



PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

NOTE

Repair or adjustment of transmitter circuits must be under supervision of a person with first-or second-class radiotelephone license.

(Refer to FCC Rules and Regulations Part 95, Subpart C & D.)

The frequency of the transmitter should be checked periodically with a secondary frequency standard to insure proper and legal operation.

Best results will be obtained when adjusting the final RF output circuit if the antenna normally used is connected and the chassis is as nearly in the cabinet as possible.

Connect either 50-ohm dummy load or the normally used antenna system.



MODEL SBE-44CB (Malibu 40)

MANUFACTURER'S SPECIFICATIONS

TRANSMITTER

Power Output	4 watts (Maximum)
Modulation	95-100%
Modulator Response	300 Hz to 3000 Hz, +3 -10db
Output Impedance	50 Ω , unbalanced
Output Indicator	Back lit front panel meter

RECEIVER

Sensitivity	1.0 μ V for 10db S+N/N ratio
Selectivity	55db @ $\pm$ 10kHz, 60db @ $\pm$ 20kHz, 65db @ $\pm$ 30kHz
IF Frequencies	10.695 MHz, 455 kHz
Automatic Gain Control	Less than 10db change in audio output for signal inputs from 10-500,000 μ V
Squelch Threshold	0.5 μ V
Audio Power Output	Greater than 2.0 watts @ 10% T.H.D.
Built-in Speaker	8 Ω
External Speaker	(Not Supplied) 4 or 8 Ω . Disables internal speaker when connected.
Power Consumption	13.8 VDC Receive (squelch) 0.25 amp Receive (2 watts audio) 0.7 amp Transmit (95% modulation) 1.5 amp

Courtesy of the Manufacturer

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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SBE MODEL SBE-44CB

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120V AC. Allow a 15-minute warm-up period. Adjustments made with 13.80 volts DC input. Connect low sides of test equipment to ground unless specified otherwise. Connect 50-ohm dummy load or antenna before keying transmitter.

Suggested Alignment Tools: GC ELECTRONICS
T103 thru T107, T3015009, 8728-A, 8728
T302, L305, L308, L3099091, 8728-A, 8728
L1, L3, L4, L302, L303, T1 T101, T102.9440
C3258276, 5000

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (Q1, Emitter).	Ch. 19 XMT Ch. 19	L1 R11	Adjust for 10.238MHz. Adjust for 10.240MHz.
Input of oscilloscope to TP2 (Q5, G2).	Ch. 19	T1	Adjust for maximum RF.
Input of DC meter to TP3 (U3 pin 13).	Ch. 19 Ch. 19	L3	Adjust for 3.50 volts. Check for 2.12 volts.
Input of oscilloscope to TP4 (Q9, Collector).	Ch. 19	L4	Adjust for maximum RF.
Input of frequency counter to TP4 (Q9, Collector).	Ch. 19 Ch. 19, XMT		Check for 16.270MHz. Check all channels. (See Truth Chart for correct frequencies) Check for 16.727MHz. (See Truth Chart for correct frequencies)
Input of frequency counter to TP5 (U2, pin 6)	Ch. 19 Ch. 19, XMT Ch. 19, XMT		Check for .910MHz. Check all channels. (See Truth Chart for correct frequencies) Check for 1.370MHz Check all channels Check for 1.370MHz. Check all channels. (See Truth Chart for correct frequencies.)

RECEIVER ALIGNMENT

Connect an AC VTVM or AF wattmeter across speaker voice coil. Adjust volume control to obtain a suitable indication. Set generator output low enough to prevent AGC limiting. Squelch MINIMUM.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output signal generator thru .01uF to TP6 (Q15, gate). 455kHz, 1000Hz @ 30% modulation.	Ch. 19	T107, T106, T105	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T104, T103, T102, T101	Adjust for maximum output. If necessary readjust T105, T106 and T107.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 50,000uV.	Ch. 19 Squelch maximum	R118	SQUELCH RANGE Adjust so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19 Squelch MINIMUM	R128	S METER Adjust for 9 on S scale of meter.

TRANSMITTER ALIGNMENT

Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after alignment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of Spectrun analyzer or harmonic meter to antenna jack.	Ch. 19	T301,L302, L303,T302, L305,L308, L309	Adjust for maximum.
	Ch. 19	L308,L309	Adjust for 4 watts maximum.
	Ch. 19	C325	Adjust for MINIMUM at 54MHz.

TRANSMITTER ADJUSTMENTS

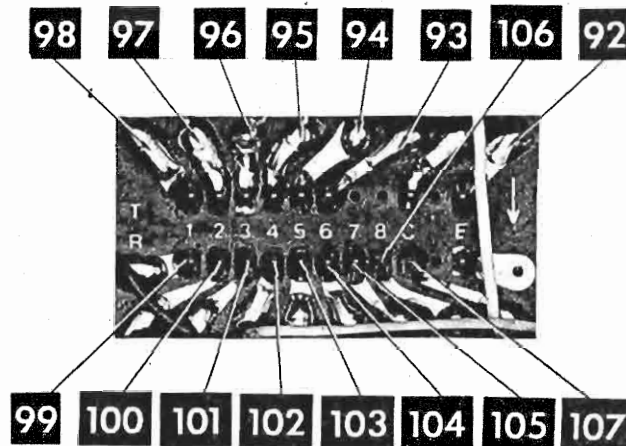
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna jack. Inject a 1000Hz, 20mV signal at MIC input.	Ch. 19	R226	AMC Adjust for 100% modulation maximum.
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector	Ch. 19	R319	RFO METER Adjust so that RFO meter agrees with RF wattmeter.

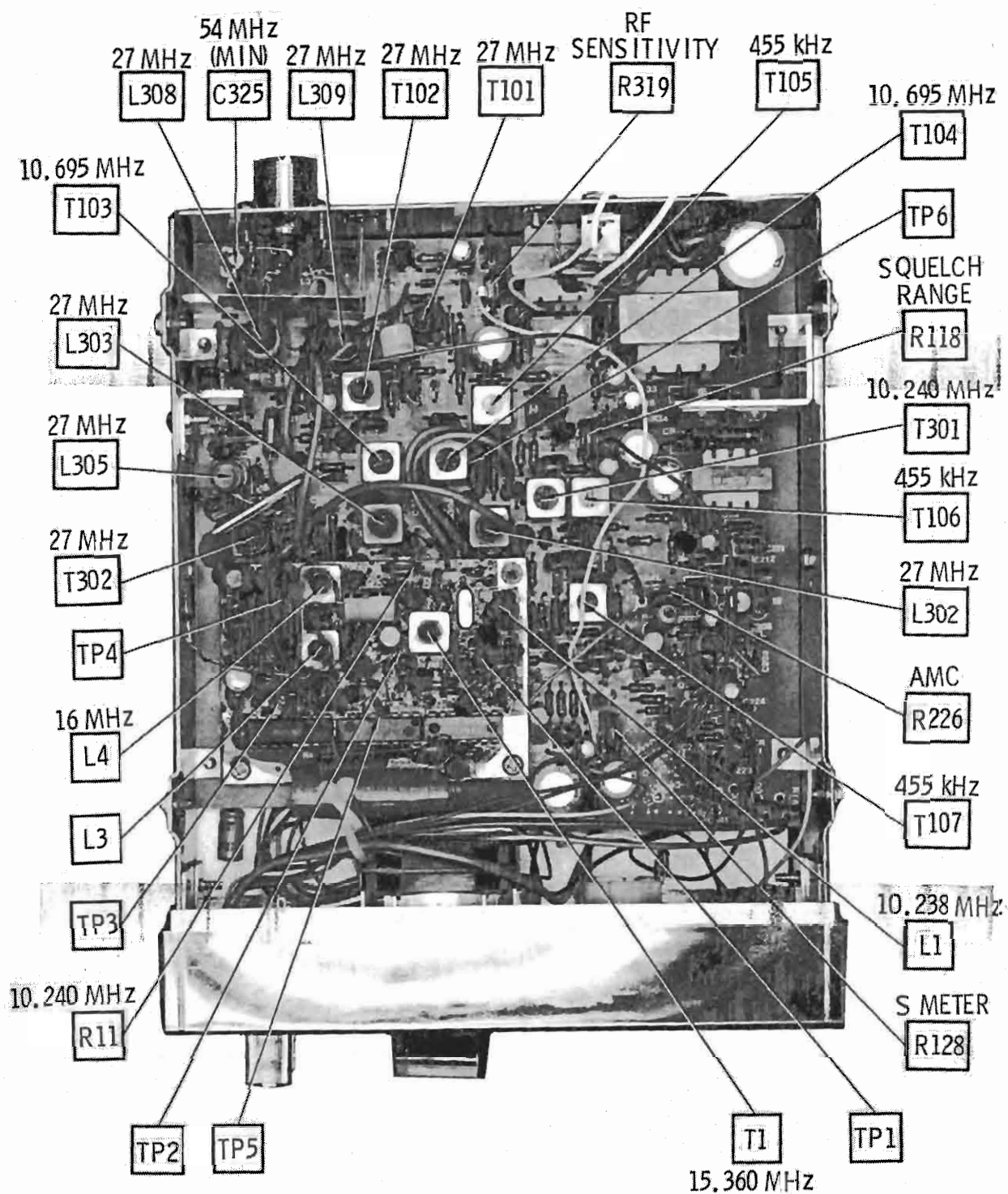
TRUTH CHART

CHANNEL	1 = 6.30 Volts 0 = 0 Volts XMT PROGRAM DIVIDER								REC VCO OUTPUT IN MHz AT TP4	XMT VCO OUTPUT IN MHz AT TP4	DIFFERENCE FREQ REC VCO OUTPUT IN MHz AT TP5	DIFFERENCE FREQ XMT VCO OUTPUT IN MHz AT TP5
	PINS											
	U3				U2							
	4	5	6	7	2	14	5	11				
1	1	0	0	0	1	0	1	0	16.270	16.727	.910	1.370
2	1	0	0	0	1	0	0	1	16.280	16.737	.920	1.380
3	1	0	0	0	1	0	1	1	16.290	16.747	.930	1.390
4	1	0	0	0	1	1	1	0	16.310	16.767	.950	1.410
5	1	0	0	0	1	1	0	1	16.320	16.777	.960	1.420
6	1	0	0	0	1	1	1	1	16.330	16.787	.970	1.430
7	1	0	0	1	0	0	0	0	16.340	16.797	.980	1.440
8	1	0	0	1	0	0	0	1	16.360	16.817	1.000	1.460
9	1	0	0	1	0	0	1	1	16.370	16.827	1.010	1.470
10	1	0	0	1	0	1	0	0	16.380	16.837	1.020	1.480
11	1	0	0	1	0	1	1	0	16.390	16.847	1.030	1.490
12	1	0	0	1	0	1	1	1	16.410	16.867	1.050	1.510
13	1	0	0	1	1	0	0	0	16.420	16.877	1.060	1.520
14	1	0	0	1	1	0	1	0	16.430	16.887	1.070	1.530
15	1	0	0	1	1	0	0	1	16.440	16.897	1.080	1.540
16	1	0	0	1	1	1	0	0	16.460	16.917	1.100	1.560
17	1	0	0	1	1	1	1	0	16.470	16.927	1.110	1.570
18	1	0	0	1	1	1	0	1	16.480	16.937	1.120	1.580
19	1	0	0	1	1	1	1	1	16.490	16.947	1.130	1.590
20	1	0	1	0	0	0	1	0	16.510	16.967	1.150	1.610
21	1	0	1	0	0	0	0	1	16.520	16.977	1.160	1.620
22	1	0	1	0	0	0	1	1	16.530	16.987	1.170	1.630
23	1	0	1	0	0	1	0	1	16.560	17.017	1.200	1.660
24	1	0	1	0	0	1	0	0	16.540	16.997	1.180	1.640
25	1	0	1	0	0	1	1	0	16.550	17.007	1.190	1.650
26	1	0	1	0	0	1	1	1	16.570	17.027	1.210	1.670
27	1	0	1	0	1	0	0	0	16.580	17.037	1.220	1.680
28	1	0	1	0	1	0	1	0	16.590	17.047	1.230	1.690
29	1	0	1	0	1	0	0	1	16.600	17.057	1.240	1.700
30	1	0	1	0	1	0	1	1	16.610	17.067	1.250	1.710
31	1	0	1	0	1	1	0	0	16.620	17.077	1.260	1.720
32	1	0	1	0	1	1	1	0	16.630	17.087	1.270	1.730
33	1	0	1	0	1	1	0	1	16.640	17.097	1.280	1.740
34	1	0	1	0	1	1	1	1	16.650	17.107	1.290	1.750
35	1	0	1	1	0	0	0	0	16.660	17.117	1.300	1.760
36	1	0	1	1	0	0	1	0	16.670	17.127	1.310	1.770
37	1	0	1	1	0	0	0	1	16.680	17.137	1.320	1.780
38	1	0	1	1	0	0	1	1	16.690	17.147	1.330	1.790
39	1	0	1	1	0	1	0	0	16.700	17.157	1.340	1.800
40	1	0	1	1	0	1	1	0	16.710	17.167	1.350	1.810

