

Fig. 1-1 TR-7 Block Diagram

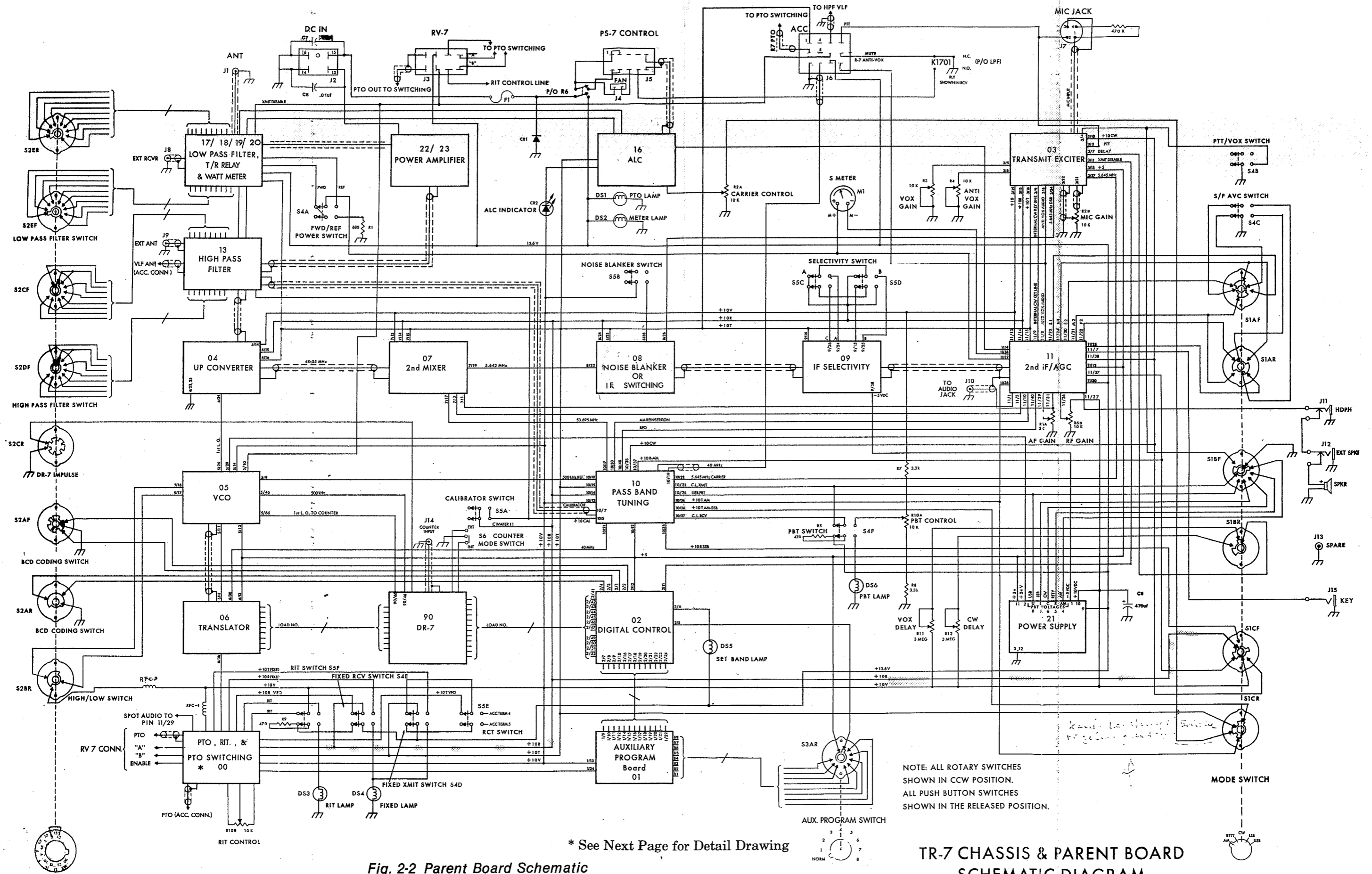
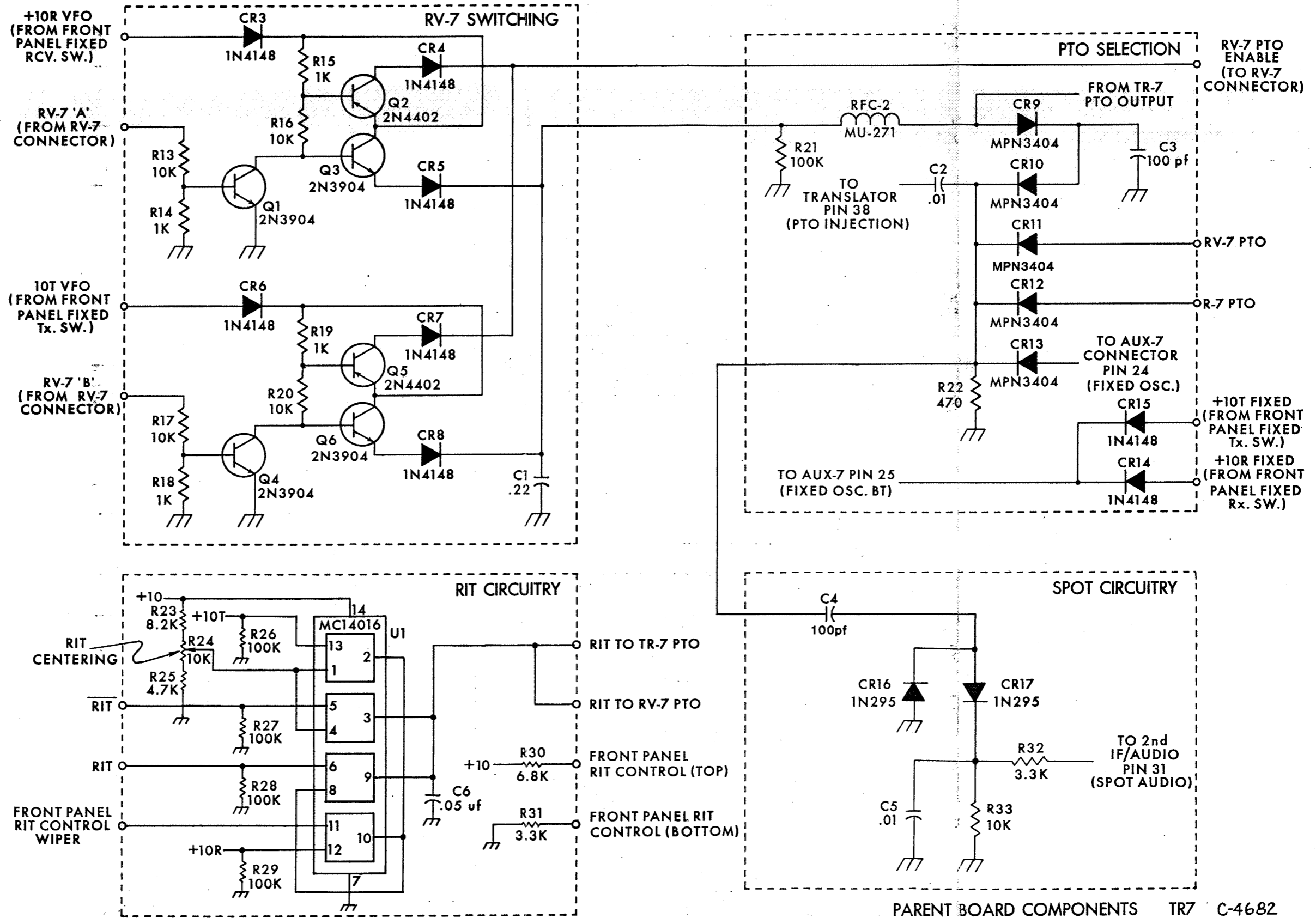


Fig. 2-2 Parent Board Schematic

\* See Next Page for Detail Drawing

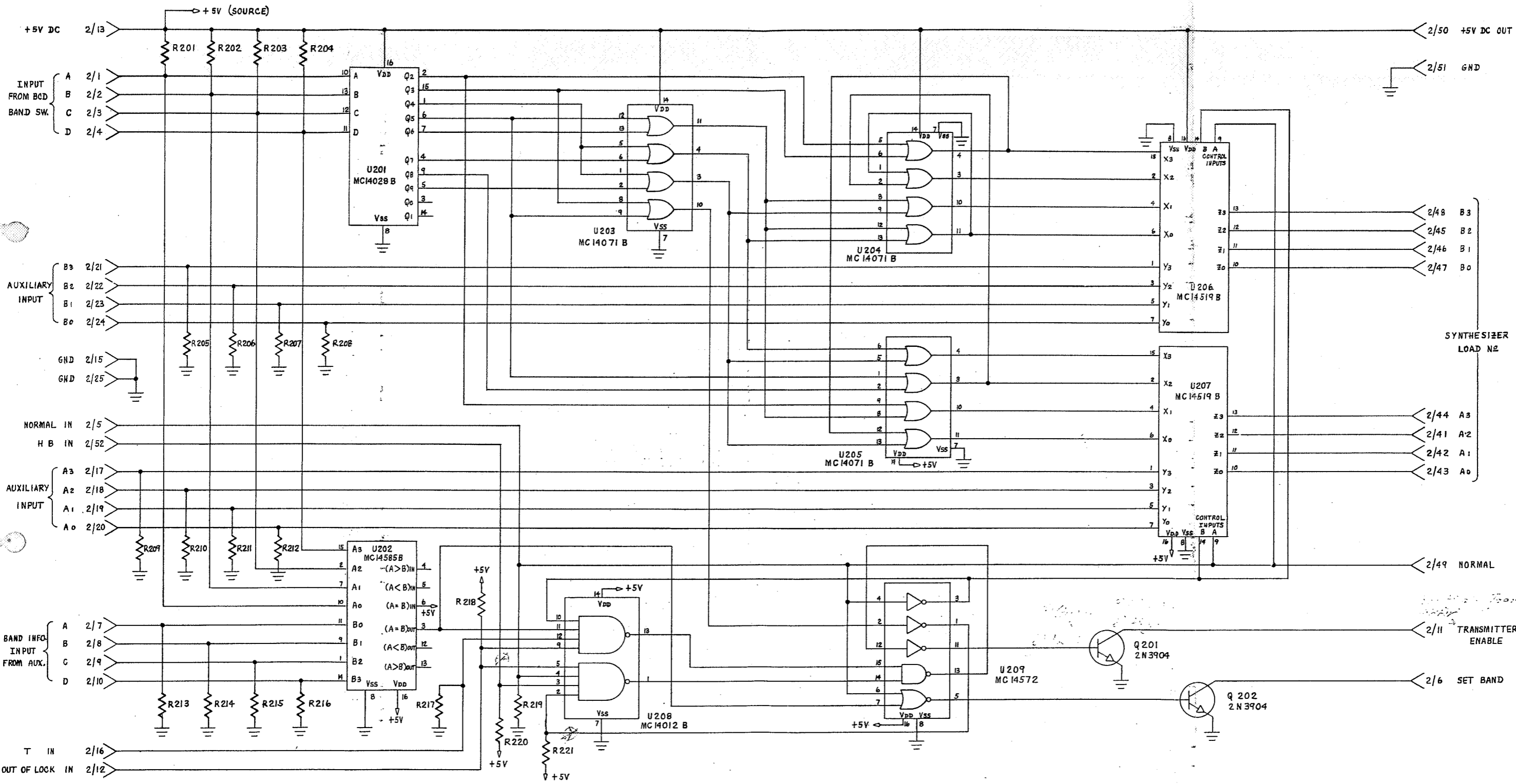
TR-7 CHASSIS & PARENT BOARD SCHEMATIC DIAGRAM

