

Fig. 1-1 TR-7 Block Diagram

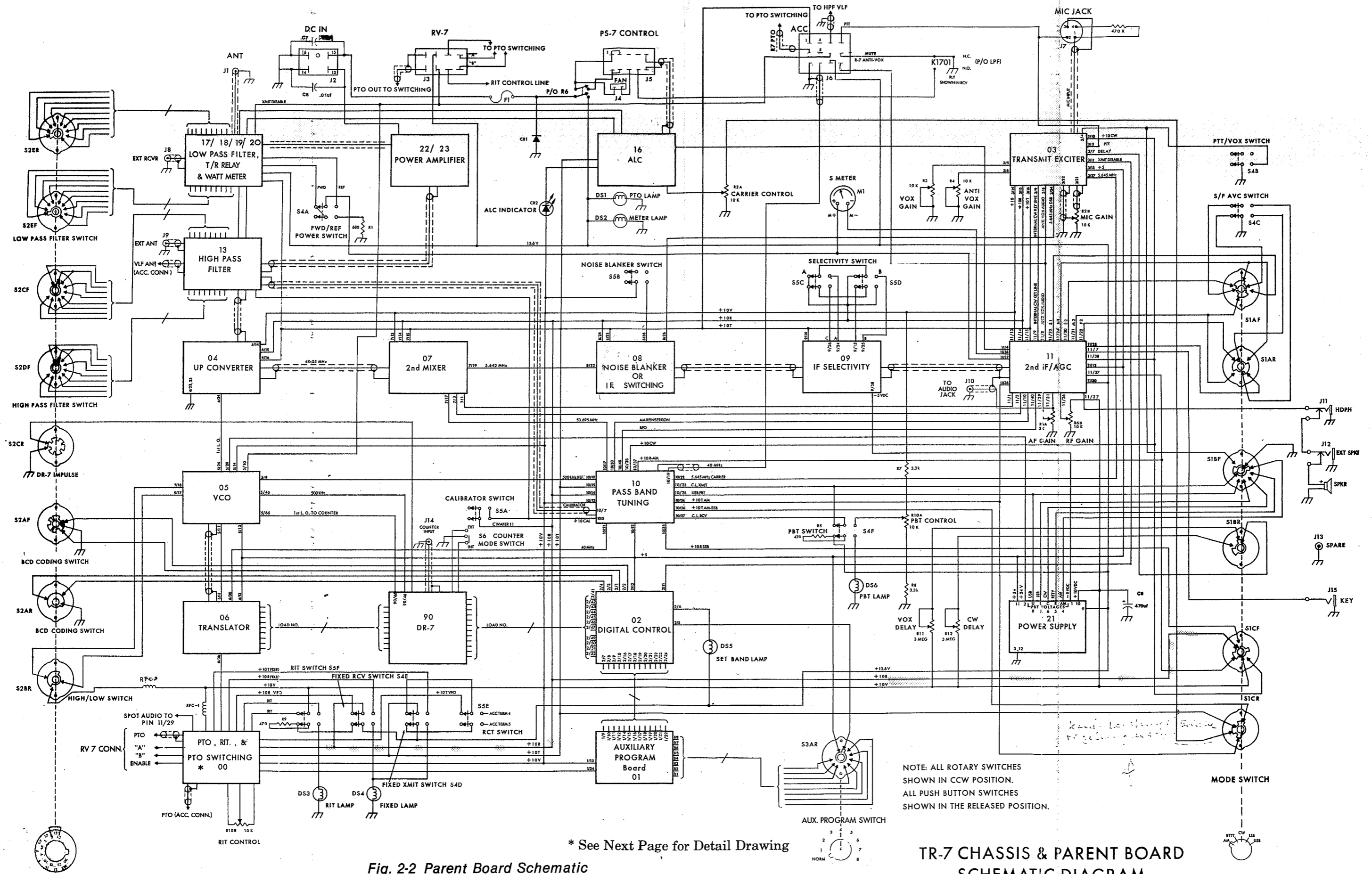
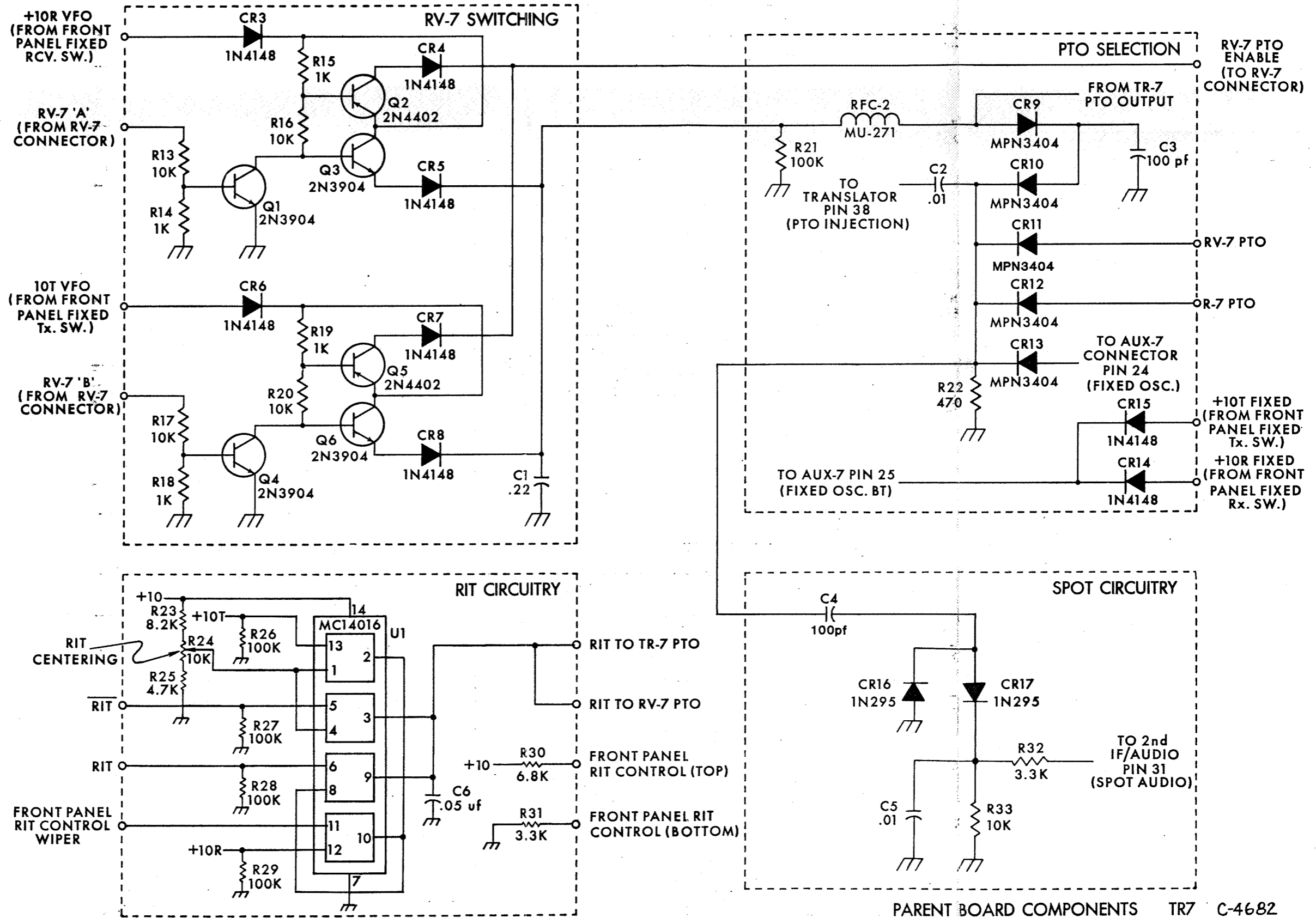


