

第13図 アマチュア局申請用ブロックダイアグラム

C-CAPACITOR				
240, 2125	DIPPED MICA 500WV 1PF ±0.5PF	31, 37, 38, 40, 41, 43, 44, 49, 50, 52, 55, 56, 57, 58, 59, 60, 69, 70, 72, 77, 83, 108, 202, 203, 206, 208, 213, 214, 218, 221, 222, 225, 228, 229, 231, 235, 238, 242, 244, 245, 247, 248, 249, 252, 253, 256, 259, 261, 262, 264, 265, 274, 275, 276, 284, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 2103, 2104, 2105,	500WV 0.01μF	±100% 0%
282	DIPPED MICA 500WV 2PF ±0.5PF			
12	DIPPED MICA 500WV 3PF ±0.5PF			
81, 93, 2109, 705, 1004	DIPPED MICA 500WV 5PF ±0.5PF			
11, 89, 98, 101, 110, 281	DIPPED MICA 500WV 10PF ±10%			2117, 2118, 2126, 403, 414, 513, 1202, 1203, 1204, 1205, 1206, 1208, 1209, 1210
74, 212, 246, 277, 2116, 902	DIPPED MICA 500WV 15PF ±10%			
75, 82, 243, 1002	DIPPED MICA 500WV 20PF ±10%	501, 502, 503, 504, 509, 510, 511, 512	CERAMIC DISC (AL) 1.4KVDC 0.0047μF	±100% 0%
33, 279, 1003, 1102	DIPPED MICA 500WV 30PF ±10%	63, 64, 107	CERAMIC DISC (AL) 1.4KVDC 0.01μF	±100% 0%
34, 278	DIPPED MICA 500WV 40PF ±10%	415	CERAMIC (TC) NPO 500WV 8PF	±0.5PF
13, 88, 96, 2108, 304, 305, 308, 311, 313, 802, 805, 904	DIPPED MICA 500WV 50PF ±10%	404	CERAMIC (TC) NPO 500WV 10PF	±10%
703, 903	DIPPED MICA 500WV 60PF ±10%	416	CERAMIC (TC) NPO 500WV 20PF	±10%
224, 226, 230, 232, 241, 804, 901	DIPPED MICA 500WV 70PF ±10%	419	CERAMIC (TC) NPO 500WV 82PF	±10%
302, 803, 1103	DIPPED MICA 500WV 80PF ±10%	420	CERAMIC (TC) N750 500WV 4PF	±0.5PF
3, 6, 217, 219, 233, 234, 239, 273, 2106, 408, 1005, 1104	DIPPED MICA 500WV 100PF ±10%	418	CERAMIC (TC) N750 500WV 10PF	±10%
2, 10, 215, 216, 2100, 2101, 2102, 801	DIPPED MICA 500WV 150PF ±10%	417	CERAMIC (TC) N750 500WV 20PF	±10%
30, 84, 87, 258, 410, 411	DIPPED MICA 500WV 200PF ±10%	111, 112	CERAMIC FEED THRU BYPASS 500WV 0.001μF	±100% 0%
35, 79, 236, 301, 310	DIPPED MICA 200WV 250PF ±10%	100	CERAMIC RDA-30 3KTV 80PF	±10%
29, 94	DIPPED MICA 500WV 300PF ±10%	99	CERAMIC RDA-40 3KTV 280PF	±10%
14, 91, 806	DIPPED MICA 500WV 470PF ±10%	61, 250	MYLAR FILM 50WV 0.047μF	±20%
401, 402	DIPPED MICA 500WV 650PF ±10%	263, 266, 267,	MYLAR FILM 50WV 0.1μF	±20%
4, 71, 205, 209, 220, 227, 251, 2115, 306, 307	DIPPED MICA 500WV 1000PF ±10%	280	MYLAR FILM 50WV 0.22μF	±20%
303, 405	DIPPED MICA 500WV 2000PF ±10%	237	MYLAR FILM 50WV 0.47μF	±20%
109	MICA CML1 1000WV 10PF ±10%	36	PAPER 600WV 0.047μF	±20%
32	MICA CML1 1000WV 50PF ±10%	103	METALIZED PAPER 160WV 0.47μF	±20%
25	MICA CML1 1000WV 100PF ±10%	2107, 2114	ELECTROLYTIC 16WV 1μF	+80% -20%
47	MICA CM35 1500WV 300PF ±10%	255, 257, 260, 268	ELECTROLYTIC 16WV 10μF	+80% -20%
48	MICA CM35 1500WV 500PF ±10%	299	ELECTROLYTIC 16WV 470μF	+80% -20%
86	MICA CM35 1500WV 1000PF ±10%	514	ELECTROLYTIC 16WV 1000μF	+80% -20%
46	MICA CMBS 3000WV 1000PF ±10%	298	ELECTROLYTIC 25WV 470μF	+80% -20%
45	MICA CMBS 3000WV 5000PF ±10%	106	ELECTROLYTIC 25WV 1000μF	+80% -20%
2113	CERAMIC DISC 50WV 0.0022μF	270	ELECTROLYTIC 50WV 10μF	+80% -20%
309, 312, 406, 407, 409, 412, 413, 421, 701, 702, 704, 1201, 1211	CERAMIC DISC 50WV 0.01μF	2112	ELECTROLYTIC 160WV 1μF	+80% -20%
39, 42	CERAMIC DISC 50WV 0.047μF	272, 2110, 2111, 1207	ELECTROLYTIC 160WV 10μF	+80% -20%
85, 269, 283	CERAMIC DISC 500WV 0.0047μF	65, 66	ELECTROLYTIC 160WV 22μF	+80% -20%
7, 8, 15, 23, 24, 26, 27, 28,	CERAMIC DISC	73	ELECTROLYTIC 350WV 22μF	+80% -20%
		92, 95	ELECTROLYTIC	