Falsch 8/25 = 8/37



PARENT BOARD COMPONENTS TR7 C-4682

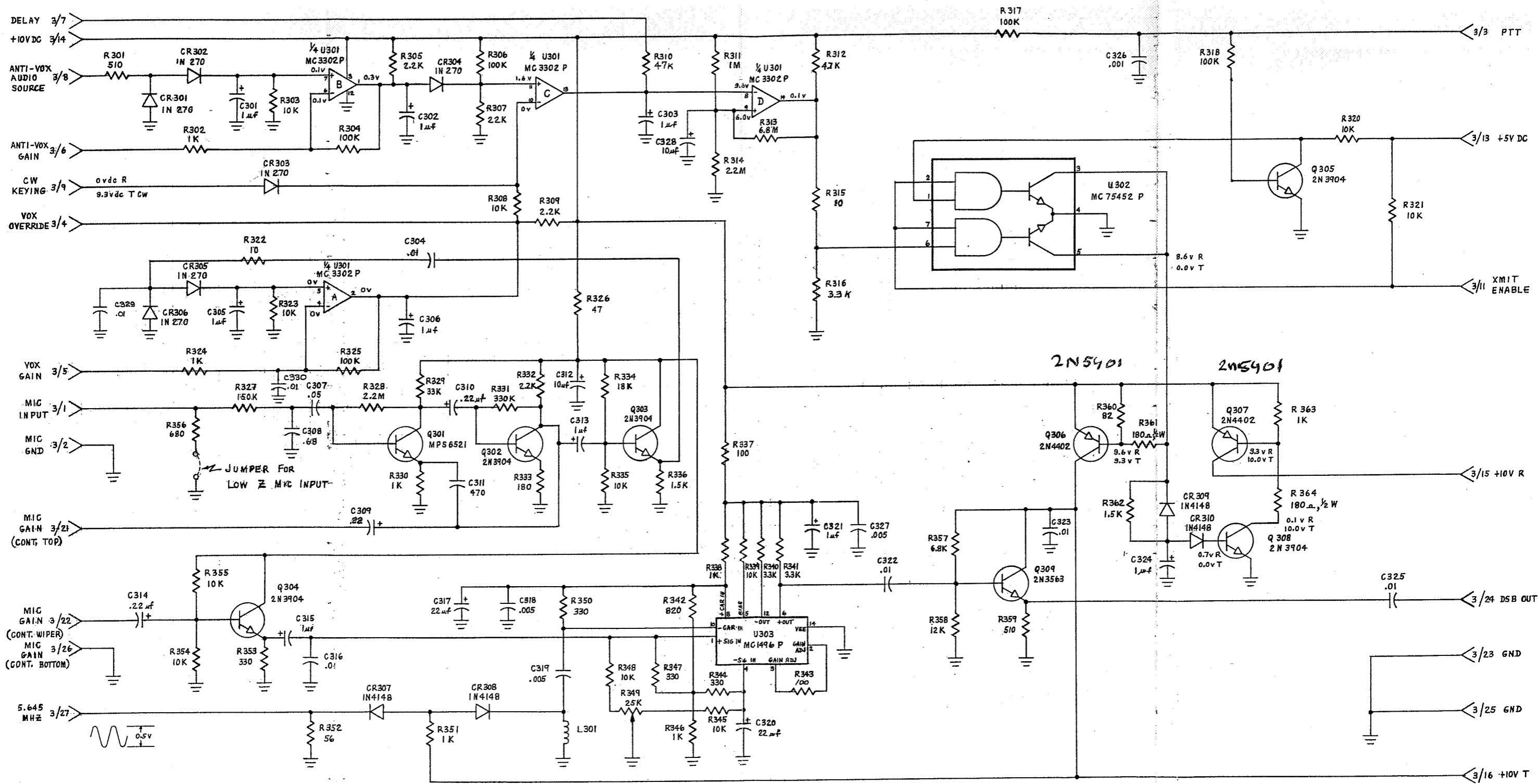
R	209	201	205	202	206	203	207	204	208		217	218	220	219	221
	213	210	214	211	215	212	216								



NOTE - ALL RESISTORS ARE 100K  $\Omega$ , 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	327 329 333	322 334 349 340	323 357 358	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	334 349 340	342 346 347	311 338 339 343 345	312 344 345	313 341 343	314 315 316	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

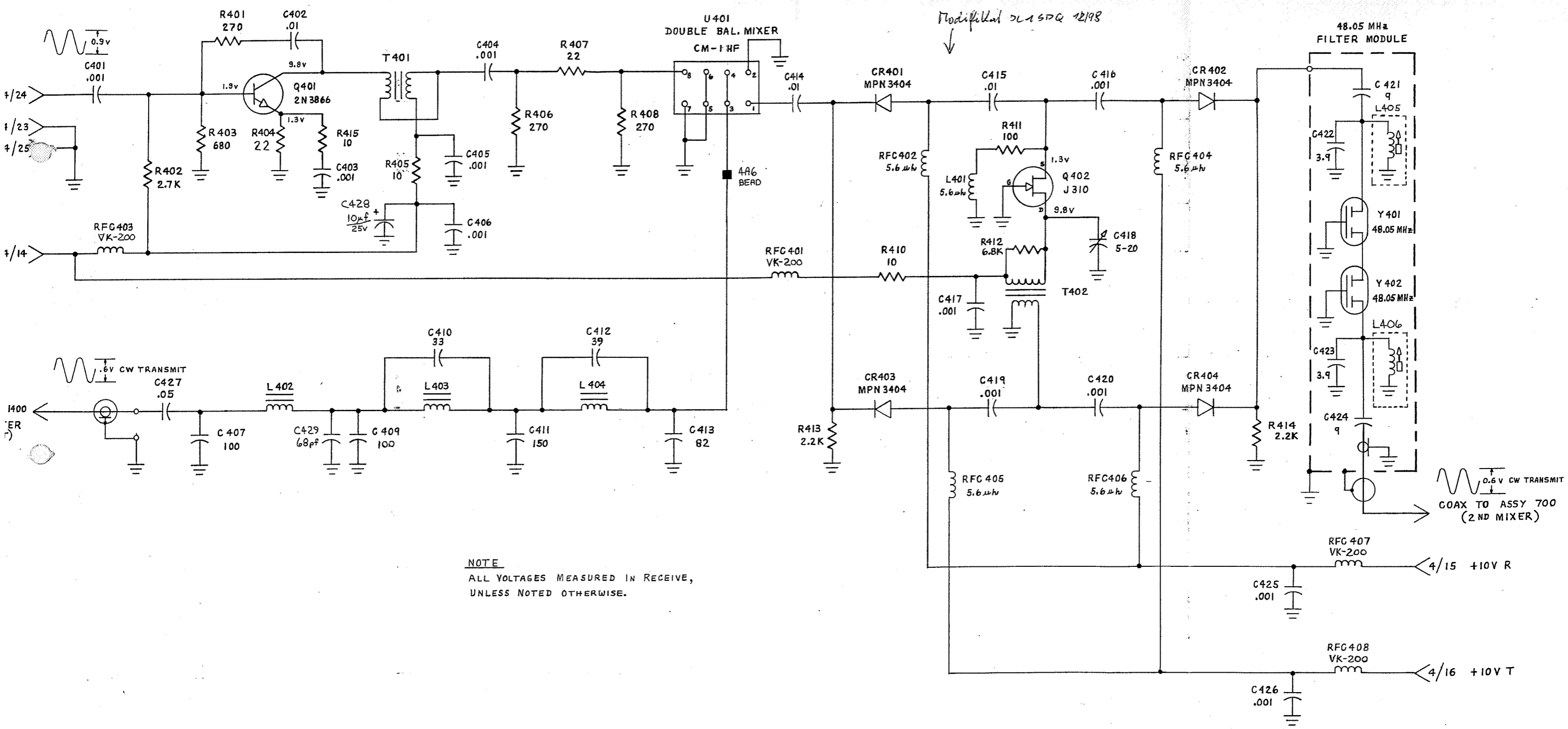


Fig. 2-8 Up-Converter Board Schematic

C	533	501 534 514	536 537	502 535 515	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	544 529	530	531 545 546	547 550	532	548 551 552	549	
R	501 507		502 508		519 520		503 509	521	523 522	524	525	526 527	528 510	504 529	505 530 511 530 512	506 538	539	531 534 535 513 532	516 536 532	517	533	514 537	518
L												501 502											

