

SAMS PHOTOFACT[®]

CB RADIO SERIES



CB-50
50
DECEMBER 1973



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PHOTOFACT[®] with

CIRCUITRACE[®]

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NOTE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES AND REGULATIONS PART 95, SUBPARTS 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-12CB (Sidebander II)

ALIGNMENT

Suggested Alignment Tools:

L1 thru L4, T1 thru T11, T13, T14 GC ELECTRONICS #9440
L5 thru L8, T12 #9087, 9089

SYNTHESIZER

FREQUENCY

Trimmer capacitors should not require adjustment unless a crystal or frequency determining circuit component has been replaced, or transmitter is not within frequency tolerance.

Connect a frequency counter to gate 1 of Q14 (Mixer). Set CLARIFIER to center position. Set mode switch to LSB. and Channel Selector to channel 1. Adjust CV6 for oscillator frequency of 11.700MHz.

CHANNEL SELECTOR	ADJUST	FREQUENCY
1	CV5	19.1625MHz
2	CV4	19.1725MHz
3	CV3	19.1825MHz
4	CV2	19.2025MHz
5	CV7	19.2125MHz
9	CV8	19.2625MHz
13	CV9	19.3125MHz
17	CV10	19.3625MHz
21	CV11	19.4125MHz

Connect frequency counter to TP2. Adjust VC1 (CV1) for oscillator frequency of 7.8025MHz.

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

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SBE MODEL SBE-12CB

SYNTHESIZER (CONTINUED)

OUTPUT

INDICATOR	ADJUST	REMARKS
Connect an RF voltmeter to TP1, low side to chassis.	T9, T10, L3.	Set channel selector to 13, mode switch to LSB. Adjust for maximum.
	T11, L4, T7, T8, L2.	Set mode switch to USB. Adjust for maximum.
	L2 or L3	Adjust L2 or L3 for approximately equal RF levels in LSB and USB.

RECEIVER ALIGNMENT

Connect an AC VTVM across speaker terminals. Set SQUELCH fully counterclockwise, RF GAIN fully clockwise, CLARIFIER to center position. Adjust volume for suitable reading.

AM (Set Mode Switch to AM)

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
No signal		VR4	Adjust for 1.00 volt at TP3.
High side thru .01mfd to base of Q5 (IF Amp), low side to chassis. Set to 7.800MHz, (Mod.)		T5, T4, T3	Adjust for maximum.
High side thru .01mfd to antenna connector, low side to chassis. Set to 27.085MHz (Ch. 11)(Mod).	11	T2, L1, T1	Adjust for maximum.
As above; set output level to 250uv.	11	VR5	Turn SQUELCH fully clockwise. Adjust until squelch just opens.
As above; set output level to 150uv.	11	VR3	Adjust for reading of S-9 on S/RP meter.
SSB Set mode switch to USB or LSB.			
High side thru .01mfd to base of Q5 (IF Amp), low side to chassis. Set to 7.800MHz. (Unmod).		T6 (T5, T4, T3)	Adjust for maximum.

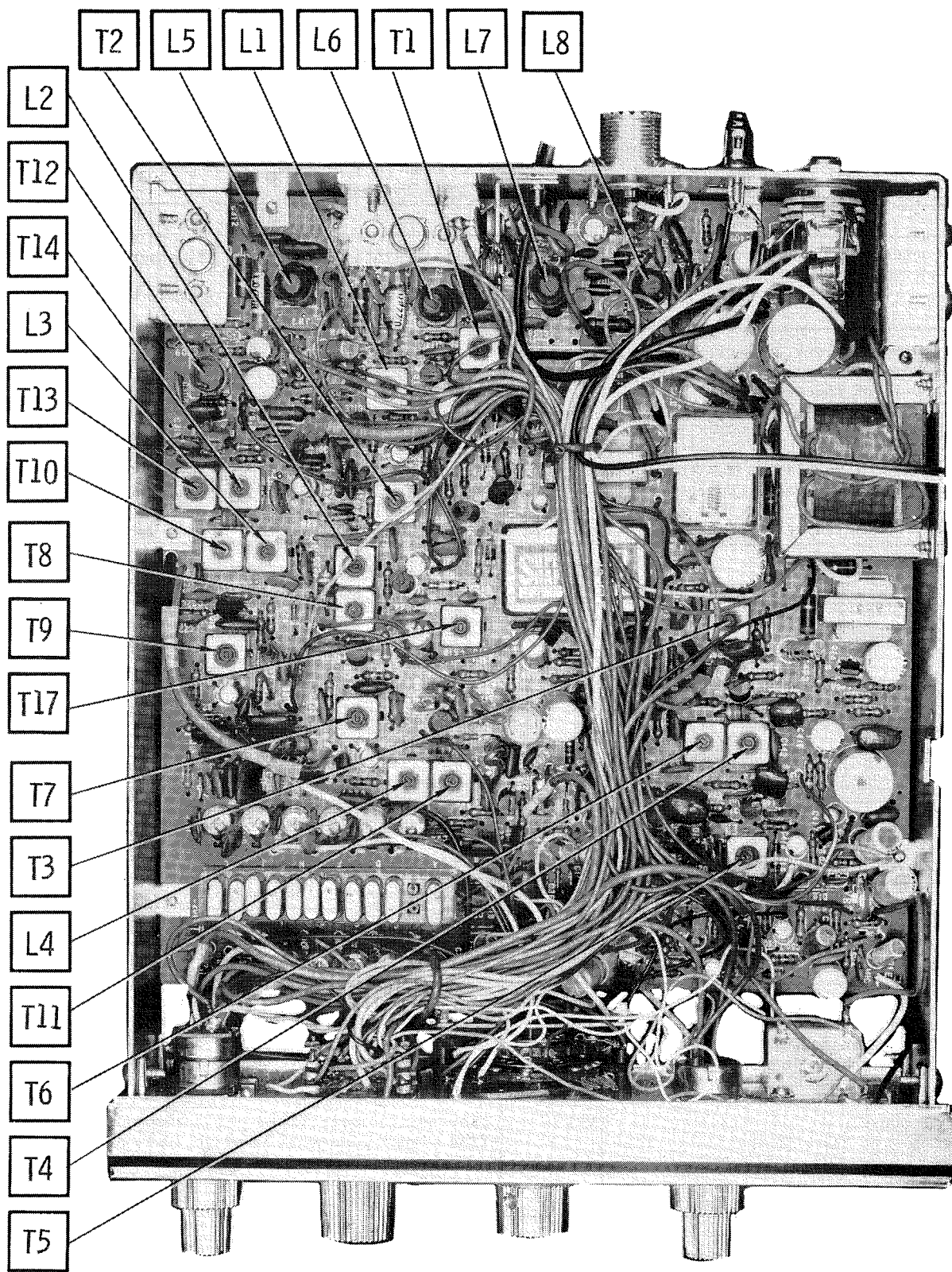
TRANSMITTER ALIGNMENT

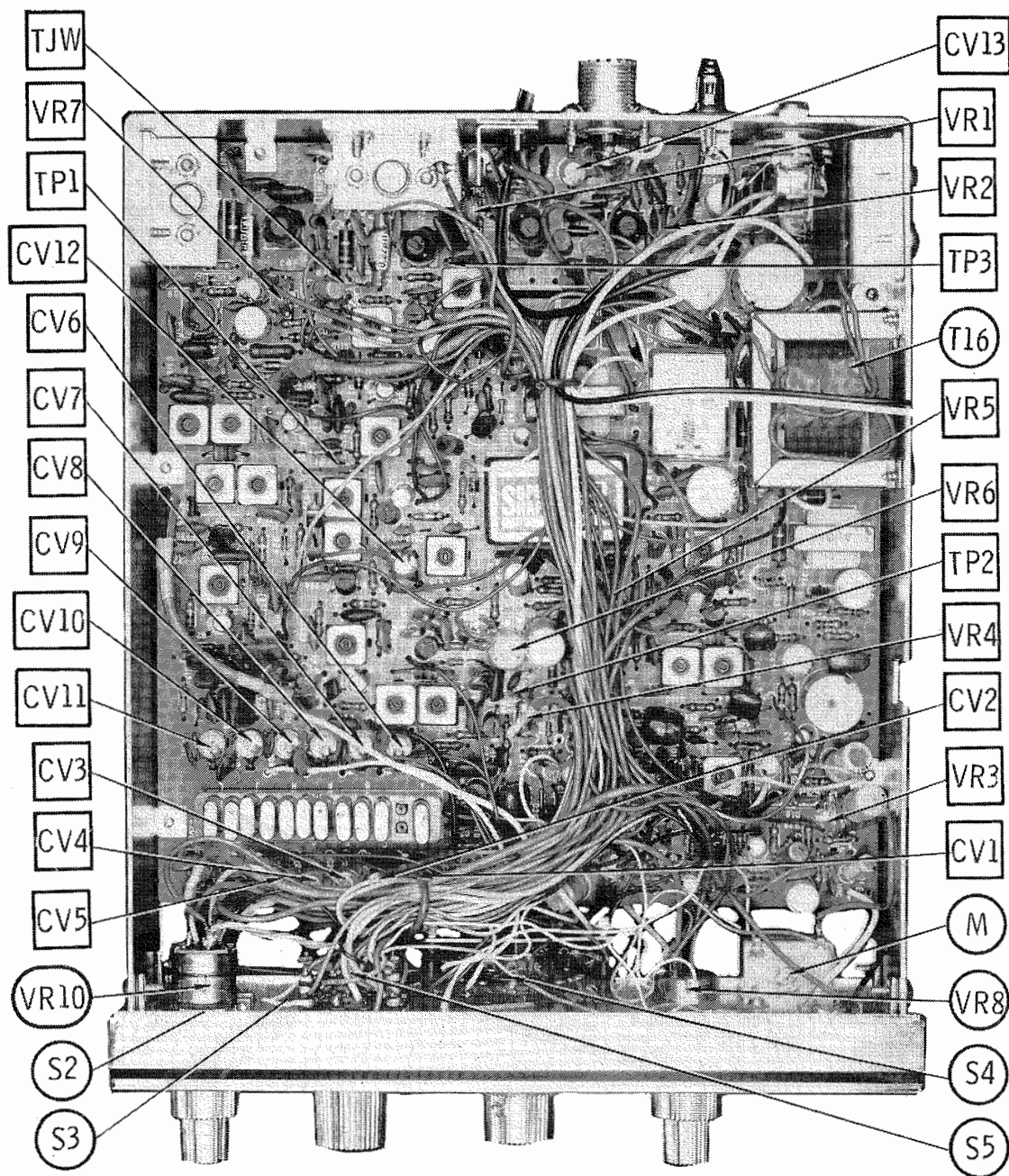
AM (Set Mode Switch to AM)

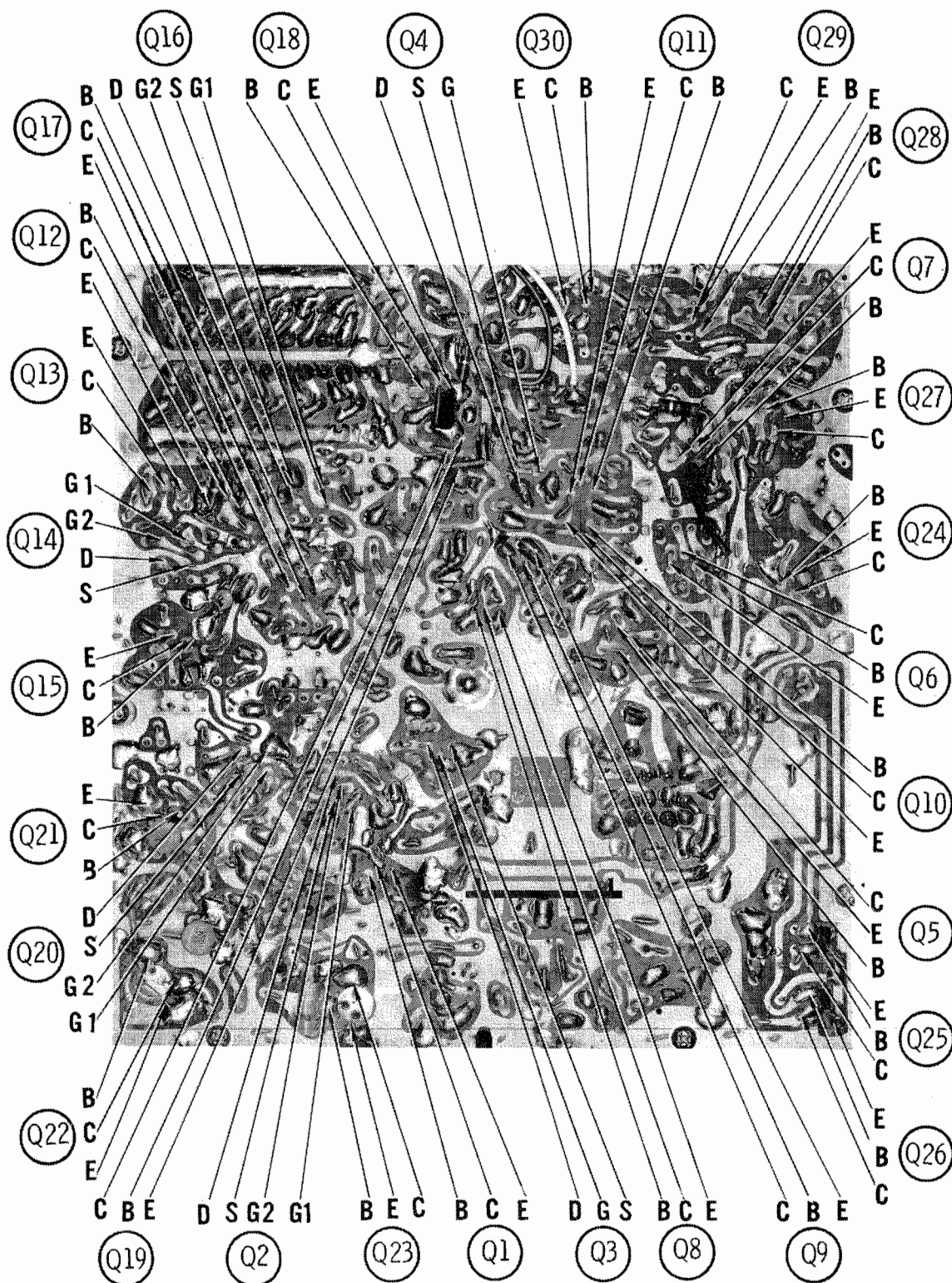
INDICATOR	ADJUST	REMARKS
Connect an RF wattmeter between antenna connector and dummy load.	T14, T13, T12, L5, L6, L7, L8	Perform synthesizer output adjustments (See SYNTHESIZER ALIGNMENT). Key transmitter and adjust for maximum output.
As above; break collector lead of Q23 (Final Amp) at TJW and insert a 0-1A DC Ammeter.	L7	Turn counterclockwise to reduce input to 5 watts.
Connect a modulation monitor across dummy load. Connect an audio signal generator to microphone input. Set to 2.5kHz.	VR2	Adjust for desired reading on S/Rf meter.
	VR7	Set output of signal generator for 50% modulation. Increase output 16db and adjust for 90% modulation.
Nearby TV to (Ch.2)	CV13	Adjust for MINIMUM interference.

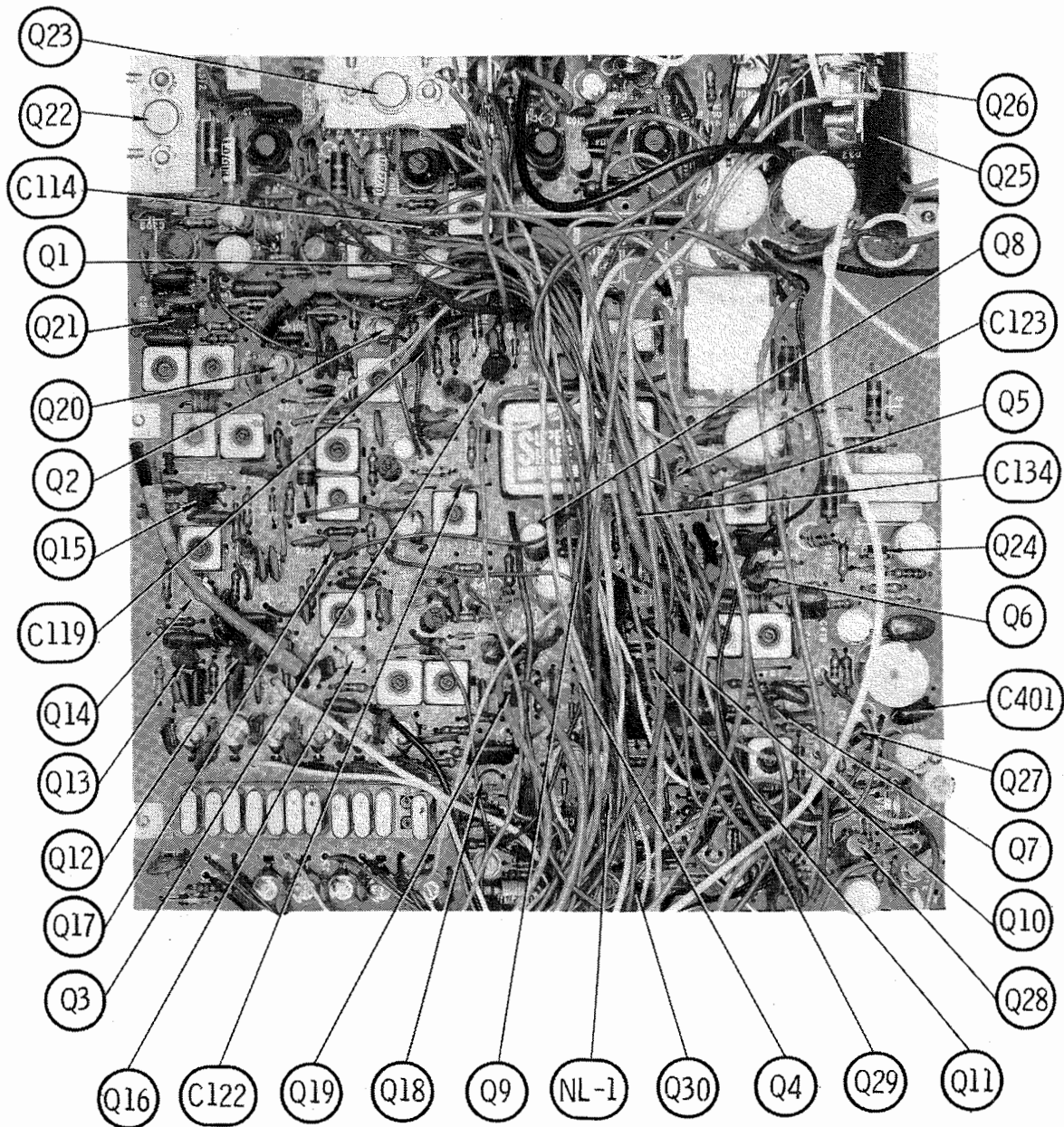
SBE MODEL SBE-12CB

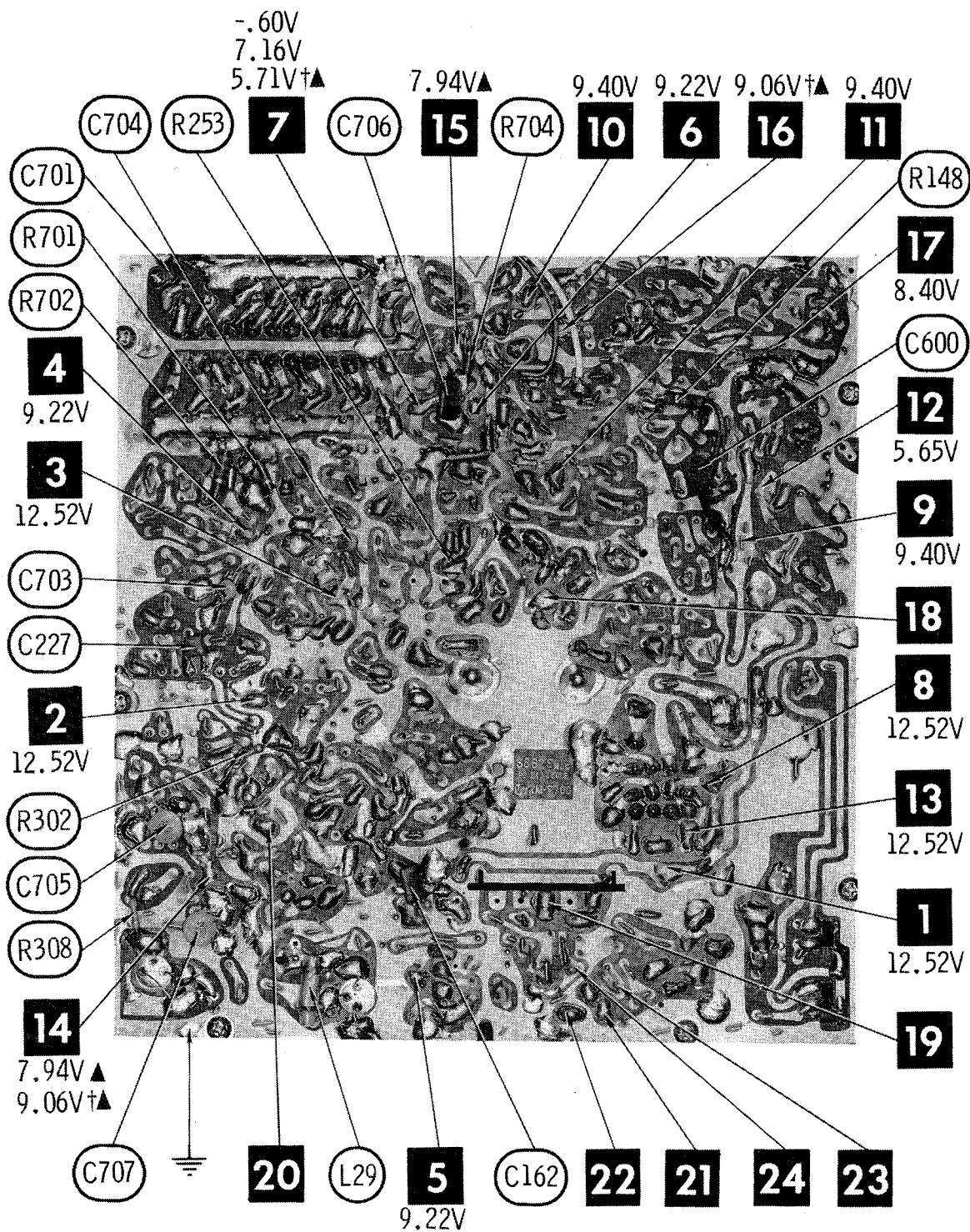
INDICATOR	ADJUST	REMARKS
Connect a 0-10ma DC ammeter in collector circuit of Q23 (Final Amp) at TJW.	CV12, VR6	Temporarily short microphone input to ground. Key transmitter and adjust for minimum current.
Connect an RF wattmeter between antenna connector and dummy load. Connect an audio signal generator to microphone input. Set to 1kHz.	T17, T3	Key transmitter and adjust signal generator output to give a few watts RF output. Adjust for maximum RF. Perform adjustments in Step 1 of AM Transmitter Alignment if not already done.
As above.	VR1	Key transmitter; adjust for maximum output. Set signal generator level to 40mv. at pin 2 of microphone connector and adjust for 8 watts output.

