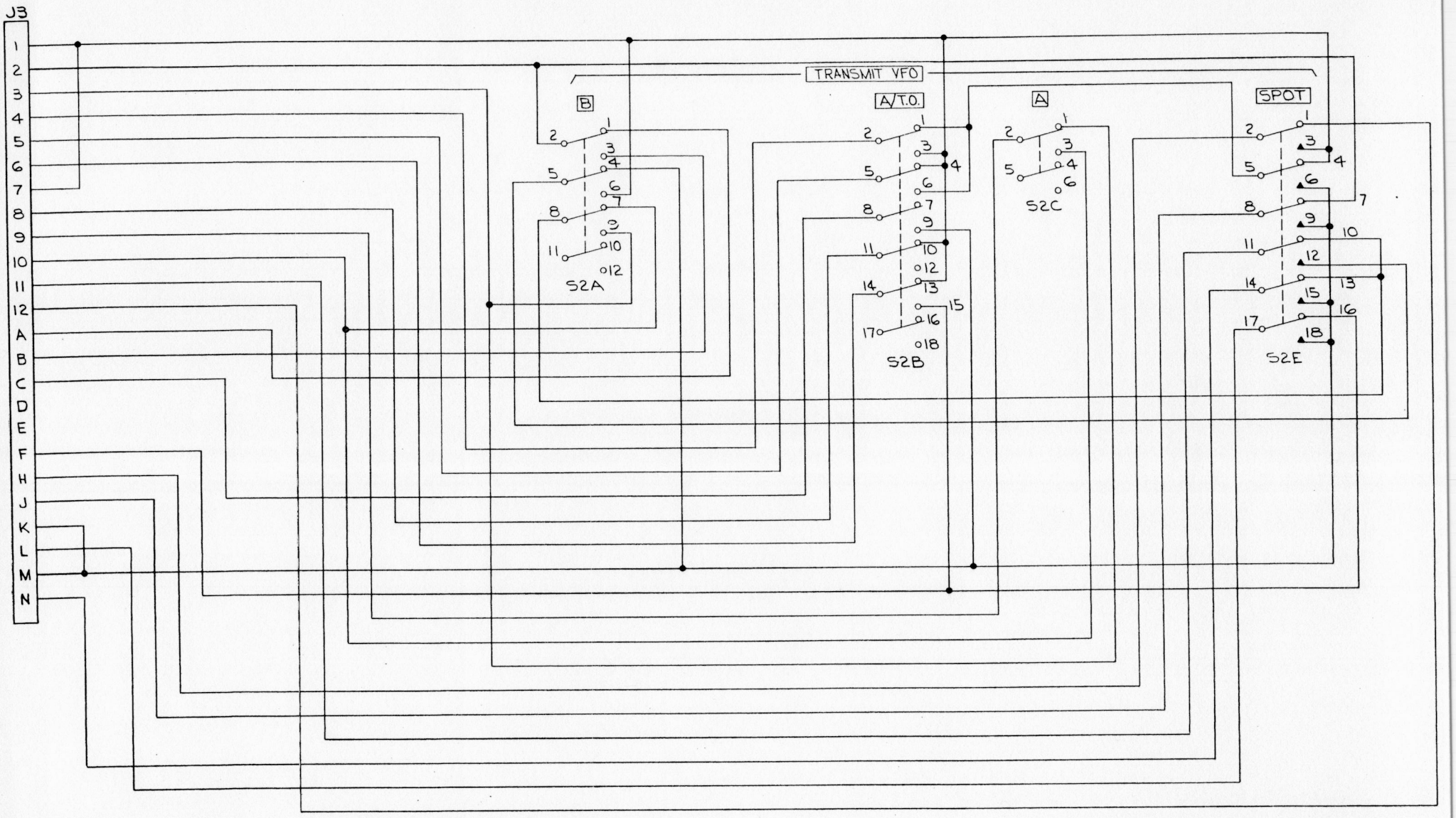


Figure 6-12. S2 Board A11 Schematic Diagram

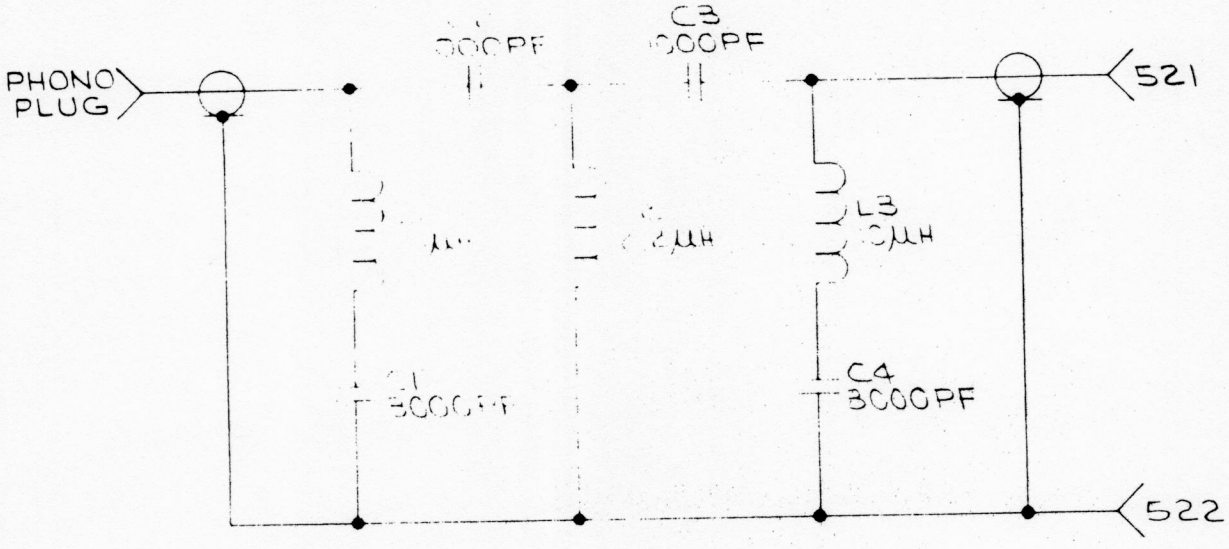


Figure 6-13. HLP Printer Interface Board A12 Schematic Diagram

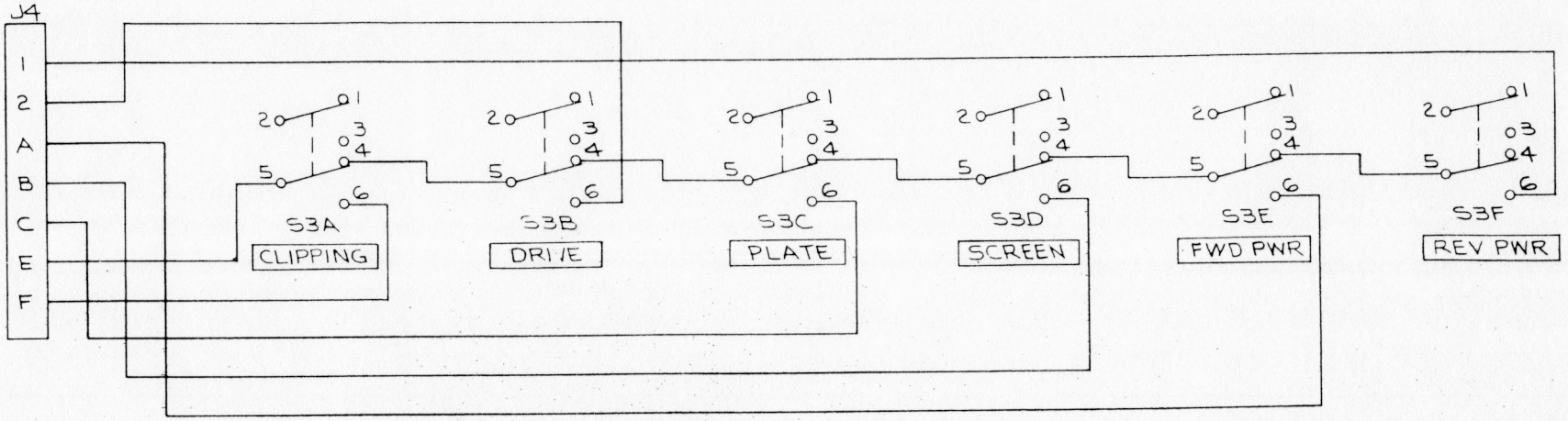


Figure 6-14. S3 Board A13 Schematic Diagram

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
	DELUXE INTEGRATED STATION MODEL CX7	
A1A	PTO A MODULE	03-S0001-001
A1B	PTO B MODULE	03-S0001-001
A2	FRONT END BOARD	61-S0002-001
A3	POWER SUPPLY BOARD	61-S0003-001
A4	BFO BOARD	61-S0004-001
A5	RF DRIVER	61-S0005-001
A6	AUDIO BOARD	61-S0006-001
A7	COUNTER BOARD	61-S0007-001
A8	IF BOARD	61-S0008-001
A9	AGC DETECTOR BOARD	61-S0009-001
A10	POWER AMPLIFIER /UPPER/	03-S0003-001
	POWER AMPLIFIER /LOWER/	03-S0005-001
A11	S2 BOARD	61-S0011-001
A12	HI-PASS FILTER BOARD	61-S0012-001
A13	S3 BOARD	61-S0013-001
C1	CAPACITOR, VARIABLE 15 TO 409 PF TRW PART NO. V2461	11-S0017-001
C2	CAPACITOR, FIXED 2000 UF, PORM 10 PCT 75 V MALLORY PART NO. FP-20-23745	11-S0009-003
C3,C5	CAPACITOR, FIXED 150 UF, PORM 10 PCT 450 V SPRAGUE PART NO. TVL-1770	11-S0009-001
C6	CAPACITOR, FIXED 1500 UF, PORM 10 PCT 50 V AEROVOX PART NO. AFH1-14-50	11-S0009-002
C7,C8	CAPACITOR, FIXED SAME AS C3	11-S0009-001
C9	CAPACITOR, FIXED SAME AS C6	11-S0009-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C10,C11	CAPACITOR, FIXED 0.01 UF, PORM 10 PCT 1000 V ERIE PART NO. 811-000 Z5U0 103M	11-S0003-021
C12 THRU C15	CAPACITOR, FIXED 0.01 UF, +80, -20 PCT 100 V RMC PART NO. .01 TA +80-20	11-S0005-002
C16	CAPACITOR, FIXED 175 UF, PORM 10 PCT, 25 V MALLORY PART NO. MTA 175F25	11-S0008-030
C17	CAPACITOR, FIXED 50 UF, PORM 10 PCT, 15 V MALLORY PART NO. 50E15	11-S0008-018
C18	CAPACITOR, FIXED MICA 100 PF, PORM 5 PCT, 15 V CDE PART NO. CM05-FD101 J03	11-S0001-026
C19	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. 0.001 JF PORM10PCT	11-S0005-008
C20	CAPACITOR, FIXED SAME AS C17	11-S0008-018
C21 THRU C23	CAPACITOR, VARIABLE 190 TO 760 PF	11-S0019-002
C24 THRU C26	CAPACITOR, FIXED 0.005 UF, PORM 10 PCT, 3 KV	11-S0027-001
C27	CAPACITOR, FIXED 20 UF, PORM 10 PCT, 30 V MALLORY PART NO. MTA 20D30	11-S0008-032
C28	CAPACITOR, FIXED 0.1 UF, +80, -20 PCT, 100 V RMC PART NO. 0.1 TA +80-20	11-S0005-006
C29 THRU C31	CAPACITOR, FIXED SAME AS C19	11-S0005-008
CR1	DIODE, 1N456	20-S0017-001
F1	FUSE, 3AG, SLO BLO, 5A	17-S0002-001
J1	CONNECTOR SWITCHCRAFT PART NO. 12A	16-S0005-001
J2	CONNECTOR SWITCHCRAFT PART NO. C12-B	16-S0004-001
J3,J4	CONNECTOR, PHONO SWITCHCRAFT PART NO. 3505F	16-S0002-001
J5	CONNECTOR, RECEPTACLE AMPHENOL PART NO. 57-40240	16-S0010-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
J6	CONNECTOR, RECEPTACLE AMPHENOL PART NO. 57-40140	16-S0010-001
J7	CONNECTOR, TIP JACK EF JOHNSON PART NO. 105-802	16-S0003-001
J8 THRU J11	CONNECTOR, PHONO SAME AS J3	16-S0002-001
J12	CONNECTOR SWITCHCRAFT PART NO. 12B	16-S0006-001
J13	CONNECTOR SWITCHCRAFT PART NO. 11	16-S0007-001
J14	NOT USED	
J15	CONNECTOR, COAXIAL JAN TYPE SO-239	16-S0008-002
J16 THRU J18	CONNECTOR, PHONO SAME AS J3	16-S0002-001
K1	RELAY, TIME DELAY AMPERITE PART NO. 115N060T	47-S0002-001
L1	INDUCTOR, 10 UH PORM 10 PCT JEFFERS PART NO. 4445-2K	09-S0022-020
L2	COIL ASSEMBLY	09-S0019-003
L3	CHOKE, RF	09-S0029-001
L4	INDUCTOR, 22 UH PORM 1 PCT JEFFERS PART NO. 4424-1K	09-S0031-001
L5	INDUCTOR, 2.5 MH NATIONAL PART NO. R50	09-S0020-001
M1	METER, 0-1 MA MODUTEC PART NO. 18-DMA-001-81	33-S0001-001
P1	CONNECTOR, PLUG AMPHENOL PART NO. 57-30140	16-S0009-001
	LINE CORD AND PLUG BELDEN PART NO. 17419B	16-S0012-001
P2	CONNECTOR, PLUG AMPHENOL PART NO. 57-30240	16-S0009-002
P3	CONNECTOR, PLUG CINCH-JONES PART NO. 50-24A-30	16-S0015-001
	CONNECTOR, PLUG /BOARD INTERCONNECTIONS/ AMPHENOL PART NO. 60804-2	16-S0014-001
Q1	TRANSISTOR, NPN TEXAS INST. PART NO. T1P-29A	20-S0003-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
Q2	TRANSISTOR, PNP TEXAS INST. PART NO. T1P-30	20-S0004-001
Q3,Q4	TRANSISTOR, NPN SAME AS Q1	20-S0003-001
R1	RESISTOR, VARIABLE 5K, PORM 20 PCT, 1/2 W	10-S0012-001
R2	RESISTOR, VARIABLE 10K, PORM 20 PCT, 1/2 W	10-S0008-001
R3	RESISTOR, VARIABLE 1K, PORM 20 PCT, 1/2 W	10-S0003-001
R4	RESISTOR, VARIABLE 25K, PORM 10 PCT, 1/2 W	10-S0007-001
R5	RESISTOR, VARIABLE 5K, PORM 20 PCT, 1/2 W	10-S0009-001
R6	RESISTOR, VARIABLE 10K, PORM 10 PCT, 1/2 W	10-S0002-001
R7	RESISTOR, VARIABLE /PART OF S5/	
R8	RESISTOR, VARIABLE /PART OF S6/	
R9	RESISTOR, VARIABLE, DUAL 500 OHMS, EACH, 1/2 W FRONT SECTION PORM 10 PCT, REAR SECTION PORM 20 PCT	10-S0010-001
R10	RESISTOR, VARIABLE 5K, PORM 20 PCT, 1/2 W	10-S0006-001
R11	RESISTOR, VARIABLE 250 OHM, PORM 20 PCT, 1/2 W	10-S0005-001
R12	RESISTOR, VARIABLE 500K, PORM 20 PCT, 1/2 W	10-S0004-001
R13	RESISTOR, VARIABLE 100 OHM, PORM 20 PCT, 1/2 W	10-S0011-001
R14	RESISTOR, VARIABLE, DUAL FRONT SECTION 2K, PORM 20 PCT, 1/2 W REAR SECTION 20K, PORM 10 PCT, 1/2 W	10-S0001-001
R15 THRU R18	RESISTOR, FIXED 120K, PORM 10 PCT, 2 W	10-S0020-006
R19	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R20	NOT USED	
R21	RESISTOR, FIXED 330 OHM, PORM 10 PCT, 1/4 W	10-S0013-026
R22,R23	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R24	RESISTOR, FIXED 3.3M, PORM 10 PCT, 1/4 W	10-S0013-074

