



# Metal Plate Kit

## Z Master® Commercial 2000 Series Riding Mower

Model No. 125-4790

### Installation Instructions

**Note:** Keep the mower deck belt installed during the installation of this kit. There is no interference with the mower deck belt.

#### ⚠ 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.

## Loose Parts

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

Description	Qty.	Use
No parts required	—	Check the fuel tank.
No parts required	—	Install the fuel tank.
No parts required	—	Remove the pulleys.
No parts required	—	Inspect the idler-arm pulley.
Plate	1	Install the plate.
Star washer	1	
Thin flat washer	1	
Flange nut (3/8 inch)	2	
Thick flat washer	1	

#### ⚠ CAUTION

If the machine has been running, the muffler and exhaust system will be very hot and can cause serious burns if you touch them.

Allow the machine to cool completely before performing this procedure.

## Checking the Fuel Tank

**Note:** Ensure a new fuel tank and idler pulley are ordered if there is any wear on the existing fuel tank.

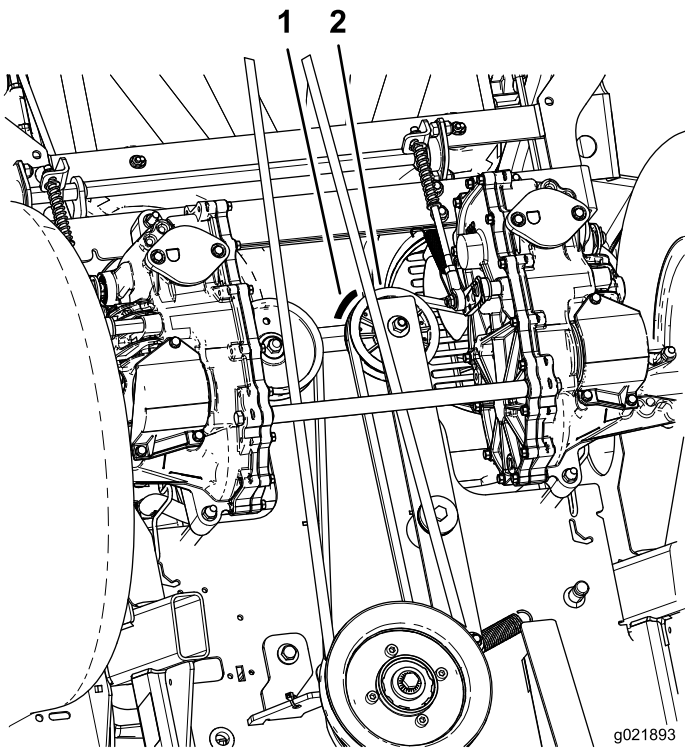
Check the fuel tank for any wear under the idler pulley (Figure 1).

- If you see or feel with your finger nail, a groove in the fuel tank from the idler pulley, replace the fuel tank and idler

pulley (Figure 1). Order a new fuel tank and a new idler pulley. Proceed to Replacing the Fuel Tank (page 2).

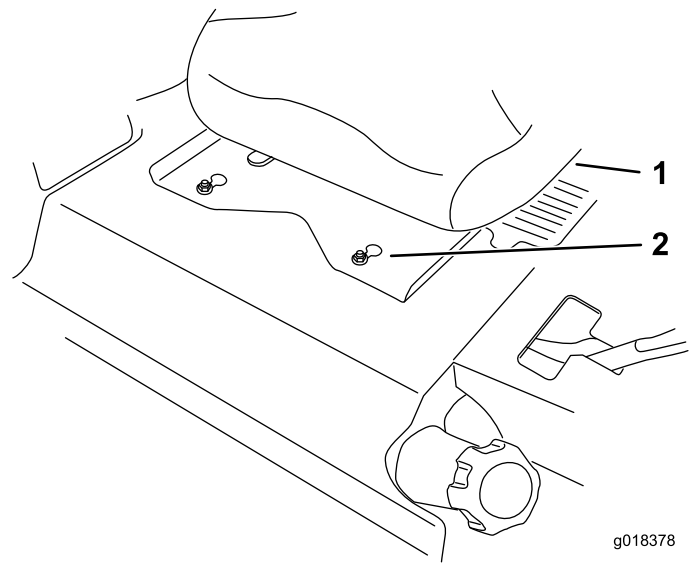
- If the fuel tank does not have any wear from the idler pulley, proceed to Removing the Pulleys (page 4).





