

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 3-5818A

MANUFACTURER'S SPECIFICATIONS

RECEIVER		TRANSMITTER	
Sensitivity:	0.5uv for 500mw	Frequency Response:	400 Hz to 2.5 kHz
Frequency Coverage:	26.965 to 27.405 MHz	Frequency Coverage:	26.965 to 27.405 MHz
Adjacent Channel Attenuation:	Better than 45db	Transmit Power Output:	4 watts max. @ 13.8V DC
Audio Output Power:	2.2 watts @ 10% Dist.	Modulation:	Capable of 100%
Spurious Rejection:	Better than 40db	Frequency Tolerance:	Better than .005%
IF Frequencies:	455 kHz, 10.695 MHz	Microphone:	Dynamic, 500Ω
Squelch Sensitivity	0.5uv or Less		
Image Rejection Ratio:	Better than 40db		
Delta Tune Range:	Approx. ± 1kHz		
Built-in Speaker:	8Ω Impedance		

Courtesy of the Manufacturer

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

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GENERAL ELECTRIC MODEL 3-5818A

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120V AC. Allow a 15-minute warm-up period. Adjustments made with 13.8-volt DC input. Connect low sides of test equipment to ground unless specified otherwise. Connect 50-ohm dummy load or antenna before keying transmitter. Connect microphone.

Suggested Alignment Tools: GC Electronics:

T6,T7,T8,T9.....5009

T1 thru T5,L3.....9440

L5,L9,L10.....9304

CT1,CT2.....5000

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter thru 47pF capacitor to jumper J4 (Base of Q8).	Ch. 19, Delta Tune 0	CT1	Adjust for 10.240MHz +50Hz.
Input of DC meter to TP8 (Junction R7 & R9).	Ch. 1	T1	Adjust 2.0 volts +.1 volt.
	Ch. 1, XMT	CT2	Adjust for 2.0 volts +.1 volt.
Input of frequency counter to J5 (Junction C59, C60 & R29).	Ch. 1		Check for 16.270MHz. Repeat for all channels (Channel frequency - 10.695MHz = frequency on counter).
Input of frequency counter to TP1 (Pin 9 of IC3).	Ch. 1, XMT		Check for 26.965MHz. Repeat for all channels (Should indicate channel frequency).

RECEIVER ALIGNMENT

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

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to J4 (Base of Q8). 455kHz,1000Hz @ 30% modulation.	Ch. 19 Squelch MINIMUM Delta Tune 0 ANL Off Noise Blanker Off	T9,T8,T7	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.185MHz,1000Hz @ 30% modulation.	Ch. 19 Squelch MINIMUM Delta Tune 0 ANL 0 Noise Blanker Off	T6,T5,T4, T3	Adjust for maximum output. If necessary readjust T7, T8, and T9.

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 500uV.	Ch. 19 Delta Tune 0 ANL Off Noise Blanker Off	RV1	SQUELCH RANGE Set Squelch Control VR2 fully clockwise. Adjust RV1 so that squelch just breaks.
Output of signal generator thru .01uF antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19, Delta Tune 0 ANL Off Noise Blanker Off	RV3	S METER Adjust RV3 for 9 on S scale of meter.

TRANSMITTER ALIGNMENT

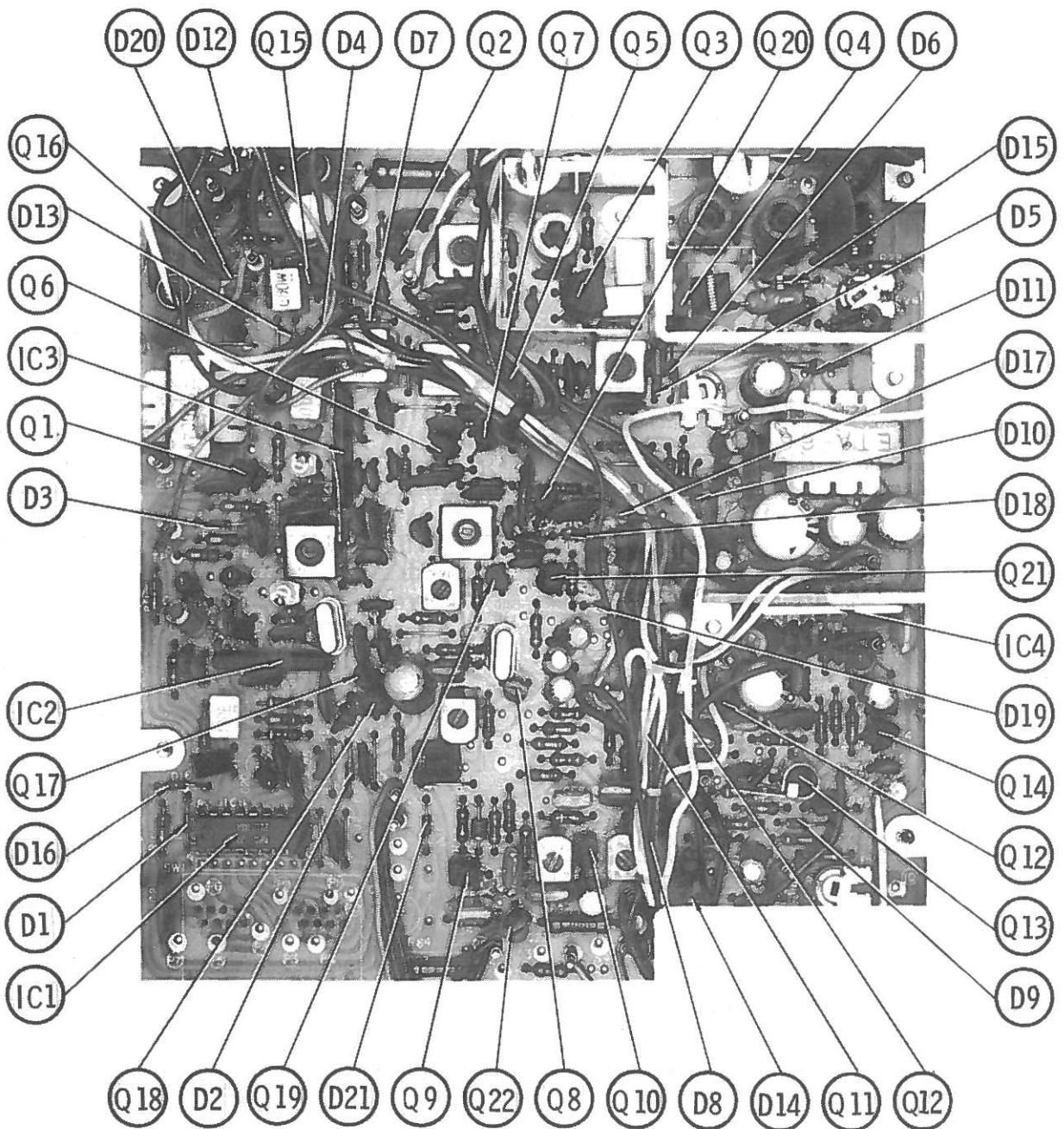
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector at all times.
NOTE: Be sure to check transmit frequency and power on all active channels after alignment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
RF Wattmeter (See Connection above)	Ch. 19	T2, L3, L5, L9, L10	Adjust for maximum.
	Ch. 19	L10	Adjust for 3.8 watts.

