

 SAMS
PHOTOFACT®
CB RADIO
SERIES



CB-46
46
 JUNE 1973



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



PHOTOFACT®

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 Skipper 71B

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:

L101, L201, L301, L601, L701, L801, L901, T1401GC ELECTRONICS #9302, #9440
 L503GC ELECTRONICS #9150
 C1303, C1404GC ELECTRONICS #5000, #8290

PALOMAR MODEL SKIPPER 71B

OSCILLATOR ADJUSTMENT

INDICATOR	ADJUST	REMARKS
Frequency Counter	C101	Set MODE Switch to AM. Set Clarifier for MINIMUM capacitance (fully open). Connect counter to dummy load on transmitter. Set channel selector to channel 11. Key transmitter and adjust C101 for 27.095MC.

"S" METER ADJUSTMENT

INDICATOR	ADJUST	REMARKS
"S" Meter on front panel	R1503	Turn RF Gain fully counterclockwise. Set channel selector to "PIC" position. "Zero" the meter by adjusting R1503.

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ALIGNMENT INSTRUCTIONS (Continued)

TRANSMITTER (AM)

INDICATOR	ADJUST	REMARKS
RF Wattmeter or Field Strength Meter	L101, L201, L301, L503, L801	Set MODE Switch to AM. Turn Mic Gain fully counterclockwise. Key transmitter and adjust for maximum.
0-500ma D.C. Ammeter	L503	Insert meter in plate circuit of V4 (Final Amp) and adjust L503 for 5 watts D.C. input.

TRANSMITTER (SSB)

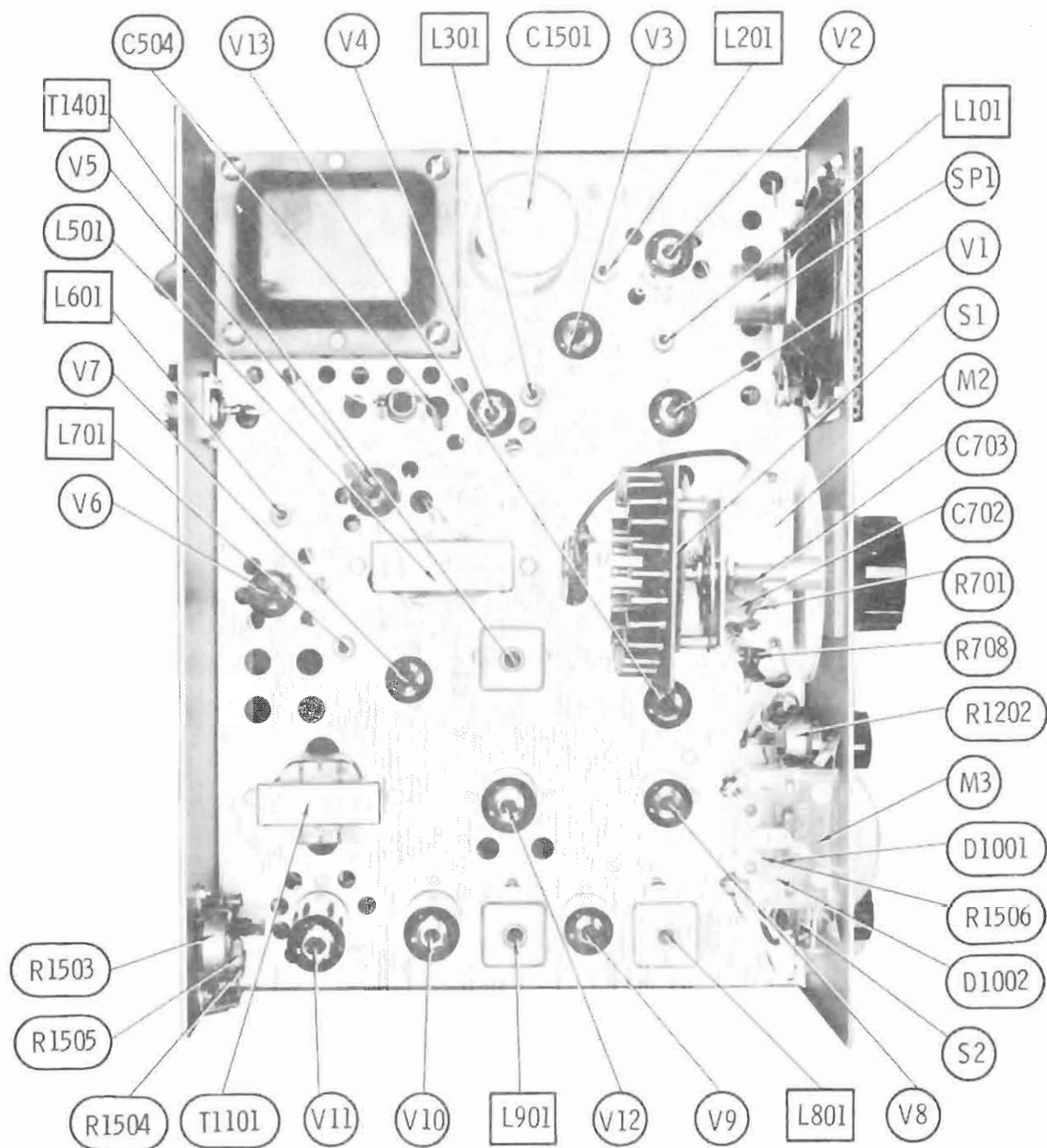
INDICATOR	ADJUST	REMARKS
RF Wattmeter and Monitor Scope	L801, T1401	Set MODE Switch to LSB. Set Mic Gain to mid-range. Inject an 800 cycle tone into mic input jack. Key transmitter and set audio level from generator to give an RF output indication without distortion. Adjust L801 and T1401 for maximum output.
RF Wattmeter and Monitor Scope	R1403, C1404	Set MODE Switch to USB. Remove audio and short mic input to ground. Key transmitter and adjust R1403 and C1404 for MINIMUM carrier (with no audio input).
RF Wattmeter and Monitor Scope.	R1403, C1404	Set MODE Switch to LSB. Carrier output should be the same level as for USB. If output level is different switch alternately between USB and LSB while adjusting R1403 and C1404 for equal outputs as near Zero as possible.
RF Wattmeter and Monitor Scope	C1303	Set MODE Switch to LSB. Set Mic Gain to mid-range. Inject an 800 cycle tone into mic input jack. Key transmitter and set audio level from generator to give an RF output indication without distortion. Alternately switch between USB and LSB while adjusting C1303 for equal maximum outputs.

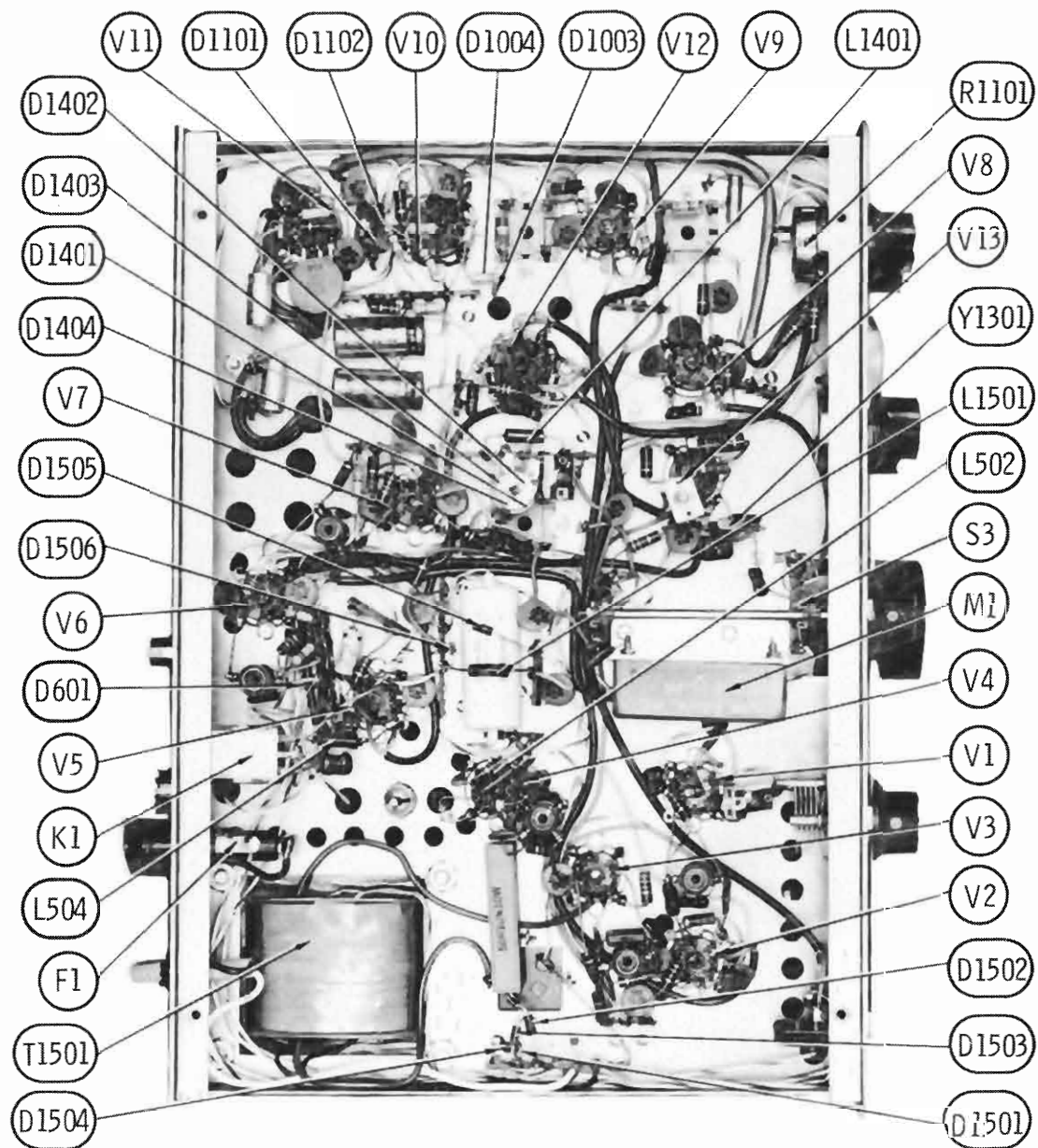
RECEIVER (AM)

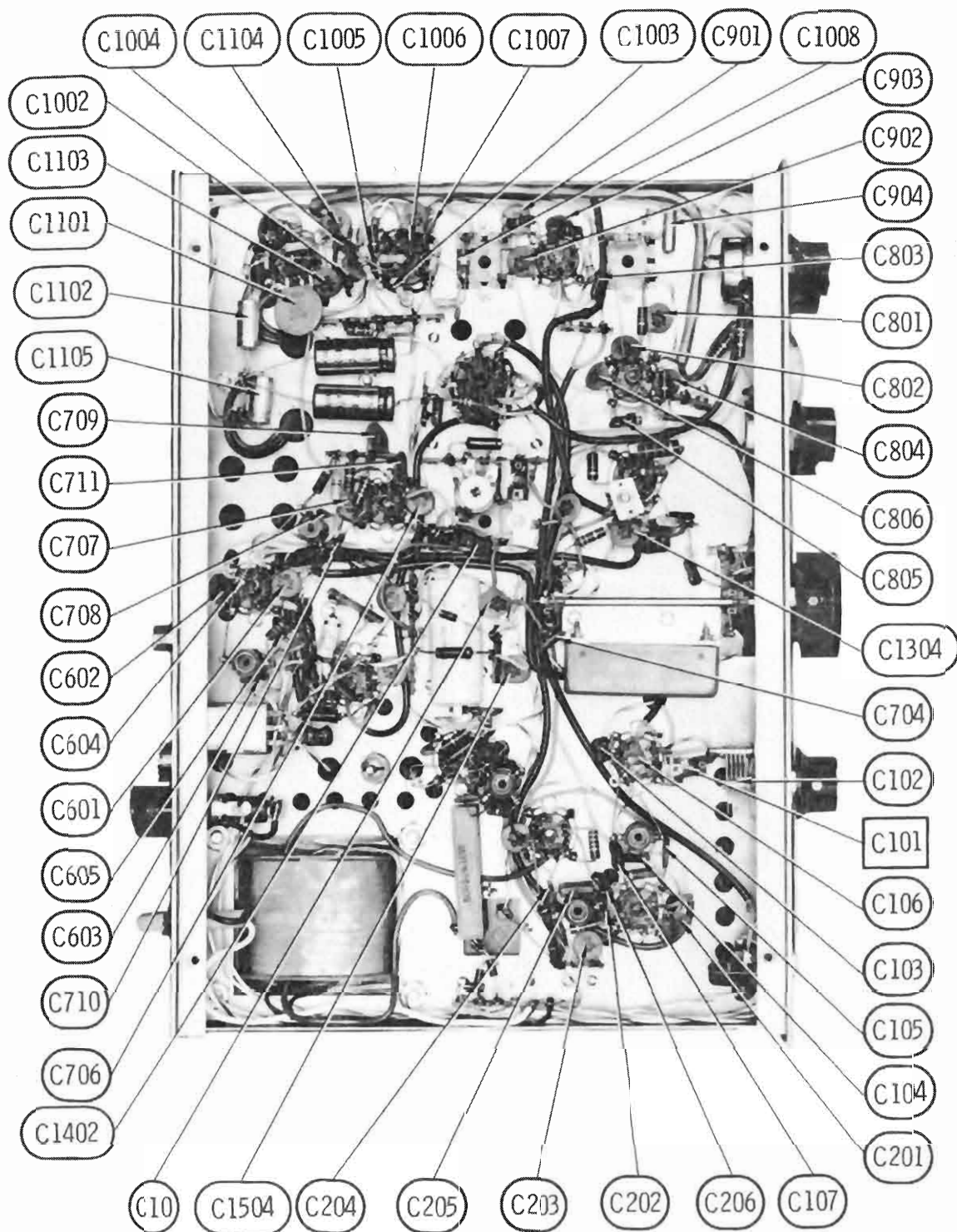
Connect an AC VTVM across speaker voice coil. Set Squelch control fully counterclockwise. Adjust Volume control to obtain a suitable reading.			
SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to pin #1 of V8 (1st IF Amp), low side to ground. Set to 455KC (Mod).	Any	L901, L801	Set MODE switch to AM. Adjust for maximum.
High side thru .01mfd to antenna connector, low side to ground. Set to 27.085MC (Mod). (Ch. 11)	Ch.11	L701, L601	Adjust for maximum.

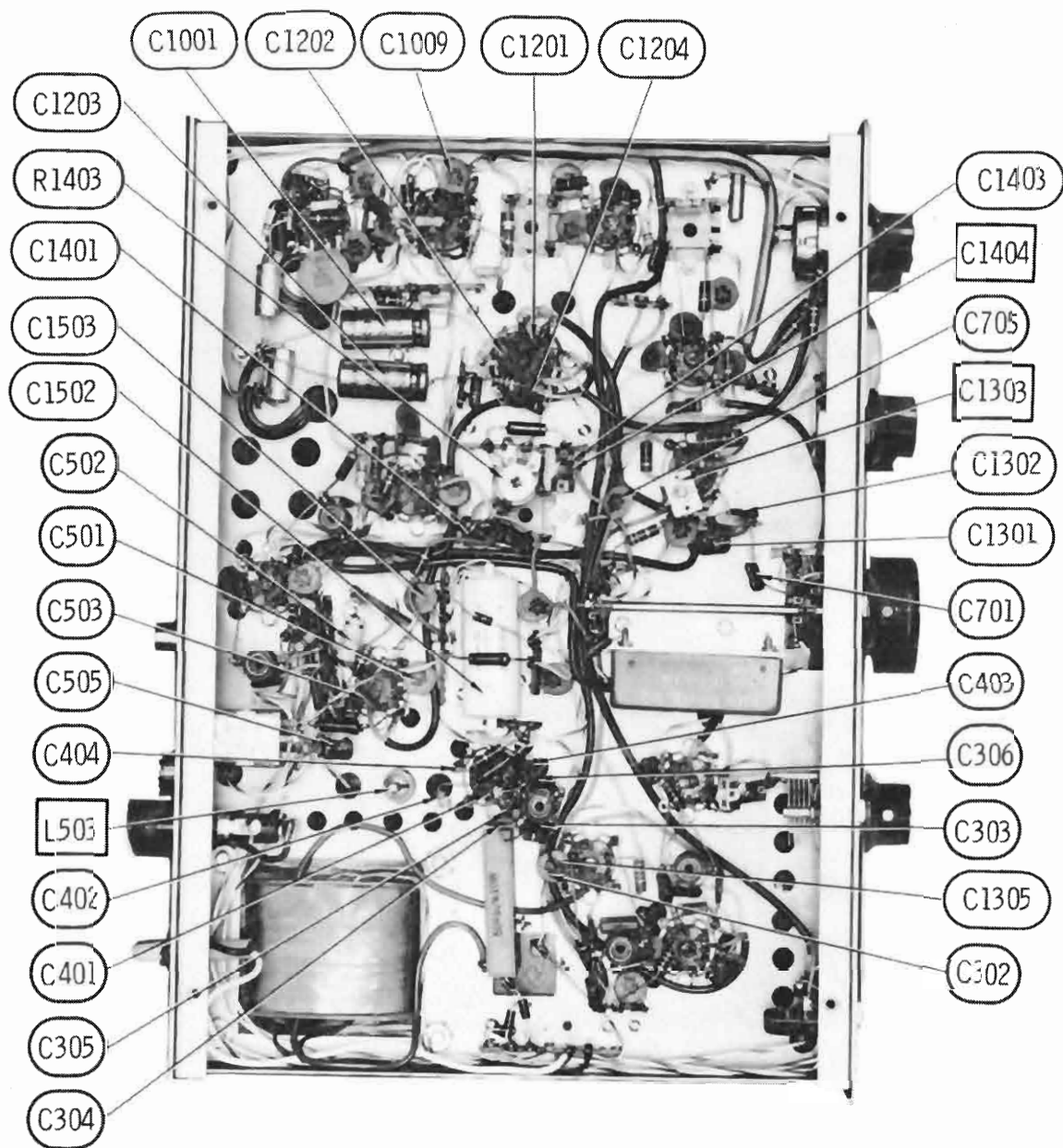
RECEIVER (SSB)

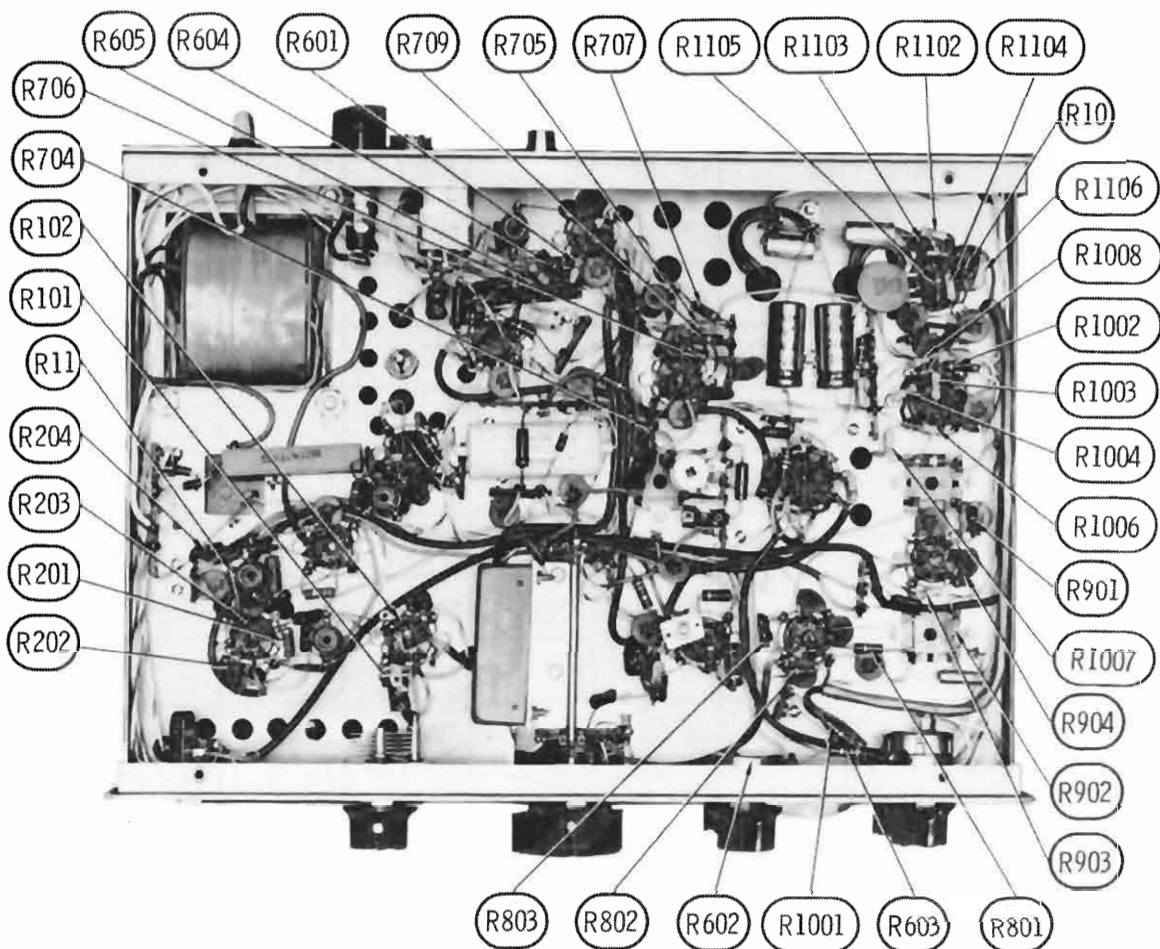
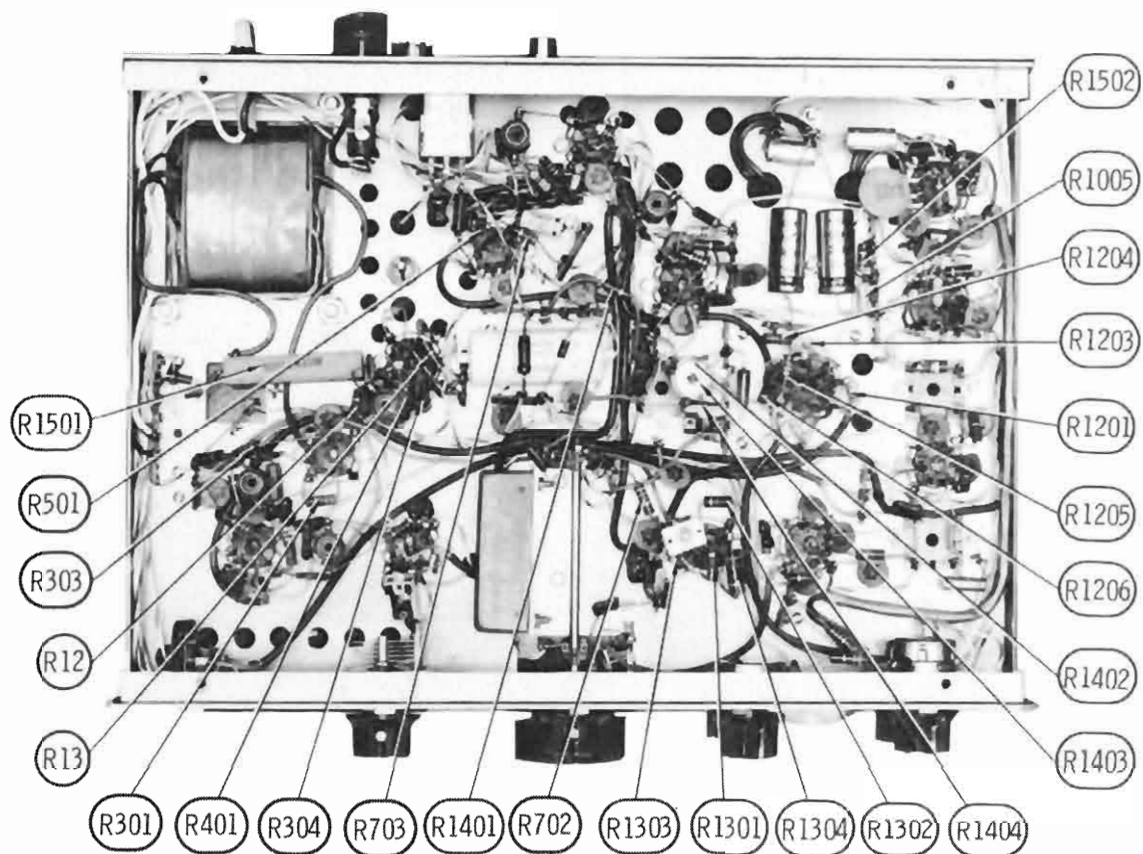
Because circuit components common to SSB transmitter and receiver have been aligned under transmitter alignment section, no further receiver alignment is necessary.
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PARTS LIST AND DESCRIPTION

(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.)

