



Z500 Series Z Master[®] Diesel Mowers

Form No. 3351–414 Rev A

Setup Instructions

Loose Parts

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

Step	Description	Qty.	Use
1	No parts needed	–	Adding fuel to the machine
2	No parts needed	–	Raising the machine up
3	Roll bar, right section Roll bar, left section Roll bar, center section Bolt, 3/8 x 1 inch Curved washer Flange nut, 3/8 inch Bolt, 1/2 x 3-1/4 inches Flange nut, 1/2 inch Lanyard	1 1 1 8 8 8 2 2 2	Installing the roll over protection system (ROPS)
4	Wheels	2	Installing the drive wheels
5	No parts needed	–	Checking the tire pressure
6	Control lever–right Control lever–left Bolt, 3/8 x 1 inch Curved washer, 3/8 inch	1 1 4 4	Adjusting the motion control levers
7	Bulk electrolyte with 1.265 specific gravity (Purchase from a battery supply outlet.)	1 US Gallon	Activating the battery for international machines only
8	No parts needed	–	Charging the battery for international and domestic machines
9	Number 2 general purpose lithium base or molybdenum base grease. (Purchase separately.)	1 tube	Greasing the bearings
10	No parts needed	–	Preparing the side discharge chute

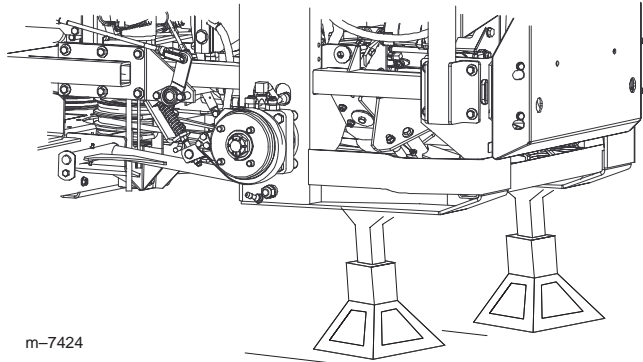
Step	Description	Qty.	Use
11	No parts needed.	–	Checking the machine before delivery
12	Key <i>Operator's Manual</i> <i>Engine Owner's Manual</i> <i>Parts Catalog</i> Safety video Registration card	2 1 1 1 1 1	Delivering the machine to the customer

Step**1****Adding Fuel to the Machine****Parts needed for this step:**

None

Procedure

Note: Add fuel to the machine before starting it. Refer to your *Owners Operator* manual for the correct fuel and procedure.



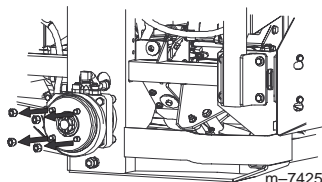
m-7424

Step**2****Raising the Machine Up****Parts needed for this step:**

None

Procedure

1. Remove the wheel nuts from both sides of the vehicle.
2. Remove the right angle retaining plate from the crate and the wheel hub.
3. Raise the back of the machine up and support it with jack-stands.



m-7425

Step

3

Installing the Roll Over Protection System (ROPS)

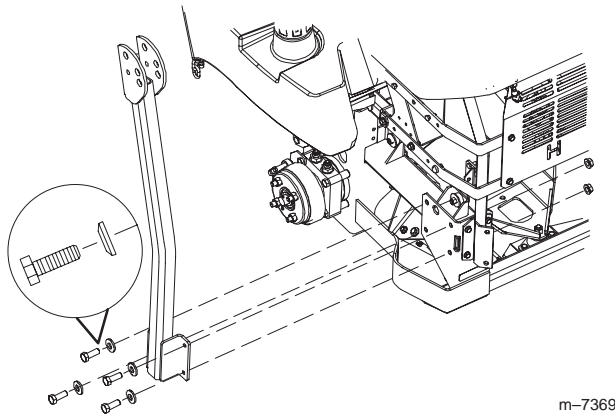
Parts needed for this step:

Qty.	Part
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

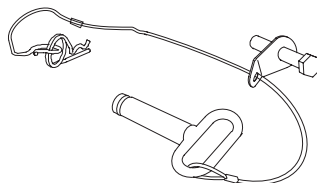
1. **Loosely** install the right and left roll bar sections to the frame, with 8 bolts (3/8 x 1 inch), 8 curved washers and 8 flange nuts (3/8 inch).

Note: The spring disk cone must be installed toward the bolt head.



