## Hp-23A, B, C Installation Instructions

This board Installs on the 4 existing screws, 2 that hold the transformer in and 2 that hold the choke in, if screws are too short you may have to replace them with some a little bit longer. You will need 4 more nuts the same size as the existing screws. If you bought the kit use the board diagram to see where to place all the components, the 4 150uf 450volt caps go in from the top side of the board, and the rest of the parts go in from the side with the traces. Stand them off the board a little bit so they can breathe. You will need to take the breaker, the switch loose leaving the wires on them, and un solder the 2 resistors from the the bias adjustment pot and take it loose leaving the green wire on it, and move them up out of the way. If your supply does not have switch omit that part, if your supply does not have the bias pot, omit that part and us one of the 27K ohm 2 watt resistors included in a bag by themselves from solder pad 2 to ground instead of the 2 10K resistors to the pot. Next remove the rest of the old components, and disconnect the rest of the wires. If your wires are the same as the ones in the picture this should work. If they are different, look at the schematic, or check where they are connected before you disconnect them and note this. When your done your chassis should be clean except for the transformer, the choke, the three items you moved up and out of the way. Now take a piece of cardboard place it in the chassis underneath where the board goes and trim to size, and trim out the holes where the original caps were mounted. The 4 150uf 450volt caps go up through these holes. This piece of cardboard is to make sure nothing on the back side of the board shorts to the chassis. Once you have completed trimming and inserting the cardboard, then place the full populated board on the screws, you may have to alter the screw holes a little bit to make it fit, and use the 4 new nuts to secure it. Then reinstall breaker, switch if it has one, and the bias pot if it has one. Now solder the 2 vertically mounted 10K resistors to the bias pot if it has a bias pot, if not omit that part. Now you can solder the wires back to the board as follows. The wires from the choke go through hole H1.

Solder Pad 1: The orange wire from pin 3 on the elev	ven pin radio plug, and
the black wire from the choke.	

Solder Pad 2: Already has the 10k 2 watt resistor soldered on it that goes to the bias pot if it has a bias pot, if it does not have a bias pot, then it will have a 27k 2 watt resistor to ground if you ordered the fully populated board, or you populated the board your self. The yellow wire from the radio plug goes on pad also.

Solder Pad 3: The wire from the pin on the switch as the brown-yellow wire

from the transformer. If you have the model that does not have the switch a switch, the brown-yellow wire goes to pad 3.

- Solder Pad 4: The wire from the center pin on the switch. If you have the model that does not have the switch, if you want the voltage to be 300 volts the brown wire goes to pad 4, if you want the voltage to be 250 volts leave th brown wire from the transformer disconnected and add a jumper from pad 4 to pad 3.
- Solder Pad 5: The red wire from the choke.
- Solder Pad 6: The red wire from the transformer.
- Solder Pad 7: The red wire from pin 4 on the eleven radio connector.
- Solder Pad 8: Red-yellow wire from the transformer.
- Solder Pad 9: The wire from the AC line that is not on the breaker, and the black wire from the transformer.

Thanks and 73's Rusty (WK5R)