

BEARD AUDIO : P.505 PRE-AMPLIFIER

1. Amplifier completely dead on switch on (no light or output)

Blown A.C. fuse. Disconnect supply, remove top cover. Examine A.C. wiring for damaged insulation. Test rectifiers and examine large capacitors for electrolyte leakage. Fit a new fuse of the correct rating.

Check continuity through A.C. supply cable, fuseholder, switch and transformer. Check heaters.

2. Light works but no output from either channel.

Remove the top cover, switch on and make sure that all heaters are glowing (this is easier to see in a darkened room). The heaters are hard-wired together under the board. V7 and V8 heaters are connected in series, the remainder are connected in parallel in the order: V7/8, V9, V6, V5, V4, V1, V2, V3. A string of unlit valves is probably caused by a break in this wiring.

Check D.C. operating voltages against the table. If the fault remains undiscovered, connect a signal generator to the phono input, set the generator to 1mV/1kHz, select phono and set volume at maximum. Both the tape monitor switches should be out.

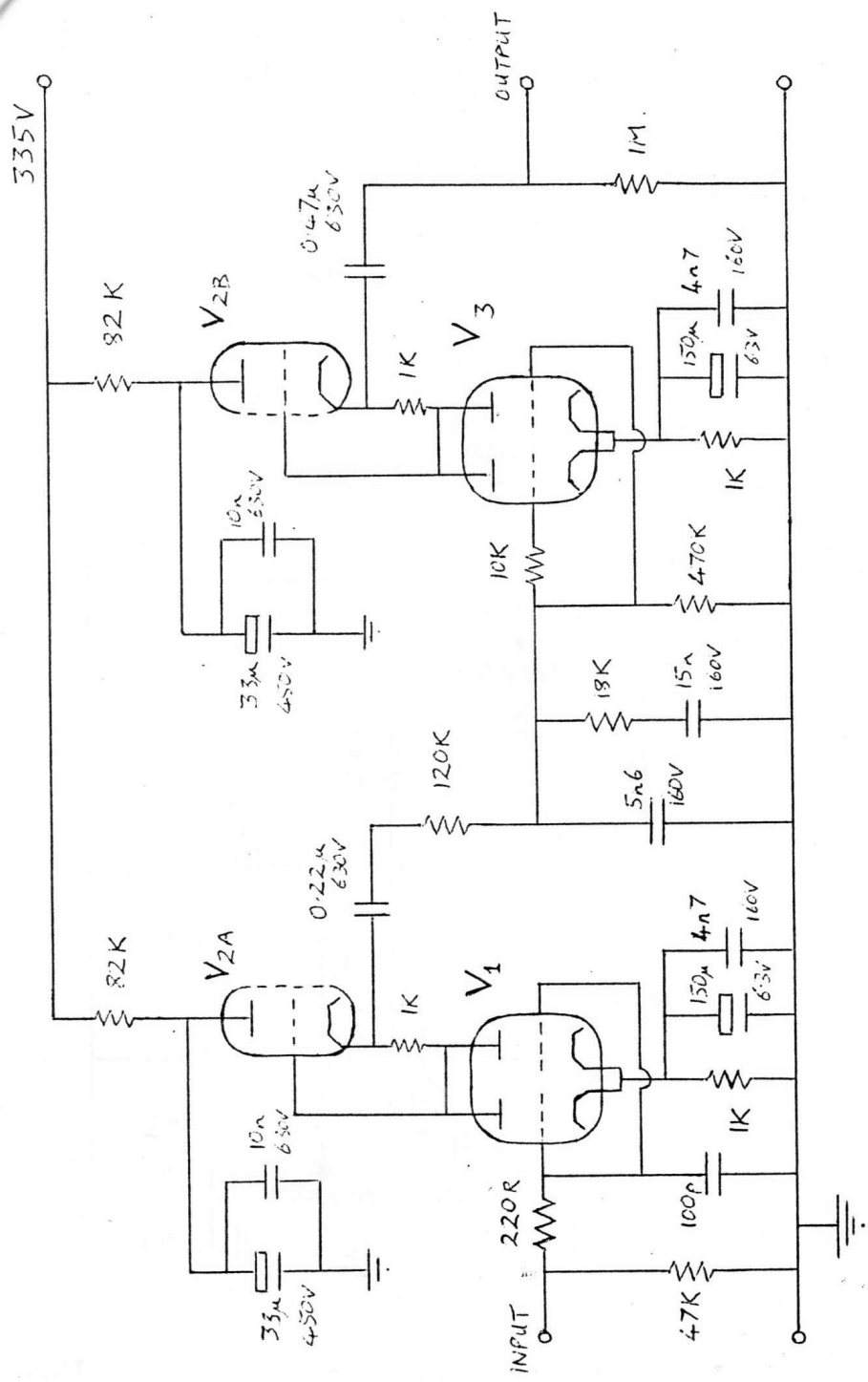
Check the signal levels against the table and trace the signal to and from each stage to find the break.