**Figure 1**

1. Wear area on fuel tank      2. Idler pulley



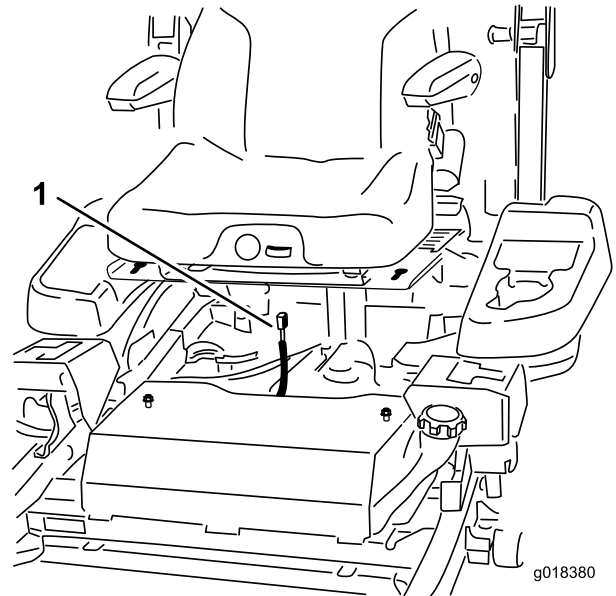
**Figure 2**

1. Seat      2. Front nuts with key hole

## Replacing the Fuel Tank

**Note:** Only replace the fuel tank when there is wear on the existing fuel tank from the idler pulley.

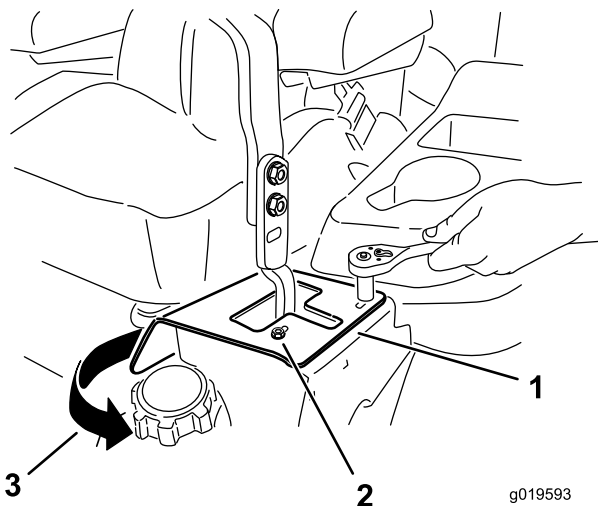
1. Drive the machine to a level surface.
2. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
3. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
4. Move the seat the furthest rear position to expose the front nuts.
5. Loosen the front nuts. The nuts do not need to be removed.
6. Move the seat the furthest forward position to expose the rear nuts.
7. Loosen the rear nuts. The nuts do not need to be removed.
8. Slide the seat and seat plate forward to allow the front nuts to go through the key hole (Figure 2).