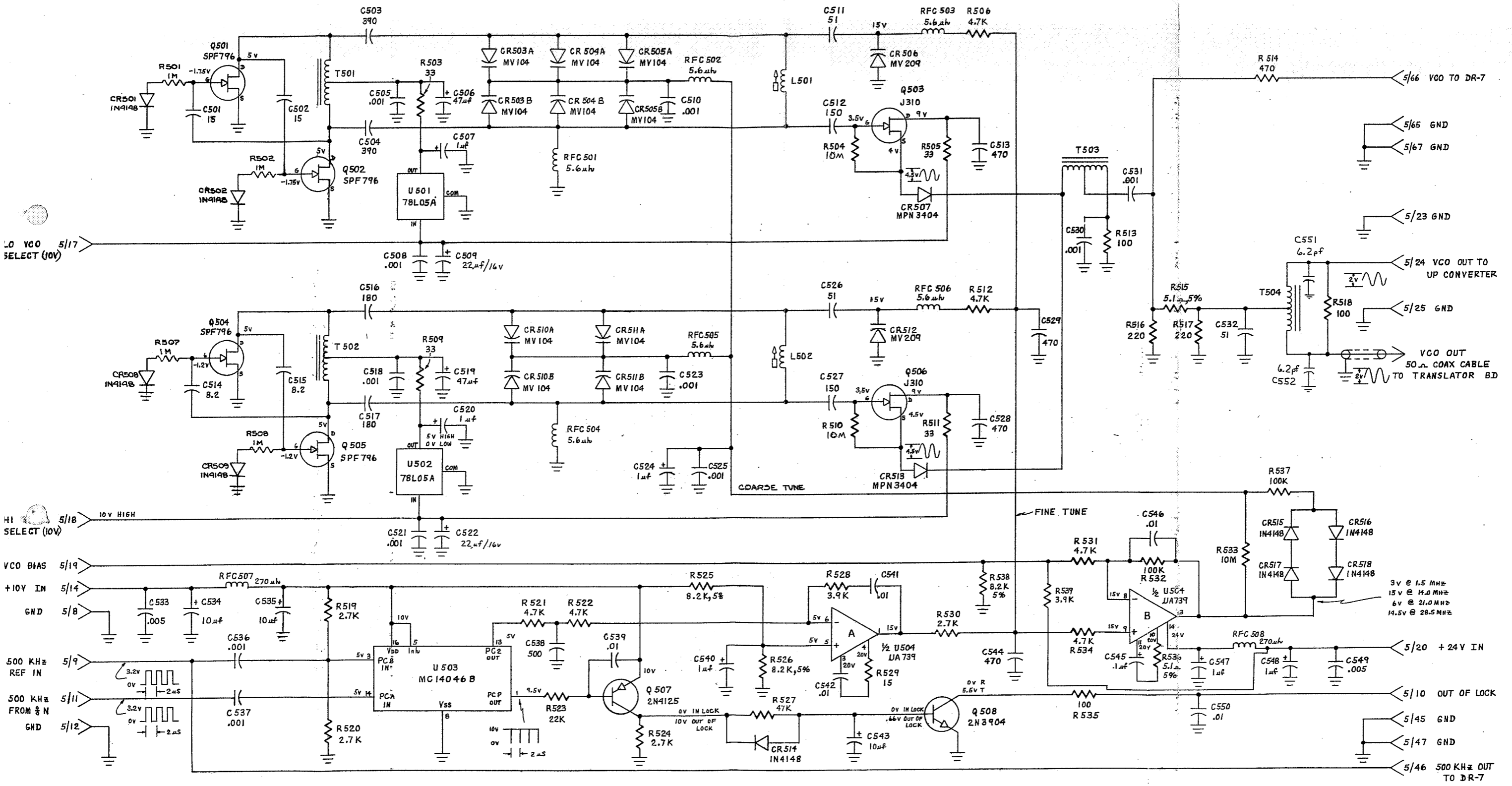


Fig. 2-10 VCO Board Schematic



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									

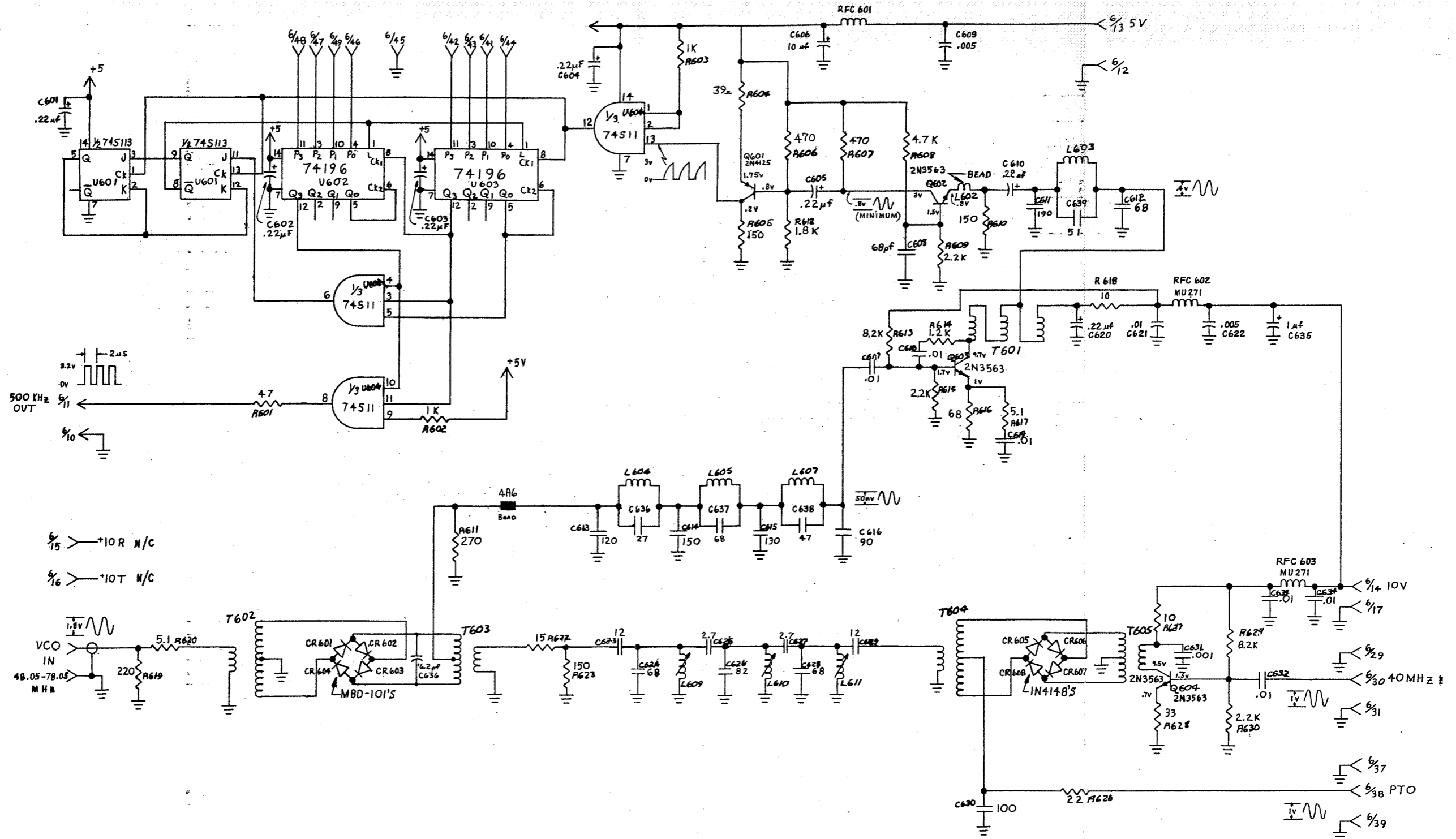


Fig. 2-12 Translator Board Schematic



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										

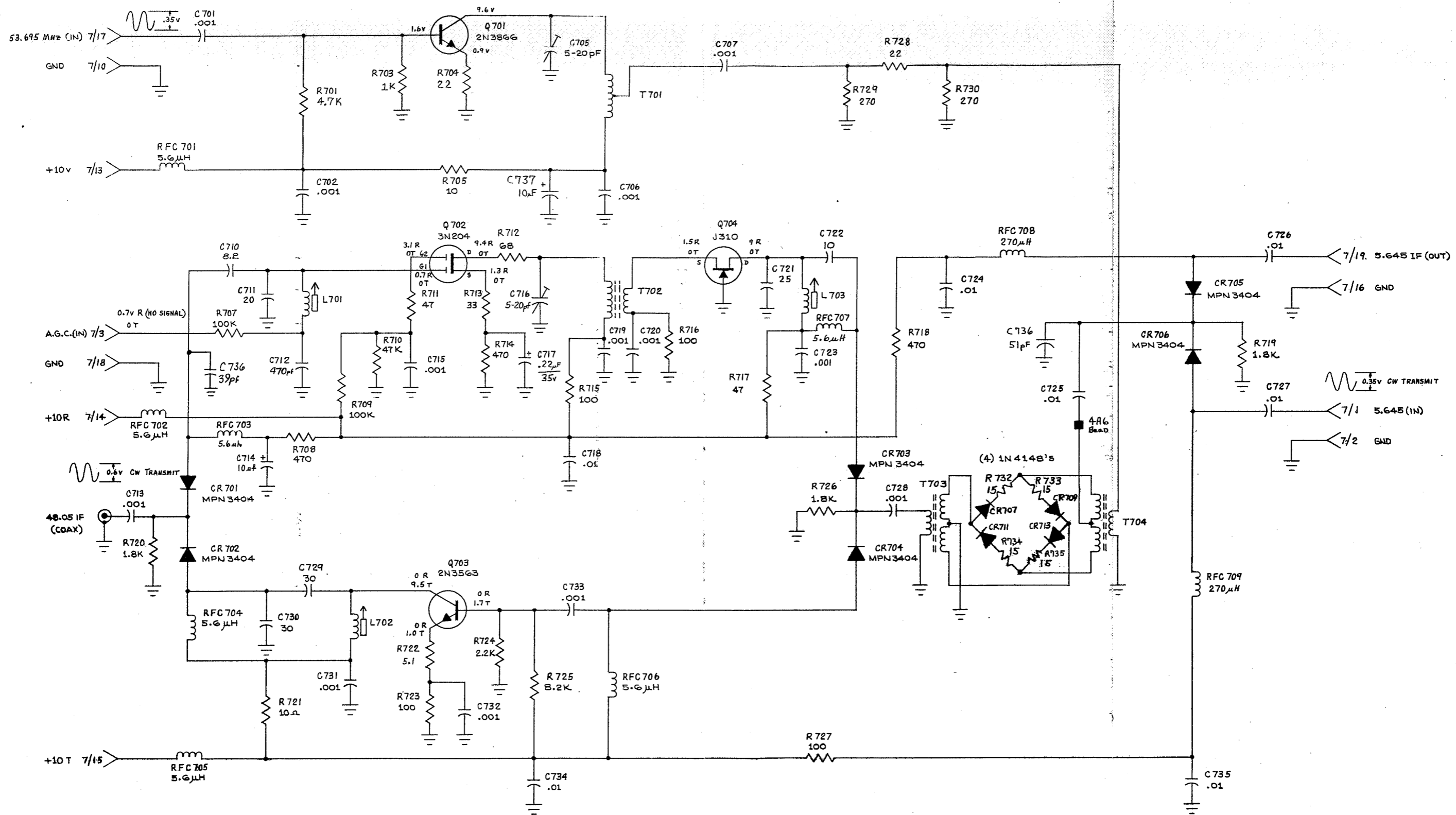


Fig. 2-14 2nd Mixer Board Schematic

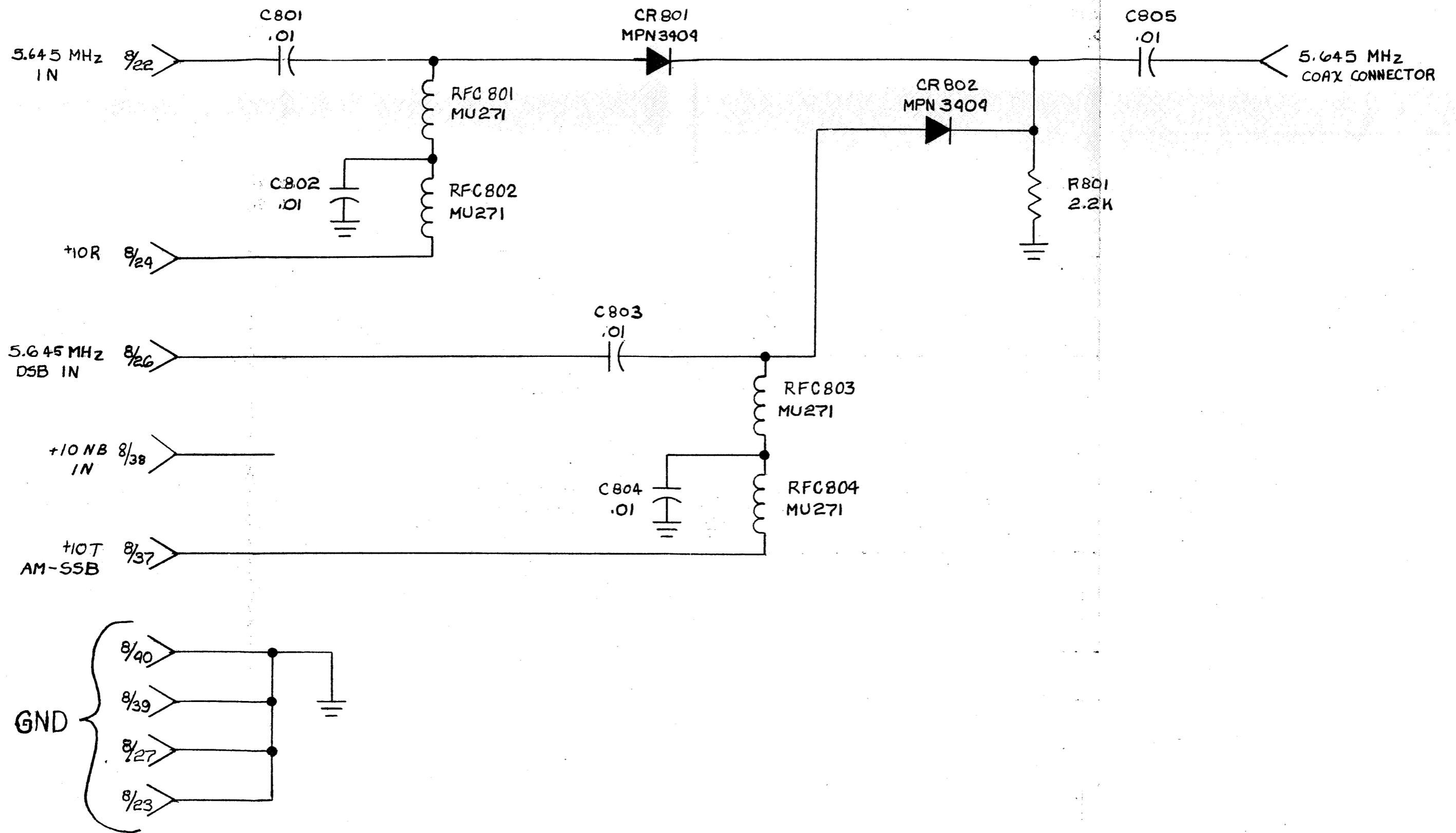


Fig. 2-16 IF Switching Board Schematic

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	919	918 920 922	917 921	925 928
RFC		901 902				903 904				905 906				907 908			