3. Whistling noise from one channel, phono selected.

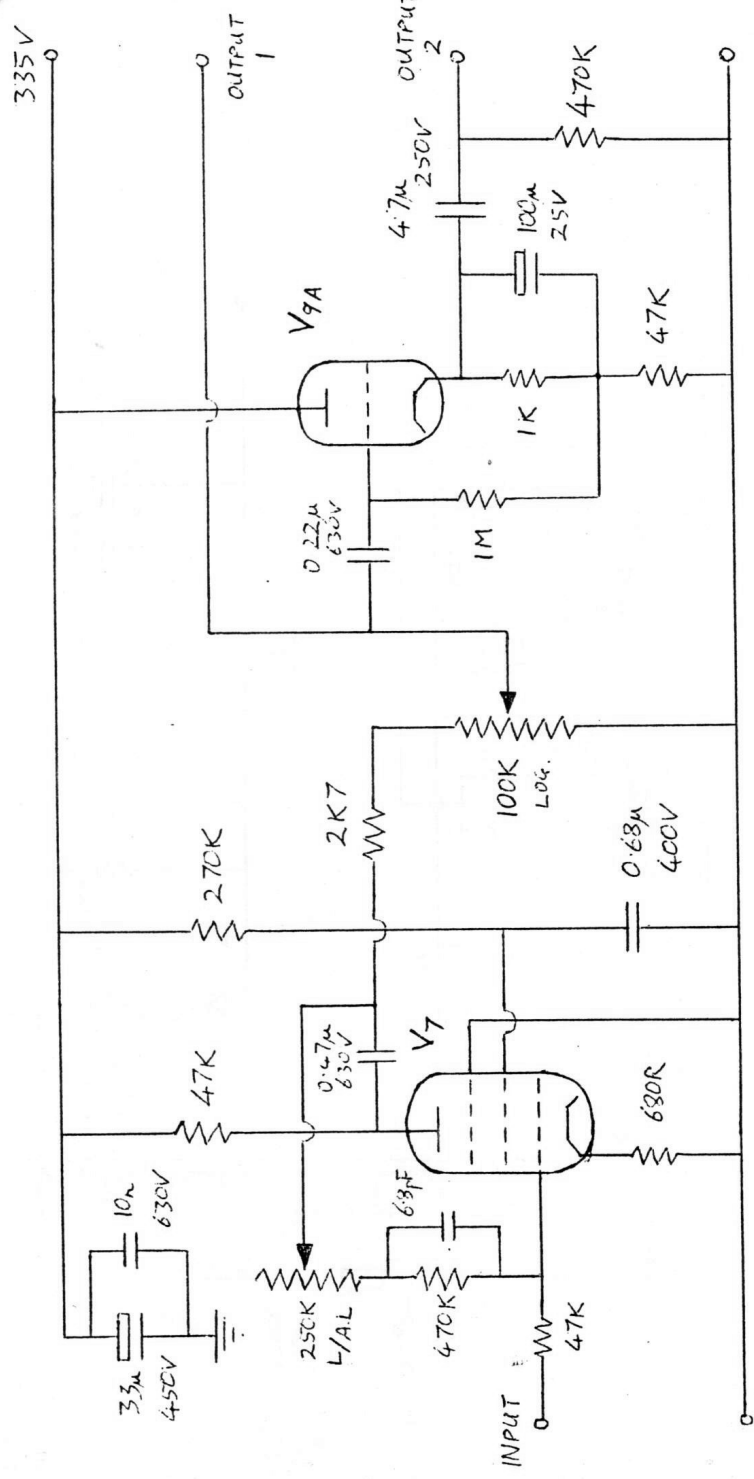
If on the left channel, replace V5.
If on the right channel, replace V2.

