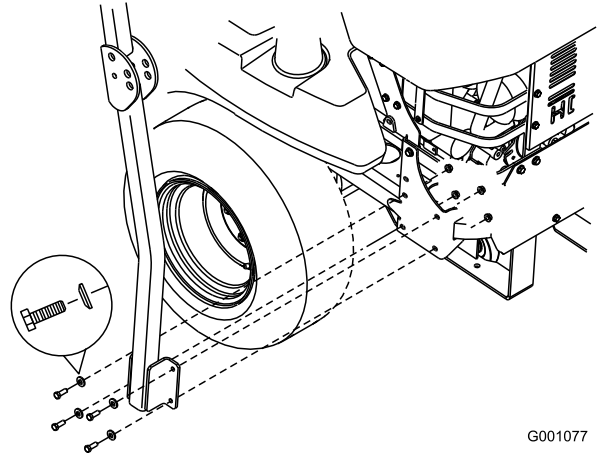
International Machines Using Gasoline Only

Parts needed for this procedure:

1	Rollover Protection System (ROPS) Kit
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Procedure

Install the Rollover Protection System (ROPS) Kit. Follow the *Installation Instructions*.



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Figure 23

16

Installing the ROPS

Diesel Machines Only

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 inches)
2	Flange nut (1/2 inch)

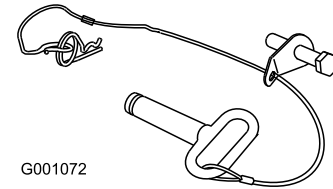
Procedure

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

Note: Install the curved washer cone toward the bolt head.

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

Note: Ensure that the bent tab points toward the head of the bolt.



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Figure 24

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

Note: Install the bolts from the outside of the roll bar.

Note: Install the lanyard tab oriented as shown in [Figure 25](#) and pointing forward.

Note: No more than 1 thread should be exposed outside the nut.

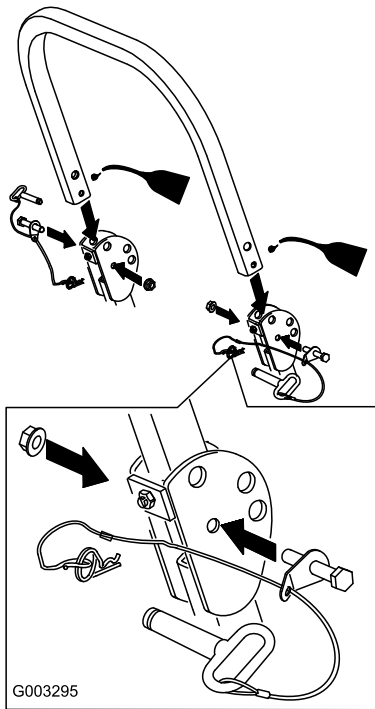


Figure 25

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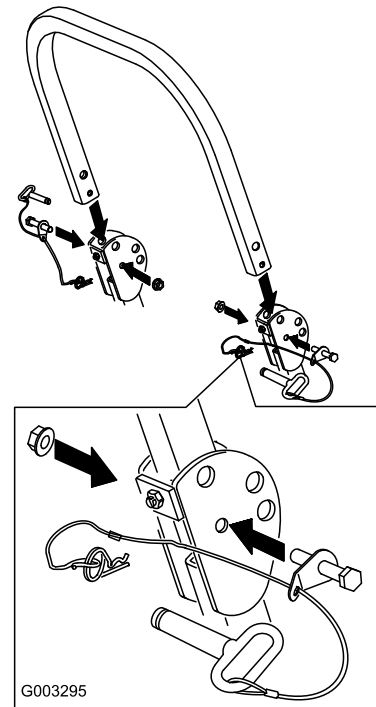


Figure 27

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

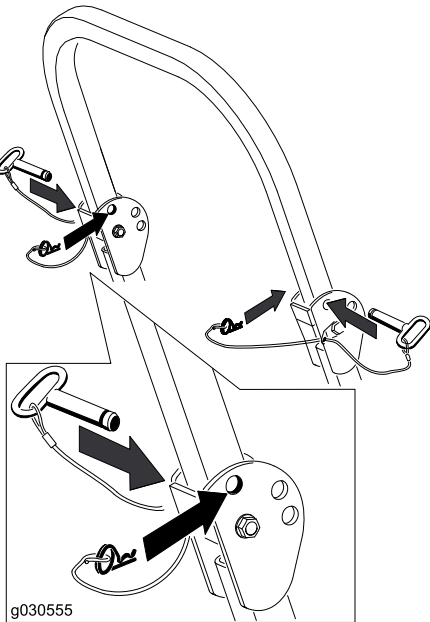


Figure 26

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6. Torque all of the lower fasteners attached to the machine frame to 40.7 N·m (30 ft-lb).
7. Tighten the center roll bar bolts (1/2 x 3-1/4 inches) so that it rotates freely with some resistance.

