



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 MDU-6000

MANUFACTURER'S SPECIFICATIONS

RECEIVER

CIRCUIT:

DUAL CONVERSION SUPERHETERODYNE WITH RF STAGE AND 455 KHz CERAMIC FILTER.

FREQUENCY:

DIGITALLY SYNTHESIZED
40 CHANNELS IN THE 27MHz
CITIZENS BAND.

SENSITIVITY:

1.0 μ V FOR 10dB S/N

SELECTIVITY:

40dB at $\pm$ 10KHz

SQUELCH RANGE:

0 — 100 μ V

IF FREQUENCY:

1st IF: 9.785MHz

2nd IF: 455KHz

TRANSMITTER

FREQUENCY:

DIGITALLY SYNTHESIZED
40 CHANNELS IN THE 27MHz
CITIZENS BAND.

RF OUTPUT POWER

4W MAXIMUM

TYPE OF EMISSION

6A3

FREQUENCY TOLERANCE:

WITHIN $\pm$ 0.005%

SPURIOUS REJECTION:

MORE THAN 60dB

MODULATION:

AM, 90% TYPICAL

Courtesy of the Manufacturer

AUDIOVOX MODEL MDU-6000

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

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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:

T101, T102, T105, T106, T107, T204, T205, T2065000, 5009, 8276, 8728,

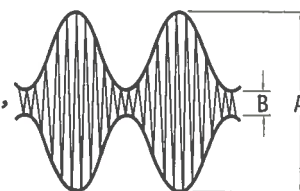
8728A

.9440

T103, T104, T201, T202, T2039300, 8302, 9304

L202, L206, L2075000, 8276

C1395000, 8276



$$\text{Modulation Ratio} = \frac{A - B}{A + B} \times 100 (\%)$$

FIGURE 1

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCIEVER	ADJUST	REMARKS
Input of oscilloscope to C4.	Ch. 19	T107	Adjust for maximum RF. (210mV p-p typical).
Input of frequency counter to C4.	Ch. 19	C139	Adjust for 10.240MHz +100Hz.
Input of frequency counter to TP1 (IC101 pin 16).	Ch. 19		Check for 5.120MHz.
Input of DC meter to P3.	Ch. 1	T105	Adjust for 3.00 volts. Check for approx. 3.95 volts on Channel 40.
Input of oscilloscope to P4.	Ch. 19	T106	Adjust for maximum RF. (1-1V p-p typical).
Input of frequency counter to P4.	Ch. 1		Check for 1.820MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of frequency counter to P4.	Ch. 1, XMT		Check for 1.365MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP2 (Junction of C154 and C226)	Ch. 19	T101	Adjust for maximum RF. (90mV p-p typical).
Input of frequency counter to TP2 (Junction of C154 and C226).	Ch. 1		Check for 17.180MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP3 (T102 secondary).	Ch. 19, XMT	T102	Adjust for maximum RF. (500mV p-p typical).
Input of frequency counter to TP3 (T102 secondary).	Ch. 1, XMT		Check for 16.725MHz. Check all channels. (See Truth Chart for correct frequencies.)

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. Preset controls as follows, unless otherwise noted.
RF Gain Max, Ch. 9/Norm Norm, Squelch MINIMUM, Auto/Man Man, NB/ANL Off.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to C4. 455kHz, 1000Hz @ 30% modulation.	Ch. 19	T206,T205	Adjust for maximum output.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T204,T203, T202	Adjust for maximum output. Readjust T205 and T206 for maximum.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.
Preset controls as follows, unless otherwise noted:
RF Gain Max, Ch. 9/Norm Norm, Squelch MINIMUM, Auto/Man Man, NB/ANL Off.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19 Squelch Max	R257	SQUELCH RANGE Adjust so that squelch just breaks.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	R236	SIGNAL LEVEL INDICATOR Adjust so that all LED's are on.

TRANSMITTER ALIGNMENT

Connect a 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
Input of RF wattmeter to antenna input.	Ch. 19	T103, T104, T201, L202, L207	Adjust for maximum output.
Input of RF wattmeter to antenna input.	Ch. 19	L202	Readjust for 4.0 watts RF output maximum.
Input of spectrum analyzer or harmonic meter to antenna input.	Ch. 19	L206	Adjust for MINIMUM at 54MHz (2nd harmonic).

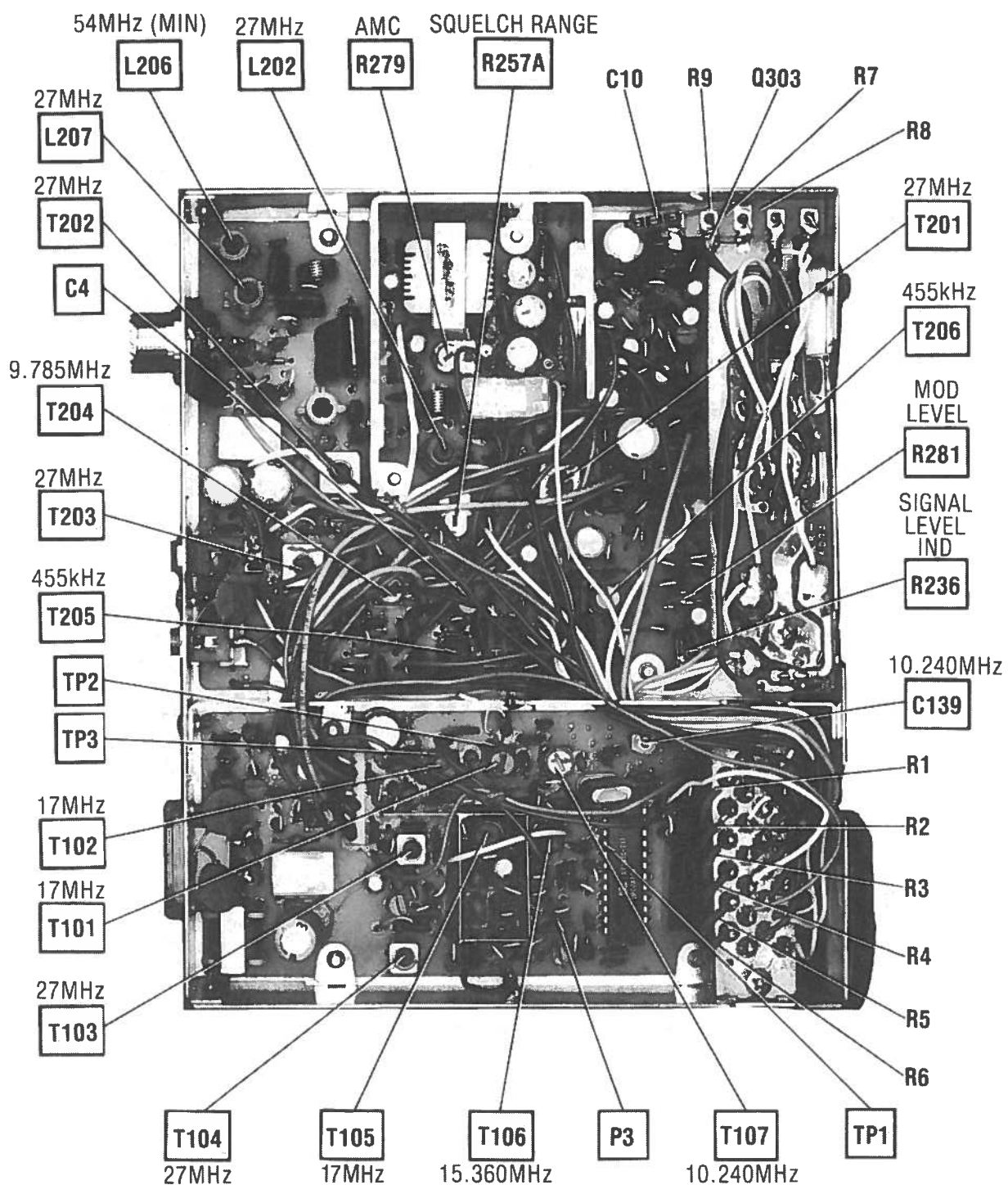
TRANSMITTER ADJUSTMENTS

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

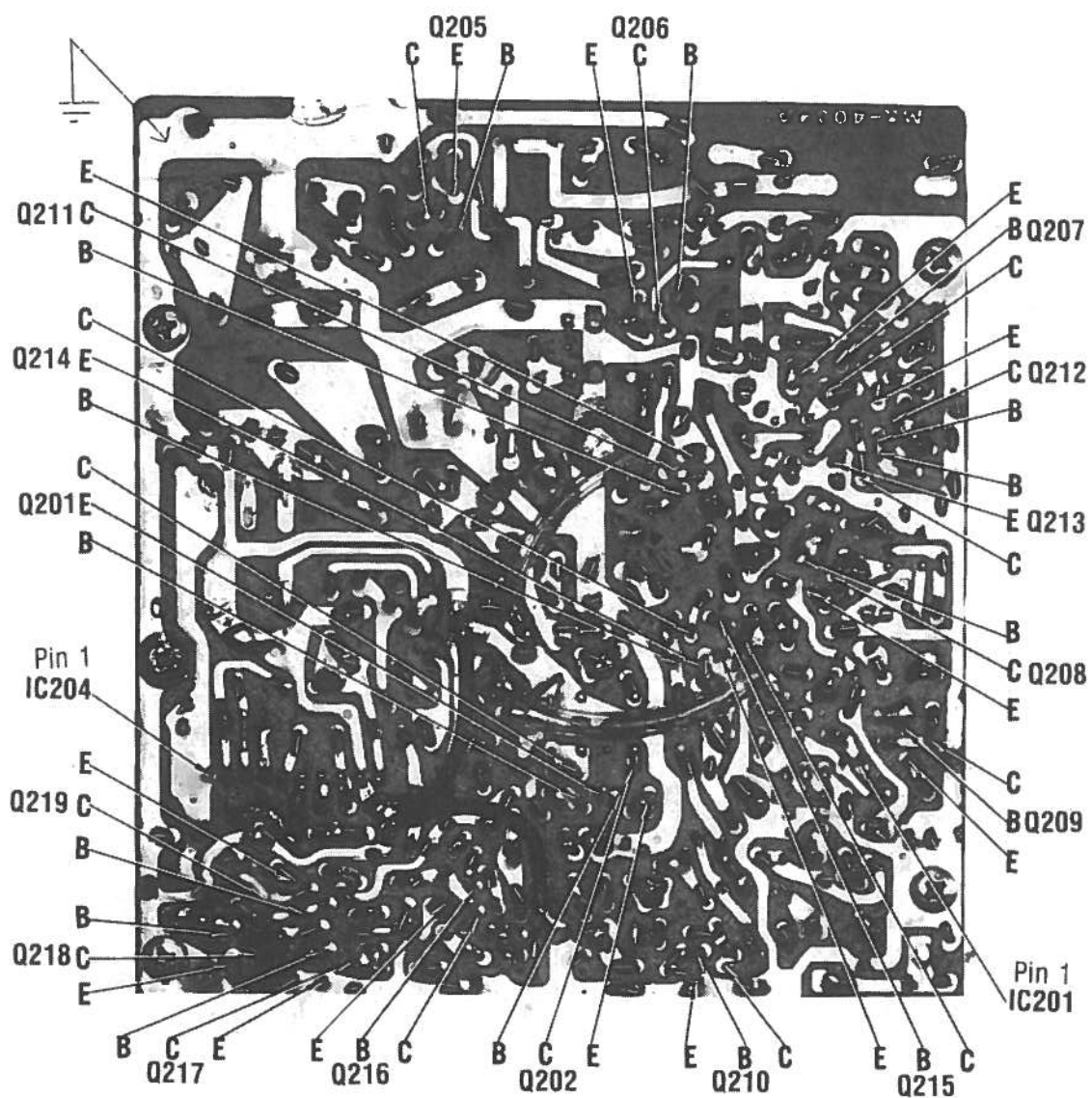
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz 5mV signal at Mic input.	Ch. 19	R279	AMC Adjust for 90% modulation maximum. (See Figure 1.)
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz signal at Mic input.	Ch. 19	R281	MOD LEVEL INDICATOR Set input level to produce 50% modulation. (See Figure 1.) Adjust R281 so all LED's are on.

