

NOTES:

1. NOMINAL VALUE - EXACT VALUE SELECTED TO LIMIT PLATE CURRENT OF A1V1 TO 35MA.
2. TERMINALS 5 AND 6 USED AS TIE POINTS ONLY - NO INTERNAL CONNECTION.
3. Y=YELLOW DOTS; R=RED DOT

Figure 1. G166D to G166E Rework Schematic  
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G166D RECEIVER BLOCK DIAGRAM

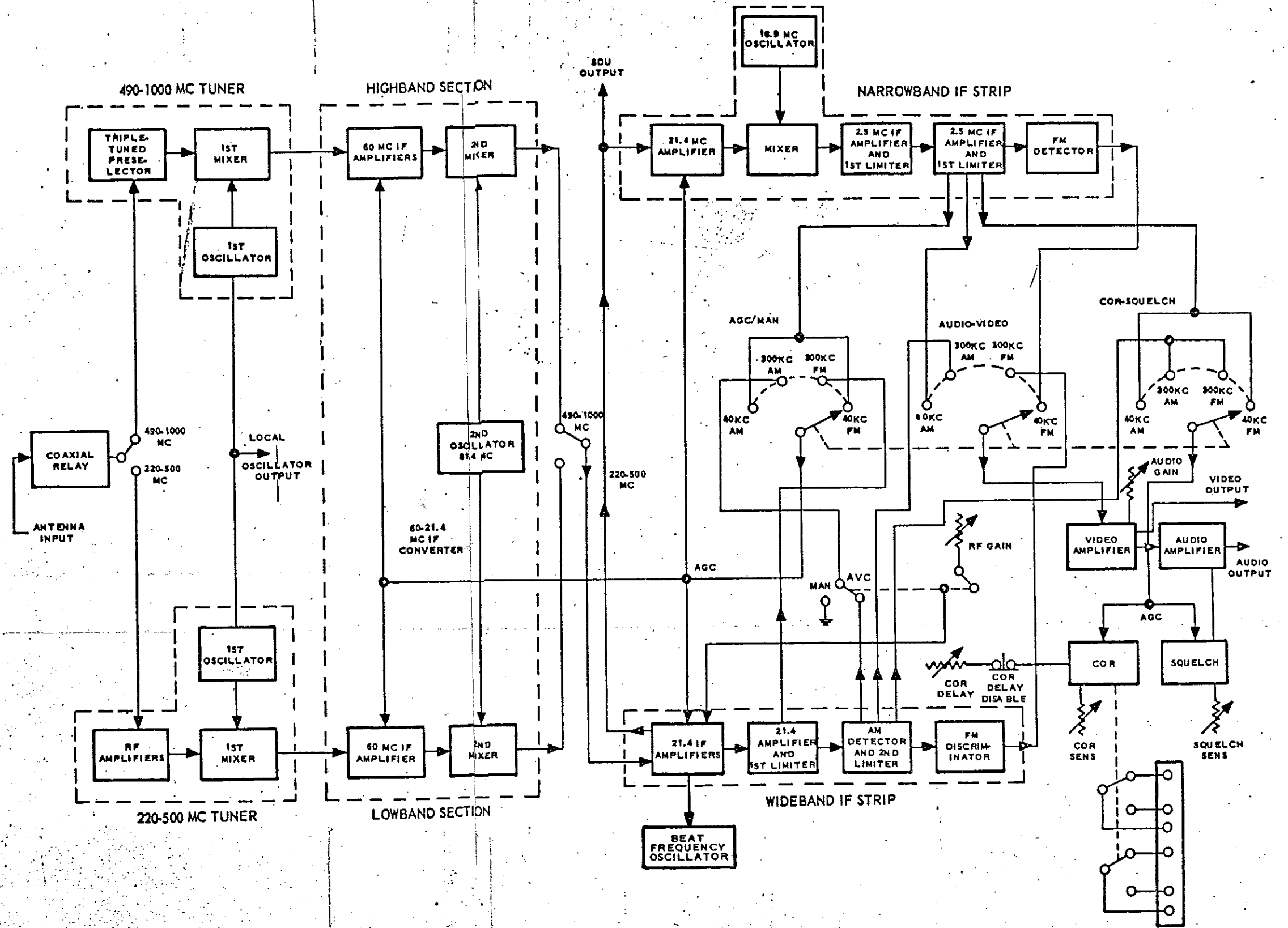


Figure 4-1  
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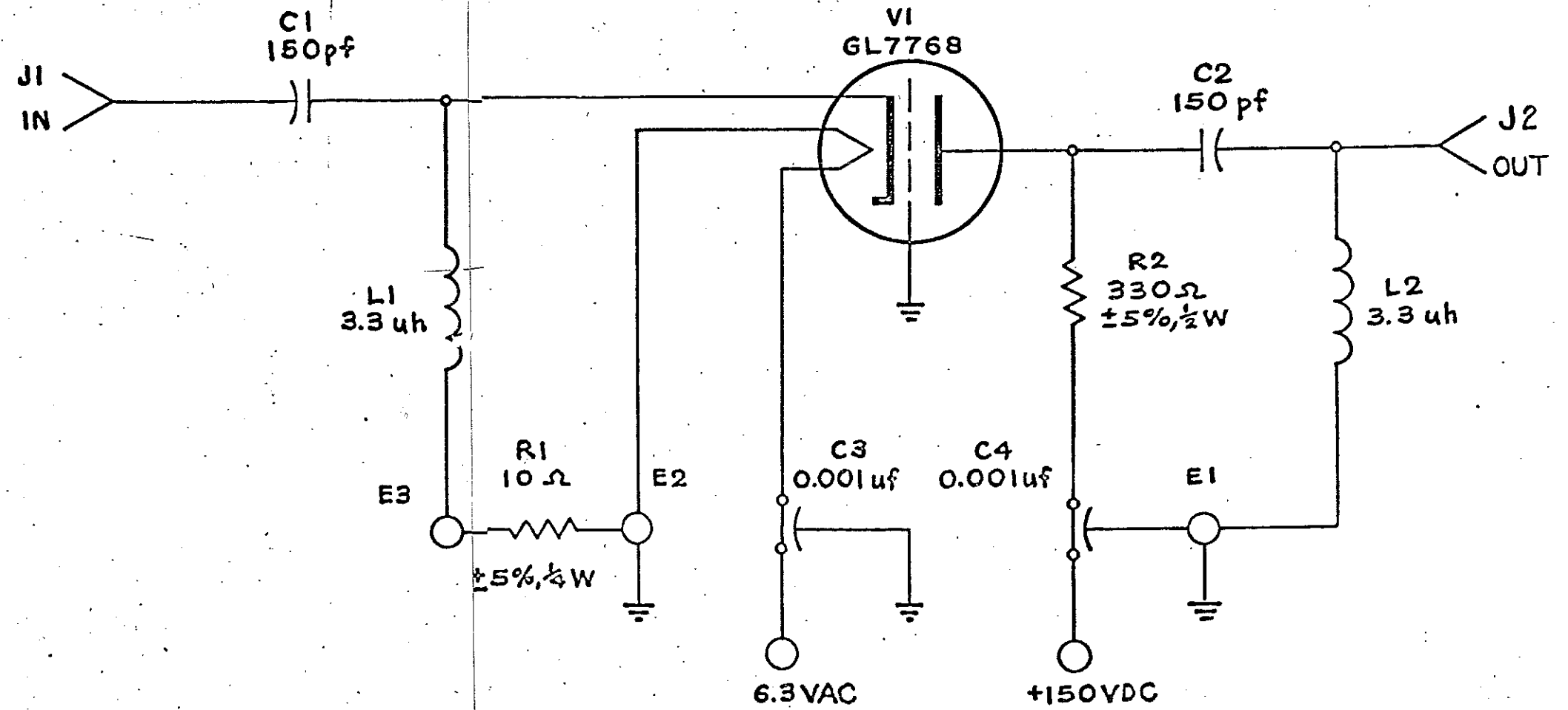


Figure 2. G166E10000-1 Isolation Amplifier Schematic  
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## TUBE SOCKET VOLTAGES