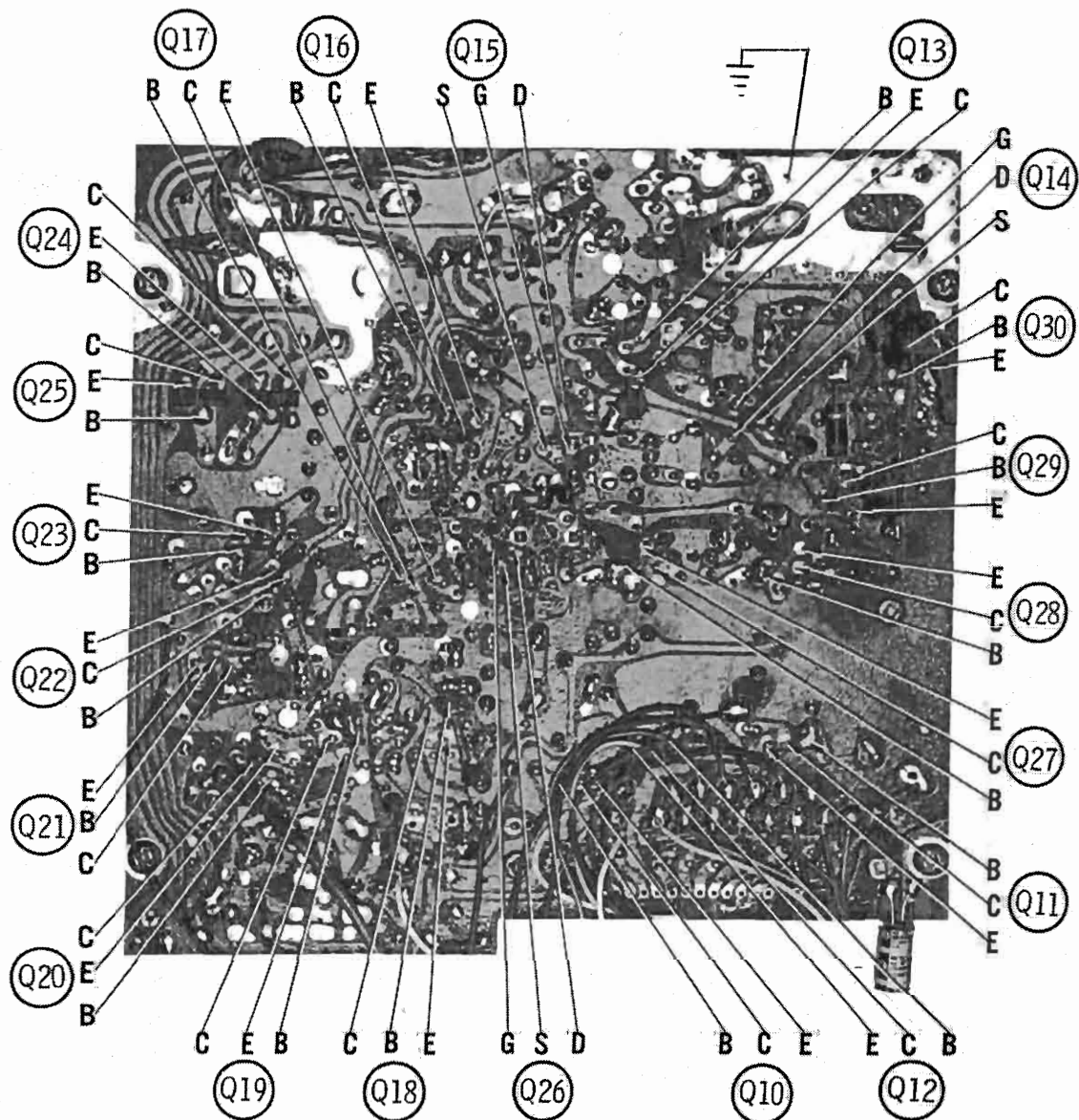
A Howard W. Sams CIRCUITRACE Photo



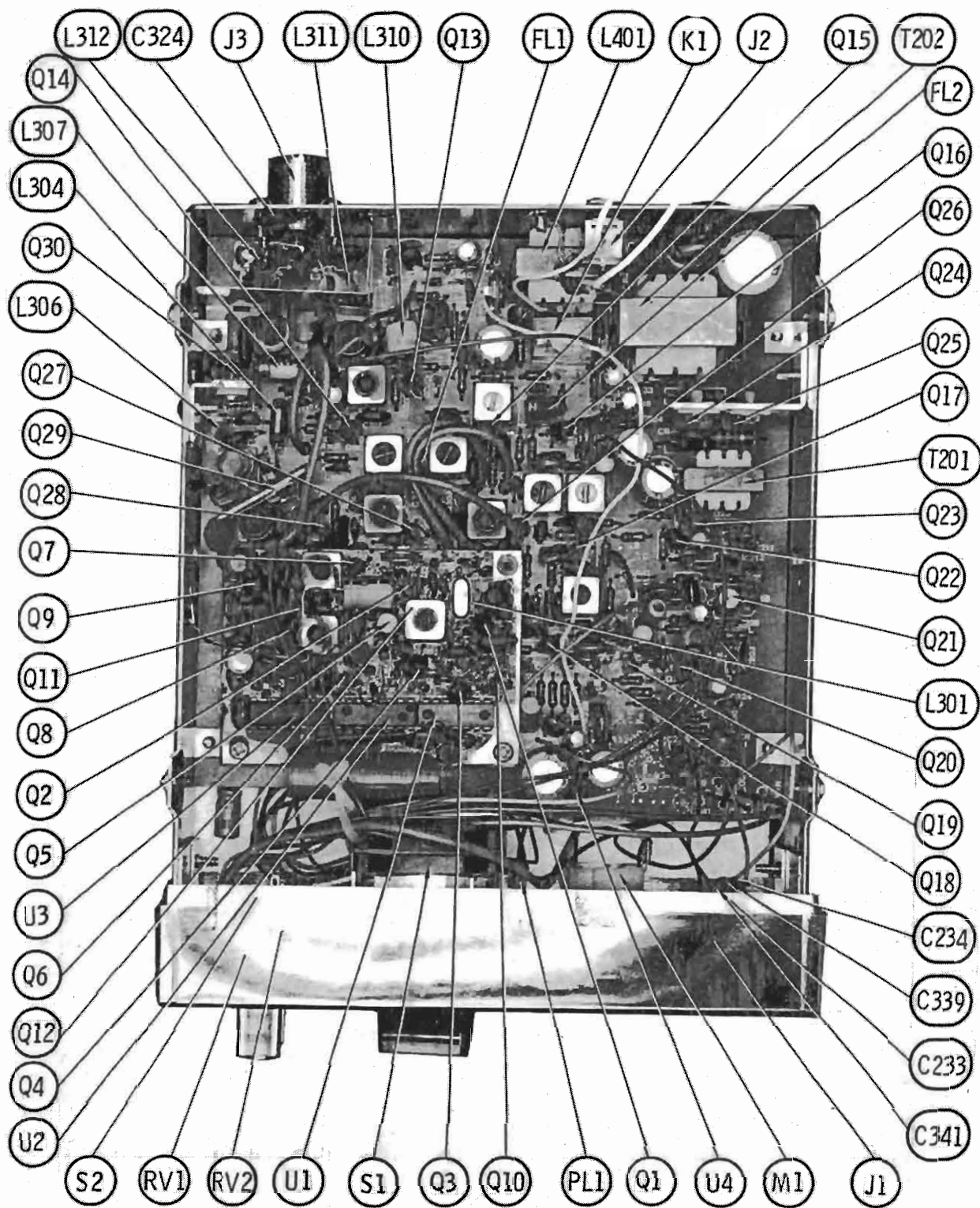
CH. SELECTOR BOARD



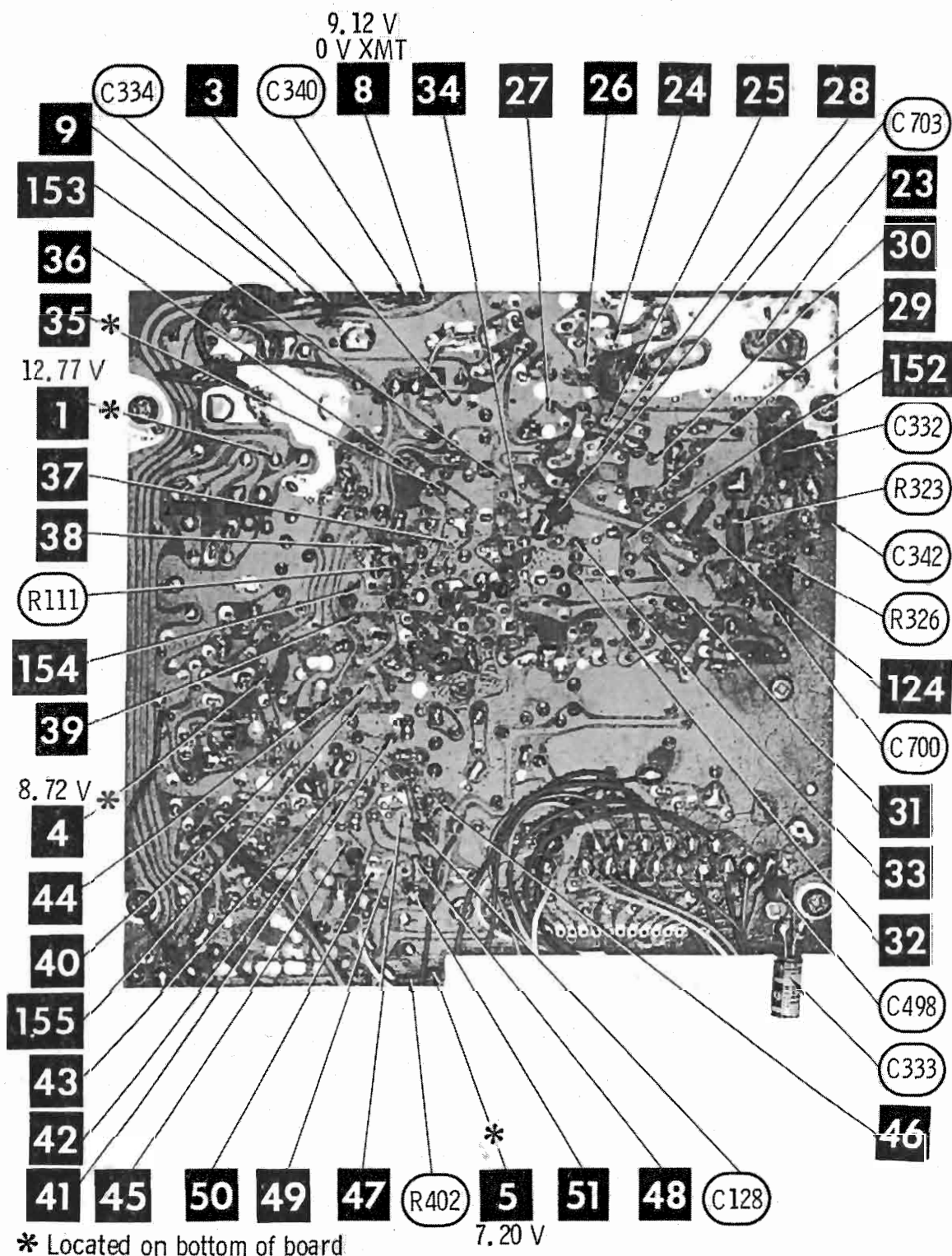
CHASSIS-BOTTOM