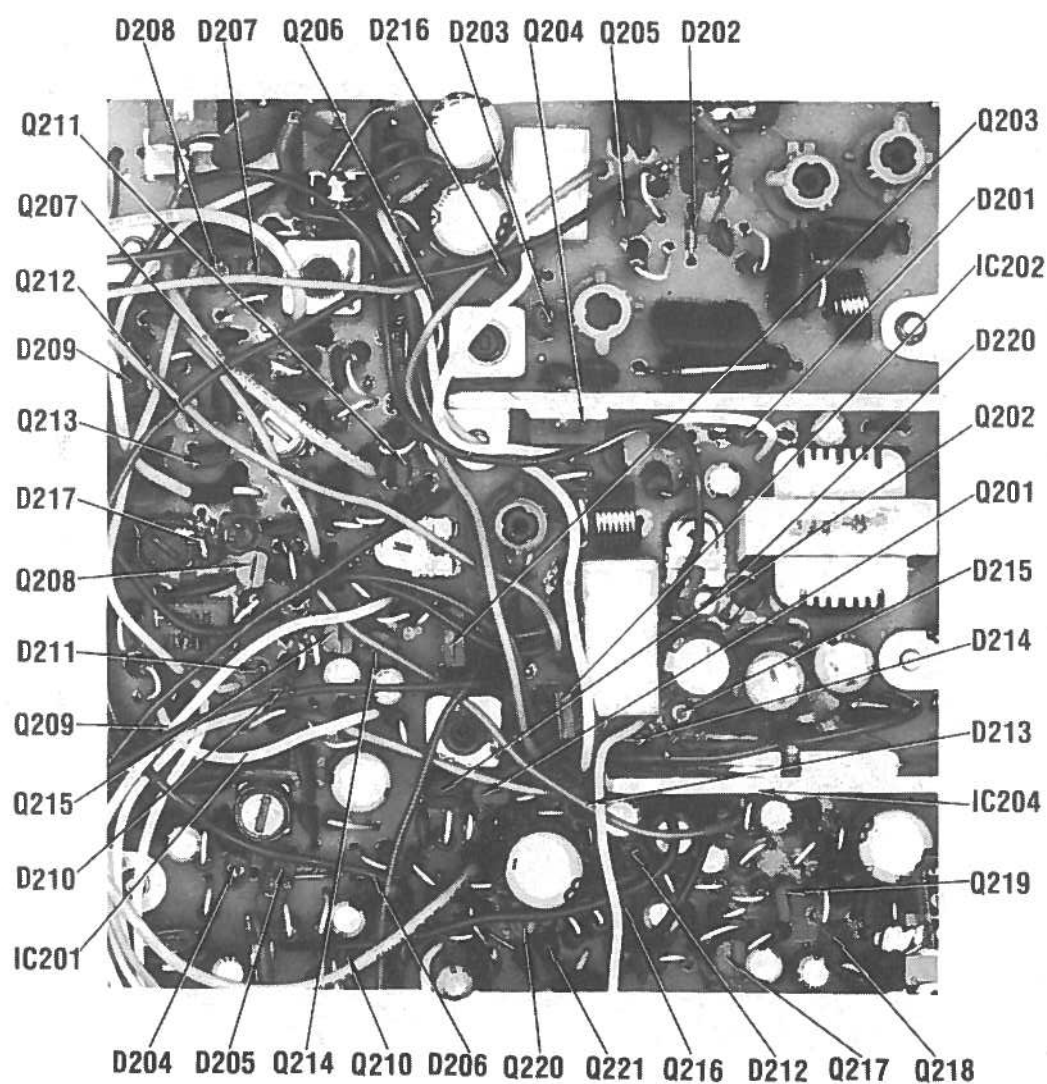
TRUTH CHART

C H A N N E L	1 = 4.40 Vol s 0 = 0 Volts							REC DIVIDER INPUT IN MHz AT P4	REC VCO OUTPUT IN MHz AT TP2	XMT DIVIDER INPUT IN MHz AT P4	XMT VCO OUTPUT IN MHz AT TP2
	CHANNEL INPUT CODES										
	PINS										
	7	6	5	4	3	2	1				
1	0	0	0	0	0	0	0	1.820	17.180	1.365	16.725
2	0	0	0	0	0	1	0	1.830	17.190	1.375	16.735
3	0	0	0	0	0	1	1	1.840	17.200	1.385	16.745
4	0	0	0	0	1	0	0	1.860	17.220	1.405	16.765
5	0	0	0	0	1	0	1	1.870	17.230	1.415	16.775
6	0	0	0	0	1	1	0	1.880	17.240	1.425	16.785
7	0	0	0	0	1	1	1	1.890	17.250	1.435	16.795
8	0	0	0	1	0	0	0	1.910	17.270	1.455	16.815
9	0	0	0	1	0	0	1	1.920	17.280	1.465	16.825
10	0	0	1	0	0	0	0	1.930	17.290	1.475	16.835
11	0	0	1	0	0	0	1	1.940	17.300	1.485	16.845
12	0	0	1	0	0	1	0	1.960	17.320	1.505	16.865
13	0	0	1	0	0	1	1	1.970	17.330	1.515	16.875
14	0	0	1	0	1	0	0	1.980	17.340	1.525	16.885
15	0	0	1	0	1	0	1	1.990	17.350	1.535	16.895
16	0	0	1	0	1	1	0	2.010	17.370	1.555	16.815
17	0	0	1	0	1	1	1	2.020	17.380	1.565	16.925
18	0	0	1	1	0	0	0	2.030	17.390	1.575	16.935
19	0	0	1	1	0	0	1	2.040	17.400	1.585	16.945
20	0	1	0	0	0	0	0	2.060	17.420	1.605	16.965
21	0	1	0	0	0	0	1	2.070	17.430	1.615	16.975
22	0	1	0	0	0	1	0	2.080	17.440	1.625	16.985
23	0	1	0	0	0	1	1	2.110	17.470	1.655	17.015
24	0	1	0	0	1	0	0	2.090	17.450	1.635	16.995
25	0	1	0	0	1	0	1	2.100	17.460	1.645	17.005
26	0	1	0	0	1	1	0	2.120	17.480	1.665	17.025
27	0	1	0	0	1	1	1	2.130	17.490	1.675	17.035
28	0	1	0	1	0	0	0	2.140	17.500	1.685	17.045
29	0	1	0	1	0	0	1	2.150	17.510	1.695	17.055
30	0	1	1	0	0	0	0	2.160	17.520	1.705	17.065
31	0	1	1	0	0	0	1	2.170	17.530	1.715	17.075
32	0	1	1	0	0	1	0	2.180	17.540	1.725	17.085
33	0	1	1	0	0	1	1	2.190	17.550	1.735	17.095
34	0	1	1	0	1	0	0	2.200	17.560	1.745	17.105
35	0	1	1	0	1	0	1	2.210	17.570	1.755	17.115
36	0	1	1	0	1	1	0	2.220	17.580	1.765	17.125
37	0	1	1	0	1	1	1	2.230	17.590	1.775	17.135
38	0	1	1	1	0	0	0	2.240	17.600	1.785	17.145
39	0	1	1	1	0	0	1	2.250	17.610	1.795	17.155
40	0	0	0	0	0	0	0	2.260	17.620	1.805	17.165

