

EFX800-16 Lift Motor Replacement

Applies to

Model: EFX800-16 Ellipticals

Mfg. Date: Unit date codes prior to 9/21/2016

Issue

Incline lift motor failure caused by a defective internal potentiometer. The lift motor fails to operate in workout mode and does not recover in service mode. Error code 42 “Lift Position Out Of Range” will be logged.

Symptoms

- 1) The lift motor fails to operate in workout mode, does not recover in service mode, and there is at least one logged occurrence of error code 42 “Lift Position Out Of Range” in the Error Log.
- 2) The lift motor operates normally in workout mode and service mode, but more than four occurrences of error code 42 are accumulated in the Error Log.

Resolution

Follow the troubleshooting steps outlined in the procedure below to determine the appropriate corrective action for the specific symptoms exhibited.

Tools required

- 9/16” socket
- Torque wrench, range 320 in-lbs (236.2 Nm)

Parts required

QTY	Part Number	Description
1	PPP000000303324102	EFX LIFT MOTOR ACTUATOR

Procedure

Review entire procedure before starting.

Verify the lift motor symptoms

Complete the following steps to verify the failed lift motor symptoms and rule out other failure modes:

- 1 Verify that error 42 is listed in the Error Log.
- 2 Inspect the lift motor extension cable wires and connections. Verify that the pins are fully inserted into the connector plastic housing.
- 3 Inspect the lift motor cable wires and connections. Verify that the pins are fully inserted into the connector plastic housing.
- 4 Start a workout and test the crossramp functionality through the full range of up (1-20) and down (20-1) incline.
 - a If the lift motor operates normally in a workout, check and complete the following:
 - i If the Error Log lists more than four occurrences of error 42, replace the lift motor.
 - ii If the Error Log lists fewer than four occurrences of error 42, reset the ASL light to Blue Solid (does not erase error log) and monitor this machine for any new reoccurrence of error 42.

- b If the lift motor does NOT operate in workout, it is possible the crossramp has moved below the normal operating lower limit causing the lift motor to not respond to incline up commands. Access the **Hardware Validation** (51765761) **CROSSRAMP TEST** (or **Incline Test**) and try to force the crossramp to move upward into normal operating range.
 - i If the crossramp moves up into normal operating range, exit Hardware Validation mode and re-test the incline functionality in a workout. If the lift motor operates normally:
 - On P10/P30 consoles, clear the Error Log and monitor for reoccurrence of error 42
 - On P82 consoles, monitor the Event Log for any new reoccurrence of error 42.
 - ii If the lift motor does not operate normally in a workout, replace the lift motor.

Lift Motor Replacement Procedure:

1. If the lift motor error code 42 has been verified, continue with this procedure to replace the Lift Motor:
 - a. Replace the failed Lift Motor with replacement (PPP00000303324102) and calibrate per the [EFX800-16 Base Service Manual](#) "Lift Motor Replacement" procedure, see [Lift Motor Replacement](#).
2. Verify the lift motor operation through full range of incline (min to max range).
3. Verify machine operation and return to service.