



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 AM-500D

MANUFACTURER'S SPECIFICATIONS

TRANSMITTER

Power Output	4 watts.
Modulation	Amplitude Modulation
Frequency Response	300 to 3000 Hz.
Output Impedance	50 ohms, unbalanced.
Output Indicators	Meters indicate relative RF output power and standing wave length.

RECEIVER

Sensitivity	Less than 0.5 μ V for 10 dB (S+N)/N.
Selectivity	6 dB @4 kHz, 60 dB @10 kHz.
Image Rejection	50 dB.
IF Frequencies	Double conversion, 1st: 10.695 MHz. 2nd: 455 kHz.
Adjacent Channel Rejection	70 dB.
RF Gain Control	Adjustable for optimum signal.
Automatic Gain Control (AGC)	Less than 10 dB change in audio output for inputs from 10 to 50,000 microvolts.
Squelch	Adjustable, threshold less than 1 μ V.
Audio Output Power	3.5 Watts into 8 ohms.
Frequency Response	300 to 2,100 Hz.
Distortion	Less than 10% @3.5 watts output.

Courtesy of the Manufacturer

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

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ROBYN MODEL AM-500D

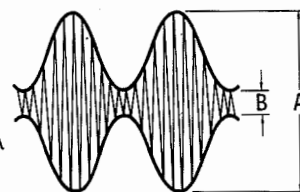
ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment.
 Maintain line voltage at 120V AC. Allow a 15-minute warm-up period.
 Adjust VR201 @ TP13 for 13.8 volts DC output.
 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

L1 thru L5, L16, L 7, L18, L20, L21.9440
 L6, L7, L85000, 5009, 8276, 8728, 8728A
 L10, L12, L15.8282, 9304, 8728, 8728A
 VC1.5000, 8276



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

FIGURE 1

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope to TP1.	Ch. 19	L5	Adjust for maximum RF output.
Input of frequency counter to TP1.	Ch. 19	VC1	Adjust for 10.240MHz.
Input of DC meter to TP5.	Ch. 1	L20	Adjust for 1.85 volts..
Input of frequency counter to TP10. (TR18 gate 1).	Ch. 19	L24	Adjust for 36.570MHz.
Input of frequency counter to TP4.	Ch. 1		Check for 1.090MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP6.	Ch. 19	L21	Adjust for maximum RF output.
Input of frequency counter to TP6.	Ch. 1		Check for 37.660MHz. If necessary readjust L24 for correct frequency. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP11 (TR9 gate 1).	Ch. 19, XMT	L18	Adjust for maximum RF output.
Input of frequency counter to TP11 (TR9 gate 1).	Ch. 19, XMT		Check for 10.695MHz.

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.
 RF Gain maximum, Squelch MINIMUM, ANL Switch OFF

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP12 (TR3 base). 455kHz, 1000Hz @ 30% modulation	Ch. 19	L8, L7, L6	Adjust for maximum output.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	L4.L3,L2,L1	Adjust for maximum output. If necessary readjust L6, L7 and L8 for maximum.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.
RF Gain Maximum, ANL Switch OFF.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 50,000uV.	Ch. 19 Squelch MINIMUM	VR2	AGC Set volume VR301 for 0db. Decrease generator output to 50uV. Adjust so that audio does not drop more than 10db.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 1000uV.	Ch. 19 Squelch Maximum	VR3	SQUELCH RANGE Adjust so that squelch just breaks.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 10uV.	Ch. 19 Squelch MINIMUM	VR1	S METER Adjust for 9 on signal scale of meter.

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
Input of RF wattmeter and 50 ohm, 25 watt dummy load to antenna input.	Ch. 19	L17, L16 L15, L12	Adjust for maximum RF output.
Input of RF wattmeter and 50 ohm, 25 watt dummy load to antenna input.	Ch. 19	L12	Readjust for 4.0 watts RF output maximum.
Input of spectrum analyzer or harmonic meter to antenna input.	Ch. 19	L10	Adjust for MINIMUM at 54MHz (2nd harmonic)

TRANSMITTER ADJUSTMENTS

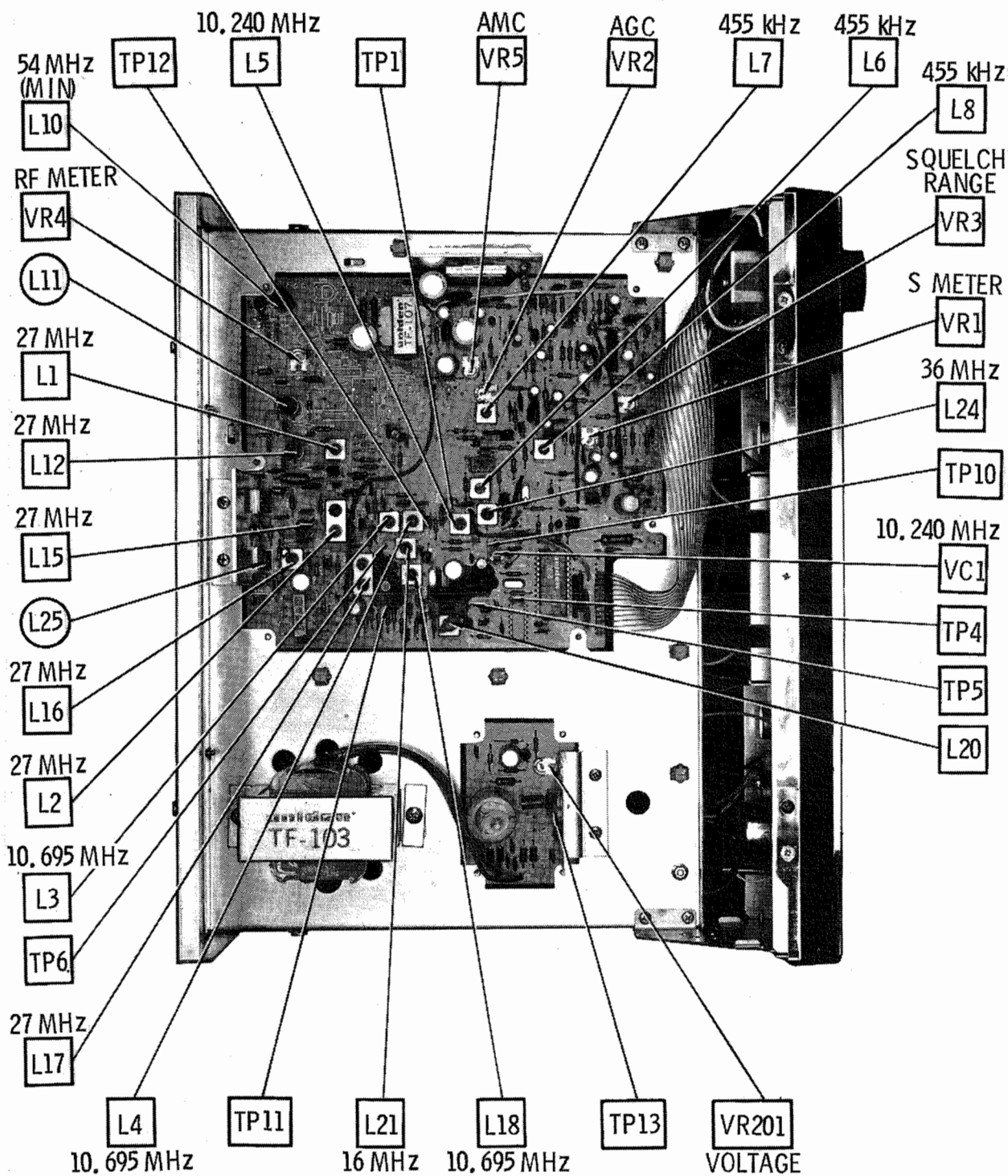
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 20mV signal at mic input.	Ch. 19	VR5	AMC Adjust for 100% modulation maximum. See figure 1.
Input of RF wattmeter and 50 ohm, 25 watt dummy load to antenna input.	Ch. 19	VR4	RF METER Adjust so that needle rests in area between white and red stripes on RF PWR scale of meter.