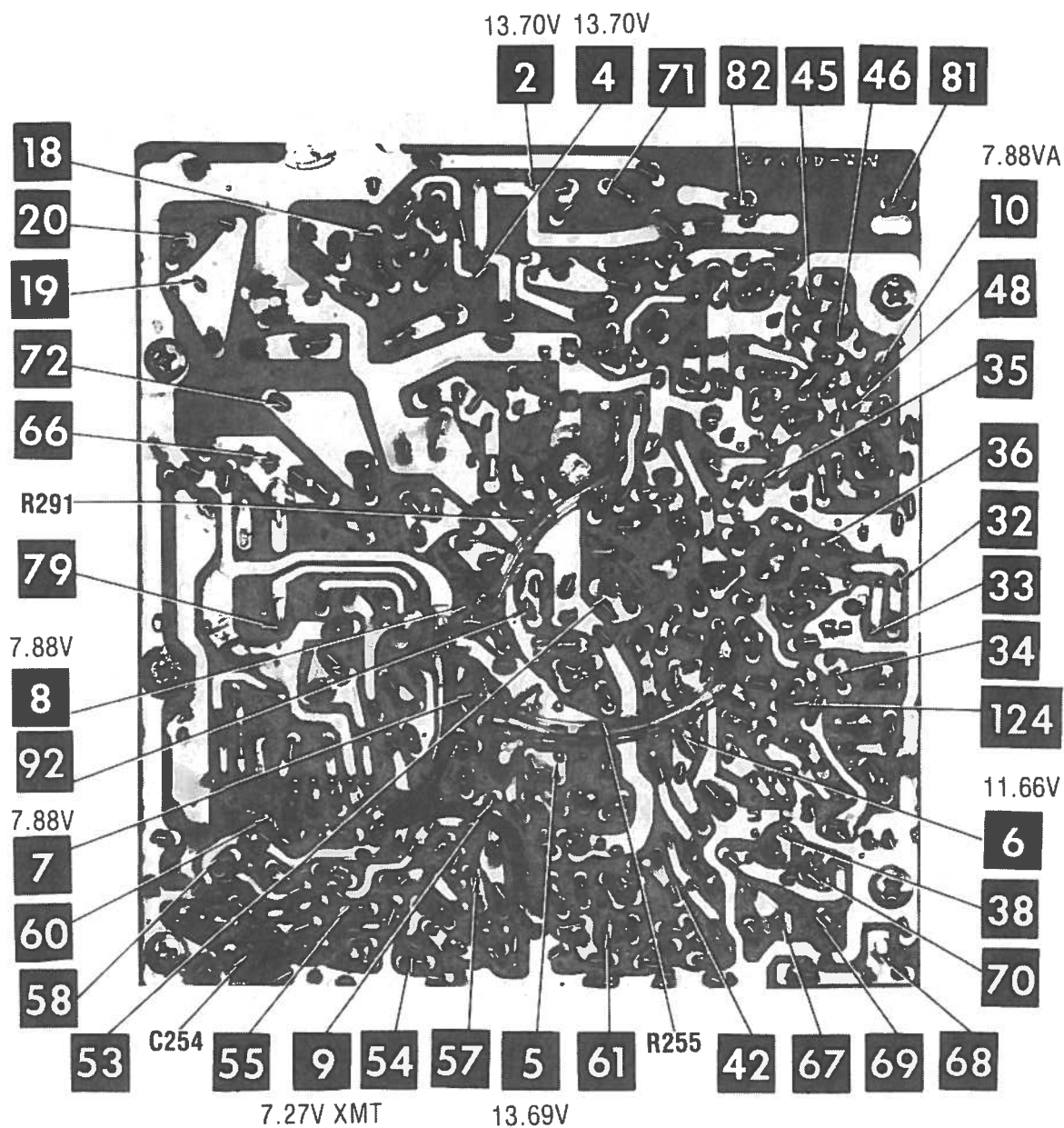


CHASSIS-BOTTOM

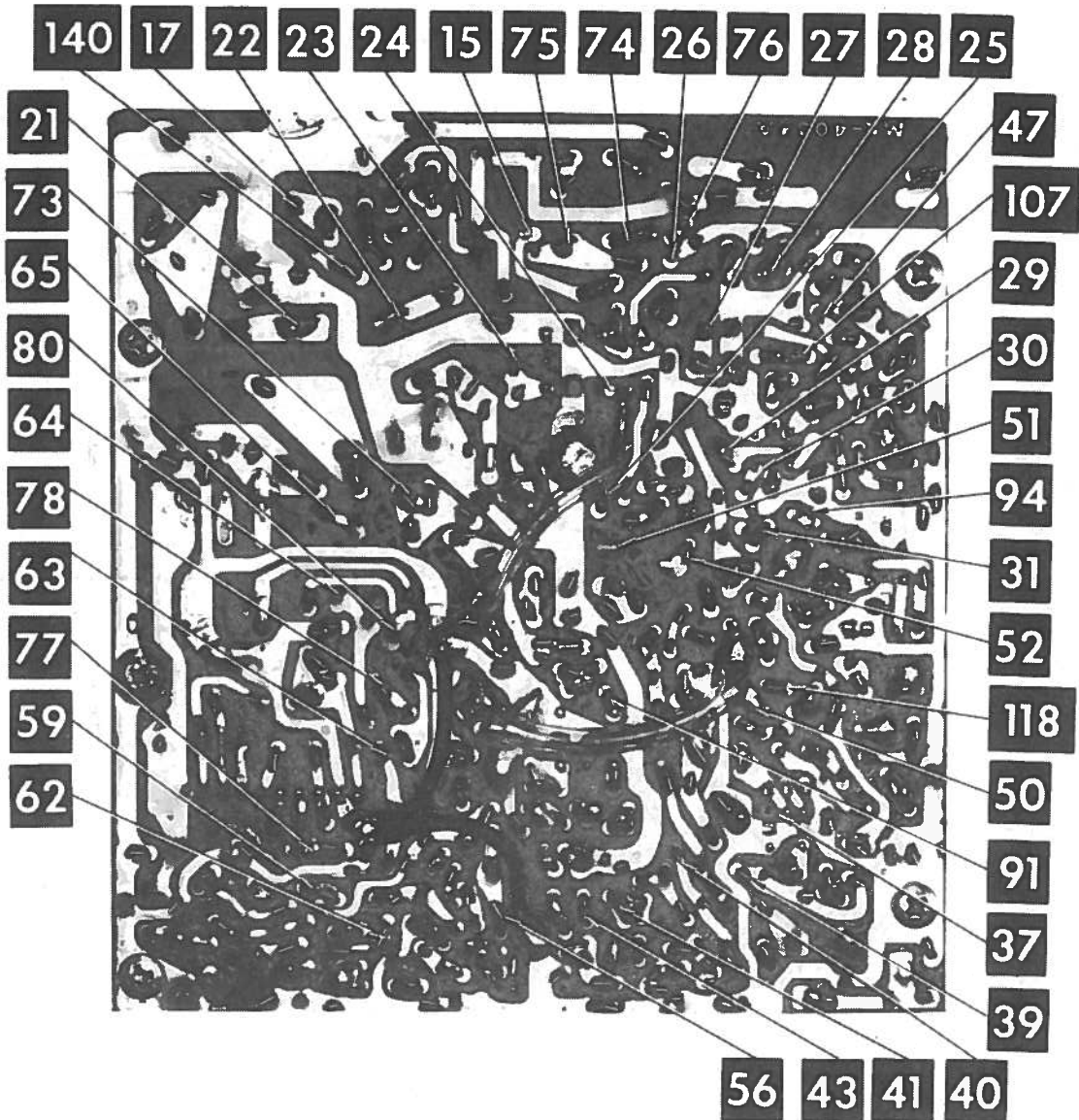




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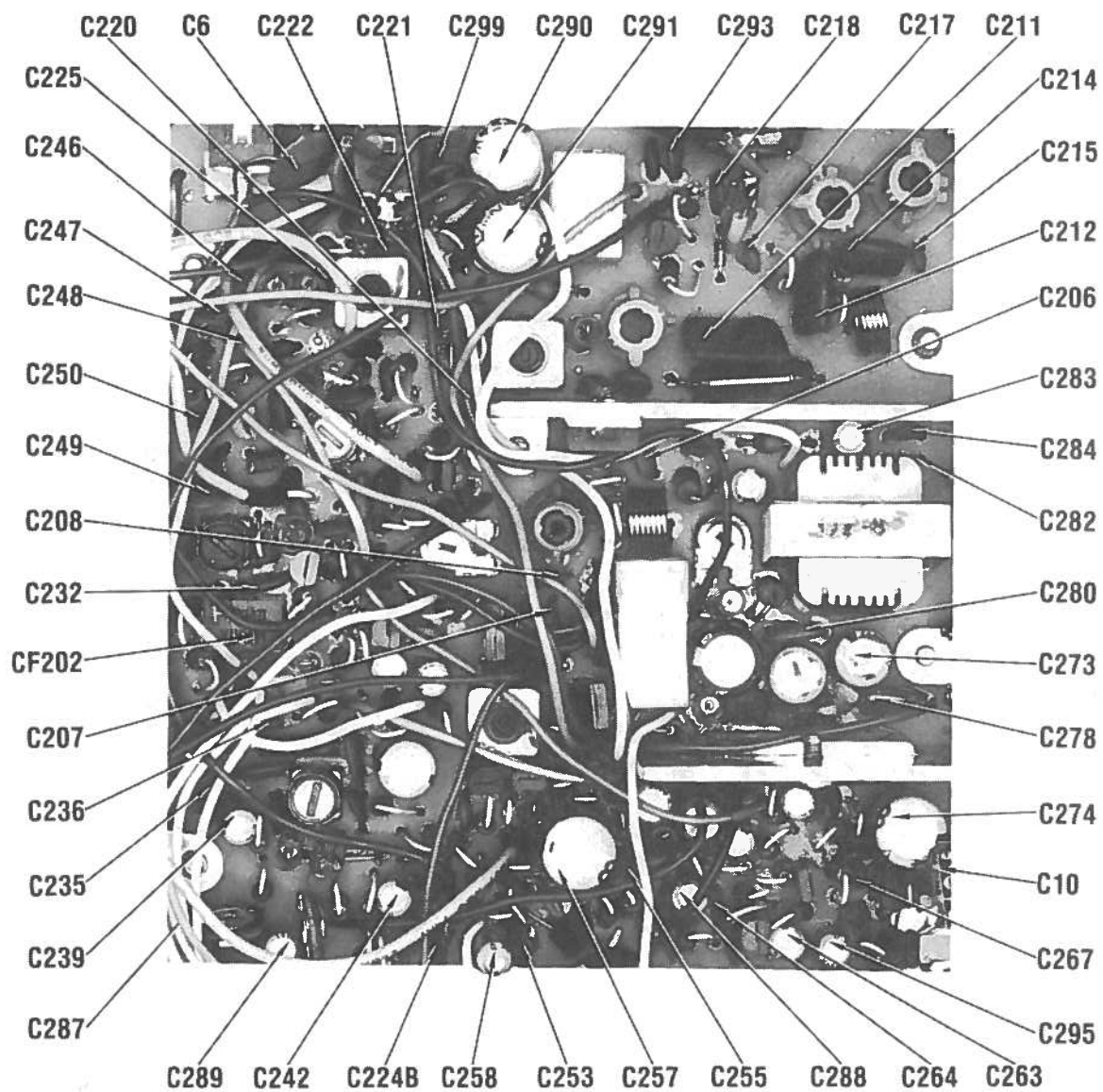


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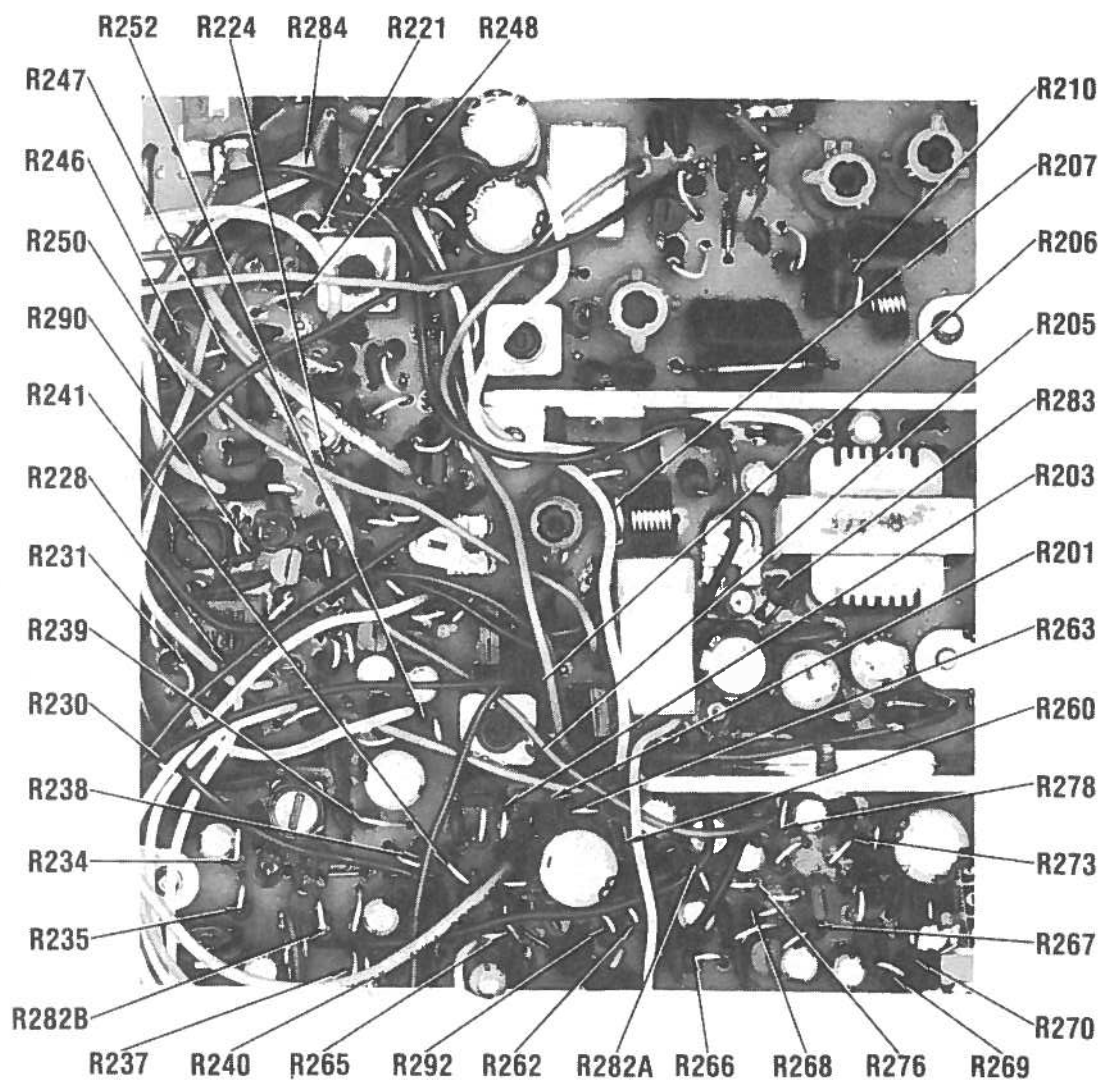


