

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 DYNA-COM 40 (42-93510)

MANUFACTURER'S SPECIFICATIONS

TRANSMITTER	PLL controlled, amplitude collector modulated (Meets FCC Regulations Part 95).
POWER INPUT	5 Watt input to final RF Power Amplifier.
MODULATION	High level push-pull modulator with RANGE BOOST.
RECEIVER	Dual Conversion Superheterodyne with RF Stage and 455 kHz Ceramic Filter.
SENSITIVITY	1 μ V for 10 dB $\frac{S+N}{N}$ or better.
SELECTIVITY (Adjacent-Channel)	± 10 kHz, more than -50 dB
SQUELCH RANGE	1 μ V to 1000 μ V ± 6 dB
AGC FIGURE OF MERIT	70 dB
AUDIO OUTPUT	2 Watt
ANTENNA	Total Height, 60 inches Telescoping whip; Height extension from top of chassis 50 inches telescoping whip.
BATTERY DRAIN	Transmit: unmodulated 700 mA. Transmit: 100% modulated 1100 mA. Receive: Squelch on, 200 mA. Receive: Maximum Volume 500 mA.
SEMI-CONDUCTORS	19 Transistors, 3 IC's, 14 Diodes.
DIMENSIONS (overall)	Height 11", Width 3-3/4", Depth 3". H-279 mm, W-95 mm, D-76 mm.
NET WEIGHT	2 lbs. 16 oz./1.3 kg.

LAFAYETTE MODEL DYNA-COM 40

Courtesy of the Manufacturer

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 15-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:

L1,L2,T1,T2,T5,T13	9440
L14,L16,T3,T4,T6,T7,T8,T10	5000,5009,8276,8728,9089
L11,L12	9300,9302,9304
L7,L17	8728,9304,9089
CT1	5000,8276,9089

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (IC1 Pin 3).	Ch. 19	CT1	Adjust for 10.240MHz.
Input of meter to TP8.	Ch. 1	L1A	Adjust for 3.60 volts. Check for approximately 1.90 volts on Channel 40.
Input of frequency counter to TP2 (IC1 Pin 2).	Ch. 1		Check for 3.300MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of oscilloscope to TP3 (IC3 Pin 1).	Ch. 19	T1,L2A,T2	Adjust for maximum RF (30mV p-p typical). (See Figure 1.)
Input of frequency counter to TP3 (IC3 Pin 1).	Ch. 1		Check for 37.660MHz. Check all channels. (See Truth Chart for correct frequencies.)
Input of frequency counter to TP4 (IC3 Pin 9).	Ch. 1, XMT		Check for 26.965MHz. If necessary, readjust CT1 for correct frequency. Check all channels. (See page 4 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.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to TP5 (Q10 Base). 455kHz, 1000Hz @ 30% modulation.	Ch. 19	T10,T8	Adjust for maximum audio output.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T7,L14,T6, L16,T5	Adjust for maximum audio output. Readjust T8 and T10 for maximum.

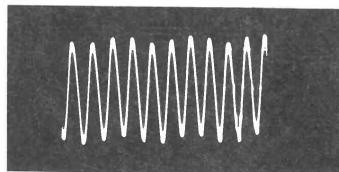


Figure 1.

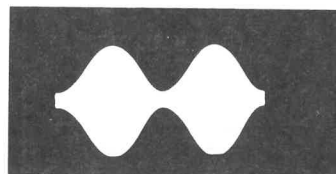


Figure 2.

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 1000uV.	Ch. 19 Squelch Maximum	RV1	SQUELCH RANGE Adjust so squelch just breaks.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19	RV3	S METER Adjust for full scale deflection into red area on meter.

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 external antenna input.	Ch. 19	T3,T4	Adjust for maximum RF output.
Input of RF wattmeter to external antenna input.	Ch. 19	L7A,L11,L12	Adjust for 3.0 watts RF output maximum.
Input of field strength meter located near telescopic antenna.	Ch. 19	L17	With telescopic antenna fully extended, adjust for maximum indication on field strength meter.
Input of spectrum analyzer or harmonic meter to external antenna input.	Ch. 19	T13	Adjust for MINIMUM at 54MHz (2nd harmonic).