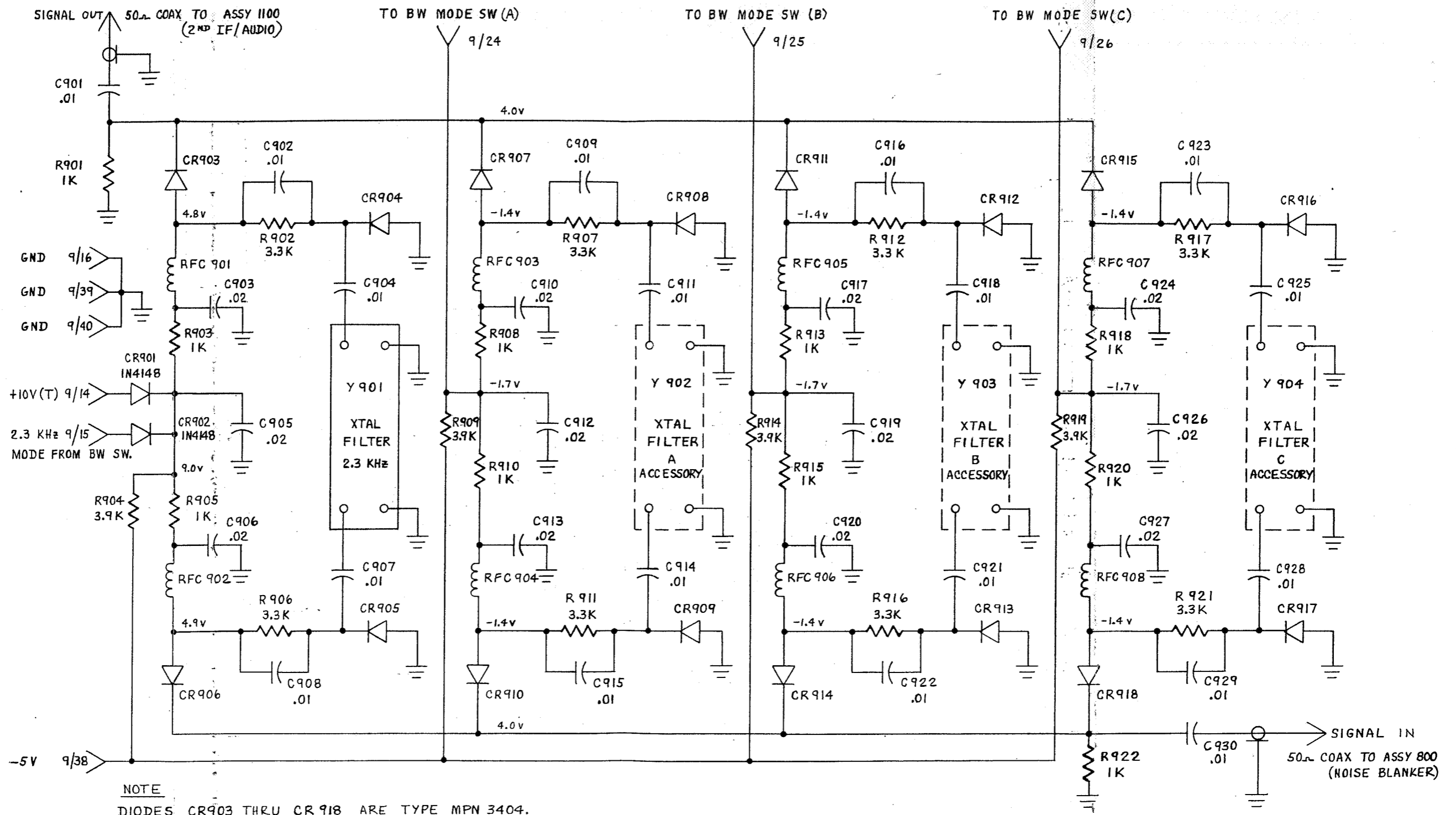
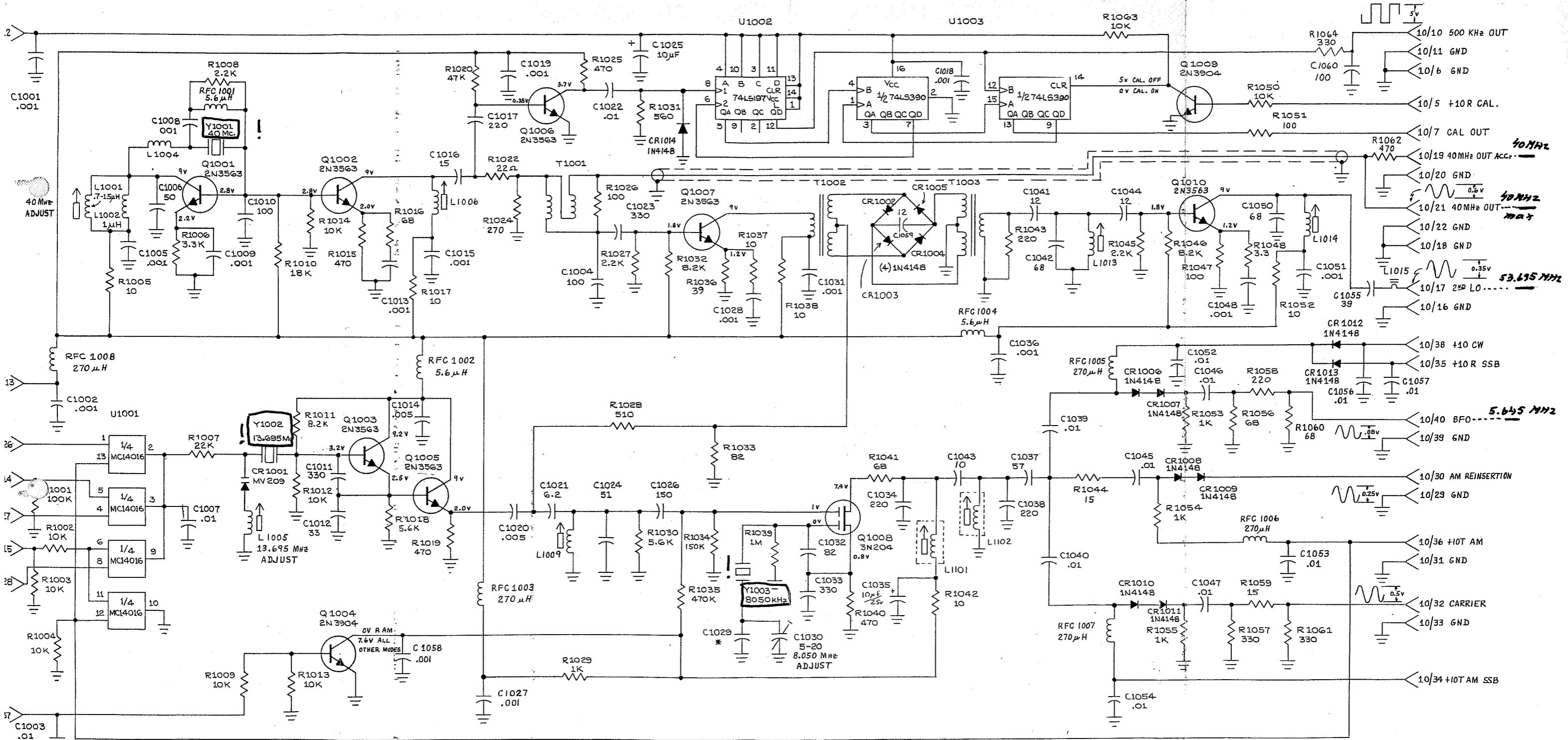


Fig. 2-18 IF Selectivity Board Schematic



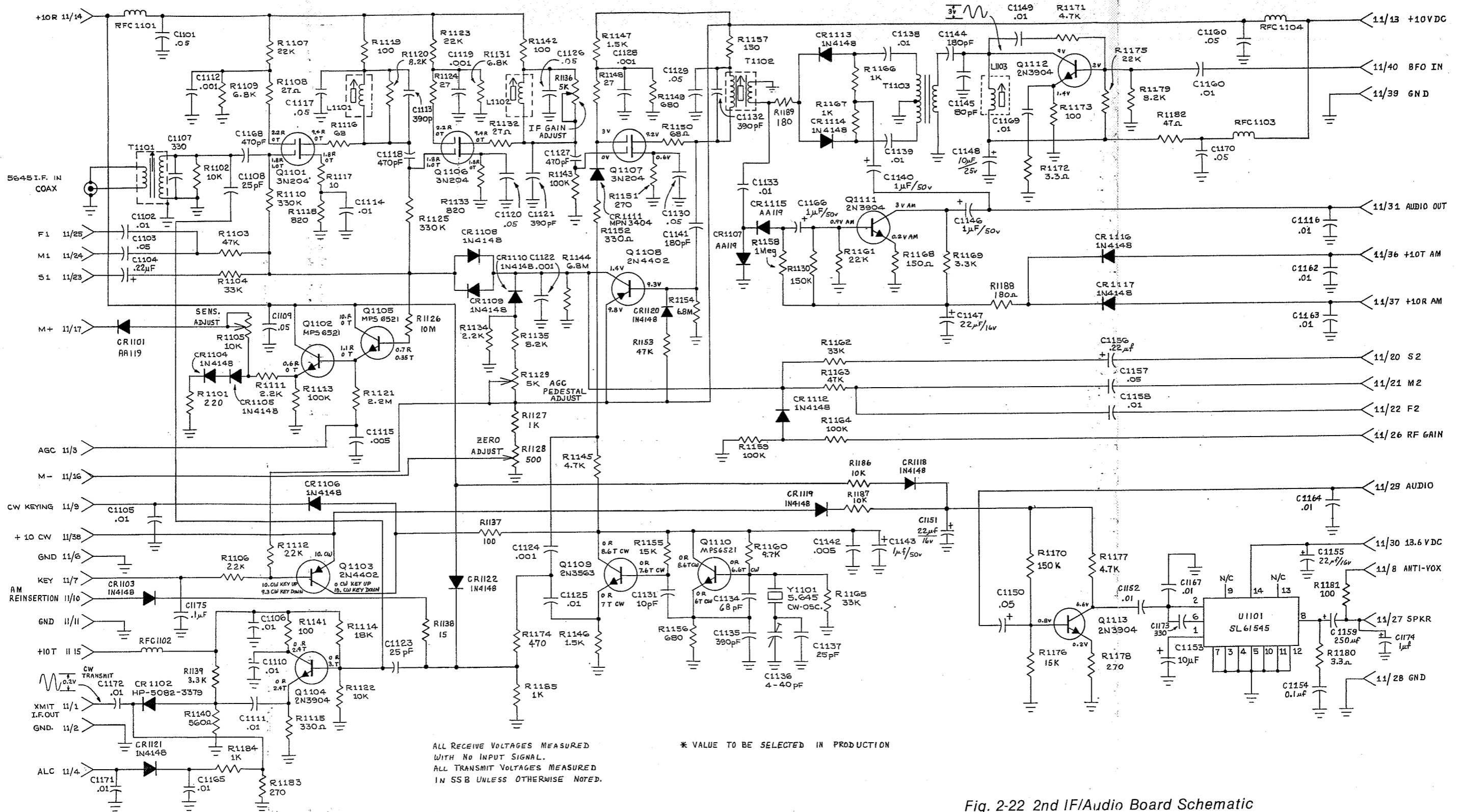
1001	1002	1005	1006	1008	1009	1010	1011	1014	1015	1016	1017	1019	1020	1022	1024	1025	1031	1032	1036	1037	1038	1040	1041	1042	1043	1044	1063	1045	1046	1047	1050	1052	1060	1064	1062																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
1001	1002	1005	1006	1008	1009	1010	1011	1012	1013	1015	1016	1019	1021	1024	1025	1026	1027	1030	1033	1034	1028	1030	1031	1034	1036	1041	1042	1044	1052	1046	1053	1056	1051	1058	1061	1055	1057																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
1001	1002	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	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	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494	1495	1496	1497	1498	1499	1500	1501	1502	1503	1504	1505	1506	1507	1508	1509	1510	1511	1512	1513	1514	1515	1516	1517	1518	1519	1520	1521	1522	1523	1524	1525	1526	1527	1528	1529	1530	1531	1532	1533	1534	1535	1536	1537	1538	1539	1540	1541	1542	1543	1544	1545	1546	1547	1548	1549	1550	1551	1552	1553	1554	1555	1556	1557	1558	1559	1560	1561	1562	1563	1564	1565	1566	1567	1568	1569	1570	1571	1572	1573	1574	1575	1576	1577	1578	1579	1580	1581	1582	1583	1584	1585	1586	1587	1588	1589	1590	1591	1592	1593	1594	1595	1596	1597	1598	1599	1600	1601	1602	1603	1604	1605	1606	1607	1608	1609	1610	1611	1612	1613	1614	1615	1616	1617	1618	1619	1620	1621	1622	1623	1624	1625	1626	1627	1628	1629	1630	1631	1632	1633	1634	1635	1636	1637	1638	1639	1640	1641	1642	1643	1644	1645	1646	1647	1648	1649	1650	1651	1652	1653	1654	1655	1656	1657	1658	1659	1660	1661	1662	1663	1664	1665	1666	1667	1668	1669	1670	1671	1672	1673	1674	1675	1676	1677	1678	1679	1680	1681	1682	1683	1684	1685	1686	1687	1688	1689	1690	1691	1692	1693	1694	1695	1696	1697	1698	1699	1700	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	1711	1712	1713	1714	1715	1716	1717	1718	1719	1720	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	1751	1752	1753	1754	1755	1756	1757	1758	1759	1760	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770	1771	1772	1773	1774	1775	1776	1777	1778	1779	1780	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790	1791	1792	1793	1794	1795	1796	1797	1798	1799	1800	1801	1802	1803	1804	1805	1806	1807	1808	1809	1810	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820	1821	1822	1823	1824	1825	1826	1827	1828	1829	1830	1831	1832	1833	1834	1835	1836	1837	1838	1839	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000



