

# Spin-Steer Lawn Tractor SST15, SST16 and SST18

OMM147096 L2

## Removing Mower



**CAUTION: Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:**

- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

1. Park machine safely. (See Parking Safely in the SAFETY Section.)
2. Adjust mower cutting height to the lowest position.
3. Lower mower down onto blocks.



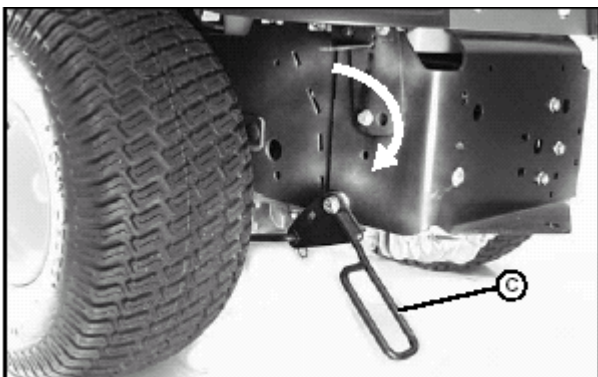
**CAUTION: Avoid injury! If lift pedal is spring-assisted it may have unexpected movement.**

Lock the lift lever in the mowing position when installing or removing the mower.



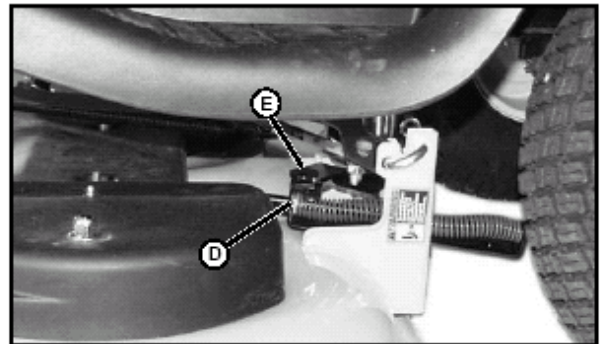
MX4900a

4. Pull back lift pedal (A) and pull up on lift lever (B) to lock mower in the down position.
5. Push down on lift pedal to make sure it is locked. Lift pedal should not move.



MX15924

6. Unlock tension handle (C) and rotate down to release tension on drive belt.
7. Remove drive belt.

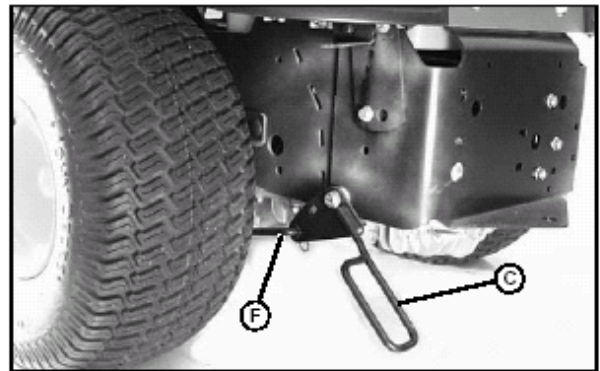


MX15956

8. Remove drive belt tension rod (D) from bracket (E) by removing spring pin.

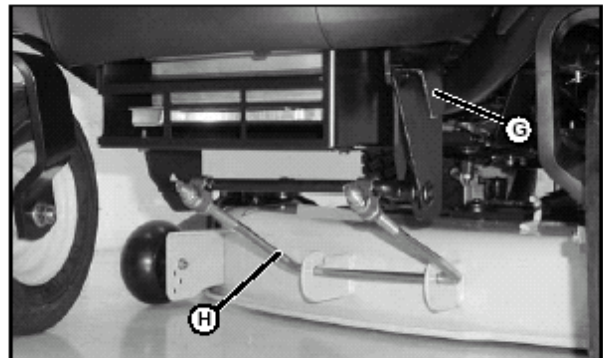


**CAUTION: Avoid injury! Jacksheave pivot arm is under spring tension and may move unexpectedly. Hold tension rod securely while removing.**



MX15924

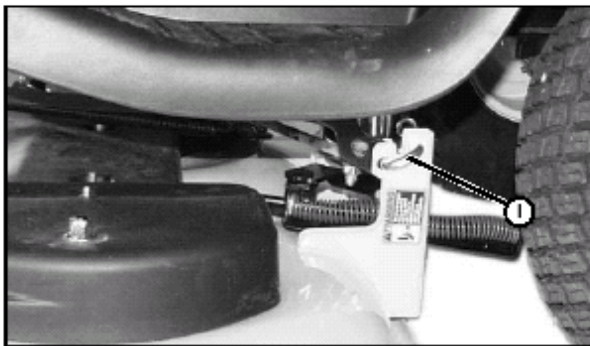
9. Remove drive belt tension rod (F) from tension handle (C) by removing quick-pull pin and set aside.
10. Place tension handle into the locked position for storage.