TUBES

AMPEREX			GENERAL ELECTRIC			RCA			SYLVANIA		
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	Rec. - Xmtr. Oscillator	12BA6	V8	1st IF Amp	12BA6	V1	Rec. - Xmtr. Oscillator	12BA6	V8	1st IF Amp	12BA6
V2	Xmtr. Mixer	12BE6	V9	2nd IF Amp	12BA6	V2	Xmtr. Mixer	12BE6	V9	2nd IF Amp	12BA6
V3	Driver	12BA6	V10	Product Detector - AF Amp	12AX7A	V3	Driver	12BA6	V10	Product Detector - AF Amp	12AX7A
V4	Final Amp	6AQ5	V11	Output - Squelch	6GW8	V4	Final Amp	6AQ5	V11	Output - Squelch	6GW8
V5	Modulator	12AQ5	V12	Mic Amp - AF Amp	12AX7A	V5	Modulator	12AQ5	V12	Mic Amp - AF Amp	12AX7A
V6	RF Amp	12BZ6	V13	SSB Carrier Oscillator	12BA6	V6	RF Amp	12BZ6	V13	SSB Carrier Oscillator	12BA6
V7	Rec. Mixer	12BZ6				V7	Rec. Mixer	12BZ6			

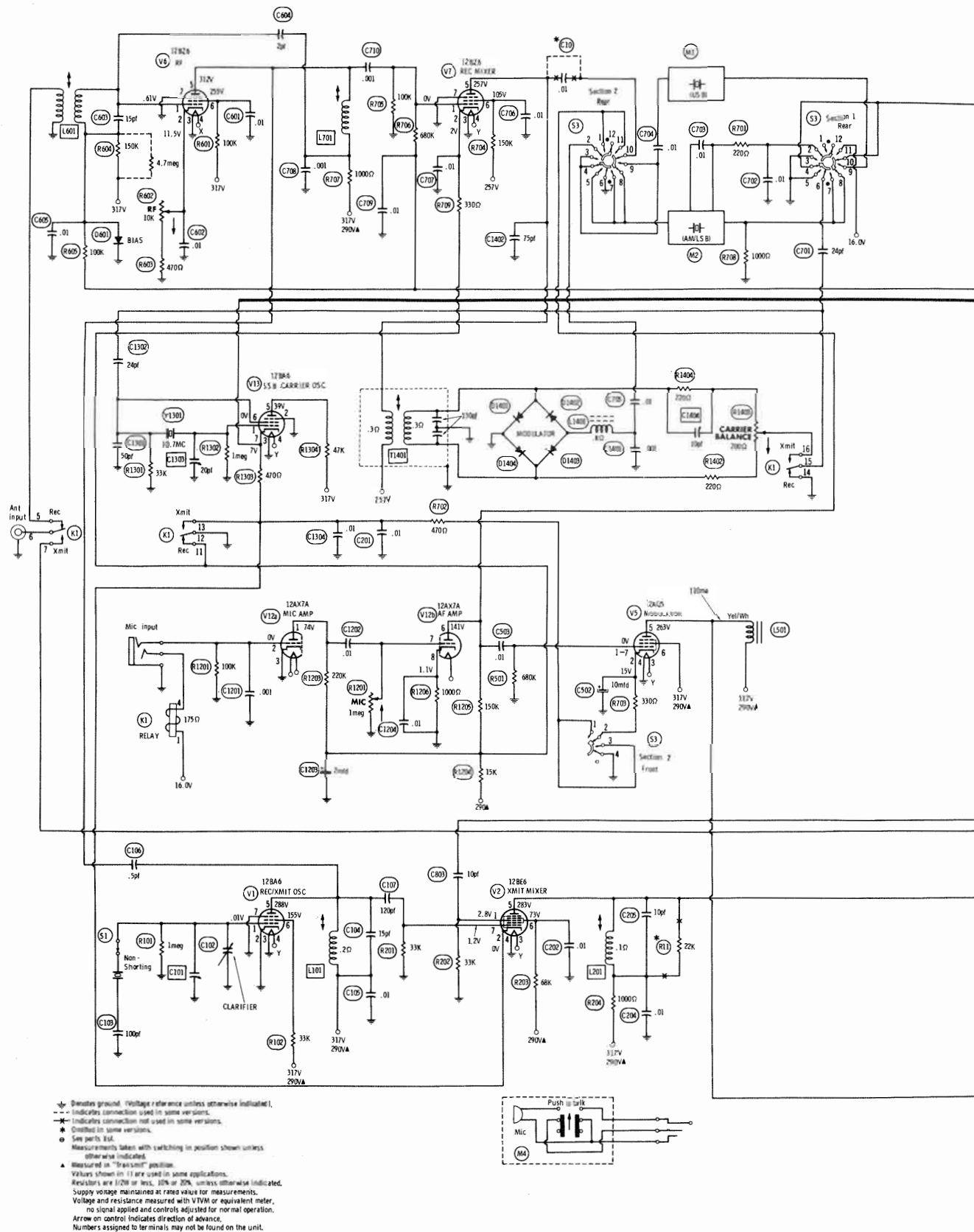
SEMICONDUCTORS

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.
D601	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1001	1N964B		Z1212	PTC508	HEPZ0416			ECG 5022
D1002	1N964B		Z1212	PTC508	HEPZ0416			ECG 5022
D1003	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1004	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1101	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1102	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1401	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1402	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1403	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1404	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D1501	1N4005	GE-504A	8D6 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117
D1502	1N4005	GE-504A	8D6 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117
D1503	1N4005	GE-504A	8D6 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117
D1504	1N4005	GE-504A	8D6 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117
D1505	1N4005	GE-504A	8D6 or 5A6D	PTC202	HEPR0054	SK3017A or SK3032	RT210 or RT215	ECG 116 or ECG 117
D1506	1N914(1N4148)	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C502	10 25V		ME-2-G-010	EA30-10	WBR10-25	MTA10D35	TVA-1204
C904	1 25V		ME-1-G-001	EA30-2	WBR1-50	MTA1D50	TVA-1200
C1001	2 450V		CTA-1405		WBR2-450	TC695A	TVA-1701
C1102	25 25V		ME-3-G-025	EA30-25	WBR25-25	MTA25D35	TVA-1205
C1105	25 25V		ME-3-G-025	EA30-25	WBR25-25	MTA25D35	TVA-1205
C1203	2 450V		CTA-1405		WBR2-450	TC695A	TVA-1701
C1501a	100 300V				BB0332A	FP227.7A	TVL-2641
C1501b	100 300V						
C1502	1000 25V		ME-G1000	EA30-1000	WBR1000-25	MTA1000G25	TVA-1211

(CONTINUED ON PAGE 90)



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PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENDO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C10	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C101	20		402	823-DZ			
C102	35						
C103	100 10%		DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C104	15 10%		DM-15-150J			SX415	
C105	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C106	.5						
C107	120 10%		DM-15-121J	CPR-120J	CD15FD121J03	SX312	424MC1200J500
C201	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C202	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C203	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C204	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C205	10		DM-15-100J		CD15CD100J03	SX410	
C206	33 10%		DM-15-330J	CPR-33J	CD15ED330J03	SX433	
C302	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C303	10 10%		DM-15-100J		CD15CD100J03	SX410	
C304	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C305	.001 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C306	24 10%		DM-15-240J	CPR-24J		SX424	MS-424
C401	2						
C402	3.3			DTZ-3R3	NP03P3	CN0533	10TCC-V33
C403	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C404	.001 500V		CCD-102	DD-102	GP10000	GP210	10TS-D10
C501	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C503	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C504	.0022 1KV		CCD-222	DD-222	GP2200	GP222	10TS-D22
C505	120 10% 500V		DM-15-121J	CPR-120J	CD15FD121J03	SX312	424MC1200J501
C601	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C602	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C603	15 10%		DM-15-150J			SX415	
C604	2						
C605	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C701	24 10% 500V		DM-15-240J	CPR-24J		SX424	MS-424
C702	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C703	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C704	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C705	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C706	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C707	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C708	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C709	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C710	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C711	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C801	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C802	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C803	10 10%		DM-15-100J		CD15CD100J03	SX410	
C804	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C805	15 10%		DM-15-150J			SX415	
C806	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C901	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C902	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C903	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1002	.002 500V		CCD-202	DD-202	GP2000	GP220	10TS-D20
C1003	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C1004	.0022 500V		CCD-222	DD-222	GP2200	GP222	10TS-D22
C1005	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C1006	.002 500V		CCD-202	DD-202	GP2000	GP220	10TS-D20
C1007	220 500V		CCD-221	DD-221	GP220	GP322	10TS-T22
C1008	1					CN0510	10TCC-V10
C1009	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1101	.005 10% 1.4KV		3CCD-502	DD30-502			30GA-D50
C1103	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1104	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1201	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C1202	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1204	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1301	50 10%		DM-15-500J				
C1302	24 10%		DM-15-240J	CPR-24J		SX424	MS-424
C1303	20		402	823-DZ			
C1304	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1305	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1401	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1402	75 10%		DM-15-750J	CPR-75J	CD15EP750J03	SX475	424MC750J501
C1403	.001 500V		CCD-102	DD-102	GP1000	GP210	10TS-D10
C1404	10		420	823-DZ			
C1503	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10
C1504	.01 500V		CCD-103	DD-103	GP10000	JF110	10TS-S10

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R101	AF Gain (Volume)/ Switch	1meg	(052-010)	F2-1meg, SRS012, KR-1	A47-1meg-Z, RS-2, SWE-12 or [NP-1meg-Z, NML-A-300, NWE-12]	B13-137, SK3, 76-1 or [BU1, CF26, SS3, GC]*	UA16A, SL2500, US41 or [RU16A, SL38, SL2500, US41 or U53, US26
R602	RF Gain	10K		F1-10K, SRS012	A47-10K-S, RS-2 or [NP-10K-S, NML-A-300]	B11-116, SK3 or [BU2, CF9, SS3, DC1]*	UA14L, SL2500 or [RU14L, SL39, SL2500] or U20
R1202	Mic Gain	1meg		F2-1meg, SRS010	A47-1meg-Z, RS-2 or [NP-1meg-Z, NML-A-300]	B13-137, SK3 or [BU1, CF26, SS3, DC1]*	UA16A, SL2500 or [RU16A, SL38, SL2500] or U53
R1403	Carrier Balance	200		T-200(2) or TSV-250 (2)		U201R251B	MTC22L4
R1503	"S" Meter Adjust	25K	(025-038)	TT-26(2) or [F1-25K(2), SRS004]	B47-25K-S(2) or [NP-25K-S(2), UP-S-010]	B11-120, SK2(2) or [BU11(2), CF11, SS6A]*	RU253L(2), SN750 or [UA253L(2), SN750] or TA253L(2)

*"SNAPTROL"

- (1) Bend the two outside terminals to meet requirements. Use Jumper wire to connect center terminal.
 (2) Use original mounting bracket.

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.
R1304	47K, 1 Watt Carbon	CB-47000		R1501	50 , 10 Watt Wirewound	10W-SQ-50	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L101	Xmtr. Oscillator				
L201	Xmtr. Mixer				
L301	Xmtr. Driver				
L502	RF Choke (22uh)		19-6022	74F225AI	TA311
L503	Antenna Loading				
L504	RF Choke (22uh)		16-6022	74F225AI	TA311
L601	Rec. Antenna				
L701	Rec. RF				
L801	Input IF	014-009			
L901	Output IF	014-009			
L1401	RF Choke (22uh)		16-6022	74F225AI	TA311
L1501	RF Choke (22uh)		16-6022	74F225AI	TA311
T1401	Balance Modulator	014-008			

CHOKE (Audio)

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.	
L501	110ma	240	6.2hy	272-001				

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1101	3920	3.2		A-3328 (1)	22S23 (1)	S14Z (1)	(1) Drill new mounting holes.

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1501	120VAC @ .990AAC	263VAC @ .170ADC					
	SEC. 2	SEC. 3					
	13.4VAC @ 2.4AAC						

SPEAKER

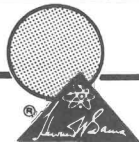
ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	3-1/2" PM, 3.2 ohms		3A05	

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	3AG, 2 Amp			AGC 2	HKP	312002	342012		

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
K1	Relay		Receive - Transmit
M1	Crystal Filter		USB
M2	Crystal Filter		AM/LSB
M3	"S" Meter		
M4	Microphone Assembly		
S1	Switch		Channel Selector
S2	Switch		ANL On/Off
S3	Switch		Sideband Selector
Y1301	Crystal		Oscillator 10.7MC
	Crystal		Channel 1, 26.965MC
	Crystal		Channel 2, 26.975MC
	Crystal		Channel 3, 26.985MC
	Crystal		Channel 4, 27.005MC
	Crystal		Channel 5, 27.015MC
	Crystal		Channel 6, 27.025MC
	Crystal		Channel 7, 27.035MC
	Crystal		Channel 8, 27.055MC
	Crystal		Channel 9, 27.065MC
	Crystal		Channel 10, 27.075MC
	Crystal		Channel 11, 27.085MC
	Crystal		Channel 12, 27.105MC
	Crystal		Channel 13, 27.115MC
	Crystal		Channel 14, 27.125MC
	Crystal		Channel 15, 27.135MC
	Crystal		Channel 16, 27.155MC
	Crystal		Channel 17, 27.165MC
	Crystal		Channel 18, 27.175MC
	Crystal		Channel 19, 27.185MC
	Crystal		Channel 20, 27.205MC
	Crystal		Channel 21, 27.215MC
	Crystal		Channel 22, 27.235MC
	Crystal		Channel 23, 27.255MC



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 Cheetah SSB

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:	GC ELECTRONICS
T1 thru T11, T15 thru T20	#9440
L10, L12, L13, T12 thru T14	#9089
CT2 thru CT19	#5000, #8290

OSCILLATOR ADJUSTMENT

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
Frequency Counter	CH1	CT2	Set MODE switch to AM. Connect counter to TP1. Adjust for 11.00MC.
Frequency Counter	CH5	CT3	Adjust for 11.050MC.
Frequency Counter	CH9	CT4	Adjust for 11.100MC.
Frequency Counter	CH13	CT5	Adjust for 11.150MC.
Frequency Counter	CH17	CT6	Adjust for 11.200MC.
Frequency Counter	CH21	CT7	Adjust for 11.250MC.
Frequency Counter	CH1	CT8	Leave MODE switch on AM. Connect counter to TP2. Adjust for 8.1665MC.
Frequency Counter	CH2	CT9	Adjust for 8.1765MC.
Frequency Counter	CH3	CT10	Adjust for 8.1865MC.
Frequency Counter	CH4	CT11	Adjust for 8.2065MC.

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

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PEARCE-SIMPSON MODEL CHEETAH SSB

ALIGNMENT INSTRUCTIONS (Continued)

OSCILLATOR ADJUSTMENT (cont.)

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
Frequency Counter	CH1	CT12	Set MODE switch to LSB. Leave counter at TP2. Adjust for 8.1635MC.
Frequency Counter	CH2	CT13	Adjust for 8.1735MC.
Frequency Counter	CH3	CT14	Adjust for 8.1835MC.
Frequency Counter	CH4	CT15	Adjust for 8.2035MC.
Frequency Counter	Any	CT18	Connect counter to emitter of TR20 (SSB Osc.). Adjust for 7.8015MC.
Frequency Counter	Any	CT17	Leave counter connected to TR20. Set MODE switch to USB. Adjust for 7.7985MC.
Frequency Counter	Any	CT16	Set MODE switch to AM. Connect counter to TP7 and adjust for 7.3435MC.

RECEIVER (AM)

Connect an AC VTVM across speaker voice coil. Set squelch control fully counterclockwise. Adjust Volume control to obtain a suitable reading.			
SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to base of TR10 (2nd Rec. Mixer), low side to ground. Set to 455KC (Mod.)	Any	T14, T13, T12	Adjust for maximum.
High side thru .01mfd to antenna connector, low side to ground. Set to 27.085MC (Mod.) (Channel 11)	11	T8, T2, T1	Adjust for maximum.

RECEIVER (SSB)

Connect an AC VTVM across speaker voice coil. Set Squelch control fully counterclockwise. Adjust Volume control to obtain a suitable reading.			
SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to TP4, low side to ground. Set to 7.8MC (unmod.). (An audio beat note will be produced by SSB Osc. and 7.8MC IF).	Any	T10, T9, T15	Turn MODE switch to LSB and adjust for maximum.

ALIGNMENT INSTRUCTIONS (Continued)

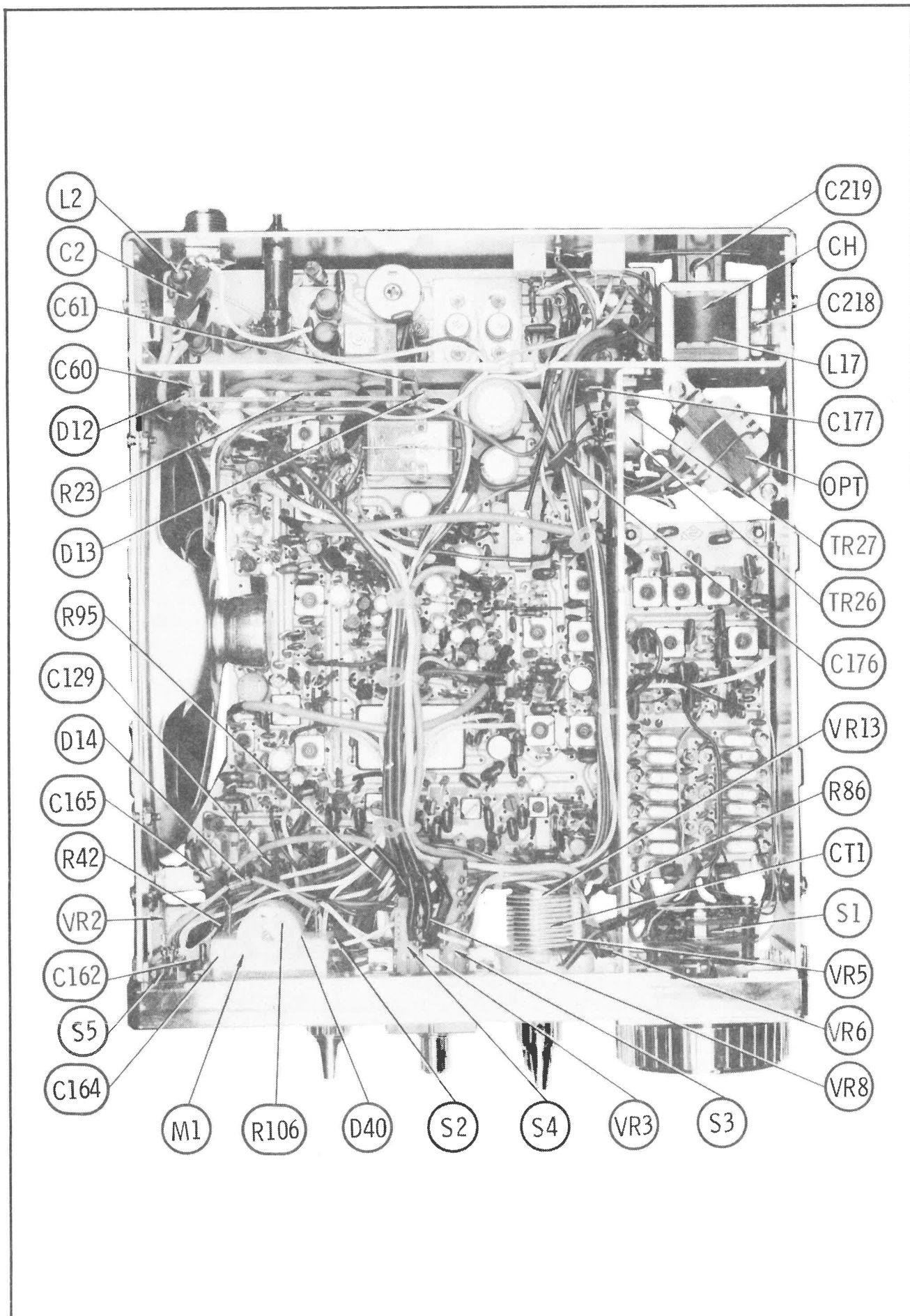
TRANSMITTER (AM)

INDICATOR	ADJUST	REMARKS
RF Wattmeter or Field Strength Meter.	T3, T4, T5, T6, T7, T18, T19, T20, VR15, L10, L13	Key transmitter and adjust for maximum.
0-500MA DC Ammeter	L13	Insert meter in collector circuit of TR30 and TR31 (Final Amps). Key transmitter and re-adjust L13 for 5 watts DC input.
Television (CH.2)	L1	Key transmitter and adjust L1 for MINIMUM interference.
		Note: After SSB transmitter alignment is completed it may be necessary to readjust L13 for 5 watts AM input.

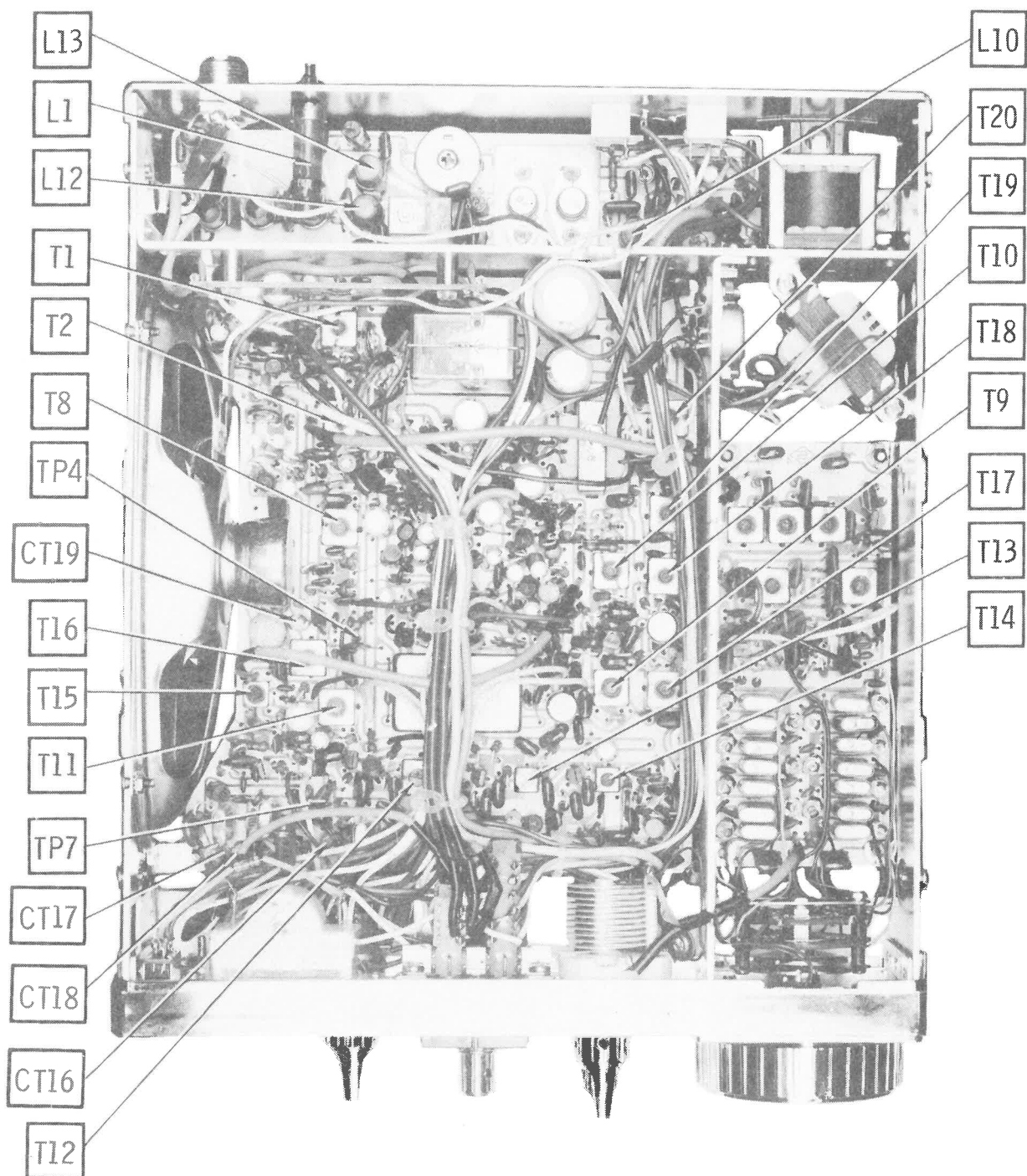
PEARCE-SIMPSON MODEL CHEETAH SSB

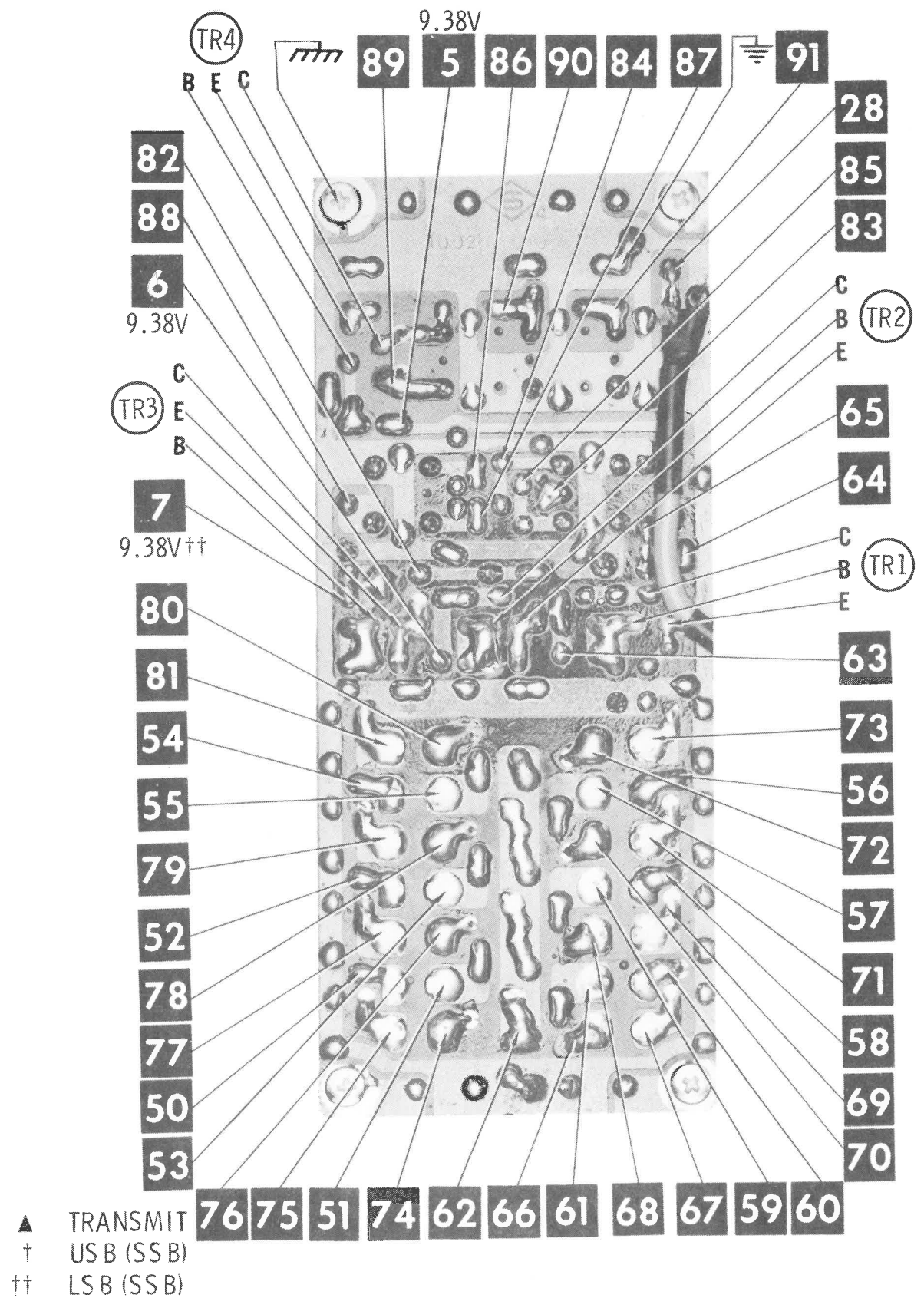
TRANSMITTER (SSB)

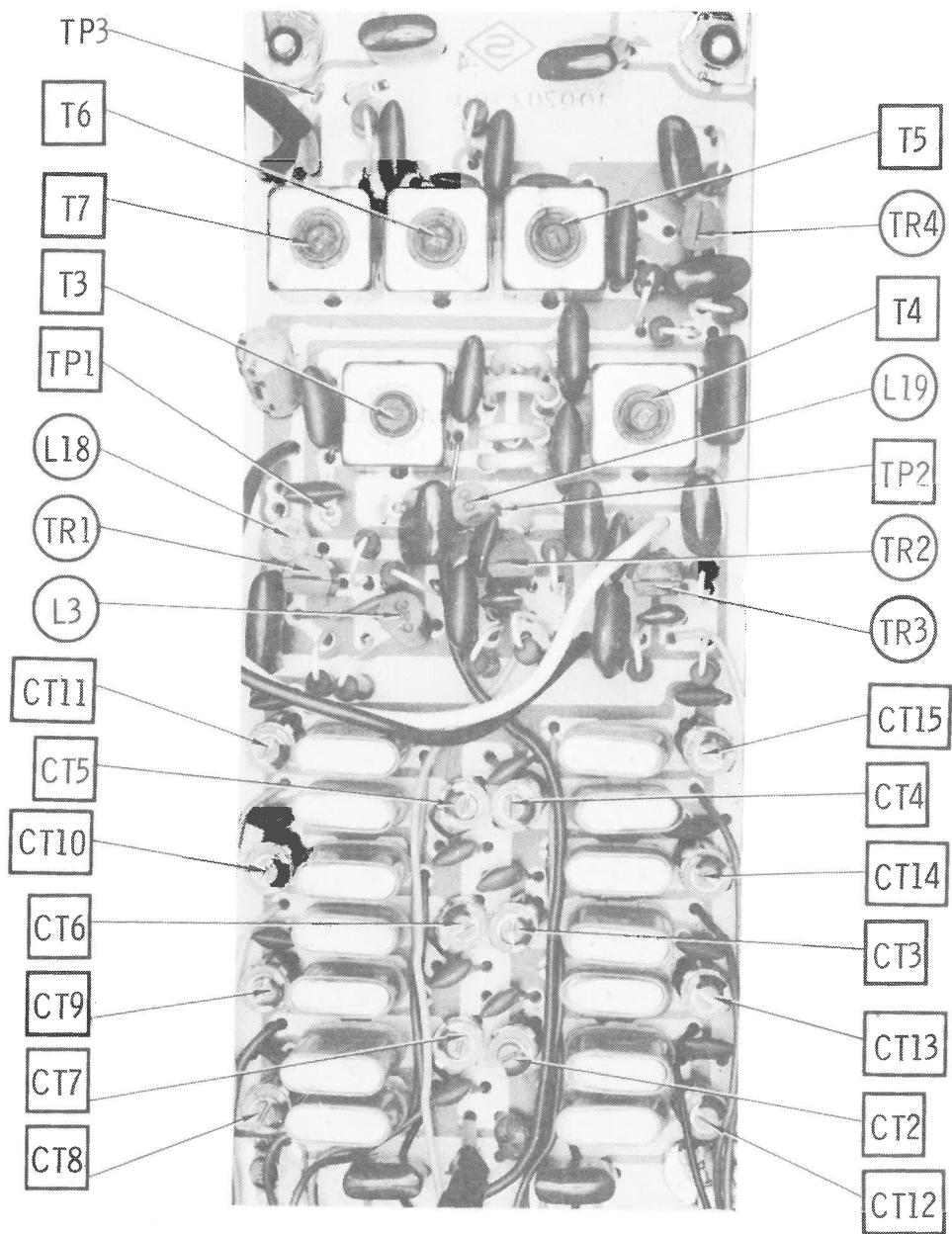
INDICATOR	ADJUST	REMARKS
RF Wattmeter and Monitor Scope.	VR11	Connect the wattmeter and scope to the antenna connector. Set "mode" switch to USB or LSB. Short mic input to ground. Key transmitter and adjust VR11 for MINIMUM carrier (no audio).
0-50ma DC Ammeter	VR16	Insert meter in collector circuit of TR30 and TR31 (Final Amps). Key transmitter and adjust VR16 for MINIMUM current (no audio).
RF Wattmeter and Monitor Scope.	T17, VR17	Remove short from mic input and connect an audio generator to the input. Set audio level to obtain maximum output without distortion. Adjust T17, VR17, L12 for maximum.
RF Wattmeter and 0-1 Amp DC Ammeter.	L12	Key transmitter and adjust L12 to reduce collector current until power output begins to fall off.