17

Checking the Machine for Grease

Parts needed for this procedure:

1 tube	No. 2 lithium or molybdenum grease. (Purchase separately.)
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Procedure

Before you use the machine, check the machine for grease; refer to Lubrication in the *Operator's Manual*.

18

Removing the Shipping Straps

For Machines with MyRide™ Suspension System Only

No Parts Required

Procedure

⚠ WARNING

The springs are compressed by the shipping straps. When the straps are cut, the seat will raise up quickly by approximately 8.9 cm (3-1/2 inches).

Note: Ensure that the straps are removed before operating the machine.

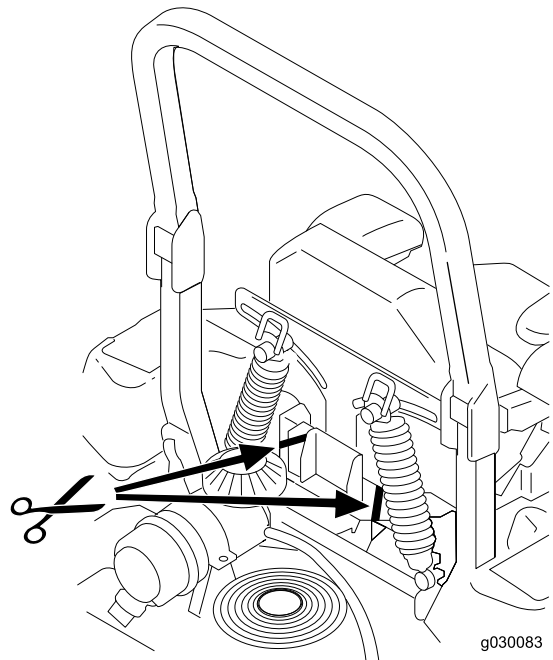


Figure 28

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19

Checking the Machine Before Delivery to the Customer For All Machines

No Parts Required

Procedure

Before delivering the machine to the customer, ensure that you perform or have performed the procedures listed in the following table and initial each when finished. Refer to the *Operator's Manual* for instructions on performing these procedures.

Initial	Check Procedure
	Check the tire pressure.
	Check the level of the machine.
	Check that all spindles are greased.
	Check the engine-oil level.
	Check the hydraulic-fluid level.
	Check that the ROPS is secure.
	On liquid-cooled machines, check the level of the coolant in the radiator and overflow bottle.
	Check the adjustment of the parking brake.
	Ensure that the machine tracks correctly; refer to the <i>Operator's Manual</i> for the adjustment procedure.
	Check the safety-interlock system; refer to the <i>Operator's Manual</i> .
	Ensure that the PTO works properly.
	Check all the fasteners that you installed and ensure that they are tight.

When you finish setting up the machine, sign and date in the space provided below:

Signature: _____ Date: _____

20

Delivering the Machine to the Customer

For All Machines

Parts needed for this procedure:

1	Operator's Manual
1	Engine Owner's Manual
1	Registration card
1	Operator training material
2	Key

Procedure

At delivery, fill in the model and serial number, complete the items listed in the following table, and initial each when finished.

Model No. _____ Serial No. _____

Dealer Initial	Customer Initial	Check Procedure
		Show the customer where the following features are located and how they function:
		• Fuel tank
		• Oil-fill cap/Oil dipstick
		• Spark plug(s)
		• Engine-oil filter
		• Engine-oil drain
		• Fuel gauge, valve, and hose
		• Air filter
		• Radiator coolant (if applicable)
		• Hydraulic-fluid reservoir
		• Hydraulic filter
		• Battery
		• Ignition switch
		• Throttle lever
		• Choke (if applicable)
		• Power take off switch (PTO)
		• Motion-control levers
		• Parking brake
		• Height of cut
		• Lift-assist lever (if applicable)

Dealer Initial	Customer Initial	Check Procedure
		<ul style="list-style-type: none"> • Z Stand® (if applicable) • Adjustable seat • Hydraulic-bypass valves • Rollover Protection System (ROPS) • Deck-flow baffle
		Refer to the <i>Operator's Manual</i> to point out safety procedures, operation, and maintenance procedures.
		Review the warranty statement as shown in the <i>Operator's Manual</i> .
		Describe the post sale service procedures for your store.
		Assist the customer in filling out and mailing the registration card or register online at www.Toro.com
		Make sure that the customer receives the <i>Operator's Manual</i> , <i>Engine Owner's Manual</i> , <i>Set Up Instructions</i> , and operator training material.
		Make sure the customer knows the <i>Parts Catalog</i> is available at www.Toro.com .
		Assist the customer in loading the machine.

Note: When you, the dealer representative, have finished delivering the machine to the customer, sign and date in the space provide below and keep a copy of this page for dealer records. Also, the dealer must remind the customer to use a full-width trailer ramp to load the machine.

Signature: _____ **Date:** _____

Signature: _____ **Date:** _____