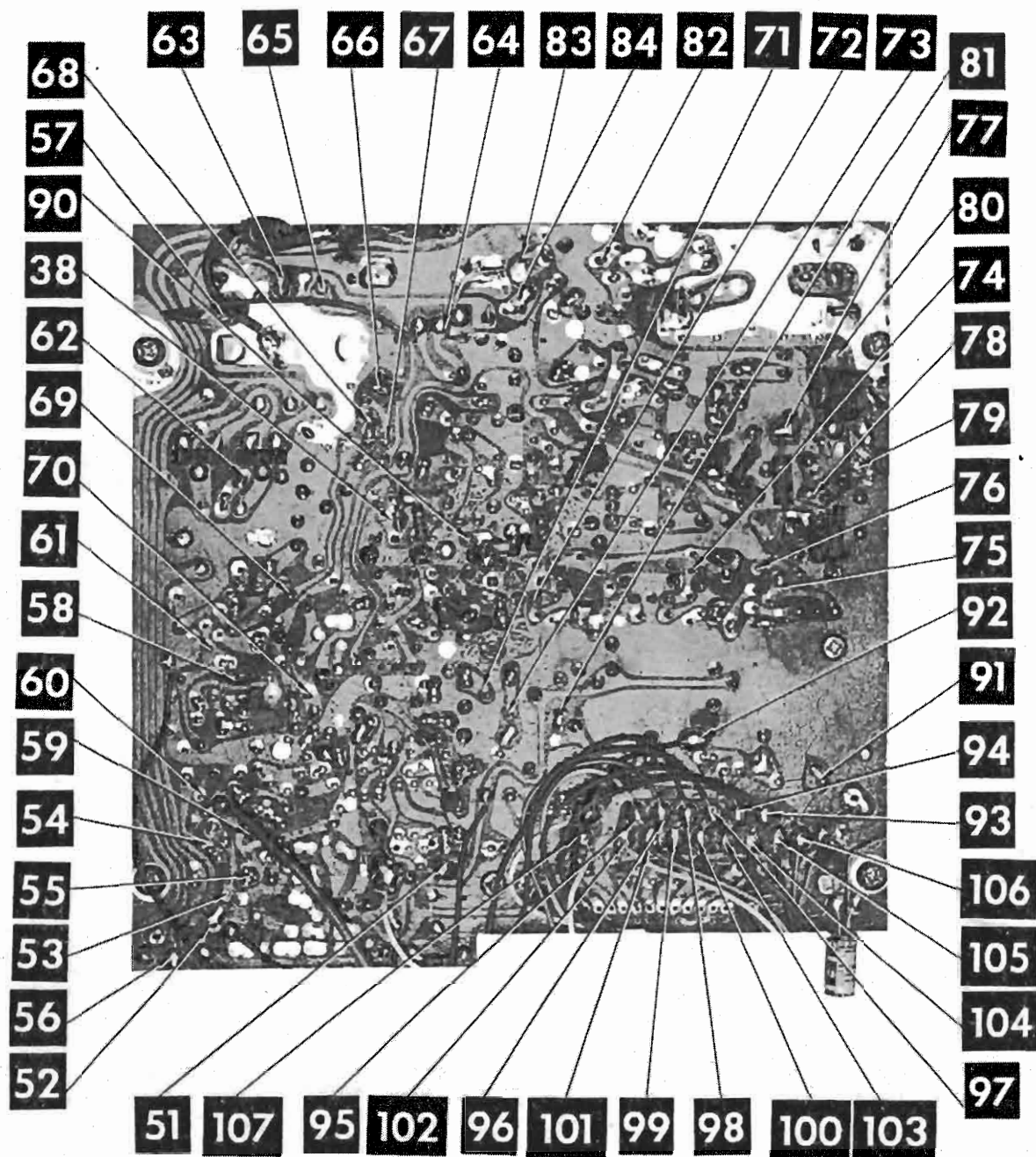
MAIN BOARD



MAIN BOARD

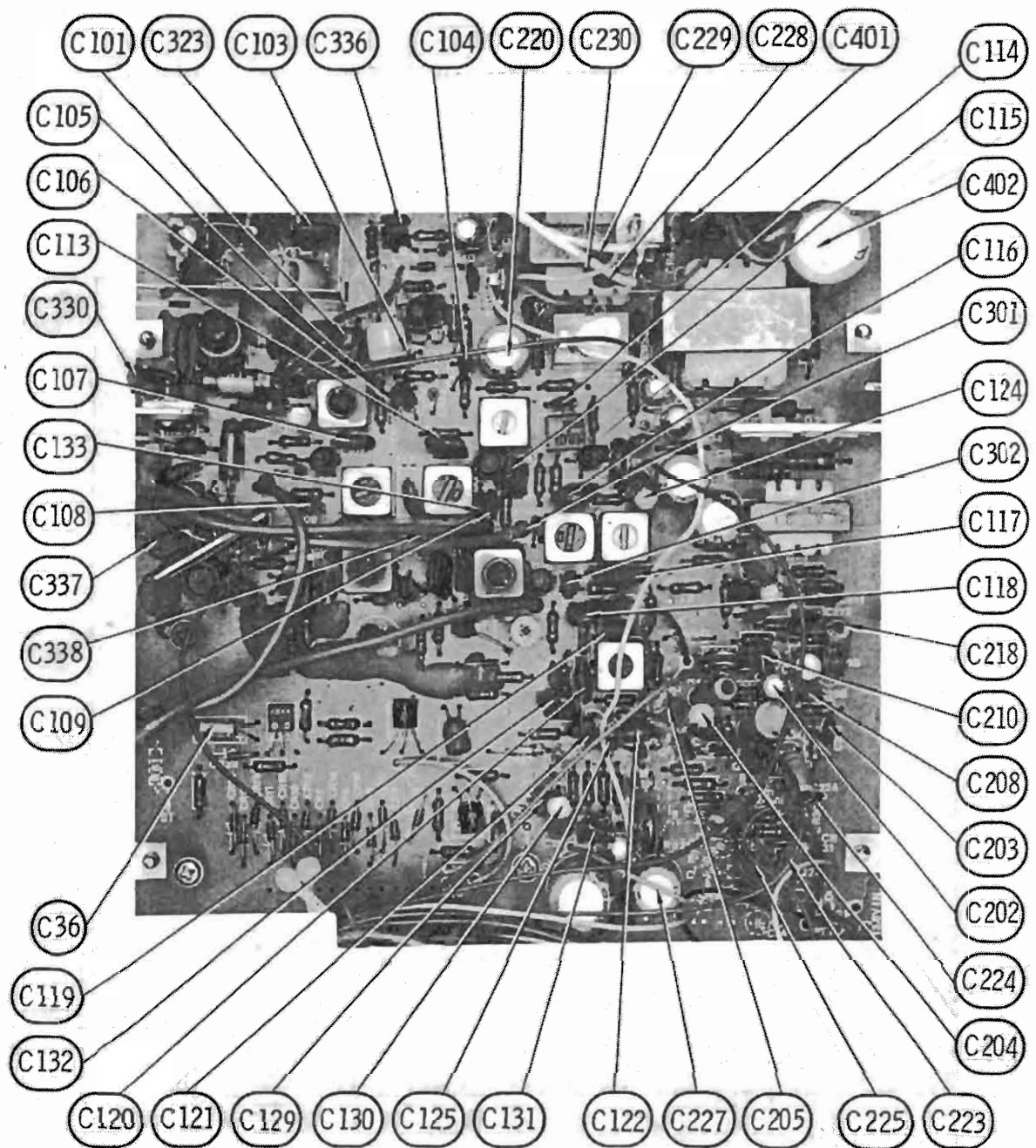


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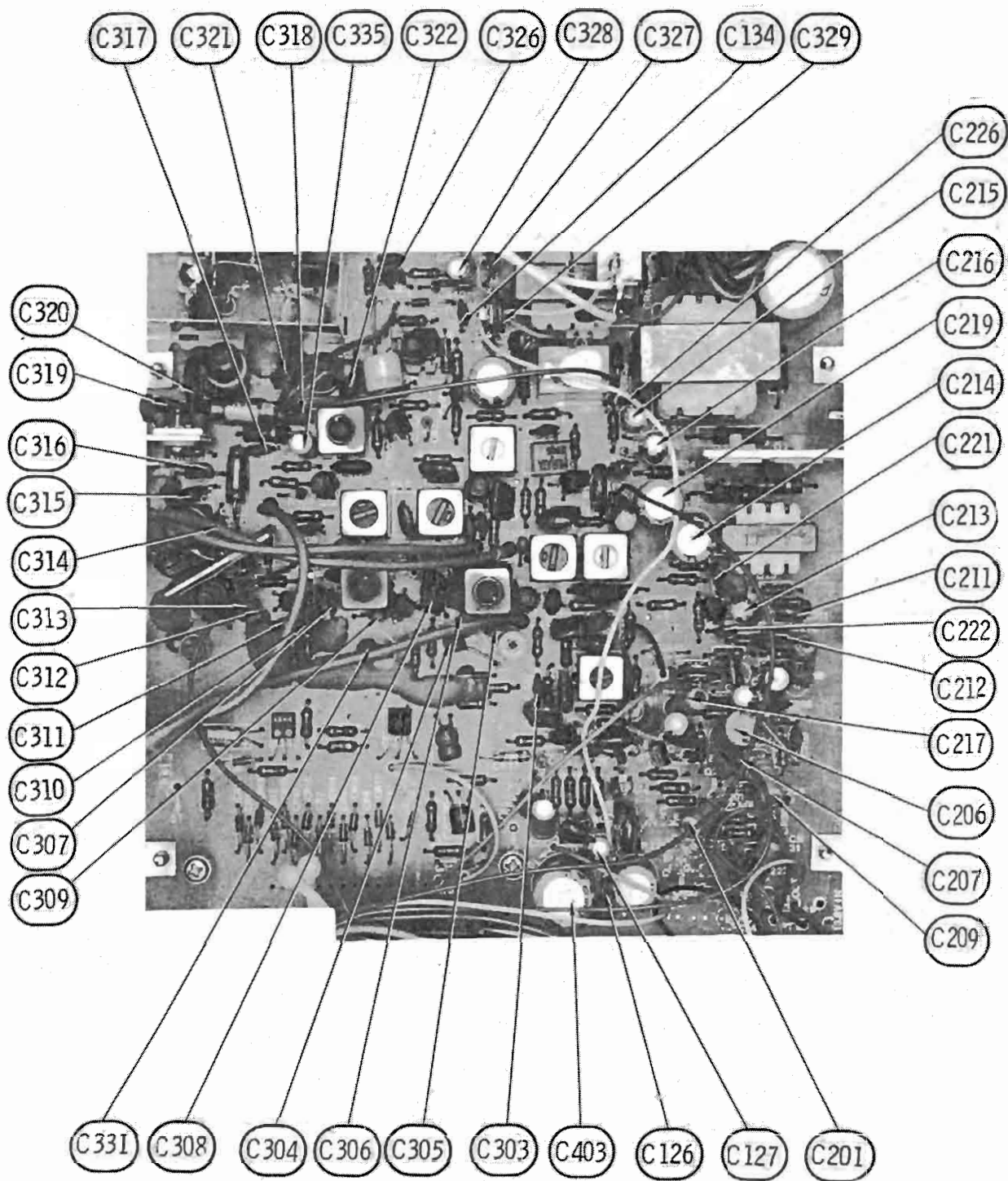