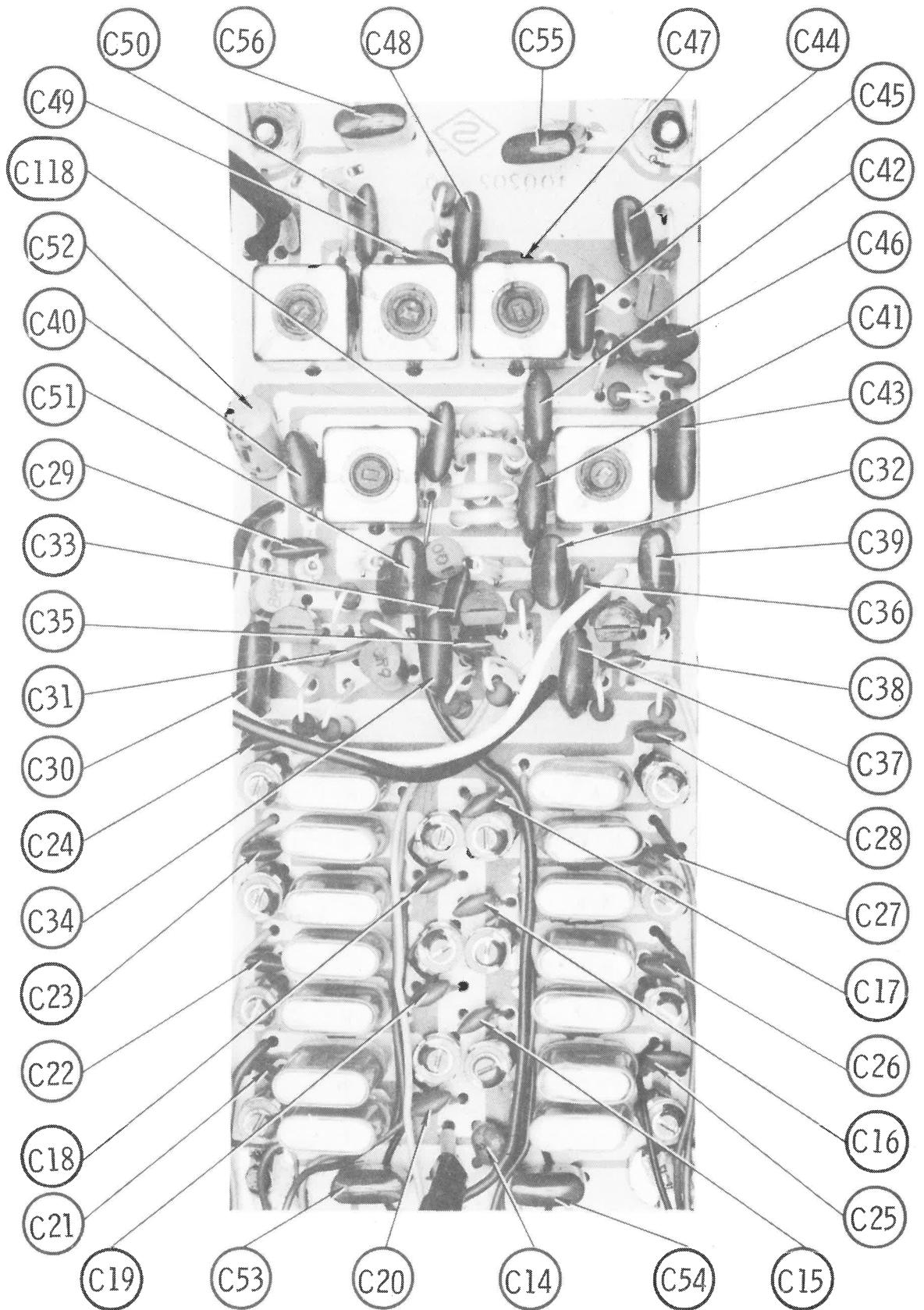


PEARCE-SIMPSON MODEL CHEETAH SSB

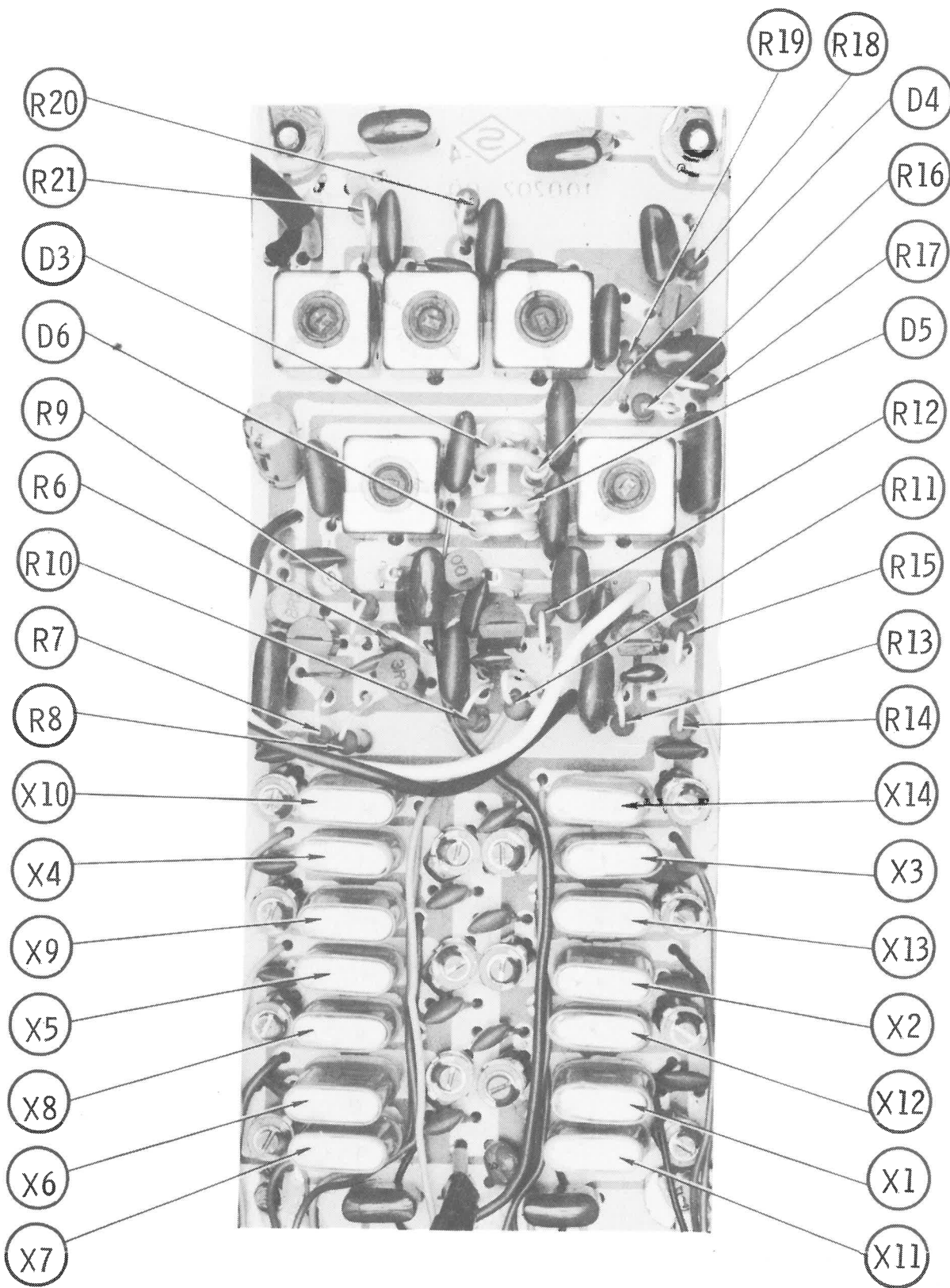


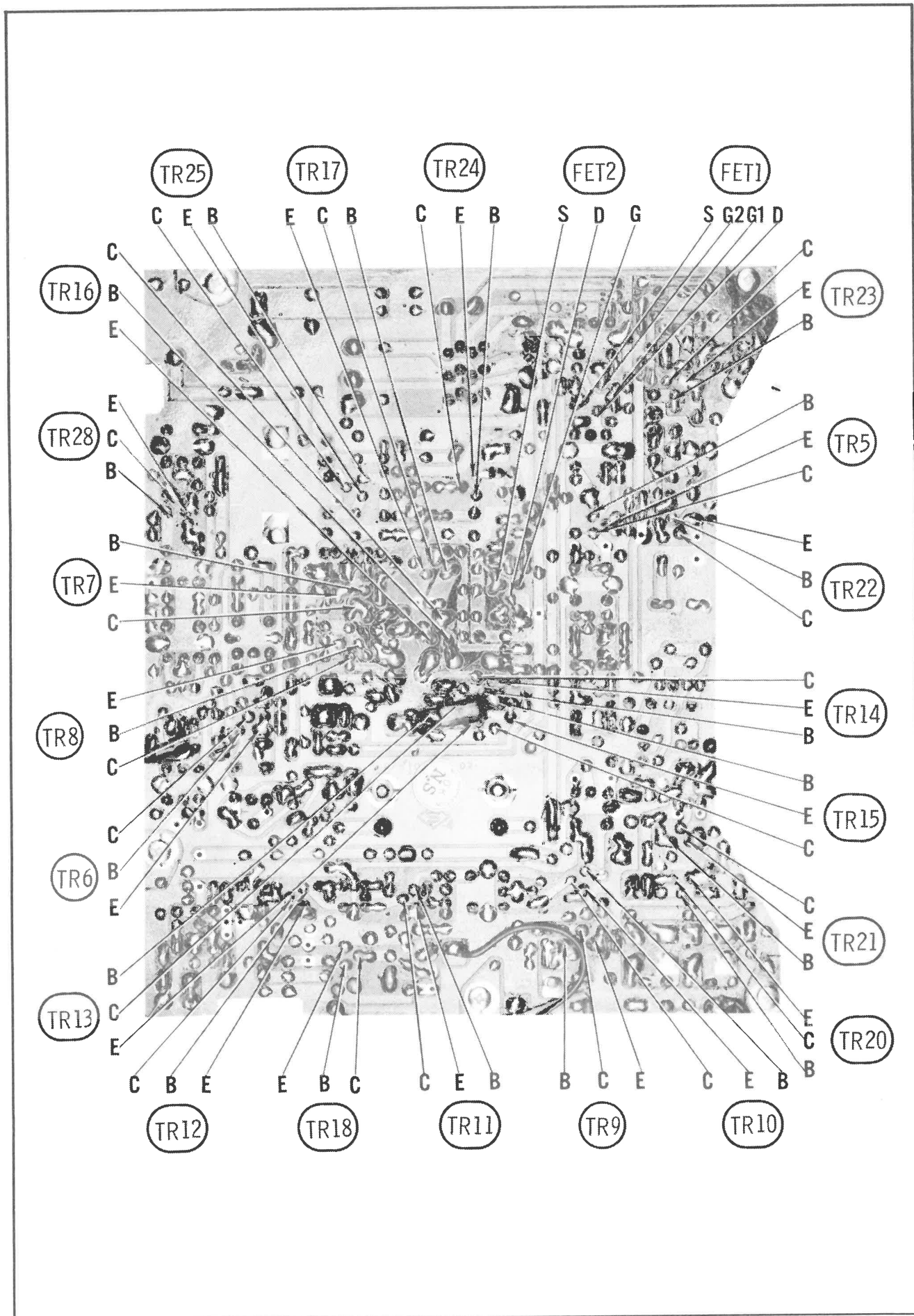


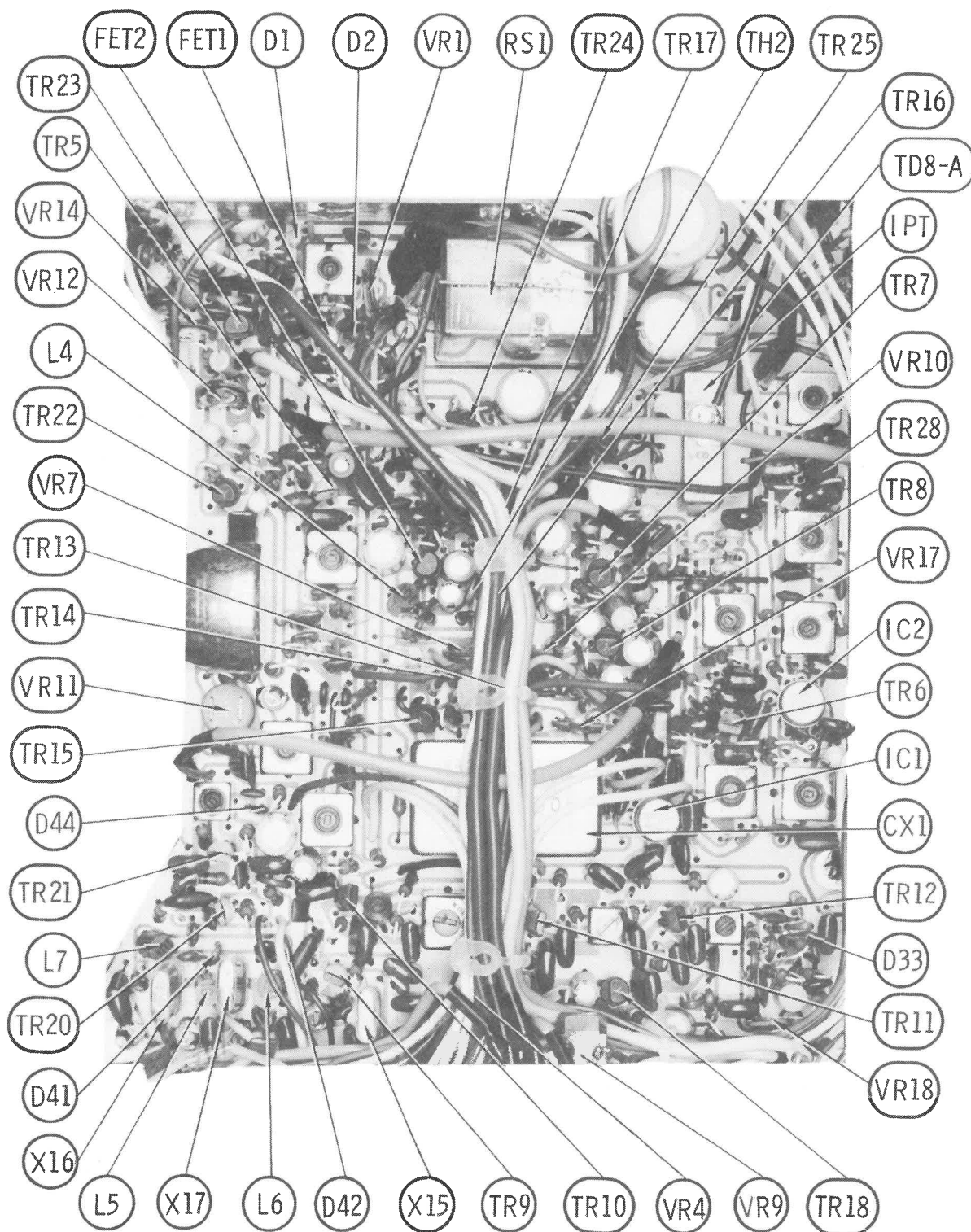


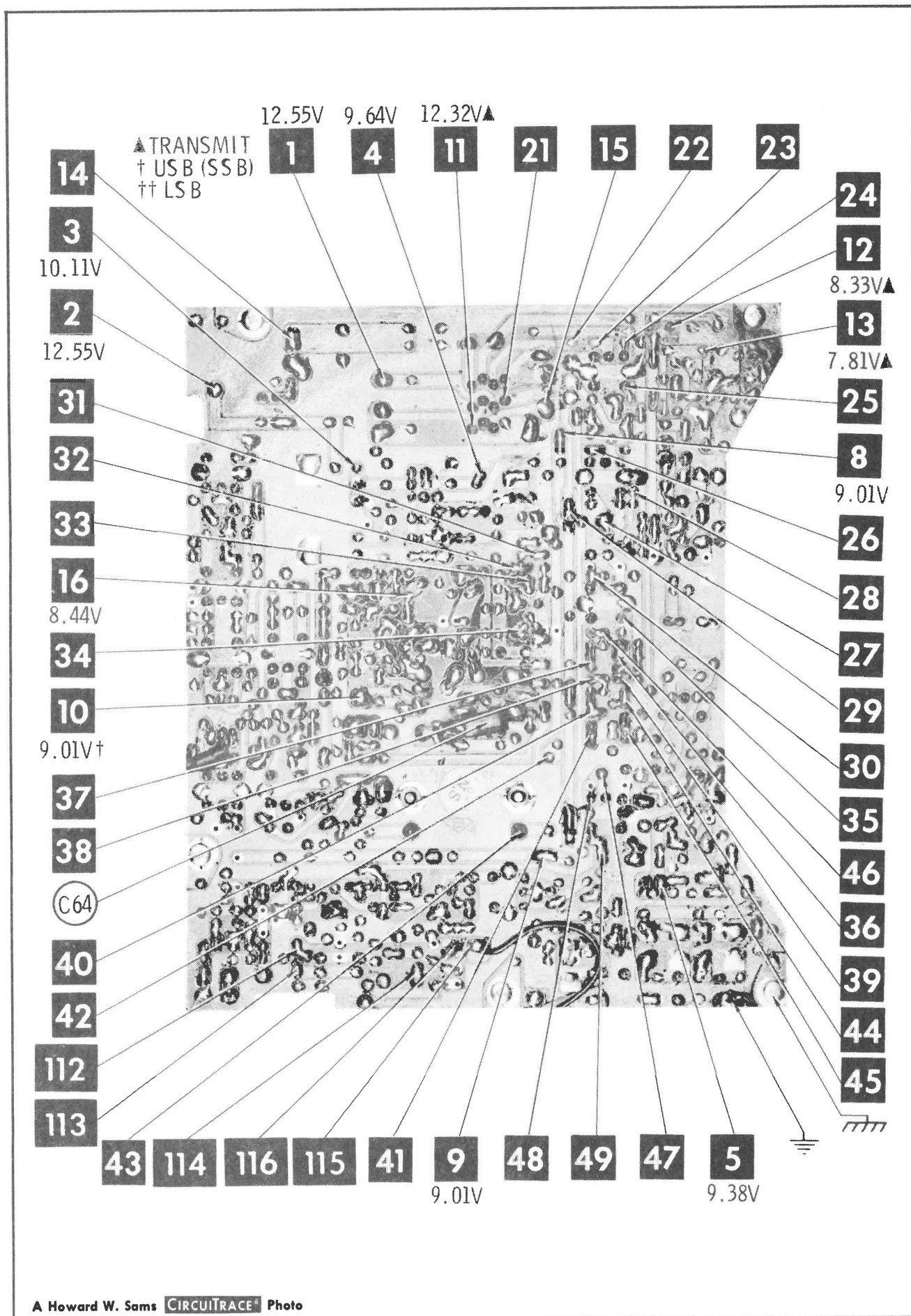


PEARCE-SIMPSON MODEL CHEETAH SS8

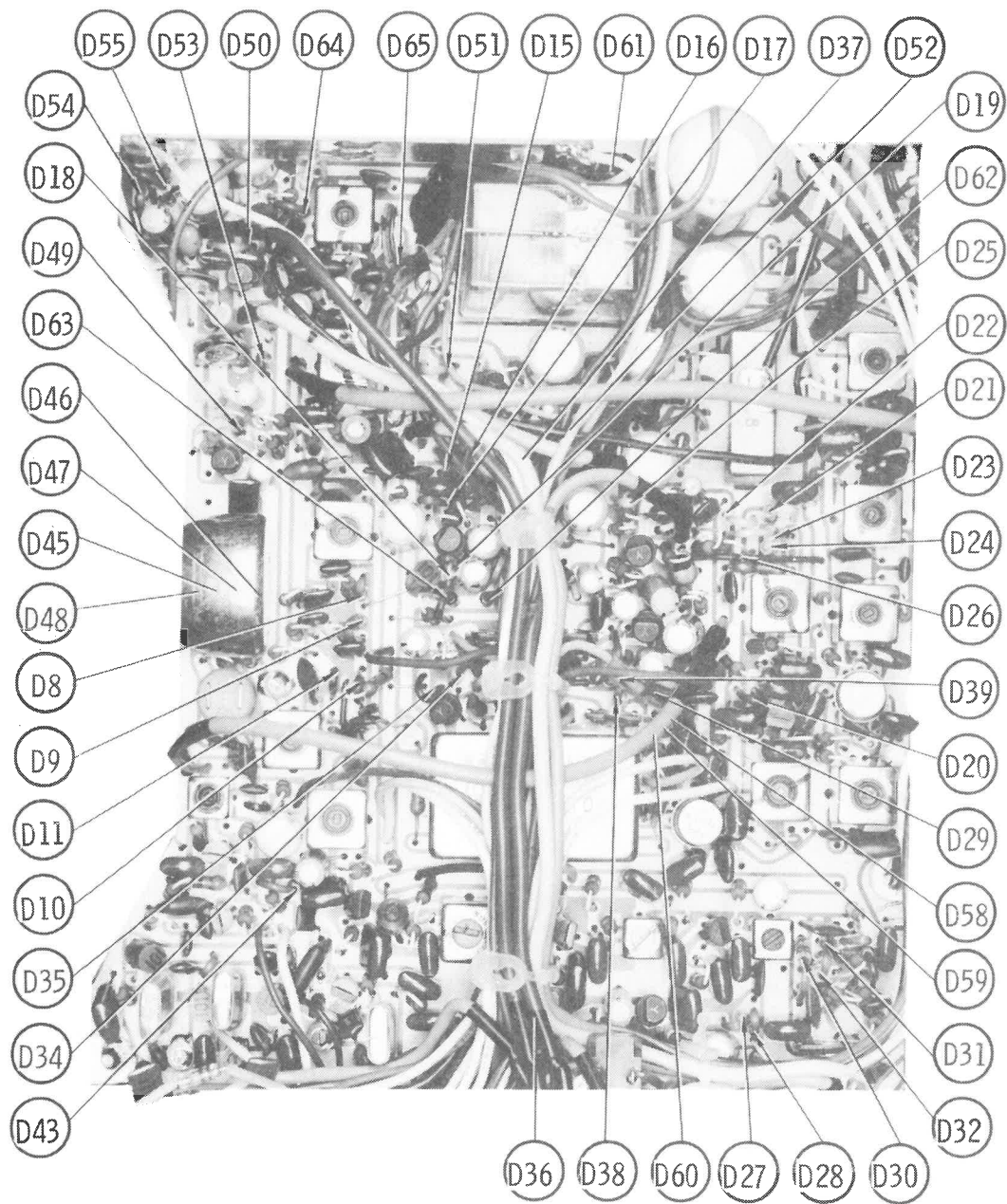


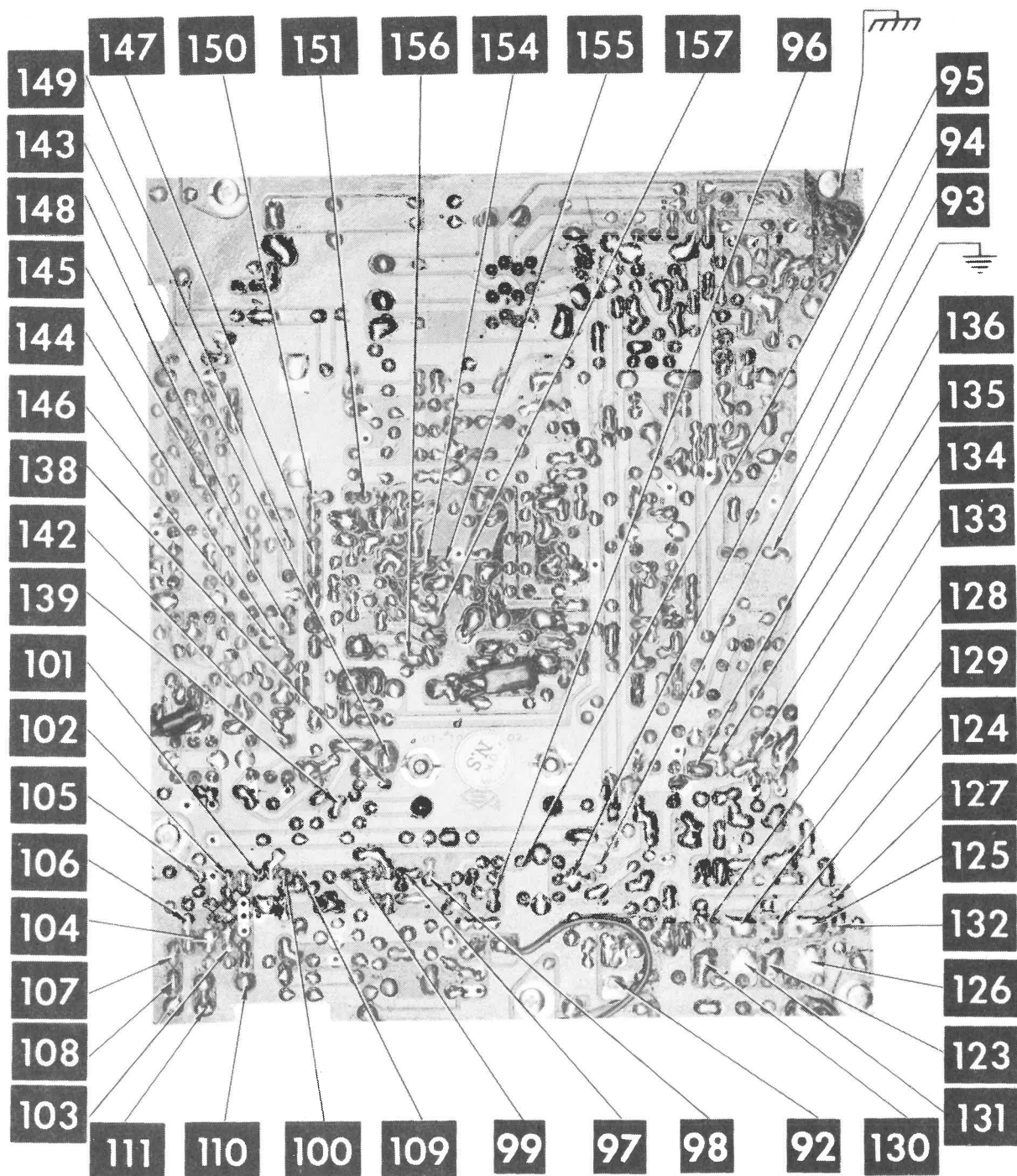


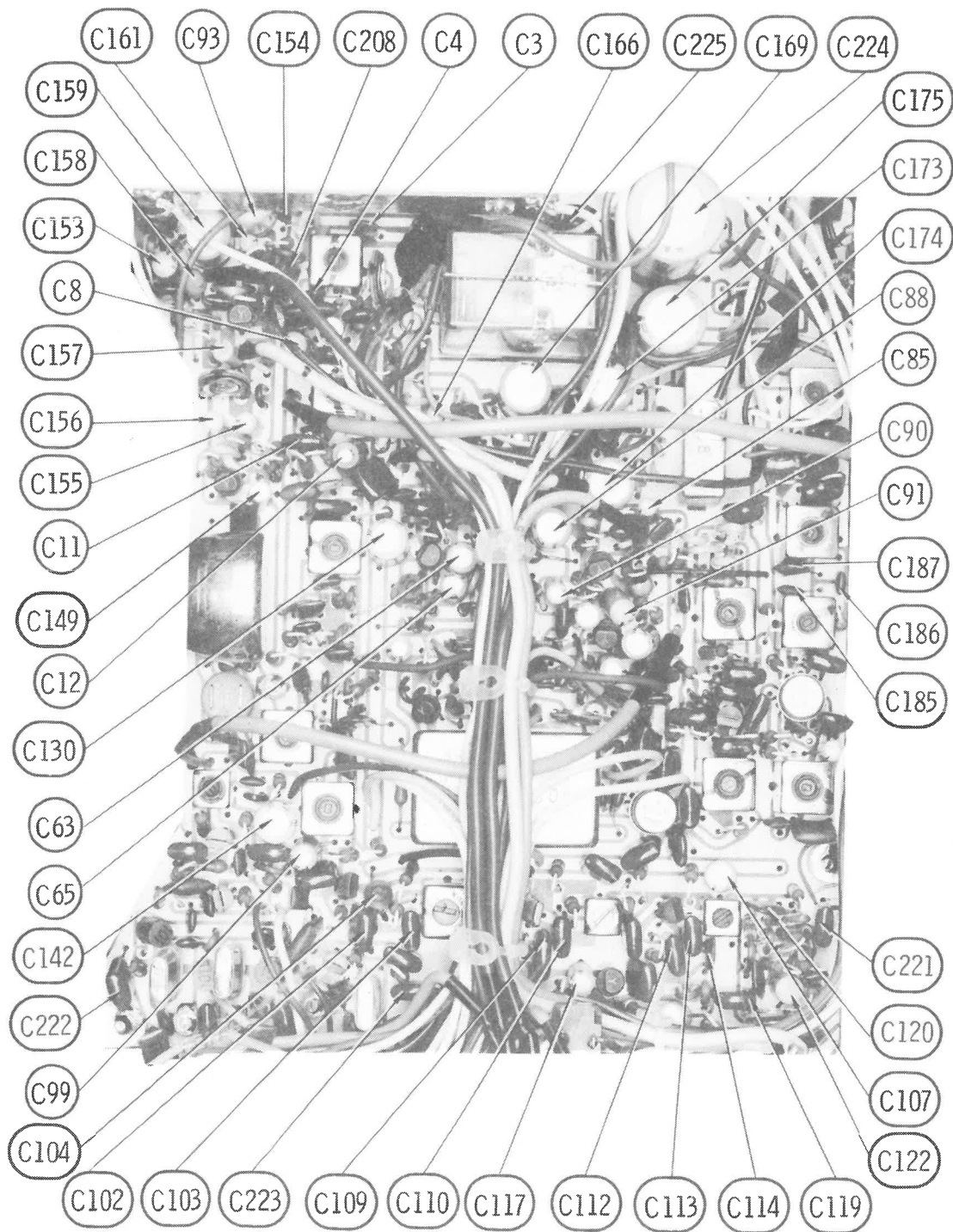


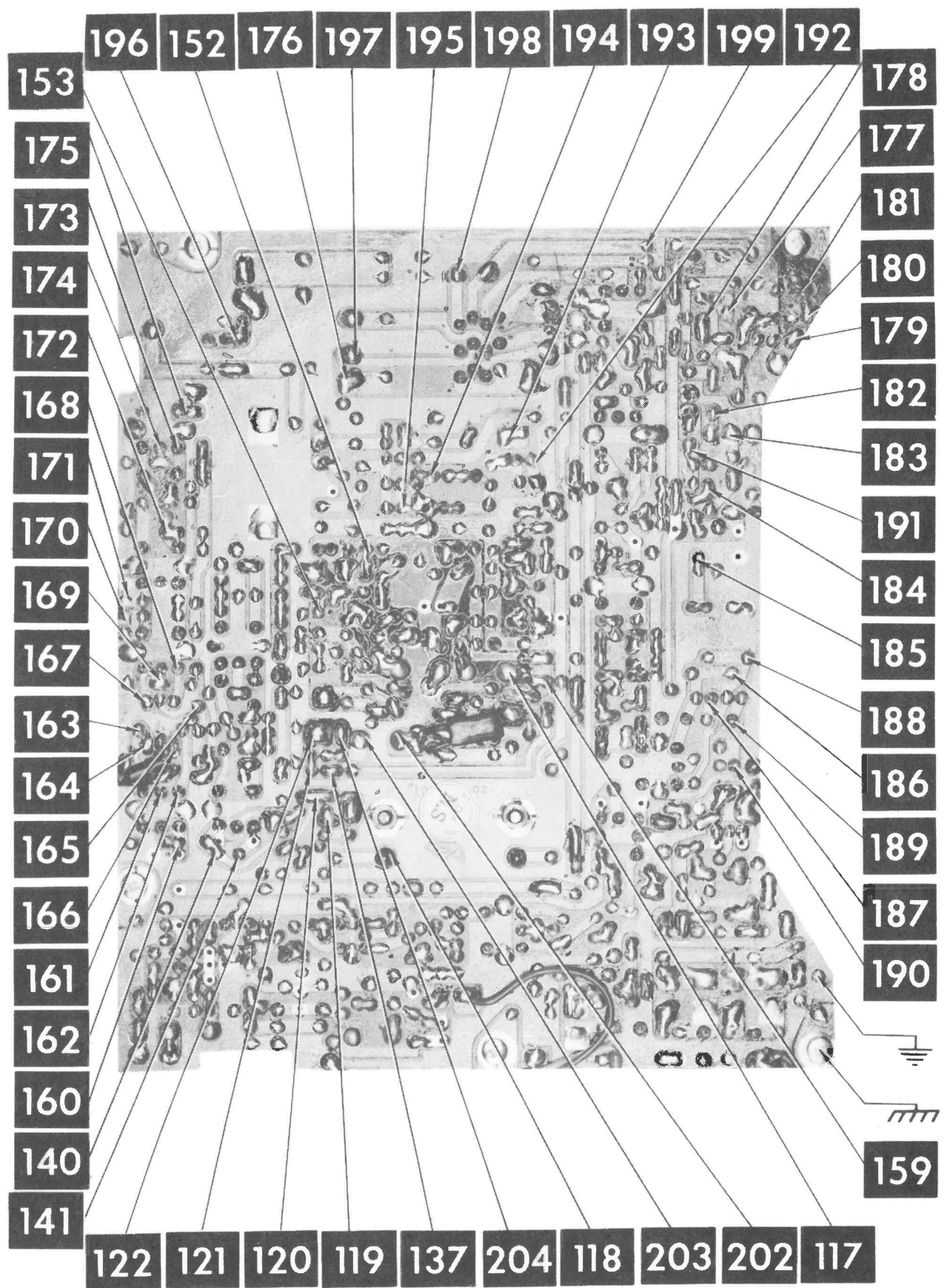


A Howard W. Sams CIRCUITRACE® Photo

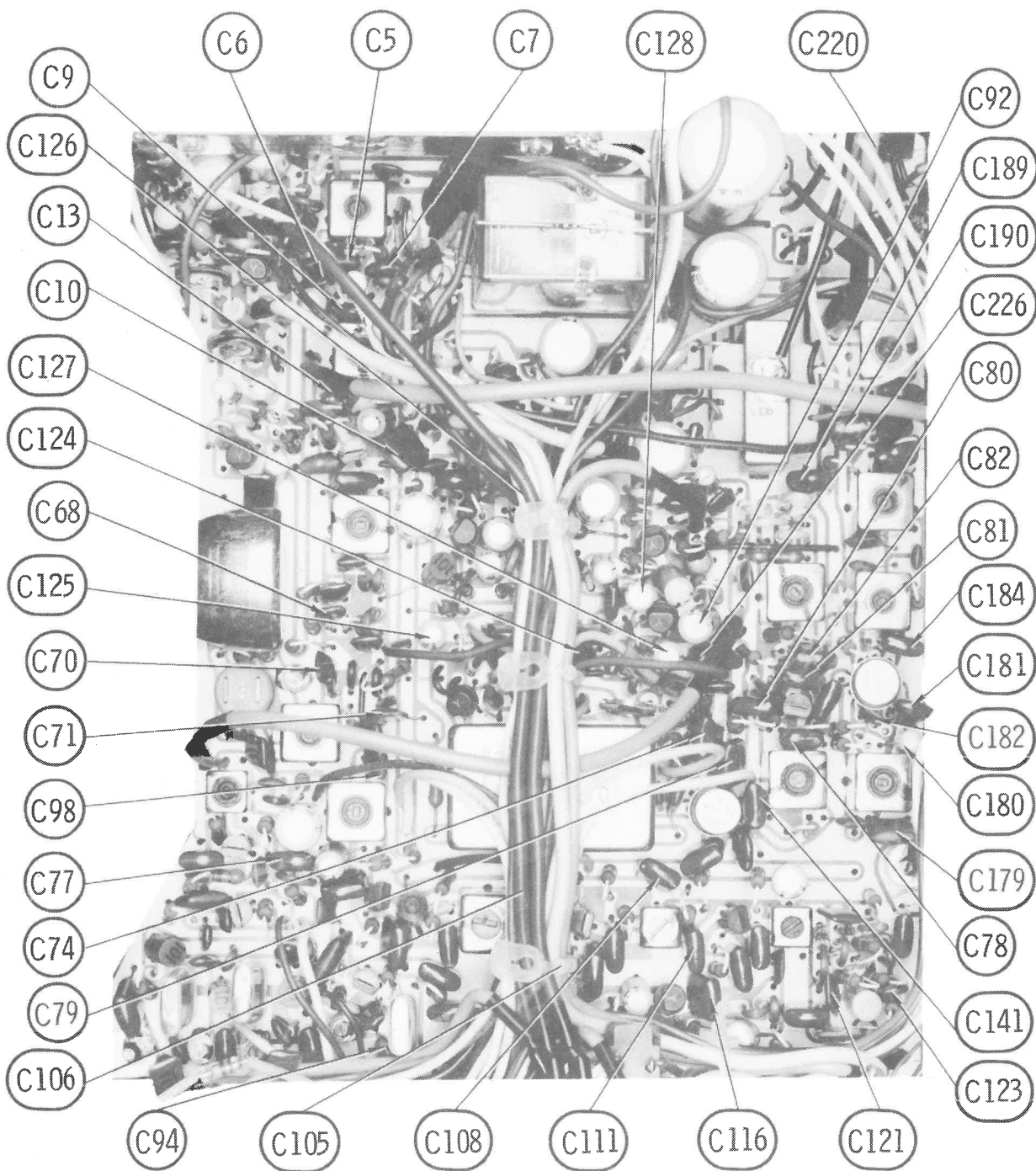




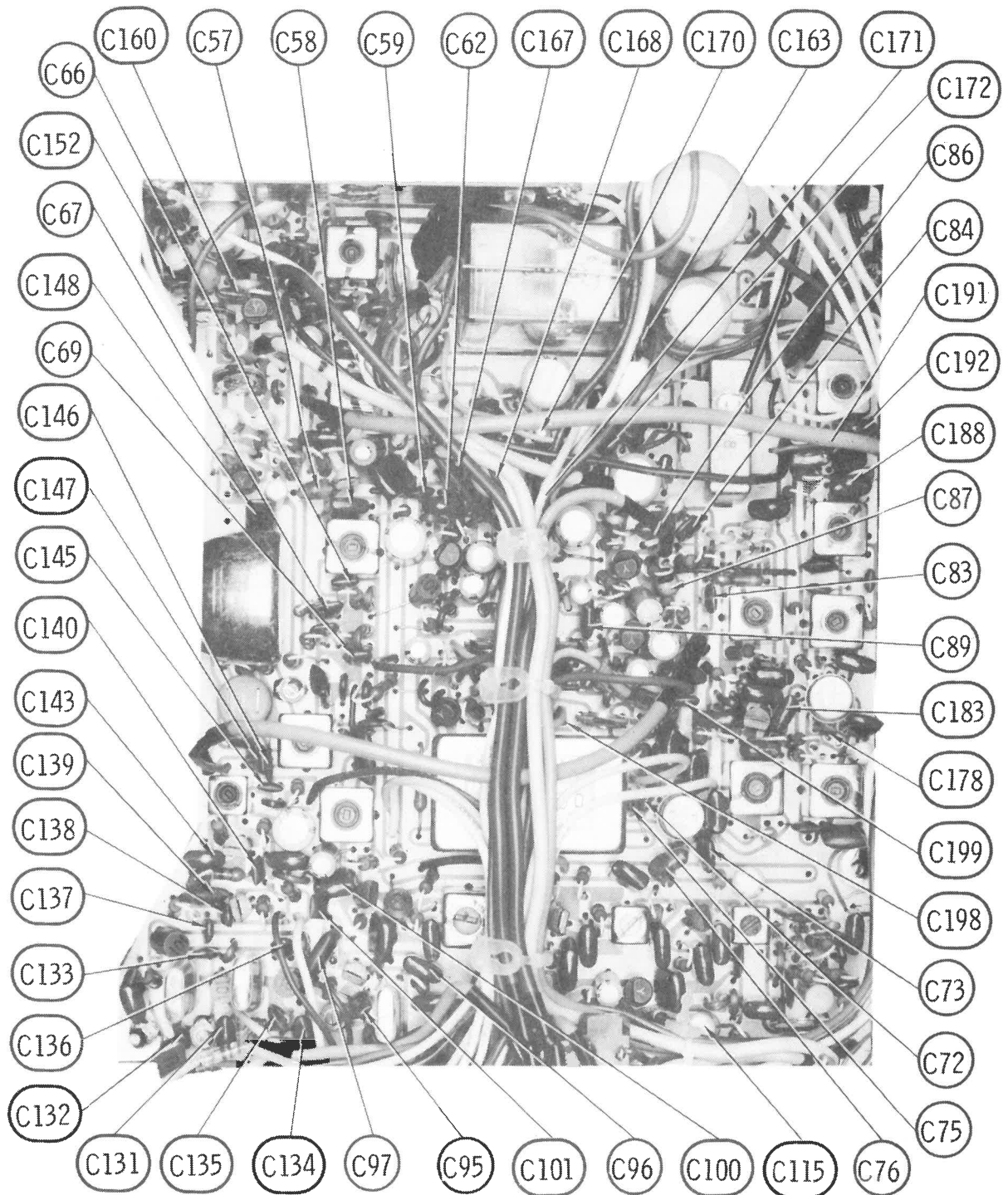


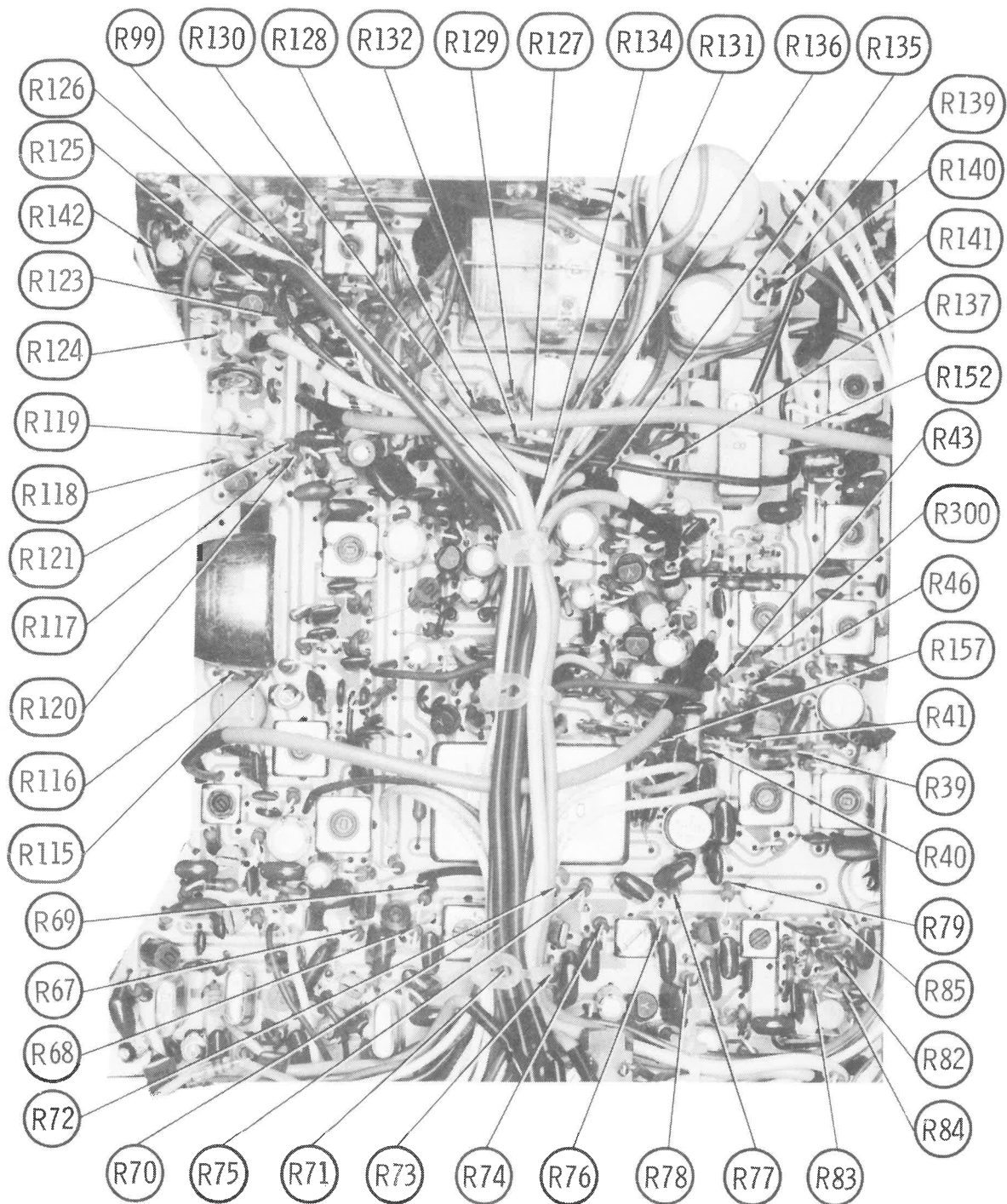


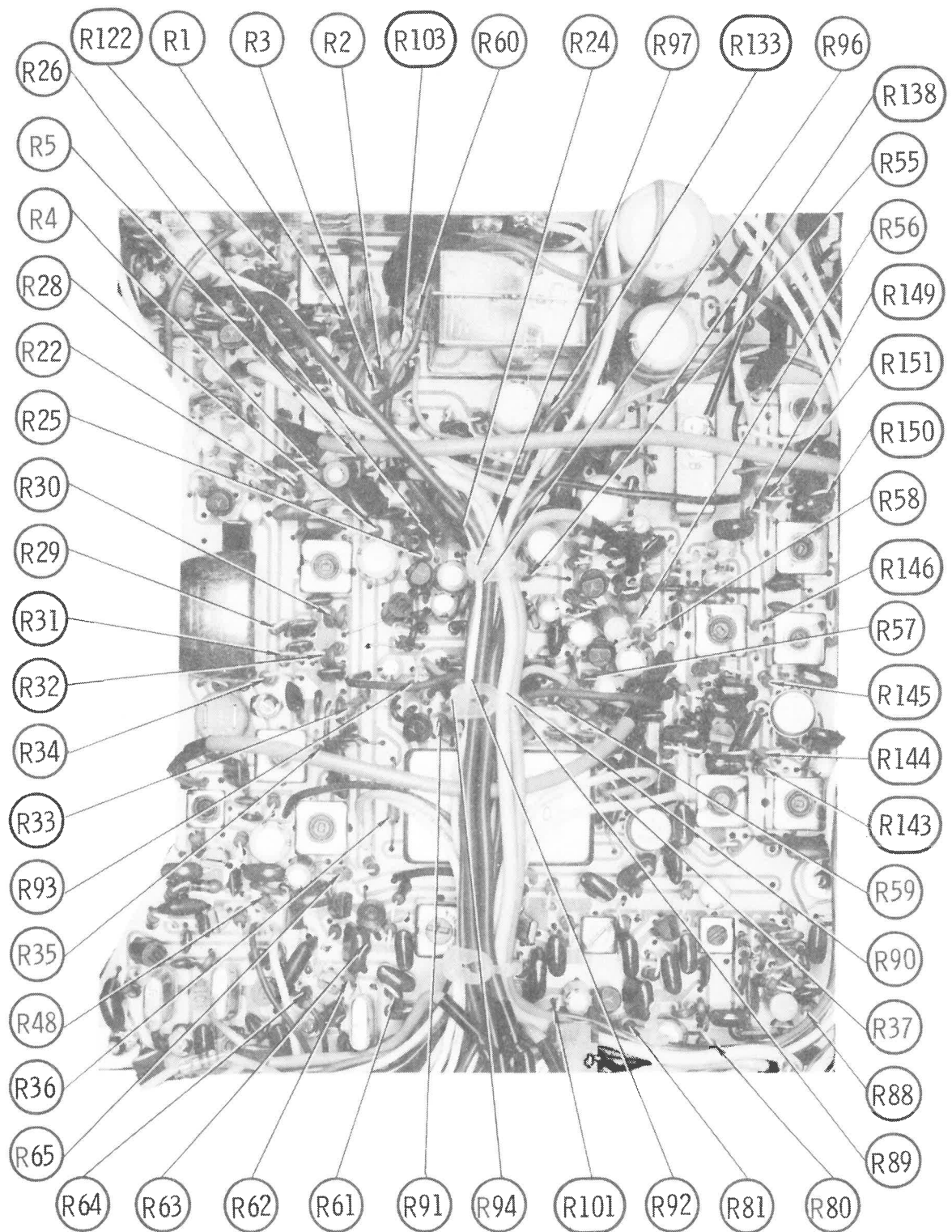
A Howard W. Sams **CIRCUITRACE®** Photo

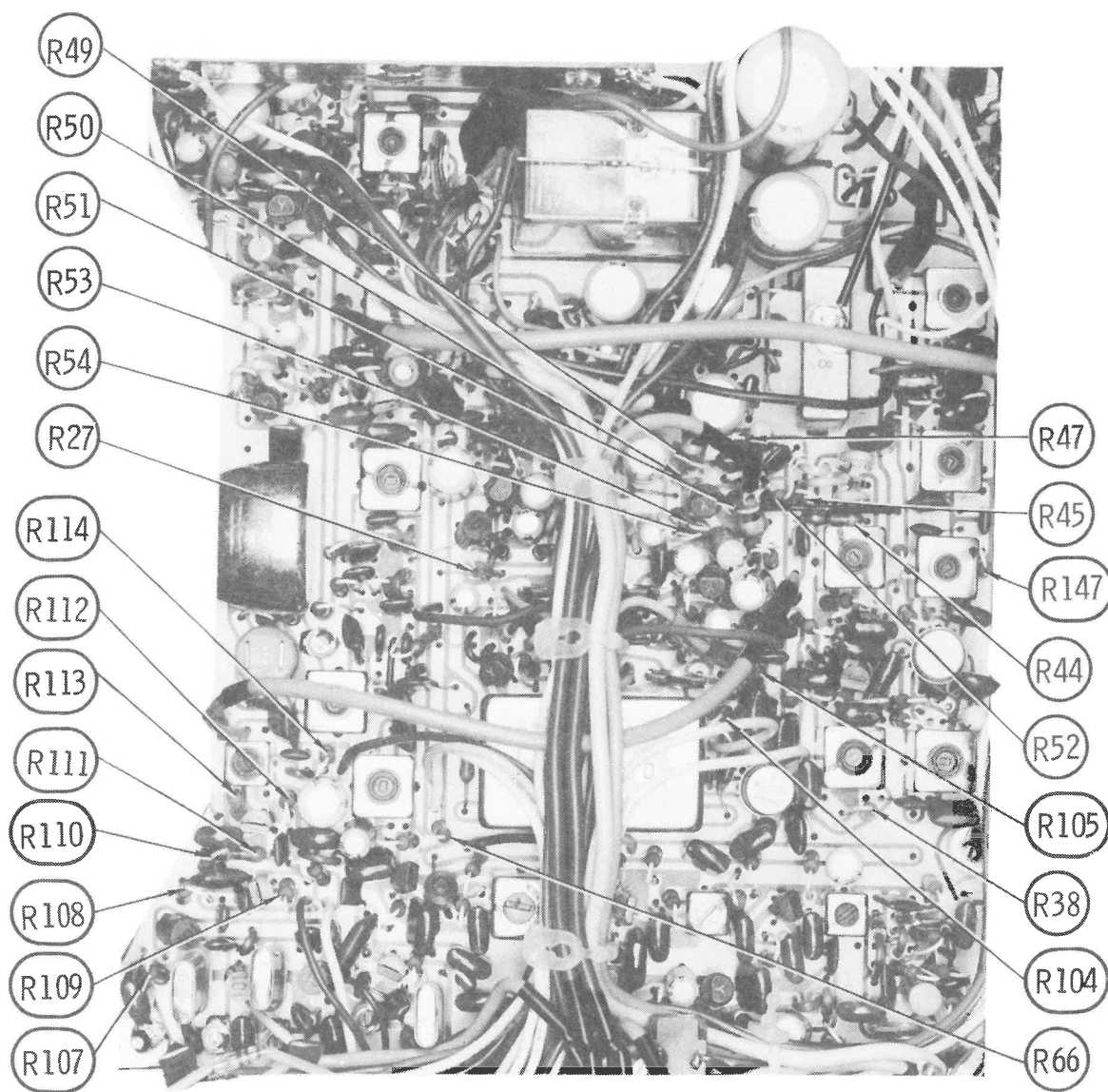


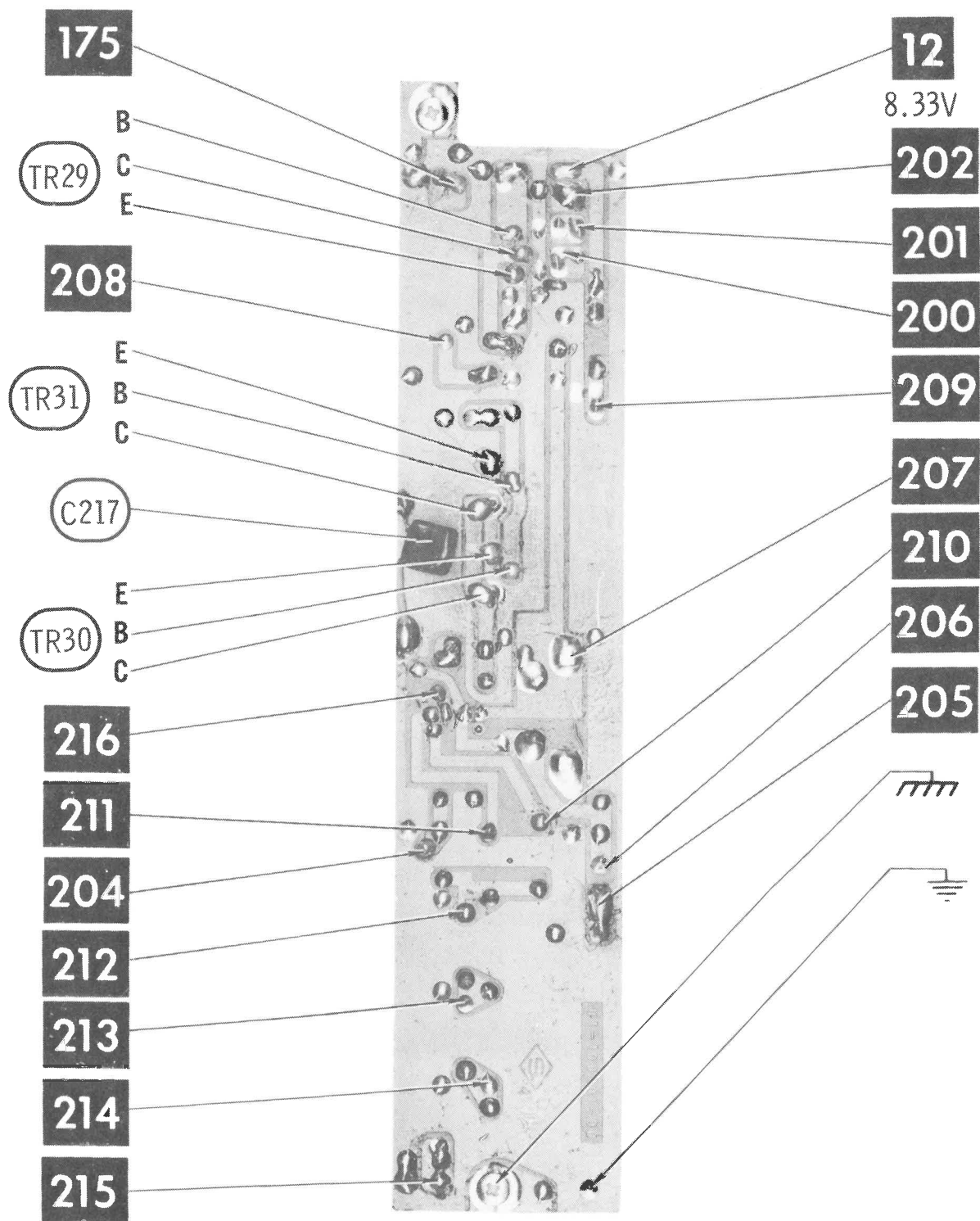
PEARCE-SIMPSON MODEL CHEETAH SS8



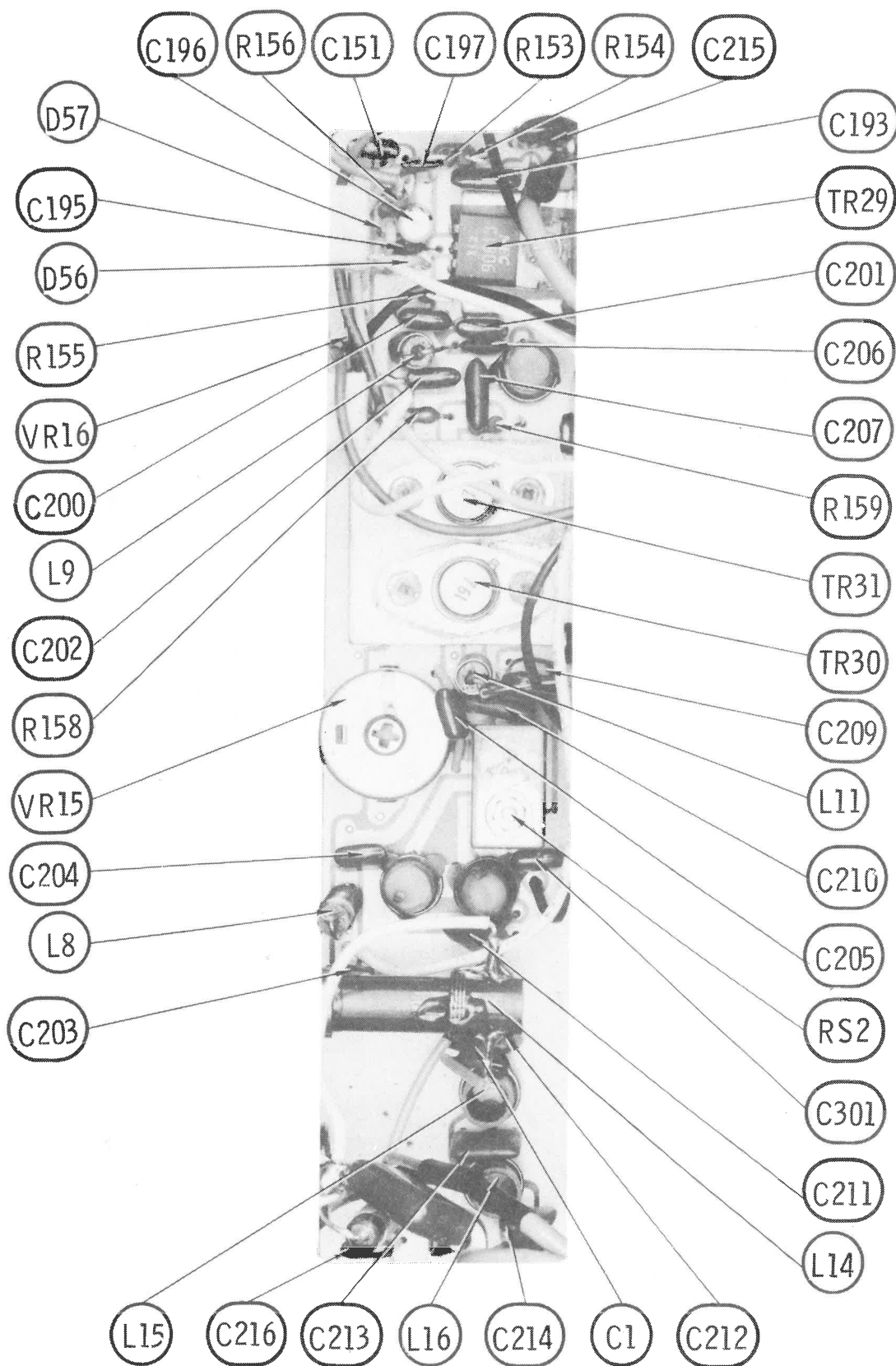


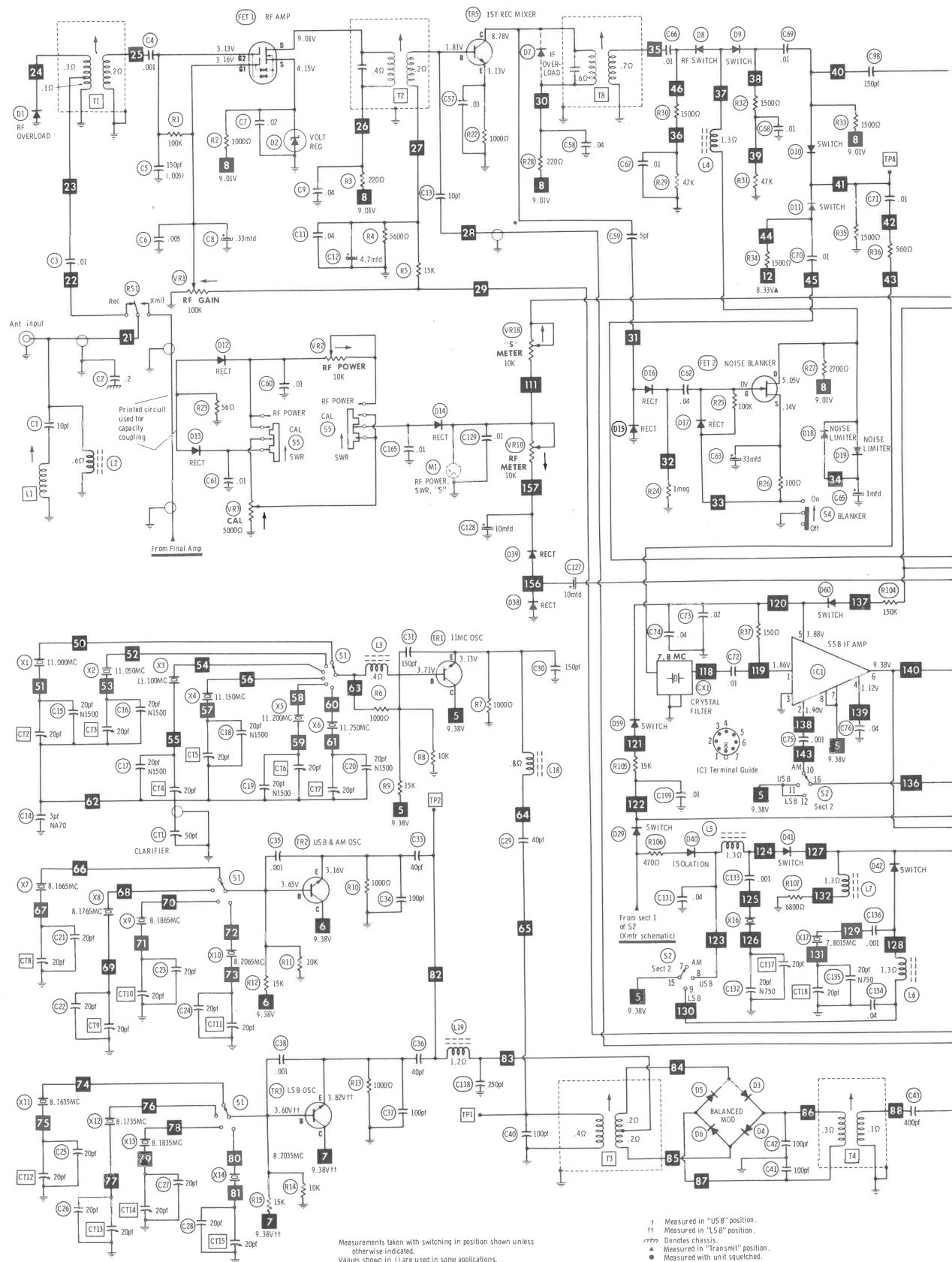






A Howard W. Sams CIRCUITRACE® Photo

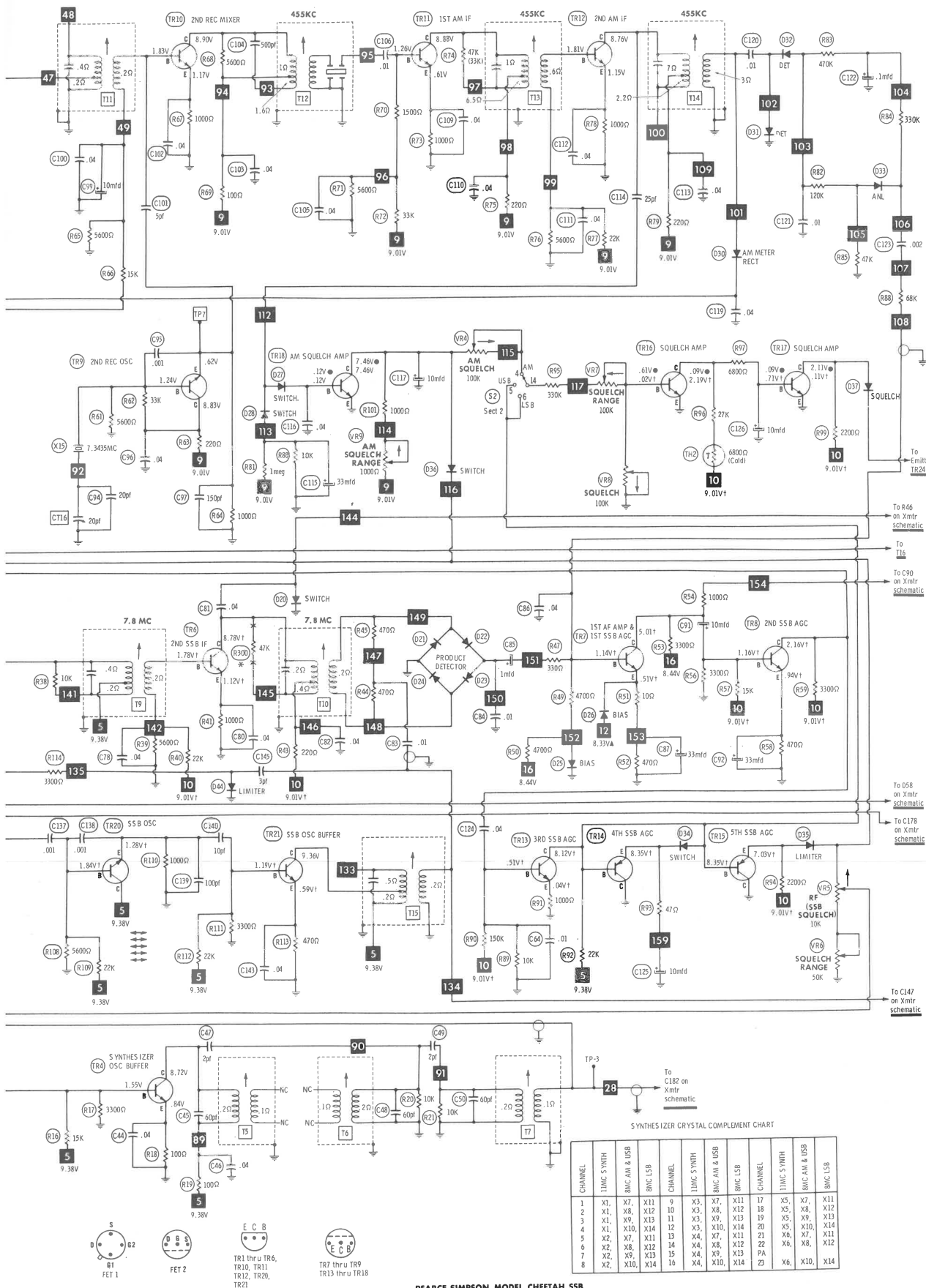


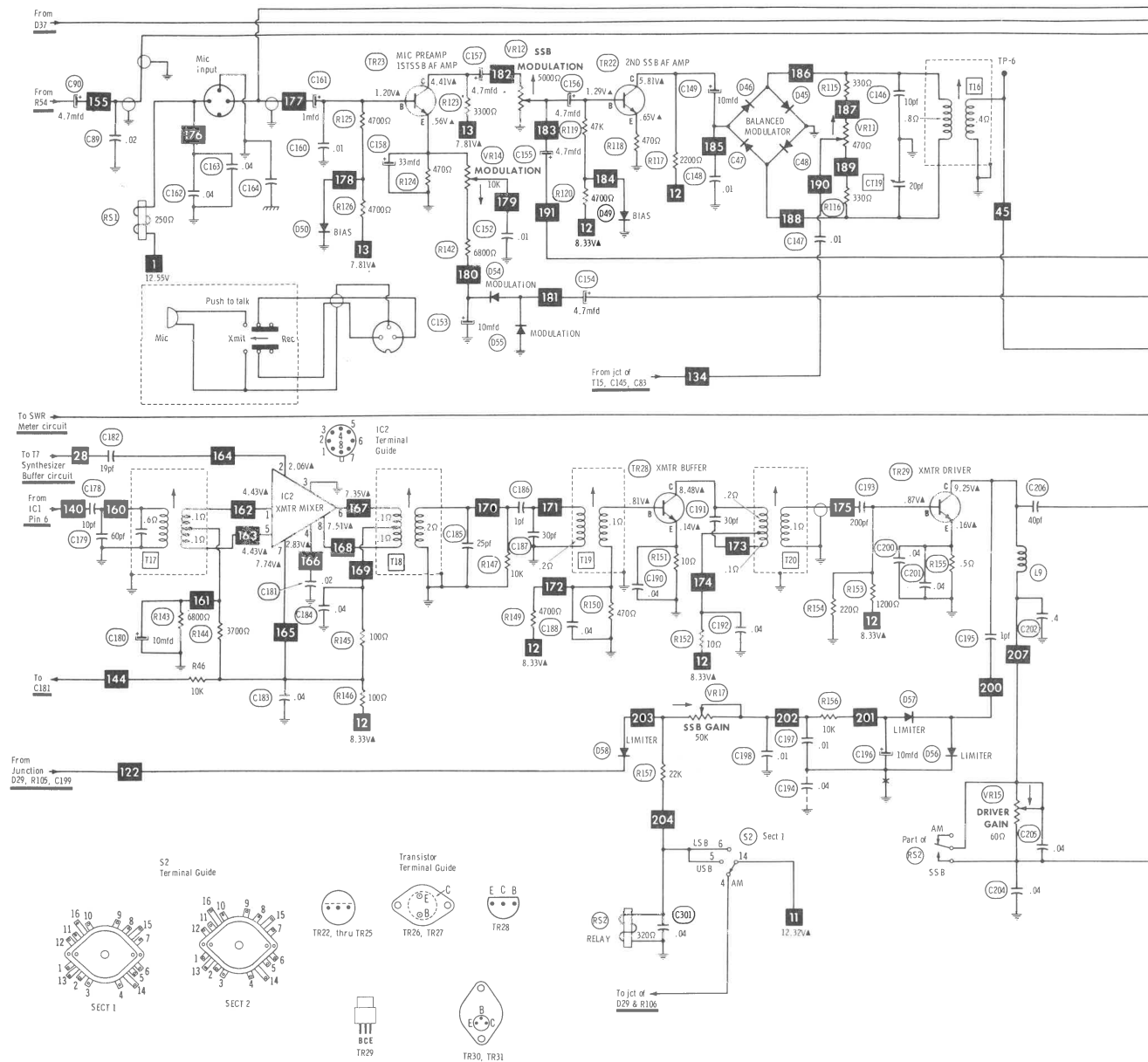


A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**
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Measurements taken with switching in position shown unless otherwise indicated.
Values shown in () are used in some applications.
Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.
Supply voltage maintained at rated value for measurements.
Voltage and resistance measured with VTVM or equivalent meter.
No signal applied and controls adjusted for normal operation.
Arrow on control indicates direction of advance.
Numbers assigned to terminals may not be found on the unit.
Transistor resistances vary widely. No resistance measurements taken.

- † Measured in "US B" position.
- 11 Measured in "LS B" position.
- ⌘ Denotes chassis.
- ▲ Measured in "Transmit" position.
- Measured with unit squelched.
- ⊥ Denotes ground. (Voltage reference unless otherwise indicated).
- Indicates connection used in some versions.
- ★ Indicates connection not used in some versions.
- * Omitted in some versions.
- See parts list.



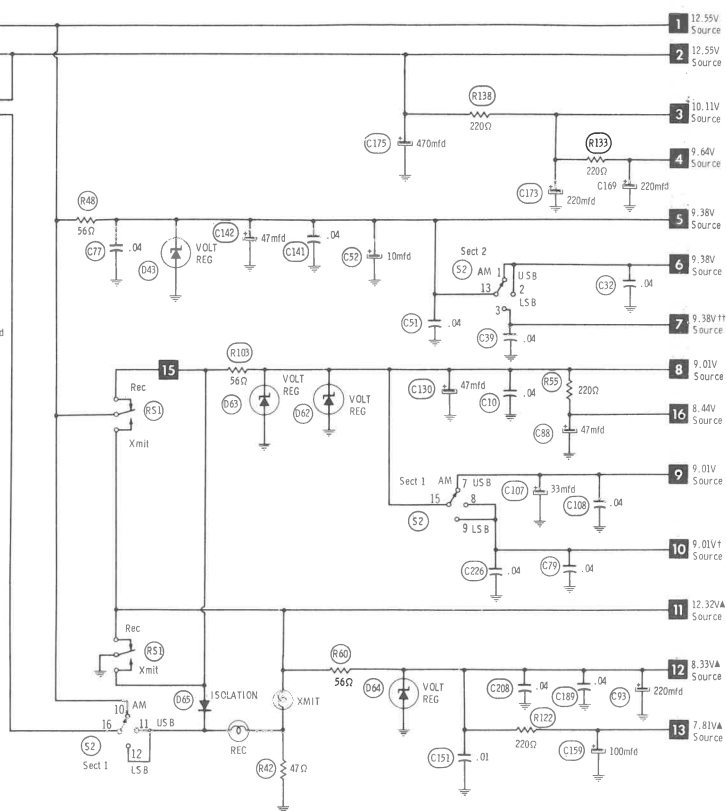


Denotes chassis.
 1 Measured in "US B" position.
 11 Measured in "LS B" position.
 ● Measured with unit switched.
 ▲ Measured in "Transmit" position.
 ⊕ Denotes ground. (Voltage reference unless otherwise indicated).
 --- Indicates connection used in some versions.
 * Indicates connection not used in some versions.
 * Omitted in some versions.
 * See parts list.
 Measurements taken with switching in position unless otherwise indicated.
 Values shown in () are used in some applications.
 Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.
 Supply voltage maintained at rated value for measurements.
 Voltage and resistance measured with VTVM or equivalent meter.
 no signal applied and controls adjusted for normal operation.
 Arrow on control indicates direction of advance.
 Numbers assigned to terminals may not be found on the unit.
 Transistor resistances vary widely. No resistance measurements taken.

A PHOTOFACT STANDARD NOTATION SCHEMATIC

with CIRCUITRACE

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PEARCE-SIMPSON MODEL CHEETAH SSB

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. 8499 Single-Conductor Shielded (Neoprene)
	8498 Single-Conductor Shielded (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	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D2	1N704A		Z-1200					ECG 5068
D3	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D4	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D5	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D6	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D8	1S1007	GE-300 (7)	D200MP (6)	PTC215 (6)	HEPR0600 (7)	SK3100 (7)	RT218 (7)	ECG 178MP (6)
D9	1S1007							
D10	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D11	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D12	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D13	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D14	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D15	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D16	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D17	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D18	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D19	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D20	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D21	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D22	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D23	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D24	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D25	KB262	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D26	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D27	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D28	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D29	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D30	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D31	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D32	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D33	1S1694	GE-504A	8D4 or 5A4D	PTC201 or	HEPR0052	SK3030 or	RT213 or	ECG 116 or
