



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 582

ROYCE MODEL 582

MANUFACTURER'S SPECIFICATIONS

RECEIVER

- | | |
|---------------------------|------------------------------------|
| 1. Frequency Range (MHz) | : 26.965 ~ 27.405 |
| 2. Sensitivity | : 0.5 μ V 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 ohms | : More than 2W at 10% distortion |
| at 4 ohms | : More than 3.5W at 10% distortion |
| 6. Audio fidelity | |
| (1KHz=0dB 6dB down) | : 400Hz ~ 2,000Hz |
| 7. AGC figure of merit | : More than 80dB |
| 8. Squelch Sensitivity | : Less than 0.5 μ V |
| (Threshold) | |
| 9. Spurious Rejection | : More than 45dB |

TRANSMITTER

- | | |
|--------------------------|-------------------|
| 1. Frequency Range (MHz) | : 26.965 ~ 27.405 |
| 2. RF Power Output | : 4 W |
| 3. Modulation Capability | : More than 80% |
| 4. Spurious Suppression | : More than 60dB |
| 5. Frequency Tolerance | : $\pm 0.005\%$ |

Courtesy of the Manufacturer

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

© 1979 Howard W. Sams & Co., Inc. Printed in U. S. of America

9CE1066

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:
T101, T102, T301, T302, T401 thru T405 9440
L303 8728, 9304, 9089
T103 5000, 5009, 8276, 8728, 9089
CT401, CT402 5000, 8276, 9089

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (CF401 output).	Ch. 19	CT401	Adjust for 10.240MHz.
Input of DC meter to TP2 (IC402 Pin 6).	Ch. 40	T401	Adjust for 3.00 volts. Check for approximately 1.50 volts on channel 1.
Input of oscilloscope to TP3 (IC101 Pin 21).	Ch. 19	CT402	Adjust for maximum RF (40mV p-p typical). (See Figure 1.)
Input of frequency counter to TP4 (IC402 Pin 1).	Ch. 1		Check for 17.180MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of frequency counter to TP4 (IC402 Pin 1).	Ch. 1, XMT		Check for 16.725MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP5 (T405 Secondary).	Ch. 19, XMT	T403, T404, T405	Adjust for maximum RF (.2 volts p-p typical). (See Figure 2.)
Input of frequency counter to TP5 (T405 Secondary).	Ch. 1, XMT		Check for 26.965MHz. 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: Squelch MINIMUM, ANL Off.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to TP6 (IC101 Pin 17). 455kHz, 1000Hz @ 30% modulation.	Ch. 19	T103	Adjust for maximum audio output.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T102, T101	Adjust for maximum audio output. Readjust T601 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: Squelch MINIMUM, ANL Off.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 1uV.	Ch. 19 Volume Maximum	VR101	AGC Adjust for 2.00 volts RMS (.5 watt) audio output.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 1000uV.	Ch. 19 Squelch Maximum	VR102	SQUELCH RANGE Adjust so squelch just breaks.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19	VR103	S METER Adjust for 9 on S scale of meter.

ROYCE MODEL 582

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	TRANSCIVER	ADJUST	REMARKS
Input of RF wattmeter to antenna input.	Ch. 19, XMT	T301,T302	Adjust for maximum RF output.
Input of RF wattmeter to antenna input.	Ch. 19, XMT	L303	Adjust for 4.0 watts RF output maximum.

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	TRANSCIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 30mV audio signal at Mic input.	Ch. 19, XMT	VR201	PWR AMC Adjust for 90% modulation maximum. (See Figure 3.)

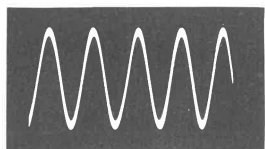


FIGURE 1

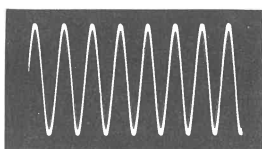


FIGURE 2

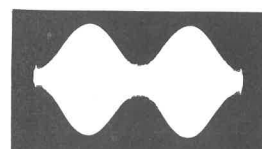
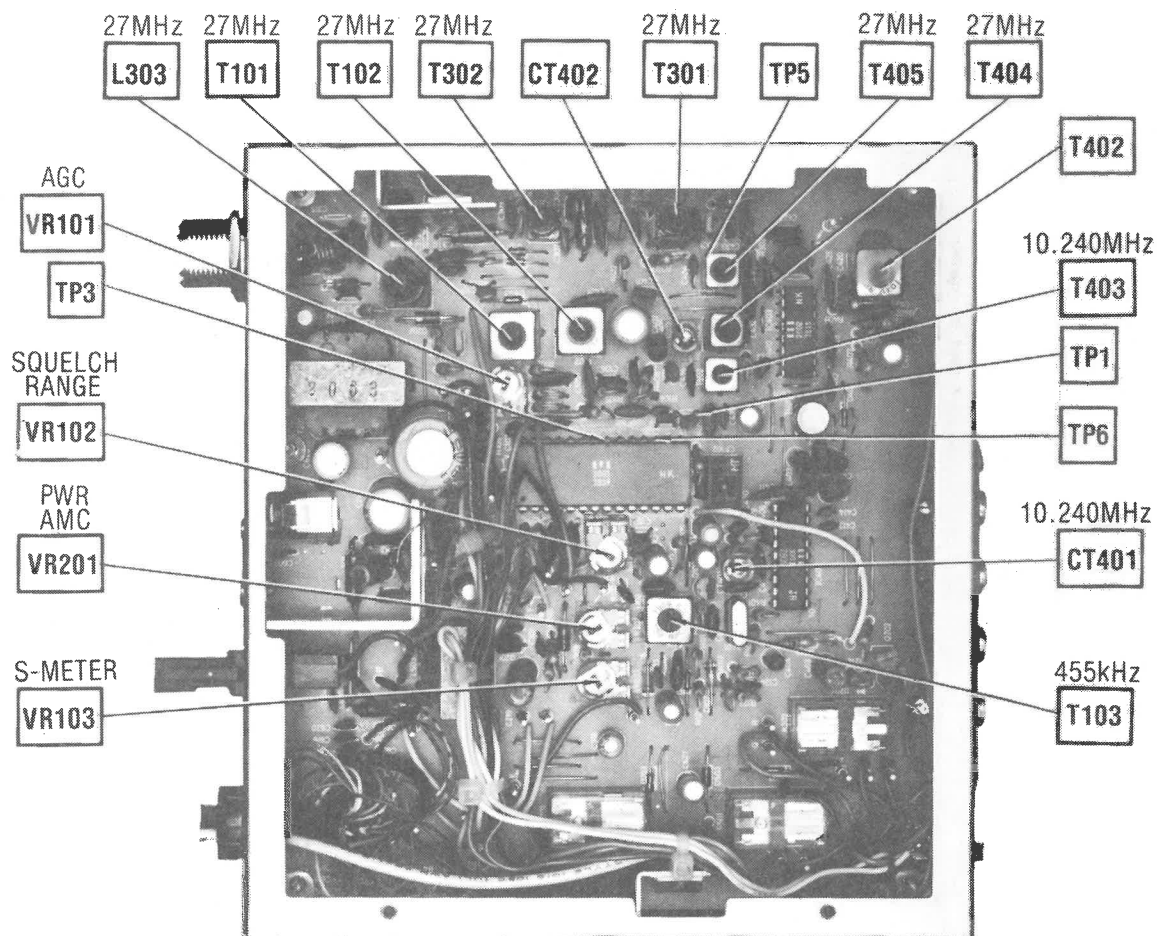