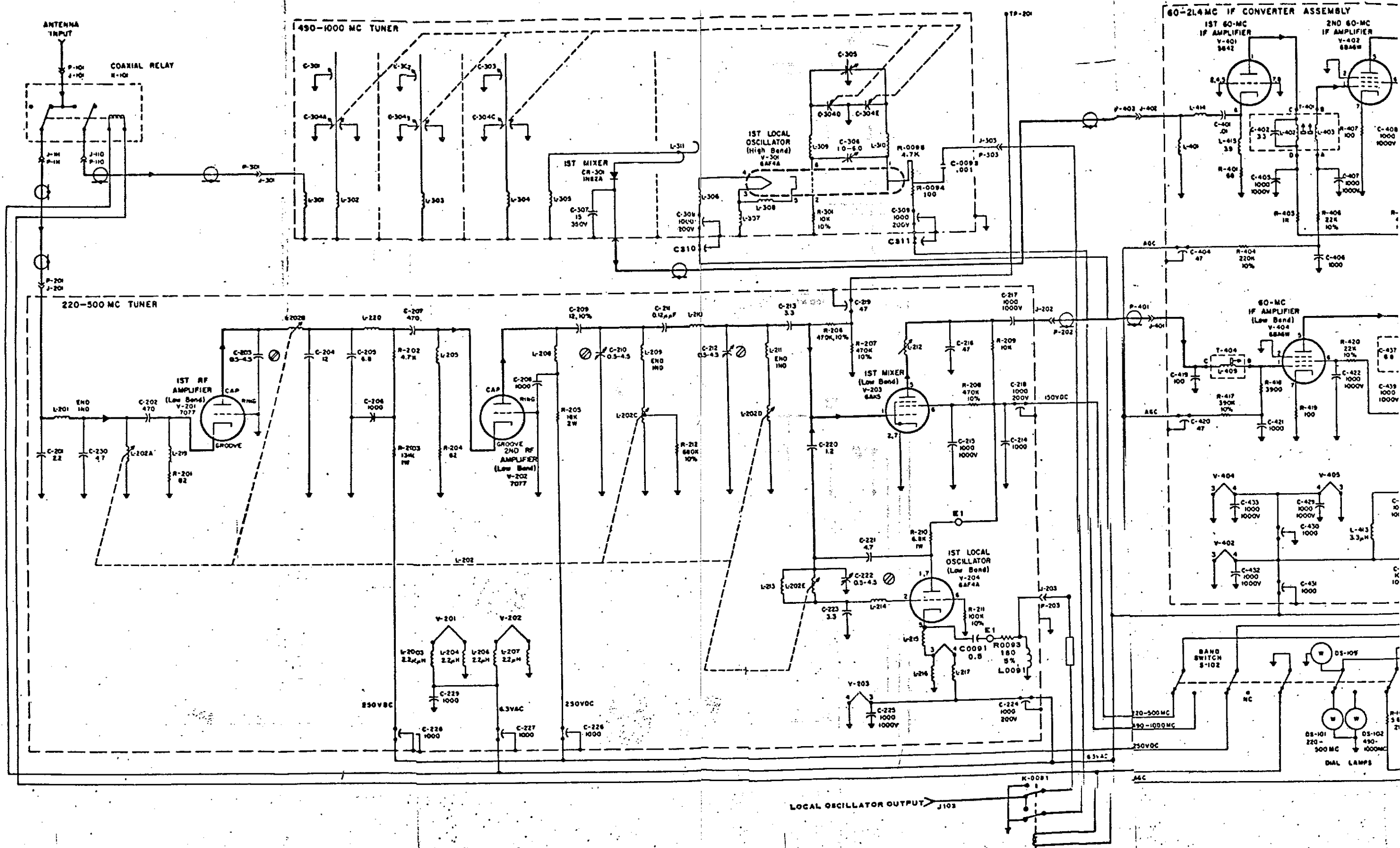
TUBE		NOTES	PINS												
SCHEMATIC DESIGNATION	TYPE NUMBER		1	2	3	4	5	6	7	10	12	PLATE	GROOVE	RING	HEATER PIN
V101	12AU7A		70	6.5	8.1	0	0	168	-4.	-	-	-	-	-	-
V102	12AU7A		280	155	175	0	0	280	155	-	-	-	-	-	-
V103	12AU7A		62	-4.3	0	0	0	225	61	-	-	-	-	-	-
V104	12AU7A		105	0	5.8	0	0	275	0	-	-	-	-	-	-
V105	12AU7A		275	160	170	0	0	200	160	-	-	-	-	-	-
V201	7077	1	-	-	-	-	-	-	-	-	-	145	0.6	0	6.1 ac
V202	7077	1	-	-	-	-	-	-	-	-	-	130	0.6	0	6.1 ac
V203	6AK5	1	-4.2	0	6.3 ac	0	140	36	0	-	-	-	-	-	-
V204	6AF4A	1	86	-8	0	6.3 ac	0	-8	86	-	-	-	-	-	-
V301	6AF4A	2	-	-	-	-	-	-	-	-	-	-	-	-	-
V401	5842	3	155	0	0	0	0	1.4	0	-	-	-	-	-	-
V402	6BA6W	3	1.9	0	0	6.3 ac	160	90	0.	-	-	-	-	-	-
V403	6V8	3	115	-2.7	5.8	6.3 ac	0	150	0	-	-	-	-	-	-