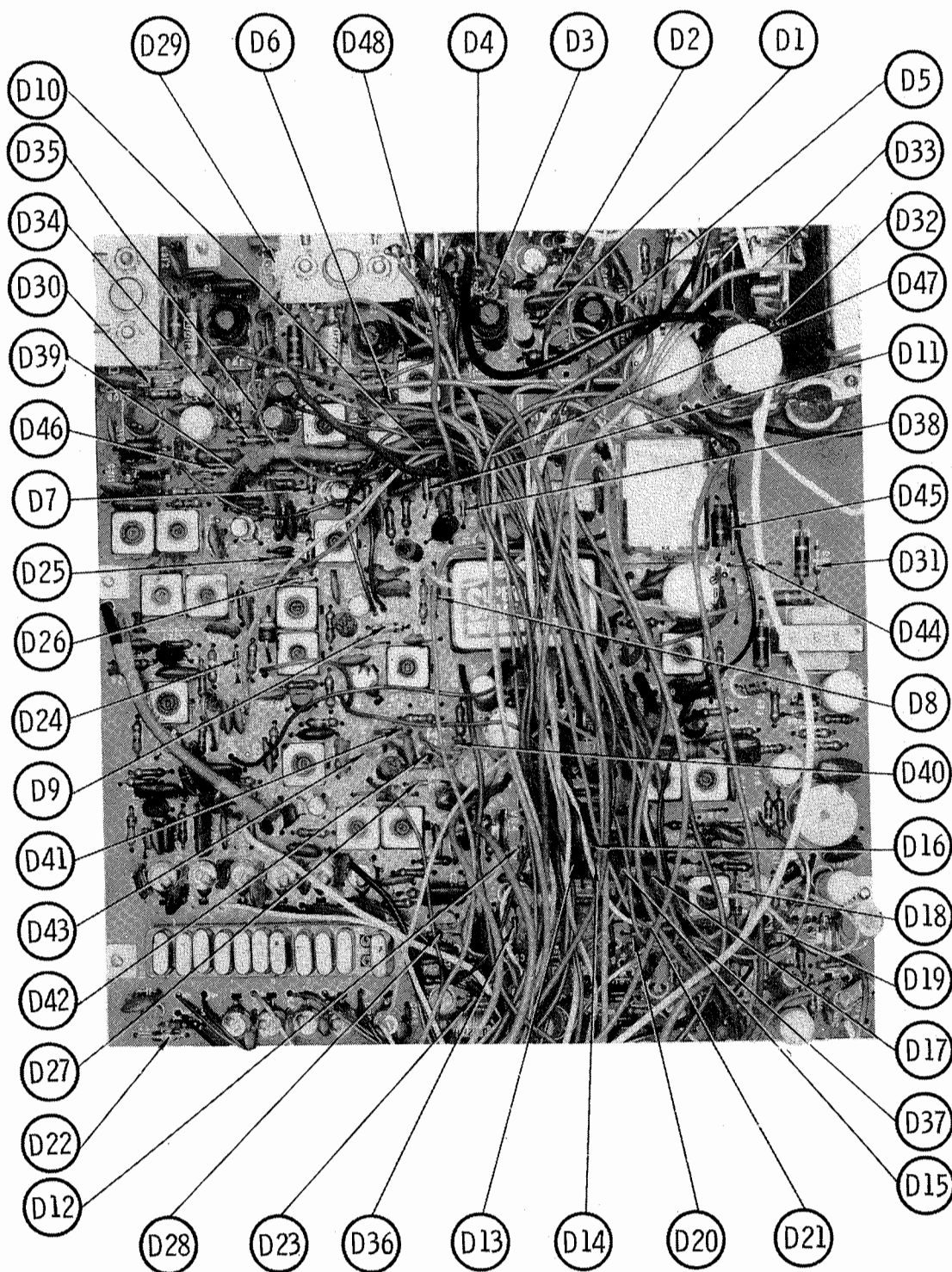


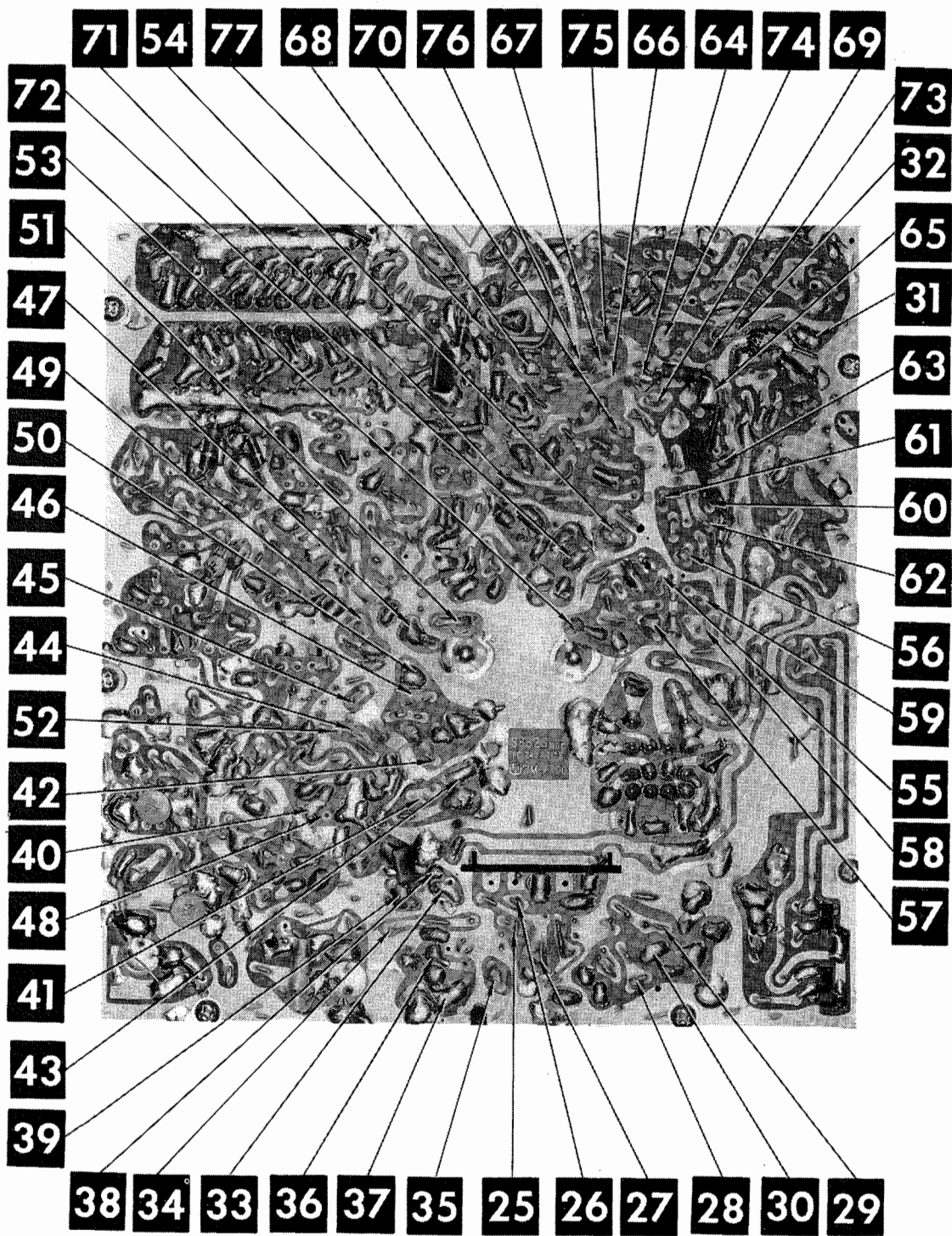


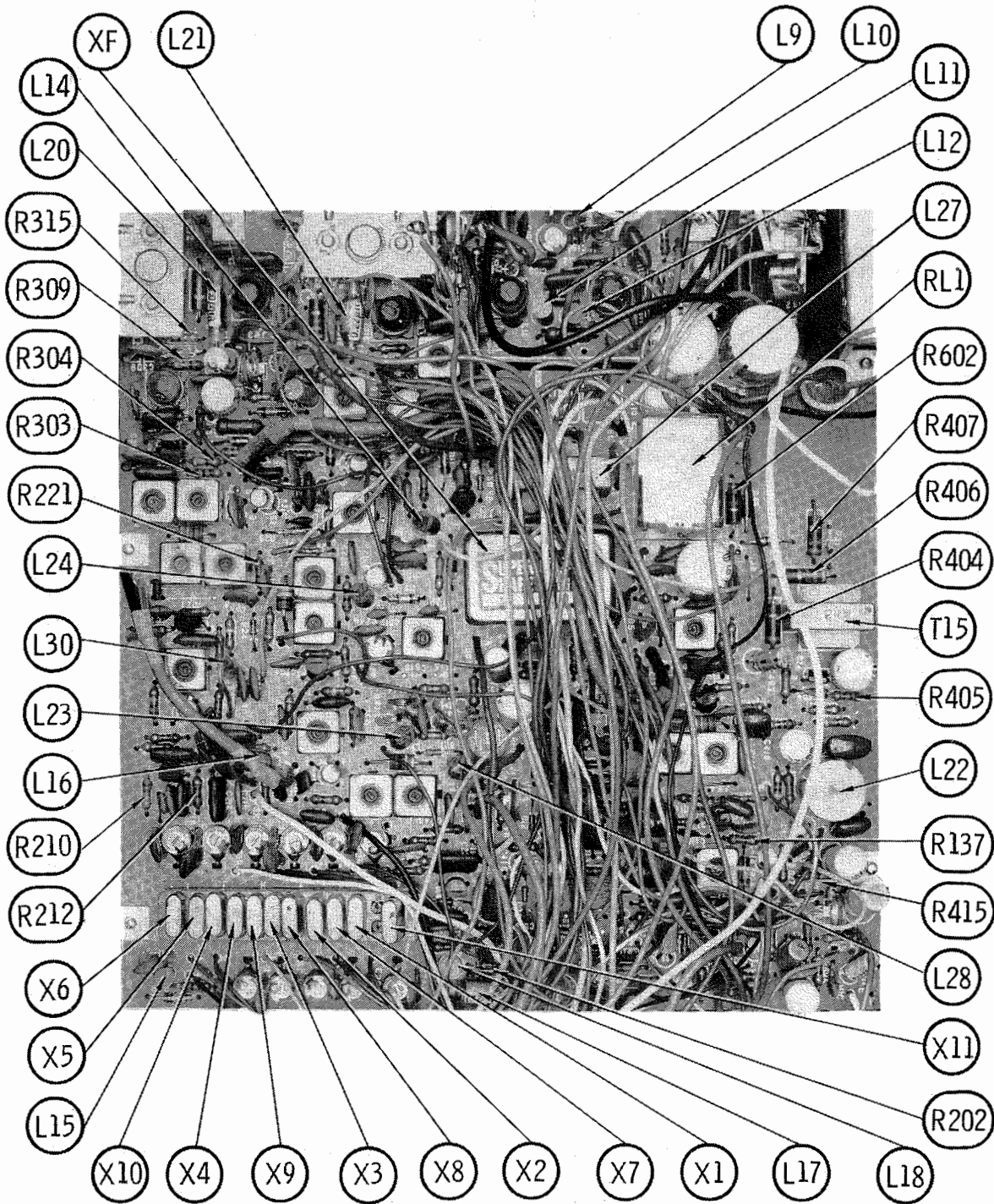


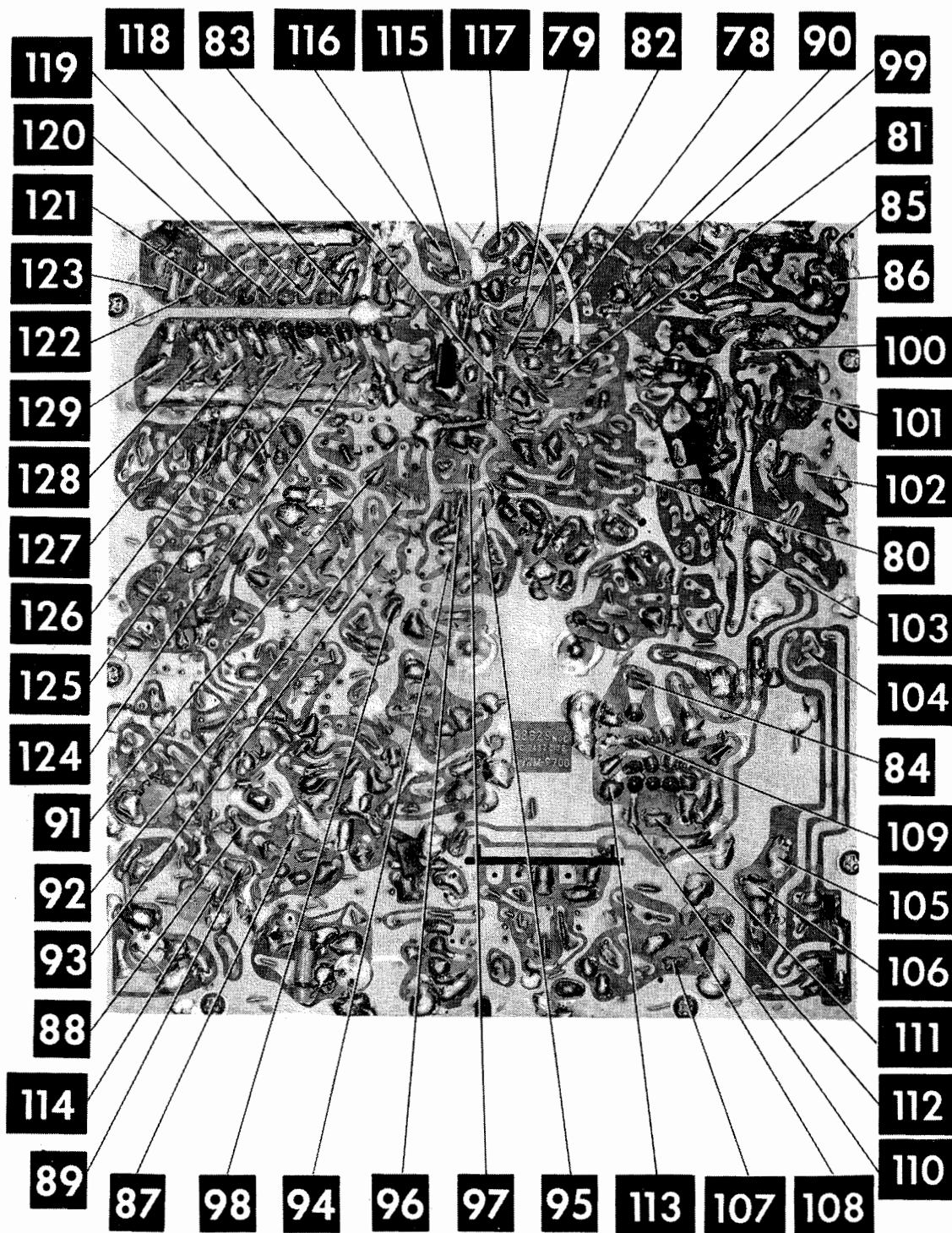


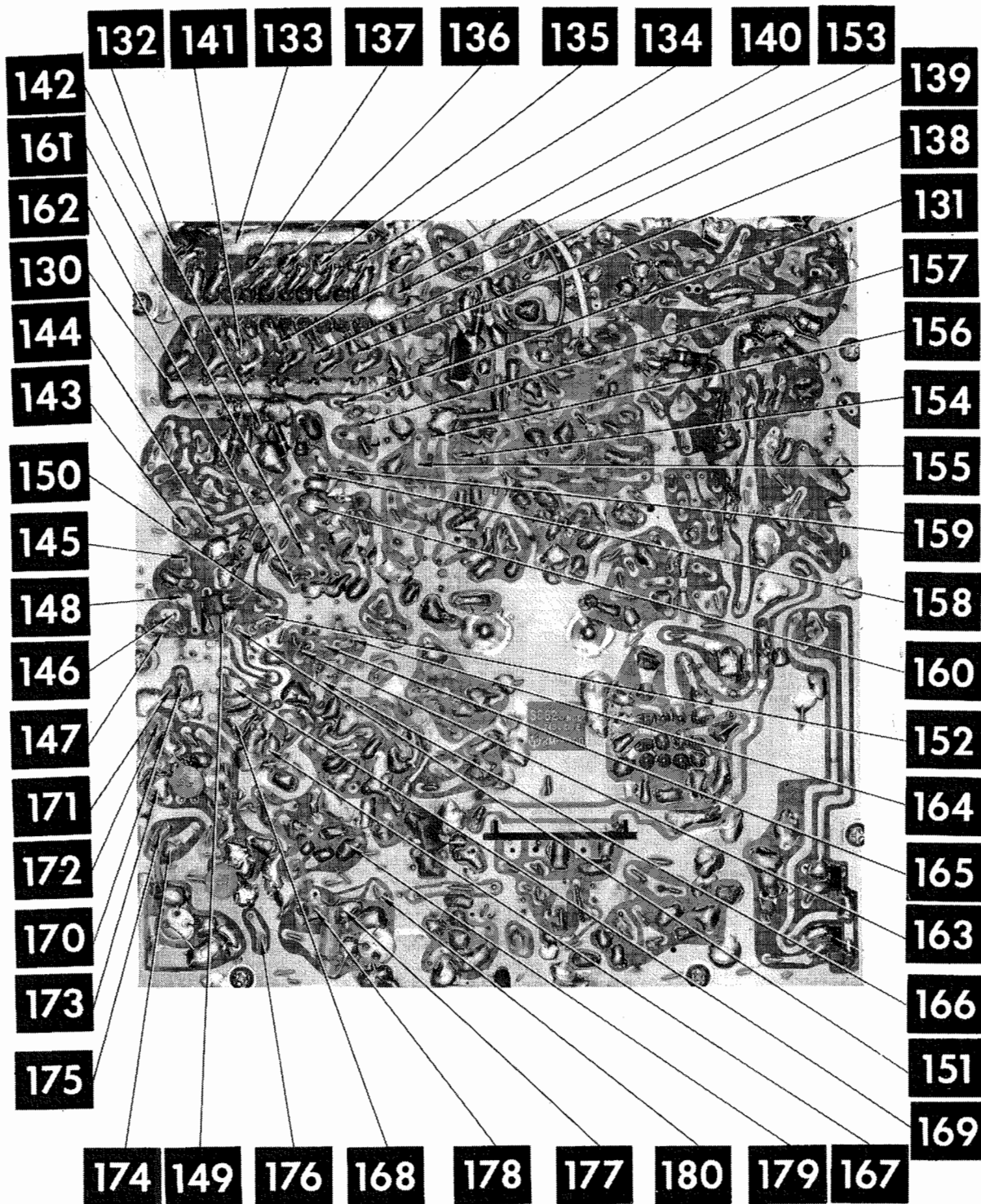




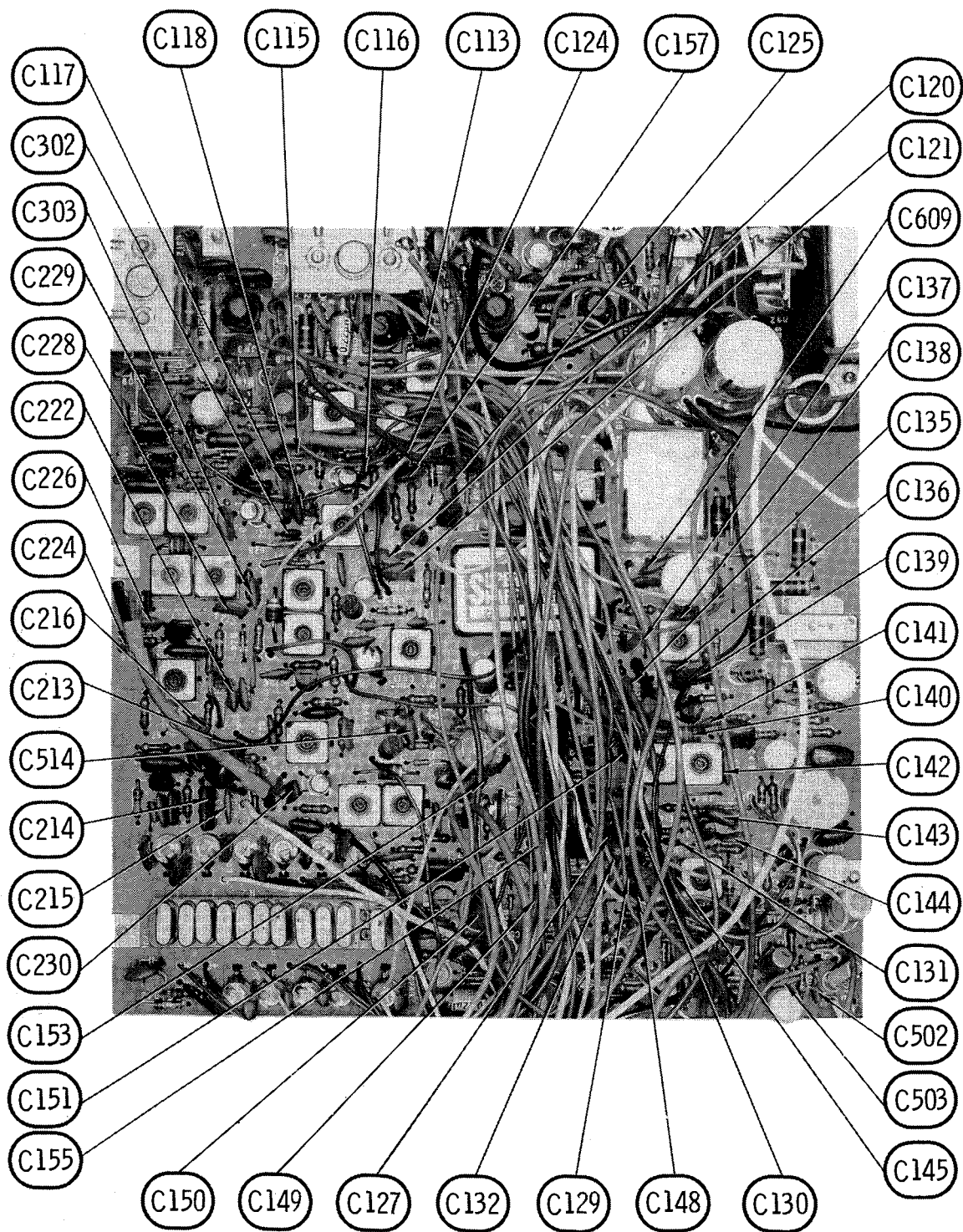


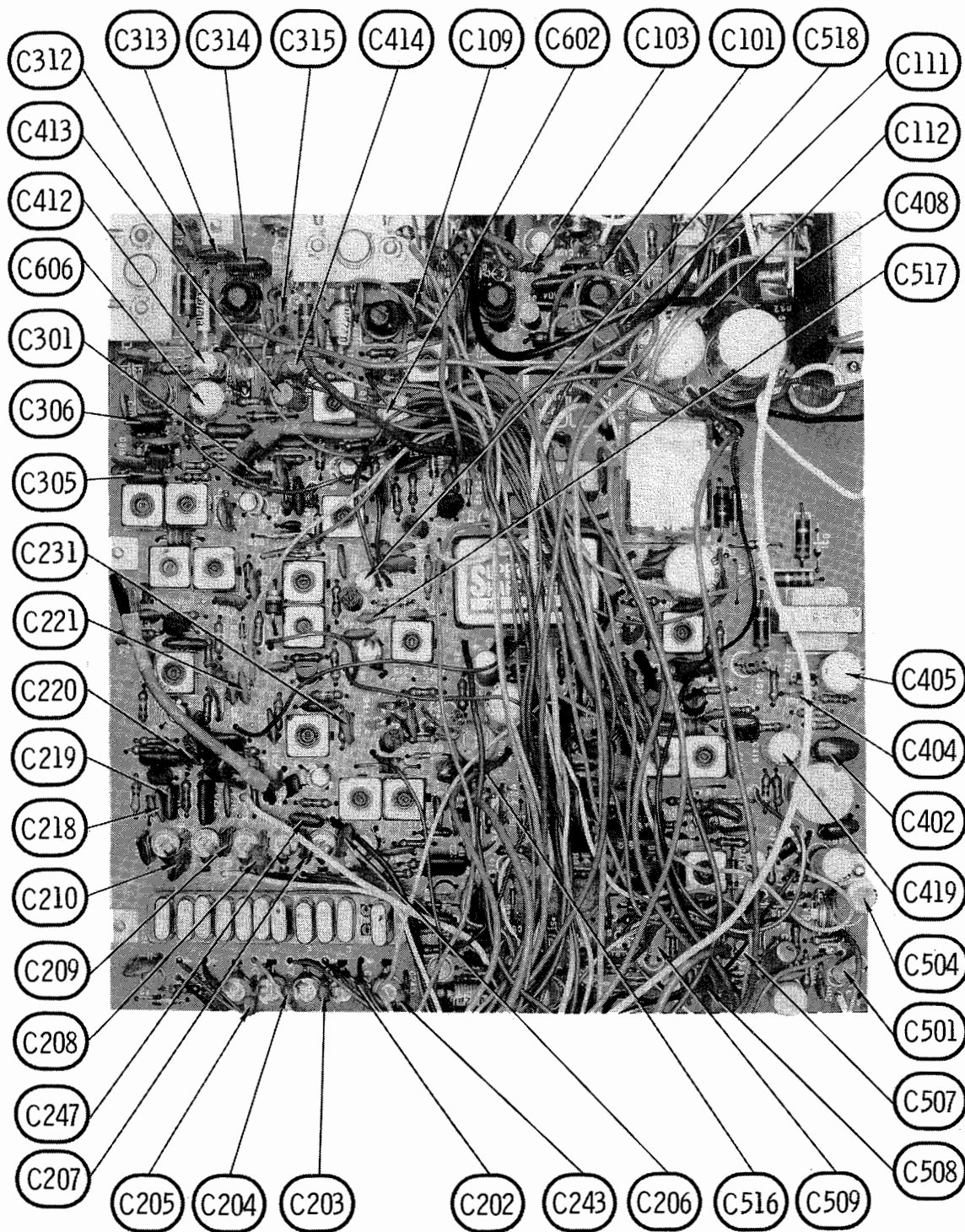


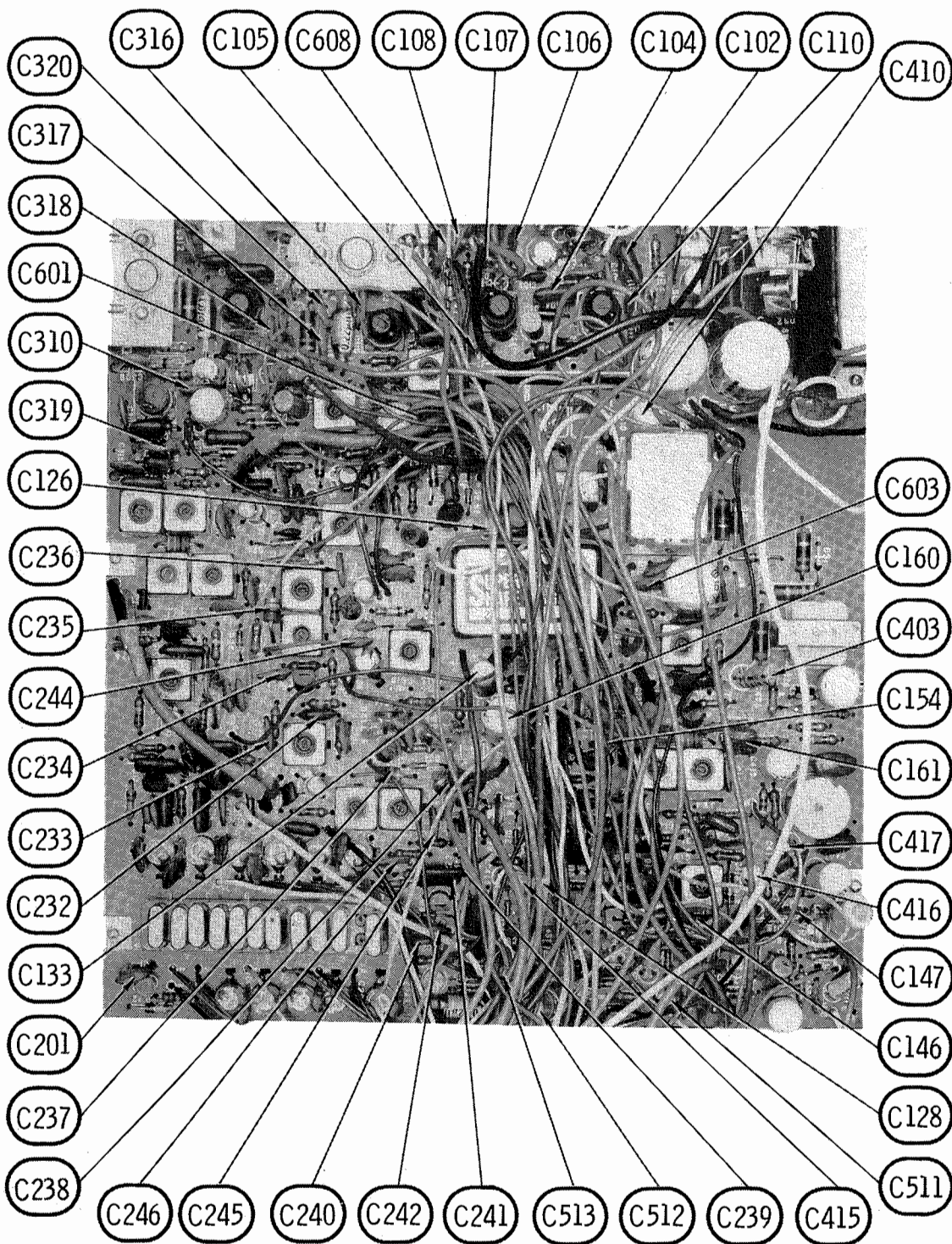


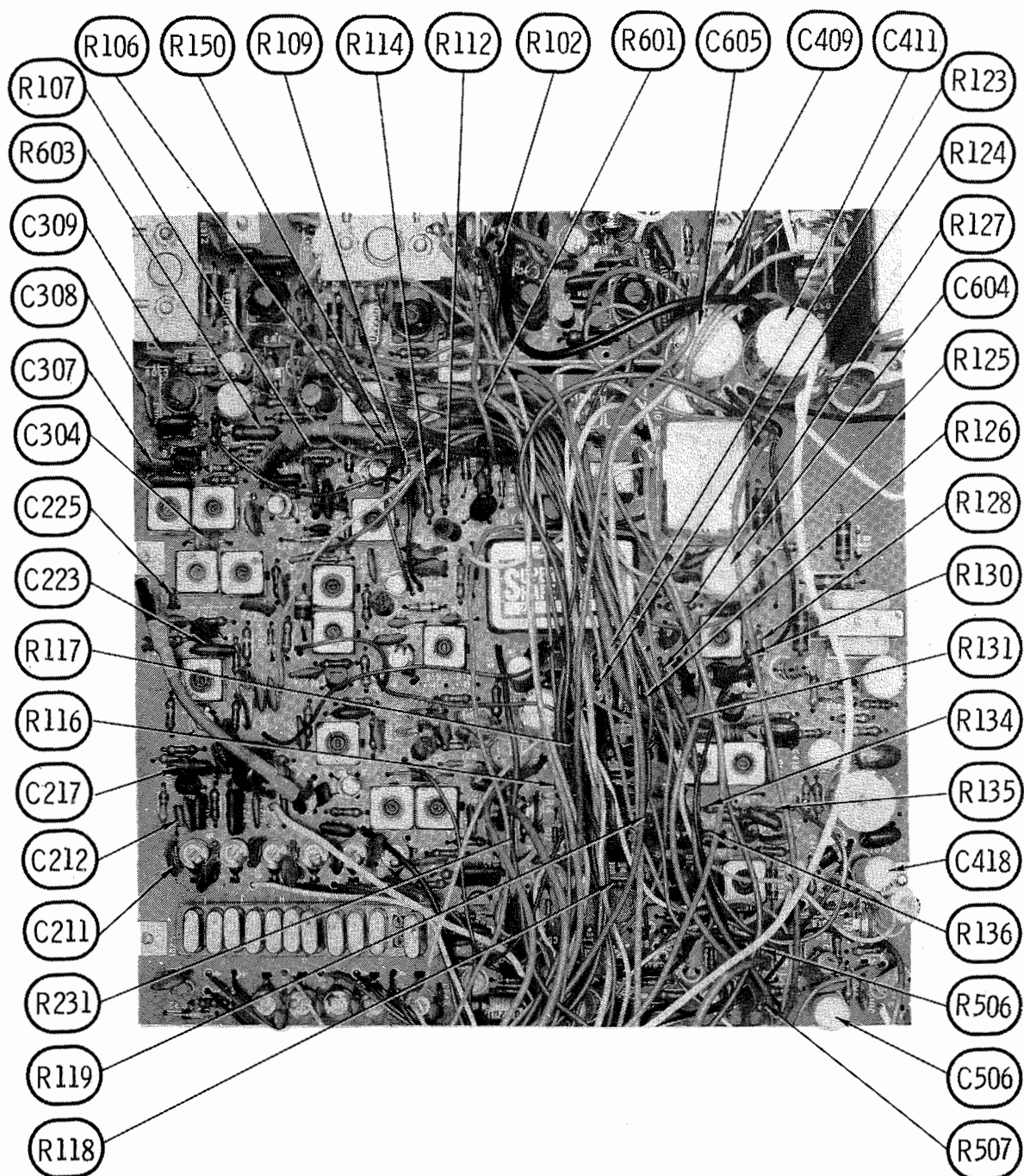


SBE MODEL SBE-12CB

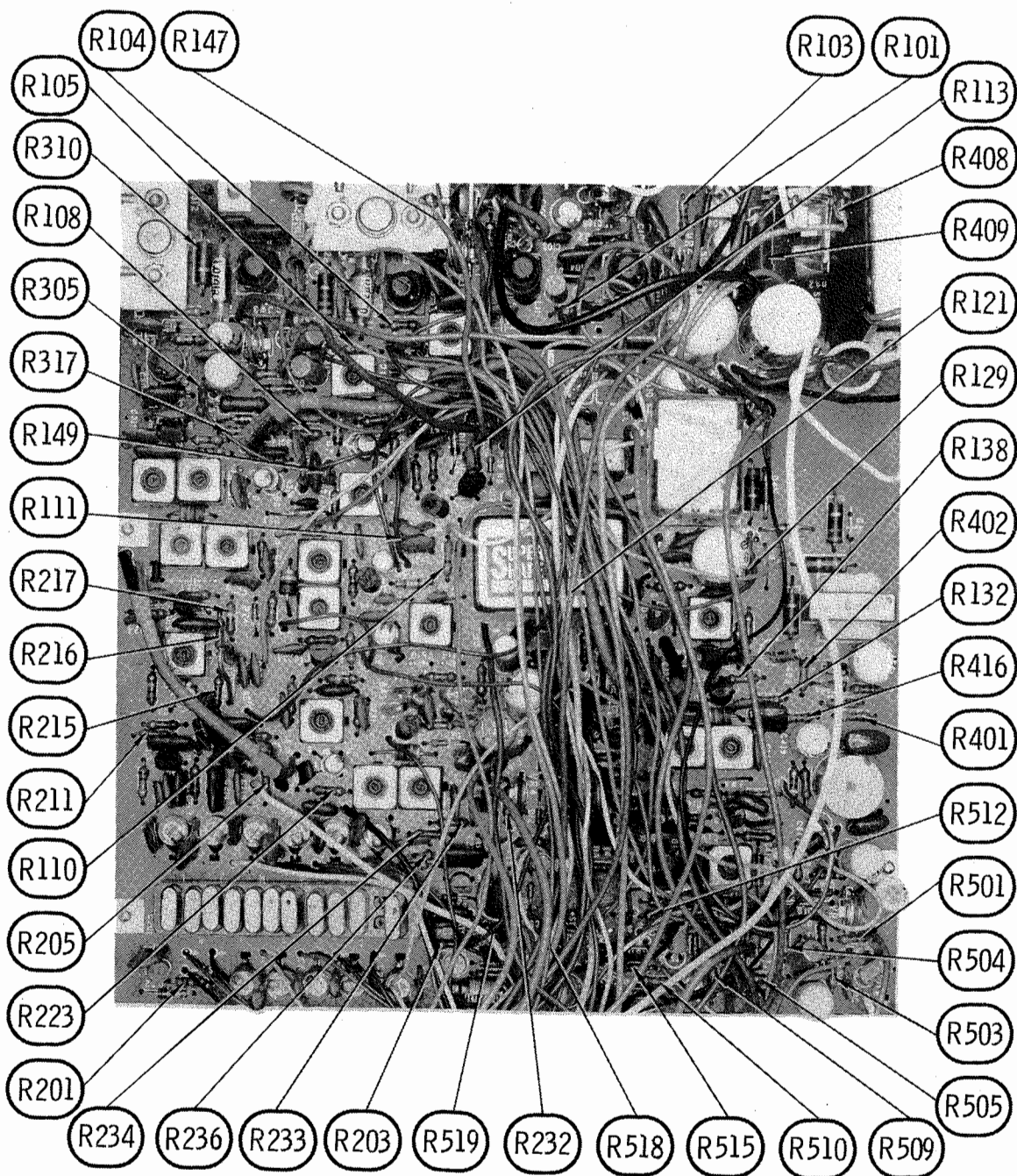


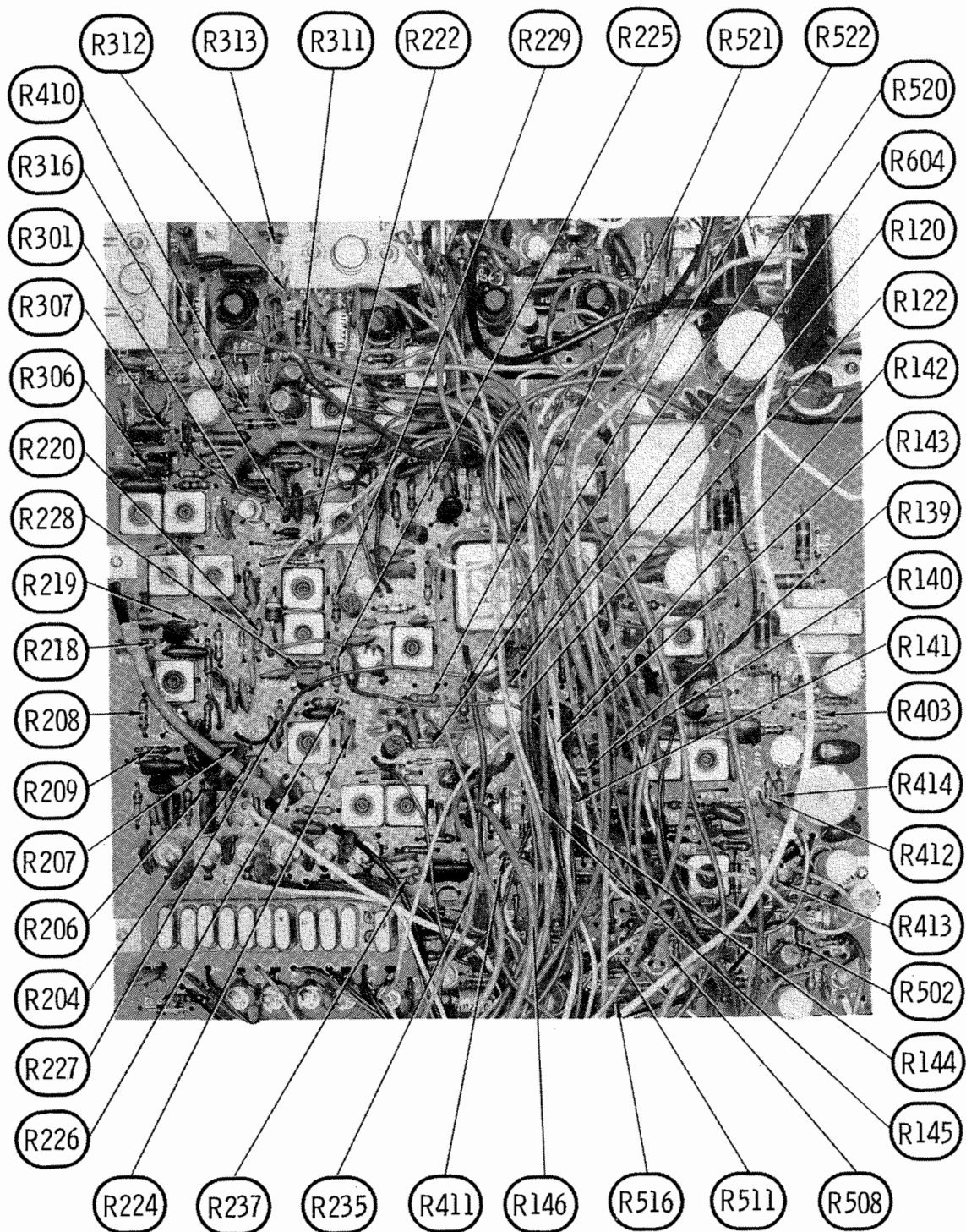


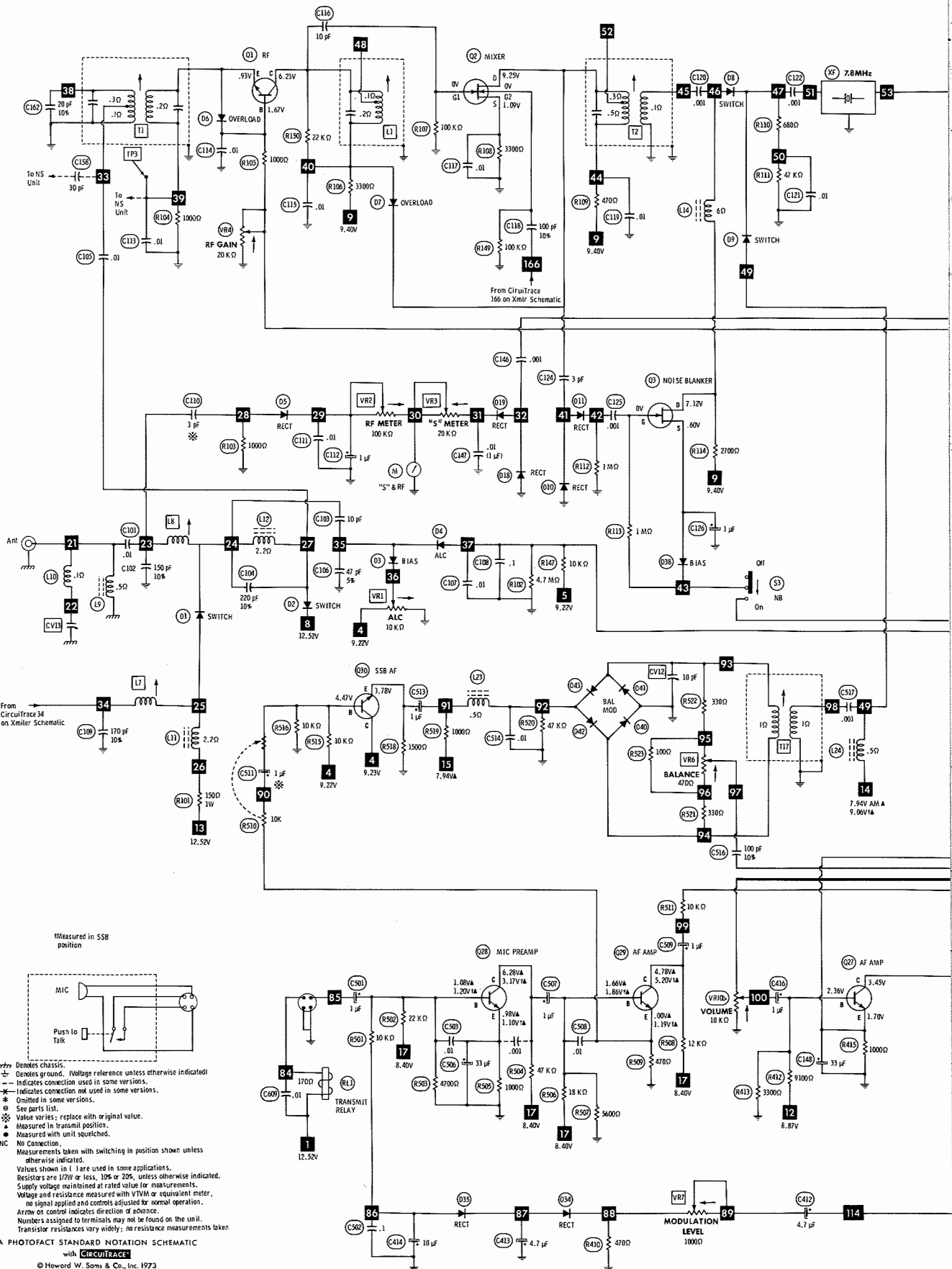




SBE MODEL SBE-12CB









PARTS LIST AND DESCRIPTION

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

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
	8524 (Stranded) Available in 12 Colors
Shielded Antenna Lead	Use BELDEN No. 8214 Lowest-loss (RG-8/U Type)
	8237 Low-loss (RG-8/U)
	8240 (Solid) Miniature (RG-58/U)
	8259 (Stranded) Miniature (RG-58A/U)
Coiled Microphone Cable	Use BELDEN No. 8497 3-Conductor, 1 Shielded, for Press-to-Talk (Neoprene)
	8496 3-Conductor, 1 Shielded, for Press-to-Talk (Vinyl)
Ignition Noise Suppression	Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap	Use BELDEN No. 8661 (3/8 In.)

SEMICONDUCTORS

ITEM No.	TYPE / MFR. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D1	10D-2B(-4)/ 8000-00011-041	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D2	10D-4/ 800-00011-041	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D3	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D4	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D5	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D6	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D7	1S1007/ 8000-00011-046	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D8	1N60P/ 8000-00004-063	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D9	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D10	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D11	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D12	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D13	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D14	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D15	1N34A/ 8000-00011-042	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D16	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D17	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D18	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D19	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D20	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D21	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D22	1S-1007/ 8000-00011-046	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D23	1S-352M/ 8000-00004-248	GE-90 (8)	D201 (8)		HEPR2503 (8)	SK3126 (8)		
D24	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D25	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D26	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D27	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D28	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D29	1S-990S/ 8000-00004-184	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D30	1S-990S/ 8000-00004-184	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D31	1S-1211/ 8000-00011-045	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D32	10D-4/ 8000-00011-041	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D33	10D-4/ 8000-00011-041	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D34	1N34A/ 8000-00004-060	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D35	VD-121C/ 8000-00003-044	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D36	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177