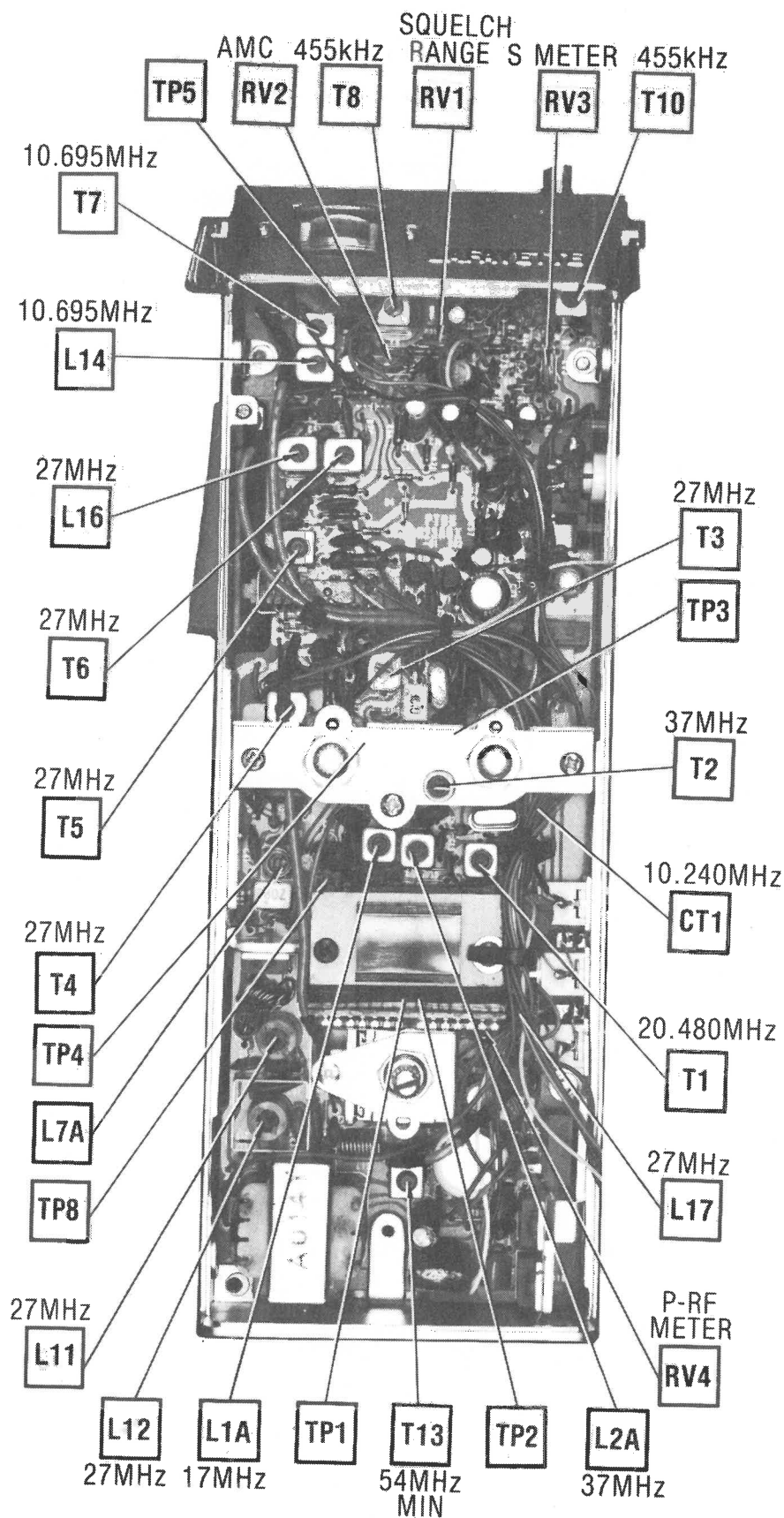
TRANSMITTER ADJUSTMENTS

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.

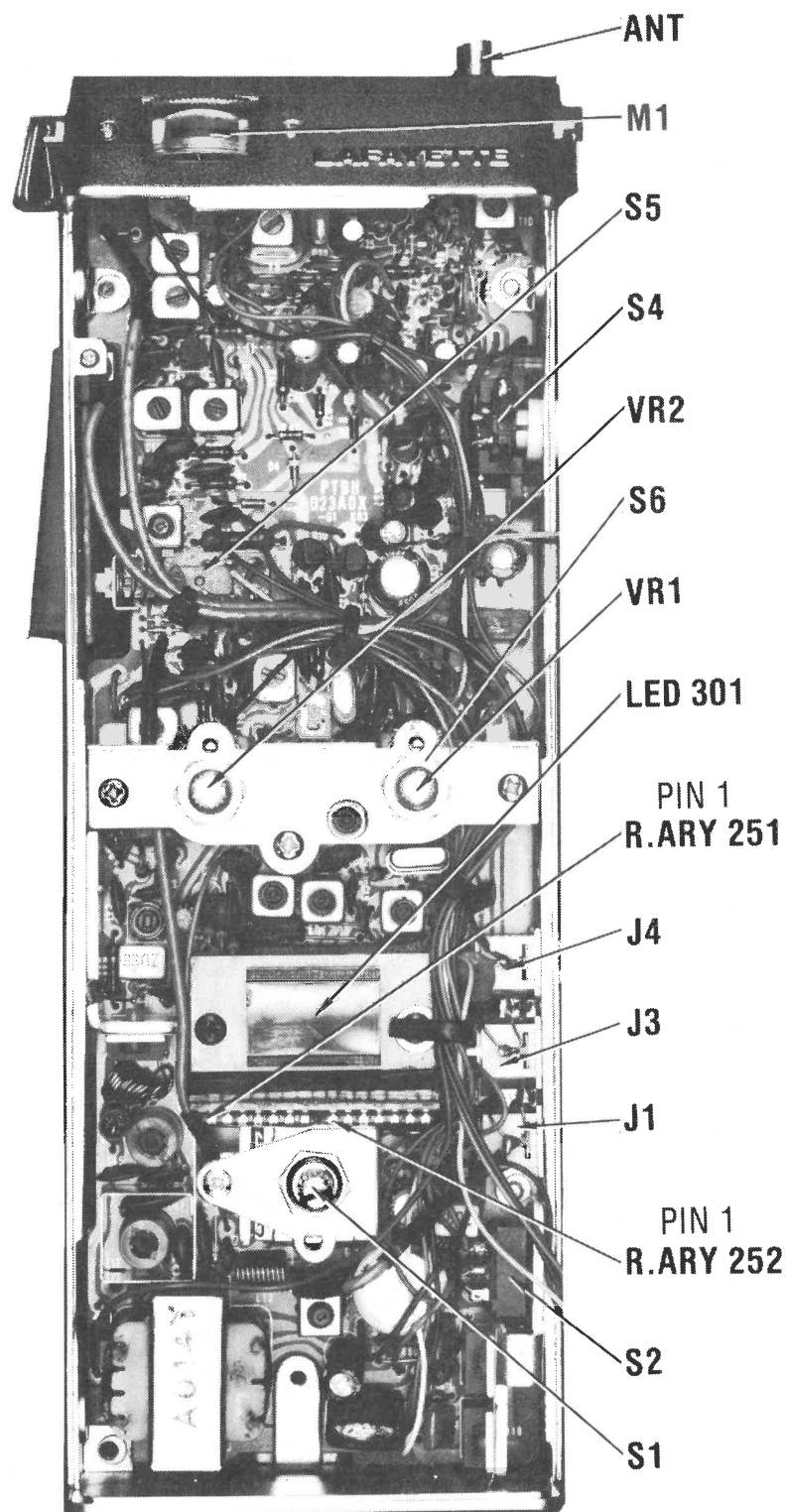
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to external antenna input. Inject a 1000Hz, 20mV audio signal at Mic input.	Ch. 19	RV2	AMC Adjust for 85-90% modulation maximum. (See Figure 2.)
Input of RF wattmeter to external antenna input.	Ch. 19	RV4	P-RF METER At 3.0 watts RF output adjust for full scale deflection into blue area of meter.