	350WV 47 μ F	+80% -20%	508, 601, 602
603	ELECTROLYTIC		1, 29, 234, 267, 285, 2108 $\frac{1}{2}$ W 1M Ω \pm 10%
	400WV 3 \times 47 μ F	+80% -20%	225, 269, 271 $\frac{1}{2}$ W 2.2M Ω \pm 10%
601, 602	ELECTROLYTIC		2110 $\frac{1}{2}$ W 3.3M Ω \pm 10%
	500WV 100 μ F	+80% -20%	224 $\frac{1}{2}$ W 5.6M Ω \pm 10%
VC-VARIABLE CAPACITOR			23, 26 1W 56 Ω \pm 10%
1	PRESELECT	B565A118	275 1W 220 Ω \pm 10%
2	PLATE	YA-270P	2120 1W 3.3K Ω \pm 10%
3	LOADING	ECV-2HA43A44	513 $\frac{1}{2}$ W 4.7K Ω \pm 10%
401	V. F. O.	CS21A112	218 1W 5.6K Ω \pm 10%
TC-TRIMMER CAPACITOR			52, 53, 516 1W 22K Ω \pm 10%
1	AIR		18 2W 5.1K Ω \pm 10%
	TSN-170C-10P		35, 50 2W 33K Ω \pm 10%
203, 204, 205, 701, 702, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109	CERAMIC		16, 284 3W 47K Ω \pm 10%
	ECV-1ZW20P32		517 4W 5.6 Ω \pm 10%
			17 5W 4.7K Ω \pm 10%
			34 5W 22K Ω \pm 10%
206, 207, 208	CERAMIC		48 20W 1.5K Ω \pm 10%
	ECV-1ZW40P32		49 20W 4K Ω \pm 10%
301	CERAMIC		25 METER SHUNT
	DT-120-50P		
401	AIR		VR-VARIABLE RESISTOR
	TSN-150C-30P		1, 10 EVW-JOAS 15B51 B50 Ω
402	AIR (SPLIT STATOR)		2, 9 EVF-93QF 11653
	TSN-170C-10P \times 2		B500K Ω /C10K Ω DUAL SHAFT with DPDT SWICH
R-RESISTOR			3 EVR-NOAS50B13 B1K Ω
56	$\frac{1}{2}$ W	5.6 Ω \pm 10%	5 EVH-BOAS15B54 B50K Ω
57, 59, 704	$\frac{1}{2}$ W	10 Ω \pm 10%	6 EVR-NOAS50A55 A500K Ω
282	$\frac{1}{2}$ W	22 Ω \pm 10%	7, 8 EVH-BOAS15A55 A500K Ω
21, 24, 36, 39, 42, 44, 221	$\frac{1}{2}$ W	56 Ω \pm 10%	11 EVC-BOAS15B24 B20K Ω
3, 40, 41, 212, 216, 303, 310	$\frac{1}{2}$ W	100 Ω \pm 10%	12 EVC-BOAS15B36 B3M Ω
277	$\frac{1}{2}$ W	150 Ω \pm 10%	13 EVC-BOAS15B33 B3K Ω
15, 279, 411, 703	$\frac{1}{2}$ W	220 Ω \pm 10%	202 (TRIMMER) EVL-S3AA00B13 B1K Ω
410, 702	$\frac{1}{2}$ W	270 Ω \pm 10%	4, 14, 201 (TRIMMER) EVL-S3AA00B53 B5K Ω
203, 403, 406	$\frac{1}{2}$ W	330 Ω \pm 10%	301 (TRIMMER) EVL-S3AA00B14 B10K Ω
7, 294, 1202	$\frac{1}{2}$ W	470 Ω \pm 10%	204, 205 (TRIMMER) EVL-S3AA00B54 B50K Ω
293	$\frac{1}{2}$ W	560 Ω \pm 10%	203 (TRIMMER) EVL-S3AA00B55 B500K Ω
2119	$\frac{1}{2}$ W	680 Ω \pm 10%	TR-TRANSISTOR & FET
4, 6, 8, 11, 13, 20, 60, 201, 204, 207, 209, 214, 219, 229, 230, 235, 237, 244, 280, 289, 295, 2121, 404, 407, 412, 1201, 1206, 1207	$\frac{1}{2}$ W	1K Ω \pm 10%	202, 403 2SC372Y
19, 253, 262, 272, 297, 298, 2102	$\frac{1}{2}$ W	2.2K Ω \pm 10%	201 2SC504
258, 296	$\frac{1}{2}$ W	3.3K Ω \pm 10%	301, 302, 303, 304 2SC735Y
247, 260, 2113, 305, 307	$\frac{1}{2}$ W	4.7K Ω \pm 10%	402 FET 2SK19G
37	$\frac{1}{2}$ W	5.1K Ω \pm 10%	401 FET 3SK22G
286	$\frac{1}{2}$ W	5.6K Ω \pm 10%	701 FET MK-10-E or MK-10-F
408	$\frac{1}{2}$ W	8.2K Ω \pm 10%	D-DIODE
22, 47, 276, 283, 2105, 2107, 2112, 301, 308, 401, 514, 705, 1203, 1204	$\frac{1}{2}$ W	10K Ω \pm 10%	401, 701 VARACTOR 1S145
213	$\frac{1}{2}$ W	15K Ω \pm 10%	215 ZENER 1S331
211, 217, 2122, 2123, 409	$\frac{1}{2}$ W	22K Ω \pm 10%	217 ZENER 1S334
306	$\frac{1}{2}$ W	27K Ω \pm 10%	216 ZENER 1S336
55, 304	$\frac{1}{2}$ W	33K Ω \pm 10%	1, 204, 205, 206, 212, 1201, 1202, 1203 1S1007
5, 14, 45, 236, 238, 240, 241, 243, 245, 246, 248, 249, 250, 259, 268, 278, 291, 292, 2104	$\frac{1}{2}$ W	47K Ω \pm 10%	2, 3, 202, 203, 207, 208, 209, 210, 213, 218 1S1941
12, 54, 202, 205, 208, 210, 215, 220, 228, 233, 239, 252, 256, 261, 266, 287, 288, 290, 2106, 302, 309, 402, 405, 515, 701,	$\frac{1}{2}$ W	100K Ω \pm 10%	211, 513, 514, 515 1S1943
242	$\frac{1}{2}$ W	150K Ω \pm 10%	509, 510, 511, 512 1S1944
257, 264, 270, 273	$\frac{1}{2}$ W	220K Ω \pm 10%	501, 502, 503, 504, 505, 506, 507, 508, 10D10
2, 226, 254, 263, 265, 274, 299, 2100, 2101, 2103, 2109, 501, 502, 503, 504, 505, 506, 507,	$\frac{1}{2}$ W	470K Ω \pm 10%	V-VACUUM TUBE
			3 6AH6
			2, 205, 211 6BA6
			203 6BE6
			210 6BM8
			1, 204 6BZ6
			201, 202 6CB6
			4 6GK6
			5, 6 6KD6
			212 6U8
			209 12AT7
			206, 213 12AU7
			208 12AX7
			207 7360
			7 VR105MT