AUDIOVOX MODEL MDU-6000

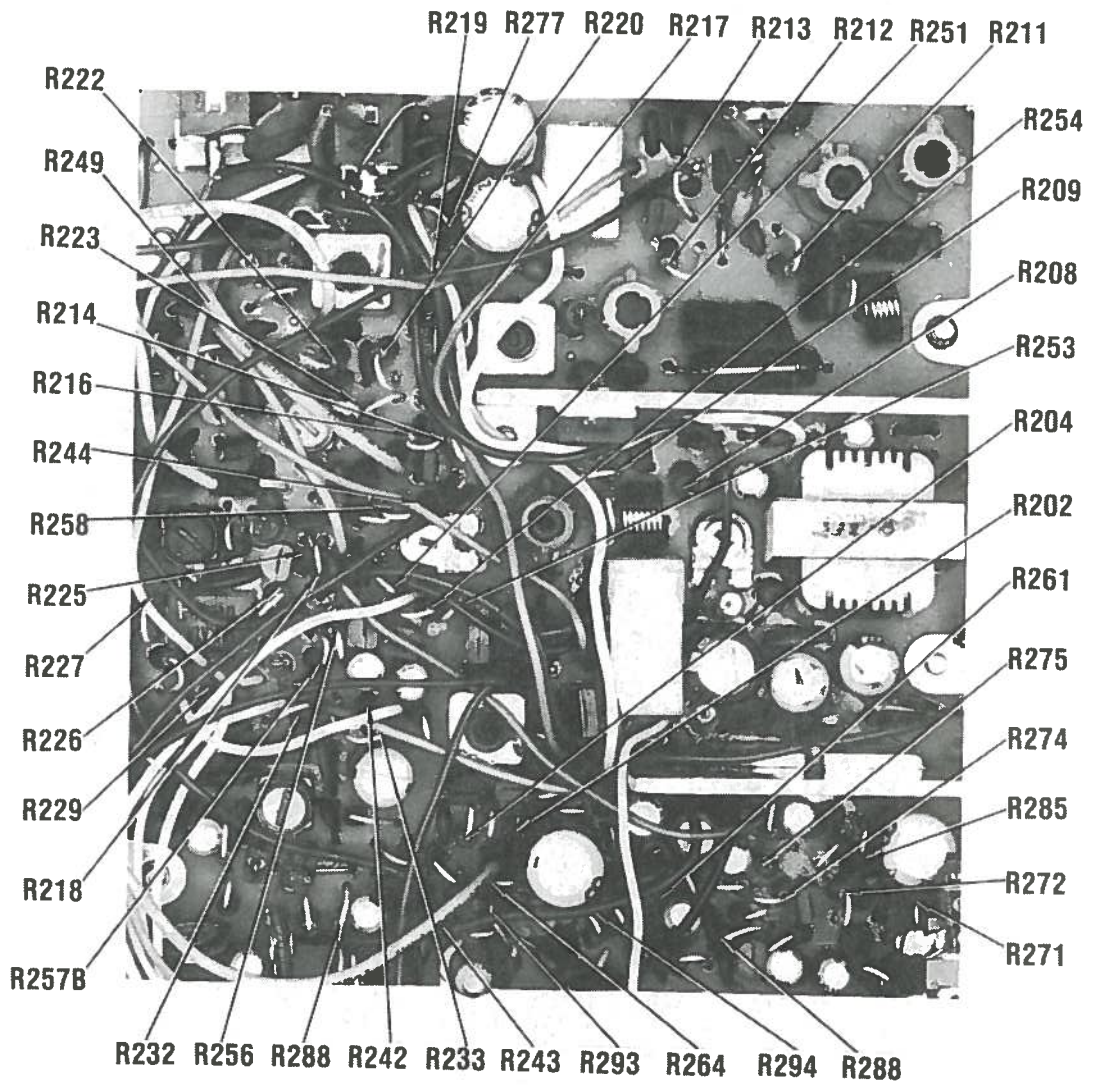
MAIN BOARD



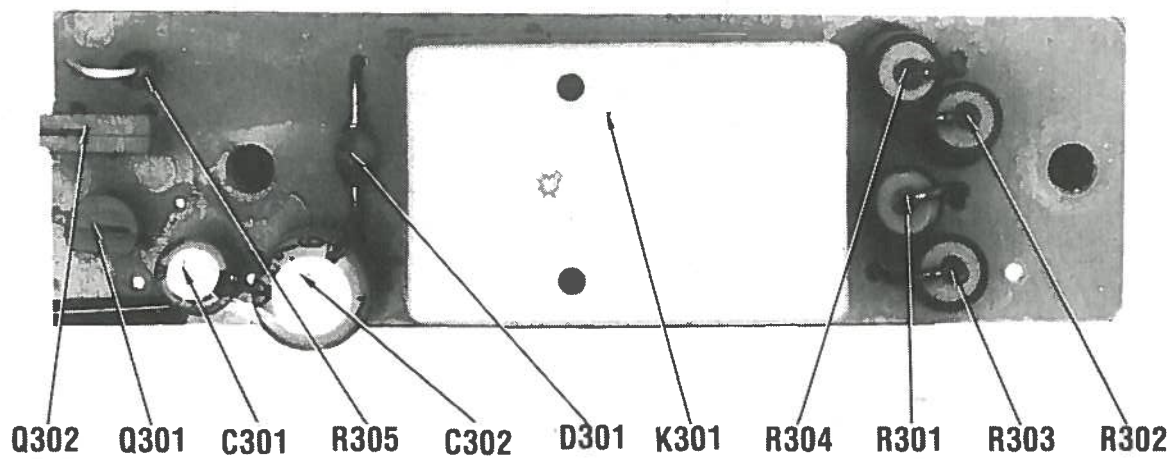
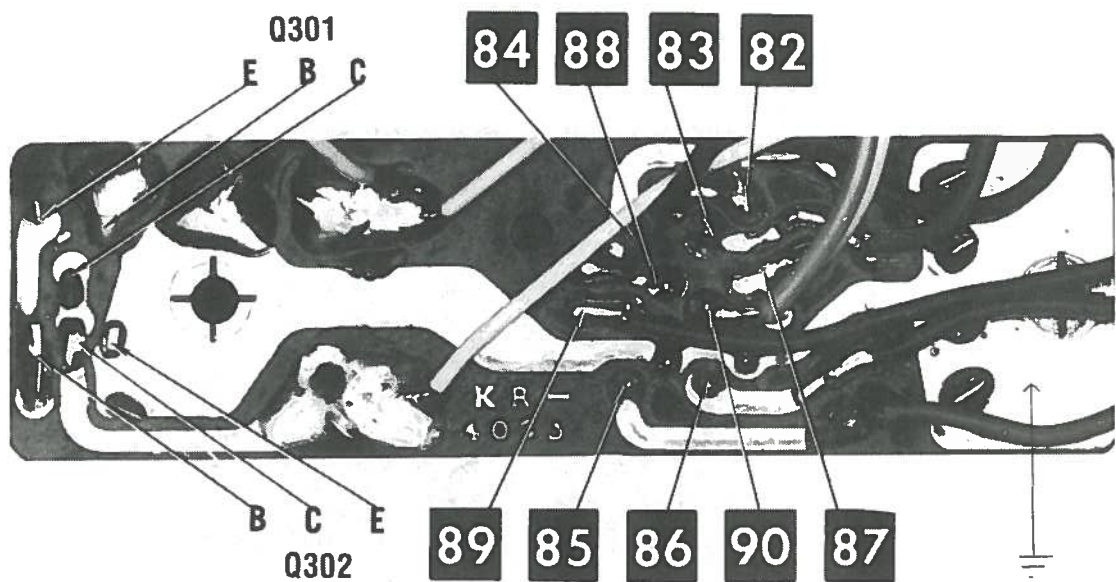
MAIN BOARD



