

DRIVE BELT REPLACEMENT

(FOR SD-EX-80 TRUCKS)

Removing the Drive Belt

1. Jack the drive tires off the ground, and be sure its properly supported
2. Disconnect the battery (power) from the truck (Figure #1)
3. Remove the side cover by removing the hardware (3/8-16 bolts) attaching it, and the operator floor cover (Figure #1)

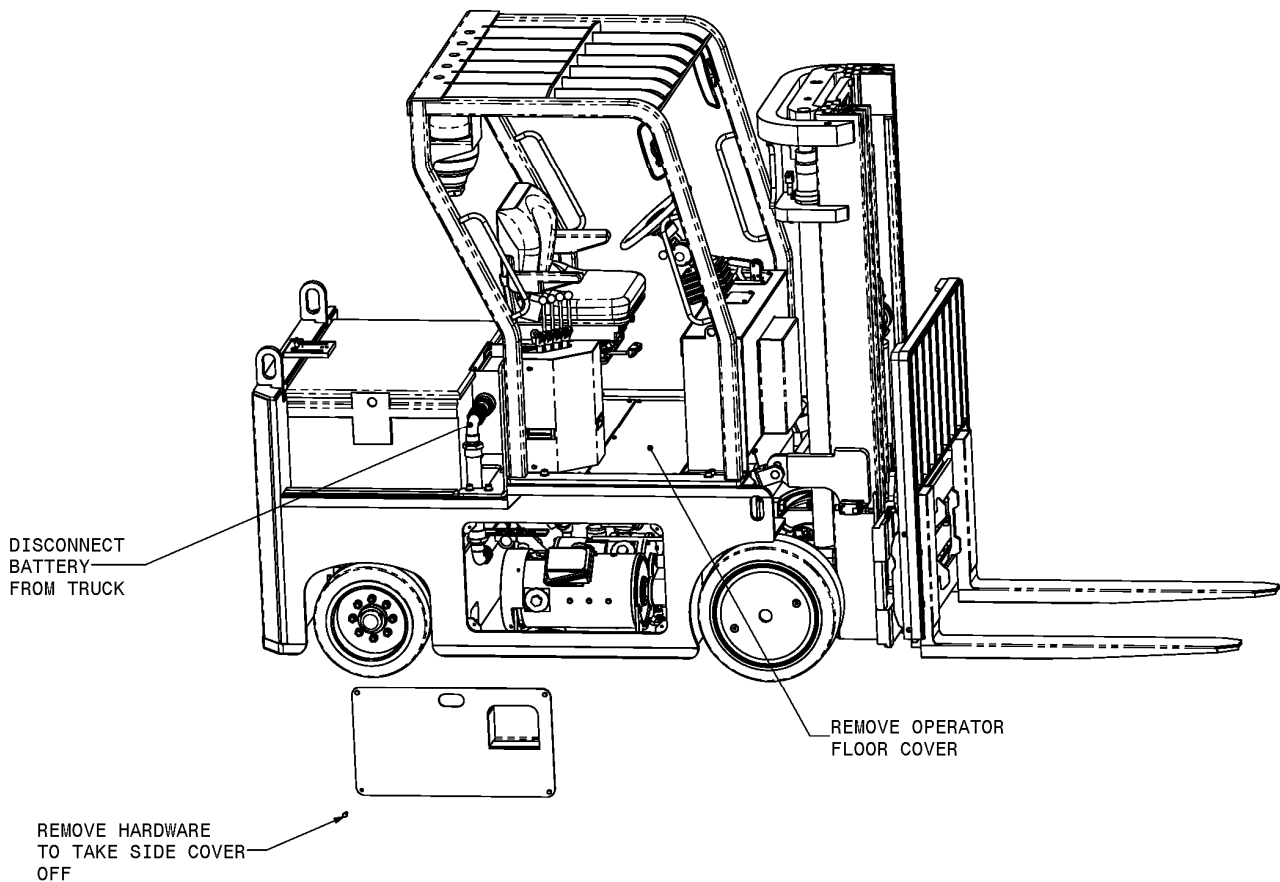


Figure #1

4. Remove the three bolts retaining the drive pulley flange to the drive pulley (Figure #2). Note, you may have to apply the parking brake to help secure the pulley from rotating