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

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

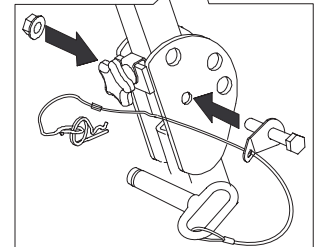
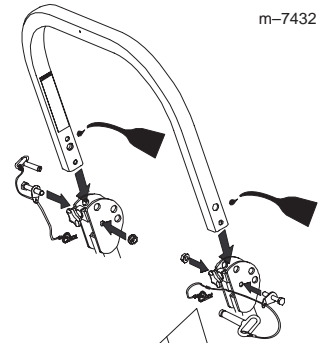


3. Lightly oil the ends of the center roll bar section.

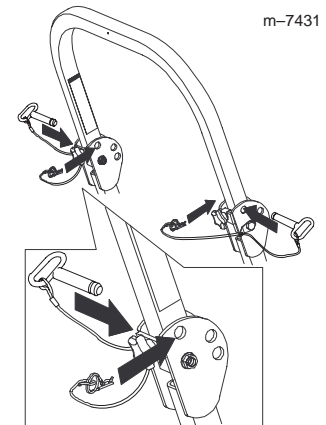
4. Loosely install the center roll bar section, using 2 bolts (1/2 x 3-1/4 inches) and 2 flange nuts (1/2 inch).

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

Note: Make sure the lanyard tab is install as shown and points forward.



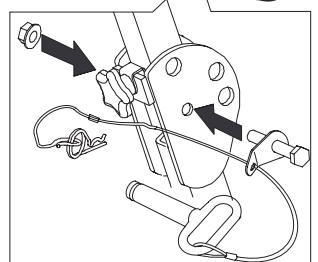
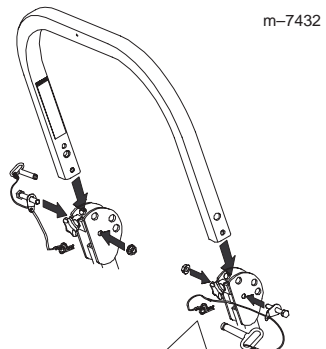
5. Raise the roll bar into the upright position and secure it with the pins and hairpin cotter pins fastened to the lanyards.



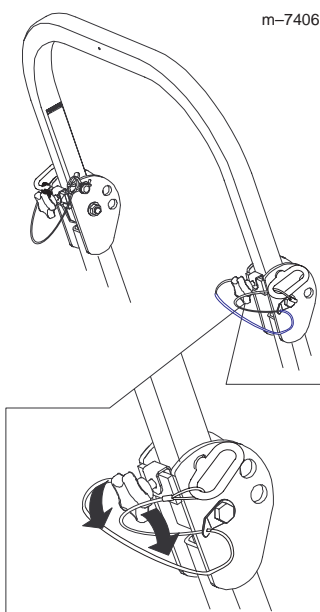
6. Torque all lower fasteners, attached to the machine frame, to 30 ft-lb.

7. Tighten the center roll bar bolts (1/2 x 3-1/4 inches) so it rotates freely with some resistance.

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



8. Tighten the front handles against the center roll bar ends.



Step

5

Checking the Tire Pressure

Parts needed for this step:

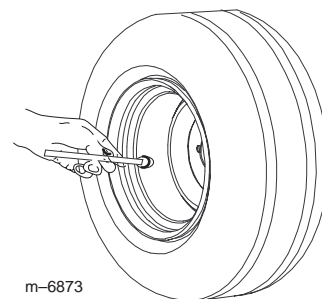
None

Procedure

1. Check the air pressure in the front and rear tires.

Pressure: 13 psi
(90 kPa)

2. Remove the jack stands and lower the machine.



Step

4

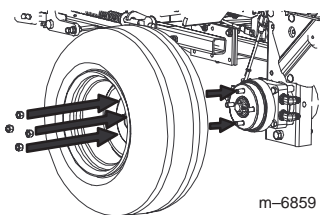
Installing the Drive Wheels

Parts needed for this step:

Qty.	Part
2	Rear wheels

Procedure

1. Mount the wheels with the valve stem to the outside and secure them with the nuts previously removed in Step 1.



2. Torque the nuts to 95 ft-lb (128 N·m).

Step

6

Adjusting the Motion Control Levers

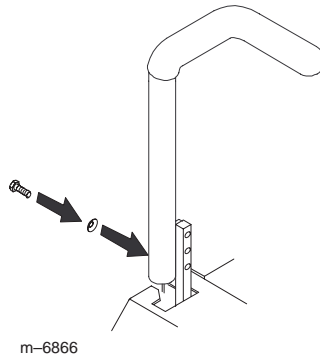
Parts needed for this step:

Qty.	Part
1	Control lever-right (assembled)
1	Control lever-left (assembled)
4	Bolt, 3/8 x 1 inch (assembled)
4	Curved washer, 3/8 inch (assembled)

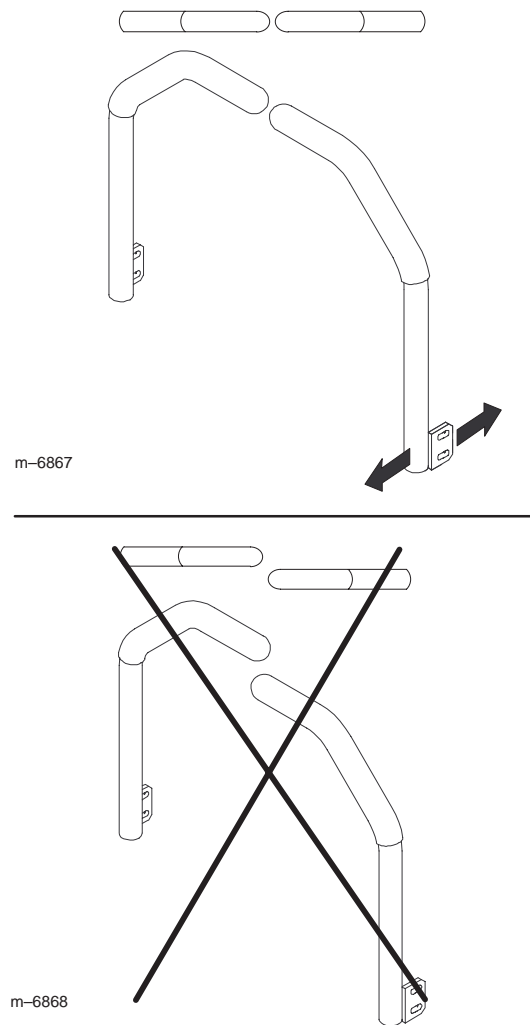
Procedure

1. Check the control levers for the correct alignment.
2. If adjustment is needed, loosen the 4 bolts on the outside of the levers.

Note: If desired, install the levers in the top and middle holes for the high position or the middle and bottom holes for the low position.



3. In the neutral position, raise the levers, bringing them together, and slide them until they are aligned, then tighten the bolts.



Step

7

Activating the Battery for International Machines Only

Parts needed for this step:

Qty.	Part
80 ounces	Bulk electrolyte with 1.265 specific gravity (Purchase from a battery supply outlet.)

Procedure



Danger



Battery electrolyte contains sulfuric acid which is a deadly poison and causes severe burns.

- Do not drink electrolyte and avoid contact with skin, eyes or clothing. Wear safety glasses to shield your eyes and rubber gloves to protect your hands.
- Fill the battery where clean water is always available for flushing the skin.
- Follow all instructions and comply with all safety messages on the electrolyte container.



Warning



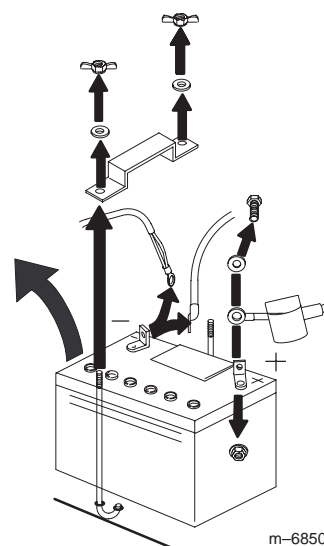
CALIFORNIA

Proposition 65 Warning

Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. *Wash hands after handling.*

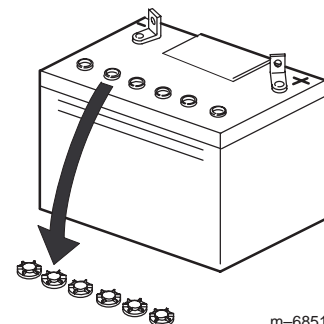
1. Remove the battery. Refer to the *Operator's Manual* for instructions.