WARNING: This equipment operates at high voltages, so take care to avoid electric shocks. The power supply capacitors are large and take several minutes to discharge. Test equipment may be damaged unless suitable precautions are taken during measurement.

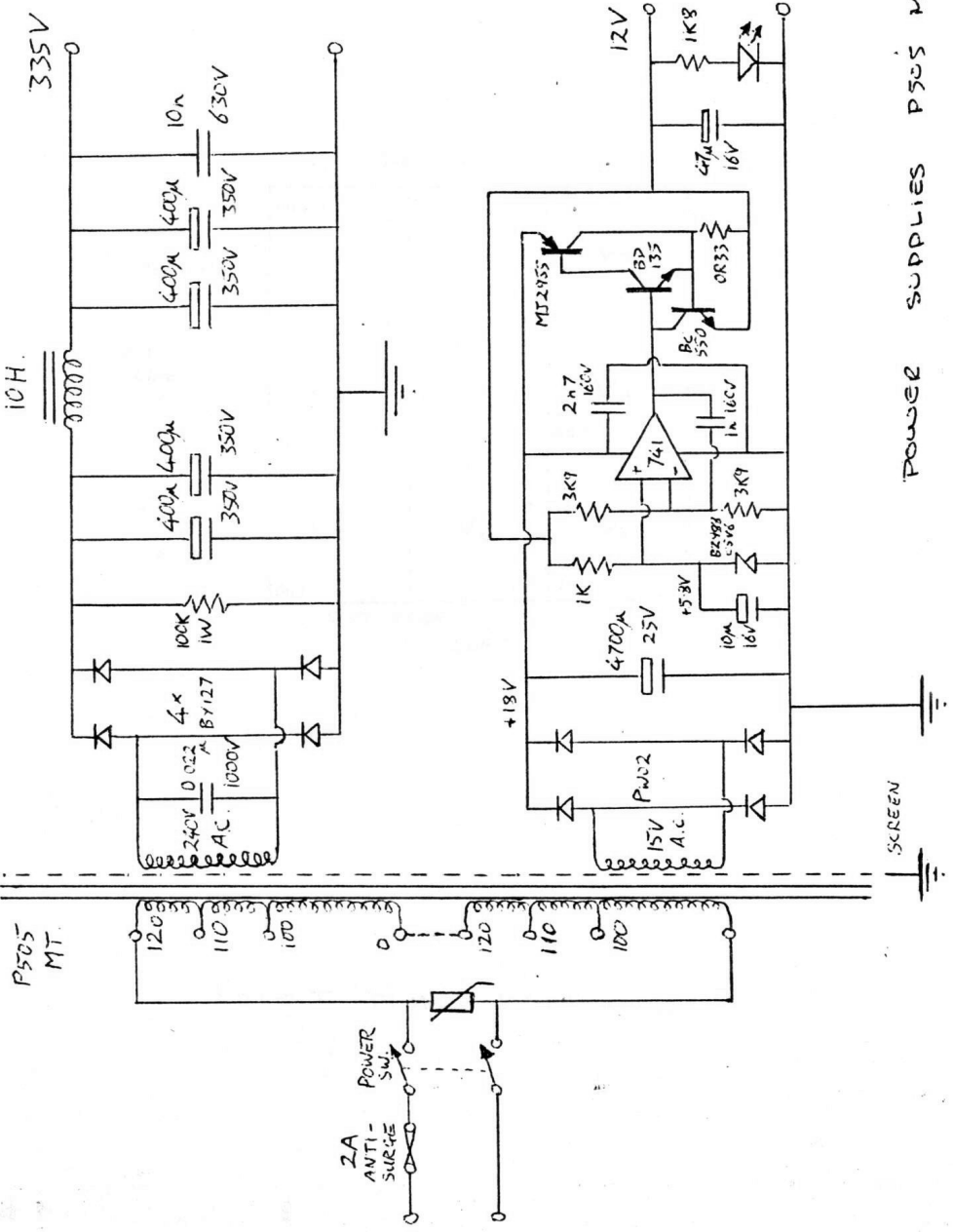
BEARD P505 Mk II PREAMPLIFIER R.I.A. STAGE



