



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 1-662

ROYCE MODEL 1-662

MANUFACTURER'S SPECIFICATIONS

Receiver

- | | |
|---|------------------------------------|
| 1. Frequency Range (MHz) | : 26.965 ~ 27.255. |
| 2. Sensitivity | : 0.5 Microvolts for 10db S + N/N. |
| 3. Selectivity | : 5KHz minimum at 6db down. |
| 4. Adj. Channel Rejection | : More than 60db. |
| 5. Audio Power output at 8 ohm | : More than 4 W at 10% distortion. |
| 6. Audio fidelity (1KHz ~ 0db, 6db down) | : 400 Hz ~ 2,000Hz. |
| 7. A.G.C. figure of merit (input 94db for 10db range) | : More than 80db. |
| 8. Squelch sensitivity (Threshold) | : Less than 0.5uV. |
| 9. Spurious Rejection | : More than 45db. |

Transmitter

- | | |
|--------------------------|--------------------|
| 1. Frequency Range (MHz) | : 26.965 ~ 27.255. |
| 2. RF Output Power | : 4 Watts. |
| 3. Modulation Capability | : 100%. |
| 4. Spurious Suppression | : More than 50db. |
| 5. Frequency Tolerance | : $\pm 0.005\%$. |

Courtesy of the Manufacturer

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

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8CY668

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.
Suggested Alignment Tools: GC ELECTRONICS:
T201, T401 thru T404 5009
T101, T102 9440

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (Pin 2 of PLL-1).	Ch. 1		Check for 10.240MHz.
Input of frequency counter to TP2 (Pin 19 of PLL-1).	Ch. 1		Check for 37.66MHz. Check all channels (Channel frequency - 10.695MHz = frequency on counter).
Input of frequency counter to TP4 (Pin 23 of PLL-1).	Ch. 1, Xmit		Check for 26.965MHz. Check 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.

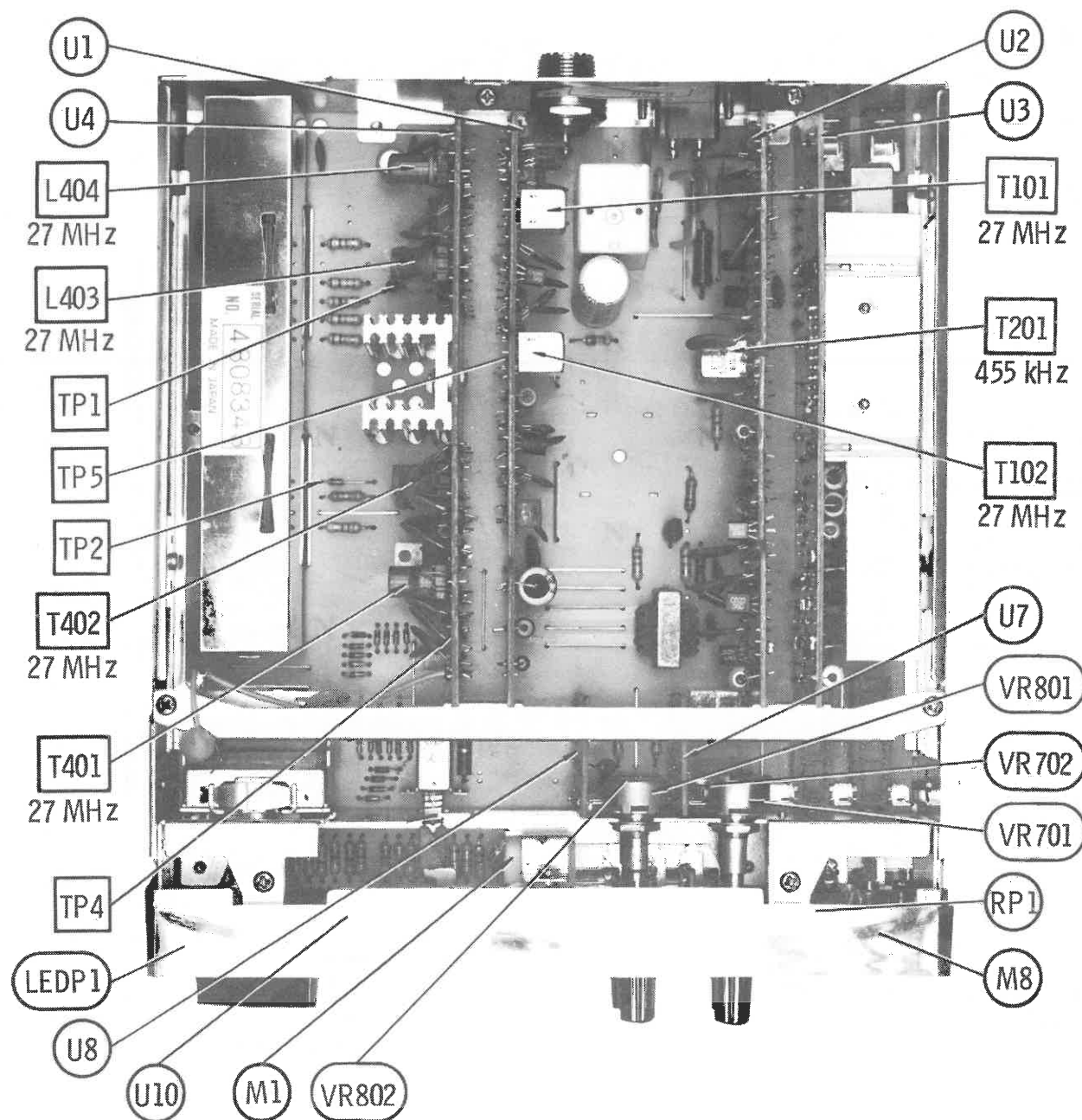
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP5 (Base of Q201). 455kHz, 1000Hz @ 30% modulation.	Ch. 13 RF Gain Max Squelch Min Delta Tune Midrange ANL Off	T201	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation.	Ch. 13 RF Gain Max Squelch Min Delta Tune Midrange ANL Off	T102, T101	Adjust for maximum output. Repeat above steps, if necessary.

TRANSMITTER ALIGNMENT

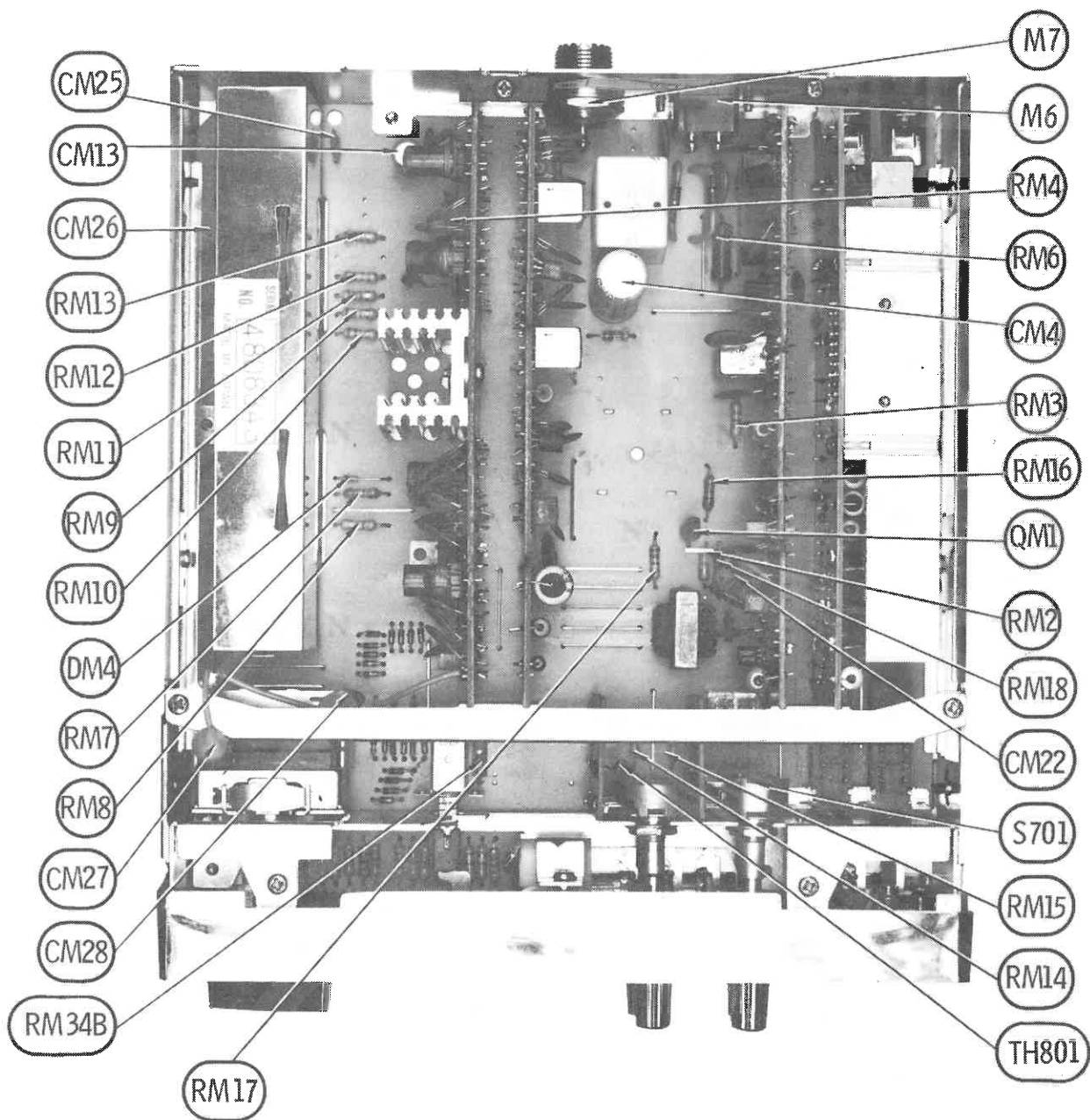
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.