SBE MODEL SBE-4ACB

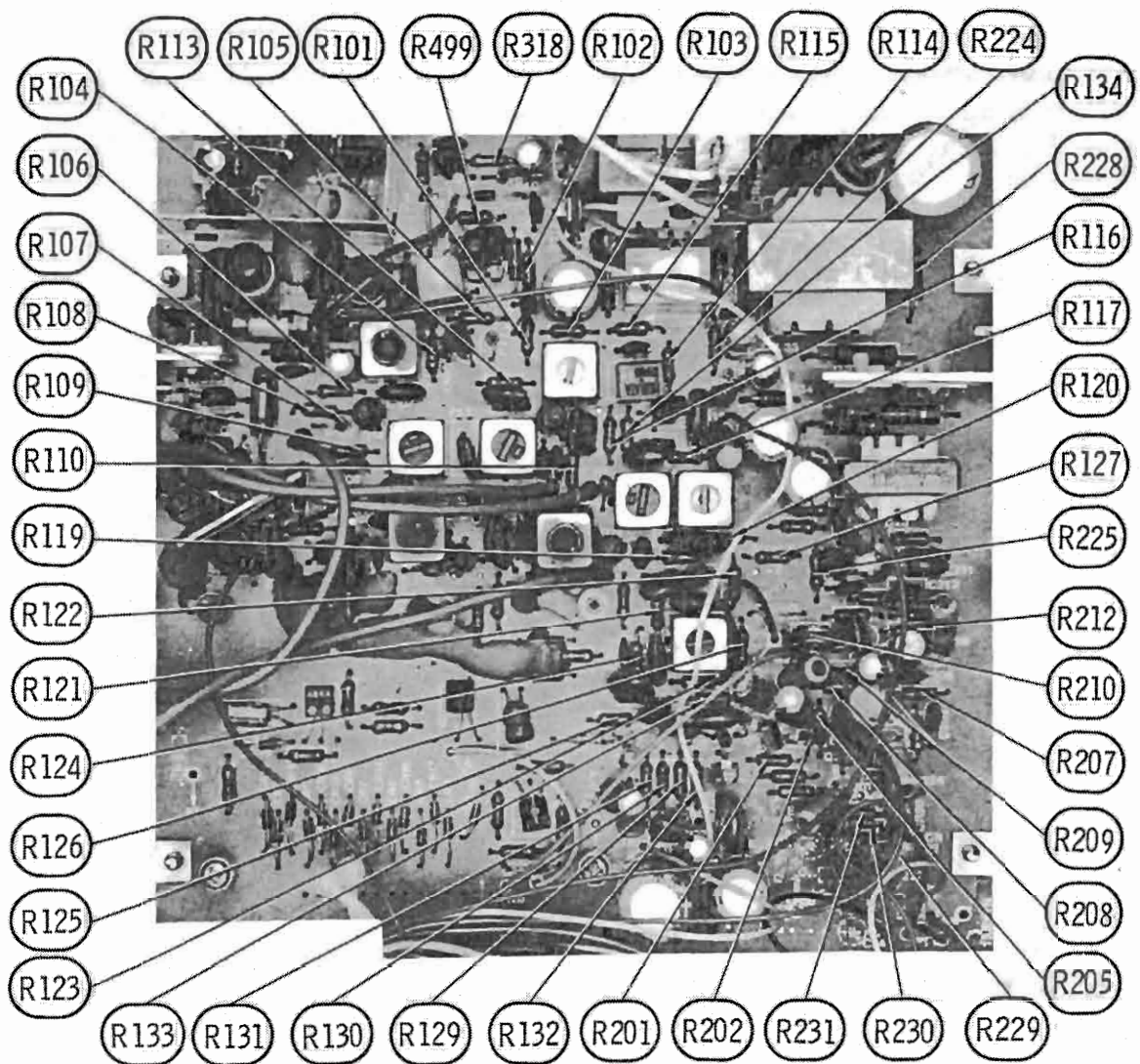
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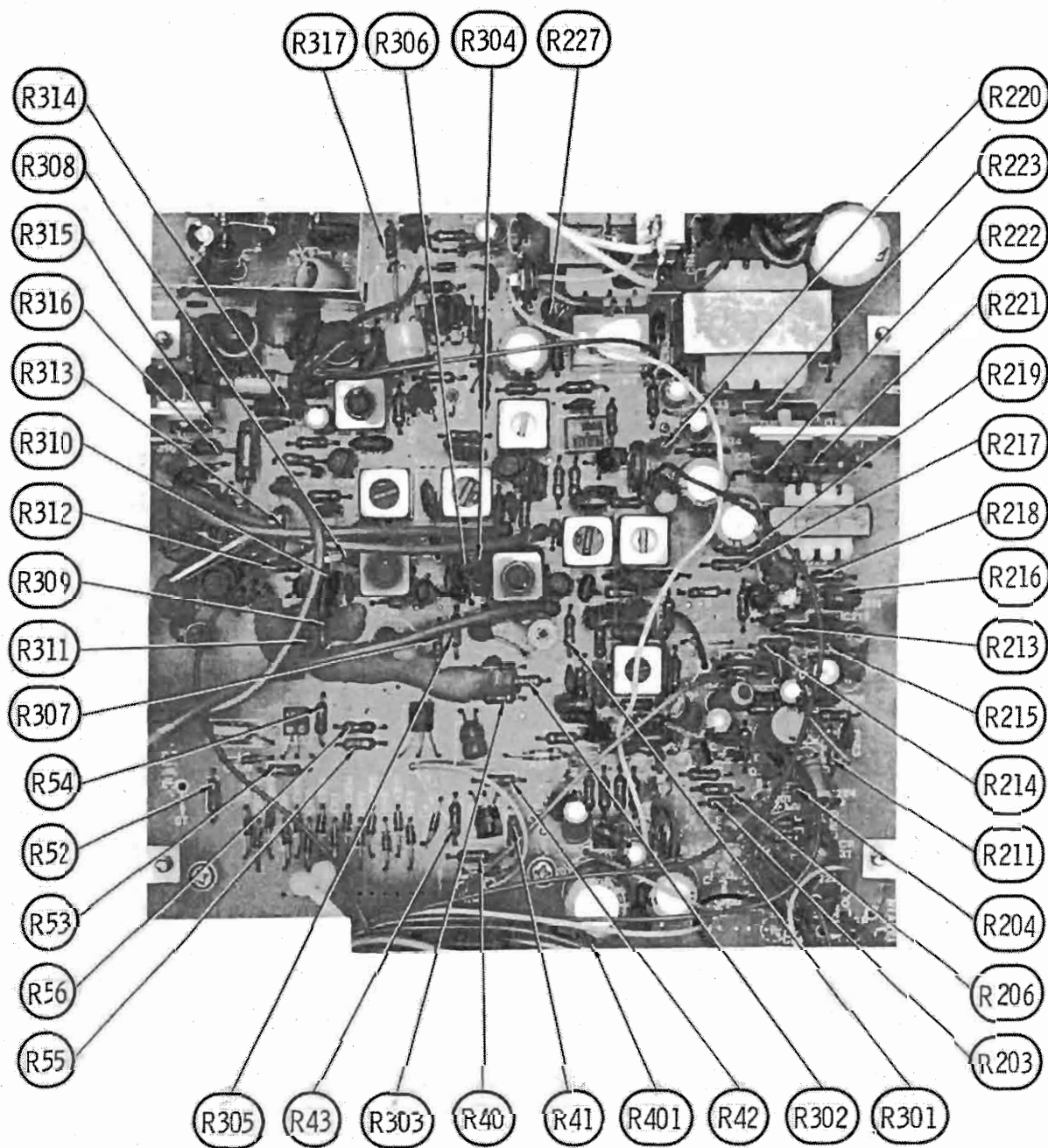
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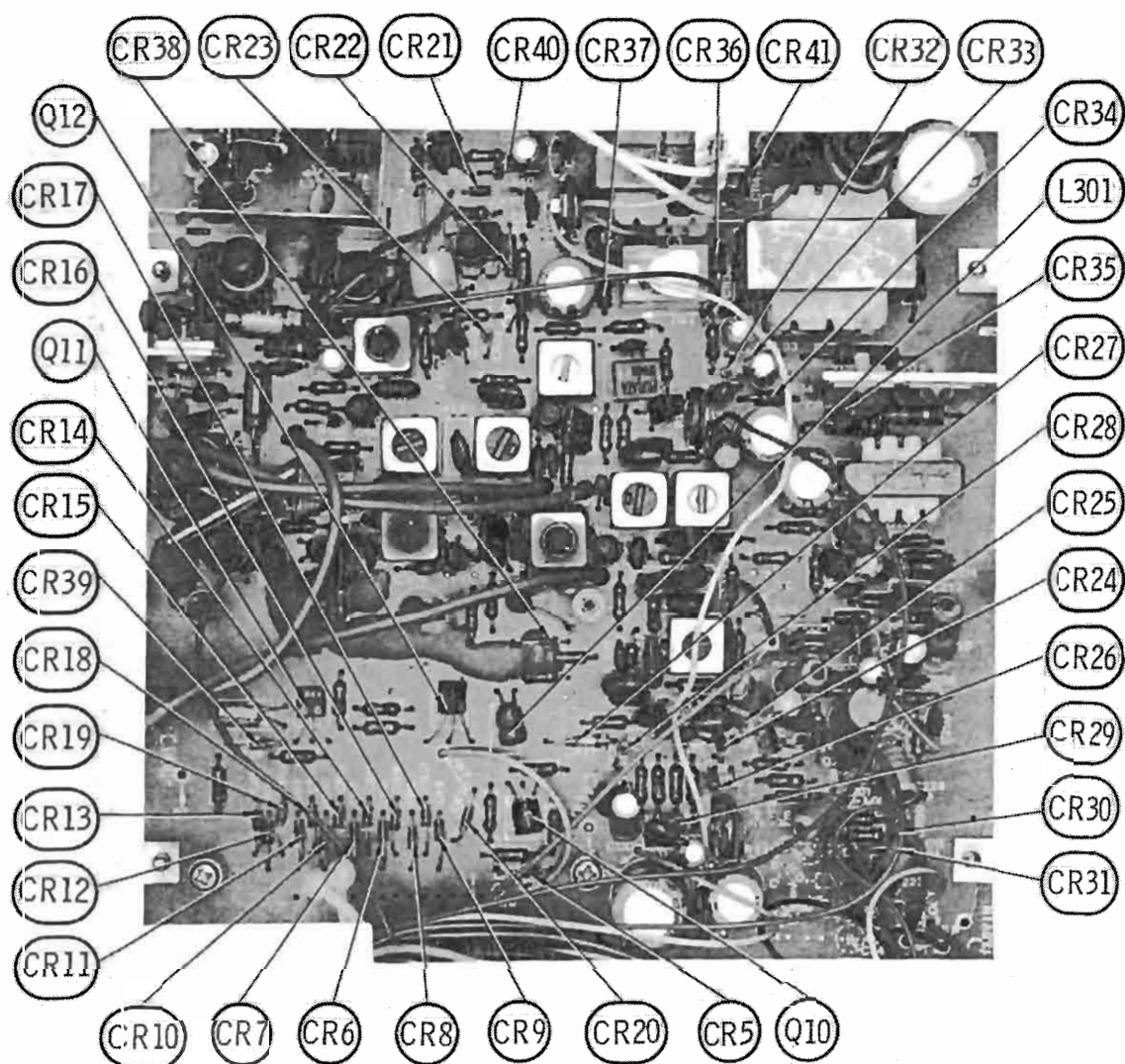
