

BCF2000

Teardown and Adjustment

Step by Step Guide

by

Nathan Parrow

The Behringer BCF2000 is frequently shipped from the factory with it's drive belts so loose that the faders are sloppy and noisy. This guide will help you open it up and tighten the belts.

As you can see, I am wearing an esd strap and working on a static mat. While failing to use proper electrostatic discharge protection gear does not necessarily mean that you will damage your equipment, it certainly can result in both immediate damage, and also component stress that can lead to premature failure weeks, months, or even years down the road. You have been warned!



Using a phillips head screwdriver, remove the two screws from each of the end caps.



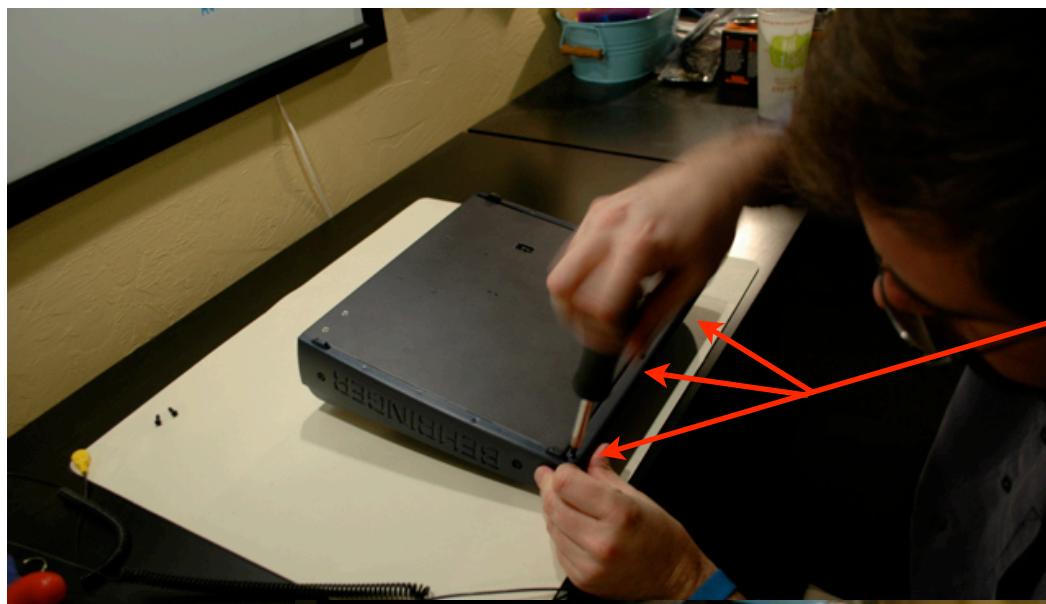
Use a knife or other thin metal tool to release the clip that holds the center of the end cap.



If you break this clip, don't despair. The two screws do a good job of holding the end caps on even without the clip.

Remove the fader caps by lifting straight up. As this can require substantial force, I find that it helps to gently slide a fork underneath them and then pull up on the fork.