V404	6BA6W	1	-1.9	0	0	6.3 ac	175	120	0.	-	-	-	-	-	-
V405	6AK5	1	-1.75	0	0	6.3 ac	150	57	0	-	-	-	-	-	-
V501	6DC6	4	0.28	1.5	6.3 ac	0	270	88	0	-	-	-	-	-	-
V502	6DC6	4	0.28	1.1	6.3 ac	0	270	74	0	-	-	-	-	-	-
V503	6CB6	4	-0.57	0.07	6.3 ac	0	145	34	0	-	-	-	-	-	-
V503		5	-0.38	0.28	6.3 ac	0	140	58	0	-	-	-	-	-	-
V504	6AK5	4	-14	0	6.3 ac	0	33	80	0	-	-	-	-	-	-
V504		5	-32	0	6.3 ac	0	36	82	0	-	-	-	-	-	-
V505	6AL5	4	-0.42	0.7	5.0 ac	0	0	N.C.	-8.	-	-	-	-	-	-
V601	6CW4	6	-	6.8	-	-0.3	-	-	0	6.3 ac	-	-	-	-	-
V602	6CW4	6	-	125	-	64	-	-	0	6.3 ac	-	-	-	-	-
V603	7587	6.8	-	10	-	-6	-	-	0	6.3 ac	125	-	-	-	-
V604	6CW4	6.8	-	55	-	-7	-	-	0	6.3 ac	-	-	-	-	-
V605	7587	6	-	22	-	-0.3	-	-	0	6.3 ac	145	-	-	-	-
V605		7	-	10	-	-0.3	-	-	0	6.3 ac	148	-	-	-	-
V606	7587	6	-	15	-	-0.3	-	-	6.3 ac	0	22	-	-	-	-