ROBYN MODEL AM-500D

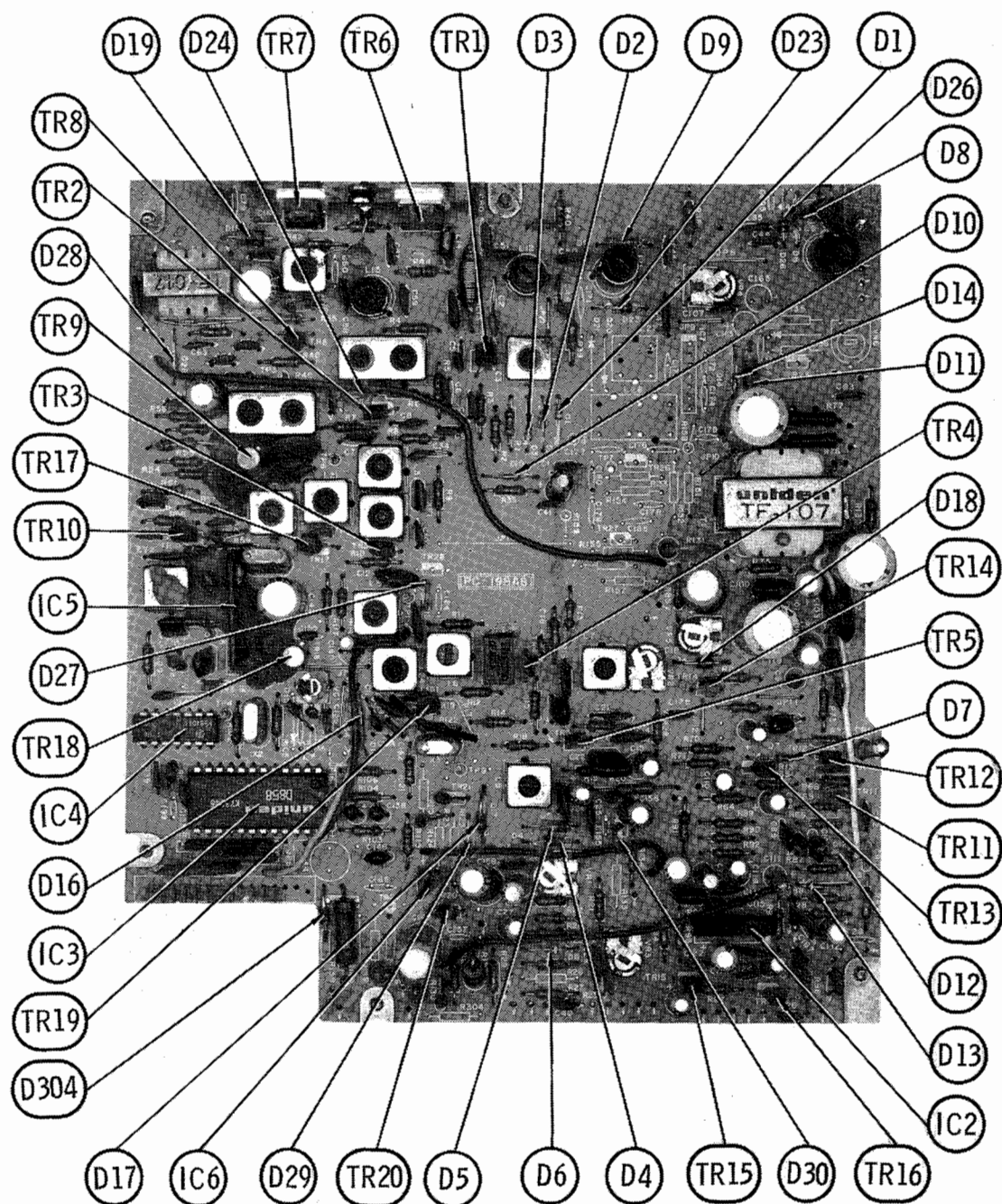
TRUTH CHART

CHANNEL	1 = 4.67 Volts 0 = 0 Volts IC3 PROGRAM DIVIDER								DIVIDER INPUT VCO OUTPUT IN MHz AT TP4	REC & XMT SYNTH OUTPUT IN MHz AT TP6	
	PINS										
		19	18	17	16	15	14	13			
1		0	0	0	1	0	0	1	1.090	37.660	
2		0	0	1	0	0	0	0	1.100	37.670	
3		0	0	1	0	0	0	1	1.110	37.680	
4		0	0	1	0	0	1	1	1.130	37.700	
5		0	0	1	0	1	0	0	1.140	37.710	
6		0	0	1	0	1	0	1	1.150	37.720	
7		0	0	1	0	1	1	0	1.160	37.730	
8		0	0	1	1	0	0	0	1.180	37.750	
9		0	0	1	1	0	0	1	1.190	37.760	
10		0	1	0	0	0	0	0	1.200	37.770	
11		0	1	0	0	0	0	1	1.210	37.780	
12		0	1	0	0	0	1	1	1.230	37.800	
13		0	1	0	0	1	0	0	1.240	37.810	
14		0	1	0	0	1	0	1	1.250	37.820	
15		0	1	0	0	1	1	0	1.260	37.830	
16		0	1	0	1	0	0	0	1.280	37.850	
17		0	1	0	1	0	0	1	1.290	37.860	
18		0	1	1	0	0	0	0	1.300	37.870	
19		0	1	1	0	0	0	1	1.310	37.880	
20		0	1	1	0	0	1	1	1.330	37.900	
21		0	1	1	0	1	0	0	1.340	37.910	
22		0	1	1	0	1	0	1	1.350	37.920	
23		0	1	1	1	0	0	0	1.380	37.950	
24		0	1	1	0	1	1	0	1.360	37.930	
25		0	1	1	0	1	1	1	1.370	37.940	
26		0	1	1	1	0	0	1	1.390	37.960	
27		1	0	0	0	0	0	0	1.400	37.970	
28		1	0	0	0	0	0	1	1.410	37.980	
29		1	0	0	0	0	1	0	1.420	37.990	
30		1	0	0	0	0	1	1	1.430	38.000	
31		1	0	0	0	1	0	0	1.440	38.010	
32		1	0	0	0	1	0	1	1.450	38.020	
33		1	0	0	0	1	1	0	1.460	38.030	
34		1	0	0	0	1	1	1	1.470	38.040	
35		1	0	0	1	0	0	0	1.480	38.050	
36		1	0	0	1	0	0	1	1.490	38.060	
37		1	0	1	0	0	0	0	1.500	38.070	
38		1	0	1	0	0	0	1	1.510	38.080	
39		1	0	1	0	0	1	0	1.520	38.090	
40		1	0	1	0	0	1	1	1.530	38.100	