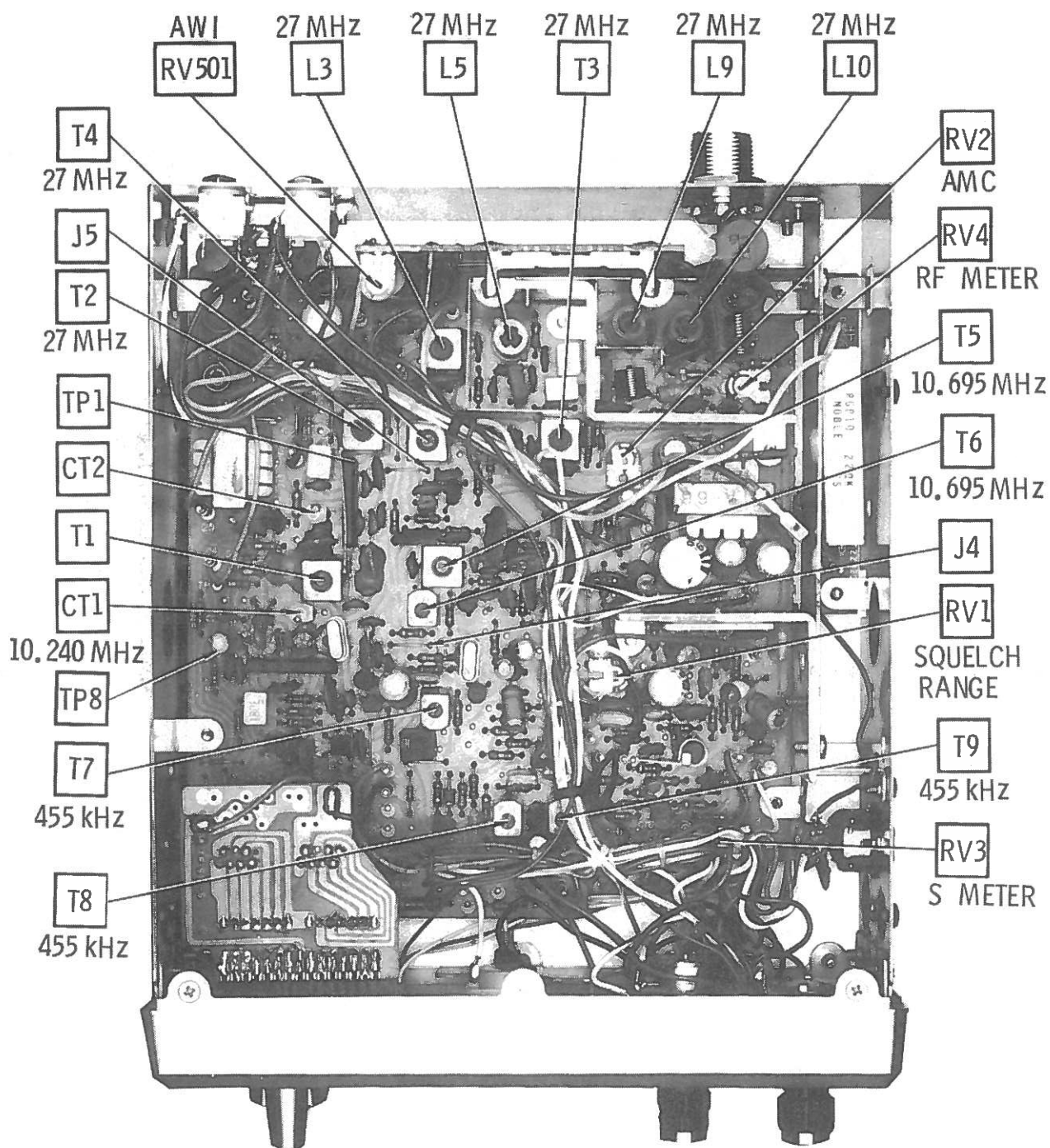
TRANSMITTER ADJUSTMENTS

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

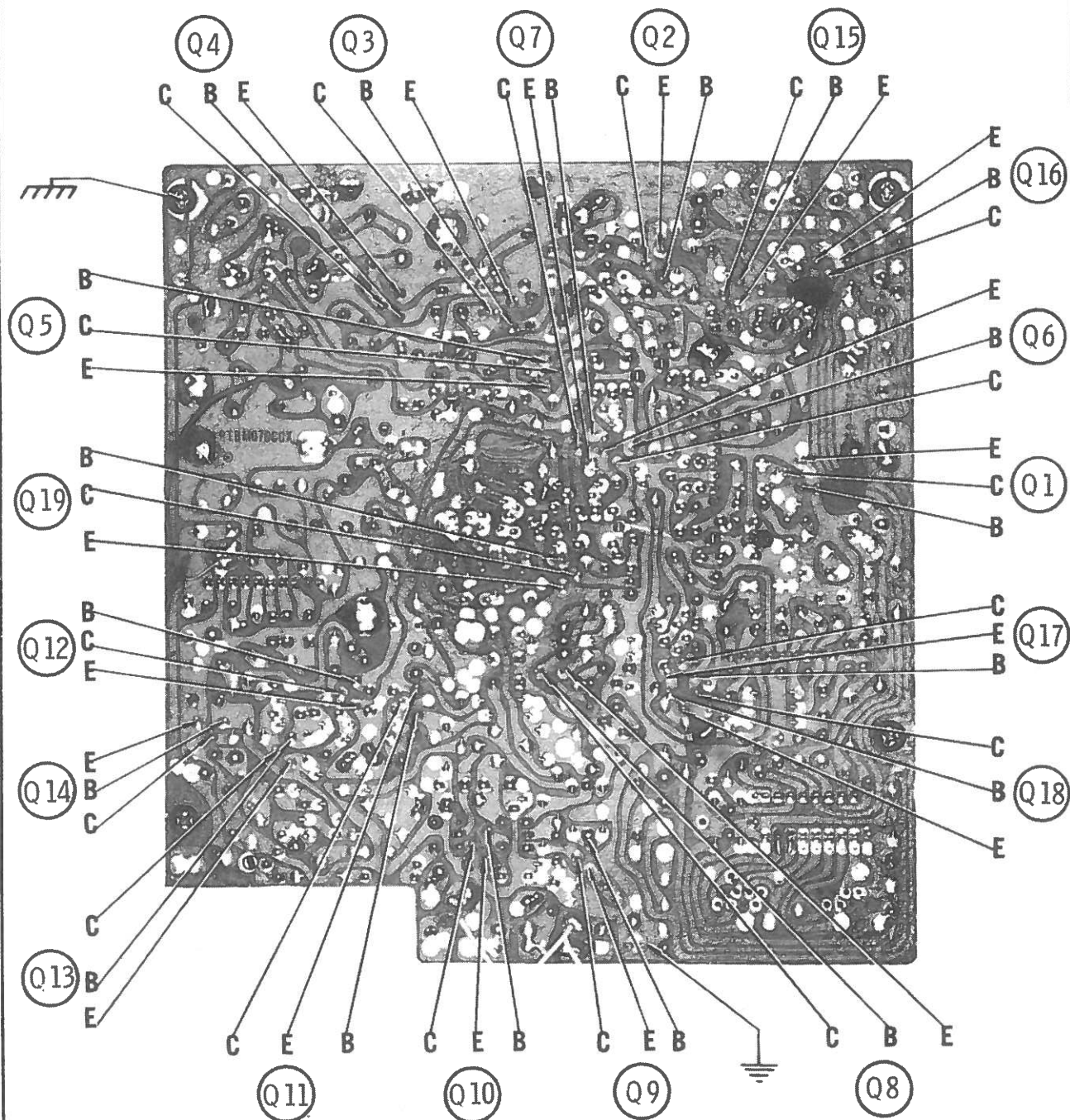
TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Modulation meter to antenna jack. Inject a 1000Hz, 20mV signal at MIC input.	Ch. 19, Mic Pwr Maximum	RV2	AMC Adjust RV2 for 90% modulation.
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.	Ch. 19, Meter Function- TX Power	RV4	RF PANEL METER Adjust RV4 so that RF panel meter agrees with RF wattmeter.
Connect a 250 ohm, 25-watt non-inductive resistor to antenna connector.	Ch. 19	RV501	AWI Adjust RV501 so that AWI indicator lights.



