



PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

NOTE

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

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

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

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

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



MODEL 1-620

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:

L5, L6	GC ELECTRONICS
ALL other tunable coils and transformers	#5000, 8290
	#9440

ROYCE MODEL 1-620

RECEIVER

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
Adjustments made with 120-volt AC input to power supply.
Adjust volume control to obtain suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
High side thru .01uF to base of Q3, low side to ground.	455kHz, 1000Hz @ 30% modulation	Any	L5, L6	Set generator to maintain a 0.5V output across voice coil. Adjust for maximum.
High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation	13	L1,L2,L3, L4,L7	Adjust for maximum.

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

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RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
These adjustments made with 120-volt AC input to power supply.
Adjust volume control to obtain a suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
SQUELCH RANGE High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 500uV.	13	VR3	Set squelch control fully clockwise. Adjust so that squelch just breaks.
S METER High side thru .01uF to antenna jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 100uV.	13	VR4	Adjust for an S9 reading on panel meter.

TRANSMITTER

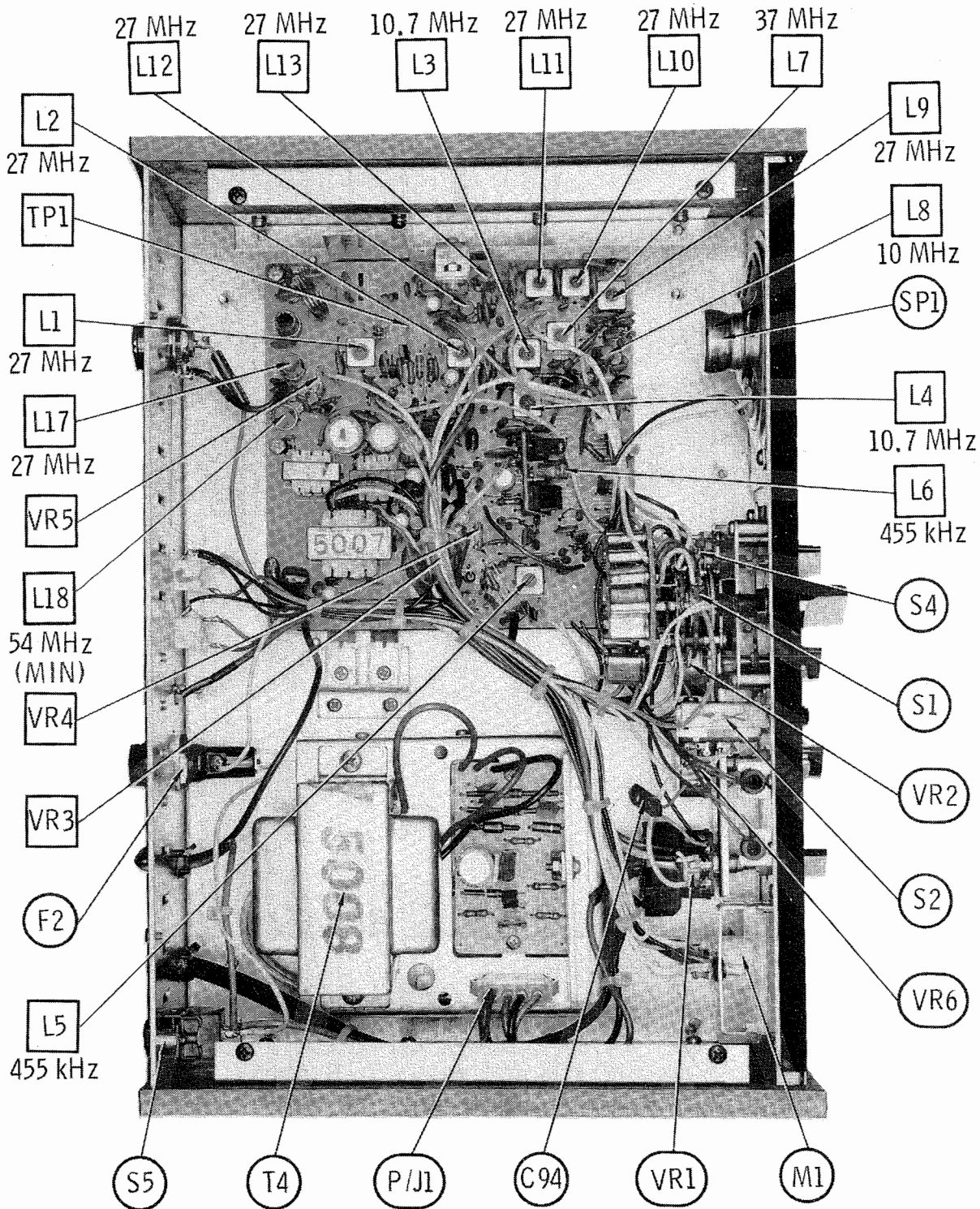
Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 120-volt AC input to power supply.

INDICATOR	ADJUST	REMARKS
OSCILLATOR, MIXER, BUFFER, DRIVER, FINAL RF Wattmeter	L8,L9,L10, L11	Channel selector to CH. 13. Key transmitter. Adjust for maximum.
TVI TRAP TV (CH. 2)	L18	Key transmitter. Adjust for MINIMUM interference on TV.
FINAL INPUT POWER Remove jumper at TP and connect 0-1000DC milliammeter and RF Wattmeter.	L12,L17, L13	Adjust L12 for maximum final input current. Adjust L17 for maximum output power and MINIMUM final current. Adjust L13 for 5 watts maximum.
FREQUENCY CHECK Frequency counter		Connect to dummy load. Key transmitter. Check frequency on all channels $\pm 0.005\%$.

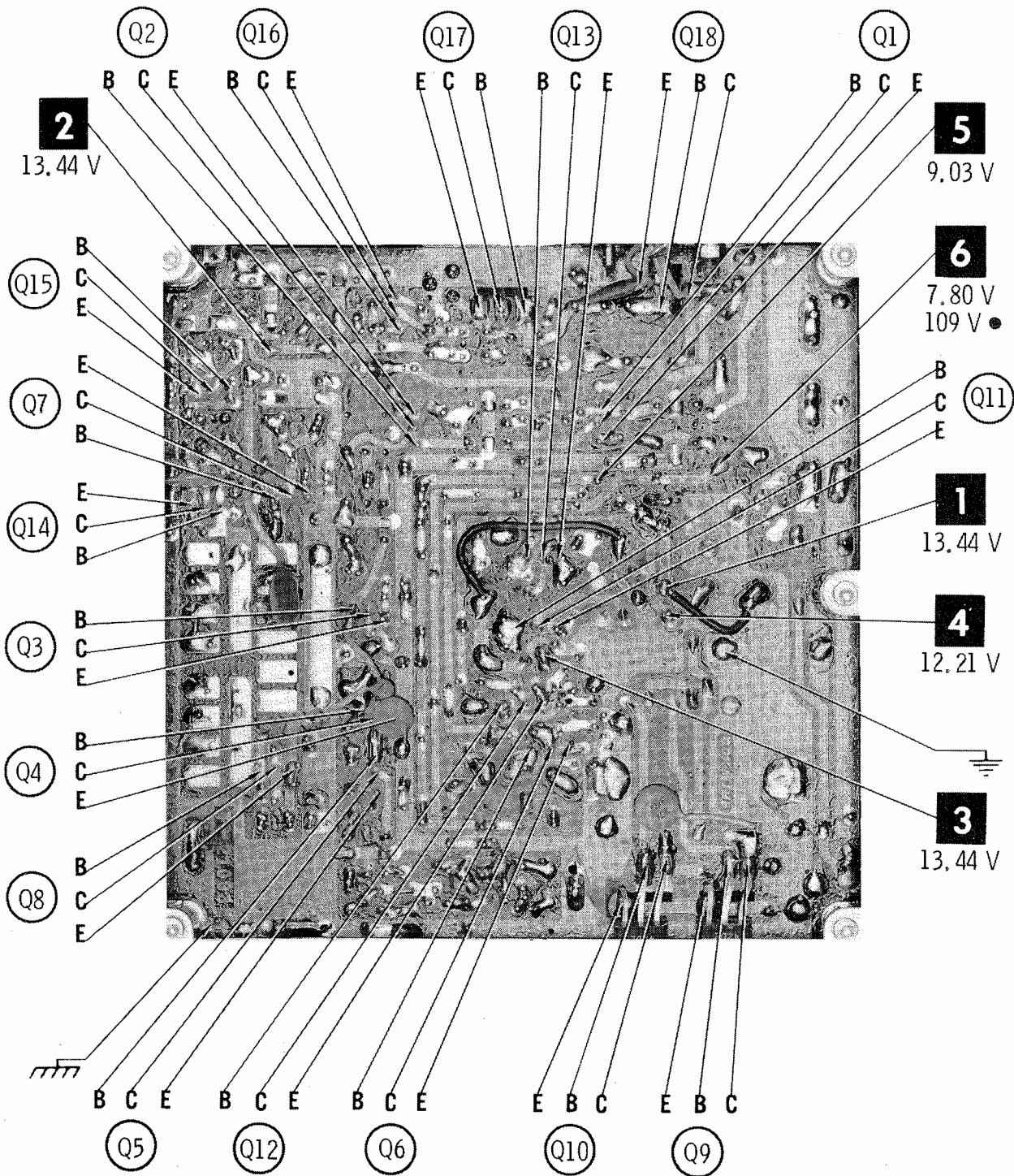
TRANSMITTER ADJUSTMENTS

Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 120-volt AC input to power supply.