SBE MODEL SBE-12CB

PARTS LIST AND DESCRIPTION (CONTINUED)

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

SEMICONDUCTORS (cont)

ITEM No.	TYPE / MFR. No./PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D37	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D38	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D39	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D40	1N60P/ 8000-00004-063	1N60 (12)	1N60 (12)	PTC206 (12)	HEP135 (12)	SK3088 (12)		ECG 109 (12)
D41	1N60P/ 8000-00004-063							
D42	1N60P/ 8000-00004-063							
D43	1N60P/ 8000-00004-063							
D44	BZ-090/ 8000-00011-043 9.40V Zener	GEZD-9.1		PTC505	HEPZ0412	SK3060	RT240	ECG 139
D45	1S-2472/ 8000-00011-042	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D46	BZ-090/ 8000-00011-043 9.06V Zener	GEZD-9.1		PTC505	HEPZ0412	SK3060	RT240	ECG 139
D47	BZ-090/ 8000-00011-043 9.22V Zener	GEZD-9.1		PTC505	HEPZ4012	SK3060	RT240	ECG 139
D48	10D-4/ 8000-00011-041	GE-504A	8D4 or 5A4D	PTC201 or PTC202 PTC101	HEPR0052	SK3030 or SK3031 SK3039	RT213 or RT214 RT107	ECG 116 or ECG 117 ECG 108
Q1	2SC710(B)/ 8000-00011-004	GE-17			HEP720			
Q2	3SK41(L)/ 8000-00011-053				HEPF2005			
Q3	2SK34(C), 2SK31(C)/ 8000-00011-054	GE-FET-2	FE-100	PTC152	HEPF0021		RT175	ECG 132
Q4	2SK34(E)/ 8000-00011-055	GE-FET-2	FE-100	PTC152	HEPF0021		RT175	ECG 132
Q5	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q6	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q7	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q8	2SC458(C)/ 8000-00004-085	GE-20	TR-24	PTC139	HEP724	SK3038	RT102	ECG 123A
Q9	XA495(C)/ 8000-00004-089	GE-21	TR-30	PTC103	HEP715	SK3114	RT115	ECG 159
Q10	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q11	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q12	2SC710(D)/ 8000-00011-048	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q13	2SC710(D)/ 8000-00011-048	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q14	3SK41(L)/ 8000-00011-053				HEPF2005			
Q15	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q16	3SK41(L)/ 8000-00011-053				HEPF2005			
Q17	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q18	2SC710(D)/ 8000-00011-048	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q19	2SC710(C)/ 8000-00011-047	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q20	3SK41(L)/ 8000-00011-053				HEPF2005			
Q21	2SC710(D)/ 8000-00011-048	GE-10		PTC126	HEP723	SK3018	RT107	ECG 107
Q22	2SC776(Y)/ 8000-00011-051							
Q23	2SC1239/ 8000-00011-052					SK3049		ECG 224
Q24	2SC458(C)/ 8000-00004-085	GE-20	TR-24	PTC139	HEP724	SK3038	RT102	ECG 123A
Q25	2SC1061/ 8000-00011-050	GE-66 (7)	1RTR-55 (7)	PTC110 (7)	HEPS5003 (7)	SK3041 (7)	RT150 (7)	ECG 184 (7)
Q26	2SC1061/ 8000-00011-050							
Q27	2SC458 (LGC), (LGD)/ 8000-00011-049	GE-20	TR-24	PTC121	HEP53	SK3124	RT102	ECG 123A
Q28	2SD77(B), (P)/ 8000-00004-085	GE-6	TR-08	PTC108	HEP641	SK3010	RT119	ECG 103A
Q29	2SC458(C)/ 8000-00004-085	GE-20	TR-24	PTC121	HEP53	SK3124	RT102	ECG 123A
Q30	2SC458(C)/ 8000-00004-085	GE-20	TR-24	PTC121	HEP53	SK3124	RT102	ECG 123A

(7) Two required - select a matched pair.

