

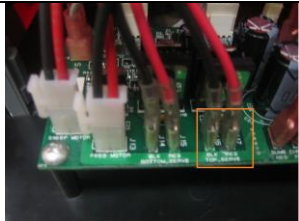
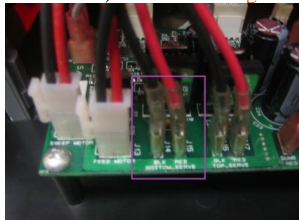


Replacing and Installing a Liberty Board on a Freedom Machine

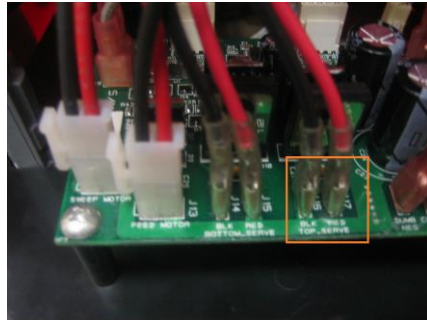
Step	Description	Tools	Picture
	<p>Models that Apply: ELOA</p> <p>This guide is to help you install a Liberty board on your Freedom model machine.</p>	<p>Phillips Screw Driver and Needle Nose Pliers</p>	
	<p style="text-align: center;">Unscrewing your Control Panel</p> <p>Step 1.) Unscrew the 4 black screws at the top right, left, and bottom right, left sections of the control panel. Pull on the panel until it is hanging by its wires. <i>Note: This is easiest to do if the red case is still on the machine, as it gives the cables and wires more slack.</i></p> <p>Step 2.) Disconnect the Red and black wires from the battery. <i>Note: This will ensure no power is running through the board, so that no wires will accidentally get burnt if they a positive touches a negative contact.</i></p>	<p>Phillips Screw Driver</p>	 <p>Liberty Control Panel attached to red case.</p>  <p>Battery for Freedom and Liberty machines.</p>
	<p style="text-align: center;">Connecting The New Liberty Board. Motor Connections.</p> <p>Step 1.) You will be disconnecting generally a pair of wires or a single wire from the old panel, and connecting it to the proper location on the new panel, one at a time, until all of the wires are transferred from the old board, to the new board. The diagram and images below will help guide you through where each wire is located.</p> <p>Each wire or wire pair is notated by a color and letter (in this guide). The lower case letters are from the Freedom board, and the capital letters are from the Liberty board.</p> <p>You will start with the Motor Connections.</p>	<p>Needle Nose pliers</p>	 <p>a. Top Server Motors (pair red and black) marked in orange.</p>  <p>b. Bottom Server Motors (pair red and black) marked in Dark Purple.</p>

Replacing and Installing a Liberty Board on a Freedom Machine

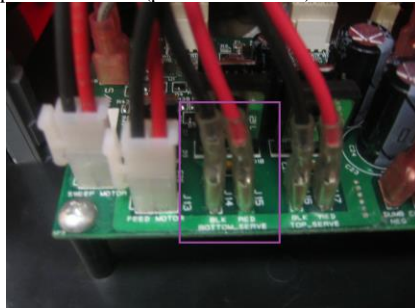
ELOA

Motor Connections

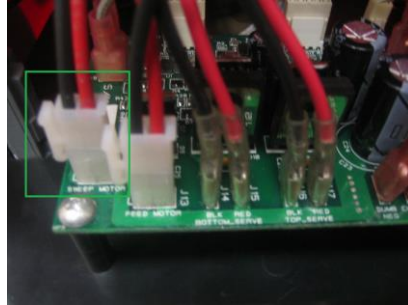
- a. Top Server Motor (Shown in Orange)
- b. Bottom Server Motor (Shown in Dark Purple)
- c. Feed Motor (Shown in Green)
- d. Sweep Motor (Shown in Dark Blue)



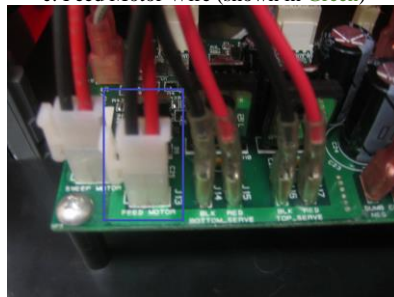
a. Top Server Motors (pair red and black) marked in orange.



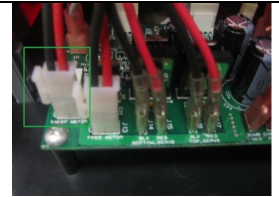
b. Bottom Server Motors (pair red and black) marked in Dark Purple.



