



Power Deck Lift Kit

Z Master 3000, 5000, and 6000 Series Mowers

Model No. 132-5986

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.

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

Note: This kit is not compatible with machines that have the MyRide™ suspension system.

Safety

Safety and Instructional Decals

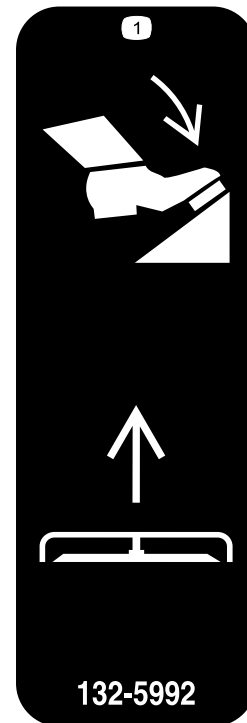


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



119-6807

1. Warning—no step



132-5992

132-5992

1. Press down on the pedal to lift the deck.



Installation

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	Deck foot pedal	1	Install the deck foot pedal.
3	Switch template Momentary switch Power lift foot pedal Screw (1/4 x 3/4 inch) Flat washer (1/4 inch) Whiz-lock nut (1/4 inch)	1 1 1 2 2 2	Install the power lift foot pedal and switch.
4	Z Master 6000 series template Z Master 3000/5000 series template Actuator bracket Screw (7/16 x 4–1/2 inches) Spring disc washer (7/16 inch) Whiz-lock nut (7/16 inch) Screw (3/8 x 3–1/2 inches); for Z Master 6000 series units only Cone disc washer Whiz-lock nut (3/8 inch) Screw (3/8 x 3–1/4 inches); for Z Master 3000 and 5000 series units only Nyloc nut	1 1 1 1 1 1 1 1 1 1 1	Install the actuator bracket.
5	Front deck lift bracket Screw (1/2 x 6–1/2 inches) Spring disc washer (1/2 inch) Locknut (1/2 inch) Actuator Clevis pin Cotter pin Actuator side plate Flat washer (1/2 inch) Spacer Screw (1/2 x 2–1/2 inches)	1 2 2 3 1 2 2 2 2 2 1	Install the actuator.
6	Wire harness Cable tie Fuse, 25 A Fuse, 30 A	1 8 1 1	Install the deck lift harness.
7	No parts required	–	Complete the installation.
8	No parts required	–	Make the final deck lift adjustment.

1

Preparing the Machine

No Parts Required

Procedure

1. Park the machine on a level surface, disengage the PTO, move the motion-control levers to the NEUTRAL-LOCK position, shut off the engine, set the parking brake, and remove the key from the ignition switch.

⚠ CAUTION

If you leave the key in the ignition switch, someone could accidentally start the engine and seriously injure you or bystanders.

Remove the key from the ignition switch before you perform any maintenance.

2. Disconnect the negative cable from the battery post; refer to the *Operator's Manual* for your machine.

⚠ WARNING

Incorrect battery cable routing could damage the machine and cables causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
 - Always connect the positive (red) battery cable before connecting the negative (black) cable.
3. Disconnect the positive cable from the battery post; refer to the *Operator's Manual* for your machine.
 4. Remove the spark-plug wire from the terminal of the spark plug.

2

Installing the Deck Foot Pedal

Parts needed for this procedure:

1	Deck foot pedal
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Procedure

⚠ WARNING

Installing the power lift foot pedal on Z Master 3000, 5000, and 6000 series mowers without replacing the deck foot pedal could result in serious injury.

Replace the deck foot pedal on all units.

Note: Use the existing hardware.