Fig. 2-2 Parent Board Schematic

* See Next Page for Detail Drawing

TR-7 CHASSIS & PARENT BOARD SCHEMATIC DIAGRAM

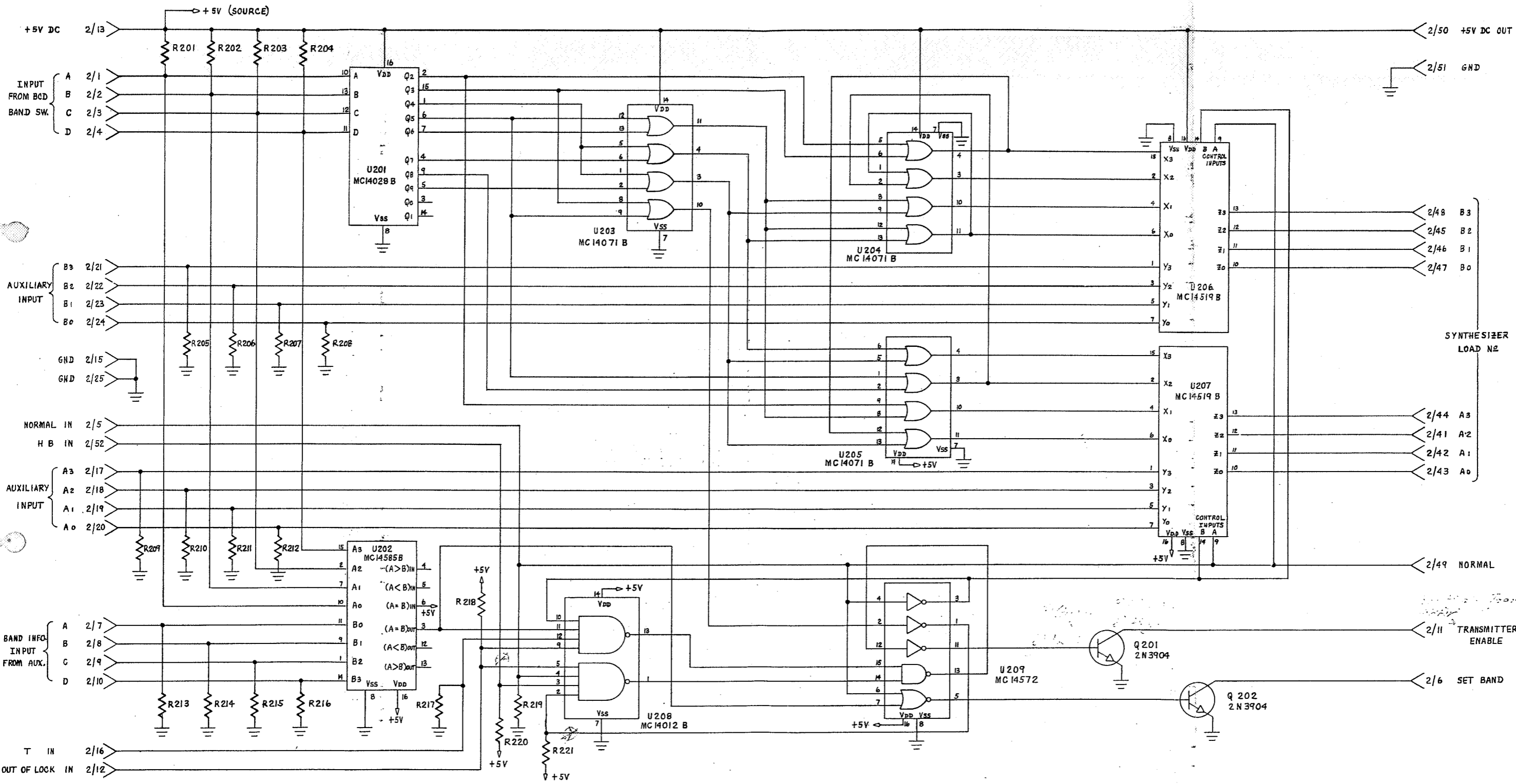
Falsch 8/25 = 8/37



PARENT BOARD COMPONENTS TR7 C-4682



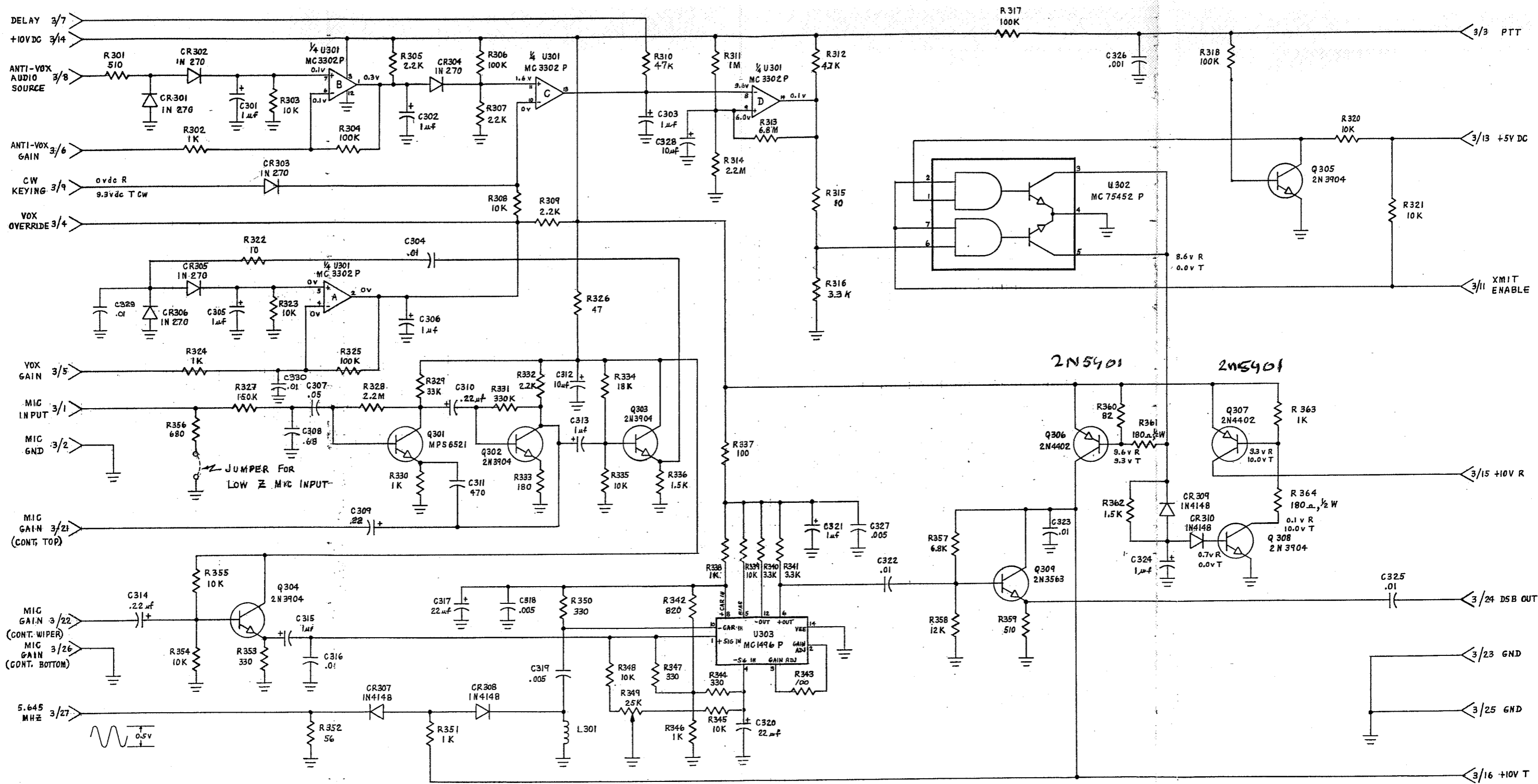
R	209	201	205	202	206	203	207	204	208		217	218	220	219	221
	213	210	214	211	215	212	216								



NOTE - ALL RESISTORS ARE 100K Ω , 1/4 W, 10%

Fig. 2-4 Digital Control Board Schematic

C	34 328	301 305	315 330	307 308 316	309 306	302 304 306	310 311 317	318 307	312 313 319	303 308	320 326 330	321 332 335	327 334 349	322 330 336	323 331 338 344	326 360 361	304 318 363	325 320 321	
R	301	302 304 356	355 322 327	303 323 353	352 304 325	328 305 329 330	351 306 307 331	308 309 332 333	326 335 340	334 349 326	342 346 347	311 338 339 343	344 340 343	312 335 345	357 358	317 359	360 362	318 363 364	320 321



NOTE ALL VOLTAGES MEASURED IN RECEIVE, UNLESS NOTED OTHERWISE.

Fig. 2-6 Transmit Exciter Board Schematic

R	402	403	401	404	415	405	406	407	408	413	410	411	412	414	415	417	419	416	418	420	425	422	421		
C	401	427	407	402	403	409	405	404	411	412	413	414	415	417	419	416	418	420	425	422	421	426	423	424	
L				402		403			404						401									405	406

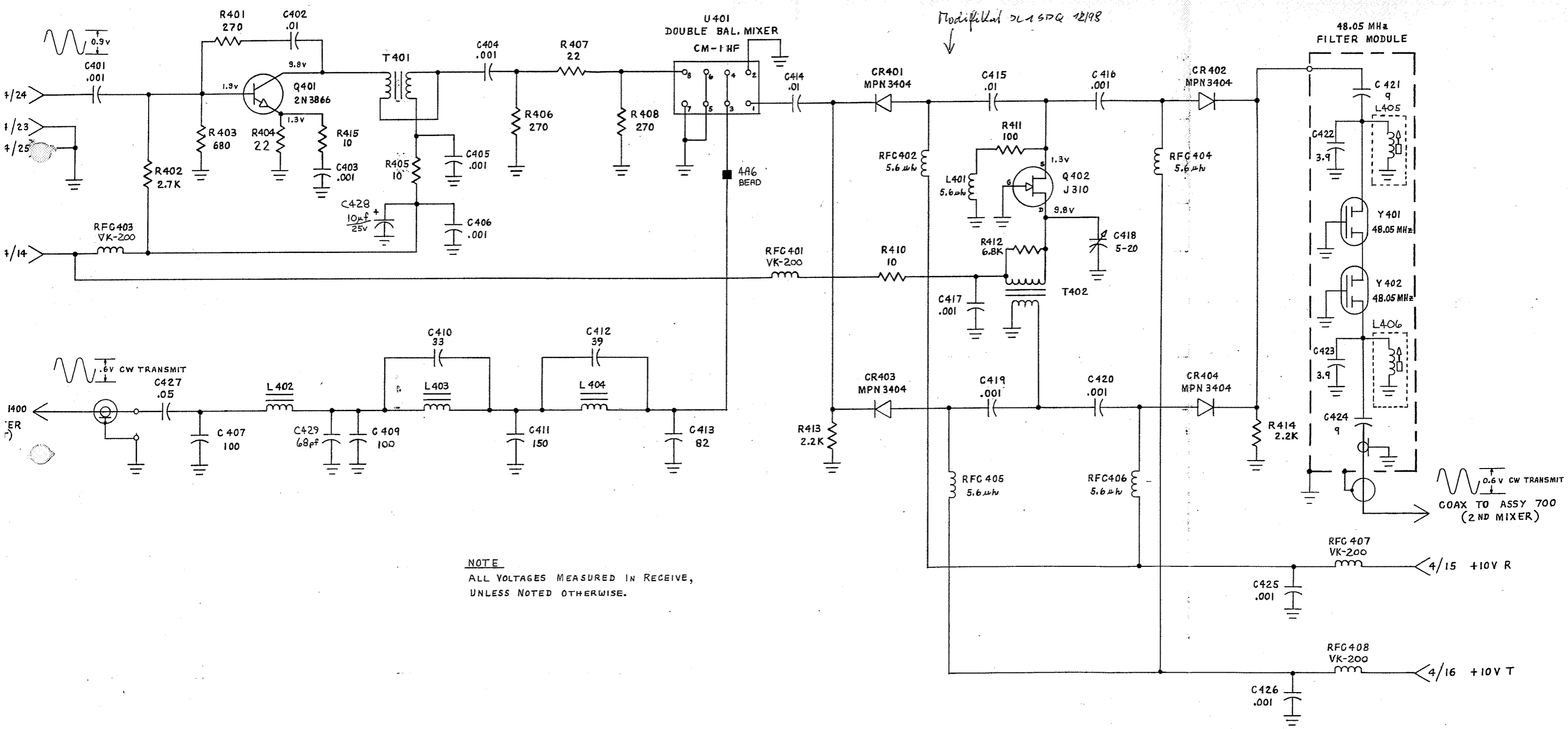


Fig. 2-8 Up-Converter Board Schematic



C	533	501 534 514	536 537	502 515 535	503 516 504 517	505 518	508 521 507 519 522	538	539	510 523 524	525	540	511 526 512 527	542 543 541	513 528	544 504 529	529	530	531 535 513	546 532	547 550	532	548 551 552	549
R	501 507		502 508		519 520		503 509		521	523 522		524	525	526 527		505 511 530 512	538 539	539	531 534 535	516 536 515	517	533	514 537	518
L													501 502											

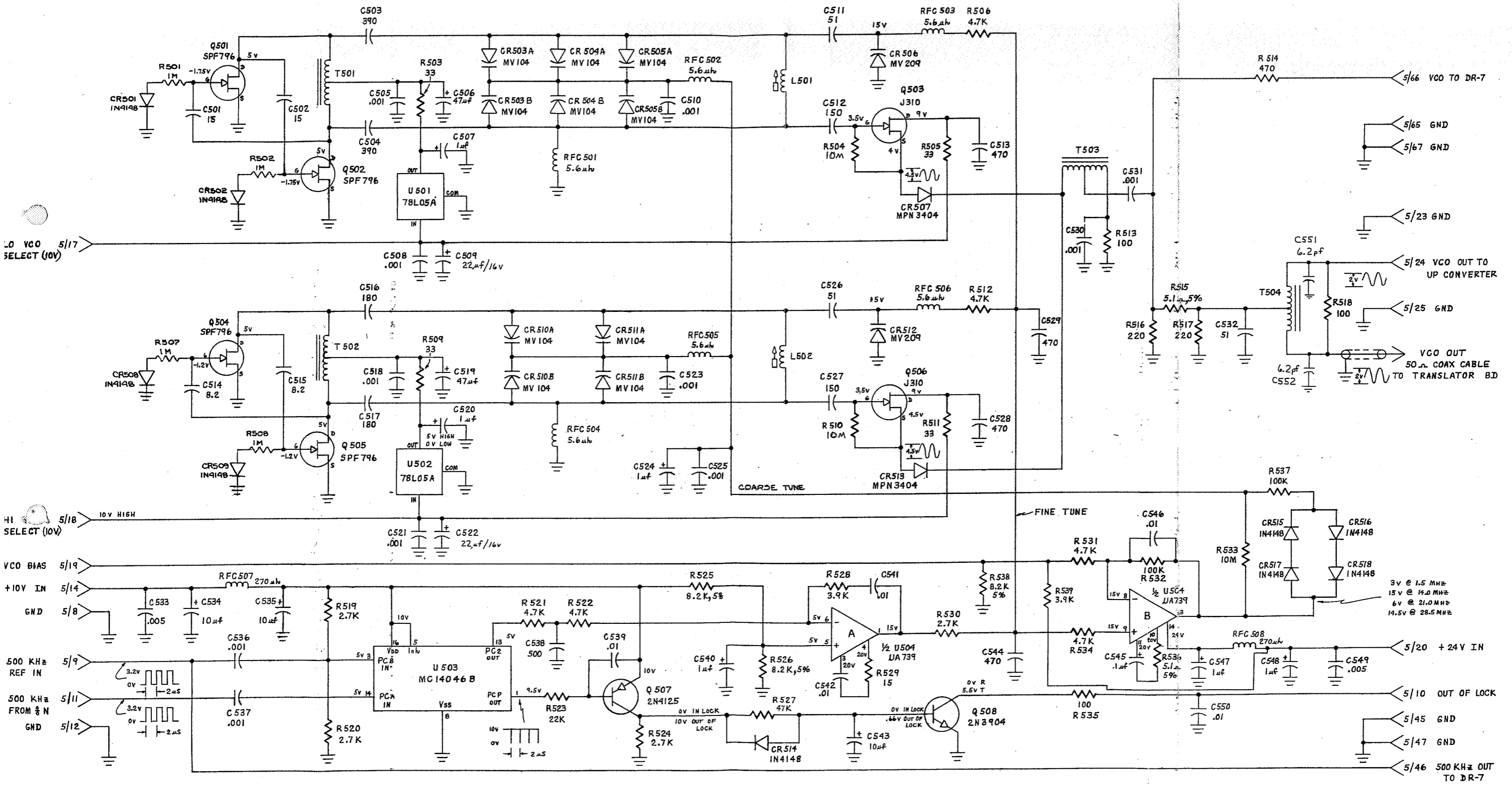


Fig. 2-10 VCO Board Schematic



C	601	602	603	604	623	636	614	626	627	606	610	608	609	630	610	611	620	612	631	633	632	635	634	
R	619	620	601	602	611	622	623	603	604	606	607	608	609	610	617	626	618	627	629					
L				604	609	605	610	607	611				602		603									