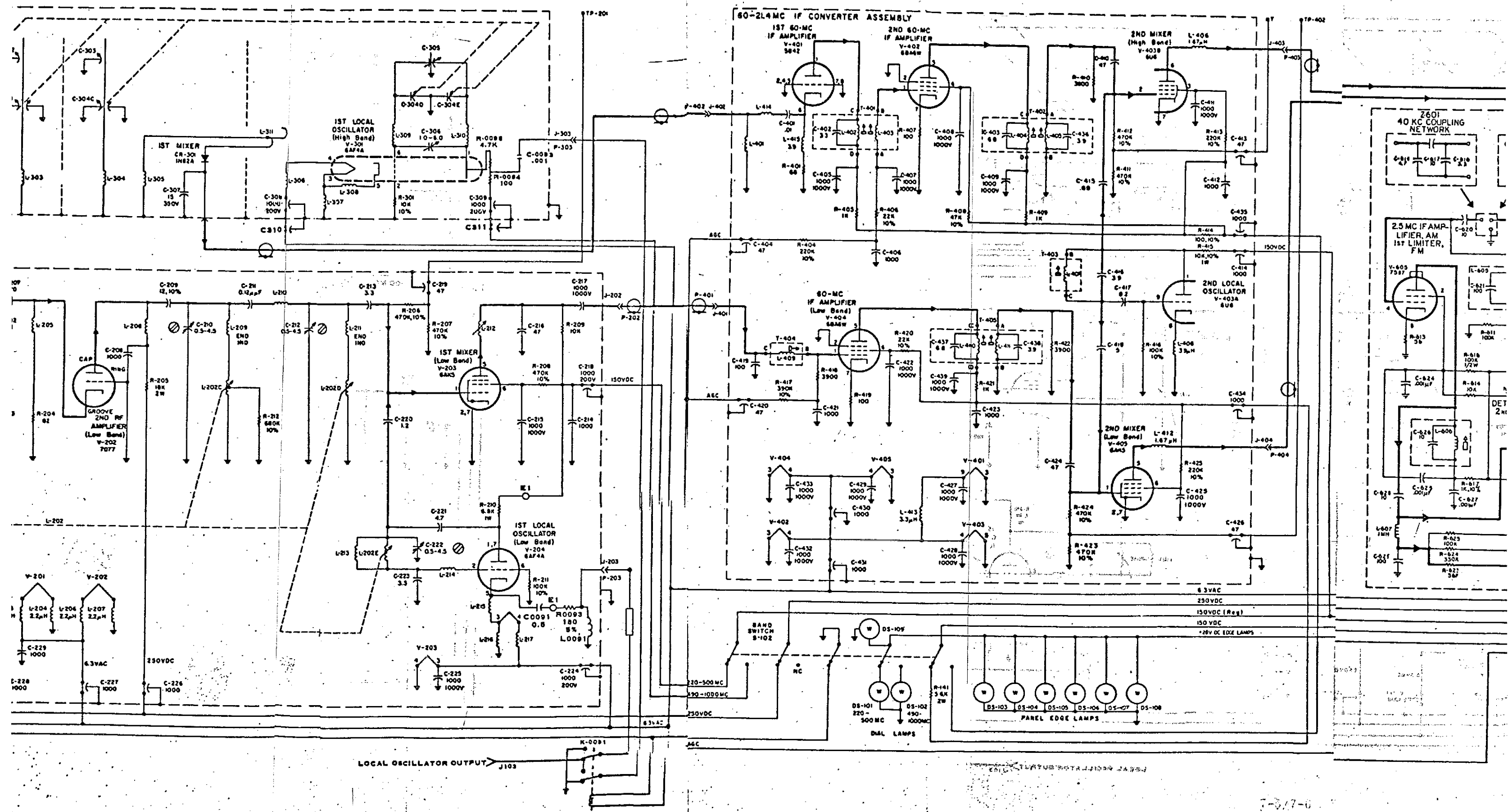
## NOTES:

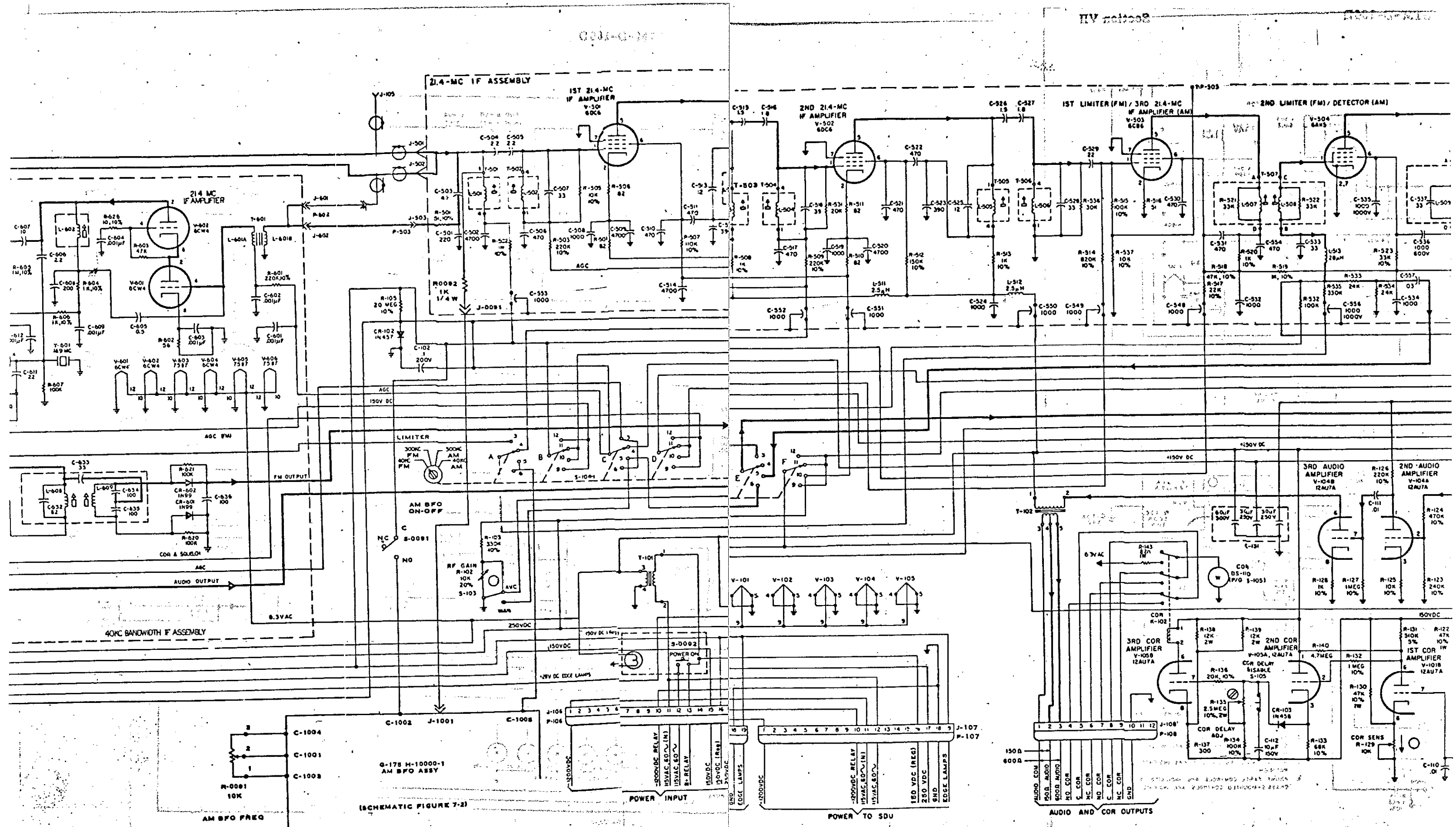
1. Band switch to 220-500 mc
2. Sealed unit. Tube socket pins inaccessible
3. Band switch to 490-1000 mc
4. Mode-Bandwidth Selector to 300 KC FM
5. Mode-Bandwidth Selector to 300 KC AM
6. Mode-Bandwidth Selector to 40 KC AM
7. Mode-Bandwidth Selector to 40 KC FM
8. Use one megohm resistor in series with probe for pin 4 measurement
9. High B+ during these measurements was 280VDC. This value varies input power voltage and G227 load