\* 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	1119 1121	1120 1126	1123 1124	1125 1128	1131 1134	1132 1137	1142 1135	1127 1128	1136 1143	1147 1148	1149 1151	1150 1153	1157 1160	1159 1160	1158 1165	1169 1163	1167 1161	1168 1186	1169	1188 1170	1172 1176	1171 1173	1175 1177	1179 1178	1182	1180 1155	1181 1116	1164 1159	1174 1163		
C	1102 1103 1104	1172 1171 1105	1101 1107 1175	1112 1165 1111	1168 1106 1110	1109 1110	1117 1115	1114 1118	1123 1118	1119 1118	1120 1122	1121 1124	1126 1125	1127 1125	1128	1130 1134	1129 1141	1132 1135	1133 1134	1136 1137	1144 1147	1145 1146	1148 1151	1149 1150	1156 1157	1158	1159 1169	1175 1157	1158	1152 1153	1167 1173	1160 1170	1161 1170	1155 1154	1116 1162	1164 1159	1174 1163	
L							1101		1102																													



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

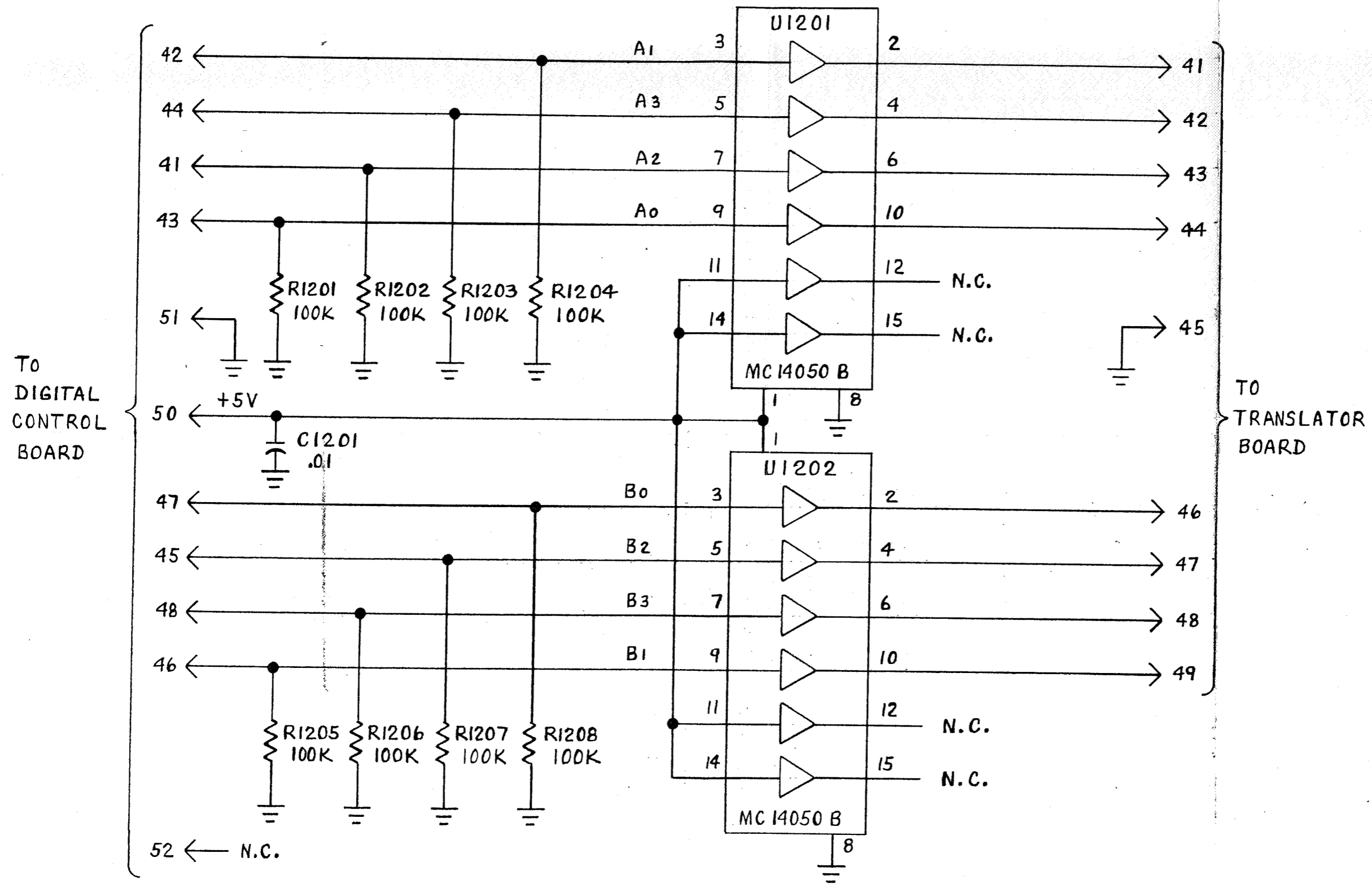


Fig. 2-24 Jumper Board Schematic

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

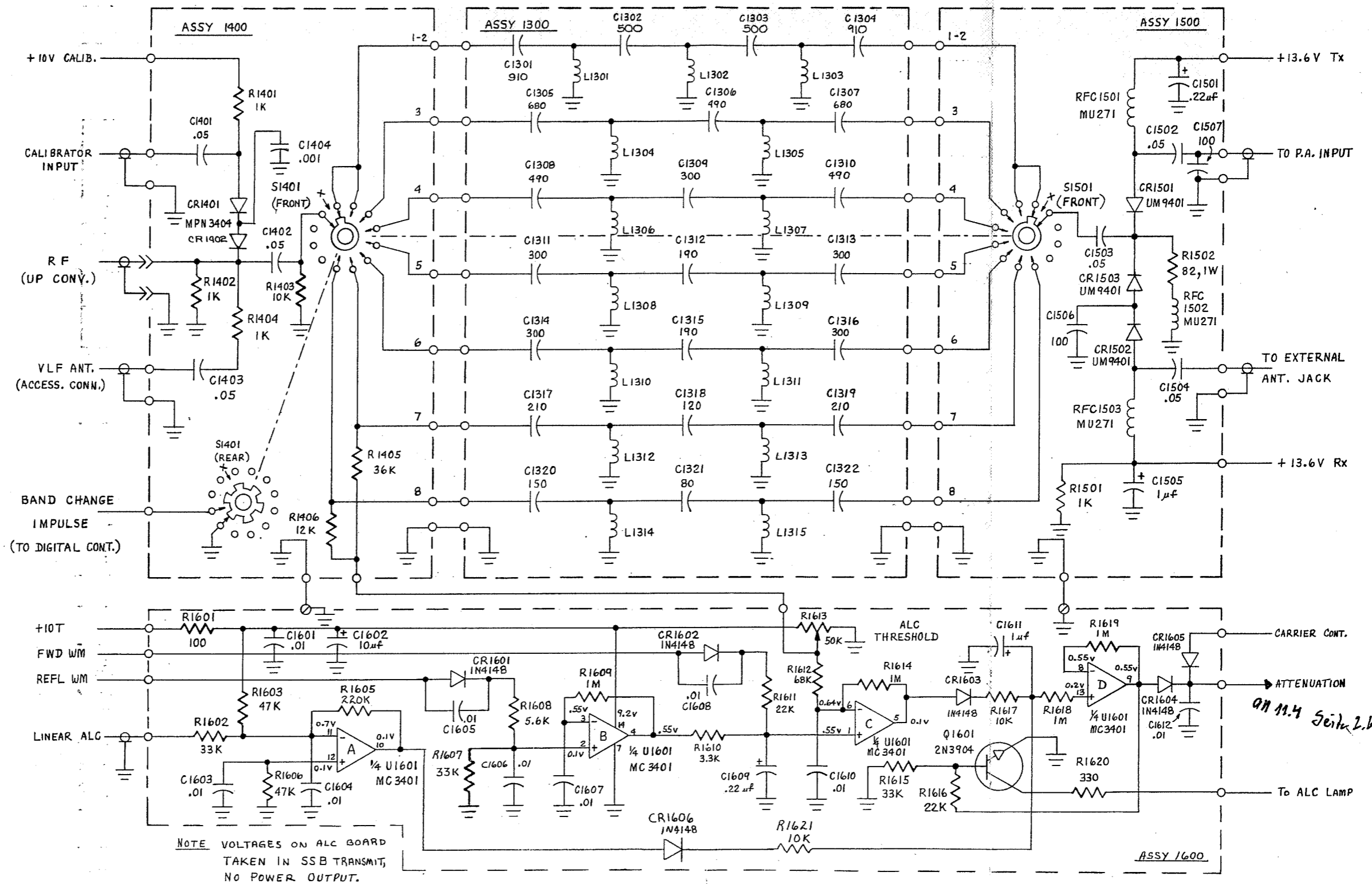


Fig. 2-28 High Pass Filter Module Schematic

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 1702 1706 1802 1806 1703 1707 1803 1807 1704 1708 1804 1808			