NOTE: Be sure to check transmit frequency and power on all active channels after alignment of transmitter.
See page 4 for channel frequencies.

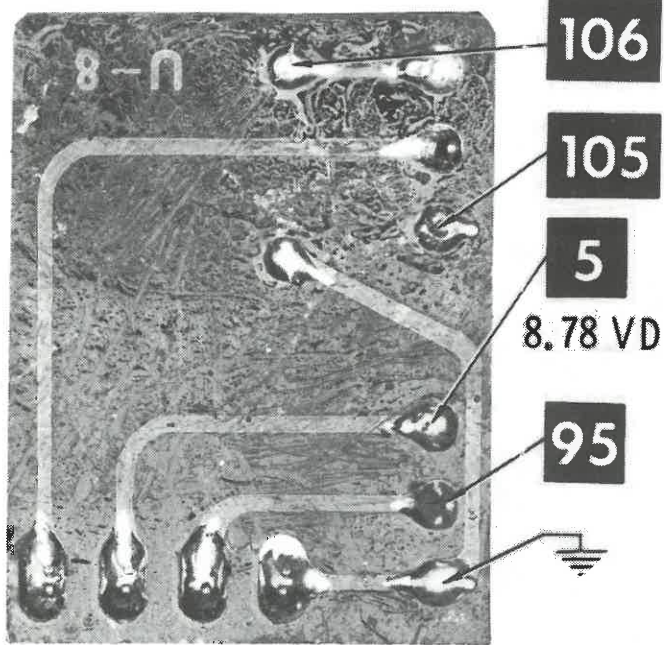
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
	Ch. 13	T401, T402, L403, L404	Adjust for maximum.
	Ch. 13	L404	Adjust for 4 watts maximum.