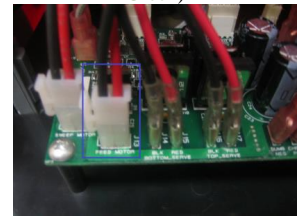
c. Feed Motor Wire (shown in Green)



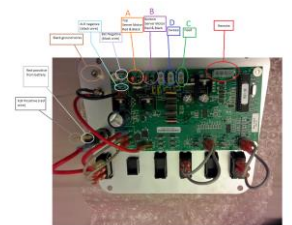
d. Sweep Motor Wire (Shown in Dark Blue)



c. Feed Motor Wire (shown in Green)

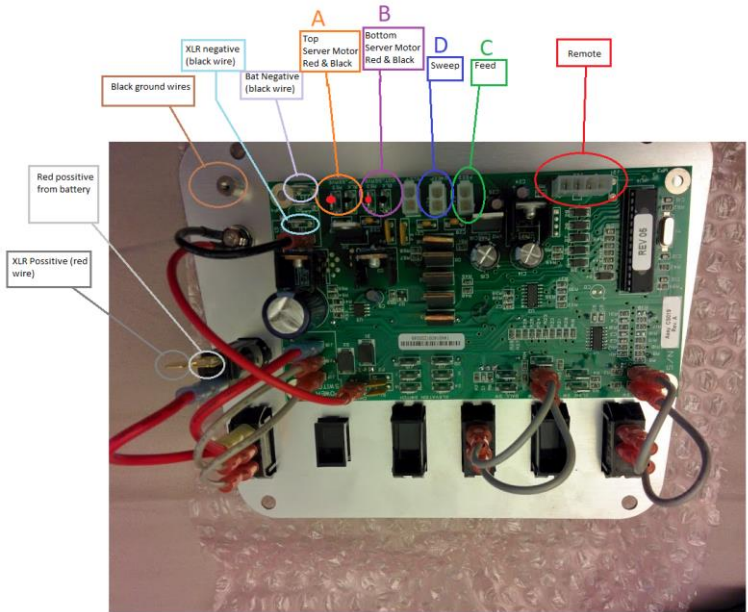


d. Sweep Motor Wire (Shown in Dark Blue)



Liberty Circuit Board (locations labeled)

Replacing and Installing a Liberty Board on a Freedom Machine



Liberty Board
 A = Top Serv
 B = Bot Serv
 C = Feed
 D = Sweep

**Connecting The New Liberty Board.
 Power Wire Connections.**

Step 2.) Following the same process, you will now disconnect the Power Wire connections from the Freedom board and connect onto the Liberty Board.

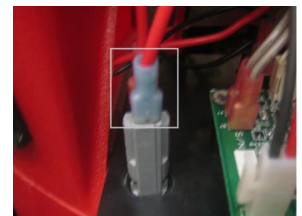
**ELOA
 Power Wire Connection**

- e. Battery Negative Wire (black) from battery terminal on back of control panel. (Shown in light purple)
- f. Battery Positive Wire (red) from battery terminal to connection tab on back of reset switch. (Shown in light grey)

Needle
 Nose
 Pliers

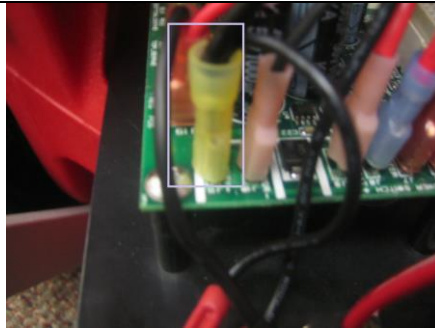


e. Battery Negative Wire (shown in light purple).

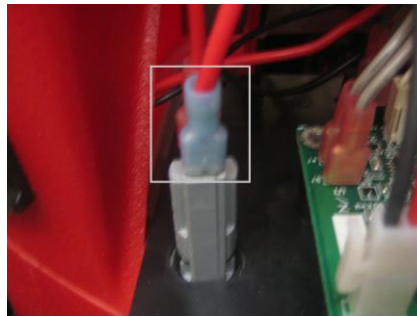


f. Battery Positive wire (shown in light grey)

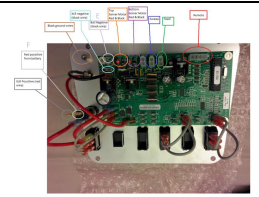
Replacing and Installing a Liberty Board on a Freedom Machine