(8) Varactor

(12) Four required - select a matched set.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS (cont)

ITEM No.	RATING	REPLACEMENT DATA					
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C108	.1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	TAS104K020POA	SD35-R109
C112	.1 16V					MTV1CB50	EV-1315
C126	.1 16V					TAS104K020POA	SD35-R109
C128	.1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C133	2.2 16V	8000-00011-002	RME-A-E-002	EP15-2	WBR2-50	VTT2R2A50	EV-1317
C160	220 16V	8000-00004-044	ME-6-E-200	EA15-250	PC200-16	MTV200DE15	EV-1240
C403	10 16V	8000-00004-047	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C405	220 16V	8000-00004-044	ME-6-E-200	EA15-250	PC200-16	MTV200DE15	EV-1240
C409	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226
C410	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226
C411	470 35V	8000-00011-015	RME-O-H-500	EA50-500	WBR500-35	TC50050C	EV-1450
C412	4.7 35V	8000-00011-014	RME-B-H-005	EP50-5	PC5-50	VTT4R7A50	EV-1519
C413	4.7 16V	8000-00004-030	RME-A-E-005	EP15-5	PC5-50	VTT4R7A50	EV-1319
C414	10 16V	8000-00004-047	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C415	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C416	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C417	.22 16V	8000-00004-045				TAS224K020POA	SD35-R229
C418	33 16V	8000-00011-003	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C419	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226
C501	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C504	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226
C506	33 16V	8000-00011-003	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C507	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C509	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C511	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C512	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226
C513	1 16V	8000-00004-042	RME-A-E-001	EP15-2	PC1-50	MTV1CB50	EV-1315
C518	10 16V	8000-00004-047	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C602	220 16V	8000-00004-044	ME-6-E-200	EA15-250	PC200-16	MTV200DE15	EV-1240
C604	470 16V		RME-L-E-500	EA15-500	PC500-16	MTV500DN15	EV-1250
C605	1000 16V	8000-00004-049	RME-N-E-1000	EA15-1000	PC1000-16	TC1501B	EV-1260
C606	47 16V	8000-00004-009	RME-E-E-050	EP15-50	PC50-16	MTV50CB15	EV-1226

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C101	.01	8000-00011-010 8000-00004-040	CCD-103	DD-103	GP10000	JF110	10TS-S10
C102	150 50V 10%		DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C103	10 50V		DM-15-100J		CD15CD100J03	SX470	
C104	220 50V 10%		DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C105	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C106	47 50V 5%		DM-15-470J	CPR-47J	CD15ED470J03	SX447	424MC47R0J501
C107	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C109	170 50V 10%						
C110	3 50V						
C111	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C113	.01	8000-00004-040	CCD-103	DD-103	GP10000	JF110	10TS-S10
C114	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C115	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C116	10 50V		DM-15-100J		CD15CD100J03	SX470	
C117	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C118	100 50V 10%		DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C119	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C120	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C121	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C122	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C123	.001	8000-00004-040	CCD-102	DD-102	GP1000	GP210	10TS-D10
C124	3 50V						
C125	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C127	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C129	.04 50V 10%		1DP-1-403			EWFA1A39	1PB-S39
C130	.1 50V 10%		1DP-2-104		DPMS2P1	EWFA010	225P10491WD3
C131	4.7 50V						
C132	4.7 50V						
C134	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C135	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C136	15 50V	8000-00004-002	DM-15-150J			SX415	
C137	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C138	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C139	.04 50V 10%		1DP-1-403			EWFA1A39	1PB-S39
C140	1 10%					CN0510	10TCC-V10
C141	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C142	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C143	.04 50V 10%		1DP-1-403			EWFA1A39	1PB-S39
C144	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C145	47 50V 5%						
C146	.001	8000-00004-002	CCD-102	DD-102	GP1000	GP210	10TS-D10
C147	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C148	100 50V 10%		DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C149	.005 50V		1DP-1-502		DPMS6D5	EWFA250	6PS-D50
C150	.1 50V 10%		1DP-2-104	CPR-5000J	DPMS2P1	EWFA010	225P10491WD3
C151	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C153	15 50V		DM-15-150J			SX415	
C154	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C155	.04 50V 10%		1DP-1-403			EWFA1A39	1PB-S39
C157	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C161	.04 50V 10%		1DP-1-403			PVC114	
C162	20 50V 10%		DM-15-200J	CPR-20J		SX420	

SBE MODEL SBE-12CB

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING		MFGR. PART No.	REPLACEMENT DATA				
				ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C201	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C202	22 N750			CCTN-220	DTN-22	N22	CN7422	10TCU-Q22
C203	22 N750			CCTN-220	DTN-22	N22	CN7422	10TCU-Q22
C204	22 N750			CCTN-220	DTN-22	N22	CN7422	10TCU-Q22
C205	22 N750			CCTN-220	DTN-22	N22	CN7422	10TCU-Q22
C206	30 N470	10%		*		*	*	10TCT-Q30
C207	30 N470	10%		*		*	*	10TCT-Q30
C208	30 N470	10%		*		*	*	10TCT-Q30
C209	30 N470	10%		*		*	*	10TCT-Q30
C210	30 N470	10%		*		*	*	10TCT-Q30
C211	30 N470	10%		*		*	*	10TCT-Q30
C212	.001			CCD-102	DD-102	GP1000	GP210	10TS-D10
C213	300 50V 10%			DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C214	300 50V 10%			DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C215	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C216	4.7 50V							
C217	300 50V 10%			DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C218	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C219	100 50V 10%			DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C220	4.7 50V							
C221	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C222	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C223	220 50V 10%			DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME7200J501
C224	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C225	2 50V		8000-00004-013					
C226	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C227	3		8000-00004-040					
C228	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C229	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C230	4.7 50V							
C231	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C232	56 50V 10%			DM-15-560J	CPR-56J	CD15ED560J03	SX456	424MC5600J501
C233	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C234	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C235	1 10%							
C236	.01			CCD-103	DD-103	GP10000	CN0510	10TCC-V10
C237	1 10%						JF110	10TS-S10
C238	15 50V		8000-00004-002	DM-15-150J			CN0510	10TCC-V10
C239	15 50V		8000-00004-002	DM-15-150J			SX415	
C240	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C241	500 50V 10%		8000-00004-017	DM-19-501J				
C242	150 50V 10%			DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C243	22 N750			CCTN-220	DTN-22	N22	CN7422	10TCU-Q22
C244	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C245	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C246	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C247	78 10%			DM-15-750J	CPR-75J	CD15ED750J03	SX475	424MC7500J501
C301	30 50V 10%			DM-15-300J	CPR-30J		SX430	
C302	20 50V			DM-15-200J	CPR-20J		SX420	
C303	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C304	1 10%						CN0510	10TCC-V10
C305	220 50V 10%			DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C306	100 50V 10%			DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C307	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C308	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C309	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C310	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C312	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C313	56 50V 10%			DM-15-560J	CPR-56J	CD15ED560J03	SX456	424MC5600J501
C314	150 50V 5%			DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C315	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C316	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C317	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C318	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C319	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C320	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C401	.05 50V 10%			6DP-3-503		DPMS6S5	PVC615	6PS-S50
C402	.1 50V 10%			1DP-2-104		DPMS2P1	EWFA010	225P10491WD3
C404	.001			CCD-102	DD-102	GP1000	GP210	10TS-D10
C408	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C502	.1				CK-104		TA010	TG-P10
C503	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C508	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C514	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C516	100 50V 10%			DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C517	.001			CCD-102	DD-102	GP1000	GP210	10TS-D10
C600	.04 50V 10%							
C601	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C603	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C608	.01							
C609	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C701	10			DM-15-100J		CD15CD100J03	SX410	
C703	.001			CCD-102	DD-102	GP1000	GP210	10TS-D10
C704	.001			CCD-102	DD-102	GP1000	GP210	10TS-D10
C705	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
C706	300 10%			DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C707	.01			CCD-103	DD-103	GP10000	JF110	10TS-S10
CV1	20		8000-00004-050					
CV2	20		8000-00004-050					
CV3	20		8000-00004-050					
CV4	20		8000-00004-050					
CV5	20		8000-00004-050					

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
CV6	30	8000-00004-051					
CV7	30	8000-00004-051					
CV8	30	8000-00004-051					
CV9	30	8000-00004-051					
CV10	30	8000-00004-051					
CV11	30	8000-00004-051					
CV12	10	8000-00004-204					
CV13	10	8000-00004-205					

* 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.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
VR1	ALC	10K	8000-00004-096	TSV-50K or T-50K	C-503	X201R503B	MTC54L1
VR2	RF Meter	100K	8000-00004-094	TSV-100K(1) or T-100K (1)	C-104 (1)	X201R104B (1)	MTC15L1 (1)
VR3	S Meter	20K	8000-00011-083	T-20K (1) or TSV-25K (1)	C-253 (1)	X201R253B (1)	MTC24L1 (1)
VR4	RF Gain	20K	8000-00011-083	T-20K (1) or TSV-25K (1)	C-253 (1)	X201R253B (1)	MTC24L1 (1)
VR5	Squelch Range	10K	8000-00004-097	TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
VR6	Balance	470					
VR7	Modulation	1000	8000-00011-082	TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
VR8a	Clarifier	10K					
b	Squelch	10K					
VR10a	RF Gain	5K					
b	Volume	10K					

(1) 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.
R310	2.2 1/2W		8000-00011-001	R409	10 2W	CC-10	8000-00004-266
R408	1 1W		8000-00004-091				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	RF Amp	8000-00011-023			
L2	34MHz Buffer	8000-00011-024			
L3	19MHz Buffer	8000-00011-025			
L4	15MHz Filter	8000-00011-026			
L5	Xmit Driver	8000-00004-075			
L6	Xmit Output	8000-00011-027			
L7	RF Filter	8000-00004-077			
L8	RF Filter	8000-00004-078			
L9	RF Choke (.22uh)	8000-00004-053	19-6022	74F225AI	TA311
L10	RF Choke (.85uh)	8000-00004-059	19-2008	4594	TA812
L11	Peaking (150uh)	8000-00011-018	19-2026	72F154AP	T868
L12	Peaking (150uh)	8000-00011-018	19-2026	72F154AP	T868
L14	Peaking (470uh)	8000-00011-020	19-3500	72F474AP	T323
L15	Peaking (470uh)	8000-00011-020	19-3500	72F474AP	T323
L16	RF Choke (5.5uh)	8000-00011-017	19-1008	4609	T820
L17	RF Choke (.22uh)	8000-00011-016	19-2003	4584	T957
L18	Peaking (470uh)	8000-00011-020	19-3500	72F474AP	T323
L20	RF Choke (1uh)	8000-00004-025			
L21	RF Choke (.22uh)	8000-00011-016	19-2003	4584	T957
L22	AF Choke (130mh)	8000-00011-021			
L23	RF Choke (22uh)	8000-00011-019	19-6022	74F225AI	TA311
L24	RF Choke (22uh)	8000-00011-019	19-6022	74F225AI	TA311
L28	RF Choke (15uh)	8000-00004-056	19-2018	4624	T862
L29	RF Choke (3uh)	8000-00004-054		74F336AP	T816
L30	RF Choke (22uh)	8000-00011-019	19-6022	74F225AI	TA311
T1	Antenna Matching	8000-00011-028			
T2	Input IF	8000-00011-029			
T3	Interstage IF	8000-00011-029			
T4	Interstage IF	8000-00011-029			
T5	AM Output IF	8000-00011-030			
T6	SSB Output IF	8000-00011-031			
T7	34MHz Filter	8000-00011-032			
T8	34MHz Filter	8000-00011-033			
T9	19MHz Mixer	8000-00011-034			
T10	19MHz Buffer	8000-00011-035			
T11	15MHz Filter				
T12	Xmit Buffer	8000-00004-118			
T13	Xmit Mixer (Sec)	8000-00011-036			

SBE MODEL SBE-12CB

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF) (cont)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
T14	Xmit Mixer (Pri)	8000-00011-037			
T17	Balanced Mod	8000-00011-038			

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L27	2A Max	.2	2.1mh	8000-00011-022				

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD Part No.	
T15	1.1	1CT		8000-00011-039				

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T16	40CT	18	8000-00011-040				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2 3/4" PM 8 ohms	800-00011-057	27A05Z8	

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
F1	3A	8000-00011-078	8000-00004-151	AGC3	HDJ	312003	150145	

MISCELLANEOUS

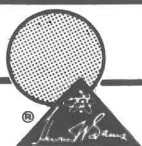
ITEM No.	PART NAME	PART No.	NOTES
M	Meter	8000-00011-086	"S"
RL1	Relay	8000-00004-141	(Rec-Xmit)
S2	Switch	8000-00004-101	(PA-CB)
S3	Switch	8000-00011-092	(NB)
S4	Switch	8000-00011-058	(Selector)
S5	Switch	8000-00004-102	(AM-USB-LSB)
X11	Crystal	8000-00011-059	7.8025MHz
X10	Crystal	8000-00011-060	7.5025MHz
X9	Crystal	8000-00011-061	7.4825MHz
X8	Crystal	8000-00011-062	7.4725MHz
X7	Crystal	8000-00011-063	7.4625MHz
X1	Crystal	8000-00011-064	11.700MHz
X2	Crystal	8000-00011-065	11.750MHz
X3	Crystal	8000-00011-066	11.800MHz
X4	Crystal	8000-00011-068	11.850MHz
X5	Crystal	8000-00011-069	11.900MHz
X6	Crystal	8000-00011-070	11.950MHz
XF	Crystal	8000-00011-071	Filter 7.8MHz

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

ITEM	PART No.	ITEM	PART No.
Cabinet	8000-00011-075	Knob, Mode	8000-00004-147
Overlay, Panel	8000-00011-080	Knob, Volume & RF Gain	8000-00004-148
Escutcheon (Front)	8000-00011-079	Knob, Clarifier & Squelch	8000-00004-149
Knob, Channel Selector	8000-00004-145	Mounting Bracket	8000-00011-081

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone Assembly	8000-00004-153	(Complete)



PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

NOTE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES AND REGULATIONS PART 95, SUBPARTS 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 Telsat SSB-50 (99-32666W)

SYNTHESIZER ALIGNMENT

Trimmer capacitors should not require adjustment unless an oscillator circuit component has been replaced.

23MHz OSCILLATOR

Connect a frequency meter or counter input to TP1 (emitter of Q1). Set FINE TUNE control to center position. Key transmitter and adjust to frequency +25Hz.

CHANNEL SELECTOR	ADJUST	FREQUENCY
1	TC1	23.330MHz
5	TC2	23.380MHz
9	TC3	23.430MHz
13	TC4	23.480MHz
17	TC5	23.530MHz
21	TC6	23.580MHz

With FINE TUNE control in center position oscillator frequency should not change when transmitter is un-keyed; adjust trimmer on back of FINE TUNE control to equalize transmit and receive frequencies if necessary.

14MHz OSCILLATORS

Connect a frequency meter or counter to TP3 (emitter of Q3). Set mode switch to USB or AM. Adjust to frequency +5Hz.

CHANNEL SELECTOR	ADJUST	FREQUENCY
1	TC7	14.910MHz
2	TC8	14.920MHz
3	TC9	14.930MHz
4	TC10	14.950MHz

Connect frequency meter or counter to TP4 (emitter of Q4). Set mode switch to LSB. Adjust to frequency +5kHz.

CHANNEL SELECTOR	ADJUST	FREQUENCY
1	TC11	14.907MHz
2	TC12	14.917MHz
3	TC13	14.927MHz
4	TC14	14.947MHz

11MHz OSCILLATORS

Connect a frequency meter or counter to TP6 (emitter of Q6). Set mode switch to USB. Adjust TC15 to frequency of 11.275MHz.

Connect frequency meter or counter to TP7 (emitter of Q7). Set mode switch to LSB. Adjust TC16 to frequency of 11.272MHz.

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

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LAFAYETTE MODEL TELSAT SSB-50

RECEIVER ALIGNMENT

Suggested Alignment Tools:	GC ELECTRONICS
L1 thru L16, L21, L24, L26, L30, L32, L33	#9440
L18, L26 thru L29, L31	#9087, 9089
L19, L20	#9440, 9295, 9302

Connect an AC VTVM across speaker voice coil. Set SQUELCH control fully counterclockwise, FINE TUNE to center position, and ANL/NS to ANL. Adjust VOLUME control for suitable reading.

AM

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
Connect high side thru .01mfd to cathode of D35 or D36 (2nd Mixer), low side to ground. Set to 455kHz (Mod).	Any	L29, L28, L27, MF	Set mode switch to AM. Adjust for maximum.
Connect high side thru .01mfd to antenna connector, low side to chassis. Set to 27.085MHz. (Channel 11) (Mod.)	11	L33, L26, L24, L23, L22	Adjust for maximum.
AM SQUELCH ADJUSTMENT Connect high side thru .01mfd to antenna connector, low side to chassis. Set to 27.085MHz (Channel 11) (Unmod). Set output level to desired squelch maximum.	11	RV15	Turn SQUELCH control fully clockwise (maximum). Adjust until squelch just opens.
AM S-METER ADJUSTMENT As above. Set output level to 150uv.	11	RV14	Adjust for reading of 9 on S-RF meter.
SSB Connect high side thru .01mfd to antenna connector, low side to chassis. Set output to 27.086MHz. (Unmod).	11	L25, L10, L21, RV11	Set mode switch to USB. Adjust for maximum.
SSB SQUELCH ADJUSTMENT As above. Set output level to desired squelch maximum.	11	RV12	Turn SQUELCH control fully clockwise. Adjust until squelch just opens.
SSB S-METER ADJUSTMENT As above. Set output level to 150uv.	11	RV13	Adjust for reading of 9 on S-RF meter.
NOISE SILENCER ADJUSTMENT Connect high side thru .01mfd to antenna connector, low side to chassis. Set to approximately 24MHz. (Mod). Connect the vertical input of an oscilloscope to observe detected signal, high side to TP25, low side to ground.		L32, L31, L30, TC19	Set ANL/NS switch to NS. Adjust for maximum without causing oscillation. Band width should be at least 500kHz, centered near 24MHz.

AM

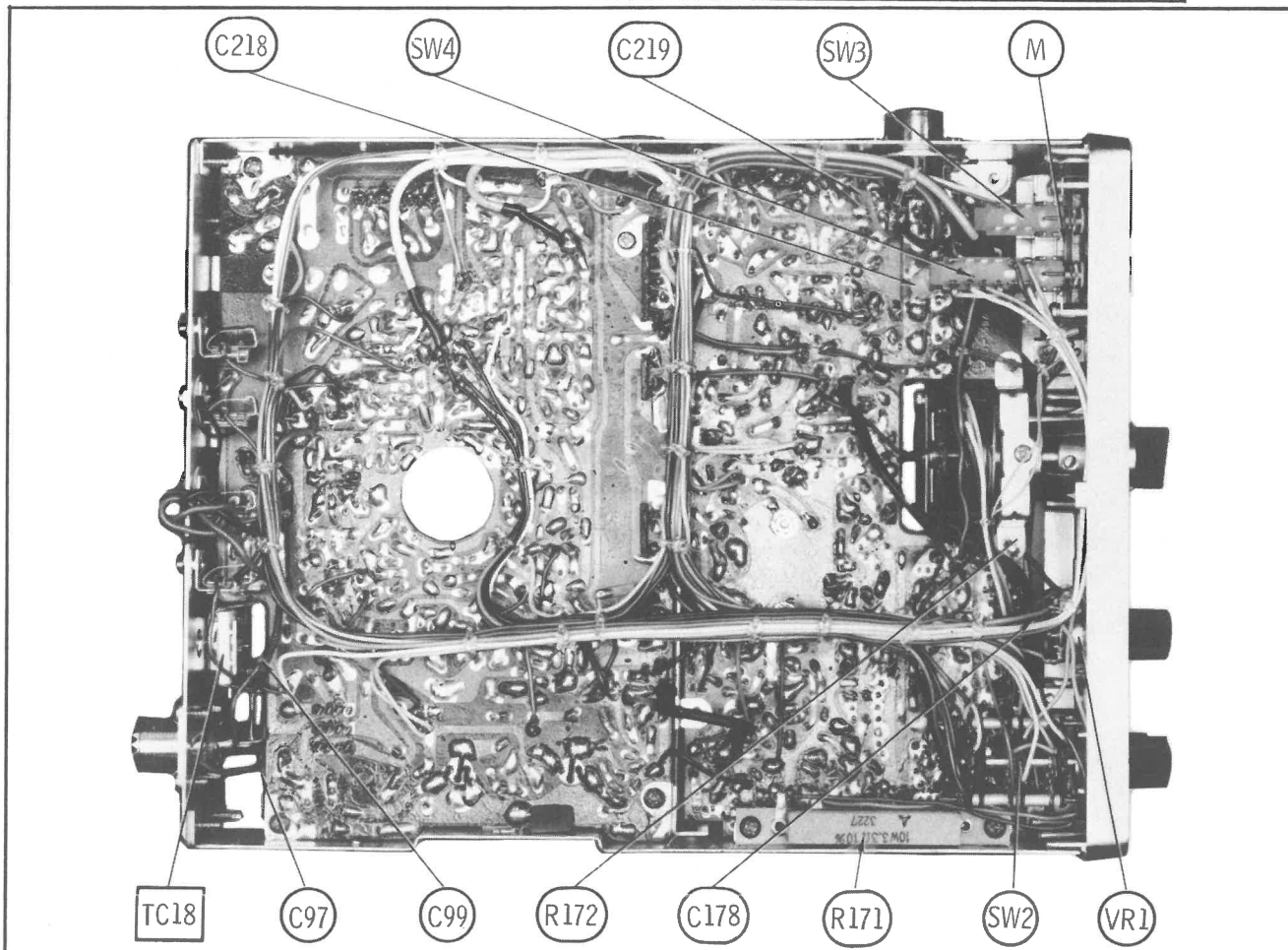
TRANSMITTER ALIGNMENT

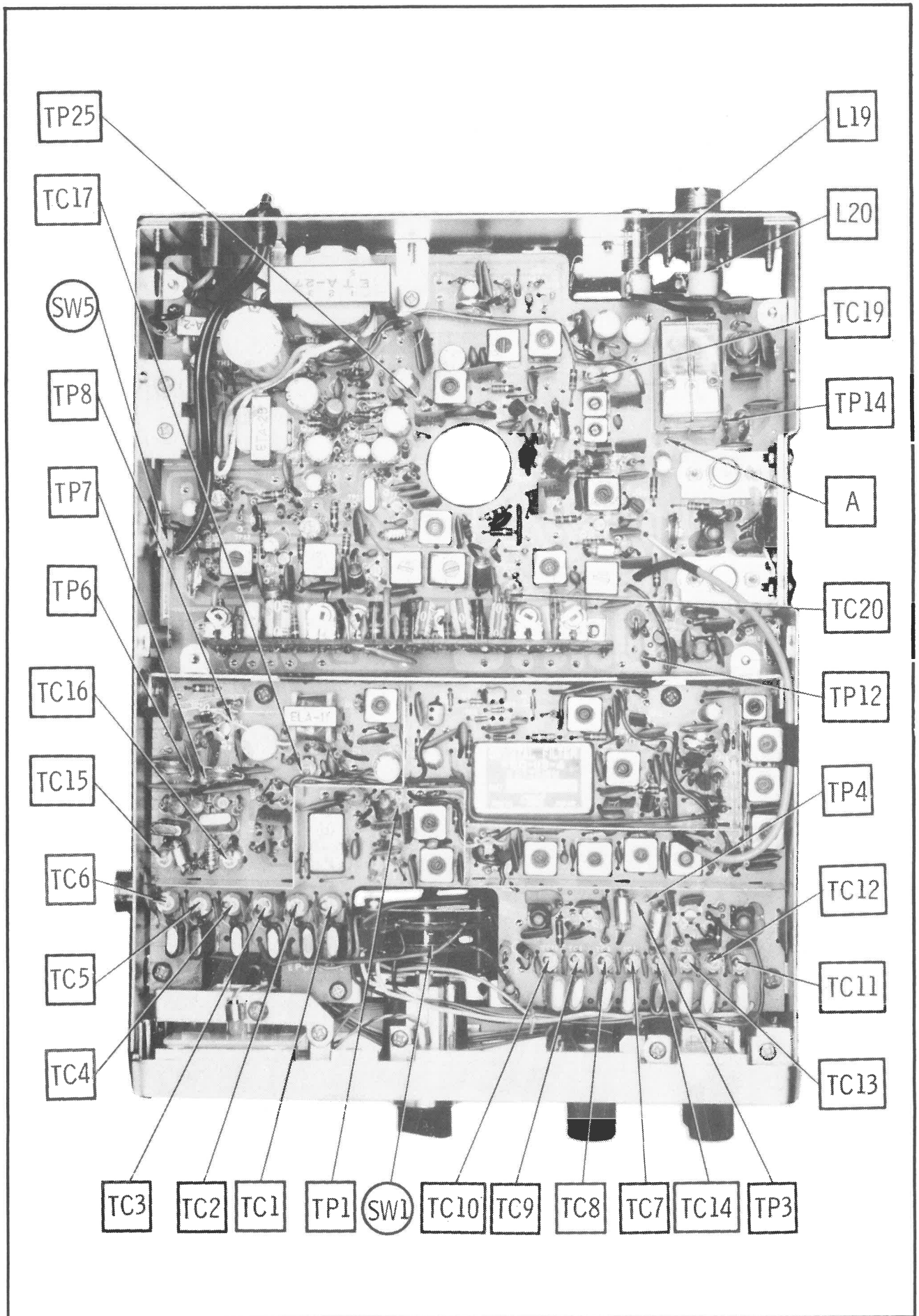
INDICATOR	ADJUST	REMARKS
Measure voltage to ground at TP12 with a DC VTVM.	L1, L2, L5, L6, L7 L8, L11, L12, L13, L14.	Set mode switch to AM. Key transmitter and adjust for MINIMUM voltage, approximately equal on all channels.
Connect an RF wattmeter between antenna connector and dummy load. Insert a 0-500ma DC ammeter in collector circuit of Q13 (RF Amp) at TP14.	L15, L16, L18, L19, TC18.	Adjust for maximum output. Readjust L19 to reduce DC input to 5 watts.
RF-METER ADJUSTMENT RF wattmeter as above.	RV6	Adjust for S-RF meter reading to agree with wattmeter.