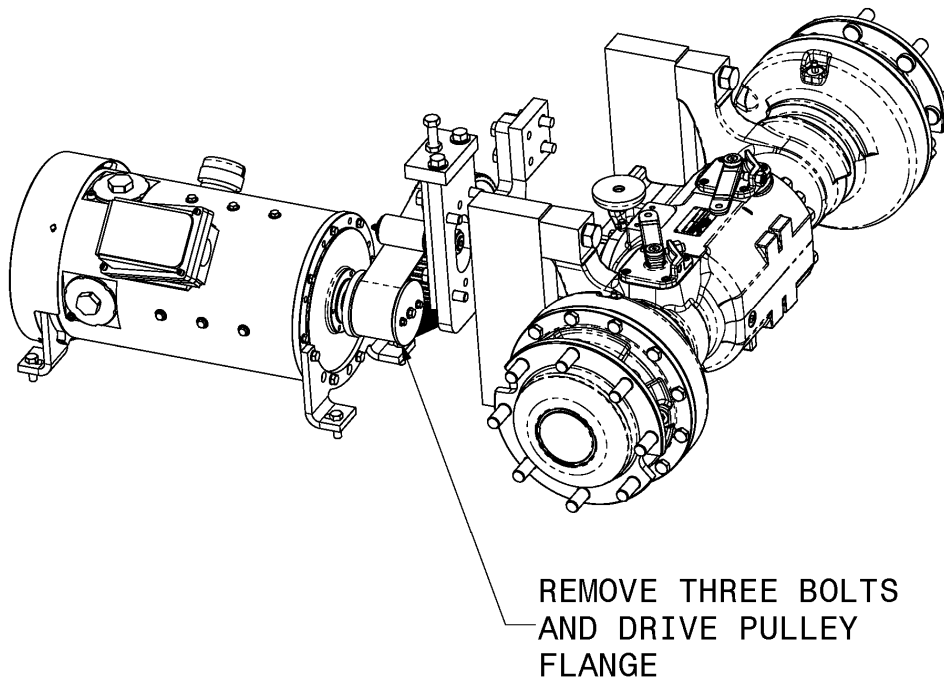


Figure 2

5. Loosen the idler pulley tensioning bolt (Figure #3), and slide up the idler pulley assembly and prop in place with something under it to hold in place
6. Remove the four (4) bolts securing the drive motor to the frame (Figure #3)