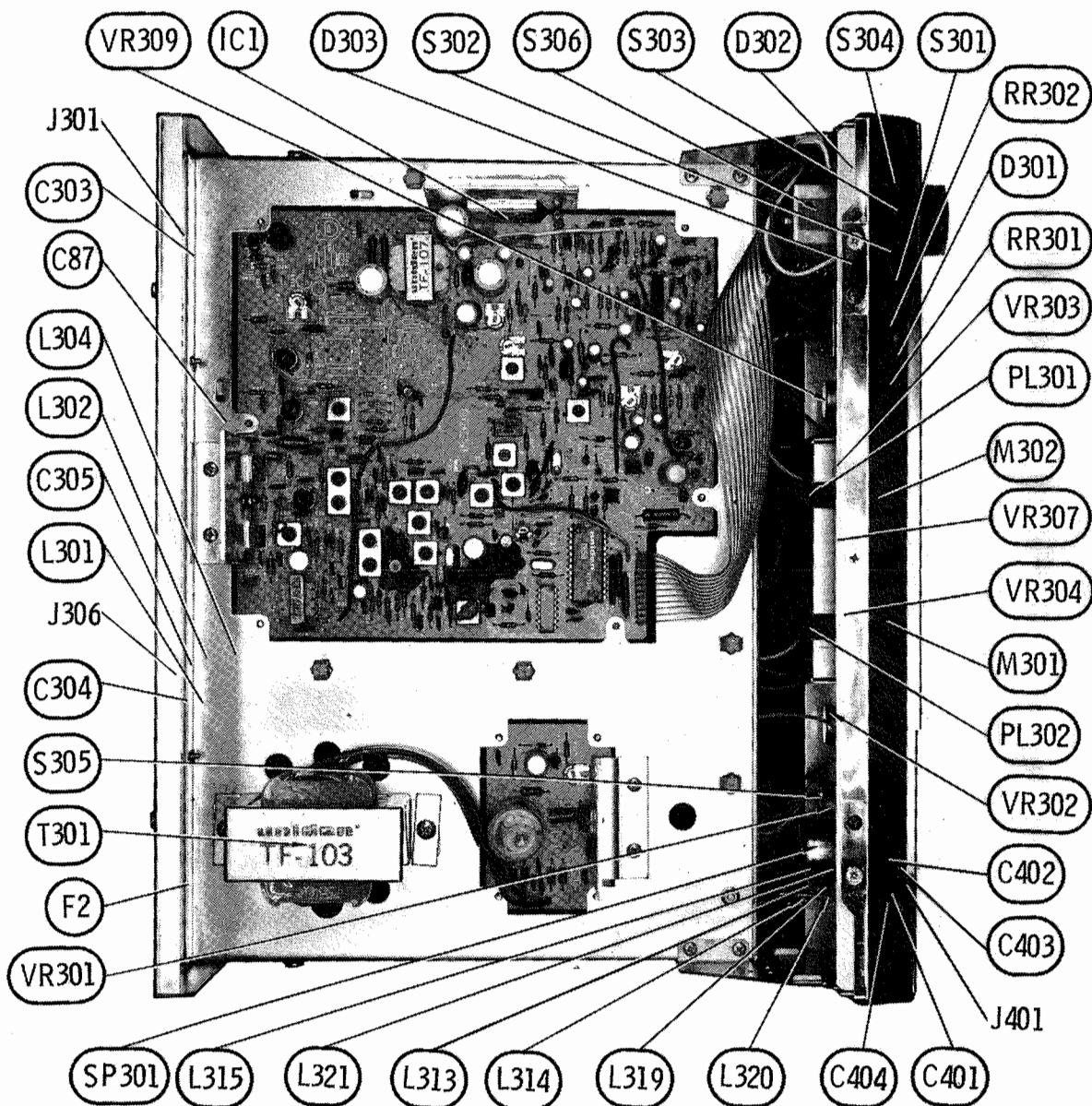


ROBYN MODEL AM-500D

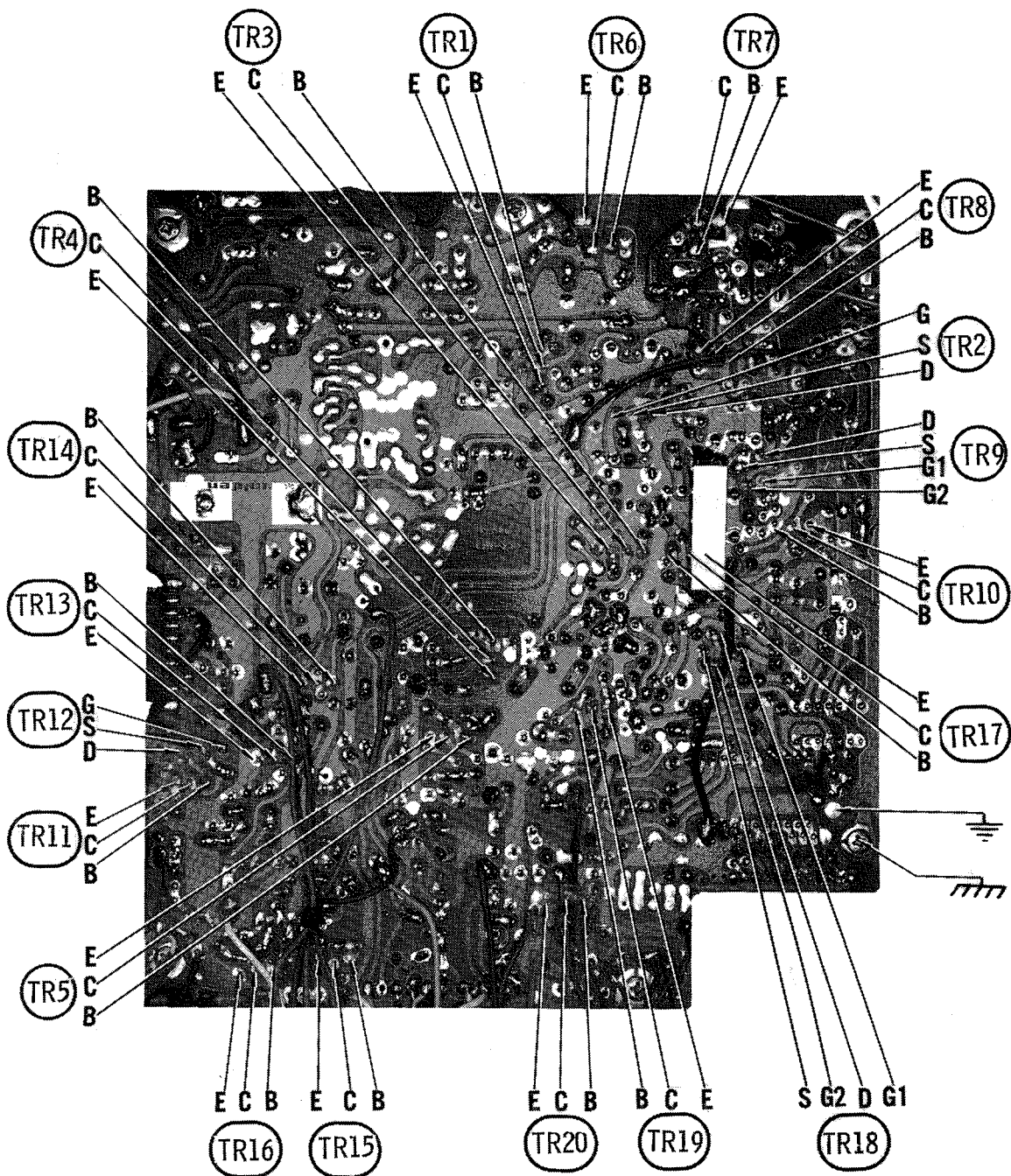
CHASSIS-TOP



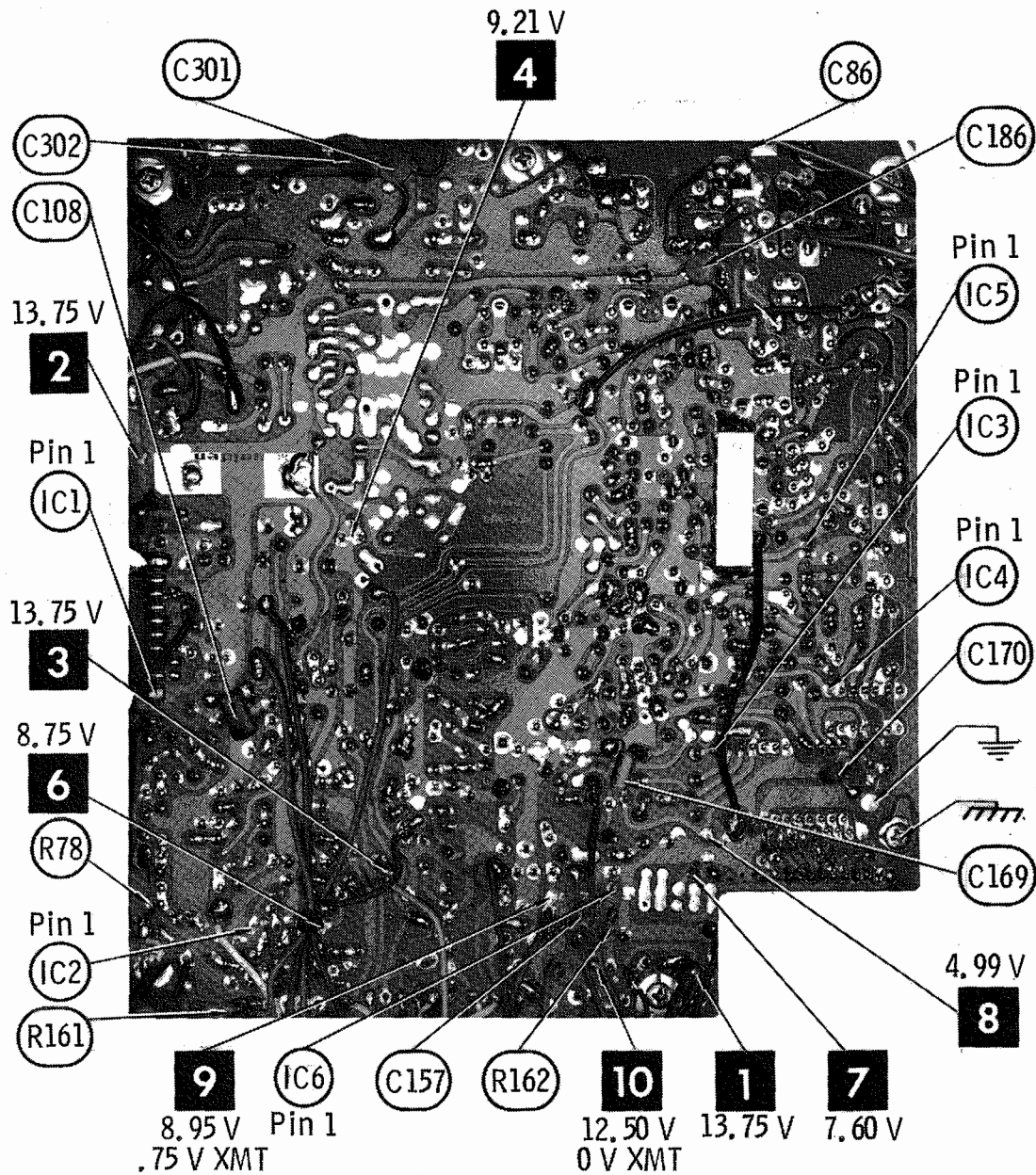
MAIN BOARD



CHASSIS-TOP



MAIN BOARD

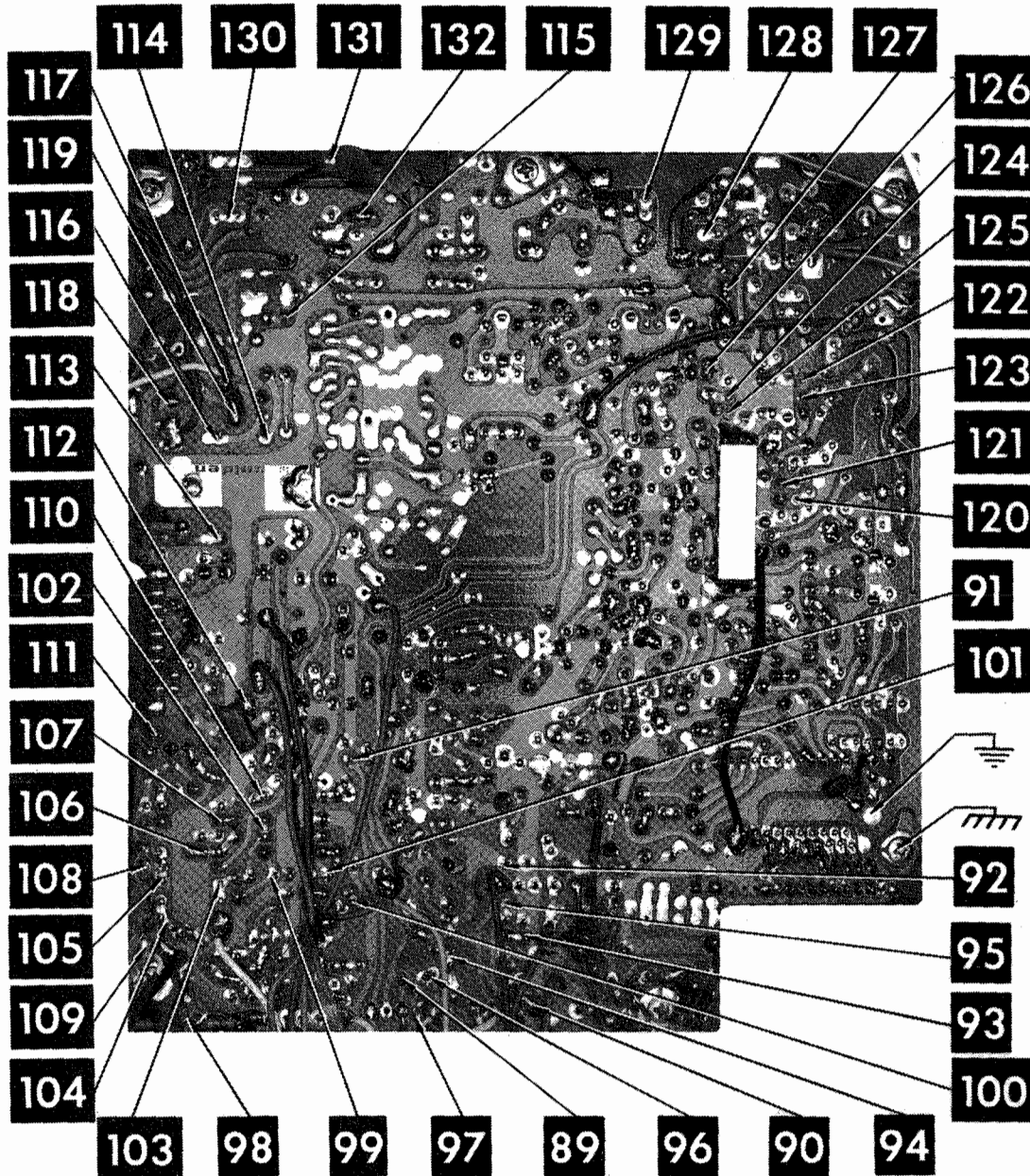