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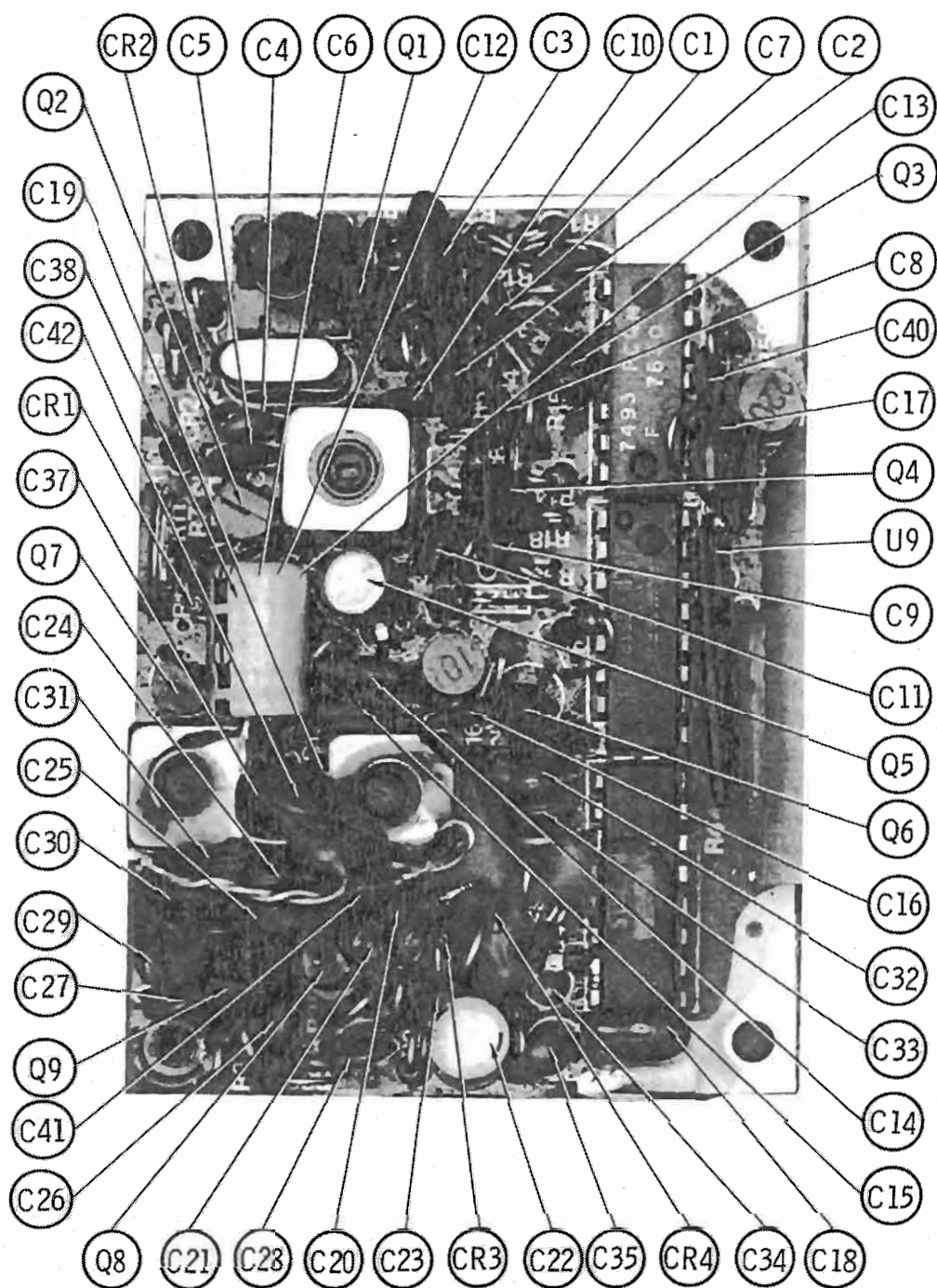
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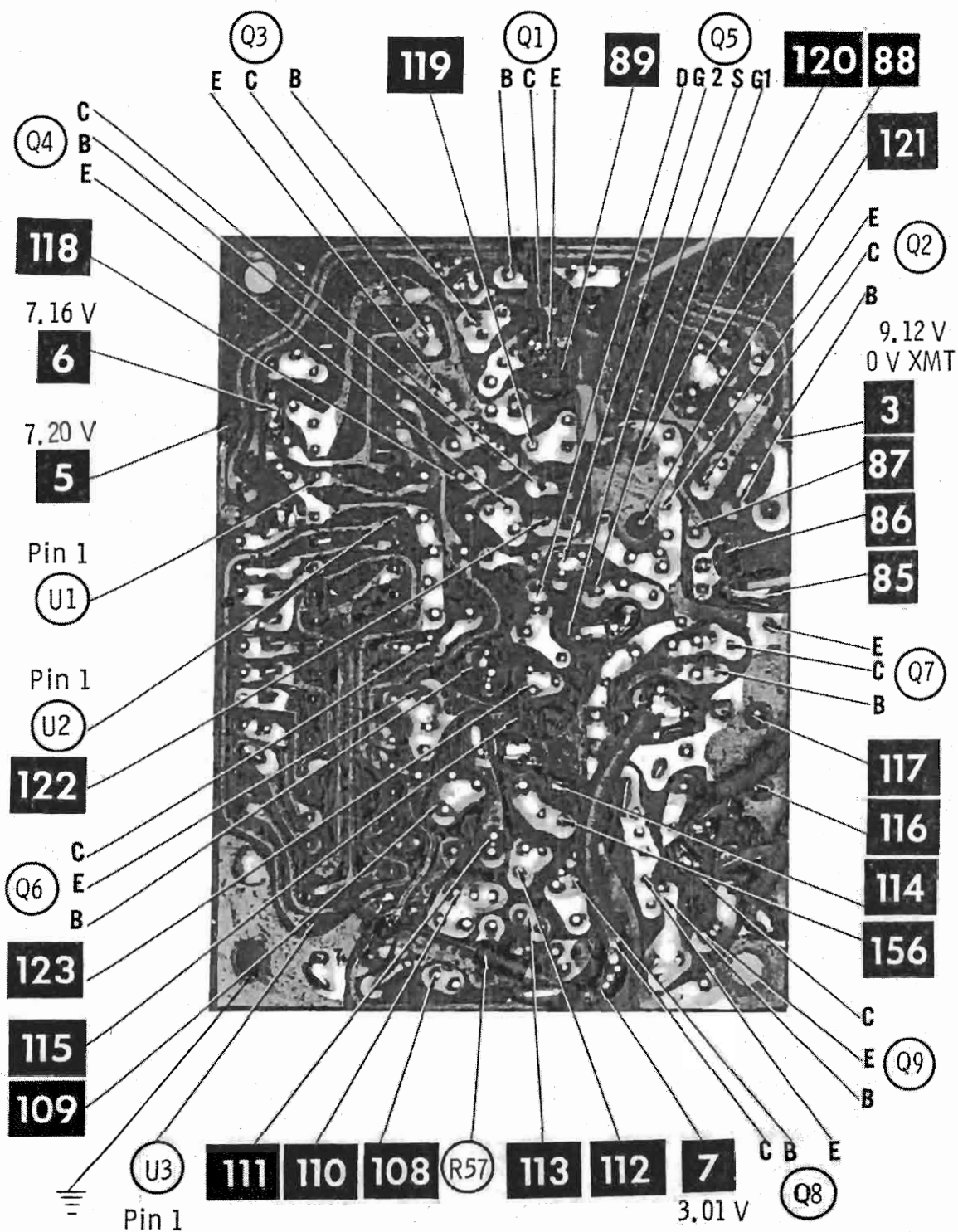
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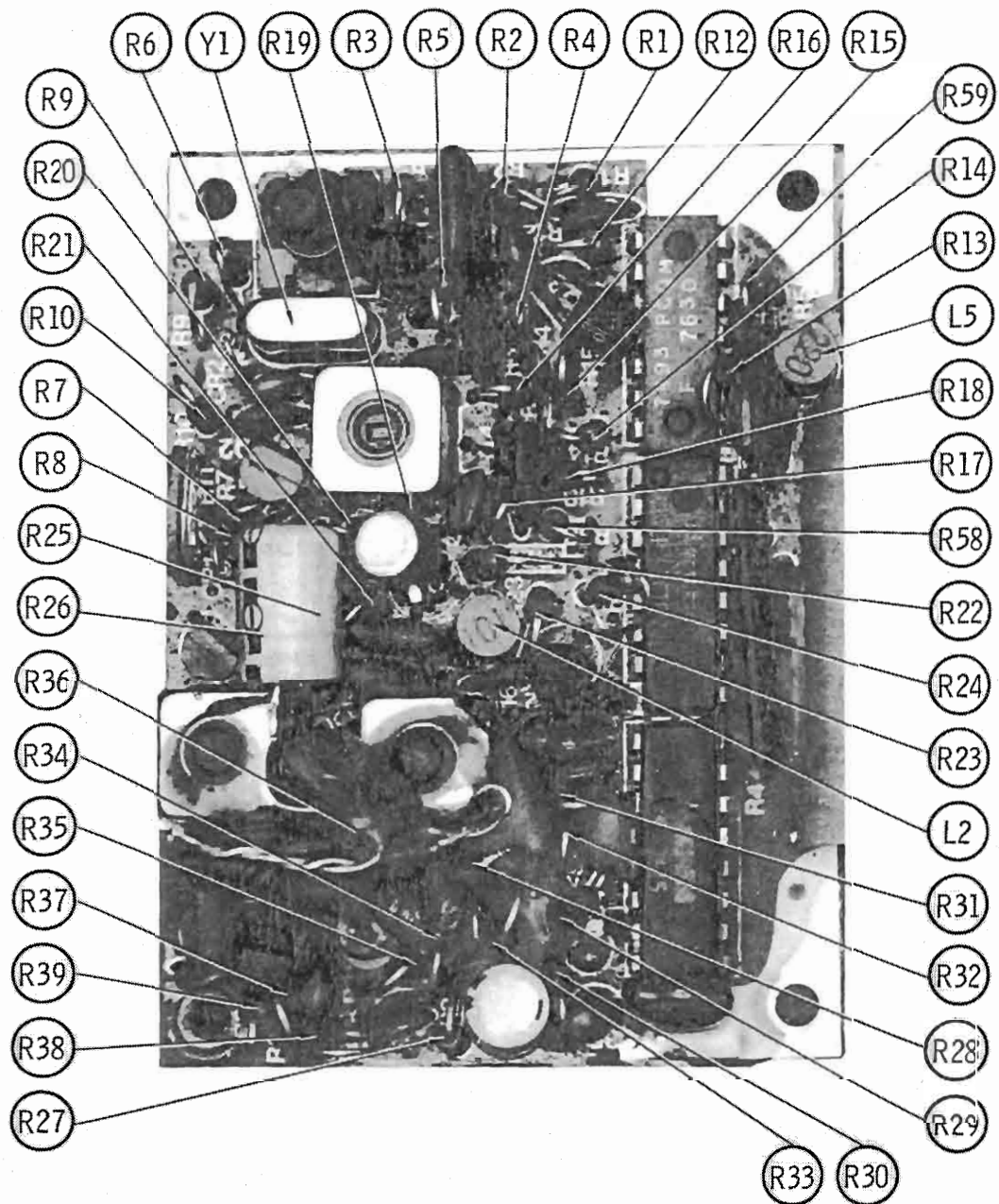
MAIN BOARD