TRUTH CHART

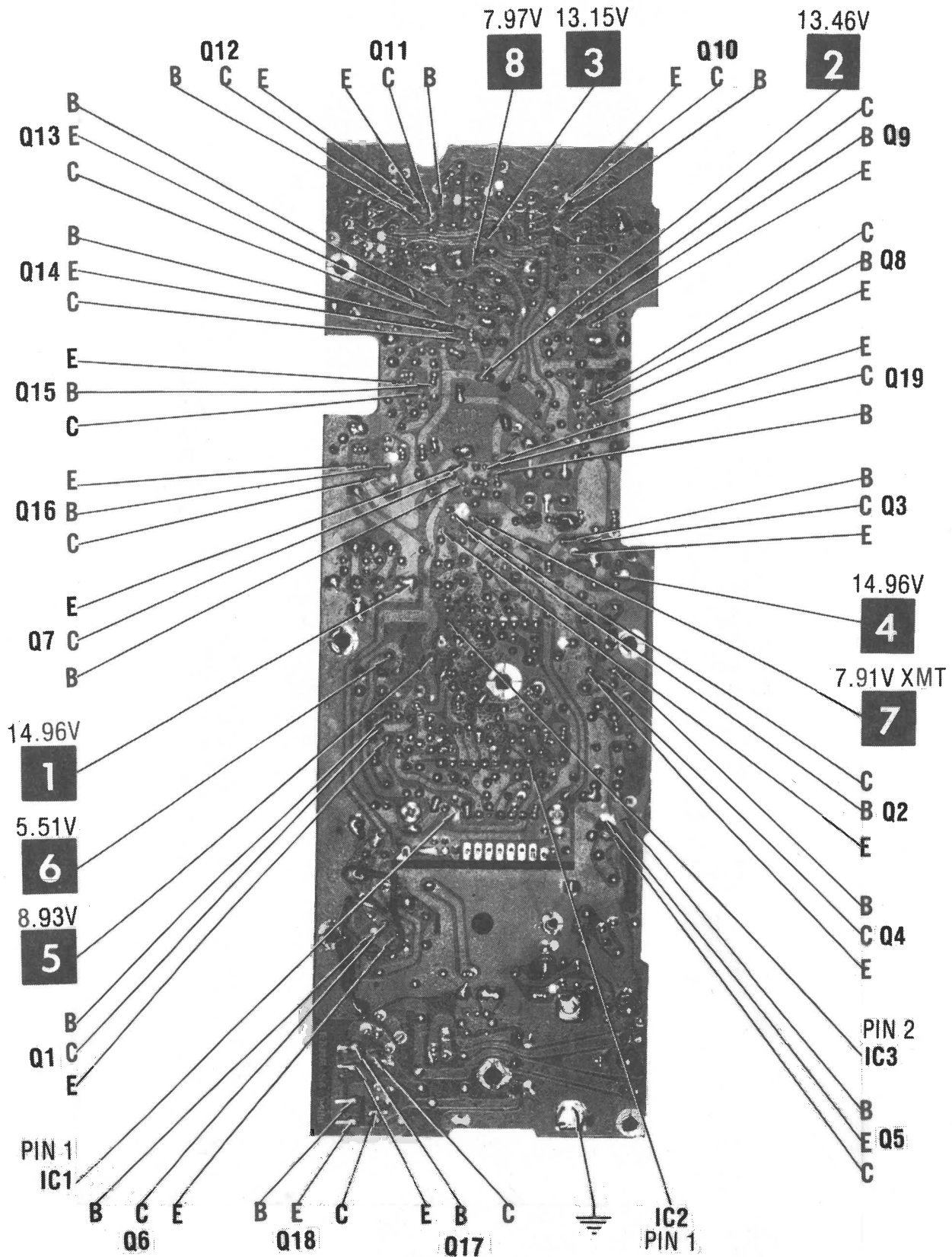
CHANNEL	1 = 5.51 Volts 0 = 0 Volts CHANNEL INPUT CODES								DIVIDER INPUT IN MHz AT TP2	REC & XMT SYNTH OUTPUT IN MHz AT TP3	
	IC1 PINS										
	9	10	11	12	13	14	15				
1	1	0	0	1	0	1	0		3.300	37.660	
2	1	0	0	1	0	0	1		3.290	37.670	
3	1	0	0	1	0	1	1		3.280	37.680	
4	1	0	0	0	1	1	0		3.260	37.700	
5	1	0	0	0	1	0	1		3.250	37.710	
6	1	0	0	0	1	1	1		3.240	37.720	
7	1	0	0	0	0	1	1		3.230	37.730	
8	1	0	0	0	0	0	1		3.210	37.750	
9	1	0	0	0	0	1	0		3.200	37.760	
10	0	1	1	1	1	1	1		3.190	37.770	
11	0	1	1	1	1	1	0		3.180	37.780	
12	0	1	1	1	1	0	0		3.160	37.800	
13	0	1	1	1	0	1	1		3.150	37.810	
14	0	1	1	1	0	1	0		3.140	37.820	
15	0	1	1	1	0	0	1		3.130	37.830	
16	0	1	1	0	1	1	1		3.110	37.850	
17	0	1	1	0	1	1	0		3.100	37.860	
18	0	1	1	0	1	0	1		3.090	37.870	
19	0	1	1	0	1	0	0		3.080	37.880	
20	0	1	1	0	0	1	0		3.060	37.900	
21	0	1	1	0	0	0	1		3.050	37.910	
22	0	1	1	0	0	0	0		3.040	37.920	
23	0	1	0	1	1	0	1		3.010	37.950	
24	0	1	0	1	1	1	1		3.030	37.930	
25	0	1	0	1	1	1	0		3.020	37.940	
26	0	1	0	1	1	0	0		3.000	37.960	
27	0	1	0	1	0	1	1		2.990	37.970	
28	0	1	0	1	0	1	0		2.980	37.980	
29	0	1	0	1	0	0	1		2.970	37.990	
30	0	1	0	1	0	0	0		2.960	38.000	
31	0	1	0	0	1	1	1		2.950	38.010	
32	0	1	0	0	1	1	0		2.940	38.020	
33	0	1	0	0	1	0	1		2.930	38.030	
34	0	1	0	0	1	0	0		2.920	38.040	
35	0	1	0	0	0	1	1		2.910	38.050	
36	0	1	0	0	0	1	0		2.900	38.060	
37	0	1	0	0	0	0	1		2.890	38.070	
38	0	1	0	0	0	0	0		2.880	38.080	
39	0	0	1	1	1	1	1		2.870	38.090	
40	0	0	1	1	1	1	0		2.860	38.100	