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

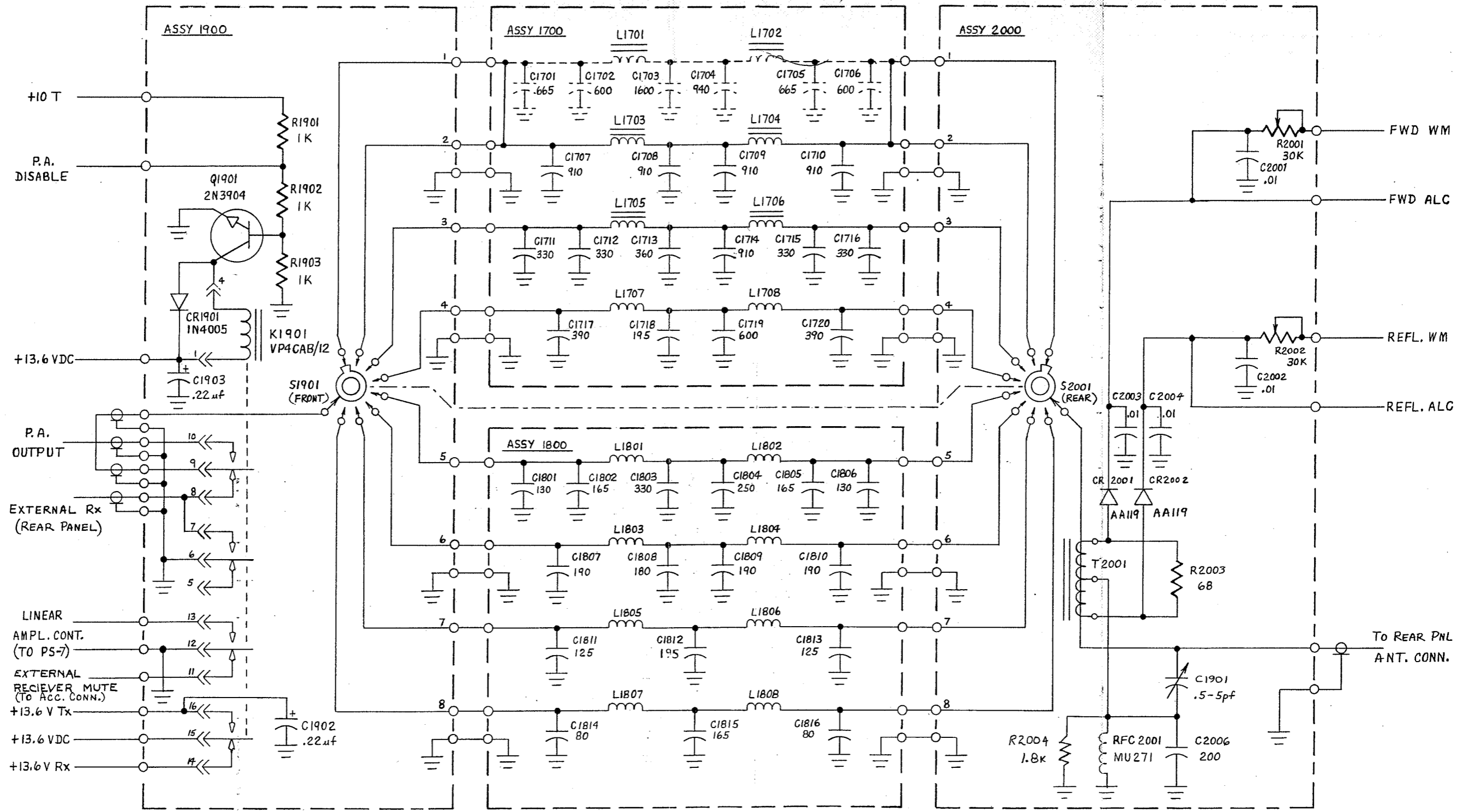
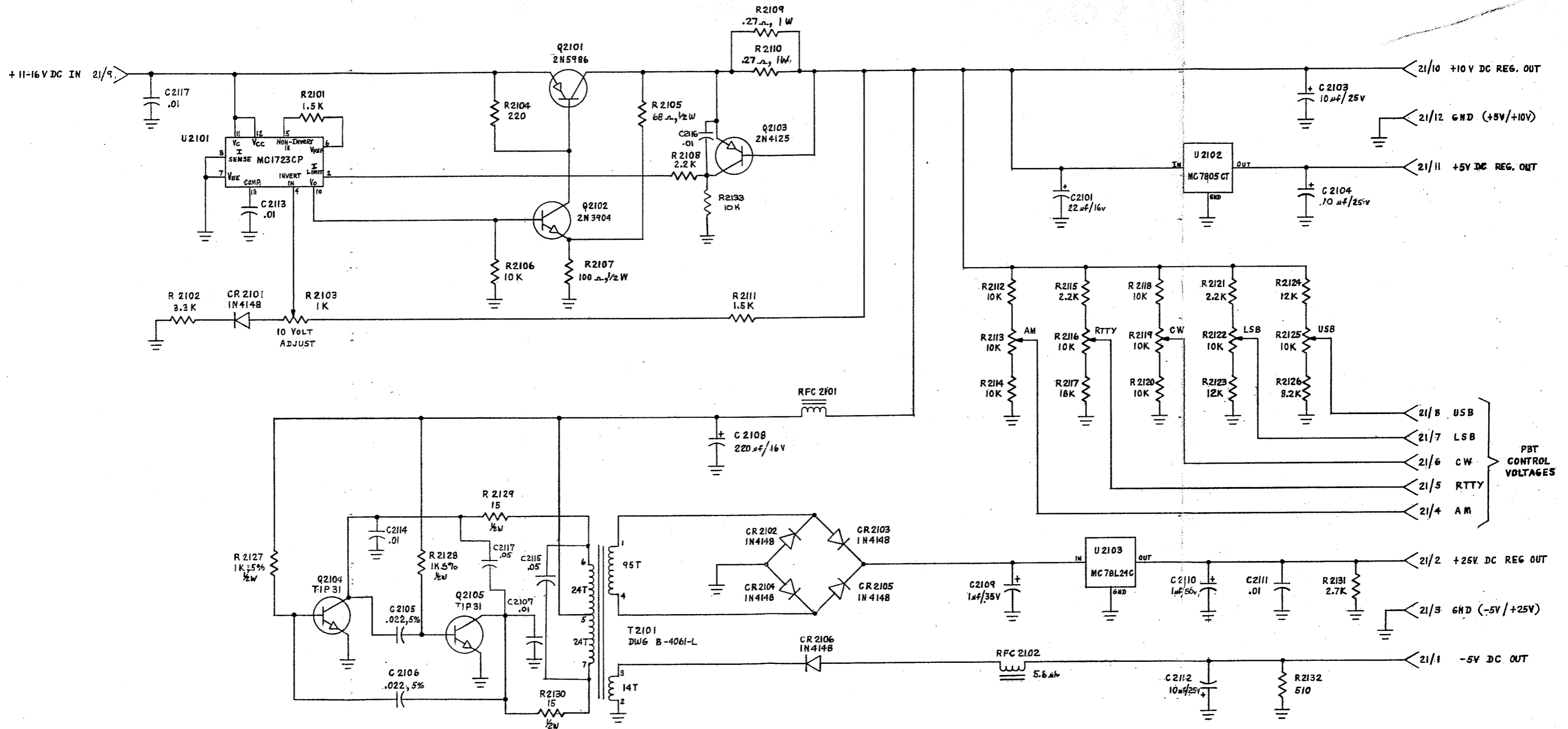


Fig. 2-32 Low Pass Filter Module Schematic



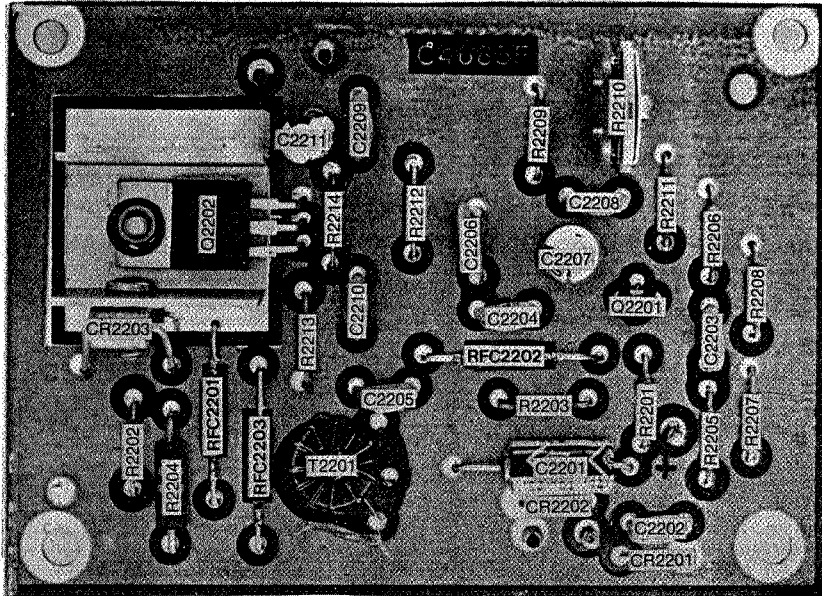
C	2117	2113	2114	2105 2106	2117	2107	2115	2108 2116	2109	2101	2110 2112	2111	2103 2104		
R	2102	2127	2103 2101	2128	2104 2106 2129	2107 2130	2105	2108 2133 2111	2109 2110	2112 2113 2114	2115 2116 2117	2118 2119 2120	2121 2122 2123	2132 2124 2125 2126	2131



**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

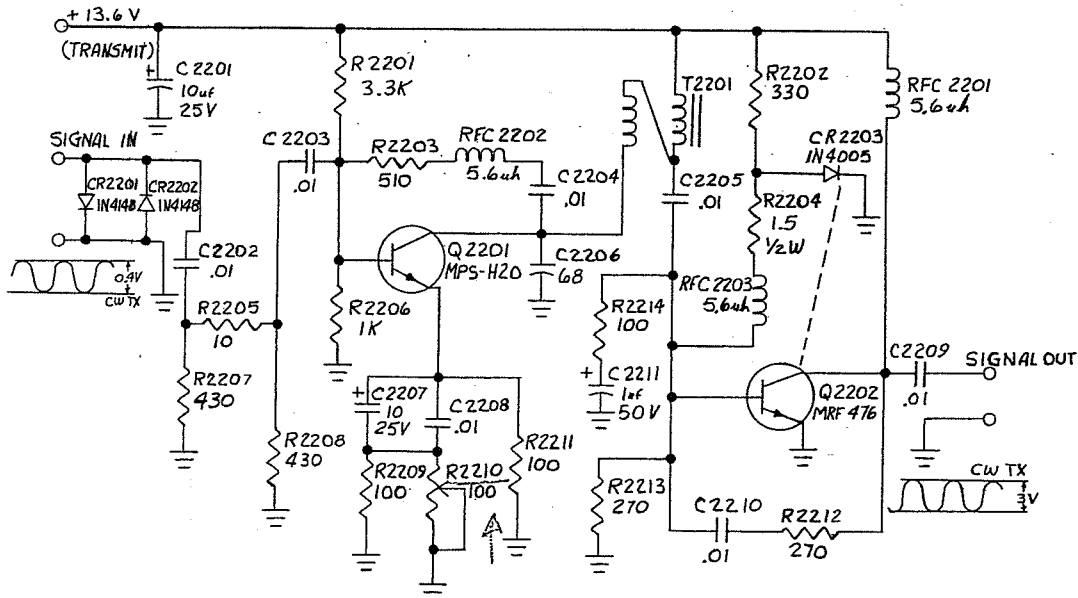
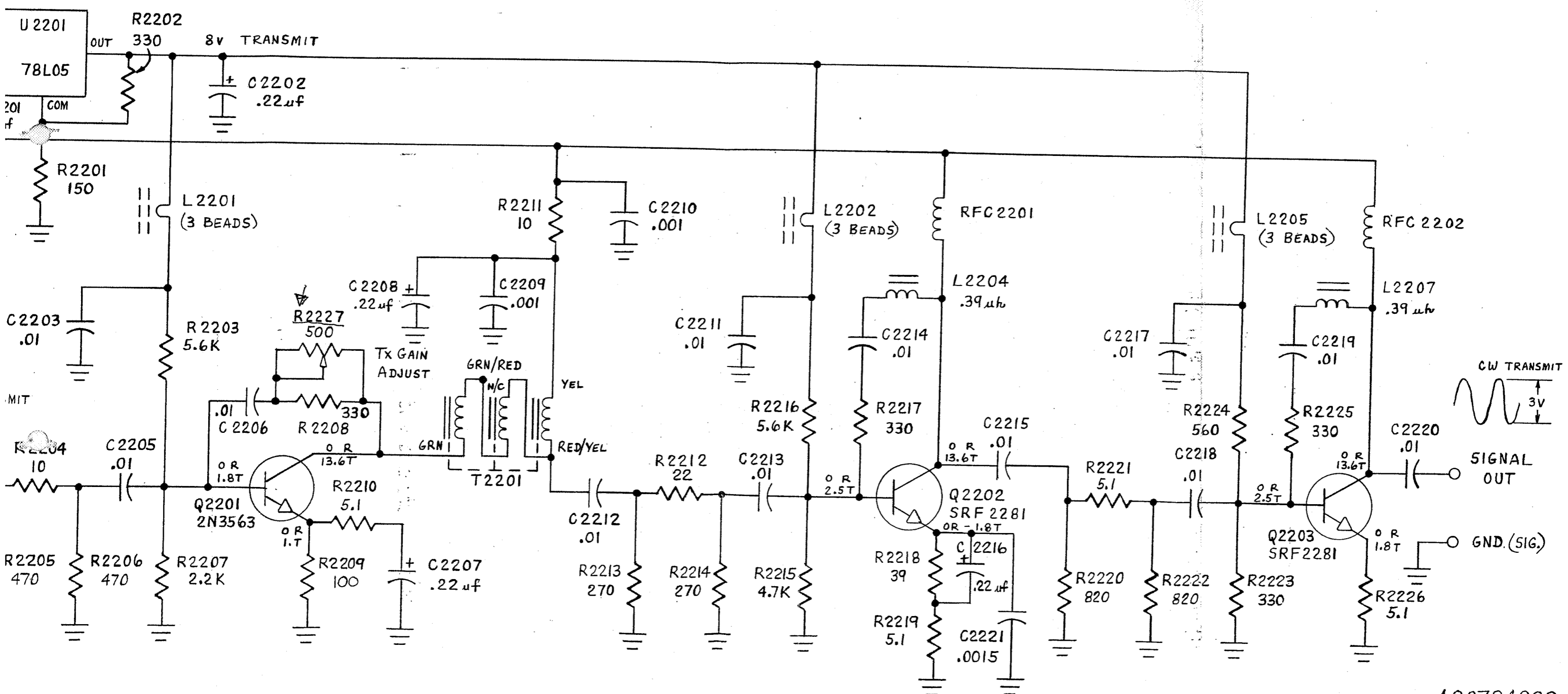