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R25	RESISTOR /SURGISTOR/ WORKMAN PART NO. FRT2	10-S0028-001
S1A THRU S1E	SWITCH ASSEMBLY	07-S0003-001
S2A THRU S2E	SWITCH ASSEMBLY	07-S0002-001
S3A THRU S3F	SWITCH ASSEMBLY	07-S0001-001
S4	SWITCH/POTENTIOMETER ASSY /PART OF R4/	
S5	SWITCH/POTENTIOMETER ASSY	07-S0007-001
S6	SWITCH/POTENTIOMETER ASSY	07-S0008-001
S7	NOT USED	
S8	SWITCH ASSEMBLY	07-S0009-001
S9	SWITCH SWITCHCRAFT PART NO. A6203L	07-S0013-001
T1	TRANSFORMER, POWER	08-S0003-001
T2	TRANSFORMER, AUDIO DELTONA CORP PART NO. 327-W1	08-S0009-001
TB1	TERMINAL BOARD	61-S0010-001
V1	TUBE RCA PART NO. 8072	20-S0001-001
XF1	FUSE HOLDER LITTLEFUSE PART NO. 342014	17-S0001-001
XK1	SOCKET AMPHENOL PART NO. 59-446	19-S0002-001
	PTO MODULE A1	
C1	CAPACITOR, FIXED SELECTED DURING TEST	
C2	CAPACITOR, FIXED 82 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED820 J03	11-S0001-024
C3	CAPACITOR, FIXED 390 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD391 J03	11-S0001-040
C4,C5	CAPACITOR, FIXED 680 PF, PORM 5 PCT, 300 V CDE PART NO. CM05 FD681 J03	11-S0001-046

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C6	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V ERIE PART NO. 805-000-X5V0-103Z	11-S0005-002
C7	CAPACITOR, FIXED 2 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000 COKO 209C	11-S0002-005
C8 THRU C15	CAPACITOR, FIXED SAME AS C6	11-S0005-002
C16	CAPACITOR, VARIABLE 5.5 TO 18 PF ERIE PART NO. 538-011-92A	11-S0020-002
C17	CAPACITOR, FIXED 47 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED470 J03	11-S0001-018
C18	CAPACITOR, FIXED 68 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED680 J03	11-S0001-022
CR1	DIODE HEWLETT-PACKARD PART NO. HPA 5082-2800	20-S0010-001
CR2	DIODE, VARACTOR 1N3182	20-S0018-001
CR3	DIODE, ZENER 12 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ12.0	20-S0011-018
L1	COIL ASSEMBLY	09-S0015-001
L2	INDUCTOR, FIXED 1 MH PORM 10 PCT NYTRONICS PART NO. SWD-1000	09-S0024-001
L3	INDUCTOR, FIXED 33 UH PORM 5 PCT JEFFERS PART NO. 4465-2J	09-S0022-029
Q1	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001
Q2,Q3	TRANSISTOR, NPN RCA PART NO. 40235	20-S0009-001
R1	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R2	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R3,R4	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R5,R6	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R7	RESISTOR, FIXED SAME AS R2	10-S0013-020
R8	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R9	RESISTOR, FIXED SAME AS R2	10-S0013-020
R10	RESISTOR, FIXED 1.5K, PORM 10 PCT, 1/4 W	10-S0013-034
R11	RESISTOR, FIXED 100K, PORM 10 PCT, 1/4 W	10-S0013-056
R12,R13	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
	FRONT END BOARD A2	
C1	CAPACITOR, FIXED 82 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED820J03	11-S0001-024
C2	CAPACITOR, FIXED 3000 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM06-FD302J03	11-S0001-061
C3	CAPACITOR, FIXED 22 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED220J03	11-S0001-010
C4	CAPACITOR, FIXED 1000 PF, PORM 5 PCT, 100 V CORNELL DUBILIER PART NO. CM05-FA102J03	11-S0001-050
C5	CAPACITOR, FIXED 5.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000C0H0509C	11-S0002-010
C6	CAPACITOR, FIXED 220 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD221J03	11-S0001-034
C7	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. 0.01 JF	11-S0005-008
C8	NOT USED	
C9	CAPACITOR, FIXED SAME AS C3	11-S0001-010
C10	CAPACITOR, FIXED 18 PF PORM 0.5 PF, 500 V CDE PART NO. CM05 CD180 D03	11-S0001-008
C11	CAPACITOR, FIXED 270 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD271J03	11-S0001-036
C12	CAPACITOR, FIXED 150 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD151J03	11-S0001-030
C13	CAPACITOR, FIXED 390 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD391 J03	11-S0001-040

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C14	NOT USED	
C15 THRU C17	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V ERIE PART NO. 805-000-X5V0-103Z	11-S0005-002
C18	CAPACITOR, FIXED 0.1 UF, +80-20 PCT, 100 V ERIE PART NO. 845-000-X5V0-104Z	11-S0005-006
C19	CAPACITOR, FIXED SAME AS C15	11-S0005-002
C20	CAPACITOR, FIXED 0.0005 UF, PORM 10 PCT, 100 V RMC PART NO. 0.0005 JF	11-S0005-007
C21	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C22	CAPACITOR, FIXED SAME AS C20	11-S0005-007
C23	CAPACITOR, FIXED 12 PF, PORM 0.5 PF, 500 V CORNELL DUBILIER PART NO. CM05-CD120D03	11-S0001-006
C24	CAPACITOR, FIXED 120 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD121J03	11-S0001-028
C25	CAPACITOR, FIXED 3.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000C0J0309C	11-S0002-007
C26	CAPACITOR, FIXED SAME AS C23	11-S0001-006
C27	CAPACITOR, FIXED SAME AS C20	11-S0005-007
C28 THRU C30	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C31	CAPACITOR, FIXED 1.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000C0K0109C	11-S0002-003
C32	CAPACITOR, FIXED SAME AS C20	11-S0005-007
C33 THRU C35	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C36	CAPACITOR, FIXED 10 PF, PORM 0.5 PF CORNELL DUBILIER PART NO. CM05-CD100D03	11-S0001-005
C37	CAPACITOR, FIXED SAME AS C15	11-S0005-002
C38	CAPACITOR, FIXED SAME AS C7	11-S0005-008

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C39	CAPACITOR, FIXED SAME AS C15	11-S0005-002
C40	CAPACITOR, FIXED SAME AS C25	11-S0002-007
C41	CAPACITOR, FIXED 0.5 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0K0508C	11-S0002-001
C42,C43	CAPACITOR, FIXED SAME AS C5	11-S0002-010
C44	NOT USED	
C45 THRU C47	CAPACITOR, FIXED SAME AS C15	11-S0005-002
C48	CAPACITOR, FIXED SAME AS C18	11-S0005-006
C49	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C50	CAPACITOR, VARIABLE 5.5 TO 18 PF ERIE PART NO. 538-011-92A	11-S0020-002
C51	CAPACITOR, FIXED 68 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED680J03	11-S0001-022
C52	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C53	CAPACITOR, FIXED 47 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED470J03	11-S0001-018
C54	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C55	CAPACITOR, FIXED 39 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED390J03	11-S0001-016
C56 THRU C59	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C60	CAPACITOR, FIXED 27 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED270J03	11-S0001-012
C61	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C62 THRU C66	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C67	CAPACITOR, FIXED 330 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD331J03	11-S0001-038