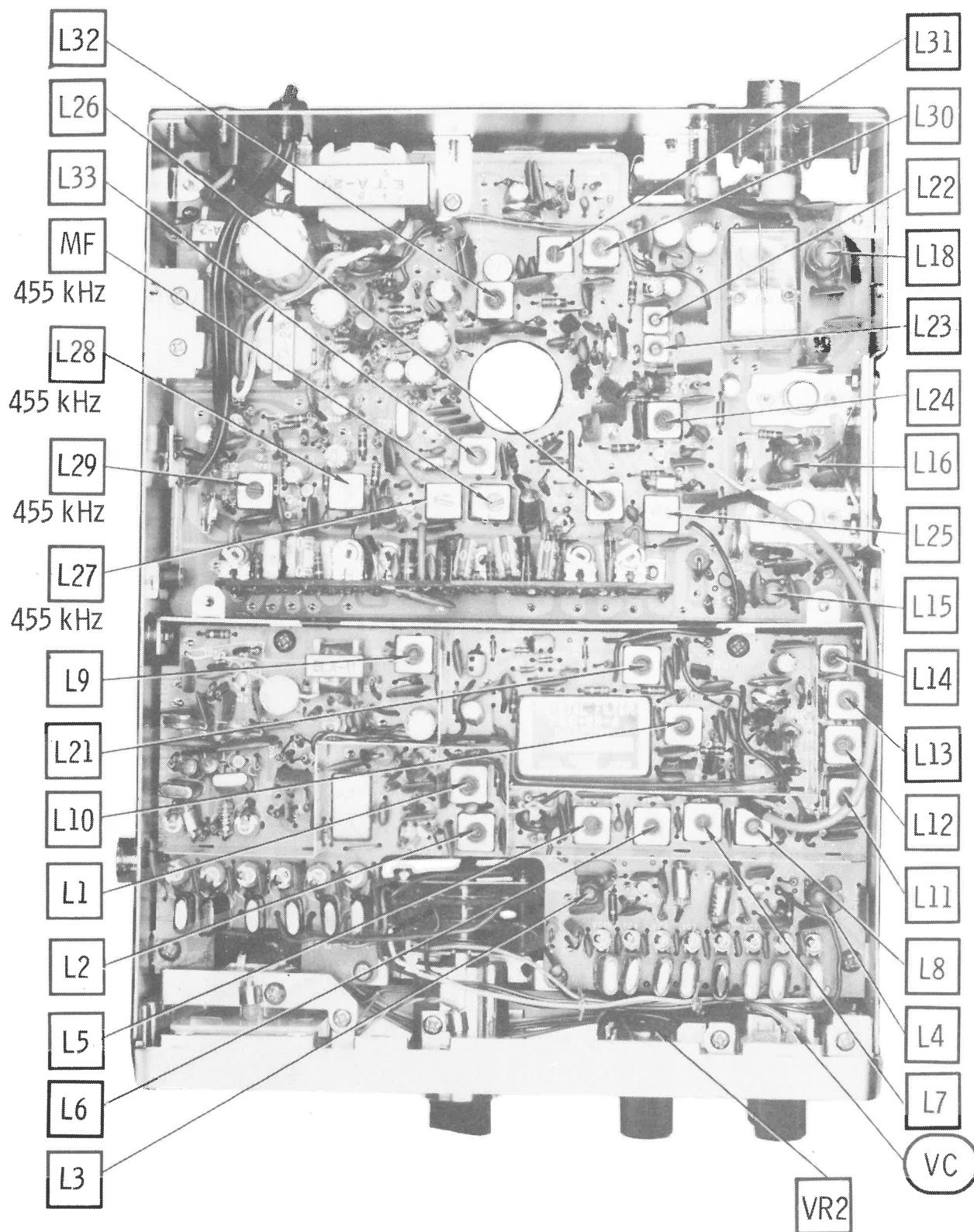
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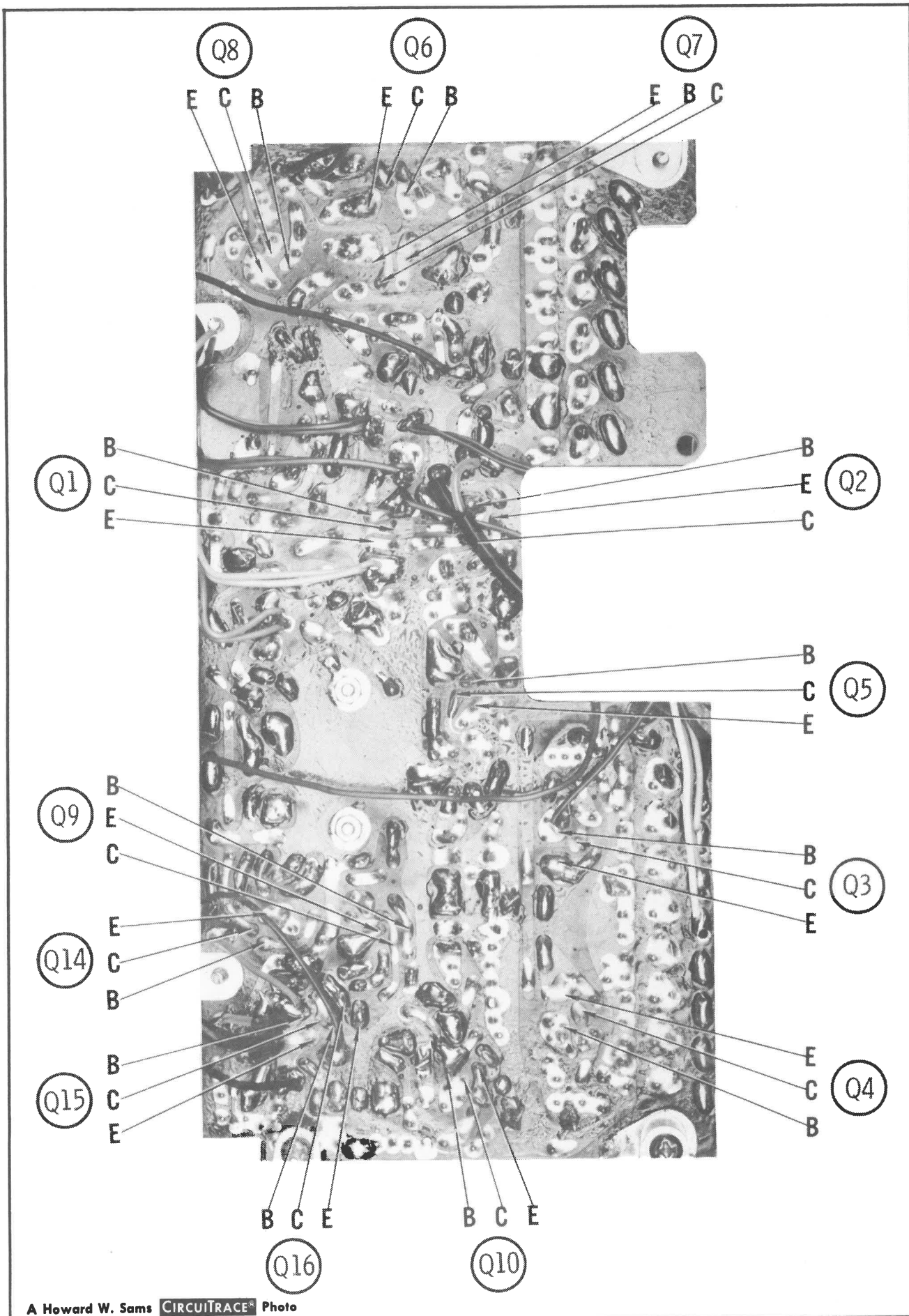
INDICATOR	ADJUST	REMARKS
AM MODULATION ADJUSTMENT		
Connect a modulation monitor across dummy load.	RV8	Key transmitter, speak into microphone, adjust to limit modulation to 100%.
SSB BALANCED MODULATOR ADJUSTMENT		
Measure voltage to ground at TP8 with a DC VTVM.	RV1, RV2.	Adjust for equal readings at TP8 with mode switch in USB (RV1) and LSB (RV2) (approximately 1.7V).
Connect an RF voltmeter across dummy load.	RV3, TC17.	Set mode switch to USB or LSB. Remove microphone plug from socket; key transmitter by shorting point A to ground. Adjust for MINIMUM RF output. Remove short key transmitter.
Connect an audio frequency generator to center connector of microphone socket. Set to 1kHz. Connect an RF wattmeter between antenna connector and dummy load.	L9, L10	Adjust output level of audio generator for RF output of about 1 watt. Adjust L9 and L10 for maximum output.
SSB BIAS ADJUSTMENT		
Measure voltage to ground at the junction of R48 and RV4 (RF Driver emitter circuit).	RV4	Set mode switch to USB or LSB. Adjust for 7.50V.
Measure voltage at junction of R51 and RV5. (RF Final Amp emitter circuit).	RV5	Adjust for 5.00V.
TV1 ADJUSTMENT		
TV receiver tuned to channel 2.	L20	Set mode switch to AM. Key transmitter; adjust for MINIMUM interference.