MX10549

11. Pull out and rotate lever (G) counterclockwise to release front lift rod assembly (H).
12. Remove front lift rod assembly from machine and mower deck.

**NOTE:** It may be necessary to manually lift up on rear of mower deck to pull out J-pins.



MX15956

13. Pull out and rotate J-pin (I) and disconnect lift arms, one on each side.

**CAUTION:** Avoid injury! If lift pedal is spring-assisted it can snap back when deck is removed.  
Hold lift pedal securely when releasing from lock (lower) position.

14. Raise mower lift arms to transport position:



MX4900a

- Pull back and hold attachment lift pedal (A).
- Push attachment lift lever (B) down to unlock.
- Hold lift pedal securely and slowly move it to the down position.

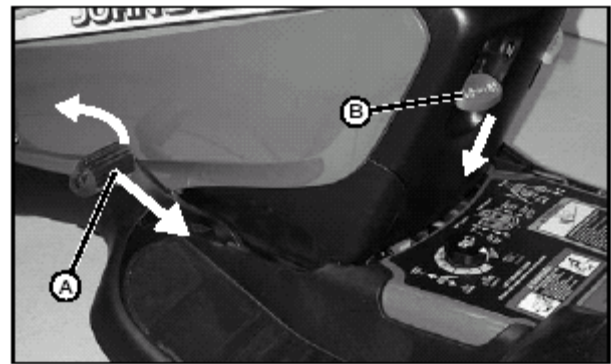
15. Slide mower out from under the machine.

## Installing Mower

**CAUTION:** Avoid injury! Rotating blades are dangerous. Before adjusting or servicing mower:

- Disconnect spark plug wire(s) to prevent engine from starting accidentally.
- Always wear gloves when handling mower blades or working near blades.

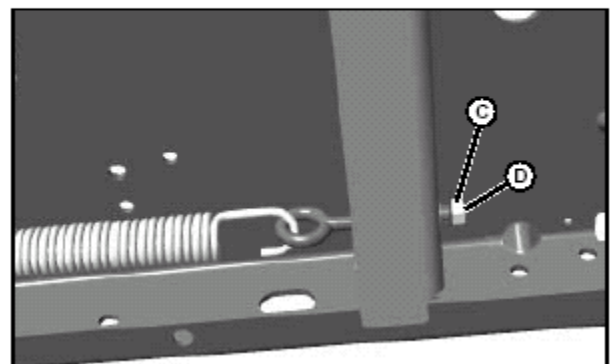
- Park machine safely. (See Parking Safely in the SAFETY Section.)
- Raise mower lift arms to transport position:



MX7594

**Picture Note:** When the lift pedal is down, the mower lift arms are in the up position.

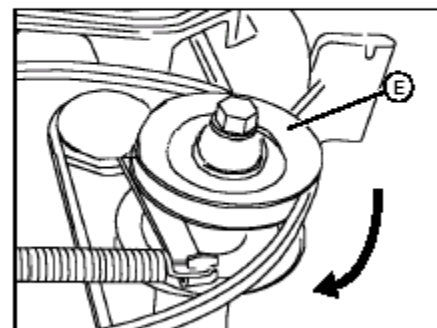
- Pull back and hold attachment lift pedal (A).
  - Push attachment lift lever (B) down to unlock.
  - Move lift pedal (A) slowly forward.
3. When a front blade was removed: For best lawn cut quality, make sure the lift assist spring is adjusted for mowing applications before installing the mower deck.



MX10584a

**Picture Note:** Lift assist spring adjustment is located under left front side of machine, above front axle.

- Nut (C) should be to the end (D) of lift assist spring eyebolt. Adjust if necessary.



MX7587a

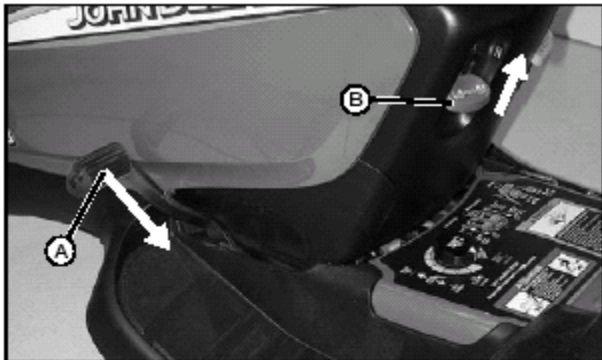
**Picture Note:** Line art used for illustration only.