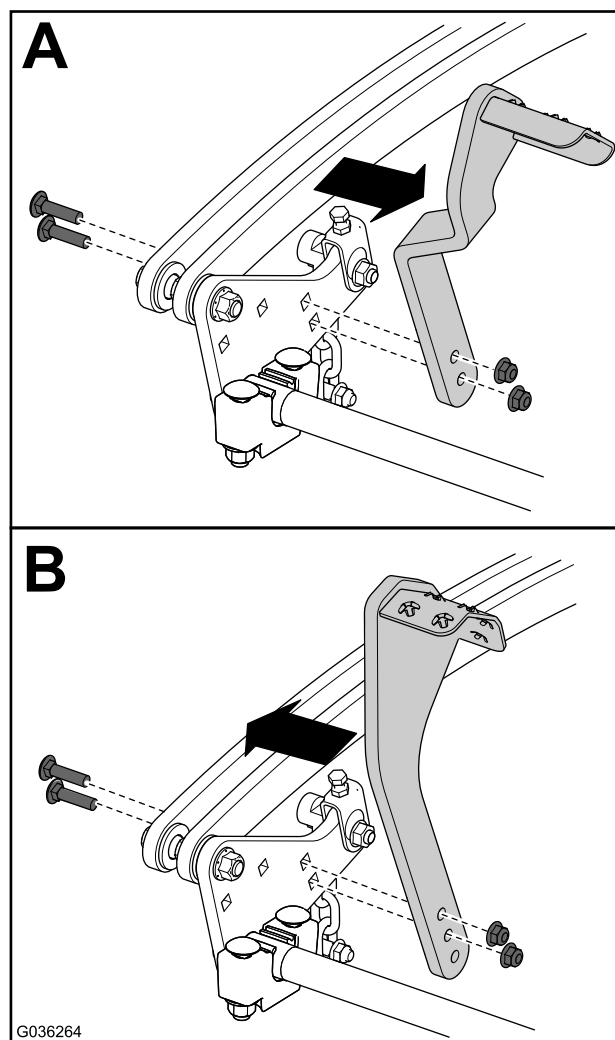


Figure 1

3

Installing the Power Lift Foot Pedal and Momentary Switch

Parts needed for this procedure:

1	Switch template
1	Momentary switch
1	Power lift foot pedal
2	Screw (1/4 x 3/4 inch)
2	Flat washer (1/4 inch)
2	Whiz-lock nut (1/4 inch)

Procedure

1. Raise and lock the deck in the 14 cm (5-1/2 inch) transport position.
2. Cut out the switch template, align the template as shown in [Figure 2](#), center punch the holes, and drill the holes as follows:
 - For the switch-mounting hole, drill a hole (5/8 inch diameter) through the toe board.
 - For the power lift foot pedal mounting holes, drill 2 holes (11/32 inch diameter) through the toe board.

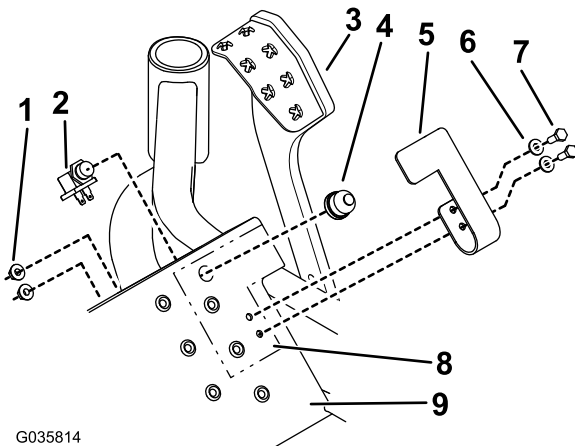


Figure 2

- | | |
|-----------------------------|---------------------------|
| 1. Whiz-lock nut (1/4 inch) | 6. Washer (1/4 inch) |
| 2. Switch—bottom half | 7. Screw (1/4 x 3/4 inch) |
| 3. Deck foot pedal | 8. Switch template |
| 4. Switch—top half | 9. Toeboard |
| 5. Power lift foot pedal | |

4. Insert the bottom half of the switch through the underside of the toeboard, making sure the contacts point downward ([Figure 2](#)). Screw on the top half of the switch hand-tight. Do not overtighten.
5. Hand tighten the nut on the bottom half of the switch until it rests against the underside of the toe board. Do not overtighten.
6. Install the power lift foot pedal using 2 screws (1/4 x 3/4 inch), 2 flat washers(1/4 inch), and 2 whiz-lock nuts (1/4 inch) as shown in [Figure 2](#).