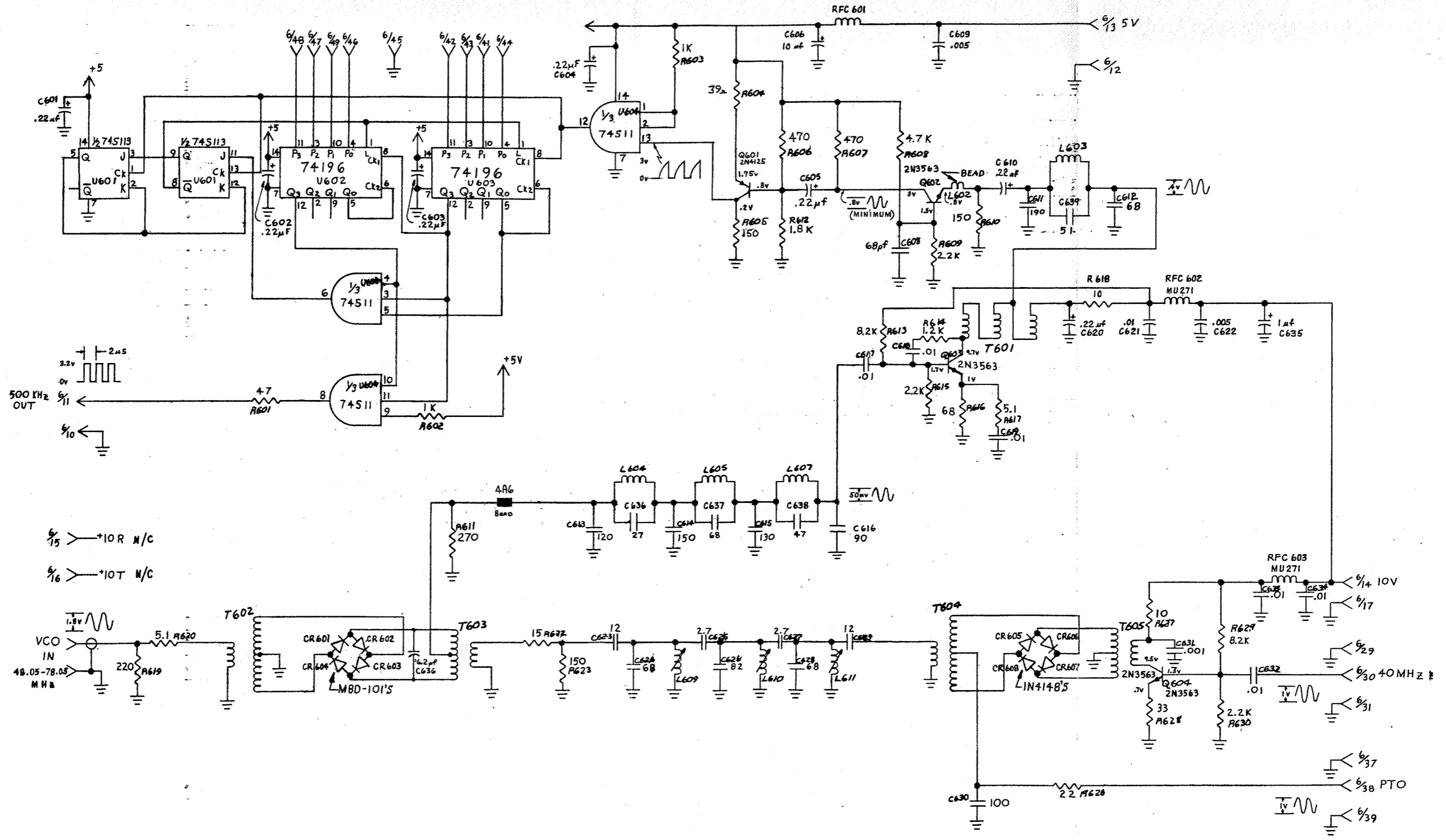


Fig. 2-12 Translator Board Schematic

C	713	701	710	711	730	702	729	731	715	732	717	734	716	733	706	720	707	721	723	722	728	724	736	725	735	726	727
R	720	707	721	701	709	710	711	722	704	713	712	725	715	716	717	726	729	718	728	730	732	733	734	735	719		
L					701	702													703								

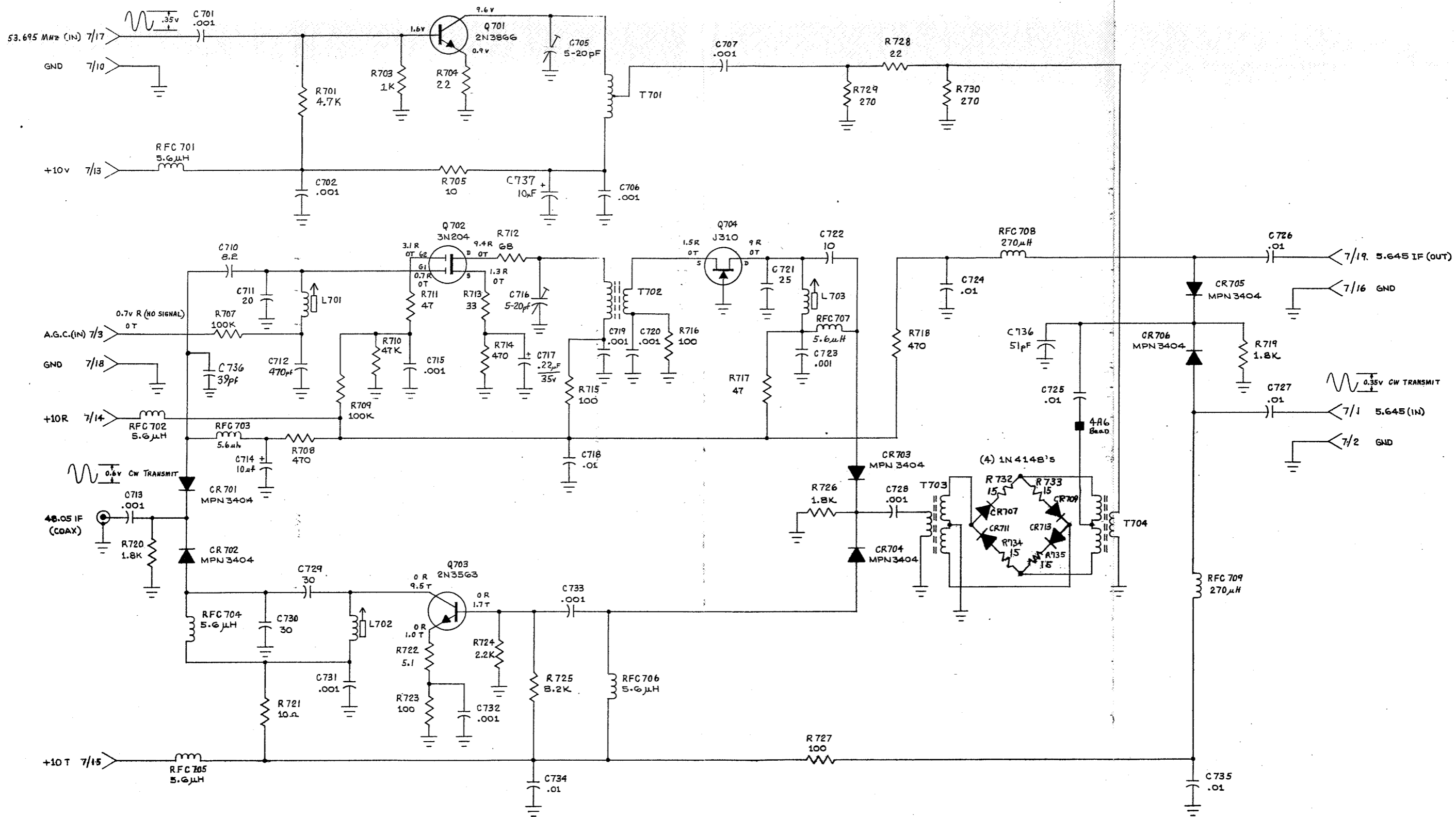


Fig. 2-14 2nd Mixer Board Schematic

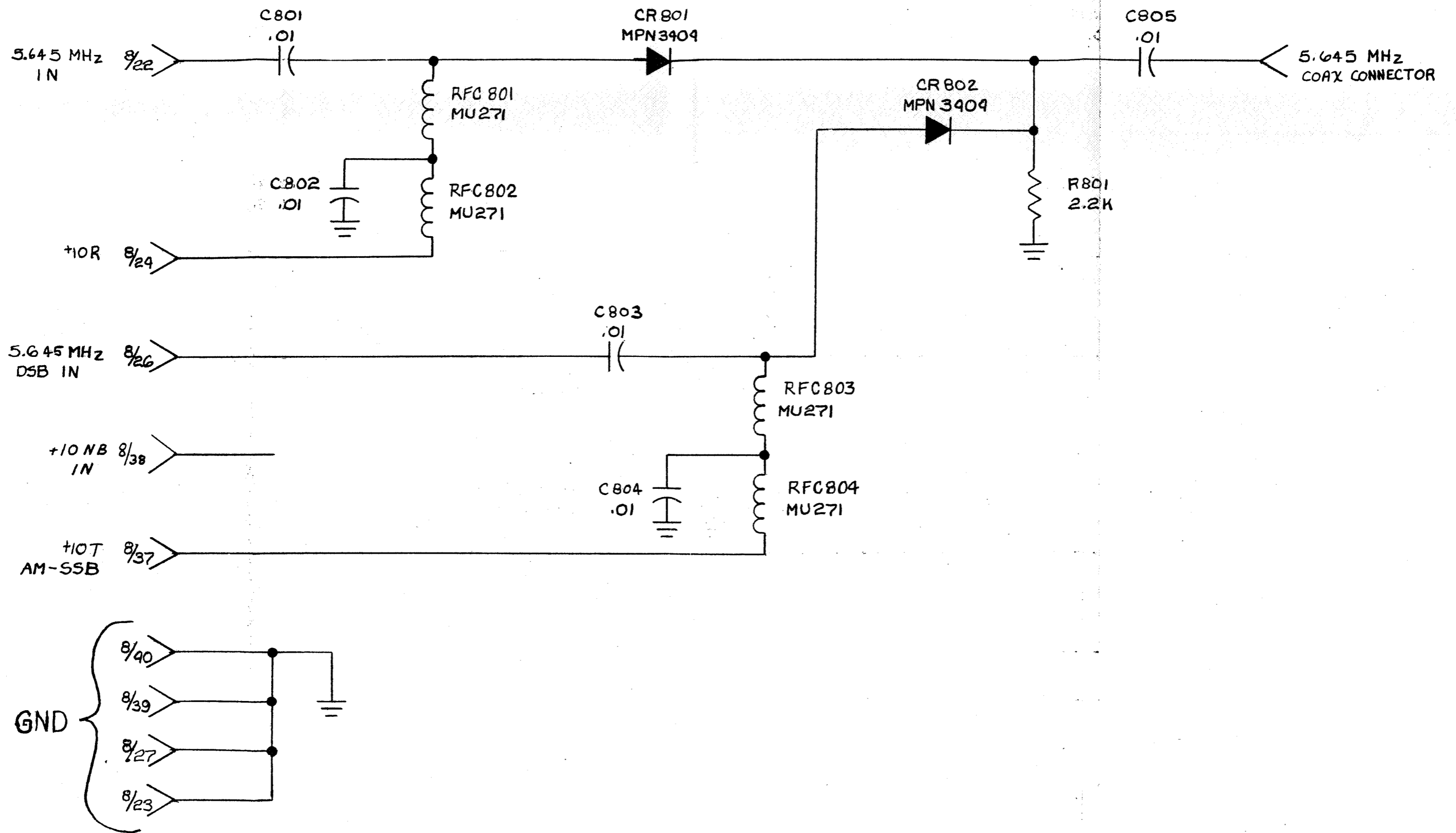
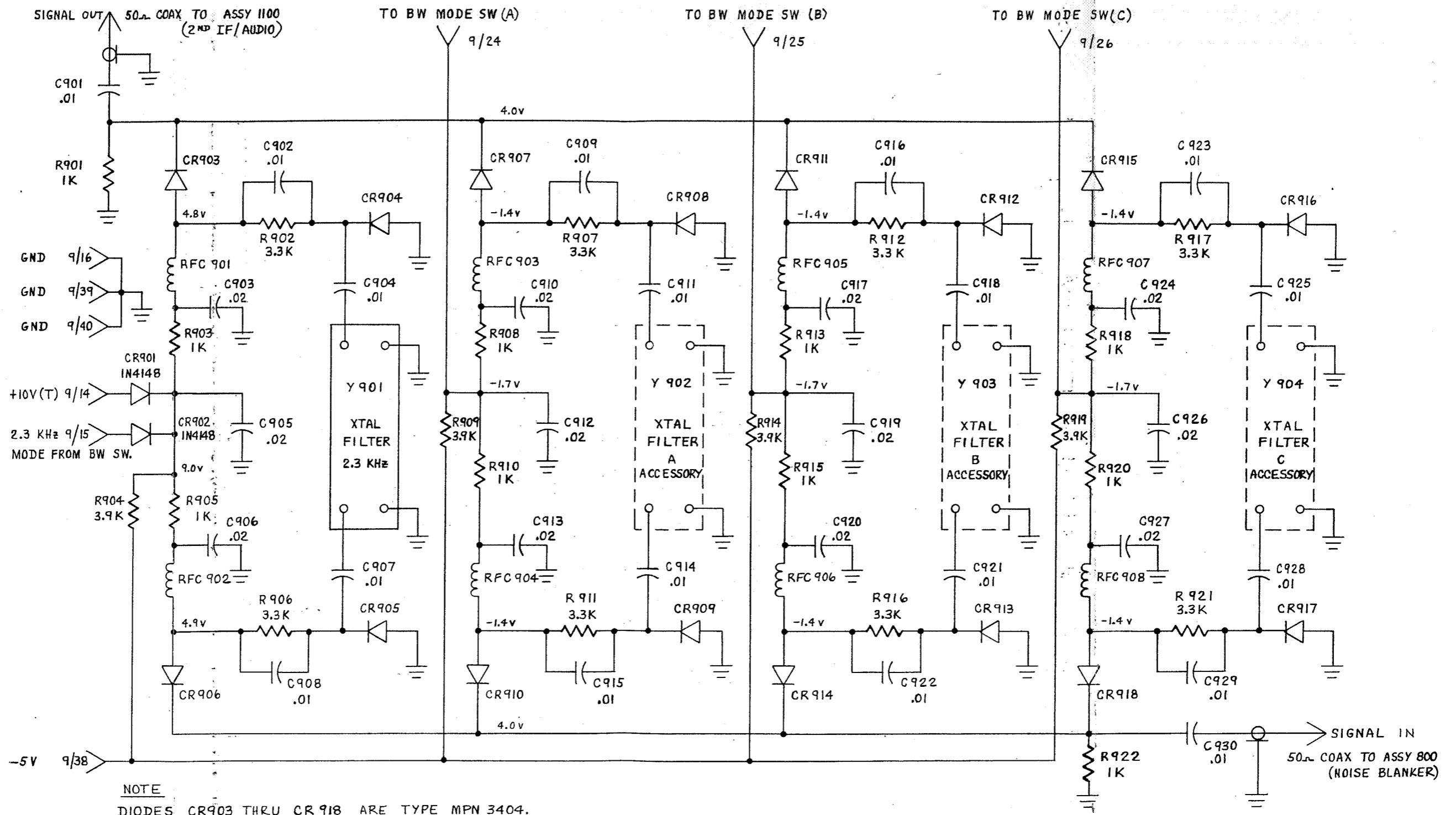