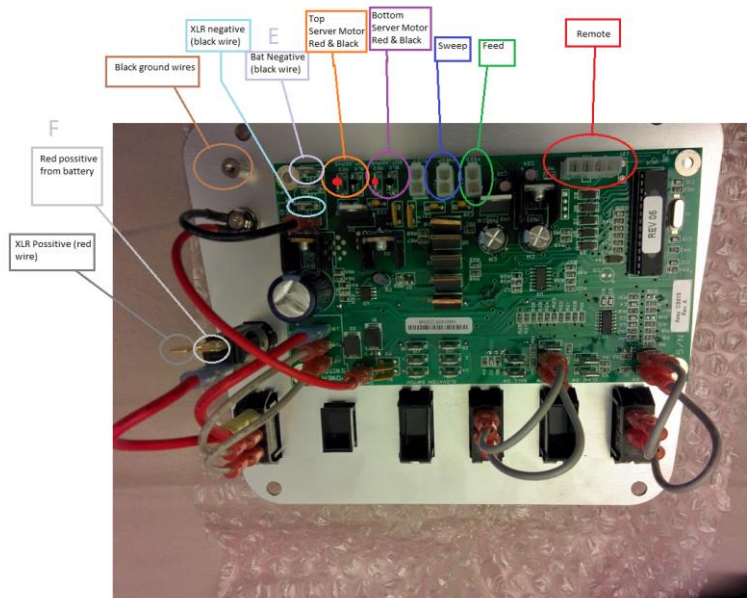
e. Battery Negative Wire (shown in light purple).



f. Battery Positive wire (shown in light grey)



Liberty Control Panel (all labeled)



Liberty Control Panel

E = Battery Negative (black wire coming from the battery)
 F = Positive Red wire (Red wire coming from the battery)

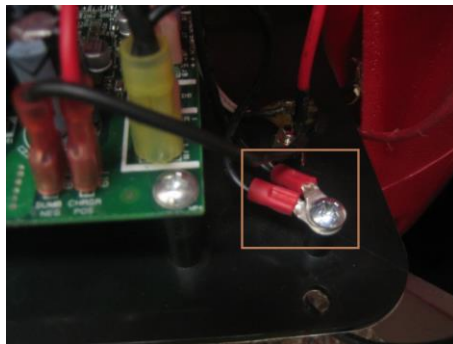
Replacing and Installing a Liberty Board on a Freedom Machine

**Connecting The New Liberty Board,
Ground Wire Connection.**

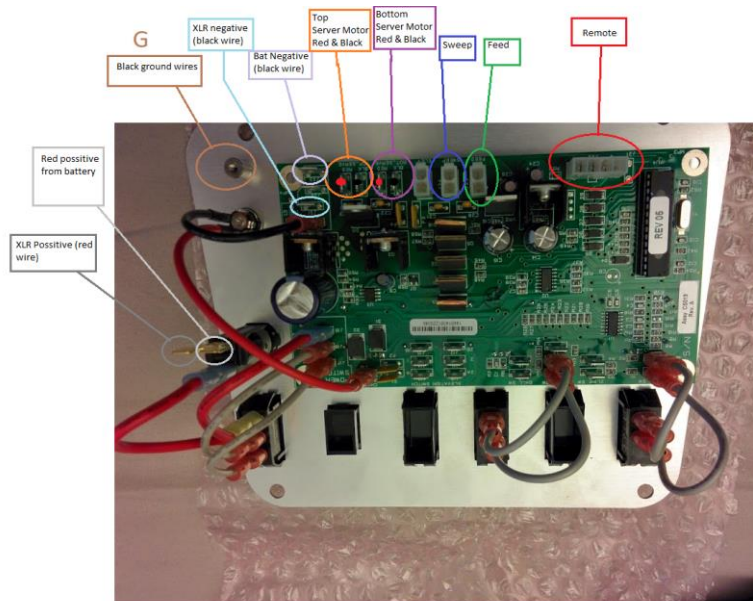
Step 3.) Following the same process, you will now disconnect the Ground Wire Connection from the Freedom board and connect onto the Liberty Board.

**ELOA
Ground Wire Connection**

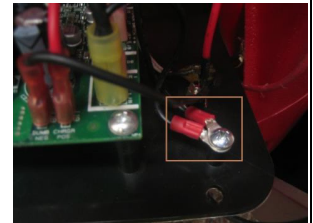
- g. Ground wire (black) from feed motor (Coming from the top of the machine). Note there is also a small ground wire coming from the Battery Negative black wire (which at this point has already been moved to the new liberty panel). These are held in by a screw on the new panel, that screw into a pole on the side of the green board. (Ground wires Shown in **Light Brown**).



g. Ground wires from feed and battery negative black wire (shown in light brown)

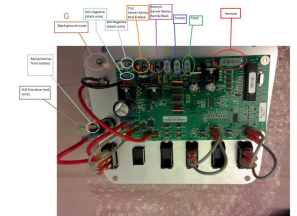


Liberty Control Panel



g. Ground wires from feed and battery negative black wire (shown in light brown)