**Figure 3**

1. Harness connector

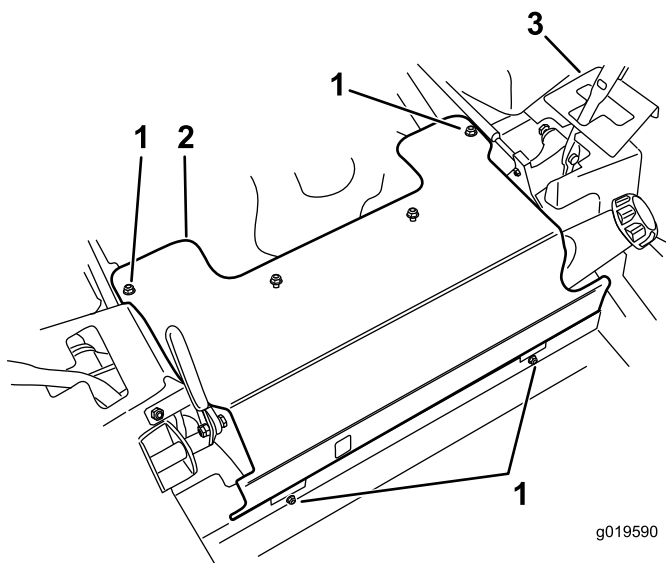
11. Remove the two bolts holding the left side motion control lever bracket.
12. Rotate the motion control lever bracket to allow the front panel to be removed (Figure 4).



**Figure 4**

1. Motion control lever bracket
2. Remove the two bolts
3. Rotate the motion control lever bracket

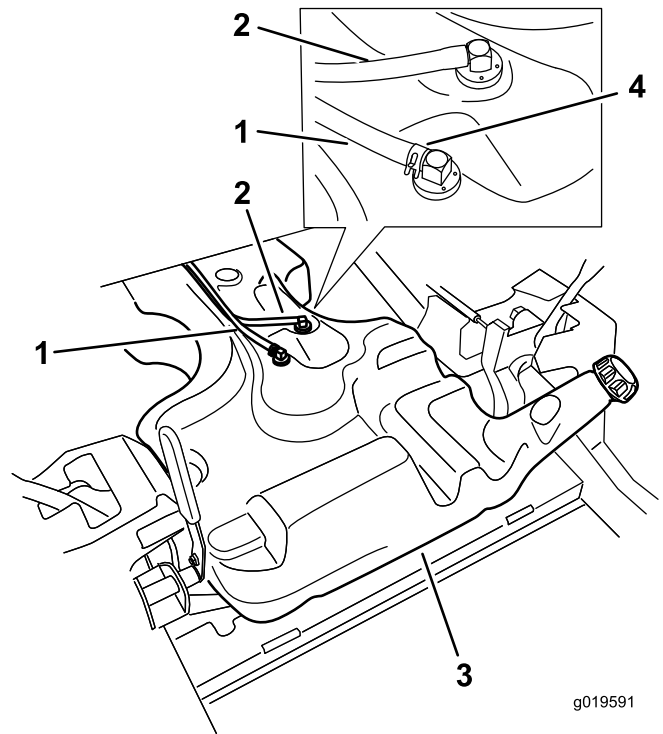
13. Remove the four bolts holding the front panel in place and remove the front panel (Figure 5).



**Figure 5**

1. Remove these bolts
2. Front panel
3. Motion control lever bracket

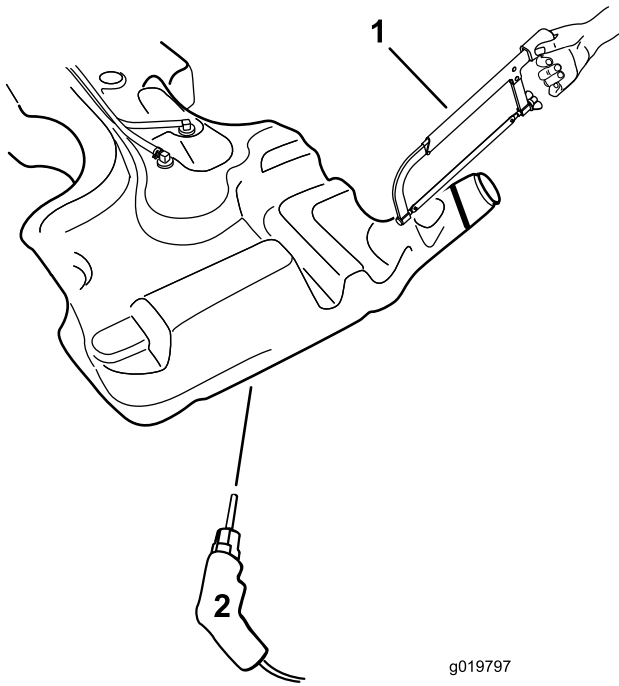
14. Using a pliers, loosen the fuel hose clamp and slide it down the fuel hose.
15. Remove the fuel vent hose and fuel hose from the fuel tank (Figure 6).