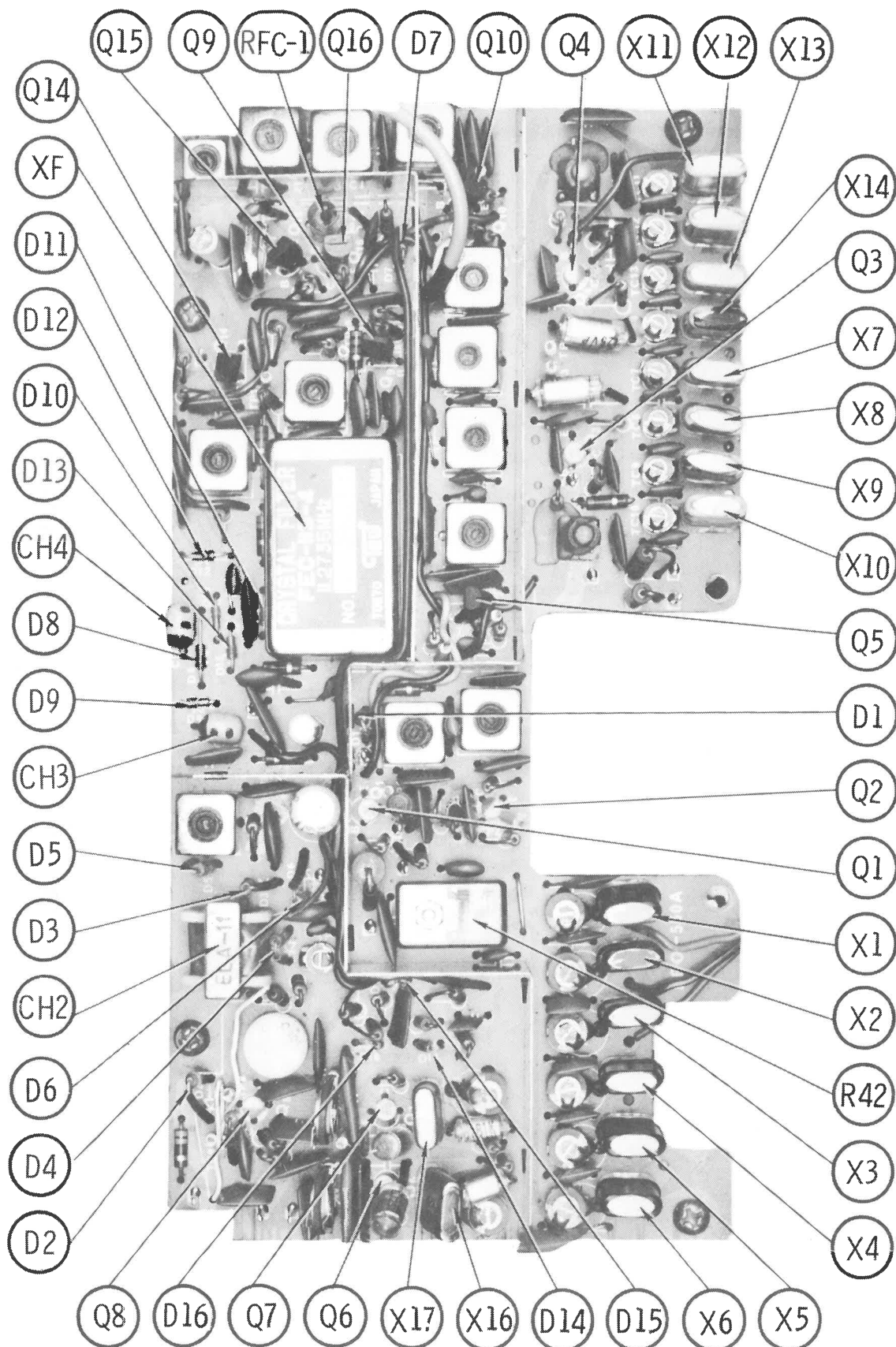
LAFAYETTE MODEL TELSAT SSB-50

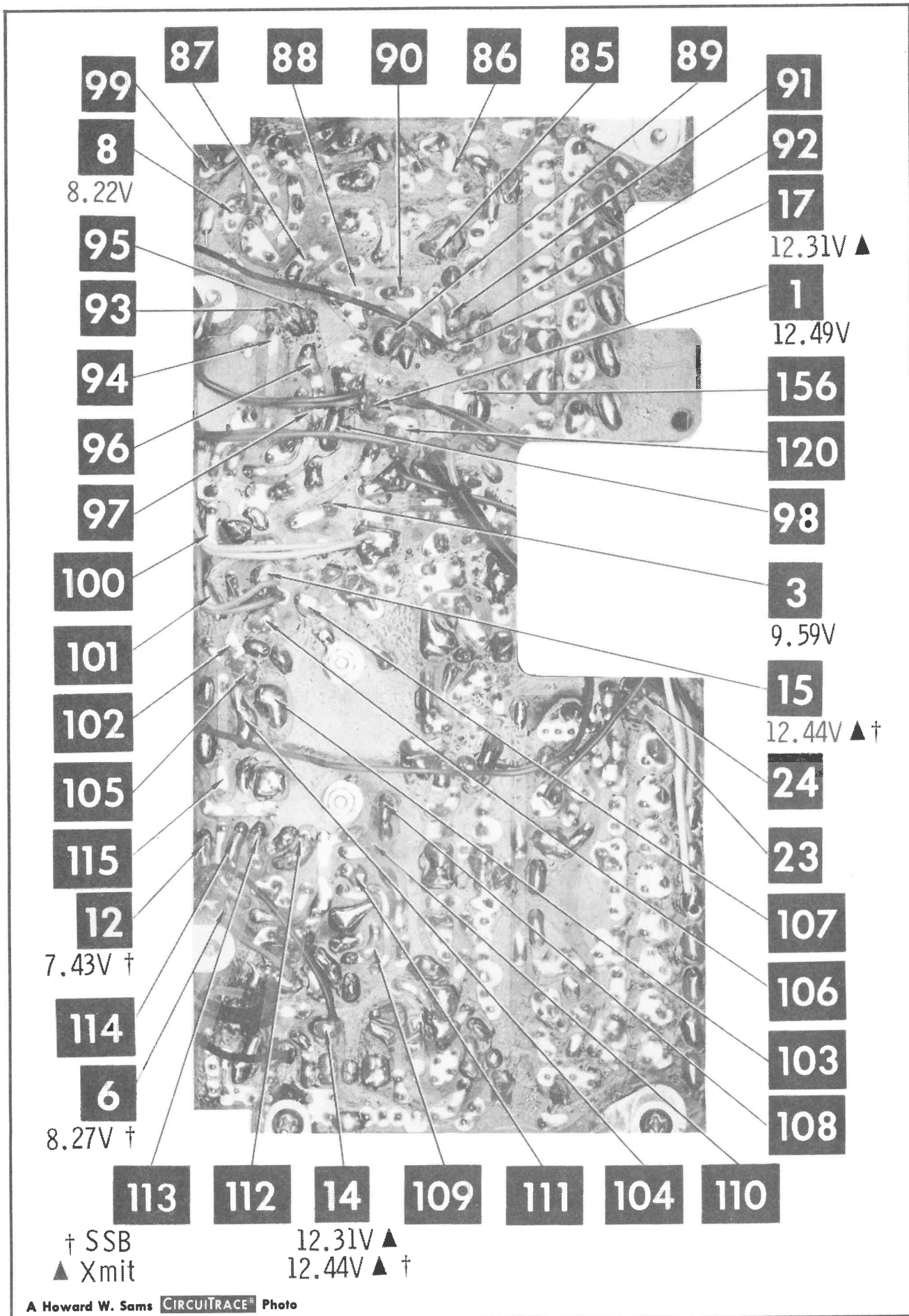


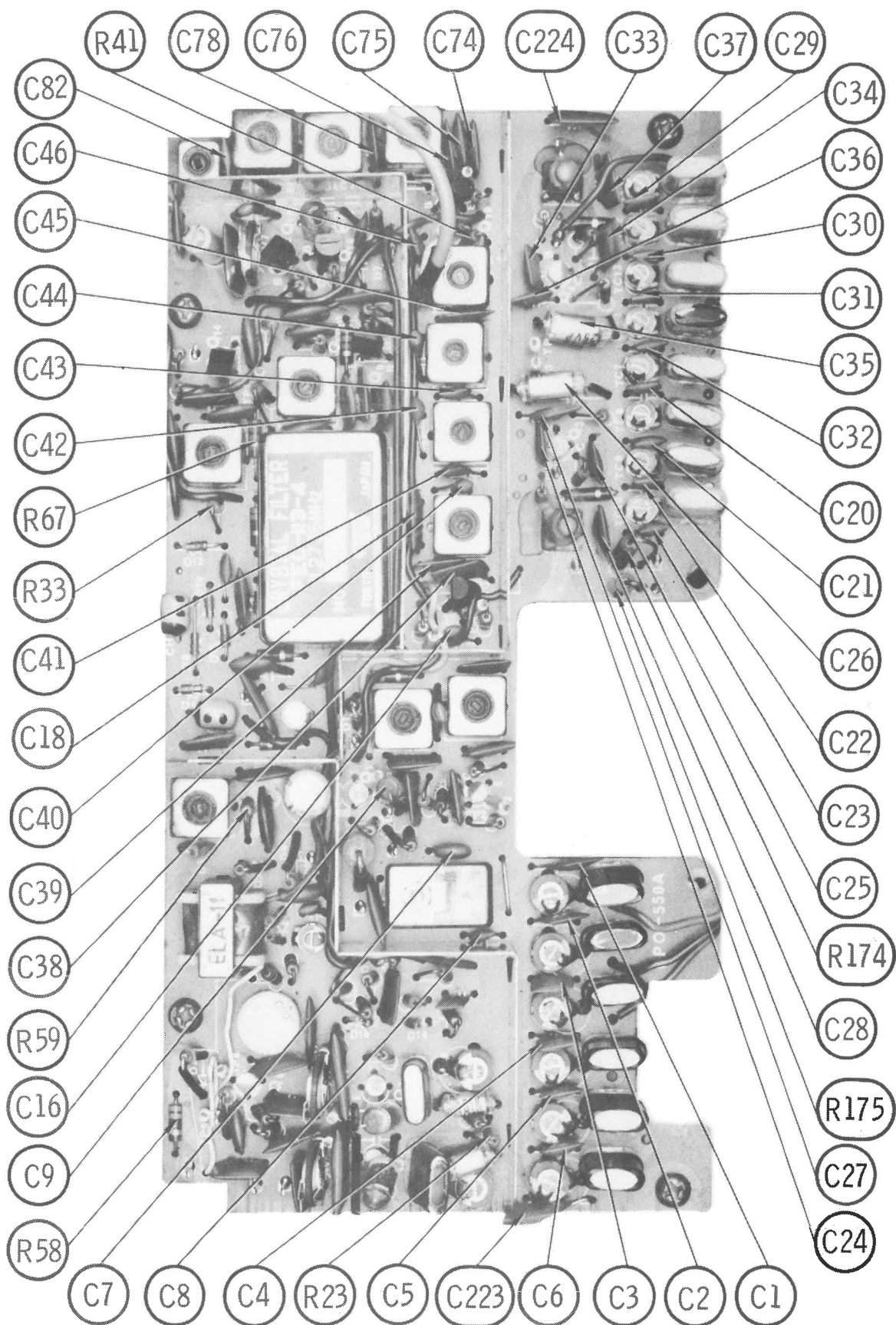


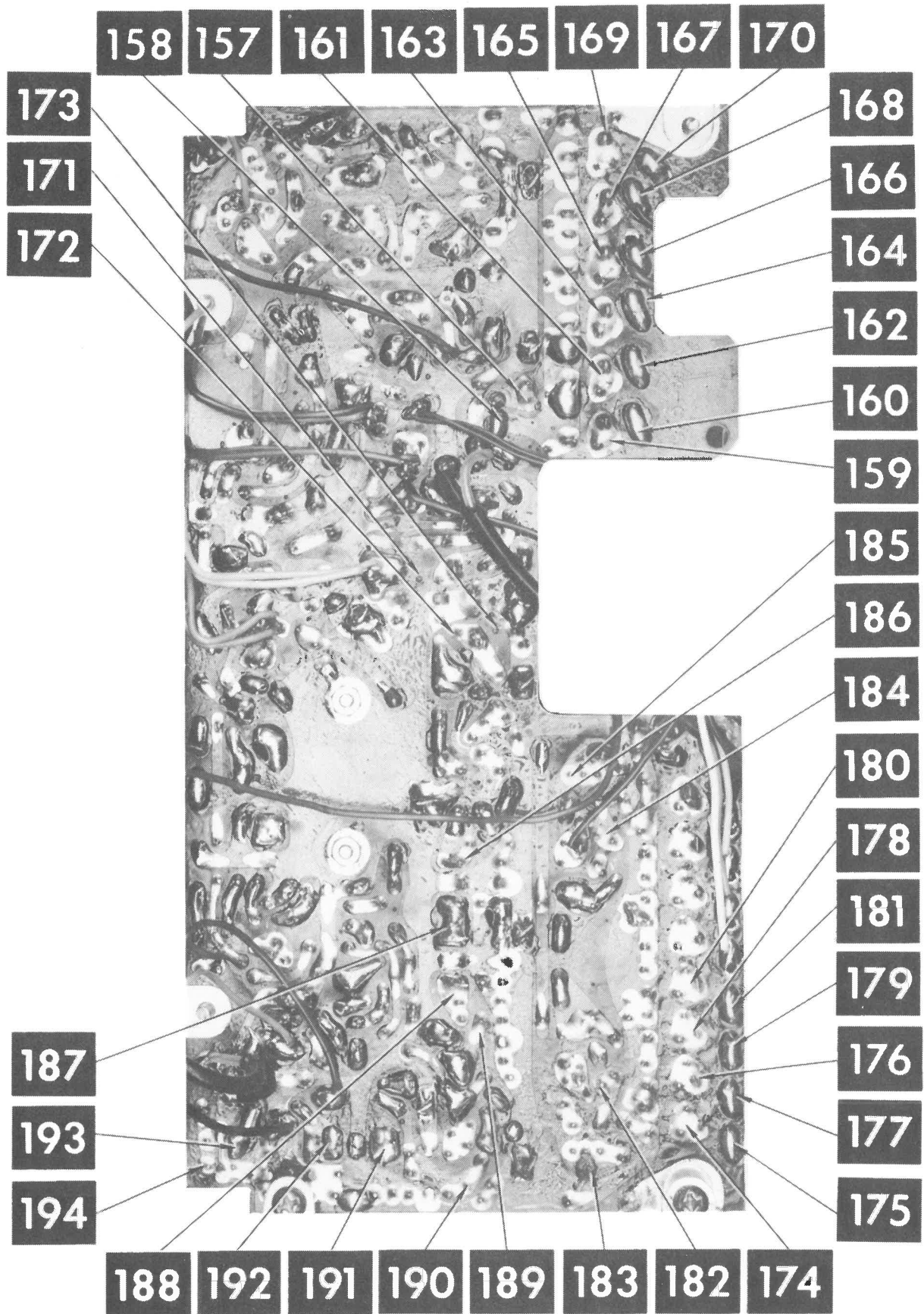




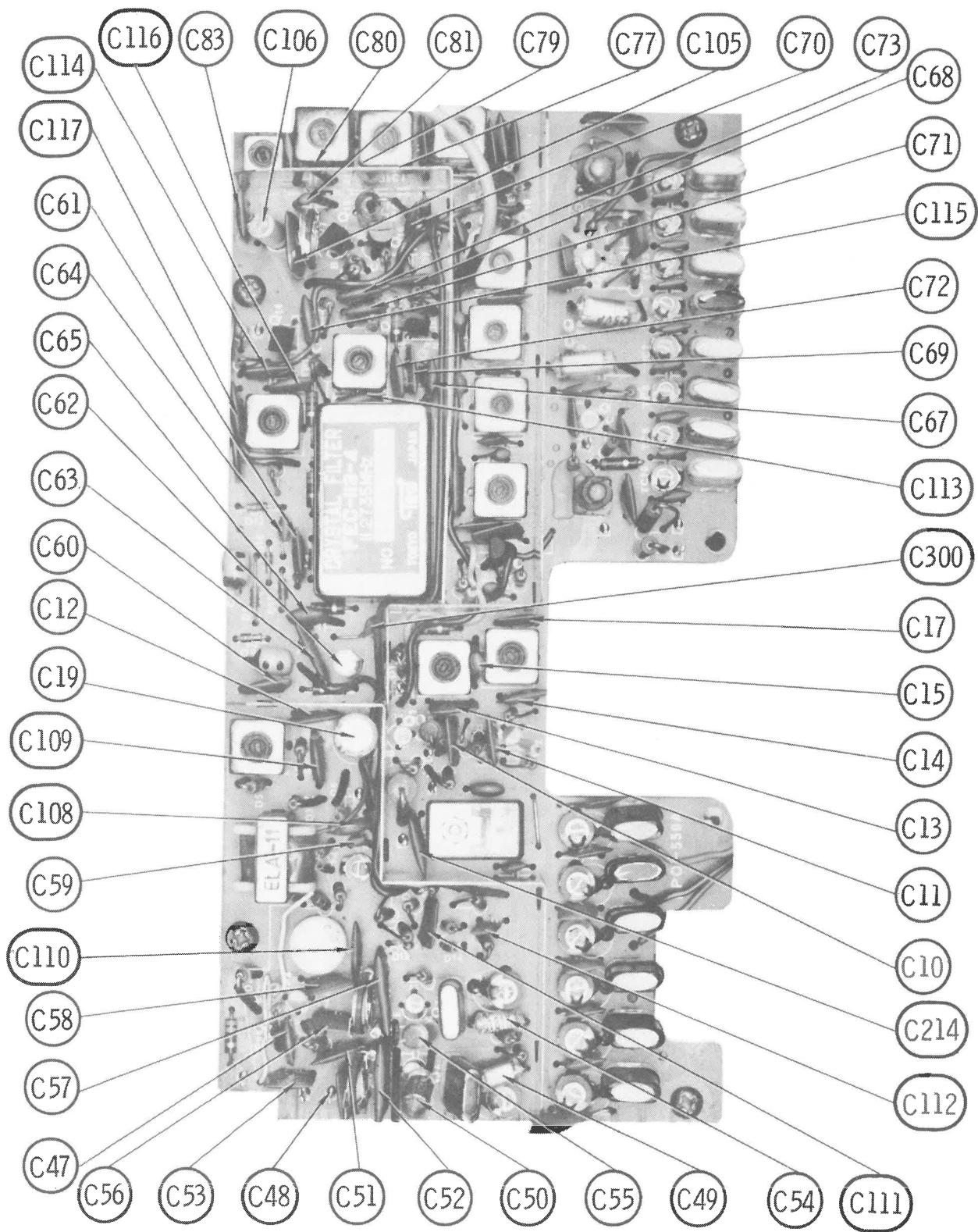


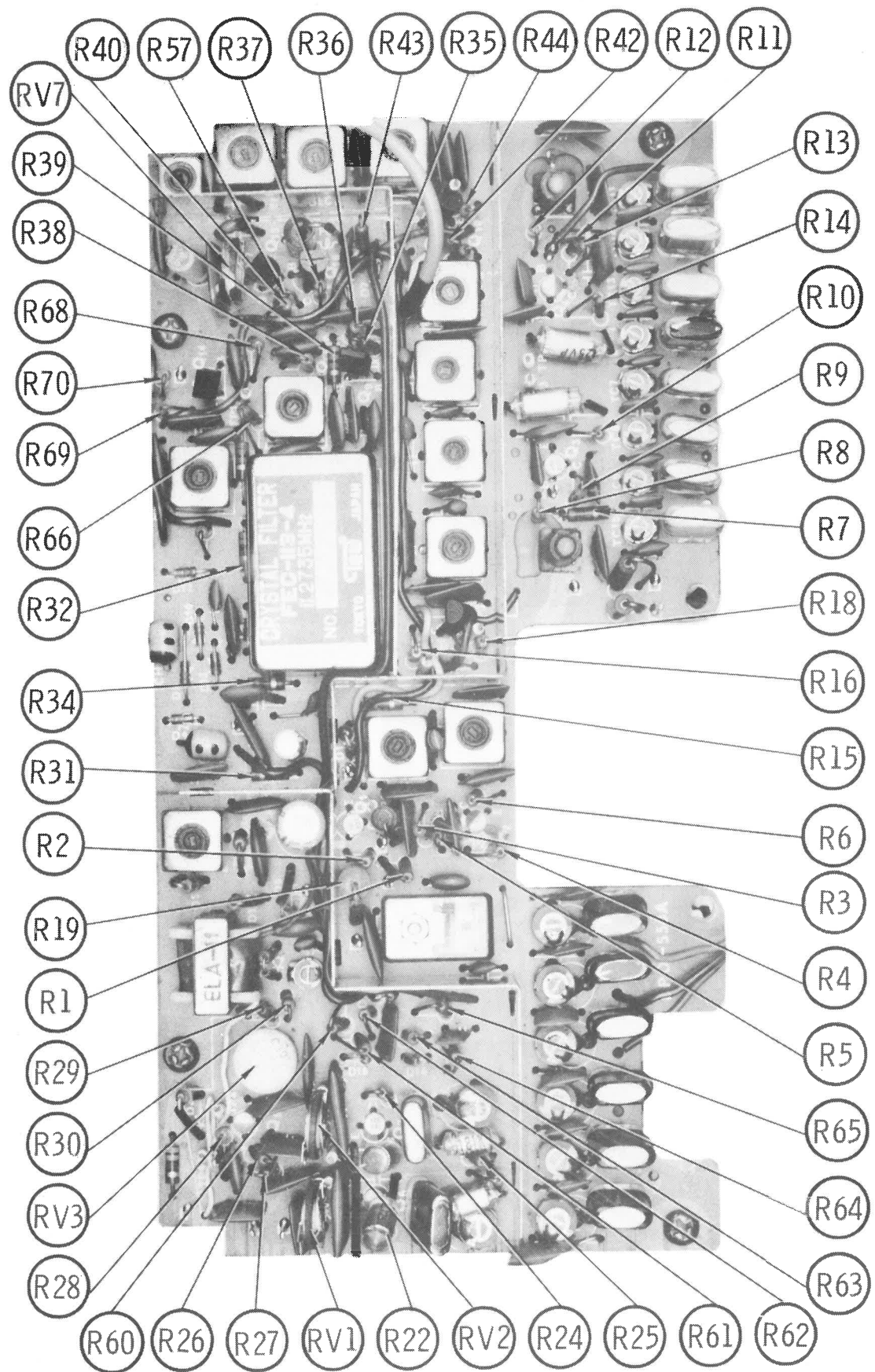


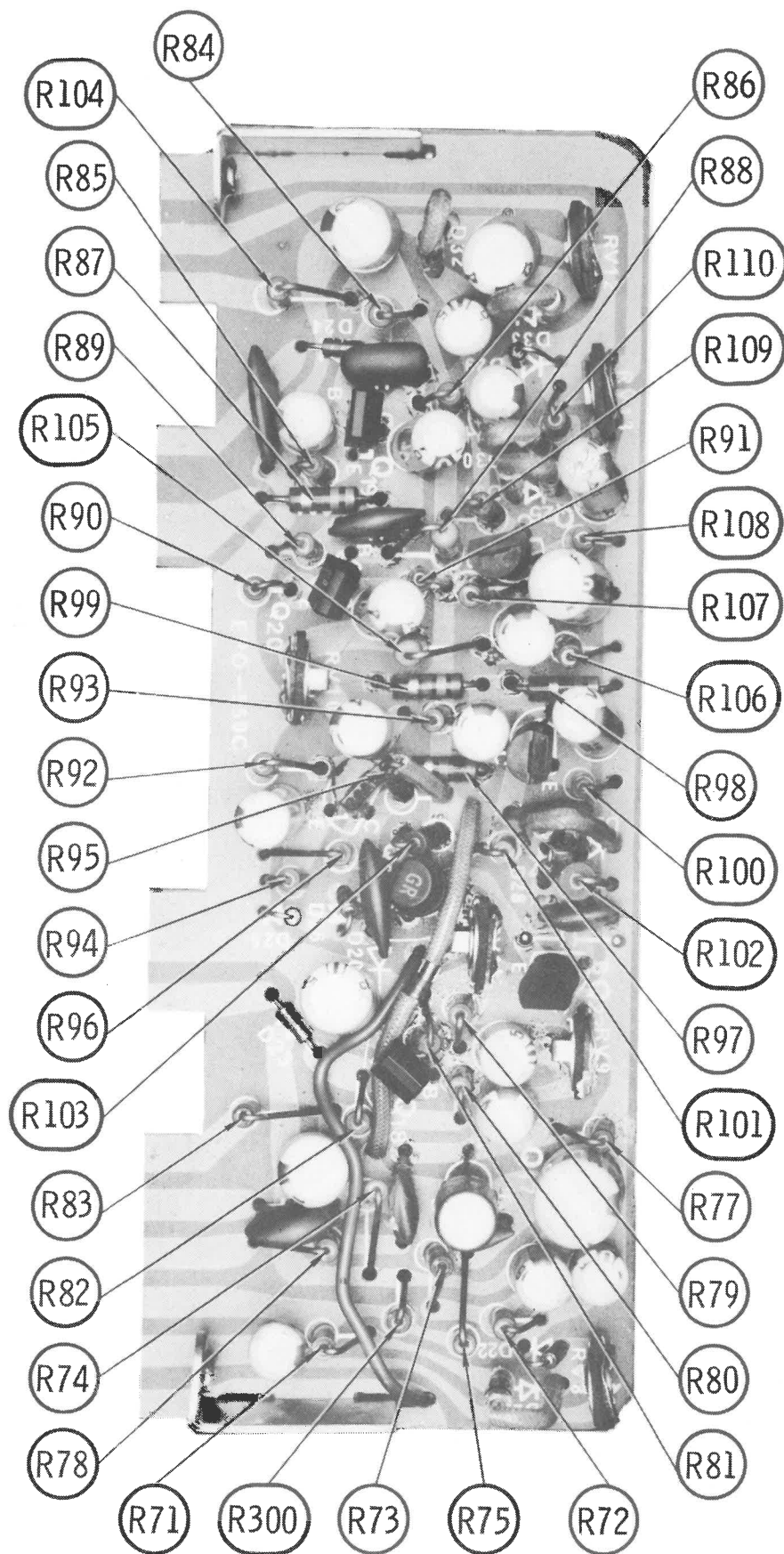




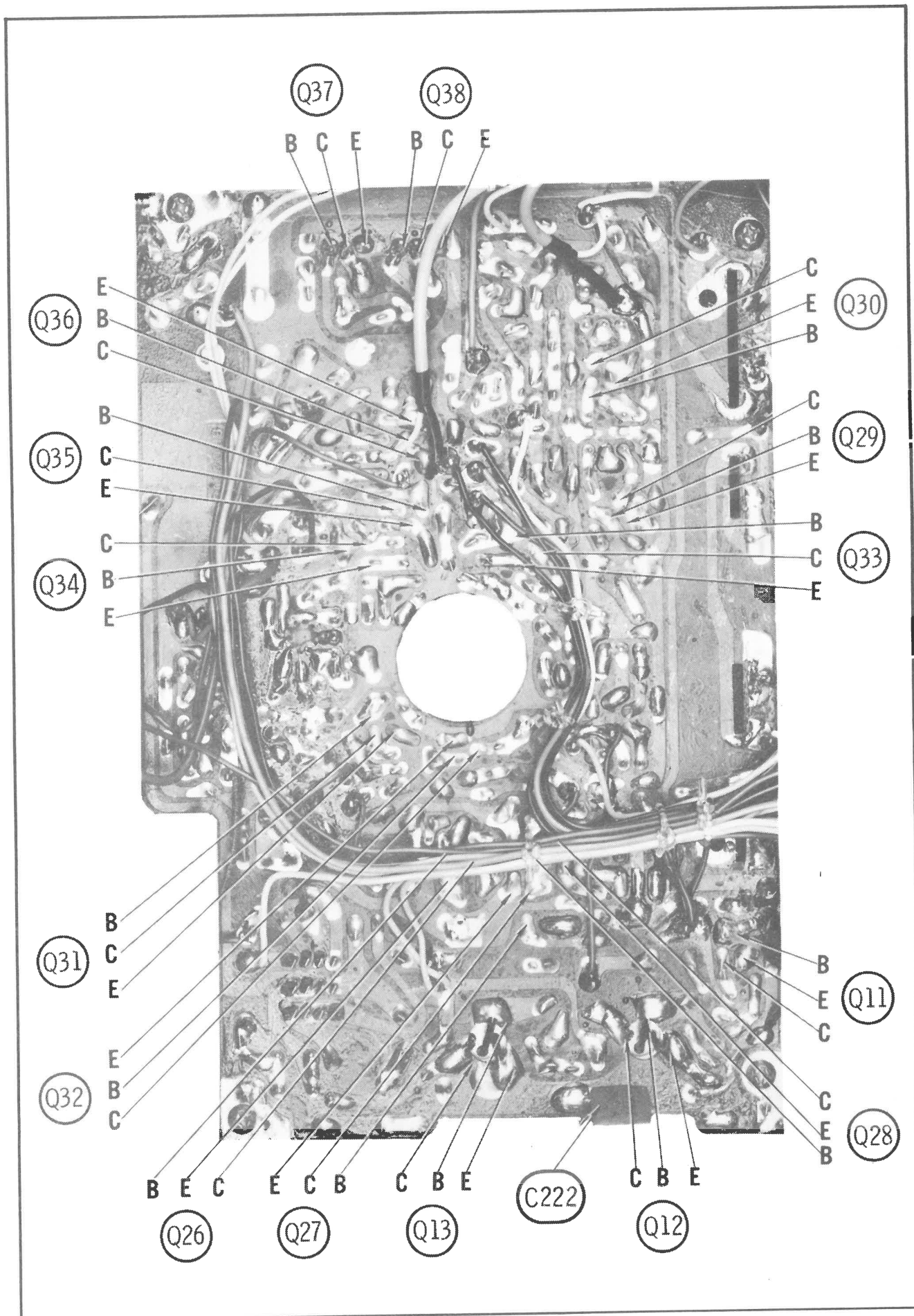
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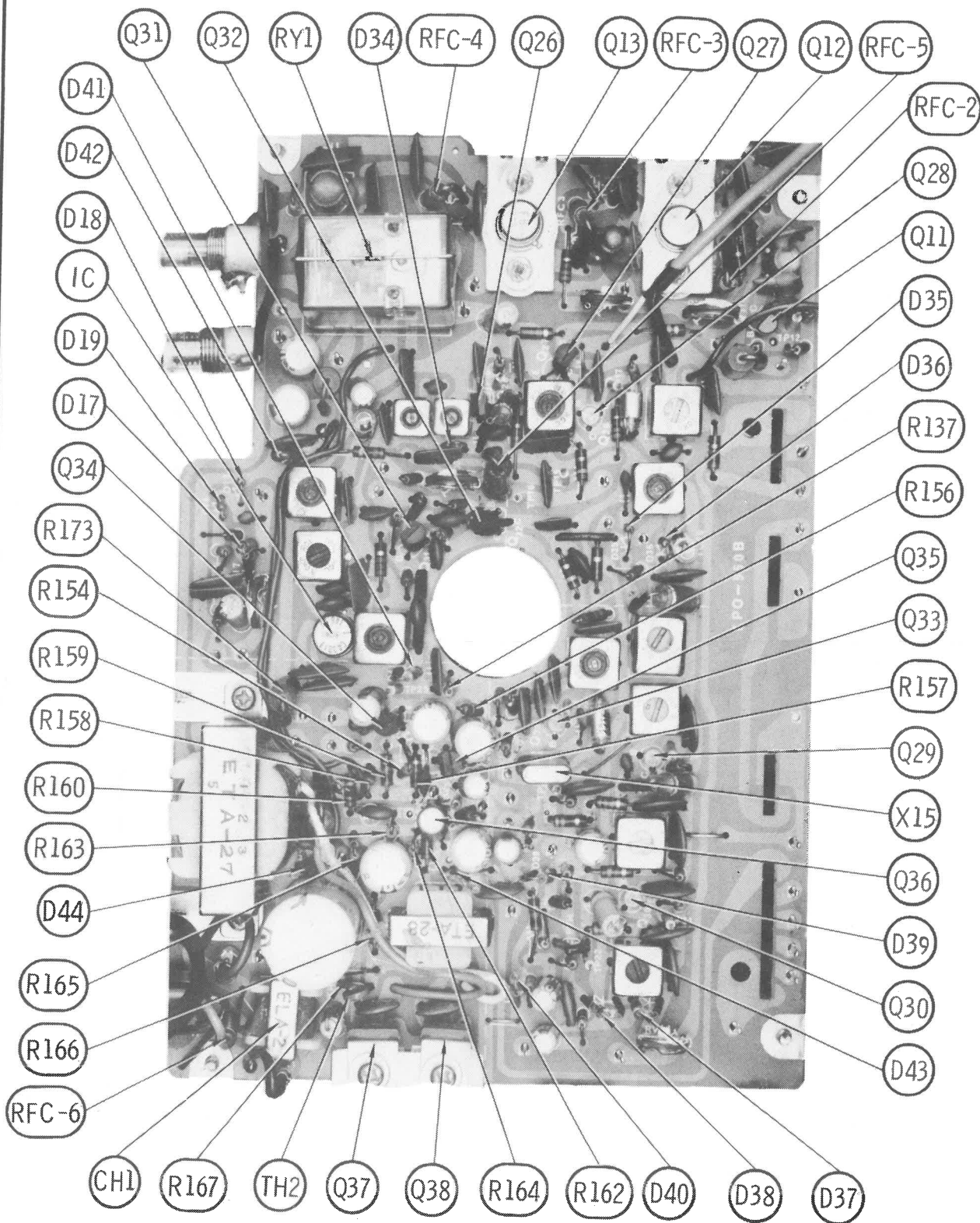