- Move mower drive sheave (E) inward to tighten mower belt.
- Slide mower deck under machine and line up mower deck lift brackets, one on each side, with lift arms.
- Adjust mower cutting height to the lowest position.



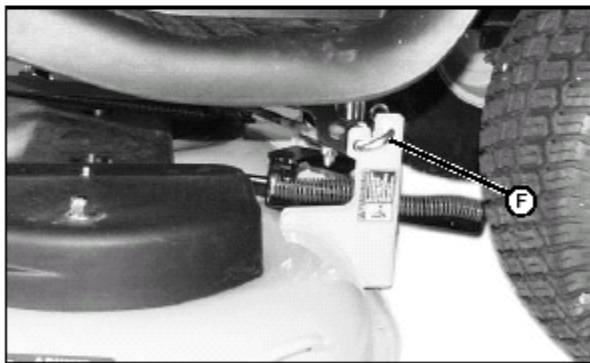
**CAUTION: Avoid injury! If lift pedal is spring-assisted it may have unexpected movement.**  
**Lock the lift lever in the mowing position when installing or removing the mower.**

7. Lower mower lift arms:



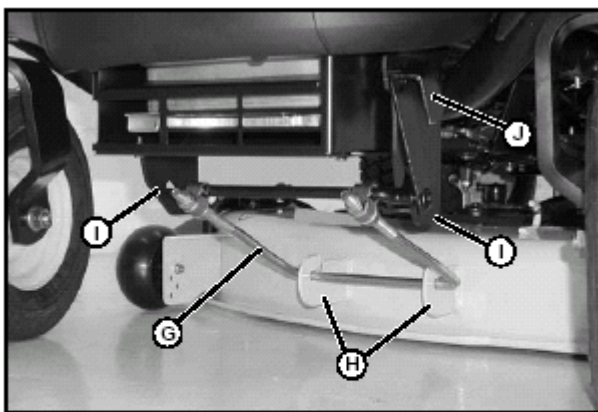
MX7594

- a. Hold attachment lift pedal (A) securely and pull it back as far as it will go and hold.
- b. Lift up on attachment lift lever (B) and lock lift arms in mowing (down) position.



MX15956

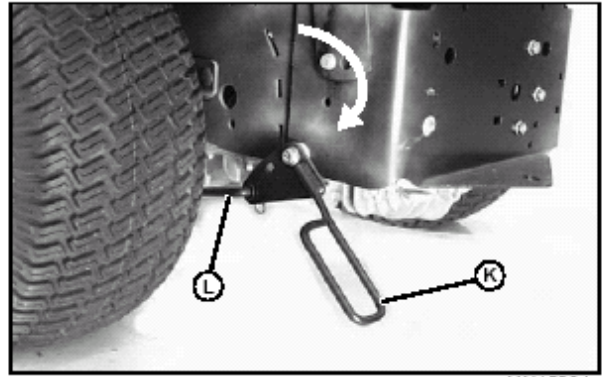
8. Release J-pin (F), one on each side, to connect mower deck to lift arms. Make sure J-pin is fully seated in deck bracket.



MX10549

9. Hook front lift rod assembly (G) into mower brackets (H).
10. Place front lift rod into frame hooks (I) so lever (J) is at left side of machine. Make sure rod is seated in frame hooks.

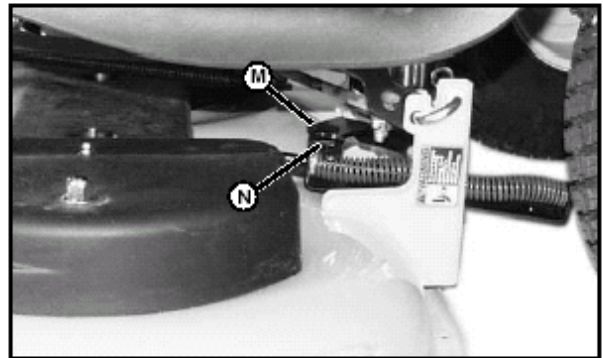
11. Rotate lever (J) clockwise until tab locks into hole in frame.