**Figure 6**

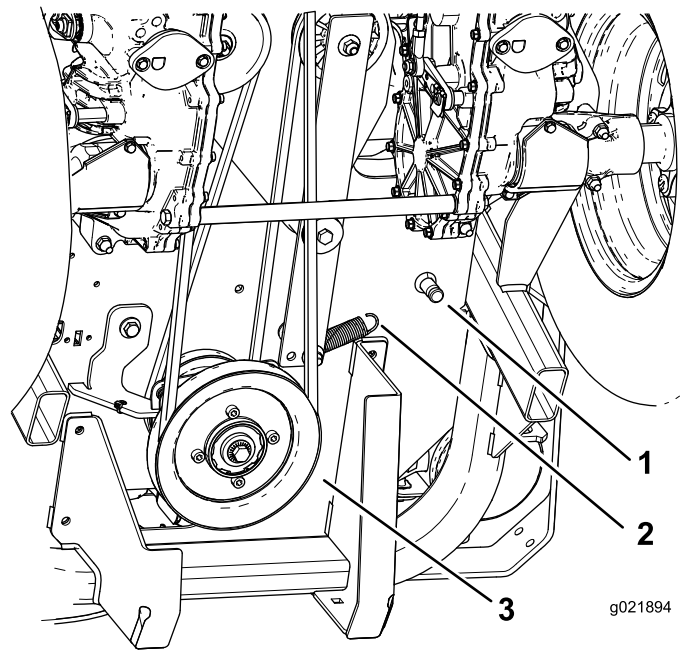
1. Fuel hose
2. Vent hose
3. Fuel tank
4. Hose clamp

16. Remove any fuel from the tank by pumping it out into a fuel can.
17. Remove the tank from the machine.
18. Install the new fuel tank by reversing steps 4 through 17.
19. Destroy the old fuel tank by one of the following processes:
  - Drill a 1/4 inch hole in the bottom of the fuel tank (Figure 7).
  - Cut the filler neck off of the fuel tank (Figure 7).



**Figure 7**

1. Cut the filler neck off
2. Drill a 1/4 inch hole



**Figure 8**

1. Idler-spring post
2. Spring
3. Clutch pulley

## Removing the Pulleys

### **⚠ WARNING**

**Mechanical or hydraulic jacks may fail to support machine and cause a serious injury.**

**Use jack stands when supporting machine.**

1. Drive the machine to a level surface.
2. Disengage the PTO, move the motion control levers to the neutral locked position, and set the parking brake.
3. Stop the engine, remove the key, and wait for all moving parts to stop before leaving the operating position.
4. Raise the rear of machine up and support it with jack stands.
5. Remove the spring from the idler-spring post (Figure 8). This will release the tension on the hydraulic-pump belt.

**Note:** Do not remove the hydraulic-pump belt from the machine; allow the hydraulic-pump belt to lay loose in the machine while installing this kit.

6. Remove the idler arm bolt, washer, rubber washers, inner spacer, idler arm, large spacer and the flange nut above the engine deck (Figure 12 and Figure 13).
7. Remove the fixed idler pulley and washer from the machine (Figure 11). Discard the washer.

**Note:** Do not remove the fixed-idler carriage bolt.

## Inspecting the Idler-Arm Pulley

1. Inspect the idler-arm pulley to ensure it freely rotates and has no wobble. Replace the pulley if necessary.
  2. If the idler-arm pulley does not need to be replaced, torque the idler-pulley bolt between 27 and 33 ft-lbs.
  3. If the pulley needs to be replaced, remove the pulley from the idler arm (Figure 9). Make note of how it is installed.
  4. Install the new idler-arm pulley with a new flange nut (3/8 inch) as shown in Figure 9.
- Note:** Ensure the bushing is installed towards the idler arm (Figure 9).
5. Torque the idler-pulley bolt between 27 and 33 ft-lbs.