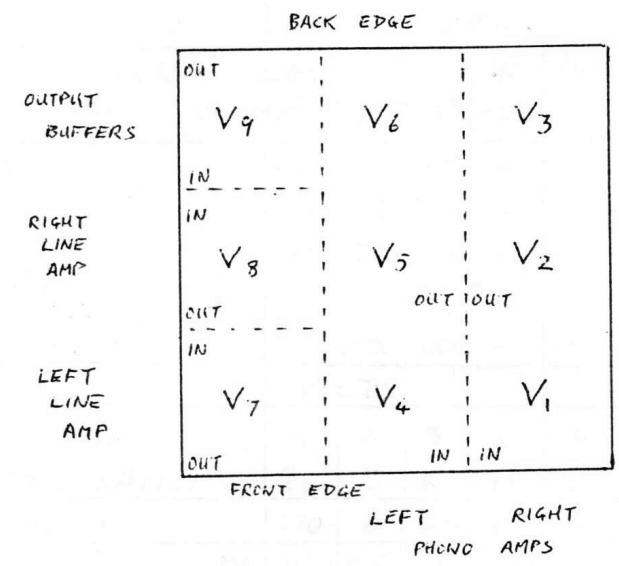
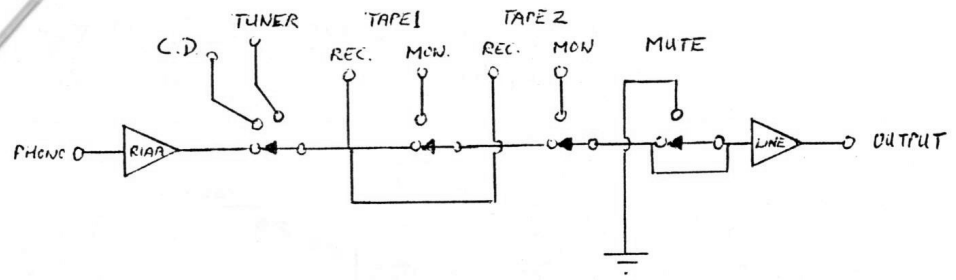
BEARD P 505 Mk II PREAMPLIFIER LINE STAGE



ALL RESISTORS 0.4W METAL



POWER SUPPLIES P505 MK II.



LAYOUT PLAN P505 MKII.

ARD PSD'S PREAMPLIFIER TEST TABLE.

6.

OPERATING VOLTAGES

AT H.T. LEVEL 335V

PIN		1	2	3	4	5	6	7	8	9	
DESIGNATION		A	G	K	H	H	A'	G'	K'	H _{CT}	
V ₁ AND V ₄	ECC 83	165	0	1.2	0.0R12	12.0R0	165	0	1.2	6	VDC
V ₂ AND V ₅		250	165	165	0.0R12	12.0R0	250	165	165	6	
V ₃ AND V ₆	ECC 83	165	0	1.2	0.0R12	12.0R0	165	0	1.2	6	
V ₉	ECC 82	335	-	200	0.0R12	12.0R0	335	-	200	6	

TYPICAL SIGNAL LEVELS IN MILLIVOLTS
AT MAX. VOLUME, 0.35mV 1KHz INJECTED.

V ₁ AND V ₄	20	0.35	0.2	-	-	20	0.35	0.2	-	mV
V ₂	0	125	125	-	-	0	20	20	-	
V ₅	0	20	20	-	-	0	125	125	-	
V ₃ AND V ₆	125	8	0.25	-	-	125	8	0.25	-	
V ₉	0	1000	1000	-	-	0	1000	1000	-	

D.C. VOLTS

PIN	1	2	3	4	5	6	7	8	9	
DESIGNATION	G ₂	S	K	H	H	A	S	G ₃	G ₁	
V ₇ AND V ₈	170	0	25	6	0.0R12	175	0	0	0	VDC
V ₇ AND V ₈	5	0	28	-	-	1100	0	0	45	mV

VALVE BASE TOP VIEW

