



## **Bias-Easy 800™**

### **Bias Tester Instructions**

1. Turn off your amp.
2. Remove one of the power tubes (6L6, EL34, 5881, 6550, 6V6, KT66, KT77, etc)
3. Insert the Bias-Easy™ probe into the power tube socket, making sure to line up the key on the probe post with the key in the center hole of the socket. Repeat for the second power tube with the second probe.
4. Insert each tube you removed into each socket of the Bias-Easy™. Make sure the key on the tube base is properly lined up with the key on the center hole of the socket. Both power tube(s) must be in place in their sockets during testing.
5. If your amp has 4 power tubes, you will need to repeat steps 2-4 for the other two power tubes. Leave those additional tubes inserted into their sockets during the test.
6. Make certain that a speaker is connected to the amp. If this is an amp head, connect a cable between the speaker jack and the speaker cabinet.
7. Make sure both bias probes are connected to the jacks at the top of the Bias-Easy. Connect the power supply cord to the jack on the bottom of the Bias-Easy, and connect the USB connector on the cord to the power supply. Plug in the power supply to a power outlet. The display should read "000"
8. Turn on the amp, allow to warm up, and turn the standby switch to "operate".
9. The toggle switch on the Bias-Easy points to which probe is being measured. You will read the tube cathode current on the digital display in milliamps (mA) of the tube which is plugged into the socket indicated by the toggle switch. If the current exceeds 100mA, be prepared to immediately turn the amp back to standby. You have a problem in the amp, or a defective tube.
10. Adjust the bias pot for the proper bias reading. A rule-of-thumb generic setting is about 35mA for 6L6 and EL34, 18mA for 6V6. A much more accurate setting is determined by knowing the plate voltage of the amplifier, and using that information along with the type of tubes (6L6, EL34, etc) on our online Tube Bias Calculator at [www.amprepairparts.com/bias.htm](http://www.amprepairparts.com/bias.htm).
11. Flip the toggle switch to the other position to read the cathode current on the other power tube. If the tubes are well-matched, both tubes should read with 3-4 mA of each other. If the tubes have significantly different current readings (greater than 6 mA), your tubes are not matched and should be replaced with a matched pair (or matched quad in the case of a 100W 4-tube amp).
13. Turn off the amp, allow the tubes to cool, remove the tube from the Bias-Easy™ socket, remove the socket from the amp, and reinstall the tubes as normal. Again, be careful to line up the key on the tube base to the key slot in the socket.