AMP TEST PROCEDURE FOR PC00026
THE BIPOLAR BEAR BASS

- Before powering up the unit, check the wiring on both the primary and secondary of the mains transformer
- Ensure that the input is correctly wired into PL1
- Check that the output is correctly wired into LS1
- Check that the fan has been wired with the correct polarity
- Confirm that the thermal trip is securely fastened to the heatsink and wired into the PCB
- Using a multimeter, test the connectivity from the 'front' side of R32 to the earth solder tag - this should be a short circuit
- Using a multimeter, test the connectivity from the 'earth' of the input jack socket to the earth solder tag - this should read 10KΩ
- If either of these connections is not good, check that the paint has been thoroughly scraped from the mounting point GND1
- Inject a 1KHz signal and set the preamp controls to their mid points, with the output level and gain set to '3'
- Connect a 4Ω load to the output of he unit
- ***Slowly*** wind up the variac to the correct mains input voltage
- Check that the output is a clean sine wave
- Check that the fan is operating and blowing the right direction (onto the heatsinks)
- Switch the signal generator to 10KHz, low amplitude (-40dB)
- Adjust the input gain and volume pots to give a 1Vpp signal **at the loudspeaker output**
- Adjust preset RV1 to trim out the DC offset to zero (this should be already very close to perfect from the PCB test)
- Turn preset RV2 fully anticlockwise
- Increase RV2 until the crossover distortion ***just*** disappears (do not overdo this setting) It is better to allow a small amount of crossover distortion than to over-bias the amplifier(!)
- Return the signal generator to 1KHz and perform a power output test, the rms output voltage should be as follows:

  290 watts rms into 4Ω = 34.1Vrms
  150 watts rms into 4Ω = 24.5Vrms

- Reduce the output level to approximately 10.0Vrms and briefly short circuit the output (for up to 2 seconds) - the amplifier should recover immediately after the short circuit is removed
- Remove the load and run the amplifier up to full output with an open circuit
- Test is complete

14/02/97