PLL BOARD

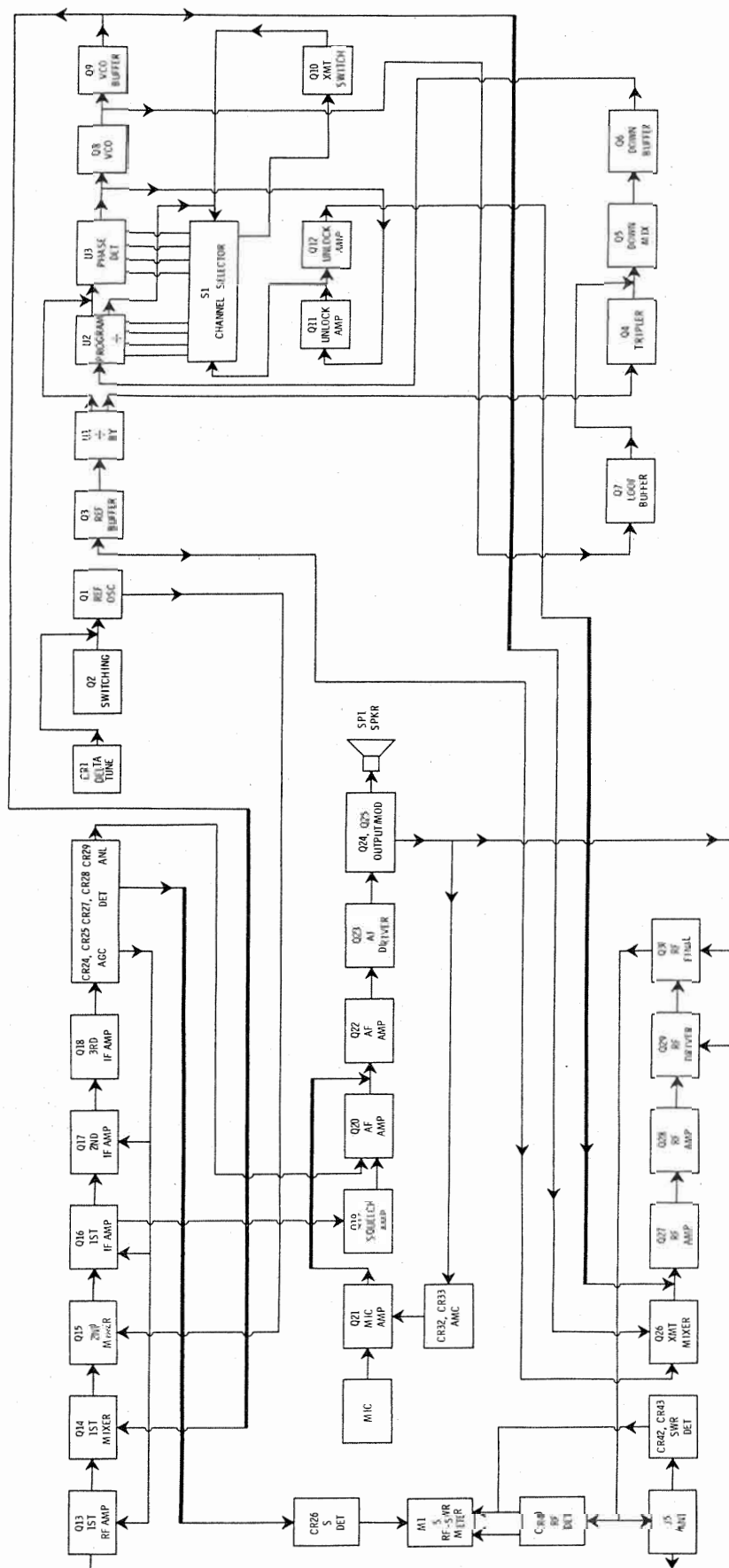


PLL BOARD



PLL BOARD

BLOCK DIAGRAM



PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

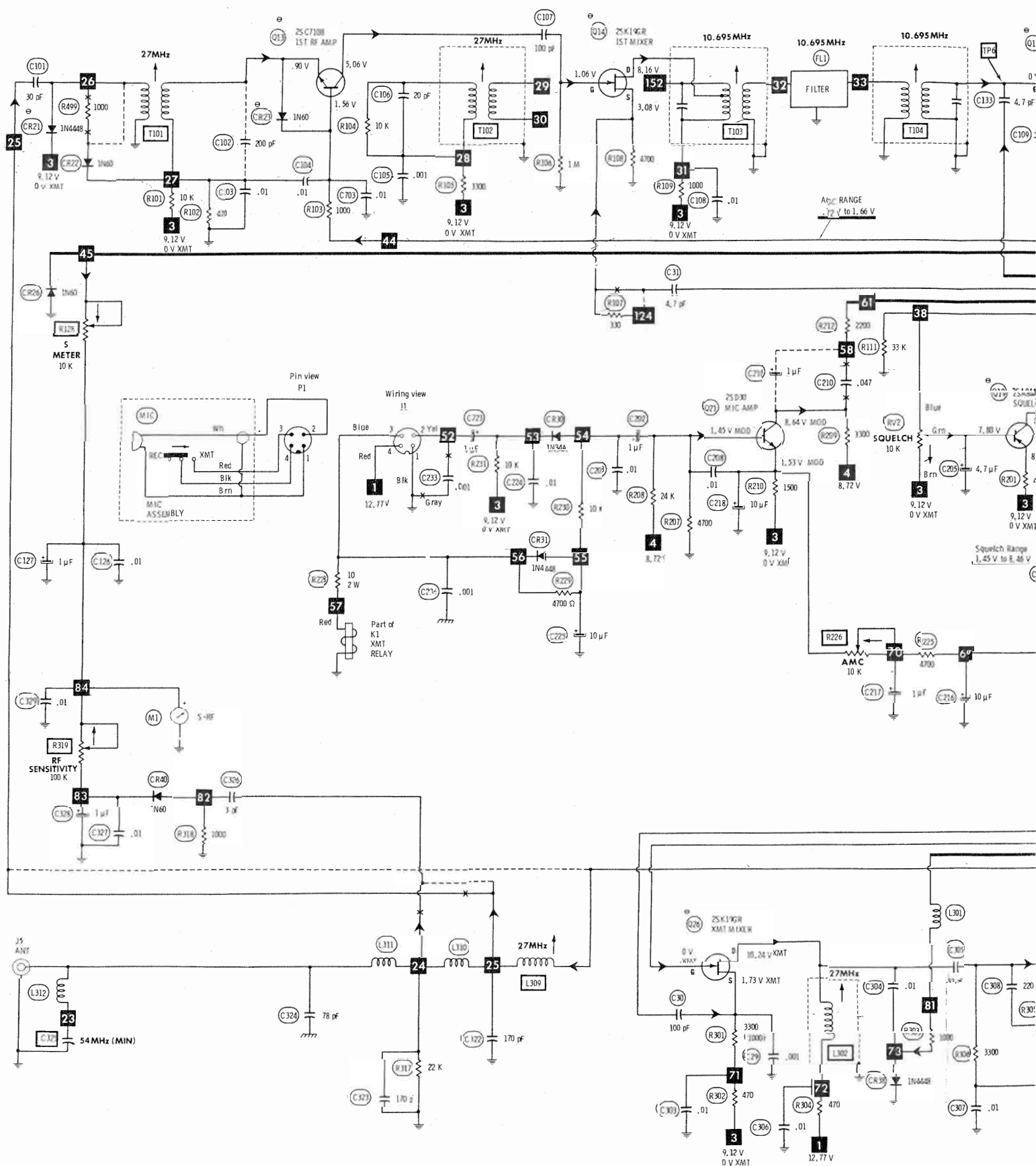
WIRING DATA

General-use Hook-up Wire (available in 5 colors)	BELDEN No. 8523	Coiled Microphone Cable	
Shielded Hook-up Wire (spiral wrapped)	BELDEN No. 8421	3-conductor (1 shielded) 23AWG	BELDEN No. 9471 (5')
(braided)	BELDEN No. 8401		BELDEN No. 8497 (6')
Speaker Cable (available in 4 colors)	BELDEN No. 8782		BELDEN No. 9472 (7-1/2')
Bonding Strap	BELDEN No. 8672	28AWG	BELDEN No. 9466 (6')
AC Power Cord	(6') BELDEN No. 17106	31AWG	BELDEN No. 9468 (10')
	(9') BELDEN No. 17109	4-conductor (unshielded) 23AWG	BELDEN No. 8415 (6')
		5-conductor (1 shielded) 28AWG	BELDEN No. 9467 (6')
			BELDEN No. 9465 (7-1/2')

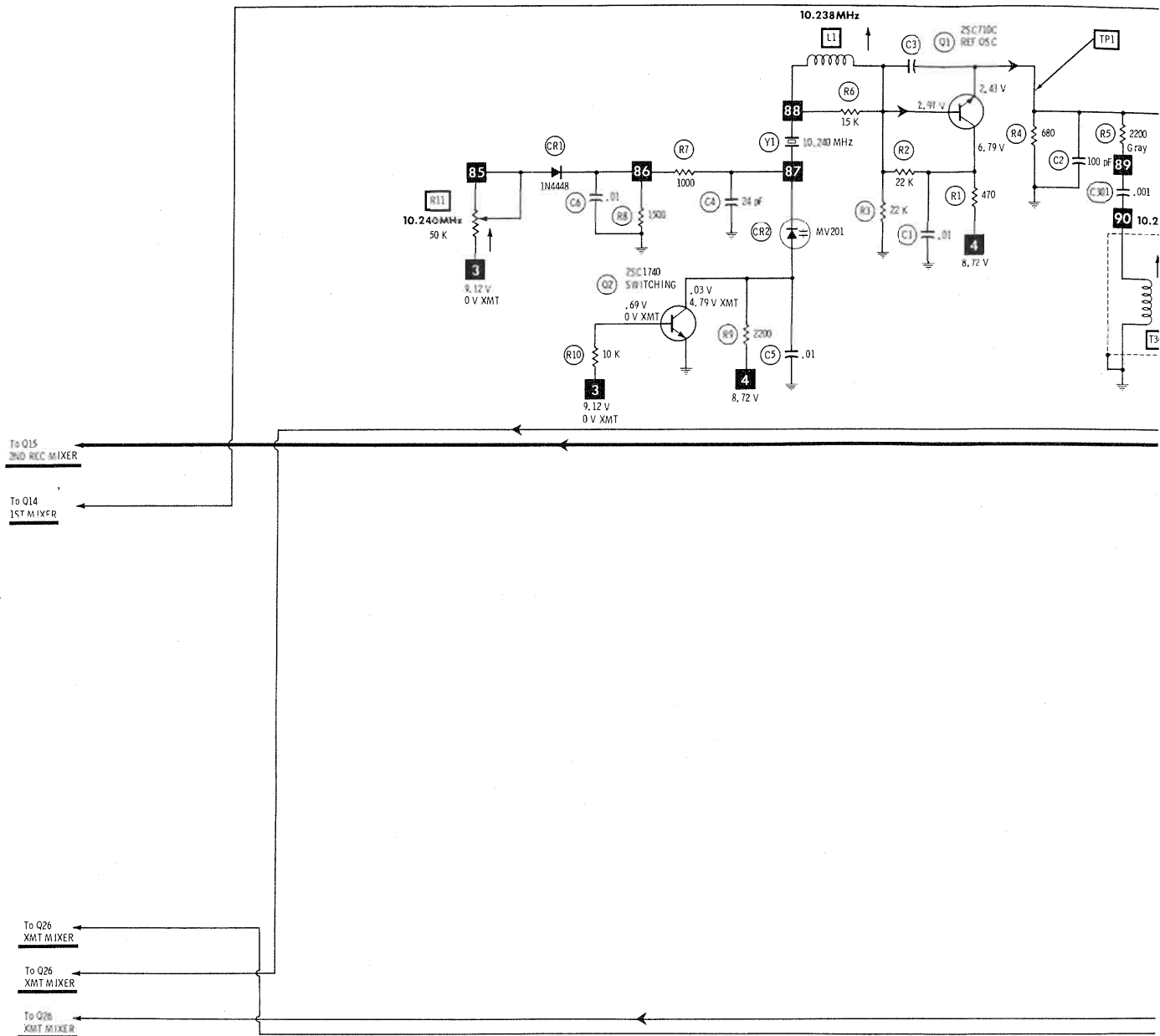
SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA									
			GENERAL ELECTRIC PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
CR1	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR2	MV201	8000-00038-010			HEPR2502	REN 612			ECG612			ZEN-452
CR3	MV201	8000-00038-010			HEPR2502	REN 612			ECG612			ZEN-452
CR4	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR5	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR6	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR7	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR8	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR9	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR10	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR11	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR12	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR13	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR14	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR15	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR16	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR17	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR18	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR19	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR20	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR21	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR22	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR23	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR24	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR25	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR26	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR27	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR28	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR29	1N34A	8000-00004-060	1N34AS	PTC207	HEPR9134A	REN 109	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
CR30	1N34A	8000-00004-060	1N34AS	PTC207	HEPR9134A	REN 109	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
CR31	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR32	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR33	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR34	BZ090	8000-00011-043	GEZD-9.1	ZB9.1B	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR35	1S1211	8000-00011-045	GE-504A	1N4002	HEPR0052	REN 116	SK3312	RT-213	ECG116	1N4004	WEP156	212-76-02
CR36	1N4002	8000-00030-010	GE-504A	1N4002	HEPR0052	REN 116	SK3312	RT-213	ECG116	1N4004	WEP156	212-76-02
CR37	BZ090	8000-00011-043	GEZD-9.1	ZB9.1B	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR38	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR39	1N4448	8000-00042-007	GE-514	PTC214	HEPR0602	REN 177	SK3100	RT-218	ECG519	1N4148	WEP925	
CR40	1N60	8000-00006-007	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
CR41	1N4002	8000-00030-010	GE-504A	1N4002	HEPR0052	REN 116	SK3312	RT-213	ECG116	1N4004	WEP156	212-76-02
Q1	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q2	2SC1740		GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP736*	121-972
	2SC1647	8000-00050-015	GE-62	PTC136	HEPS0015*	REN 123A*	SK3124	RT-302	ECG199		WEP63	121-972
	2SC372Y		GE-61*	PTC121*	HEPS0015*	REN 123A*	SK3444	RT-308	ECG123A*	2SC372	WEP372	121-29000*
Q3	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q4	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q5	3SK45B	8000-00042-013	GE-FET-4	PTC182	HEPF2007	REN 122	SK3065	RT-181	ECG222		WEP945	121-826
Q6	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0015*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q7	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0015*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q8	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0015*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q9	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0015*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q10	2SC1740		GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP716*	121-972
	2SC372Y		GE-35	PTC118	HEPS0029	REN 162	SK315	RT-139	ECG162		WEP707	
	2SC1647	8000-00050-015	GE-62	PTC136	HEPS0015*	REN 123A*	SK3124	RT-302	ECG199		WEP63	121-972
Q11	2SA844A		GE-244*	PTC103*	HEPS0019*	REN 129*	SK314	RT-1261*	ECG129*		WEP60*	
	2SA844A	8000-00050-016	GE-244*	PTC103*	HEPS0019*	REN 129*	SK314	RT-1261*	ECG129*		WEP60*	
Q12	2SC1740		GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP736*	121-972
	2SC372Y		GE-61*	PTC121*	HEPS0015*	REN 123A*	SK3444	RT-308	ECG123A*	2SC372	WEP372	121-29000*
Q13	2SC1647	8000-00050-015	GE-62	PTC136	HEPS0015*	REN 123A*	SK3124	RT-302	ECG199		WEP66	121-972
Q14	2SK196R	8000-00011-004	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
	2SK41F	8000-00050-017	GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312		WEP641	ZEN-123
	2SK41F		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312		WEP641	ZEN-123
Q15	2SK196R		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312		WEP641	ZEN-123
	2SK41F		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312		WEP641	ZEN-123
	2SK41F		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312		WEP641	ZEN-123
Q16	2SC108	8000-00011-004	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q17	2SC10C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q18	2SC10C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q19	2SA44D		GE-244*	PTC103*	HEPS0019*	REN 129*	SK3114	RT-126A*	ECG129*		WEP60*	
	2SA44D	8000-00050-016	GE-244*	PTC103*	HEPS0019*	REN 129*	SK3114	RT-126A*	ECG129*		WEP60*	
Q20	2SC1740Q		GE-62	PTC136	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP736*	121-972
	2SC1647	8000-00050-015	GE-62	PTC136	HEPS0015*	REN 123A*	SK3124	RT-302	ECG199		WEP66	121-972
	2SC372Y		GE-61*	PTC121*	HEPS0015*	REN 123A*	SK3444	RT-308	ECG123A*	2SC372	WEP372	121-29000*
Q21	2SD30		GE-55	PTC134	HEPG601	REN 103A	SK3010	RT-119	ECG103A		WEP641	
	2SD187	8000-00030-009	GE-55	PTC134	HEPG601	REN 103A	SK3010	RT-119	ECG103A		WEP641	
Q22	2SC1740Q		GE-62	PTC136	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP736*	121-972
	2SC1647	8000-00050-015	GE-62	PTC136	HEPS0015*	REN 123A*	SK3124	RT-302	ECG199		WEP66	121-972
	2SC372Y		GE-61*	PTC121*	HEPS0015*	REN 123A*	SK3444	RT-308	ECG123A*	2SC372	WEP372	121-29000*