ROBYN MODEL AM-500D

MAIN BOARD

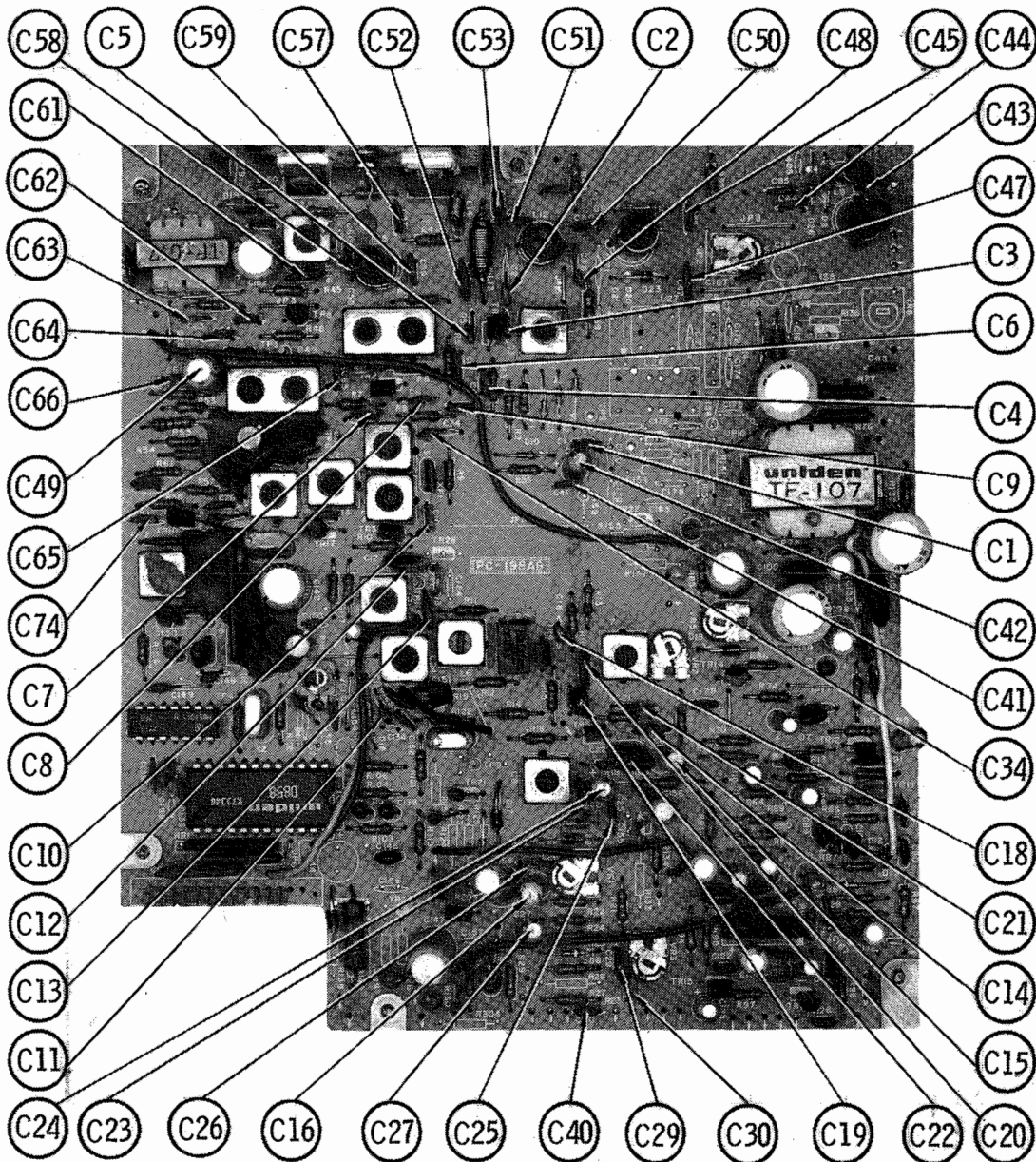


MAIN BOARD

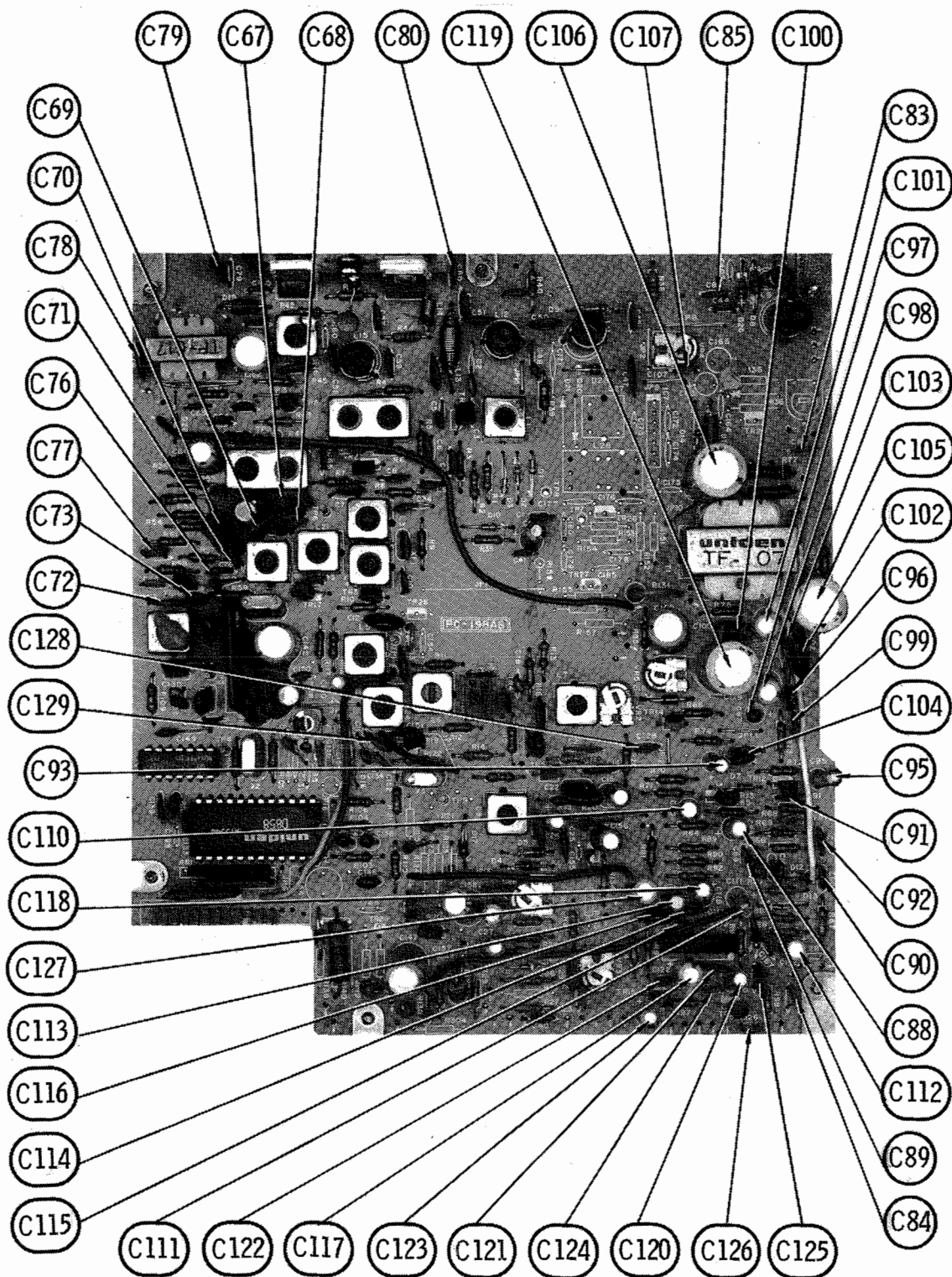


ROBYN MODEL AM-500D

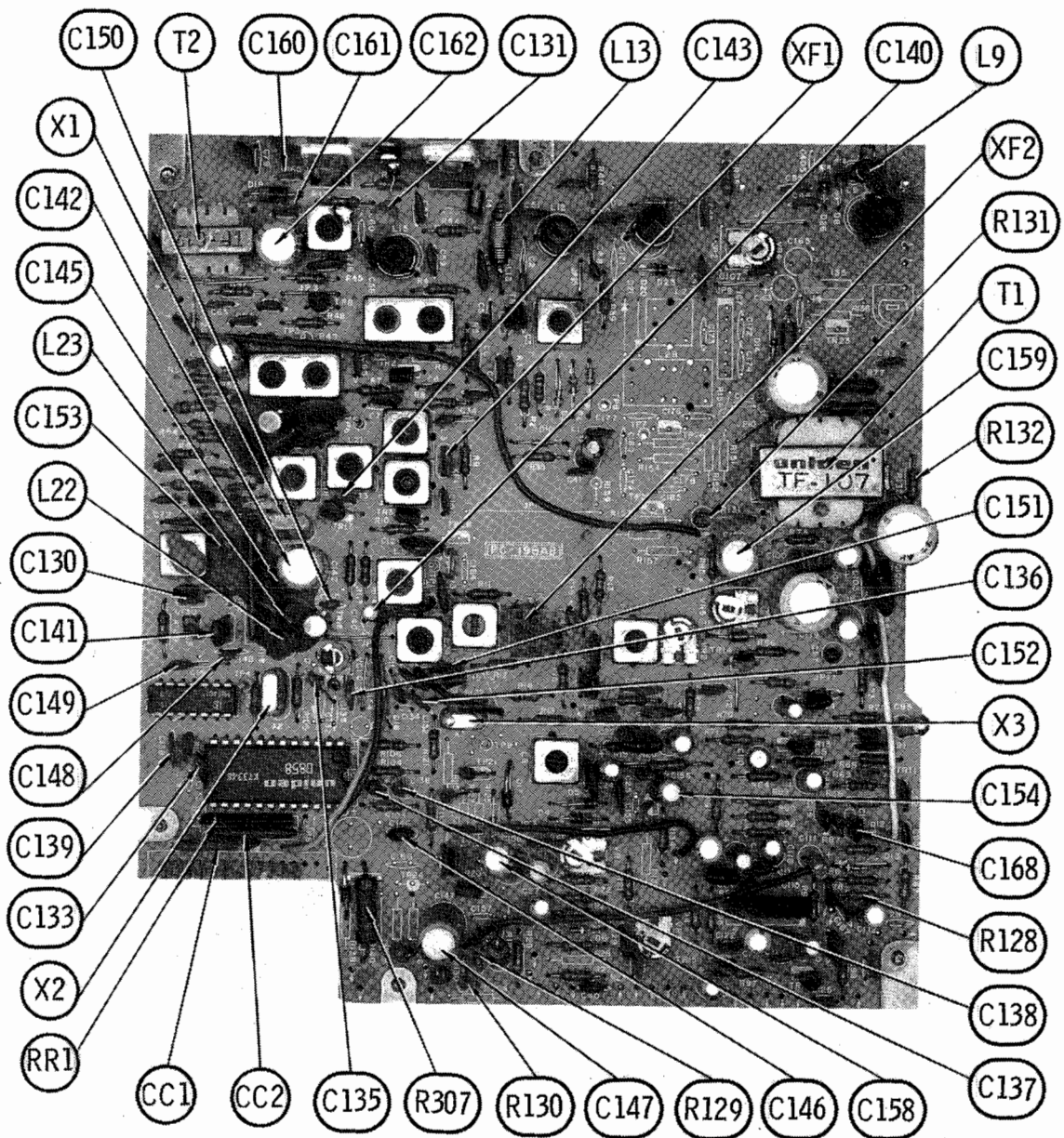
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