Fig. 2-36 Predriver Board #2 Pictorial & Schematic

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		2209	2227					2216	2219		2223	2225	2226
		2201								2202	2204		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									

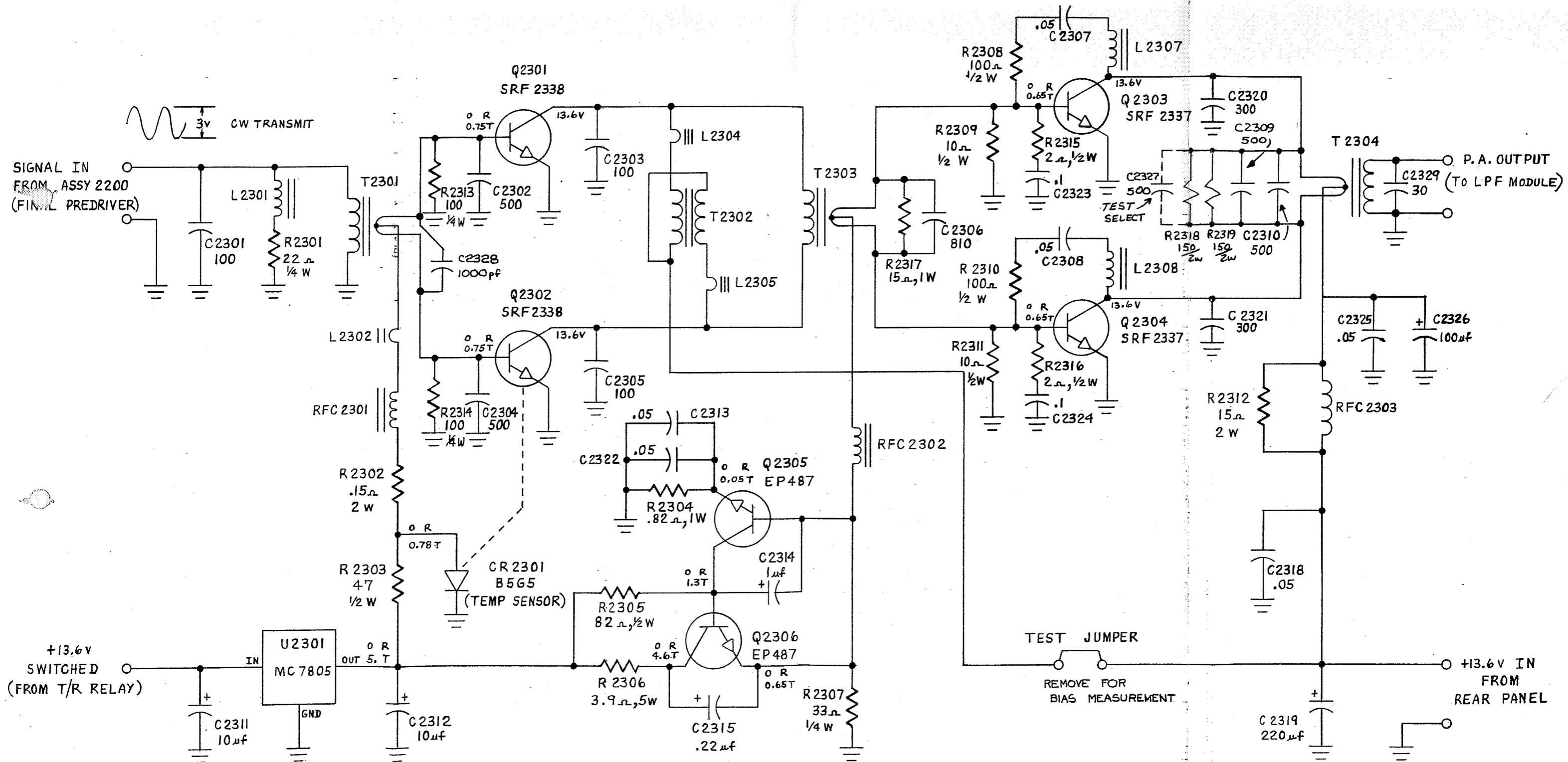


Fig. 2-38 Power Amplifier Schematic

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	9077	9078	9087	9089	9090					
C	9002	9003	9004	9005	9006	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						
U	9001	9001	9001	9001	9002	9005	9007	9006	9008	9009	9009	9009	9011	9012	9011	9014	9011	9014	9015	9016	9017	9019	9019	9021	9022	9020	9022	9023	9026	9024	9025	9027	9028	9030	9030	9031	9032	9034

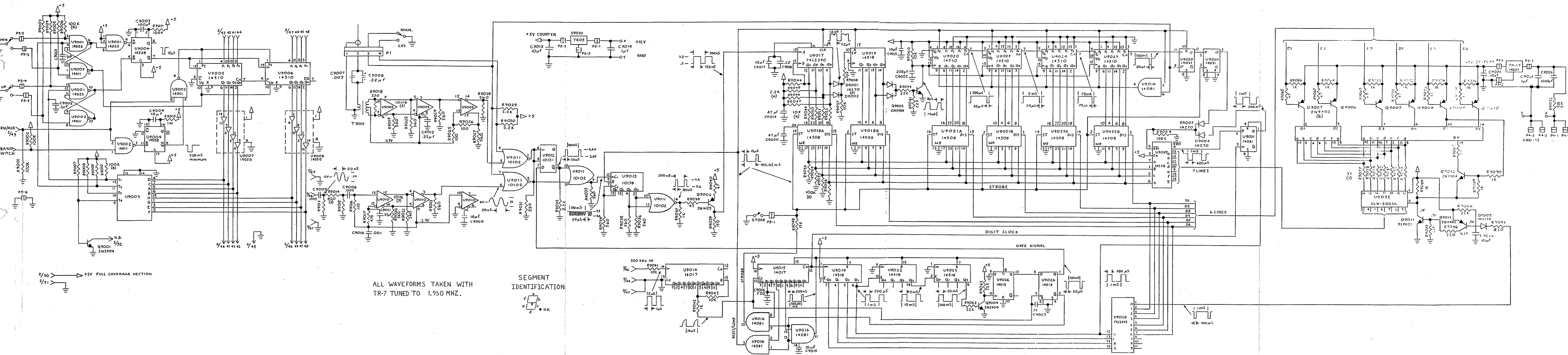


Fig. 4-2 DR-7 Board Schematic

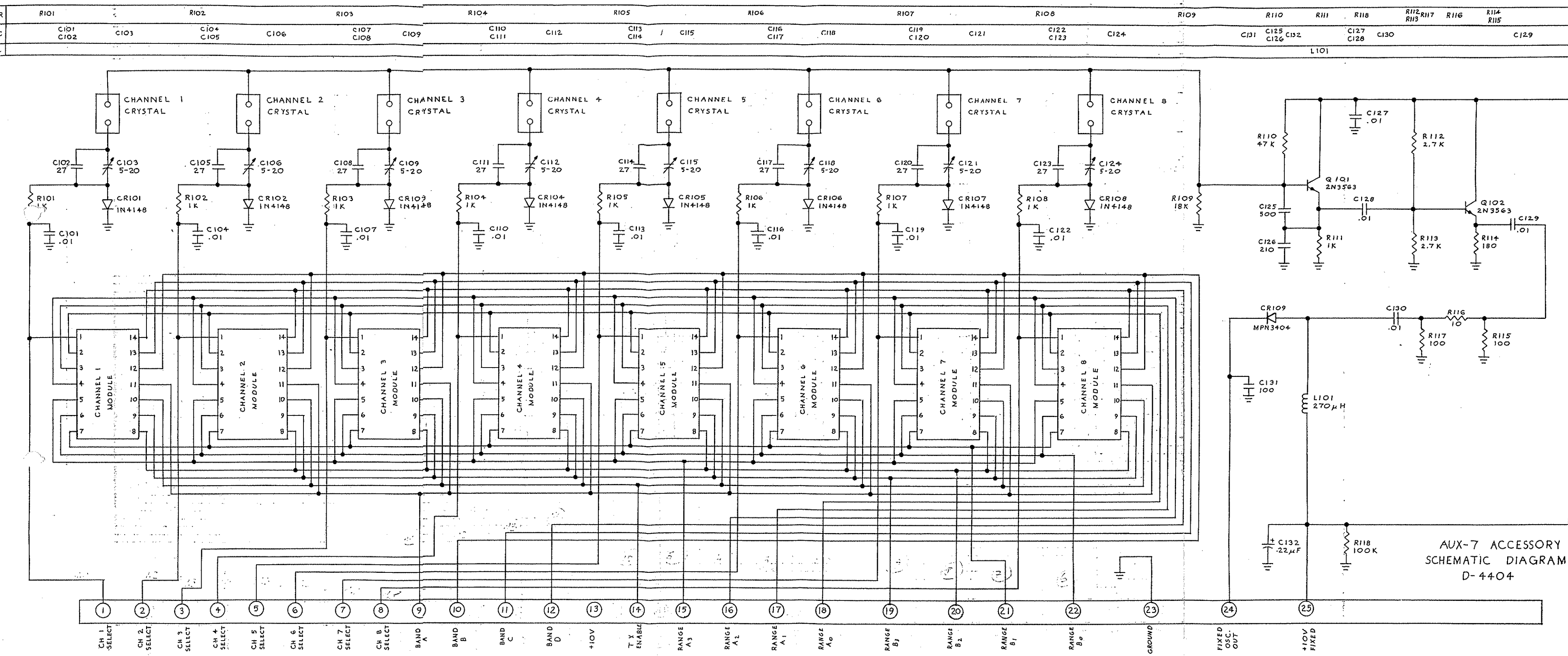
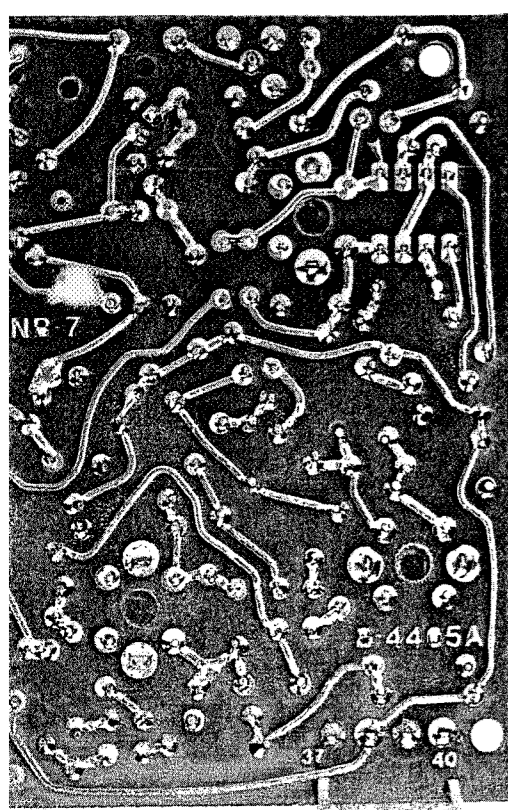
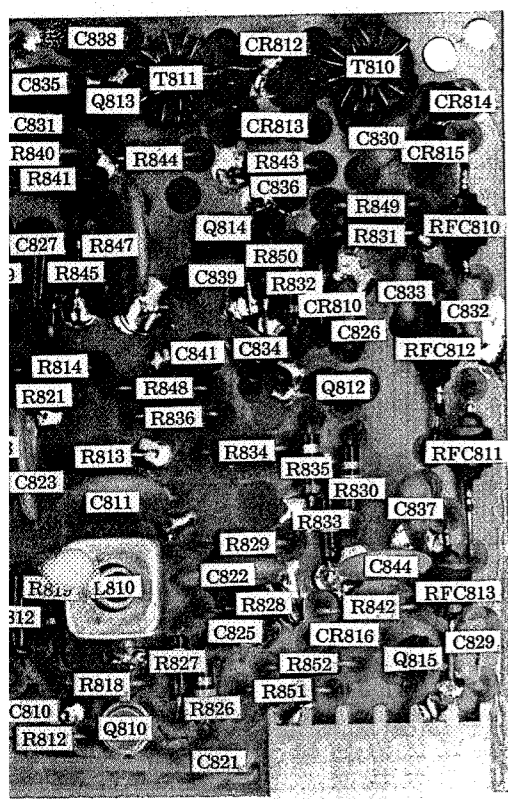