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C68	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C69	CAPACITOR, FIXED SAME AS C36	11-S0001-005
C70	CAPACITOR, FIXED 56 PF, PORM 5 PCT, 500 V CORNELL DUBILIER CM05-ED560J03	11-S0001-020
C71	CAPACITOR, FIXED 100 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 CD100 J03	11-S0001-026
C72,C73	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C74	CAPACITOR, FIXED SAME AS C12	11-S0001-030
C75	CAPACITOR, FIXED 15 PF, PORM 0.5 PF, 500 V CORNELL DUBILIER PART NO. CM05-CD150D03	11-S0001-007
C76	CAPACITOR, FIXED SAME AS C55	11-S0001-016
C77	CAPACITOR, VARIABLE SAME AS C50	11-S0020-002
C78	CAPACITOR, FIXED SAME AS C60	11-S0001-012
C79	CAPACITOR, FIXED SAME AS C12	11-S0001-030
C80	CAPACITOR, FIXED SAME AS C71	11-S0001-026
C81,C82	CAPACITOR, FIXED SAME AS C5	11-S0002-010
CR1	NOT USED	
CR2	NOT USED	
CR3	DIODE 1N456	20-S0017-001
IC1	INTEGRATED CIRCUIT RCA PART NO. CA3028A	72-S0006-001
L1	INDUCTOR, FIXED 3.3 UH, PORM 10 PCT JEFFERS PART NO. 4425-12K	09-S0022-014
L2	INDUCTOR, FIXED 4.7 UH, PORM 10 PCT JEFFERS PART NO. 4425-14K	09-S0022-016
L3	INDUCTOR, VARIABLE	09-S0004-001
L4	INDUCTOR, VARIABLE	09-S0004-002
L5	INDUCTOR, FIXED	09-S0026-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
L6,L7	INDUCTOR, FIXED	09-S0026-001
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, DUAL GATE FIELD-EFFECT RCA PART NO. 40673	20-S0025-001
Q2	TRANSISTOR, DUAL GATE FIELD-EFFECT RCA PART NO. 40604	20-S0008-001
Q3,Q4	TRANSISTOR, DUAL GATE FIELD-EFFECT RCA PART NO. 40603	20-S0007-001
Q5	TRANSISTOR, NPN BIPOLAR 2N2222A	20-S0026-001
Q6	TRANSISTOR, FIELD-EFFECT RCA PART NO. 40468A	20-S0006-001
Q7	TRANSISTOR, NPN BIPOLAR RCA PART NO. 40235	20-S0009-001
Q8	TRANSISTOR, NPN 2N5187	20-S0022-001
R1	RESISTOR, FIXED 47K, PORM 10 PCT, 1/4 W	10-S0013-052
R2	RESISTOR, FIXED 470K, PORM 10 PCT, 1/4 W	10-S0013-064
R3,R4	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R5	RESISTOR, FIXED 820 OHM, PORM 10 PCT, 1/4 W	10-S0013-031
R6	RESISTOR, FIXED 15K, PORM 10 PCT, 1/4 W	10-S0013-046
R7	RESISTOR, FIXED SAME AS R1	10-S0013-052
R8	RESISTOR, FIXED /SELECTED DURING TEST/	
R9	RESISTOR, FIXED 4.7K, PORM 10 PCT, 1/4 W	10-S0013-040
R10 THRU R12	RESISTOR, FIXED SAME AS R3	10-S0013-024
R13	RESISTOR, FIXED SAME AS R2	10-S0013-064
R14	RESISTOR, FIXED 12K, PORM 10 PCT, 1/4 W	10-S0013-045
R15	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R16,R17	RESISTOR, FIXED SAME AS R3	10-S0013-024

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R18	RESISTOR, FIXED SAME AS R6	10-S0013-046
R19	RESISTOR, FIXED 82K, PORM 5 PCT, 1/4 W	10-S0026-001
R20	RESISTOR, FIXED SAME AS R3	10-S0013-024
R21	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R22	RESISTOR, FIXED SAME AS R15	10-S0013-044
R23	RESISTOR, FIXED SAME AS R21	10-S0013-042
R24	RESISTOR, FIXED 330 OHM, PORM 10 PCT, 1/4 W	10-S0013-026
R25	RESISTOR, FIXED SAME AS R21	10-S0013-042
R26	RESISTOR, FIXED 47 OHM, PORM 10 PCT, 1/4 W	10-S0013-016
R27	RESISTOR, FIXED SAME AS R24	10-S0013-026
R28,R29	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R30	RESISTOR, FIXED SAME AS R9	10-S0013-040
R31	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
R32	RESISTOR, FIXED SAME AS R28	10-S0013-032
R33	RESISTOR, FIXED SAME AS R15	10-S0013-044
R34	RESISTOR, FIXED SAME AS R31	10-S0013-028
R35	RESISTOR, FIXED SAME AS R28	10-S0013-032
R36,R37	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R38	RESISTOR, FIXED SAME AS R31	10-S0013-028
R39	RESISTOR, FIXED 1.2K, PORM 10 PCT, 1/4 W	10-S0013-033
R40	RESISTOR, FIXED SAME AS R3	10-S0013-024
R41	NOT USED	
R42	RESISTOR, FIXED SAME AS R15	10-S0013-044
R43,R44	NOT USED	

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R45	RESISTOR, FIXED SAME AS R21	10-S0013-042
R46	RESISTOR, FIXED SAME AS R28	10-S0013-032
R47,R48	RESISTOR, FIXED SAME AS R26	10-S0013-016
S1 THRU S6	NOT USED	
S7	SWITCH	07-S0012-001
T1	TRANSFORMER, FIXED	09-S0009-002
T2	TRANSFORMER, FIXED	09-S0010-001
T3	TRANSFORMER, FIXED	09-S0006-002
T4	TRANSFORMER, FIXED	09-S0006-003
T5	NOT USED	
T6 THRU T8	TRANSFORMER, VARIABLE	09-S0004-003
T9	TRANSFORMER, FIXED	09-S0011-001
T10	TRANSFORMER, FIXED	09-S0012-001
XY1	NOT USED	
XY2 THRU XY8	SOCKET, CRYSTAL CONNECTOR CORP. PART NO. CS110	19-S0003-001
Y1	NOT USED	
Y2	CRYSTAL, 69 MHZ	13-S0006-003
Y3	CRYSTAL, 68 MHZ	13-S0006-002
Y4	CRYSTAL, 61 MHZ	13-S0006-001
Y5	CRYSTAL, 54 MHZ	13-S0005-004
Y6	CRYSTAL, 47 MHZ	13-S0005-003
Y7	CRYSTAL, 43 MHZ	13-S0005-002
Y8	CRYSTAL, 41 MHZ	13-S0005-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
	POWER SUPPLY BOARD A3	
C1	CAPACITOR, FIXED 70 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-70-N-50-PDJ	11-S0007-058
C2	CAPACITOR, FIXED 100 UF, +80-20 PCT, 150 V SPRAGUE PART NO. TVA-1420	11-S0010-001
C3,C4	CAPACITOR, FIXED 150 UF, +80-20 PCT, 35 V MALLORY PART NO. MTV-150-N-35-PDJ	11-S0007-043
C5	CAPACITOR, FIXED 0.1 UF, +80-20 PCT, 100 V RMC PART NO. 0.1TA+80-20	11-S0005-006
C6,C7	CAPACITOR, FIXED SAME AS C3	11-S0007-043
C8	CAPACITOR, FIXED SAME AS C5	11-S0005-006
C9	CAPACITOR, FIXED SAME AS C3	11-S0007-043
C10	CAPACITOR, FIXED 0.47 UF, +80-20 PCT, 25 V ERIE PART NO. 5865-000-Y5U0-474Z	11-S0006-007
C11	CAPACITOR, FIXED SAME AS C3	11-S0007-043
C12	CAPACITOR, FIXED SAME AS C1	11-S0007-058
C13	CAPACITOR, FIXED SAME AS C5	11-S0005-006
C14	CAPACITOR, FIXED 1 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-1-N-50-PCB	11-S0007-045
C15	CAPACITOR, FIXED 5 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-5-N-50-PCB	11-S0007-049
C16	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. .001J5 PORM 10 PCT	11-S0005-008
C17	CAPACITOR, FIXED SAME AS C3	11-S0007-043
C18	CAPACITOR, FIXED SAME AS C5	11-S0005-006
C19	CAPACITOR, FIXED SAME AS C1	11-S0007-058
C20	CAPACITOR, FIXED 0.022 UF, PORM 10 PCT, 100 V MALLORY PART NO. PV1 1122	11-S0022-002
C21 THRU C23	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V RMC PART NO. .01TA+80,-20PCT	11-S0005-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C24	CAPACITOR, FIXED 180 PF, PORM 5 PCT, 500 VDC CDE PART NO. CM05 FD181 J03	11-S0001-032
CR1 THRU CR4	DIODE SARKES-TARZIAN PART NO. HVC-240	20-S0012-001
CR5 THRU CR8	DIODE ATLANTIC PART NO. 75A4	20-S0013-001
CR9,CR10	DIODE ATLANTIC PART NO. 75A1	20-S0014-001
CR11	DIODE, ZENER 10 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ10.0	20-S0011-016
CR12 THRU CR17	DIODE ATLANTIC PART NO. 1A1	20-S0015-001
CR18, CR19	DIODE 1N270	20-S0016-001
CR20	DIODE, ZENER 3.9 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ3.9	20-S0011-006
IC1	INTEGRATED CIRCUIT GENERAL ELECTRIC PART NO. PA237	72-S0007-001
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1,Q2	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
Q3 THRU Q6	TRANSISTOR, NPN RCA PART NO. 2N5184	20-S0021-001
Q7,Q8	TRANSISTOR, NPN RCA PART NO. 2N5183	20-S0020-001
Q9,Q10	TRANSISTOR, NPN SAME AS Q3	20-S0021-001
Q11	TRANSISTOR, NPN TEXAS INSTR. PART NO. T1P-29A	20-S0003-001
Q12	TRANSISTOR, NPN SAME AS Q3	20-S0021-001
R1	RESISTOR, FIXED 2.7 OHM, PORM 5 PCT, 1 W	10-S0023-001
R2	RESISTOR, FIXED 649 OHM, PORM 1 PCT, 1/4 W	10-S0015-003
R3	RESISTOR, FIXED 4.870K, PORM 1 PCT, 1/4 W	10-S0015-010

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R4	RESISTOR, FIXED 47K, PORM 5 PCT, 1/4 W	10-S0014-052
R5	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R6	RESISTOR, FIXED 100 OHM, PORM 5 PCT, 1/2 W	10-S0017-001
R7,R8	RESISTOR, FIXED 300 OHM, PORM 10 PCT, 5 W	10-S0021-002
R9	RESISTOR, FIXED 100K, PORM 10 PCT, 1/4 W	10-S0013-056
R10	RESISTOR, FIXED 330 OHM, PORM 10 PCT, 1/4 W	10-S0013-026
R11,R12	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R13	RESISTOR, FIXED 7.5 OHM, PORM 10 PCT, 5 W	10-S0021-001
R14	RESISTOR, FIXED 120K, PORM 10 PCT, 2 W	10-S0020-006
R15	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R16	RESISTOR, VARIABLE 500 OHM, PORM 20 PCT, 1/4 W	10-S0024-005
R17	RESISTOR, FIXED SAME AS R11	10-S0013-024
R18	RESISTOR, FIXED 2K, PORM 1 PCT, 1/4 W	10-S0015-006
R19	RESISTOR, FIXED 820 OHM, PORM 10 PCT, 1/4 W	10-S0013-031
R20,R21	RESISTOR, FIXED SAME AS R11	10-S0013-024
R22	RESISTOR, FIXED SAME AS R13	10-S0021-001
R23	RESISTOR, FIXED 1.050K, PORM 1 PCT, 1/4 W	10-S0015-004
R24	RESISTOR, FIXED 1.820K, PORM 1 PCT, 1/4 W	10-S0015-005
R25	RESISTOR, FIXED 820 OHM, PORM 10 PCT, 1/2 W	10-S0016-007
R26	RESISTOR, FIXED 7.150K, PORM 1 PCT, 1/4 W	10-S0015-011
R27	RESISTOR, FIXED 3.320K, PORM 1 PCT, 1/4 W	10-S0015-009
R28	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037
R29	RESISTOR, FIXED 100 OHM, PORM 5 PCT, 1/2 W	10-S0017-001
R30	RESISTOR, FIXED 2.490K, PORM 1 PCT, 1/4 W	10-S0015-008

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R31	RESISTOR, FIXED 1.910K, PORM 1 PCT, 1/4 W	10-S0015-016
R32	RESISTOR, FIXED 576 OHM, PORM 1 PCT, 1/4 W	10-S0015-002
R33	RESISTOR, FIXED 56K, PORM 10 PCT, 1/4 W	10-S0013-053
R34	RESISTOR, FIXED 680K, PORM 10 PCT, 1/4 W	10-S0013-066
R35	RESISTOR, FIXED SAME AS R33	10-S0013-053
R36	RESISTOR, FIXED SAME AS R5	10-S0013-042
R37	RESISTOR, FIXED 330K, PORM 10 PCT, 1/4 W	10-S0013-062
R38	RESISTOR, FIXED 18K, PORM 10 PCT, 1/4 W	10-S0013-047
R39	RESISTOR, FIXED SAME AS R19	10-S0013-031
R40	RESISTOR, FIXED SAME AS R1	10-S0023-001
R41	RESISTOR, FIXED 1 OHM, PORM 5 PCT, 1 1/2 W	10-S0019-001
R42	RESISTOR, FIXED 82K, PORM 10 PCT, 1/4 W	10-S0013-055
	BFO BOARD A4	
C1 THRU C11	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V RMC PART NO. .01TA +80,-20PCT	11-S0005-002
C12	CAPACITOR, FIXED 47 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED470 J03	11-S0001-018
C13,C14	CAPACITOR, FIXED 5.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000C0H0-509C	11-S0002-010
C15 THRU C23	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C24,C25	CAPACITOR, FIXED 33 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED330J03	11-S0001-014
C26	CAPACITOR, FIXED 1000 PF, PORM 5 PCT, 100 V CORNELL DUBILIER PART NO. CM05-FA102J03	11-S0001-050
C27	CAPACITOR, FIXED 10 PF, PORM 0.5 PF, 500 V CORNELL DUBILIER PART NO. CM05-CD100D03	11-S0001-005