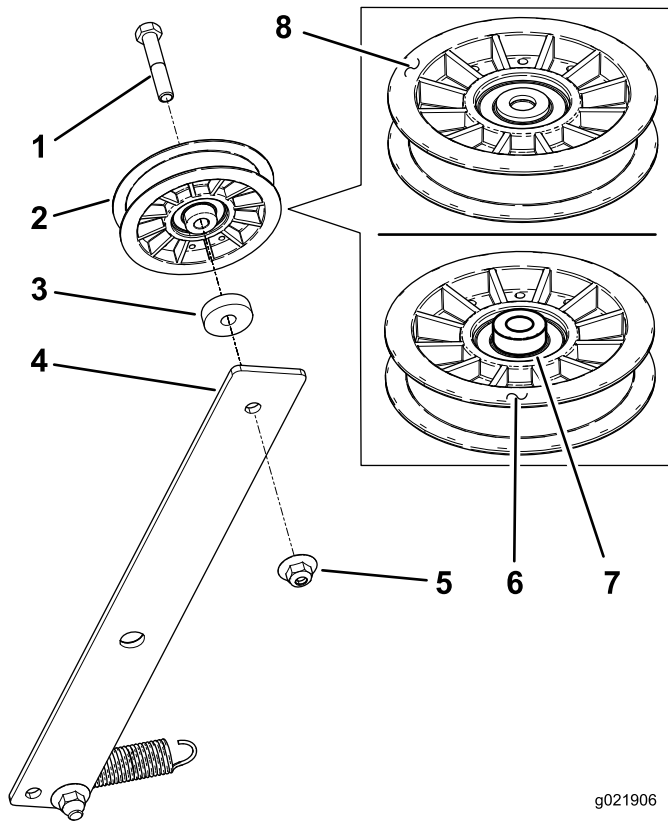


Figure 9

- |                      |  |
|----------------------|--|
| 1. Idler-pulley bolt | 5. New flange nut (3/8 inch)                             |
| 2. Idler-arm pulley  | 6. Bottom of the idler arm pulley                        |
| 3. Spacer            | 7. Ensure the bushing is installed towards the idler arm |
| 4. Idler arm         | 8. Top of the idler arm pulley                           |