3. Unscrew the top half of the switch from the bottom half and unscrew the nut from the bottom half until it stops.

4

Installing the Actuator Bracket

Parts needed for this procedure:

1	Z Master 6000 series template
1	Z Master 3000/5000 series template
1	Actuator bracket
1	Screw (7/16 x 4-1/2 inches)
1	Spring disc washer (7/16 inch)
1	Whiz-lock nut (7/16 inch)
1	Screw (3/8 x 3-1/2 inches); for Z Master 6000 series units only
1	Cone disc washer
1	Whiz-lock nut (3/8 inch)
1	Screw (3/8 x 3-1/4 inches); for Z Master 3000 and 5000 series units only
1	Nyloc nut

Procedure

1. Raise and lock the deck in the 14 cm (5-1/2 inch) transport position.
2. Insert the height-adjustment pin into the 14 cm (5-1/2 inch) hole to assure the deck is locked in the full-up (transport) position.
3. On the left side of the unit, measure the distance between the nut on the end of the spring and the bracket (Figure 3). Note this measurement.

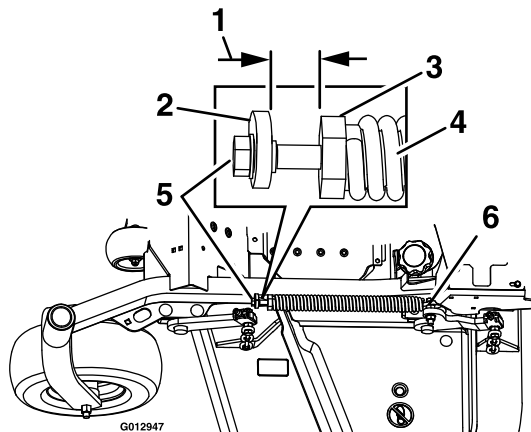


Figure 3

- | | |
|---------------------|-------------------|
| 1. Measure distance | 4. Side spring |
| 2. Bracket | 5. Front hardware |
| 3. Nut | 6. Rear hardware |

4. Remove and retain the rear hardware holding the spring.

Note: If the hardware is difficult to remove, cut off the bolt head.

5. Remove and retain the front spring hardware and the side spring.
6. Cut out the appropriate rear deck lift arm template, align the template as shown in Figure 4, center punch the hole, and drill the hole as follows:
 - For Z Master 6000 series units, drill a hole (25/64 or 13/32 inch diameter).
 - For Z Master 3000 and 5000 series units, drill a pilot hole (5/16 inch diameter) and tap 3/8-16UNC.

Note: A flat-bottom tap is necessary to fully thread the hole.

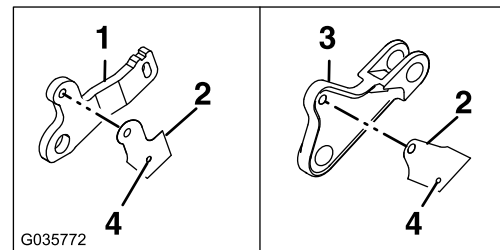


Figure 4

- | | |
|---|--|
| 1. Z Master 3000/5000 series rear deck lift arm | 3. Z master 6000 series rear deck lift arm |
| 2. Template | 4. Bottom hole |

7. Install the actuator bracket to the rear deck lift arm by performing the following:
 - A. Align the top hole of the actuator bracket and rear deck lift arm.
 - B. Attach the actuator bracket to the rear deck lift arm with a screw (7/16 x 4-1/2 inches), spring disc washer (7/16 inch), and whiz-lock nut (7/16 inch) as shown in Figure 5. Hand tighten against the bracket.