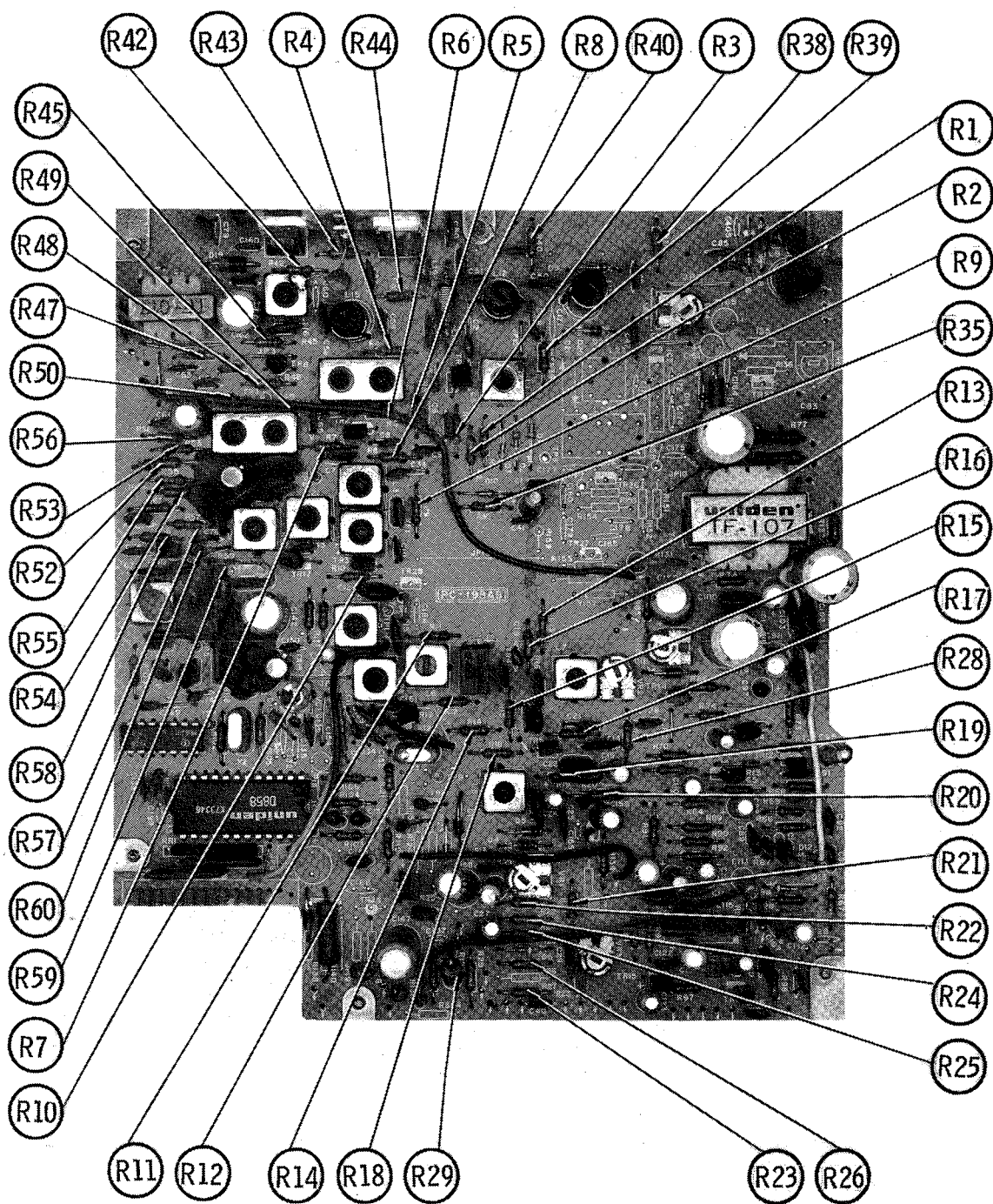
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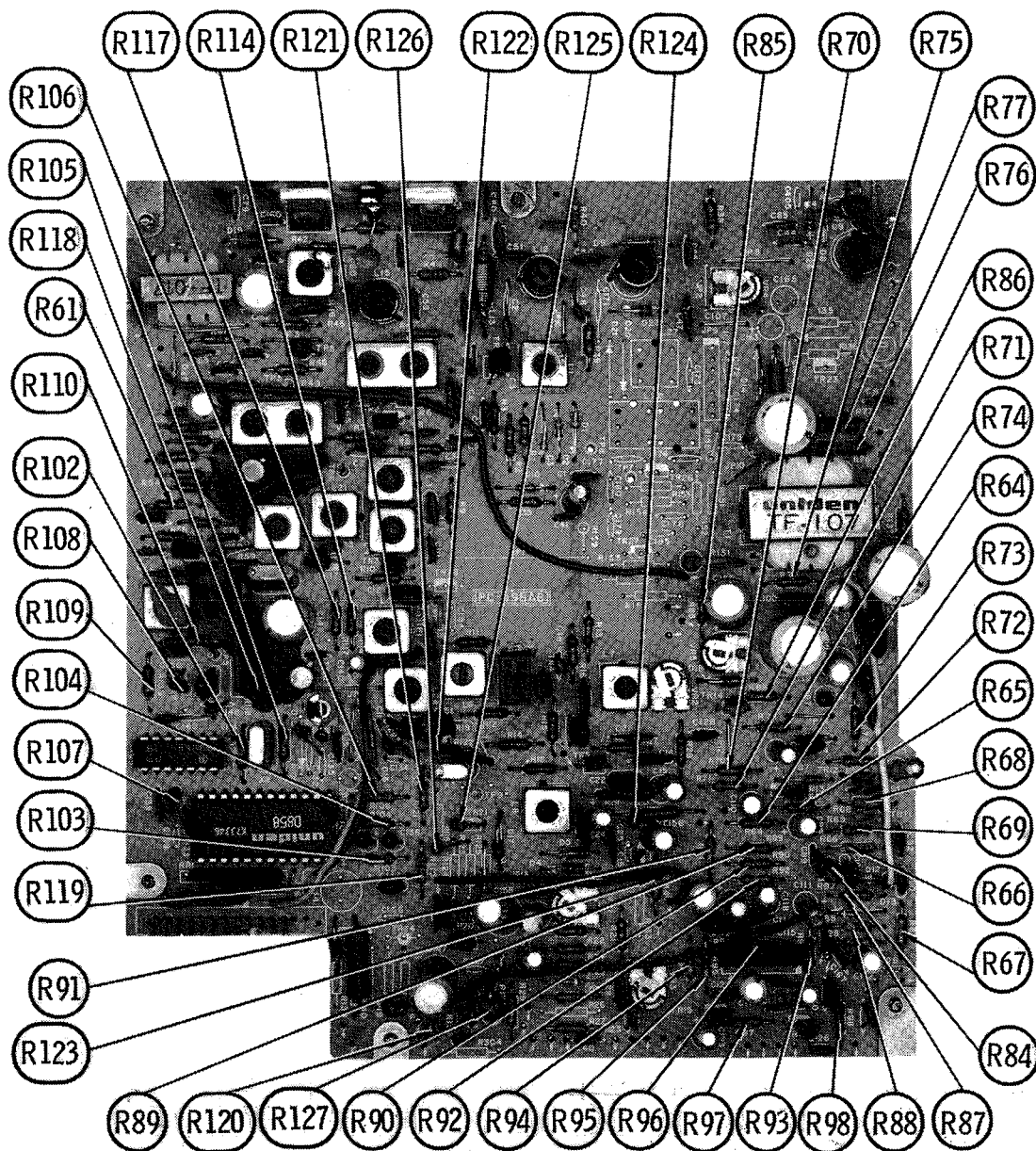
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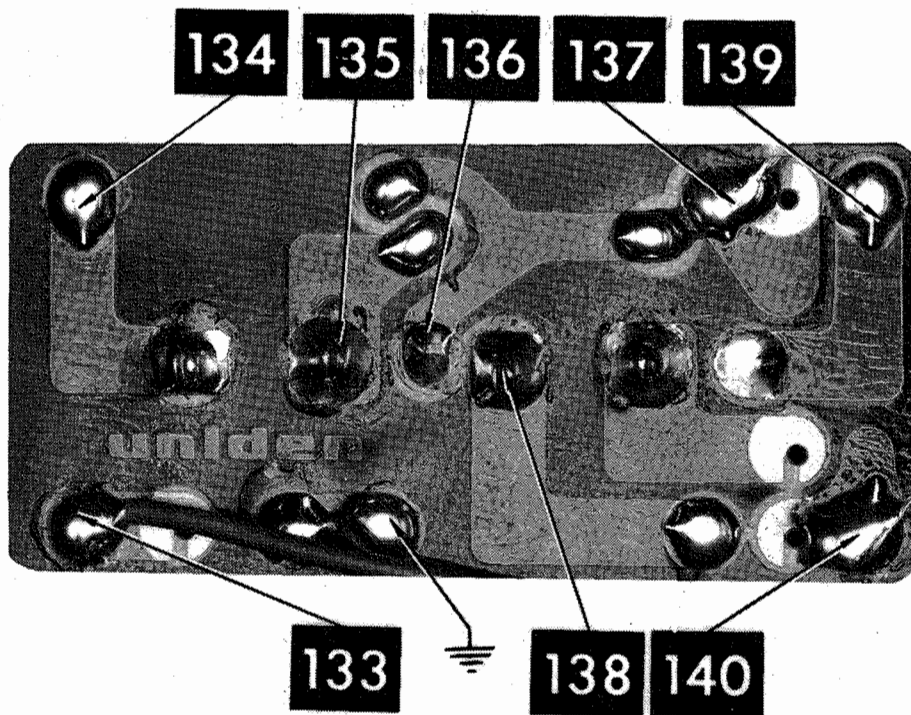
MAIN BOARD