MX15924

12. Unlock tension handle (K) and rotate down.

13. Install drive belt tension rod (L) into tension handle and secure with spring pin.



MX15956

14. Align and install jacksheave pivot arm pin (M) into drive belt tension rod bracket (N) and secure with spring pin.

15. Place belt around mower sheave and engine sheave.

16. Rotate tension handle up into the locked position.

17. Check that primary belt is not hooked over hydro pedal arm.

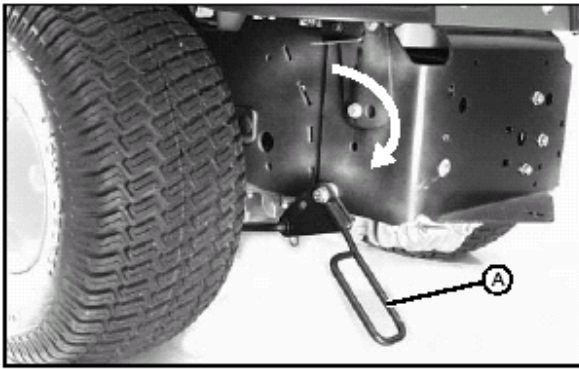
18. Unlock the lift lever.

19. Level mower.

20. Adjust mower wheels for desired cutting height.

### Replacing Primary Mower Drive Belt

1. Park machine safely. (See Parking Safely in the SAFETY Section.)
2. Adjust mower cutting height to the lowest position.

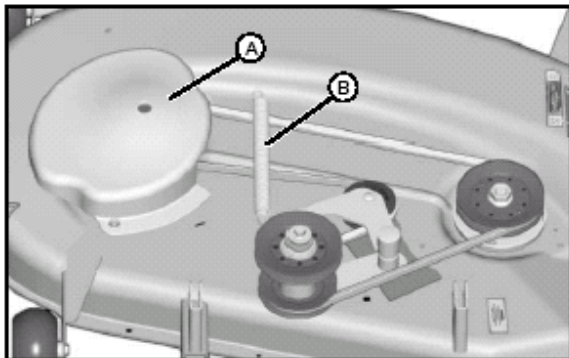


MX15924

3. Unlock tension handle (A) and rotate down to release tension on drive belt. Latch handle in down position on machines with 42C and 48C mower decks.
4. Remove mower drive belt from engine drive sheave and mower sheave.
5. Inspect belt for wear or damage; replace as necessary.
6. Place belt around mower sheave and engine sheave.
7. Rotate tension handle up into the locked position.
8. Check that primary belt is not hooked over hydro pedal arm.

### Replacing Mower Deck (Secondary) Belt (42C)

1. Park machine safely. (See Parking Safely in the SAFETY Section.)
2. Remove mower deck.

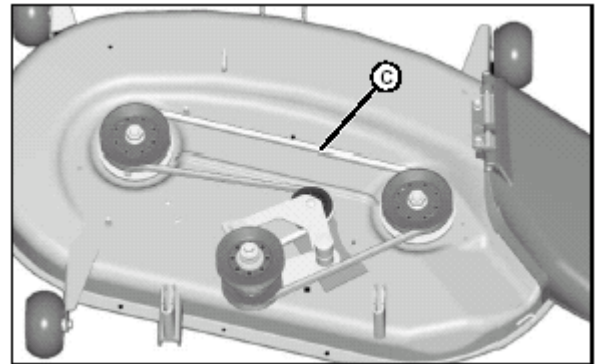


MX4889

3. Remove belt shield (A).

**CAUTION: Avoid injury! Springs are installed under tension. Use caution when attaching or disconnecting springs. Wear eye protection.**

4. Disconnect idler spring (B).



MX4890

5. Remove mower belt (C).
6. Inspect belt for wear or damage; replace as necessary.
7. Clean top surface of mower deck and sheaves.
8. Install belt on mower deck as shown.
9. Connect idler spring to idler arm.
10. Install belt shield.
11. Install mower deck.

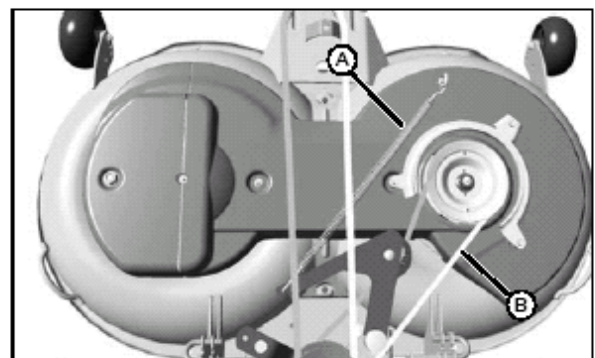
### Replacing Mower Deck Secondary Belt and Timing Belt (Freedom42)