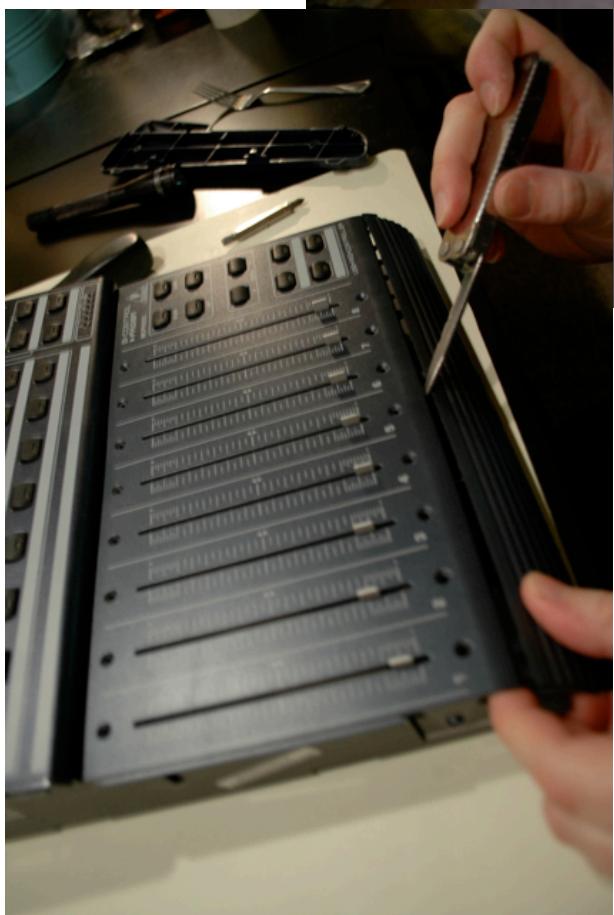




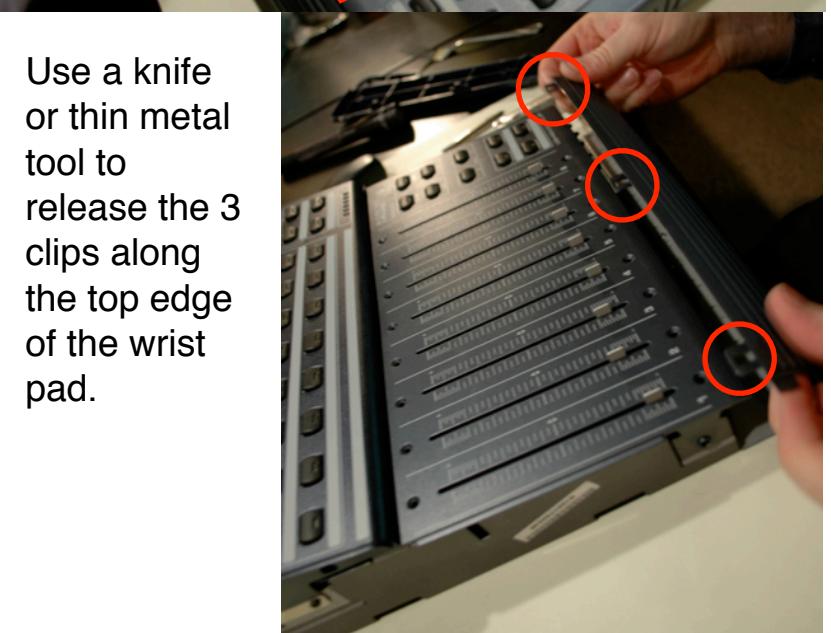
Remove the three screws along the bottom of the front edge.



Next, remove the 16 screws along the top and bottom of each fader.



Use a knife or thin metal tool to release the 3 clips along the top edge of the wrist pad.





Remove the 2 screws at each end of the rotary control board.

Gently lift the rotary control board up, exposing the two ribbon cables that connect it to the main board. These cables have been glued in, so you will



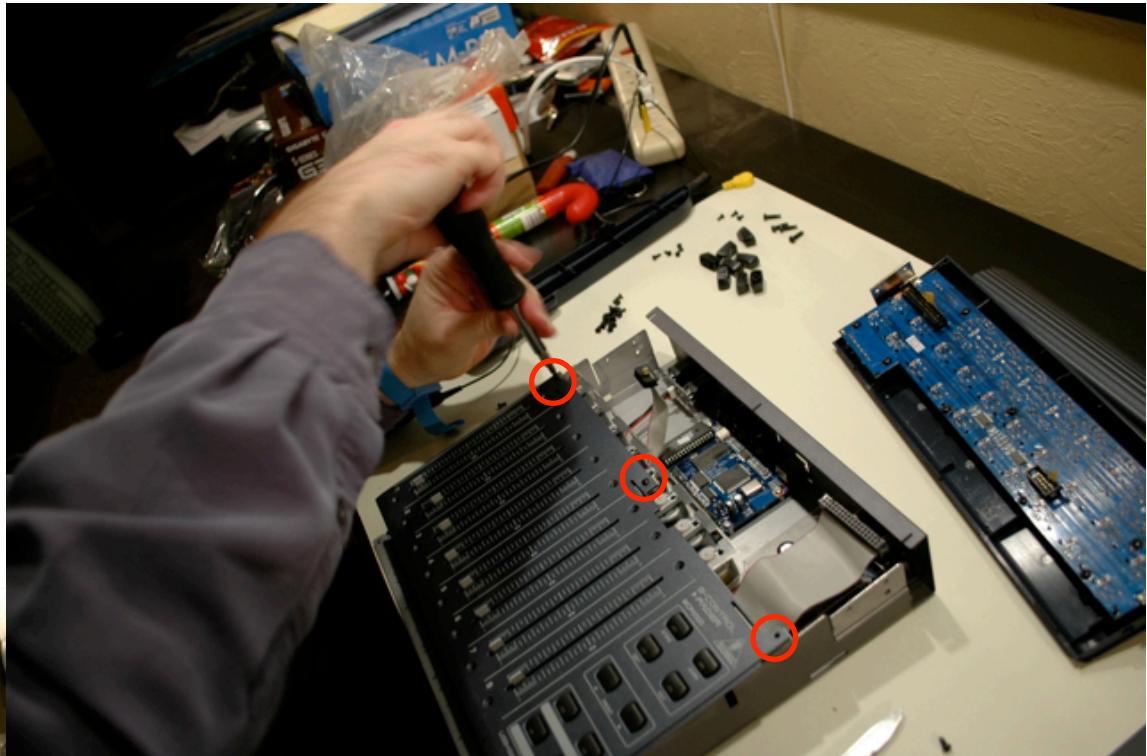
need to remove the glue before attempting to unplug them.