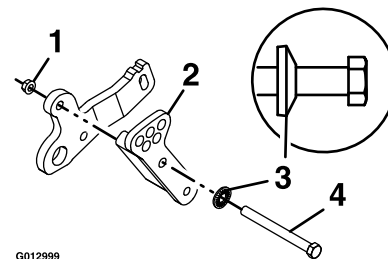


Figure 5

- | | |
|------------------------------|---|
| 1. Whiz-lock nut (7/16 inch) | 3. Spring disc washer (7/16 inch); cone towards bolt head |
| 2. Actuator bracket | 4. Screw (7/16 x 4-1/2 inches) |

C. Install hardware into bottom hole of the actuator bracket by performing the following:

- For Z Master 6000 series units, install a screw (3/8 x 3-1/2 inches), cone disc washer, and whiz-lock nut (3/8 inch) and tighten hand-tight.
- For Z Master 3000 and 5000 series units, install a screw (3/8 x 3-1/4 inches) and cone disc washer.

8. Torque the screws from step 7 according to the following table.

Screw Size	Torque Specification
7/16 inch	61 to 75 N·m (45 to 55 ft-lb)
3/8 inch	37 to 45 N·m (27 to 33 ft-lb)

9. Install the side spring by placing the rear hook onto the screw. Install the nyloc nut and leave a 9 mm (0.35 inch) gap between the nyloc nut and whiz-lock nut (7/16 inch) as shown in Figure 6.

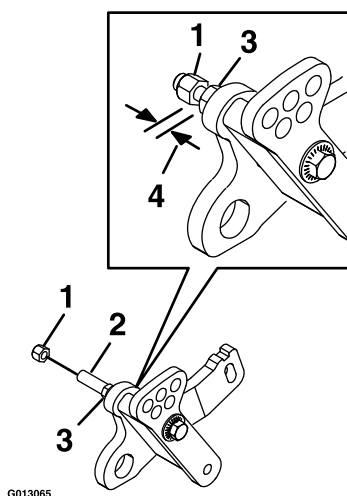


Figure 6

- | | |
|--------------------------------|------------------------------|
| 1. Nyloc nut | 3. Whiz-lock nut (7/16 inch) |
| 2. Screw (7/16 x 4-1/2 inches) | 4. 9 mm (0.35 inch) gap |

10. Have a helper press down on the deck pedal and hold the deck to the full-up (transport) position.
11. Install the front bolt of the side spring, use the measurement recorded in step 3 to set the gap between the nut on the end of the spring and the bracket (see Figure 3), and tighten or loosen the spring bolt until the appropriate gap is reached.
12. Your helper can now release the deck and allow it to return to the TRANSPORT-LOCK position.

5

Installing the Actuator

Parts needed for this procedure:

1	Front deck lift bracket
2	Screw (1/2 x 6-1/2 inches)
2	Spring disc washer (1/2 inch)
3	Locknut (1/2 inch)
1	Actuator
2	Clevis pin
2	Cotter pin
2	Actuator side plate
2	Flat washer (1/2 inch)
2	Spacer
1	Screw (1/2 x 2-1/2 inches)

Procedure

1. Raise the left side of the deck and support it with jack stands. Make sure that there is no weight on the left front deck lift link adjuster.

⚠ WARNING

Raising the mower for service or maintenance relying solely on mechanical or hydraulic jacks could be dangerous. The mechanical or hydraulic jacks may not be enough support or may malfunction allowing the unit to fall, which could cause injury.

Do not rely solely on mechanical or hydraulic jacks for support. Use adequate jack stands or equivalent support.

2. Raise and lock the deck in the 14 cm (5-1/2 inch) transport position.
3. Insert the height-adjustment pin into the 14 cm (5-1/2 inch) hole to assure the deck is locked in the full-up (transport) position.
4. Remove the hardware from the left, front cross-shaft support.

5. Install the front deck lift bracket using 2 screws (1/2 x 6–1/2 inches), 2 spring disc washers (1/2 inch), and 2 locknuts (1/2 inch) as shown in [Figure 7](#). Torque the screws to 91 to 113 N·m (67 to 83 ft-lb).