SBE MODEL SBE-44CB







- ✱ Circuitry not used in some versions
- Circuitry used in some versions
- ⊖ See parts list
- ✱ Nominal value
- ⊥ Ground
- ⏏ Chassis
- ▽ Common tie point
- ➔ Signal path
- ➔ Voltage path

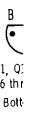
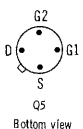
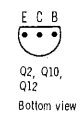
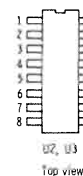
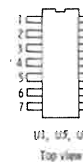
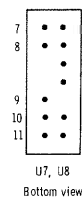
Measurements made in Channel 1 with switching as shown unless noted.
 Item numbers in rectangles appear in the alignment/adjustment instructions.
 Supply voltage maintained as shown at input.
 Voltages measured with digital meter, no signal.
 Controls adjusted for normal operation.
 Arrow at control indicates direction of advance.
 Terminal identification may not be found on unit.
 Resistors are 1/2W or less, 5% unless noted.
 Value in () used in some versions.

A PHOTOFAC STANDARD NOTATION SCHEMATIC

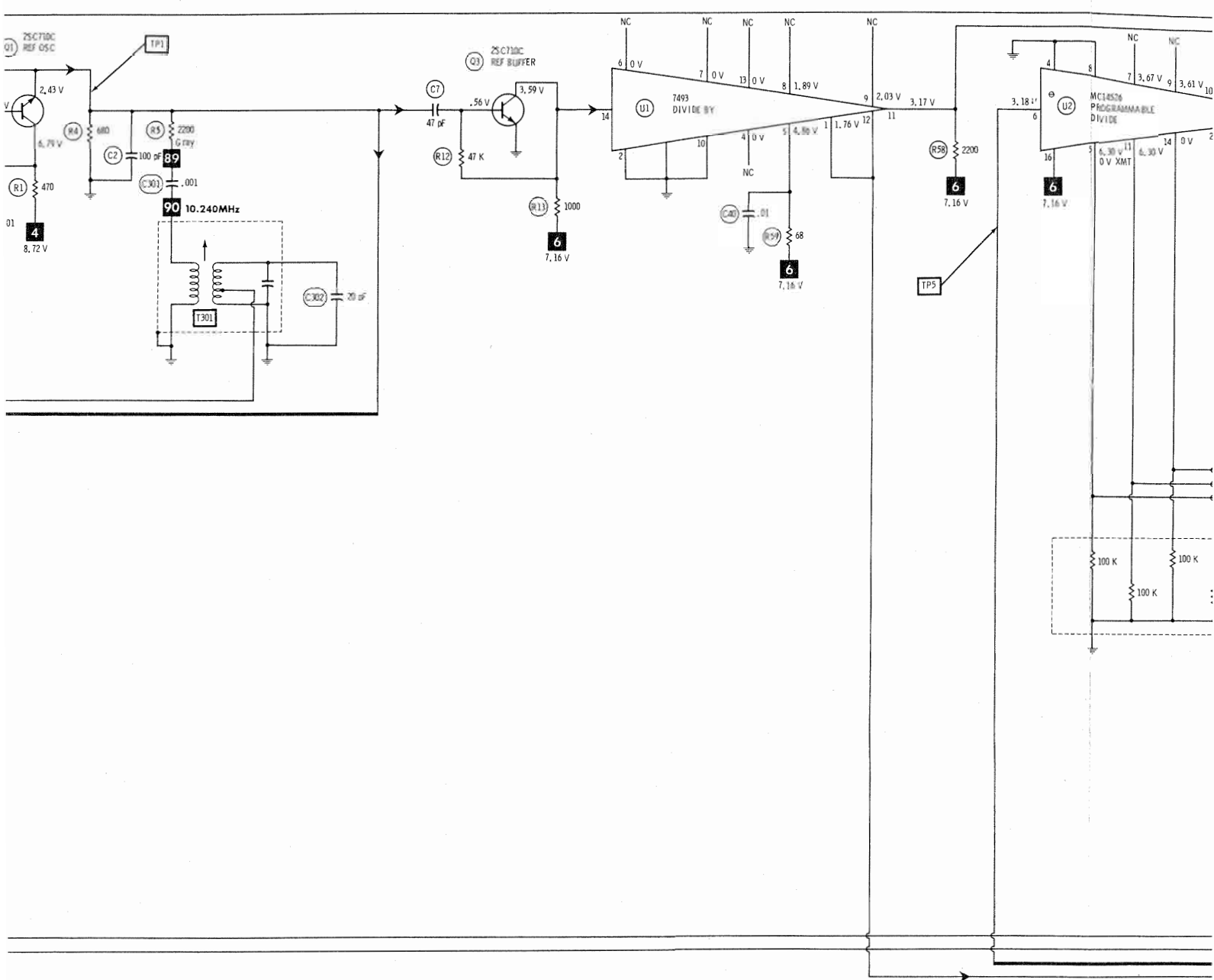
WITH **CIRCUITRACE**

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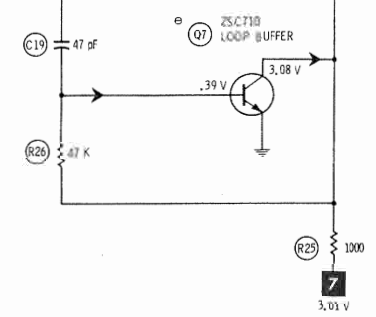
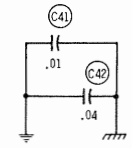
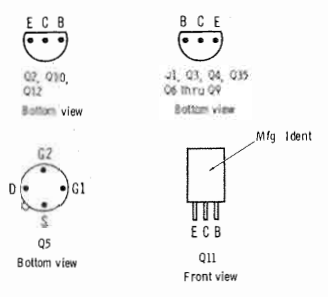
Terminal Guide

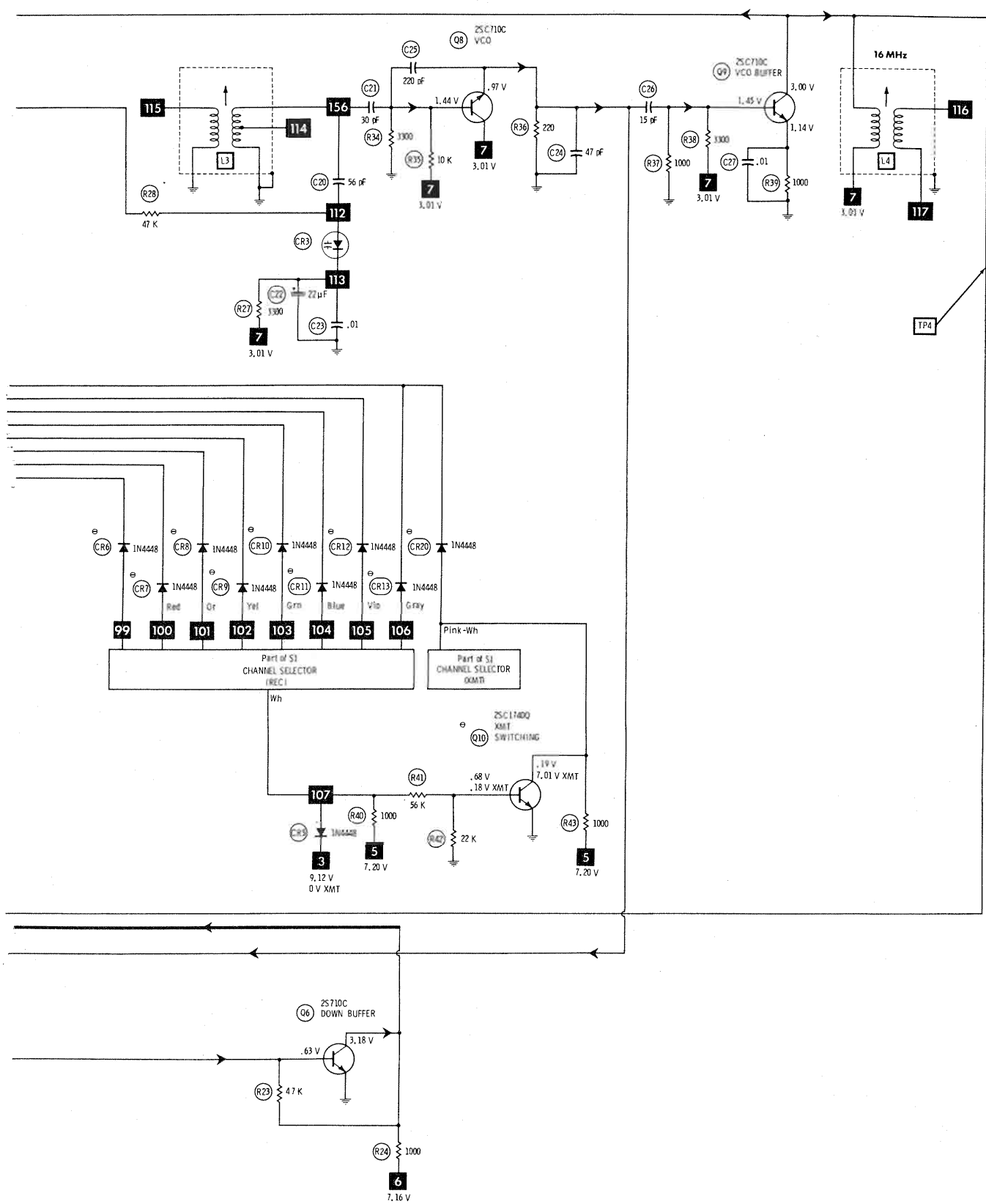


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PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA									
			GENERAL ELECTRIC PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
Q23	2SC17400	8000-00050-015	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*		WEP736*	121-972
	2SC1647		GE-62	PTC136	HEPS0015	REN 199	SK3124	RT-302	ECG199		WEP66	121-972
	2SC372Y		GE-61*	PTC121*	HEPS0015*	REN 123A*	SK3444	RT-308	ECG123A*	2SC372	WEP372	121-29000*
Q24	2SC1014	8000-00004-087	GE-273	PTC193		REN 300	SK3464	RT-137	ECG300	2SC482*	WEP1014	
Q25	2SC1014	8000-00004-087	GE-273	PTC193		REN 300	SK3464	RT-137	ECG300	2SC482*	WEP1014	
Q26	2SK196R	8000-00050-017	GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312			ZEN-123
	2SK41F		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312			ZEN-123
	2SK55E		GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312			ZEN-123
Q27	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q28	2SC710C	8000-00011-047	GE-211*	PTC132	HEPS0016*	REN 123A*	SK3444	RT-308*	ECG123A*	2SC710	WEP710	121-29000*
Q29	2SC1957		GE-270	PTC180	HEPS3044	REN 295	SK3197				WEP913	
	2SC495T		GE-270	PTC180		REN 295	SK3253	RT-162			WEP913	ZEN-205
	2SC2091	8000-00038-001	GE-270	PTC180		REN 295	SK3253				WEP913	
	2SC2028		GE-270	PTC180	HEPS3044	REN 295	SK3253	RT-162		2SC1018*	WEP913	200-767
	2SC1449		GE-270	PTC180		REN 295	SK3253				WEP913	
	2SC2086		GE-47*	PTC143*	HEPS3001*	REN 293*					WEP912*	
	2SC1306		GE-215	PTC186		REN 235	SK3197	RT-146	ECG235	2SC1306	WEP785	
	2SC1975		GE-338	PTC186		REN 235	SK3197	RT-146	ECG235		WEP785	
	2SC2092		GE-337	PTC186		REN 235	SK3197	RT-146	ECG235	2SC1306	WEP785	
	2SC2029		GE-333	PTC186		REN 235	SK3197	RT-146	ECG235		WEP785	
	2SC1678		GE-322	PTC186		REN 235	SK3197	RT-146	ECG235	2SC1306	WEP785	
	2SC1816		GE-216	PTC186		REN 295	SK3239	RT-146	ECG295		WEP785	
	2SC2166		GE-215	PTC186		REN 235	SK3197	RT-146	ECG235	2SC1306	WEP785	
U1	7493	8000-00038-006				REN 7493A	SK7493	TVCM-504	ECG7493A			
U3	7493/9393	8000-00047-003				REN 7493A	SK7493	TVCM-504	ECG7493A			
U3	MC14526	8000-00047-002										
	14526											
	MC14568											
U4	14568	8000-00047-006										
	78L08A											
	78L08AC											
	78L06								ECG981			
									ECG981			
									ECG962			