1. Park machine safely. (See Parking Safely in the SAFETY Section.)
2. Remove mower deck from tractor.

**CAUTION: Avoid injury! Mower blades are sharp. Always wear gloves when handling mower blades or working near blades.**

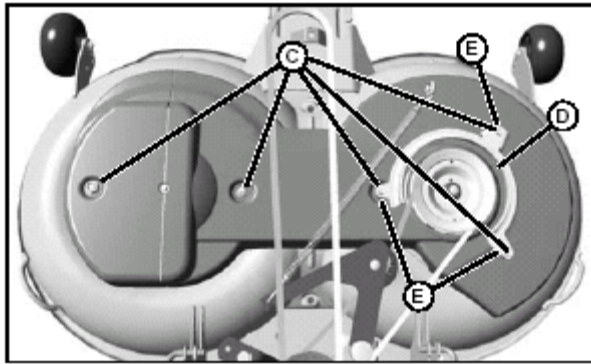
3. Check blade bolt torque. Carefully hold blade with glove, use a hand torque wrench, and tighten bolt to 62 N·m (46 lb-ft).

**CAUTION: Avoid injury! Springs are installed under tension. Use caution when attaching or disconnecting springs. Wear eye protection.**



MX15957

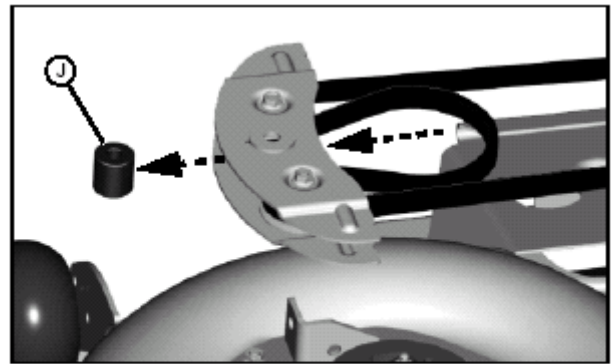
4. Disconnect idler spring (A).
5. Remove secondary belt (B) from right spindle sheave.



MX15957

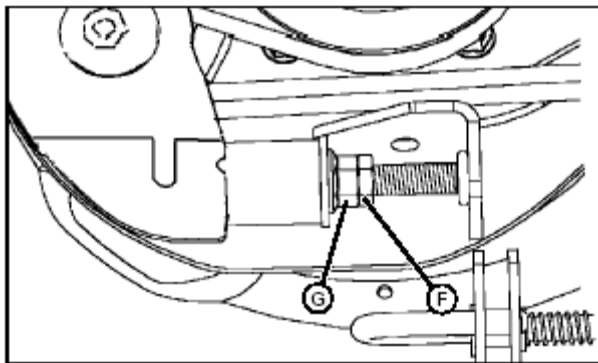
6. Remove five nuts (C).

7. Remove bracket (D), three spacers (E) and timing belt cover.



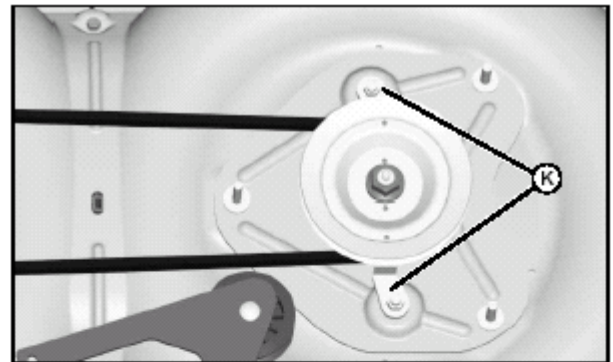
MX3863

10. Remove spacer (J) located between fixed idler assembly plates and remove idler assembly from belt.



MX0234

8. Turn jam nut (F) and adjusting nut (G) counterclockwise to end of threaded rod, and remove tensioning spring assembly.



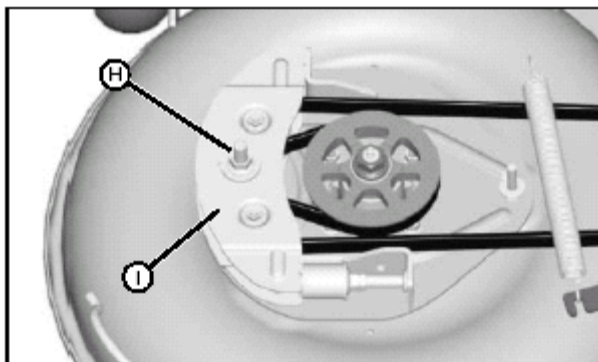
MX4882a

11. Loosen two belt guides (K) and rotate away from left sprocket.

12. Remove damaged timing belt.

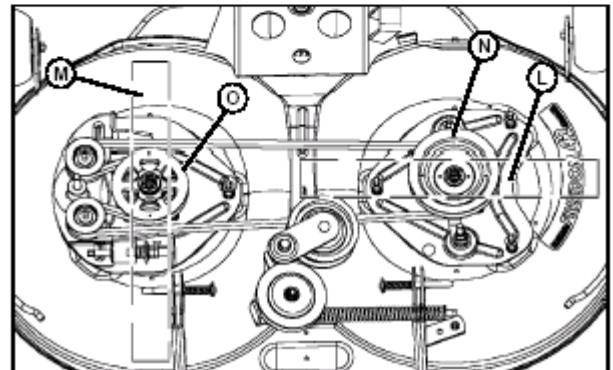
13. Clean top surface of mower deck and sheaves.