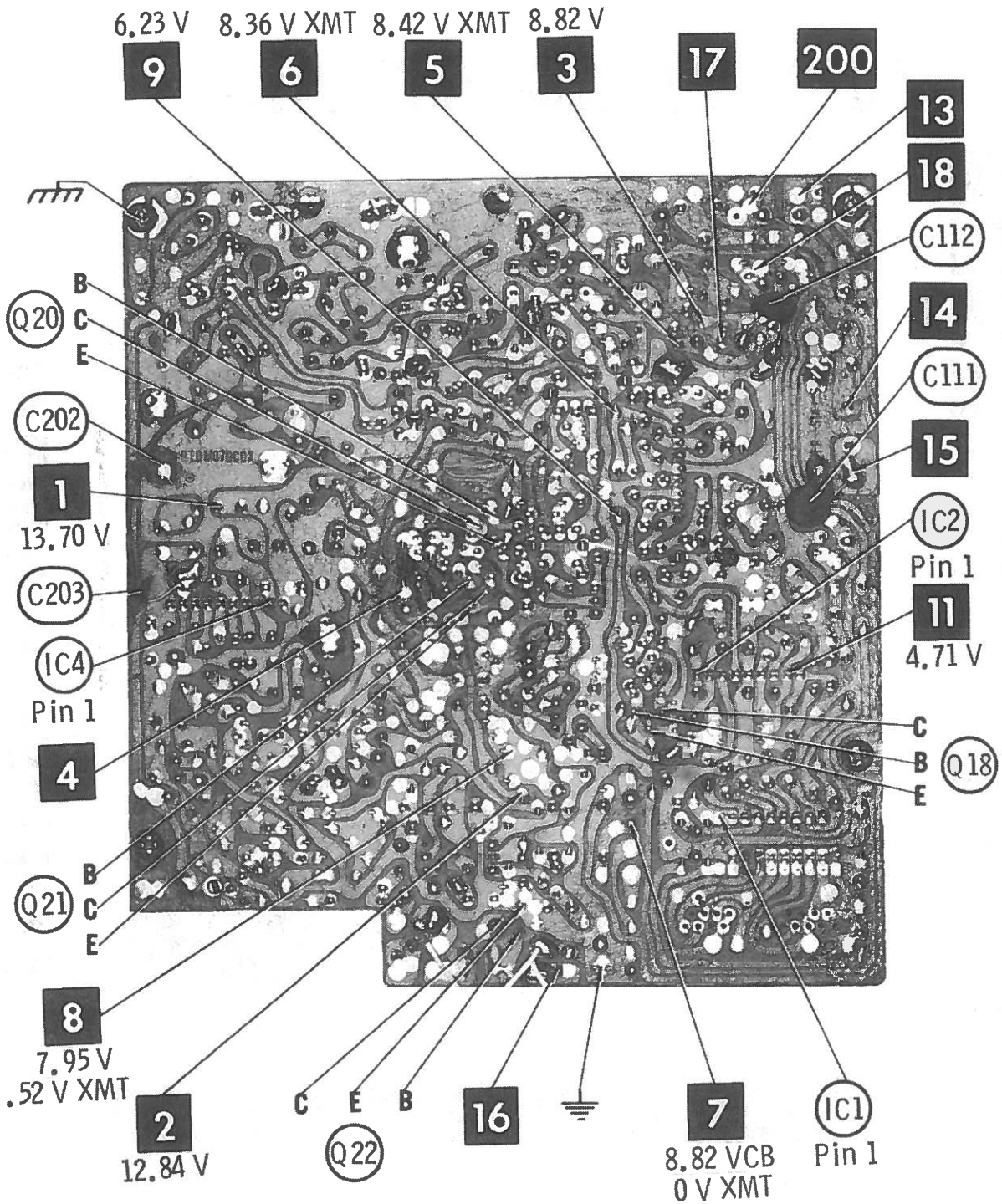
MAIN BOARD



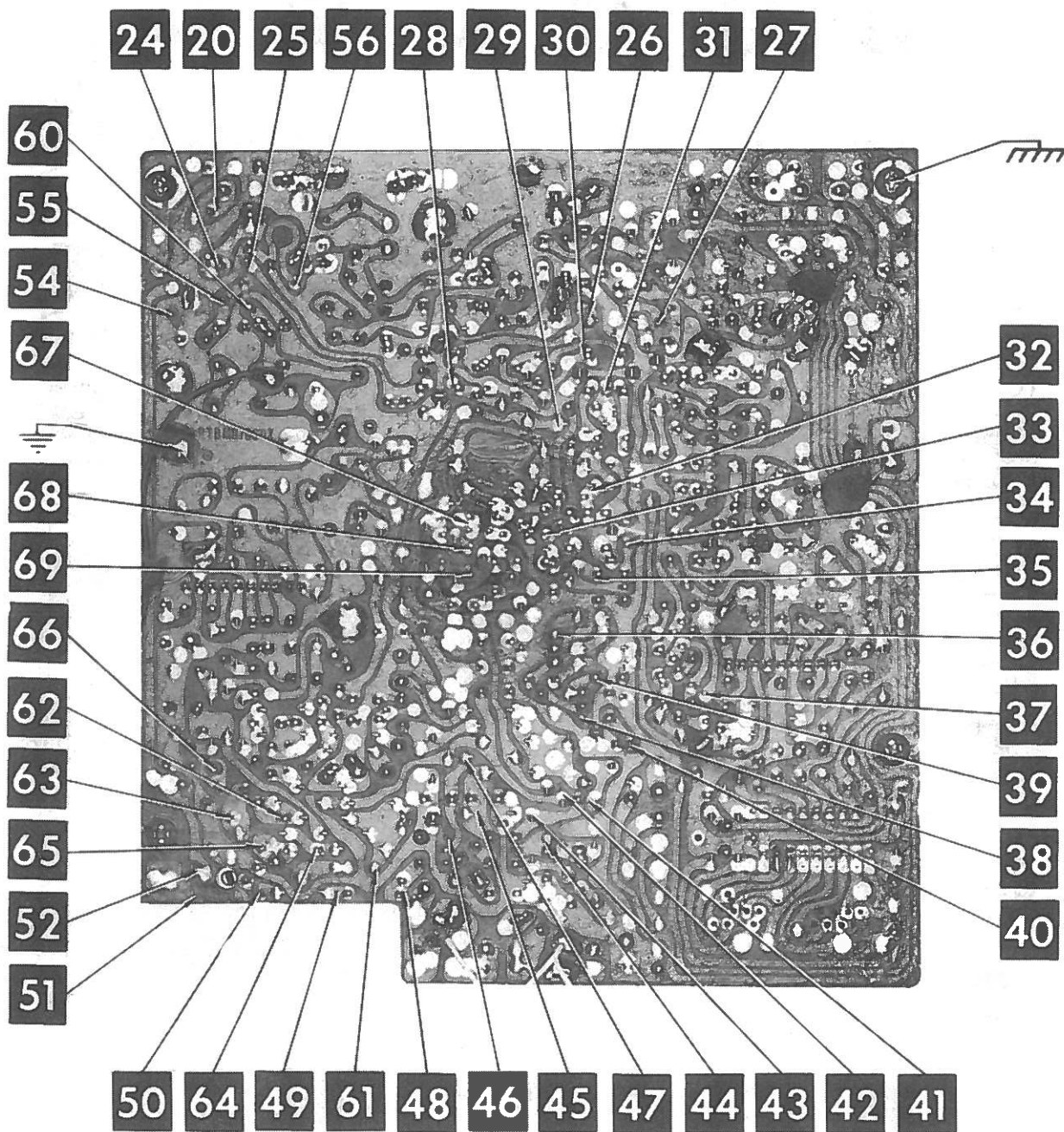
CHASSIS - BOTTOM



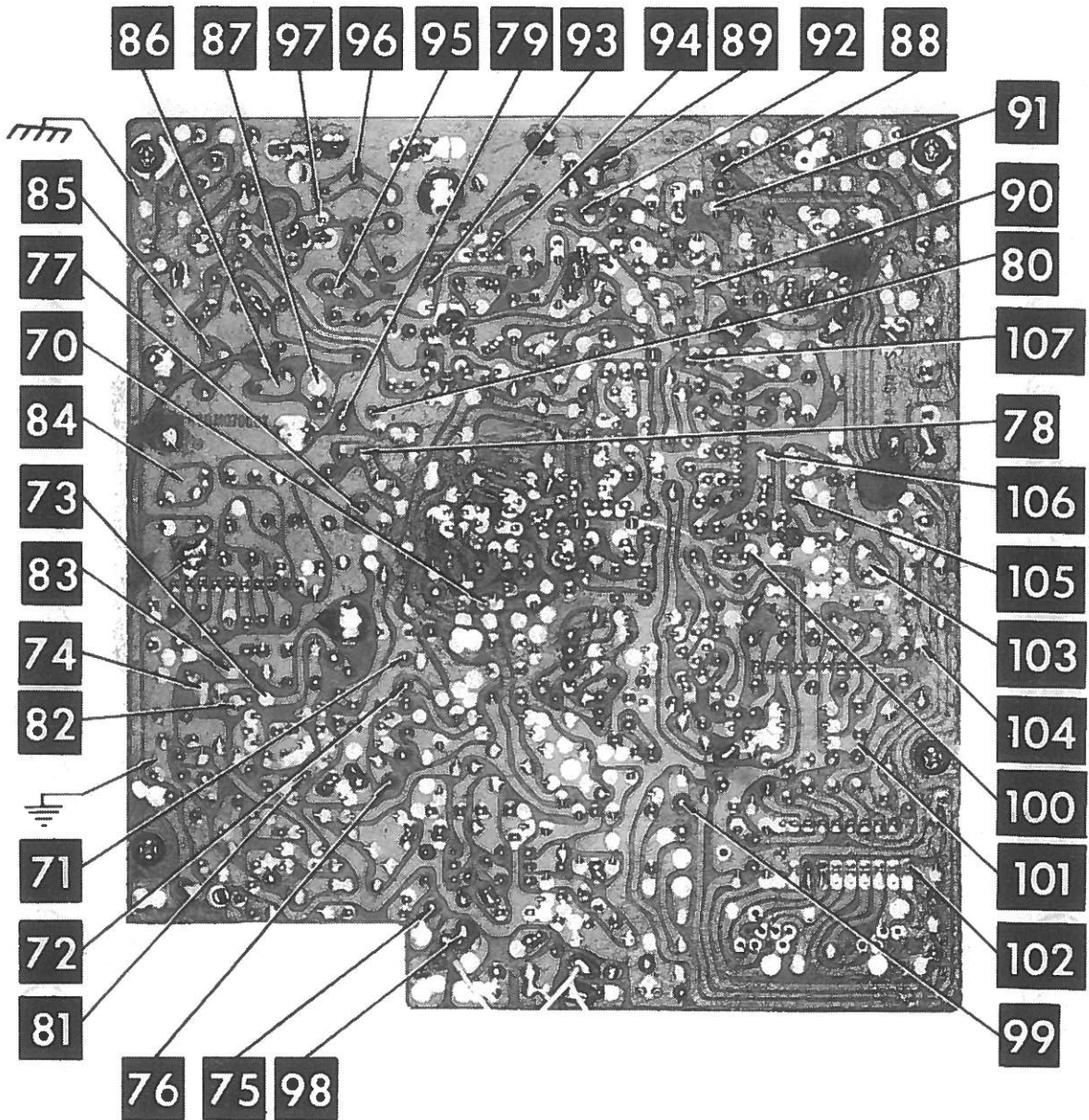
MAIN BOARD



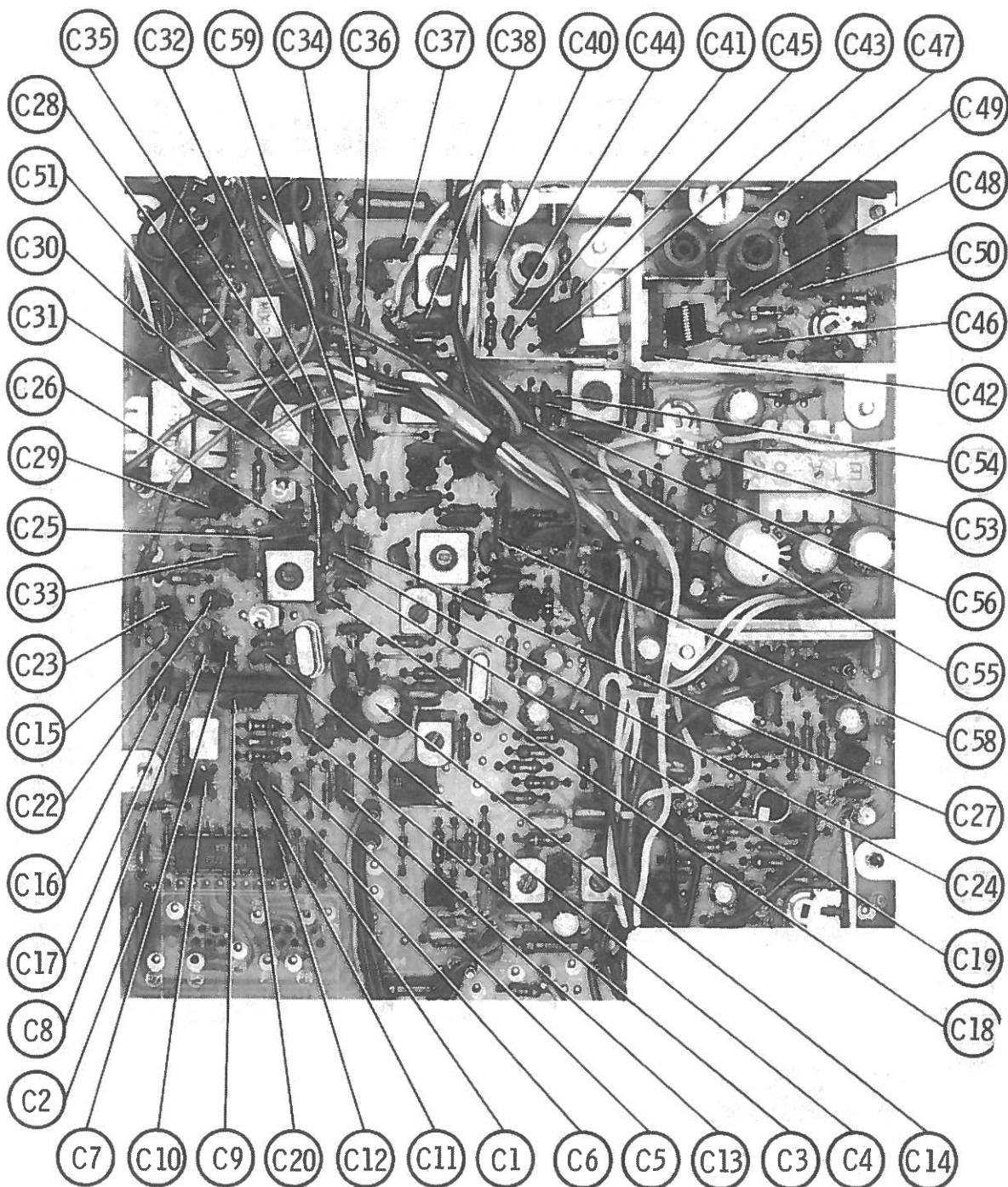
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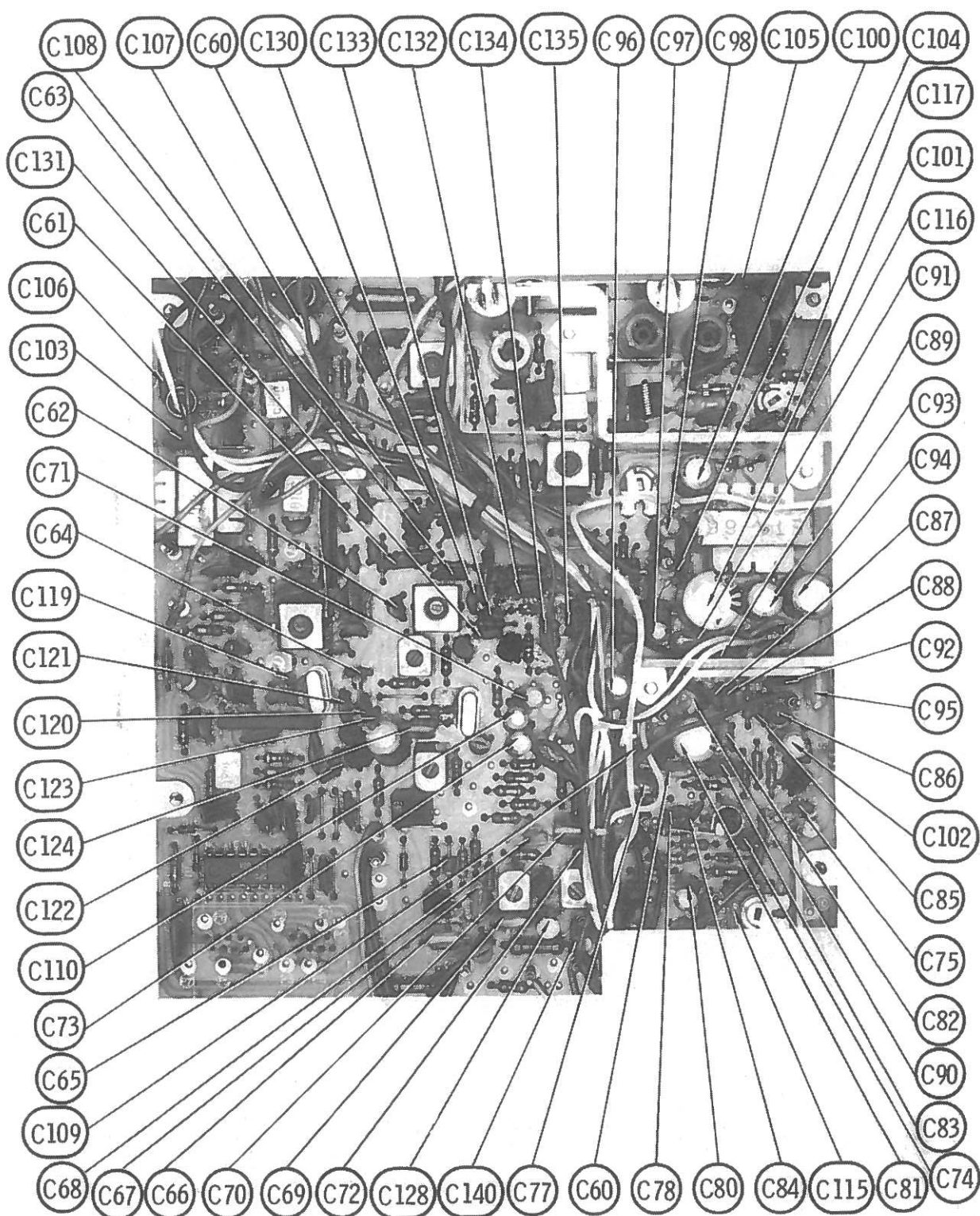
MAIN BOARD