Fig. 2-16 IF Switching Board Schematic

C	901	903 906	905	902 908	904 907		910 913	912	909 915	911 914		917 920	919	916 922	918 921		924 927	926	923 929 930	925 928
R	901	904	903 905		902 906		909	908 910		907 911		914	913 915		912 916		919	918 920 922		917 921
RFC			901 902					903 904					905 906					907 908		

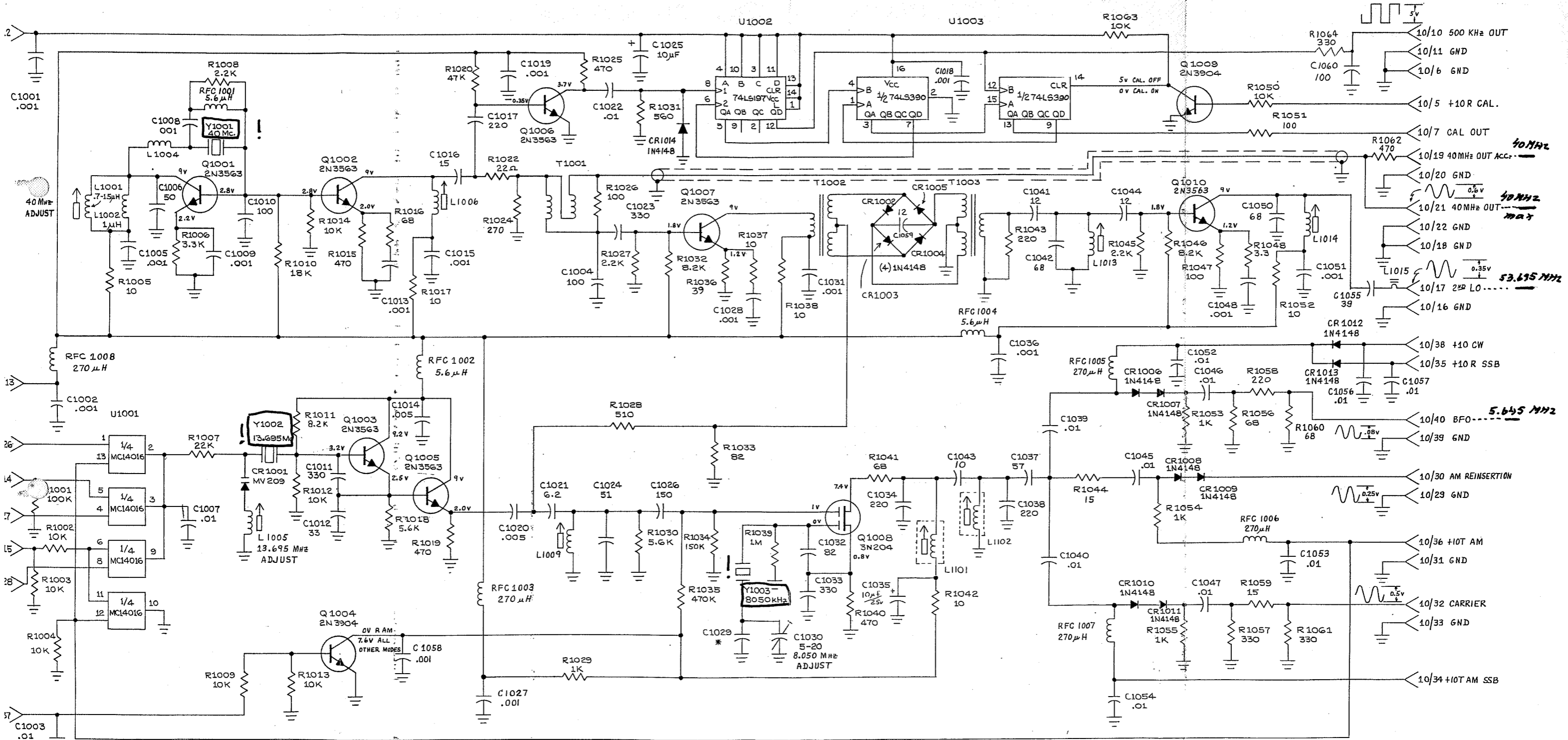


NOTE
 DIODES CR903 THRU CR918 ARE TYPE MPN 3404.
 ALL VOLTAGES MEASURED IN 2.3 KHz POSITION.

Fig. 2-18 IF Selectivity Board Schematic



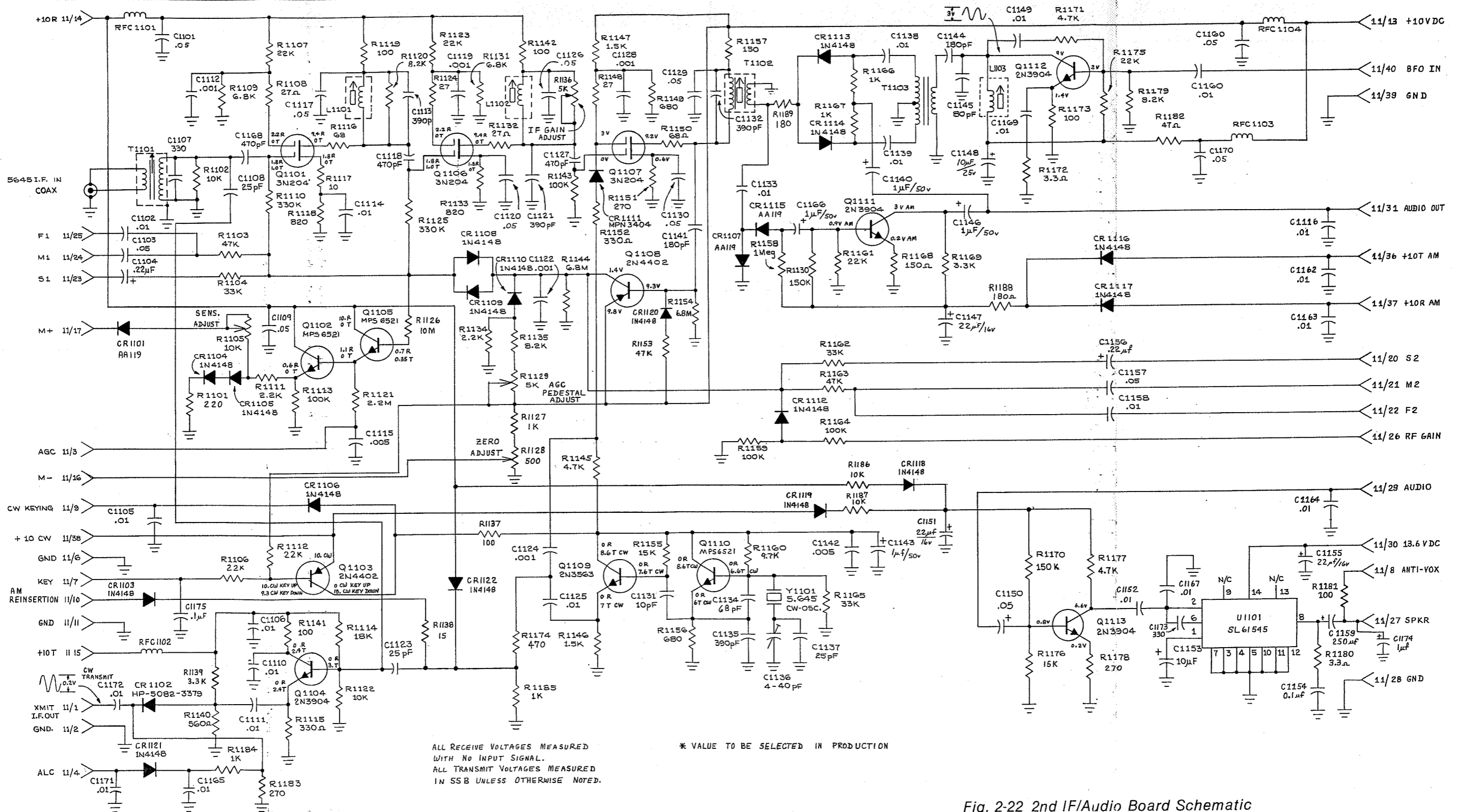
1001	1002	1005	1006	1008	1009	1010	1011	1014	1015	1016	1017	1019	1020	1022	1024	1025	1031	1032	1036	1037	1038	1040	1041	1042	1043	1044	1063	1045	1046	1047	1050	1052	1060	1064	1062																						
1001	1002	1005	1006	1008	1009	1010	1011	1012	1013	1015	1016	1019	1021	1024	1025	1026	1027	1030	1033	1034	1037	1038	1040	1041	1042	1043	1044	1046	1047	1050	1052	1060	1064	1062																							
1001	1002	1003	1005	1006	1007	1009	1010	1011	1012	1013	1014	1015	1016	1017	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062
1001	1002	1004	1005	1006	1009	1010	1011	1012	1013	1014	1015	1016	1017	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	



* VALUE SELECTED IN PRODUCTION

Fig. 2-20 PBT/Reference Board Schematic

R	1102 1101	1109 1139	1103 1104	1105 1108	1107 1112	1111 1114	1113 1118	1114 1122	1119 1121	1120 1126	1123 1124	1123 1124	1131 1134	1132 1137	1142 1135	1127 1128	1136 1143	1147 1148	1145 1146	1149 1151	1150 1153	1159 1154	1160 1156	1158 1159	1169 1160	1169 1160	1172 1170	1171 1173	1175 1177	1179 1178	1182	1180 1181	
C	1102 1103 1104	1172 1171 1105	1101 1107 1175	1112 1165 1111	1168 1106 1110	1109 1109	1117 1114	1114 1115	1123 1118	1113 1118	1119	1119	1120 1121 1126 1127	1121 1124 1125	1121 1124 1125	1128	1130 1134 1135	1136 1137	1166 1137	1142 1143	1140 1139	1144 1147 1151	1145 1146 1151	1148 1148	1149 1150	1149 1150	1156 1157 1158	1152 1157	1167 1173 1170	1160 1161	1155 1156 1159 1163	1164 1174	
L							1101						1102														1103						



ALL RECEIVE VOLTAGES MEASURED WITH NO INPUT SIGNAL.
 ALL TRANSMIT VOLTAGES MEASURED IN SSB UNLESS OTHERWISE NOTED.