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C28,C29	CAPACITOR, FIXED SAME AS C26	11-S0001-050
C30	CAPACITOR, FIXED 100 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FD101J03	11-S0001-026
C31	CAPACITOR, VARIABLE 2.4 TO 24.5 PF EF JOHNSON PART NO. 189-509-5	11-S0028-001
C32 THRU C35	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C36,C37	CAPACITOR, FIXED 82 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-ED820J03	11-S0001-024
C38	CAPACITOR, FIXED 2.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000C0K0-209C	11-S0002-005
C39 THRU C47	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C48	CAPACITOR, FIXED SAME AS C26	11-S0001-050
C49	CAPACITOR, FIXED 12 PF, PORM 0.5 PF, 500 V CORNELL DUBILIER PART NO. CM05-CD120D03	11-S0001-006
C50,C51	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C52	CAPACITOR, FIXED /SELECTED DURING TEST/	
CR1,CR2	DIODE, VARACTOR AMPEREX PART NO. 1N3182	20-S0018-001
CR3	DIODE, VARACTOR EASTRON PART NO. VC 825	20-S0028-001
CR4,CR5	DIODE 1N270	20-S0016-001
CR6,CR7	DIODE 1N456	20-S0017-001
CR8	DIODE 8.6 V, PORM 5 PCT, 1 W SCHAUER PART NO. SZ8.6A	20-S0011-022
CR9,CR10	DIODE SAME AS CR6	20-S0017-001
CR11	DIODE SAME AS CR8	20-S0011-022
IC1 THRU IC3	INTEGRATED CIRCUIT RCA PART NO. CA 3028A	72-S0006-001
L1	INDUCTOR, FIXED 10 UH, PORM 10 PCT JEFFERS PART NO. 4445-2K	09-S0022-020

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
L2	INDUCTOR, FIXED 1.2 UH, PORM 10 PCT JEFFERS PART NO. 4425-7K	09-S0022-009
L3	INDUCTOR, FIXED 22 UH, PORM 5 PCT JEFFERS PART NO. 4445-7J	09-S0022-025
L4	INDUCTOR, VARIABLE 34.2 MHZ	09-S0004-004
L5	INDUCTOR, FIXED 33 UH, PORM 5 PCT JEFFERS PART NO. 4465-2J	09-S0022-029
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, NPN RCA PART NO. 2N5184	20-S0021-001
Q2	TRANSISTOR, NPN RCA PART NO. 2N5183	20-S0020-001
Q3	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001
Q4	TRANSISTOR, NPN SAME AS Q2	20-S0020-001
Q5	TRANSISTOR, NPN BIPOLAR RCA PART NO. 40235	20-S0009-001
R1	RESISTOR, FIXED 750 OHM, PORM 5 PCT, 2 W	10-S0026-001
R2,R3	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R4	RESISTOR, FIXED 330 OHM, PORM 5 PCT, 1/4 W	10-S0014-026
R5	RESISTOR, FIXED 1.5K, PORM 5 PCT, 1/4 W	10-S0014-034
R6	RESISTOR, FIXED 47K, PORM 10 PCT, 1/4 W	10-S0013-052
R7	RESISTOR, FIXED 3.3K, PORM 5 PCT, 1/4 W	10-S0014-038
R8	RESISTOR, FIXED 120 OHM, PORM 5 PCT, 1/4 W	10-S0014-021
R9	RESISTOR, FIXED SAME AS R4	10-S0014-026
R10	RESISTOR, FIXED 680 OHM, PORM 5 PCT, 1/4 W	10-S0014-030
R11	RESISTOR, FIXED 100 OHM, PORM 5 PCT, 1/4 W	10-S0014-020
R12	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R13	RESISTOR, FIXED SAME AS R10	10-S0014-030

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R14	RESISTOR, FIXED SAME AS R6	10-S0013-052
R15	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R16	RESISTOR, FIXED SAME AS R2	10-S0013-044
R17,R18	RESISTOR, FIXED 220 OHM, PORM 5 PCT, 1/4 W	10-S0014-024
R19	RESISTOR, FIXED 1K, PORM 5 PCT, 1/4 W	10-S0014-032
R20,R21	RESISTOR, FIXED SAME AS R2	10-S0013-044
R22	RESISTOR, FIXED SAME AS R10	10-S0014-030
R23,R24	RESISTOR, FIXED SAME AS R11	10-S0014-020
R25	RESISTOR, FIXED SAME AS R12	10-S0013-042
R26	RESISTOR, FIXED SAME AS R7	10-S0014-038
R27	RESISTOR, FIXED SAME AS R2	10-S0013-044
R28	RESISTOR, FIXED 1.2K, PORM 5 PCT, 1/4 W	10-S0014-033
R29	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
R30	RESISTOR, FIXED SAME AS R19	10-S0014-032
R31	RESISTOR, FIXED SAME AS R6	10-S0013-052
R32	RESISTOR, FIXED SAME AS R29	10-S0013-028
R33	RESISTOR, FIXED SAME AS R6	10-S0013-052
R34	RESISTOR, FIXED SAME AS R29	10-S0013-028
R35	RESISTOR, FIXED SAME AS R7	10-S0014-038
R36	RESISTOR, FIXED SAME AS R12	10-S0013-042
R37	RESISTOR, FIXED SAME AS R6	10-S0013-052
R38,R39	RESISTOR, FIXED SAME AS R11	10-S0014-020
R40	RESISTOR, FIXED SAME AS R17	10-S0014-024
R41	RESISTOR, FIXED SAME AS R19	10-S0014-032

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R42	RESISTOR, FIXED SAME AS R6	10-S0013-052
R43	RESISTOR, VARIABLE 5.0K, PORM 20 PCT, 1/4 W	10-S0027-011
R44	RESISTOR, FIXED 5.6K, PORM 5 PCT, 1/4 W	10-S0014-041
R45	RESISTOR, FIXED /SELECTED DURING TEST/	
R46	RESISTOR, VARIABLE 1K, PORM 20 PCT, 1/4 W	10-S0024-007
R47	RESISTOR, FIXED SAME AS R29	10-S0013-028
R48,R49	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037
R50	RESISTOR, FIXED 33K, PORM 10 PCT, 1/4 W	10-S0013-050
R51,R52	RESISTOR, FIXED SAME AS R5	10-S0014-034
T1	TRANSFORMER, VARIABLE 34.2 MHZ	09-S0004-005
T2	TRANSFORMER, VARIABLE 34.2 MHZ	09-S0004-006
T3	TRANSFORMER, VARIABLE 34.2 MHZ	09-S0004-007
Y1	CRYSTAL, 8.813500 MHZ	13-S0002-002
Y2	CRYSTAL, 8.816500 MHZ	13-S0002-001
Y3	CRYSTAL, 43.100 MHZ	13-S0003-001
Y4	CRYSTAL, 11.42783 MHZ	13-S0004-001
	RF DRIVER BOARD A5	
C1	CAPACITOR, FIXED 0.1 UF, +80,-20 PCT, 100 V RMC PART NO. .1TA,+80,-20PCT	11-S0005-006
C2,C3	CAPACITOR, FIXED 0.01 UF, +80,-20 PCT, 100 V RMC PART NO. .01TA,+80,-20PCT	11-S0005-002
C4	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. .001JFPORM10PCT	11-S0005-008
C5 THRU C7	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C8	CAPACITOR, FIXED 3.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0J0-309C	11-S0002-007

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C9	CAPACITOR, FIXED 0.5 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0K0-508C	11-S0002-001
C10,C11	CAPACITOR, FIXED 5.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0H0-509C	11-S0002-010
C12	NOT USED	
C13,C14	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C15 THRU C17	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C18	CAPACITOR, FIXED 390 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD391 J03	11-S0001-040
C19 THRU C21	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C22	CAPACITOR, FIXED 5.0 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-5-N-50-P-CB	11-S0007-049
C23,C24	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C25	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C26,C27	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C28	CAPACITOR, FIXED 33.0 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED330 J03	11-S0001-014
C29	CAPACITOR, FIXED 50 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-50-N-50-P-DE	11-S0007-057
C30	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 1000 V ERIE PART NO. 811-000-Z5U0-103M	11-S0003-021
C31	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C32,C33	NOT USED	
C34,C35	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C36	CAPACITOR, FIXED 10 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-10-N-50-P-CB	11-S0007-052
C37	CAPACITOR, FIXED SAME AS C30	11-S0003-021

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C38	CAPACITOR, FIXED 680 PF, PORM 5 PCT, 300 V CDE PART NO. CM05 FC681 J03	11-S0001-046
C39,C40	NOT USED	
C41	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C42	CAPACITOR, FIXED 0.22 UF, PORM 10 PCT, 100 V MALLORY PART NO. PVC 1022	11-S0022-010
C43	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C44	CAPACITOR, FIXED 4.7 UF, PORM 10 PCT, 35 VDC SPRAGUE PART NO. 164D-475X903582	11-S0011-004
C45	CAPACITOR, FIXED SAME AS C2	11-S0005-002
CR1	DIODE, ZENER 12 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ12.0	20-S0011-018
CR2	DIODE, ZENER 3.9 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ3.9	20-S0011-006
CR3 THRU CR7	DIODE 1N270	20-S0016-001
CR8,CR9	DIODE 1N456	20-S0017-001
IC1	INTEGRATED CIRCUIT RCA PART NO. CA 3028A	72-S0006-001
L1,L2	INDUCTOR, VARIABLE	09-S0004-001
L3	INDUCTOR, FIXED	09-S0005-001
L4	INDUCTOR, FIXED	09-S0006-001
L5	INDUCTOR, FIXED 33 UH, PORM 5 PCT JEFFERS PART NO. 4465-2J	09-S0022-029
L6	INDUCTOR, FIXED 22 UH, PORM 5 PCT JEFFERS PART NO. 4445-7J	09-S0022-025
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001
Q2	TRANSISTOR, NPN 2N3866	20-S0019-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
Q3,Q4	TRANSISTOR, NPN SOLITRON PART NO. SRF-53104	20-S0023-001
Q5	TRANSISTOR, NPN 2N5184	20-S0021-001
Q6	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
Q7	TRANSISTOR, NPN 2N5183	20-S0020-001
R1,R2	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R3	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R4	RESISTOR, FIXED 47 OHM, PORM 10 PCT, 1/4 W	10-S0013-016
R5	RESISTOR, FIXED SAME AS R3	10-S0013-032
R6,R7	RESISTOR, FIXED SAME AS R1	10-S0013-042
R8	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036 040
R9	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R10	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R11	RESISTOR, FIXED SAME AS R4	10-S0013-016
R12	RESISTOR, FIXED 39 OHM, PORM 10 PCT, 1/4 W	10-S0013-015
R13	RESISTOR, FIXED 1.2K, PORM 10 PCT, 1/4 W	10-S0013-033
R14	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/2 W	10-S0016-005
R15,R16	RESISTOR, FIXED 3.9 OHM, PORM 10 PCT, 1/4 W	10-S0013-003
R17	RESISTOR, FIXED 15 OHM, PORM 10 PCT, 1/4 W	10-S0013-010
R18	RESISTOR, FIXED 1.5K, PORM 10 PCT, 2 W	10-S0020-004
R19	RESISTOR, VARIABLE 5K, PORM 20 PCT, 1/4 W	10-S0024-011
R20	RESISTOR, FIXED 560 OHM, PORM 5 PCT, 1/2 W	10-S0017-003
R21	RESISTOR, FIXED SAME AS R17	10-S0013-010
R22	RESISTOR, FIXED 10 OHM, PORM 10 PCT, 1/4 W	10-S0013-008
R23	RESISTOR, FIXED 4.7 OHM, PORM 10 PCT, 1/2 W	10-S0016-001
R24	NOT USED	