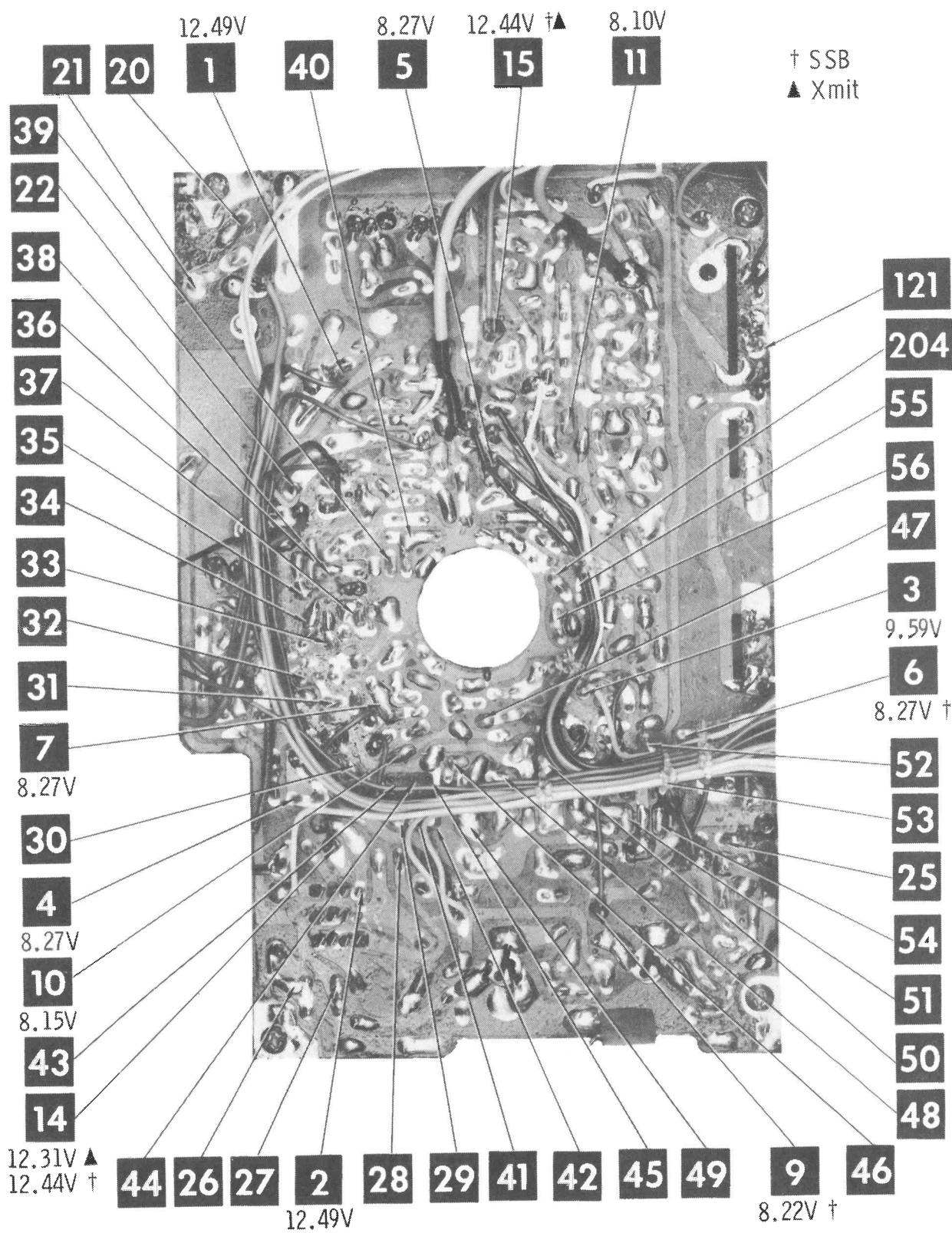


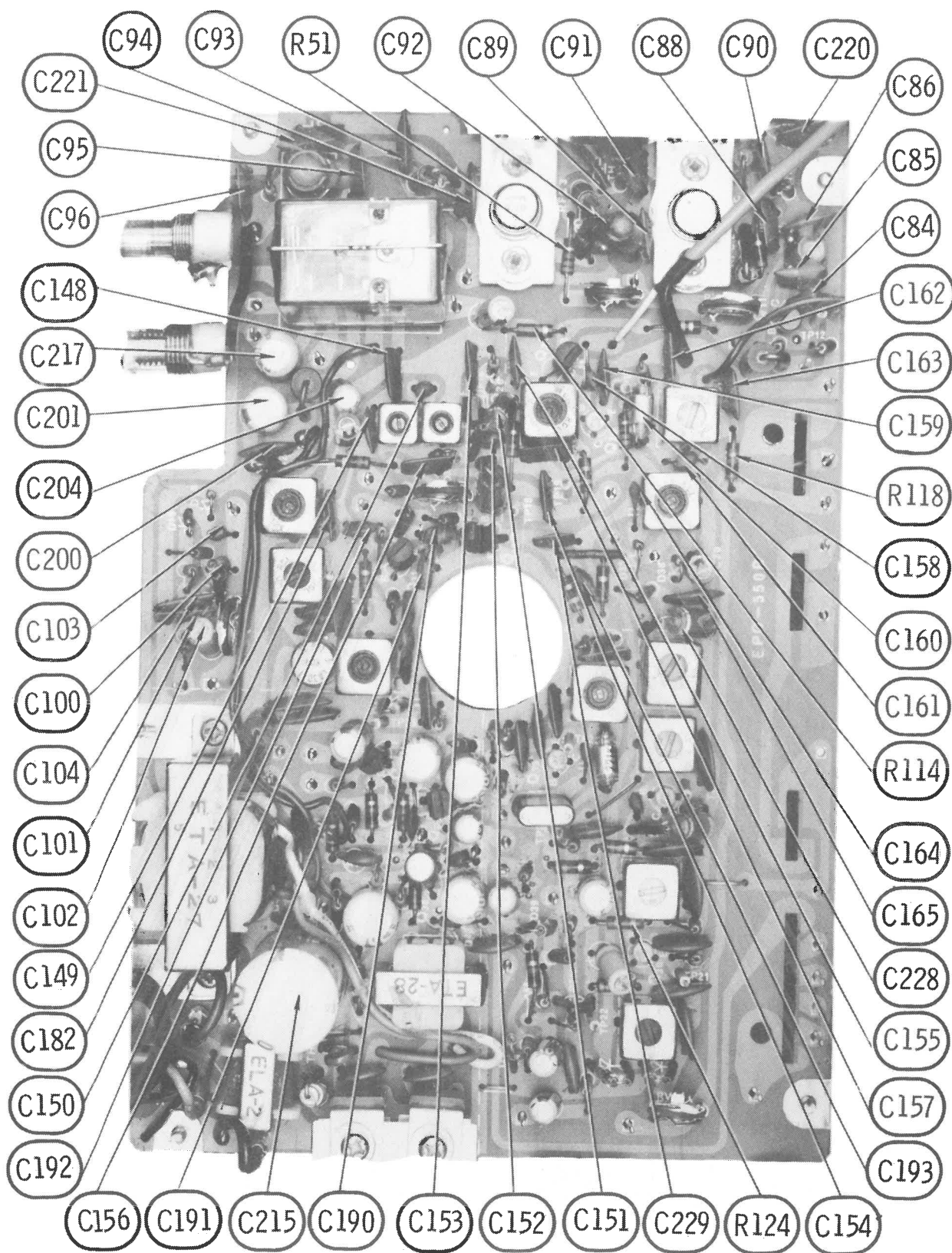
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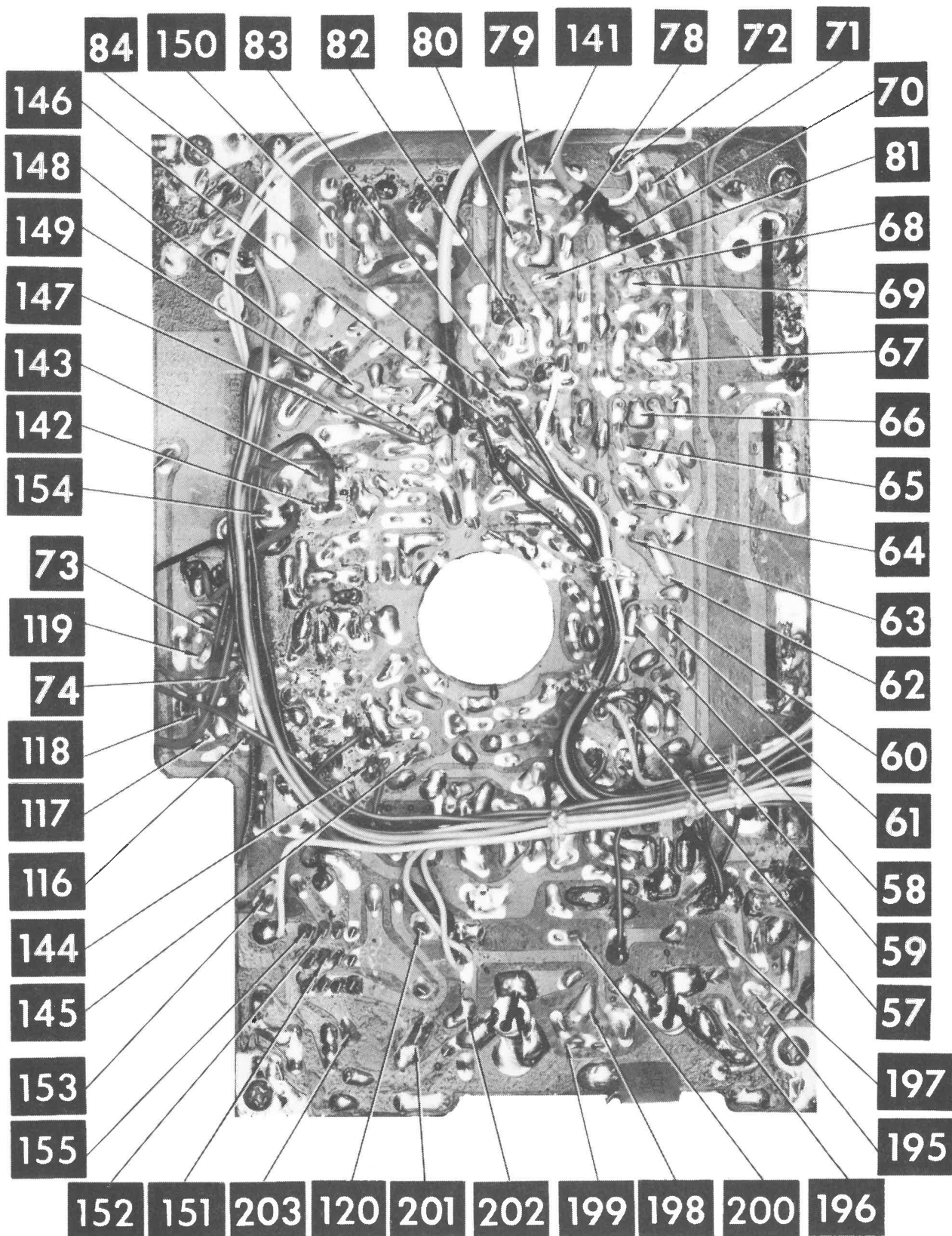


LAFAYETTE MODEL TELSAT SSB-50

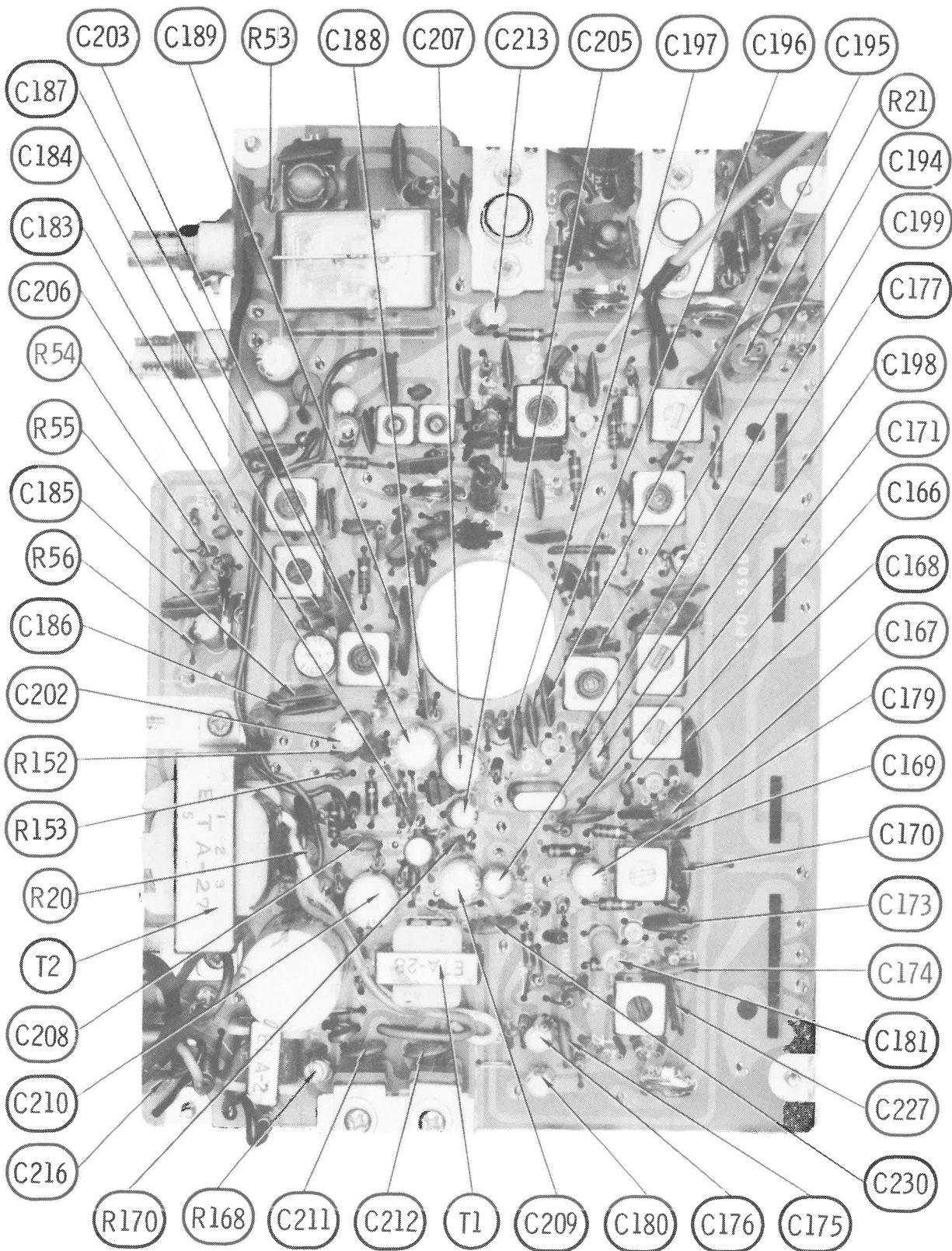




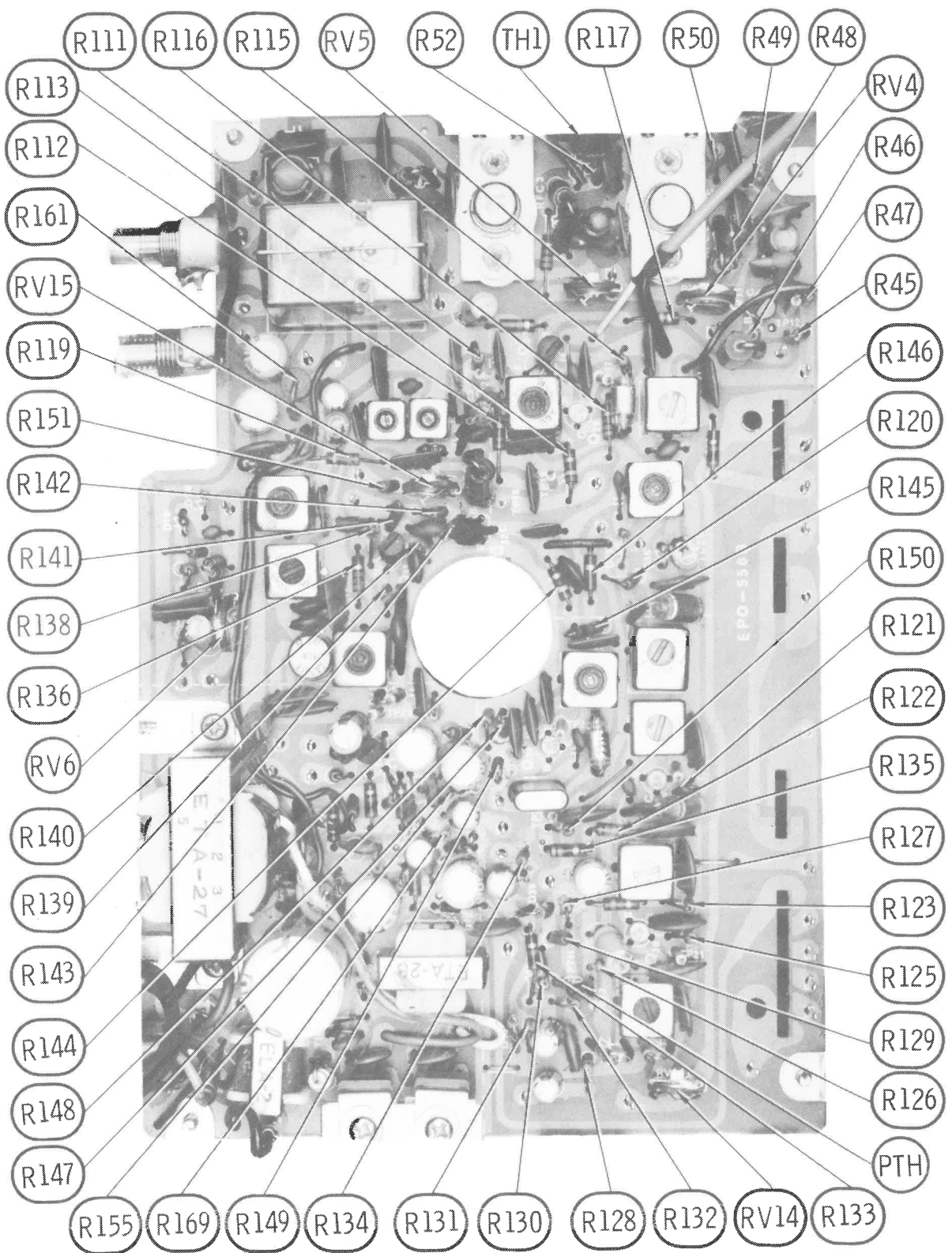
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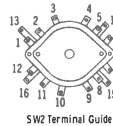
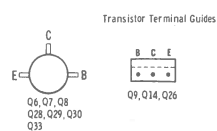
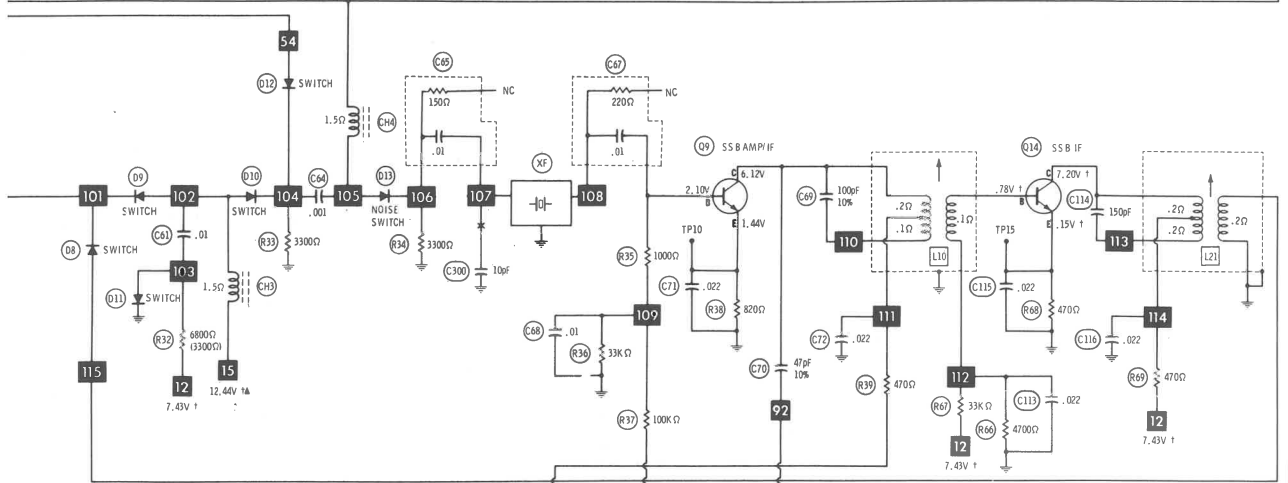
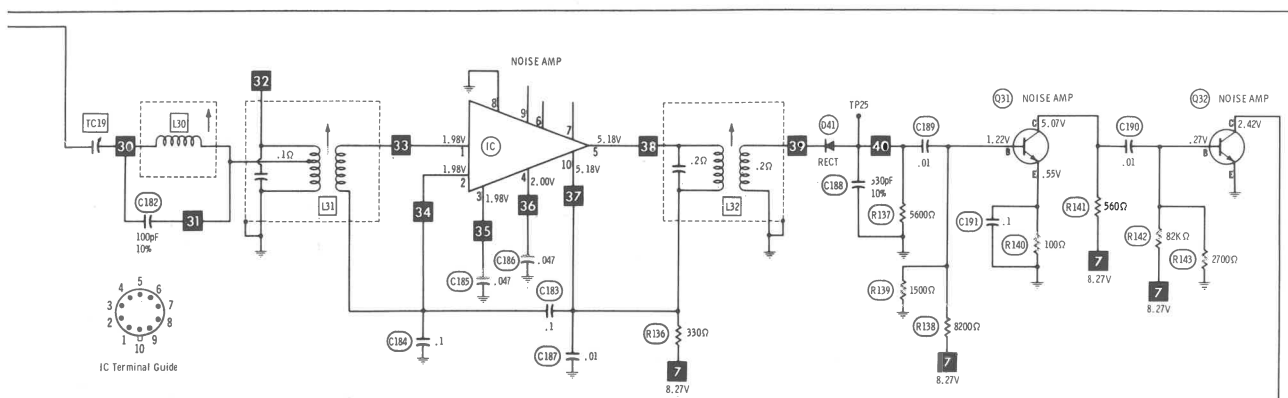
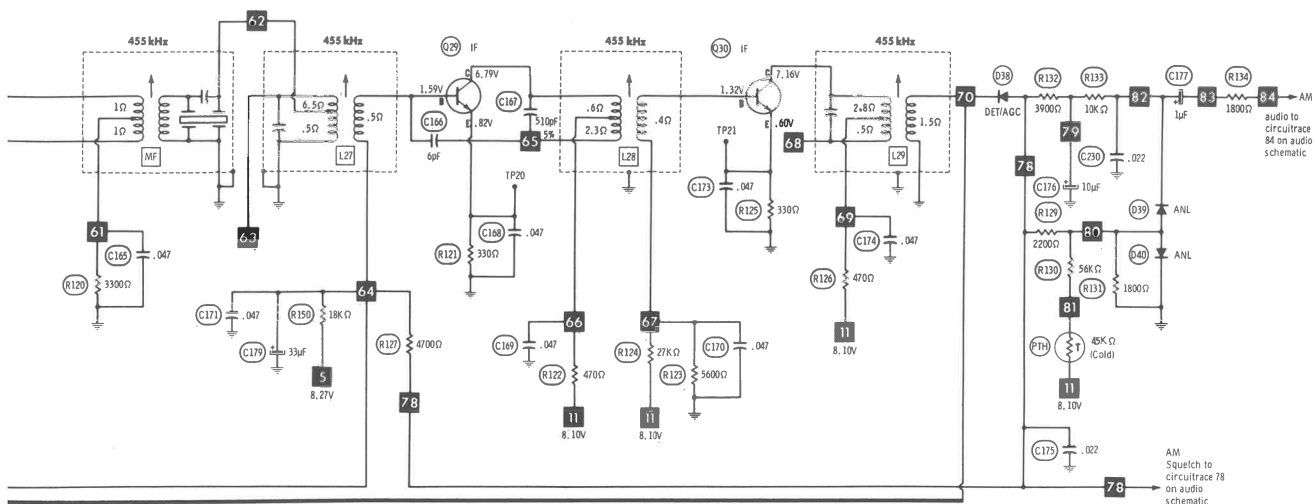


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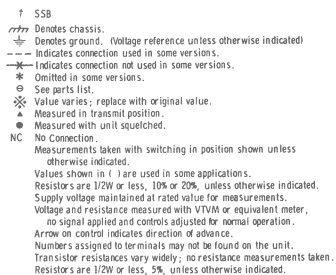


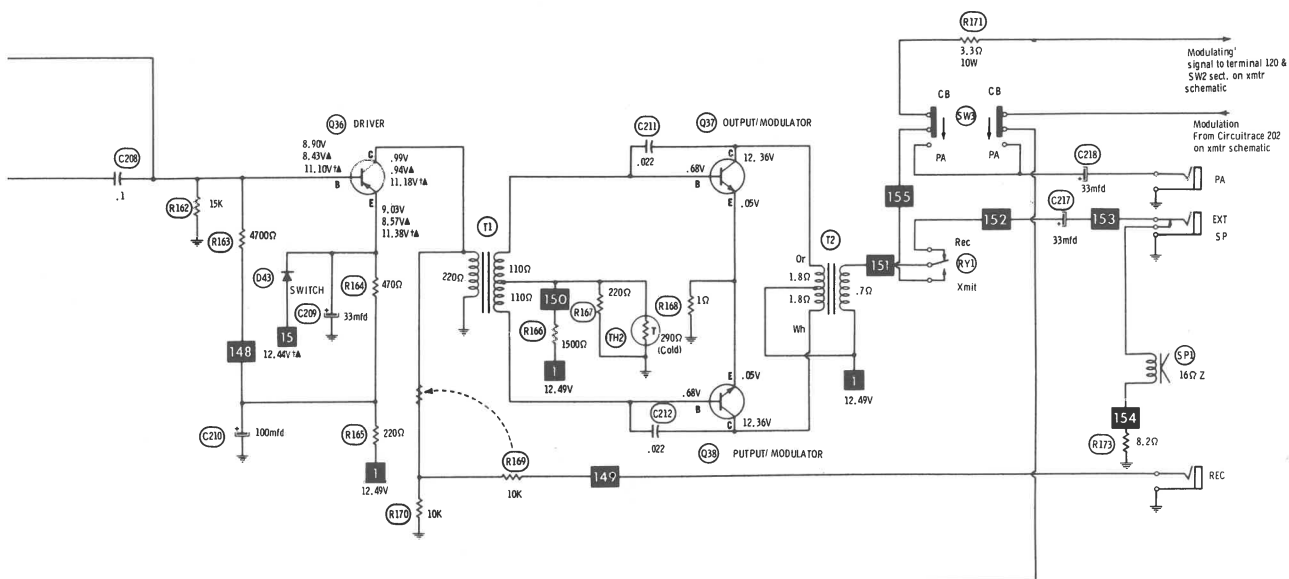
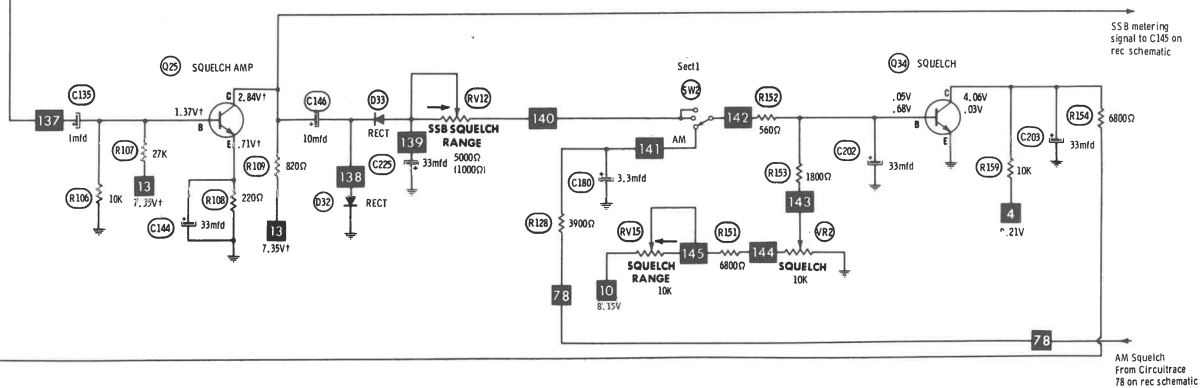
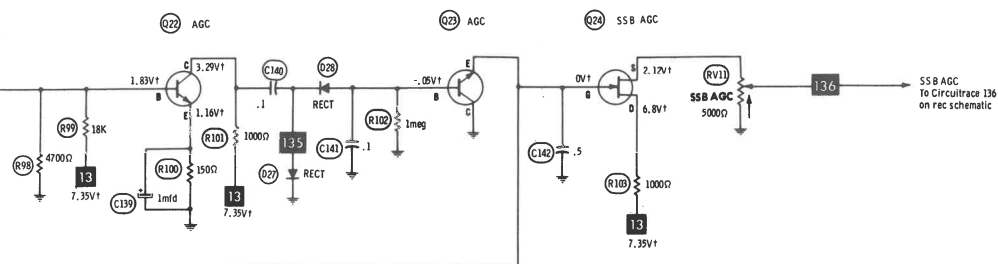
LAFAYETTE MODEL TELSAT SSR-50