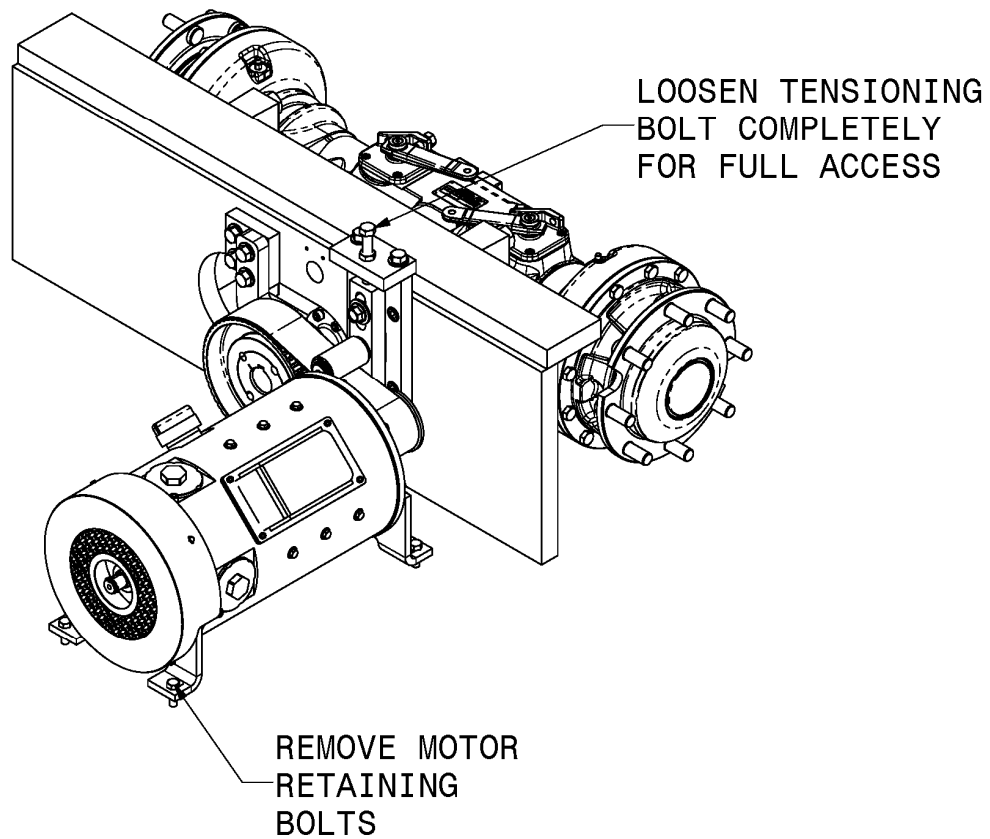


Figure #3

7. Now the drive motor can be swiveled to remove the drive belt (Figure #4)

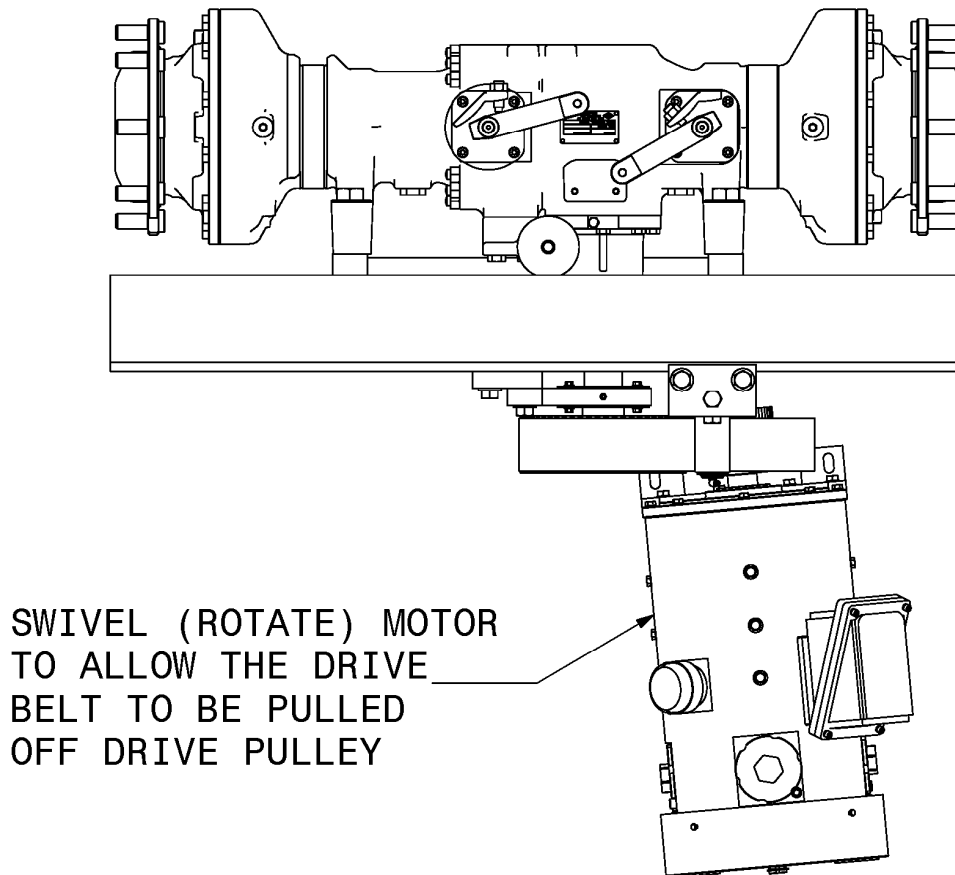


Figure #4

Installing the Drive Belt

1. If the drive belt has not been removed, please refer to “Removing the Drive Belt”
2. With the drive motor still swiveled to allow access of the belt removal, place a new belt over both drive and driven pulleys
3. Swivel the drive motor back to its normal operating position using the motor securing bolts for locating the drive motor, do not torque the drive motor mounting bolts at this time, leave loose
4. Re-install the drive pulley flange with the three bolts (Figure #3)
5. Place a straight edge on the drive pulley to the driven pulley, they need to be parallel with one another, adjust the drive motor until both pulleys are parallel (Figure #5)