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R25	RESISTOR, FIXED 1K, PORM 10 PCT, 2 W	10-S0020-003
R26	RESISTOR, FIXED 120 OHM, PORM 10 PCT, 1/2 W	10-S0016-004
R27	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 2 W	10-S0020-008
R28,R29	RESISTOR, FIXED 22 OHM, PORM 10 PCT, 2 W	10-S0020-001
R30	RESISTOR, FIXED 1.5K, PORM 10 PCT, 1/4 W	10-S0013-034
R31	RESISTOR, VARIABLE 50K, PORM 20 PCT, 1/4 W	10-S0024-018
R32	RESISTOR, FIXED 3.3K, PORM 10 PCT, 1/4 W	10-S0013-038
R33	RESISTOR, FIXED 4.7K, PORM 10 PCT, 1/4 W	10-S0013-040
R34	RESISTOR, VARIABLE SAME AS R19	10-S0024-011
R35	NOT USED	
R36	RESISTOR, FIXED 33K, PORM 10 PCT, 1/4 W	10-S0013-050
R37 THRU R40	NOT USED	
R41	RESISTOR, FIXED SAME AS R36	10-S0013-050
R42	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R43	RESISTOR, FIXED SAME AS R36	10-S0013-050
R44	RESISTOR, FIXED SAME AS R3	10-S0013-032
R45	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037
R46	RESISTOR, FIXED SAME AS R8	10-S0013-036
R47	RESISTOR, FIXED 47K, PORM 10 PCT, 1/4 W	10-S0013-052
R48	RESISTOR, FIXED SAME AS R33	10-S0013-040
R49	RESISTOR, FIXED SAME AS R3	10-S0013-032
T1,T2	TRANSFORMER, FIXED	09-S0007-001
T3	TRANSFORMER, FIXED	09-S0008-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
	AUDIO BOARD A6	
C1	CAPACITOR, FIXED 0.1 UF, +80,-20 PCT, 100 V RMC PART NO. .1TA,+80-20PCT	11-S0005-006
C2	CAPACITOR, FIXED 0.01 UF, +80,-20 PCT, 100 V RMC PART NO. .01TA,+80,-20PCT	11-S0005-002
C3	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C4	CAPACITOR, FIXED SAME AS ~~C2~~ C1 See F ?	11-S0005-00?
C5	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C6	CAPACITOR, FIXED 10 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-10-N-50-P-CB	11-S0007-052
C7	CAPACITOR, FIXED 100 UF, +80-20 PCT, 35 V MALLORY PART NO. MTV-100-N-35-P-DE	11-S0007-042
C8	CAPACITOR, FIXED 1 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-1-N-50-P-CB	11-S0007-045
C9	CAPACITOR, FIXED SAME AS C2	11-S0005-002
C10, C11	C10 Capacitor Fixed Released (Sec 2.1) CAPACITOR, FIXED SAME AS C1	11-S0005-006
C12	CAPACITOR, FIXED SAME AS C7	11-S0007-042
C13	CAPACITOR, FIXED SAME AS C6	11-S0007-052
C14 THRU C16	CAPACITOR, FIXED 0.047 UF, PORM 10 PCT, 100 V MALLORY PART NO. PVC 1147	11-S0022-005
C17	CAPACITOR, FIXED 0.47 UF, PORM 10 PCT, 100 V MALLORY PART NO. PVC 1047	11-S0022-013
C18	CAPACITOR, FIXED SAME AS C8	11-S0007-045
C19	CAPACITOR, FIXED SAME AS C12	11-S0007-042
C20	CAPACITOR, FIXED SAME AS C8	11-S0007-045
C21	CAPACITOR, FIXED 50 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-50-N-50-P-DE	11-S0007-057
C22,C23	CAPACITOR, FIXED 5 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-5-N-50-P-CB	11-S0007-049

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C24	CAPACITOR, FIXED SAME AS C8	11-S0007-045
C25,C26	CAPACITOR, FIXED SAME AS C22	11-S0007-049
C27	CAPACITOR, FIXED 0.47 UF, +80-20 PCT, 25 V ERIE PART NO. 5865-000-Y5U0-474Z	11-S0006-007
C28	CAPACITOR, FIXED 4.7 UF, +80-20 PCT, 35 VDC SPRAGUE PART NO. 164D-475X9035B2	11-S0011-004
C29	CAPACITOR, FIXED 270 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD271 J03	11-S0001-036
C30 THRU C32	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C33	CAPACITOR, FIXED SAME AS C7	11-S0007-042
C34	CAPACITOR, FIXED SAME AS C21	11-S0007-057
C35	CAPACITOR, FIXED 100 UF, +80-20 PCT, 6 VDC MALLORY PART NO. MTV-100-N-6-P-CB	11-S0007-006
C36	CAPACITOR, FIXED SAME AS C1	11-S0005-006
C37	CAPACITOR, FIXED SAME AS C22	11-S0007-049
C38,C39	CAPACITOR, FIXED SAME AS C7	11-S0007-042
C40	CAPACITOR, FIXED 100 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD101 J03	11-S0001-026
C41,C42	CAPACITOR, FIXED 56 UF, PORM 20 PCT, 6 V SPRAGUE PART NO. 150D 566X9006B2	11-S0011-005
C43	CAPACITOR, FIXED 56 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED560 J03	11-S0001-020
CR1,CR2	DIODE 1N270	20-S0016-001
L1,L2	INDUCTOR, FIXED 100 UH, PORM 5 PCT JEFFERS PART NO. 1315-12J	09-S0022-041
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
Q2,Q3	TRANSISTOR, NPN RCA PART NO. 2N5183	20-S0020-001
Q4	TRANSISTOR, FIELD EFFECT SAME AS Q1	20-S0006-001
~~Q5~~,Q6	TRANSISTOR, NPN SAME AS Q2	20-S0020-001
Q7	TRANSISTOR, NPN RCA PART NO. 2N5184	20-S0021-001
Q8	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
Q9	TRANSISTOR, FIELD EFFECT SAME AS Q1	20-S0006-001
Q10,Q11	TRANSISTOR, NPN SAME AS Q2	20-S0020-001
Q12 THRU Q15	TRANSISTOR, PNP SAME AS Q8	20-S0005-001
Q16,Q17	TRANSISTOR, NPN SAME AS Q2	20-S0020-001
Q18,Q19	TRANSISTOR, FIELD EFFECT SAME AS Q1	20-S0006-001
R1	RESISTOR, FIXED 47K, PORM 10 PCT, 1/4 W	10-S0013-052
R2	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R3	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R4	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R5	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R6	RESISTOR, FIXED 82 OHM, PORM 10 PCT, 1/4 W	10-S0013-019
R7	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
R8,R9	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R10	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R11	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R12	RESISTOR, VARIABLE 5.0K, PORM 20 PCT, 1/4 W	10-S0027-011
R13,R14	RESISTOR, FIXED SAME AS R8	10-S0013-044
R15,R16	RESISTOR, FIXED 1.5K, PORM 10 PCT, 1/4 W	10-S0013-034
R17	RESISTOR, FIXED SAME AS R2	10-S0013-024

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R18	RESISTOR, FIXED 33K, PORM 10 PCT, 1/4 W	10-S0013-050
R19	RESISTOR, FIXED SAME AS R8	10-S0013-044
R20	NOT USED	
R21	RESISTOR, FIXED 680 OHM, PORM 10 PCT, 1/4 W	10-S0013-030
R22	RESISTOR, FIXED SAME AS R10	10-S0013-032
R23	RESISTOR, FIXED SAME AS R2	10-S0013-024
R24	RESISTOR, FIXED SAME AS R8	10-S0013-044
R25	RESISTOR, FIXED SAME AS R11	11-S0013-020
R26,R27	RESISTOR, FIXED SAME AS R15	10-S0013-034
R28	RESISTOR, FIXED 3.3K, PORM 10 PCT, 1/4 W	10-S0013-038
R29	RESISTOR, FIXED SAME AS R18	10-S0013-050
R30	RESISTOR, FIXED SAME AS R5	10-S0013-036
R31	RESISTOR, FIXED 68 OHM, PORM 10 PCT, 1/4 W	10-S0013-018
R32	RESISTOR, FIXED SAME AS R21	10-S0013-030
R33	RESISTOR, FIXED SAME AS R11	10-S0013-020
R34	RESISTOR, FIXED SAME AS R4	10-S0013-048
R35	RESISTOR, FIXED SAME AS R28	10-S0013-038
R36	RESISTOR, FIXED SAME AS R2	10-S0013-024
R37	RESISTOR, FIXED 1.8K, PORM 10 PCT, 1/4 W	10-S0013-035
R38,R39	RESISTOR, FIXED SAME AS R8	10-S0013-044
R40	RESISTOR, FIXED SAME AS R15	10-S0013-034
R41	RESISTOR, FIXED SAME AS R1	10-S0013-052
R42	RESISTOR, FIXED SAME AS R10	10-S0013-032
R43	RESISTOR, FIXED SAME AS R28	10-S0013-038

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R44	RESISTOR, FIXED 47 OHM, PORM 10 PCT, 1/4 W	10-S0013-016
R45,R46	RESISTOR, FIXED SAME AS R8	10-S0013-044
R47	RESISTOR, FIXED SAME AS R15	10-S0013-034
R48	RESISTOR, FIXED SAME AS R18	10-S0013-050
R49	RESISTOR, FIXED 1M, PORM 10 PCT, 1/4 W	10-S0013-068
R50	RESISTOR, FIXED SAME AS R5	10-S0013-036
R51	RESISTOR, FIXED 12K, PORM 10 PCT, 1/4 W	10-S0013-045
R52	RESISTOR, FIXED 4.7K, PORM 10 PCT, 1/4 W	10-S0013-040
R53,R54	RESISTOR, FIXED SAME AS R2	10-S0013-024
R55	RESISTOR, FIXED SAME AS R37	10-S0013-035
R56	RESISTOR, FIXED SAME AS R10	10-S0013-032
R57	RESISTOR, FIXED SAME AS R11	10-S0013-020
R58,R59	RESISTOR, FIXED SAME AS R1	10-S0013-052
R60	NOT USED	
R61	RESISTOR, FIXED SAME AS R1	10-S0013-052
R62	RESISTOR, FIXED SAME AS R11	10-S0013-020
R63	RESISTOR, FIXED SAME AS R15	10-S0013-034
R64	RESISTOR, FIXED SAME AS R2	10-S0013-024
R65,R66	RESISTOR, FIXED 12 OHM, PORM 10 PCT, 1/2 W	10-S0016-011
	COUNTER BOARD A7	
C1	CAPACITOR, FIXED 0.47 UF, +80-20 PCT, 100 V ERIE PART NO. 5865-000-Y5U0-474Z	11-S0006-007
C2,C3	NOT USED	
C4	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V RMC PART NO. .01TA+80-20PCT	11-S0005-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C5	CAPACITOR, FIXED 0.1 UF, +80-20 PCT, 100 V RMC PART NO. .1TA+80-20PCT	11-S0005-006
C6	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. .001JFPORM10PCT	11-S0005-008
C7	CAPACITOR, FIXED 1 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-1-N-50-PCB	11-S0007-045
C8	CAPACITOR, FIXED SAME AS C5	11-S0005-006
C9	CAPACITOR, FIXED SAME AS C6	11-S0005-008
C10 THRU C13	CAPACITOR, FIXED SAME AS C5	11-S0005-002
C14	CAPACITOR, FIXED 15 UF, +80-20 PCT, 20 V SPRAGUE PART NO. 164D156X9020B2	11-S0011-002
C15	CAPACITOR, FIXED 0.47 UF, +80-20 PCT, 10 V CENTRALAB PART NO. UK-10-474	11-S0012-001
C16	CAPACITOR, FIXED 56 UF, PORM 20 PCT, 6 V CI PART NO. TS2-006-566-20	11-S0011-005
C17	CAPACITOR, FIXED 1 UF, PORM 10 PCT, 35 V CI PART NO. TS1-035-105-10	11-S0011-006
CR1 THRU CR11	DIODE 1N270	20-S0016-001
CR12	DIODE, ZENER 3.9 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ3.9	20-S0011-006
IC1 THRU IC3	INTEGRATED CIRCUIT TEXAS INST. PART NO. SN7490N	72-S0005-001
IC4	INTEGRATED CIRCUIT TEXAS INST. PART NO. SN7473N	72-S0004-001
IC5	INTEGRATED CIRCUIT TEXAS INST. PART NO. SN7400N	72-S0001-001
IC6 THRU IC9	INTEGRATED CIRCUIT SAME AS IC1	72-S0005-001
IC10 THRU IC13	INTEGRATED CIRCUIT TEXAS INST. PART NO. SN7441AN	72-S0003-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
IC14	INTEGRATED CIRCUIT RCA PART NO. CA3028A	72-S0006-001
IC15	INTEGRATED CIRCUIT TEXAS INST. PART NO. SN7420N	72-S0002-001
IC16	INTEGRATED CIRCUIT SAME AS IC4	72-S0004-001
IC17	INTEGRATED CIRCUIT SAME AS IC5	72-S0001-001
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, NPN 2N5183	20-S0020-001
Q2	TRANSISTOR, NPN 2N5187	20-S0022-001
Q3	TRANSISTOR, NPN SAME AS Q1	20-S0020-001
Q4	TRANSISTOR, NPN SAME AS Q2	20-S0022-001
Q5	TRANSISTOR, NPN SAME AS Q1	20-S0020-001
Q6,Q7	TRANSISTOR, NPN 2N5184	20-S0021-001
Q8	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
Q9	TRANSISTOR, NPN SAME AS Q6	20-S0021-001
R1,R2	RESISTOR, FIXED 4.7K, PORM 10 PCT, 1/4 W	10-S0013-040
R3,R4	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R5	RESISTOR, FIXED SAME AS R1	10-S0013-040
R6	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R7	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R8	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R9,R10	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R11	RESISTOR, FIXED SAME AS R1	10-S0013-040
R12,R13	RESISTOR, FIXED SAME AS R3	10-S0013-032
R14	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R15	RESISTOR, FIXED SAME AS R9	10-S0013-036
R16,R17	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
R18	RESISTOR, FIXED 3.9K, PORM 10 PCT, 1/4 W	10-S0013-039
R19	RESISTOR, FIXED SAME AS R6	10-S0013-044
R20	RESISTOR, FIXED SAME AS R14	10-S0013-037
R21	RESISTOR, FIXED 15K, PORM 10 PCT, 1/4 W	10-S0013-046
R22 THRU R25	RESISTOR, FIXED 68K, PORM 10 PCT, 1 W	10-S0018-002
R26	RESISTOR, FIXED 8.2K, PORM 10 PCT, 2 W	10-S0020-005
R27 THRU R29	RESISTOR, FIXED SAME AS R1	10-S0013-040
R30	RESISTOR, FIXED 33K, PORM 10 PCT, 1/4 W	10-S0013-050
R31	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R32	RESISTOR, FIXED SAME AS R16	10-S0013-028
R33	RESISTOR, FIXED SAME AS R7	10-S0013-020
R34	RESISTOR, FIXED 1.5K, PORM 5 PCT, 1/4 W	10-S0014-034
R35	RESISTOR, FIXED SAME AS R3	10-S0013-032
R36	RESISTOR, FIXED SAME AS R7	10-S0013-020
R37	RESISTOR, FIXED SAME AS R3	10-S0013-032
R38	RESISTOR, FIXED 56K, PORM 10 PCT, 2 W	10-S0020-007
V1 THRU V4	TUBE, NIXIE BURROUGHS PART NO. B5750	20-S0002-001
	IF BOARD A8	
C1,C2	CAPACITOR, FIXED 0.01 UF, +80-20 PCT, 100 V RMC PART NO. .01TA+80-20PCT	11-S0005-002
C3	CAPACITOR, VARIABLE 2 TO 8 PF ERIE PART NO. 538-011-89A	11-S0020-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C4,C5	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C6	CAPACITOR, FIXED 2.2 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0J0-229C	11-S0002-006
C7,C8	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. .001JFPORM10PCT	11-S0005-008
C9 THRU C13	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C14,C15	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C16,C17	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C18	CAPACITOR, FIXED 100 UF, +80-20 PCT, 6 V MALLORY PART NO. MTV-100-N-6-PCB	11-S0007-006
C19	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C20	CAPACITOR, VARIABLE SAME AS C3	11-S0020-001
C21	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C22,C23	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C24	CAPACITOR, FIXED 24 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED240 J03	11-S0001-011
C25	CAPACITOR, FIXED 560 PF, PORM 5 PCT, 300 V CDE PART NO. CM05 FC561 J03	11-S0001-044
C26	CAPACITOR, FIXED SAME AS C24	11-S0001-011
C27	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C28	CAPACITOR, FIXED 150 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD101 J03	11-S0001-030
C29	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C30	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C31	CAPACITOR, FIXED 3.0 PF, PORM 0.25 PF, 500 V ERIE PART NO. 301-000-C0J0-309C	11-S0002-007
C32	CAPACITOR, FIXED 68 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 ED680 J03	11-S0001-022