MAIN BOARD

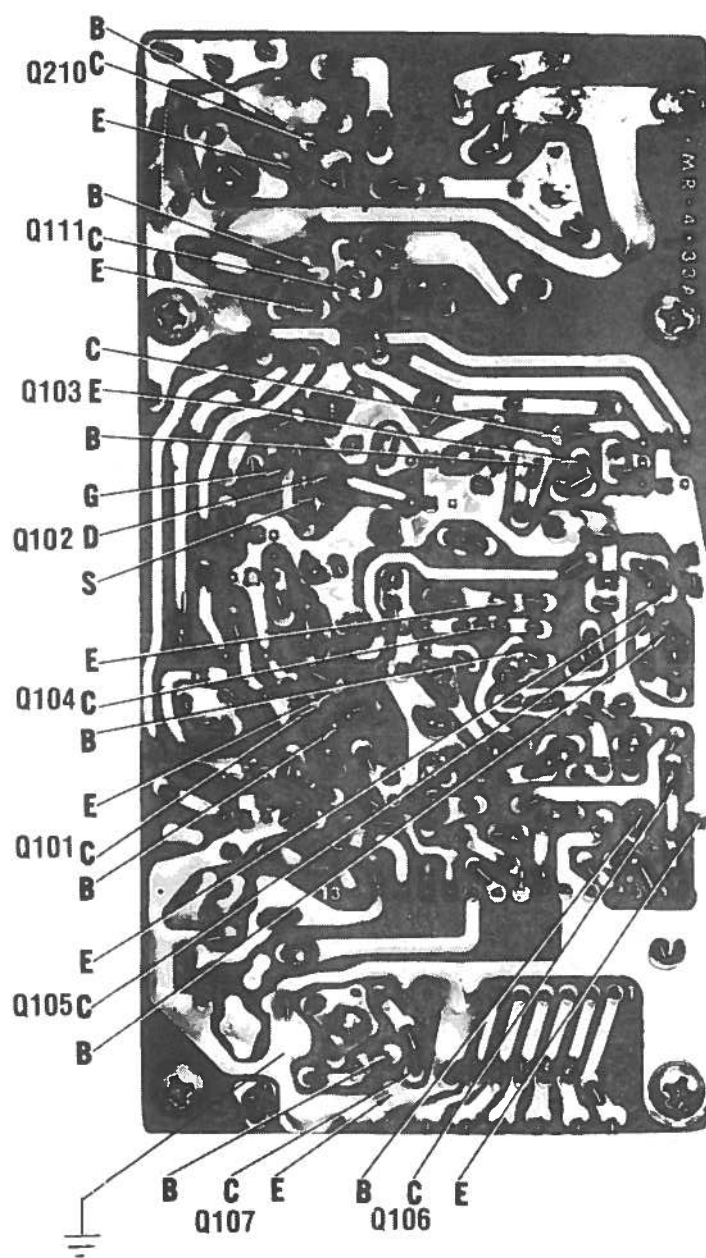


MAIN BOARD

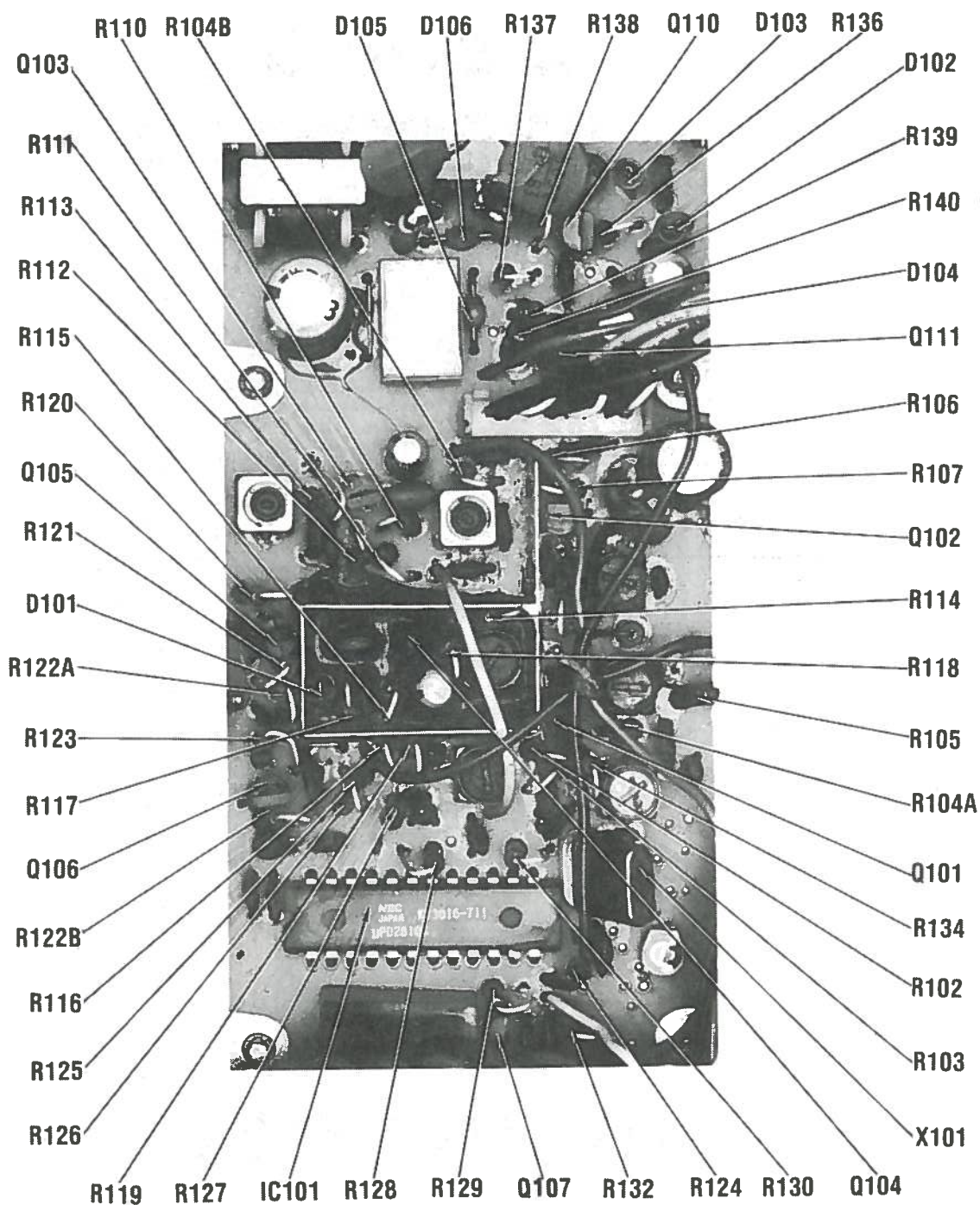


RELAY BOARD

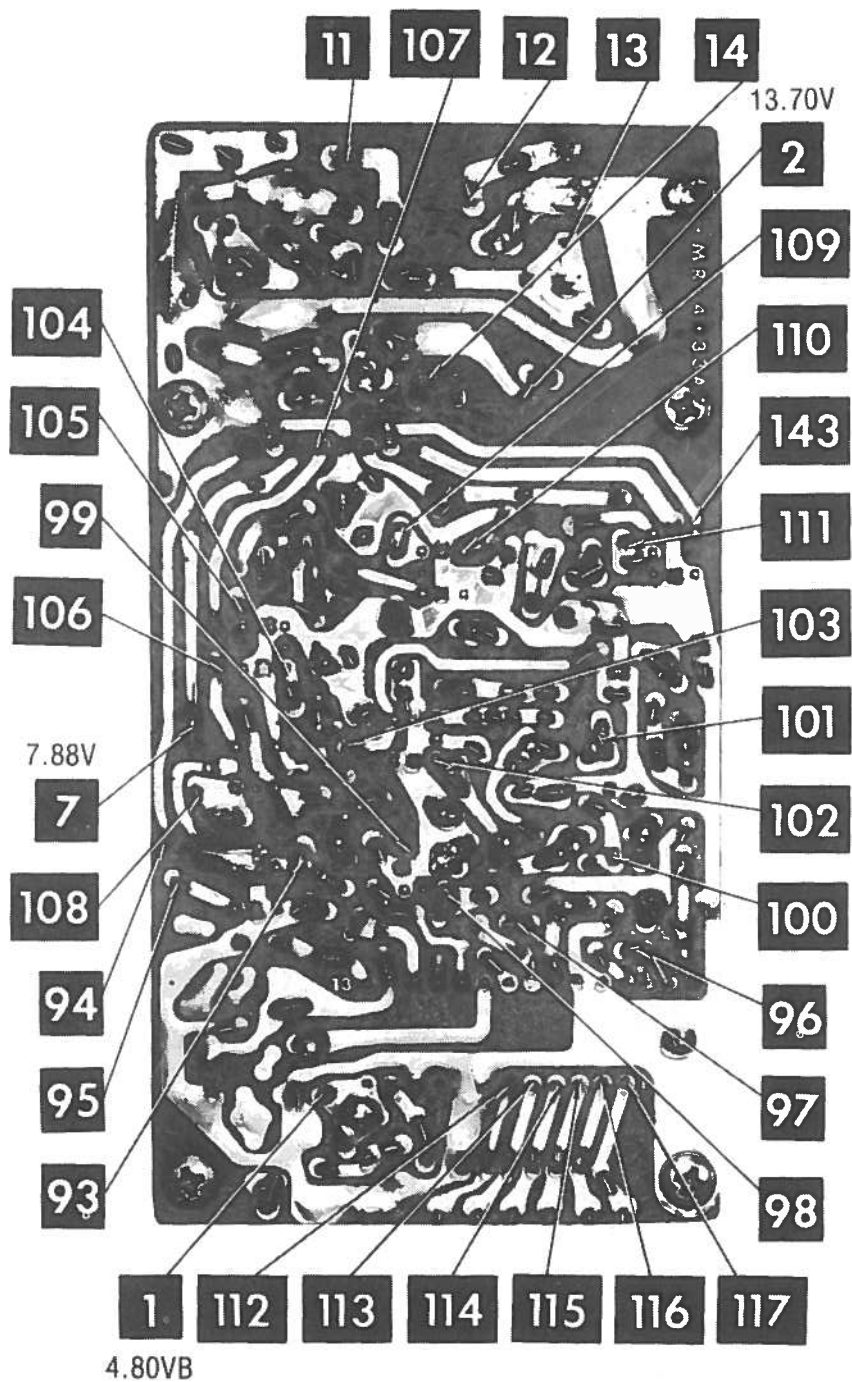
AUDIOVOX MODEL MDU-6000



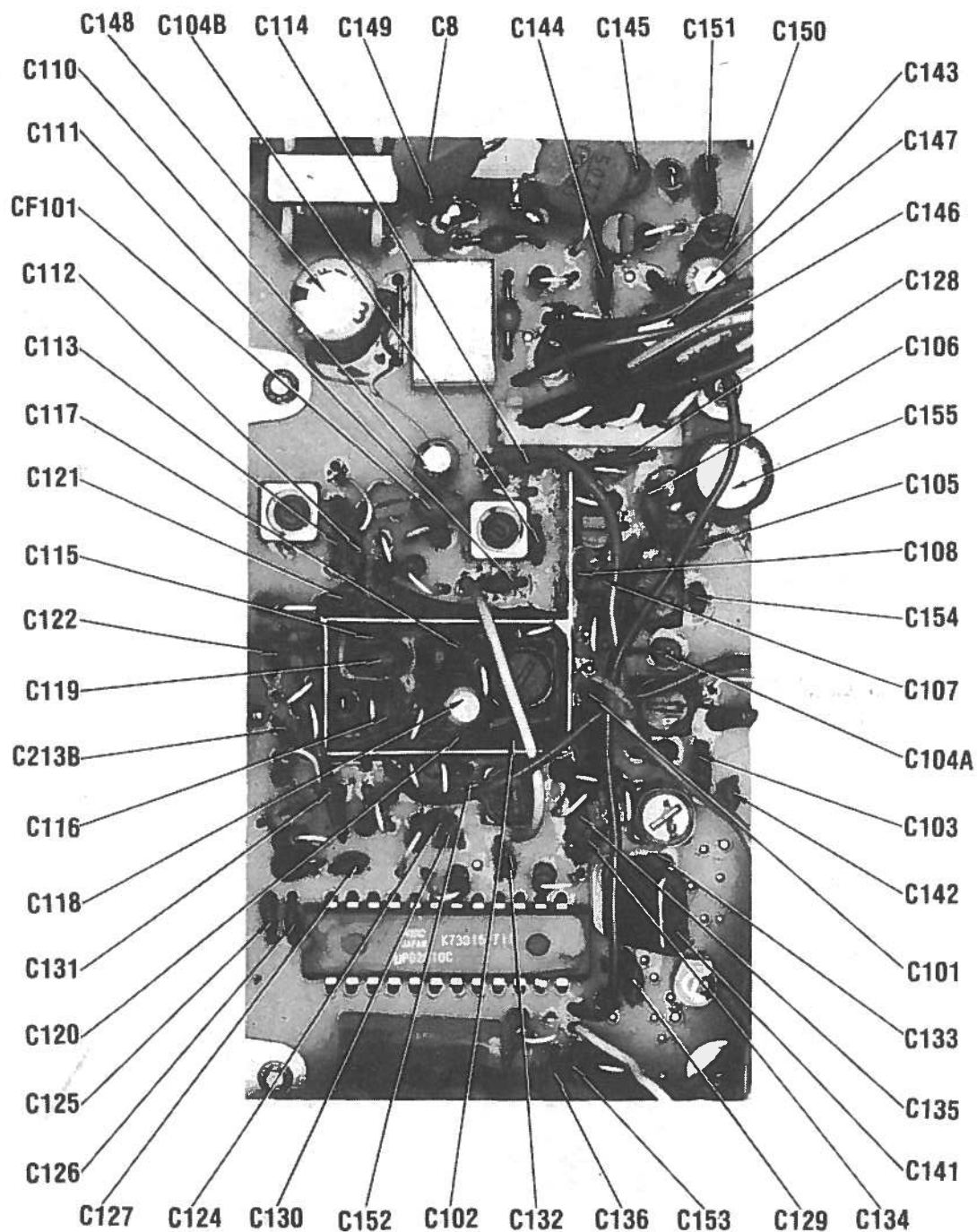
PLL BOARD



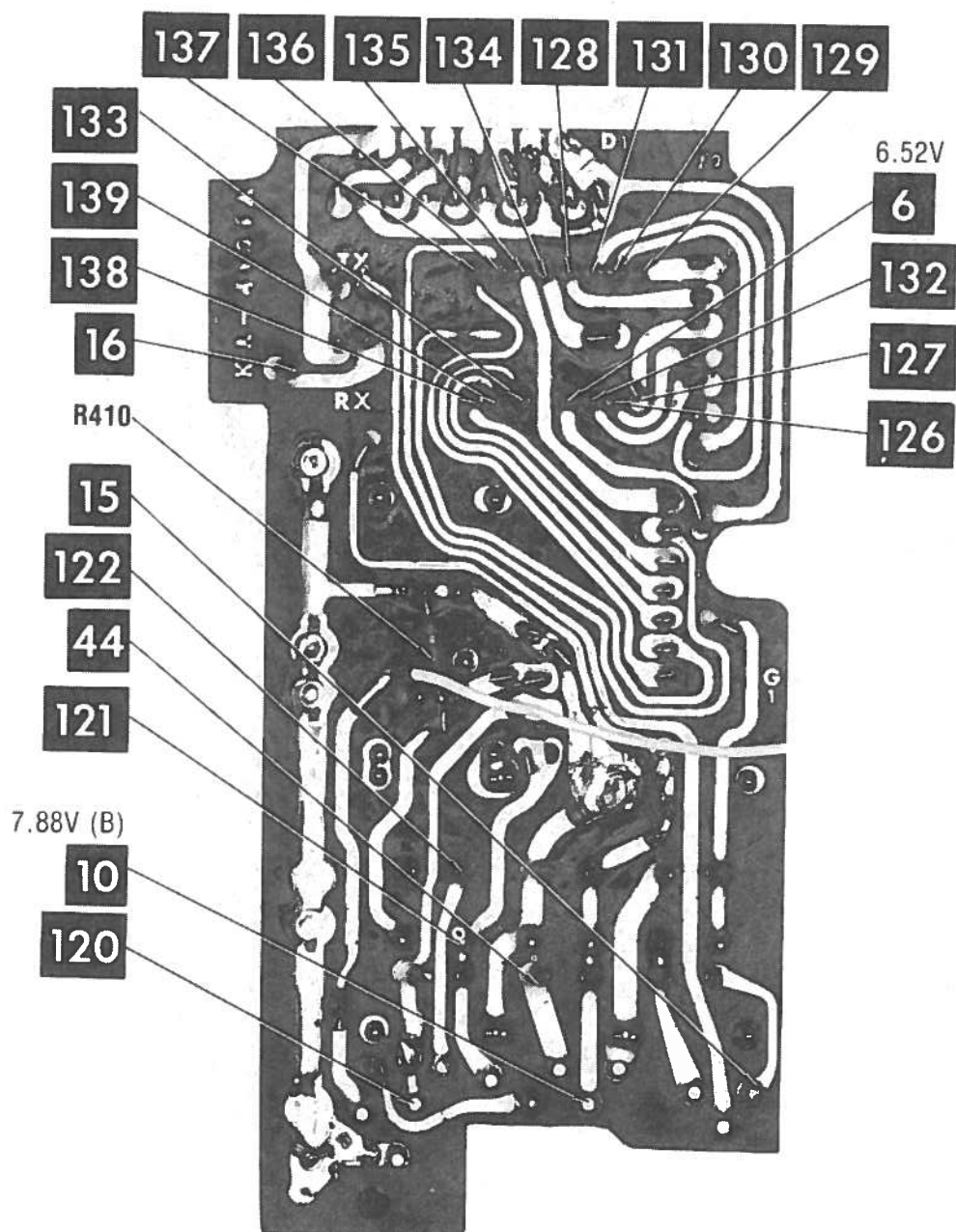
PLL BOARD



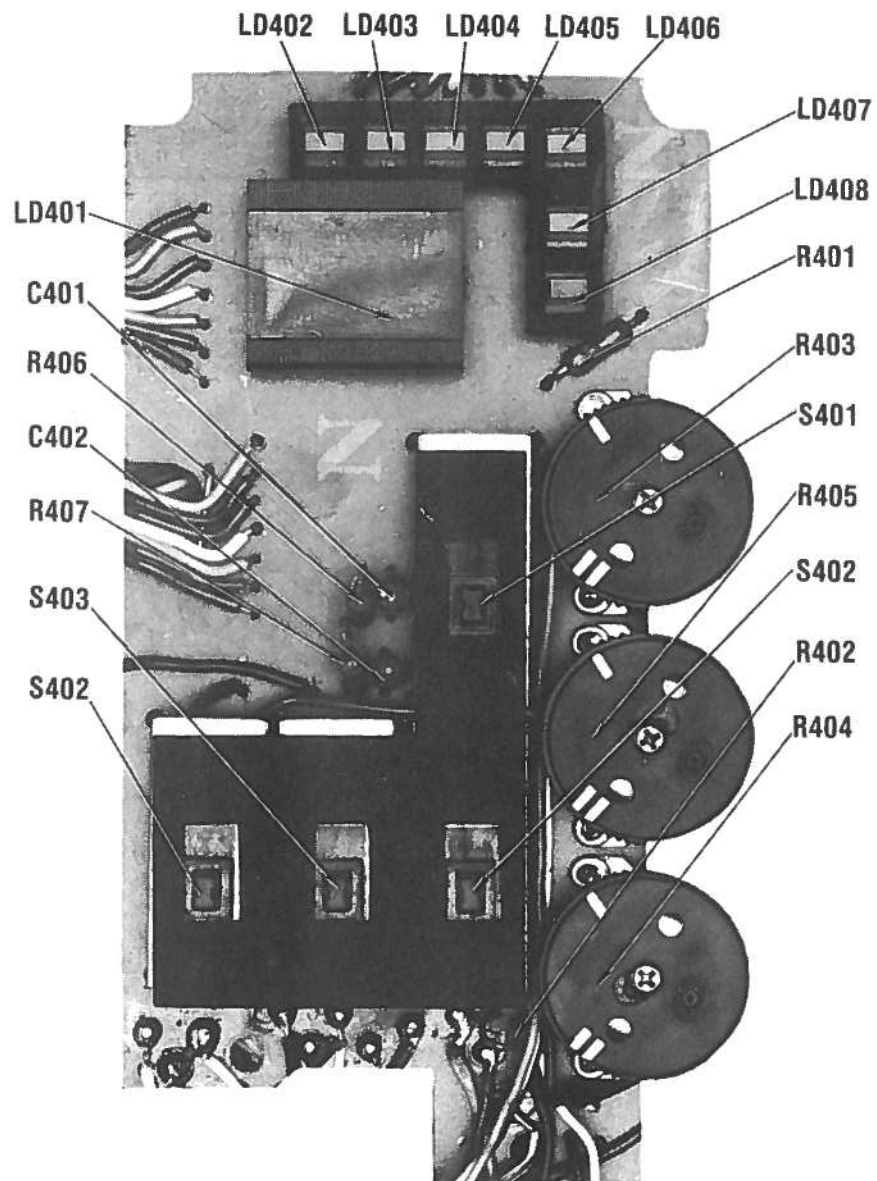
PLL BOARD



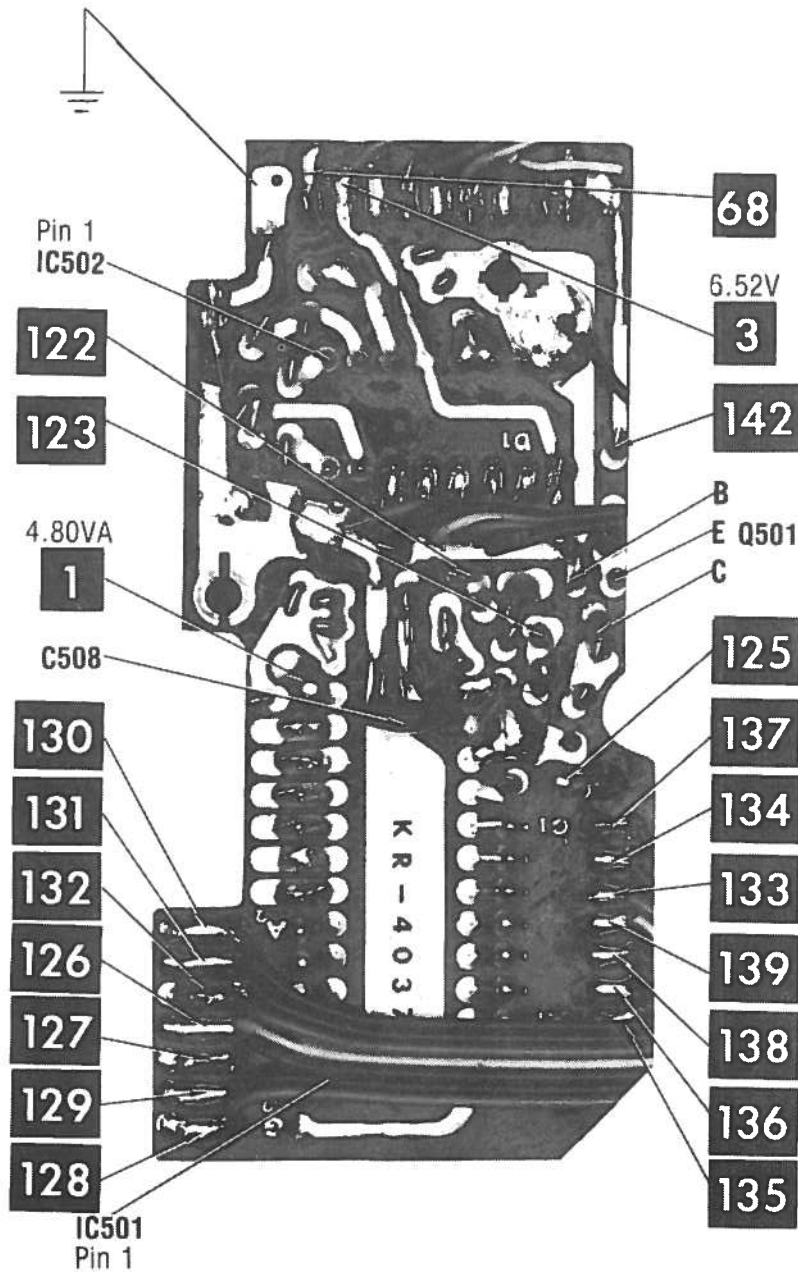
PLL BOARD



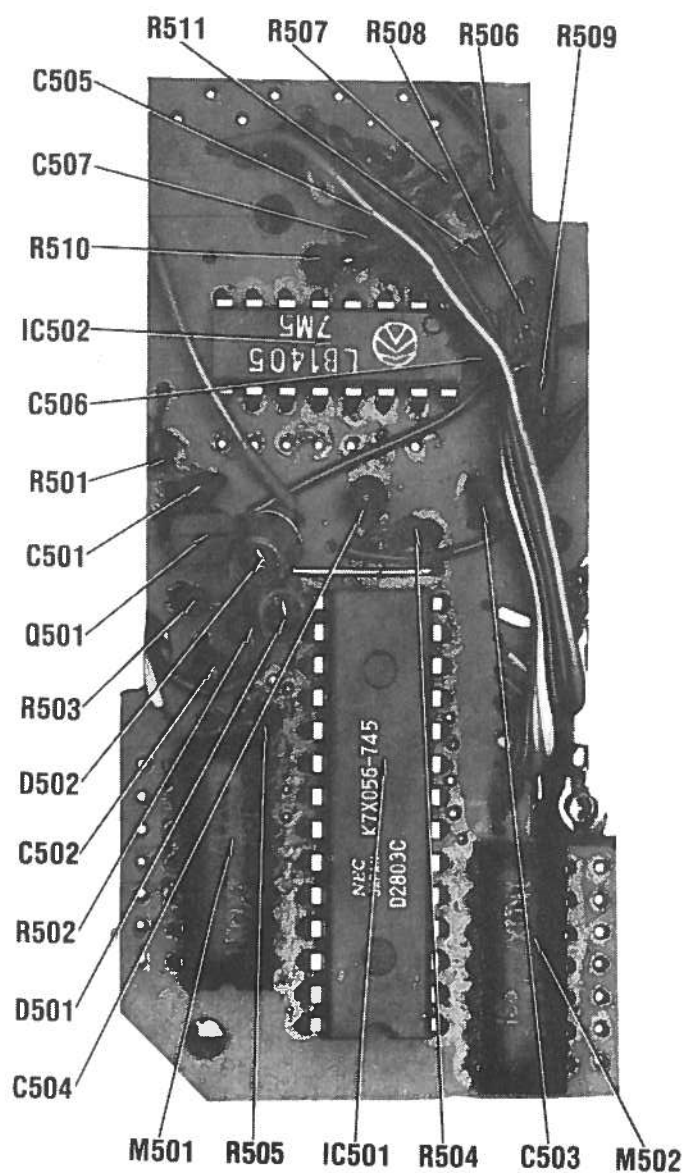
MIC BOARD



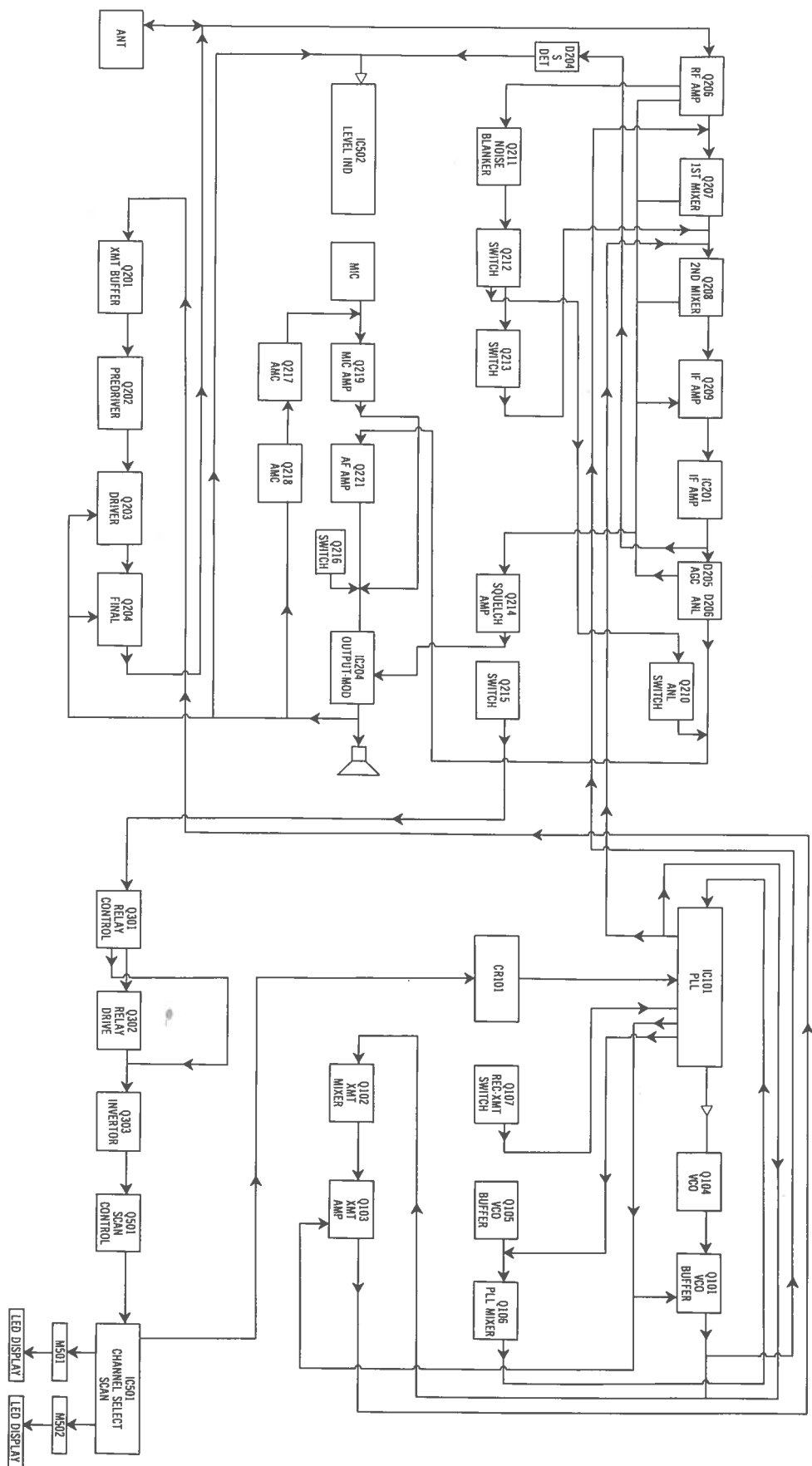
MIC BOARD



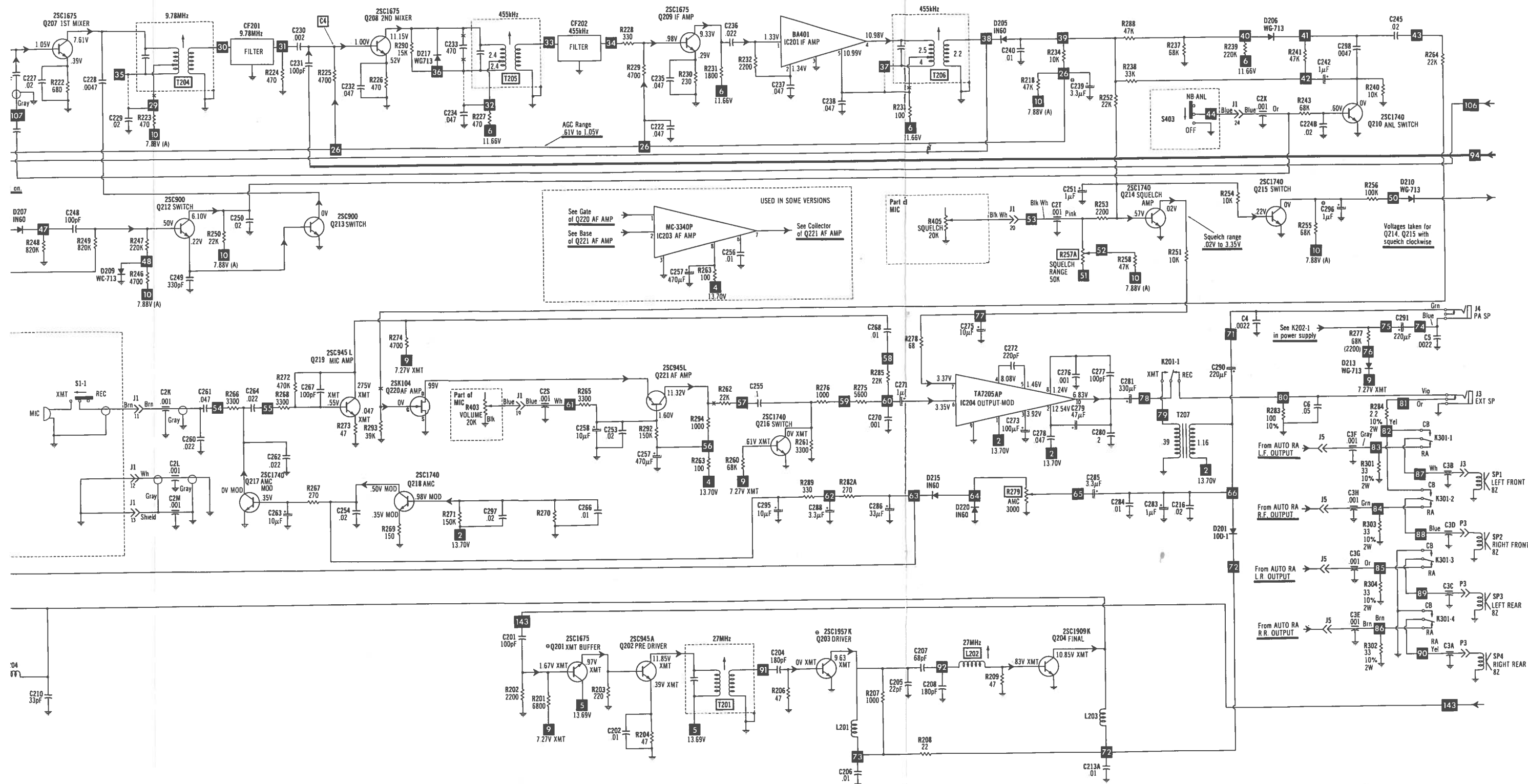
CH SEL. & SCAN LEVEL BOARD



CH SEL. & SCAN LEVEL BOARD



BLOCK DIAGRAM



MAIN SCHEMATIC

AUDIOVOX MODEL MDU-6000

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.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D101	ITT-310		GE-90		HEPR2503	REN 614		RT-262	ECG614		WEP200	
D102	RD-5.1EB	44T-300-91	GE-90		HEPR2503	REN 614		RT-262	ECG614		WEP200	
D103	RD-10EB	44T-300-92	GEZD-5.1				SK3056	RT-235		1N4733A	WEP1103	103-290
D104	RD-7.5EB	44T-300-93	GEZD-10	ZB108		REN 140	SK3061	RT-241	ECG140A	TM140/**	WEP1110	103-Z9010
D105	10D-1	44T-300-94	GEZD-7.5	ZB7.58		REN 138	SK3059	RT-239	ECG138A	TM138/**	WEP1107	103-Z9002
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D106	10D-1	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D201	10D-1	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D202	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP156	212-76-02
D203	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D204	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D205	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D206	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D207	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D208	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D209	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D210	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D211	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D212	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D213	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D214	10D-1	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D215	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D216	10D-1	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D217	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D220	1N60	44T-300-97	1N60	PTC206	HEPR9135	REN 109	SK3088	RT-263	ECG109	TM109/**	WEP134	103-Z9001
D301	10D-1	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
	F-14A	44T-300-95	GE-504A	PTC201	HEPRO052	REN 116	SK3311	RT-213	ECG116	TM116	WEP156	212-76-02
D501	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
D502	WG-713	44T-300-96	GE-300	PTC214	HEPRO0602	REN 177	SK3100	RT-218	ECG177	TM177	WEP1062	103-131
IC101	UPD2810C	44T-300-98										
IC201	BA401	44T-300-99	GEIC-91				SK3225		ECG1104	TA7060P	WEP944	
IC202	78L08						SK3630		ECG964			