When using this chart set all variable controls clockwise, and AVC-MAN switch to MAN set as Noted.

Figure 5-14



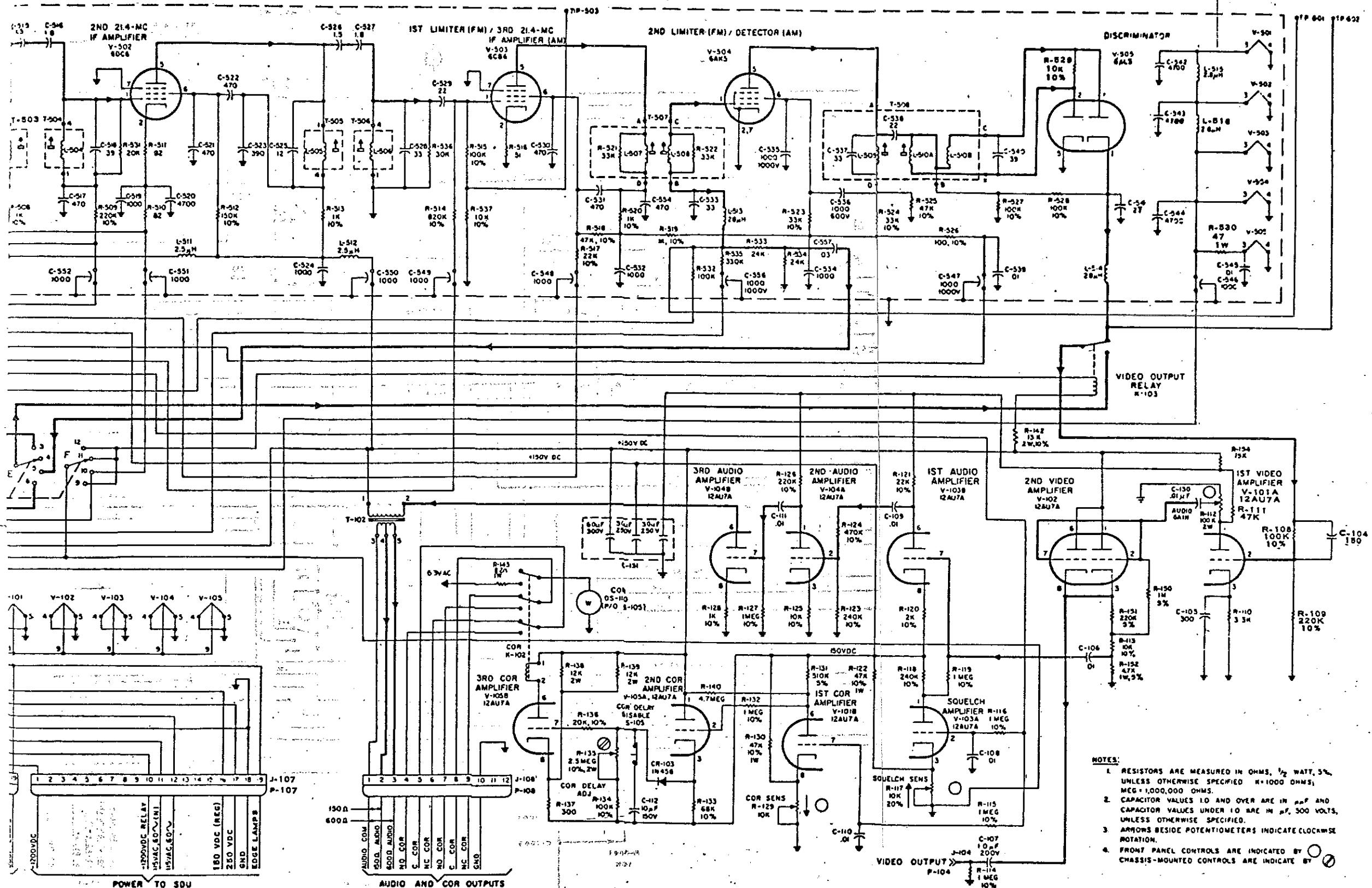




(S to S leads) shown as Figure 7-1. G

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YMO 320 JA1217



NOTES:  
 1. RESISTORS ARE MEASURED IN OHMS, 1/2 WATT, 5%, UNLESS OTHERWISE SPECIFIED R=1000 OHMS, MEG=1,000,000 OHMS.  
 2. CAPACITOR VALUES 10 AND OVER ARE IN  $\mu$ F AND CAPACITOR VALUES UNDER 10 ARE IN  $\mu$ F, 500 VOLTS, UNLESS OTHERWISE SPECIFIED.  
 3. ARROWS BESIDE POTENTIOMETERS INDICATE COUNTERCLOCKWISE ROTATION.  
 4. FRONT PANEL CONTROLS ARE INDICATED BY CHASSIS-MOUNTED CONTROLS ARE INDICATED BY

Figure 7-1. G166D UHF Receiver Schematic (Sheet 2 of 2)  
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