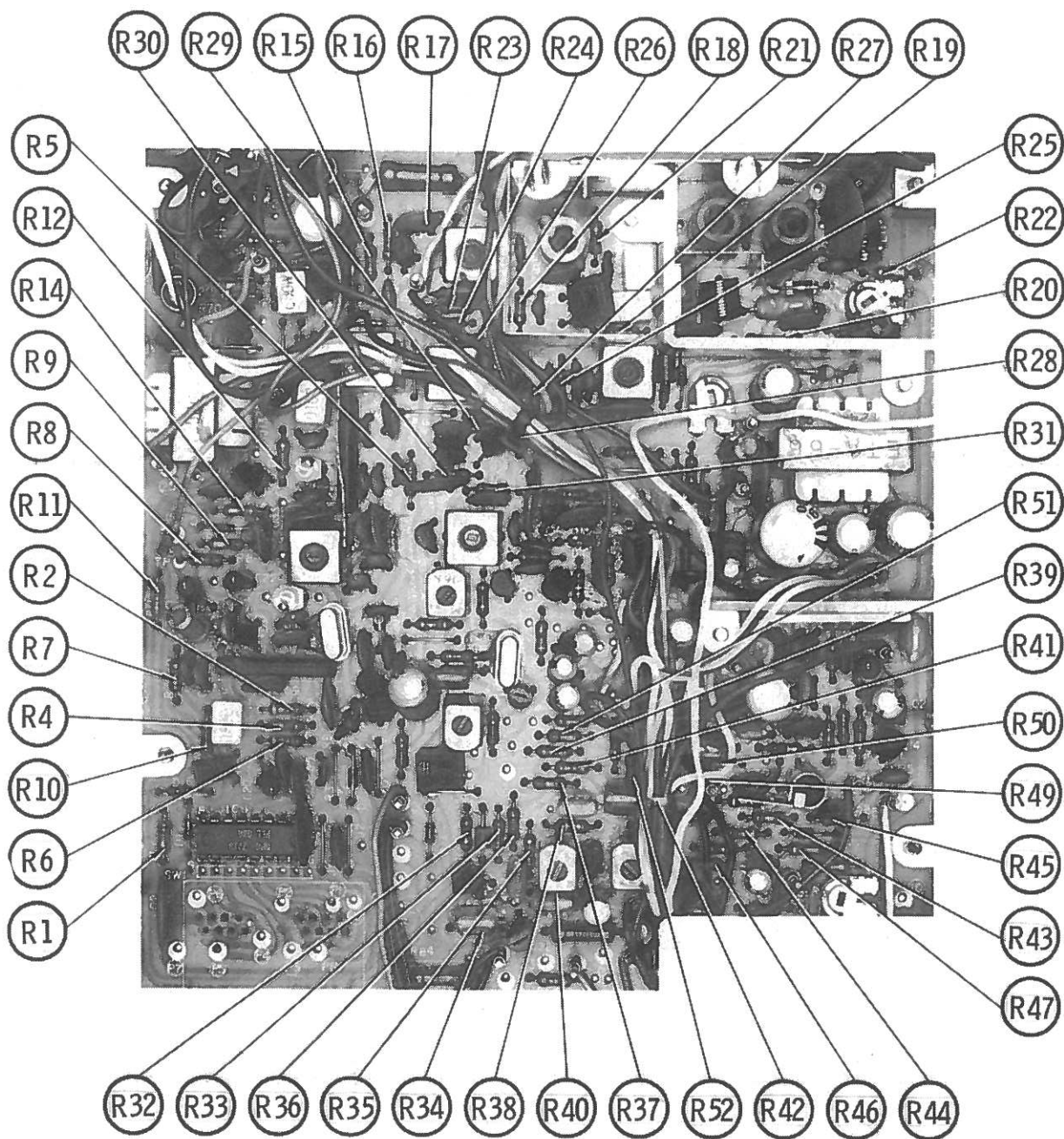
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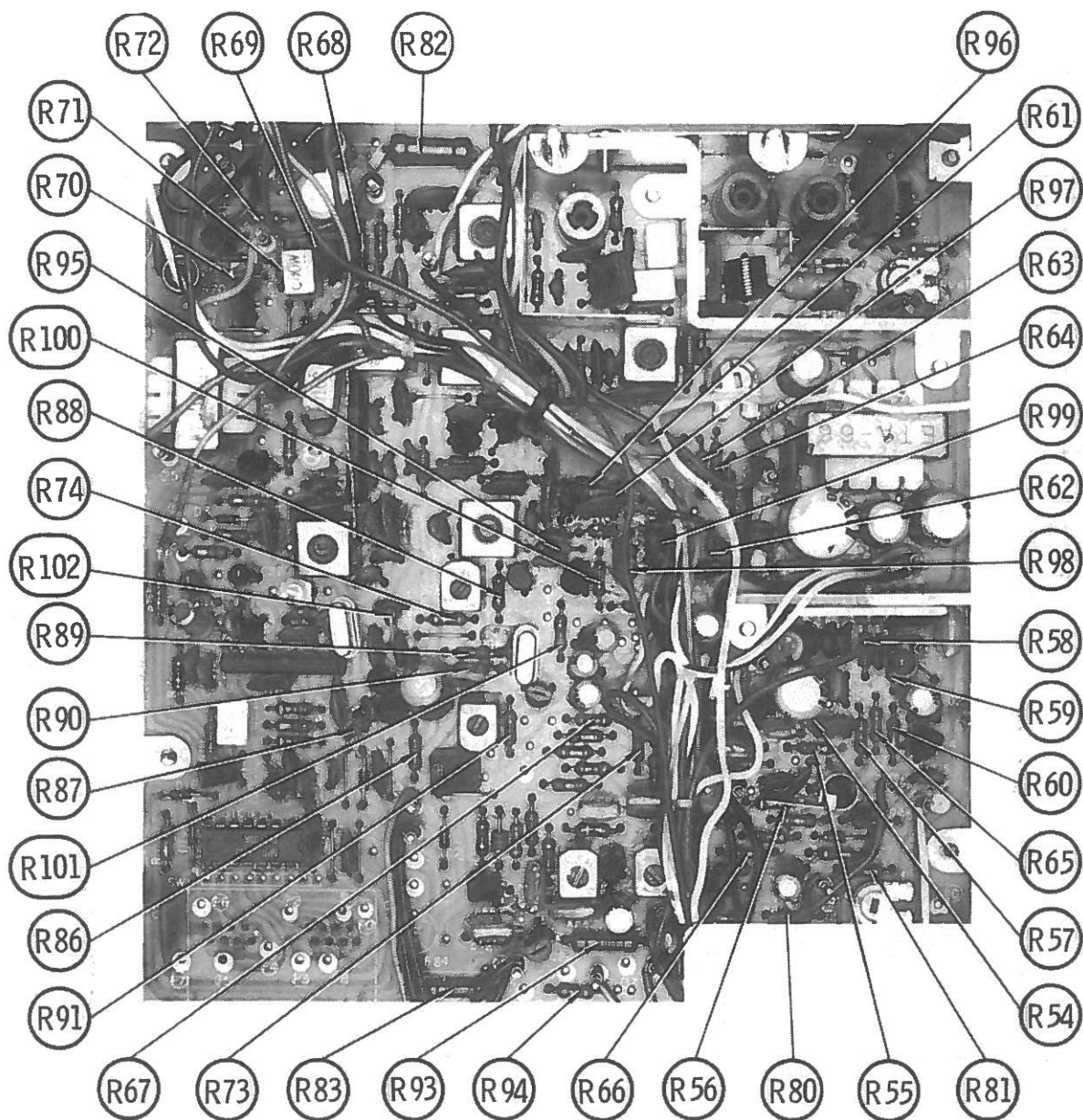
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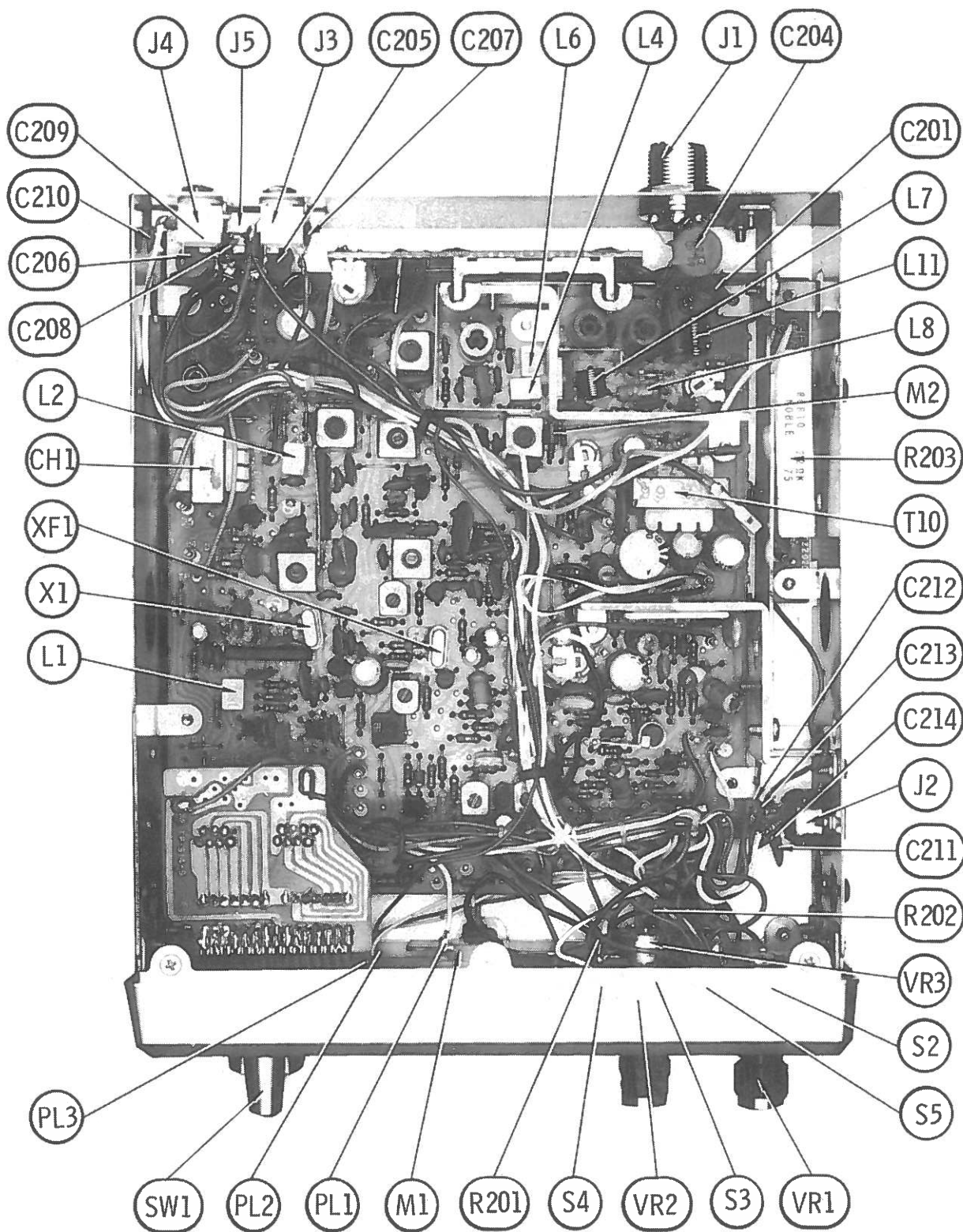
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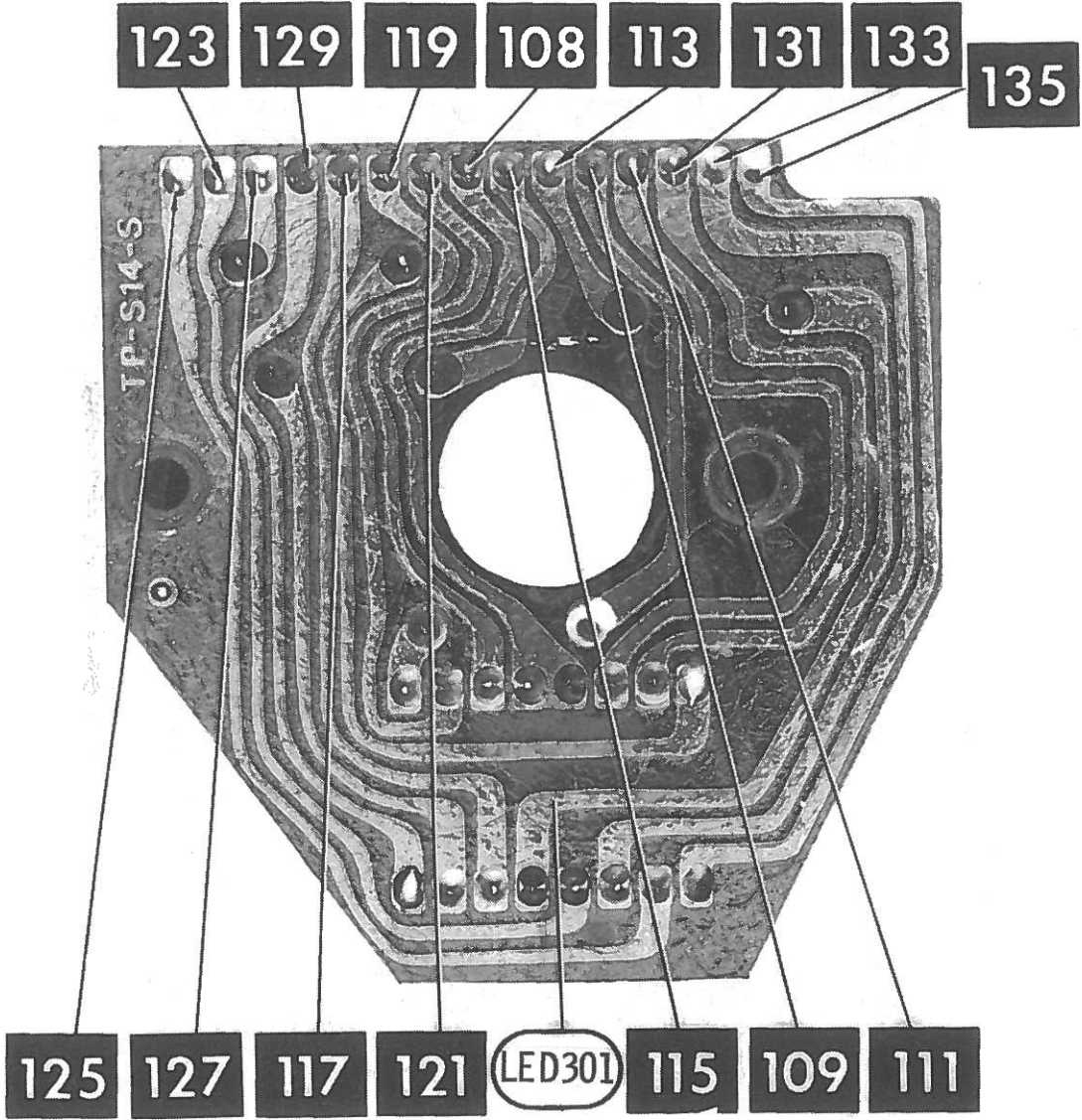
MAIN BOARD