L-INDUCTOR		4	JPL-259 (COAXIAL)
1, 2, 7, 403	MICRO-INDUCTOR 250 μ H	5	PA-602B (11P MALE)
		RL-RELAY	
402	R. F. CHOKE COIL TV-245 250 μ H	2, 201	RAB- 100D-11
		PL-PILOT LAMP	
6	R. F. CHOKE COIL 200 μ H	1, 2	8V 0.15AMP.
24	R. F. CHOKE COIL 300 μ H	PLH-PILOT LAMP HOLDER	
14	R. F. CHOKE COIL 500 μ H	1, 2	S-3512
215	R. F. CHOKE COIL 2MH	F-FUSE	
301, 302	R. F. CHOKE COIL 4MH	1	10AMP. for 117V 6AMP. for 220V
T-TRANSFORMER		FH-FUSE HOLDER	
1	OUTPUT TRANSFORMER	1	S-N1001
2	POWER TRANSFORMER		
CH-A. F. CHOKE COIL		M-METER	
201	1H 20MA	1	MK-45 1mA
1	2.5H 150MA	XS-CRYSTAL SOCKET	
VS-VACUUM TUBE SOCKET		1, 2, 3	TYPE HC-25/U
1, 2, 3	TS102 C01	201, 202, 301, 701, 702	TYPE HC-6/U
4	TS103 C01	X-CRYSTAL	
7	TS102 C04	1	80m BAND LOCAL OSC. HC-18/U 9.52MHz
5, 6	S-B0703-2	2	40m " " " " 13.02 "
201, 202, 203, 204, 205	S-B0933-2	3	20m " " " " 20.02 "
211		4	15m " " " " 27.02 "
206, 207, 208, 213	S-B1330-2	5	10mA " " " " 34.02 "
209, 210, 212	S-B1307-2	6	10mB " " " " 34.52 "
S-SWITCH		7	10mC " " " " 35.02 "
1	BAND SELECTOR RS13-13-11	8	10mD " " " " 35.52 "
2	AGC RS1-1-3	201 LSB CARRIER OSC. HC-6/U 3181.5KHz	
3	CLARIFIER RS1-2-3	202 USB " " " " 3178.5 "	
4	MODE RS4-8-5	301 CALIBRATOR OSC. HC-13/U 100KHz	
5	FUNCTION RS1-4-7	XF-CRYSTAL FILTER	
6	SELECT RS2-4-6	201	XF-3A 2.4KHz
7	METER RS1-1-3	202	(OPTION) XF-3C 600Hz
J-JACK & RECEPTACLE		PB-PRINTED CIRCUIT BOARD	
2, 7, 9, 10, 11	CN-7017	PB1001-2	GENERATOR
3, 6	S-G7615 (2P)	PB1002	CALIBRATOR
1	S-G7701 (3P)	PB1004-2	POWER SUPPLY
4	J50-239 (COAXIAL)	PB1007	$\times 3$ COIL ASS'Y
5	SA-602B (11P FEMALE)	PB1022A	TRIMMER CAP. ASS'Y
P-PLUG		PB1038	DIODE SWICH.
2, 7, 9, 10, 11	CN-7017	PB1056	V. F. O.
3, 6	S-H3001 (2P)	PB1058	B. P. F.
1	S-H3601 (3P)	PB1059	B. P. F.