CHASSIS-BOTTOM



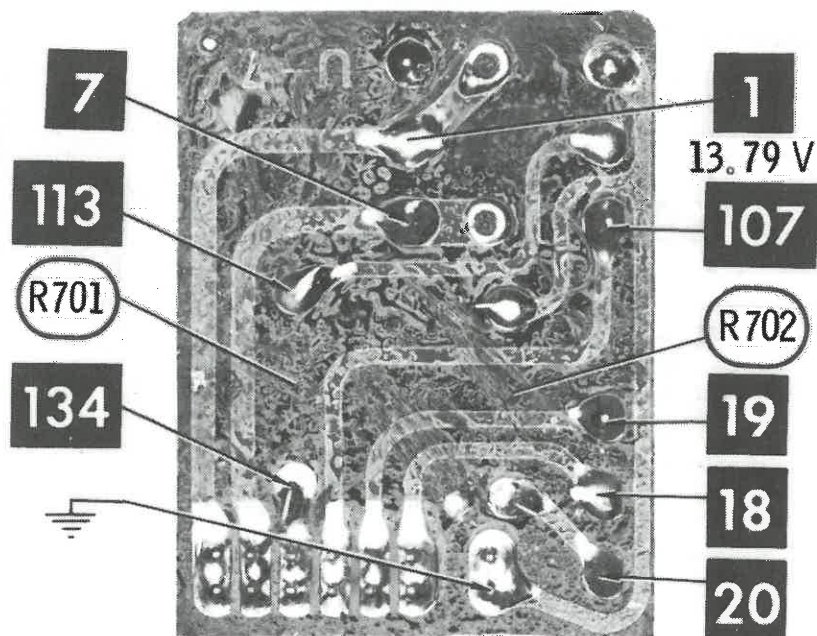
CHASSIS-BOTTOM



4-6

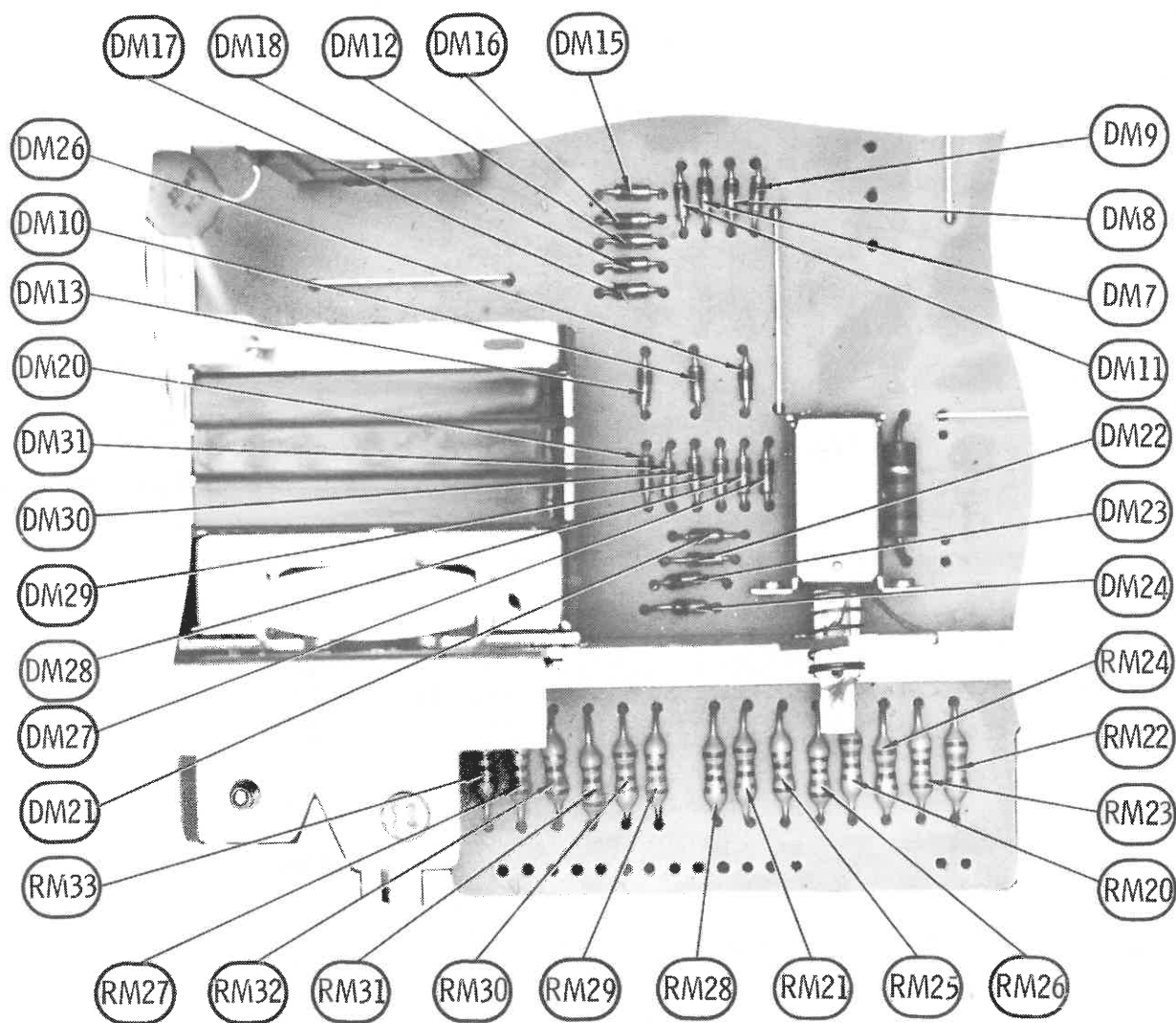
U-7 BOARD

ROYCE MODEL 1-662

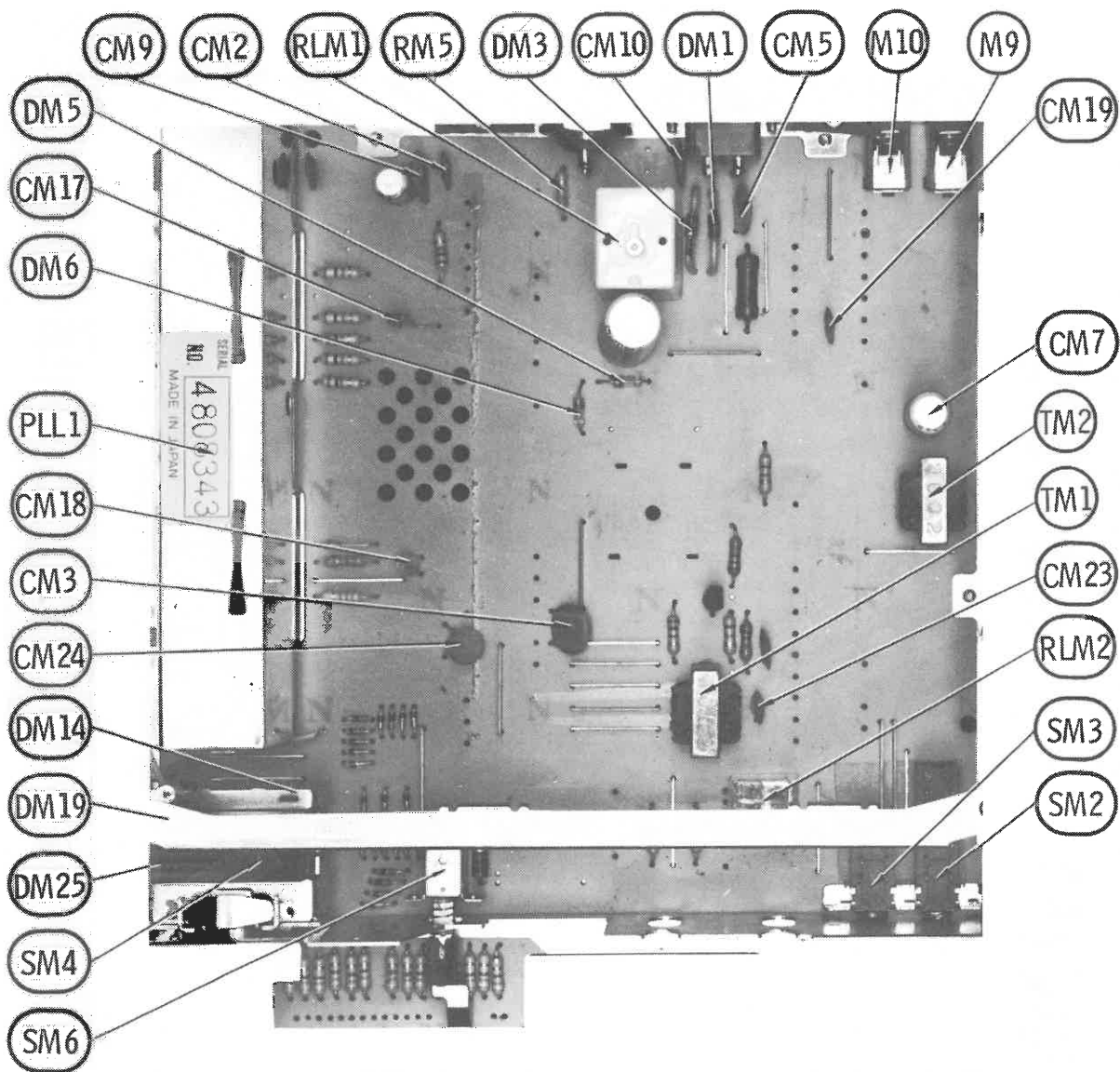


4-7

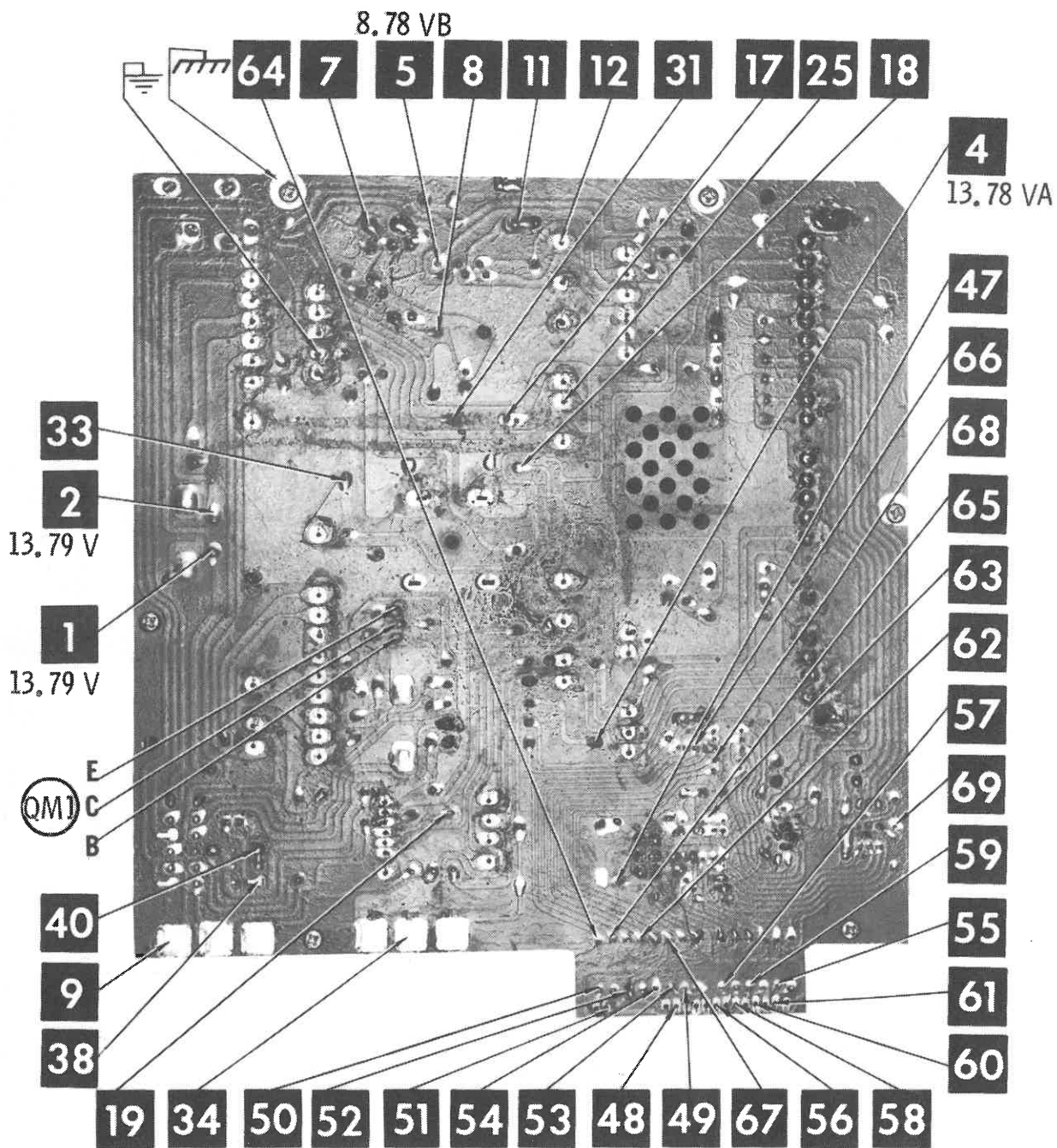
U-8 BOARD



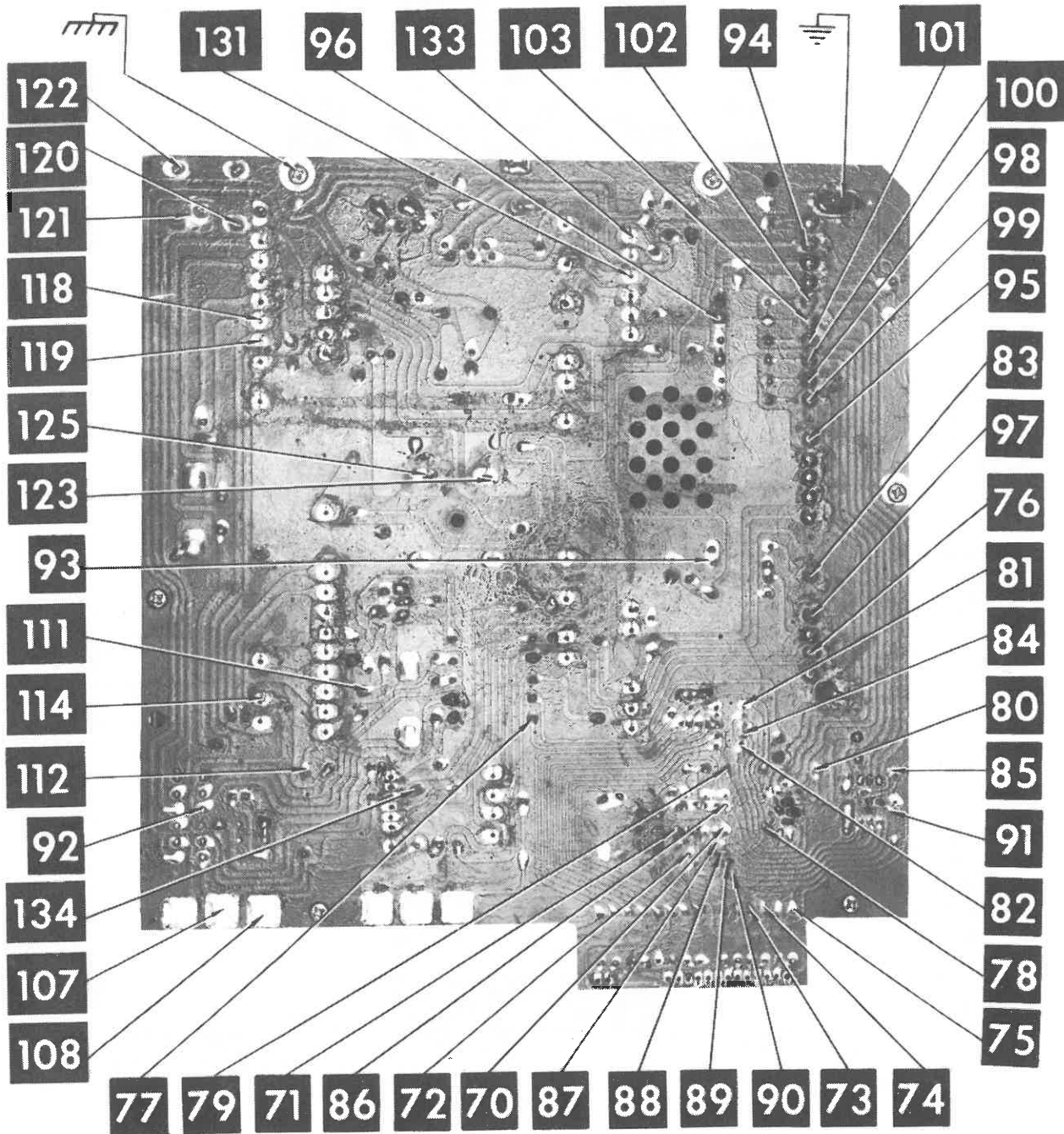
MOTHER BOARD (PARTIAL)