	UPC78L08	44T-300-100					SK3630		ECG964			
IC203	MC-3340P	44T-300-101										
IC204	TA7205AP	44T-300-102	GEIC-179	PTC780		REN 1155	SK3231	TVM-81	ECG1155	TM1155	WEP949	
IC501	D2803C											
	UPD2803C	44T-300-358										
IC502	L81405	44T-300-359										
Q101	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q102	2SK49F	44T-300-105	GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312	TM312	WEP920	121-756
	2SK49	44T-300-106	GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312	TM312	WEP920	121-756
Q103	2SC945A	44T-300-104	GE-213	PTC132*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
Q104	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q105	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q106	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q107	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q110	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q111	2SC1449	44T-300-107	GE-270	PTC180	HEPS0015*	REN 295	SK3253	RT-162	ECG295	TM295	WEP701	121-880
Q201	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q202	2SC945A	44T-300-106	GE-212	PTC121*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
Q203	2SC1957K		GE-270	PTC180	HEPS3044	REN 295	SK3197		ECG295	TM295	WEP913	121-880
	2SC1957		GE-270	PTC180	HEPS3044	REN 295	SK3197		ECG295	TM295	WEP913	121-880
Q204	2SC1909K	44T-300-108	GE-215	PTC186		REN 235	SK3197	RT-146	ECG235	TM235	WEP785	121-Z9039
	2SC1909	44T-300-109	GE-215	PTC186		REN 235	SK3197	RT-146	ECG235	TM235	WEP785	121-Z9039
Q205	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q206	2SC1674	44T-300-110	GE-61	PTC132*	HEPS0010*	REN 229*	SK3246	RT-308	ECG229*	TM229*	WEP784	121-Z9021
Q207	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q208	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q209	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q210	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q211	2SC1675	44T-300-104	GE-213	PTC132*	HEPS0025*	REN 229*	SK3122	RT-308	ECG229*	TM229*	WEP773	121-Z9021
Q212	2SC900	44T-300-111	GE-62	PTC139*	HEPS0015*	REN 199	SK3124	RT-302	ECG199	TM199/**	WEP66	121-972
Q213	2SC900	44T-300-111	GE-62	PTC139*	HEPS0015*	REN 199	SK3124	RT-302	ECG199	TM199/**	WEP66	121-972
Q214	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q215	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q216	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q217	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q218	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q219	2SC945L	44T-300-112	GE-212	PTC121*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
	2SC945Q	44T-300-112	GE-212	PTC121*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
Q220	2SK104	44T-300-113	GE-FET-2	PTC161	HEPF0021	REN 132	SK3448	RT-175	ECG312	TM312	WEP920	121-756
Q221	2SC945L	44T-300-112	GE-212	PTC121*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