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C33	CAPACITOR, FIXED 12 PF, PORM 0.5 PCT, 500 V CDE PART NO. CM05 CD120 D03	11-S0001-006
C34 THRU C39	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C40	CAPACITOR, VARIABLE 5.5 TO 18 PF ERIE PART NO. 538-011-92A	11-S0020-002
C41	CAPACITOR, VARIABLE SAME AS C3	11-S0020-001
C42	CAPACITOR, VARIABLE 9.0 TO 35 PF ERIE PART NO. 538-011-94D	11-S0020-008
C43	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C44 THRU C48	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C49	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C50	CAPACITOR, FIXED SAME AS C33	11-S0001-006
C51	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C52,C53	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C54	CAPACITOR, FIXED SAME AS C25	11-S0001-044
C55	CAPACITOR, FIXED 270 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD271 J03	11-S0001-036
C56 THRU C59	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C60	CAPACITOR, FIXED SAME AS C33	11-S0001-006
C61,C62	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C63	CAPACITOR, FIXED SAME AS C28	11-S0001-030
C64 THRU C67	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C68	CAPACITOR, FIXED 82 PF, PORM 0.5 PF, 500 V CDE PART NO. CM05 ED820 J03	11-S0001-024
C69	CAPACITOR, FIXED SAME AS C1	11-S0005-002

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C70	NOT USED	
C71	CAPACITOR, VARIABLE SAME AS C40	11-S0020-002
C72	CAPACITOR, FIXED 100 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD101 J03	11-S0001-026
C73	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C74 THRU C80	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C81	CAPACITOR, FIXED 220 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD221 J03	11-S0001-034
C82	CAPACITOR, FIXED 18 PF, PORM 0.5 PF, 500 V CDE PART NO. CM05 CD180 D03	11-S0001-008
C83,C84	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C85	CAPACITOR, FIXED SAME AS C7	11-S0005-008
C86	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C87	CAPACITOR, FIXED SAME AS C72	11-S0001-026
C88,C89	NOT USED	
C90	CAPACITOR, FIXED 200 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD201 J03	11-S0001-033
C91 THRU C98	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C99	CAPACITOR, FIXED 10 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-10-N-50-PC8	11-S0007-052
C100 THRU C104	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C105	CAPACITOR, FIXED SAME AS C33	11-S0001-006
C106, C107	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C108	CAPACITOR, FIXED SAME AS C7	11-S0005-008

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C109, C110	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C111	CAPACITOR, FIXED 120 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD121 J03	11-S0001-028
C112 THRU C114	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C115	CAPACITOR, FIXED SAME AS C111	11-S0001-028
CR1 THRU CR4	DIODE 1N270	20-S0016-001
CR5	NOT USED	
CR6	DIODE SAME AS CR1	20-S0016-001
CR7 THRU CR10	DIODE 1N456	20-S0017-001
CR11, CR12	DIODE, ZENER 3.9 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ3.9	20-S0011-006
CR13 THRU CR20	DIODE SAME AS CR7	20-S0017-001
FL1,FL2	FILTER, CRYSTAL	08-S0008-001
FL3	FILTER, CRYSTAL	08-S0010-001
IC1 THRU IC5	INTEGRATED CIRCUIT RCA PART NO. CA-3053	72-S0008-001
J	JACK, FILTER TIP EF JOHNSON PART NO. 264-030 /FL1 THRU FL3 CONNECTIONS/	16-S0001-001
L1	INDUCTOR, VARIABLE	09-S0004-010
L2,L3	INDUCTOR, FIXED 22 UH, PORM 5 PCT JEFFERS PART NO. 4445-7J	09-S0022-025
L4	NOT USED	
L5	INDUCTOR, FIXED SAME AS L2	09-S0022-025

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001
Q2 THRU Q6	TRANSISTOR, FIELD EFFECT, DUAL GATE RCA PART NO. 40604	20-S0008-001
Q7	TRANSISTOR, NPN, BIPOLAR RCA PART NO. 40235	20-S0009-001
Q8	TRANSISTOR, FIELD EFFECT, DUAL GATE SAME AS Q2	20-S0008-001
Q9	TRANSISTOR, FIELD EFFECT SAME AS Q1	20-S0006-001
Q10	TRANSISTOR, FIELD EFFECT, DUAL GATE SAME AS Q2	20-S0008-001
Q11	TRANSISTOR, FIELD EFFECT, DUAL GATE RCA PART NO. 40603	20-S0007-001
Q12,Q13	TRANSISTOR, NPN, BIPOLAR SAME AS Q7	20-S0009-001
Q14	TRANSISTOR, FIELD EFFECT, DUAL GATE SAME AS Q11	20-S0007-001
Q15	NOT USED	
Q16	TRANSISTOR, NPN, BIPOLAR SAME AS Q7	20-S0009-001
Q17	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
R1	RESISTOR, FIXED 330K, PORM 10 PCT, 1/4 W	10-S0013-062
R2	RESISTOR, FIXED 33K, PORM 10 PCT, 1/4 W	10-S0013-050
R3	RESISTOR, FIXED 15K, PORM 10 PCT, 1/4 W	10-S0013-046
R4,R5	RESISTOR, FIXED 1K, PORM 10 PCT, 1/4 W	10-S0013-032
R6	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R7	RESISTOR, FIXED SAME AS R4	10-S0013-032
R8	RESISTOR, FIXED SAME AS R3	10-S0013-046
R9,R10	RESISTOR, FIXED SAME AS R2	10-S0013-050
R11	RESISTOR, FIXED 150K, PORM 10 PCT, 1/4 W	10-S0013-058

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R12	RESISTOR, FIXED SAME AS R6	10-S0013-024
R13,R14	RESISTOR, FIXED SAME AS R2	10-S0013-050
R15	RESISTOR, FIXED SAME AS R1	10-S0013-062
R16	RESISTOR, FIXED SAME AS R3	10-S0013-046
R17	RESISTOR, FIXED 100K, PORM 10 PCT, 1/4 W	10-S0013-056
R18	RESISTOR, FIXED 39K, PORM 10 PCT, 1/4 W	10-S0013-051
R19,R20	RESISTOR, FIXED SAME AS R2	10-S0013-050
R21	RESISTOR, FIXED SAME AS R11	10-S0013-058
R22	RESISTOR, FIXED SAME AS R3	10-S0013-046
R23	RESISTOR, FIXED SAME AS R18	10-S0013-051
R24	RESISTOR, FIXED 3.3K, PORM 10 PCT, 1/4 W	10-S0013-038
R25,R26	RESISTOR, FIXED SAME AS R6	10-S0013-024
R27	RESISTOR, FIXED SAME AS R1	10-S0013-062
R28	RESISTOR, FIXED SAME AS R3	10-S0013-046
R29	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R30	RESISTOR, FIXED SAME AS R6	10-S0013-024
R31	RESISTOR, FIXED SAME AS R1	10-S0013-062
R32	RESISTOR, FIXED 470 OHM, PORM 5 PCT, 1/4 W	10-S0014-028
R33	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R34	RESISTOR, FIXED SAME AS R2	10-S0013-050
R35	RESISTOR, FIXED SAME AS R3	10-S0013-046
R36	RESISTOR, FIXED 47K, PORM 10 PCT, 1/4 W	10-S0013-052
R37,R38	RESISTOR, FIXED SAME AS R6	10-S0013-024
R39	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R40,R41	RESISTOR, FIXED SAME AS R4	10-S0013-032
R42	RESISTOR, FIXED SAME AS R32	10-S0014-028
R43	RESISTOR, FIXED SAME AS R4	10-S0013-032
R44	RESISTOR, FIXED SAME AS R2	10-S0013-050
R45	RESISTOR, FIXED SAME AS R1	10-S0013-062
R46	RESISTOR, FIXED SAME AS R3	10-S0013-046
R47,R48	RESISTOR, FIXED SAME AS R6	10-S0013-024
R49	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R50,R51	RESISTOR, FIXED SAME AS R32	10-S0014-028
R52	RESISTOR, FIXED SAME AS R49	10-S0013-044
R53	RESISTOR, FIXED SAME AS R4	10-S0013-032
R54	RESISTOR, FIXED SAME AS R49	10-S0013-044
R55	RESISTOR, FIXED SAME AS R2	10-S0013-050
R56	RESISTOR, FIXED SAME AS R36	10-S0013-052
R57	RESISTOR, FIXED SAME AS R18	10-S0013-051
R58	RESISTOR, FIXED SAME AS R6	10-S0013-024
R59	RESISTOR, FIXED 270K, PORM 10 PCT, 1/4 W	10-S0013-061
R60	RESISTOR, FIXED SAME AS R6	10-S0013-024
R61	RESISTOR, FIXED 1.8K, PORM 10 PCT, 1/4 W	10-S0013-035
R62	RESISTOR, FIXED SAME AS R32	10-S0014-028
R63	RESISTOR, FIXED 150 OHM, PORM 10 PCT, 1/4 W	10-S0013-022
R64	RESISTOR, FIXED 1.5K, PORM 10 PCT, 1/4 W	10-S0013-034
R65	RESISTOR, FIXED SAME AS R24	10-S0013-038
R66	RESISTOR, FIXED 10K, PORM 1 PCT, 1/4 W	10-S0015-014