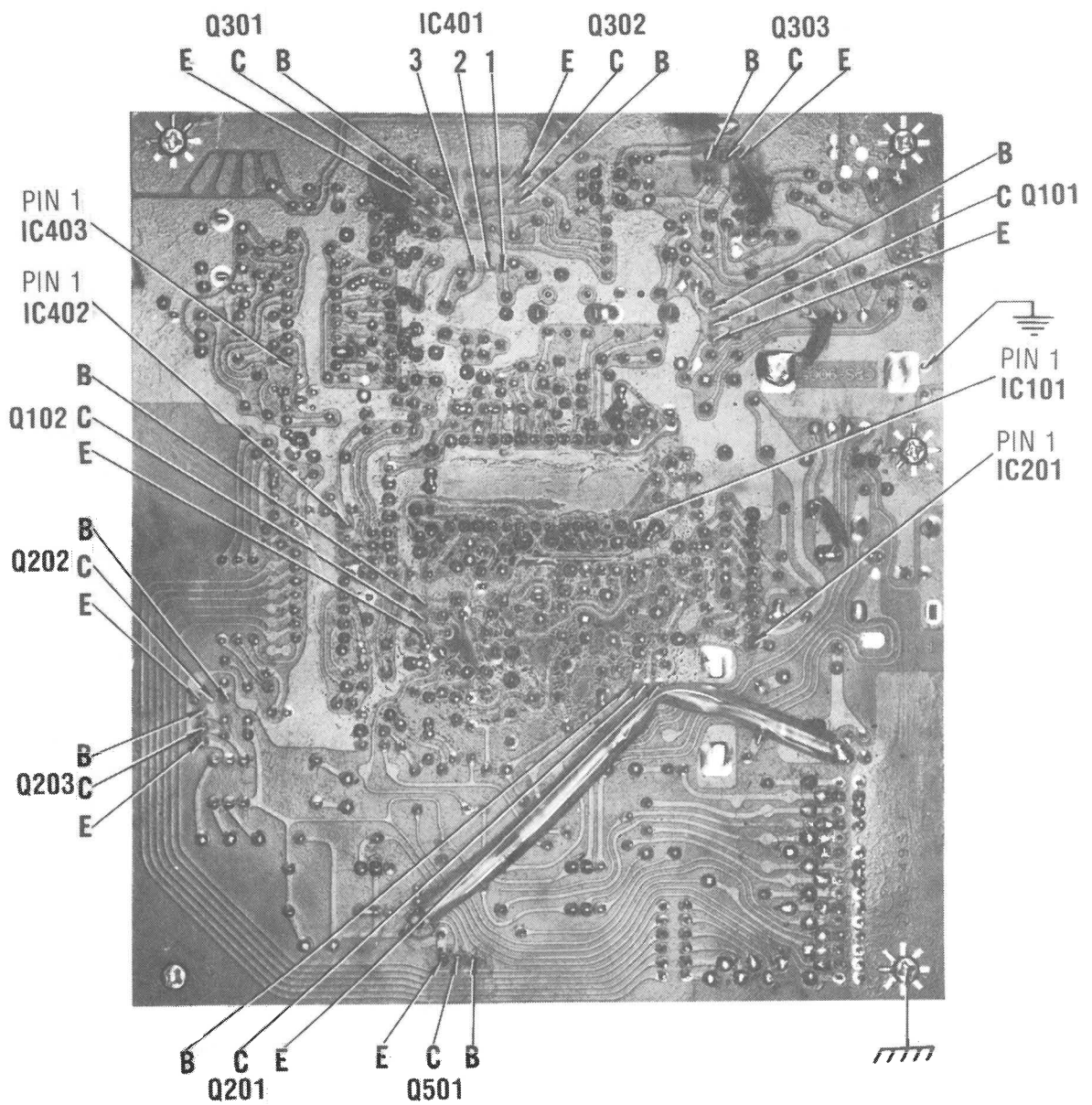
FIGURE 3

TRUTH CHART

C H A N N E L	1 = 5.80 Volts 0 = 0 Volts								REC VCO OUTPUT IN MHz AT TP4	XMT VCO OUTPUT IN MHz AT TP4	XMT SYNTH OUTPUT IN MHz AT TP5
	CHANNEL INPUT CODES										
	IC501 PINS										
	11	12	13	14	15	16					
1	0	0	0	0	0	0			17.180	16.725	26.965
2	0	0	0	0	0	1			17.190	16.735	26.975
3	0	0	0	0	1	0			17.200	16.745	26.985
4	0	0	0	1	0	0			17.220	16.765	27.005
5	0	0	0	1	0	1			17.230	16.775	27.015
6	0	0	0	1	1	0			17.240	16.785	27.025
7	0	0	0	1	1	1			17.250	16.795	27.035
8	0	0	1	0	0	1			17.270	16.815	27.055
9	0	0	1	0	1	0			17.280	16.825	27.065
10	0	0	1	0	1	1			17.290	16.835	27.085
11	0	0	1	1	0	0			17.300	16.845	27.095
12	0	0	1	1	1	0			17.320	16.865	27.105
13	0	0	1	1	1	1			17.330	16.875	27.115
14	0	1	0	0	0	0			17.340	16.885	27.125
15	0	1	0	0	0	1			17.350	16.895	27.135
16	0	1	0	0	1	1			17.370	16.915	27.155
17	0	1	0	1	0	0			17.380	16.925	27.165
18	0	1	0	1	0	1			17.390	16.935	27.175
19	0	1	0	1	1	0			17.400	16.945	27.185
20	0	1	1	0	0	0			17.420	16.965	27.205
21	0	1	1	0	0	1			17.430	16.975	27.215
22	0	1	1	0	1	0			17.440	16.985	27.225
23	0	1	1	1	0	1			17.470	17.015	27.255
24	0	1	1	0	1	1			17.450	16.995	27.235
25	0	1	1	1	0	0			17.460	17.005	27.245
26	0	1	1	1	1	0			17.480	17.025	27.265
27	0	1	1	1	1	1			17.490	17.035	27.275
28	1	0	0	0	0	0			17.500	17.045	27.285
29	1	0	0	0	0	1			17.510	17.055	27.295
30	1	0	0	0	1	0			17.520	17.065	27.305
31	1	0	0	0	1	1			17.530	17.075	27.315
32	1	0	0	1	0	0			17.540	17.085	27.325
33	1	0	0	1	0	1			17.550	17.095	27.335
34	1	0	0	1	1	0			17.560	17.105	27.345
35	1	0	0	1	1	1			17.570	17.115	27.355
36	1	0	1	0	0	0			17.580	17.125	27.365
37	1	0	1	0	0	1			17.590	17.135	27.375
38	1	0	1	0	1	0			17.600	17.145	27.385
39	1	0	1	0	1	1			17.610	17.155	27.395
40	1	0	1	1	0	0			17.620	17.165	27.405