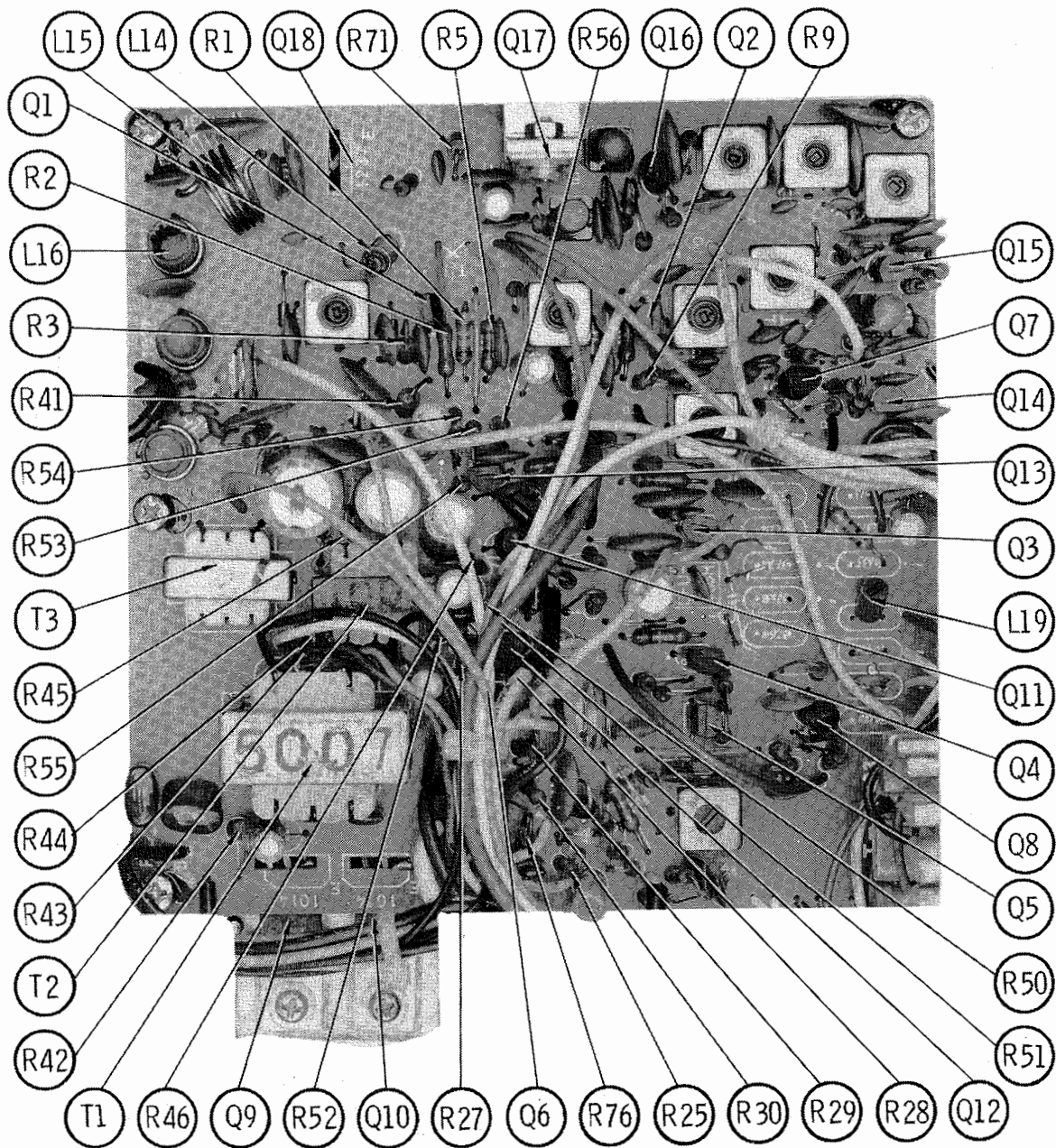
INDICATOR	ADJUST	REMARKS
VOLTAGE REGULATOR DC Voltmeter connected to S5 and ground.	VR7	Adjust for 14 VDC at S5 with switch in AC position. Key transmitter. Voltage should not vary.