## Installing the Plate

1. Install the thin flat washer and star washer onto the fixed-idler carriage bolt (Figure 10).

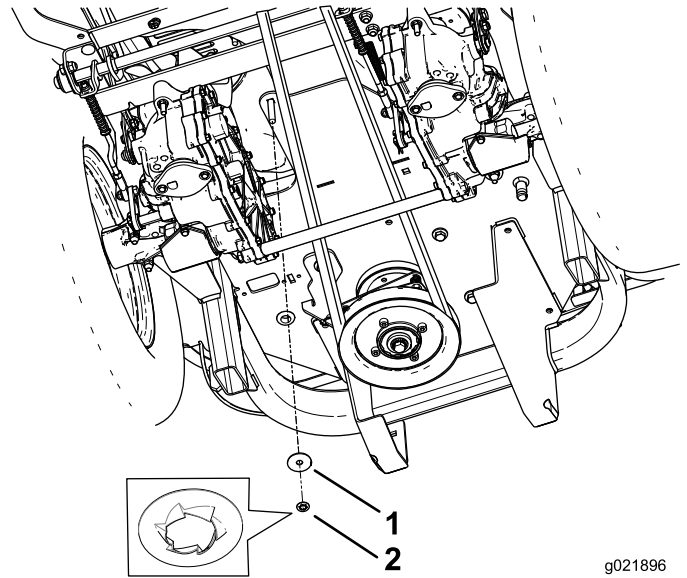
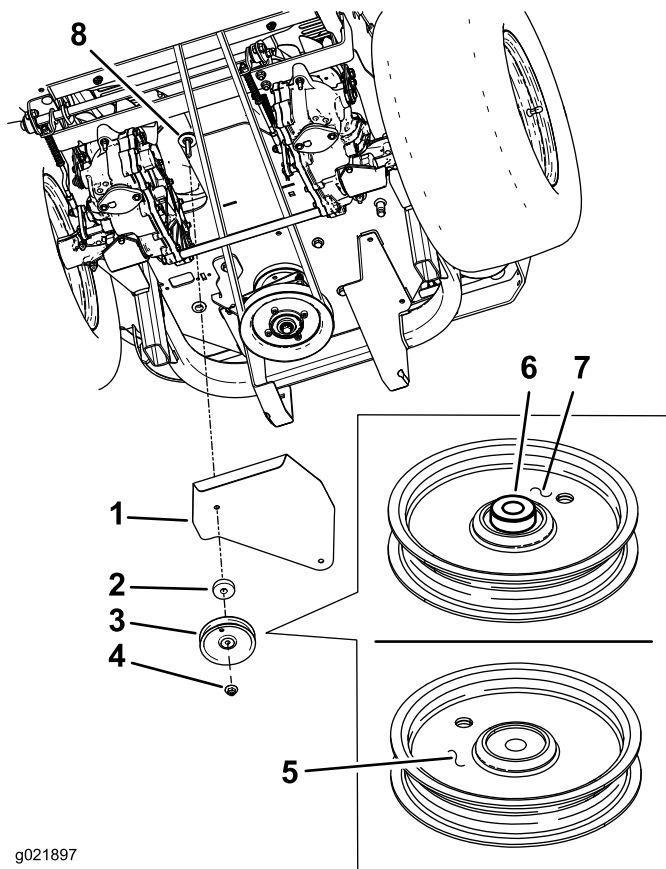


Figure 10

1. Thin flat washer
2. Star washer

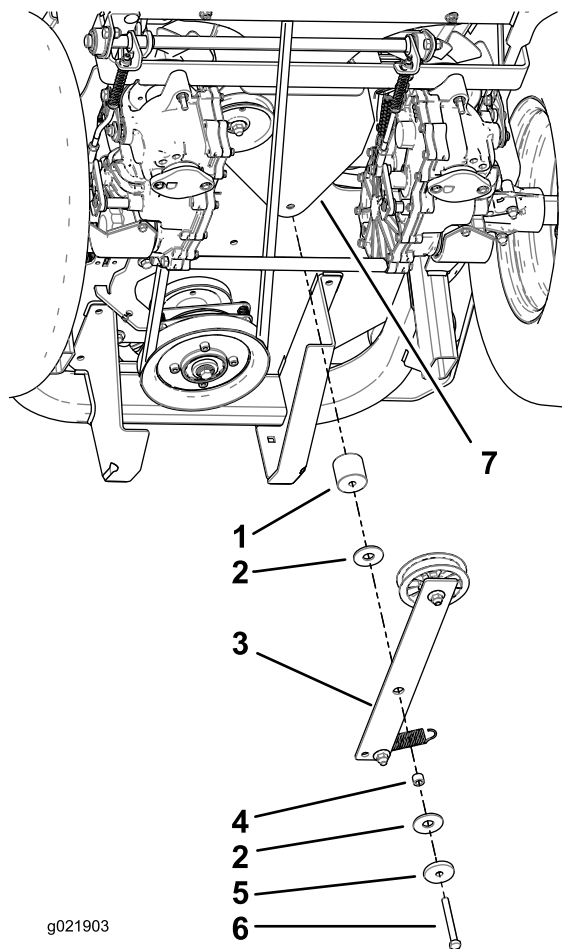
2. Position the plate into the machine, flush against the bottom of the engine deck (Figure 11).
3. Install the new thick flat washer, fixed-idler pulley (correct orientation) and the new locknut (Figure 11).

