

11. DECK LIFT SHAFT ASSEMBLY

- 11.1. If the deck lift shaft itself requires removal, first remove the cutting deck.
- 11.2. Remove the fenders as described in the FENDER REMOVAL section of this manual.
- 11.3. Disconnect the deck lift assist spring that extends from the deck lift shaft to the transaxle torque bracket using a length of starter rope or a spring tool. See Figure 11.3.



Figure 11.3

- 11.4. On models built in 2004 and prior, the lift assist springs extend rearward to a pair of openings with mounting tabs in the back surface of the upper frame. See Figure 11.4.



Figure 11.4

- 11.5. Unbolt the seat bracket mounting plate from the frame (4 screws) using a 1/2" wrench. This will allow the fuel tank to be lifted slightly for clearance, but the tank need not be removed.

- 11.6. With the deck height control lever all the way forward, remove the hairpin clips that secure the deck lift cables to the arms on the deck lift shaft. See Figure 11.6.

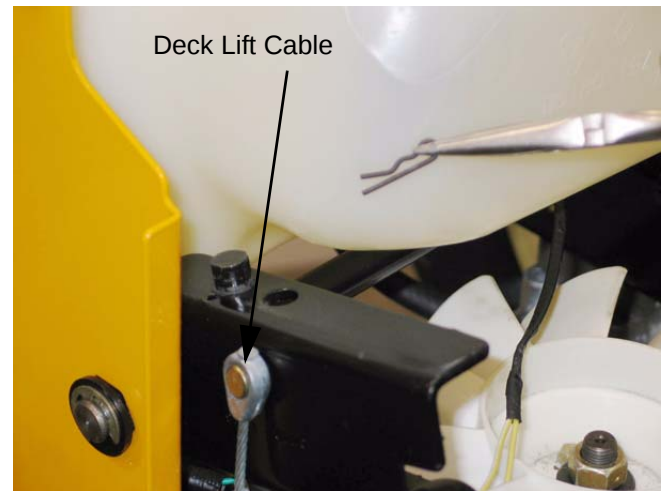


Figure 11.6

- 11.7. Remove the E-clip from each end of the lift-shaft. See Figure 11.7.

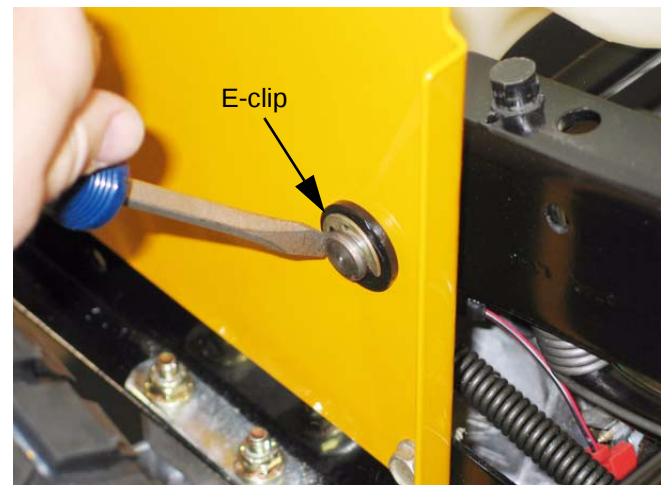


Figure 11.7

- 11.8. Pry the bushings that support the lift shaft out of the frame.

Series 1000 and 1500

- 11.9. Slide the lift shaft assembly to the right, providing clearance to remove the left end of the shaft from the frame. See Figure 11.9.



Figure 11.9

- 11.10. Slide the lift shaft back to the left to remove it from the tractor.
- 11.11. On the bench, relieve torsion spring pressure between the lift shaft and the lever that controls it using a length of starter rope. See Figure 11.11.

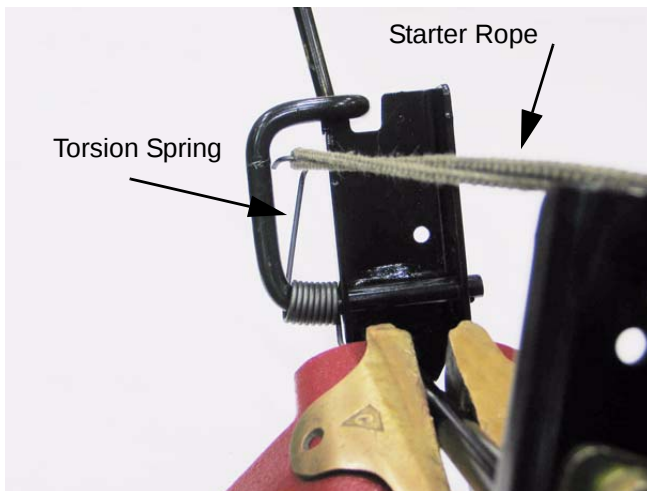


Figure 11.11

- 11.12. Rotate the lever to align the coined “ears” with the slots in the lift shaft arm, allowing separation of the lever from the arm.
- 11.13. Assembly notes:
- Because of the dusty environment that many mowers operate in, grease applied to this bushing may accelerate wear rather than prevent it. If any lubricant is used between the shaft and the

bushing, it should be a dry graphite or PTFE based lube.

- Replace the bushings and E-clips if they show signs of wear.
- Reverse the removal process to install the lift shaft.
- Connect the cables and install the bushings prior to connecting the tension spring between the lift shaft arm and the transaxle torque bracket.

12. LIFT SHAFT BUSHINGS

- 12.1. The most common item on the lift shaft assembly to require service is likely to be the bushings that support the shaft. These bushings are visible beneath the fender. See Figure 12.1.

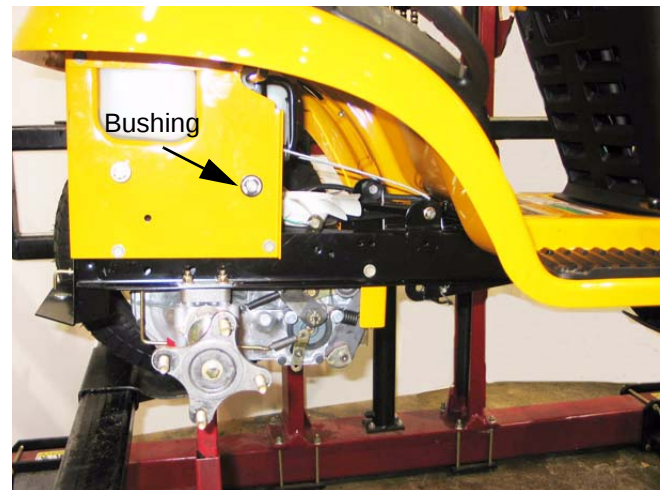


Figure 12.1

- 12.2. When performing normal maintenance that requires deck removal, inspect the lift shaft bushings while the weight of the deck is removed from them.
- These bushings are normal wear items.
 - Grasp the lift shaft and apply up and down force.
 - Watch for shaft motion within the bushings.
 - Larger decks, such as the 50" and 54" (P and K) decks will place a greater load on the bushings.
 - Worn bushings may cause deck leveling issues.
- 12.3. To replace the bushings, the weight of the deck should be removed from the deck lift cable. Remove the cutting deck before attempting to remove the bushings.