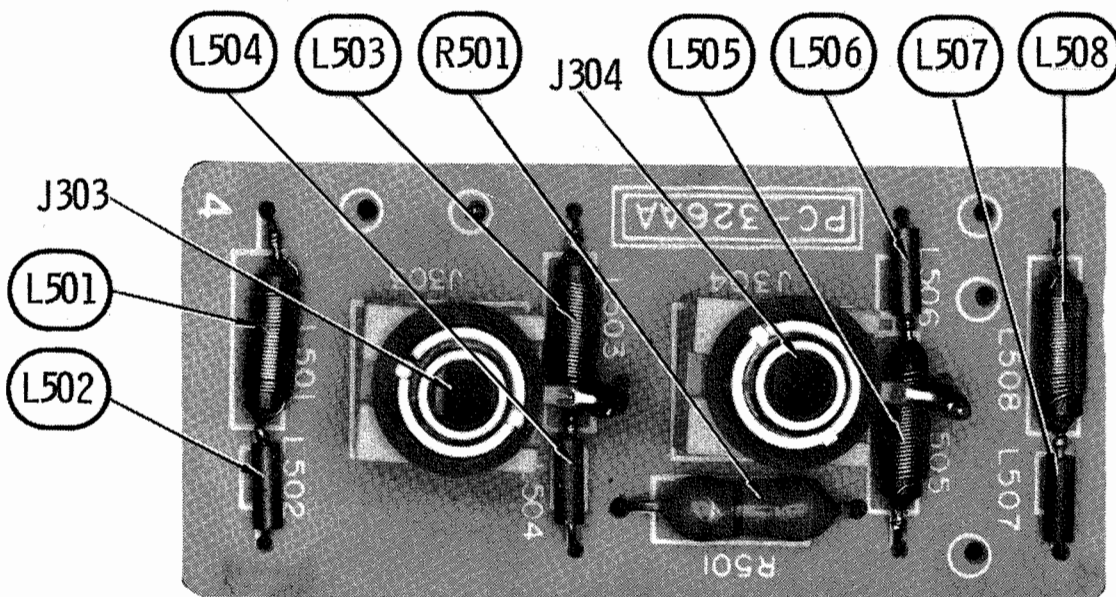
MAIN BOARD



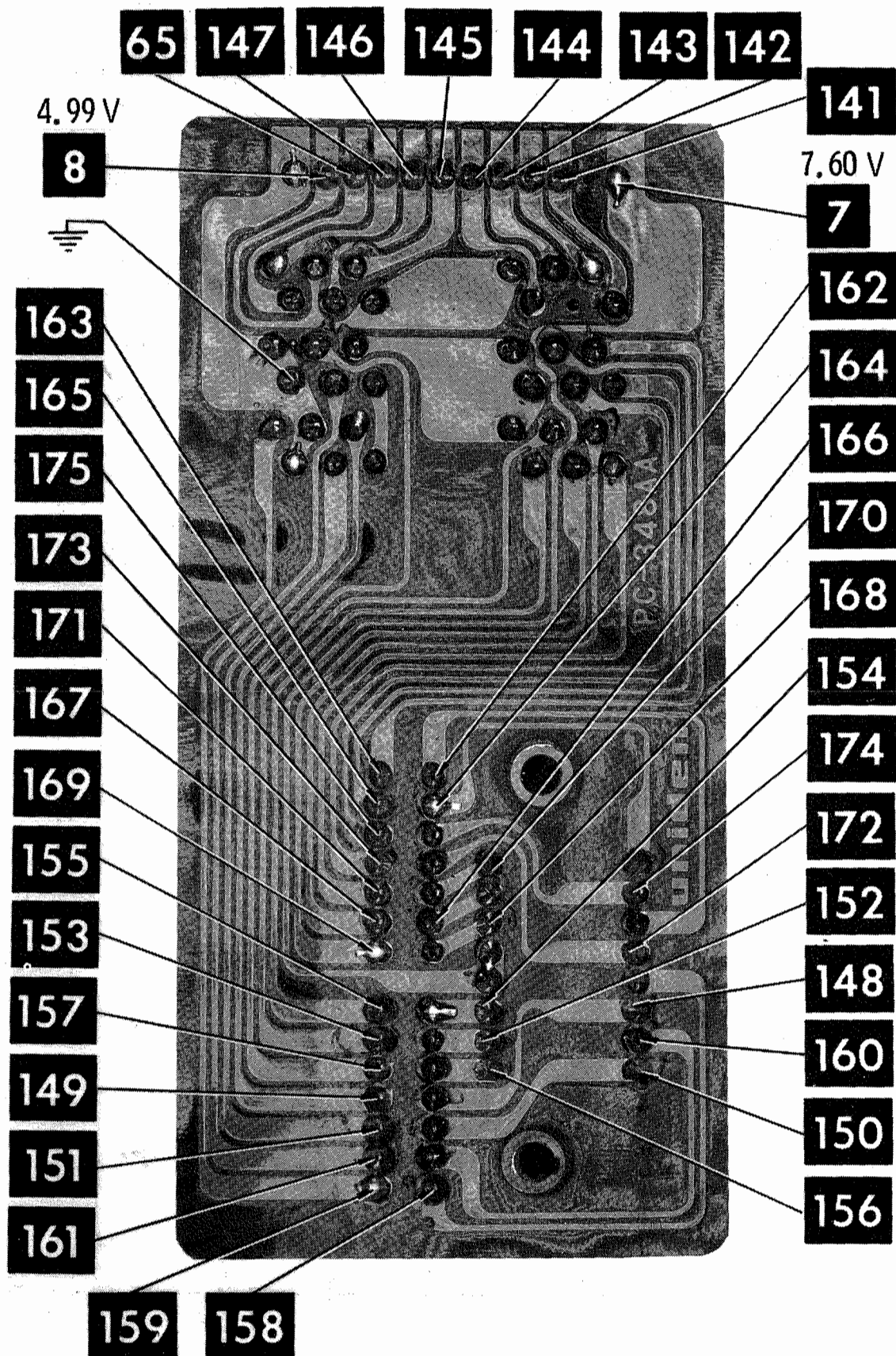
MAIN BOARD



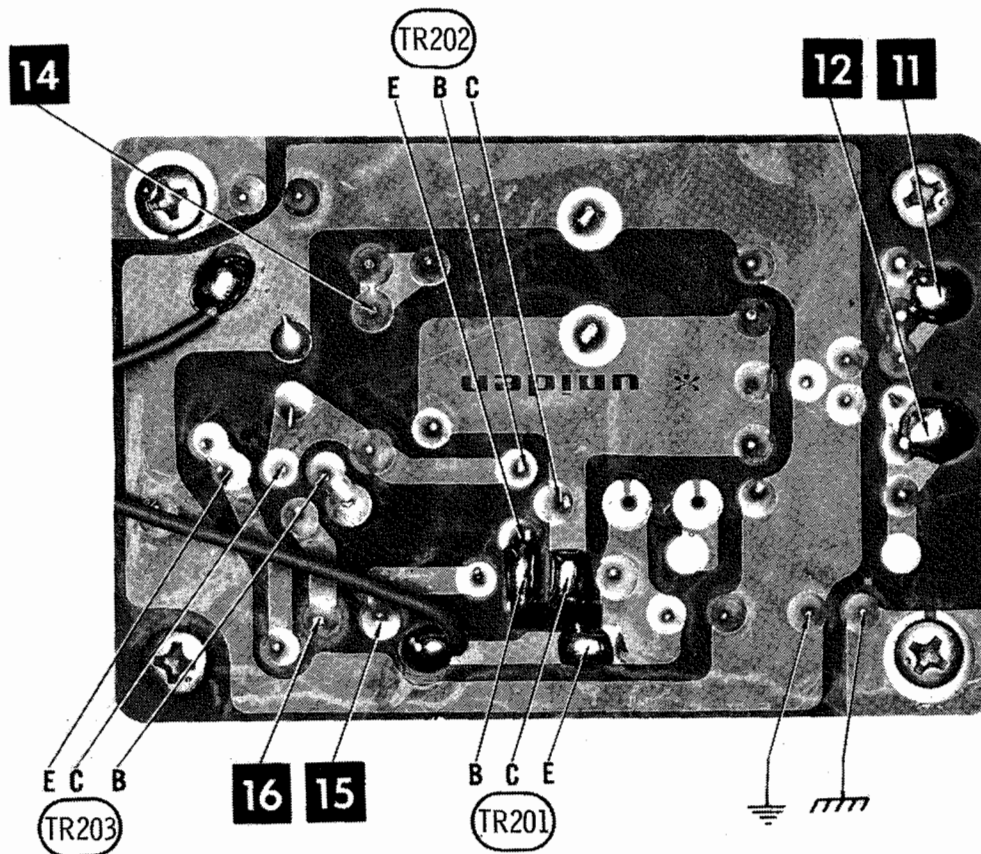
ROBYN MODEL AM-500D



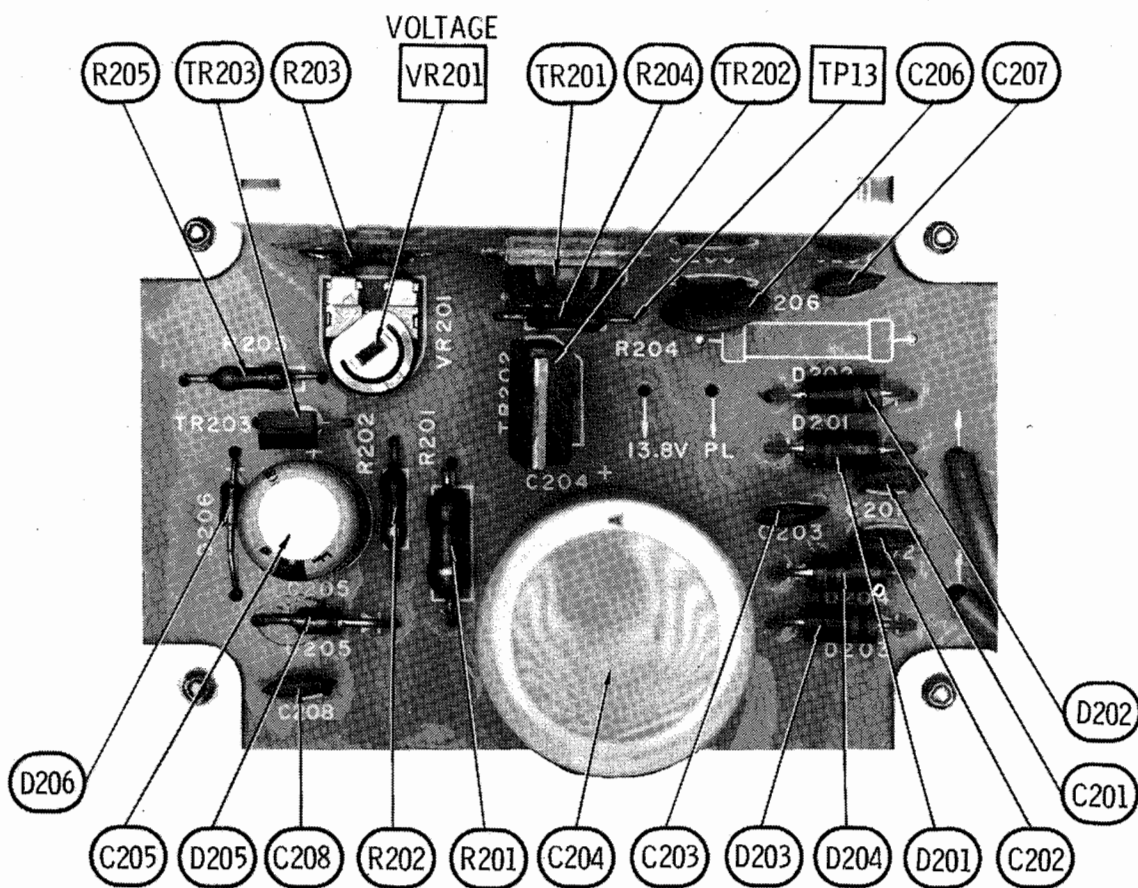
JACK BOARD



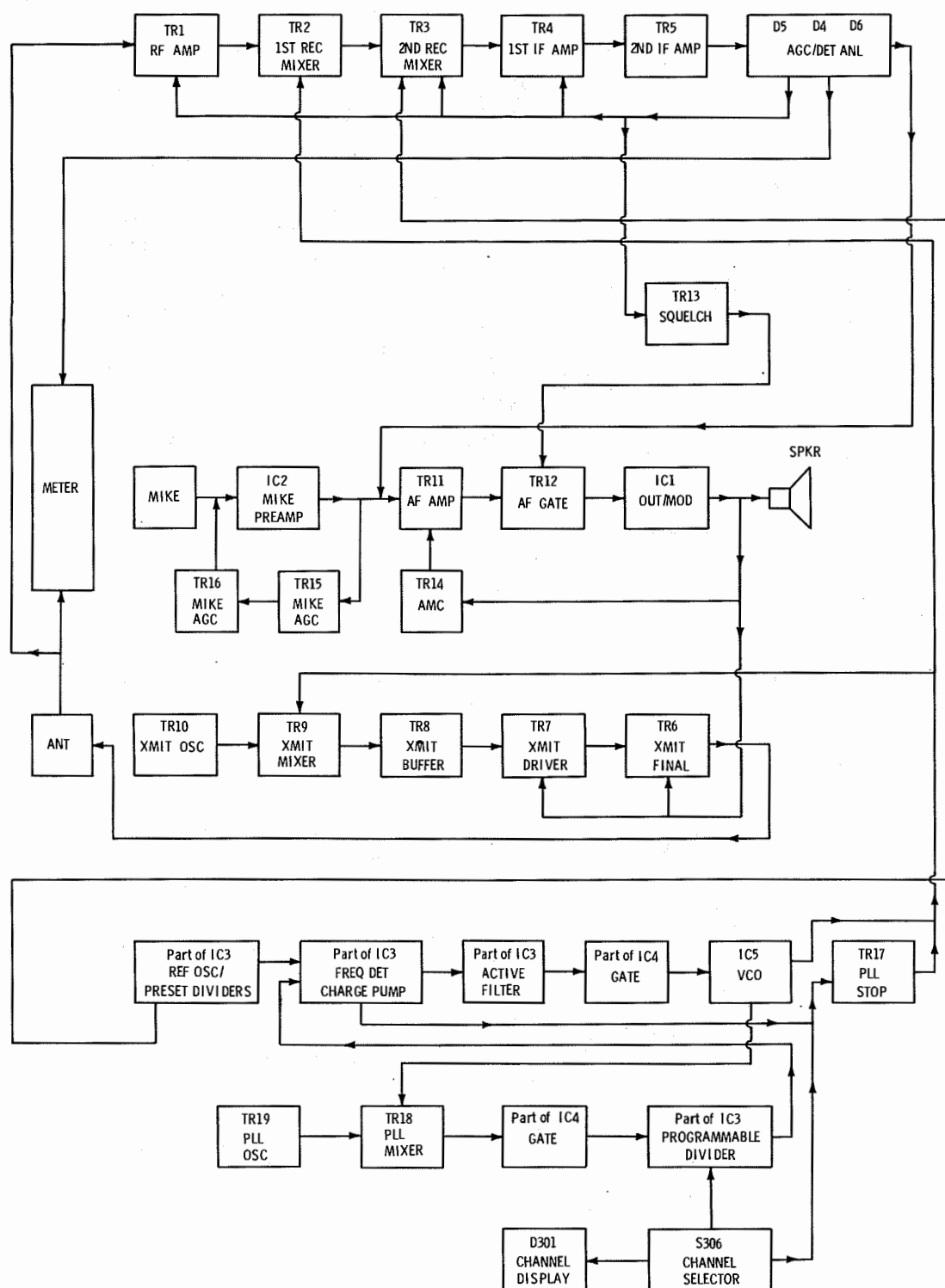
CHANNEL SELECTOR & LED BOARD



ROBYN MODEL AM-500D



POWER SUPPLY BOARD



BLOCK DIAGRAM

PARTS LIST AND DESCRIPTION

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

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	4-conductor (unshielded)	23AWG BELDEN No. 8415 (6')
	(9') BELDEN No. 17109	5-conductor (1 shielded)	28AWG BELDEN No. 9467 (6')
			BELDEN No. 9465 (7-1/2')

SEMICONDUCTORS (Select replacement transistor for best results)

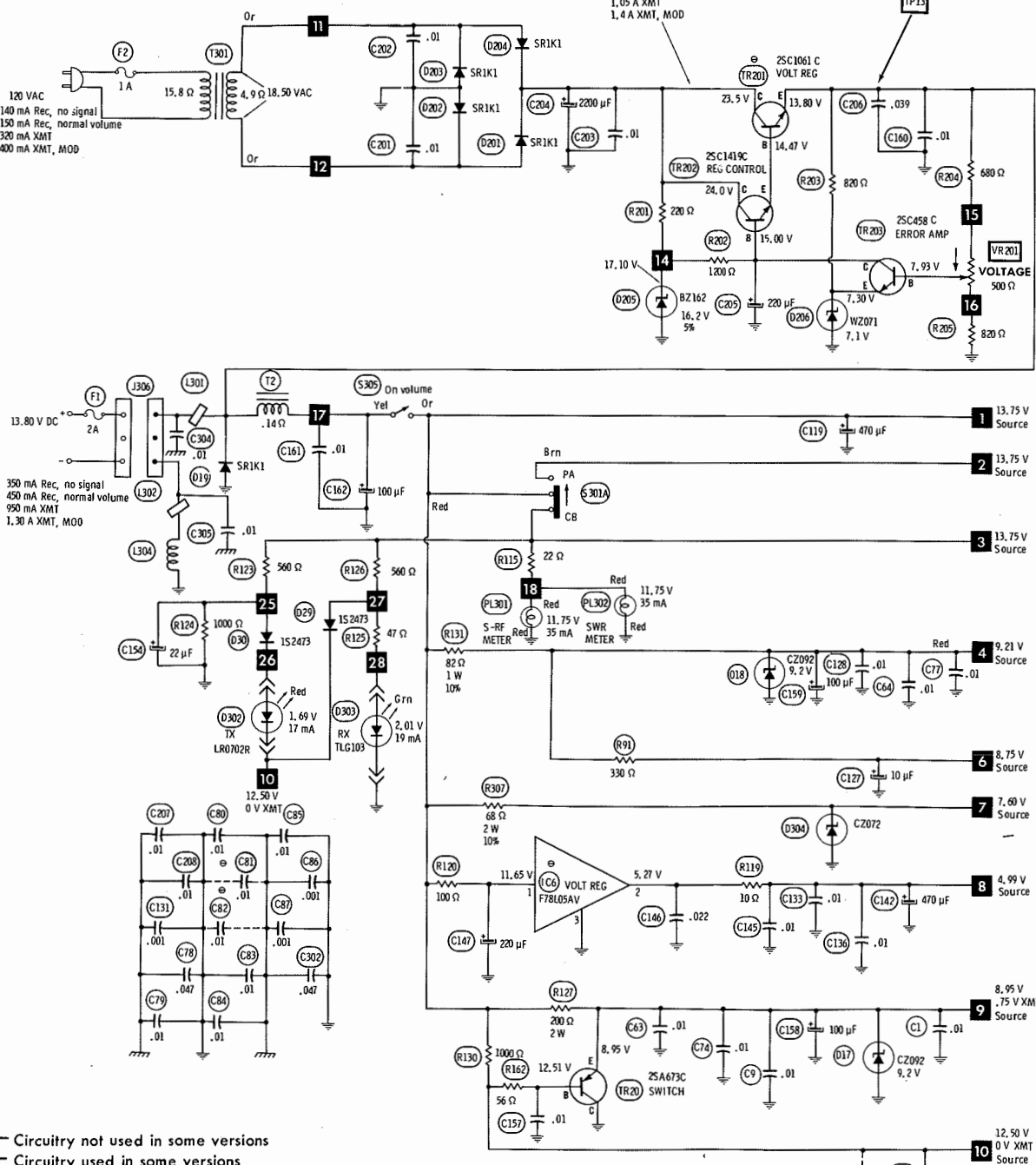
ITEM No.	TYPE No.	MFG. PART No.	REPLACEMENT DATA									
			GENERAL ELECTRIC PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D2	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D3	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D4	1N60-AM	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D5	1N60-AM	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D6	1S2473K	DS2473	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D7	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D8	1N60-AM	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D9	1N60-MP	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D10	1N60-MPX-B	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D11	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D12	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D13	1S2473K	DS2473	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D14	1S2473	DS2473	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D15	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D16	CZ-092	DZ0921	GEZD-9.1	Z89.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D17	CZ-092	DZ0921	GEZD-9.1	Z89.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D18	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D19	1N60-AM	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D20	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D21	1N60-AM	DG1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D22	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D23	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D24	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D25	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D26	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D27	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D28	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D29	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D30	1S2473	DS2473	GE-514	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D31	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D32	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D33	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D34	SR1K-1	DR1100	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D35	BZ-162	DZ1621	GEZD-16	ZB16B		RE 122		RT-246	ECG5075A	1N4745A	WEP1160	
D36	WZ-071	DZ0710	GEZD-7.5	ZM7.5B		RE 111		RT-239	ECG5015	1N4737A	WEP1416	
D37	CZ-072	DZ0720	GEZD-7.5	ZM7.5B		RE 111		RT-239	ECG5015	1N4737A	WEP1416	
IC1	UPC1156H	NA156H							ECG1194			
IC2	UPC592H2	NA92H2					SK3469		ECG1195			
IC3	D858	NC858							ECG1198			
IC4	MB84011-U	NC011U							ECG4011B			
IC5	UHC-004E	NR004							ECG1203			
IC6	78L05	ND8L05							ECG977			
IC7	1N4780A	ND8L05							ECG977			
TR1	2SC1342B	QS1342	GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
TR2	2SC1342D	QS1342	GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
TR3	2SK55D	QF55D	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
TR4	2SC460B	QSC460	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG107	2SC460	WEP460	121-722
TR5	2SC460B	QSC460	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG107	2SC460	WEP460	121-722
TR6	2SC460B	QSC460	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG107	2SC460	WEP460	121-722
TR7	2SC2092(12)	QS2092	GE-337	PTC186		RE 203	SK3197	RT-146	ECG235	2SC1306	WEP785	
TR8	2SC2091(13)	QS2091	GE-270	PTC180		RE 209			ECG295		WEP913	
TR9	2SC2076C	QS2076	GE-210*	PTC121*	HEPS0015*	RE 13*	SK3122	RT-308	ECG229		WEP736	121-722
TR10	3SK45B	QF45B	GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
TR11	2SC460B	QSC460	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG107	2SC460	WEP460	121-722
TR12	2SC458C	QSC458	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR13	JF1033G	QF1033	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
TR14	JF1033G	QF1033	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
TR15	2SC458C	QSC458	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR16	2SC458C	QSC458	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR17	2SC458C	QSC458	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR18	3SK45	QF45B	GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
TR19	3SK45B-09	QF4509	GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
TR20	2SC460B	QSC460	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG107	2SC460	WEP460	121-722
TR21	2SA673C	QTA673	GE-269	PTC103*	HEPS0026*	RE 197*	SK3114	RT-115*	ECG290		WEP911	121-774
TR22	2SC1061C	QS1061	GE-66	PTC154	HEPS3061	RE 21	SK3054	RT-197	ECG152	2SC1061	WEP745	921-1009
TR23	2SC1061D	QS1061	GE-66	PTC154	HEPS3061	RE 21	SK3054	RT-197	ECG152	2SC1061	WEP745	921-1009
TR24	2SC1419C	QS1419	GE-66	PTC167	HEPS5027	RE 21	SK3054	RT-197	ECG152		WEP745	
TR25	2SC458C	QSC458	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114