CHASSIS-REAR

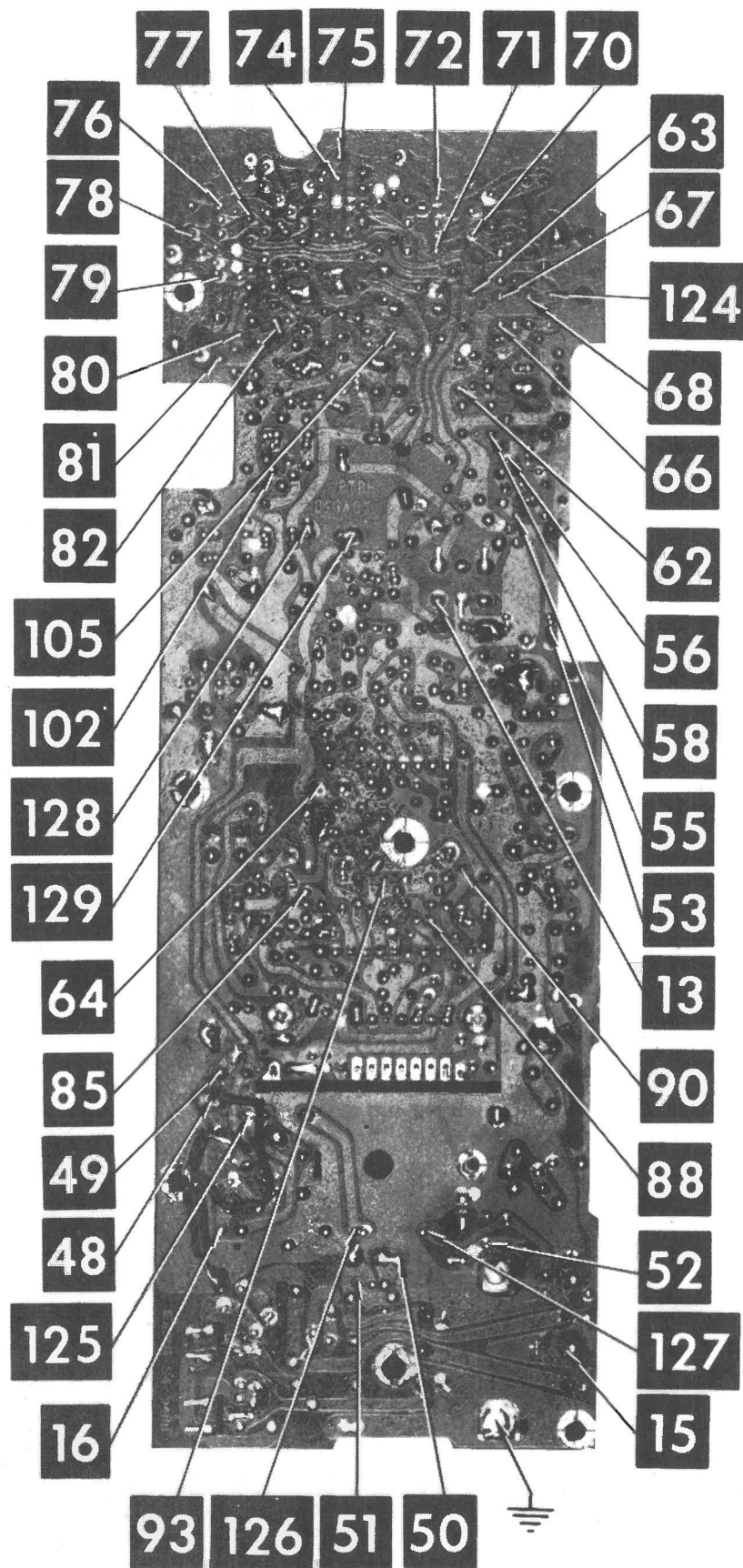


CHASSIS-REAR

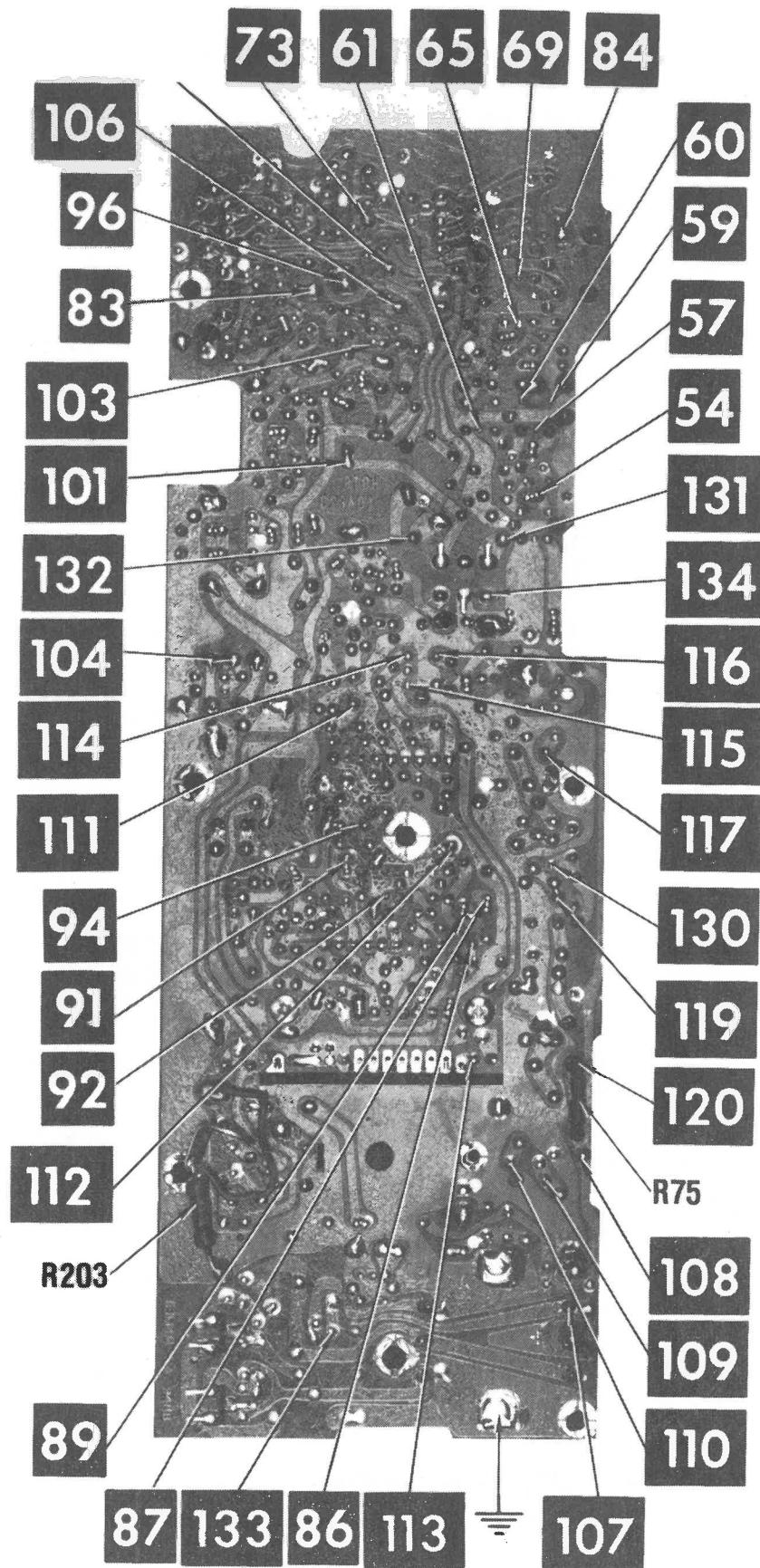