Important: Do not add electrolyte while the battery is in the machine. You could spill it, causing corrosion.



m-6850

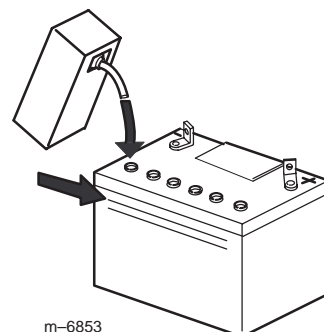
2. Clean the top of the battery and remove the vent caps.



m-6851

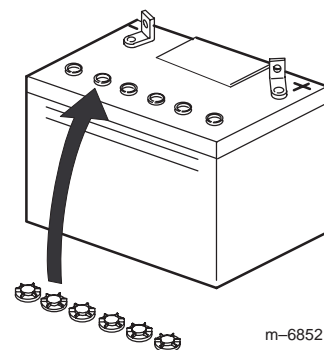
3. Slowly pour electrolyte into each battery cell until the level is up to the **upper** line on the battery case.

Important: Do not overfill the battery.



m-6853

4. Wait five to ten minutes, then add electrolyte, if necessary, until the electrolyte level is up to the **upper** line on the battery case.
5. Install battery filler caps.



m-6852

Step

8

Charging the Battery for International and Domestic Machines

Parts needed for this step:

None

Procedure



Warning

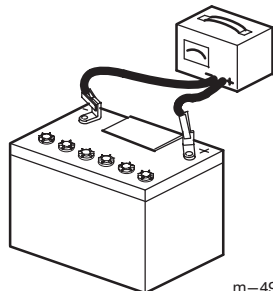


Charging the battery produces gasses that can explode and cause serious injury.

- 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.

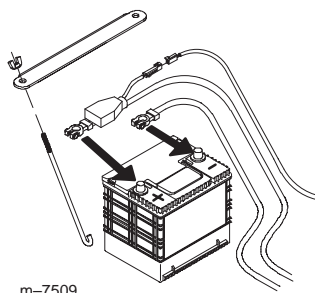
Important: Do not run the machine with the battery disconnected; electrical damage may occur to the engine computer.

1. Charge international battery and then install it on the machine. Refer to the *Operator's Manual* for instructions.



m-4970

2. Charge the domestic battery and then install it on the machine. Refer to the *Operator's Manual* for instructions.



m-7509

Step

9

Checking the Spindles for Grease

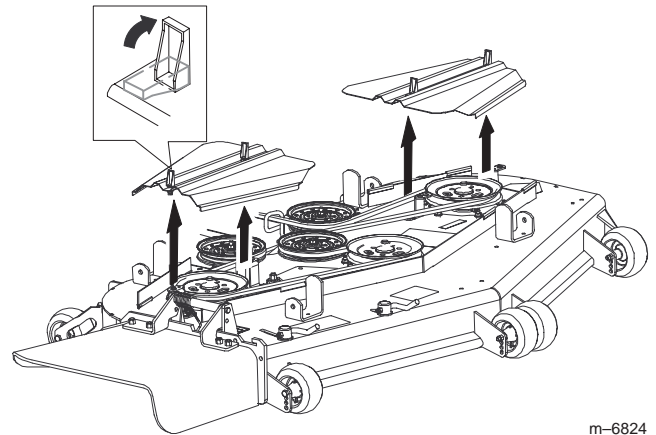
Parts needed for this step:

Qty.	Part
1 tube	Number 2 general purpose lithium base or molybdenum base grease. (Purchase separately.)

Procedure

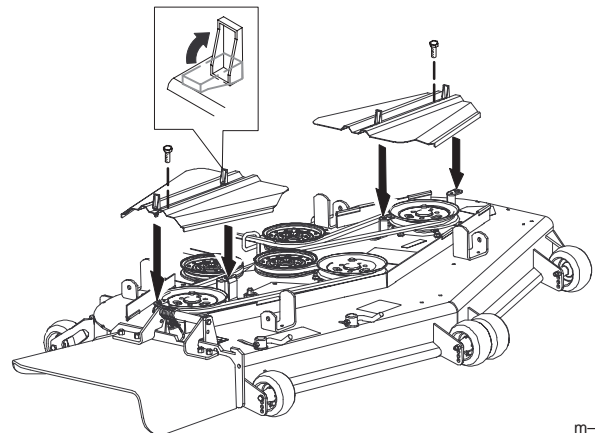
Important: Check the **cutting unit spindles** to make sure they are greased before starting the engine.

