PHASE INVERTER ADJUSTMENT (FAQ)

This adjustment should not be attempted unless the associated circuit has been repaired or tampered with, and then only with the proper equipment.

1. Connect an accurate low-distortion audio generator to the input jack.
2. Connect a 6N1 100W resistor to the speaker terminals (red & black).
3. Connect a harmonic or intermodulation distortion analyzer across the resistor.
4. Set Impedance Switch (10k) to 10 and the Z-Matic Control (10) to "OFF".
5. Allow all equipment to warm up for 30 minutes.
6. Adjust the generator to 1kHz and its output slightly below the clipping point. (Approx. 1dB) At the amplifier output. This output must be held constant.
7. Adjust the Phase Inverter X4 for minimum distortion on the analyzer.

1. DC voltage measurements taken with vacuum tube voltmeter. AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as dot lines. This means that the component values may vary for a given set of conditions. The values will be shown as "typical".
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance of component values makes possible a variation of ±10% in voltage and resistance readings.
6. All controls at minimum, proper output, load connected.

BIAS ADJUSTMENT (R2)

If either output tube V12, V13, V14 is replaced, R2 should be adjusted.

1. Turn Level R20 Control fully counterclockwise.
2. Connect the speaker or proper load to the unit.
3. Connect a 5-10kΩ, DC meter in the plate current jack. (If desired, the plate current jack may be opened and meter connected across the jack terminals.)
4. Allow the unit to warm up for 30 minutes.
5. Adjust R2 for a meter reading of ±10mA.