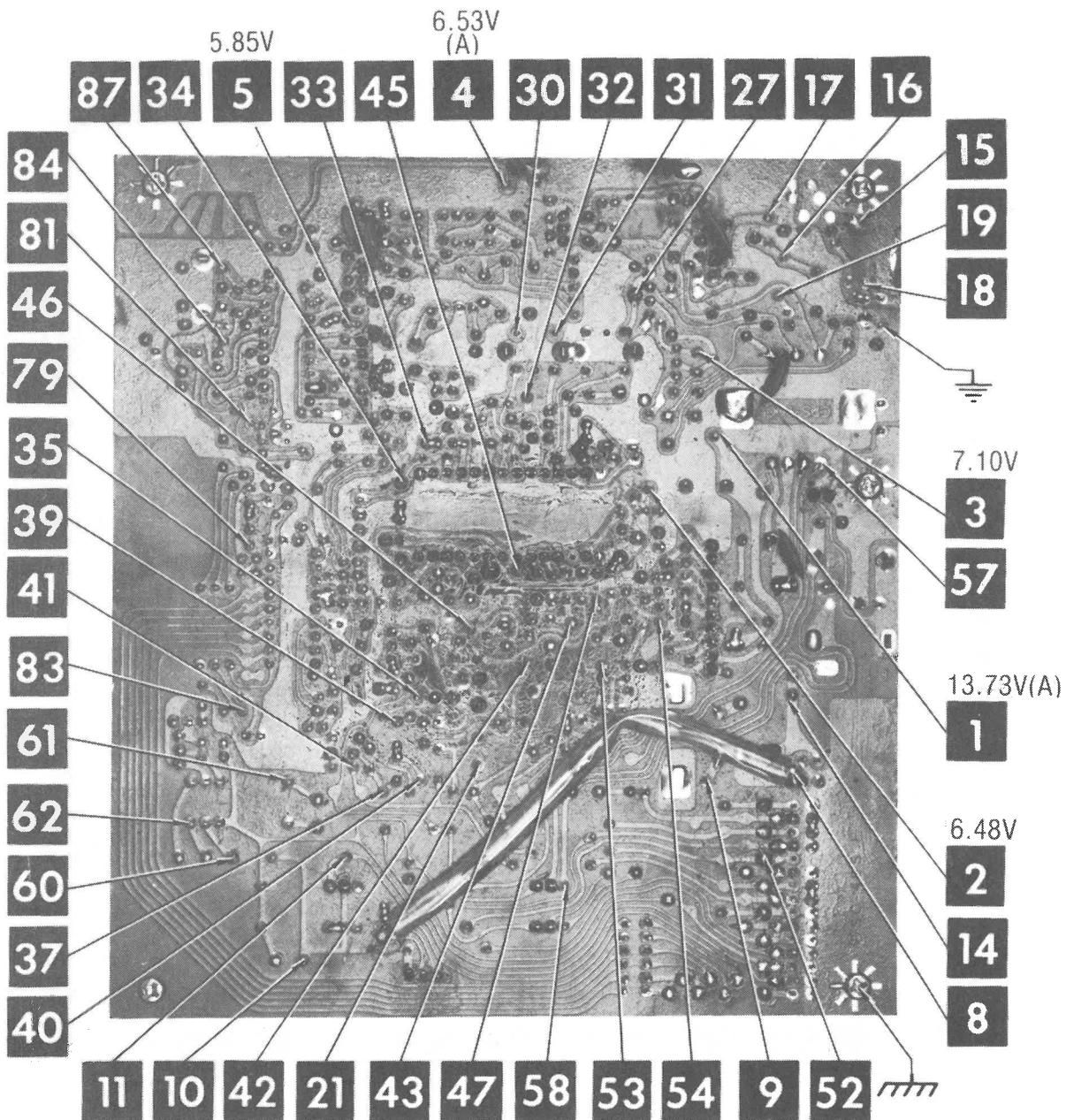


CHASSIS-BOTTOM

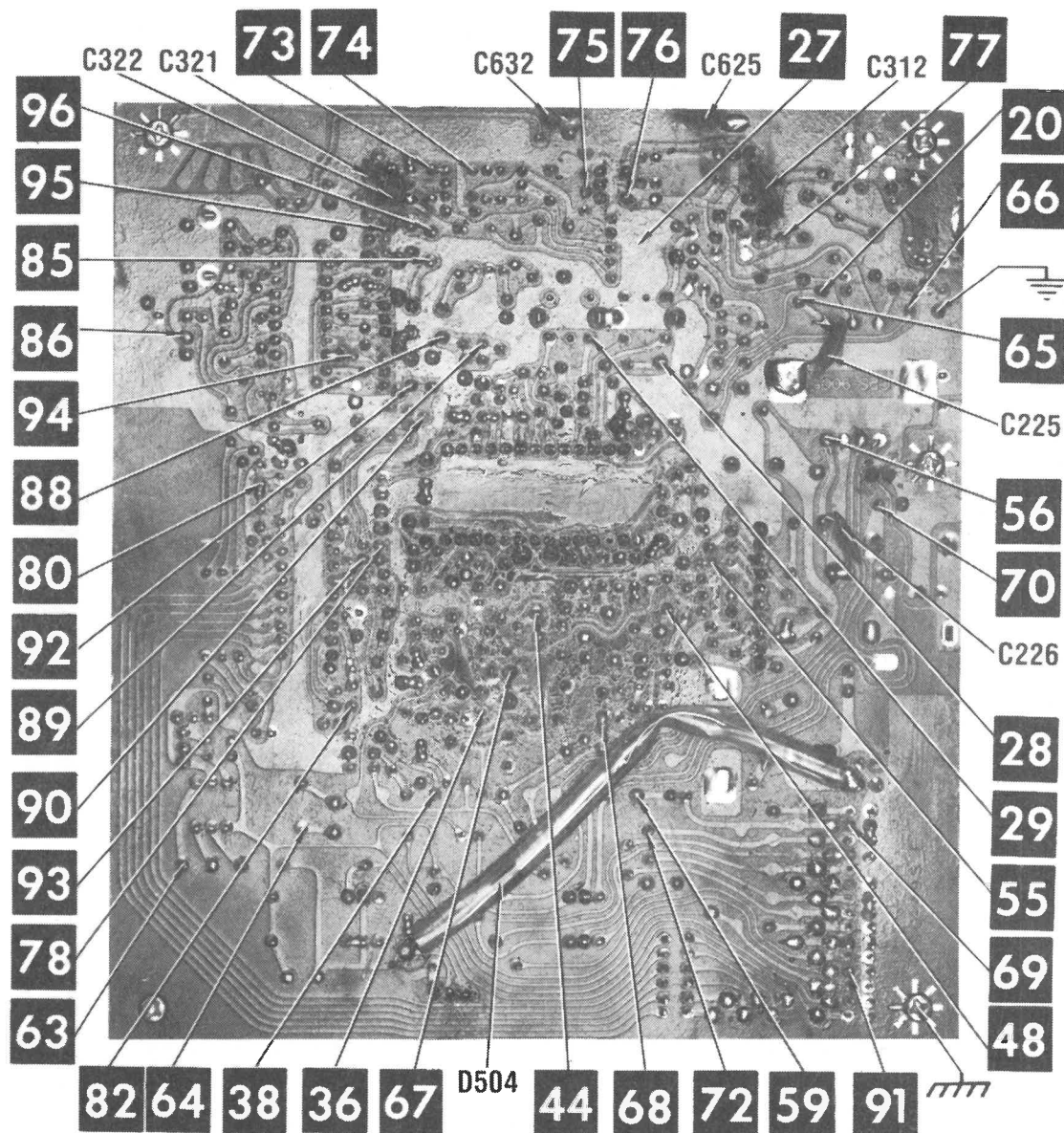


MAIN BOARD

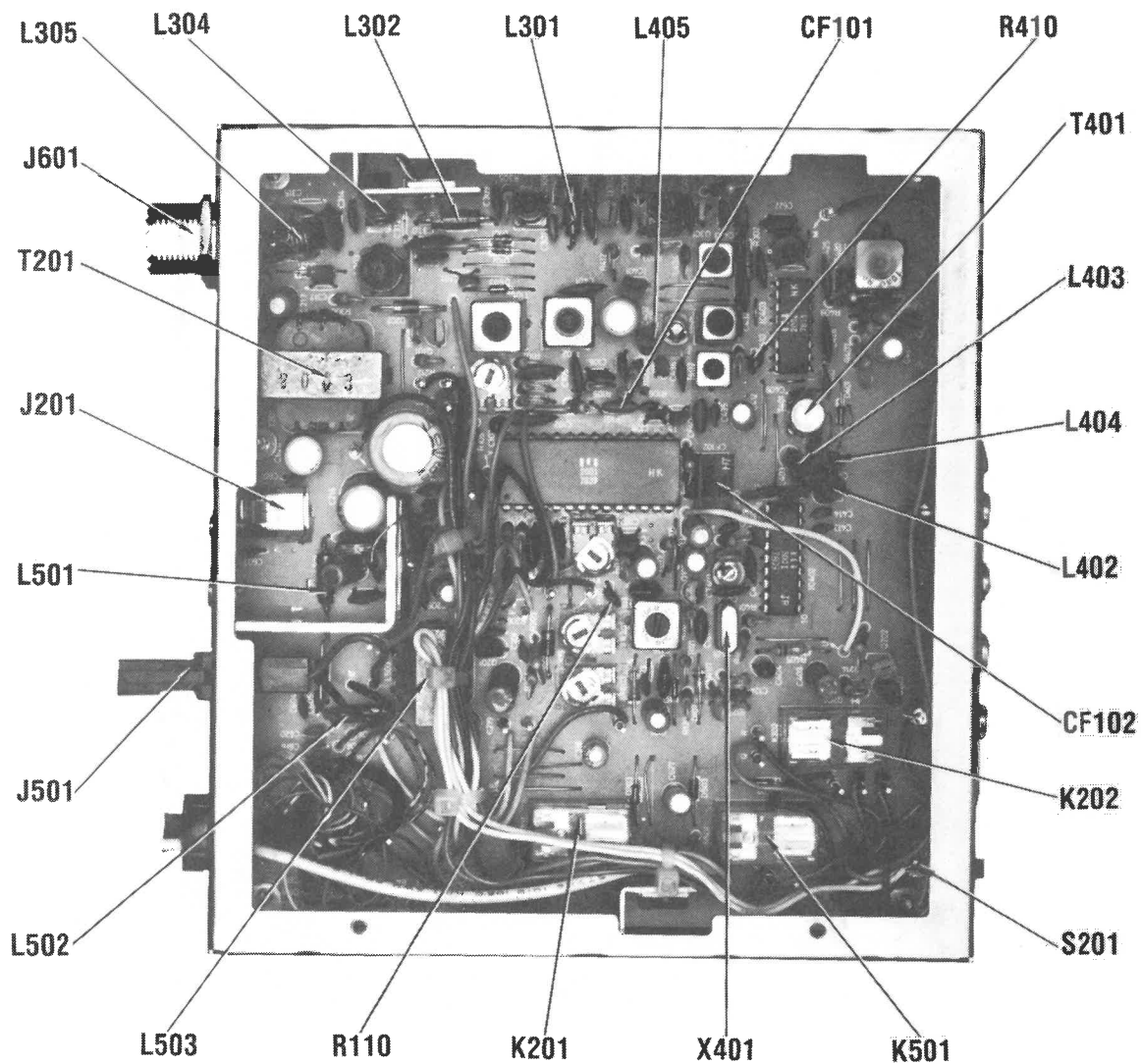
ROYCE MODEL 582



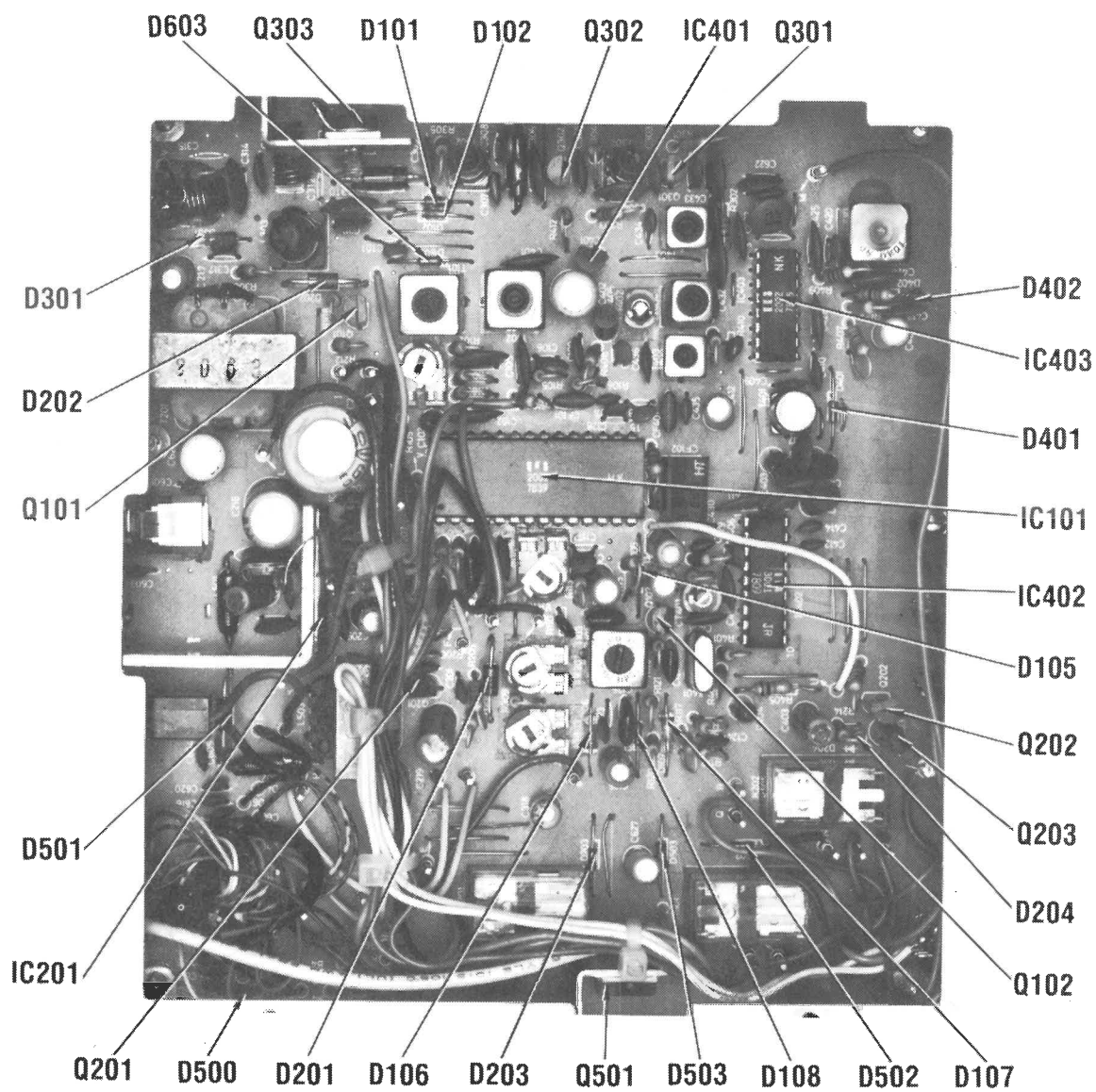