Replace the glue with a bit of hot glue during reassembly.

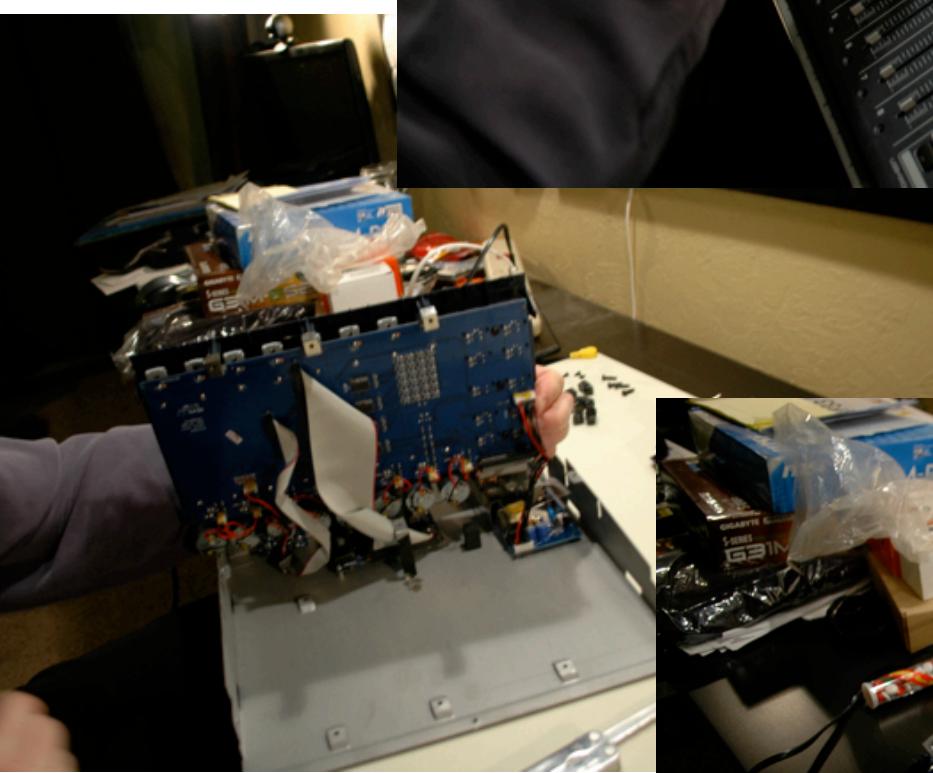
Unplug both ribbon cables and set the rotary control board aside.

Now flip the unit over and remove the remaining four screws. Be careful as this releases the fader subframe from the main chassis.

Remove the 3 small screws from the top edge of the fader subframe, then gently tilt the fader subframe up toward the rear of the unit.



Next, locate the 3 screws that are holding the faceplate to the circuit board, and remove them.

