

Procedure 7.10 - Replacing the Lift Motor Assembly

Removing the Lift Motor Assembly

1. With the lift set at 1, turn off the EFX 544 with the circuit breaker, then unplug the power cord from the wall outlet.

WARNING

Before continuing with this procedure, review the Warning and Caution statements listed in Section One, Things You Should Know.

2. Remove the front and rear covers as described in Procedure 7.1.
3. Lift the stair arms from the ramp assembly and rotate them towards the back of the EFX 544.
4. Rotate the ramps to the back of the unit. Rest the ramps on the flywheels.
5. Remove the outboard snap rings from each end of the lower lift shaft. Remove the lower axle wear tubes. Hold one end of the lower lift shaft with a wrench. Loosen the other end with a second wrench. Using the wrenches, unthread both ends of the lower lift shaft from the threaded stud. Set aside the lower lift shaft and the stud.

Note:

Units built before September 3, 1996, will have a one-piece lower lift shaft.

6. Cut the cable ties that secure the ribbon cable to the lift motor and EFX 544 wiring cables.
7. Disconnect the lift motor cable assembly from the lower PCA.
8. Remove the wires from the lift motor capacitor.
9. Remove the screw that secures the lift motor ground wire to the EFX 544 frame.
10. Remove the two screws that secure the top of the lower electronics bracket to the EFX 544 frame.
11. While an assistant supports the lift motor, remove the snap ring from one end of the upper lift shaft. Remove the upper lift shaft and the two plastic spacers (read the Note below) from the EFX 544 frame.

Note:

Units built after July 9, 1996, have two plastic spacers inserted into the upper lift shaft.

12. Lift the lift motor assembly up and away from the EFX 544 (see Diagram 7.6).
13. Calibrate the lift motor per Procedure 5.3, steps 13 to 22.

Replacing the Lift Motor Assembly

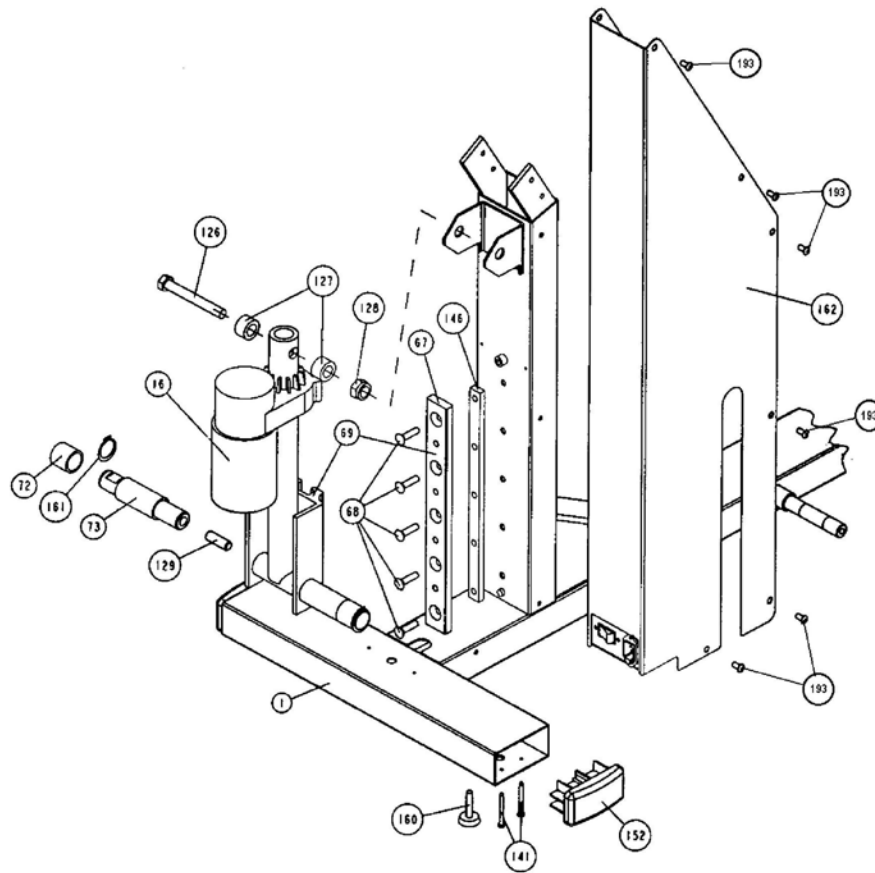
14. Inspect the upper and lower lift shafts. If they are worn, install new shafts on the EFX 544.
15. Position the lift motor assembly against the lift guide. Align the bore in the lift tube with the bore in the lift bracket.
16. Remove the lower lift shaft from the threaded stud. Clean off the old loc-tite. Put a small amount of blue loc-tite on the threaded stud. Thread one end of the lower lift shaft onto the stud, then insert the shaft with the stud through the lift guide clamp.
17. Thread the remaining lower lift shaft onto the stud. Hand tighten and then use wrenches to tighten the lift shaft an additional 1/4 turn.

CAUTION

If you do warp the lift guide clamp, the fit between the lift guide clamp and the lift guide will be loose. This situation results in noise when the unit is used.

18. Replace the snap rings on each end of the lower lift shaft (see Diagram 7-4).

Diagram 7.4 - EFX 544 Lift System



19. Insert the upper lift shaft through the EFX 544 frame and upper lift motor assembly. Replace the plastic spacers (if you have a unit built after June 19, 1996) and the snap ring on the end of the upper lift shaft.
20. Position the lower electronics bracket against the EFX 544 frame. Replace the two screws that secure the top of the bracket to the frame.
21. Refer back to Diagram 7.3. Re-connect the lift motor cables to the lower PCA and lift capacitor. Connect the lift motor ground wire.
22. Replace the screw that secures the lift motor and EFX 544 ground wires to the frame.
23. Using a large cable tie, secure the ribbon cable, lift motor cable and lift motor capacitor wires to the lift motor. Loop the lift motor cable over the lift motor until the lift motor cable lies flat against the motor casing.
24. Rotate the ramps and then the stair arms to the front of the EFX 544. Position the stair arms on the ramp.
25. Re-install both covers as described in Procedure 7.1, then check the operation of the EFX 544 as described in Section Four.