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R67	RESISTOR, FIXED SAME AS R32	10-S0014-028
R68	RESISTOR, FIXED SAME AS R63	10-S0013-022
R69	RESISTOR, FIXED 330 OHM, PORM 10 PCT, 1/4 W	10-S0013-026
R70	RESISTOR, FIXED SAME AS R4	10-S0013-032
R71	RESISTOR, FIXED 1.2K, PORM 10 PCT, 1/4 W	10-S0013-033
R72 THRU R74	RESISTOR, FIXED SAME AS R32	10-S0014-028
R75	RESISTOR, FIXED SAME AS R39	10-S0013-037
R76	RESISTOR, FIXED SAME AS R4	10-S0013-032
R77	RESISTOR, FIXED SAME AS R63	10-S0013-022
R78	RESISTOR, FIXED SAME AS R6	10-S0013-024
R79	RESISTOR, FIXED SAME AS R63	10-S0013-022
R80	RESISTOR, FIXED SAME AS R66	10-S0015-014
R81	RESISTOR, FIXED SAME AS R32	10-S0014-028
R82	RESISTOR, FIXED SAME AS R63	10-S0013-022
R83	RESISTOR, FIXED SAME AS R32	10-S0014-028
R84	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R85	RESISTOR, FIXED SAME AS R66	10-S0015-014
R86	RESISTOR, FIXED SAME AS R64	10-S0013-034
R87	RESISTOR, FIXED SAME AS R32	10-S0014-028
R88	RESISTOR, FIXED SAME AS R49	10-S0013-044
R89	RESISTOR, FIXED SAME AS R84	10-S0013-042
R90	RESISTOR, FIXED SAME AS R32	10-S0014-028
R91	RESISTOR, FIXED SAME AS R4	11-S0013-032
R92	RESISTOR, FIXED SAME AS R33	10-S0013-036

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R93	RESISTOR, FIXED SAME AS R32	11-S0014-028
R94	RESISTOR, FIXED SAME AS R4	10-S0013-032
R95	RESISTOR, FIXED SAME AS R32	10-S0014-028
R96	RESISTOR, FIXED SAME AS R29	10-S0013-020
R97	RESISTOR, FIXED SAME AS R2	10-S0013-050
R98	RESISTOR, FIXED 1M, PORM 10 PCT, 1/4 W	10-S0013-068
R99	RESISTOR, FIXED SAME AS R4	10-S0013-032
R100	RESISTOR, FIXED SAME AS R49	10-S0013-044
R101	RESISTOR, FIXED SAME AS R32	10-S0014-028
R102 THRU R104	RESISTOR, FIXED SAME AS R6	10-S0013-024
R105	RESISTOR, FIXED 2.4K, PORM 5 PCT, 1/4 W	10-S0014-087
R106	RESISTOR, FIXED 10K, PORM 1 PCT, 1/4 W	10-S0015-014
R107	RESISTOR, FIXED SAME AS R6	10-S0013-024
R108	RESISTOR, FIXED SAME AS R63	10-S0013-022
R109	RESISTOR, FIXED SAME AS R84	10-S0013-042
T1	TRANSFORMER, VARIABLE	09-S0004-008
T2	TRANSFORMER, VARIABLE	09-S0004-009
T3	TRANSFORMER, VARIABLE	09-S0004-003
T4	NOT USED	
T5	TRANSFORMER, FIXED	09-S0005-002
T6	TRANSFORMER, VARIABLE	09-S0003-004
T7	TRANSFORMER, FIXED	09-S0010-003
T8	TRANSFORMER, VARIABLE	09-S0003-003

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
T9	NOT USED	
T10	TRANSFORMER, VARIABLE	09-S0003-001
	AGC DETECTOR BOARD A9	
C1 THRU C3	CAPACITOR, FIXED 0.1 UF, +80-20 PCT, 100 V ERIE PART NO. 805-000-X5V0-103Z	11-S0005-002
C4	CAPACITOR, FIXED 220 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD221 J03	11-S0001-034
C5	NOT USED	
C6 THRU C10	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C11	CAPACITOR, FIXED 1.0 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-1-N-50-PCB	11-S0007-045
C12	CAPACITOR, FIXED 10 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-10-N-50-PCB	11-S0007-052
C13 THRU C15	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C16	CAPACITOR, FIXED 100 UF, +80-20 PCT, 6 V MALLORY PART NO. MTV-100-N-6-PCD	11-S0007-006
C17	CAPACITOR, FIXED 0.022 UF, PORM 10 PCT, 100 V MALLORY PART NO. PVC-1122	11-S0022-002
C18	CAPACITOR, FIXED 100 UF, +80-20 PCT, 35 V MALLORY PART NO. MTV-100-N-35-PDE	11-S0007-042
C19	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C20	CAPACITOR, FIXED SAME AS C11	11-S0007-045
C21 THRU C26	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C27	NOT USED	
C28	CAPACITOR, FIXED SAME AS C1	11-S0005-002
C29	CAPACITOR, FIXED 150 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD151 J03	11-S0001-030

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C30	CAPACITOR, VARIABLE 2.4 TO 24.5 PF EF JOHNSON PART NO. 189-509-5	11-S0028-001
C31	CAPACITOR, FIXED 18 PF, PORM 0.5 PF, 500 V CDE PART NO. CM05 CD100 D03	11-S0001-008
C32	CAPACITOR, FIXED SAME AS C18	11-S0007-042
C33	CAPACITOR, FIXED 330 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD331 J03	11-S0001-038
C34	CAPACITOR, FIXED 3000 PF, PORM 10 PCT, 500 V CDE PART NO. CM06 FD302 J03	11-S0001-061
C35	CAPACITOR, FIXED 0.47 UF, +80-20 PCT, 25 V ERIE PART NO. 5865-000-Y5U0-474Z	11-S0006-007
C36	CAPACITOR, FIXED 0.1 UF, PORM 10 PCT, 100 V	11-S0005-006
C37	CAPACITOR, FIXED SAME AS C35	11-S0006-007
C38,C39	CAPACITOR, FIXED 0.001 UF, PORM 10 PCT, 100 V RMC PART NO. 0.001JFPORM10PCT	11-S0005-008
C40	CAPACITOR, FIXED SAME AS C11	11-S0007-045
C41	CAPACITOR, FIXED, NON POLARIZED 1 UF, +80-20 PCT, 20 V MALLORY PART NO. MTV-1-N-20-N-PCB	11-S0007-061
C42	CAPACITOR, FIXED 50 UF, +80-20 PCT, 50 V MALLORY PART NO. MTV-50-N-50-PDE	11-S0007-057
C43	CAPACITOR, FIXED 4.7 UF, PORM 10 PCT, 35 V SPRAGUE PART NO. 164D-475X9035B2	11-S0011-004
C44	CAPACITOR, FIXED 2 PF, PORM .25 PF, 500 V ERIE PART NO. 301-000-C0K0-209C	11-S0002-005
C45	CAPACITOR, FIXED SAME AS C1	11-S0005-002
CR1,CR2	DIODE 1N456	20-S0017-001
CR3	DIODE, ZENER 3.9 V, PORM 10 PCT, 1 W SCHAUER PART NO. SZ3.9	20-S0011-006
CR4 THRU CR7	DIODE, HOT CARRIER HEWLETT-PACKARD PART NO. 5082-2800	20-S0010-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
CR8	DIODE 1N270	20-S0016-001
CR9	DIODE SAME AS CR1	20-S0017-001
IC1	INTEGRATED CIRCUIT RCA PART NO. CA3028A	72-S0006-001
L1,L2	INDUCTOR, FIXED 22 UH, PORM 5 PCT JEFFERS PART NO. 4445-7J	09-S0022-025
L3	INDUCTOR, FIXED 2.2 UH, PORM 10 PCT JEFFERS PART NO. 4425-10K	09-S0022-012
L4	INDUCTOR, FIXED 3 MH, PORM 5 PCT JEFFERS PART NO. 1312-30J	09-S0023-035
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
Q1	TRANSISTOR, NPN RCA PART NO. 2N5183	20-S0020-001
Q2	TRANSISTOR, PNP MOTOROLA PART NO. MPS-3702	20-S0005-001
Q3 THRU Q5	TRANSISTOR, NPN SAME AS Q1	20-S0020-001
Q6	TRANSISTOR, FIELD EFFECT, DUAL GATE RCA PART NO. 40604	20-S0008-001
Q7	TRANSISTOR, NPN SAME AS Q1	20-S0020-001
Q8	TRANSISTOR, FIELD EFFECT, DUAL GATE SAME AS Q6	20-S0008-001
Q9	TRANSISTOR, FIELD EFFECT RCA PART NO. 40468A	20-S0006-001
Q10 THRU Q14	TRANSISTOR, NPN SAME AS Q1	20-S0020-001
R1	RESISTOR, FIXED 6.8K, PORM 10 PCT, 1/4 W	10-S0013-042
R2	NOT USED	
R3	RESISTOR, FIXED 3.3K, PORM 10 PCT, 1/4 W	10-S0013-038
R4	RESISTOR, FIXED 330 OHM, PORM 10 PCT, 1/4 W	10-S0013-026
R5,R6	NOT USED	
R7	RESISTOR, FIXED 1K, PORM 5 PCT, 1/4 W	10-S0014-032

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R8,R9	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R10	RESISTOR, FIXED 220 OHM, PORM 10 PCT, 1/4 W	10-S0013-024
R11	RESISTOR, FIXED SAME AS R7	10-S0014-032
R12 THRU R14	RESISTOR, FIXED SAME AS R8	10-S0013-044
R15	RESISTOR, FIXED 1M, PORM 10 PCT, 1/4 W	10-S0013-068
R16	RESISTOR, FIXED 4.7K, PORM 5 PCT, 1/4 W	10-S0014-040
R17	RESISTOR, FIXED SAME AS R7	10-S0014-032
R18	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R19	RESISTOR, FIXED 180 OHM, PORM 10 PCT, 1/4 W	10-S0013-023
R20	RESISTOR, FIXED 22K, PORM 10 PCT, 1/4 W	10-S0013-048
R21	RESISTOR, FIXED SAME AS R10	10-S0013-024
R22	RESISTOR, FIXED SAME AS R8	10-S0013-044
R23	RESISTOR, FIXED 390 OHM, PORM 10 PCT, 1/4 W	10-S0013-027
R24,R25	NOT USED	
R26	RESISTOR, VARIABLE 2.5K, PORM 20 PCT, 1/4 W	10-S0027-029
R27	RESISTOR, FIXED SAME AS R10	10-S0013-024
R28	RESISTOR, FIXED 15K, PORM 10 PCT, 1/4 W	10-S0013-046
R29	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R30,R31	RESISTOR, FIXED SAME AS R10	10-S0013-024
R32	RESISTOR, FIXED 470 OHM, PORM 5 PCT, 1/4 W	10-S0014-028
R33	RESISTOR, FIXED 1K, PORM 5 PCT, 1/4 W	10-S0014-032
R34,R35	RESISTOR, FIXED SAME AS R8	10-S0013-044
R36	RESISTOR, FIXED 100K, PORM 10 PCT, 1/4 W	10-S0013-056
R37,R38	RESISTOR, FIXED SAME AS R10	10-S0013-024