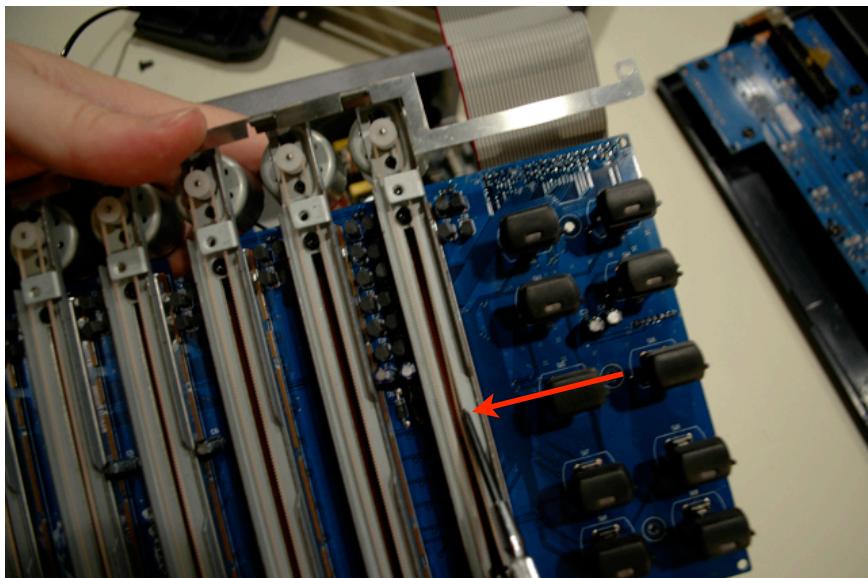
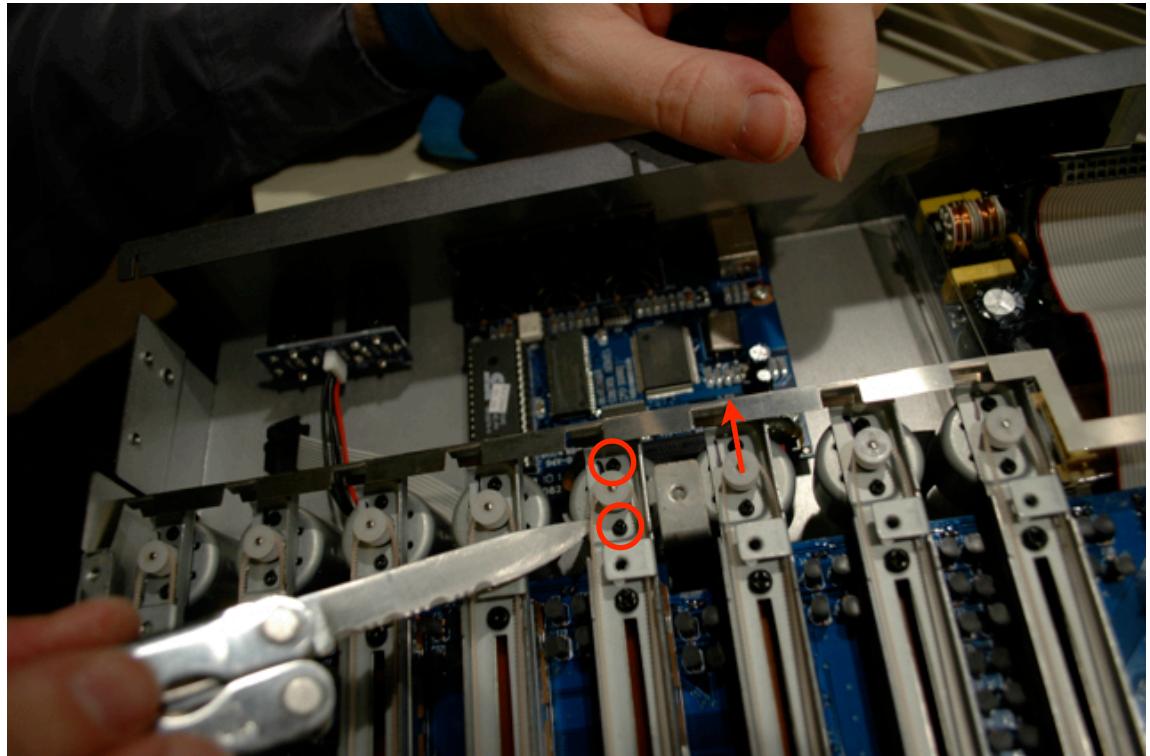


Remove the faceplate, and set it aside.