* Lead configuration may vary from original.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C22	22 16V	8000-00004-284	PC25-25	VTT22B16	QV1-55	EV-1224
C34	.22 50V	8000-00050-007		TDC224M050EL	QDT1-10	SD50-R229
C35	1 50V	8000-00004-004		TDC105M050EL	QDT1-25	SD50-19
C36	.22 50V	8000-00050-006		TDC224M050EL	QDT1-10	SD50-R229
C38	47 16V	8000-00028-023	PC50-16	VTT47D16	QV1-73	EV-1226
C124	10 16V	8000-00028-026	PC10-25	VTT10B25	QV1-41	EV-1222
C127	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C130	4.7 50V	8000-00049-013	PC5-50	VTT47B50	QV1-29	EV-1519
C201	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C202	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C204	4.7 50V	8000-00049-013	PC5-50	VTT47B50	QV1-29	EV-1519
C205	4.7 50V	8000-00049-013	PC5-50	VTT47B50	QV1-29	EV-1519
C206	47 16V	8000-00028-023	PC50-16	VTT47D16	QV1-73	EV-1226
C209	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C210	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C213	.47 50V	8000-00041-010	PC1-50	VTT47A63	QV1-3	EV-1610
C214	220 16V	8000-00028-032	PC250-25	VTT220H16	QV1-117	EV-1240
C215	4.7 50V	8000-00049-013	PC5-50	VTT47B50	QV1-29	EV-1519
C216	10 16V	8000-00028-026	PC10-25	VTT10B25	QV1-41	EV-1222
C217	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C218	10 16V	8000-00028-026	PC10-25	VTT10B25	QV1-41	EV-1222
C219	220 16V	8000-00028-032	PC250-25	VTT220H16	QV1-117	EV-1240
C220	220 16V	8000-00028-032	PC250-25	VTT220H16	QV1-117	EV-1240
C223	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C225	10 16V	8000-00028-026	PC10-25	VTT10B25	QV1-41	EV-1222
C227	220 16V	8000-00028-032	PC250-25	VTT220H16	QV1-117	EV-1240
C326	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C333	33 16V	8000-00011-003	PC30-25	VTT33D25	QV1-63	EV-1325
C335	1 50V	8000-00028-024	PC1-50	VTT1A50	QV1-11	EV-1615
C402	1000 16V	8000-00004-049	PC1000-16	VTT1000L16	QV1-183	EV-1260
C403	470 16V	8000-00011-143	PC500-16	VTT470K16	QV1-151	EV-1250

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE Q-LINE	PART No. GENERAL LINE
C1	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C2	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C3	300 50V			CD15FD301J03	SX330	QW1-38	MMA-301
C4	24 N750 50V		DTN-25				10TCU-Q25
C5	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C6	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C7	47 50V			CD15ED470J03	SX447	QW1-19	MMA-470
C8	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C9	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C10	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C11	2 50V			CD15CD010D03		QW1-1	MMA-010
C12	4.7 50V			CD15CD050D03		QW1-2	MMA-050
C13	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C14	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C15	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C16	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C17	.04 50V			DPMS6S39	PVC6139		6PS-S39
C18	.04 50V			DPMS6S39	PVC6139		6PS-S39
C19	47 50V			CD15ED470J03	SX447	QW1-19	MMA-470
C20	56 50V			CD15ED560J03	SX456	QW1-21	MMA-560
C21	33 N750 50V		DTN-33	N33	CN7433		10TCU-Q33
C23	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C24	47 50V			CD15ED470J03	SX447	QW1-19	MMA-470
C25	220 50V			CD15FD221J03	SX322	QW1-35	MMA-221
C26	.75 50V			CD15CD150J03		QW1-8	MMA-150
C27	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C28	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C29	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C30	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C31	4.7 50V			CD15CD050D03		QW1-2	MMA-050
C32	.04 50V			DPMS6S39	PVC6139		6PS-S39
C33	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C37	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C40	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C41	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C42	.04 50V			DPMS6S39	PVC6139		6PS-S39
C101	30 N750 50V		DTN-33	N33	CN7433		10TCU-Q33
C102	220 50V			CD15FD221J03	SX322	QW1-35	MMA-221
C103	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C104	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C105	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C106	20 N750 50V		DTN-20	N20	CN7420		10TCU-Q20
C107	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C108	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C109	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C113	.04 50V			DPMS6S39	PVC6139		6PS-S39
C114	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C115	.04 50V			DPMS6S39	PVC6139		6PS-S39
C116	.04 50V			DPMS6S39	PVC6139		6PS-S39
C117	.04 50V			DPMS6S39	PVC6139		6PS-S39
C118	.04 50V			DPMS6S39	PVC6139		6PS-S39
C119	.04 50V			DPMS6S39	PVC6139		6PS-S39
C120	.04 50V			DPMS6S39	PVC6139		6PS-S39
C121	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C122	.04 50V			DPMS6S39	PVC6139		6PS-S39
C125	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C126	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C128	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C129	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C131	.02 50V			DPMS2S2	PVC212		2PS-S20
C132	.04 50V			DPMS6S39	PVC6139		6PS-S39
C133	4.7 50V			CD15CD050D03		QW1-2	MMA-050
C134	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C203	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C207	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C208	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C210	.047 50V			DPMS2S47	ENF1A147	QF1-171	1PB-S47
C211	.03 50V			DPMS6S33	ENF6133		6PS-S33
C212	.02 50V			DPMS2S2	PVC212		2PS-S20
C221	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C222	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C224	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C226	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C228	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C229	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C230	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C233	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C234	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C301	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C302	20 50V			CD15ED200J03	SX420	QW1-10	MMA-200
C303	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C304	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C305	33 N470 50V	8000-00050-005			*		
C306	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C307	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C308	220 50V			CD15FD221J03	SX322	QW1-35	MMA-221
C309	33 N470 50V	8000-00050-005			*		
C310	220 50V			CD15FD221J03	SX322	QW1-35	MMA-221
C311	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C3 2	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C3 3	120 50V			CD15FD121J03	SX312	QW1-29	MMA-121
C314	24 50V			CD15ED240J03	SX424	QW1-12	MMA-240
C315	100 50V			CD15FD101J03	SX310	QW1-27	MMA-101
C316	47 50V			CD15ED470J03	SX447	QW1-19	MMA-470
C317	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C318	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C319	47 50V			CD15ED470J03	SX447	QW1-19	MMA-470

SBE MODEL SBE-44CB

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C320	300 50V	8000-00004-204		CD15FD301J03	SX330	QW1-38	MMA-301
C321	270 50V			CD15FD271J03	SX327	QW1-37	MMA-271
C322	170 50V			CD15FD181J03	SX318	QW1-33	MMA-181
C323	170 50V			CD19FD252J03	SX225		
C324	78 50V			CD15ED750J03	SX475	QW1-24	MMA-750
C325	10 50V						
C326	3 50V			CD15CD050D03		QW1-2	MMA-050
C327	.01 50V			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C329	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C330	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C331	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C332	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C333	.04 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C334	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C336	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C337	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C338	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C339	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C340	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C341	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C342	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C401	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C498	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C700	68 50V			CD15ED680J03	SX468	QW1-23	MMA-680
C703	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA			
			MFR. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
R11	10.240MHz	50K				X260R503B(2)
R118	Squelch Range	10K	8000-00004-096			X260R103B(2)
R128	S Meter	10K	8000-00004-096			X260R103B(2)
R319	RF Sensitivity	100K				X260R104B(2)
R226	AMC	10K	8000-00004-096			X260R103B(2)
RV1	Volume/Switch	10K	8000-00006-333			
RV2	Squelch	10K	8000-00006-282			

(2) Cut off one of the end terminals and bend to fit PC board.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFR. PART No.			WORKMAN PART No.	MFR. PART No.
U9	Resistor Network		(1)				

(1) Consists of eight 100K resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Ref Osc (10.240MHz)	8000-00038-022	Z353Z		
L2	RF Choke (100uH)	8000-00049-037			
L3	VCO	8000-00050-008	Z353N		
L4	VCO (16MHz)	8000-00038-017	C354N		
L5	RF Choke (22uH)	8000-00011-019		9330-32	
L301	RF Choke (22uH)	8000-00011-019		9330-32	
L302	XMT Mixer (27MHz)	8000-00004-118	C042D	CB746	
L303	XMT Amp (27MHz)	8000-00038-017	C354N		
L304	RF Choke (2.5uH)	8000-00030-011			
L305	XMT Driver (27MHz)	8000-00004-075		CB140(1)	
L306	RF Choke (8.2uH)	8000-00004-206		9310-34	
L307	RF Choke (.65uH)	8000-00004-055			
L308	Final (27MHz)	8000-00004-077		CB144(1)	
L309	P1 Filter (27MHz)	8000-00004-077	C045Z	CB144(1)	
L310	RF Choke (.42uH)	8000-00050-009			
L311	RF Choke (.42uH)	8000-00050-009			
L312	RF Choke (.85uH)	8000-00004-059		4594	
T1	Tripler (15.360MHz)	8000-00011-026	Z1761	CBS131-TC	
T101	Rec Ant (27MHz)	8000-00006-287	C360D		
T102	Rec RF (27MHz)	8000-00050-012	C337B		
T103	IF (10.695MHz)	8000-00050-014	F001A		
T104	IF (10.695MHz)	8000-00050-014	F001A		
T105	IF (455kHz)	8000-00012-034	EIA227B	2067	
T106	IF (455kHz)	8000-00012-034	EIA227B	2067	
T107	IF (455kHz)	8000-00038-021	A293A		
T301	Ref Osc. (10.240MHz)	8000-00050-014	F001A		
T302	XMT Osc. (27MHz)	8000-00038-017	C354		

(1) Cut off unwanted terminals. Rotate replacement to use the two terminals required.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
L401	1.2A	.233	1.6mH	8000-00050-010 K-18(1)			(1) Number on unit.

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T201	2	1.5		8000-00030-019 A-31(1)			(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T202	32	1 2 8 15.68	8000-00050-013 E-067(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM 8 ohms	8000-00006-298		

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA							
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	
FU1	2 amp	8000-00004-152	8000-00030-047	AGC2	HDJ	312002	150145	FG2-2	

MICROPHONE

ITEM No.	REPLACEMENT DATA				CONNECTION DATA							
	MFGR. PART No.	GC PART No.	GC NOISE CANCEL	GC POWER	GC CONNECTOR	GC Red	GC Shield	GC Yellow	GC Blue	GC White	GC Black	
MIC	8000-00004-153	18-032	18-034	18-010	18-092	2	1	3	NC	NC	4	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
FL1	Ceramic Filter	8000-00028-209	10.695MHz
FL2	Ceramic Filter	8000-00004-139	455kHz
J1	Jack	8000-00004-070	Microphone
J2	Jack	8000-00030-021	Ext Sp
J3	Jack	8000-00004-069	Antenna
K1	Relay	8000-00050-020	XMT/Rec
M1	Meter	8000-00006-322	S/Rf (A-36)
PL1	Lamp		Channel Indicator (13.80V @ 180mA)
S1	Switch	8000-00050-011	Channel Selector
S2	Switch		Power (Part of Volume Control)
Y1	Crystal	8000-00038-011	10.240MHz
	PC Board	8000-00050-034	Main
	PC Board	8000-00050-035	Channel Selector Switch
	PC Board	8000-00050-036	PLL

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Escutcheon	8000-00006-327	Cabinet Top	8000-00006-324
Knob, Control	8000-00050-027	Cabinet Bottom	8000-00006-325
Knob, Channel Selector	8000-00006-115	Mounting Bracket	8000-00006-334
Disc, Channel Selector	8000-00050-026	Microphone Hanger	8000-00004-157
Channel Indicator Window	8000-00006-016		