V208 12AX7
MIC AMP

V209a 12AT7
VOX AMP

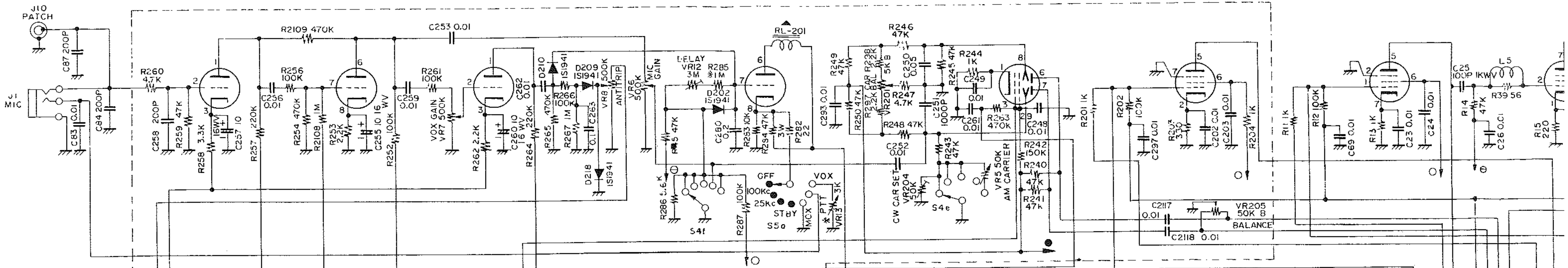
V209b 12AT7
RELAY CONTROL

V207 7360
B M

V201 6CB6
TRANS 1ST MIX

V3 6AH6
TRANS 2ND MIX

V4
DRI



TR202
2SC372Y

V212 6U8