6. For a starting point, drive pulley should be 2-3/8” from front of compartment, and mounting feet should be 5-1/4” from side of compartment (Figure #5)
7. Tighten the drive motor mounting bolts to the chassis frame (Figure #5)

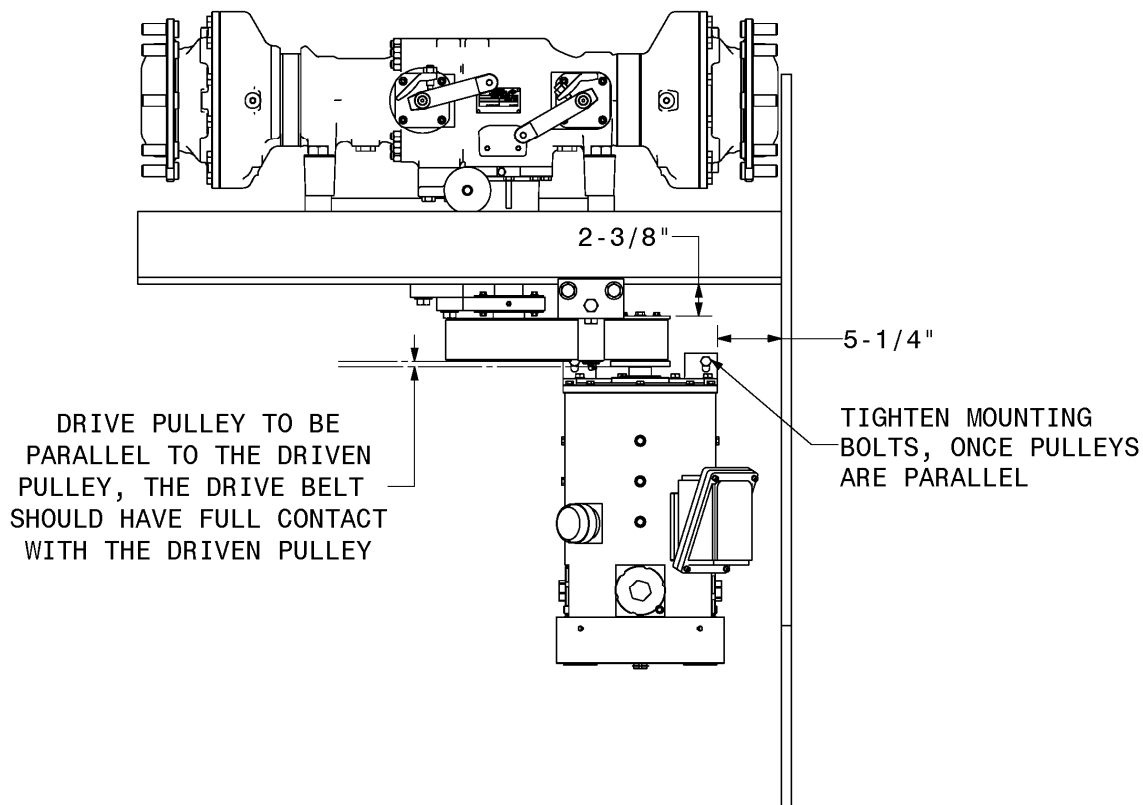


Figure #5

8. Remove the item that was used to prop up the idler pulley assembly

9. The weight of the idler pulley assembly should take the slack out of the belt. The drive pulley may need to be rotated by hand slightly to ensure there is no slack on the drive belt opposite of the idler pulley
10. Adjust idler tensioning bolt until it makes contact with the idler pulley assembly, then turn the tensioning bolt an additional 1-1/2 turns to tension the drive belt. Tighten locknut on tensioning bolt, and reattach the drive pulley flange with the three bolts removed from Step #4 (Figure #6)