MOTHER BOARD

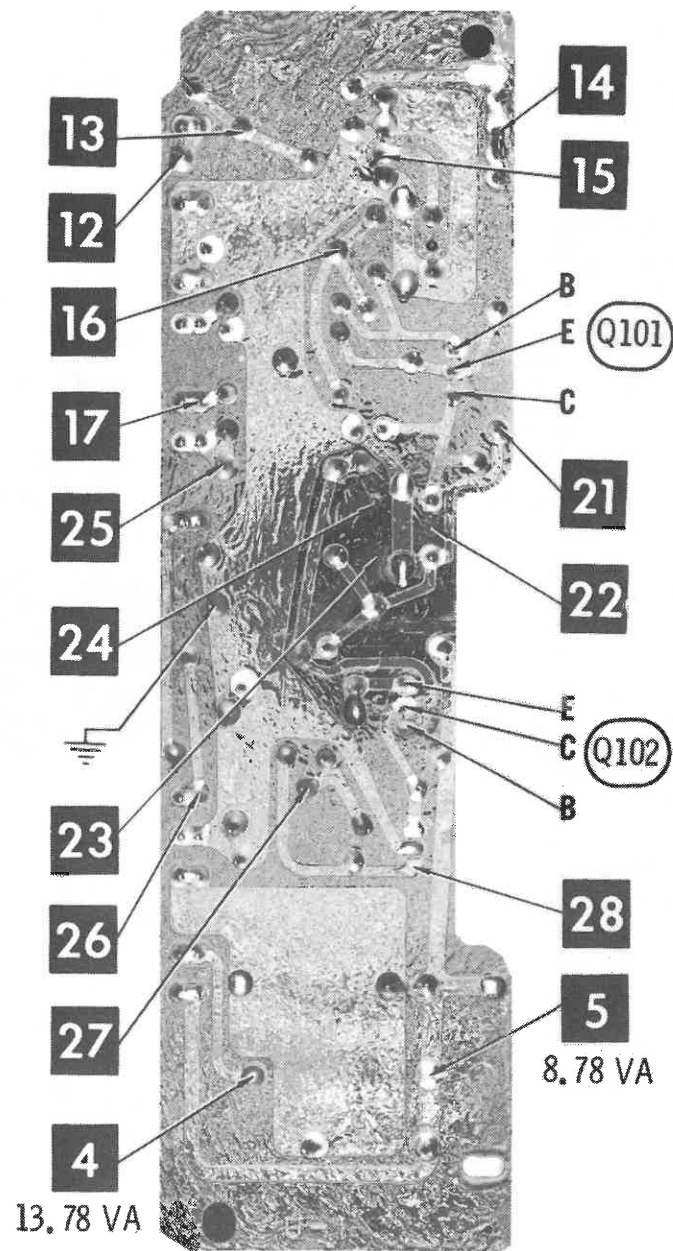


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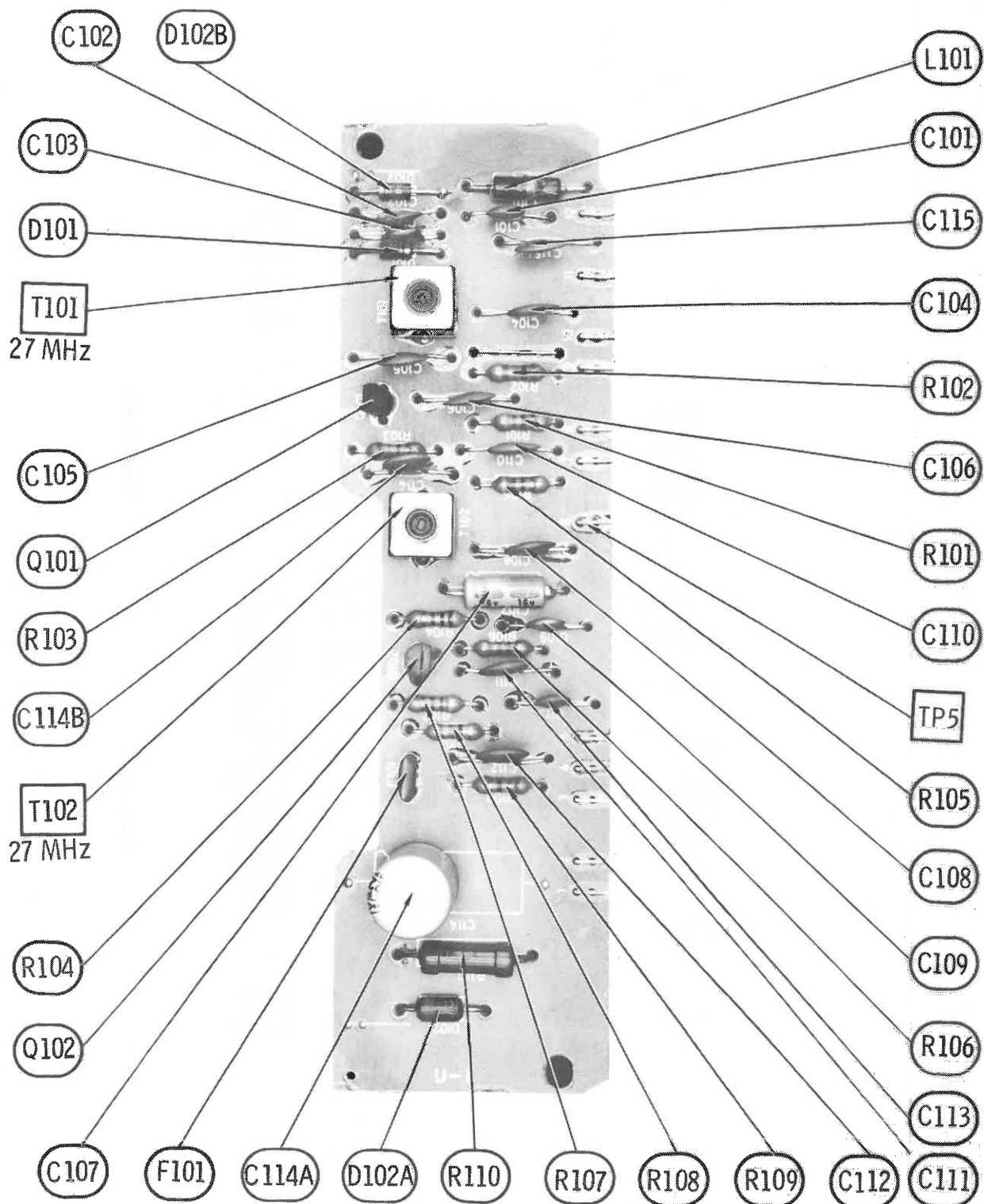