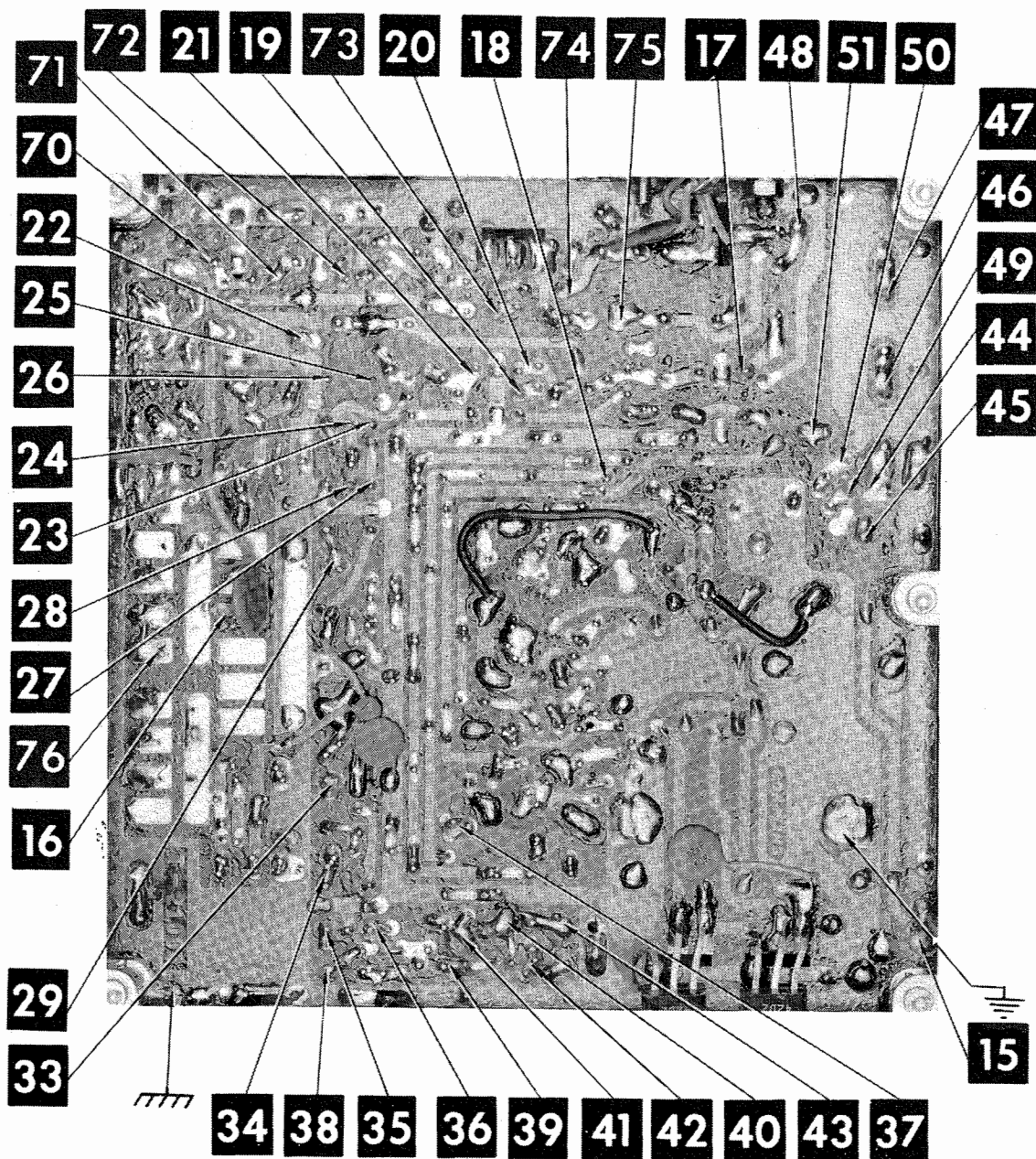
CHASSIS - TOP



MAIN BOARD

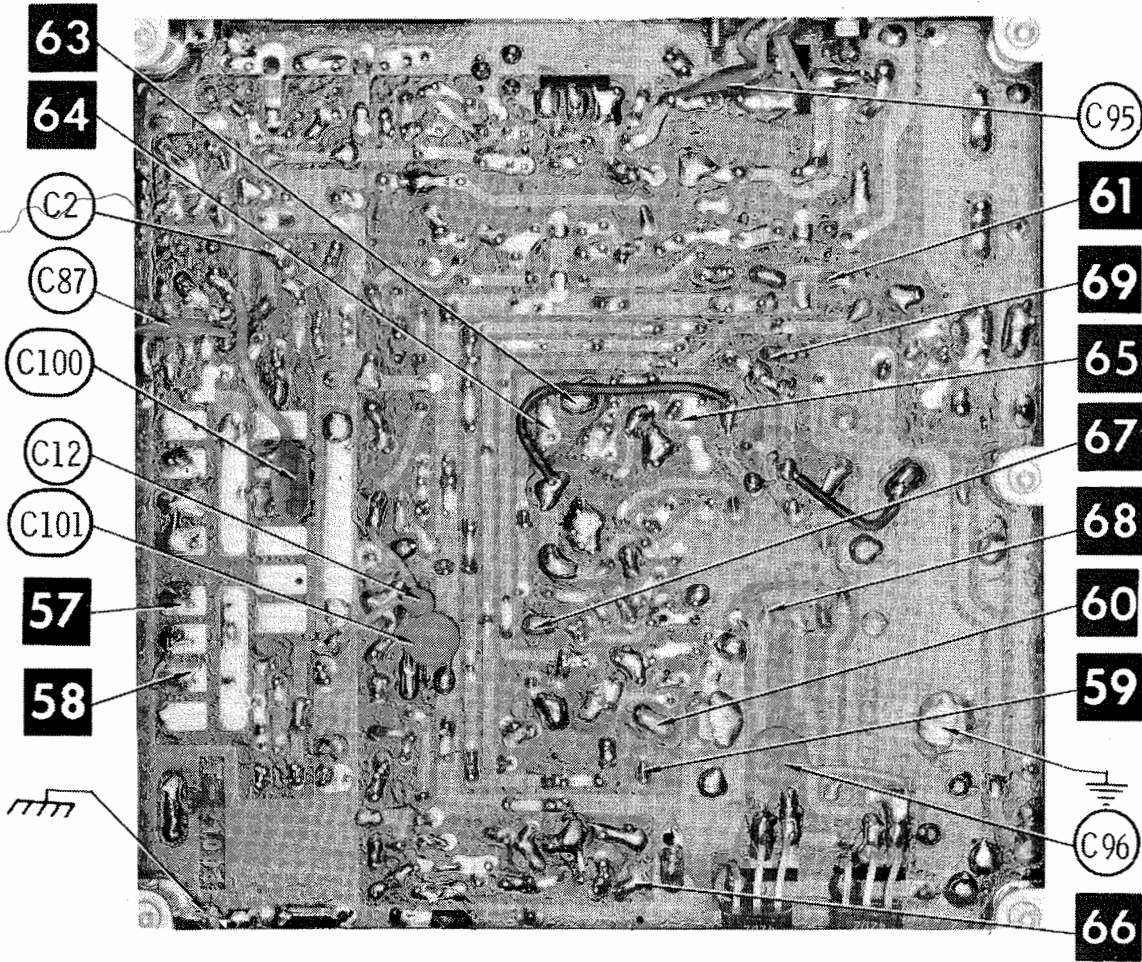


MAIN BOARD

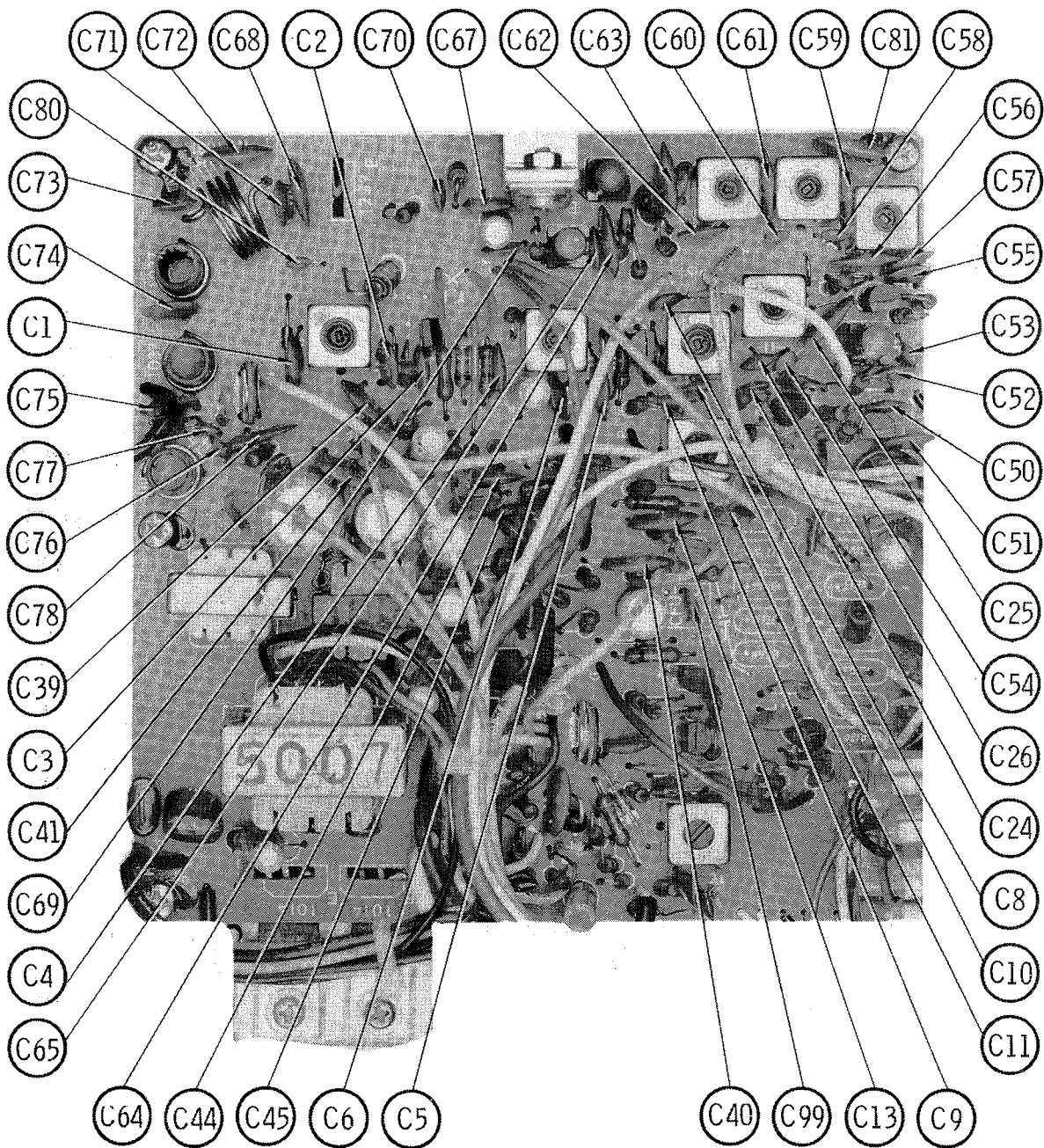


MAIN BOARD