* VALUE TO BE SELECTED IN PRODUCTION

Fig. 2-22 2nd IF/Audio Board Schematic

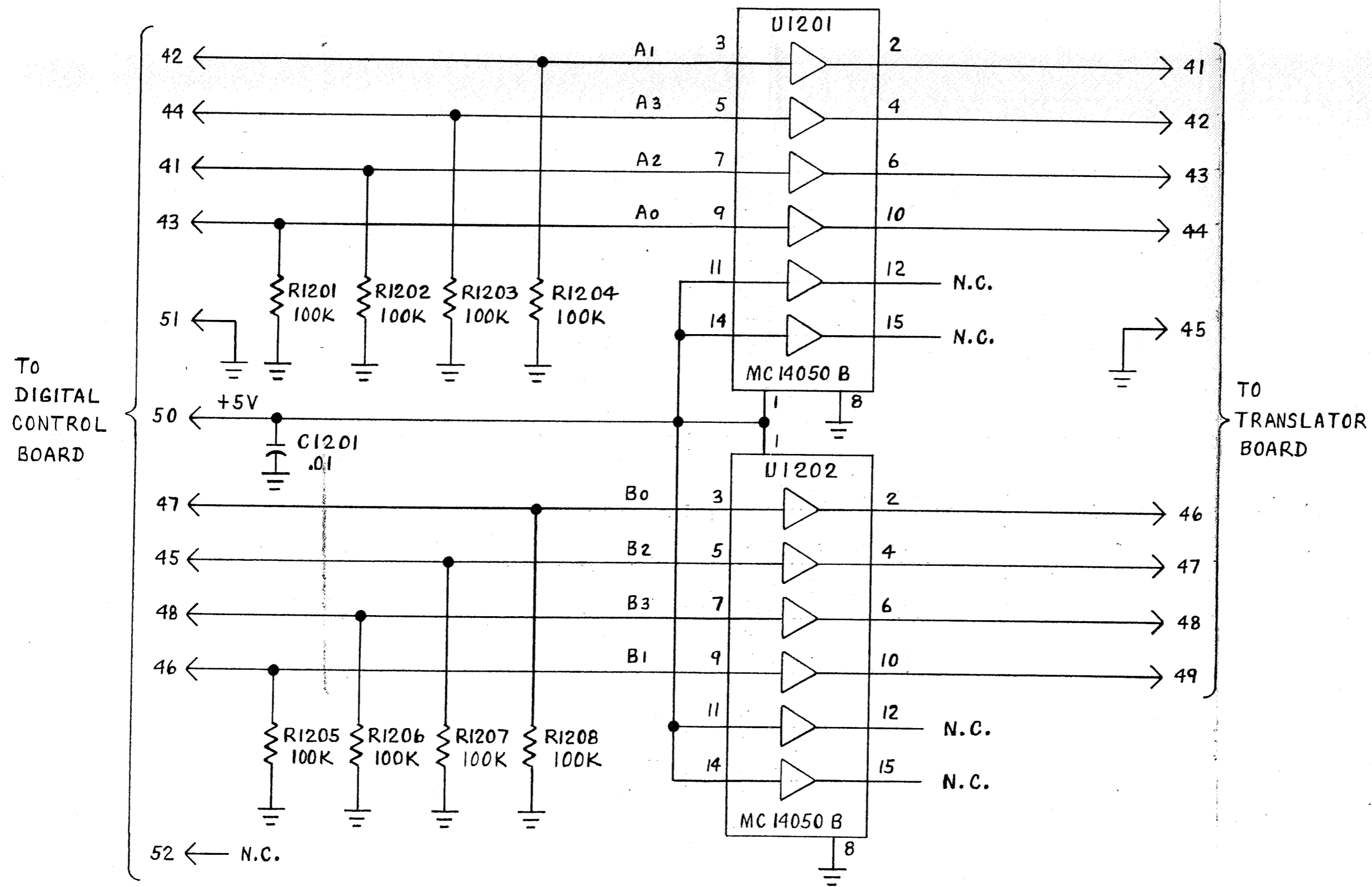


Fig. 2-24 Jumper Board Schematic

C	1401 1603 1402 1604 1602 1601 1404	1605	1301 1305 1311 1317 1607 1302 1309 1315 1321 1303 1307 1313 1319 1304	1611	1503 1505 1501 1504
R	1402 1601 1401 1403 1406 1405 1607 1608 1609 1610 1611 1621 1612 1614 1615 1616 1617 1618 1619 1502 1507				
L	1404 1602 1603 1606 1605		1301 1306 1310 1314 1302 1304 1308 1312 1305 1309 1313 1303 1307 1311 1315		1502 1504

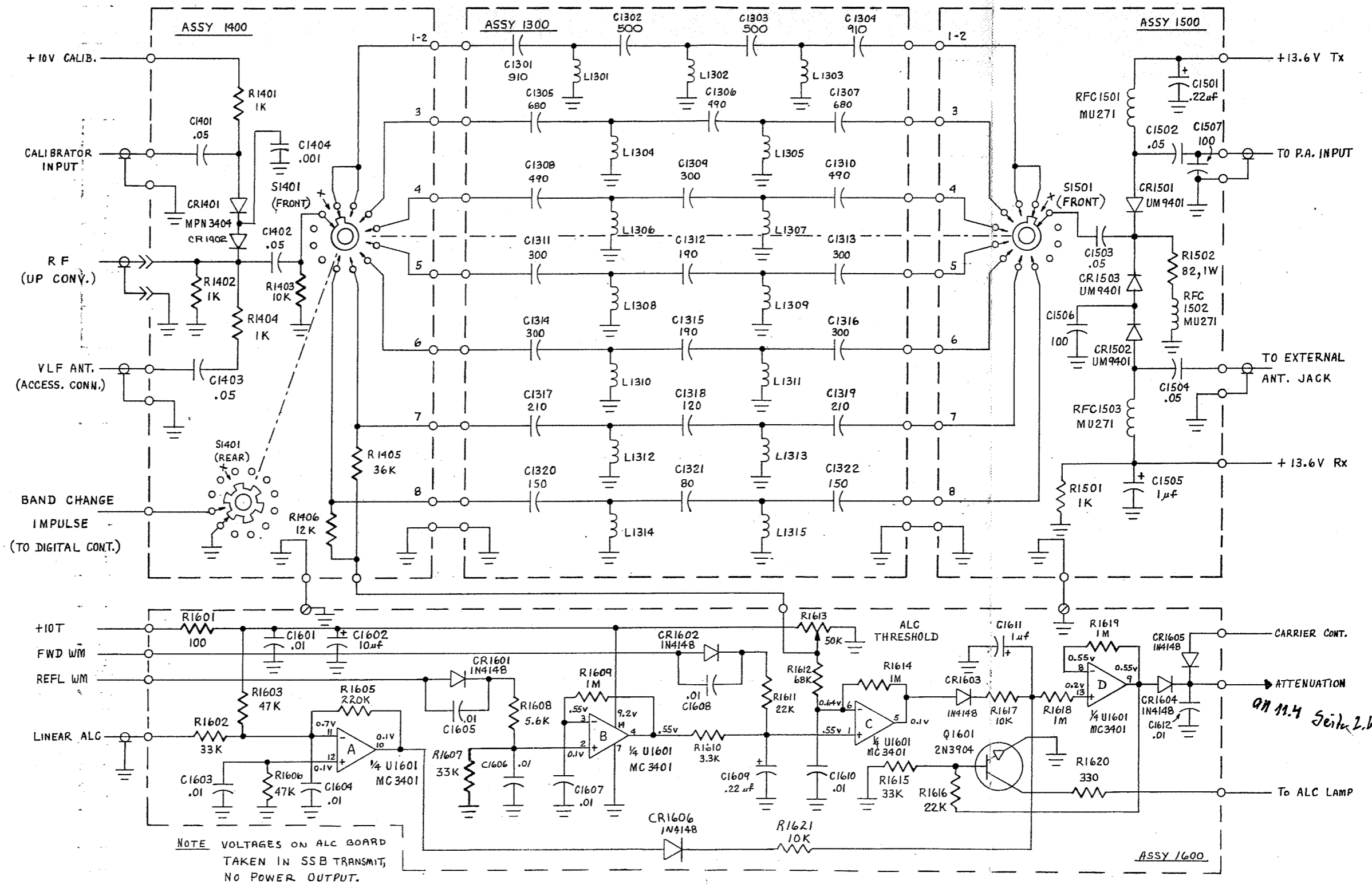


Fig. 2-28 High Pass Filter Module Schematic

C	1903	1902	1701 1707 1702 1801 1811 1802 1703 1713 1704 1714 1803 1812 1804 1705 1710 1706 1805 1813 1806 1711 1717 1712 1807 1814 1708 1718 1709 1719 1808 1815 1809 1715 1720 1716 1810 1816	2003 2004	1901 2006	2001 2002
R		1901 1903 1902		2004	2003	2001 2002
L			1701 1705 1801 1805 1703 1707 1803 1807	1702 1706 1802 1806 1704 1708 1804 1808		

NOTE: BAND 1 FILTER IS OPTIONAL
FOR OPERATION BELOW 1.8MHz.