				PTC202		SK3031	RT214	ECG 117
D34	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D35	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D36	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D37	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D38	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D39	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D40	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D41	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D42	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D43	BZ090	GEZD-9.1	Z-1208	PTC505	HEP104	SK3060		ECG 139
D44	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D45	1S1007	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D46	1S1007	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D47	1S1007	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D48	1S1007	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D49	KB262	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D50	KB262	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D51	KB262	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D52	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D53	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D54	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D55	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D56	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D57	1N60	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D58	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D59	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D60	WG1010A	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D61	SR1K	GE-504A	8D4 or 5A4D	PTC201 or	HEPR0052	SK3030 or	RT213 or	ECG 116 or
				PTC202		SK3031	RT214	ECG 117
D62	BZ090	GEZD-9.1	Z-1208	PTC505	HEP104	SK3060		ECG 139
D63	1N756A	GE-X11	Z-1208	ZB8.2	HEPZ0217			ECG 5072
D64	BZ090	GEZD-9.1	Z-1208	PTC505	HEP104	SK3060		ECG 139

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.
D65	SR1K	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	HEPR3030 or HEPR3031	RT213 or RT214	ECG 116 or ECG 117
FET-1	3SK22Y	GE-FET-2	FE-100	PTC152	HEPF2004 HEPF0021	SK3050 SK3116	RT180 RT175	ECG 132
FET-2	2SK30Y							
IC1	TA7045M							
IC2	TA7045M	GE-17	TR-21	PTC121	HEP728	SK3018	RT102	ECG 108
TR1	2SC839(H)							
TR2	2SC839(H)							
TR3	2SC839(H)	GE-17	TR-21	PTC121	HEP728	SK3018	RT102	ECG 108
TR4	2SC839(H)							
TR5	2SC839(H)							
TR6	2SC839(H)	GE-17	TR-21	PTC121	HEP728	SK3018	RT102	ECG 108
TR7	2SC372(Y)							
TR8	2SC372(Y)							
TR9	2SC839(H)	GE-17	TR-21	PTC139	HEP55	SK3044	RT102	ECG 108
TR10	2SC839(H)							
TR11	2SC839(H)							
TR12	2SC839(H)	GE-17	TR-21	PTC121	HEP728	SK3018	RT102	ECG 108
TR13	2SC372(Y)							
TR14	2SA495(Y)							
TR15	2SA495(Y)	GE-21	TR-30	PTC103	HEP52	SK3114	RT102	ECG 123A
TR16	2SC372(Y)							
TR17	2SC372(Y)							
TR18	2SC372(Y)	GE-20	TR-21	PTC139	HEP55	SK3044	RT102	ECG 123A
TR20	2SC839(H)							
TR21	2SC839(H)							
TR22	2SC372(Y)	GE-20	TR-21	PTC121	HEP728	SK3018	RT102	ECG 108
TR23	2SC372(Y)							
TR24	2SC372(Y)							
TR25	2SC735(Y)	GE-20	TR-21	PTC139	HEP55	SK3044	RT102	ECG 123A
TR26	2SB474							
TR27	2SB474							
TR28	2SC710(C)	GE-20	IRTR-50 (7)	PTC120 (7)	HEP643 (7)	SK3086 (6)	RT102	ECG 131MP (6)
TR29	2SC1306							
TR30	2SC1239							
TR31	2SC1239	GE-28	IRTR-55	PTC110	HEPS3023	SK3054	RT154	ECG 123A
		GE-28	IRTR-65	PTC110	HEPS3001	SK3049		ECG 186
		GE-28	IRTR-65	PTC110	HEPS3001	SK3049		ECG 195

(6) Matched Pair

(7) Two Required - Select Matched Pair

PEARCE-SIMPSON MODEL CHEETAH SSB

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C8	.33 50V					TDC334M50EL	SD50-R339
C12	4.7 25V		RME-A-G-005	EP30-5	WBR5-50	VTT4R7A50	EV-1319
C52	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C63	33 10V		ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C65	1 50V		RME-A-J-001	EP50-2	WBR1-50	MTV1 CB50	EV-1615