MAIN BOARD



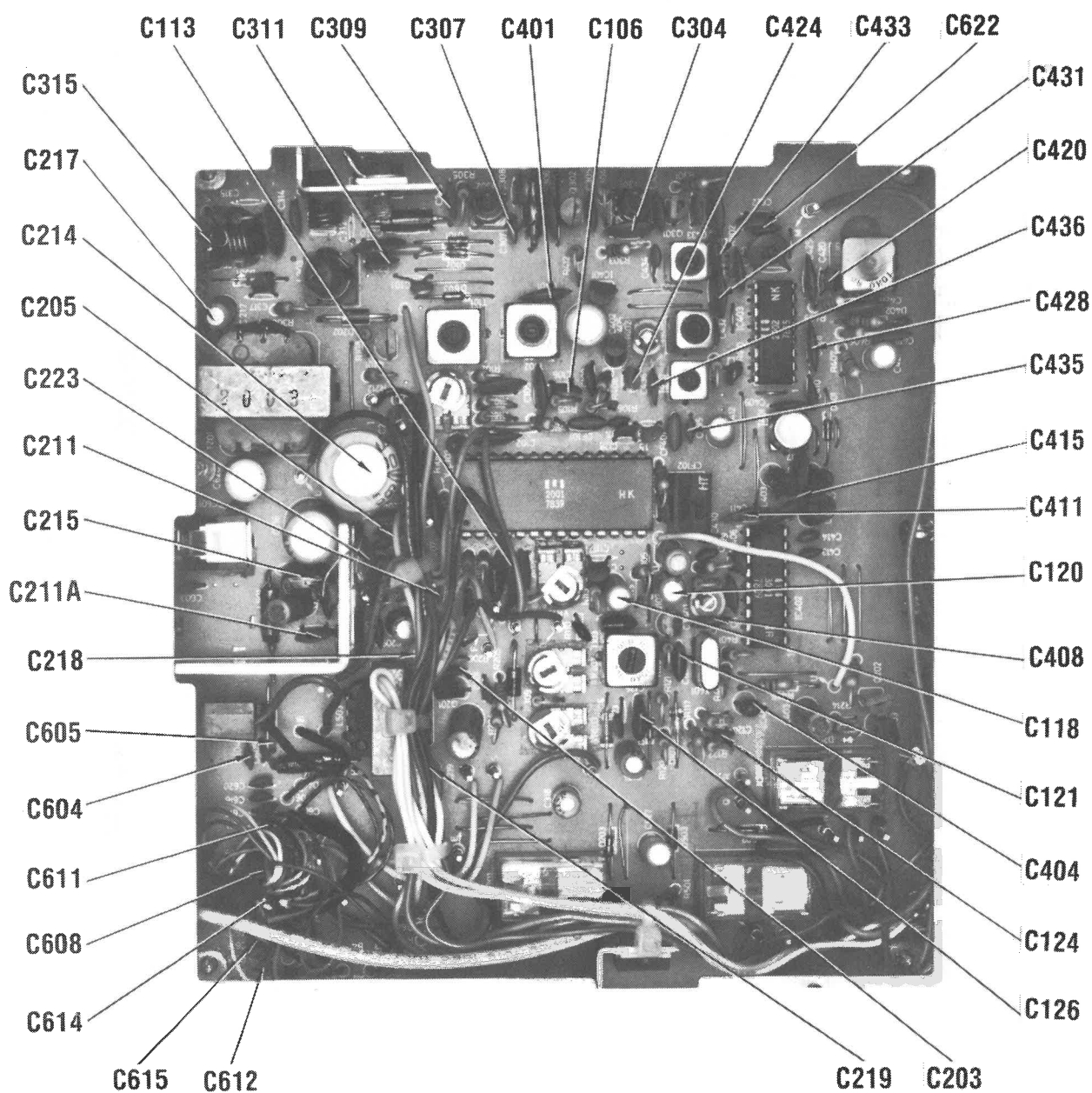
MAIN BOARD



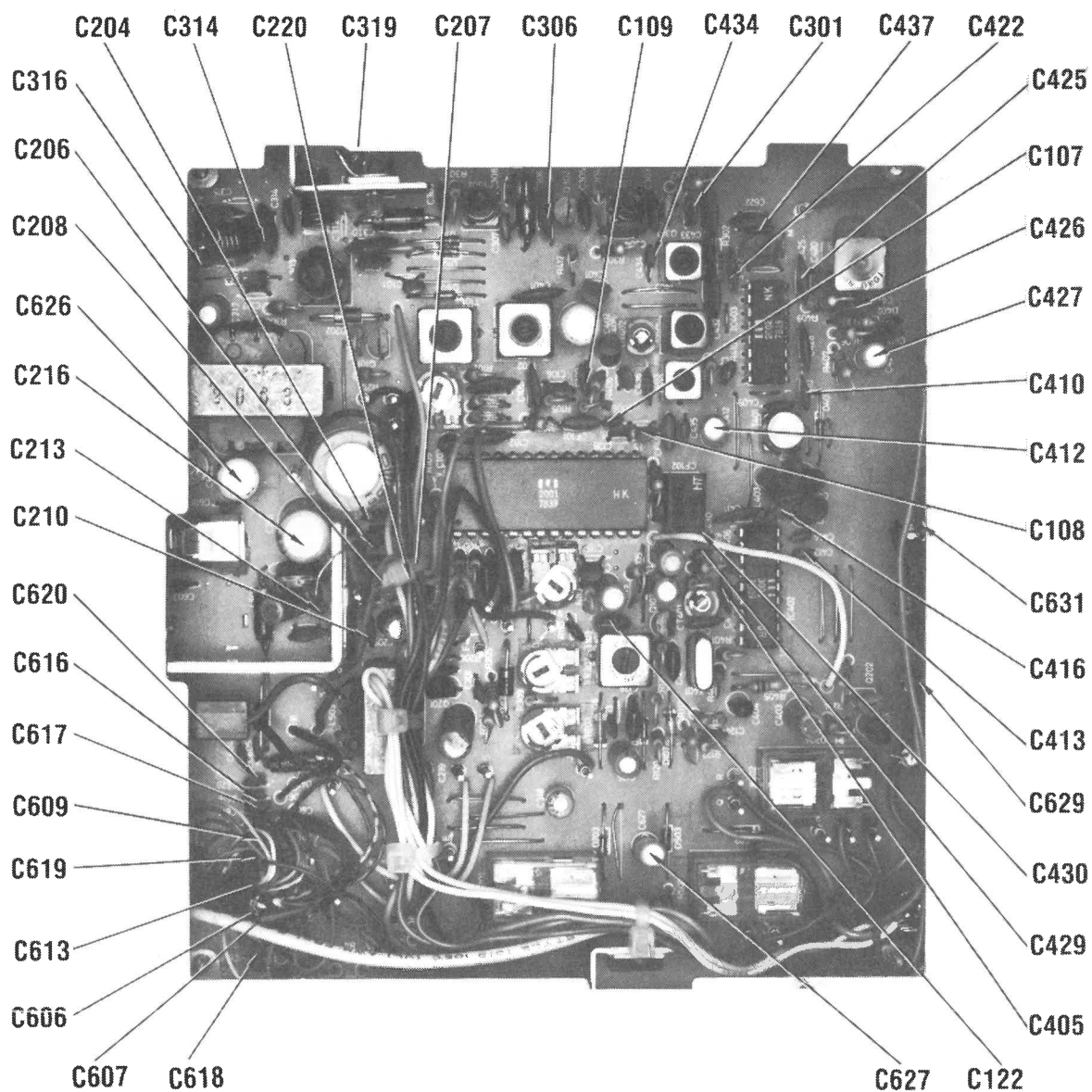
CHASSIS-BOTTOM



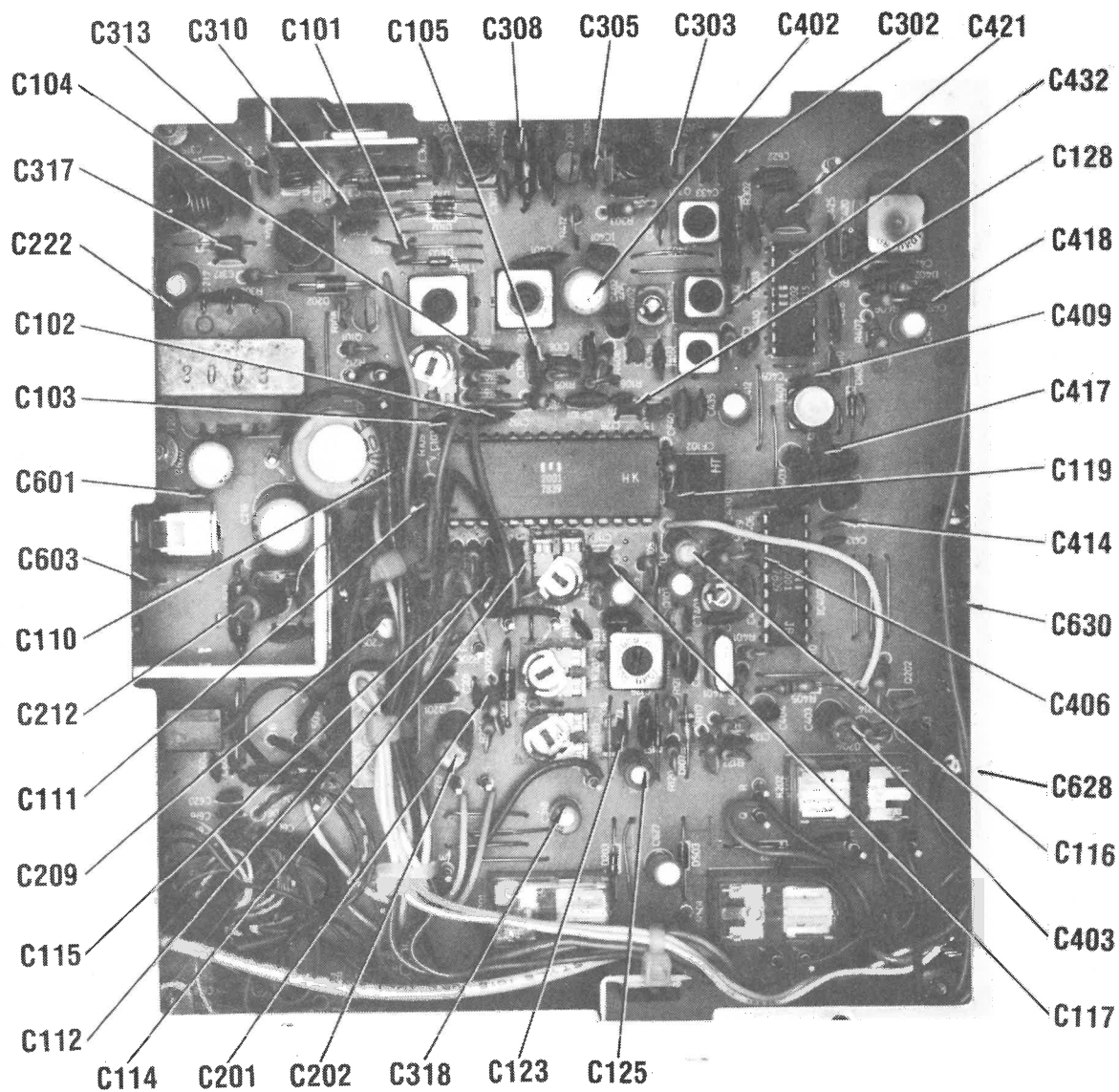
MAIN BOARD



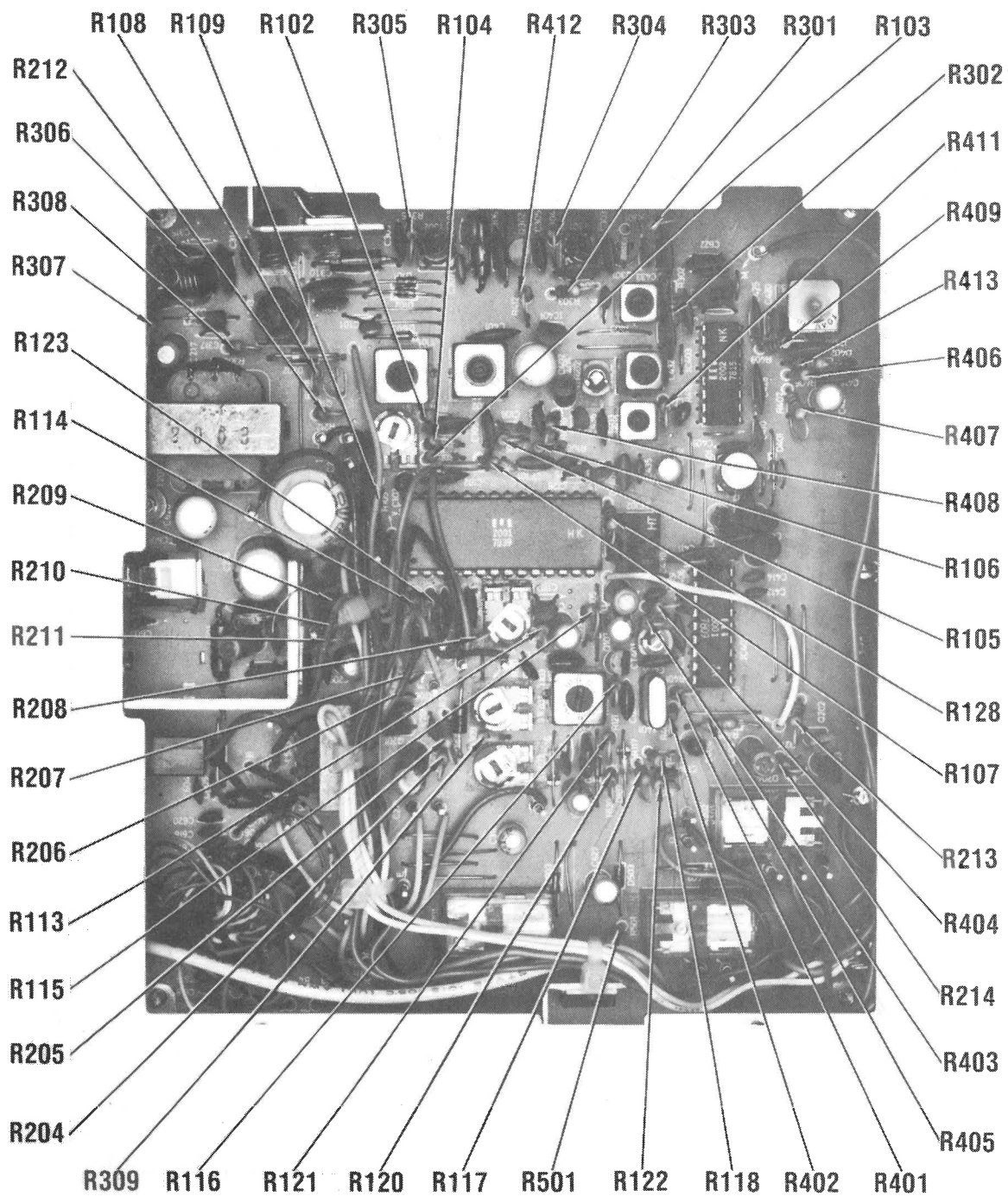
