FB-922 FILTER CAPACITOR BLOCK INSTALLATION INSTRUCTIONS

PARTS SUPPLIED WITH THIS KIT:

(1) FB-922 Filter Capacitor Block PC Board
(8) 210μF 450VDC Electrolytic Capacitors
(8) 1N4005 Diodes
(13) #10-32x3/8" SEMS Screws (with integral lock washer)

(8) 100kΩ 3-Watt Resistors

(3) #10-32x3/8" Screw (Non-SEMS)

(3) Bent #10 Solder Lugs

To start the installation, read these instructions very carefully. Now unplug the amplifier and remove any input, output and control cables that may be connected to the back of the amplifier. You are now ready to proceed with the installation.

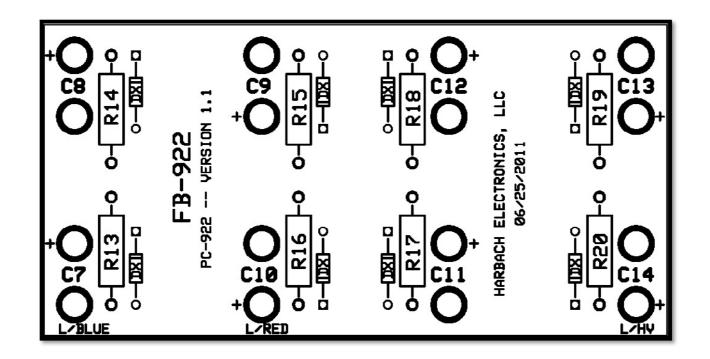
- () Assemble FB-922 PC board according to the parts layout diagram. Note: All parts mount on the silk screened side of the PC board. Diodes DX mount flat to the board and resistors R13-R20 must be raised above the PC board, but no more than 1/4" above board.
- () Be sure that all high voltage has been properly bled to ground before removing any covers or putting your hands inside the amplifier. You CAN BE KILLED by the high voltages inside this equipment!
- () Remove the top cover, bottom cover and left side panel to expose electrolytic filter capacitor box.
- () Again, be sure that all high voltage has been properly bled to ground. Use whatever means necessary to insure that all HV has been bled to ground!!!
- () Remove the capacitor box from the chassis. During this process you must also unsolder the <u>CLEAR HV</u> wire, the <u>RED</u> wire and the <u>BLUE</u> wire from the filer capacitor assembly.
- () Remove the old bleeder resistors and bypass capacitors from the electrolytic capacitors. You can either clip or unsolder them.
- () Remove the cover plate from the filter capacitor box assembly.
- () Remove the old filter capacitors and spacers from the filter capacitor box assembly. Be sure to note how the spacers were arranged in the assembly.
- () Repack the filter capacitor box assembly with alternating layers of spacers and 8 new 210µF 450VDC electrolytic capacitors. Be sure to rotate the capacitors so that the screw terminals are in the proper polarity orientation for attachment of the PC board assembly.
- () Attach the completed PC board assembly to the top of the capacitor assembly using #10-32x3/8 SEMS screws (screws with the integral washer). NOTE: Use a regular #10-32x3/8" screw and a bent #10-32 solder lug on the holes marked "L". Make sure that the bent solder lugs are clear of any part of the filter capacitor box assembly to avoid any HV short to ground.
- () Reattach the cover removed earlier to the filter capacitor box.
- () Reinstall the upgraded filter capacitor box back into the amplifier chassis and secure. During this step you will have to solder the <u>CLEAR HV</u>, <u>RED</u> and <u>BLUE</u> wires to the appropriate solder lugs attached to the PC board assembly.
- () Reinstall the left side panel, top cover, bottom cover.

This completes the installation of the FB-922 filter capacitor block. It will provide you with a better power supply that provides the necessary B+ filtering and regulation. Your amplifier should not experience any filtering problems in the future.

PC BOARD PARTS DESIGNATION:

C7-C14 R13-R20 $210\mu F$ 450VDC Electrolytic Capacitors $100k\Omega$ 3-Watt Resistors

DX L1-L3 1N4005 Diodes #10 Bent Solder Lugs



HARBACH ELECTRONICS, LLC

Jeff Weinberg – W8CQ 468 County Road 620 Polk, OH 44866-9711 (419) 945-2359 <u>http://www.harbachelectronics.com</u> info@harbachelectronics.com