C85	1 10V		ME-1-D-001	EP15-2	WBR1-50	MTV1 CB50	EV-1315
C87	33 10V		ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C88	47 16V		RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C90	4.7 10V		RME-A-D-005	EP15-5	WBR5-50	VTT4R7A50	EV-1319
C91	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C92	33 6.3V		ME-2-B-035	EP6-25	WBR35-50	VTT33A10	EV-1125
C93	220 16V		ME-6-E-200	EA15-250	WBR250-16	MTV200DE15	EV-1240
C99	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C107	33 10V		ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C115	33 6.3V		ME-2-B-035	EP6-25	WBR35-50	VTT33A10	EV-1125
C117	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C122	.1 25V					TDC104M50EL	SD35-R109
C125	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C126	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C127	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C128	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C130	47 16V		RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C142	47 16V		RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C149	10 10V		RME-A-D-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C153	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C154	4.7 25V		RME-A-G-005	EP30-5	WBR5-50	VTT4R7A50	EV-1319
C155	4.7 10V		RME-A-D-005	EP15-5	WBR5-50	VTT4R7A50	EV-1319
C156	4.7 10V		RME-A-D-005	EP15-5	WBR5-50	VTT4R7A50	EV-1319
C157	4.7 10V		RME-A-D-005	EP15-5	WBR5-50	VTT4R7A50	EV-1319
C158	33 10V		ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C159	100 16V		RME-E-E-100	EP15-100	WBR100-16	MTV100CD15	EV-1230

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.
C161	1 10V		ME-1-D-001	EP15-2	WBR1-50	MTV1CB50	EV-1315
C166	1 10V		ME-1-D-001	EP15-2	WBR1-50	MTV1CB50	EV-1315
C168	220 6.3V		ME-6-B-200	EA6-250	WBR250-16	MTV200DB10	EV-1140
C169	220 16V		ME-6-E-200	EA15-250	WBR250-16	MTV200DE15	EV-1240
C170	1 10V		ME-1-D-001	EP15-2	WBR1-50	MTV1CB50	EV-1315
C173	220 16V		ME-6-E-200	EA15-250	WBR250-16	MTV200DE15	EV-1240
C174	220 6.3V		ME-6-B-200	EA6-250	WBR250-16	MTV200DB10	EV-1140
C175	470 16V		RME-L-E-500	EA15-500	WBR500-16	MTV500DN15	EV-1250
C180	10 10V		RME-A-D-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C196	10 16V		RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C224	1000 25V		RME-P-G-1000				EV-1360

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.
C1	10	10%	DM-15-100J		CD15DC100J03	SX410	
C2	.2		1DP-3-224			PVC1022	1DB-P22
C3	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C4	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C5	150	10%	DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C6	.005		CCD-502	CK-502	MGP005	TA250	TG-D50
C7	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C9	.04			DD-403		GP140	
C10	.04			DD-403		GP140	
C11	.04			DD-403		GP140	
C13	10		DM-15-100J		CD15CD100J03	SX410	
C14	3	N470					10TCT-V30
C15	20	N1500					10TCW-Q20
C16	20	N1500					10TCW-Q20
C17	20	N1500					10TCW-Q20
C18	20	N1500					10TCW-Q20
C19	20	N1500					10TCW-Q20
C20	20	N1500					10TCW-Q20
C21	20		DM-15-200J	CPR-20J		SX420	
C22	20		DM-15-200J	CPR-20J		SX420	
C23	20		DM-15-200J	CPR-20J		SX420	
C24	20		DM-15-200J	CPR-20J		SX420	
C25	20		DM-15-200J	CPR-20J		SX420	
C26	20		DM-15-200J	CPR-20J		SX420	
C27	20		DM-15-200J	CPR-20J		SX420	
C28	20		DM-15-200J	CPR-20J		SX420	
C29	40		DM-15-390J	CPR-39J	CD15ED390J03	SX439	MS-44
C30	150	10%	DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C31	150		CCD-151	DD-151	GP150	GP315	10TS-T15
C32	.04			DD-403		GP140	
C33	40		DM-15-390J	CPR-39J	CD15ED390J03	SX439	MS-44
C34	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C35	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C36	40	10%	DM-15-390J	CPR-39J	CD15ED390J03	SX439	MS-44
C37	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C38	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C39	.04			DD-403		GP140	
C40	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C41	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C42	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J501
C43	400	10%	DM-19-391J	CPR-390J	CD15FD391J03	SX339	MS-34
C44	.04			DD-403		GP140	
C45	60	10%	DM-15-620J	CPR-62J		SX462	MS-46
C46	.04			DD-403		GP140	
C47	2		DM-15-020D				
C48	60	10%	DM-15-620J	CPR-62J		SX462	MS-46
C49	2		DM-15-020D				
C50	60	10%	DM-15-620J	CPR-62J		SX462	MS-46
C51	.04			DD-403		GP140	
C53	.04			DD-403		GP140	
C54	.04			DD-403		GP140	
C55	.04			DD-403		GP140	
C56	.04			DD-403		GP140	
C57	.03		CCD-203	CK-303		GP130	TG-S30
C58	.04			DD-403		GP140	
C59	5		DM-15-050D		CD15CD050D03	SX550	