MAIN BOARD

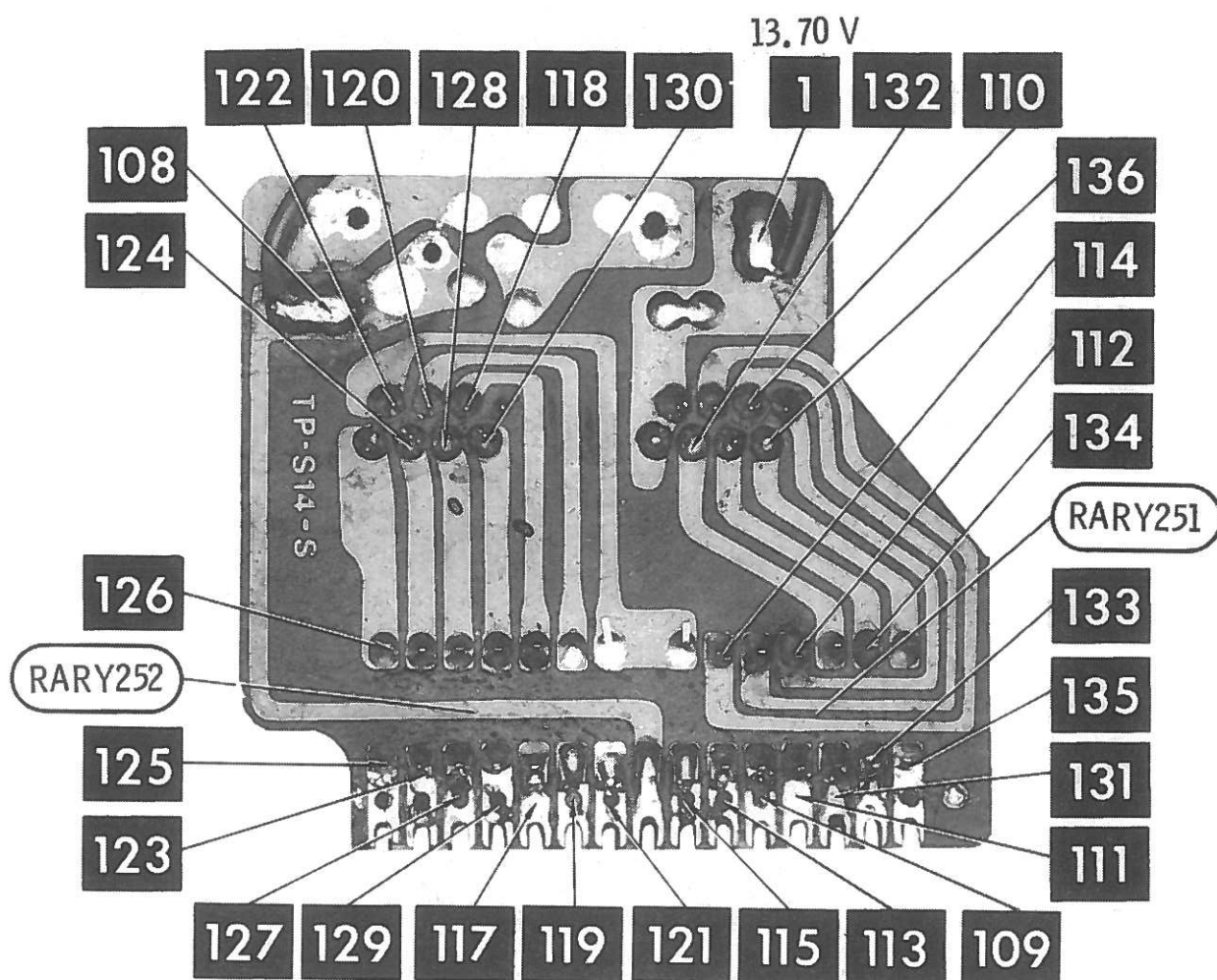


CH. SELECTOR BOARD

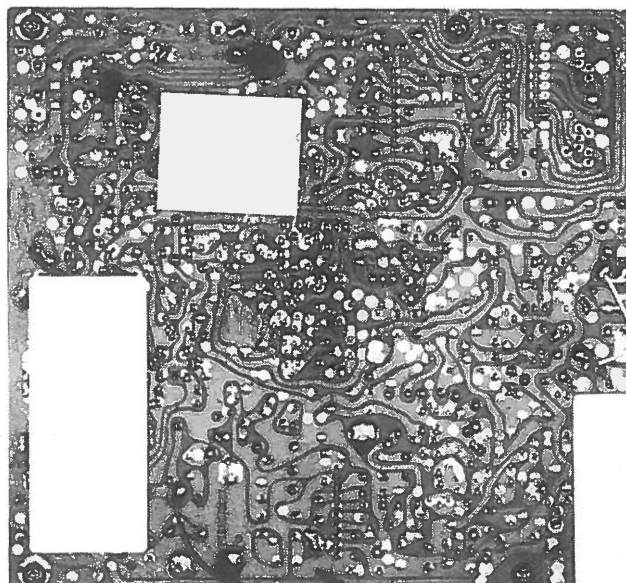


GENERAL ELECTRIC MODEL 3-5818A

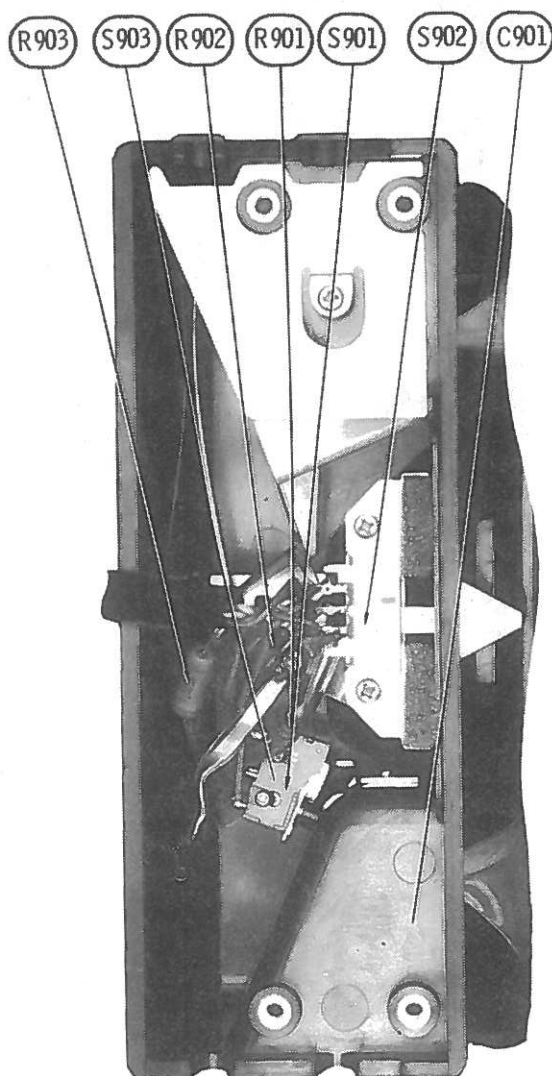
LED BOARD



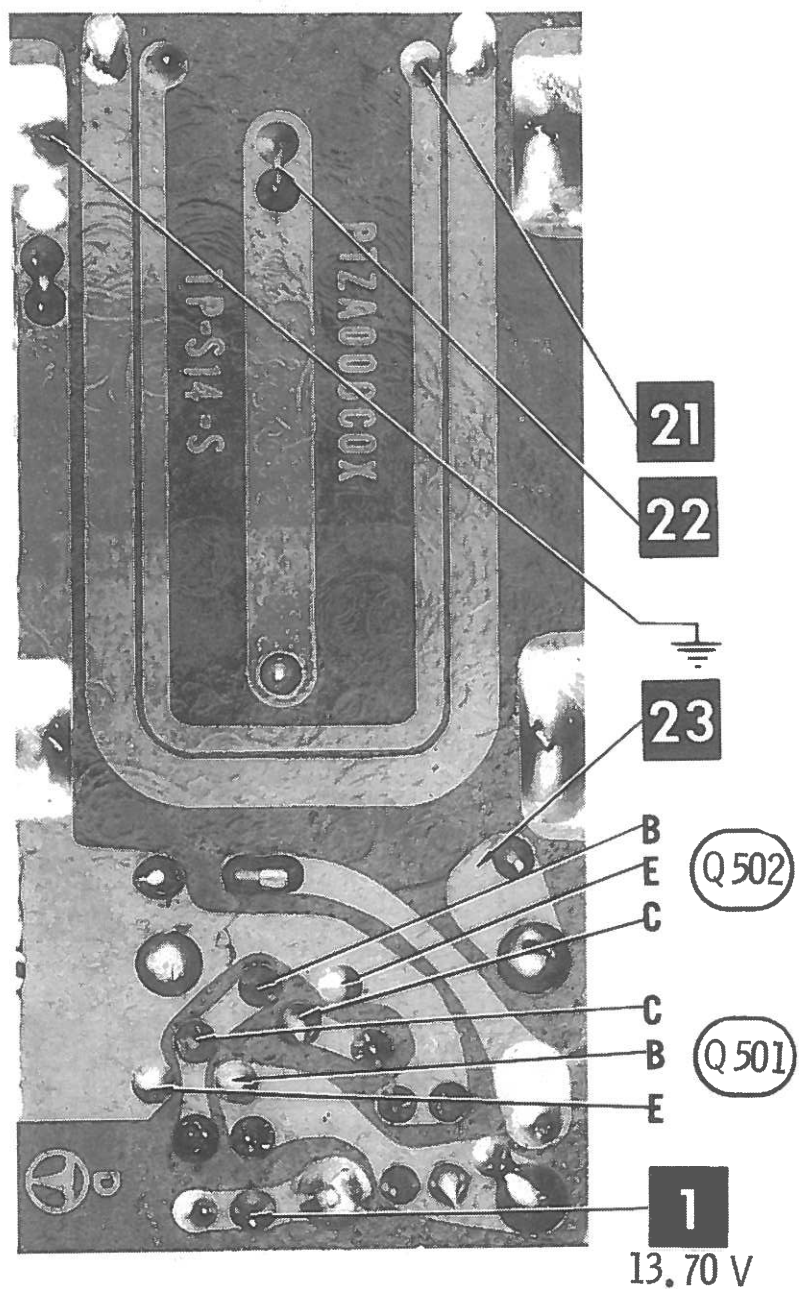
CH. SELECTOR BOARD



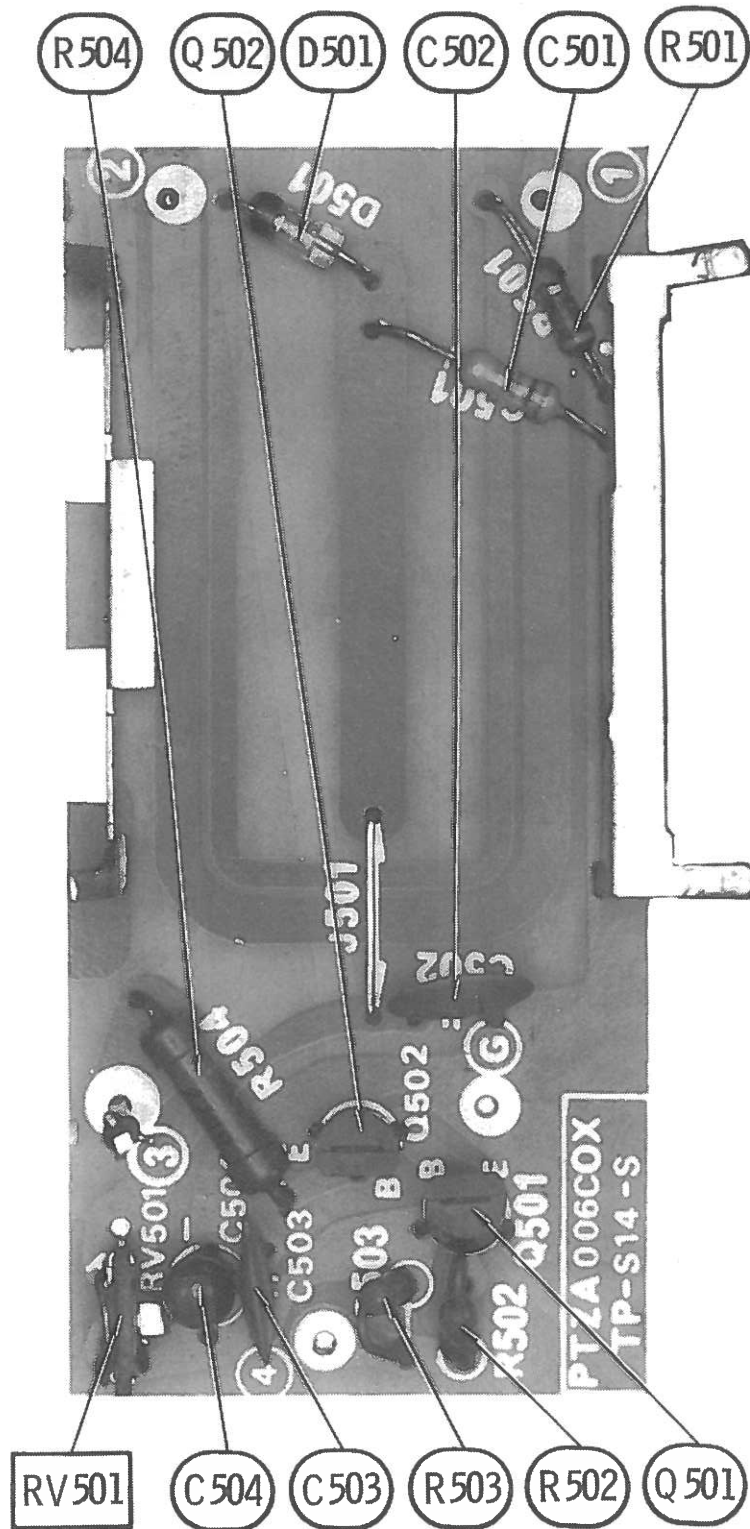
SHIELD LOCATION



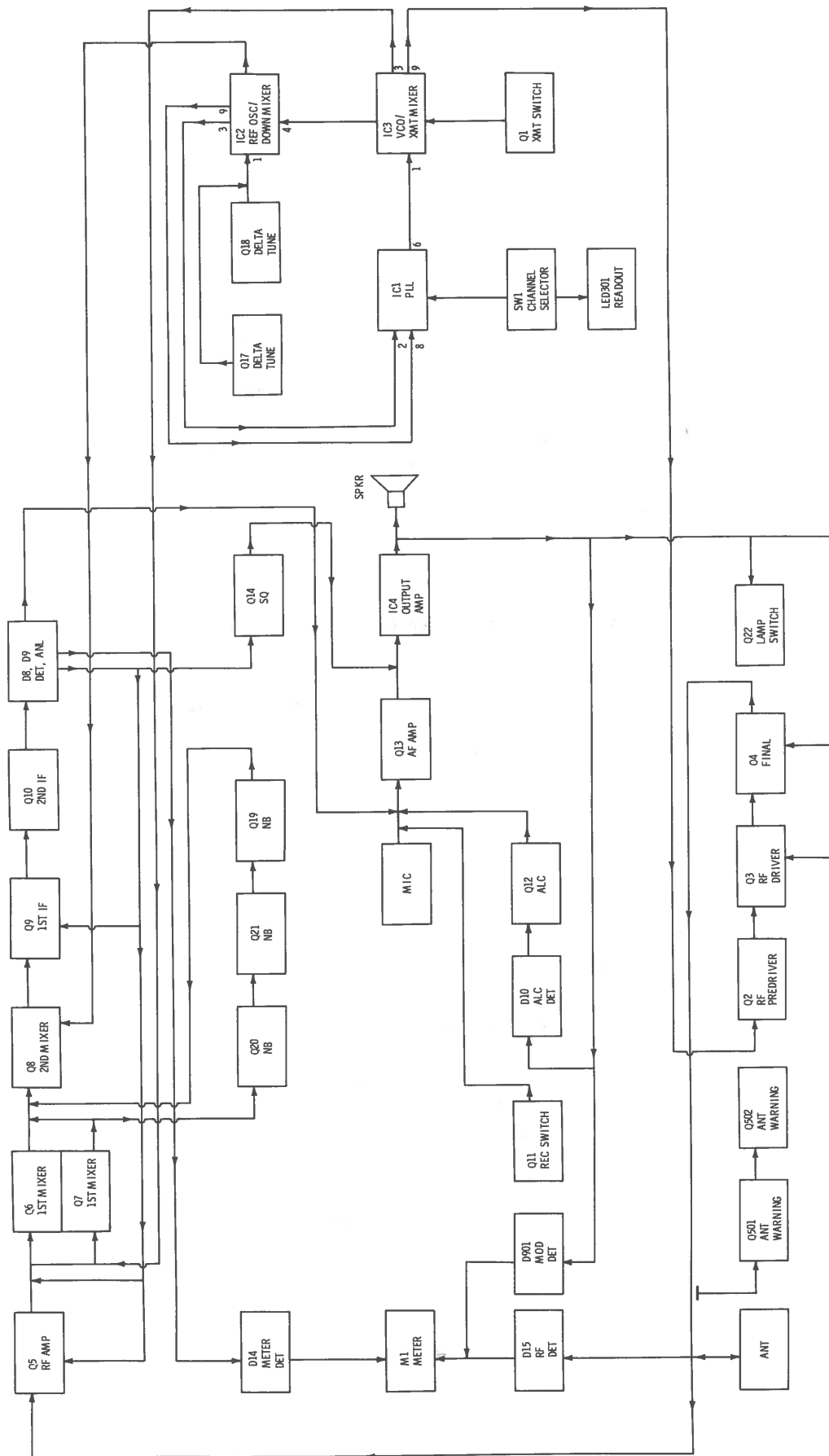
HAND SET - BOTTOM



ANT. WARNING BOARD



ANT. WARNING BOARD



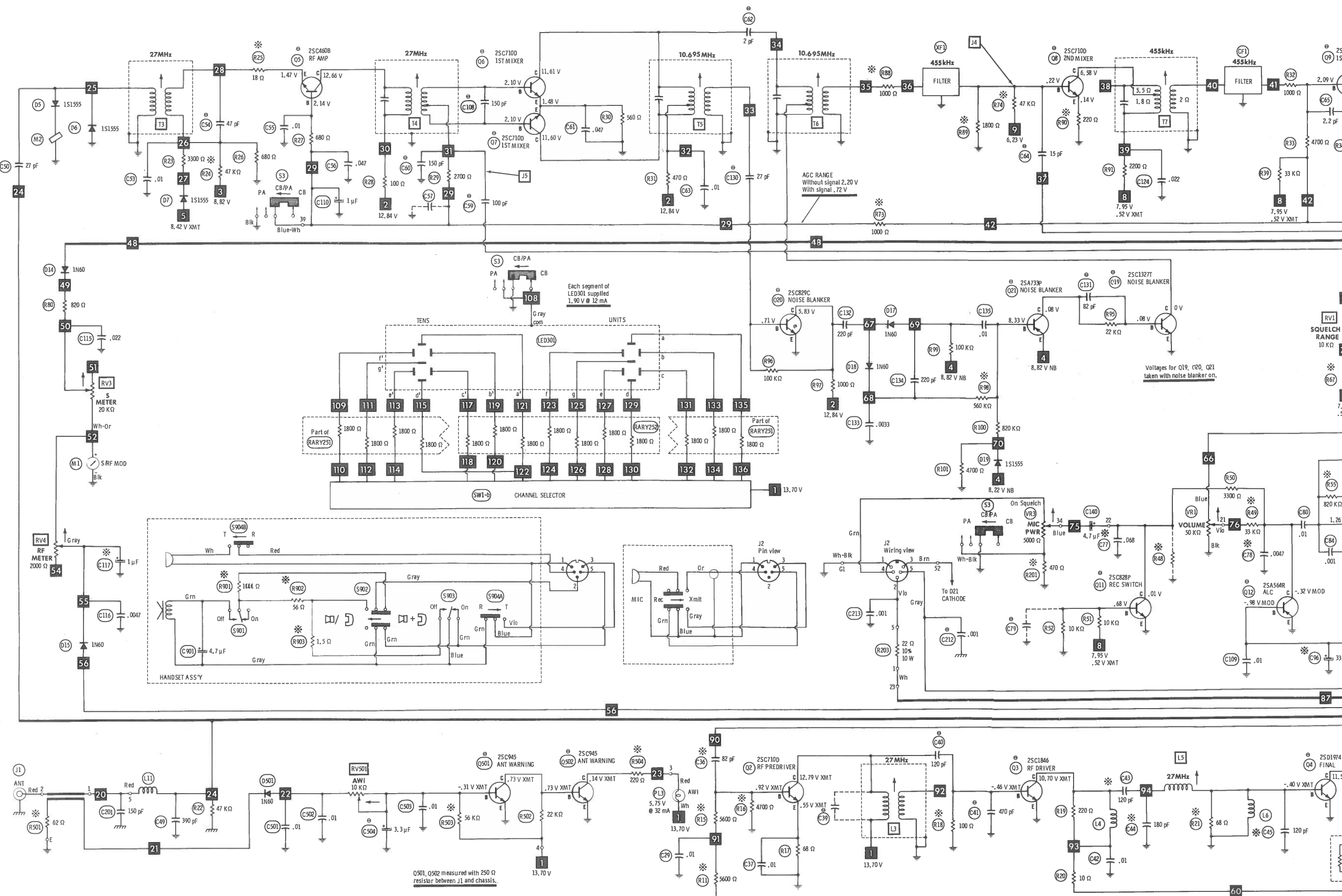