MAIN BOARD



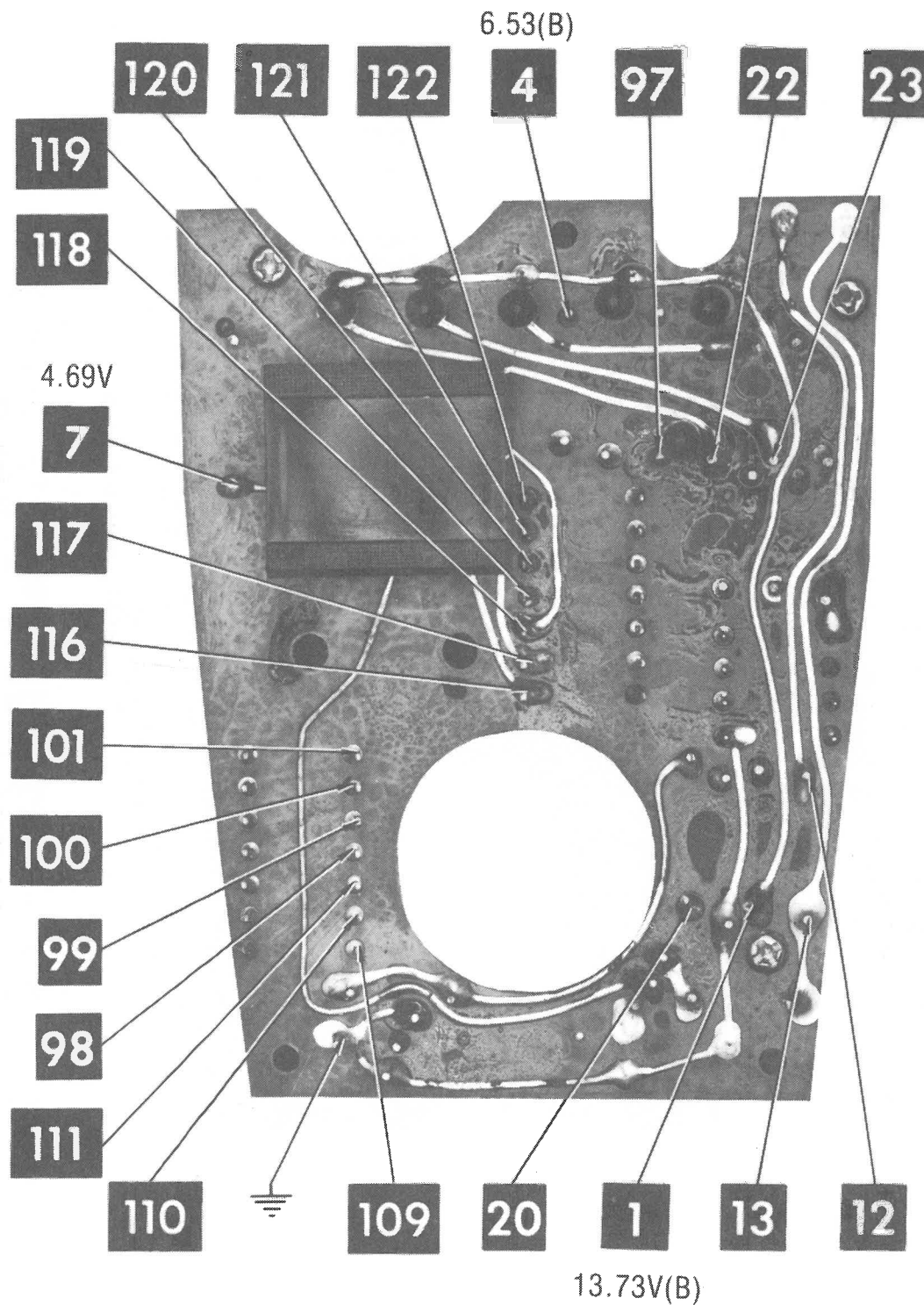
MAIN BOARD



MAIN BOARD

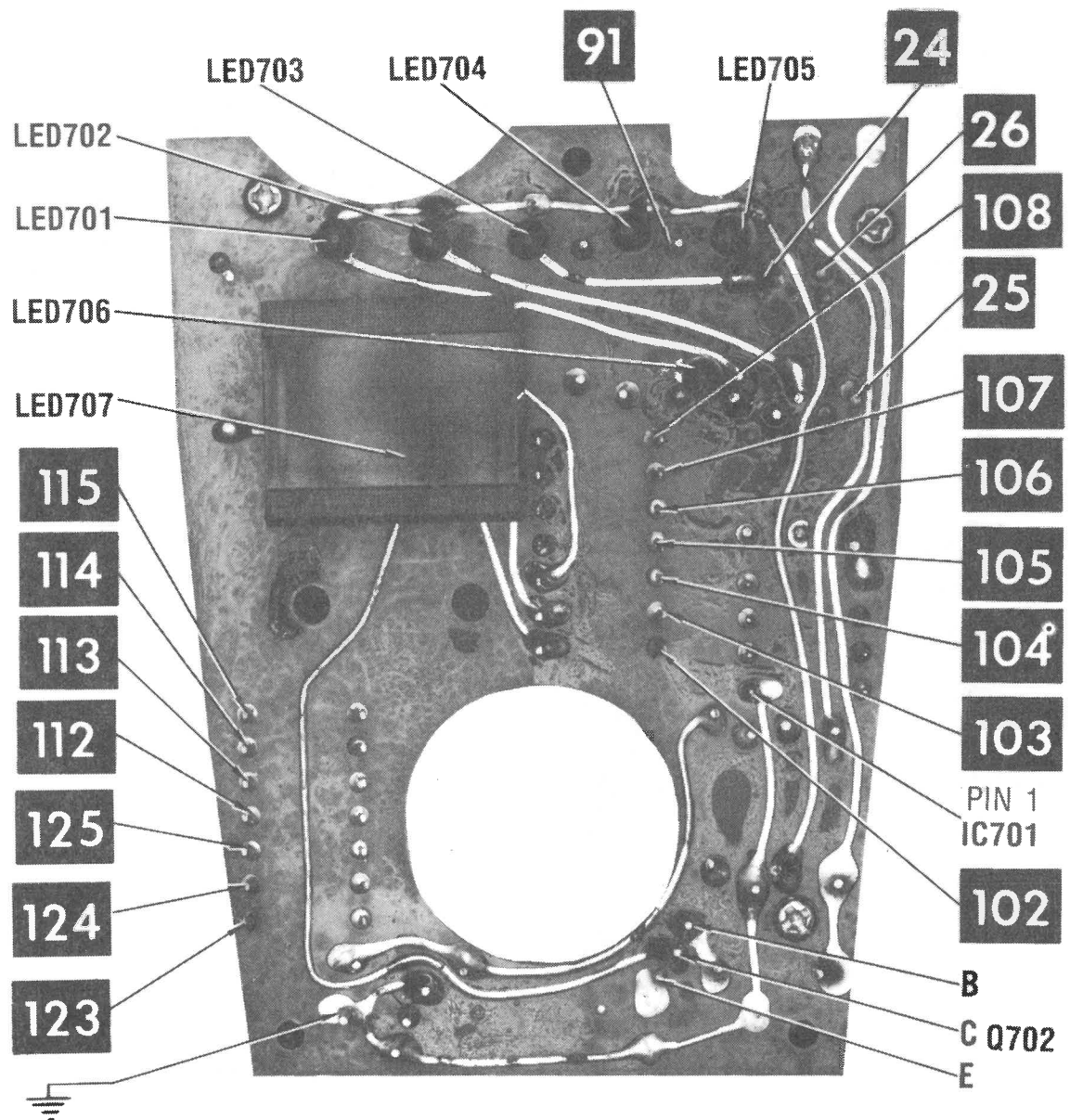


MAIN BOARD

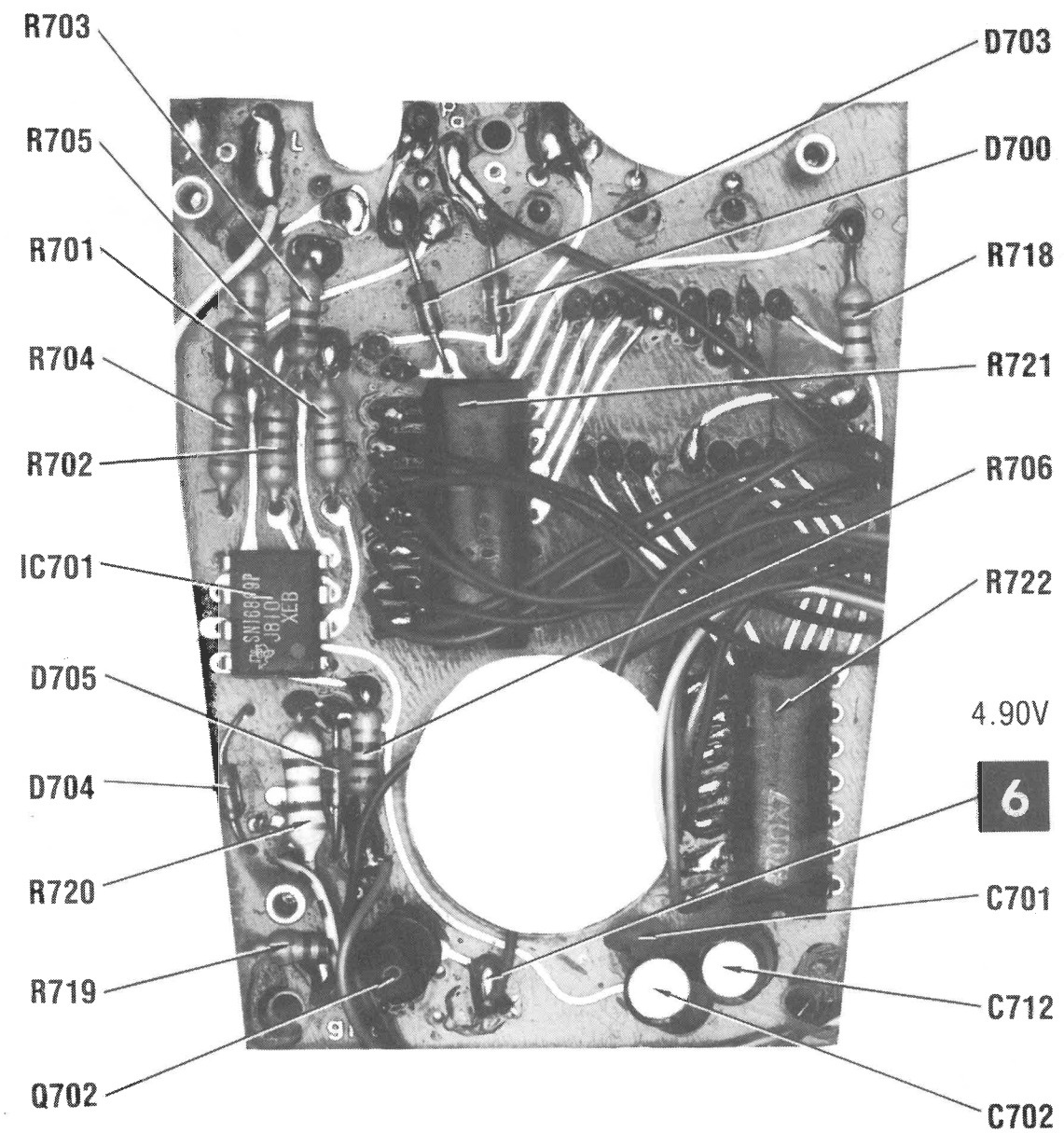


ROYCE MODEL 582