TONE OSC

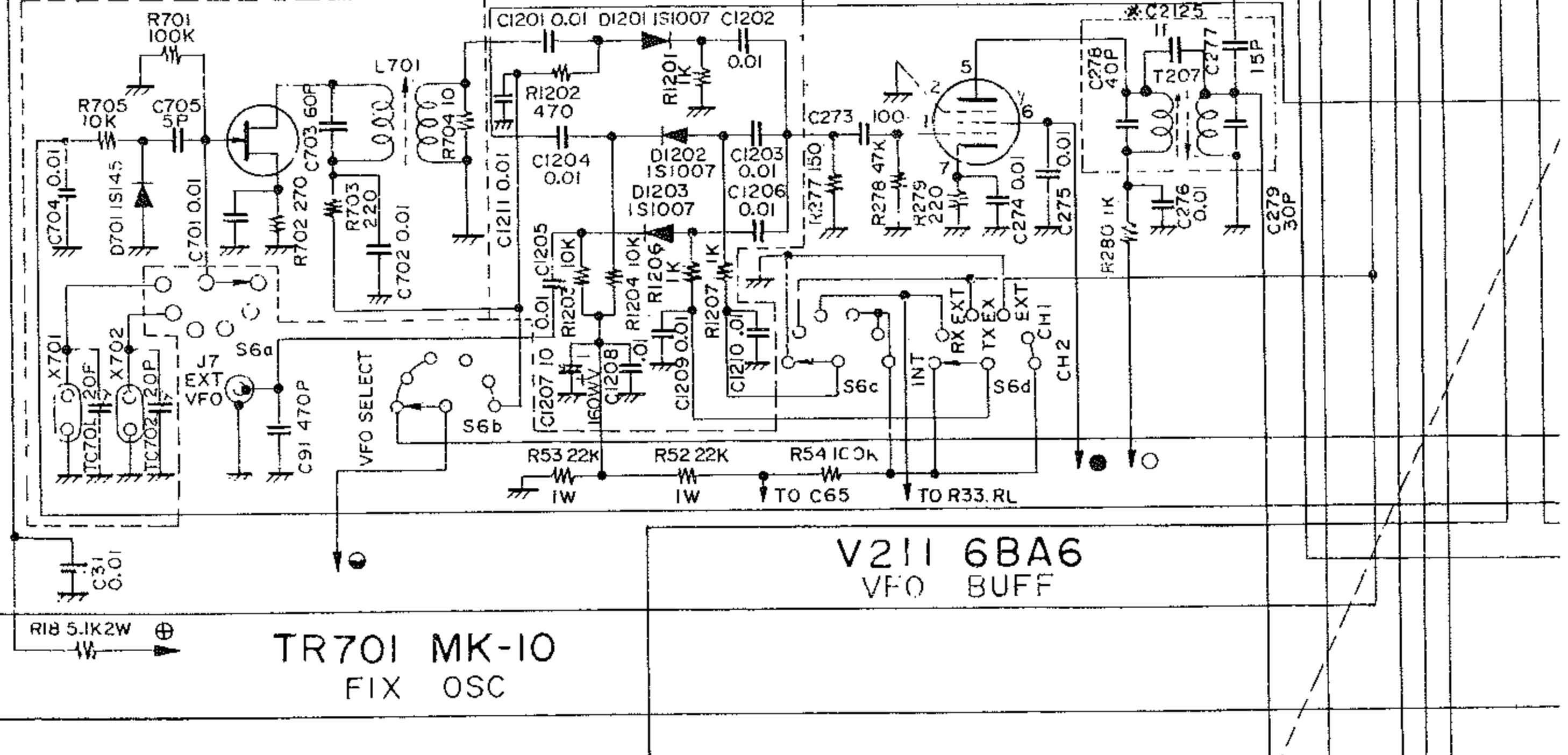
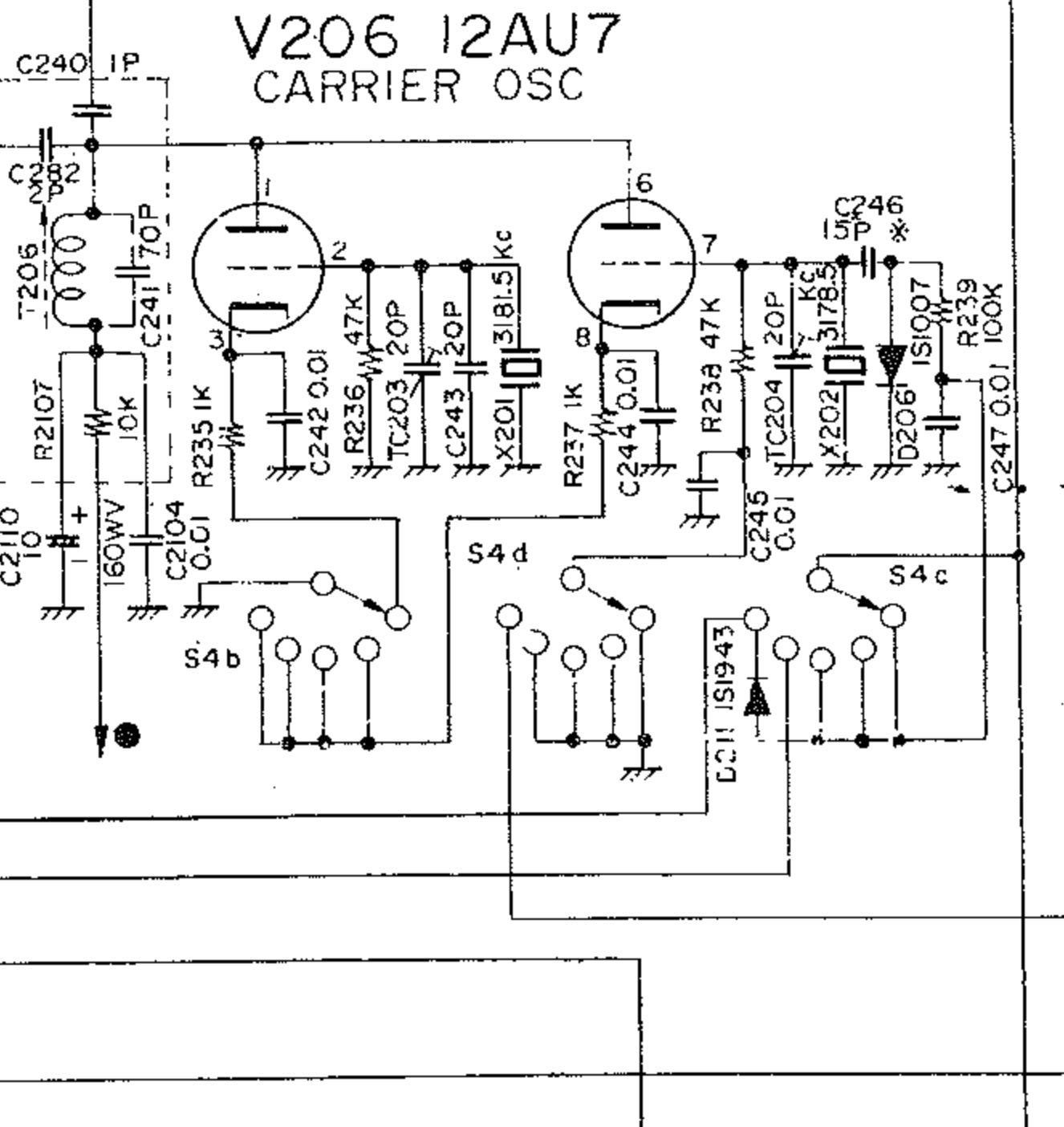
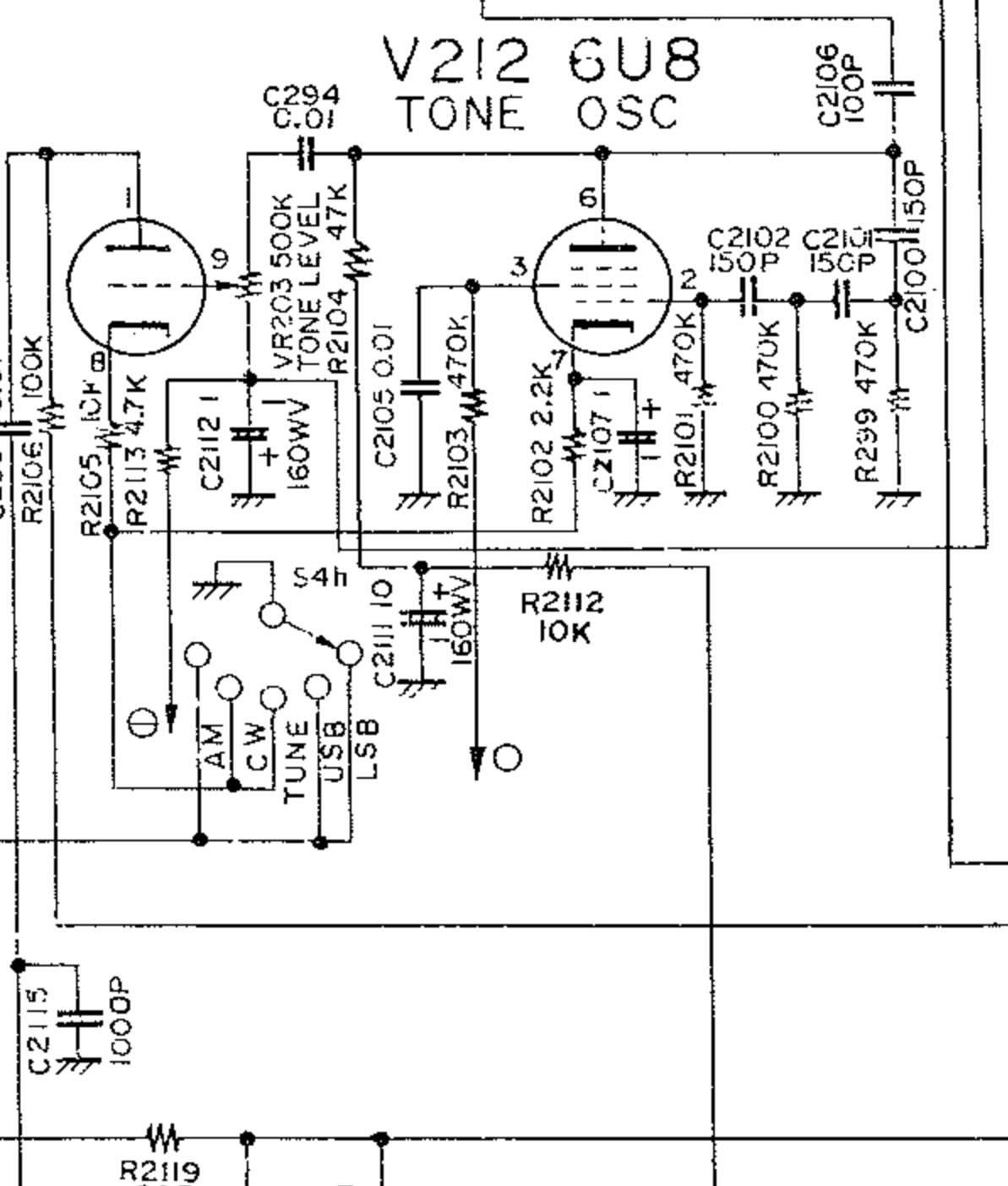
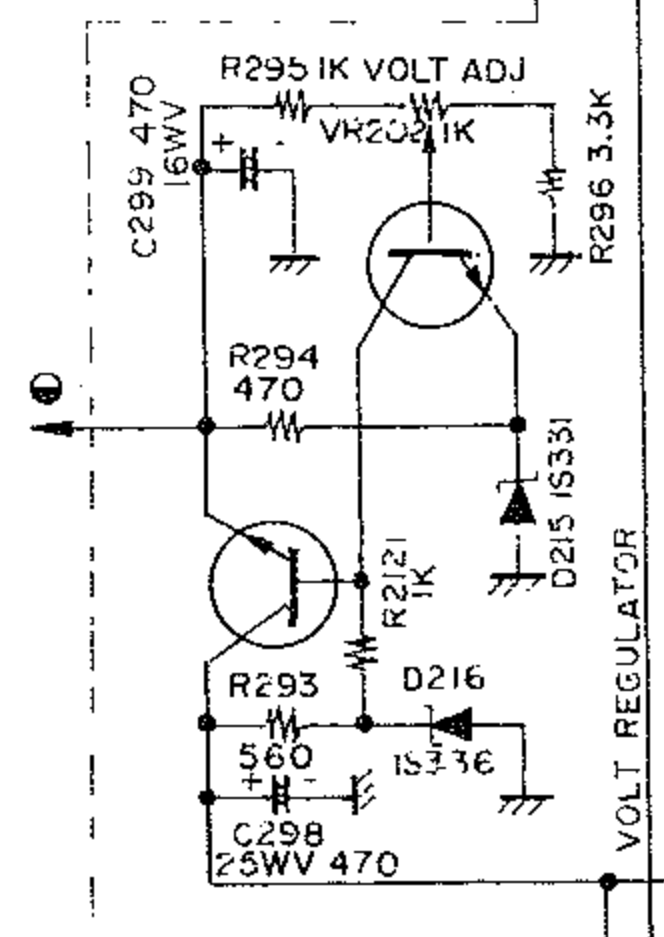
V206 12AU7
CARRIER OSC