ROYCE MODEL 1-662

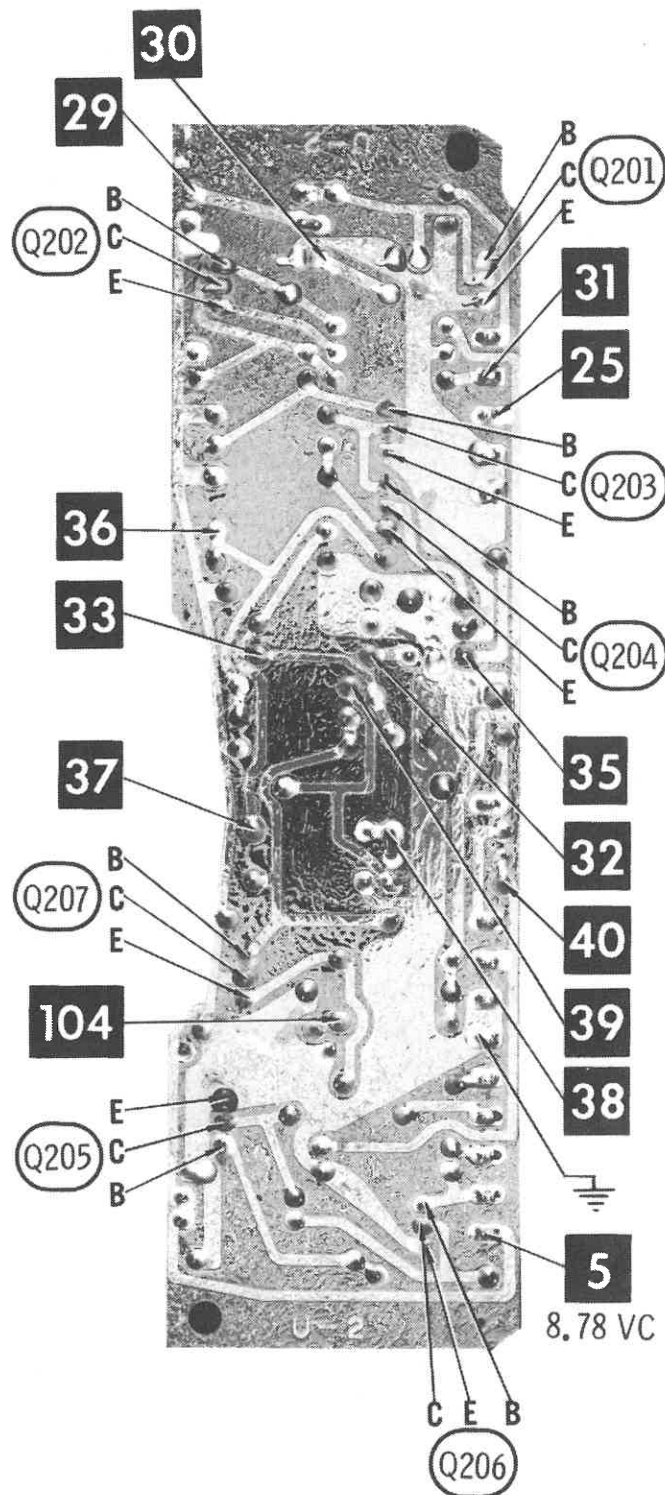
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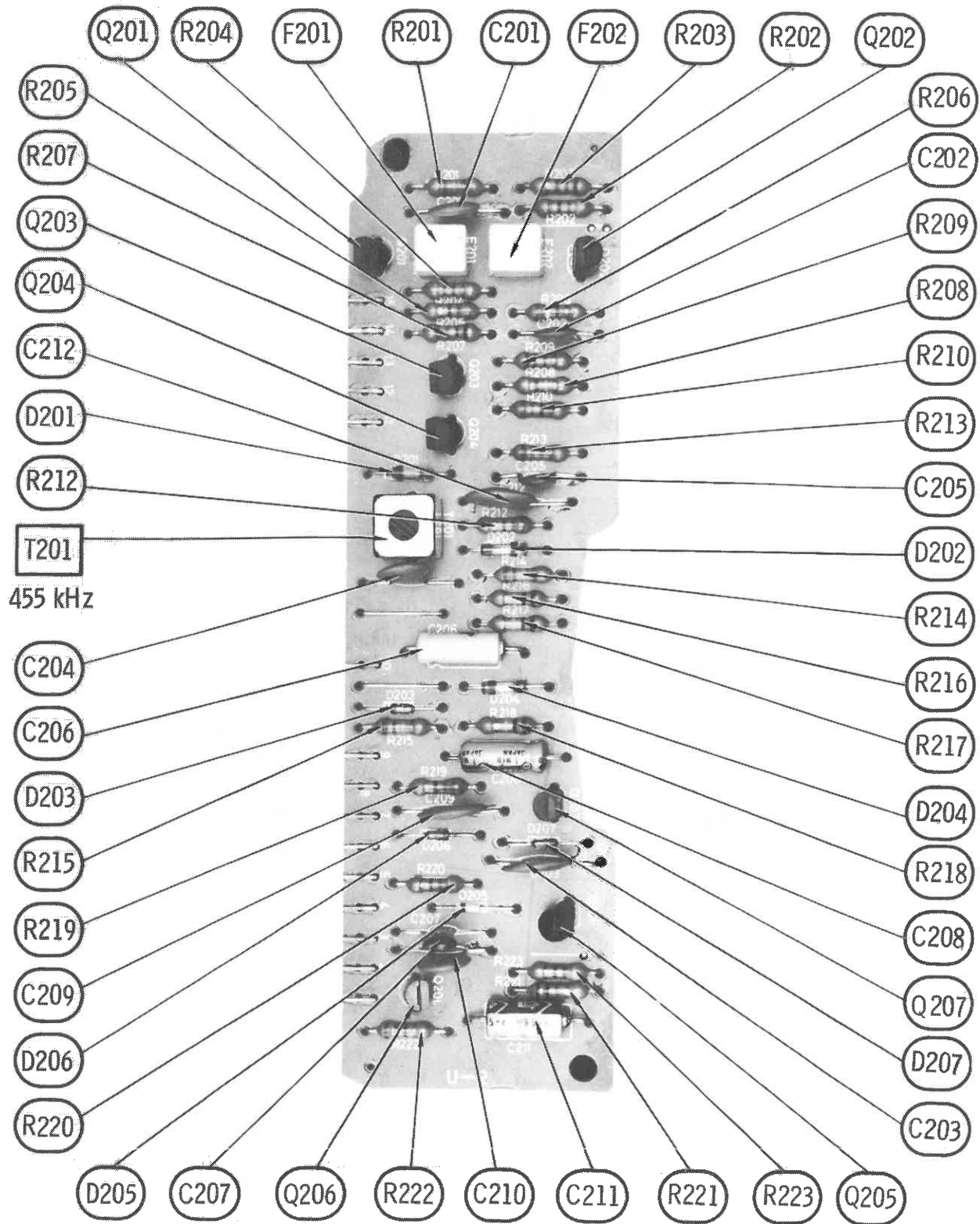
U-1 BOARD