	2SC945Q	44T-300-112	GE-212	PTC121*	HEPS0015*	REN 199	SK3124	RT-107A	ECG199	TM199/**	WEP1945	121-972
Q301	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q302	2SC1449	44T-300-107	GE-270	PTC180		REN 295	SK3253	RT-162	ECG295	TM295	WEP701	121-880
Q303	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*
Q501	2SC1740	44T-300-103	GE-62	PTC121*	HEPS0015*	REN 123A*	SK3122	RT-109*	ECG123A*	TM123A*	WEP736*	121-Z9000A*

* Lead configuration may vary from original.
/** Also available as exact type replacement.

AUDIOVOX MODEL MDU-6000

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFRG. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C10	3.3 35V	44T-300-4	PC5-50	VTT3R3A50	QV1-25	EV-1618
C110	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C118	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C130	1 25V	44T-300-15		TDC105M035EL		SD35-19
C143	47 10V	44T-300-21	PC50-16	VTT47D16	QV1-73	EV-1226
C145	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C147	47 10V	44T-300-21	PC50-16	VTT47D16	QV1-73	EV-1226
C148	470 16V	44T-300-22	PC500-16	VTT470K16	QV1-151	EV-1250
C152	2.2 16V	44T-300-23		TDC225M035FL		SD35-2R29
C155	33 16V	44T-300-24	PC30-25	VTT33D25	QV1-63	EV-1325
C239	3.3 35V	44T-300-4	PC5-50	VTT3R3A50	QV1-25	EV-1618
C242	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C243	47 16V	44T-300-31	PC50-16	VTT47D16	QV1-73	EV-1226
C251	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C257	470 16V	44T-300-22	PC500-16	VTT470K16	QV1-151	EV-1250
C258	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C263	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C269	33 16V	44T-300-33	PC30-25	VTT33D25	QV1-63	EV-1325
C271	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C273	100 10V	44T-300-34	PC100-10	VTT100E10	QV1-93	EV-1130
C274	470 16V	44T-300-22	PC500-16	VTT470K16	QV1-151	EV-1250
C275	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C279	47 16V	44T-300-31	PC50-16	VTT47D16	QV1-73	EV-1226
C281	330 16V	44T-300-24	WBR300-35*	VTT330H16	QV1-133	EV-1245
C283	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C285	3.3 35V	44T-300-4	PC5-50	VTT3R3A50	QV1-25	EV-1618
C286	33 16V	44T-300-33	PC30-25	VTT33D25	QV1-63	EV-1325
C288	3.3 35V	44T-300-4	PC5-50	VTT3R3A50	QV1-25	EV-1618
C289	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C290	220 16V	44T-300-37	PC250-25	VTT220H16	QV1-117	EV-1240
C291	220 16V	44T-300-37	PC250-25	VTT220H16	QV1-117	EV-1240
C295	10 16V	44T-300-9	PC10-25	VTT10B25	QV1-41	EV-1222
C296	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C301	1 50V	44T-300-7	PC1-50	VTT1A50	QV1-11	EV-1615
C302	47 16V	44T-300-31	PC50-16	VTT47D16	QV1-73	EV-1226
C401	1 25V			TDC105M035EL		SD35-19
C402	1 25V			TDC105M035EL		SD35-19
C418	470 16V	44T-300-22	PC500-16	VTT470K16	QV1-151	EV-1250
C502	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
C504	.1 35V			TDC104M050EL	QDT1-2	SD50-R109