PARTS LIST AND DESCRIPTION

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

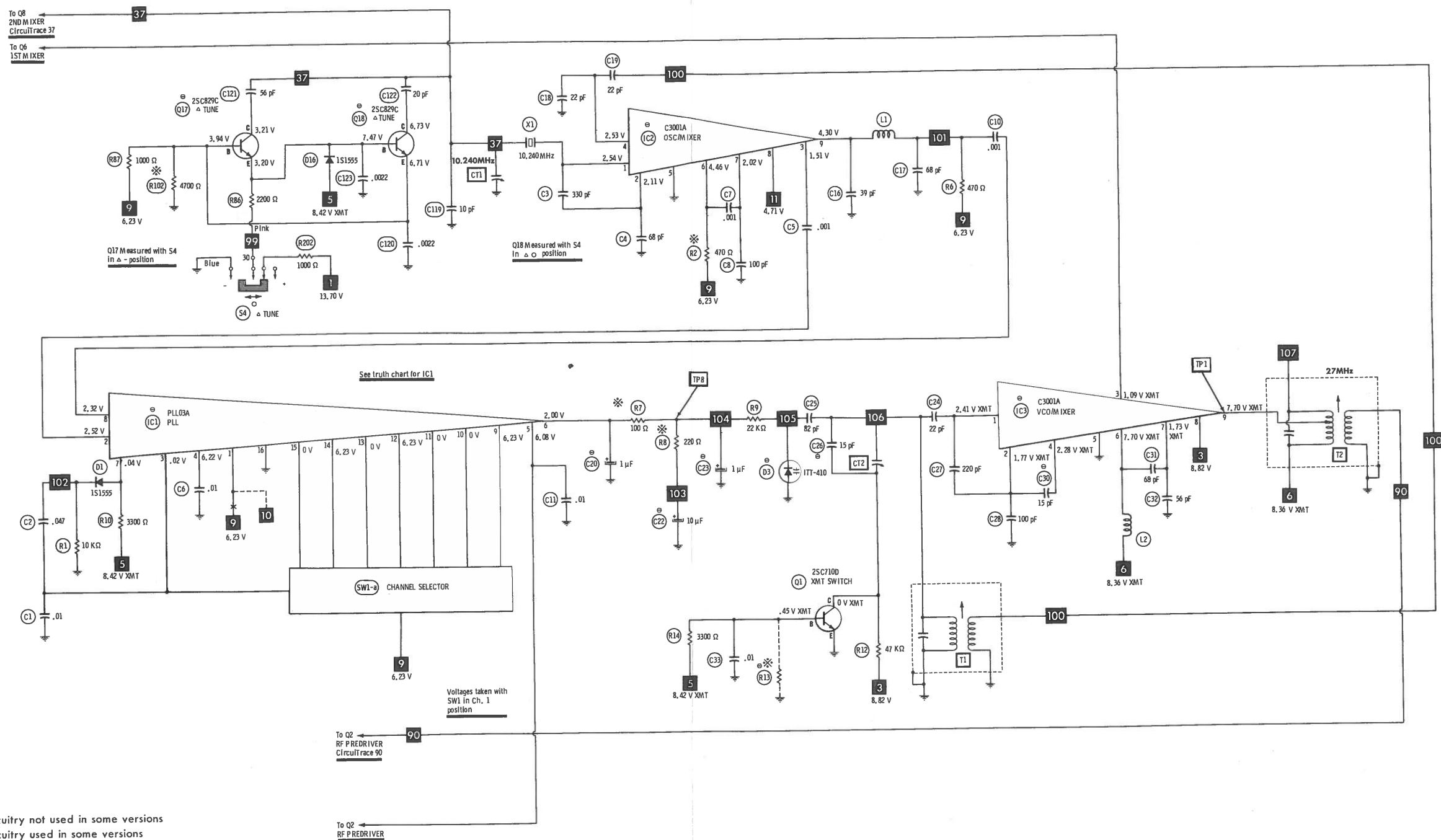
General-use Hook-up Wire (available in 5 colors)	BELDEN No. 8523	Coiled Microphone Cable	
Shielded Hook-up Wire (spiral wrapped)	BELDEN No. 8421	3-conductor (1 shielded) 23AWG	BELDEN No. 9471 (5')
" " " " (braided)	BELDEN No. 8401		BELDEN No. 8497 (6')
Speaker Cable (available in 4 colors)	BELDEN No.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