PB-1060

PB-1038

V211 6BA6
VFO BUFF

TR701 MK-10
FIX OSC



TR201
2SC504

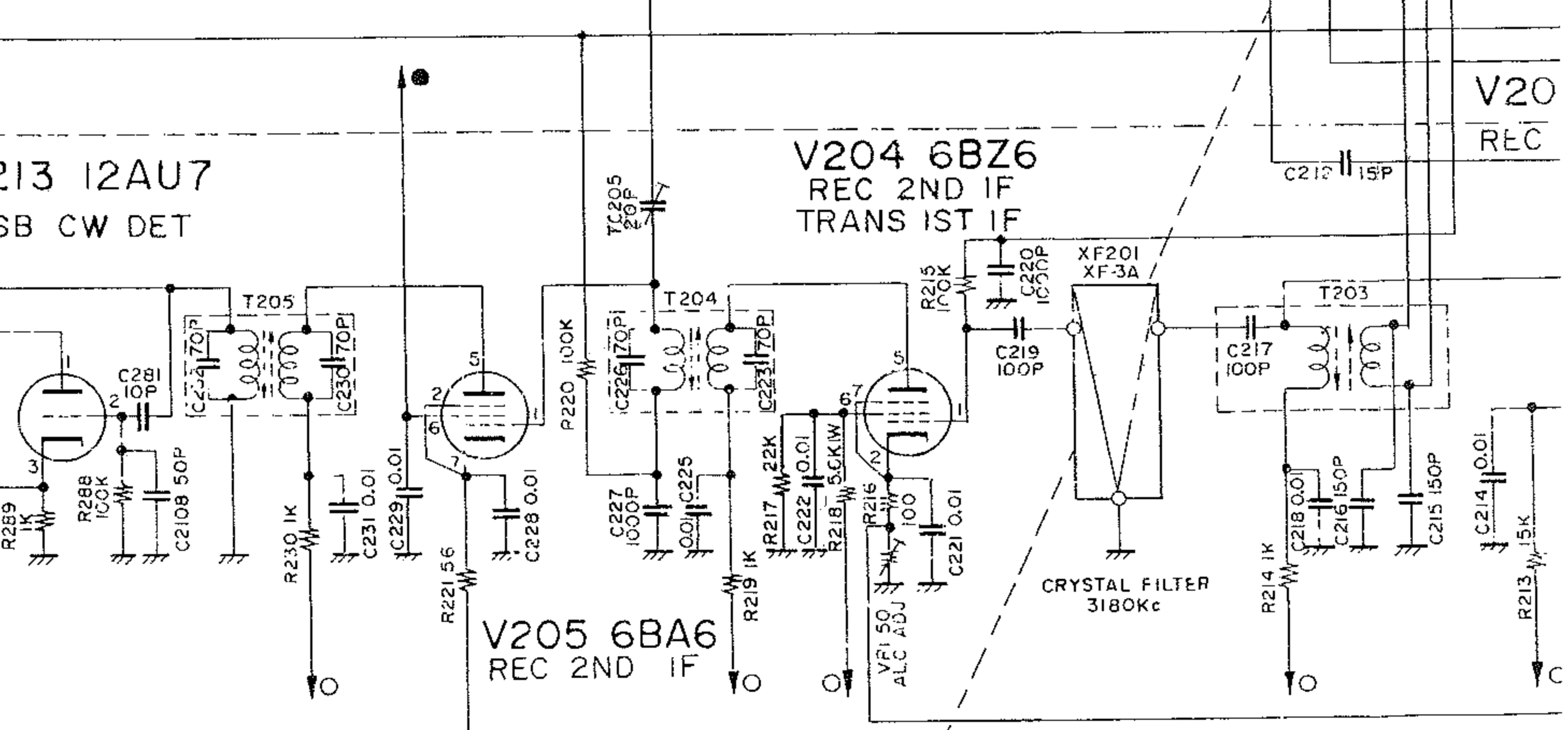
