Dx Super A BIAS Adjustment

1.   After the boards are completely assembled, two 10R/10W or 5W resistors are installed into the board in place of the fuses, or even externally installed if you want, also keep in mind that the trim pot has to be set to midway, half maximum resistance before that, is adjusted with the trim pot outside the circuit of course.

2.   The power supply is now on and measure +42V 0 -42 V.

3.   The trim pot is adjusted until the DC voltmeter reading is 2.35V.

4.   Make sure you have the DC voltage is **not greater than 25mV** from out to ground.

5.   After the adjustment is completed remove the 10R resistors or bypass them with fuses.

6.   Now with fuses installed and a resistive load (dummy load) or speaker connected into the output terminals.

7.   Play music or inject 1V sinusoidal 1 KHz generator till your heat sinks reach 50 degrees Celsius or more.

8.   Q8 is now ready, and is ready, because heat, from collector to emitter thermal resistance already shifted down.

9.   It is time to adjust once again with your amplifier hot, or (while your amplifier is hot).

10. Remove signal from the input, install speaker, and check ones again the offset voltage (less than 25mV DC).

11. Remove fuses that are bypassing the 10 ohms/10 watts resistor, or re install these resistors.

12. Now with resistors in series, adjust your stand by current trim pot one more time while your amplifier is **hot.**

13. Play some louder music for about 20 minutes and check to see if the current have increased…. This can be made into the power emitter resistors they should read, each one of them, 27mV of voltage drop (0.22 ohms resistors).

    Detecting your reading increased, meaning your current have increased as consequence, and if this increase is bigger than 20 percent, then it is clear that your heat sink size is not big enough, or your ventilation is poor (convection natural cooling) and that you may need a fan blower… or even two small ones, depending on your needs…a fan blower can be silent if you install it through a voltage regulator alike LM7808…then speed will reduced and also the noise too…in this case use two to have

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a silent operation…two smaller ones at lower speed works better than a single big one at high speed (tested!).
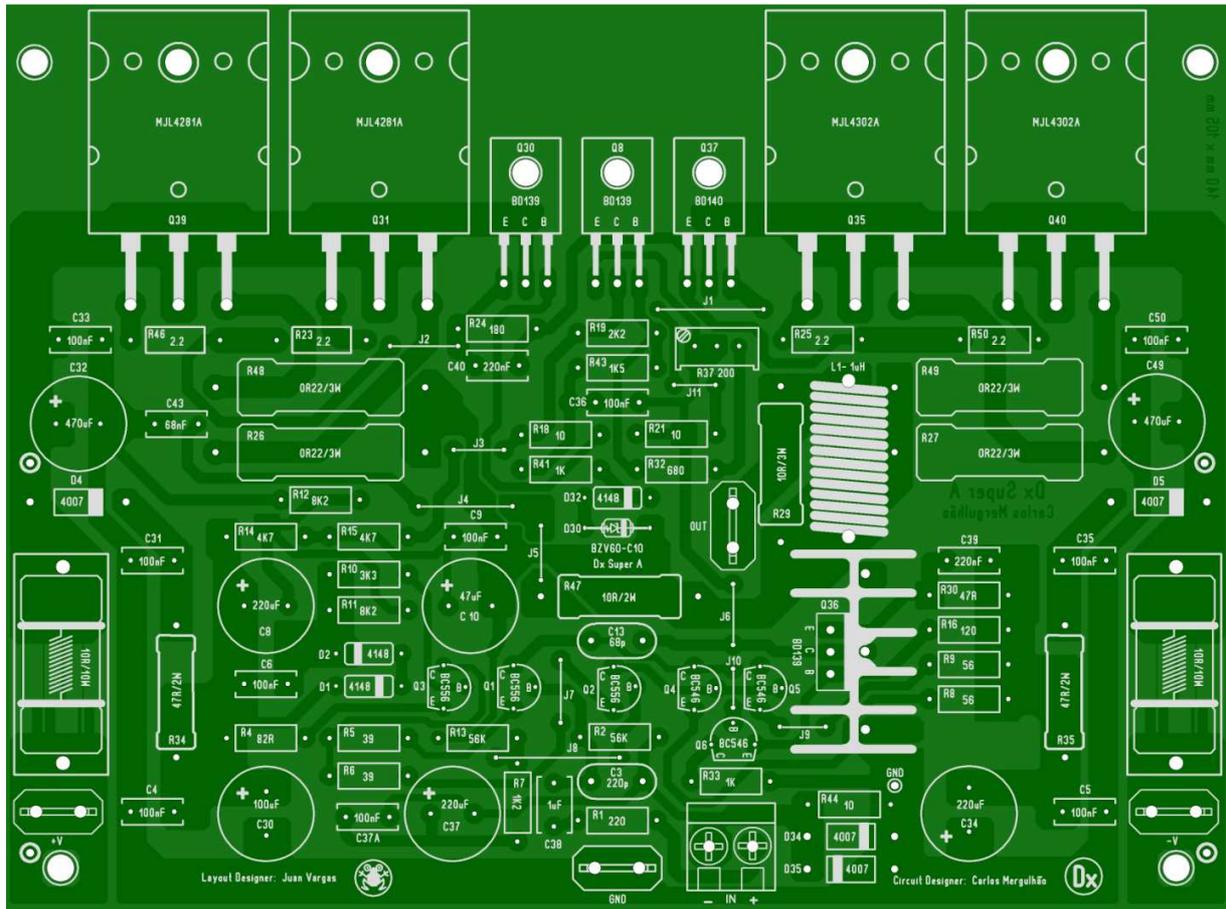
Dx Super A

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