**NOTE:** The position of the drain holes in the spindle sheave (N) and the indentations in the timing sprocket (O) are in alignment with the mower blades (L) and (M).



MX4893

9. Remove center nut and washer (H) and remove fixed idler assembly (I) from left support plate. Do not loosen other idler assembly hardware that retains idlers.

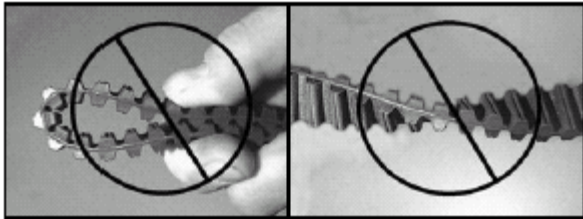


MX0236

14. Position mower blades (L) and (M) 90° from each other.

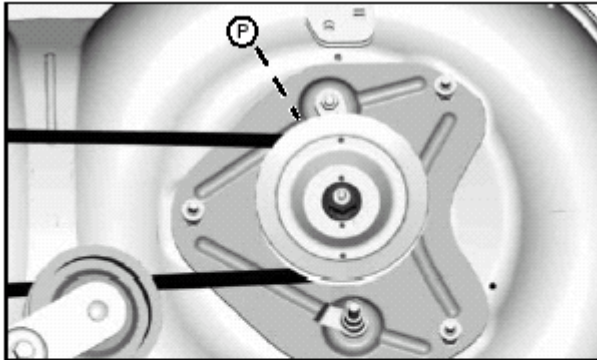
**IMPORTANT:** Avoid damage! Handle timing belts with care.

- Do not crimp.
- Do not fold.
- Do not twist.



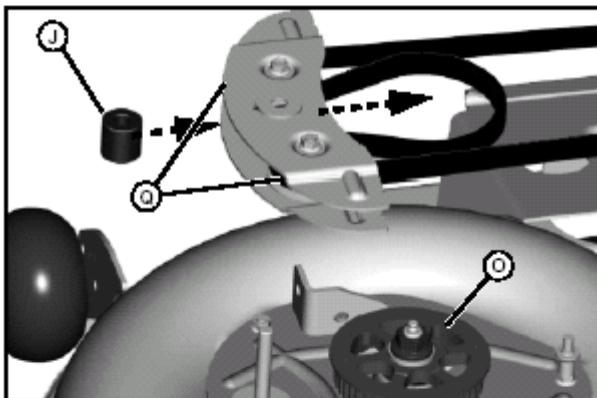
M92926a/M92927a

15. Install new mower deck timing belt.



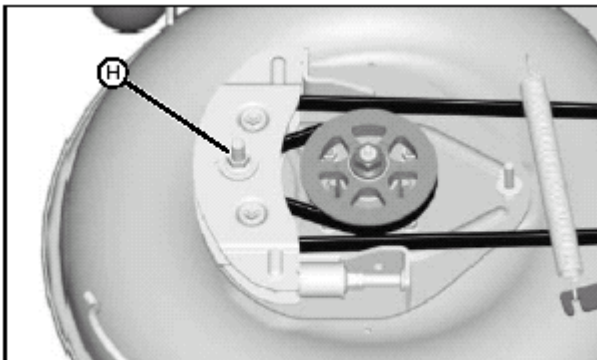
MX3864

a. Route belt around right spindle sprocket (P) located under the mower drive belt sheave.