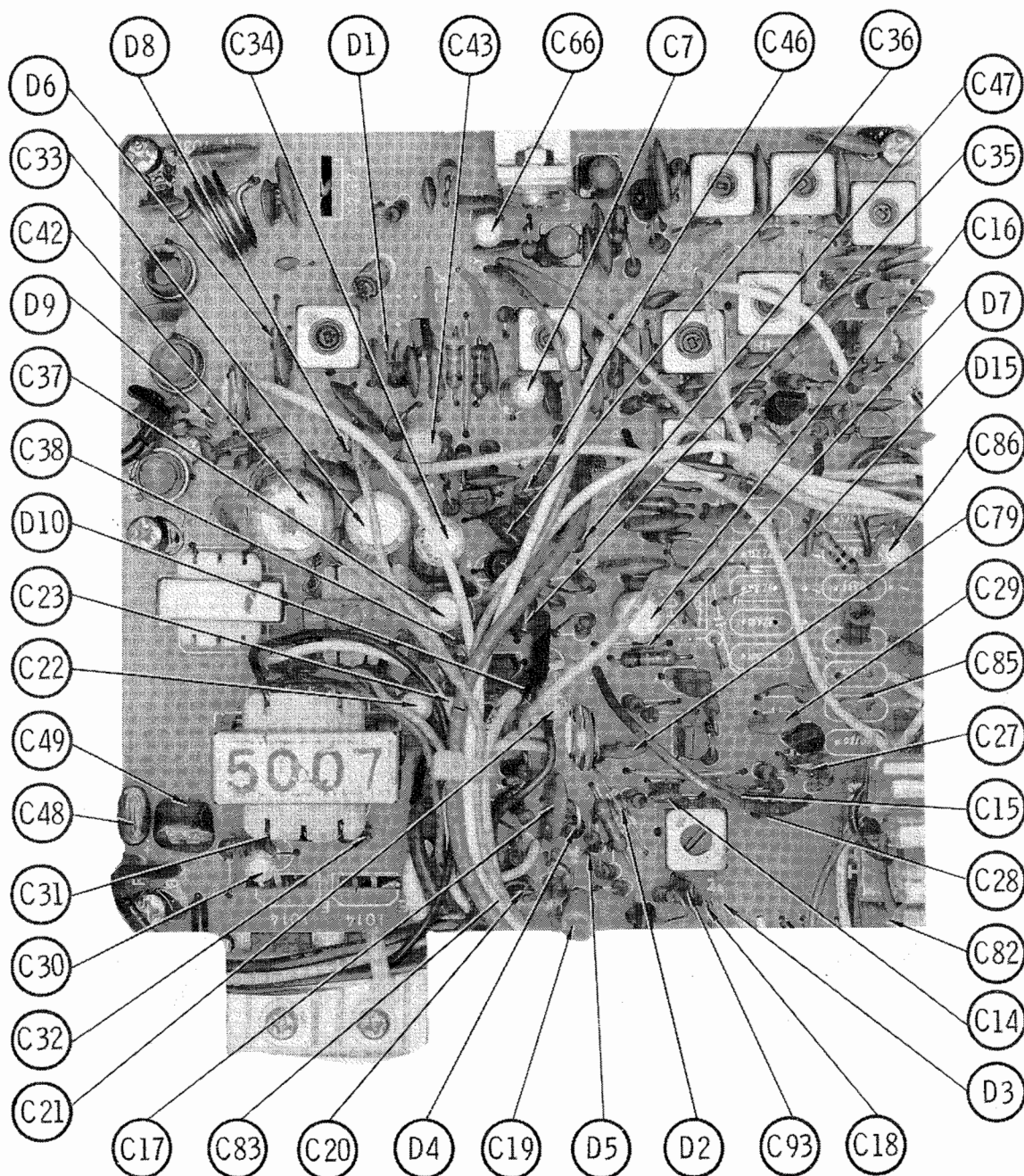
ROYCE MODEL 1-620



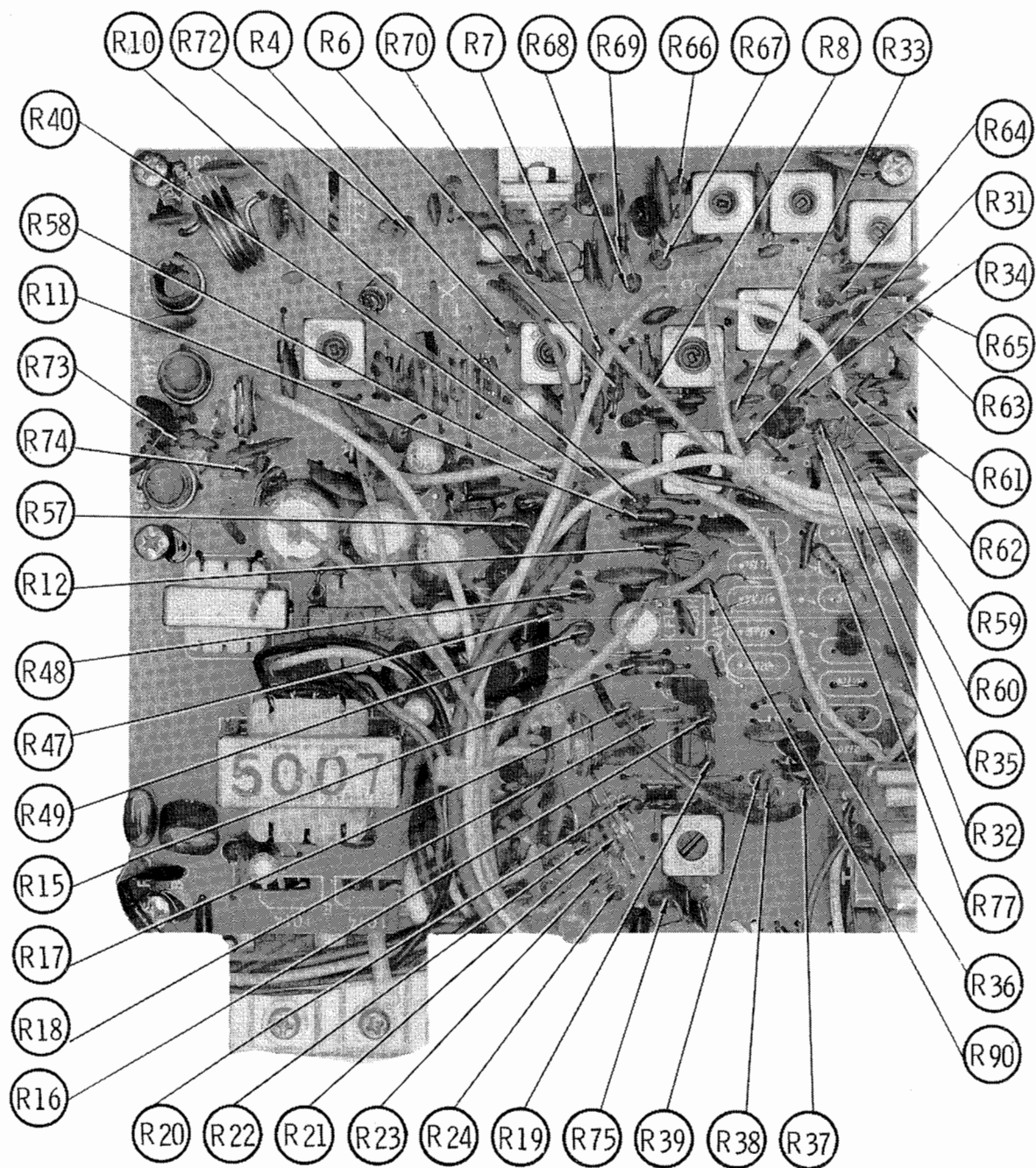
MAIN BOARD



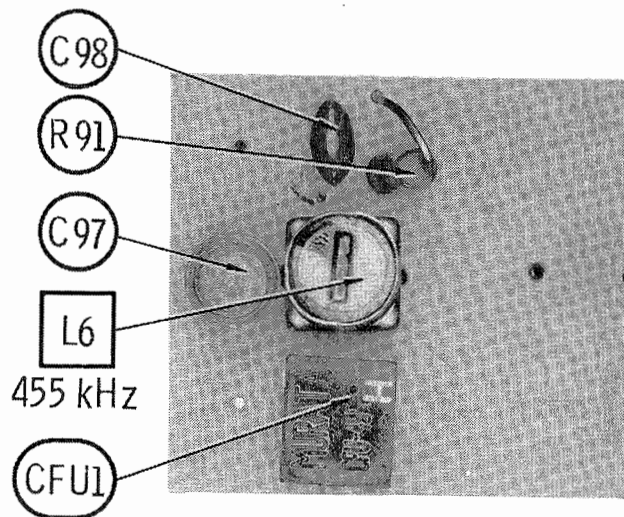
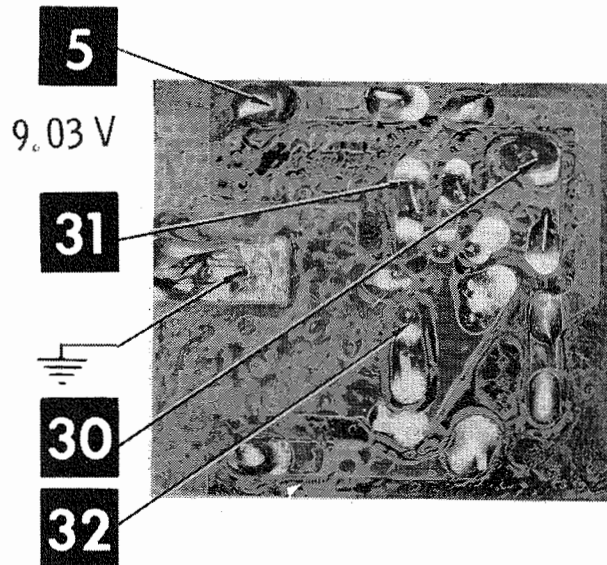
MAIN BOARD