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/ELMENC	CENTRALAB	CORNELL-DUBILIER	MALLORY	SPRAGUE
			PART No.	PART No.	PART No.	PART No.	PART No.
C60	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C61	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C62	.04			DD-403		GP140	
C64	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C66	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C67	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C68	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C69	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C70	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C71	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C72	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C73	.02		CCD-103	CK-103	MGP01	TA110	TG-S10
C74	.04		CCD-203	CK-203	MGP02	TA120	TG-S20
C75	.001			DD-403		GP140	
C76	.04		CCD-102	DD-102	GP1000	SM210	2SS-D10
C77	.04			DD-403		GP140	
C78	.04			DD-403		GP140	
C79	.04			DD-403		GP140	
C80	.04			DD-403		GP140	
C81	.04			DD-403		GP140	
C82	.04			DD-403		GP140	
C83	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C84	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C86	.04			DD-403		GP140	
C89	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C94	20	N750		DTN-20	N20	CN7420	10TCU-Q20
C95	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C96	.04			DD-403		GP140	
C97	150	10%	DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C98	150	10%	DM-15-151J	CPR-150J	CD15FD151J03	SX315	424MC1500J501
C100	.04			DD-403		GP140	
C101	5		DM-15-050D		CD15CD050D03	SX550	
C102	.04			DD-403		GP140	
C103	.04			DD-403		GP140	
C104	500	10%	DM-19-501J	CPR-510J	CD15FD511J03	SX351	424ME5100J501
C105	.04			DD-403		GP140	
C106	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C108	.04			DD-403		GP140	
C109	.04			DD-403		GP140	
C110	.04			DD-403		GP140	
C111	.04			DD-403		GP140	
C112	.04			DD-403		GP140	
C113	.04			DD-403		GP140	
C114	25	10%	DM-15-240J	CPR-24J		SX424	MS-425
C116	.04			DD-403		GP140	
C118	250	10%	DM-19-251J	CPR-240J	CD15FD241J03	SX324	MS-324
C119	.04			DD-403		GP140	
C120	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C121	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C123	.002		CCD-202	DD-202	GP2000	GP220	2SS-D20
C124	.04			DD-403		GP140	
C129	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C131	.04			DD-403		GP140	
C132	20	N750		DTN-20	N20	CN7420	10TCU-Q20
C133	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C134	.04			DD-403		GP140	
C135	20	N750		DTN-20	N20	CN7420	10TCU-Q20
C136	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C137	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C138	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C139	100	10%	DM-15-101J	CPR-100J	CD15FD101J03	SX310	424MC1000J01
C140	10		DM-15-100J		CD15CD100J03	SX410	
C141	.04			DD-403		GP140	
C143	.04			DD-403		GP140	
C145	3		DM-15-030D				
C146	10		DM-15-100J		CD15CD100J03	SX410	
C147	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C148	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C151	.04			DD-403		GP140	
C152	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C160	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C162	.04			DD-403		GP140	
C163	.04			DD-403		GP140	
C164	.04			DD-403		GP140	
C165	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C167	.04			DD-403		GP140	
C171	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C172	.04			DD-403		GP140	
C176	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C177	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C178	10		DM-15-100J		CD15CD100J03	SX410	
C179	60	10%	DM-15-620J	CPR-62J		SX462	MS-46
C181	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C182	10						
C183	.04			DD-403		GP140	
C184	.04			DD-403		GP140	
C185	25	10%	DM-15-240J	CPR-24J		SX424	MS-425
C186	1		DM-15-010D				

PEARCE-SIMPSON MODEL CHEETAH SSB

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.
C187	30	10%	DM-15-300J	CPR-30J		SX430	
C188	.04			DD-403		GP140	
C189	.04			DD-403		GP140	
C190	.04			DD-403		GP140	
C191	30	10%	DM-15-300J	CPR-30J		SX430	
C192	.04			DD-403		GP140	
C193	200	10%	DM-19-201J	CPR-200J	CD15FD201J03	SX320	424ME2000J501
C195	1		DM-15-010D				
C197	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C198	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C199	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C200	.04			DD-403		GP140	
C201	.04			DD-403		GP140	
C202	.04			DD-403		GP140	
C203	.04			DD-403		GP140	
C204	.04			DD-403		GP140	
C205	.04			DD-403		GP140	
C206	40	10%	DM-15-390J	CPR-39J	CD15ED390J03	SX439	MS-44
C207	200	10%	DM-19-201J	CPR-200J	CD15FD201J03	SX320	424ME2000J501
C208	.04			DD-403		GP140	
C209	.04			DD-403		GP140	
C210	300	10%	DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C211	600	10%	DM-19-621J	CPR-620J	CD19FD621J03	SX362	MS-36
C212	300	10%	DM-19-301J	CPR-300J	CD15FD301J03	SX330	424ME3000J501
C213	120	10%	DM-15-121J	CPR-120J	CD15FD121J03	SX312	424MC1200J501
C214	80	10%	DM-15-820J	CPR-82J	CD15ED820J03	SX482	424MC820J501
C215	.04			DD-403		GP140	
C216	.04			DD-403		GP140	
C217	.04			DD-403		GP140	
C218	.001						
C219	.2		1DP-3-224			PVC1022	1DB-P22
C220	.04			DD-403		GP140	
C221	.04			DD-403		GP140	
C222	.04			DD-403		GP140	
C223	.04			DD-403		GP140	
C225	.04			DD-403		GP140	
C226	.04			DD-403		GP140	
C301	.04			DD-403		GP140	
CT-1	0-50						
CT-2	0-20						
CT-3	0-20						
CT-4	0-20						
CT-5	0-20						
CT-6	0-20						
CT-7	0-20						
CT-8	0-20						
CT-9	0-20						
CT-10	0-20						
CT-11	0-20						
CT-12	0-20						
CT-13	0-20						
CT-14	0-20						
CT-15	0-20						
CT-16	0-20						
CT-17	0-20						
CT-18	0-20						
CT-19	0-20						

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
VR1	RF Gain	100K		TSV-100K or T-100K	C-104	X201R104B	MTC15L1
VR2	RF Power	10K		TSV-10K(1) or T-10K(1)	C-103(1)	X201R103B(1)	MTC14L1(1)
VR3	Calibrate	5000					
VR8	Squelch	100K					
VR4	AM Squelch	100K		TSV-100K(1) or T-100K(1)	C-104(1)	X201R104B(1)	MTC15L1(1)
VR5	"SSB" RF Squelch	10K					
VR13	Volume/Switch	10K					
VR6	"SSB" Squelch Range	50K		TSV-50K(1) or TSV-100K(1) or TSV-1K(1) or T-1000(1)	C-503(1) C-104(1) C-102(1)	X201R503B(1) X201R104B(1) X201R102B(1)	MTC54L1(1) MTC15L1(1) MTC13L1(1)
VR7	Squelch Range	100K					
VR9	AM Squelch Range	1000					
VR10	RF Meter Adjust	10K		TSV-10K(1) or T-10K(1)	C-103(1)	X201R103B(1)	MTC14L1(1)
VR11	Balance	470		TSV-500(2) or T-500(2)	C-501(2)	X201R501B(2)	MTC52L1(2)

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CONTROLS (cont)

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
VR12	"SSB" Modulation Adjust	5000		TVS-5K or T-5000	C-502	X201R502B	MTC53L1
VR14	Modulation Adjust	10K		TSV-10K(1) or T-10K(1)	C-103(1)	X201R103B(1)	MTC14L1(1)
VR15	Driver Gain	60		WCP-60 or V-60		110-60	
VR16	Bias	200		T-200(1) or TSV-250(1)		X201R251B(1)	MTC22L1(1)
VR17	"SSB" Gain	50K		TSV-50K(1) or T-50K(1)	C-503(1)	X201R503B(1)	MTC54L1(1)
VR18	"S" Meter Adjust	10K		TSV-10K(1) or T-10K(1)	C-103(1)	X201R103B(1)	MTC14L1(1)

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

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R51	10 1/4 Watt	CD-10	
R141	1 1/2 Watt		
R151	10 1/4 Watt	CD-10	
R152	10 1/4 Watt	CD-10	

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R155	.5 1/4 Watt		
TH1	35 (Co1d)		TD8A-40
TH2	6800 (Co1d)		TD-C263

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	TVI Trap	NS-1531	19-6022	74F225AI	TA311
L2	Antenna Loading	LF-3R9	19-1003	4608	T858
L3	RF Choke (3.9uh)	LF-101	19-1016	4632	T866
L4	RF Choke (100uh)	LF-101	19-1016	4632	T866
L5	RF Choke (100uh)	LF-101	19-1016	4632	T866
L6	RF Choke (100uh)	LF-101	19-1016	4632	T866
L7	RF Choke (100uh)	LF-101	19-1016	4632	T866
L8	RF Choke	NS-1515	19-1000	74F106AP	T855
L9	RF Choke	NS-1515	19-1000	74F106AP	T855
L10	RF Choke (Adjustable)	NS-1503 (1)			
L11	RF Choke	NS-1515	19-1000	74F106AP	T855
L12	AM Antenna	NS-1503(1)			
L13	SSB Antenna	NS-1503(1)			
L14	Pi Filter	NS-1503(2)			
L15	Pi Filter	NS-1503(2)			
L16	Pi Filter	NS-1503(2)			
L17	RF Choke	NS-1516	19-2006	4590	T803
L18	RF Choke (8.2uh)	LF4-8R2	19-1009	4611	T960
L19	RF Choke (10uh)	LF4-100	19-1010	4622	
T1	Rec. Antenna	TKXC-22019GN			
T2	Rec. RF	TKXC-22017AO			
T3	Input Mixer	TKXN-21017ZV1			
T4	Output Mixer	KXN-6711BM			
T5	Harmonic Suppressor	KXN-6711BN			
T6	Harmonic Suppressor	KXN-6711BN			
T7	Oscillator Buffer	KXN-6711BN			
T8	1st Mixer Output	TKAC-22020AO			
T9	7.8MC SSB IF	TKAC-22015A			
T10	7.8MC SSB IF	TKAC-22015A			
T11	2nd Mixer Output	TKAC-22015A			
T12	Input IF	MFH-535			
T13	Interstage IF	LLC-3657	16-9034	8811	
T14	Output IF	LLC-4990A2	16-9035	8515	
T15	Carrier Oscillator	113CC-2804AC			
T16	Balance Modulator	TKAN-21016AO			
T17	Xmtr. SSB IF	TKAN-21012ZV1			
T18	Xmtr. SSB 1st Mixer	TKXN-21379UH			
T19	Xmtr. SSB 2nd Mixer	TKXN-21014AO			
T20	Xmtr. SSB Buffer	TKXN-22018GN			

(1) Includes Slug. (2) Less Slug.

Harmonic Suppressor

None
5/10/74

PEARCE-SIMPSON MODEL CHEETAH SSB

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.	
CH	250ma (1) 980ma (2)	.5	2.75mh	N28-7111H				(1) Receive (2) Transmit

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
OPT	26 ohms	8	N35-7274H				

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.	
IPT	1.1	1CT		N24A-7258A				

SPEAKER

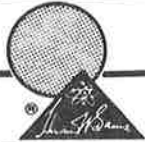
ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2" x 6" PM 8 ohms	16D-1363SF	26A07Z8	

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	3AG, 2 Amp		RF-104	AGC2	HDJ	312002	155120A	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CX1	Crystal Filter	G-7250	7.8MC
M1	Meter	Type-91	RF Power - SWR - "S"
RS1	Relay	HE-3144	Receiver/Transmit
RS2	Relay	MT-2	AM/SSB
S1	Switch	RL-2.4.24	Channel Selector
S2	Switch	SRE2.8.3.R208	Mode Selector (AM-USB-LSB)
S3	Switch		CB-PA
S4	Switch		Noise Blanker
S5	Switch		S/RF-CAL-SWR
X1	Crystal		11.000MC
X2	Crystal		11.050MC
X3	Crystal		11.100MC
X4	Crystal		11.150MC
X5	Crystal		11.200MC
X6	Crystal		11.250MC
X7	Crystal		8.1665MC
X8	Crystal		8.1765MC
X9	Crystal		8.1865MC
X10	Crystal		8.2065MC
X11	Crystal		8.1635MC
X12	Crystal		8.1735MC
X13	Crystal		8.1835MC
X14	Crystal		8.2035MC
X15	Crystal		7.3435MC
X16	Crystal		7.7985MC
X17	Crystal		7.8015MC
	Microphone Assembly	SM-143	



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NOTE

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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 Dyna-Com 3B (99-32450L)

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: GC ELECTRONICS
L3, L4, CF#9087, #9089
L5, L6, L9#9440

RECEIVER

Connect an AC VTVM across speaker voice coil. Set squelch control fully counterclockwise. Adjust Volume control to obtain a suitable reading.

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to base of TR2 (Mixer), low side to ground. Set to 455KC (Mod.)	Any	L4, L3, CF	Adjust for maximum.
High side thru .01mfd to antenna connector, low side to ground. Set generator to 27.075MC (Mod) (Channel 10).	10	L2, L1	Adjust for maximum.

METER ADJUSTMENT

Connect 15VDC to power input connector. Turn unit on and adjust VR5 for an indication at the extreme right edge of the center section marked "B".

TRANSMITTER

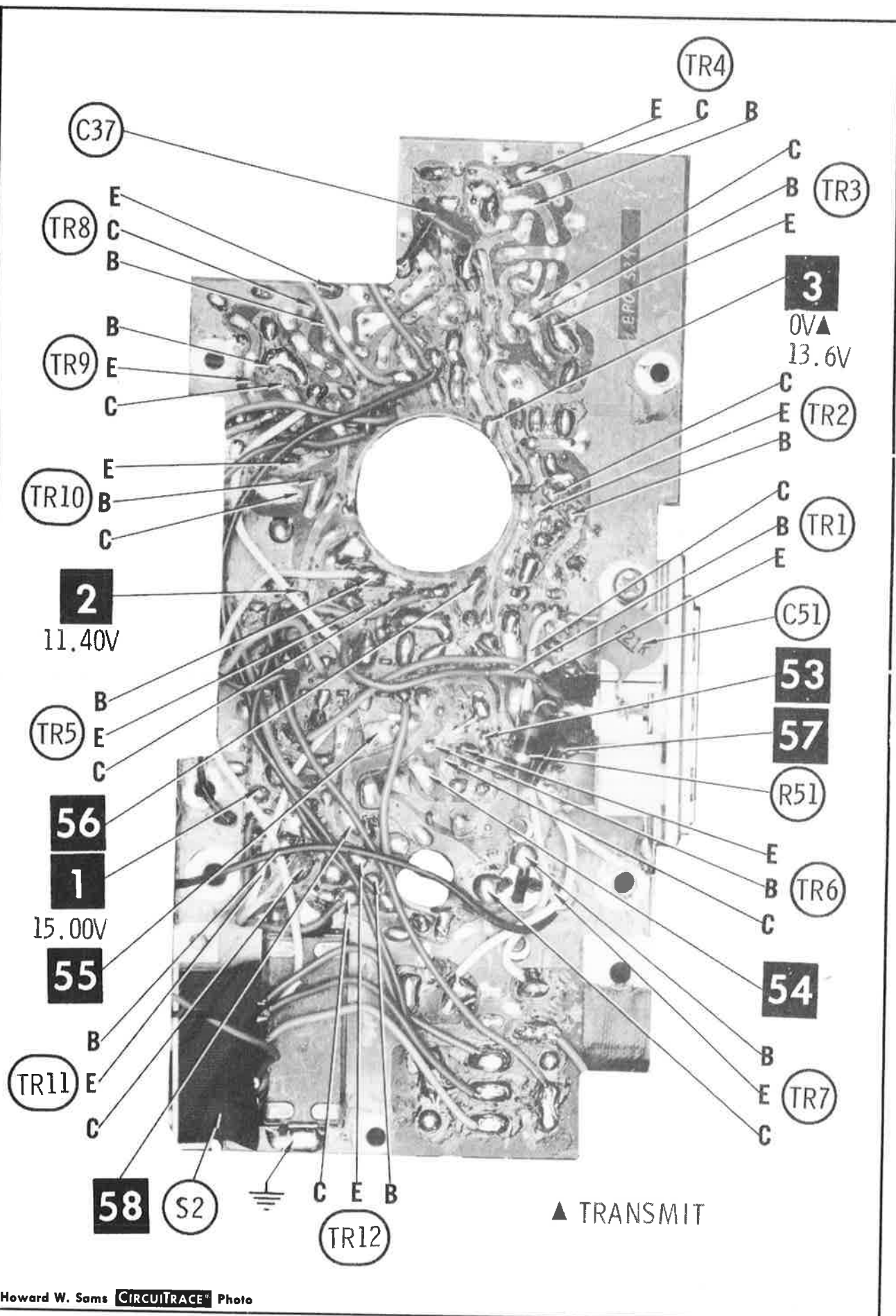
INDICATOR	ADJUST	REMARKS
RF Wattmeter or Field Strength Meter.	L5, L6	Key Transmitter and adjust for maximum.
Television (Channel 2)	L9	Key Transmitter and adjust for MINIMUM interference.

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

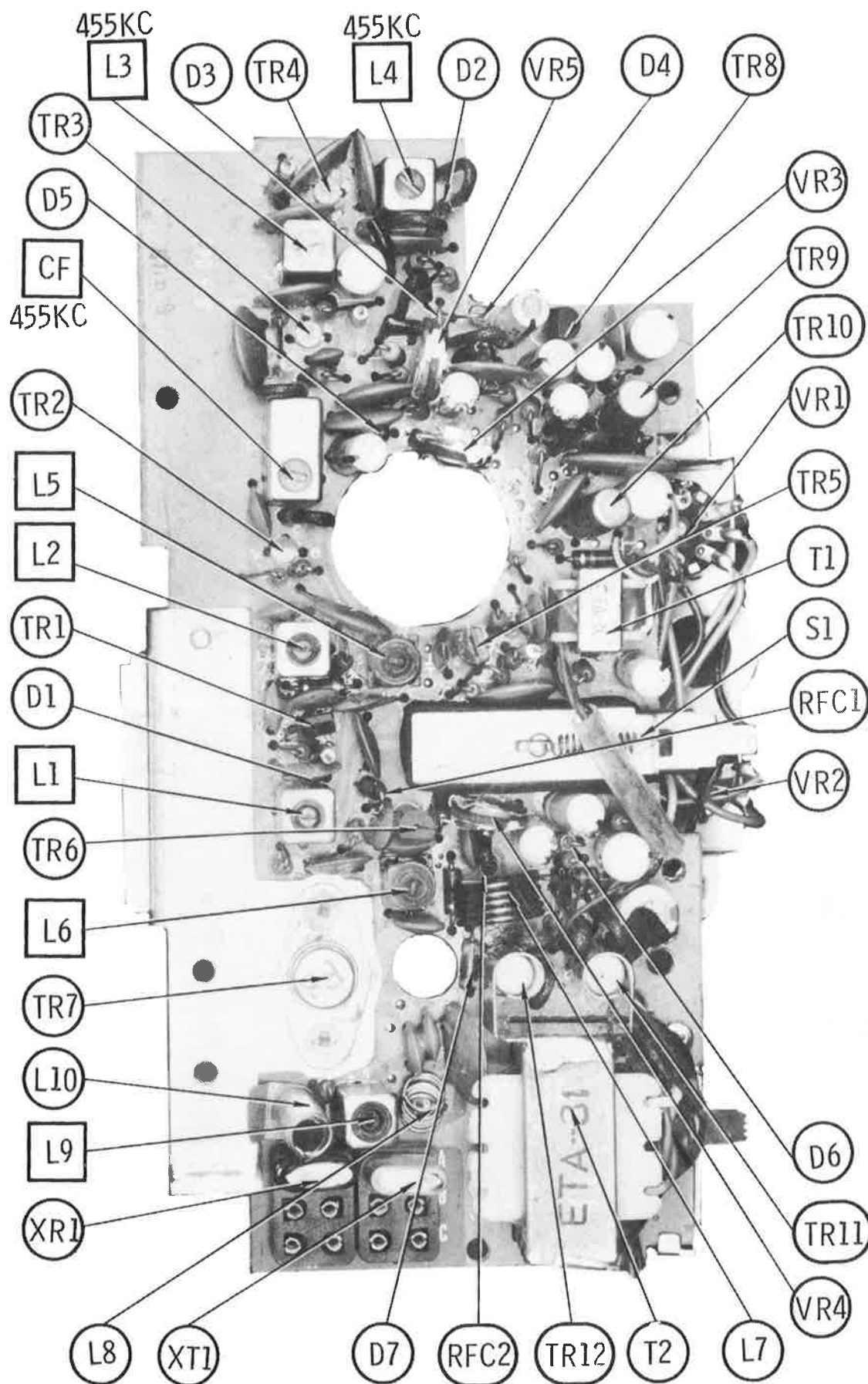
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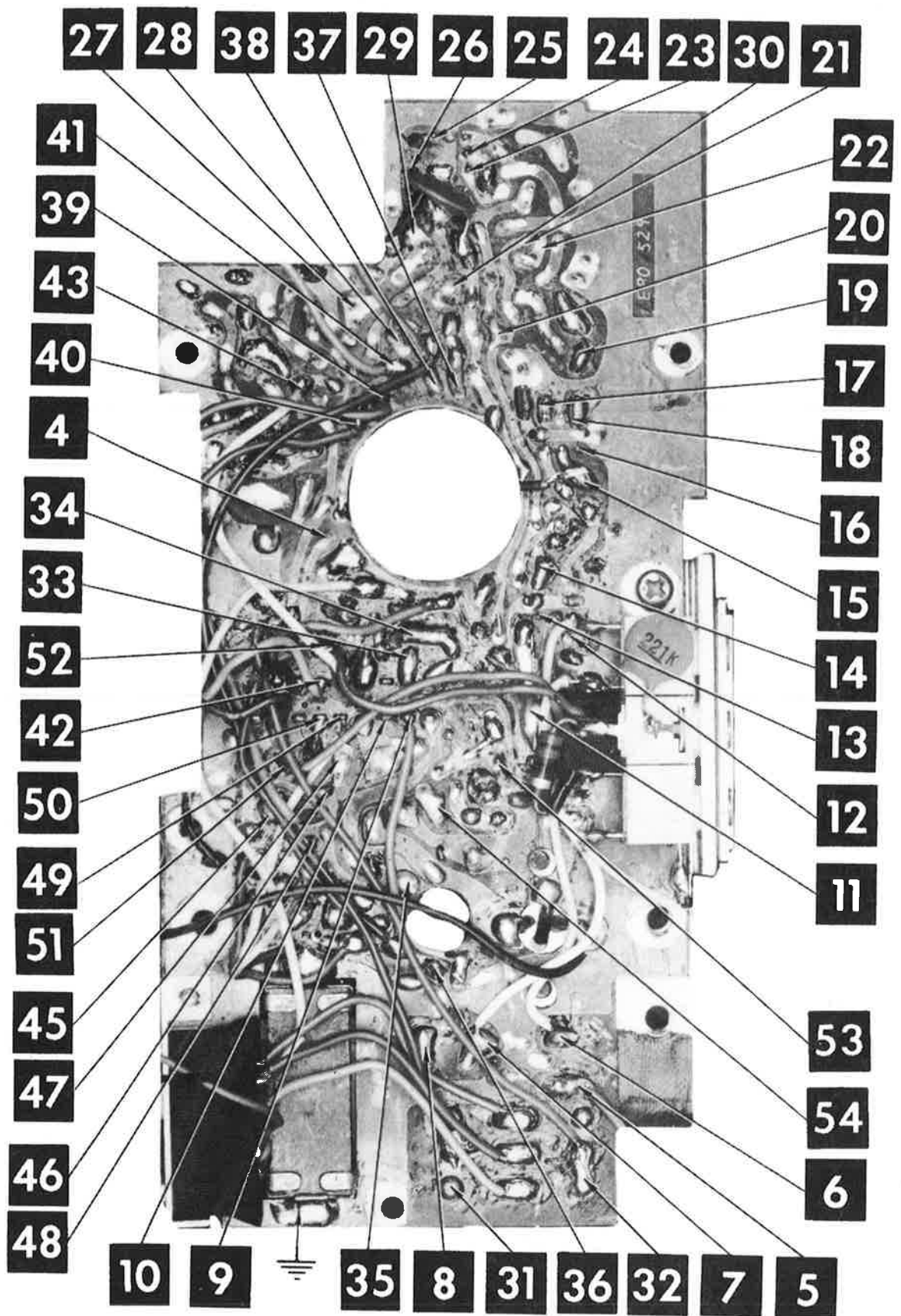
LAFAYETTE MODEL DYNA-COM 3B