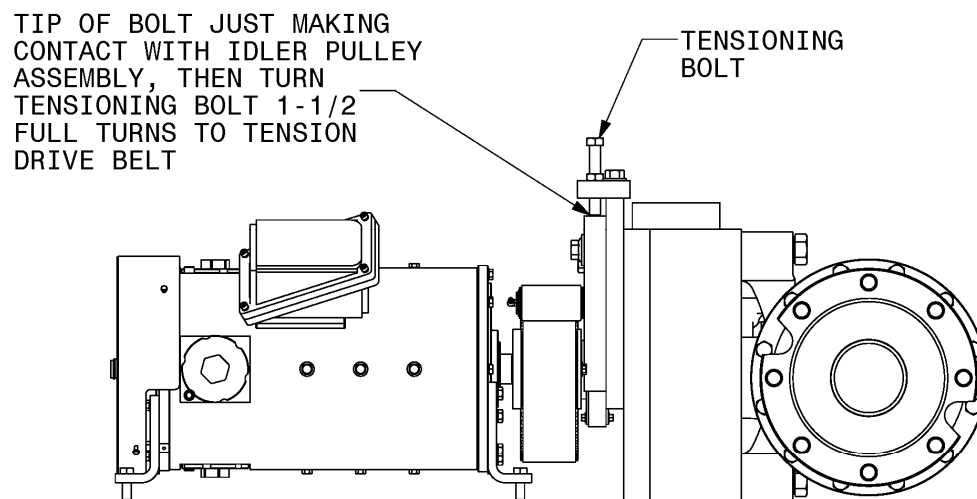


Figure 6

11. With the new belt installed, all parts put back in place, all hardware secured, and the idler pulley tensioned, the “tracking” of the belt can be adjusted. Tracking is defined as the drive belt wanting to move front-to-back (and vice-versa) on the drive pulleys, while the pulleys are rotating (Figure #7)