MAIN BOARD

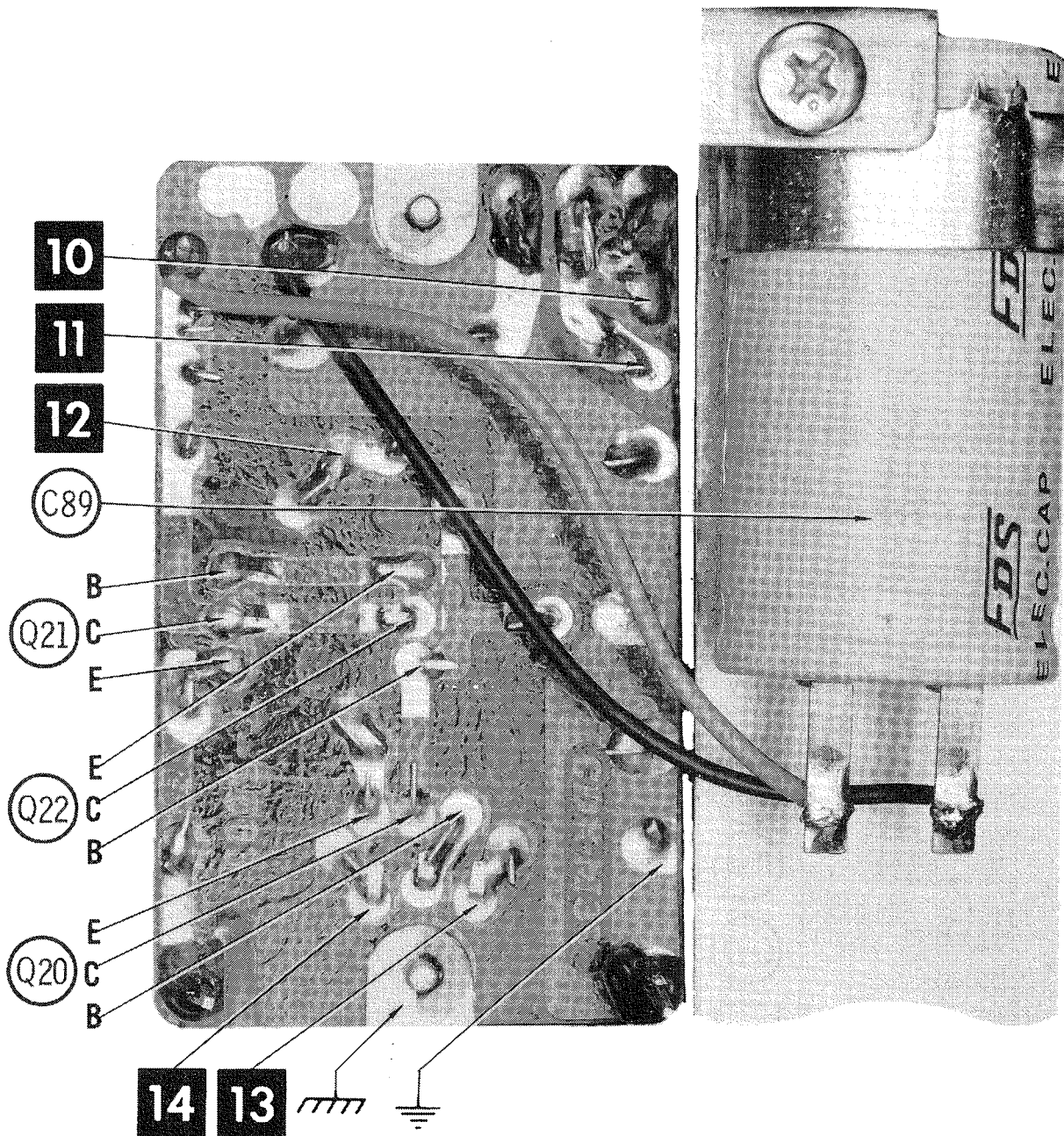


MAIN BOARD

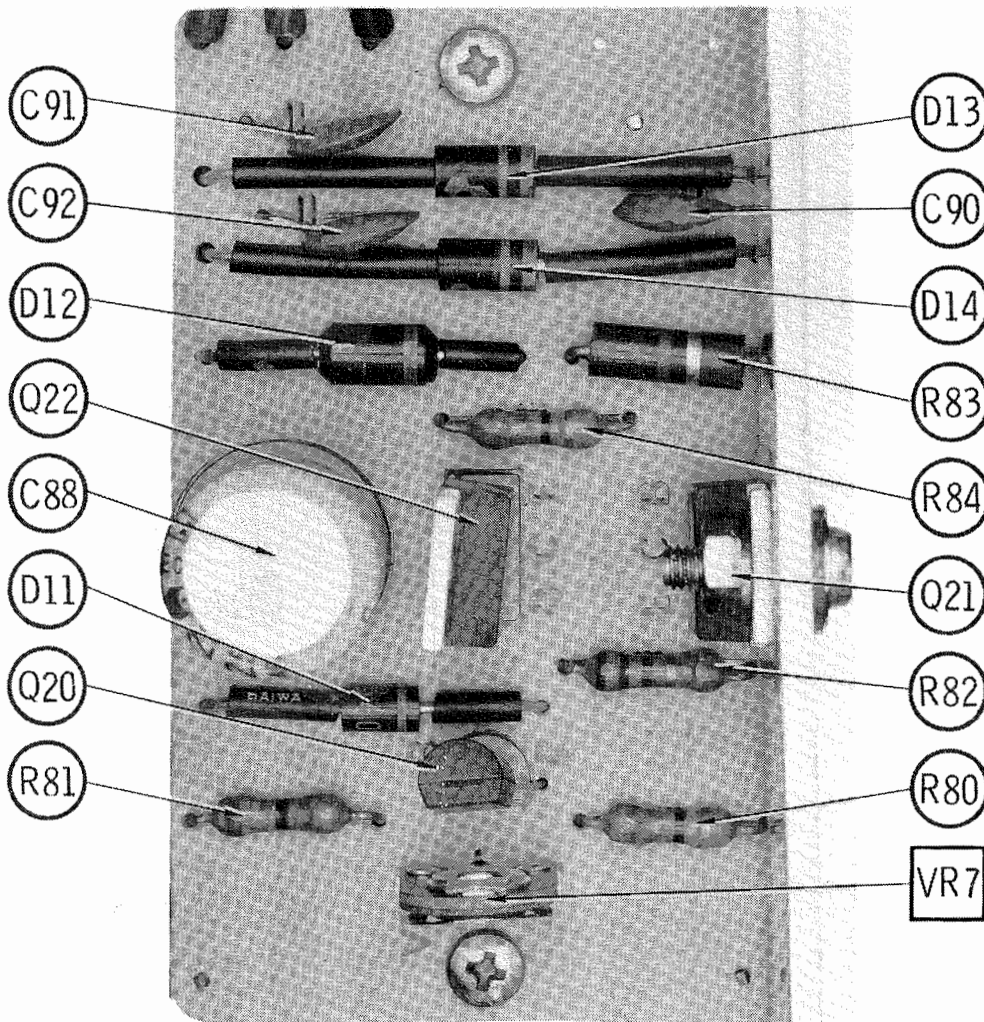


ROYCE MODEL 1-620

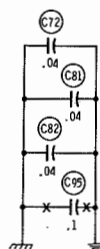
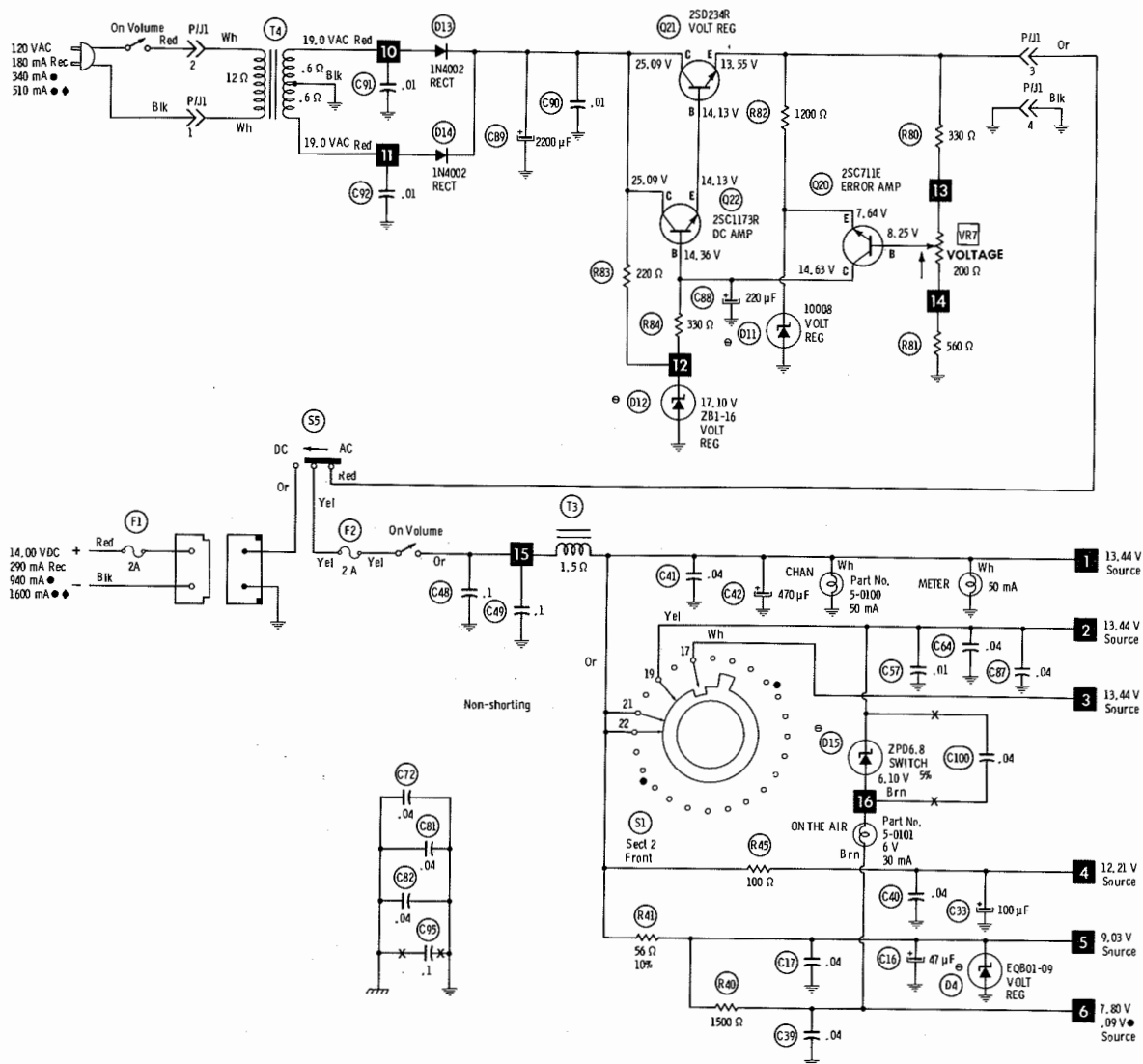
455kHz BOARD



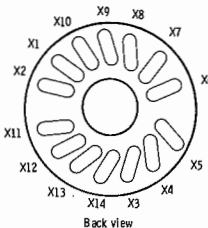
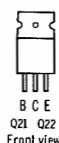
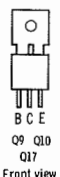
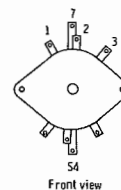
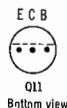
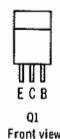
REGULATOR BOARD



REGULATOR BOARD