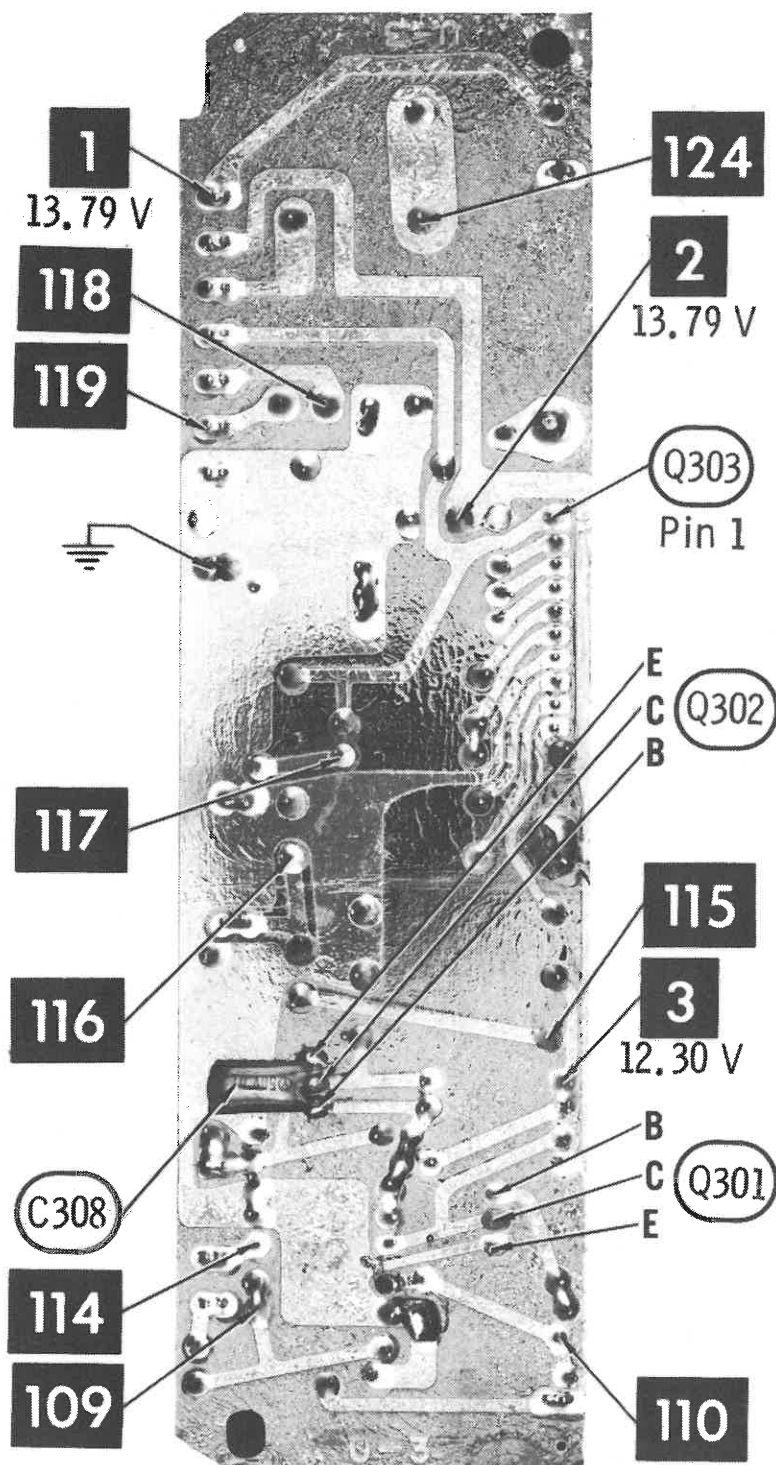
U-1 BOARD



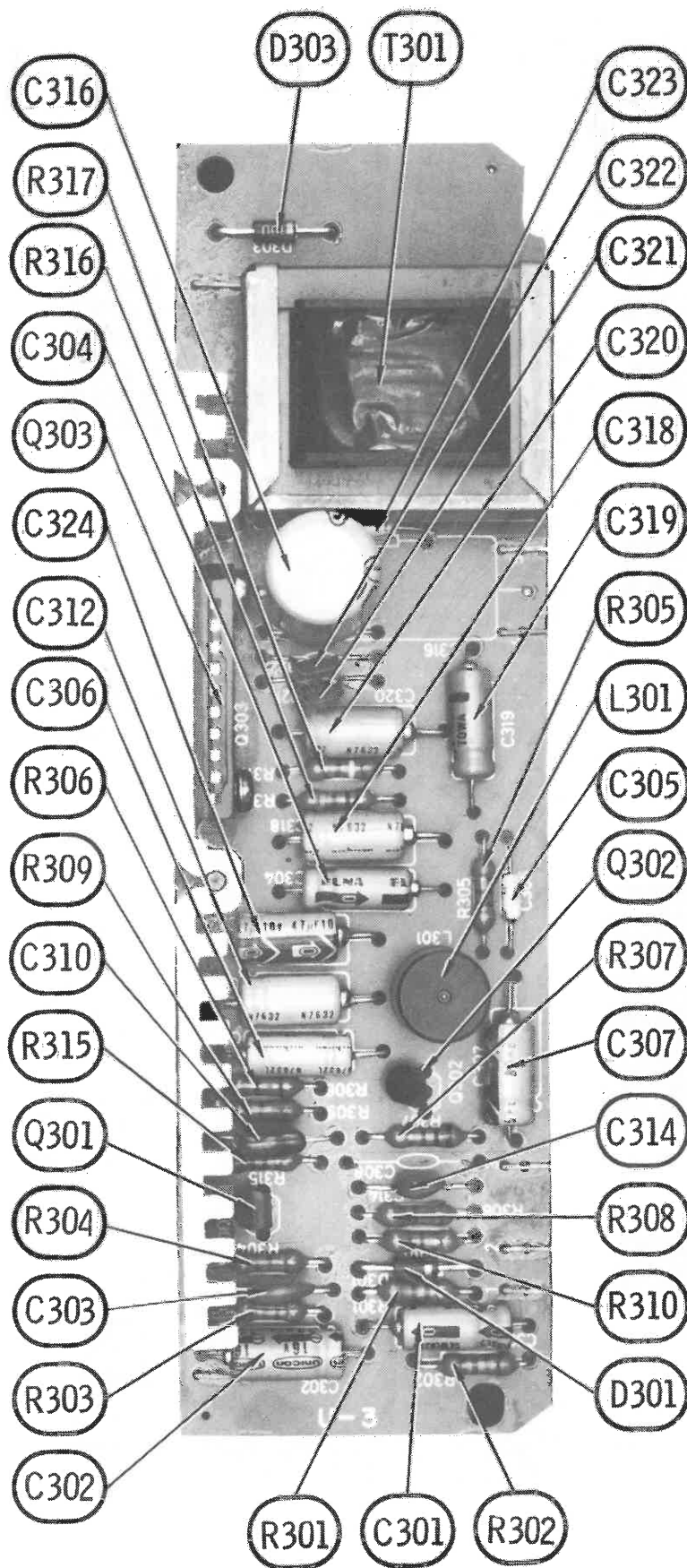
U-2 BOARD



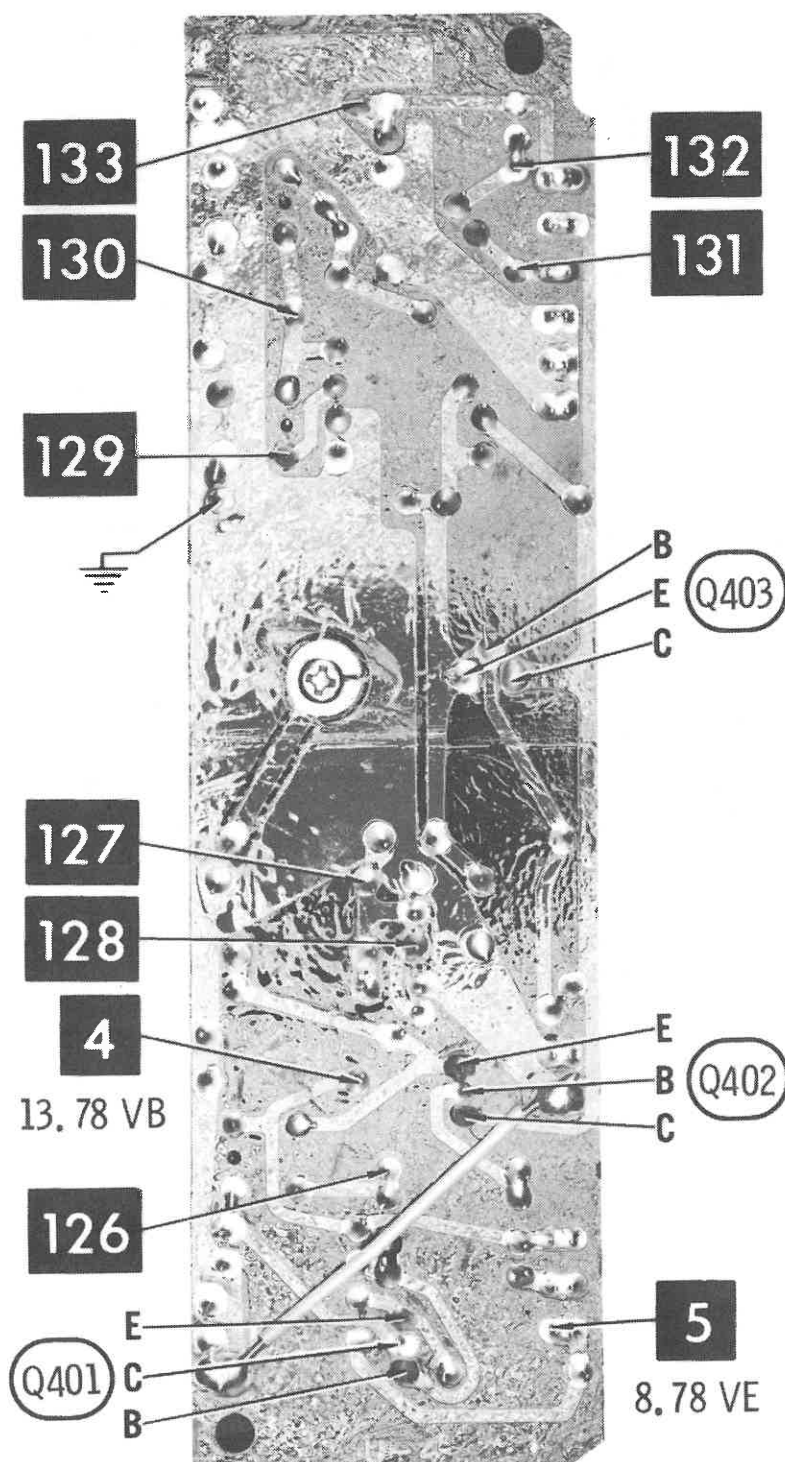
U-2 BOARD



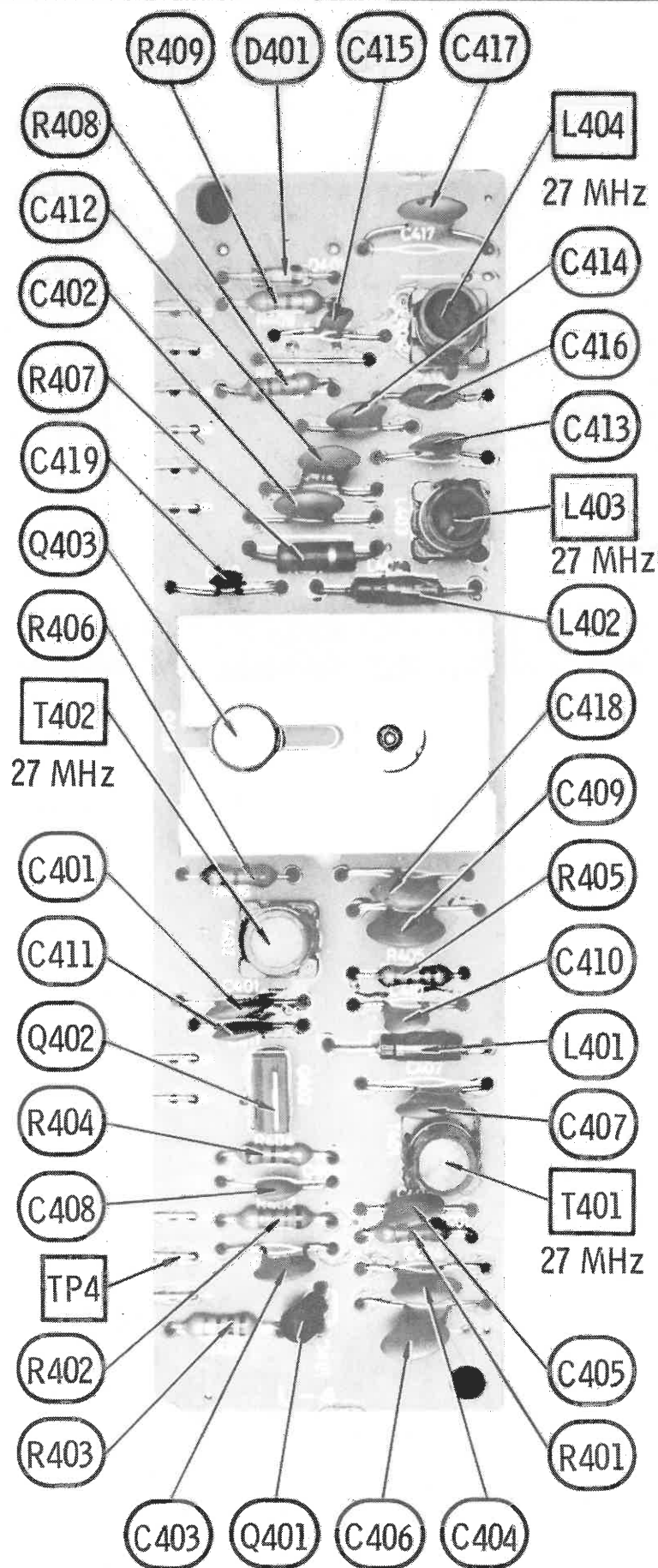
U-3 BOARD



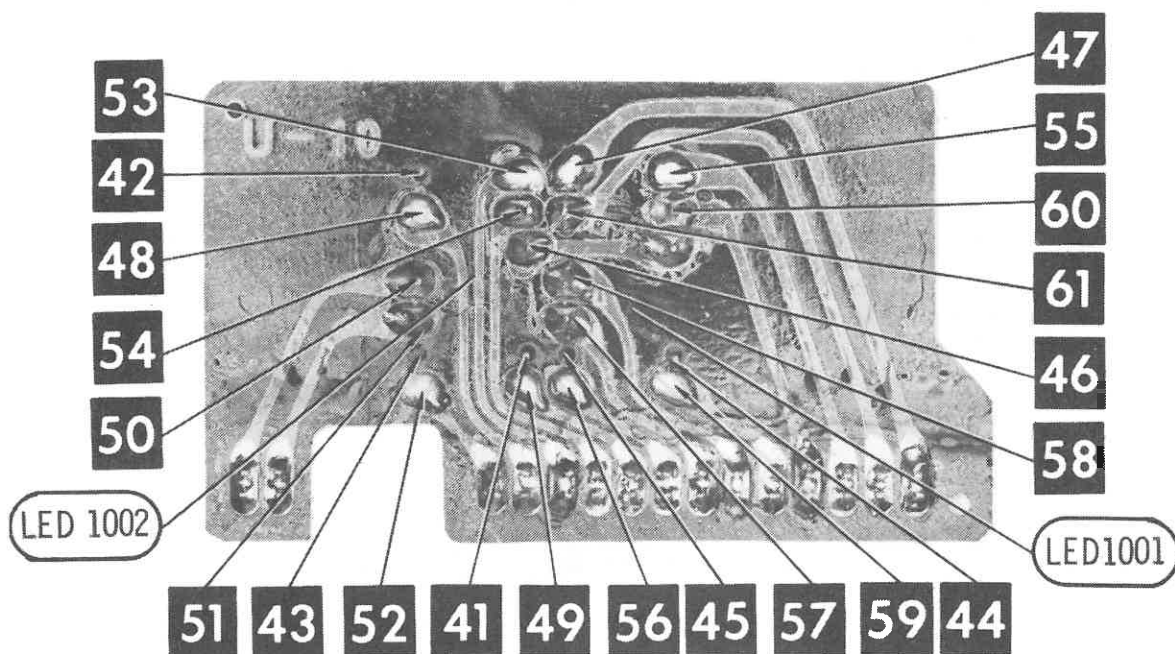
U-3 BOARD



U-4 BOARD



U-4 BOARD

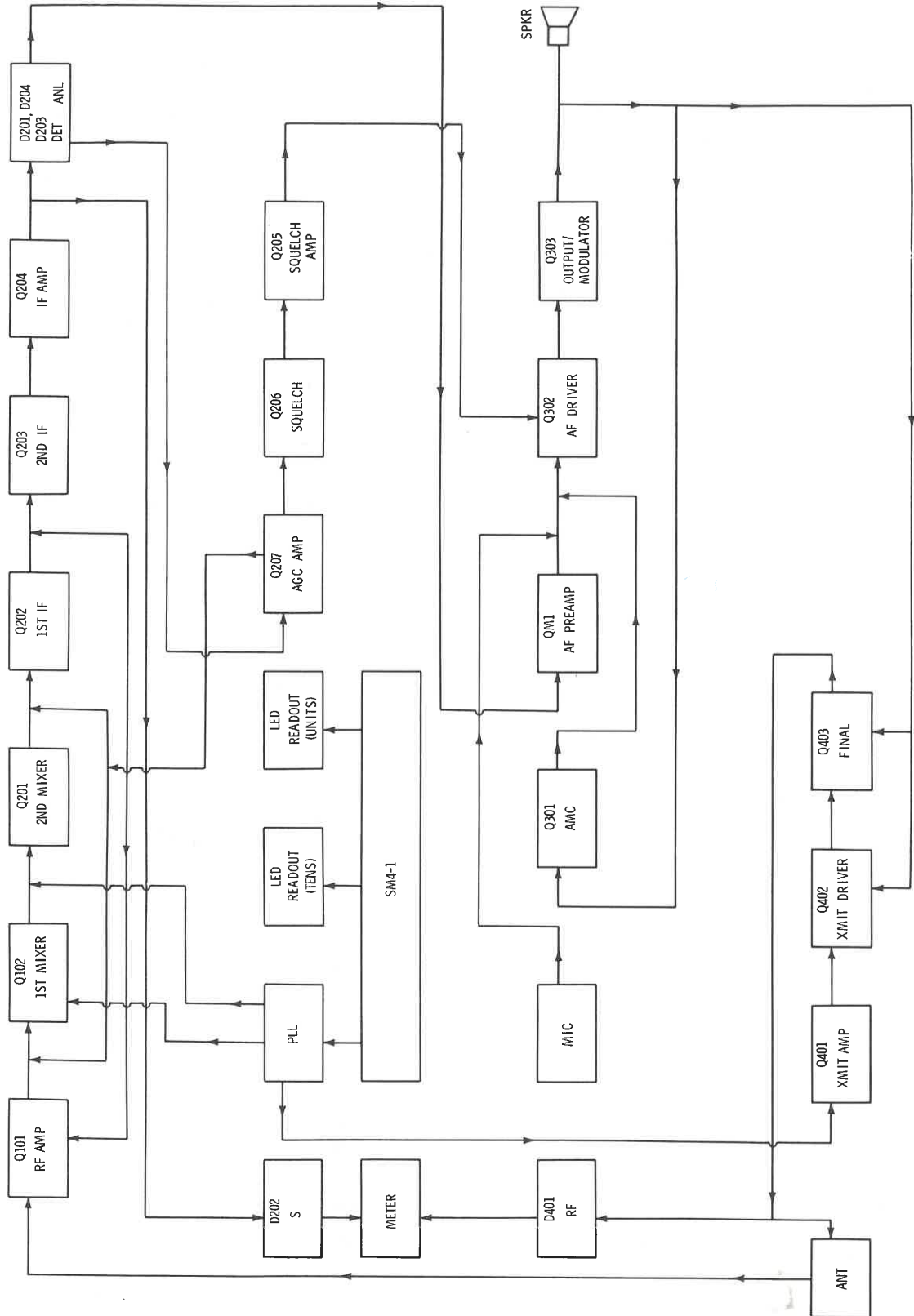


U-10 BOARD

TRUTH CHART

1 = <u>5.60</u> Volts 0 = <u>0</u> Volts								
CHANNEL	PLL-1 PLL UNIT						REC VCO OUTPUT IN MHz AT TP2	XMIT VCO OUTPUT IN MHz AT TP4
	PINS							
	5	7	8	9	10	21		
1	0	0	0	0	0	1	37.660	26.965
2	0	0	0	1	0	1	37.670	26.975
3	0	0	0	0	1	1	37.680	26.985
4	0	0	1	0	0	1	37.700	27.005
5	0	0	1	1	0	1	37.710	27.015
6	0	0	1	0	1	1	37.720	27.025
7	0	0	1	1	1	1	37.730	27.035