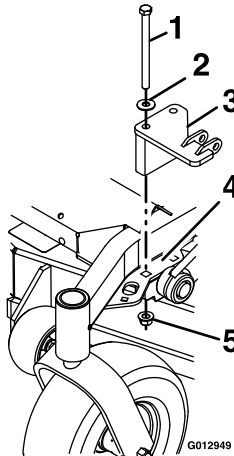


Figure 7

- | | |
|--|------------------------------------|
| 1. Screw (1/2 x 6–1/2 inches) | 4. Left, front cross-shaft support |
| 2. Spring disc washer (1/2 inch); cone towards bolt head | 5. Locknut (1/2 inch) |
| 3. Front deck lift bracket | |

6. Install the actuator on the front, deck-lift bracket using the clevis pin and hairpin cotter ([Figure 8](#)).

Note: Make sure that the motor is pointing down.

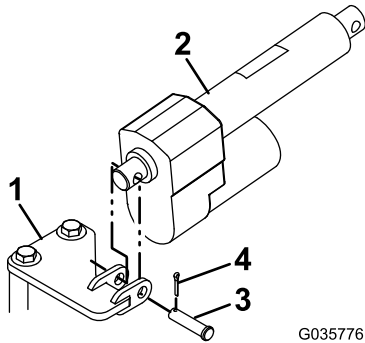


Figure 8

- | | |
|-----------------------------|-------------------|
| 1. Front, deck-lift bracket | 3. Clevis pin |
| 2. Actuator | 4. Hairpin cotter |

7. Install the rear actuator side plates as shown in [Figure 9](#).

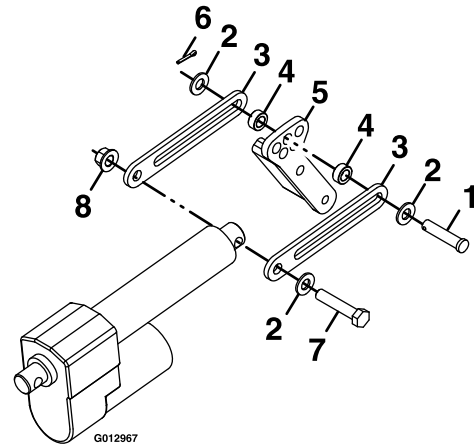


Figure 9

- | | |
|---------------------------|-------------------------------|
| 1. Clevis pin | 5. Actuator bracket |
| 2. Flat washer (1/2 inch) | 6. Hairpin cotter |
| 3. Actuator side plates | 7. Screw (1/2 x 2–1/2 inches) |
| 4. Spacer | 8. Locknut (1/2 inch) |

8. If the actuator hole does not align with the actuator-side-plate hole, turn the end of the actuator clockwise or counterclockwise until it aligns as shown in [Figure 10](#).

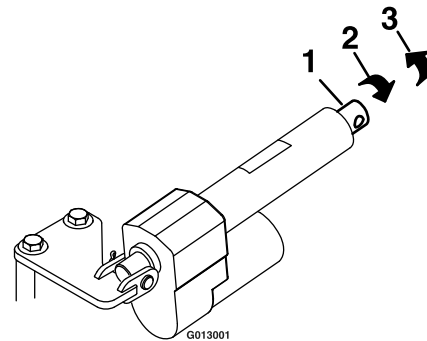


Figure 10

- | | |
|---------------------|--------------------|
| 1. Actuator end | 3. Turn to shorten |
| 2. Turn to lengthen | |

9. Install the actuator side plates to the actuator bracket as shown in [Figure 9](#).

Note: Use the top center hole position.