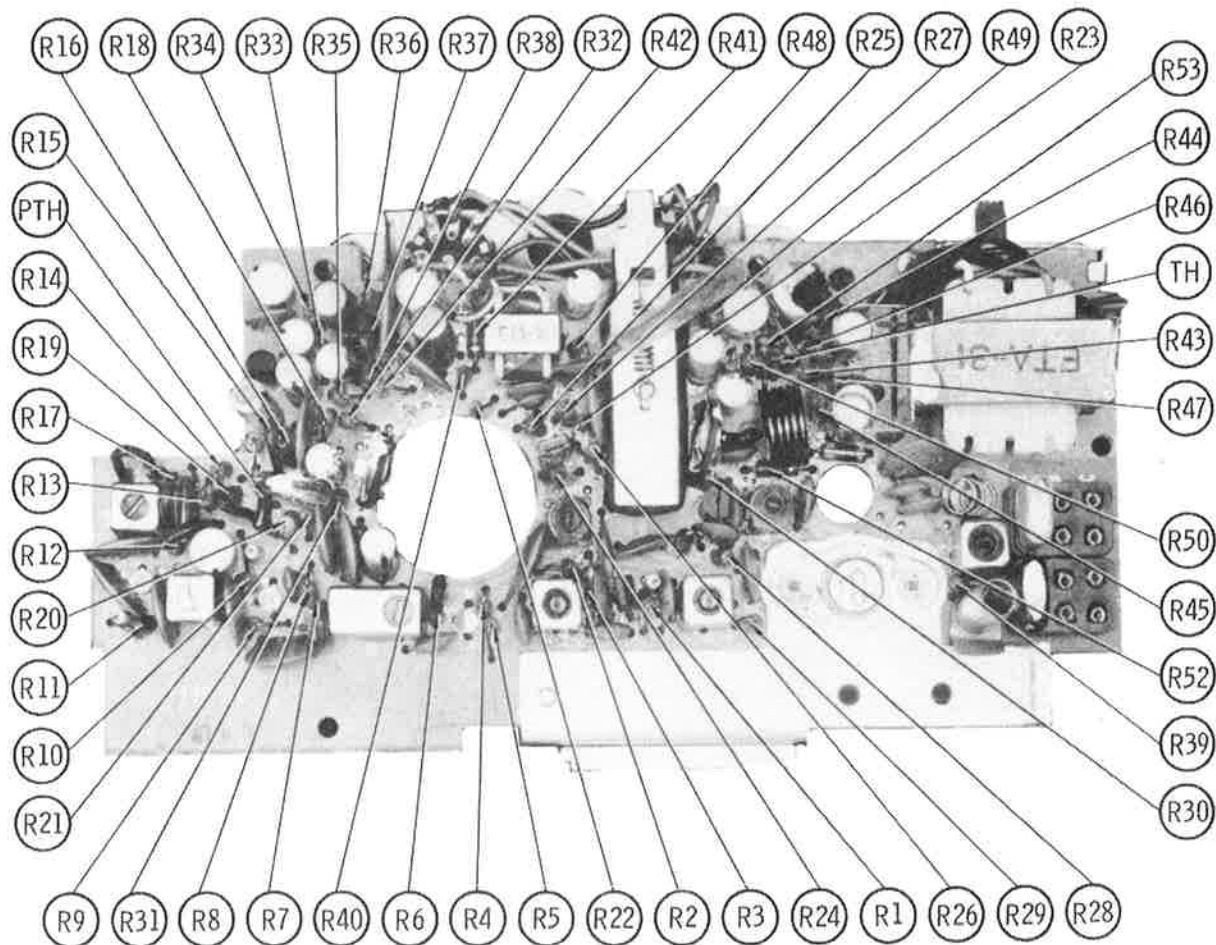
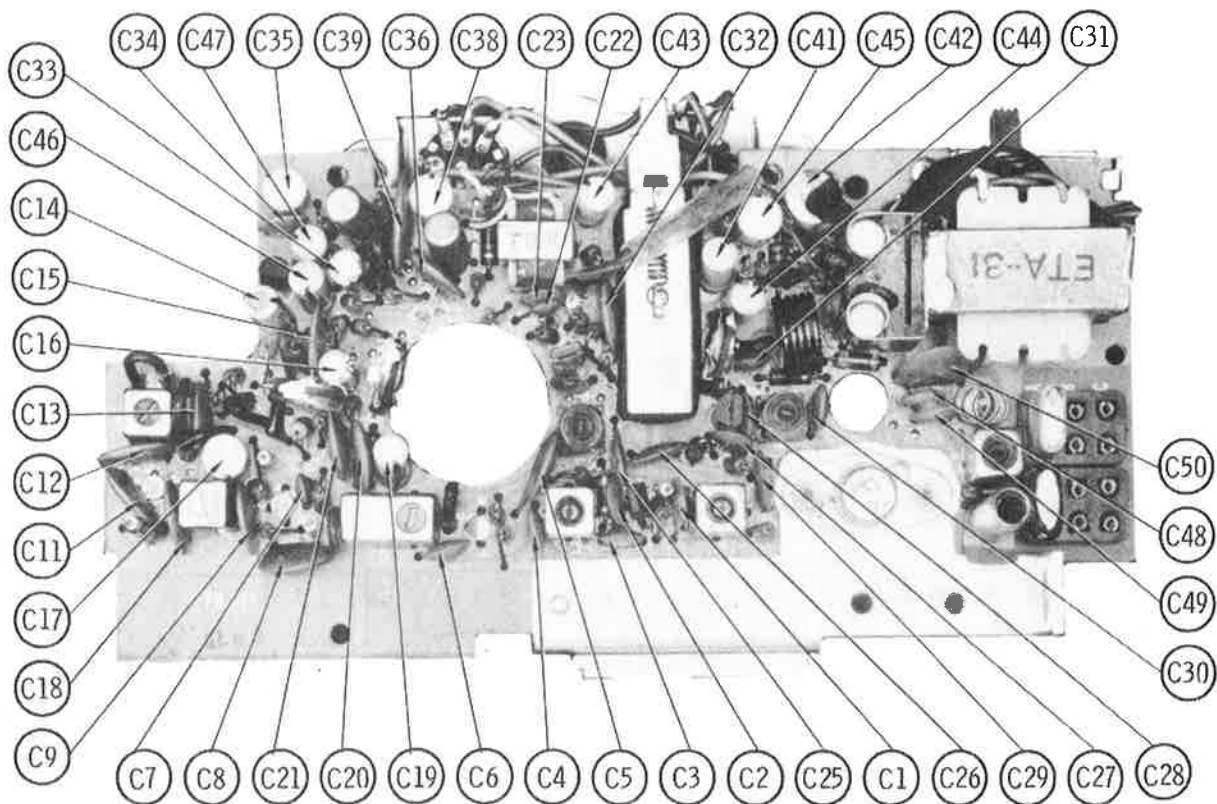
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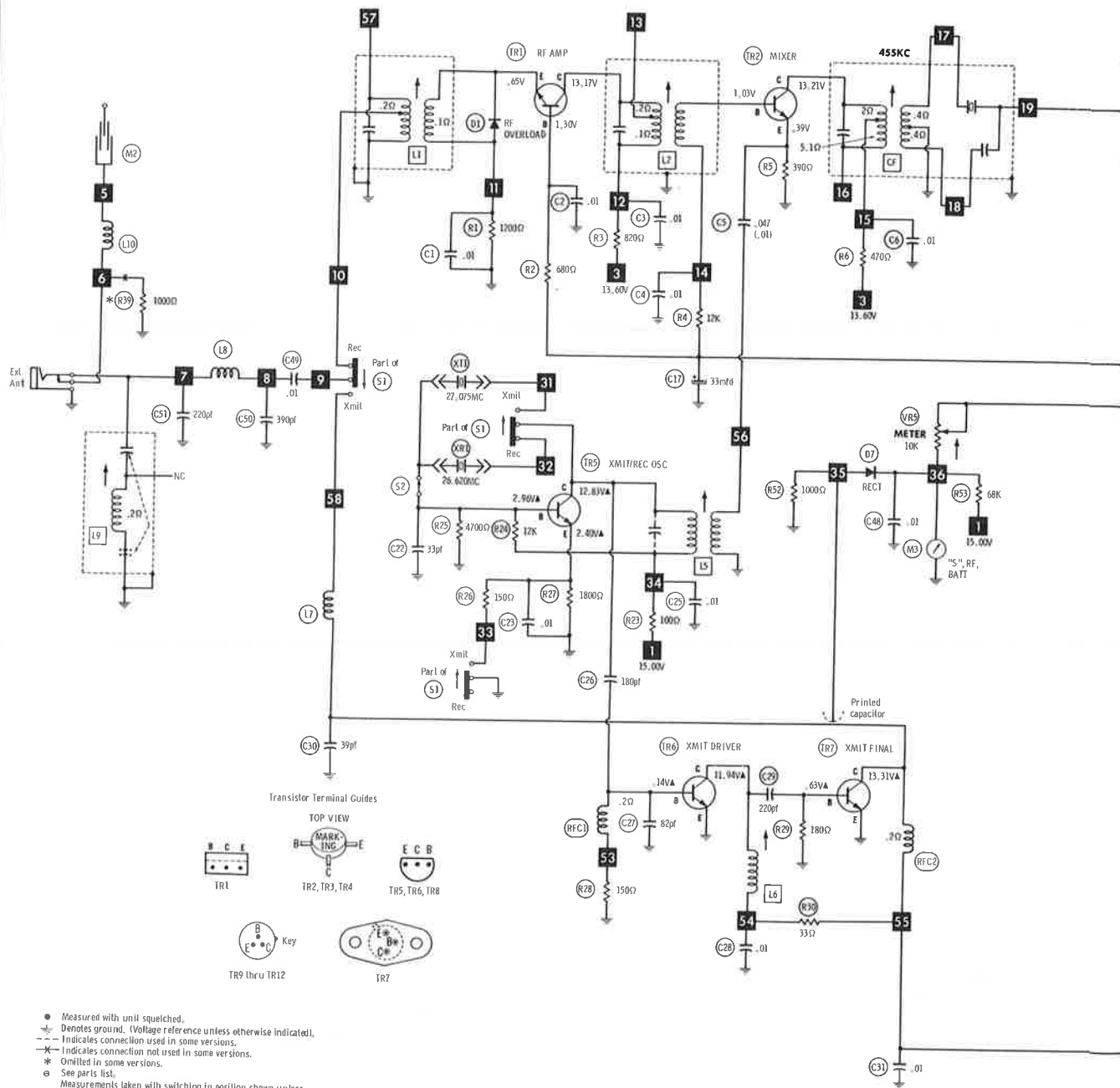
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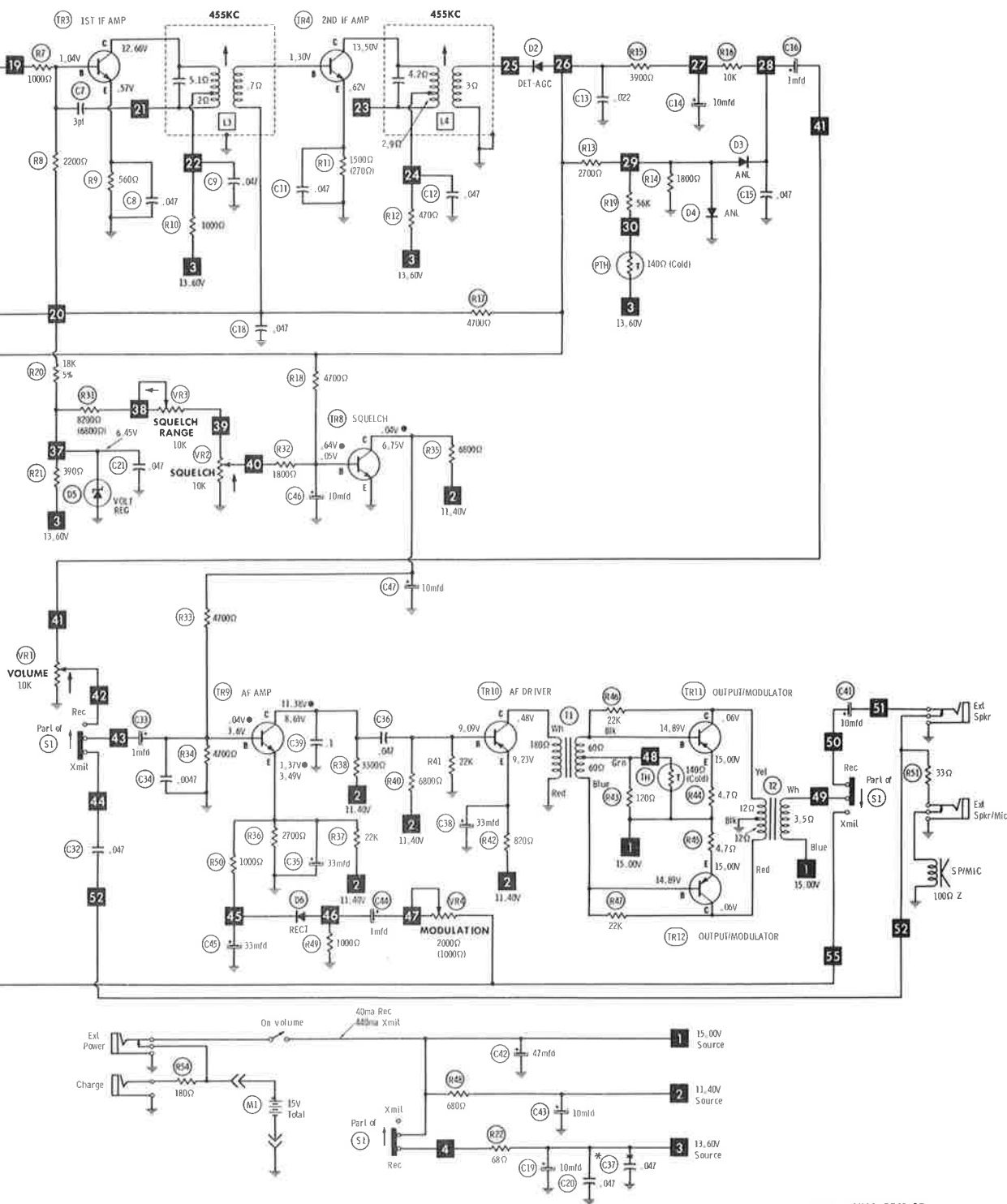
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with **CIRCUITRACE**

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LAFAYETTE MODEL DYNA-COM 3B

PARTS LIST AND DESCRIPTION

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

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	1S953/2066-17	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D2	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D3	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D4	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D5	RD-7A/1794-17	GEZD-7.5	Z1208	PTC504	HEPZ0410	SK3059		ECG 138
D6	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D7	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
TR1	2SC460(B)/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR2	2SC184/1634-17	GE-60	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR3	2SC183/1210-17	GE-60	TR-21	PTC132	HEP56	SK3124	RT113	ECG 108
TR4	2SC183/1210-17	GE-60	TR-21	PTC132	HEP56	SK3124	RT113	ECG 108
TR5	2SC815(K)/1879-17	GE-18	TR-25	PTC123	HEP736	SK3024	RT102	ECG 123A
TR6	2SC815(L)/1879-17	GE-18	TR-25	PTC123	HEP736	SK3024	RT102	ECG 123A
TR7	2SCF8/1068-17				HEPS3001	SK3049		
TR8	2SC945/2063-17	GE-18	TR-21	PTC121	HEP728	SK3124	RT102	ECG 123A
TR9	2SD77(B)/1906-17	GE-8	TR-08	PTC108	HEP641	SK3010	RT122	ECG 103A
TR10	2SB77(C)/1960-17	GE-2	TR-14	PTC109	HEP633	SK3004	RT121	ECG 102A
TR11	2SB324(E)/1102-17	GE-53	TR-14	PTC109	HEP254	SK3004	RT121	ECG 158
TR12	2SB324(E)/1102-17	GE-53	TR-14	PTC109	HEP254	SK3004	RT121	ECG 158

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C14	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
	10 10V	3102-12	RME-A-D-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C16	1 50V		RME-A-J-001	EP50-2	WBR1-50	MTVICB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MTVICB50	EV-1315
C17	33 10V	3089-12	ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C19	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C33	1 50V		RME-A-J-001	EP50-2	WBR1-50	MTVICB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MTVICB50	EV-1315
C35	33 10V	3089-12	ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C38	33 10V	3089-12	ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C41	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C42	47 16V	3082-12	RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C43	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C44	1 50V		RME-A-J-001	EP50-2	WBR1-50	MTVICB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MTVICB50	EV-1315
C45	33 10V	3089-12	ME-3-D-035	EP15-25	WBR35-50	VTT33A10	EV-1125
C46	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
	10 10V	3102-12	RME-A-D-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C47	10 16V	2986-12	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
	10 10V	3102-12	RME-A-D-010	EP15-10	WBR10-25	VTT10A25	EV-1222

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENC0 PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C2	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C3	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C4	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C5	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C6	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C7	3						10TCC-V30
C8	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C9	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C11	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C12	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C13	.022		CCD-203	CK-203	MGP02	TA120	TG-S20
C15	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C18	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C20	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C21	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C22	33		CCT0-330	DTZ-33	NPO33	CNO433	10TCC-Q33
C23	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C25	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C26	180 10%		CCD-181	DD-181	GP180	GP318	10TS-T18
C27	82		CCT0-820	DTZ-82	NPO82	CNO482	10TCC-Q82
C28	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C29	220 10%		CCD-221	DD-221	GP220	GP322	10TS-T22
C30	39					CNO439	10TCC-Q39
C31	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C32	.047		CCD-503	CK-503	MGP05	TA150	TG-S50

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.
C34	.0047		CCD-472	DD-472G	GP4700	JF247	10TS-D47
C36	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C37	.047		CCD-503	CK-503	MGP05	TA150	TG-S50
C39	.1			CK-104		TA010	TG-P10
C48	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C49	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C50	390 10%		CCD-391	DD-391	GP390	GP339	10TS-T39
C51	220 10%		CCD-221	DD-221	GP220	GP322	10TS-T22

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
VR1	Volume/Switch	10K	1631-11 (ERV-39)				
VR2	Squelch	10K	1632-11 (ERV-40)				
VR3	Squelch Range	10K	2474-13 (ERP-2)	TSV-10K(1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)
VR4	Modulation	2000		TSV-2.5K(1) or T-2500 (1)	C-252 (1)	X201R252B (1)	MTC23L1 (1)
	Modulation	1000	2564-13 (2) (ERP-15)				
VR5	Meter Adjust	10K	2474-13 (ERP-2)	TSV-10K (1) or T-10K (1)	C-103 (1)	X201R103B (1)	MTC14L1 (1)

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

(2) May be used in some versions.

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.
R44	4.7 1/8 Watt Carbon			PTH	140K (Cold)	FS920	2305-13
R45	4.7 1/8 Watt Carbon			TH	140 (Cold)	FS926	2124-17

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
CF	Input IF (Includes Filter)	1248-35			
L1	Rec. Antenna	2228-23			
L2	Rec. RF	2233-23			
L3	Interstage IF	1943-23	16-9034	8811	
L4	Output IF	1944-23	16-9035	8812	
L5	Xmtr/Rec. Oscillator	2234-23			
L6	Xmtr. Driver	2427-23			
L7	RF Coil	2428-23			
L8	Pi Filter	2429-23	19-2004	4586	TA811
L9	TVI Trap	2311-23			
L10	Antenna Loading	2312-23		74F126AP	T807
RFC1	RF Choke	2313-23	19-1000	74F106AP	T855
RFC2	RF Choke	2313-23	19-1000	74F106AP	T855

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFR. PART No.	STANCOR PART No.	THORDARSON PART No.	
T1	1.6	1 CT		1694-15			

LAFAYETTE MODEL DYNA-COM 3B

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	225 CT	100	1695-15				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2-1/4" PM, 100 ohms	1247-36		

BATTERIES

ITEM No.	VOLTAGE	MFGR. PART No.	EVEREADY PART No.	NOTES
M1	12.5 to 15V		1015 E91 E9	Standard (10 Required) Alkaline (10 Required) Mercury (10 Required)

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M2	Antenna Telescopic	1169-39	
M3	"S" Meter	1163-27	
S1	Switch	1818-14	RF/Battery
S2	Switch	1819-14	Receive/Transmit
XR1	Crystal	1247-35	Channel Selector
XT1	Crystal	1246-35	26.620MC 27.075MC

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

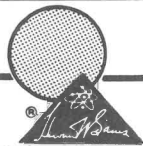
ITEM	PART No.	ITEM	PART No.
Battery Holder	4239-20	Push-Button, Receive/Transmit	1803-18
Knob, Volume and Squelch	1802-18		

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Dyna-Charge Earphone	99-31007 99-25413	Battery Charger for Nickel Cadmium Batteries Only

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. 8499 Single-Conductor Shielded (Neoprene) 8498 Single-Conductor Shielded (Vinyl)
Ignition Noise Suppression	Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap	Use BELDEN No. 8661 (3/8 In.)



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NOTE

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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 13-856

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools: L1, L2, L3, L6 thru L9 .. GC ELECTRONICS 9440
 L4, L5 GC ELECTRONICS 5000, 8290
 L13 GC ELECTRONICS 9087, 9089
 L14 GC ELECTRONICS 9150

RECEIVER

Connect an AC VTVM across speaker voice coil. Set Squelch control fully counterclockwise. Adjust Volume control to obtain a suitable reading.

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to base of Q2 (Mixer), low side to chassis. Set to 455KC (Mod.).	Any	L5,L4	Adjust for maximum.
High side thru .01mfd to antenna connector, low side to chassis. Set generator to 27.065MC (Mod.). (Channel 9).	Ch. 9	L6,L3, L2,L1	Adjust for maximum.

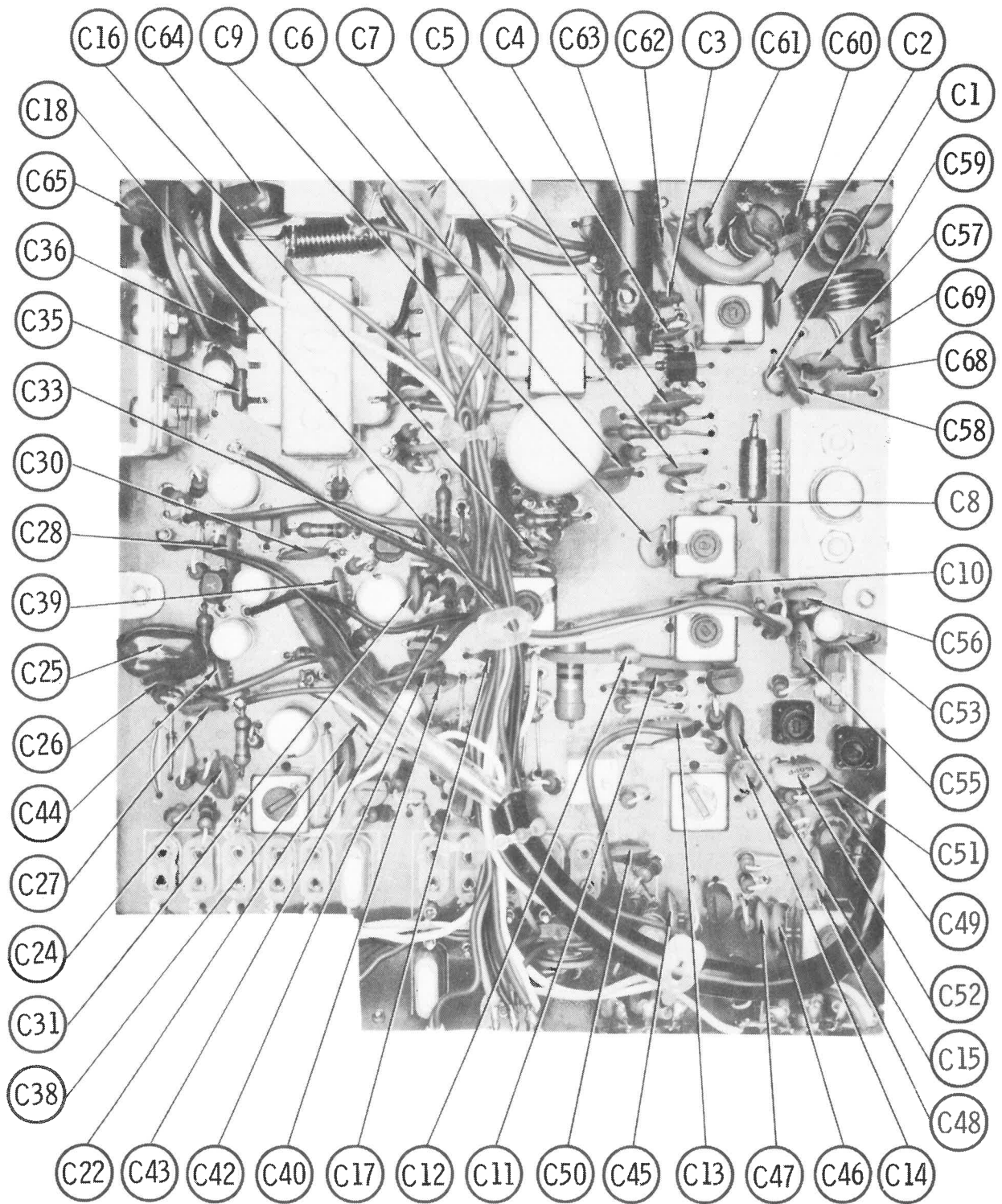
TRANSMITTER

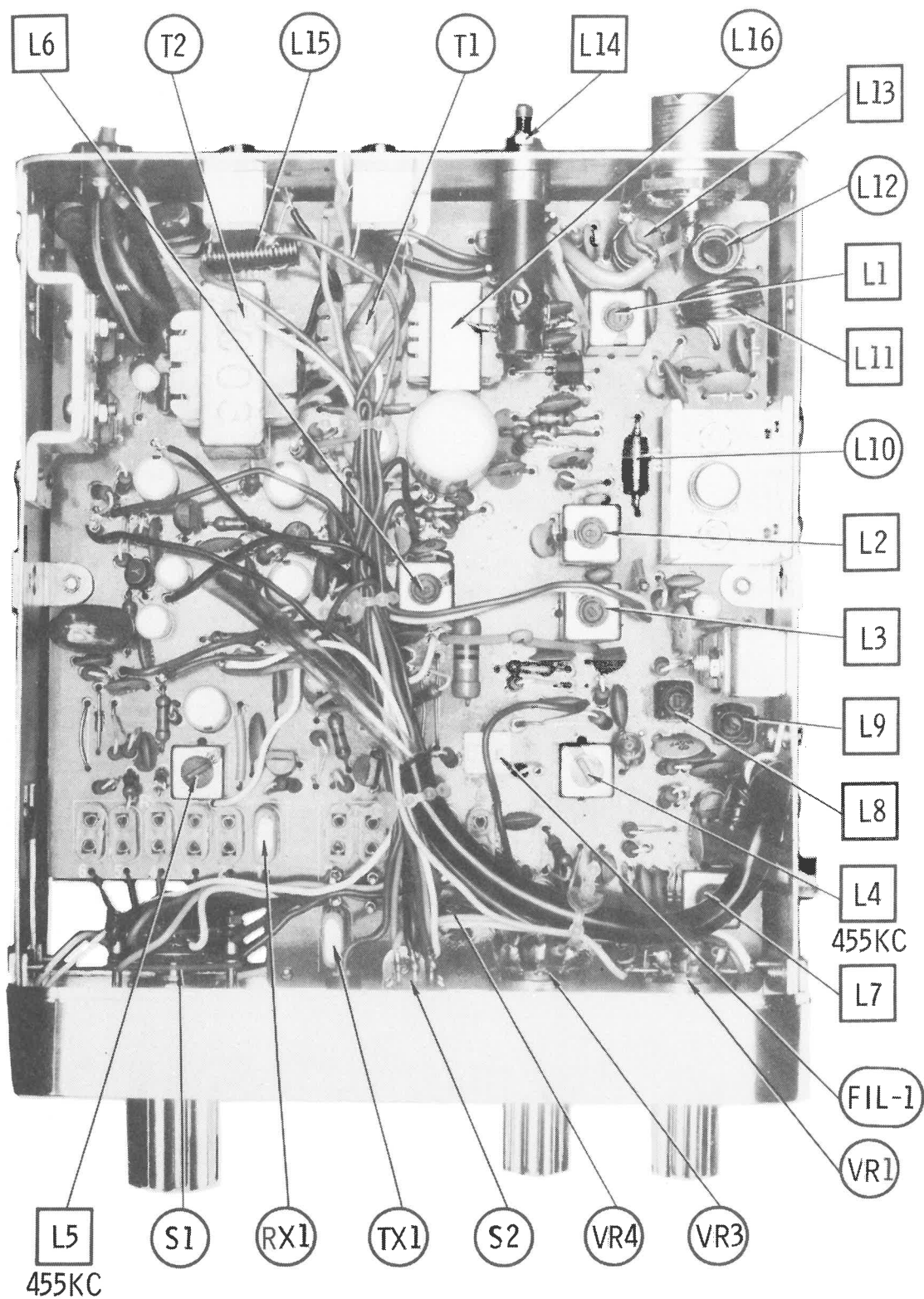
INDICATOR	ADJUST	REMARKS
RF Wattmeter or Field Strength Meter.	L7,L8, L9,L13	Key Transmitter and adjust for maximum.
0-500ma DC Ammeter	L13	Insert meter in collector circuit of Q15. Key transmitter and readjust L13 for 5 watts input. (Final Amp.)
Television (Channel 2)	L14	Key Transmitter and adjust for MINIMUM interference.

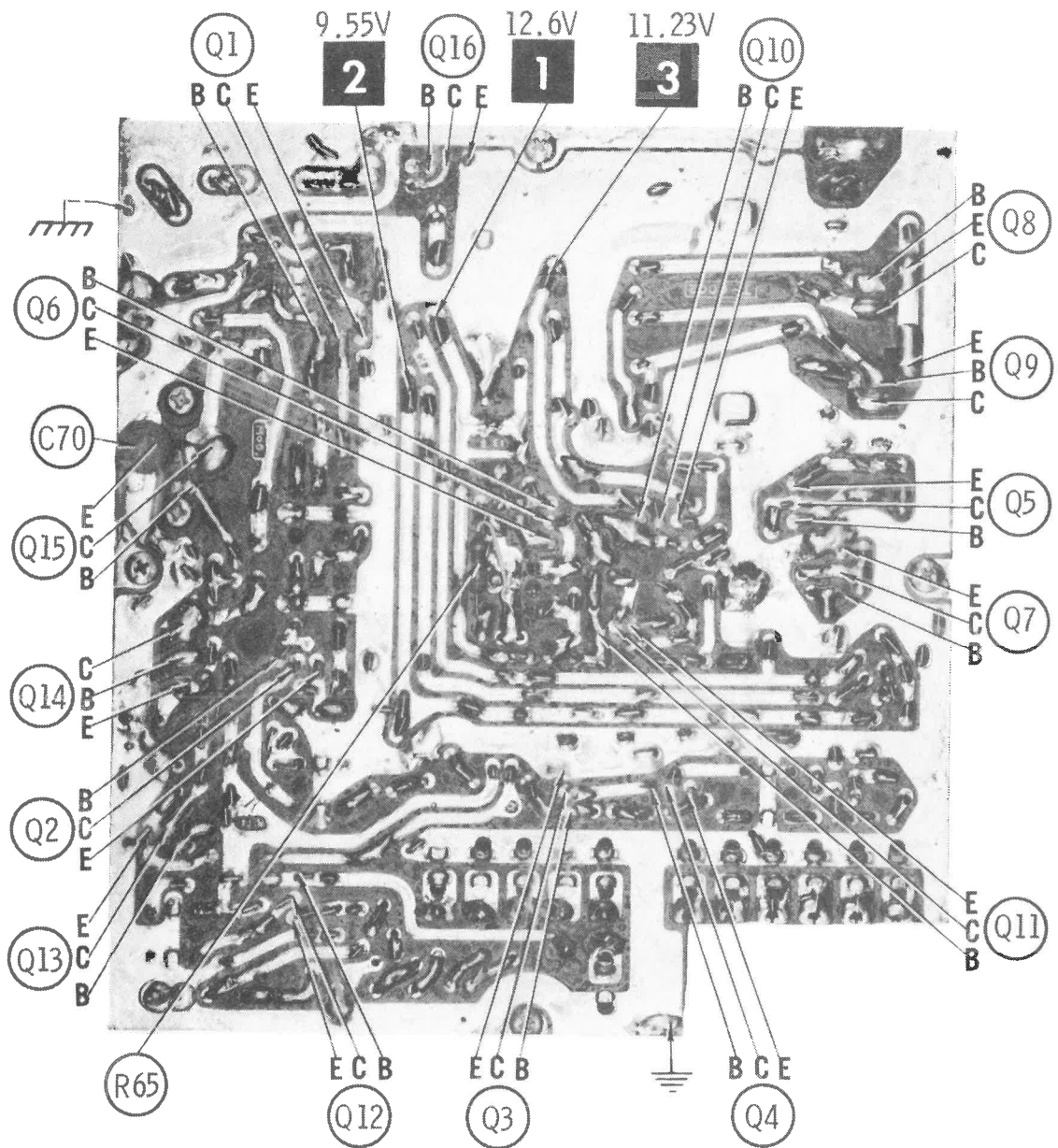
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