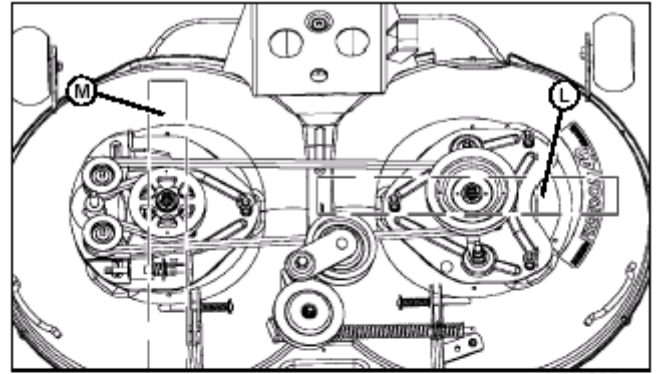


MX3863

- b. Route belt around outside of idlers and then in between left fixed idlers (Q) pulling a belt loop through the idler assembly.
- c. Insert spacer (J) between fixed idler plates and idlers.
- d. Install the fixed idler assembly on the stud of the left support plate.
- e. Wrap belt loop around left spindle sprocket (O).



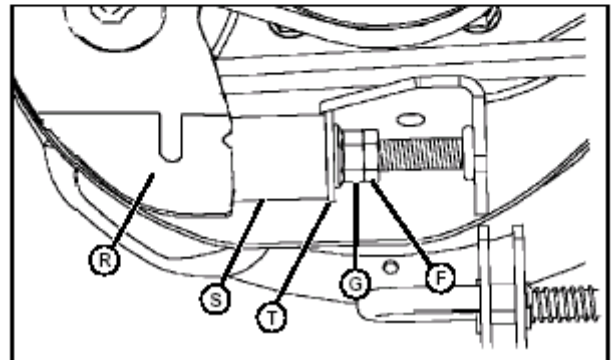
16. Install washer and center nut (H) on fixed idler assembly. Leave nut one turn loose at this time.



MX0236

17. Check that blades (L) and (M) are still timed (90° from each other).

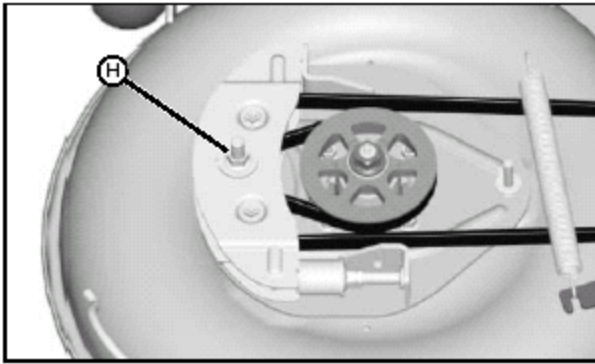
**IMPORTANT: Avoid damage! Incorrect belt tensioning can cause belt damage. Do not over tighten belt tensioning spring assembly.**



MX0234

18. Install tensioning spring assembly and adjust timing belt tension.

- a. Align notch (R) in idler assembly with tab on spring bushing (S).
- b. Rotate adjusting nut (G) clockwise until the washer (T) makes solid contact with the surface of the spring bushing (S).
- c. Turn adjusting nut an additional 1/2 turn to allow for new belt stretch. Do not over tighten.
- d. Turn right spindle sheave several rotations clockwise and observe that belt is riding properly in sprockets and idlers.
- e. Tighten jam nut (F) against adjusting nut.

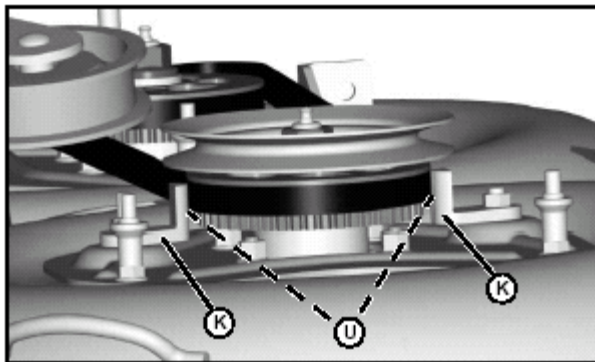


MX4803

19. Tighten center nut (H) to 73 N•m (54 lb-ft).

20. Adjust belt guides.

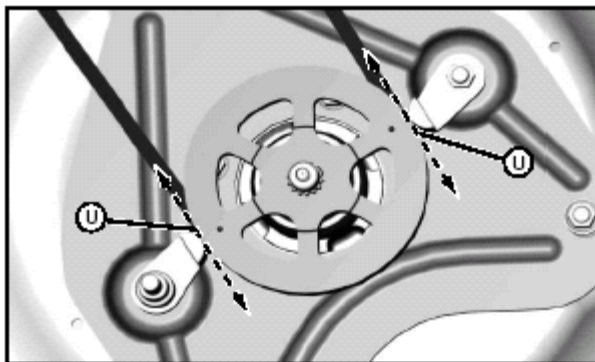
**IMPORTANT: Avoid damage! Check belt guide-to-sprocket rim clearance. Measuring clearance incorrectly can cause belt or blade damage.**



MX0235

a. Hold a 1 mm (0.039 in.) shim/gage between belt guides and sprocket rim, location (U), and rotate belt guides (K) clockwise against gage.

b. Tighten belt guide nuts to 24 N•m (18 lb-ft).