10. Carefully remove the jack stand.

6

Installing the Deck Lift Harness

Parts needed for this procedure:

1	Wire harness
8	Cable tie
1	Fuse, 25 A
1	Fuse, 30 A

Procedure

Harness routing overview:

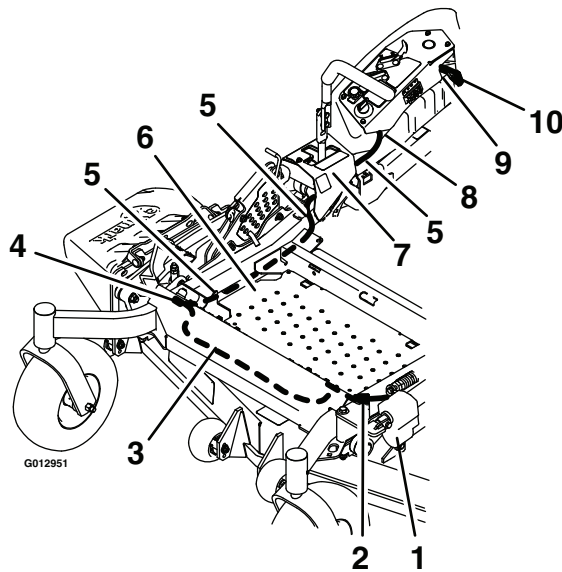


Figure 11

- | | |
|---|--|
| 1. Actuator | 6. Floor pan |
| 2. Connect actuator and deck lift harness | 7. Right motion control panel |
| 3. Deck lift harness | 8. Control panel front opening |
| 4. Connect switch to deck lift harness | 9. Control panel rear opening |
| 5. Cable tie | 10. Connect deck lift harness to accessory |

1. Plug the deck lift harness into the switch and route the harness around the cross-shaft using cable ties to secure the harness as necessary.

2. Connect the other end to the actuator harness. Push the deck lift and actuator harness connection inside the toe board (Figure 12).

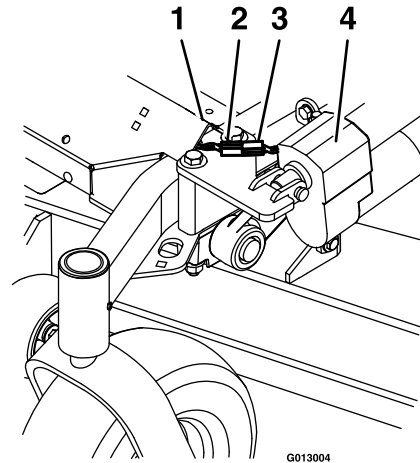


Figure 12

- | | |
|----------------------|---------------------|
| 1. Toeboard | 3. Actuator harness |
| 2. Deck lift harness | 4. Actuator |

3. Remove the 15 A accessory fuse from the fuse box and replace it with the 25 A fuse.
4. Remove the 25 A main fuse from the fuse box and replace it with the 30 A fuse.
5. Remove and retain the hardware from the control panel, carefully remove the control panel, and remove the cap from the accessory plug.
6. Route the deck lift harness under the right side of the floor panel along the side of the frame so that it joins with the main system wire harness.

Note: Use cable ties to secure the wire harness to the machine as shown in Figure 11.

7. Insert the deck lift harness through the front opening of the control panel, route it through the rear opening of the control panel, and connect it to the accessory harness plug.
8. If multiple accessories are being used, an add-on accessory harness kit is required (Part No. 109-9798).
9. Install the previously removed control panel with the corresponding hardware.

7

Completing the Installation

No Parts Required

Procedure

1. Connect the positive battery cable to the positive post of the battery; refer to the *Operator's Manual* for your machine.

⚠ WARNING

Incorrect battery cable routing could damage the machine and cables causing sparks. Sparks can cause the battery gasses to explode, resulting in personal injury.

- Always disconnect the negative (black) battery cable before disconnecting the positive (red) cable.
 - Always connect the positive (red) battery cable before connecting the negative (black) cable.
2. Connect the negative cable from the battery post; refer to the *Operator's Manual* for your machine.
 3. Connect the spark-plug wire to the terminal of the spark plug.

8

Making the Final Deck Lift Adjustment

No Parts Required

Procedure

1. After the deck lift kit is completely installed, turn on the key and activate the power lift foot pedal. The actuator retracts and lifts the deck to the highest position.

Note: The actuator has a ratcheting slip clutch you can noticeably hear when the actuator is being fully retracted. If the deck lift is adjusted properly, the deck lifts out of the TRANSPORT-LOCK position and there is a rapid clicking sound when the actuator is fully retracted.