8	0	1	0	1	0	1	37.750	27.055
9	0	1	0	0	1	1	37.760	27.065
10	0	1	0	1	1	1	37.770	27.075
11	0	1	1	0	0	1	37.780	27.085
12	0	1	1	0	1	1	37.800	27.105

1 = <u>5.60</u> Volts 0 = <u>0</u> Volts								
CHANNEL	PLL-1 PLL UNIT						REC VCO OUTPUT IN MHz AT TP2	XMIT VCO OUTPUT IN MHz AT TP4
	PINS							
	5	7	8	9	10	21		
13	0	1	1	1	1	1	37.810	27.115
14	1	0	0	0	0	1	37.820	27.125
15	1	0	0	1	0	1	37.830	27.135
16	1	0	0	1	1	1	37.850	27.155
17	1	0	1	0	0	1	37.860	27.165
18	1	0	1	1	0	1	37.870	27.175
19	1	0	1	0	1	1	37.880	27.185
20	1	1	0	0	0	1	37.900	27.205
21	1	1	0	1	0	1	37.910	27.215
22	1	1	0	0	1	1	37.920	27.225
23	1	1	1	1	0	1	37.950	27.255



BLOCK DIAGRAM



PARTS LIST AND DESCRIPTION
(When ordering parts, state Model, Part Number, and Description.)

