

**AMPULATOR TEST PROCEEDURE**

1) USE LINE VOLTAGE \ CURRENT TESTER TO VERIFY CORRECT CURRENT DRAW OF AMPULATOR BEFORE GOING ON. CORRECT SETTING OF TESTER CONTROLS FOR AMPULATOR IS :

RANGE SWITCH - "HIGH"

VERNIER KNOB - - "1.50"

2) APPLY SWEPT 20 TO 20Khz SIGNAL AT 600 mV LEVEL TO INPUT USING BALANCING CABLE PROVIDED.

3) SET FRONT PANEL CONTROLS AS FOLLOWS:

"INPUT"	10 O' CLOCK
"PRESENCE"	FULL CCW
"TUBE MATCHING"	12 O' CLOCK
"HUM INJECTION"	FULL CCW
"TUBE BIAS"	FULL CCW
"POWER LEVEL"	FULL CW (200 W)
"CHARACTER"	BUTTON OUT (TRIODE)
"CABINET BYPASS"	BUTTON IN
"MIKED CABINET"	ALL 6 BUTTONS OUT
"LO RESONANCE"	FULL CCW (- 6)
"HIGH BALANCE"	FULL CW (+ 6)
"OUTPUT LEVEL"	10 O' CLOCK
"SYSTEM"	BUTTON OUT ( OUT )

ON BACK PANEL : CONNECT SCOPE TO 1/4" OUTPUT JACK , AND PUT BOTH BUTTONS TO THE " OUT " POSITION

4) LOOK FOR 1.6V PK-PK SIGNAL ON SCOPE

5) CHECK TO SEE THAT "COMPRESS" ORANGE LED HAS JUST STARTED TO LIGHT, THAT "CLASS A" GREEN LED IS ON, AND THAT THE SIGNAL IS A CLEAN SINE WAVE, WITH NO FLATTENING OF TOP OR BOTTOM

6) PUSH IN THE "SYSTEM IN" BUTTON. VERIFY OUTPUT SIGNAL IS STILL 1.6V PK-PK.

7) TURN "PRESENCE" CONTROL CLOCKWISE AND SEE THAT FREQUENCIES ABOVE 1Khz ARE INCREASED TO ABOUT 3.6V PK-PK. RETURN CONTROL TO FULL CCW.

8) TURN "BIAS" CONTROL SLOWLY CLOCKWISE AND SEE THAT THE PRETTY "AB" AND "B" LEDS LIGHT ONE AFTER THE OTHER. YOU MAY NOTICE THAT THE SIGNAL LEVEL DECREASES AS YOU TURN THIS CONTROL, WHICH IS OK.

9) TURN "POWER" TO THE FULL CCW POSITION ( .2 W ). VERIFY OUTPUT SIGNAL DECREASES TO 0.2V PK-PK AND THAT SCOPE TRACE APPEARS TO HAVE FLAT TOP AND BOTTOM. VERIFY THAT "OVERDRIVE" LED HAS GONE ON. VERIFY THAT PUSHING THE "CHARACTER" BUTTON TO "PENTODE" CAUSES SIGNAL TO INCREASE TO ABOUT 0.4V PPK-PK. THIS TIME, TURN "HUM INJECT" ALL THE WAY CW (MAX) AND VERIFY THAT HUM APPEARS ON SCOPE TRACE TOP AND BOTTOM. NOW RETURN THE "HUM INJECT", "POWER", AND "CHARACTER" CONTROLS TO THEIR STARTING SETTINGS.

10) PUSH IN "1" BUTTON IN "SPEAKER ARRAY" SECTION. YOU SHOULD SEE AN INCREASE AROUND 100 Hz , A DECREASE AROUND 400 Hz AND AN INCREASE ABOVE 1KHz. NOW PUSH "CABINET" BUTTON TO "CLOSED" AND YOU SHOULD SEE A DECREASE IN LEVEL BELOW 100 Hz.

11) PUSH IN "2" BUTTON IN "SPEAKER ARRAY" SECTION. YOU SHOULD SEE TWO DISTINCT NOTCHES AROUND 500Hz AND 1KHz.

12) PUSH IN "4" BUTTON IN "SPEAKER ARRAY" SECTION. NOW YOU SHOULD SEE FOUR NOTCHES IN THE FREQUENCY RESPONSE TRACE. THE EXACT DEPTH AND FREQUENCY OF THESE FOUR NOTCHES IS NOT IMPORTANT IF THEY ARE EQUALLY SPACED. NOW PUSH THE "SIZE" AND "DRIVER" BUTTONS AND NOTE THE MOVEMENT OF THE FOUR NOTCHES. COMPARE THEM TO THE SET OF PICTURES IN THE ILLUSTRATIONS SECTION.

