LPB AM TRANSMITTERS BIAS VOLTAGE SETTING !

The lpb solid state series all use the same power amplifier design.

LPB AM-5 WATT UNIT = 15 volts DC for B+ and bias range is .450 to .550 DC volts.

LPB AM – 30 / 60 / 100 Watt Units = AM-30 thru the combined series..ie AM - 60 and 100 use 30 volts DC for B+ and bias range is .500 to .690 DC volts.

NOTE: All LPB solid state amplifier bias is adjusted by removing the B+ fuse to the PA, and connect a DVM meter set to read current (200ma range) across the fuse holder pins (positive to one fuse holder pin, negative to the other fuse holder pin) and adjust the bias pot on the PA for 80mA with no modulation and no RF drive from the exciter.

NOTE: On some of the earlier solid state exciters, there is a pre driver bias pot R28. This is to adjust linearity of the pre driver stage after the balanced modulator A4. On the later solid state exciters this pot was replaced with a fixed resistor. You can use a 1K ohm trim pot in place of the fixed resistor to allow for adjustment when changing bands.

NOTE: **The bias is set by removing the PA B+ fuse, and connecting a current meter or DVM to the fuse holder connections and setting the meter to read 100mA or above. Power on the transmitter and turn down the RF drive on the exciter full down. Adjust the bias pot for 80mA (.080). When complete, turn off the transmitter and wait at least 15 minutes for the big filter capacitor to discharge before re-inserting the fuse! If you don't do this, you may surge the PA transistors from the built up unloaded charge in the big filter capacitor. You can cut that wait time down by connecting a "bleed" resistor (about 25 ohms at 5 watts) to the capacitor leads so it will discharge. Measure the voltage on the capacitor and when it reads zero, you can re-insert the PA B+ fuse.**

Don't confuse the PA B+ fuse with the main AC power fuse. The PA B+ fuse will always be located next to the PA module, or on the AM 5 is located on the upper left below the crystal holder on the exciter board. The main AC power fuse is located on the power supply module on the left side of the cabinet, and in the AM 5 is located on the lower left of the exciter board.

The 80mA adjustment applies to ALL LPB solid state series PA's... including the AM 5.

INFORMATION WAS FURNISHED BY

"RFB of K-Rocks"

Version: 1 August 31, 2014 Compiled By Jeff Morrison