**Note:** Ensure that the bushing is installed towards the plate (Figure 11).



**Figure 11**

- |                              |   |
|------------------------------|---|
| 1. Plate                     | 5. Bottom of the fixed-idler pulley                         |
| 2. New thick washer          | 6. Ensure the bushing is installed towards the plate        |
| 3. Fixed-idler pulley        | 7. Top of the fixed-idler pulley, install towards the plate |
| 4. New flange nut (3/8 inch) | 8. Carriage bolt with flat washer and star washer           |

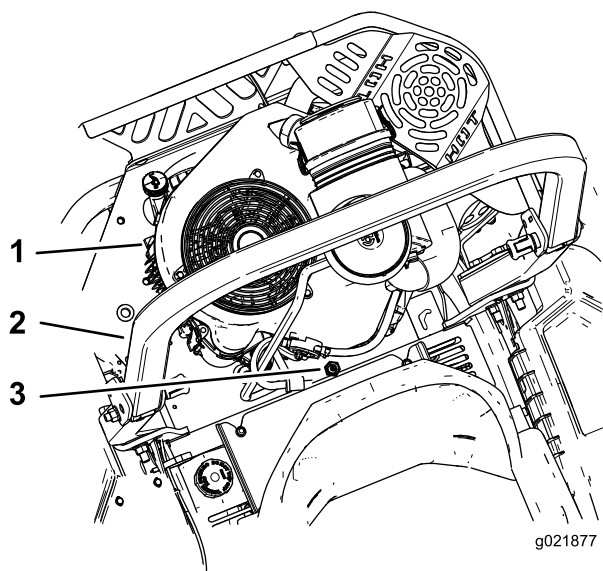


**Figure 12**

- |                  |                         |
|------------------|-------------------------|
| 1. Large spacer  | 5. Washer               |
| 2. Rubber washer | 6. Idler-arm pivot bolt |
| 3. Idler arm     | 7. Plate installed      |
| 4. Inner spacer  |                         |

4. Install the large spacer, rubber washers, idler arm, inner spacer, and washer to the engine deck with the idler arm bolt and new locknut (Figure 12 and Figure 13).

**Note:** This requires two people to complete; the flange nut is located on top of the engine deck and in front of the engine (Figure 13).



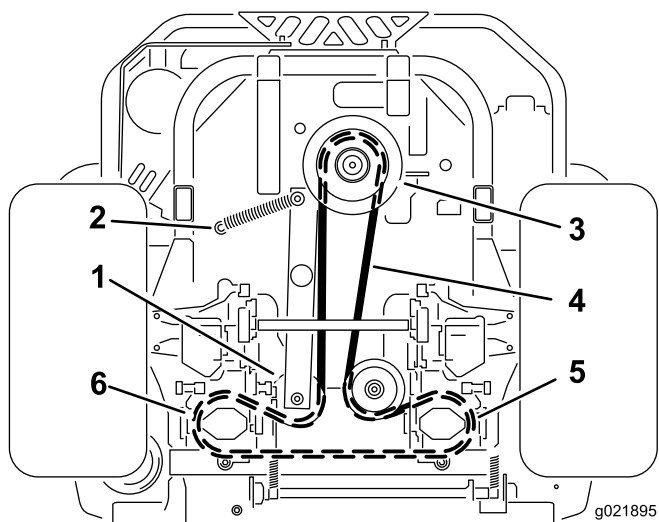
**Figure 13**

Top view of the machine

- |             |                              |
|-------------|------------------------------|
| 1. Engine   | 3. New flange nut (3/8 inch) |
| 2. Roll bar |                              |

- 
5. Torque the new flange nut and carriage bolt at the fixed-idler pulley between 27 and 33 ft-lbs (Figure 11).
  6. Torque the idler-arm pivot bolt between 27 and 33 ft-lbs (Figure 12).
  7. Route the belt around the pulleys (Figure 14).

**Note:** Ensure that the belt is routed around all pulleys.



**Figure 14**

- |                      |                                     |
|----------------------|-------------------------------------|
| 1. Idler pulley      | 4. Pump drive belt                  |
| 2. Idler spring post | 5. Right-hand hydraulic pump pulley |
| 3. Engine pulley     | 6. Left-hand hydraulic pump pulley  |

- 
8. Attach the spring to the idler-spring post(Figure 8).



**Count on it.**