

Prepare three blue wires, 1.5", 6", and 7" length and strip $\frac{1}{4}$ " of insulation from each end. Install the 1.5" blue wire in hole #5, the 7" blue wire in hole #6, and the 6" blue wire into hole #7. Bend the leads flush against the foil and solder.

All solder connections are now made to the PC card, with the exception of the red-yellow transformer center tap which will later be connected to hole #8. Check your work. Holes 2, 3, 4, and the four + power capacitor leads to this foil "island" will be the future B+ supply. Holes 5, 6, 7, and the four - power capacitor leads to that foil "island" will be the future B- supply. The .1 mfd capacitor from each foil island to ground is RFI decoupling, and each 10K resistor to ground provides a discharge load in case of a blown supply fuse.

REWIRING HAFLER DH-200 MAIN CHASSIS

Locate B1 and B4 (the two black output banana jacks) on the Hafler back panel. There are two wires connected to each. One wire at each jack is one of a twisted pair running to the audio circuit cards. These wires remain in place. The other wire at each jack will be connected to nothing, as they previously were connected, along with the red-yellow transformer lead, to the wire between the original power supply capacitors (CR1 and CL2). Remove these two "dangling" wires, one each from B1 and B4.

Cut a 4" length of the solid bare wire. Bend it into a "arch" shape. Solder one end to B1 and the other end to B4. The top of the "arch" will be up, and must clear R2 and R3 and all connections there, and also be clear of the chassis lip. The top center of the "arch" of bare wire will later be connected to the free end of the 2" bare wire sticking up from hole #1 on the new PC-10.

INSTALLING NEW PC-10 IN HAFLER CHASSIS.

Lay the new completed PC-10 card in its approximate location in the chassis, with hole #1 closest to the back panel, and the Hafler diode bridge (RB) laying loose on top of PC-10.

Insert the red-yellow power transformer lead into hole #8 on PC-10 from the top, bend the bare lead flush against the foil on the bottom of PC-10 and solder.

Locate the hardware originally used to fasten the diode bridge to the chassis of the Hafler (somewhere in the debris near you). Install the #6 screw up from the bottom of PC-10, and seat the diode bridge (RB) onto this screw on the top of PC-10 in the original orientation. The + lug of RB (RB #4) will be to the left, the - lug (RB #1) to the right. Install the original #6 lockwasher and nut from the top and tighten assembly firmly. Note that the PC-10 card is not yet fastened to the chassis.

Set the Hafler chassis on your bench, back panel towards you, with the rubber feet on the back panel side overhanging the edge of the bench. Tip the rear side of the chassis up and install two 1" #6 screws up into the chassis, from the bottom, into the new mounting holes closest to FL and FR. Lay the chassis back down, thus holding the screws in place. Slip a nylon spacer over each screw inside the chassis. Drop the PC-10 card down on top of these nylon spacers and install #6 lockwashers and #6 nuts loosely on each protruding screw. Repeat procedure for mounting holes closest to LS and RS in the Hafler chassis.

Check that none of the original Hafler wires are pinched in the new mounting hardware, and that no parts or bare wires connected to LS, LF, B1, R2, R3, B4, RF, or RS can contact the parts or foil paths on the new PC-10. Now tighten the four new PC-10 mounting screws firmly.

FINAL WIRING

Solder the bare wire from PC-10 hole #1 to the center of the bare wire arch between B1 and B4. Be sure the bare wires touch no other terminal, part, or the chassis.

Solder the 2" red wire from PC-10 hole #2 to RB Lug 4 (B+ lug on diode bridge).

Solder the 1.5" blue wire from PC-10 hole #5 to RB Lug 1 (B- lug on diode bridge).

Solder the 6" red wire from PC-10 hole #4 to FR 3 (B+ lug on Rt. Ch. fuseblock)

Solder the 7" red wire from PC-10 hole #3 to FL 3 (B+ lug on Lt. Ch. fuseblock)

Solder the 6" blue wire from PC-10 hole #7 to FL 1 (B- lug on Lt. Ch. fuseblock)

Solder the 7" blue wire from PC-10 hole #6 to FR 1 (B- lug on Rt. Ch. fuseblock)

Make sure none of the bare ends of the above wires can touch the PC-10 foil, the chassis, or the body of the diode bridge. The wiring is now completed.

PRELIMINARY TESTING. (DC VOLTMETER REQUIRED TO INSURE YOU HAVE NOT MADE ERRORS)

This test is done with the four B+ and B- fuses removed from FL and FR. With the amplifier off, and unplugged from the AC line, connect a DC voltmeter (set to read 100 volts DC full scale) as follows. Connect the ground lead of the meter to the bare wire at hole #1 of PC-10. Connect the positive lead of the meter to FR 3. Make sure probe cannot touch other points. Plug amp into AC and turn on. Meter should read + 60 volts DC. Main AC fuse should hold, and light in power switch should light up. Turn amp off, wait several minutes for DC voltage to decay to zero. Connect positive probe of meter to FL 3. Turn amp on, DC voltage should read + 60 volts DC. Turn off amp and allow voltage to decay to zero. If you have a meter that reads both + and - volts, repeat above procedure with probe connected first to FL 1 and then to FR 1. Each should read - 60 volts DC. If your meter does not read negative volts, connect the positive probe to the bare wire at PC-10 hole #1, and the negative probe to first FL 1 and then FR 1, repeating the procedure described above. At each measurement the voltage will read + 60 volts DC if the new power supply has been properly installed.

If the main 5 ampere slo-blo fuse blows (FC) when the amp is turned on, you have probably wired the diode bridge in backwards or have a B+ or B- short to ground either on the PC-10 card, in a wire to the fuseblocks or diode bridge, or have metal to metal contact between the card and the chassis or back panel parts. Find and repair the fault before trying again. A reversed voltage reading at any of the fuseblock lugs indicates you have swapped B+ and B- leads from the PC-10. This must be corrected before installing B+ and B- fuses, as reverse voltages will absolutely destroy your audio circuits. If in doubt, call us for help before installing power supply fuses.

If all check out O.K., unplug amp from AC, and let it set until voltage at FR and FL decay to zero. Then reinstall the four power supply 5 ampere quick blow fuse in FL and FR and turn on again. If any fuse blows, you have overlooked a wiring error which must be corrected before use. If all fuses hold, reinstall amplifier in your system and enjoy its improved performance.

Our Limited One Year Warranty is on the parts we supplied only, We do not warrant your workmanship at all, or damage to your amplifier caused by improper installation of the parts we supply. Call us at 612-890-3517 for service advice before returning your amplifier, or power supply parts, for service.