LAFAYETTE MODEL DYNA-COM 40

MAIN BOARD

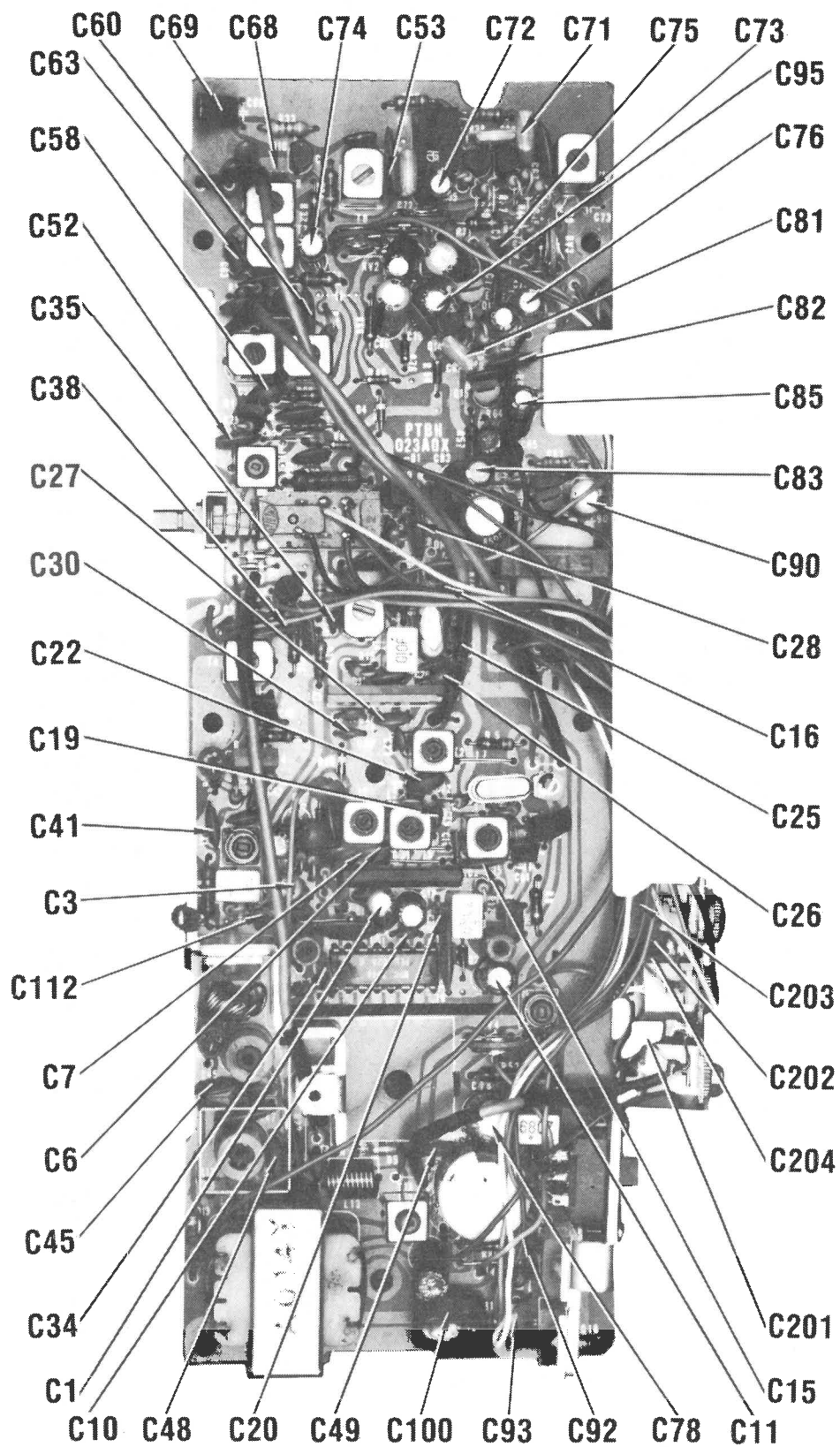


