



Power resistors R1 - R9, R28 & R29 are on the rear of the PCB.

Before attempting any repairs, read the notes on page 3.

If Power transistors fail, they usually go in pairs i.e. one 2SC3281 and one 2SA1302. On diode or transistor check, all devices will show a total short circuit. In order to find the faulty one, set the DMM to resistor measurement on the lowest range and check the base / emitter resistance on each device. The faulty one will show a much lower resistance than the remaining good ones. Alternatively de-solder one side of the base resistors R20 - R27, and check the base / emitter diode junctions. Remove the faulty device and re-check the others. Also check the associated base resistors and emitter power resistors (emitter to output).

When fitting the new transistor, smear the device with high temperature heat sink compound and tighten the screw until the compound starts to squeeze out . Take care not to overtighten the screw.

When all the faulty components have been replaced, the module should be tried out with low value fuses. Change the relevant power fuses on the power supply PCB (FS2 & 4 or FS3 & 5) to 1Amp F type. Input a sine wave signal of approximately 1 VRMS. Do not connect any load, and monitor the output on an oscilloscope. Connect the probe before the output relay, (The cathode of D11 is a suitable place).

Switch the amplifier on, the output should remain at 0V. The relay (Rel1) will click on and the signal will 'fade' up. If all is O.K., switch the amplifier off - change the fuses back to the proper value - check the amplifier out again with the resistive load.

Finally realign the bias - see next page.