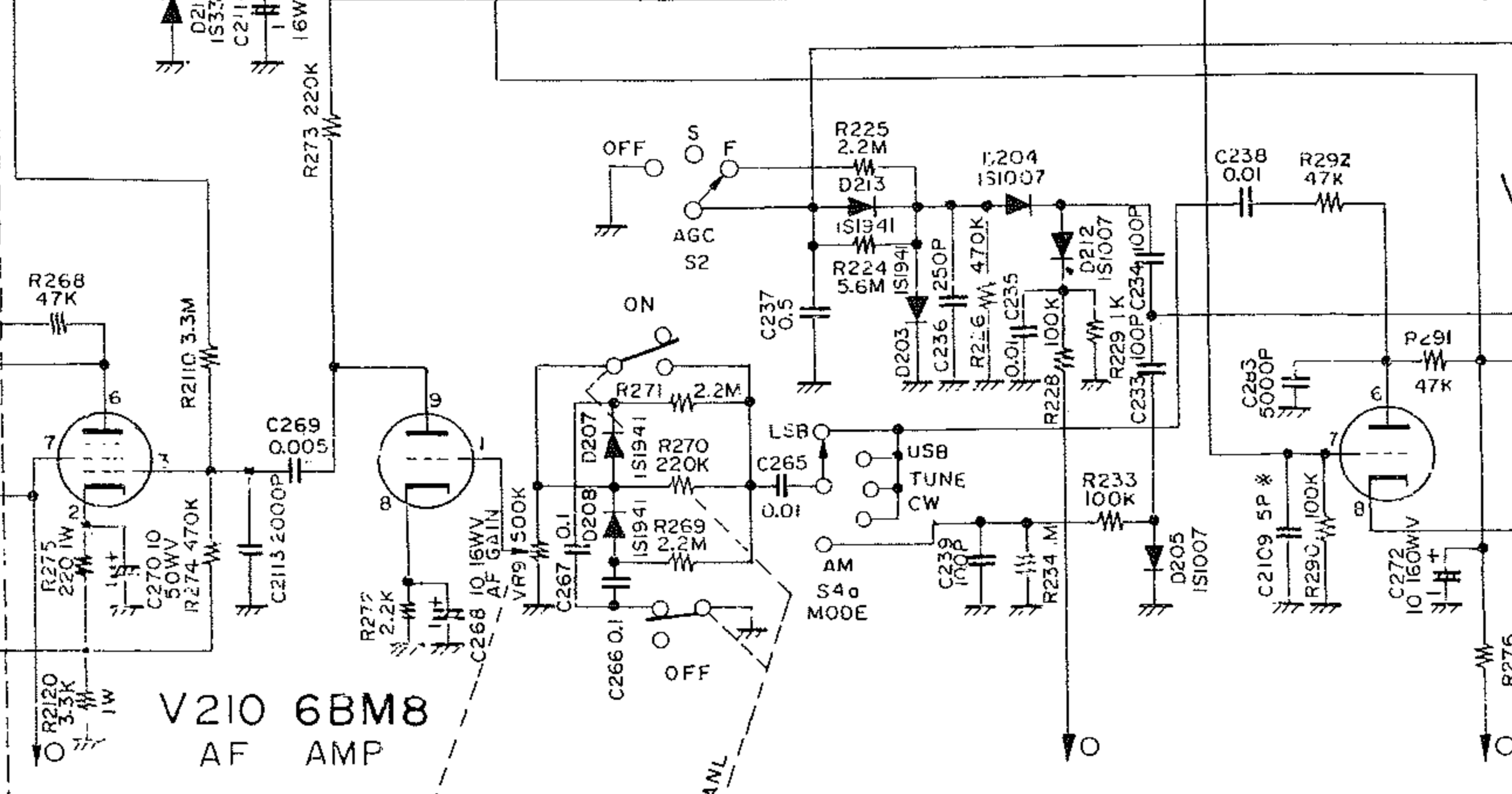
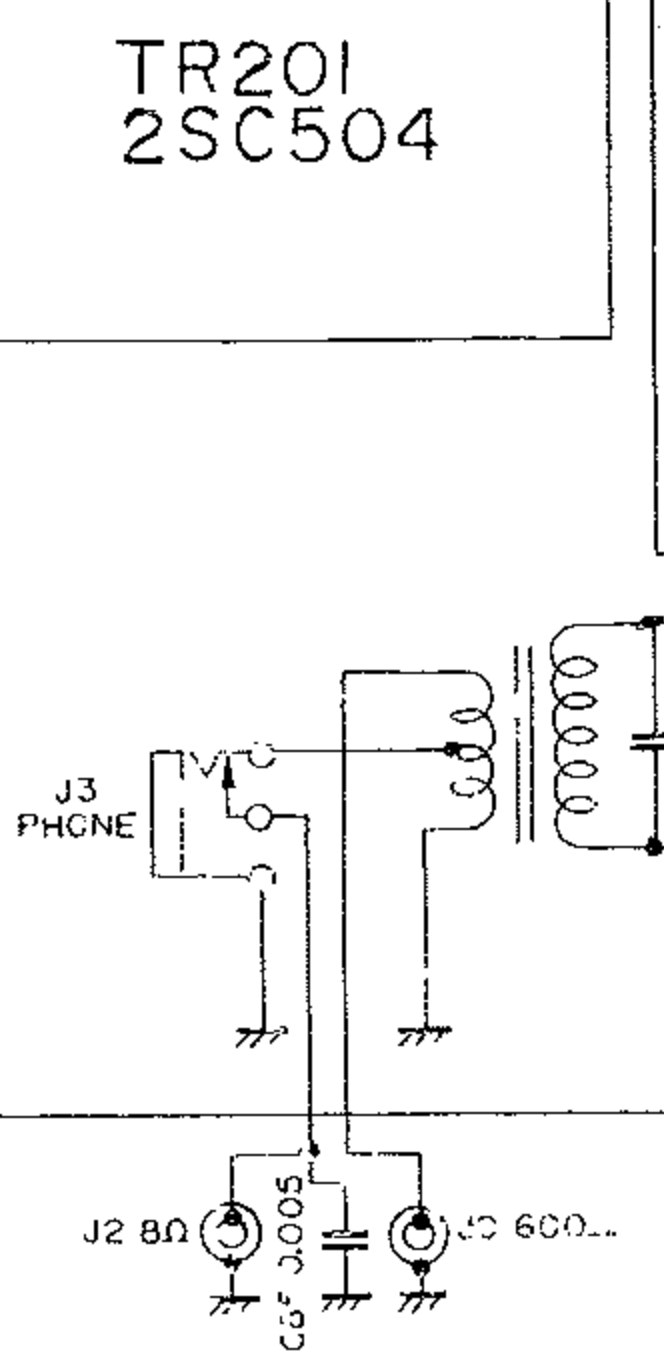
V210 6BM8
AF AMP