ITEM			REPLACEMENT DATA							
NO.	TYPE	MFRG.	GENERAL	IR	MALLORY	MOTOROLA	RAYTHEON	RCA	SPRAGUE	SYLVANIA
No.	No.	PART No.	ELECTRIC	WORKMAN	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
			PART No.	PART No.						
D1	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D2	MZ306				ZM6.08		RE 108			ECG5070A
	MZ306C	EA16X163(1)			ZM6.08		RE 108			ECG5070A
D3	1TT410	EA16X106			PTC311	HEPR2502				ECG612
	B8122	(1)			PTC311	HEPR2502				ECG612
	MV401	(1)			PTC311	HEPR2502				ECG612
D4	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D5	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D6	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D7	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D8	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D9	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D10	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D11	V06C	EA57X14	GE-504A	5A4D	PTC202	HEPR0052	RE 49	SK3030	RT-213	ECG116
D12	1S1885	RV1189	GE-504A	5A4D	PTC202	HEPR0052	RE 49	SK3030	RT-213	ECG116
D13	R9.1E	EA16X137	GEZD-9.1	Z1209	ZB9.1A	HEPR0412	RE 114	SK3060	RT-240	ECG139
D14	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D15	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D16	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D17	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D18	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D19	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D20	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D21	1S1555	RT5217	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D501	1N60	EA16X48	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
IC1	PLL03A	EA33X8501								
	PLL03	(1)								
IC2	C3001A	EA33X8394								ECG1192
	C3001	(1)								ECG1192
	TA7310P	EA33X8392(1)								ECG1192
IC3	C3001A	EA33X8394								ECG1192
	C3001	(1)								ECG1192
	TA7310P	EA33X8392(1)								ECG1192
IC4	TA7205P	EA33X8396	GEIC-179	WEP949	PTC780		RE 357-IC	SK3231	TVMC-81	ECG1155
	TA7205	(1)	GEIC-179	WEP949	PTC780		RE 357-IC	SK3231		







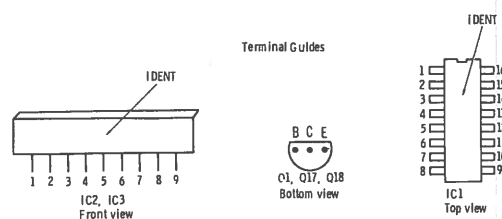


- ✱ Circuitry not used in some versions
 - Circuitry used in some versions
 - ⊙ See parts list
 - ✱ Nominal value
 - ⊥ Ground
 - ⏏ Chassis
 - ▽ Common tie point
- Measurements made in Channel 1 with switching as shown unless noted. Item numbers in rectangles appear in the alignment/adjustment instructions. Supply voltage maintained as shown at input. Voltages measured with digital meter, no signal. Controls adjusted for normal operation. Arrow at control indicates direction of advance. Terminal identification may not be found on unit. Resistors are 1/2W or less, 5% unless noted. Value in () used in some versions.

A PHOTOFACIT STANDARD NOTATION SCHEMATIC

WITH **CIRCUITRACE®**

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GENERAL ELECTRIC MODEL 3-5818A

TRUTH CHART

1 = <u>6.23</u> Volts 0 = <u> </u> 0 Volts									
C H A N N E L	IC1 PROGRAM DIVIDER							REC VCO OUTPUT IN MHZ AT J5	XMT VCO OUTPUT IN MHZ AT TP1 (IC3,Pin 9)
	PINS								
	9	10	11	12	13	14	15		
1	1	0	0	1	0	1	0	16.270	26.965
2	1	0	0	1	0	0	1	16.280	26.975
3	1	0	0	1	0	0	0	16.290	26.985
4	1	0	0	0	1	1	0	16.310	27.005
5	1	0	0	0	1	0	1	16.320	27.015
6	1	0	0	0	1	0	0	16.330	27.025
7	1	0	0	0	0	1	1	16.340	27.035
8	1	0	0	0	0	0	1	16.360	27.055
9	1	0	0	0	0	0	0	16.370	27.065
10	0	1	1	1	1	1	1	16.380	27.075
11	0	1	1	1	1	1	0	16.390	27.085
12	0	1	1	1	1	0	0	16.410	27.105
13	0	1	1	1	0	1	1	16.420	27.115
14	0	1	1	1	0	1	0	16.430	27.125
15	0	1	1	1	0	0	1	16.440	27.135
16	0	1	1	0	1	1	1	16.460	27.155
17	0	1	1	0	1	1	0	16.470	27.165
18	0	1	1	0	1	0	1	16.480	27.175
19	0	1	1	0	1	0	0	16.490	27.185
20	0	1	1	0	0	1	0	16.510	27.205

1 = <u>6.23</u> Volts 0 = <u> 0 </u> Volts									
C H A N N E L	IC1 PROGRAM DIVIDER							REC VCO OUTPUT IN MHz AT J5	XMT VCO OUTPUT IN MHz AT TP1 (IC3, Pin 9)
	PINS								
	9	10	11	12	13	14	15		
21	0	1	1	0	0	0	1	16.520	27.215
22	0	1	1	0	0	0	0	16.530	27.225
23	0	1	0	1	1	0	1	16.560	27.255
24	0	1	0	1	1	1	1	16.540	27.235
25	0	1	0	1	1	1	0	16.550	27.245
26	0	1	0	1	1	0	0	16.570	27.265
27	0	1	0	1	0	1	1	16.580	27.275
28	0	1	0	1	0	1	0	16.590	27.285
29	0	1	0	1	0	0	1	16.600	27.295
30	0	1	0	1	0	0	0	16.610	27.305
31	0	1	0	0	1	1	1	16.620	27.315
32	0	1	0	0	1	1	0	16.630	27.325
33	0	1	0	0	1	0	1	16.640	27.335
34	0	1	0	0	1	0	0	16.650	27.345
35	0	1	0	0	0	1	1	16.660	27.355
36	0	1	0	0	0	1	0	16.670	27.365
37	0	1	0	0	0	0	1	16.680	27.375
38	0	1	0	0	0	0	0	16.690	27.385
39	0	0	1	1	1	1	1	16.700	27.395
40	0	0	1	1	1	1	0	16.710	27.405

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	IR WORKMAN PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
Q13	25C1327T	(1)	GE-85 *	(IR)25C945	PTC139 *	HEPS0024 *	RE 192	SK3124	RT-107A	ECG199
	25C1327	EA4025(1)	GE-85 *	(IR)25C945	PTC139 *	HEPS0024 *	RE 192	SK3124	RT-107A	ECG199
	25C900	(1)	GE-62	(IR)25C644	PTC139 *	HEPS0015 *	RE 192	SK3124	RT-302	ECG199
	25C945	(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q14	25C945Q	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C828P	(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	25C828	(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	25C828R	EA15X325(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
Q15	25C945	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C945Q	EA15X180(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C1318Q	EA15X378	GE-61 *	(IR)25C372	PTC101	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG123A *
	25C1318	(1)	GE-210 *	TR-21 *	PTC178	HEPS0015 *	RE 17 *	SK3122	RT-302	ECG128 *
Q16	25A719P	EA15X395(1)	GE-269	TR-28 *	PTC103 *	HEPS0019 *	RE 26 *	SK3114	RT-305	ECG290
	25A719Q	(1)	GE-269	TR-28 *	PTC103 *	HEPS0019 *	RE 26 *	SK3114	RT-305	ECG290
	25A719	(1)	GE-269	TR-28 *	PTC103 *	HEPS0019 *	RE 26 *	SK3114	RT-305	ECG290
	25A720	(1)	GE-269	TR-28 *	PTC103 *	HEPS0019 *	RE 26 *	SK3114	RT-305	ECG290
Q17	25C829C	RT6733	GE-20 *	(IR)25C829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
	25C829	(1)	GE-20 *	(IR)25C829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
	25C710	(1)	GE-211 *	(IR)25C710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
	25C710D	EA15X364(1)	GE-211 *	(IR)25C710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q18	25C839	RT5900(1)	GE-61 *	(IR)25C644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG229 *
	25C829C	RT6733	GE-20 *	(IR)25C829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
	25C710	(1)	GE-211 *	(IR)25C710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
	25C710D	EA15X364(1)	GE-211 *	(IR)25C710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q19	25C839	RT5900(1)	GE-61 *	(IR)25C644	PTC132 *	HEPS0015 *	RE 13 *	SK3018 *	RT-308	ECG229 *
	25C1327T	EA15X386	GE-85 *	(IR)25C945	PTC139 *	HEPS0024 *	RE 192	SK3124	RT-107A	ECG199
	25C1327	(1)	GE-85 *	(IR)25C945	PTC139 *	HEPS0024 *	RE 192	SK3124	RT-107A	ECG199
	25C900	EA4025(1)	GE-62	(IR)25C644	PTC139 *	HEPS0015 *	RE 192	SK3124	RT-302	ECG199
Q20	25C829C	RT6733	GE-20 *	(IR)25C829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
	25C829	(1)	GE-20 *	(IR)25C829B	PTC121 *	HEPS0015 *	RE 9 *	SK3122	RT-308	ECG229 *
	25A733P	EA15X385	GE-48	TR-31	PTC103 *	HEPS0019 *	RE 26 *	SK3138	RT-303	ECG294
	25A733	(1)	GE-48	TR-31	PTC103 *	HEPS0019 *	RE 26 *	SK3138	RT-303	ECG294
Q22	25C945	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C945Q	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C828R	(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	25C828	EA15X325(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
Q501	25C945	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C828	(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	25C828R	EA15X325(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C945Q	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q502	25C945	EA15X404(1)	GE-212	(IR)25C945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	25C828	(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	25C828R	EA15X325(1)	GE-61 *	(IR)25C828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199

* Lead configuration may vary from original.

(1) Used in some versions.

(13) 12 Watts @ 3 Amps.