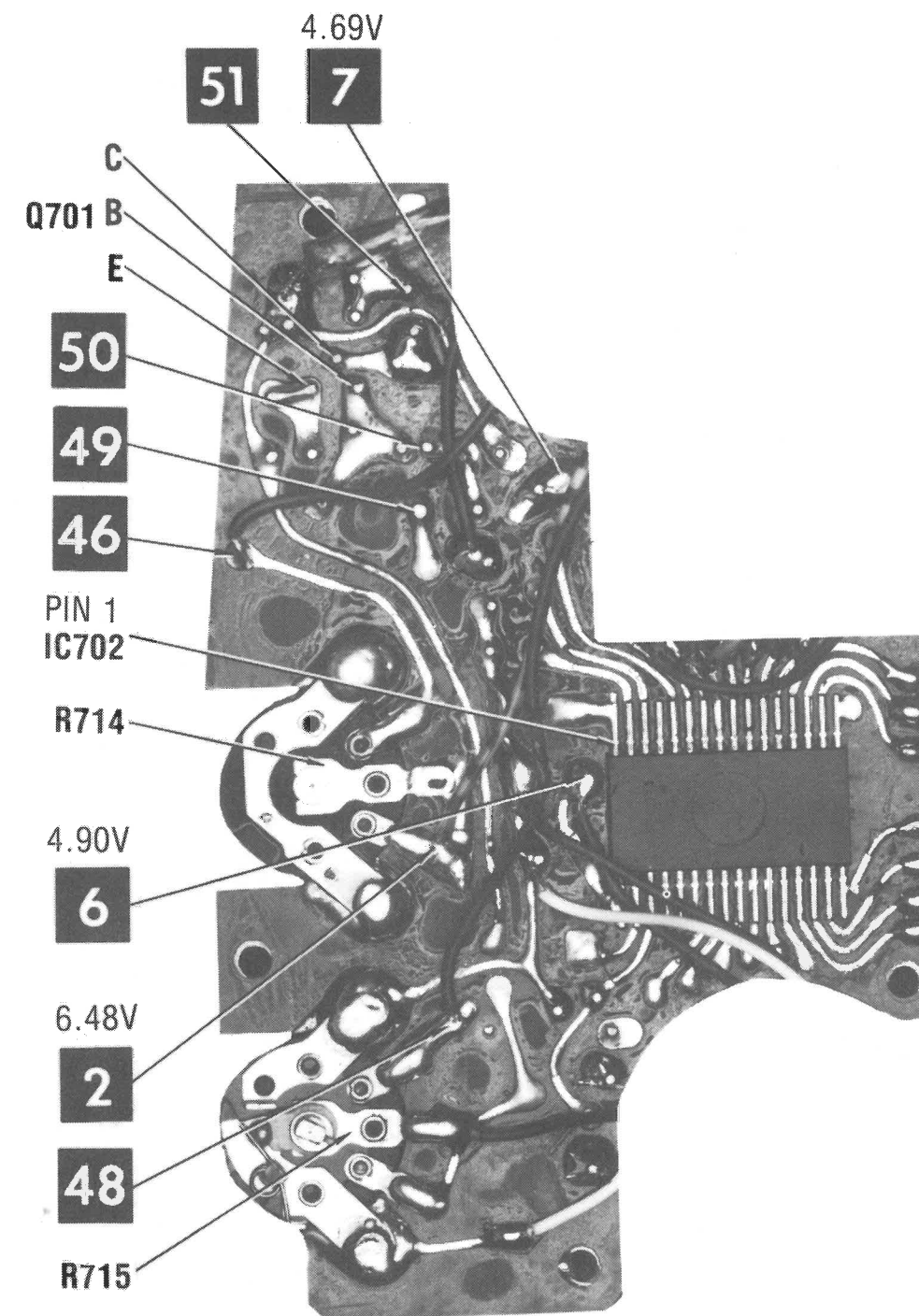
MIC LED BOARD



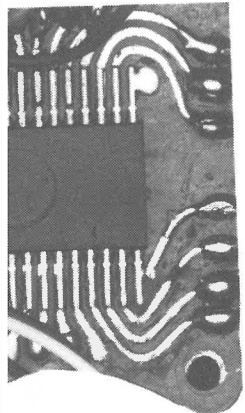
MIC LED BOARD



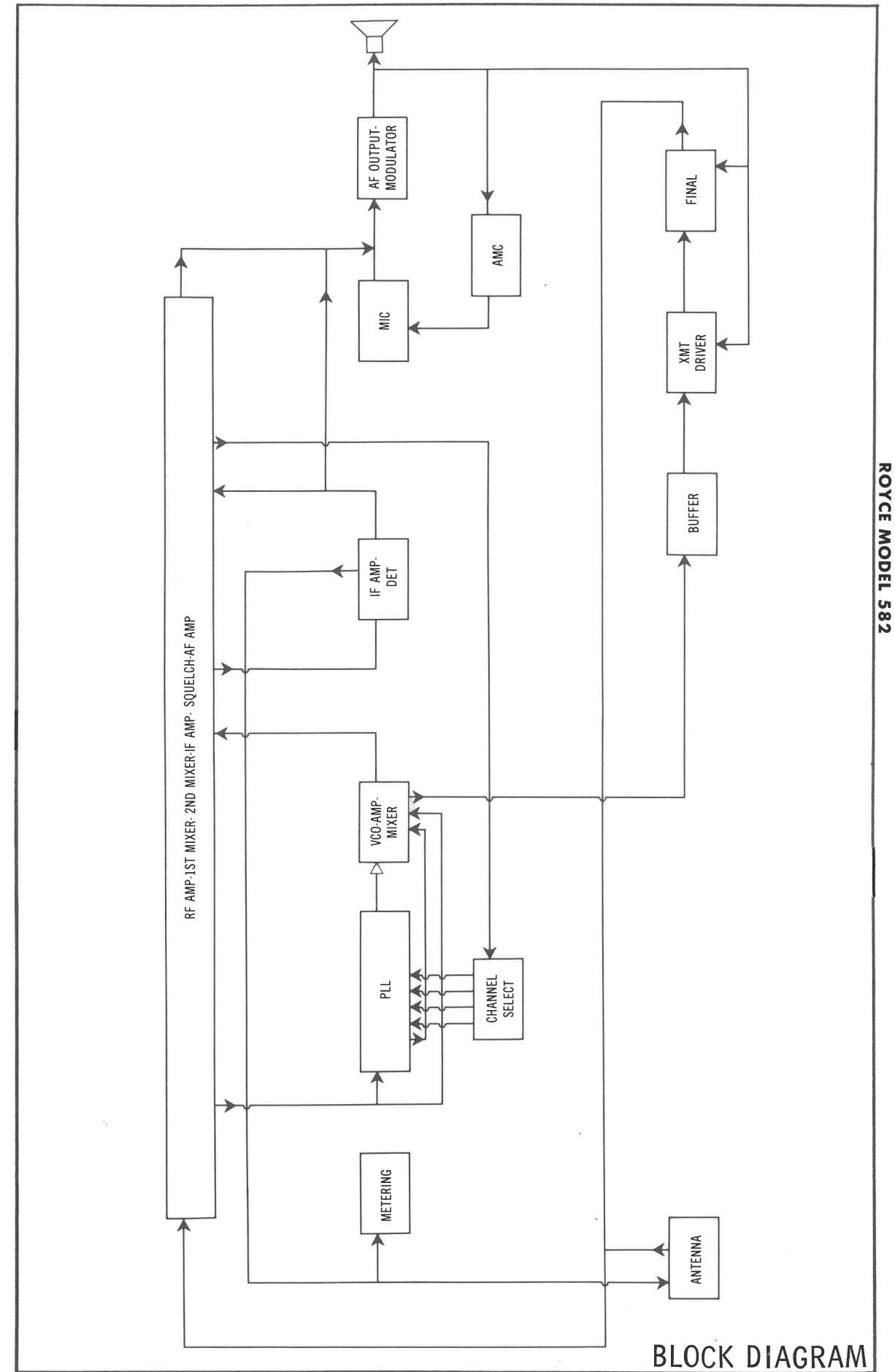
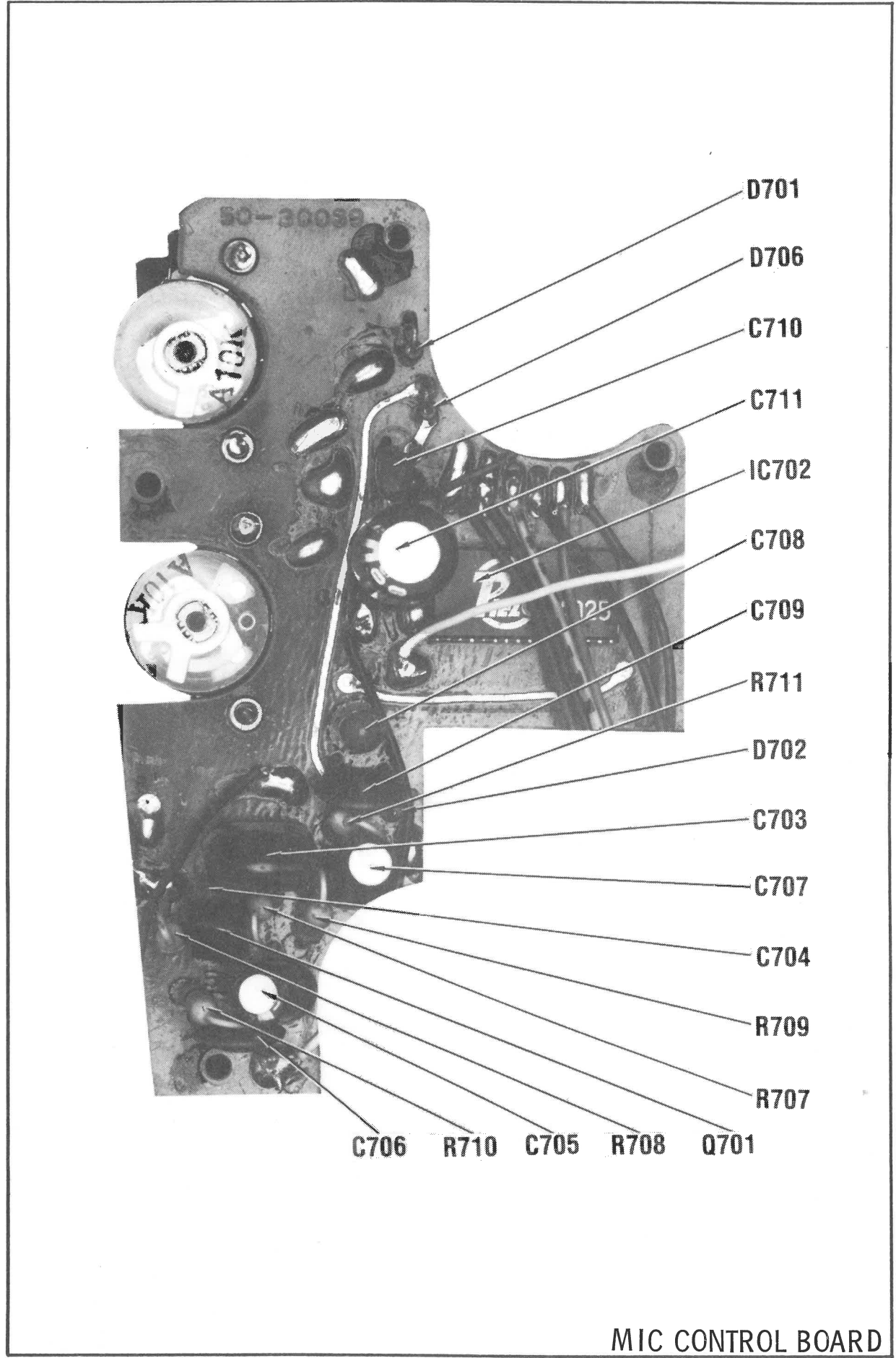
MIC LED BOARD