ROBYN MODEL AM-5000

* Lead configuration may vary from original.
 (12) Rating, 12 WATT @ 3.0 AMP.
 (13) Rating, 5.0 WATT @ 1.0 AMP.
 (14) Rating, 25 WATT @ 3.0 AMP.
 (15) Rating, 20 WATT @ 2.0 AMP.

120 VAC
140 mA Rec, no signal
150 mA Rec, normal volume
320 mA XMT
400 mA XMT, MOD

400 mA Rec, no signal
450 mA Rec, normal volume
1.05 A XMT
1.4 A XMT, MOD



✖ 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.

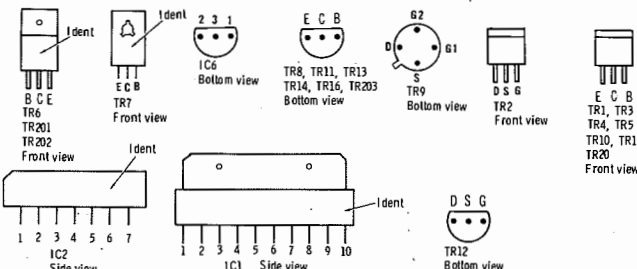
Value in () used in some versions.

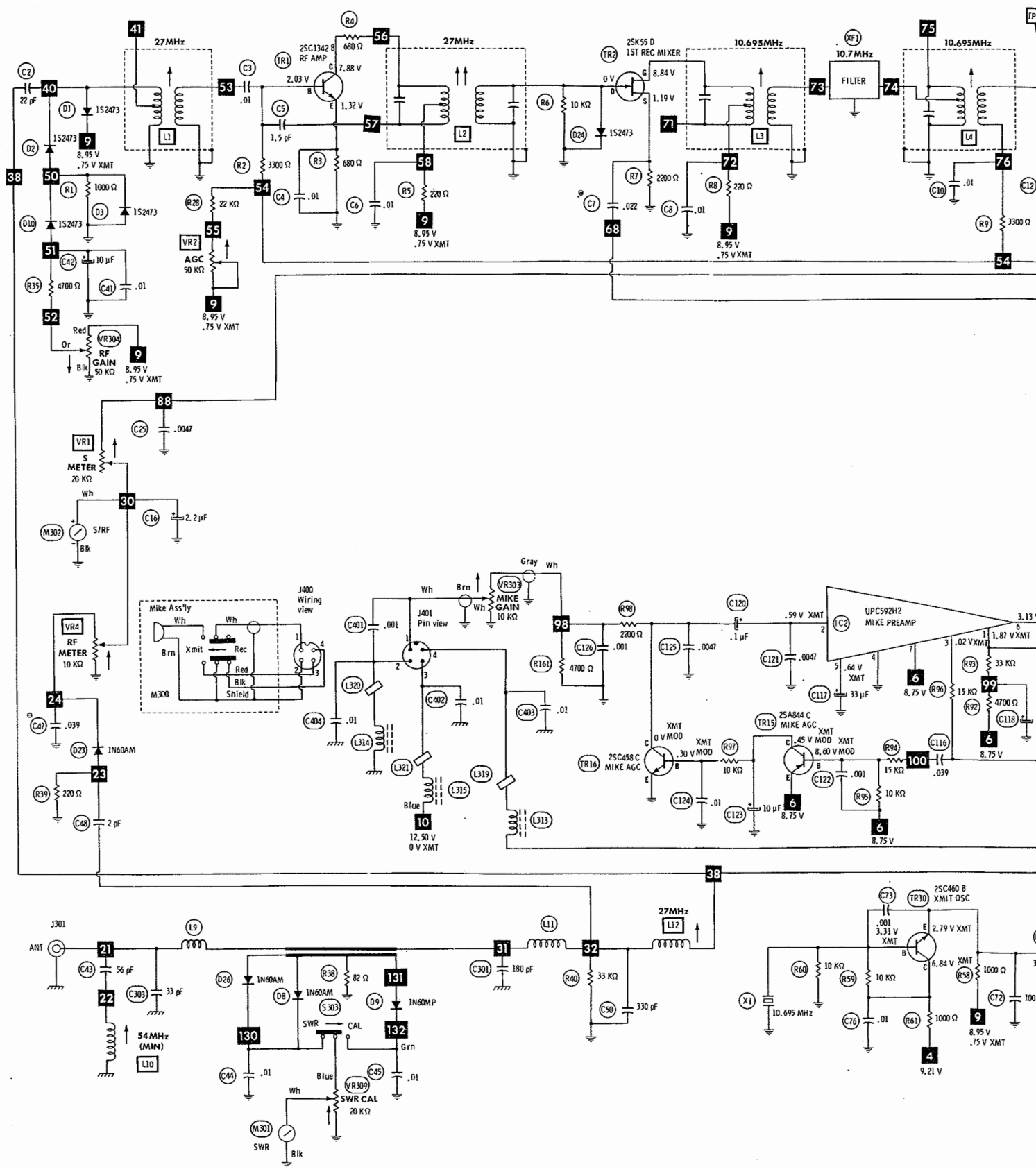
A PHOTOFAC STANDARD NOTATION SCHEMATIC

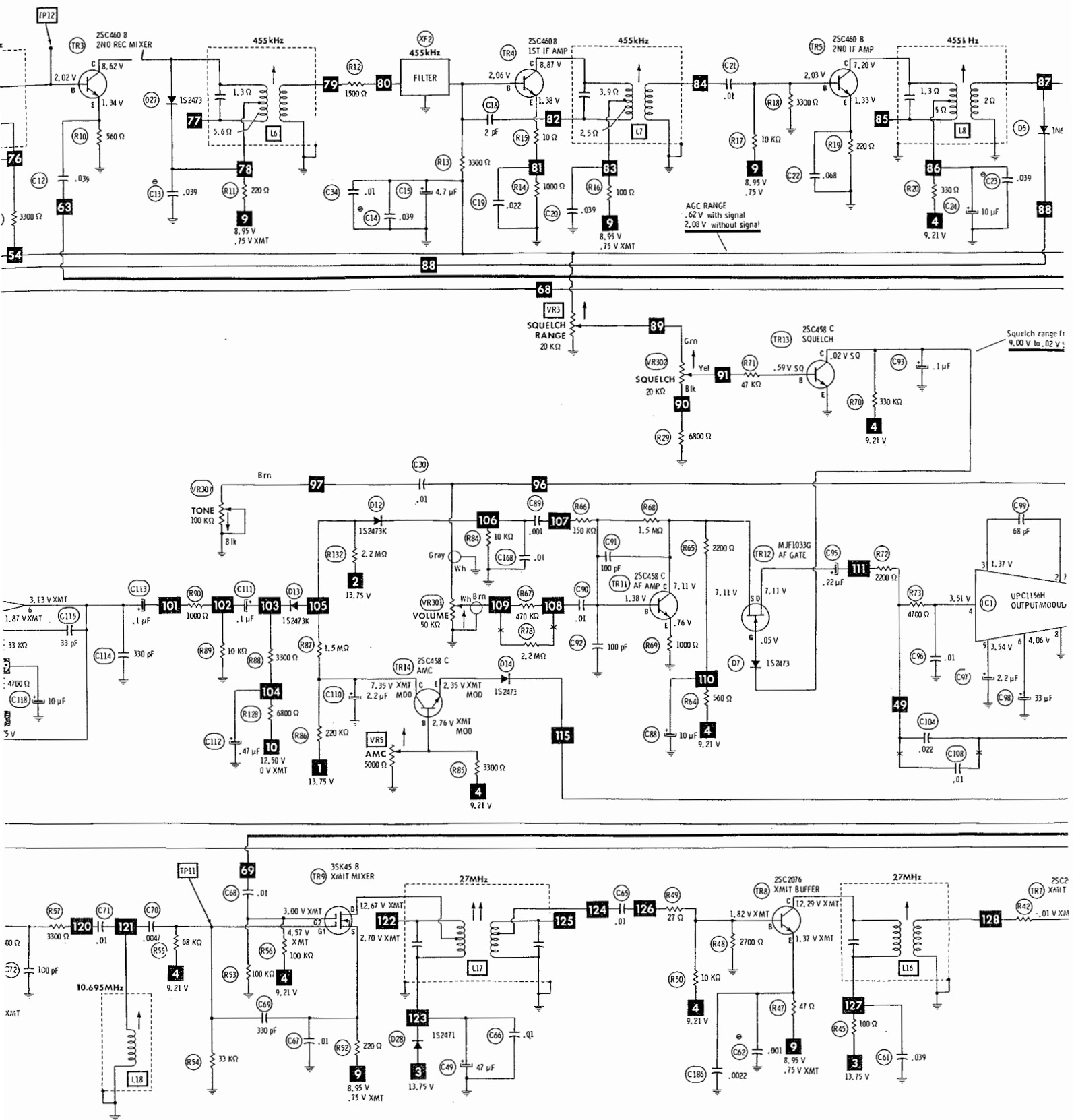
WITH **CIRCUITRACE®**

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Terminal Guides







PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFGR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C15	4.7 25V		PC5-50	VTT4R7B50	QV1-27	EV-1319
C16	2.2 25V		PC2-100	VTT2R2A50	QV1-19	EV-1517
C24	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C27	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C42	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C49	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C88	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C93	.1 10V			TDC104M050EL	QOT1-2	SD50-R109
C95	.22 10V			TDC224M050EL	QOT1-10	SD50-R229
C97	2.2 16V			TDC225M035FL		SD35-2R29
C98	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C101	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C105	470 16V		PC500-16	VTT470K16	QV1-151	EV-1250
C106	470 16V		PC500-16	VTT470K16	QV1-151	EV-1250
C110	2.2 16V		PC2-100	VTT2R2A50	QV1-19	EV-1517
C111	.1 10V			TDC104M050EL	QOT1-2	SD50-R109
C112	.47 50V		PC1-50	VTT47A63	QV1-3	EV-1610
C113	.1 10V			TDC104M050EL	QOT1-2	SD50-R109
C117	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C118	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C119	470 16V		PC500-16	VTT470K16	QV1-151	EV-1250
C120	.1 10V			TDC104M050EL	QOT1-2	SD50-R109
C123	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C127	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C137	2.2 16V			TDC225M035FL		SD35-2R29
C138	2.2 16V			TDC225M035FL		SD35-2R29
C140	.22 10V			TDC224M050EL	QOT1-10	SD50-R229
C142	470 6.3V		PC500-16	VTT470K16	QV1-149	EV-1150
C147	220 16V		PC250-25	VTT220H16	QV1-117	EV-1240
C154	22 16V		PC25-25	VTT22B16	QV1-55	EV-1224
C158	100 10V		PC100-10	VTT100E10	QV1-93	EV-1130
C159	100 16V		PC100-16	VTT100F16	QV1-95	EV-1230
C162	100 25V		PC100-25	VTT100G25	QV1-97	EV-1330
C169	.1 10V			TDC104M050EL	QOT1-2	SD50-R109
C204	2200 25V		WBR2000-25*	TC2520A*	QE1-645*	TV1213.5*
C205	220 16V		PC250-25	VTT220H16	QV1-117	EV-1240