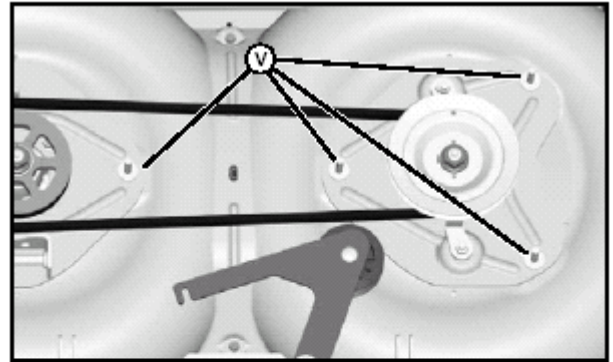


MX3861

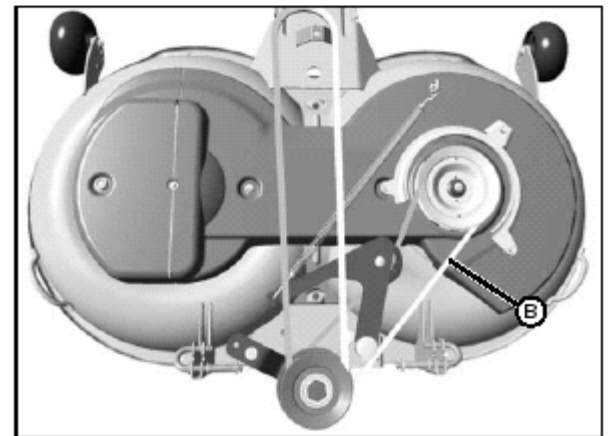
**Picture Note: Right spindle sheave removed for photo clarity only.**

c. Remove gage and inspect belt guide-to-sprocket rim

clearance (U) while rotating spindle in the clockwise direction. Clearance (U), one on each side, should be  $1 \pm 0.5$  mm ( $0.039 \pm 0.020$  in.). Belt should not contact belt guide.



21. Make sure that washers (V), three on each stud bolt, are in place before installing cover.



MX15957

22. Install timing belt cover, three spacers, sheave bracket, and secure with five nuts.

23. Install secondary belt (B) on right spindle as shown.

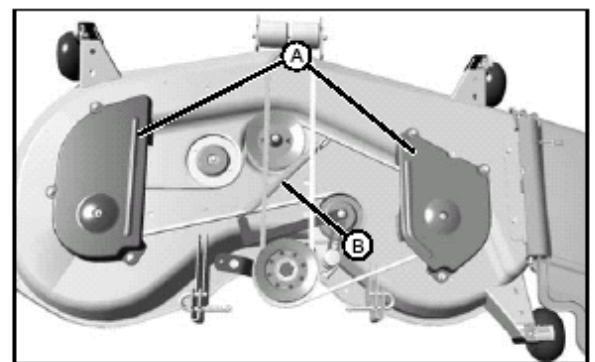
24. Connect idler spring.

25. Install mower deck.

### Replacing Mower Deck (Secondary) Belt (48C)

1. Park machine safely. (See Parking Safely in the Safety Section.)

2. Remove mower deck.



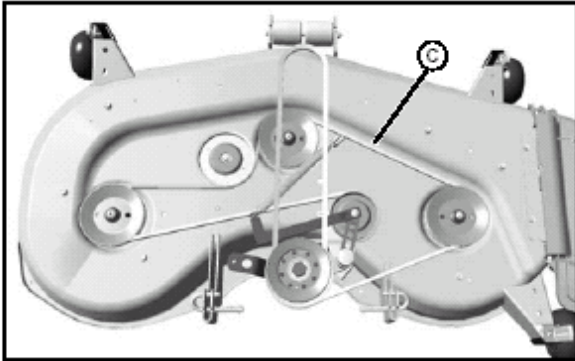
MX15920

3. Remove two belt shields (A).



**CAUTION: Avoid injury! Springs are installed under tension. Use caution when attaching or disconnecting springs. Wear eye protection.**

4. Disconnect idler spring (B).



MX15923

5. Remove mower belt (C).

6. Inspect belt for wear or damage; replace as necessary.

7. Clean top surface of mower deck and sheaves.

8. Install belt on mower deck as shown.

9. Connect idler spring to idler arm.

10. Install belt shield.

11. Install mower deck.