Terminal Guides



— Circuitry not used in some versions

--- Circuitry used in some versions

⊙ See parts list

✱ Nominal value

⊥ Ground

Chassis

Measurements with switching as shown unless noted:

■ Squelch fully clockwise ◆ 100% modulation

● Transmit ▲ AM

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Arrow at control indicates direction of advance.

Terminal identification may not be found on unit.

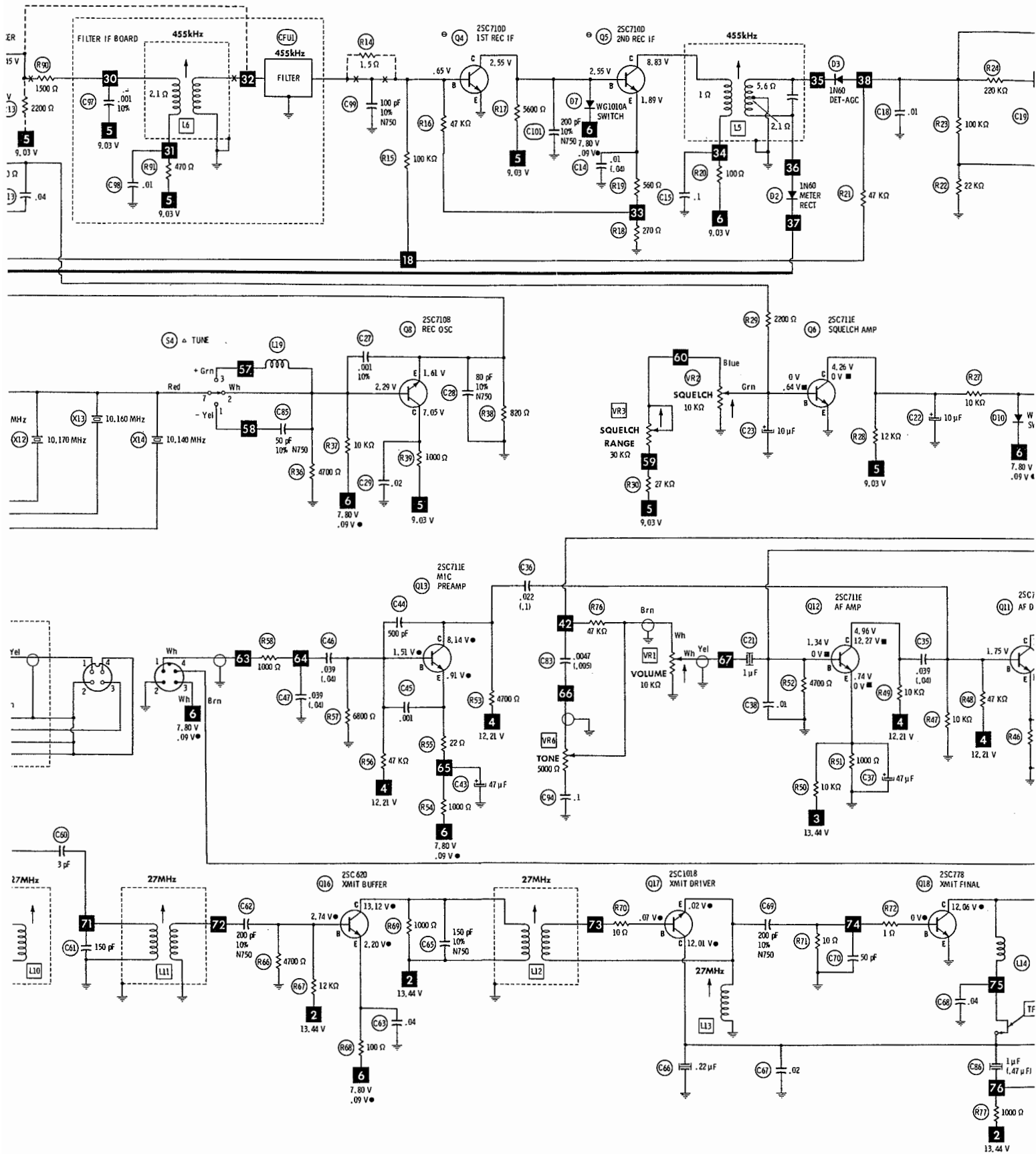
Resistors are 1/2W or less, 5% unless noted.