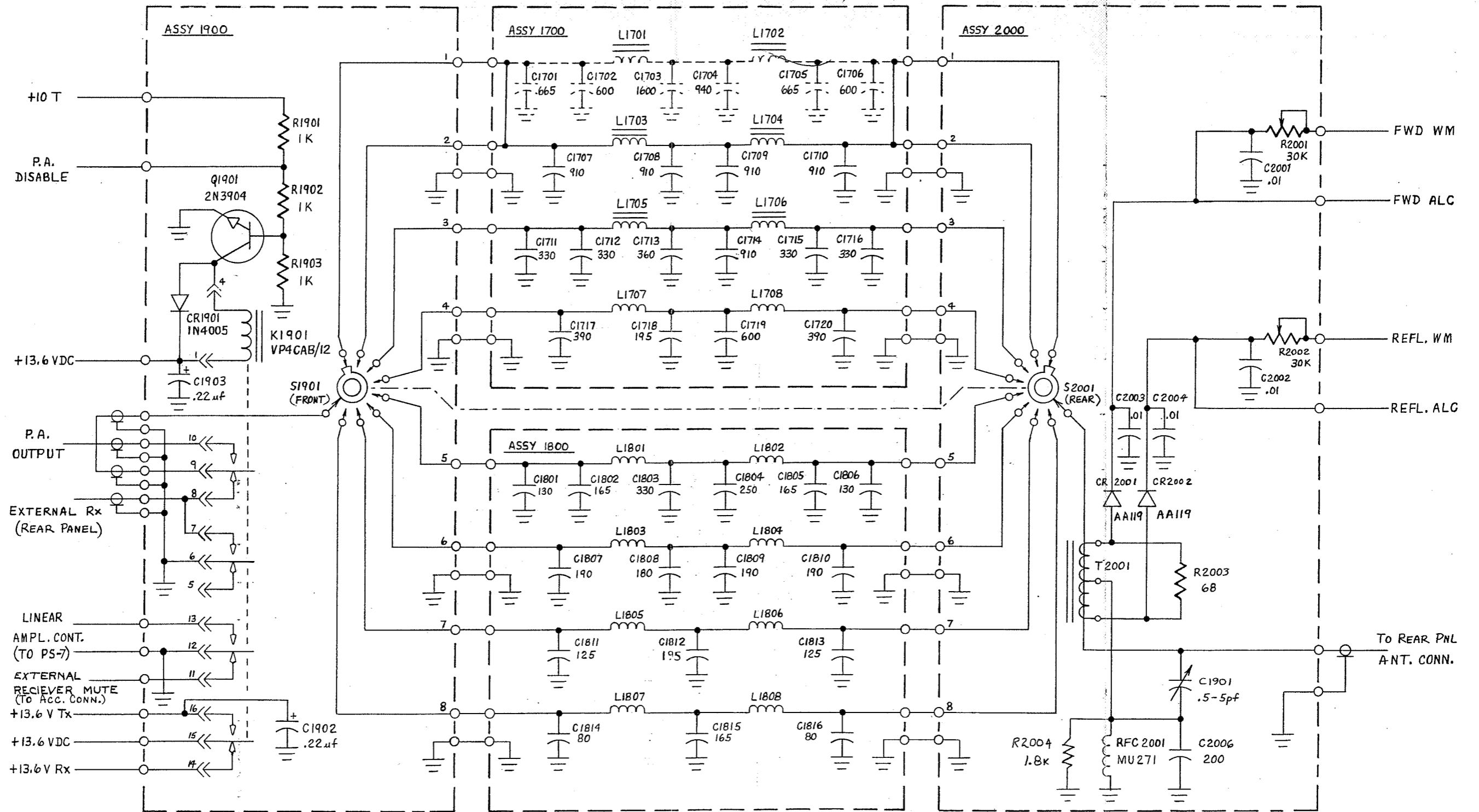
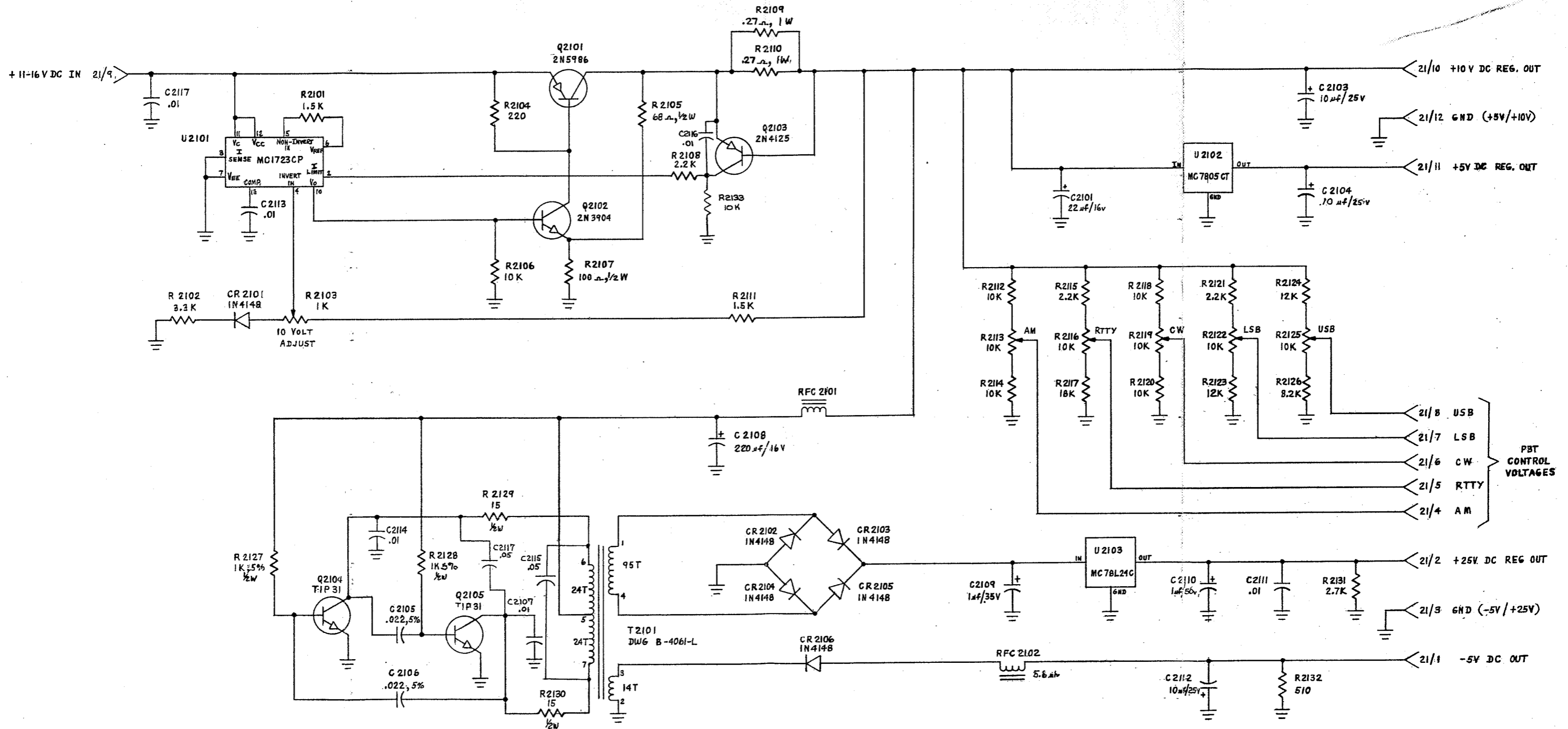


Fig. 2-32 Low Pass Filter Module Schematic

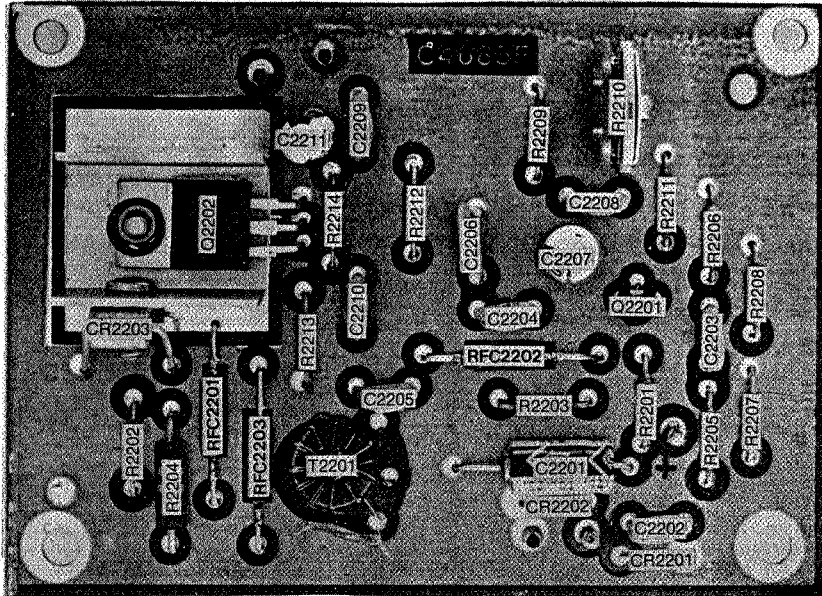
C	2117	2113	2114	2105 2106	2117	2107	2115	2108 2116	2109	2101	2110 2112	2111	2103 2104		
R	2102	2127	2103 2101	2128	2104 2106 2129	2107 2130	2105	2108 2133 2111	2109 2110	2112 2113 2114	2115 2116 2117	2118 2119 2120	2121 2122 2123	2132 2124 2125 2126	2131



NOTE
ALL RESISTORS 1/2 W, ±10% UNLESS NOTED OTHERWISE.

Fig. 2-34 Power Supply Board Schematic

R2210



- E
- C
- B

R	2205 2207	2201 2208	2203 2209	2210	2211	2214 2213	2202 2204	2212
C	2201 2202	2203	2207	2208	2204 2206	2211	2205 2210	2209

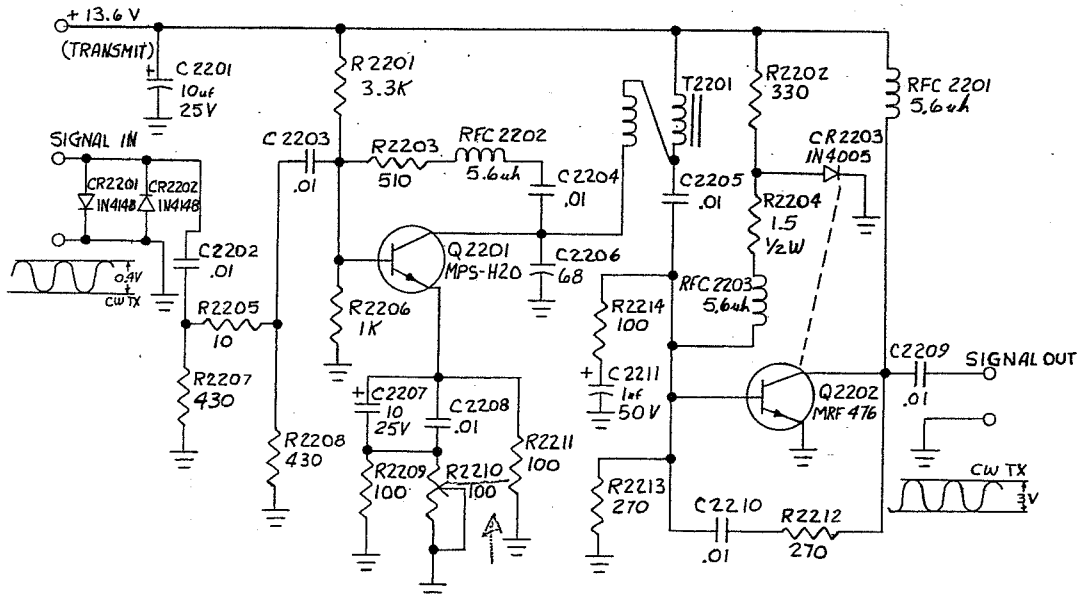
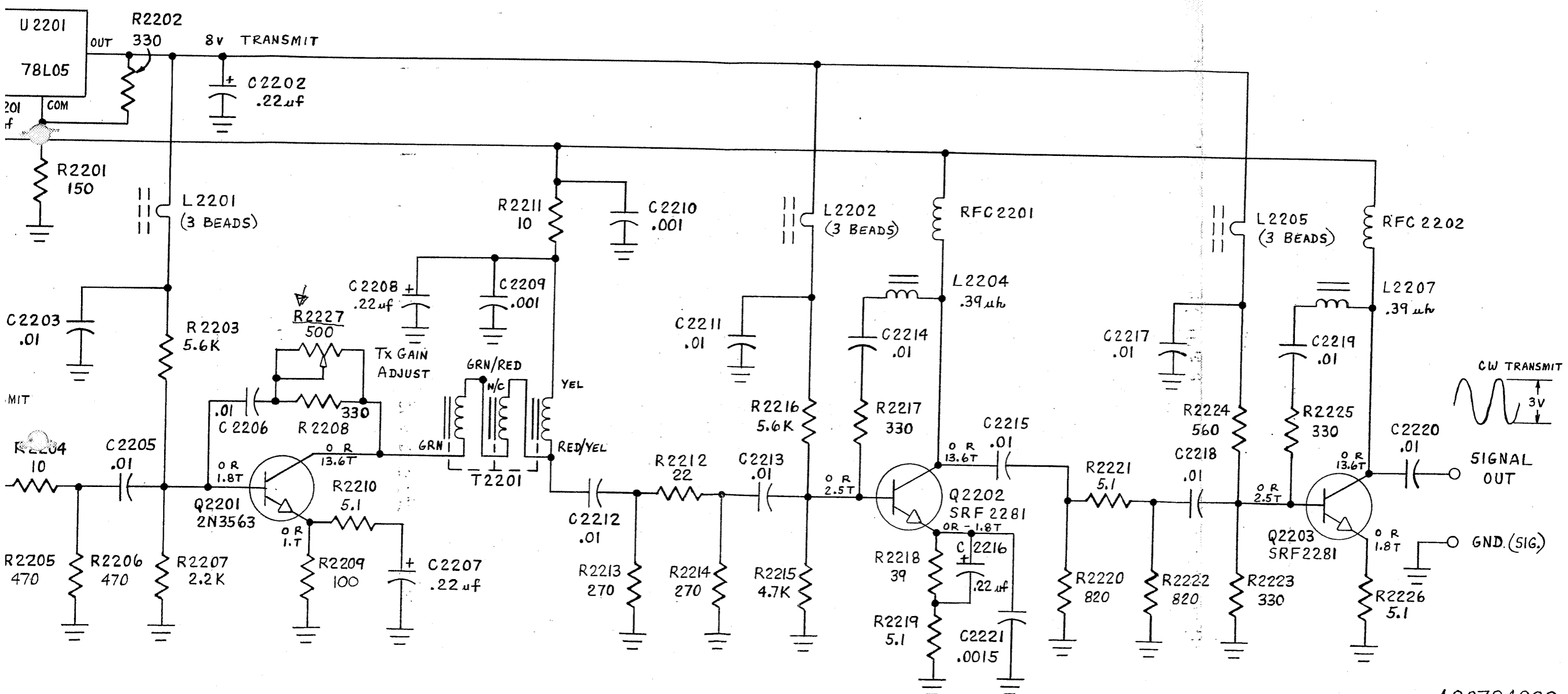