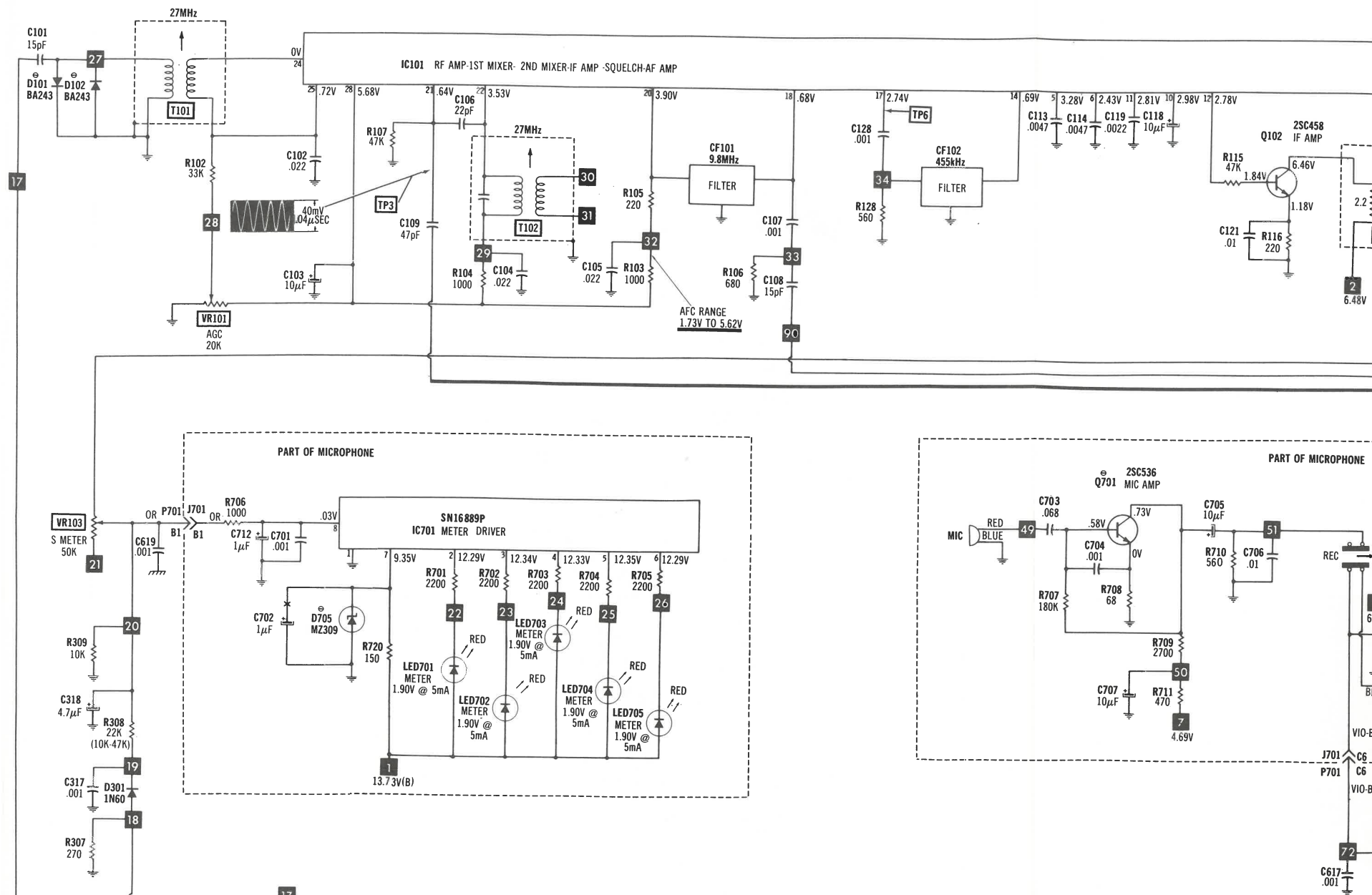


MIC CONTROL BOARD

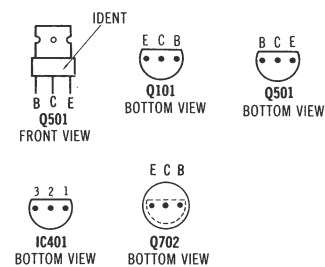


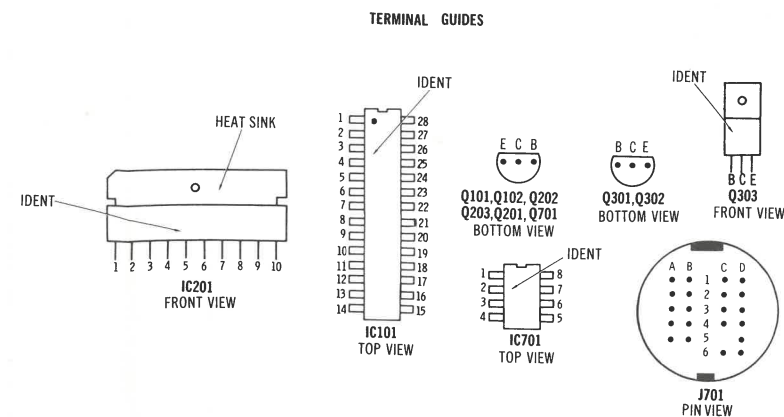
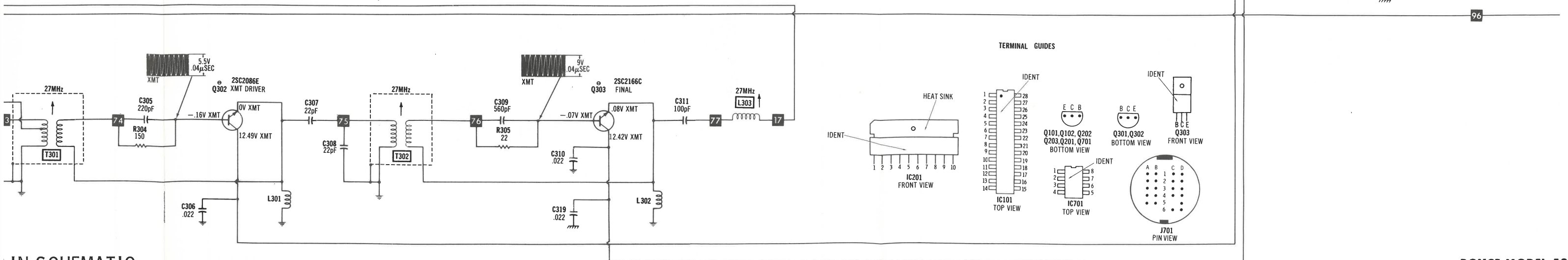
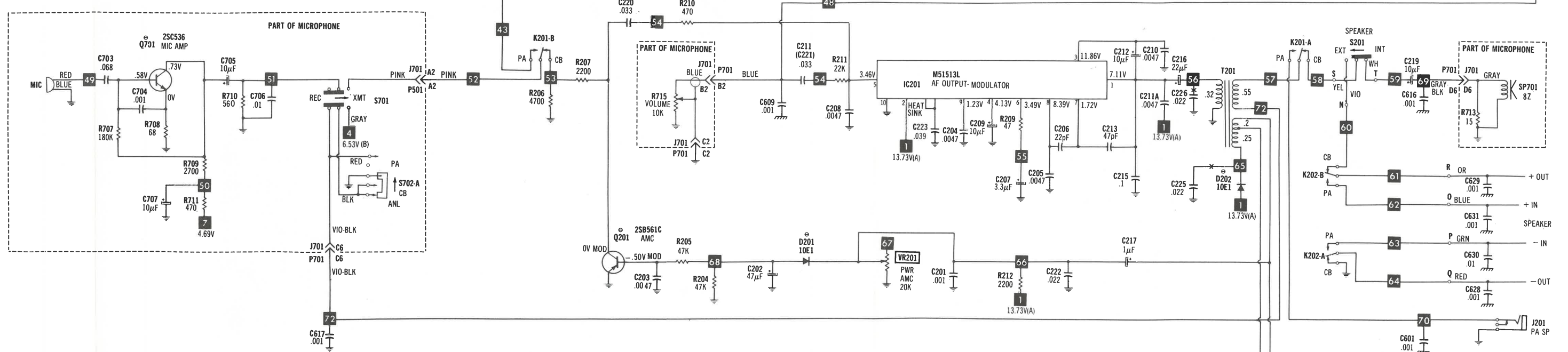
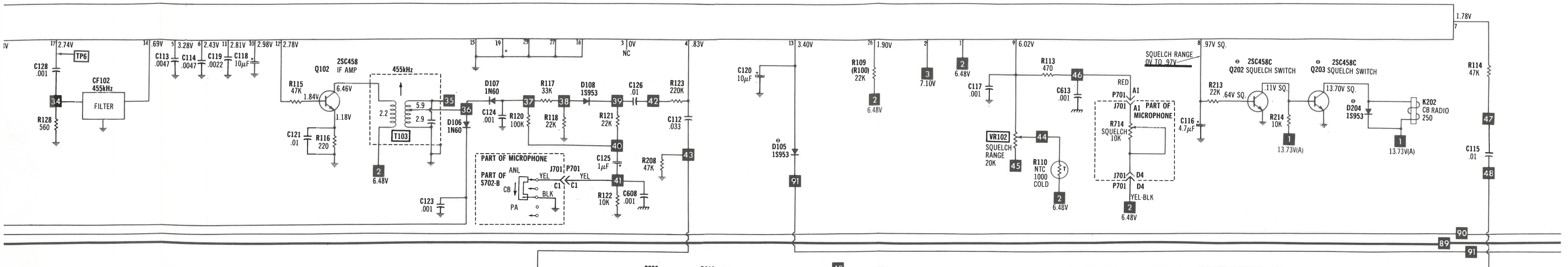
MIC CONTROL BOARD

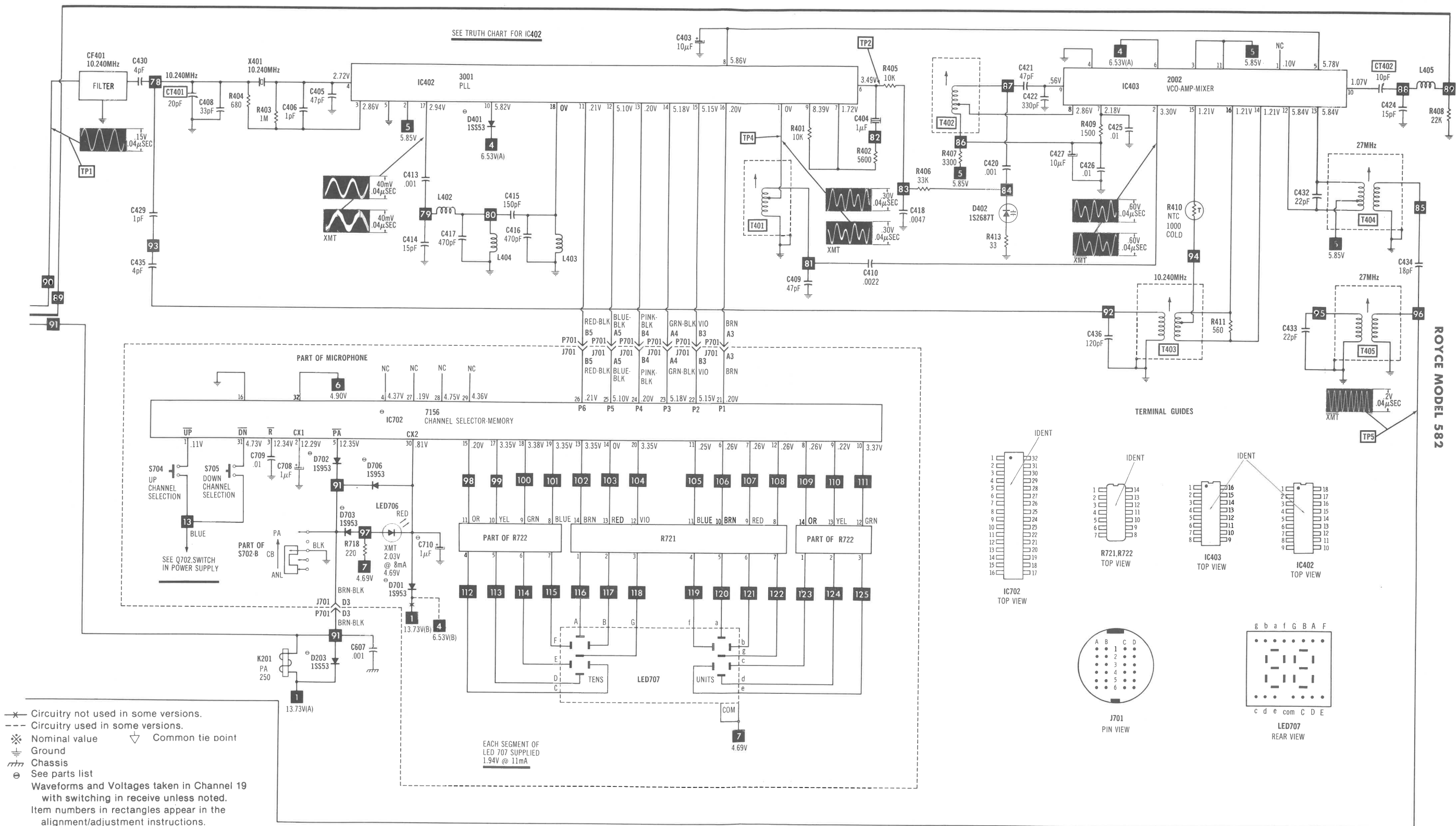




- © Howard W. Sams & Co., Inc. 1979







ROYCE MODEL 582

—X— Circuitry not used in some versions.
--- Circuitry used in some versions.
⊗ Nominal value ⊕ Common tie point
⊥ Ground
Chassis
See parts list
Waveforms and Voltages taken in Channel 19 with switching in receive 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. Terminal identification may not be found on unit. Resistors are 1/2W or less, 5% unless noted. Value in () used in some versions. Arrow head(s) at coils and transformers indicates accessibility of tuning slug(s).

A PHOTOFAC STANDARD NOTATION SCHEMATIC
WITH **CIRCUITTRACE®**
© Howard W. Sams & Co., Inc. 1979

PLL SCHEMATIC

PARTS LIST AND DESCRIPTION

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

WIRING DATA

Cable (Speaker)(Unshielded).....	Use BELDEN No. 8782 (AWG24)(4 colors)
Shielding Strap.....	Use BELDEN No. 8660 (3/16" width)
Hook-up Wire (General Use).....	Use BELDEN No. 8524 (AWG22)(13 colors)
Hook-up Wire (Shielded).....	Use BELDEN No. 8401 (Braided Shield)(1 conductor)(AWG25)
	Use BELDEN No. 8421 (Spiral Shield)(1 conductor)(AWG25)
	Use BELDEN No. 8737 (Spiral Shield)(2 conductor)(AWG22)