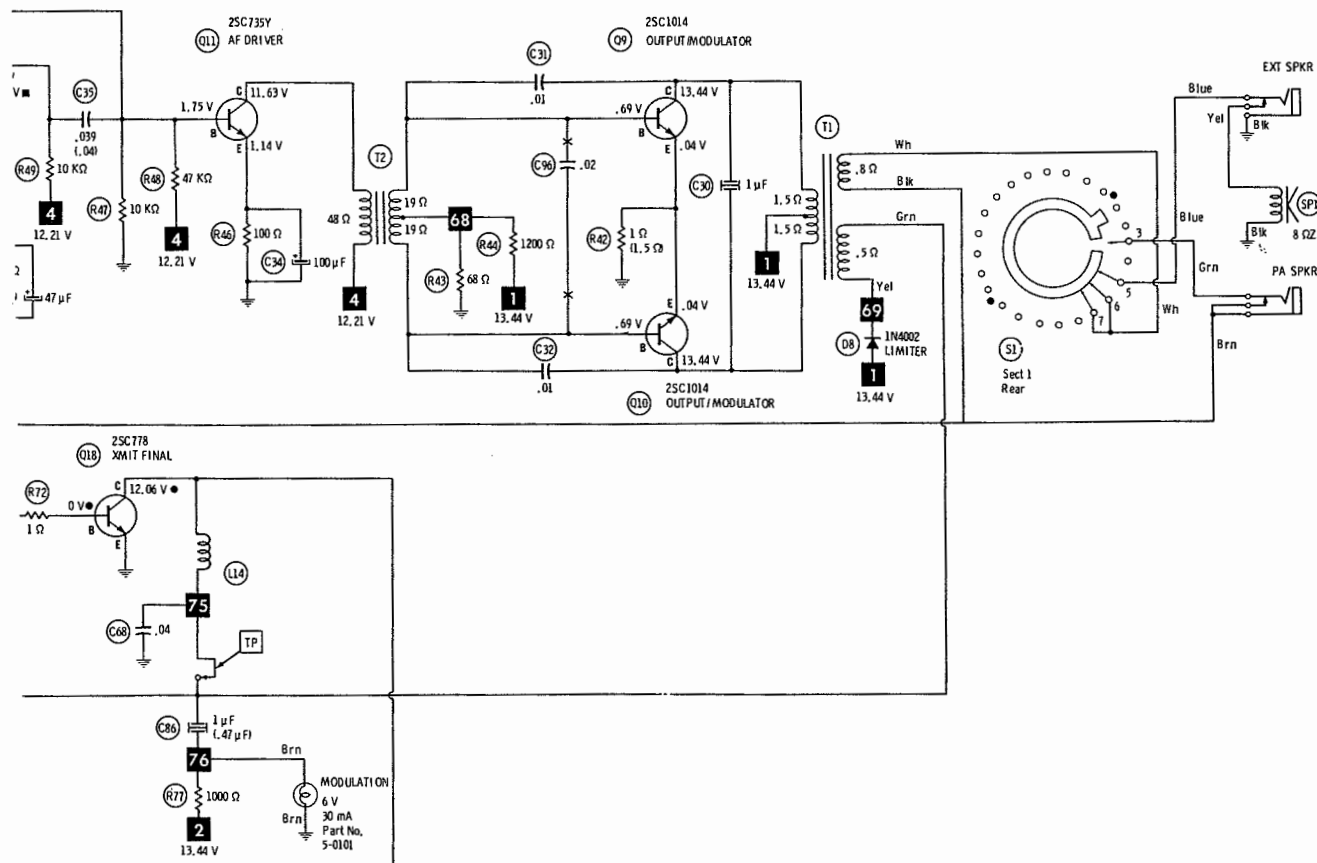
Value in () used in some versions.

A PHOTOFAC STANDARD NOTATION SCHEMATIC

WITH CIRCUITACE®

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PARTS LIST AND DESCRIPTION

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

PJ
(W)

EI

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord, 2-Wire	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) -6 feet 17109 (Plastic) or 17129 (Rubber) -9 feet
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 8491 4-Conductor (2 shielded, 2 unshielded) Neoprene

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFG. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D1	WG1010A	(9.1 Volt Zener)	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D2	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D3	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D4	EQB01-09		GEZD-9.1	Z1209	PTC505	HEPZ0412	RE 114	SK3060	RT-240	ECG139
D5	1S2075K	(8.2 Volt Zener)	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D6	WG1010A		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D7	WG1010A		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D8	1N4002		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D9	1N60	(8.2 Volt Zener)	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D10	WG1010A		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D11	10D08		GEZD-8.2	Z1208	ZB8.2A	HEPZ0411	RE 112	SK3136	RT-257	ECG5072
	EQA01-0BR		GEZD-8.2	Z1208	ZB8.2A	HEPZ0411	RE 112	SK3136	RT-257	ECG5072
D12	ZB1-16	(16 Volt Zener)	GEZD-15	Z1214	ZB16A	HEPZ0419	RE 122	SK3063	RT-246	ECG5075
D13	1N4002		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D14	1N4002		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D15	ZPD6.8				ZB6.8B				RT-238	ECG5071
Q1	2SC535B	(6.8 Volts 5% Zener)	GE-86	(1R)2SC535B	PTC136	HEPS0016	RE 9	SK3018	RT-112	ECG229
Q2	2SC710C		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q3	2SC710C		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q4	2SC710D, C		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q5	2SC710D, C	(10)	GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q6	2SC711E		GE-62	(1R)2SC372	PTC139	HEPS0024	RE 64	SK3122	RT-107A	ECG199
Q7	2SC710B		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q8	2SC710B		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q9	2SC1014	(10)								ECG300
Q10	2SC1014									ECG300
Q11	2SC735Y		GE-210	TR-21	PTC123	HEPS0015	RE 13	SK3122	RT-172	ECG289
Q12	2SC711E		GE-62	(1R)2SC372	PTC139	HEPS0024	RE 64	SK3122	RT-107A	ECG199
Q13	2SC711E	(12)	GE-62	(1R)2SC372	PTC139	HEPS0024	RE 64	SK3122	RT-107A	ECG199
Q14	2SC710B		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q15	2SC710D, B		GE-20	TR-24	PTC121	HEPS0016	RE 13	SK3018	RT-105	ECG123A
Q16	2SC620D		GE-20	TR-24	PTC136	HEPS0015	RE 13	SK3124	RT-172	ECG123A
Q17	2SC1018	(11)	GE-215				RE 80			ECG299
Q18	2SC77B		GE-46	TR-65	PTC176	HEPS3001	RE 79	SK3049	RT-182	ECG237
Q20	2SC711E		GE-62	(1R)2SC372	PTC139	HEPS0024	RE 64	SK3122	RT-107A	ECG199
Q21	2SD234R		GE-66	TR-76	PTC110		RE 21	SK3054	RT-154	ECG152
Q22	2SC1173R	(14)	GE-215	TR-76	PTC110		RE 21	SK3054	RT-154	ECG152

(10) Rating, 7.0 watts @ 1.5 amps.

(11) Rating, 4.0 watts @ 1.0 amps.

(12) Rating, 2.5 watts @ 2.0 amps.

(13) Rating, 1.5 watts @ 3.0 amps.

(14) Rating, 10 watts @ 3.0 amps.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C7	1 50V NP		CTA-7425	EN50-105	WNP1-50	TCN501A	TVAN-1560
C16	47 16V		RME-E-E-050	EP15-50	PC50-16	VTT47D16	EV-1226
C19	.47 50V NP						
C21	1 50V NP		CTA-7425	EN50-105	WNP1-50	TCN501A	TVAN-1560
C22	10 10V		RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222
C23	10 10V		RME-A-D-010	EP15-10	PC10-25	VTT10A25	EV-1222
C30	1 50V NP		CTA-7425	EN50-105	WNP1-50	TCN501A	TVAN-1560
C33	100 16V		RME-E-E-100	EP15-100	PC100-16	VTT100F16	EV-1230
C34	100 6.3V		RME-E-E-100	EP6-100	PC100-10	MTV100CB6	EV-1030
C37	47 6.3V		RME-C-B-050	EP6-50	PC50-10	VTT47A6	EV-1026
C42	470 16V		RME-L-E-500	EP15-500	PC500-16	VTT470J16	EV-1250
C43	47 6.3V		RME-C-B-050	EP6-50	PC50-10	VTT47A6	EV-1026
C66	.22 50V NP						
C86	1 50V NP		CTA-7425	EN50-105	WNP1-50	TCN501A	TVAN-1560
C88	220 25V		RME-K-G-250	EP30-250	PC250-25	VTT220H25	EV-1340
C89	2200 35V		ME-J2000		WBR2000-50	TC50200A	TVA-1318.3

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	.02		CCD-203			GP120	56A-S20
C2	.02		CCD-203			GP120	56A-S20
C3	.02		CCD-203			GP120	56A-S20
C4	.02		CCD-203			GP120	56A-S20
C5	.02		CCD-203			GP120	56A-S20
C6	.01		CCD-103				10TS-S10
C8	.001		CCD-102	DD-102		GP210	10TS-D10
C9	.02		CCD-203			GP120	56A-S20
C10	3		CCTO-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C11	.02		CCD-203			GP120	56A-S20
C12	5		CCTO-050				10TCC-V50
C13	.04		CCD-403			GP140	56A-S40
C14	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C15	.1			DC-104	MGP1	MAG5001	TG-P10
C17	.04		CCD-403			GP140	56A-S40
C18	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C20	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C24	50 10% N750			DTN-47	N47	CN7447	10TCU-Q47
C25	.04		CCD-403			GP140	56A-S40
C26	50 10% N750			DTN-47	N47	CN7447	10TCU-Q47
C27	.001 10% 50V		1MDF-1-102	CPJ-102	DPMS6D1	EPF1A210	1PB-D10
C28	80 10% N750					CN7482	10TCU-Q82
C29	.02		CCD-203			GP120	56A-S20
C31	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C32	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C35	.039 50V		6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C36	.022 50V		1MDF-1-223	CPJ-223	DPMS2S22	EPF1A122	1PB-S22
C38	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EPF1A110	1PB-S10
C39	.04		CCD-403			GP140	56A-S40
C40	.04		CCD-403			GP140	56A-S40
C41	.04		CCD-403			GP140	56A-S40
C44	500		CCD-501	DD-501	GP500	GP350	10TS-T50
C45	.001		CCD-102	DD-102		GP210	10TS-D10
C46	.039 50V		6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C47	.039 50V		6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C48	.1 50V		1MDF-3-104		DPMS2P1	EPF1A010	1PB-P10
C49	.1 50V		1MDF-3-104		DPMS2P1	EPF1A010	1PB-P10
C50	100 10% N750		CCTN-101	DTN-100	N100	CN7310	10TCU-T10
C51	500		CCD-501	DD-501	GP500	GP350	10TS-T50
C52	80 10% N750		CCTN-820			CN7482	10TCU-Q82
C53	30		CCTO-300				10TCC-Q30
C54	15		CCTO-150	DTZ-15	NP015	CN0415	10TCC-Q15
C55	.01		CCD-103				10TS-S10
C56	150 10% N750		CCTN-151	DTN-150	N150	CN7315	10TCU-T15
C57	.01		CCD-103				10TS-S10
C58	3		CCTO-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C59	150		CCD-151	DD-151		CN0315	10TCC-T15
C60	3		CCTO-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33