Fig. 2-36 Predriver Board #2 Pictorial & Schematic

2203	2205	2202	2206	2207	2209	2212	2210	2211	2213	2214	2215	2221	2217	2219	2220
05 2201	2206	2202	2203	2208	2210	2211	2213	2212	2214	2215	2217	2218	2220	2221	2222
2204	2207	2201	2209	2227	2209	2211	2213	2212	2214	2216	2219	2220	2221	2222	2223
										2202	2204				2225
															2226
															2205
															2207



408794000

Fig. 2-37 Pre-driver Board #1 Schematic

C	2301 2311	2312	2302 2304	2328	2303 2305	2313 2322	2315	2314	2306	2307 2308	2323 2324	2327	2320 2321	2317 2318	2310 2312	2309	2319	2325 2326	2329
R	2301	2302 2303	2313 2314		2305 2306	2304			2307 2317	2308 2309	2310 2311	2315 2316		2318 2319	2312				
L	2301	2302				2304	2305						2307 2308						

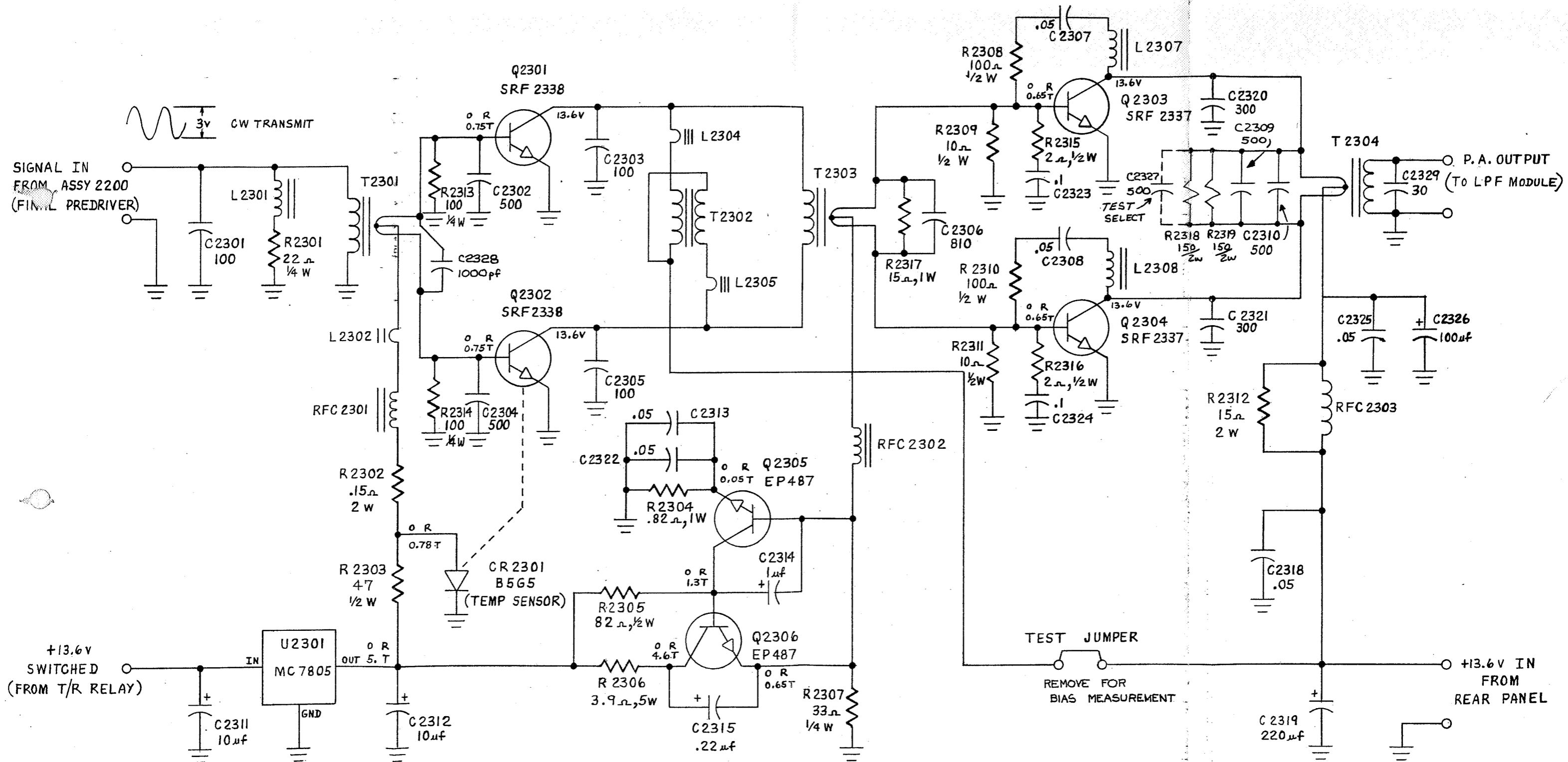


Fig. 2-38 Power Amplifier Schematic

R	9001	9006	9007	9011	9012	9013	9014	9018	9019	9021	9023	9028	9029	9032	9033	9037	9039	9044	9049	9055	9059	9064	9065	9067	9069	9070	9072	9073	9075	9077	9078	9079	9081	9082	9084	9085	9086	9088	9089	9090	9091																																																		
C	9001	9002	9003	9004	9005	9006	9007	9008	9009	9010	9011	9012	9013	9014	9015	9016	9017	9018	9019	9020	9021	9022	9023	9024	9025	9026	9027	9028	9029	9030	9031	9032	9033	9034	9035	9036	9037	9038	9039	9040	9041	9042	9043	9044	9045	9046	9047	9048	9049	9050	9051	9052	9053	9054	9055	9056	9057	9058	9059	9060	9061	9062	9063	9064	9065	9066	9067	9068	9069	9070	9071	9072	9073	9074	9075	9076	9077	9078	9079	9080	9081	9082	9083	9084	9085	9086	9087	9088	9089	9090	9091
U	9001	9002	9003	9004	9005	9006	9007	9008	9009	9010	9011	9012	9013	9014	9015	9016	9017	9018	9019	9020	9021	9022	9023	9024	9025	9026	9027	9028	9029	9030	9031	9032	9033	9034	9035	9036	9037	9038	9039	9040	9041	9042	9043	9044	9045	9046	9047	9048	9049	9050	9051	9052	9053	9054	9055	9056	9057	9058	9059	9060	9061	9062	9063	9064	9065	9066	9067	9068	9069	9070	9071	9072	9073	9074	9075	9076	9077	9078	9079	9080	9081	9082	9083	9084	9085	9086	9087	9088	9089	9090	9091

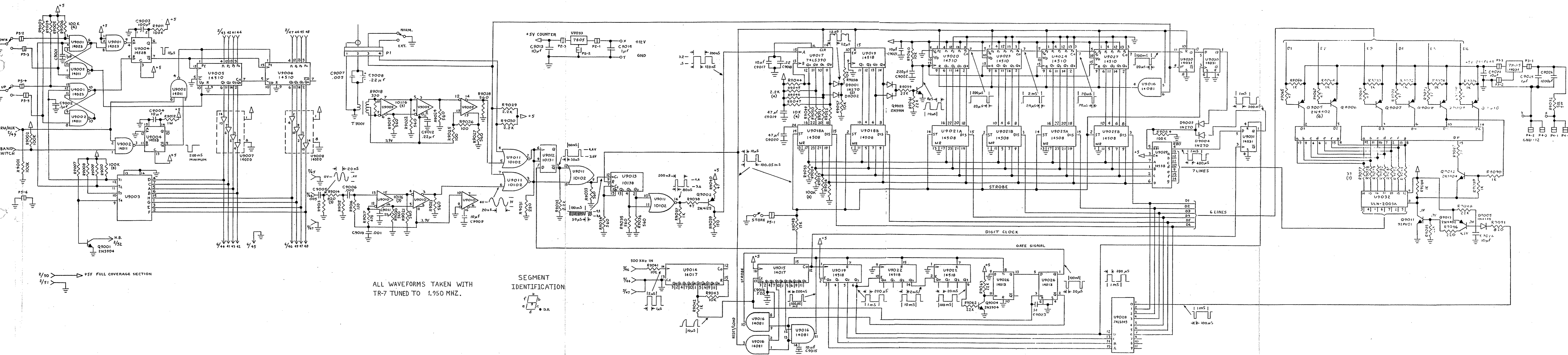


Fig. 4-2 DR-7 Board Schematic

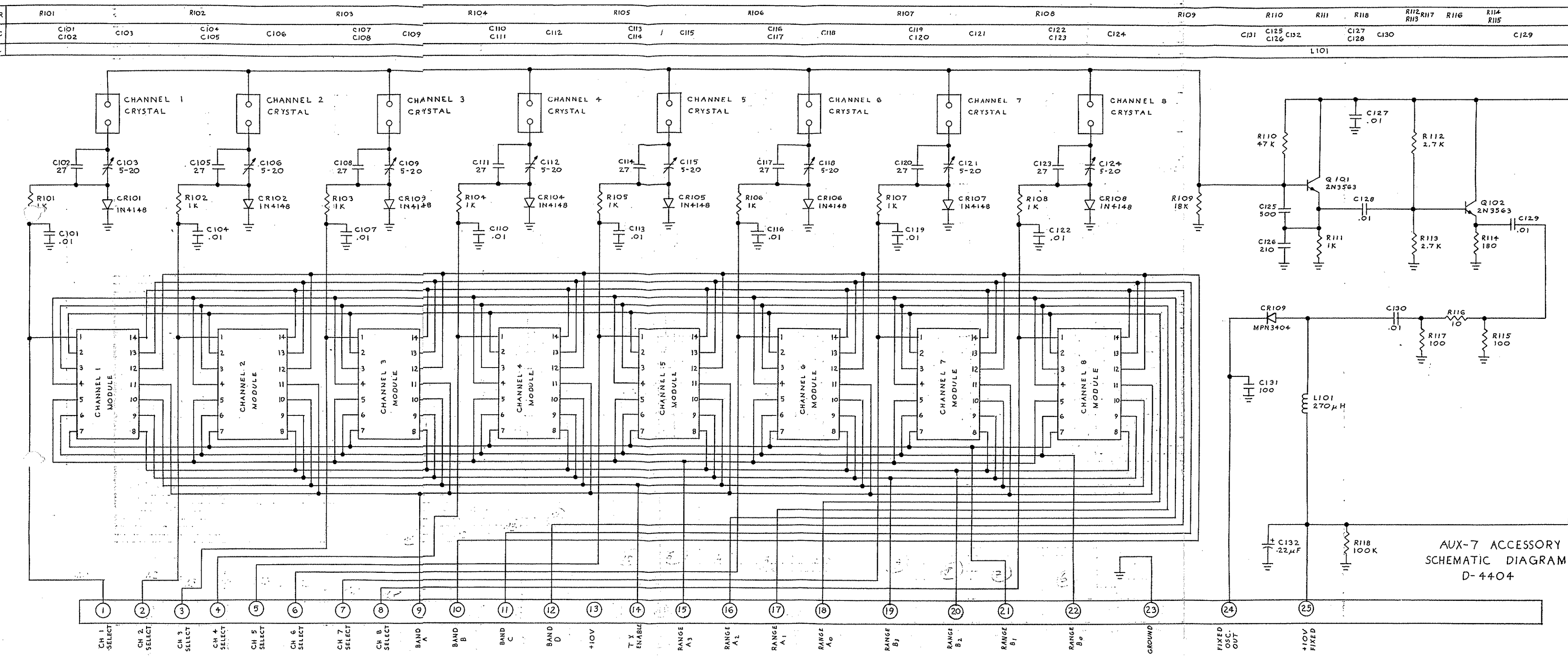
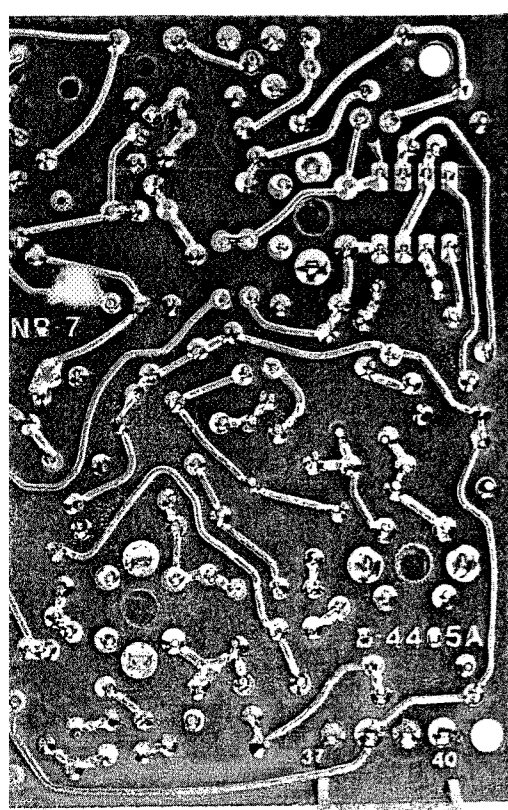
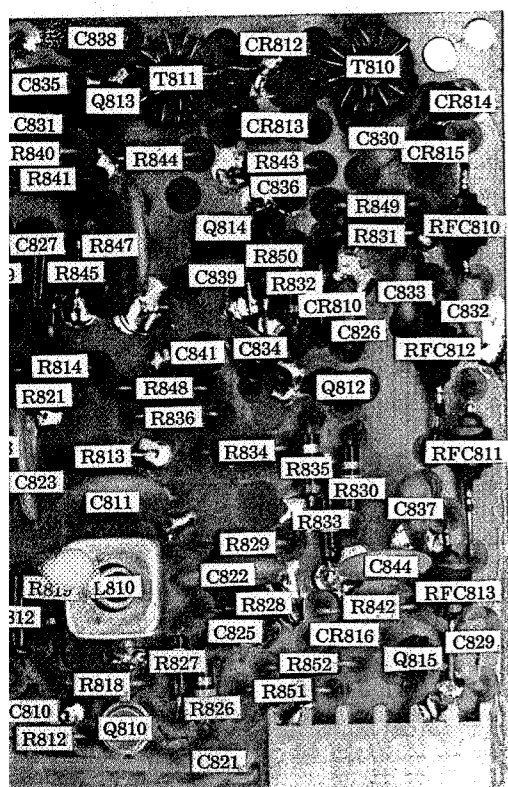