*Axial lead used as radial lead

CAPACITORS

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
C1	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C2	22 N220 50V				*		10TCR-Q22
C3	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C4	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C5	1.5 NPO 50V		DTZ-4R7	HPD4P7	CN0547		10TCC-V47
C6	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C7	.022 25V		DC-203	MGP02	TA120	QC2-157	TG-S10
C8	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C9	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C10	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C11	3 50V		DTZ-3R3	HP03P3	CN0533		10TCC-V33
	5 50V		DTZ-4R7	HPD4P7	CN0547		10TCC-V47
C12	.039 50V			DPMS6S39	PVC6139		6PS-S39
C13	.039 25V				GP140		5GA-S40
C14	.039 25V				GP140		5GA-S40
C18	2 N220 50V				*		
C19	.022 50V			DPMS2S22	EWFI1A122	QF1-127	1PB-S22
C20	.039 25V				GP140		5GA-S40
C21	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C22	.068 50V			WMF1S68	EWFI1A168	QF1-195	1PB-S68
C23	.0047 25V				GP140		5GA-S40
C26	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C29	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C30	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C34	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C40	.001 25V		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C41	.01 25V		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C43	56 N220 50V				*		10TCR-Q56
C44	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C45	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C47	.039 50V				GP140		5GA-S40
C48	2 50V		DD-331	GP330	GP333		1DTS-T33
C50	330 50V		DD-331	GP330	GP333		1DTS-T33
C51	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C52	.039 25V				GP140		5GA-S40

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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
C53	100 50V		DD-101	GP100	GP310		10TS-T10
C57	180 50V		DD-181		GP318		10TS-T18
C58	180 50V		DD-181		GP318		10TS-T18
C59	.022 25V		DC-203	MGP02	TA120	QC2-157	TG-S20
C61	.039 25V				GP140		5GA-S40
C62	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C63	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C64	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C65	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C66	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C67	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C68	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C69	330 N220 50V				*		10TCR-T33
C70	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C71	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C72	100 N220 50V				*		10TCR-T10
C73	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C74	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C76	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C77	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C78	.047 25V		DC-503	MGP05	TA150	QC2-207	TG-S50
C79	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C80	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C81	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C83	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C84	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C85	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C86	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C87	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C89	.001 50V			DPMS6D1	EWFA1210	QF1-1	1PB-D10
C90	.01 50V			WMF1S1	EWFA1110	QF1-91	1PB-S10
C91	100 50V		DD-101	GP100	GP310		10TS-T10
C92	100 50V		DD-101	GP100	GP310		10TS-T10
C96	.01 50V				PVC605		6TM-P50
C99	68 50V		DD-680	GP68	GP468		10TS-Q68
C100	.068 50V			WMF1S68	EWFA1A168	QF1-195	1PB-S68
C102	.068 50V			WMF1S68	EWFA1A168	QF1-195	1PB-S68
C103	220 50V		DD-221		GP322		10TS-T22
C104	.022 50V			DPMS2S22	EWFA1A122	QF1-127	1PB-S22
C107	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C108	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C114	330 50V		DD-331	GP330	GP333		10TS-T33
C115	33 NPO 50V				CNO439		10TCC-Q39
C116	.039 50V			DPMS6S39	PVC6139		6PS-S39
C121	.0047 50V			WMF1D47	EWFA1A247	QF1-57	1PB-D47
C122	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C124	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C125	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C126	.001 25V		DD-472	GP4700	GP247		5GA-D47
C128	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C129	47 N220 50V				*		10TCR-Q47
C130	.022 50V			DPMS2S22	EWFA1A122	QF1-127	1PB-S22
C131	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C133	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C134	15 N220 50V				*		10TCR-Q15
C135	12 N220 50V				*		10TCR-Q12
	15 N220 50V				*		10TCR-Q15
C136	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C139	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C141	.022 50V			DPMS2S22	EWFA1A122	QF1-127	1PB-S22
C143	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C145	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C146	.022 50V			DPMS2S22	EWFA1A122	QF1-127	1PB-S22
C148	22 50V		DTZ-22	NP022	CNO422		10TCC-Q22
C149	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C150	22 50V		DTZ-22	NP022	CNO422		10TCC-Q22
C151	150 50V		DD-151		GP315		10TS-T15
C152	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C153	7 N220 50V				*		10TCR-V68
C157	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C160	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C161	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C167	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C168	.01 50V			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C170	68 50V		DD-680	GP68	GP468		10TS-Q68
C201	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C202	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C203	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C206	.039 25V				GP140		5GA-S40
C207	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C208	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C301	180 50V		DD-181		GP318		10TS-T18
C302	.047 25V		DC-503	MGP05	TA150	QC2-207	TG-S50
C303	33 50V		DTZ-33	NP033	CNO433		10TCC-Q33
C304	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C305	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C401	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C402	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C403	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C404	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
CC1	.01 50V	NN0111(1)					
CC2	.01 50V	NN0111(1)					
VC1	40 50V	50DD26					

*Not normally in distributor's stock. Available thru distributor on order to manufacturer.
(1) Consists of four .01 Capacitors

ROBYN MODEL AM-5000

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	RESISTANCE	REPLACEMENT DATA			
			MFGR. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
VR1	S Meter	20K	RS2033	T-10K(2)	MTC14L1(2)	U260R253B
VR2	AGC	50K	RS5033			U260R503B
VR3	Squelch Range	20K	RS2033			U260R253B
VR4	RF Meter	10K	RS1033			U260R103B
VR5	AMC	5000	RS5023			U260R502B
VR201	Voltage	500	RS5013			U260R501B
VR301	Volume/Switch	50K	500008	F2-50K(1), SSK012 KR3	RU54A, SL36, SL1500, US41	BU1(1), CF63, SS1, 6C
VR302	Squelch	20K	510019	F1-25K(1), SSK012	RU253L, SL36, SL1500	BU1(1), CF62, SS1, DC1
VR303	Mic Gain	10K	500009	F2-10K(1), SSK012	RU14A, SL36, SL1500	BU1(1), CF61, SS1, DC1
VR304	RF Gain	50K	500007	F1-50K(1), SSK012	RU15L, SL36, SL1500	BU1(1), CF12 SS1, DC1
VR307	Tone	100K	520015	F1-100K(1), SSK012	RU15L, SL36, SL1500	BU1(1), CF13, SS1, DC1
VR309	SWR/CAL	20K	510019	F1-25K SSK012	RU253L, SL36L, SL1500	BU1(1), CF62, SS1, DC1

(1) Enlarge mounting hole.

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

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.
RR1	Resistor Network(1)	NN4727					
RR301	Resistor Network(2)	NN6817					
RR302	Resistor Network(2)	NN6817					

(1) Consists of seven 4700 ohm resistors.

(2) Consists of seven 680 ohm resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Rec Ant (27MHz)	LL0050	LA-029	CBS740-T	
L2	Rec RF (27MHz)	LL0094	LA-194		
L3	IF (10.695MHz)	LL0083	LA-180	CBS715-TC	
L4	IF (10.695MHz)	LL0084	LA-181		
L5	Rec Osc (10.240MHz)	LL0085	LA-182		
L6	IF (455kHz)	LL0082	LA-163		
L7	IF (455kHz)	LL0086	LA-183		
L8	IF (455kHz)	LL0087	LA-184		
L9	RF Choke	LL0099	LD-073		
L10	TVI Trap (54MHz)	LL0095	LC-017	CB303	
L11	Pi Filter (27MHz)	LL0096	LC-119		
L12	Final (27MHz)	LL0061	LC-018		
L13	RF Choke	LL0097	LD-012	4588	
L15	XMT Driver (27MHz)	LL0095	LC-017	CB303	
L16	XMT Buffer (27MHz)	LL0092	LA-189		
L17	XMT Mixer (27MHz)	LL0088	LA-185		
L18	XMT Osc (10.695MHz)	LL0093	LA-193		
L20	VCO (37.8MHz)	LL0090	LA-187		
L21	VCO (37.8MHz)	LL0091	LA-188		
L22	RF Choke (100uH)	LL0102	LZ-001		
L23	RF Choke (1.5uH)	LL0101	LZ-002		
L24	PLL OSC (36MHz)	LL0089	LA-186		
L304	RF Choke	LL0097	LD-012	4588	
L313	RF Choke	LL0098	LD-089		
L314	RF Choke	LL0098	LD-089		
L315	RF Choke	LL0098	LD-089		
L501	RF Choke	LL0098	LD-089		
L503	RF Choke	LL0098	LD-089		
L505	RF Choke	LL0098	LD-089		
L508	RF Choke	LL0098	LD-089		

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.	
T2	1.3A	.114	1mH	500024 TF-017(1)			(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	8	8	500023 TF107(1)			(1) Number on unit.

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	120V AC @ 380mA AC	19.0V AC @ 1.25A AC	500025 TF-103(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP301	3" PM 8 ohms	520040	30A05Z8R	

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	2 Amp	110042		AGC2	HDJ	312002	150145	FG2-2
F2	1 Amp	500013	520025	AGC1	HKP	312001	341001AL	FG1-2

ROBYN MODEL AM-500D

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	510037	18-032	18-034	18-010	18-092	1	2	3	4	NC	2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
D301	LED	0N1221	Channel Display
O302	LEO	0LR702	TX LR0702R (1.69V @ 17mA)
O303	LEO	0PG103	RX TLG103 (2.01V @ 19mA)
J301	Jack	510045	Antenna
J303	Jack	110018	PA
J304	Jack	110018	Ext Sp
J306	Jack	500020	DC Power
J400	Jack	110047	Microphone (Female)
J401	Jack	110030	Microphone (Male)
L14	Ferrite Bead	LL0103	LD-075
L25	Ferrite Bead	LL0103	LD-075
L301	Ferrite Bead	LL0100	LD-088
L302	Ferrite Bead	LL0104	YY-043
L319	Ferrite Bead	LL0068	LD-077
L320	Ferrite Bead	LL0068	LD-077
L321	Ferrite Bead	LL0068	LD-077
L502	Ferrite Bead	LL0068	LD-077
L504	Ferrite Bead	LL0068	LD-077
L506	Ferrite Bead	LL0068	LD-077
L507	Ferrite Bead	LL0068	LD-077
M301	Meter	520032	SWR
M302	Meter	520031	S/RF
PL301	Lamp	520062	S/RF (11.75V @ 35mA)
PL302	Lamp	520062	SWR (11.75V @ 35mA)
S301	Switch	500021	CB/PA
S302	Switch	500021	ANL
S303	Switch	500021	SWR/CAL
S304	Switch	500021	Ext Spk
S305	Switch	500008	Power (Part of Volume Control)
S306	Switch	500022	Channel Selector
X1	Crystal	XQ6950	10.695MHz
X2	Crystal	XQ2400	10.240MHz
X3	Crystal	XK5700	36.570MHz
XF1	Crystal Filter	500011	10.7MHz
XF2	Crystal Filter	500012	455kHz
	Flat Cable	500001	
	PC Board	500002	Main
	PC Board	500004	Power
	PC Board	500005	LEO/Switch
	PC Board	500003	Microphone
	PC Board	520057	PA/Ext Sp

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

ITEM	PART No.	ITEM	PART No.
Cabinet, Top	520011	Knob, Switch	520008
Cabinet, Bottom	520010	Window, Meters-Channel Ind.	520063
Escucheteon	520024	Microphone Hanger	510038
Knob, Channel Selector	510029	Mobile Mounting Bracket	
Knob, Control	510030		