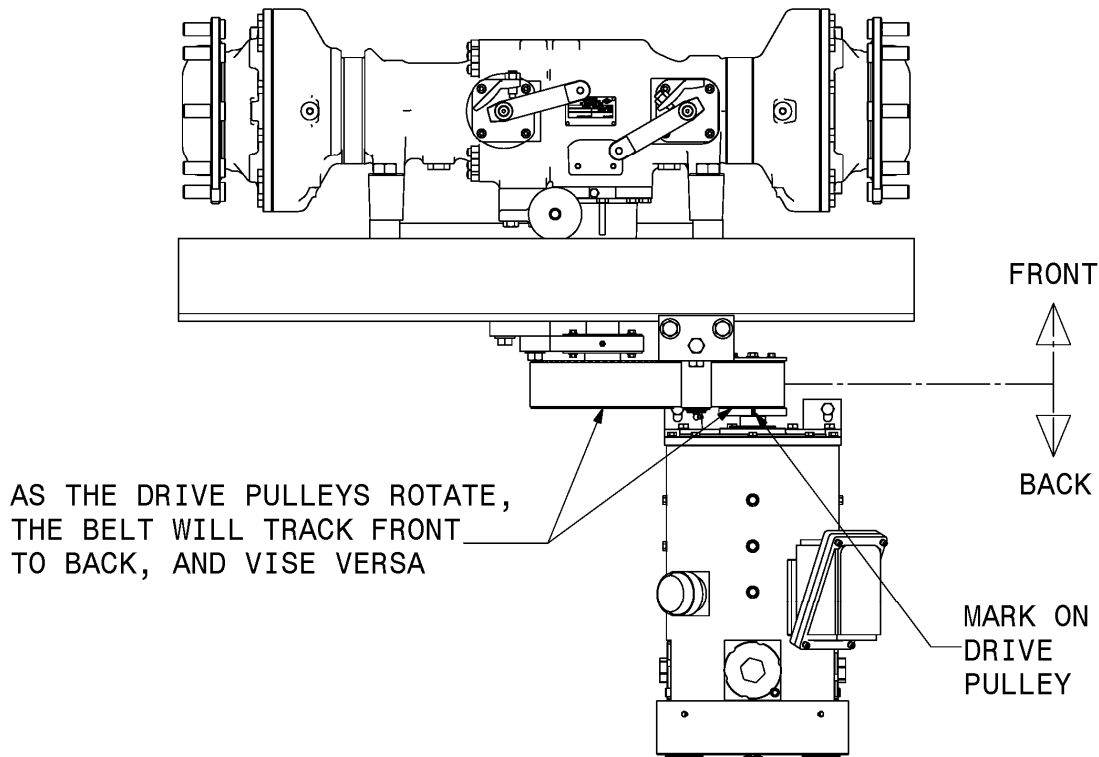
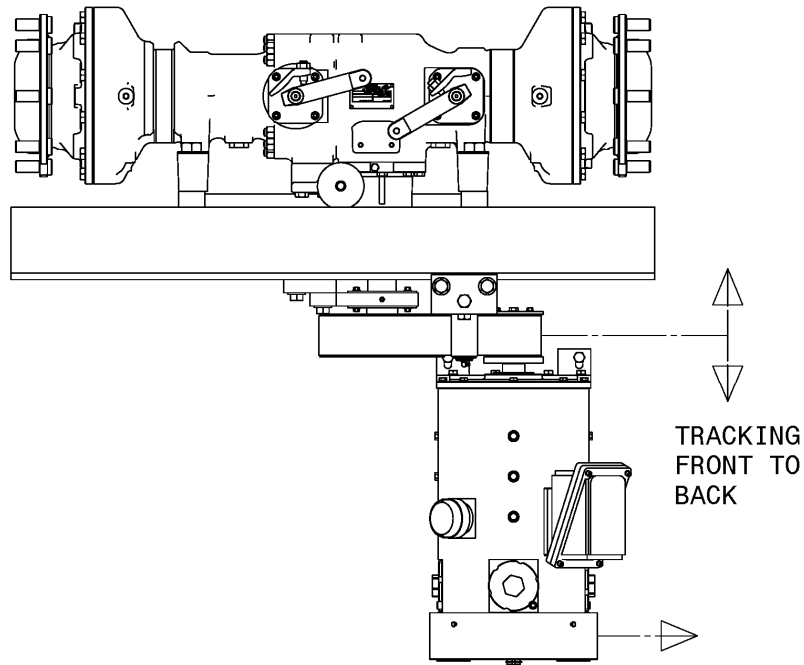


Figure 7

12. With the drive tires still off the ground, plug the battery into the truck, and turn the key "ON"
13. CAUTION: The drive motor will be engaged, but at a slow RPM to see the belt track from front to back on the pulley
14. Place a "mark" on the drive pulley for counting revolutions (Figure #7)
15. Engage the accelerator pedal at a creep speed until the drive belt goes to one side of the drive pulley's flange(s) (either front or back side)
16. Reverse the direction, engage the accelerator in a creep speed, and count the revolutions the drive pulley rotates until the drive belt engages the opposite drive flange
17. Repeat this procedure for the opposite direction
18. At this point, a determination will be made on the tracking of the belt from front to back and back to front. If the tracking is within 1-2 revolutions of one another, the drive motor is correctly adjusted. If there are more than 2 revolutions in tracking difference, the drive motor will need to be slightly rotated with in its mounting holes to compensate for the uneven tracking.
19. For compensation, loosen the idler pulley tensioning bolt (Figure #2)
20. Loosen the drive motor mounting bolts, but do not remove the bolts
21. If for example, the belt tracks from front to back in less revolutions, pry the drive motor outward at rear of truck, and/or pry the drive motor inward at the front of truck approximately 1/16", and

retighten the drive motors mounting bolts – you may have to hold the drive motor in place while tightening the drive motor bolts (Figure #8)



MOVE REAR OF MOTOR
OUTWARD IN THIS
DIRECTION APPROX.
1/16"

Figure 8

22. Go to STEP #7 – repeat motor adjusting until tracking is in the required range.
23. Turn key "OFF"
24. Disconnect battery
25. Reinstall side cover
26. Lower drive tires on the ground