Phillips Screw Driver



Liberty Control Panel (connections labeled)

Replacing and Installing a Liberty Board on a Freedom Machine

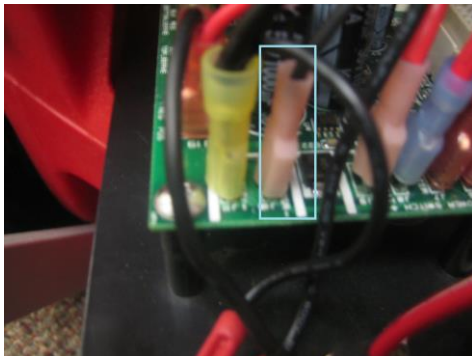
G = Ground Wires (both small wire coming off of Battery negative wire, and the long black wire coming from the top of the machine).

Connecting The New Liberty Board, Charger Jack Connection.

Step 4.) Following the same process, you will now disconnect the Charger Jack connections from the Freedom board and connect onto the Liberty Board.

**ELOA
Charger Jack Connection**

- h. XLR Charger Jack black negative wire to tab labeled "Smart Charge -" on green board. (Shown in Light Blue)
- i. XLR Charger Jack Red positive wire to tab labeled "Smart Charge +". (Shown in Dark Grey)



The negative XLR "smart charge -" wire (shown in light blue)



The positive XLR "smart charge +" wire (shown in Dark Grey)

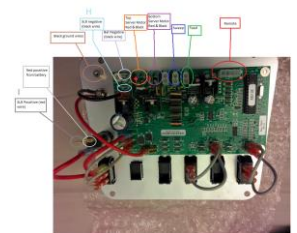


The negative XLR "smart charge -" wire (shown in light blue)



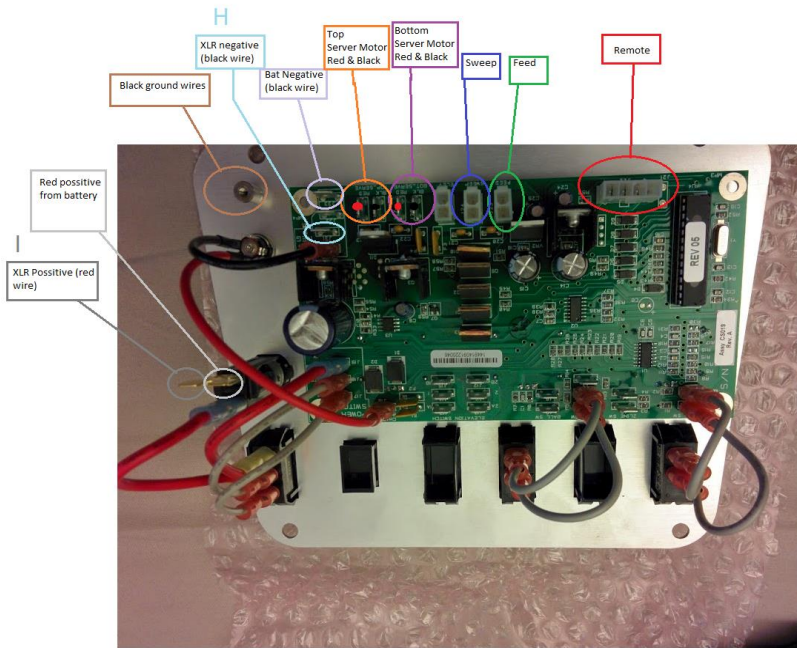
The positive XLR "smart charge +" wire (shown in Dark Grey)

Needle
Nose
Pliers



Liberty Control panel (with connections labeled).

Replacing and Installing a Liberty Board on a Freedom Machine



Liberty Control Panel

H = XLR negative wire (black wire)
I = XLR positive wire (red wire)

Re-connecting the Battery Wires.

Step 1.) Plug the Red wire into the Battery Positive terminal (red square) on the battery.

Step 2.) Plug the Black wire into the Battery Negative terminal (black square) on the battery.

Needle Nose Pliers



Battery for Freedom and Liberty machines.

Re-Attaching the Control Panel

Step 1.) Put the control panel back onto the Red Case. Line up the 4 holes (top right, left, and bottom right left) and screw all 4 black control panel screws until the control panel is securely in place. *Note: Do not overtighten the screws, as you want to have it secure, but not too tight to remove the control panel in the future.*

Step 2.) Run a test of the machine, by turning the power on, and testing the Sweep, Speed, Spin, and Feed. After testing all of these functions, turn the power off and connect the charger to ensure the machine is charging.

Phillips Screw Driver



Liberty Control Panel attached to red case.



Replacing and Installing a Liberty Board on a Freedom Machine