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							ZENITH PART No.
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RAYTHEON PART No.	RCA PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	
D101	BA243		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	MC301		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
D102	BA243		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	MC301		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
D105	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-287
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	
D106	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134/109	103-Z9001
D107	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134/109	103-Z9001
D108	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D201	10E1		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
	SR-1K		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D202	10E1		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
	SR-1K		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D203	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D204	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D301	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134/109	103-Z9001
D401	1S553		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D402	1S2687T		GE-90		REN 614		ECG614	TM614	WEP200/614	103-219
D501	10E1		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
	SR-1K		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D502	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D503	MZ306A			ZM9.1B	REN 177	SK3784/5018	ECG5018A	TM5018	WEP1419/5018	103-279-18
	WZ-056			ZM9.1B	REN 177	SK3784/5018	ECG5018A	TM5018	WEP1419/5018	103-279-18
D504	10E1		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D701	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D702	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D703	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D704	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
D705	MZ309			ZM9.1B	REN 177	SK3784/5018	ECG5018A	TM5018	WEP1419/5018	103-279-18
	WZ090			ZM9.1B	REN 177	SK3784/5018	ECG5018A	TM5018	WEP1419/5018	103-279-18
D706	1S953		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062/177	103-131
	1S2076		GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-287
IC101	CC12001									
	2001									
IC201	M51513L						ECG1257	TM1257		
IC401	78L06A						ECG988	TM988		
	78L62						ECG988	TM988		
IC402	CC13001									
IC403	CC12002									
IC701	SN16889P									
IC702	A025									
	A003									
	7156									
Q101	2SD467C		GE-243*	PTC178	REN 128*	SK3122	ECG128*	TM128*	WEP59/128*	121-792
	2SD467		GE-243*	PTC178	REN 128*	SK3122	ECG128*	TM128*	WEP59/128*	121-792
Q201	2SC458C		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
	2SC458		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
Q201	2SB561B		GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-Z9004*
	2SB561		GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-Z9004*
Q202	2SC458C		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
	2SC458		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
Q203	2SC458C		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
	2SC458		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
Q301	2SC1908E		GE-20*	PTC136*	REN 229*	SK3124/289	ECG229*	TM229*	WEP535*	121-Z9021*
	2SC1908		GE-20*	PTC136*	REN 229*	SK3124/289	ECG229*	TM229*	WEP535*	121-Z9021*
Q302	2SC2086E		GE-47*	PTC143*	REN 293*	SK3842	ECG293*	TM293*	WEP914/297	
	2SC2086		GE-47*	PTC143*	REN 293*	SK3842	ECG293*	TM293*	WEP914/297	
Q303	2SC2166C		GE-215	PTC186	REN 235	SK3197/235	ECG235	TM235	WEP736/123A*	121-Z9039
	2SC2166		GE-215	PTC186	REN 235	SK3197/235	ECG235	TM235	WEP736/123A*	121-Z9039
Q501	2SC1419C		GE-66	PTC167	REN 152	SK3197/235	ECG152	TM152	WEP745/152	121-987-02
	2SC1419		GE-66	PTC167	REN 152	SK3197/235	ECG152	TM152	WEP745/152	121-987-02
Q701	2SC536		GE-212	PTC121*	REN 199	SK3122	ECG199	TM199	WEP536	121-972
	2SC458		GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9000A*
Q702	2SA562-0		GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-Z9046
	2SB561		GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-Z9046

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

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
C102	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C103	10 16V		WNP10-50	TCN5010A	QEN1-187	TVAN-1304.1
C110	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C116	4.7 16V		PC5-50	VTT4R7B50	QV1-31	EV-1619.1
C118	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C120	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C125	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C202	47 25V		PC50-25	VTT47E25	QV1-77	EV-1426.1
C207	3.3 25V			TI4335M050P0Y	QDT1-43	SD50-3R39
C209	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C212	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C214	1000 25V		WBR1000-25*	VTT1000M25	QV1-185	EV-1360
C216	220 25V		PC250-25	VTT220K25	QV1-119	EV-1340
C217	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C218	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C219	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C318	4.7 16V		PC5-50	VTT4R7B50	QV1-31	EV-1619.1
C402	47 25V		PC50-25	VTT47E25	QV1-77	EV-1426.1
C403	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C404	1 10V NP			TDC105M035EL		SD35-19
C412	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C427	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C626	47 25V		PC50-25	VTT47E25	QV1-77	EV-1426.1
C627	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C702	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C705	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C707	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C708	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C710	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C711	100 25V		PC100-25	VTT100G25	QV1-97	EV-1331
C712	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615

* Axial replacement for radial device.

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C101	5 50V N220			*		10TCR-V50
C104	.022 50V			M192P2239R8		192P2239R8
C105	.022 50V			M192P2239R8		192P2239R8
C106	22 50V N220			*		10TCR-Q22
C107	.001 50V			GP210		10TS-D10
C108	15 50V		NP015	CN0415		10TCC-Q15
C109	47 50V		NP047	CN0447		10TCC-Q47
C111	.022 50V			M192P2239R8		192P2239R8
C112	.033 50V 10%		DPM56S33	M192P3339R8	QFT2-149	1FT-S33
C113	.0047 50V		GP4700	GP247		5GA-D47
C114	.0047 50V		GP4700	GP247		5GA-D47
C115	.01 50V 10%		WMF1S1	M192P1039R8	QFT2-91	1FT-S10
C117	.001 50V			GP210		10TS-D10
C119	.0022 50V			GP222		10TS-D22
C121	.01 50V 10%		WMF1S1	M192P1039R8	QFT2-91	1FT-S10
C122	.033 50V 10%		DPM56S33	M192P3339R8	QFT2-149	1FT-S33
C123	.001 50V			GP210		10TS-D10
C124	.001 50V			GP210		10TS-D10
C126	.01 50V 10%		WMF1S1	M192P1039R8	QFT2-91	1FT-S10
C128	.001 50V			GP210		10TS-D10
C201	.001 50V			GP210		10TS-D10
C203	.0047 50V		GP4700	GP247		5GA-D47
C204	.0047 50V		GP4700	GP247		5GA-D47
C205	.0047 50V		GP4700	GP247		5GA-D47
C206	22 50V		NP022	CN0422		10TCC-Q22
C208	.0047 50V		GP4700	GP247		5GA-D47
C210	.0047 50V		GP4700	GP247		5GA-D47
C211	.033 50V 10%		DPM56S33	M192P3339R8	QFT2-149	1FT-S33
C211A	.0047 50V 10%		WMF1D47	M192P4729R8	QFT2-63	1FT-D47
C213	47 50V		NP047	CN0447		10TCC-Q47
C215	.1 50V 10%		WMF05P1	M192P1049R8	QFT2-215	1FT-P10
C220	.033 50V			MAG50133		
C222	.022 50V			M192P2239R8		192P2239R8
C223	.039 50V			M192P3939R8		192P3939R8
C225	.022 50V			M192P2239R8		192P2239R8
C226	.022 50V			M192P2239R8		192P2239R8
C301	56 50V			CN0456		10TCC-Q56
C302	.022 50V			M192P2239R8		192P2239R8
C303	56 50V			CN0456		10TCC-Q56
C304	.022 50V			M192P2239R8		192P2239R8
C305	220 50V					10TCC-T22
C306	.022 50V			M192P2239R8		192P2239R8
C307	22 50V N220			*		10TCR-Q22
C308	22 50V N220			*		10TCR-Q22
C309	560 50V			GP356		10TS-T56
C310	.022 50V			M192P2239R8		192P2239R8
C311	100 50V		NP0100	CN0310		10TCC-T10
C312	82 50V		NP0482	CN0482		10TCC-Q82
C313	68 50V		NP068	CN0468		10TCC-Q68
C314	120 50V			CN0312		10TCC-T12
C315	68 50V		NP068	CN0468		10TCC-Q68
C316	4 50V		NP04P7	CN0547		10TCC-V47
C317	.001 50V			GP210		10TS-D10
C319	.022 50V			M192P2239R8		192P2239R8
C321	47 50V		NP047	CN0447		10TCC-Q47
C322	.01 50V			MAG5011		
C401	.01 50V			MAG5011		

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C405	47 50V		NP047	CN0447		10TCC-Q47
C406	1 50V			CN0510		10TCC-V10
C408	33 50V		NP033	CN0433		10TCC-Q33
C409	47 50V		NP047	CN0447		10TCC-Q47
C410	.0022 50V			GP222		10TS-D22
C411	.01 50V			MAG5011		
C413	.001 50V			GP210		10TS-D10
C414	15 50V		NP015	CN0415		10TCC-Q15
C415	150 50V			CN0315		10TCC-T15
C416	470 50V		GP470	GP347		10TS-T47
C417	470 50V		GP470	GP347		10TS-T47
C418	.0047 50V		GP4700	GP247		5GA-D47
C420	.001 50V			GP210		10TS-D10
C421	47 50V		NP047	CN0447		10TCC-Q47
C422	330 50V		GP330	GP333		10TS-T33
C424	15 50V		NP015	CN0415		10TCC-Q15
C425	.01 50V			MAG5011		
C426	.01 50V			MAG5011		
C428	.01 50V			MAG5011		
C429	1 50V			CN0510		10TCC-V10
C430	4 50V		NP04P7	CN0547		10TCC-V47
C431	.01 50V			MAG5011		
C432	22 50V N470			*		10TCT-Q22
C433	22 50V N470			*		10TCT-Q22
C434	18 50V			CN0418		10TCC-Q18
C435	4 50V		NP04P7	CN0547		10TCC-V47
C436	120 50V			CN0312		10TCC-T12
C437	.0022 50V			GP222		10TS-D22
C601	.001 50V			GP210		10TS-D10
C603	.001 50V			GP210		10TS-D10
C604	.001 50V			GP210		10TS-D10
C605	.001 50V			GP210		10TS-D10
C606	.001 50V			GP210		10TS-D10
C607	.001 50V			GP210		10TS-D10
C608	.001 50V			GP210		10TS-D10
C609	.001 50V			GP210		10TS-D10
C611	.001 50V			GP210		10TS-D10
C612	.001 50V			GP210		10TS-D10
C613	.001 50V			GP210		10TS-D10
C614	.001 50V			GP210		10TS-D10
C615	.001 50V			GP210		10TS-D10
C616	.001 50V			GP210		10TS-D10
C617	.001 50V			GP210		10TS-D10
C618	.001 50V			GP210		10TS-D10
C619	.001 50V			GP210		10TS-D10
C620	.001 50V			GP210		10TS-D10
C621	.0047 50V		GP4700	GP247		5GA-D47
C622	.0047 50V		GP4700	GP247		5GA-D47
C624	.022 50V			M192P2239R8		192P2239R8
C625	.01 50V			MAG5011		
C628	.001 50V			GP210		10TS-D10
C629	.001 50V			GP210		10TS-D10
C630	.01 50V			MAG5011		
C631	.001 50V			GP210		10TS-D10
C632	.001 50V			GP210		10TS-D10
C701	.001 50V			GP210		10TS-D10
C703	.068 50V 10%		WMF1S68	EW1A168	QF1-195	10TS-D10
C704	.001 50V			GP210		1PB-S68
C706	.01 50V			MAG5011		10TS-D10
C709	.01 50V			MAG5011		

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

ROYCE MODEL 582

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA		
			MFGR. PART No.	MALLORY PART No.	TRW PART No.
R714	Squelch	10K			
R715	Volume/Power Switch	10K			
VR101	AGC	20K			U260R253B
VR102	Squelch Range	20K			U260R253B
VR103	S Meter	50K			U260R503B

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		MFGR. PART No.	WORKMAN PART No.			MFGR. PART No.	WORKMAN PART No.
R110	1000 HTC Cold			R410	1000 HTC Cold		

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.	
L301	RF Choke				
L302	RF Choke				
L303	Final (27MHz)				
L304	Pi Filter				
L305	Antenna Matching				
L403	RF Choke				
L404	RF Choke				
L501	RF Choke				
L502	RF Choke				
T101	Antenna Input (27MHz)		ETC15089		
T102	Mixer (27MHz)		ETC15061		
T103	IF (455kHz)		ETC73194		
T301	Xmt Buffer (27MHz)				
T302	Xmt Driver (27MHz)				
T401	PLL				
T402	VCO		ETC10013		
T403	Ref Osc (10.240MHz)		ETC83197		
T404	Mixer (27MHz)		ETC83198		
T405	Mixer (27MHz)				

FILTER CHOKE

FILTER CHOKE							
ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
L503	1.2A	.1	1.3mH	1002(1)	TR509		(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T201	13.5	1 2 8 2.5	2003(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFR. PART No.	QUAM PART No.	
SP701	1 1/2" PM, 8 Ohms			

FUSE DEVICES

FUSE DEVICES								
ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F1	2A Quick Acting			AGC2	HRK	312002	150145	FG2-2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF101	Filter		9.8MHz
CF102	Filter		455kHz
CF401	Filter		10.240MHz
K201	Relay		PA (250 Ohms)
K202	Relay		CB Radio (250 Ohms)
K501	Relay		Power (250 Ohms)
LED701	LED		Meter (1.90V @ 5mA)
LED702	LED		Meter (1.90V @ 5mA)
LED703	LED		Meter (1.90V @ 5mA)
LED704	LED		Meter (1.90V @ 5mA)
LED705	LED		Meter (1.90V @ 5mA)
LED706	LED		Meter (1.90V @ 5mA)
LED707	LED		Xmt (2.03V @ 8mA)
S201	Switch		Channel Indicator (Each segment supplied with 1.94V @ 11mA)
S702	Switch		Ext/Int
S703	Switch		PA/Ant
S704	Switch		Power
S705	Switch		Up Switch Channel Selection
X401	Crystal		Down Switch Channel Selection
			10.240MHz