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
R39,R40	RESISTOR, FIXED SAME AS R16	10-S0014-040
R41	RESISTOR, FIXED 680 OHM, PORM 10 PCT, 1/4 W	10-S0013-030
R42	RESISTOR, FIXED 100 OHM, PORM 10 PCT, 1/4 W	10-S0013-020
R43	RESISTOR, FIXED SAME AS R8	10-S0013-044
R44	RESISTOR, FIXED 470K, PORM 10 PCT, 1/4 W	10-S0013-064
R45	RESISTOR, FIXED SAME AS R8	10-S0013-044
R46	PESISTOR, FIXED SAME AS R7	10-S0014-032
R47	RESISTOR, FIXED 47 OHM, PORM 5 PCT, 1/4 W	10-S0014-016
R48,R49	RESISTOR, FIXED SAME AS R16	10-S0014-040
R50	RESISTOR, FIXED 150 OHM, PORM 10 PCT, 1/4 W	10-S0013-022
R51	RESISTOR, FIXED 6.2K, PORM 5 PCT, 1/4 W	10-S0014-088
R52	RESISTOR, FIXED 2.2K, PORM 10 PCT, 1/4 W	10-S0013-036
R53	RESISTOR, FIXED 18K, PORM 5 PCT, 1/4 W	10-S0014-047
R54	RESISTOR, FIXED SAME AS R28	10-S0013-046
R55	RESISTOR, FIXED 2.7K, PORM 10 PCT, 1/4 W	10-S0013-037
R56	RESISTOR, FIXED SAME AS R7	10-S0014-032
R57	RESISTOR, VARIABLE 5K, PORM 20 PCT, 1/4 W	10-S0027-011
R58	RESISTOR, FIXED 1.2K, PORM 10 PCT, 1/4 W	10-S0013-033
R59	RESISTOR, FIXED 560 OHM, PORM 10 PCT, 1/4 W	10-S0013-029
R60	RESISTOR, FIXED SAME AS R7	10-S0014-032
T1,T2	TRANSFORMER, FIXED	09-S0025-001
Y1	CRYSTAL 100 KHZ	13-S0001-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
	POWER AMPLIFIER ASSEMBLY A10	
A10A1	UPPER POWER AMPLIFIER ASSEMBLY	03-S0003-001
C1	CAPACITOR, VARIABLE 10.0 TO 140.0 PF HAMMARLUND PART NO. MC 140S	11-S0014-001
C2	CAPACITOR, VARIABLE 15.0 TO 467.0 PF TRW PART NO. 467 PF	11-S0016-001
L1	INDUCTOR, FIXED	09-S0016-001
S1	SWITCH	07-S0001-001
A10A3	TUBE BOX ASSEMBLY	03-S0004-001
C1	CAPACITOR, FIXED /FEEDTHRU/ 0.001 UF, PORM 20 PCT, 500 V ERIE PART NO. 357-000-X5U0-102M	11-S0024-001
C2,C3	CAPACITOR, FIXED 1000 PF, PORM 5 PCT, 500 V ELMENCO PART NO. DM-19-102J	11-S0029-001
C4	CAPACITOR, FIXED SAME AS C1	11-S0024-001
C5	CAPACITOR, FIXED SAME AS C2	11-S0029-001
C6	CAPACITOR, FIXED SAME AS C1	11-S0024-001
CR1	DIODE ATLANTIC PART NO. 75A1	20-S0014-001
L1	INDUCTOR, FIXED 100 UH, PORM 5 PCT JEFFERS PART NO. 1315-12J	09-S0022-041
R1	RESISTOR, FIXED 390 OHM, PORM 5 PCT, 2 W	10-S0026-002
R2	RESISTOR, FIXED 560 OHM, PORM 10 PCT, 1 W	10-S0018-003
XV1	SOCKET, TUBE MYCALEX PART NO. CP464-2	19-S0004-001
A10A2	LOWER POWER AMPLIFIER ASSEMBLY	03-S0005-001
C1 THRU C4	CAPACITOR, VARIABLE 4.2 TO 24 PF HAMMARLUND PART NO. 9434-45-10060	11-S0015-001
C5	CAPACITOR, FIXED 50 PF, PORM 10 PCT, 7,500 V CENTRALAB PART NO. 850-S-50Z	11-S0025-001
C6	CAPACITOR, FIXED 20 PF, PORM 10 PCT, 7,500 V CENTRALAB PART NO. 853-A-20Z	11-S0026-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
C7	CAPACITOR, VARIABLE SAME AS C1	11-S0015-001
C8	CAPACITOR, VARIABLE 65 TO 340 PF ELMENCO PART NO. 303M /WITH DOUBLE MICA INSULATION/	11-S0018-002
C9	CAPACITOR, VARIABLE 65 TO 340 PF ARCO PART NO. 304M	11-S0030-001
C10,C11	CAPACITOR, VARIABLE SAME AS C8	11-S0018-002
C12 THRU C18	CAPACITOR, FIXED /FEEDTHRU/ 0.001 UF, PORM 20 PCT, 500 V ERIE PART NO. 375-000-X5U0-102M	
C19,C20	CAPACITOR, FIXED SAME AS C6	11-S0026-001
J1 THRU J13	NOT USED	
J14	CONNECTOR	16-S0002-001
K1	RELAY, REED	47-S0001-001
L1,L2	INDUCTOR, FIXED 22 UH, PORM 10 PCT JEFFERS PART NO. 4424-1K	09-S0031-001
L3,L4	INDUCTOR, FIXED 100 UH, PORM 5 PCT JEFFERS PART NO. 1315-12J	09-S0022-041
L5,L6	PART OF SWITCH ASSEMBLY S1	
R1	RESISTOR, FIXED 470 OHM, PORM 10 PCT, 1/4 W	10-S0013-028
S1	SWITCH ASSEMBLY	07-S0011-001
A10A4	REFLECTOMETER ASSEMBLY	03-S0006-001
C1,C2	CAPACITOR, FIXED 180 PF, PORM 5 PCT, 500 V CDE PART NO. CM05 FD181 J03	11-S0001-032
C3,C4	CAPACITOR, VARIABLE 2 TO 8 PF ERIE PART NO. 538	11-S0020-001
CR1,CR2	DIODE 1N270	20-S0016-001
R1,R2	RESISTOR, FIXED 4.32K, PORM 1 PCT, 1/4 W	10-S0015-015
R3,R4	RESISTOR, FIXED 22 OHM, PORM 10 PCT, 1/4 W	10-S0016-002
T1	TRANSFORMER, FIXED	09-S0018-001

REF DESIG	NAME AND DESCRIPTION	SIGNAL/ONE PART NO.
	S2 BOARD A11	
S1	NOT USED	
S2A THRU S2E	SWITCH ASSEMBLY	07-S0002-001
	HI-PASS FILTER BOARD A12	
C1	CAPACITOR, FIXED 3,000 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM06-FD302J03	11-S0001-061
C2,C3	CAPACITOR, FIXED 1,000 PF, PORM 5 PCT, 500 V CORNELL DUBILIER PART NO. CM05-FA102J03	11-S0001-050
C4	CAPACITOR, FIXED SAME AS C1	11-S0001-061
L1	INDUCTOR, FIXED 10 UH, PORM 10 PCT JEFFERS PART NO. 4445-10K	09-S0022-020
L2	INDUCTOR, FIXED 2.2 UH, PORM 10 PCT JEFFERS PART NO. 4425-10K	09-S0022-012
L3	INDUCTOR, FIXED SAME AS L1	09-S0022-020
P1	CONNECTOR, PLUG SWITCHCRAFT PART NO. 3501M	16-S0011-001
P	CONNECTOR, PLUG AMPHENOL PART NO. 61181-2EC /BOARD INTERCONNECTIONS/	16-S0013-001
	TERMINAL BOARD ASSEMBLY TB1	
R1	RESISTOR, FIXED 8.2K, PORM 10 PCT, 1/4 W	10-S0016-010
R2	RESISTOR, FIXED 10K, PORM 10 PCT, 1/4 W	10-S0013-044
R3	RESISTOR, FIXED 3.24K, PORM 1 PCT, 1/4 W	10-S0015-012
R4	RESISTOR, FIXED 150 OHM, PORM 10 PCT, 1/4 W	10-S0013-022
R5	RESISTOR, FIXED 4.7K, PORM 10 PCT, 1/4 W	10-S0013-040
R6	RESISTOR, FIXED 3.4K, PORM 1 PCT, 1/4 W	10-S0015-013
	S3 BOARD A13	
S1,S2	NOT USED	
S3A THRU S3F	SWITCH ASSEMBLY	07-S0001-001

ERRATA I - 26 April 1971

Page

2-17 Revise paragraph 2.3.4.2 to read as follows:

Calibrate Using "WWV."

a. Set the "MODE" selector switch to the "USB" position.

b. Turn the "IF SHIFT" control to the "-1.5" position.

NOTE

The same end-result of steps a. and b. above can also be obtained by using "LSB" and setting the "IF SHIFT" control to the "+1.5" position.

c. Set the "MHZ" band selector switch to the "14" position.

d. Tune in "WWV" at the high end of this band using either "VFO A" or "VFO B."

NOTE

The frequency counter may not indicate ".000.0" after step e. is accomplished.

e. Zero-beat the carrier of WWV using applicable VFO control.

f. Pull out the "PULL TO CALIBRATE" control. When this control is pulled out, two audio tones will be heard. One tone is a result of beating the 150th harmonic of the 100 kHz frequency standard in the Model CX7 with the carrier of WWV. The second tone is a result of the error in the frequency scheme in the Model CX7 and the 150th harmonic of the 100 kHz frequency standard in the Model CX7.

g. Insert a small screwdriver through the special cut-out on the top right-hand side of the Model CX7 cover (refer to Figure 2-3 for exact location) and adjust C30 on the AGC board for a zero beat. (This is best accomplished when WWV is transmitting a steady carrier.) This zero beat is a result of the 150th harmonic of the internal frequency standard in the Model CX7 and the carrier of WWV beating together. The 100 kHz internal frequency standard in the Model CX7 is now calibrated against WWV.

h. To calibrate the Model CX7 on the 14 MHz band:

1. Rotate the applicable VFO for a counter display of ".000.0."
2. Rotate the "PULL TO CALIBRATE" control for a zero beat.
3. Push in "PULL TO CALIBRATE" control.
4. The Model CX7 is now calibrated on the 14 MHz band.

i. To calibrate the Model CX7 on each of its other bands, refer to paragraph 2.3.4.

2-17 Delete paragraph 2.3.4.3.

2-18 Change Figure 2-3 to read:

Figure 2-3. Capacitor C30 Location.

2-24 Revise paragraph 2.4.5 to read as follows:

AM Transmission

a. Set the "MODE" selector switch to the "AM" position.

b. With the Model CX7 in the receive position ("PTT" switch depressed), set the "PUSH-TO-TALK" switch on the microphone to the "ON" or "TALK" position; or depress the "TRANSMIT" switch on the Model CX7.

NOTE

Do not talk into the microphone while performing step c.

c. Adjust the "OUTPUT" control for a forward power indication of 1.8 (refer to Table 2-4, page 2-20).

d. Talk into the microphone in a normal manner and adjust the "CLIPPING" control for a peak forward power indication of 2.4 on voice peaks.

Page

2-24 (cont) e. Depress the "PTT" switch to return the Model CX7 to the receive position. The Model CX7 is now aligned for "am" operation.

3-34 Change Table 3-2 as follows:

Lines 4, 5, and 6 in the In XMIT column should read B.

4-8 Interchange wafers G and E.

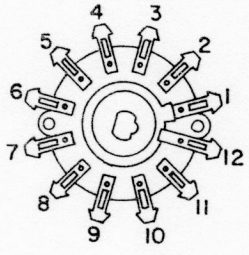
4-33 Add the following to step 2, paragraph e. RF Driver Board:

If a short Phillips-head screwdriver cannot be obtained, it will be necessary to remove the counter assembly and the transmit control push-button assembly in order to remove the Phillips-head screw located in that corner of the board.

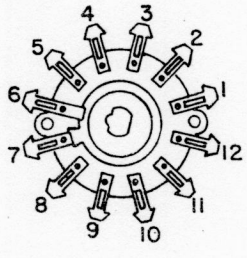
4-37 Change Table 4-2 as follows:

Pin 132 voltage in Voltage and Resistance column should read +34.0 ±0.5 VDC.

4-52 Delete contact identification diagram for switch S7 as shown in Figure 4-29 and insert the following:



REAR VIEW
WAFERS B, C, E, F, G
SWITCH S7



REAR VIEW
WAFER D
SWITCH S7

5-5 In Figure 5-4: C39 should read C59, and C58 (right-hand side of illustration) should read C57.

5-17 Change step 13 to read: Adjust IF board capacitor C71.

5-18 Change step 20 to read: Adjust IF board capacitor C3.

6-3 Wire 103, in To column should read P3-8.

6-10 Wire 394 in Color column should read BLUE.

Wire 395 in Color column should read BROWN.

Wire 402 in Color column should read VIOLET.

6-13/ 6-14 The C20, L1 node near the A7 Counter assembly should be connected to the opposite end of feedthrough capacitor C37 (C37 functions as an ordinary capacitor).

7-24 R8 change to read: RESISTOR, FIXED, 4.7K, PORM 10 PCT, 1/4W, 10-S0013-040.

7-25 R46 change to read: RESISTOR, FIXED, 1K, PORM 10 PCT, 1/4W, 10-S0013-032.

7-26 C4 change to read: CAPACITOR, FIXED SAME AS C1, 11-S0005-006.

7-26 C10 change to read: CAPACITOR, FIXED SAME AS C2, 11-S0005-002.

7-27 Q1 change to read: TRANSISTOR, FIELD EFFECT TYPE 2N5485, 20-S0029-001.

7-28 Q5 change to read: TRANSISTOR, NPN TYPE 2N3391, 20-S0027-001.

7-31 C10 change to read: CAPACITOR, FIXED SAME AS C5, 11-S0005-006.

7-42 R109 change to read: RESISTOR, FIXED SAME AS R4, 10-S0013-032.

7-45 IC1 change to read: INTEGRATED CIRCUIT RCA PART NO. CA-3053, 72-S0008-001.

7-49 C12 THRU C18 change to read: CAPACITOR, FIXED/FEEDTHRU/0.001 UF, PORM 20 PCT, 500V ERIE PART NO. 357-000-X5U0-102M, 11-S0024-001.