MAIN BOARD

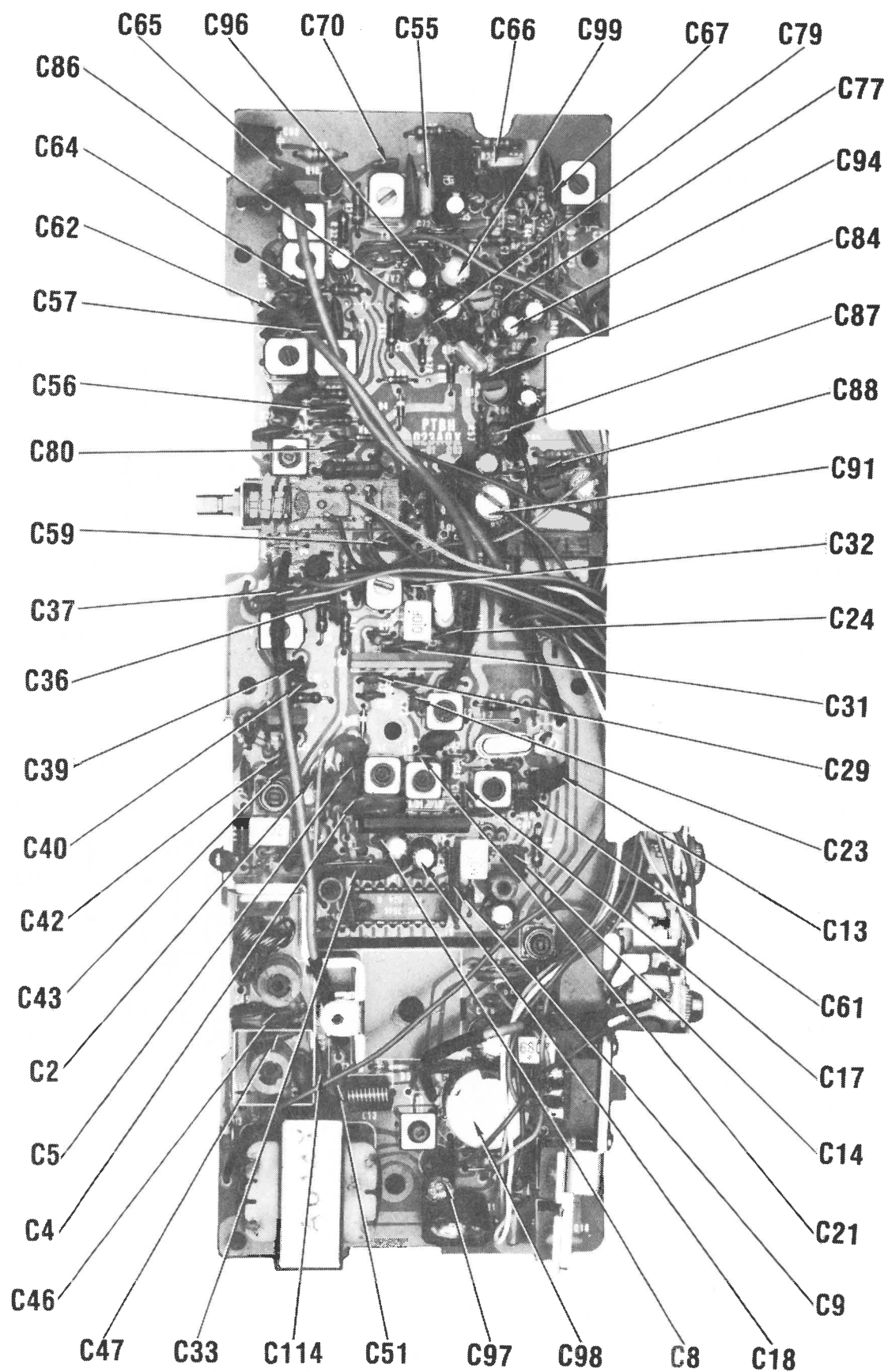


LAFAYETTE MODEL DYNA-COM 40