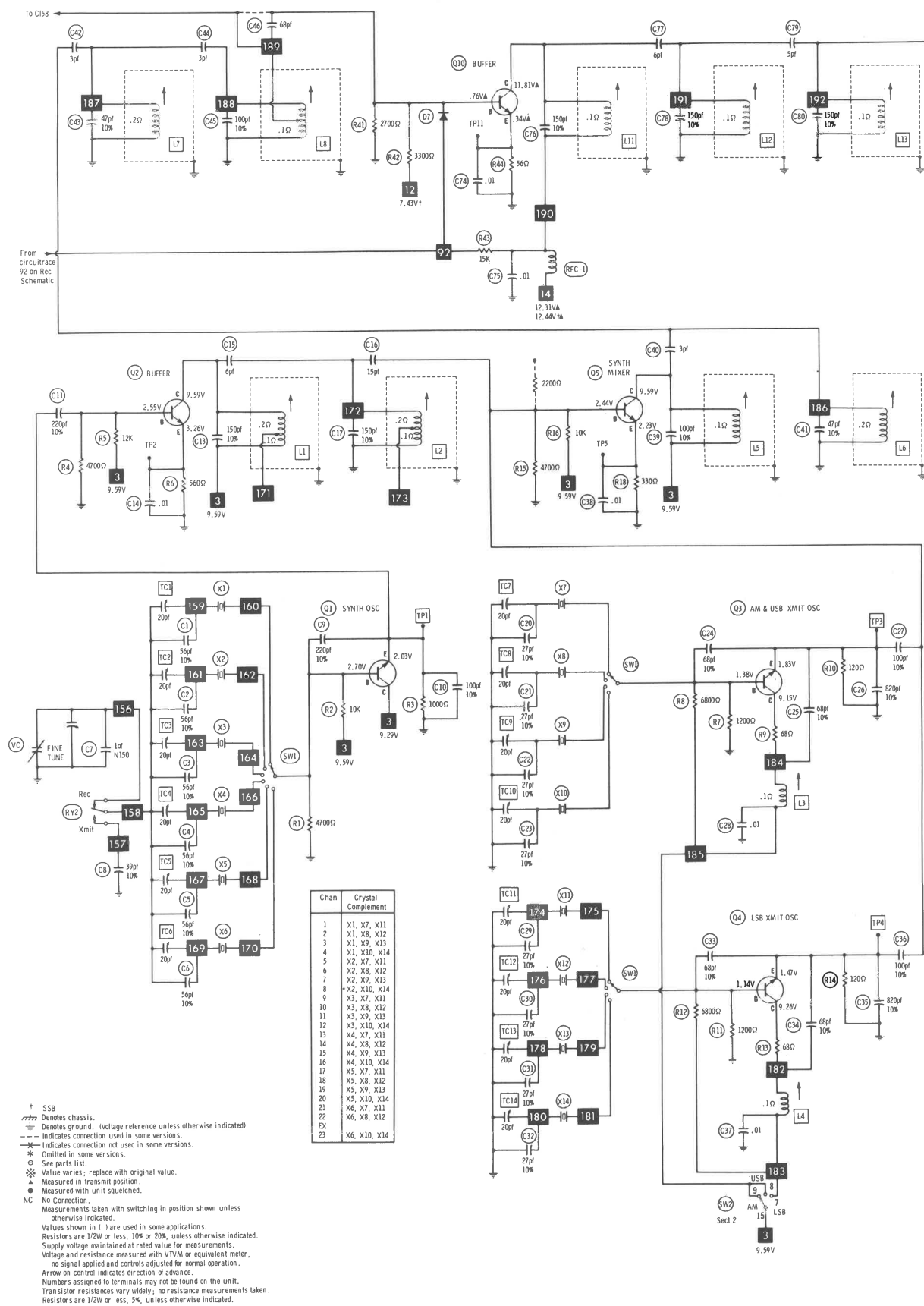


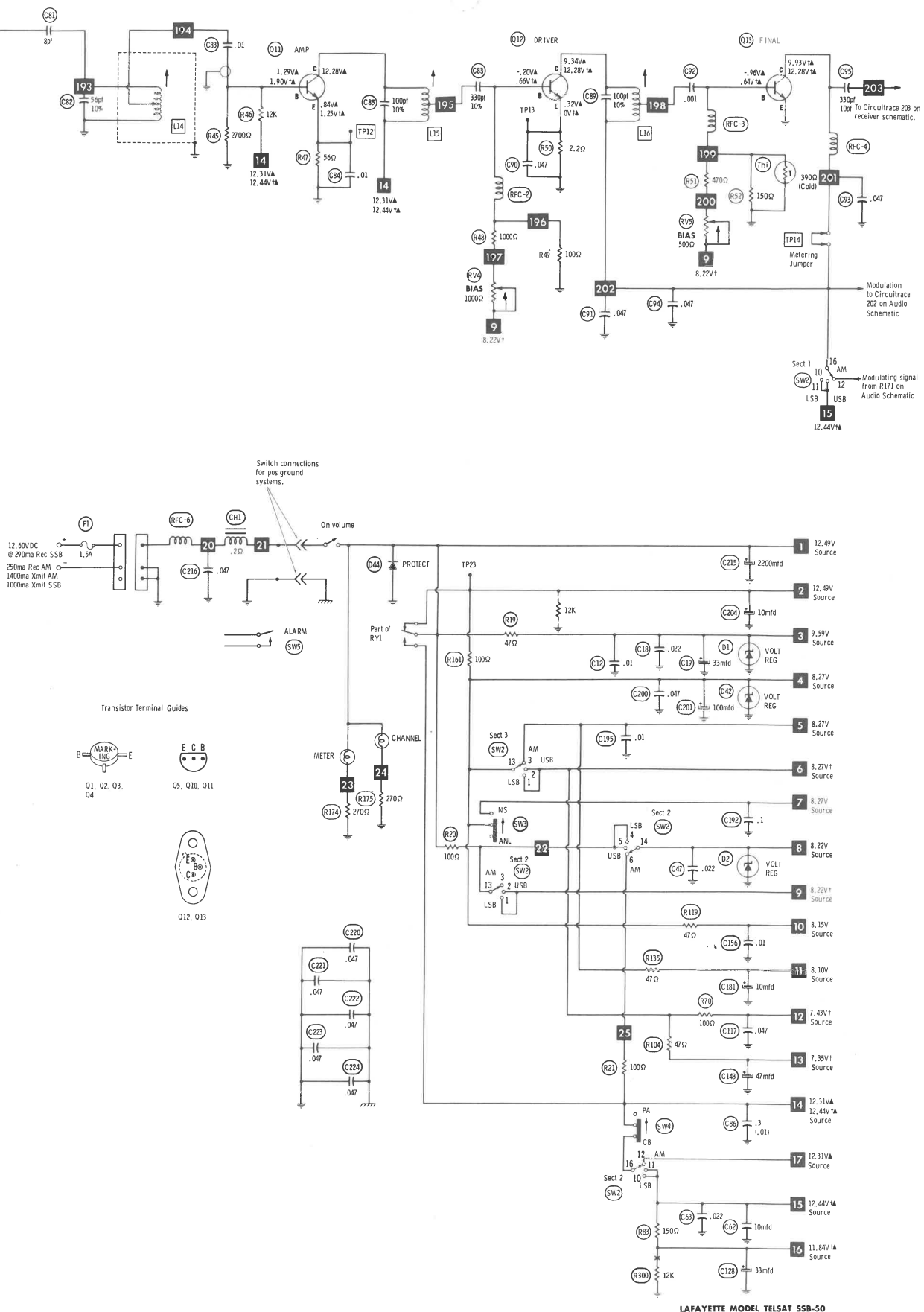
LAFAYETTE MODEL TELSAT SSB-50





LAFAYETTE MODEL TELSAT SSB-50





PARTS LIST AND DESCRIPTION (CONTINUED)

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

SEMICONDUCTORS(cont)

ITEM No.	TYPE / MFG. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
Q32	25C900(F)/2132-17	GE-20	IR-24	PTC139	HEP725	SK3124	RT102	ECG 123A
Q33	25C183(R)/1210-17	GE-20	IRTR-95	PTC136	HEP56	SK3018	RT113	ECG 108
Q34	25C900(F)/2132-17	GE-20	IR-24	PTC139	HEP725	SK3124	RT102	ECG 123A
Q35	25C900(F)/2132-17	GE-20	IR-24	PTC139	HEP725	SK3124	RT102	ECG 123A
Q36	25B77(C)	GE-1	IRTR-85	PTC109	HEP633	SK3004	RT121	ECG 102A
Q37	25C1096	GE-28(7)	IRTR-55(7)	PTC123(7)	HEPS5003(7)	SK3054(7)	RT154(7)	ECG 186(7)
Q38	25C1096 (25C1096(M)/2168-17							

(1) Four required - select matched set.
(7) Two required - select matched pair.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFG. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C19	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C62	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C102	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C106	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C118	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C119	4.7 25V	3090-12	RME-A-G-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C120	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C123	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C124	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C126	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C127	33 10V	3089-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C128	33 10V	3089-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C130	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C131	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C133	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C134	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C135	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C136	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C137	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C139	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C143	47 10V	3235-12	RME-D-D-050	EP15-50	PC50-10	MTV50CB15	EV-1226
C144	33 10V	3089-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C145	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C146	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C147	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C176	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C177	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C179	33 10V	3089-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C180	3.3 25V	3191-12	RME-A-H-003	EP30-5	WBR5-50	VTT3R3A50	EV-1618
C181	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C201	100 10V	3004-12	RME-E-D-100	EP15-100	PC100-10	MTV100CB10	EV-1130
C202	33 10V	3089-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C203	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C204	10 16V	2986-12	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C205	1 50V	3073-12	RME-A-J-001	EP50-2	PC1-50	MTV1CB50	EV-1615
C207	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C209	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C210	100 16V	3078-12	RME-E-E-100	EP15-100	PC100-16	MTV100CD15	EV-1230
C213	3.3 25V	3191-12	RME-A-H-003	EP30-5	WBR5-50	VTT3R3A50	EV-1618
C215	2200 16V	3545-12	ME-G2000	EA15-2000	WBR2000-16	TC1520B	TWA-1175.3
C217	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C218	33 16V	3104-12	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C225	33 10V	3104-12	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125

CAPACITORS

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			ARCO/ELMENC PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	56 N150	10%	3196-12	*		*	10TCP-Q56
C2	56 N150	10%	3196-12	*		*	10TCP-Q56
C3	56 N150	10%	3196-12	*		*	10TCP-Q56
C4	56 N150	10%	3196-12	*		*	10TCP-Q56
C5	56 N150	10%	3196-12	*		*	10TCP-Q56
C6	56 N150	10%	3196-12	*		*	10TCP-Q56
C7	1 N150			*		*	
C8	39 N150	10%		*		*	10TCP-Q39
C9	220 125V	10%	DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C10	100 N150	10%	*			*	10TCP-T10
C11	220 10%		CCD-221	DD-221	GP220	GP322	10TS-T22
C12	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C13	150 N150	10%	3539-12	*		*	10TCP-T15
C14	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C15	6 N150		*			*	10TCP-V68
C16	15 N150		*			*	10TCP-Q15
C17	150 N150	10%	3539-12	*		*	10TCP-T15
C18	.022		3360-12	*		*	10TSS-S20
C20	27 N150	10%		*		*	10TCP-Q27
C21	27 N150	10%		*		*	10TCP-Q27
C22	27 N150	10%		*		*	10TCP-Q27
C23	27 N150	10%		*		*	10TCP-Q27
C24	68 N150	10%	2995-12	*		*	10TCP-Q68
C25	68 N150	10%	2995-12	*		*	10TCP-Q68
C26	820 125V	10%	DM-19-821		CD19F821J500	SX382	MS-382
C27	100 10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C28	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C29	27 N150	10%	*			*	10TCP-Q27
C30	27 N150	10%	*			*	10TCP-Q27

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING			MFG. PART No.	REPLACEMENT DATA				
					ARCO/ELMENDO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C31	27	N150	10%		*			*	10TCP-Q27
C32	27	N150	10%		*			*	10TCP-Q27
C33	68	N150	10%		*			*	10TCP-Q68
C34	68	N150	10%		*			*	10TCP-Q68
C35	820	125V	10%		DM-19-821		CD19F821J500	SX382	MS-382
C36	100		10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C37	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C38	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C39	100	N150	10%		*			*	10TCP-T10
C40	3	N150		3542-12	*			*	10TCP-V30
C41	47	N150	10%	3061-12	*			*	10TCP-Q47
C42	3	N150	10%		*			*	10TCP-V30
C43	47	N150	10%	3061-12	*			*	10TCP-Q47
C44	3	N150			*			*	10TCP-V30
C45	100	N150	10%		*			*	10TCP-T10
C46	68		10%			DTZ-68		CN0468	10TCC-Q68
C47	.022			3360-12					10TSS-S20
C48	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C49	180	125V	10%		DM-19-181J	CPR-180J	CD15FD181J03	SX318	424ME1800J501
C50	510	125V	10%		DM-19-511J	CPR-510J	CD15FD511J03	SX351	424ME5100J501
C51	150	N150	10%		*			*	10TCP-T15
C52	220	N150	10%		*			*	10TCP-T22
C53	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C54	180	125V	10%		DM-19-181J	CPR-180J	CD15FD181J03	SX318	424ME1800J501
C55	510	125V	10%		DM-19-511J	CPR-510J	CD15FD511J03	SX351	424ME5100J501
C56	150	N150	10%		*			*	10TCP-T15
C57	220	N150	10%		*			*	10TCP-T22
C58	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C59	6	N150			*			*	10TCP-V68
C60	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C61	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C63	.022			3360-12					10TSS-S20
C64	.001				CCD-102	DD-102	GP1000	GP210	10TS-D10
C65	.001				CCD-102	DD-102	GP1000	GP210	10TS-D10
C67	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C68	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C69	100	N150	10%		*			*	10TCP-T10
C70	47	N150	10%		*			*	10TCP-Q47
C71	.022			3360-12					10TSS-S20
C72	.022			3360-12					10TSS-S20
C73	.022			3360-12					10TSS-S20
C74	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C75	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C76	150	N150	10%		*			*	10TCP-T15
C77	6	N150			*			*	10TCP-V68
C78	150	N150	10%		*			*	10TCP-T15
C79	5	N150			*			*	10TCP-V50
C80	150		10%						
C81	8	N150		3530-12	*			*	10TCP-V82
C82	56	N150	10%		*			*	10TCP-Q56
C83	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C84	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C85	100	N150	10%		*			*	10TCP-T10
C86	.3	12V							
C88	330		10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C89	100	N150	10%		*			*	10TCP-T10
C90	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C91	.047	25V			CCD-503	CK-503	MGP05	TA150	TG-S50
C92	.001				CCD-102	DD-102	GP1000	GP210	10TS-D10
C93	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C94	.047	25V			CCD-503	CK-503	MGP05	TA150	TG-S50
C95	330		10%		CCD-331	DD-331	GP330	GP333	10TS-T33
C96	270		10%		CCD-270	DD-271	GP270	GP327	10TS-T27
C97	22					DTZ-25		CN0425	10TCC-Q25
C99	15				CCT0-150	DTZ-15	NP015	CN0415	10TCC-Q15
C100	2					DTZ-2R2	NP02P2	CN0522	10TCC-V22
C101	.022			3360-12	*			*	10TSS-S20
C103	3	N150			*			*	10TCP-V30
C104	.022			3360-12					10TSS-S20
C105	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C107	.047	25V			CCD-503	CK-503	MGP05	TA150	TG-S50
C108	.2	12V		3543-12					
C109	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C110	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C111	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C112	.001				CCD-102	DD-102	GP1000	GP210	10TS-D10
C113	.022			3360-12	*			*	10TSS-S20
C114	150	N150	10%						10TCP-T15
C115	.022			3360-12					10TSS-S20
C116	.022			3360-12					10TSS-S20
C117	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C121	.2	12V							
C122	.0022				CCD-222	DD-222	GP2200	GP222	10TS-D22
C125	.1	12V			CCD-222	CK-104		TA010	TG-P10
C129	.0022				CCD-222	DD-222	GP2200	GP222	10TS-D22
C132	.2	12V							
C138	.047				CCD-503	CK-503	MGP05	TA150	TG-S50
C140	.1	12V				CK-104		TA010	TG-P10
C141	.1	12V				CK-104		TA010	TG-P10
C142	.5	12V		3544-12					
C148	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C149	100		10%		CCD-101	DD-101	GP100	GP310	10TS-T10
C150	2					DTZ-2R2	NP02P2	CN0522	10TCC-V22
C151	220	125V	10%		DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C152	5						NP05		10TCC-V50
C153	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C154	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C155	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C156	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10
C157	.01				CCD-103	DD-103	GP10000	JF110	10TS-S10

LAFAYETTE MODEL TELSAT SSB-50

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C158	27		CCT0-270		NP027	CN0427	10TCC-Q27
C159	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C161	5				NP05		10TCC-V50
C162	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C163	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C164	15		CCT0-150	DTZ-15	NP015	CN0415	10TCC-Q15
C165	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C166	6			DTZ-6R8	NP06P8	CN0568	10TCC-V68
C167	570	125V 5%					MS-36
C168	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C169	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C170	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C171	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C173	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C174	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C175	.022	25V					10TSS-S20
C178	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C182	100	N150 10%	*			*	10TCP-T10
C183	.1	12V		CK-104		TA010	TG-P10
C184	.1	12V		CK-104		TA010	TG-P10
C185	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C186	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C187	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C188	330	10%	CCD-331	DD-331	GP330	GP333	10TS-T33
C189	.01	25V	CCD-103	CK-103	MGP01	TA110	TG-S10
C190	.01	25V	CCD-103	CK-103	MGP01	TA110	TG-S10
C191	.1	12V		CK-104		TA010	TG-P10
C192	.1	12V		CK-104		TA010	TG-P10
C193	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C194	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C195	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C196	.01		CCD-103	DD-103	GP10000	JF110	10TS-S10
C197	270	10%	CCD-270	DD-271	GP270	GP327	10TS-T27
C198	220	125V 10%	DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C199	39					CN0439	10TCC-Q39
C200	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C206	.0022		CCD-222	DD-222	GP2200	GP222	10TS-D22
C208	.1	12V		CK-104		TA010	TG-P10
C211	.022	25V					10TSS-S20
C212	.022	25V					10TSS-S20
C214	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C216	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C219	.001		CCD-102	DD-102	GP1000	GP210	10TS-D10
C220	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C221	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C222	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C223	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C224	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C227	.047	25V	CCD-503	CK-503	MGP05	TA150	TG-S50
C228	.001	125V 10%	DM-19-102J	CPR-1000J	CD19F102J500	SX210	424ME1001J501
C229	180	10%	CCD-181	DD-181	GP180	GP318	10TS-T18
C230	.002		CCD-202	DD-202	GP2000	GP220	10TS-D20
C300	10		CCT0-100	DTZ-10	NP010	CN0410	10TCC-Q10
TC1	20	3547-12					
TC2	20	3547-12					
TC3	20	3547-12					
TC4	20	3547-12					
TC5	20	3547-12					
TC6	20	3547-12					
TC7	20	3548-12					
TC8	20	3548-12					
TC9	20	3548-12					
TC10	20	3548-12					
TC11	20	3548-12					
TC12	20	3548-12					
TC13	20	3548-12					
TC14	20	3548-12					
TC15	50	3549-12					
TC16	50	3549-12					
TC17	20						
TC18	20	2930-12					
TC19	20						
TC20	20						
VC1		3527-12					

* 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				
			MFG. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
RV1	USB	1000		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
RV2	LSB	1000		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
RV3	Balance	300		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R251B (1)	MTC32L1 (1)
RV4	Bias	1000		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
RV5	Bias	500		TSV-500 (1) or T-500 (1)	C-501 (1)	X201R501B (1)	MTC52L1 (1)
RV6	RF Meter	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
RV7	ALC	2000		TSV-25K (1) or T-2500 (1)	C-252 (1)	X201R252B (1)	MTC23L1 (1)
RV8	AM Modulation	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
RV9	SSB Mic Gain	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS—IRC PART No.	MALLORY PART No.
RV10	SSB AGC Gain	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
RV11	SSB AGC	5K		TSV-5K (1) or T-5000 (1)	C-502 (1)	X201R502B (1)	MTC53L1 (1)
RV12	Squelch Range	5000		TSV-5K (1) or T-5000 (1)	C-502 (1)	X201R502B (1)	MTC53L1 (1)
	Squelch Range	1000 (2)		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
RV13	556 Deter	1000		TSV-1K (1) or T-1000 (1)	C-102 (1)	X201R102B (1)	MTC13L1 (1)
RV14	"S" Meter	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
	"S" Meter	5000 (2)		TSV-5K (1) or T-5000 (1)	C-502 (1)	X201R502B (1)	MTC53L1 (1)
RV15	AM Squelch Range	10K		TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
VR1	Volume/Switch	10K	1608-11 (B8BL15A14)				
VR2	Squelch	10K	1609-11 (B8AL15C14)				

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

(2) Used in some versions.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.			WORKMAN PART No.	MFGR. PART No.
PTH	45K			R173	8.2, 1W, (Carbon)		2572-13
R50	2.2, 1/2W, (Carbon)			TH1	390 (Cold)		
R168	1, 1W	WS1.0	2473-13	TH2	290 (Cold)		
R171	3.3, 10W WW	10W-SQ3	2595-13				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
CH3	Peaking (100uh)	2490-23 (ELR-45)	19-2024	74F104A1	T866
C44	Peaking (100uh)	2490-23 (ELR-45)	19-2024	74F104A1	T866
L1	Synth. Buffer	2491-23 (ETR-136)			
L2	Synth. Buffer	2491-23 (ETR-136)			
L3	AM/USB Osc	2219-23 (ETR-20)			
L4	LSB Osc	2219-23 (ETR-20)			
L5	Synth. Mixer	2220-23 (ETR-24)			
L6	Synth. Mixer	2221-23 (ETR-25)			
L7	Synth. Mixer	2221-23 (ETR-25)			
L8	Synth. Mixer	2222-23 (ETR-26)			
L9	Balanced Mixer	2492-23 (ETR-137)			
L10	SSB Amp/IF	2493-23 (ETI-65)			
L11	Synth. Buffer	2220-23 (ETR-24)			
L12	Synth. Buffer	2220-23 (ETR-24)			
L13	Synth. Buffer	2220-23 (ETR-24)			
L14	Synth. Buffer	2494-23 (ETR-101)			
L15	Xmit. Amp	2028-24 (ETR-22)			
L16	Xmit. Driver	2028-24 (ETR-22)			
L18	RF Filter	2030-24 (ETR-94)			
L19	RF Filter	2489-23 (ETR-135)			
L20	TVI Trap	2216-23 (ETR-18)			
L21	SSB IF	2493-23 (ETI-65)			
L22	Ant Matching	2032-24 (ETR-12)			
L23	Ant Matching	2032024 (ETR-12)			
L24	RF Amp	2033-24 (ETR-27)			
L25	1st Mixer	2085-24 (ETI-66)			
L26	1st Mixer	2017-24 (ETI-32)			
L27	Input IF	2036-24 (ETI-33)	2066	16-9026	
L28	Interstage IF	2008-24 (ETI-41)	2067	16-9027	
L29	Output IF	1949-24 (ETI-23)	2068	16-9028	
L30	Ant Matching	2039-24 (ETR-42)			
L31	Noise Amp Input	2040-24 (ETR-43)			
L32	Noise Amp	2042-24 (ETR-44)			
L33	Rec. Osc	2041-24 (ETR-28)			
MF	2nd Mixer	2043-24 (EFC-3)(1)			
RFC1	RF Choke (2uh)	2240-23 (ELR-4)		74F226AP	T812
RFC2	RF Choke (2uh)	2240-23 (ELR-4)		74F226AP	T812
RFC3	RF Choke (2uh)	2240-23 (ELR-4)		74F226AP	T812
RFC4	RF Choke (2.2uh)			74F226AP	T812
RFC5	RF Choke (2.2uh)			74F226AP	T812
RFC6	RF Choke (1.1uh)	2217-23 (ELR-11)	19-1000	74F126AP	T807

(1) Includes 455kHz Mechanical Filter.

LAFAYETTE MODEL TELSAT SSB-50

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.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
CH1	1400ma (Max)	.2	.2mh	1090-15(ELA-2)				
CH2		2.3	15mh	(ELA-11)				

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD Part No.	
T1	1.25	1CT		2084-24(ETA-28)				

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	55CT	24	1718-15(ETA-27)				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM, 16 ohm	1260-36 (8P79SL)	30A05R216	

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
F1	1.5A, Quick Acting		2125-19	AGC 1-1/2	HDJ	31201.5	150145	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
C65	Component Combination	3435-12 (ECR-14)	
C67	Component Combination	3546-12 (ECR-15)	
M	Meter	1179-27 (EMM-21)	S/RF
RY1	Relay	1052-37 (EZR-1)	Antenna Switching
RY2	Relay	1064-37 (EZR-2)	Fine Tune
SW1	Switch	1730-14 (ESR-39)	Channel Selector
SW2	Switch	1872-14 (ESR-76)	AM/USB/LSB
SW3	Switch	1871-14 (ESP-49)	ANL/NS
SW4	Switch	1733-14 (ESP-19)	PA/CB
XF	Crystal Filter	1297-35 (EFC-13) (FEC-113-4)	11.2735MHz
X1	Crystal	1264-35	7.7766MHz
X2	Crystal	1265-35	7.7933MHz
X3	Crystal	1266-35	7.8100MHz
X4	Crystal	1267-35	7.8266MHz
X5	Crystal	1268-35	7.8433MHz
X6	Crystal	1269-35	7.8600MHz
X7	Crystal	1270-35	14.907MHz
X8	Crystal	1271-35	14.917MHz
X9	Crystal	1272-35	14.927MHz
X10	Crystal	1273-35	14.947MHz
X11	Crystal	1274-35	14.904MHz
X12	Crystal	1275-35	14.914MHz
X13	Crystal	1276-35	14.924MHz
X14	Crystal	1277-35	14.944MHz
X15	Crystal	1097-35	11.730MHz
X16	Crystal	1096-35	11.275MHz
X17	Crystal	1278-35	11.272MHz

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

ITEM	PART No.	ITEM	PART No.
Escutcheon	7801-10	Knob, Volume, Squelch, AM/USB/LSB	1840-18
Chassis, Right	7802-10	Knob, Fine Tune	1737-18
Chassis, Left	7803-10	Knob, Channel Selector	1735-18
Chassis, Rear	7804-10	Dial, Channel Selector	7808-10
Chassis, Middle	7805-10	Button, ANL/NS, CB/PA	1839-18
Cover, Top	7806-10	Mobile Mounting Bracket	7810-10
Cover, Bottom	7807-10	Microphone Hanger	2290-10

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone	1083-34	
DC Power Cord	1209-38	