GENERAL ELECTRIC MODEL 3-5818A

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C14	47 25V	EA31X213	PC50-25	VTT47E25	QV1-75	EV-1326
C15	1 50V	EA31X204	PC1-50	VTT1A50	QV1-11	EV-1615
C20	1 10V	EA31X254		TDC105M035EL		SD35-19
C22	10 10V	EA31X249		TDC106M025FL	QDT1-64	SD25-109
C23	1 10V	EA31X254		TDC105M035EL		SD35-19
C71	10 16V	EA31X246	PC10-25	VTT10B25	QV1-41	EV-1222
C73	3.3 25V	EA31X260	PC5-50	VTT3R3A50	QV1-23	EV-1318
C76	1 50V	EA31X204	PC1-50	VTT1A50	QV1-11	EV-1615
C81	100 16V	EA31X235	PC100-16	VTT100F16	QV1-95	EV-1230
C86	3.9 25V	EA31X261		TDC475M010EL	QDT1-48	SD10-4R79
C90	33 6.3V	RT5269	PC30-25	VTT33B10	QV1-61	EV-1125
C93	47 16V	EA2510	PC50-16	VTT47D16	QV1-73	EV-1226
C94	220 16V	RT5047	PC250-25	VTT220H16	QV1-117	EV-1240
C96	33 10V	RT2315	PC30-25	VTT33B10	QV1-61	EV-1125
C97	3.3 25V	EA31X260	PC5-50	VTT3R3A50	QV1-23	EV-1318
C98	3.3 25V	EA31X260	PC5-50	VTT3R3A50	QV1-23	EV-1318
C100	47 25V	RT4632	PC50-25	VTT47E25	QV1-75	EV-1326
C101	1000 16V	EA31X200	PC1000-16	VTT1000L16	QV1-183	EV-1260
C102	33 6.3V	RT5269	PC30-25	VTT33B10	QV1-61	EV-1125
C107	220 10V	EA2777	PC250-10	VTT220F10	QV1-115	EV-1140
C110	1 50V	EA31X204	PC1-50	VTT1A50	QV1-11	EV-1615
C117	1 50V	EA31X204	PC1-50	VTT1A50	QV1-11	EV-1615
C128	3.3 50V	EA31X260	PC5-50	VTT3R3A50	QV1-25	EV-1618
C140	4.7 25V	EA31X211	PC5-50	VTT47R50	QV1-27	EV-1319
C504	3.3 25V			TDC335M035FL		SD35-3R39

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C1	.01 50V	EA18X173	DC-103	MGP01	TA110	QC2-141	TG-S10
C2	.047 50V		UK50-503		MAG5015		
C3	330 50V		DD-331	GP330	GP333		10TS-T33
C4	68 N150 50V				*		10TCP-Q68
C5	.001 50V			DPMS6D1	EWFA1210		1PB-D10
C6	.01 50V		DC-103	MGP01	TA110		TG-S10
C7	.001 50V			DPMS6D1	EWFA1210		1PB-D10
C8	100 50V		DD-101	GP100	GP310		10TS-T10
C9	.01 50V		DC-103	MGP01	TA110		TG-S10
C10	.001 50V			DPMS6D1	EWFA1210		1PB-D10
C11	.01 50V	EA18X173	DC-103	MGP01	TA110	QC2-141	TG-S10
C12	.047 50V		UK50-503		MAG5015		
C13	.01 50V		DC-103	MGP01	TA110		TG-S10
C16	39 50V				CN0439		10TCC-Q39
C17	68 N150 50V				*		10TCP-Q68
C18	22 N150 50V				*		10TCP-Q22
C19	22 N150 50V				*		10TCP-Q22
C24	22 N150 50V				*		10TCP-Q22
C25	82 N150 50V				*		10TCP-Q22
C26	15 N150 50V				*		10TCP-Q15
C27	220 50V	EA18X173	DD-221		GP322	QC2-141	10TS-T22
C28	100 50V		DD-101	GP100	GP310		10TS-T10
C29	.01 50V		DC-103	MGP01	TA110		TG-S10
C30	15 50V		DTZ-15	NP015	CN0415		10TCC-Q15
C31	68 N150 50V				*		10TCP-Q68
C32	56 50V		DD-560		GP456		10TS-Q56
C33	.01 50V		DC-103	MGP01	TA110		TG-S10
C34	.01 50V		DC-103	MGP01	TA110		TG-S10
C35	.01 50V		DC-103	MGP01	TA110		TG-S10
C36	82 N150 50V				*		10TCP-Q82
C37	.01 50V	EA18X234	DC-103	MGP01	TA110	QC2-141	TG-S10
C38	.047 50V		UK50-503		MAG5015		
C39							
C40	120 50V		DTZ-120		CN0312		10TCC-T12
C41	470 50V		DD-471	GP470	GP347		10TS-T47
C42	.01 50V		DC-103	MGP01	TA110		TG-S10
C43	120 50V		DTZ-120		CN0312		10TCC-T12
C44	150 50V		DD-181		GP318		10TS-T18
C45	120 50V		DTZ-120		CN0312		10TCC-T12
C46	.01 50V		DC-103	MGP01	TA110		TG-S10
C47	120 50V	(1)	DTZ-120		CN0312	QC2-141	10TCC-T12
C48	270 50V		DD-271	GP270	GP327		10TS-T27
C49	330 50V		DD-331	GP330	GP333		10TS-T33
C50	27 50V				CN0427		10TCC-Q27
C51	.01 50V		DC-103	MGP01	TA110		TG-S10
C52	.01 50V		DC-103	MGP01	TA110		TG-S10
C53	.01 50V		DC-103	MGP01	TA110		TG-S10
C54	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C55	.01 50V		DC-103	MGP01	TA110		TG-S10
C56	.047 50V	(1)	UK50-503		MAG5015	QC2-141	TG-S10
C57	.047 50V		UK50-503		MAG5015		
C58	.047 50V		UK50-503		MAG5015		
C59	100 50V		DD-101	GP100	GP310		10TS-T10
C60	150 50V		DD-151		GP315		10TS-T15
C61	.047 50V		UK50-503		MAG5015		
C62	2 50V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C63	.01 50V		DC-103	MGP01	TA110		TG-S10
C64	15 50V		DTZ-15	NP015	CN0415		10TCC-Q15
C65	2.2 500V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C66	.047 50V	EA18X173		DPMS2S47	EWFA1A147	QC2-141	1PB-S47
C67	.047 50V			DPMS2S47	EWFA1A147		1PB-S47
C68	.047 50V			DPMS2S47	EWFA1A147		1PB-S47
C69	.047 50V			DPMS2S47	EWFA1A147		1PB-S47
C70	.047 50V			DPMS2S47	EWFA1A147		1PB-S47
C72	.0068 50V			WMF1D68	EWFA1A268		1PB-D68
C74	.0047 50V			WMF1D47	EWFA1A247		1PB-D47
C75	100 50V		DD-101	GP100	GP310		10TS-T10
C77	.047 50V			DPMS2S47	EWFA1A147		1PB-S47
C78	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C80	.01 50V	EA18X173		WMF1S1	EWFA1A110	QC2-141	1PB-S10
C82	.01 50V			WMF1S1	EWFA1A110		1PB-S10
C83	270 50V		DD-271	GP270	GP327		10TS-T27
C84	.001 50V			DPMS6D1	EWFA1A210		1PB-D10
C85	.0022 50V		DD-222		GP222		5GA-D22
C87	68 N150 50V				*		10TCP-Q68
C88	68 N150 50V				*		10TCP-Q68
C89	180 50V		DD-181		GP318		10TS-T18
C91	.068 50V			WMF1S68	EWFA1A168		1PB-S68
C92	320 50V		DD-221		GP322		10TS-T22
C95	.068 50V	EA18X232		WMF1S68	EWFA1A168	QC2-141	1PB-S68
C103	.01 50V		DC-103	MGP01	TA110		TG-S10
C104	.047 50V		UK50-503		MAG5015		
C105	.047 50V		UK50-503		MAG5015		
C106	.047 50V		UK50-503		MAG5015		
C108	150 50V		DD-151		GP315		10TS-T15
C109	.01 50V			WMF1S1	EWFA1A110		1PB-S10
C111	.01 50V		DC-103	MGP01	TA110		TG-S10
C112	.01 50V		DC-103	MGP01	TA110		TG-S10
C115	.022 50V			DPMS2S22	EWFA1A122		1PB-S22
C116	.0047 50V	EA18X207	DD-472	GP4700	GP247	QC2-97	5GA-D47
C119	33 N150 50V				*		10TCP-Q33
C120	.0022 50V		DD-222		GP222		5GA-D22
C121	56 N150 50V				*		10TCP-Q56
C122	20 N150 50V				*		10TCP-Q20
C123	.0022 50V		DD-222		GP222		5GA-D22
C124	.022 50V			DPMS2S22	EWFA1A122		1PB-S22
C130	27 50V				CN0427		10TCC-Q27
C131	.82 50V		DD-820		GP482		10TS-Q82
C132	220 50V		DD-221		GP322		10TS-T22

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C133	.0033 50V		DD-221	WMF1D33	EWF1A233	QF1-43	1PB-D33
C134	220 50V		DC-103	MGP01	GP322		10TS-T22
C135	.01 50V		DD-151		TA110	QC2-141	TG-S10
C201	150 50V		DC-103	MGP01	GP315		10TS-T15
C202	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C203	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C204	.047 50V		UK50-503		MAG5015		
C205	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C206	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C207	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C208	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C209	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C210	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C211	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C212	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C213	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C214	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C501	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C502	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C503	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
CT1	20 50V	EA30X52					
CT2	20 50V	EA30X52					

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

(1) Used in some versions.

(2) Value may vary, replace with original value.

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.	MALLORY PART No.	TRW PART No.
RV1	Squelch Range	10K	EA49X330				
RV2	AMC	2000	EA49X331				
RV3	S Meter	20K	EA49X332				
RV4	RF Meter	2000	EA49X331				
RV501	AWI	10K	EA49X356				
VR1	Volume/Power Switch	50K	EA49X392				
VR2	Squelch	5000	EA49X394 (18)				
VR3	Mic Power	10K					

(18) Includes VR2 and VR3.

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.
RARY251	Resistor Network		EA62X167 (1)	RARY252	Resistor Network		EA62X167 (1)

(1) Consists of seven 1800-ohm resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	RF Choke (18uH)	EA36X334			
L2	RF Choke (1uH)	EA36X335			
L3	Xmit Predriver (27MHz)	EA36X248			
L4	RF Choke (2.2uH)	EA36X237			
L5	Xmit Driver (27MHz)	EA36X238			
L6	RF Choke (68uH)	EA36X239			
L7	RF Choke (.55uH)	EA36X245			
L8	RF Choke (1uH)	EA36X240			
L9	Final (27MHz)	EA36X241			
L10	Pi Filter (27MHz)	EA36X242			
L11	RF Choke (.4uH)	EA36X336			
L12	RF Choke (68uH)	EA36X239			
L13	RF Choke (1.15uH)	EA36X263			
L14	RF Choke (1.15uH)	EA36X263			
T1	VCO (18MHz)	EA36X337			
T2	VCO Mixer (27MHz)	EA36X260			
T3	Rec Antenna (27MHz)	EA36X249			
T4	Rec RF (27MHz)	EA36X339			
T5	IF (10.695MHz)	EA36X340			
T6	IF (10.695MHz)	EA61X204			
T7	IF (455kHz)	EA61X188			
T8	IF (455Hz)	EA61X189			
T9	IF (455kHz)	EA61X190			

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.	
CH1	1.45A	.24	3.72mH	EA36X233 LJ119H004W(1)			(1) Number on unit

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.	THORDARSON PART No.	TRIAD PART No.		
T10	2.88	1 8	2 13.52	EA64X30 ETA-66 (1)	TR723	MCB-16	(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3 1/2" PM 8 Ohms	EA95X127	3A05Z8R	

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER
F1	2 Amp	EA68X64	EA68X119	AGC2	HDJ	S12002	150145

MICROPHONE

ITEM No.	REPLACEMENT DATA				CONNECTION DATA							
	MFGR. PART No.	GC PART No.	GC NOISE CANCEL	GC POWER	GC CONNECTOR	GC Red	GC Shield	GC Yellow	GC Blue	GC White	GC Black	
MIC	EA68X63B EA68X92 (1)	18-032	18-034	18-010	18-105 18-105	4 4	1 1	3 3	5 5	NC 2	1 1	

(1) Part Number is for complete handset assembly.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Ceramic Filter	EA36X332	455kHz
J1	Jack	EA41X155	Antenna
J2	Jack	EA41X177	Microphone
J3	Jack	EA41X135	Ext. Speaker
J4	Jack	EA41X135	PA
J5	Jack	EA41X136	Power
LED301	Led		Channel Display (TR3207D)
M1	Meter	EA62X166	S/Rf
PL1	Lamp	EA41X178	Meter (55mA @ 5.45V)
PL2	Lamp	EA41X145	Mod (30mA @ 3.90V)
PL3	Lamp	EA41X179	AWI (32mA @ 5.75V)
S1	Switch		Power (Part of Volume Control)
S2	Switch	EA39X225	ANL
S3	Switch	EA55X133	CB/PA
S4	Switch	EA39X227	Delta Tune
S5	Switch	EA39X225	Noise Blanker
SW1	Switch	EA55X141	Channel Selector
X1	Crystal	EA75X6	10.24MHz
XF1	Crystal Filter	EA36X333	10.695MHz
	Flexible Cable	EA65X9	15 Conductor
	Handset	EA68X92	Assembly (Includes Mic Element Part Number EA62X169 and Speaker EA95X128)
	Printed Circuit Board	EA93X318	Main (PTBM070COX)
	Printed Circuit Board	EA93X320	Channel Selector Switch (PTSW033COX)
	Printed Circuit Board	EA93X322	Channel Indicator (PTLD022COX)
	Printed Circuit Board	EA93X323	AWI (PTZA006COX)

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

ITEM	PART No.	ITEM	PART No.
Escutcheon	EA89X264	Knob, Mike Gain	EA43X730
Knob, Channel Selector	EA43X728	Cabinet Top	EA98X549
Knob, Volume	EA43X727	Cabinet Bottom	EA98X550
Knob, Squealch	EA43X729	Mobile Mounting Kit	EA68X168