V213 12AU7
SSB CW DET

V204 6BZ6
REC 2ND IF
TRANS 1ST IF

V205 6BA6
REC 2ND IF

V20
REC



12AT7
ONTROL

V207 7360
B M

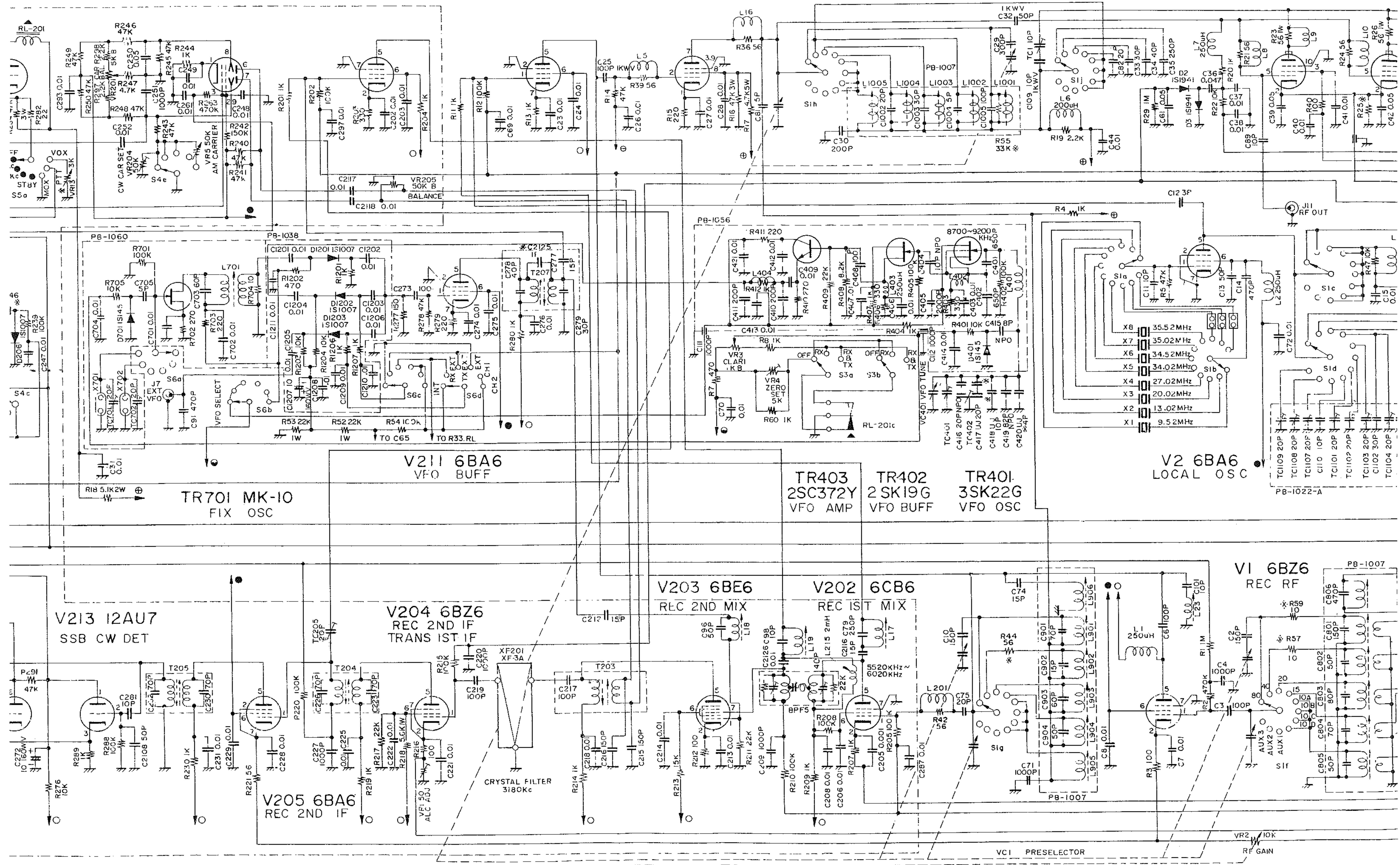
V201 6CB6
TRANS 1ST MIX

V3 6AH6
TRANS 2ND MIX

V4 6GK6
DRIVER

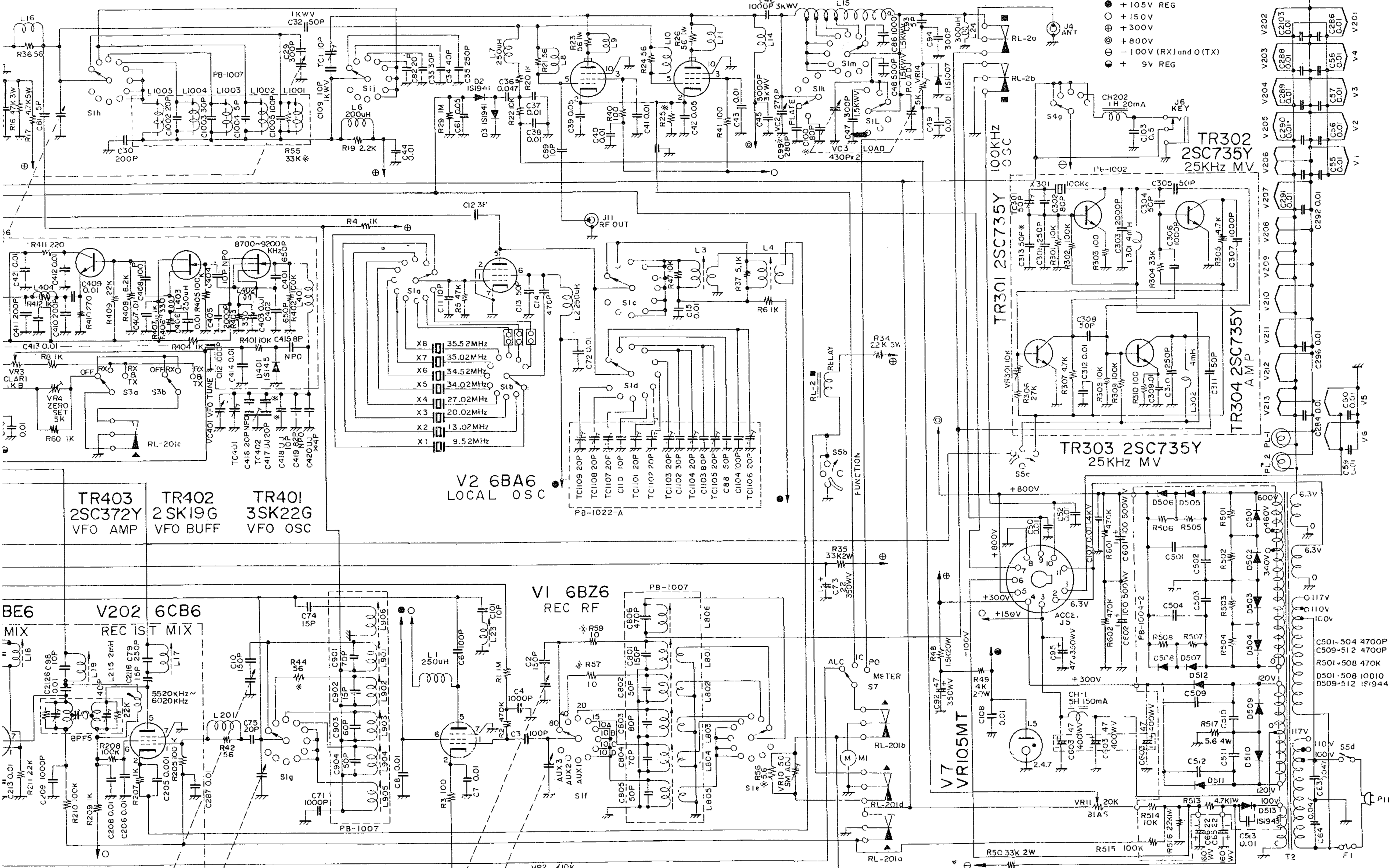
V5 6KD6
P A

V6 6L6
P



V5 6KD6 V6 6KD6
P A P A

- ▲ RL1
- RL2
- +105V REG
- +150V
- ⊕ +300V
- ⊕ +800V
- ⊖ -100V (RX) and O (TX)
- ⊕ +9V REG



- NOTES:
1. ALL RESISTORS IN OHM 1/2W ±10% UNLESS OTHERWISE NOTED.
 2. ALL CAPACITORS IN P.F UNLESS OTHERWISE NOTED.
 3. * VALUE IS NOMINAL

FTDX400
CIRCUIT DIAGRAM