Fig. 4-4 AUX-7 Board Schematic



R	810	811	812	820	827	828	818	813	819	829	814	821	822	823	815	850	834	824	816	817	838	840	841	846
C	810	821	825	836	811	822	830	832	812	842	813	823	814	815	817	824	816	817	818	835	828	819	820	845
L	844	844			843	842			837		838	826		839	841	834			818	835	847	840	848	846

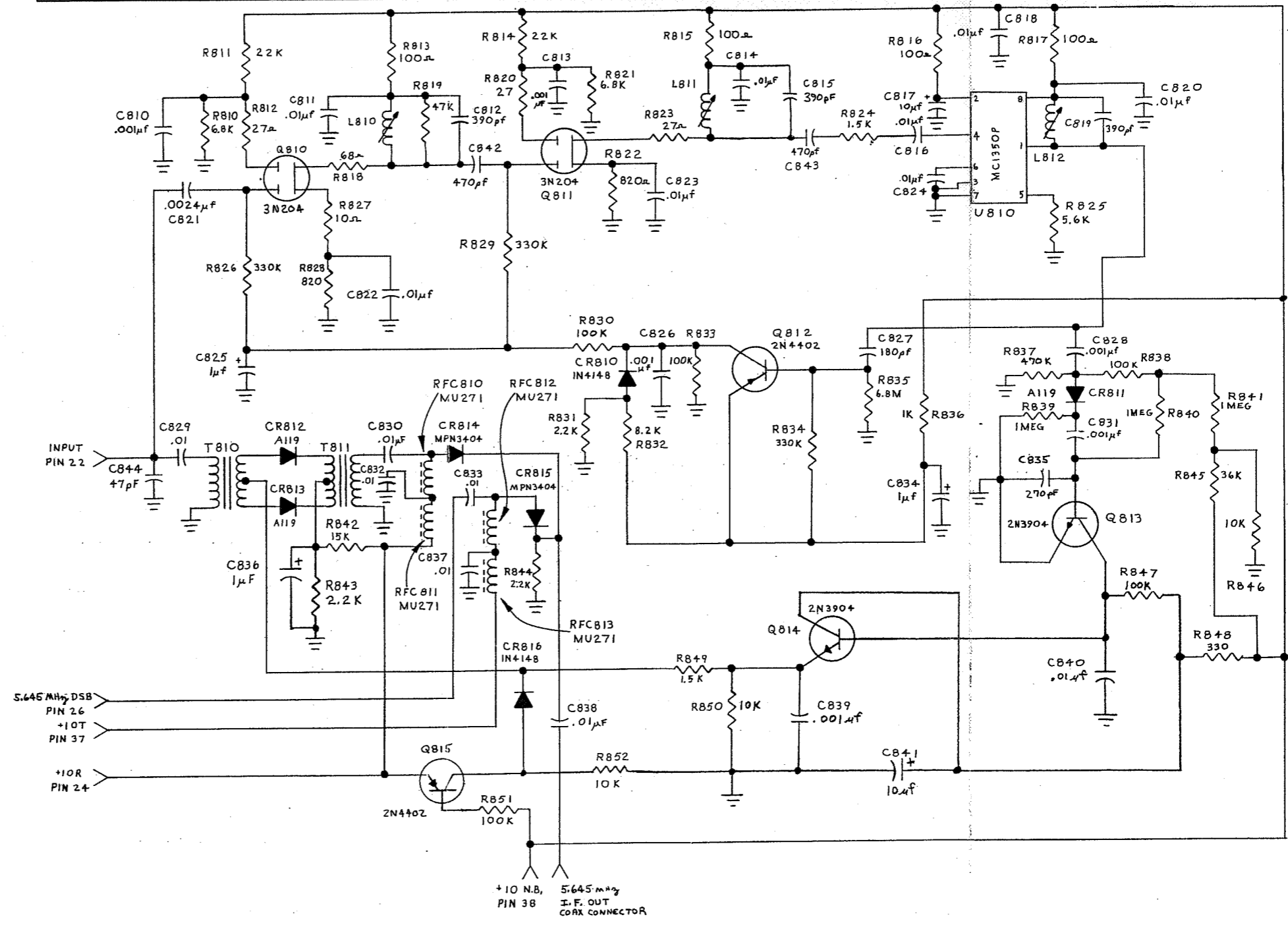
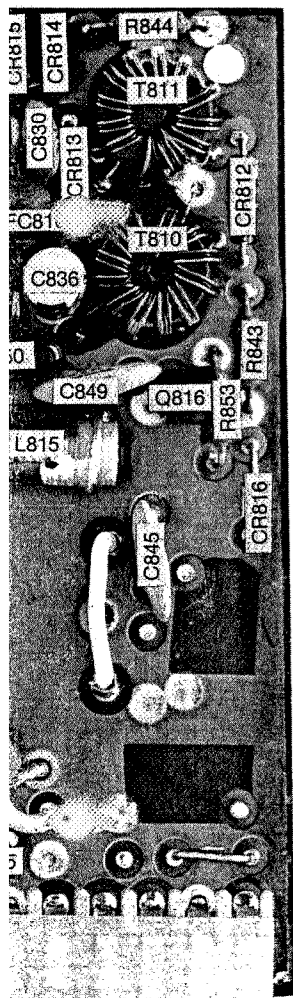
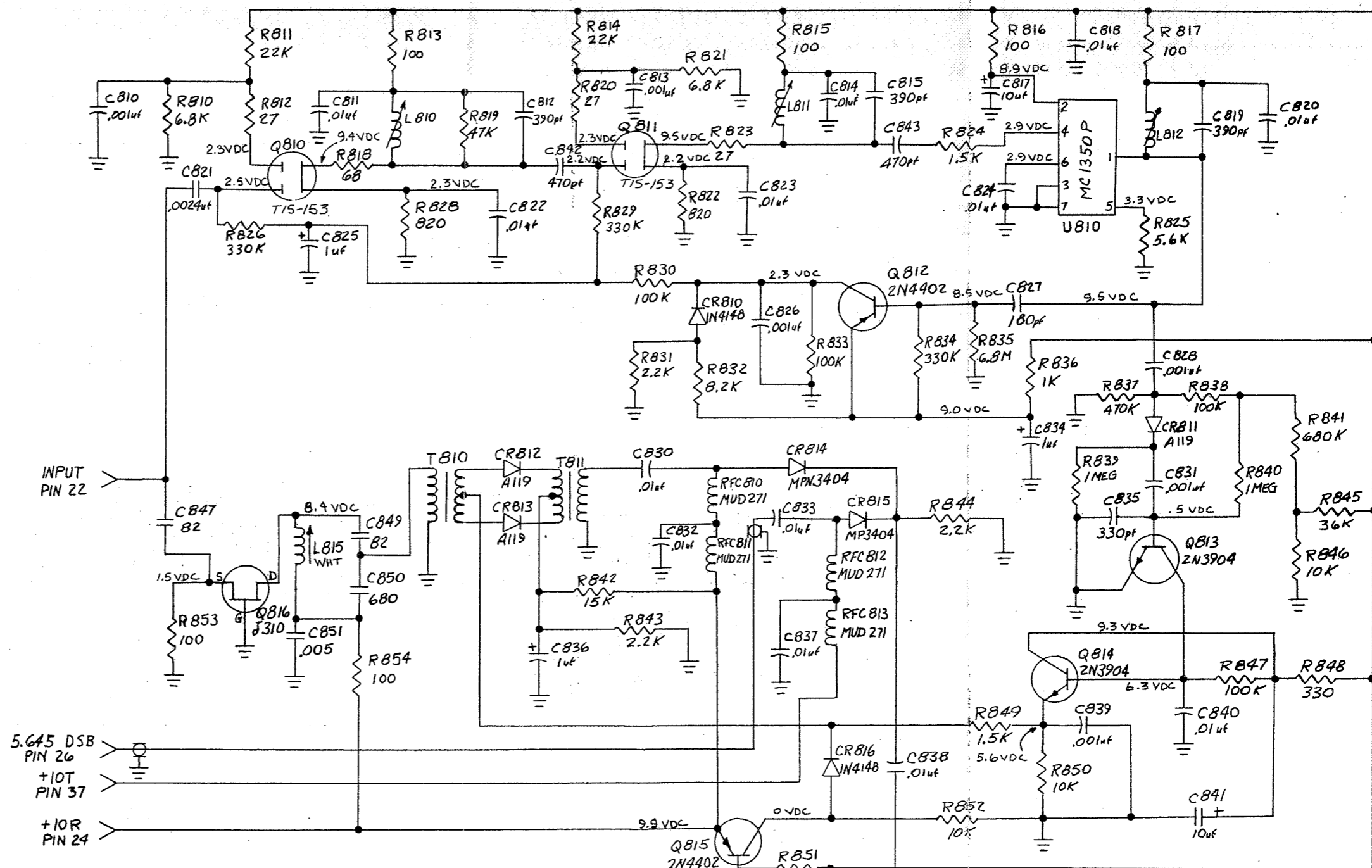


Fig. 4-6 NB-7 Board Schematic - Version 1

Board Pictorial - Version 1



R	810	826	811	818	813	820	819	814	829	830	821	823	815	851	834	824	816	836	839	837	817	838	840	841	845
C	810	847	821	825	811	849	822	812	842	813	832	823	826	814	815	843	824	834	839	835	828	840	819	820	
L				815	814																				



VOLTAGES MEASURED IN RECEIVE,
NOISE BLANKER ENABLED
HIGHEST NUMBERED RESISTOR R854
HIGHEST NUMBERED CAPACITOR C851

Fig. 4-8 NB-7 Board Schematic - Version 2