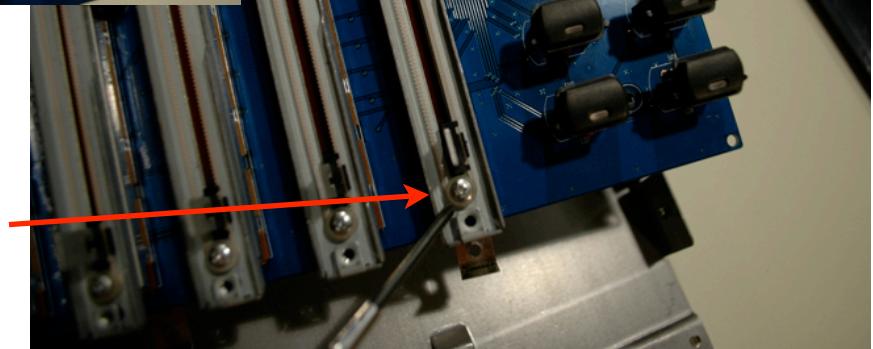


You should be able to see the problem now! The toothed belts that move the faders are so loose that the movement is sloppy. The adjustment is made by loosening the two screws that hold the motor in place for each fader, and sliding the motor back until

the belt is just snug. Then tighten the motor screws.



When you slide the fader, make sure that this pulley turns freely. If not, you may need to remove it and add a tiny bit of white lithium grease.

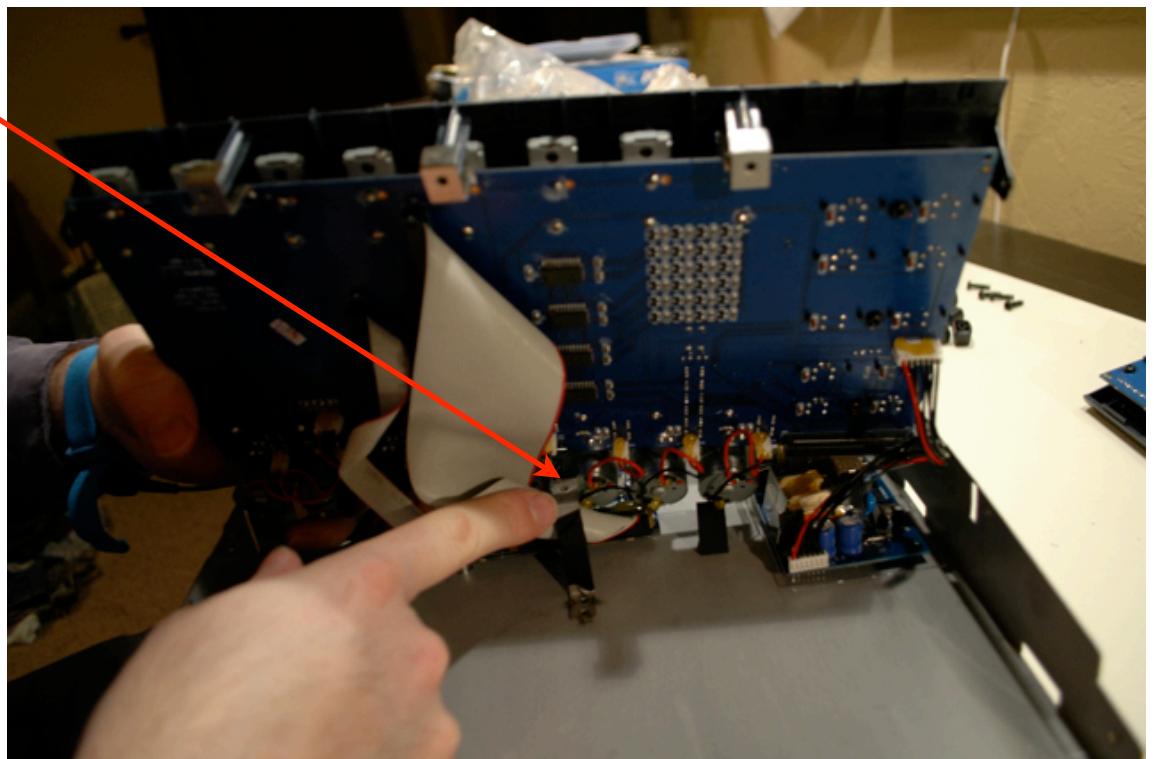


If you over tighten the belt, the motor will not be able to move the fader properly! You should have enough slack left in the belt to be able to deflect the center of it over the center of the fader track with minimal pressure.

Reassembly is basically the reverse of disassembly. Watch that you get this corner tucked in as you lower the fader subframe.



Also be careful of this bracket that has to fit between two of the motors.



Enjoy the improved performance!