2. If the actuator does not raise the deck high enough to get out of the TRANSPORT-LOCK position, move the rear clevis pin back a hole as shown in [Figure 13](#).

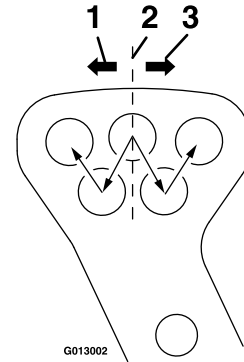


Figure 13

1. Move forward if deck hits frame stops
2. Initial position
3. Move backward if unable to get in/out of TRANSPORT-LOCK

3. If the actuator raises the deck too far and the deck hits the frame ([Figure 14](#)) prior to the actuator being fully retracted, a noticeable loud banging sound occurs as the clutch slips erratically. If this happens, move the rear clevis pin forward a hole; refer to [Figure 13](#).

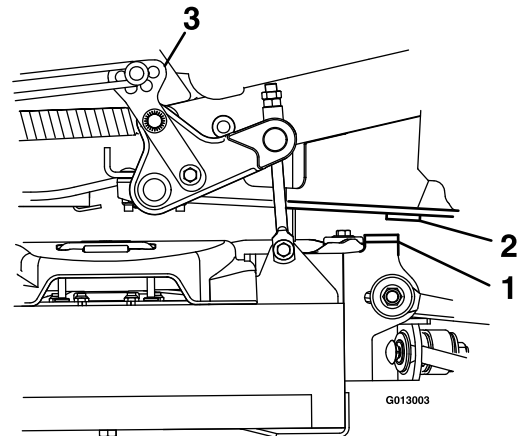


Figure 14

1. Deck stop
2. Frame stop
3. Actuator bracket

4. If the deck does not fall under its own weight, lengthen the distance between the deck bracket and side spring nut by 1/8 inch (3 mm); refer to [Figure 3](#). Test the actuator again. Repeat this step until the deck falls under its own weight.

Operation

The power deck lift kit is designed to work in conjunction with the original deck-lift, height-of-cut, and transport-lock mechanisms already on the mower. When the power deck lift kit is properly installed, an electric actuator provides a powered lifting feature that reduces the need to push on the manual foot lever when raising the deck to the TRANSPORT-LOCK position. However, the manual foot lever may still be used for manual override of the powered system, in the event it is convenient or necessary to do so.

Raising the Deck Using the Powered Deck Lift

Press the power lift foot pedal to raise the deck to the TRANSPORT-LOCK position. The electric actuator has a slip clutch that ratchets when the deck is fully raised, and there is a rapid clicking sound when the clutch is slipping. This ratcheting sound is normal as the actuator is designed to ratchet to a limited degree.

Note: Holding the power lift foot pedal against the switch for more than 2 seconds, after it is fully raised, causes the actuator to overheat and reduces the life of the actuator. It is recommended to limit the actuator ratcheting to no longer than 2 seconds at a time, with a resting period of at least 30 seconds, or excessive heating and actuator damage may occur. Put the deck in TRANSPORT-LOCK, or use the manual foot lever, to hold the deck in place for longer periods of time.

Lowering the Deck Using the Powered Deck Lift

1. Stop the machine and move the motion control levers outward to the NEUTRAL-LOCK position.
2. Disengage the PTO.
3. With the deck in the TRANSPORT-LOCK position, insert the height-adjustment pin into the desired height-of-cut setting.
4. Release pressure from the transport lock by pushing either the power lift foot pedal, or the manual deck foot lever, and simultaneously pulling on the transport-lock rod.
5. Slowly release the power lift foot pedal or the manual deck lift foot pedal. When released, the deck is free to fall under its own weight, which back-drives the actuator, until the deck stops on the height-adjustment pin.

Note: If the deck does not fall under its own weight or if the deck hits the frame when the deck is in the full-up position; refer to [8 Making the Final Deck Lift Adjustment \(page 9\)](#).

Notes:



Count on it.