SEMICONDUCTORS (Select replacement transistor for best results)

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.
D101	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D102A	EQB01-09		GEZD-9.1	Z1209	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139
D102B	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D201	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D202	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D203	1S2075K		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D204	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D205	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D206	HV-23				PTC301					ECG601
D207	HV-23				PTC301					ECG601
D301	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D303	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D401	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
DM1	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
DM3	10D-1		GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
DM4	1S2075K		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM5	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
	1S188	(1)	1N34AS	1N34A	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109
DM6	1N60		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
	1S188	(1)	1N34AS	1N34A	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109
DM7	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM8	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM9	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM10	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM11	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM12	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM13	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM14	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM15	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM16	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM17	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM18	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM19	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM20	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM21	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM22	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM23	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM24	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM25	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM26	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM27	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM28	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM29	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM30	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
DM31	WG713		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
Q101	2SC1856		GE-20 *	TR-24 *	PTC132	HEPS0015 *	RE 13 *	SK3018 *	RT-107A *	ECG123A *
Q102	2SC710C		GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
	2SC710	(1)	GE-211 *	(1R)2SC710	PTC115	HEPS0016 *	RE 13 *	SK3018 *	RT-308 *	ECG123A *
Q201	2SC711E		GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
Q202	2SC711E		GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
Q203	2SC711D		GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
Q204	2SA695D		GE-67	TR-88	PTC103	HEPS5013	RE 18	SK3025	RT-126A	ECG294
	2SA695	(1)	GE-67	TR-88	PTC103	HEPS5013	RE 18	SK3025	RT-126A	ECG294
Q205	2SC620D		GE-20 *	(1R)2SC644	PTC125 *	HEPS0015 *	RE 13 *	SK3020 *	RT-107A *	ECG123A *
	2SC620	(1)	GE-20 *	(1R)2SC644	PTC125 *	HEPS0015 *	RE 13 *	SK3020 *	RT-107A *	ECG123A *
Q206	2SC945D		GE-212	(1R)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	2SC945	(1)	GE-212	(1R)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q207	2SC945D		GE-212	(1R)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
	2SC945	(1)	GE-212	(1R)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q301	2SB561B		GE-244 *	TR-88 *	PTC127	HEPS3011	RE 18 *	SK3025 *	RT-115 *	ECG129 *
	2SB561	(1)	GE-244 *	TR-88 *	PTC127	HEPS3011	RE 18 *	SK3025 *	RT-115 *	ECG129 *
Q302	2SC711E		GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
Q303	AN315									
Q401	2SC1908E		GE-20 *	TR-21 *	PTC136 *	HEPS0015 *	RE 9 *	SK3124 *	RT-107A *	ECG107 *
	2SC1908	(1)	GE-20 *	TR-21 *	PTC136 *	HEPS0015 *	RE 9 *	SK3124 *	RT-107A *	ECG107 *
Q402	2SC1728	(12)	GE-275	WEP918			RE 204			ECG302
Q403	2SC756A	(13)	GE-46	WEP909	PTC158		RE 206			ECG282
	2SC756	(1)	GE-46	WEP909	PTC158		RE 206			ECG282
QM1	2SC711E		GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711D	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC711	(1)	GE-62 *	(1R)2SC644	PTC121	HEPS0024 *	RE 192 *	SK3124 *	RT-302 *	ECG199 *
	2SC458B	(1)	GE-210 *	(1R)2SC458B	PTC121 *	HEPS0009 *	RE 13 *	SK3124	RT-187	ECG123A *
	2SC458	(1)	GE-210 *	(1R)2SC458B	PTC121 *	HEPS0009 *	RE 13 *	SK3124	RT-187	ECG123A *

* Lead configuration may vary from original.
(1) Used in some versions.
(12) Rating 950 MW @ 0.5 AMP.
(13) Rating 10 W @ 4 AMP.

PARTS LIST AND DESCRIPTION (CONTINUED)
(When ordering parts, state Model, Part Number, and Description.)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C107	10 16V		WBR10-25	TT15X10	QE1-177	TVA-1145
C114A	220 16V		WBR250-16	TT15X260A	QE1-495	TVA-1161
C206	.33 50V			TDC334M050EL	QDT1-14	SD50-R339
C208	1 50V		WBR1-50	TT50X1	QE1-11	TVA-1300
C211	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
C301	1 50V		WBR1-50	TT50X1	QE1-11	TVA-1300
C302	22 16V		WBR25-25	TT15X25A	QE1-291	TVA-1148
C304	1 50V		WBR1-50	TT50X1	QE1-11	TVA-1300
C305	.22 25V			TDC224M050EL	QDT1-10	SD50-R229
C306	1 50V		WBR1-50	TT50X1	QE1-11	TVA-1300
C307	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
C312	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
C316	1000 16V		WBR1000-16	TT15X1000B	QE1-591	TVA-1163
C318	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
C319	10 16V		WBR10-25	TT15X10	QE1-177	TVA-1145
C320	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
C323	1 25V			TDC105M035EL		SD35-19
C324	47 10V		WBR50-25	TT10X50A	QE1-351	TVA-1150
CM4	1000 16V		PC1000-16	VT1000L16	QV1-183	EV-1260
CM7	220 16V		PC250-25	VT220H16	QV1-117	EV-1240
CM13	47 16V		PC50-16	VT47D16	QV1-73	EV-1226

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C101	82 N750				CN7482		10TCU-Q82
C102	220 N750				CN7322		10TCU-T22
C103	22 N220		DTN-220	N220	*		10TCR-Q22
C104	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C105	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C106	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C108	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C109	22 N220				*		10TCR-Q22
C110	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C111	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C112	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C113	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C114B	33 N220				*		10TCR-Q33
C115	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C201	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C202	220 N750		DTN-220	N220	CN7322		10TCU-T22
C203	.039				GP140		56A-S40
C204	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C205	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C207	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C209	.039				GP140		56A-S40
C210	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C212	.039				GP140		56A-S40
C303	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C308	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C310	.039			DPMS6S39	PVC6139		6PS-S39
C314	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C321	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C322	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C401	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C402	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C403	68 N220				*		10TCR-Q68
C404	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C405	39 N220				*		10TCR-Q39
C406	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C407	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C408	.001		DD-102G	GP1000	GP210	QC2-81	56A-D10
C409	82 N220				*		10TCR-Q82
C410	22 N220				*		10TCR-Q22
C411	220 N750		DTN-220	N220	CN7322		10TCU-T22
C412	100 N470				*		10TCT-T10
C413	220 N750		DTN-220	N220	CN7322		10TCU-T22
C414	39 N220				*		10TCR-Q39
C415	2 NP0		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C416	120 N750		DTN-120				10TCU-T12
C417	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C418	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C419	10 NP0		DTZ-10	NP010	CN0410		10TCC-Q10

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
CM2	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM3	.039				GP140		5GA-S40
CM5	.039				GP140		5GA-S40
CM9	.039				GP140		5GA-S40
CM10	.039				GP140		5GA-S40
CM17	10 NPO		DTZ-10	NPO10	CN0410		10TCC-Q10
CM18	22 N220				*		10TCR-Q22
CM19	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM22	470		DD-471	GP470	GP347		10TS-T47
CM23	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
CM24	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM25	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM26	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM27	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
CM28	.039				GP140		5GA-S40

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR701	Volume/Switch	50K	09-011				
VR702	RF Gain	10K	09-059				
VR801	Squelch	10K	09-059				
VR802	Denta Tune	10K	09-059				

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.
TH801	550 Cold NTC						

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	RF Choke		ETC49169		
L301	RF Choke (22mH)		2-0080		
L401	RF Choke		ETC49170		
L402	RF Choke		ETC4056		
L403	Final (27MHz)		ETC49168		
L404	Pi Filter (27MHz)		ETC49166		
T101	Rec Antenna (27MHz)		ETC15089	CBS774	
T102	RF (27MHz)		ETC15061	CBS708-TC	
T201	IF (455kHz)		ETC15090	CBS506-4TC	
T401	Xmit Amp (27MHz)		ETC20105		
T402	Xmit Driver (27MHz)		ETC49167		

PARTS LIST AND DESCRIPTION (CONTINUED)

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

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
TM1	1.325A	.1	1.45mH	02-127 1002 (1)	TR509		(1) Number on unit.
TM2	1.325A	.1	1.45mH	02-127 1002 (1)	TR509		

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	3.92	1 8 20.4	62017 (1)	TR827	MCB-55	(1) Number on unit.

ROYCE MODEL 1-662

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM 8 Ohms	06-004	30A0528R	

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
M16	2 Amp			AGC2	HDJ	312002	150145	FG2-2

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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					18-092						

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
F101	Ceramic Filter		10.7MHz (SFE 10.7mA)
F201	Ceramic Filter		455kHz (CFU455H)
F202	Ceramic Filter		455kHz (CFU455H)
LED1001	Led		TX Indicator (SEL101R)
LED1002	Led		Channel Display - Units (MAN72, 7 Segment)
M1	Meter	05-019	Channel Display - Tens (MAN72, 7 Segment)
M6	Jack	10-005	S/R
M7	Jack	10-002	Power
M8	Jack	10-001	Antenna
M9	Jack	10-003	Microphone
M10	Jack	10-003	PA
M15	Lamp	70-001	External Speaker
PLL-1	PLL Unit		Meter (50mA @ 13.78V)
RLM1	Relay	15-005	Xmit - Rec (TECK70)
RLM2	Relay	15-009	Xmit - Rec
S701	Switch		Power (Part of Volume Control)
SW2	Switch	09-130	PA-CB
SM3	Switch		ANL
SW4	Switch	09-115	Channel Selector
SM6	Switch	09-147	Bright-Dim

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

ITEM	PART No.	ITEM	PART No.
Cabinet	19-144	Knob, Volume/Squelch	19-610
Escutcheon	19-220	Knob, PA-CB/ANL	19-637
Mounting Bracket	14-012	Knob, Bright-Dim	19-638
Knob, Channel	19-618	Channel Indicator Lens	19-720

WIRING DATA

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