Fig. 4-4 AUX-7 Board Schematic



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	818	818	835	828	819	820	835	825	845	848
L								810				811								812					

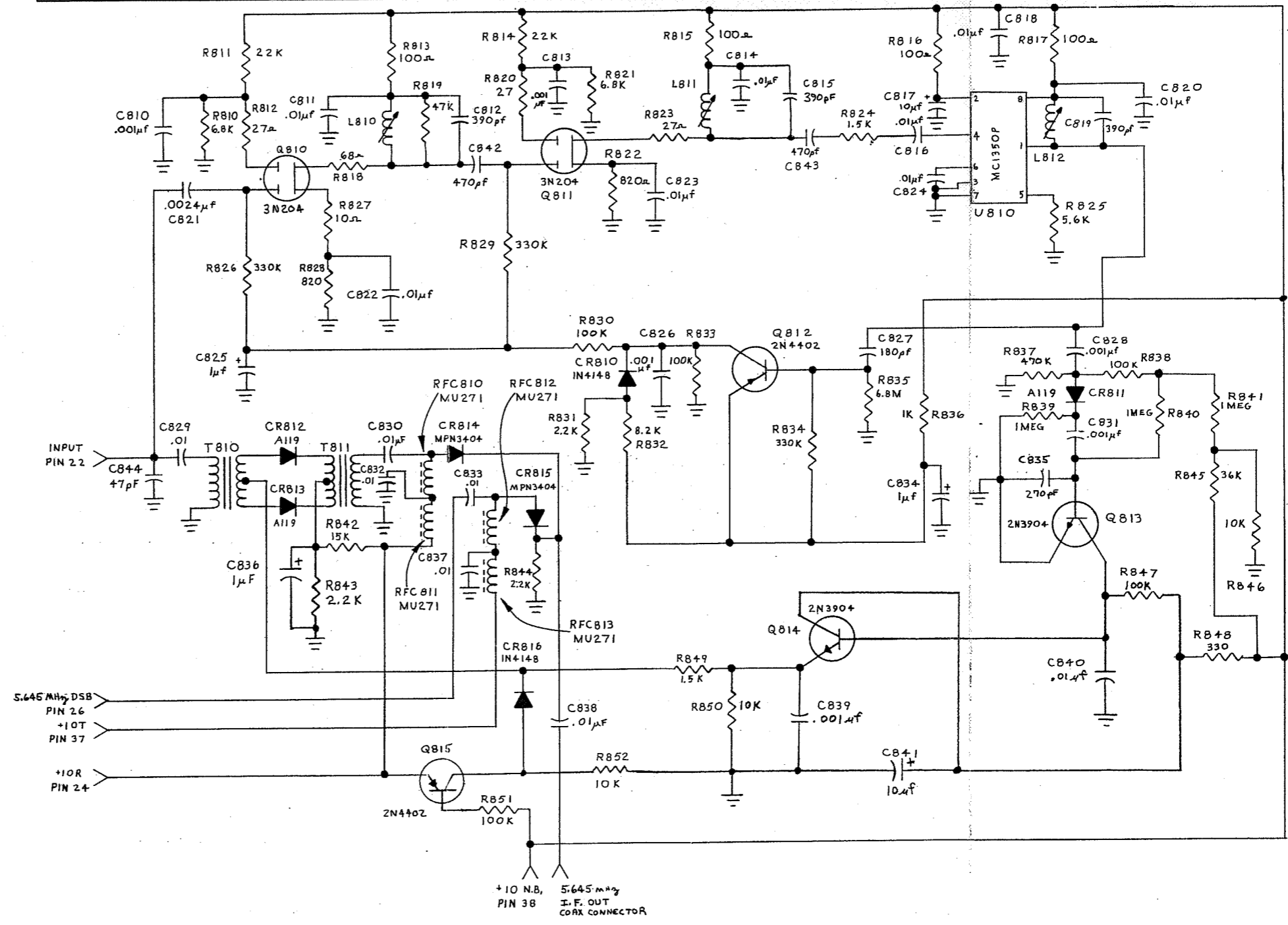
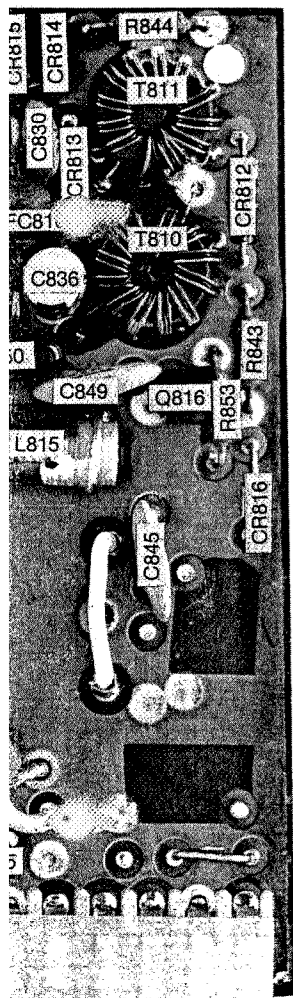
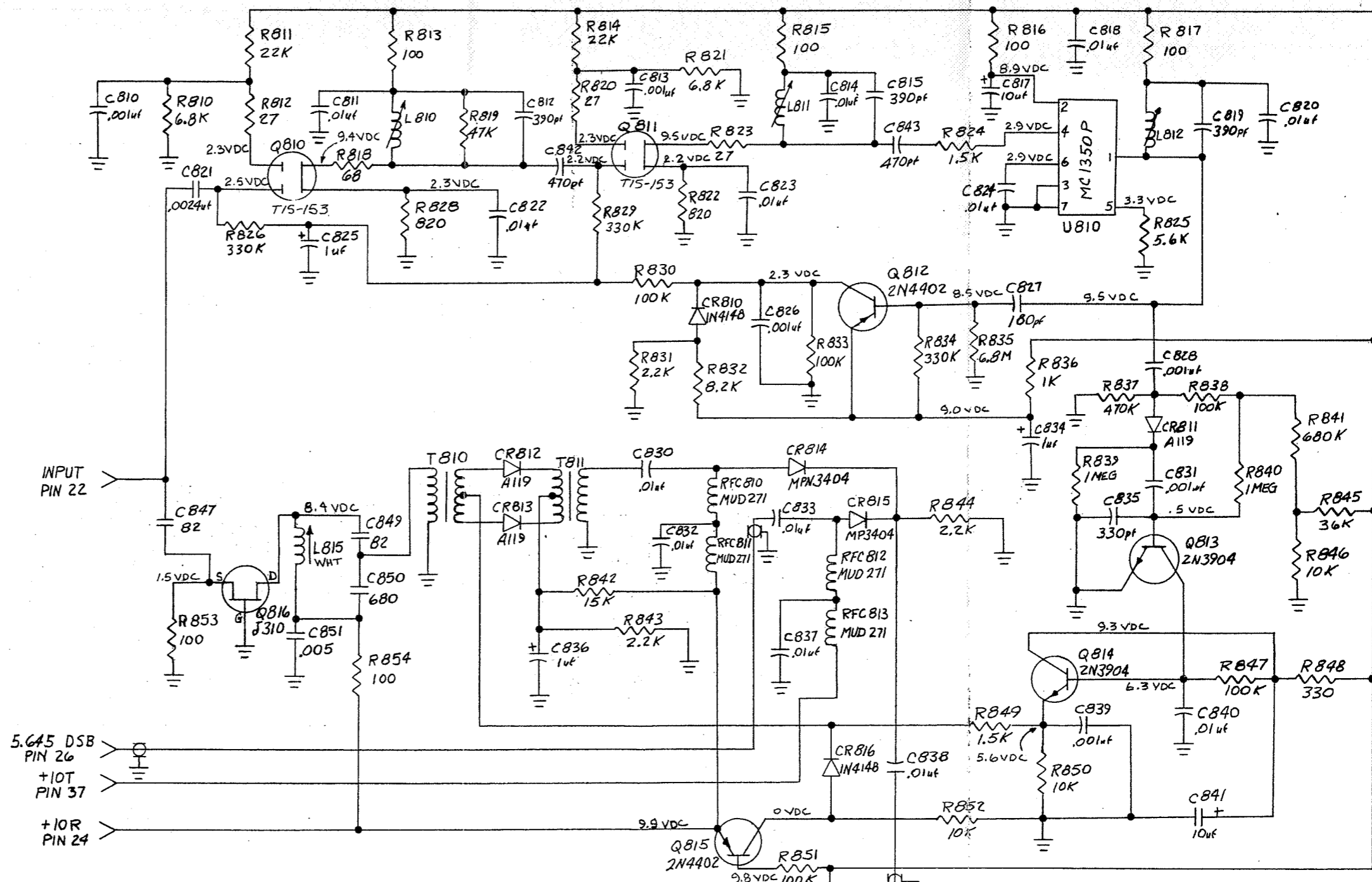


Fig. 4-6 NB-7 Board Schematic - Version 1

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
	853		812	854		828		820	842	831	822	833			852	844	835	850		825	847		846	848	
C	810	847	821	825	811	849		822	812	842	813	832	823	826	814	815	843	824	834	835	828	840	819	820	
	848			851	845	850		836		836	830			833			838	827	837	818	831	841			
L			813	815	814		810						811									812			



VOLTAGES MEASURED IN RECEIVE,  
NOISE BLANKER ENABLED

HIGHEST NUMBERED RESISTOR R854  
HIGHEST NUMBERED CAPACITOR C851

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