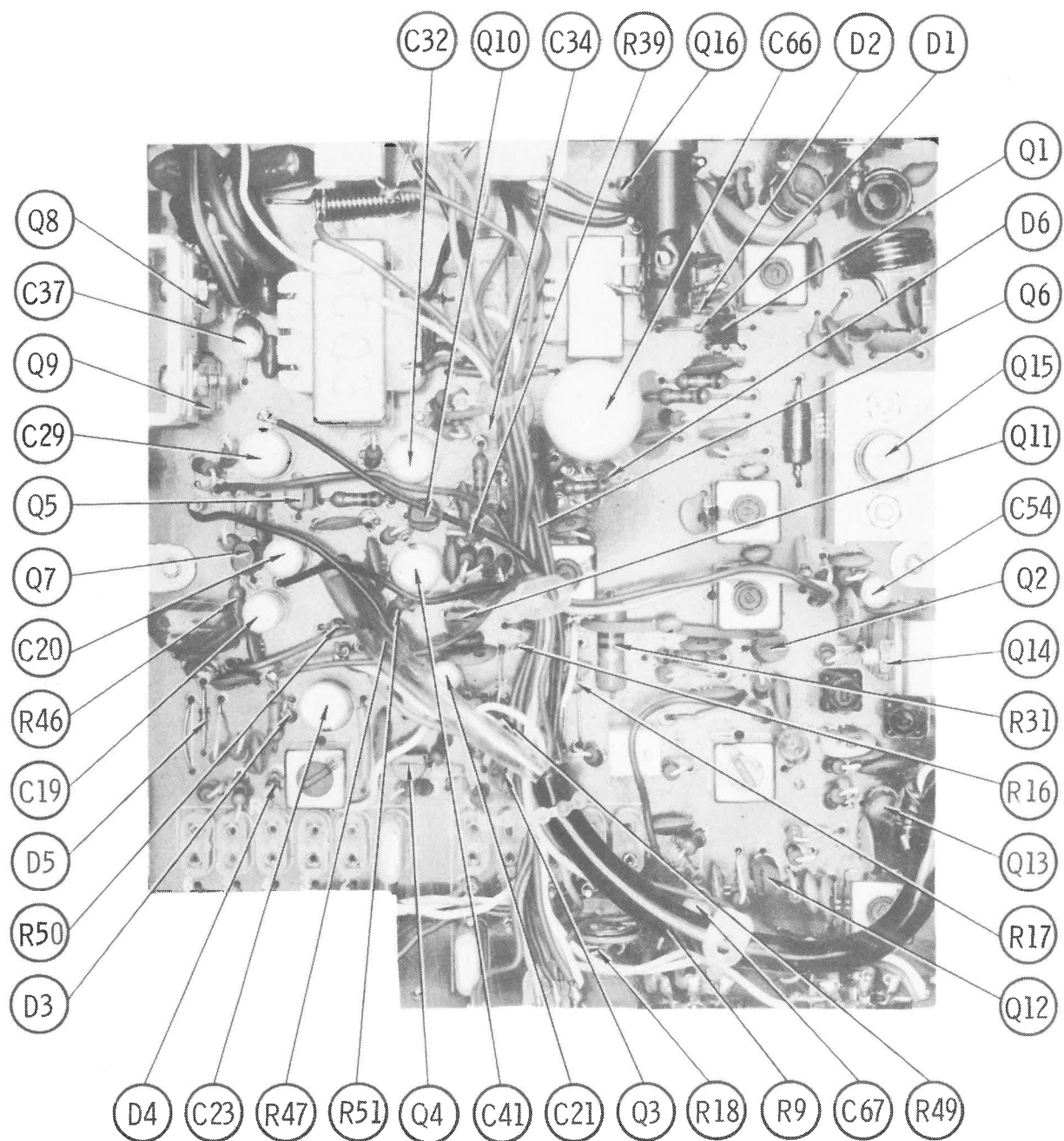
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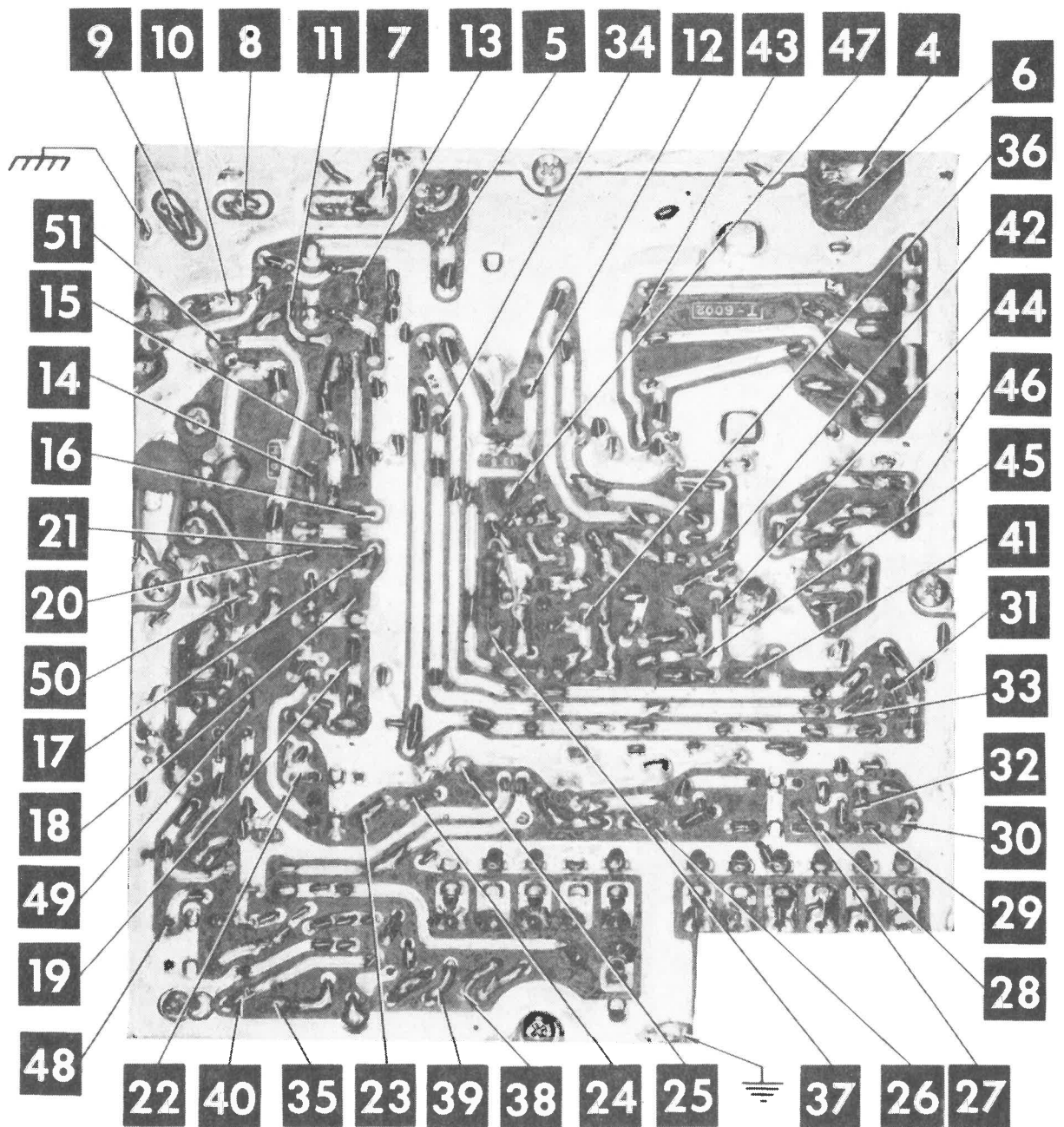
MIDLAND MODEL 13-856



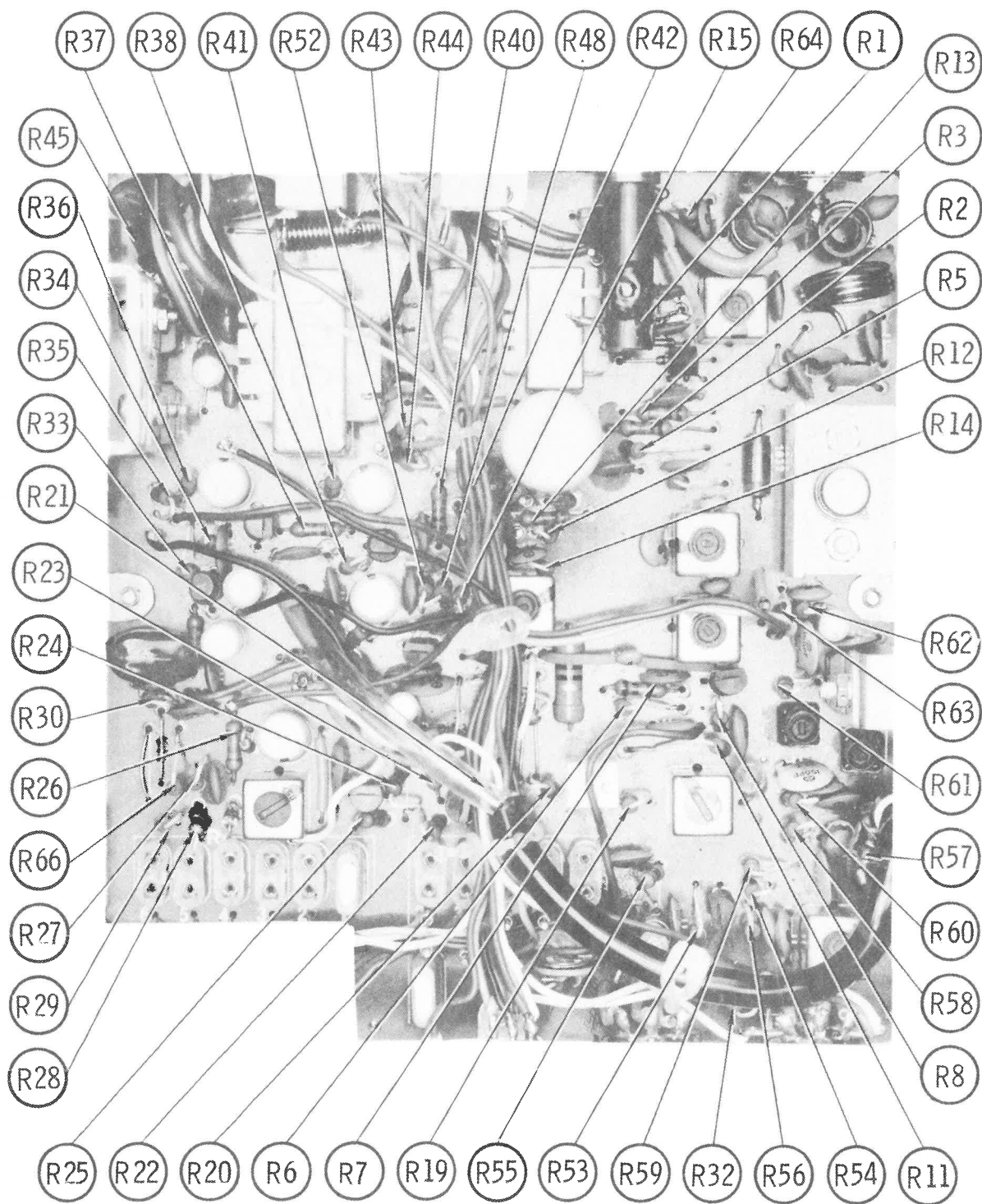


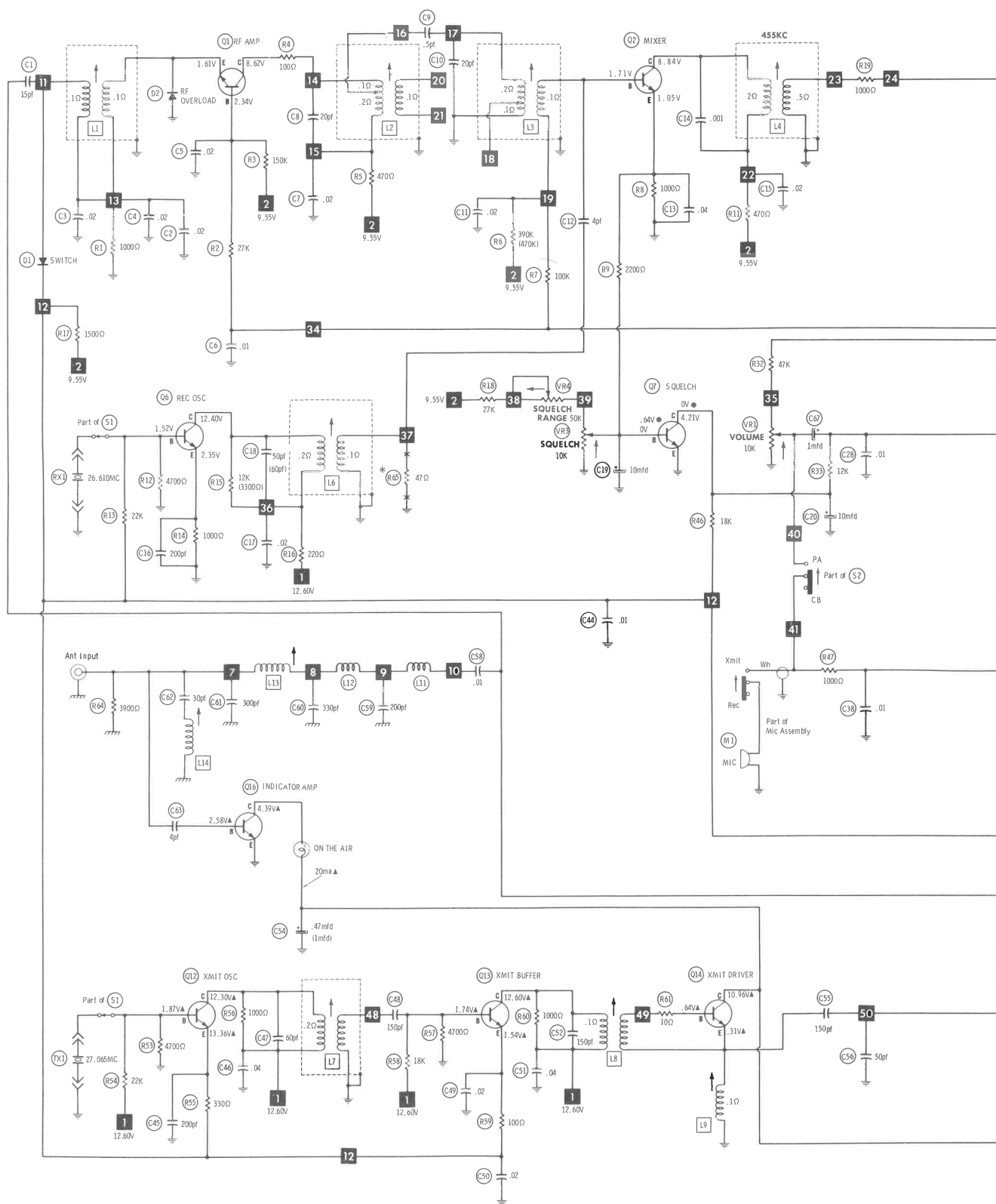






A Howard W. Sams **CIRCUITRACE**® Photo



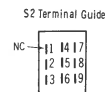
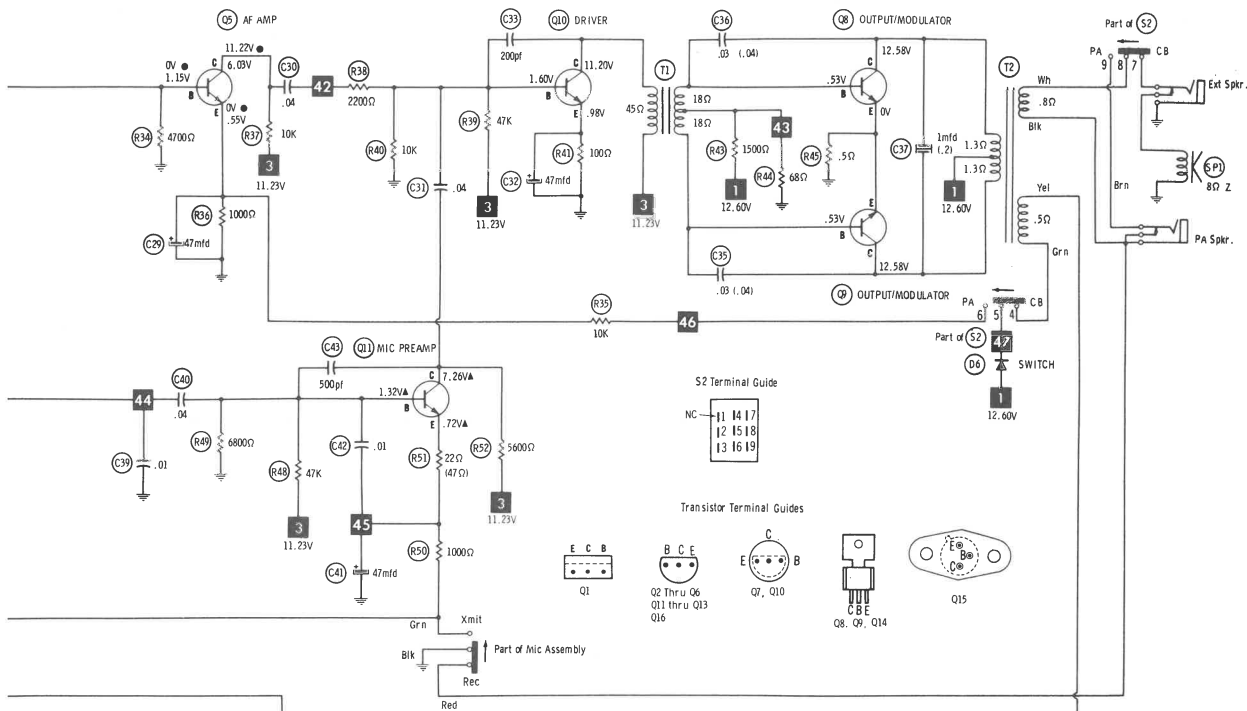
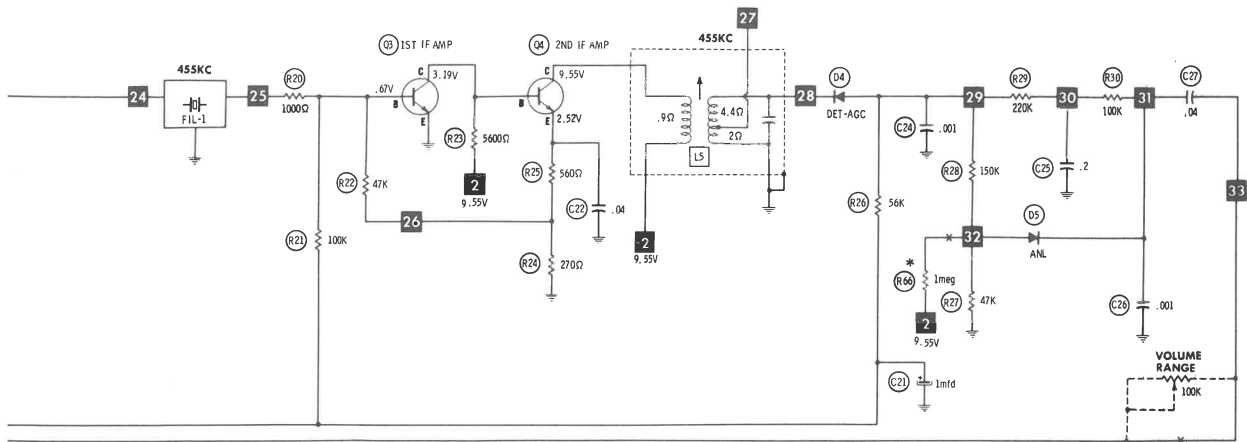


Values shown in () are used in some applications.
Resistors are 1/2W or less, 5%, unless otherwise indicated.
Supply voltage maintained at rated value for measurements.
Voltage and resistance measured with VTVM or equivalent meter,
no signal applied and controls adjusted for normal operation.
Arrow on control indicates direction of advance.
Numbers assigned to terminals may not be found on the unit.
Transistor resistances vary widely. No resistance measurements taken.

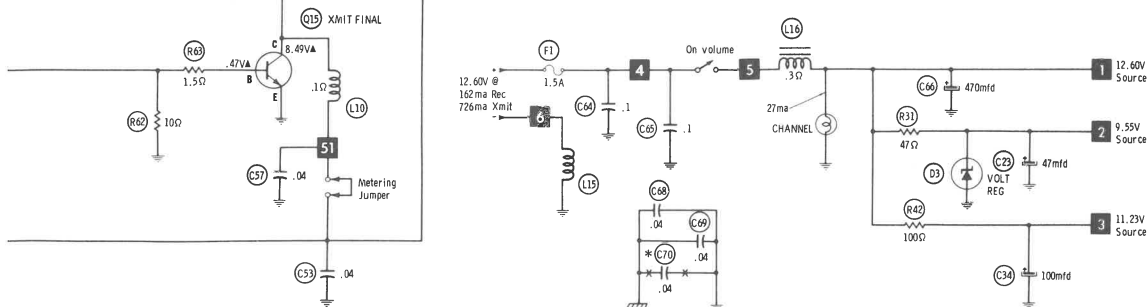
A PHOTOFAC STANDARD NOTATION SCHEMATIC

with **CIRCUITRACE**
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- Denotes chassis
- Denotes ground. (Voltage reference unless otherwise indicated).
- Indicates connection used in some versions.
- Indicates connection not used in some versions.
- Omitted in some versions.
- See parts list.
- Measurements taken with switching in position shown unless otherwise indicated.
- Measured in "Transmit" Position.
- Measured with unit squelched.



Transistor Terminal Guides



PARTS LIST AND DESCRIPTION

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

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	WG1010/09-306161	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D2	WG1010/09-306161	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D3	BZ-090/09-306180	GEZD-9.1		PTC505	HEPZ0412	SK3060		ECG 139
D4	1N60/ 09-306019	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D5	1S2075/09-306211	GE-300	D200	PTC214	HEPR0600	SK3100	RT218	ECG 177
D6	SR1K-2/09-306160	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
Q1	2SC535(B)/09-302006	GE-20	TR-21	PTC132	HEP56	SK3018	RT108	ECG 107
Q2	2SC710(C)/09-302012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A
Q3	2SC710(D)/09-302012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A
Q4	2SC710(D)/09-302012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A
Q5	2SC711(E)/09-302107	GE-18	TR-21	PTC123	HEP733	SK3018	RT102	ECG 123A
Q6	2SC710(C)/09-302012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A
Q7	2SC735(Y)/09-302040	GE-63	TR-21	PTC123	HEP53	SK3018	RT102	ECG 123A
Q8	2SC1014/ 09-302046	GE-28	IRTR-55	PTC110	HEPS3020	SK3041	RT154	ECG 186
Q9	2SC1014/ 09-302046	GE-28	IRTR-55	PTC110	HEPS3020	SK3041	RT154	ECG 186
Q10	2SC735(Y)/09-302040	GE-63	TR-21	PTC123	HEP53	SK3018	RT102	ECG 123A
Q11	2SC711(E)/09-302107	GE-18	TR-21	PTC123	HEP733	SK3018	RT102	ECG 123A
Q12	2SC710(C)/09-302012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A
Q13	2SC773(E)/09-302078	GE-20	TR-21	PTC123	HEP736	SK3018	RT102	ECG 123A
Q14	2SC1018/ 09-302102	GE-28	IRTR-55	PTC110	HEPS3020	SK3041	RT159	ECG 210
Q15	2SC778(B)/09-302051	GE-28	IRTR-55		HEPS3002	SK3049	RT114	ECG 224
Q16	2SC710(D)/09-002012	GE-20	TR-21	PTC121	HEP56	SK3018	RT102	ECG 123A

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C19	10 25V		RME-B-G-010	EP30-10	WBR10-25	VTT10A25	EV-1322
	10 16V	77-337106	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C20	10 25V		RME-B-G-010	EP30-10	WBR10-25	VTT10A25	EV-1322
	10 16V	77-337106	RME-B-E-010	EP15-10	WBR10-25	VTT10A25	EV-1222
C21	1 16V	77-337105	RME-A-E-001	EP15-2	WBR1-50	MTV1CB50	EV-1315
C23	47 16V	77-337476	RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C29	47 16V	77-337476	RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C32	47 16V	77-337476	RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C34	100 16V	77-337107	RME-E-E-100	EP15-100	WBR100-16	MTV100CD15	EV-1230
C37	1 50V NP					TCN501	
C41	47 16V	77-337476	RME-E-E-050	EP15-50	WBR50-25	MTV50CB15	EV-1226
C54	.47 50V					TDC474M050EL	EV-1610
	1 25V	77-339105	RME-A-G-001	EP30-2	WBR1-50	MTV1CB50	EV-1315
C66	470 16V	77-337477	RME-L-E-500			TT15X500	EV-1250
C67	1 16V	77-337105	RME-A-E-001	EP15-2	WBR1-50	MTV1CB50	EV-1315

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENC0 PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	15		CCT0-150	DTZ-15	NP015	CN0415	10TCC-Q15
C2	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C3	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C4	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C5	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C6	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C7	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C8	20		CCT0-200	DTZ-20	NP020	CN0420	10TCC-Q20
C9	.5pf						
C10	20		CCT0-200	DTZ-20	NP020	CN0420	10TCC-Q20
C11	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C12	4				NP03P9		10TCC-V39
C13	.04			DD-403		GP140	
C14	.001		DM-20-102J	CPR-1000J	CD19FD102J03	SX210	424ME1001J501
C15	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C16	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C17	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C18	50		CCT0-510	DTZ-50	NP050	CN0450	10TCC-Q50
C22	.04			DD-403		GP140	
C24	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C25	.22		1DP-3-224			PVC1022	1PB-P22
C26	.001		CCD-102	DD-102	GP1000	SM210	2SS-D10
C27	.04			DD-403		GP140	
C28	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C30	.04			DD-403		GP140	
C31	.04			DD-403		GP140	
C33	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C35	.03		CCD-203	CK-303		GP130	TG-S30
C36	.03		CCD-203	CK-303		GP130	TG-S30
C38	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C39	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C40	.04			DD-403		GP140	
C42	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C43	500		CCD-501	DD-501	GP500	GP350	10TS-T50
C44	.01		CCD-103	CK-103	MGP01	TA110	TG-S10

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.
C45	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C46	.04			DD-403		GP140	
C47	60						
C48	150		CCD-151	DD-151	GP150	GP315	10TS-T15
C49	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C50	.02		CCD-203	CK-203	MGP02	TA120	TG-S20
C51	.04			DD-403		GP140	
C52	150		CCD-151	DD-151	GP150	GP315	10TS-T15
C53	.04			DD-403		GP140	
C55	150		CCD-151	DD-151	GP150	GP315	10TS-T15
C56	50		CCTO-510	DTZ-50	NP050	CN0450	10TCC-Q50
C57	.04			DD-403		GP140	
C58	.01		CCD-103	CK-103	MGP01	TA110	TG-S10
C59	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C60	330		CCD-331	DD-331	GP330	GP333	10TS-T33
C61	300		CCD-301	DD-301	GP300	GP330	10TS-T30
C62	30		CCTO-300				10TCC-Q30
C63	4				NP03P9		10TCC-V39
C64	.1			CK-104		TA010	TG-P10
C65	.1			CK-104		TA010	TG-P10
C68	.04			DD-403		GP140	
C69	.04			DD-403		GP140	
C70	.04			DD-403		GP140	

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	Volume/Switch	10K	13-160082				
VR2	Volume Level	100K	13-164070 (1)				
VR3	Squelch	10K	13-166036				
VR4	Squelch Range	50K	13-164071	TSV-50K (2) or T-50K (2)	C-503 (2)	X201R503B (2)	MTC54L1 (2)

(1) May be used in some versions.

(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.
R45	.5 1/2 watt Wirewound	WS-.47	77-302508	R61	10 1/4 watt Carbon	CD-10	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	Rec. Antenna	13-176342			
L2	Rec. RF	13-176343			
L3	Rec. RF	13-176343			
L4	Input IF	13-090240			
L5	Output IF	13-090241			
L6	Rec. Oscillator	13-170182		8518	
L7	Xmtr. Oscillator	13-170183			
L8	Xmtr. Buffer	13-176325			
L9	RF Choke	13-176324			
L10	RF Choke	13-178115			
L11	Pi Filter	13-176323		74F126AP	T807
L12	Pi Filter	13-176322			
L13	Antenna Loading	13-176344			
L14	TV I Trap	13-176321			
L15	RF Choke	13-178116			

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
L16	162ma 726ma *	.3	500uh	13-176326				* Transmit

MIDLAND MODEL 13-856

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA				NOTES
				MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD Part No.	
T1	1	1-CT		13-096129				

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
			MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	32-CT	8	13-096128				
		SEC. 2					
		.5 ohm, DC Resistance					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2 9/16" PM 8 ohms	13-060078		

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	3AG 1.5 Amp		13-159107	AGC 1-1/2	HDJ	31201.5	150145	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
FIL-1	Filter	13-179026	IF (455KC)
M1	Microphone Assembly	13-038046	
S1	Switch	13-180067	Channel Selector
S2	Switch	13-183148	PA/CB
RX1	Crystal		26.610MC
TX1	Crystal		27.065MC

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

ITEM	PART No.	ITEM	PART No.
Case, Top Section	13-010169	Disc, Channel Number	13-115060
Case, Bottom Section	13-010158	Knob, Channel Selector	13-115053
Panel, Front	13-010168	Knob, Control	13-110126
Plate, Front Trim	13-020458		

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.)