CAPACITORS

ITEM No.	RATING	MFRG. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C1	220 50V 10%			CD15FD221J03	SX322	QW1-35	MMA-221
C2A-Y	.001	44T-300-2					
C3A-H	.001	44T-300-3					
C4	.0022				GP222		10TS-D22
C5	.0022				GP222		10TS-D22
C6	.05		UK50-503		MAG5015		
C7	.05		UK50-503		MAG5015		
C8	.05		UK50-503		MAG5015		
C101	10 NPO 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C102	.02		UK50-223		MAG5012		
C103	.02		UK50-223		MAG5012		
C104A	1 50V	44-T300-6			CN0510		10TCC-V10
C104B	.01		UK50-103		MAG5011		
C105	22		DTZ-22	NP022	CN0422		10TCC-Q22
C106	3		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C107	3		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C108	.01		UK50-103		MAG5011		
C111	.01		UK50-103		MAG5011		
C112	.01		UK50-103		MAG5011		
C113	.01		UK50-103		MAG5011		
C114	.01		UK50-103		MAG5011		
C115	220		UK50-103		MAG5011		
C116	.02		DTZ-220				10TCC-T22
C117	7 NPO 50V		UK50-223	NP010	MAG5012		10TCC-Q10
C119	33 N220 50V 10%		DTZ-10	*	CN0410	*	10TCR-Q33
C120	.02		UK50-223		MAG5012		
C121	10 NPO 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C122	.022 50V		DC-253	MGPO25	TA125		TG-S25
C124	10 NPO 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C125	220 10%		DTZ-220				10TCC-T22
C126	220 10%		DTZ-220				10TCC-T22
C127	.01 50V		UK50-103		MAG5011		
C128	.02		UK50-223		MAG5012		
C129	.0068 50V 10%			WMF1D68	M192P6829R8	QFT2-73	1FT-D68
C131	.047 50V		UK50-503		MAG5015		

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
C132	5 NPO 50V		DTZ-6R8	NP06P8	CN0568		10TCC-V68
C133	47 N750 50V		DTN-47	N47	CN7447		10TCU-Q47
C134	22 NPO 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C135	3		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C136	.02		UK50-223		MAG5012		
C139	20 50V						
C141	22 NPO 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C142	220		DTZ-220				10TCC-T22
C144	.02		UK50-223		MAG5012		
C146	.01		UK50-103		MAG5011		
C149	.02		UK50-223		MAG5012		
C150	.02		UK50-223		MAG5012		
C151	.02		UK50-223		MAG5012		
C153	.02		UK50-223		MAG5012		
C154	220		DTZ-220				10TCC-T22
C201	100		DTZ-100	NP0100	CN0310		10TCC-T10
C202	.01		UK50-103		MAG5011		
C203	.01		UK50-103		MAG5011		
C204	180 10%		DTZ-180				10TCC-T18
C205	22		DTZ-22	NP022	CN0422		10TCC-Q22
C206	.01		UK50-103		MAG5011		
C207	68		DTZ-68	NP068	CN0468		10TCC-Q68
C208	180 5%		DTZ-180				10TCC-T18
C209	39 50V			CD15ED390J03	SX439	QW1-17	MMA-390
C210	33 50V			CD15ED330J03	SX433	QW1-15	MMA-330
C211	390 50V 10%			CD15FD391J03	SX339	QW1-41	MMA-391
C212	270 50V 5%			CD15FD271J03	SX327	QW1-37	MMA-271
C213A	.01		UK50-103		MAG5011		
C213B	15 NPO		DTZ-15	NP015	CN0415		10TCC-Q15
C214	220 10%			CD15FD221J03	SX322	QW1-35	MMA-221
C215	22		DTZ-22	NP022	CN0422		10TCC-Q22
C216	.02		UK50-223		MAG5012		
C217	2		DTZ-2R2		CN0522		10TCC-V22
C218	.01		UK50-103	NP02P2	MAG5011		
C219	.01		UK50-103		MAG5011		
C220	.01		UK50-103		MAG5011		
C221	.01		UK50-103		MAG5011		
C222	.047 50V		UK50-503		MAG5015		
C223	10 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C224A	.01		UK50-103		MAG5011		
C224B	.02		UK50-223		MAG5012		
C225	.02		UK50-223		MAG5012		
C226	330		DD-331	GP330	GP333		10TS-T33
C227	.02		UK50-223		MAG5012		
C228	.0047		DD-472	GP4700	GP247		5GA-D47
C229	.02		UK50-223		MAG5012		
C230	.022 50V		DC-253	MGP025	TA125		TG-S25
C231	100		DTZ-100	NP0100	CN0310		10TCC-T10
C232	.047 50V		UK50-503		MAG5015		
C233	470 50V 5%			CD15FD471J03	SX347	QW1-42	MMA-471
C234	.047 50V		UK50-503		MAG5015		
C235	.047 50V		UK50-503		MAG5015		
C236	.022 50V		DC-253	MGP025	TA125		TG-S25
C237	.047 50V		UK50-503		MAG5015		
C238	.047 50V		UK50-503		MAG5015		
C240	.01 50V		UK50-103		MAG5011		
C241	.01 16V		UK16-103		MAG1611		HY-420
C245	.022 50V		DC-253	MGP025	TA125		TG-S25
	.02		UK50-223		MAG5012		
C246	150		DTZ-150		CN0315		10TCC-T15
C247	.0047		DD-472	GP4700	GP247		5GA-D47
C248	100		DTZ-100	NP0100	CN0310		10TCC-T10
C249	330 10%		DD-331	GP330	GP333		10TS-T33
C250	.02		UK50-223		MAG5012		
C253	.02		UK50-223		MAG5012		
C254	.02		UK50-223		MAG5012		
C255	.1 25V		UK25-104		MAG2501		HY-750
C260	.022 50V		DC-253	MGP025	TA125		TG-S25
C261	.047 50V		UK50-503		MAG5015		
C262	.022 50V		DC-253	MGP025	TA125		TG-S25
C264	.022 50V		DC-253	MGP025	TA125		TG-S25
C266	.01		UK50-103		MAG5011		
C267	100		DTZ-100	NP0100	CN0310		10TCC-T10
C268	.01 50V		UK50-103		MAG5011		
C270	.001		DD-102		GP210		10TS-D10
C272	220 10%		DTZ-220				10TCC-T22
C276	.001		DD-102		GP210		10TS-D10
C277	100 5%		DTZ-100	NP0100	CN0310	QFT2-171	10TCC-T10
C278	.047 50V 10%			DPMS2547	H192P4739R8		1FT-S47
C280	.2 12V						HY-470
C282	.01		UK16-204				
C284	.01		UK50-103		MAG5011		
C287	.02		UK50-223		MAG5012		
C293	.02		UK50-223		MAG5012		
C294	.02		UK50-223		MAG5012		
C297	.02		UK50-223		MAG5012		
C298	.0047		DD-472	GP4700	GP247		5GA-D47
C299	.02		UK50-223		MAG5012		
C501	.01		UK50-103		MAG5011		
C503	.01		UK50-103		MAG5011		
C505	.01		UK50-103		MAG5011		
C506	.001		DD-102		GP210		10TS-D10
C507	.01		UK50-103		MAG5011		
C508	.033 16V		UK16-333		MAG16133		HY-630

AUDIOVOX MODEL MDU-6000

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.	MALLORY PART No.	TRW PART No.
R236	Signal Lever Indicator	50K	44T-300-83	T-50K(2)	MTC54L1(2)	X201R503B(2)
R257A	Squelch Range	50K	44T-300-84			U260R503B
R279	AMC	3000	44T-300-85			U260R502B
R281	Mod Level	50K	44T-300-83	T-50K(2)	MTC54L1(2)	X201R503B(2)
R403	Volume	20K	44T-300-367			
R404	RF Gain	20K	44T-300-368			
R405	Squelch	20K	44T-300-368			

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

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	PLL Mixer	44T-300-51	SL-270		
L103	RF Choke	44T-300-53	SL-271		
L201	RF Choke	44T-300-54	CL-8-7		
L202	Driver (27MHz)	44T-300-55	HL-550		
L203	Final	44T-300-53	SL-271		
L204	Loading Final	44T-300-56	HL-650		
L205	Pi Filter	44T-300-57	CL-8-5		
L206	TVI Trap (54MHz)	44T-300-58	HL-750		
L207	Antenna Matchings	44T-300-56	HL-650		
L208	RF Choke (4.7uH)	44T-300-59	SL-4.7		
T101	VCO Buffer (17MHz)	44T-300-121	RT-113		
T102	VCO Buffer (17MHz)	44T-300-121	RT-113		
T103	XMT Mixer (27MHz)	44T-300-122	RT-104		
T104	XMT Amp (27MHz)	44T-300-122	RT-104		
T105	VCO (17MHz)	44T-300-123	RT-112		
T106	PLL (15.360MHz)	44T-300-124	RT-107		
T107	PLL (10.240MHz)	44T-300-125	IT-833B		
T201	Predriver (27MHz)	44T-300-126	RT-114		
T202	Rec Antenna (27MHz)	44T-300-127	RT-115		
T203	Rec RF (27MHz)	44T-300-128	RT-116		
T204	Rec Mixer (9.785MHz)	44T-300-125	IT-833B		
T205	Rec Mixer (455kHz)	44T-300-129	IT-211A (IT-201A)		
T206	Rec IF (455kHz)	44T-300-130	IT-201C		

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.	
L102	1.8A	12.2	3.6mH	44T-300-52			

TRANSFORMER

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T207	1	2.5		44T-300-131			

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA					
		PART No.		BUSS PART No.		LITTELFUSE PART No.	
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	WORKMAN PART No.
F1	2A Quick Acting			AGC-2	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	*										

* MIC contains all functions and controls for unit.
MIC connector is 26 pin male.

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF101	Filter	44T-300-71	27MHz
CF201	Filter	44T-300-72	9.785MHz
CF202	Filter	44T-300-73	455kHz
CR101	Component Combination	44T-300-74	
J1	Plug	44T-300-383	Mic (Cable Ass'y. with mike connector)
J2	Plug	44T-300-324	CB Antenna
J3	Jack	44T-300-325	External Speaker
J4	Jack	44T-300-326	PA Speaker
J5	Plug	44T-300-305	
	Socket	44T-300-304	
K101	Relay	44T-300-75	Power
K201	Relay	44T-300-76	Rec.
K202	Relay	44T-300-75	PA
K301	Relay	44T-300-77	Speaker
LD401	LED	44T-300-360	Channel Indicator Readout (Each of seven segments 1.98V @ 4mA)
LD402	LED	44T-300-361	S/Mod Indicator, Red (1.85V @ 3.5mA)
LD403	LED	44T-300-361	S/Mod Indicator, Red (1.85V @ 3.5mA)
LD404	LED	44T-300-361	S/Mod Indicator, Red (1.85V @ 3.5mA)
LD405	LED	44T-300-361	S/Mod Indicator, Red (1.85V @ 3.5mA)
LD406	LED	44T-300-361	S/Mod Indicator, Red (1.85V @ 3.5mA)
LD407	LED	44T-300-361	On Air, Red (1.90V @ 7.5mA)
LD408	LED	44T-300-362	RX, Green (1.90V @ 22mA)
P2	Plug	44T-300-444	DC Power
P3	Plug	44T-300-305	
S1	Switch	44T-300-378-2	XHT/Rec
S401	Switch	44T-300-379	Ch. 9 Norm.
S402	Switch	44T-300-379	PA/CB
S403	Switch	44T-300-379	NB/An1
S404	Switch	44T-300-379	Auto/Man
S601	Switch	44T-300-380	Power
S602	Switch	44T-300-380	Lock
S603	Switch	44T-300-381	Up
S604	Switch	44T-300-381	Down
X101	Crystal	44T-300-41	10.240MHz
	Printed Circuit Board	44T-300-311	CB
	Printed Circuit Board	44T-300-312	PLL
	Printed Circuit Board	44T-300-313	Relay
	Printed Circuit Board	44T-300-401	IC
	Printed Circuit Board	44T-300-402	Indicator
	Printed Circuit Board	44T-300-403	Power & Lock Switch

AUDIOVOX MODEL MDU-6000

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

ITEM	PART No.	ITEM	PART No.
Cover, Bottom	44T-300-308	Knob, PA/CB & Auto/Man	44T-300-396
Cover, Top	44T-300-309	Knob, PTT	44T-300-397
Mic Cabinet Back	44T-300-389	Knob, Up	44T-300-398
Mic Cabinet Front	44T-300-390	Knobs, Control	44T-300-399
Knob, Down	44T-300-395		

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')