1. Remove the belt covers on domestic machines as shown below.



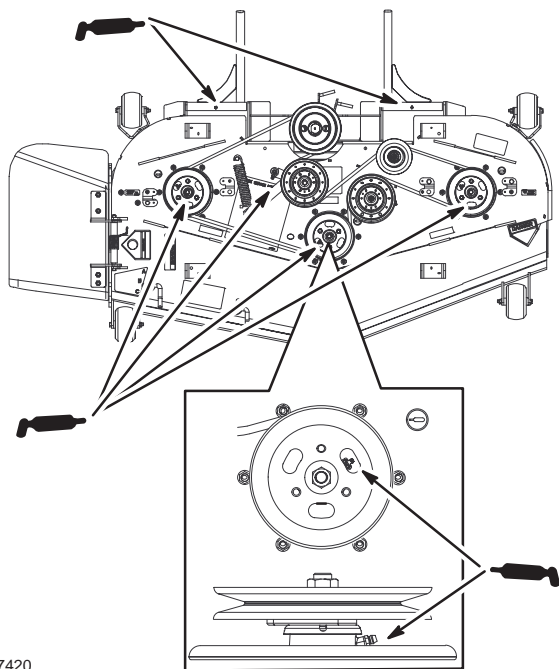
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2. Remove the belt covers and bolts on international machines as shown below.



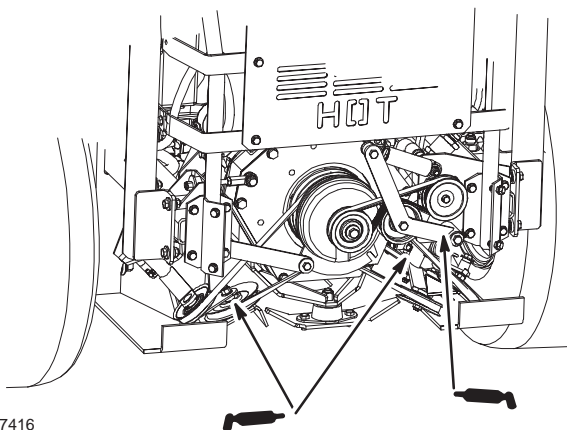
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3. Grease the fittings on the three spindle bearings. Add grease until it comes out of the lower seals.



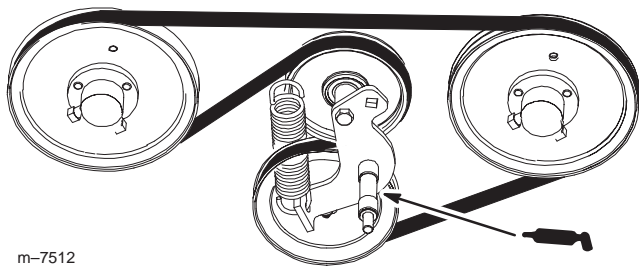
m-7420

4. Install the belt covers.
 5. Grease the cooling fan belt idler arm.
 6. Grease the drive belt idler arms.



m-7416

7. Grease the pump belt idler arm in the front of the engine.



m-7512

Step

10

Preparing the Side Discharge Chute

Parts needed for this step:

None

Procedure

Remove the plastic tie holding the side discharge chute up and lower the chute into place.

Step**11**

Checking the Machine Before Delivery to the Customer

Parts needed for this step:

None

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 mower.
	Check that all mower spindles are greased.
	Check the engine oil level.
	Check the hydraulic fluid level.
	Check ROPS is secure.
	On liquid cooled machines, check the level of the coolant in the radiator.
	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.
	Check all fasteners you installed to ensure that they are tight.

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

Signature: _____

Date: _____

Step**12**

Delivering the Machine to the Customer

Parts needed for this step:

Qty.	Part
1	<i>Operator's Manual</i>
1	<i>Parts Catalog</i>
1	<i>Engine Owner's Manual</i>
1	Registration card
1	Safety video
2	Key

Procedure

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

Model Number: _____

Serial Number: _____

Dealer Initial	Customer Initial	Check Procedure
		<p>Show the customer where the following features are located and how they function:</p> <ul style="list-style-type: none"> • Fuel Tank Caps • Oil Fill Tube/ Oil dipstick • Oil Filter • Oil Drain • Fuel Filter • Air Filter • Radiator Coolant (Liquid Cooled Only) • Hydraulic fluid reservoir • Hydraulic filter • Battery • Ignition Switch • Throttle Lever • Glow plug light and Water in Fuel Light • Power Take Off Switch (PTO) • Motion Control Levers • Parking Brake • Mower Height-of-Cut Lever • Lift Assist Lever • Z Stand® • Adjustable Seat • Hydraulic Bypass • Rollover Protection System (ROPS) • Flow Baffle
		Refer to the operator's manual 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>Parts Catalog</i> , and <i>Engine Owner's Manual</i> , <i>Set Up Instructions</i> , and safety video.
		Assist the customer in loading the mower.

Note: When you, the dealer representative, have finished delivering the machine to the customer, sign and date in the space provided below and keep a copy of this page for dealer records:

Signature: _____

Date: _____

Signature: _____

Date: _____