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 PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C61	150		CCD-151	DD-151		CN0315	10TCC-T15
C62	200 10% N750		CCTN-201	DTN-200			10TCU-T20
C63	.04		CCD-403			GP140	5GA-S40
C64	.04		CCD-403			GP140	5GA-S40
C65	150 10% N750		CCTN-151	DTN-150	N150	CN7315	10TCU-T15
C67	.02		CCD-203			GP120	5GA-S20
C68	.02		CCD-203			GP120	5GA-S20
C69	20 10% N750			DTN-20	N20	CN7420	10TCU-Q20
C70	50			DTZ-50	NP050	CN0450	10TCC-Q50
C71	.01		CCTO-510				10TS-S10
C72	.04		CCD-103				5GA-S40
C73	200		CCD-403			GP140	10TS-T20
C74	350		CCD-201	DD-201	GP200	GP320	10TS-T33
C75	300		CCD-331	DD-331	GP330	GP333	10TS-T30
C76	30		CCD-301	DD-301	GP300	GP330	10TCC-Q30
C77	1		CCTO-300				10TCC-V10
C78	.1			DC-104	MGP1	CN0510	TG-P10
C79	.02		CCD-203			MAG5001	5GA-S20
C80	.15		CCTO-150	DTZ-15	NP015	GP120	10TCC-Q15
C81	.04		CCD-403			CN0415	5GA-S40
C82	.04		CCD-403			GP140	5GA-S40
C83	.0047 50V					GP140	
C85	50 10% N750		CCTN-470	DTN-47	N47	CN7447	10TCU-Q47
C87	.04		CCD-403			GP140	5GA-S40
C90	.01		CCD-103				10TS-S10
C91	.01		CCD-103				10TS-S10
C92	.01		CCD-103				10TS-S10
C93	.0047 50V		1MDF-1-472	CPJ-472	DPMS6D47	EWF1A247	1PB-D47
C94	.1			DC-104	MGP1	MAG5001	TG-P10
C95	.1 50V			DC-104	MGP1	MAG5001	TG-P10
C96	.02		CCD-203			GP120	5GA-S20
C97	.001 10%		DM19-102J	CPR-1000J	CD19FD102J03	SX210	424ME1001J501
C98	.01 50V		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C99	100 10% N750		CCTN-101	DTN-100	N100	CN7310	10TCU-T10
C100	.04		CCD-403			GP140	5GA-S40
C101	200 10% N750		CCTN-201	DTN-200			10TCU-T20

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.	MALLORY PART No.	TRW PART No.
VR1	Volume/Switch	10K	4-0001	F2-10K(1), SSK100, KR2	A47-10K-Z(1), KSS-3 or [NP-10K-Z(1), UP-C-400]	RU14A, SL36, SL1500 or [UA14A(1),SK1000] or U18 (1)	BU1 (1), CF1, SS1, DC1
VR2	Squelch	10K	4-0021	F1-10K (1), SSK100	A47-10K-S (1), KSS-3 or [NP-10K-S (1), UP-C-400]	RU14L, SL36, SL1500 or [UA14L(1),SK1000] or U20 (1)	BU1 (1), CF9, SS1, DC1
VR3	Squelch Range	30K	4-0107	TSV-50K (2) or T-50K (2)	C-503 (2)	MTC54L1 (2)	X201R503B (2)
VR4	S Meter	30K	4-0107	TSV-50K (2) or T-50K (2)	C-503 (2)	MTC54L1 (2)	X201R503B (2)
VR5	RF	30K	4-0107	TSV-50K (2) or T-50K (2)	C-503 (2)	MTC54L1 (2)	X201R503B (2)
VR6	Tone	5000	4-0042	F1-5000 (1), SSK100	A47-5000-S (1), KSS-3 or [NP-5000-S (1), UP-C-400]	RU53L, SL36, SL1500 or [UA53L (1),SK1000] or U14 (1)	BU1 (1), CF8, SS1, DC1
VR7	Voltage	200	4-0103	T-200 or TSV-250		MTC22L1	X201R251B

(1) Enlarge mounting hole.

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

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Rec. Ant. (27MHz)	2-0049	ETC15089		
L2	Rec. RF (27MHz)	2-0045	ETC15061		
L3	Rec. Mixer (10.7MHz)	2-0046	KAC6184A		
L4	Rec. Mixer (10.7MHz)	2-0046	KAC6184A		
L5	Output IF (455kHz)	2-0050	ETC15090		
L6	Input IF (455kHz)	2-0050			
L7	Synth. Osc. (37MHz)	2-0047	ETC15063		
L8	Xmit. Osc. (10MHz)	2-0040			
L9	Harmonic Suppressor (27MHz)	2-0048	ETC15064		
L10	Harmonic Suppressor (27MHz)	2-0048	ETC15063		
L11	Xmit. Mixer (27MHz)		ETC15063		
L12	Xmit. Buffer (27MHz)	2-0035			
L13	Driver (27MHz)	2-0036			
L14	Final Tank	2-0038			
L15	Pi Filter	2-0037			
L16	Pi Filter	2-0041			
L17	Pi Filter (27MHz)	2-0041A			
L18	TVI Trap (54MHz)	2-0042			
L19	Delta Tune	2-0076	3R3	74F336AP	

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T3	1600mA	1.5	.8mH	2-0030 1002 (1)			(1) Number on unit.

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	1.6	1		2-0033 1001 (1)			(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	32	8	20043 5007 (1)			(1) Number on unit.

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T4	120VAC @ 510mA AC	38VAC @ 2500mA AC	2-0044 5008 (1)			(1) Number on unit.

ROYCE MODEL 1-620

PARTS LIST AND DESCRIPTION (CONTINUED)

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

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	2 1/2" PM, 8 Ohms	5-0136		

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	WORKMAN PART No.
F1	2 Amp Fast-acting	5-0160		AGC2	HDJ	302002	150145
F2	2 Amp Fast-acting	5-0160	5-0008	AGC2	HKD	312002	342001AL

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL	ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X1	37.600		DA20W37.600	1,2,3,4	X8	10.625		DB20W10.625	2,6,10,14,18,22
X2	37.650		DA20W37.650	5,6,7,8	X9	10.615		DB20W10.615	3,7,11,15,19
X3	37.700		DA20W37.700	9,10,11,12	X10	10.595		DB20W10.595	4,8,12,16,20,23
X4	37.750		DA20W37.750	13,14,15,16	X11	10.180		DC22W10.180	1,5,9,13,17,21
X5	37.800		DA20W37.800	17,18,19,20	X12	10.170		DC22W10.170	2,6,10,14,18,22
X6	37.850		DA20W37.850	21,22,23	X13	10.160		DC22W10.160	3,7,11,15,19
X7	16.635		DB20W10.635	1,5,9,13,17,21	X14	10.140		DC22W10.140	4,8,12,16,20,23

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CFU1	Ceramic Filter	5-0164	455kHz
M1	Meter	5-0135	S/Rf
S1	Switch	4-0053	Channel Selector
S2	Switch	4-0079	ANL.
S4	Switch	4-0071	Delta-Tune
S5	Switch	4-0089	AC-DC
	Printed Circuit Board	7-21003	Main

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

ITEM	PART No.	ITEM	PART No.
Case Top	3-0002	Knob Channel	3-0102
Bottom Cover	3-0003	Knob, Volume, Tone, Delta Tune, Squelch	3-0101
Front Panel	3-0036	Channel Dial Disc	
Wood Side Panel	3-0001	Speaker Grill	3-0059
		Microphone Hanger	5-0166

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone	5-1200	
AC Power Cord	5-0153	
DC Power Cord	5-0151	