BIAS PROCEDURE SM-400/SM-900/ST-800

Equipment required:

Sinewave generator 2 ohm, 250 watt load AC millivolt meter Oscilloscope

- 1. Lower signal generator output to minimum, set frequency to 1KHz and insert into "mono" effects return jack (unbalanced line in for Stereo 800).
- 2. Set Power Amp Assign Switch on back panel to "Stereo" position (up). Plug 2 ohm dummy load in channel to be tested.
- 3. Raise Master Volumes on SM-900 and ST-800 to full clockwise. Set Effects Blend control on SM-900 to "wet" (full clockwise). Set Balance control on SM-400 to mid-position.
- 4. Adjust bias trim pots to full counter-clockwise position.
- 5. Turn on/off switch to "on" position. Connect unit to autotransformer (variac) and raise AC line level to 115 volts.
- 6. Position ground reference on oscilloscope just above center line of screen.
- 7. Raise signal generator level so that 2 volts RMS appears at the speaker output.
- 8. Monitor signal on scope with the following settings:

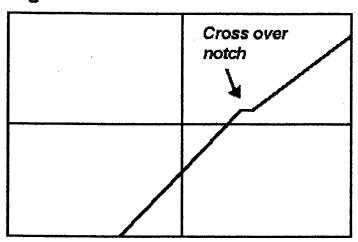
Load: 2 ohms

Scope: Sweep Time: 50us Volts/Div: 0.2V

Signal Generator: Freq. 1KHz

9. The signal should have a prominent crossover notch at about zero crossing. Refer to diagram below.

Figure 1.



- 10. Adjust bias trimpot of amp being tested just past the point the crossover notch disappears. <u>DO NOT OVER ADJUST</u> as this will set the idle current too high and the power amp will overheat
- 11. Repeat procedure for other side.