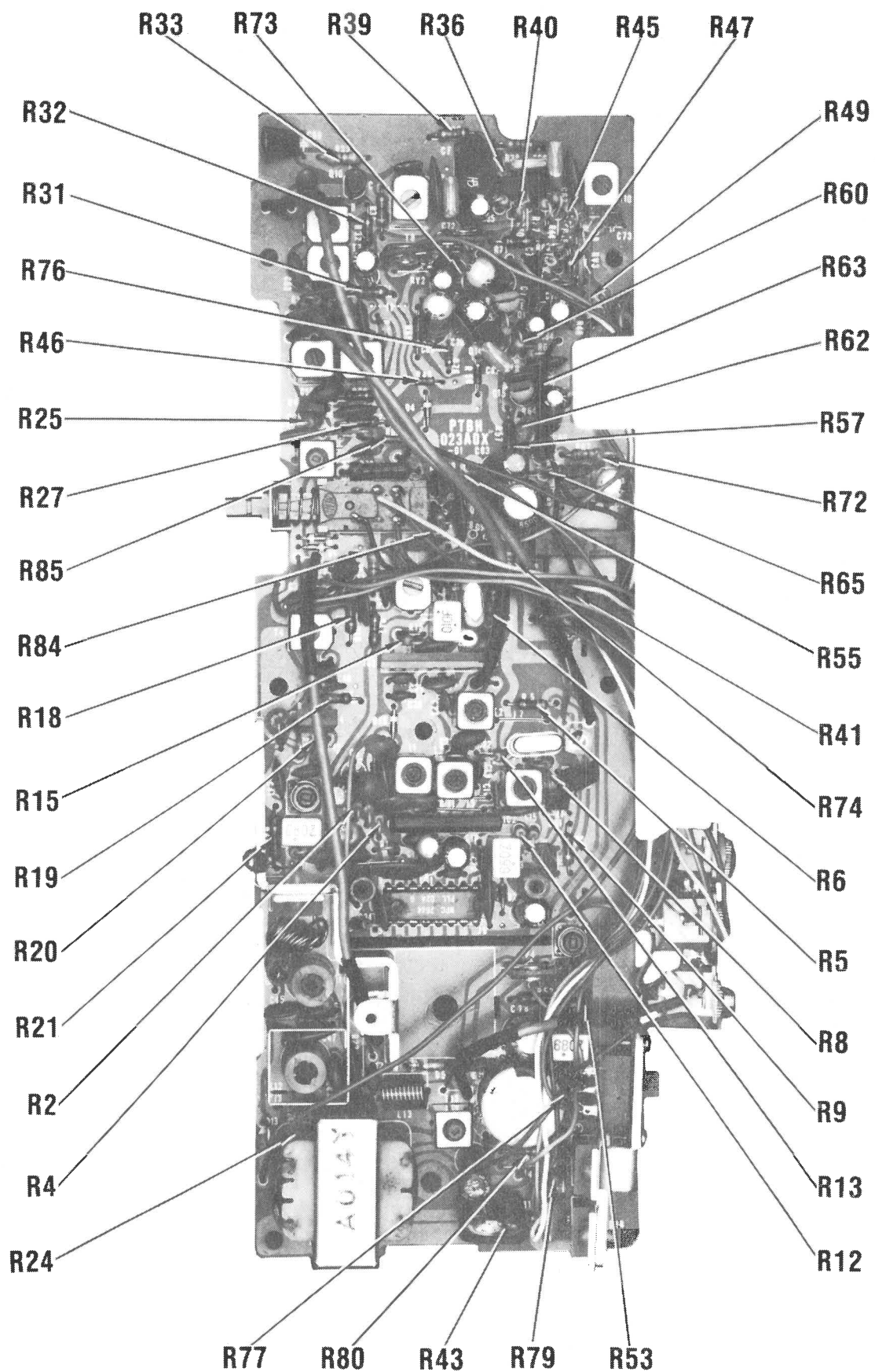
MAIN BOARD



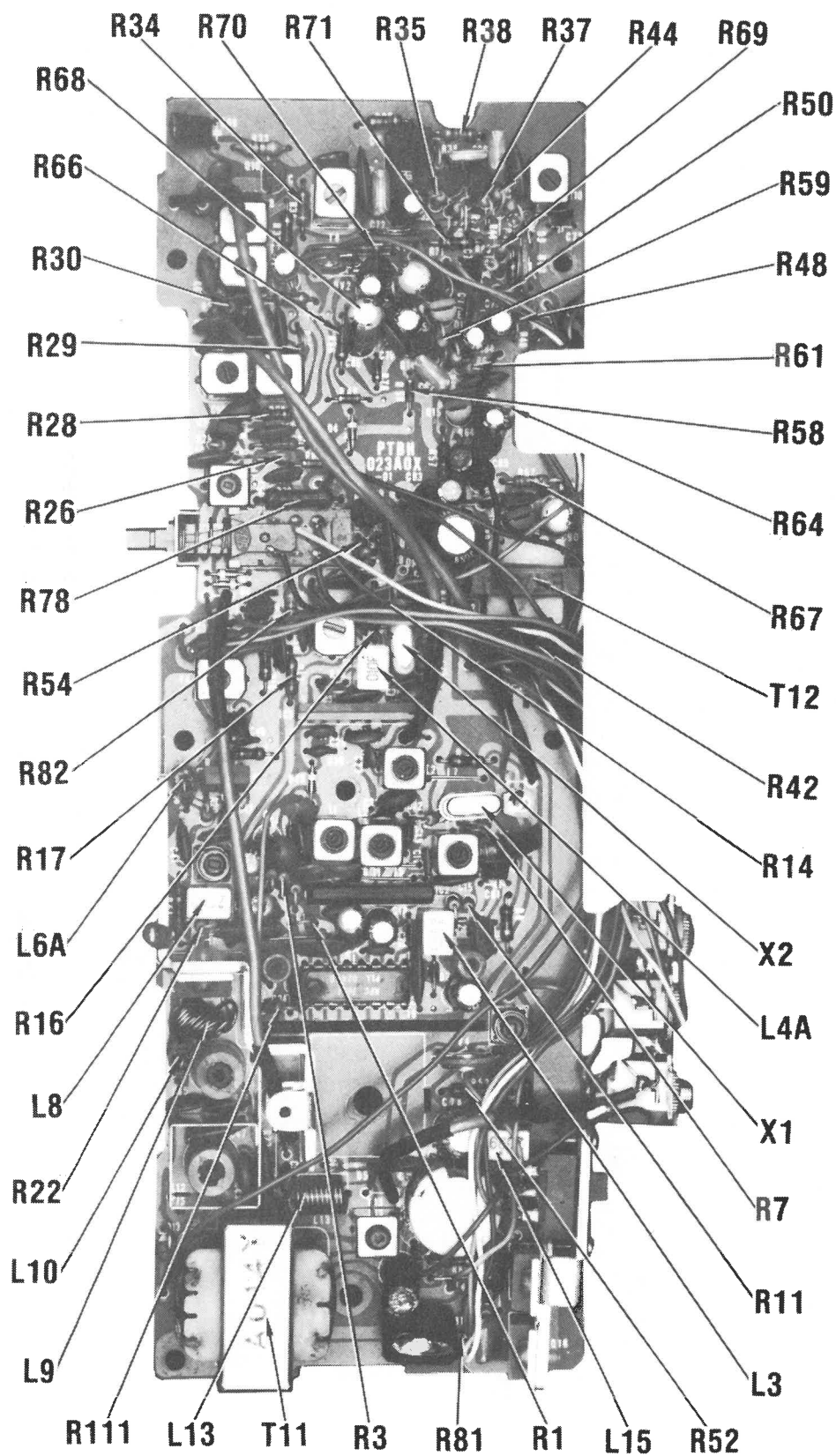
MAIN BOARD



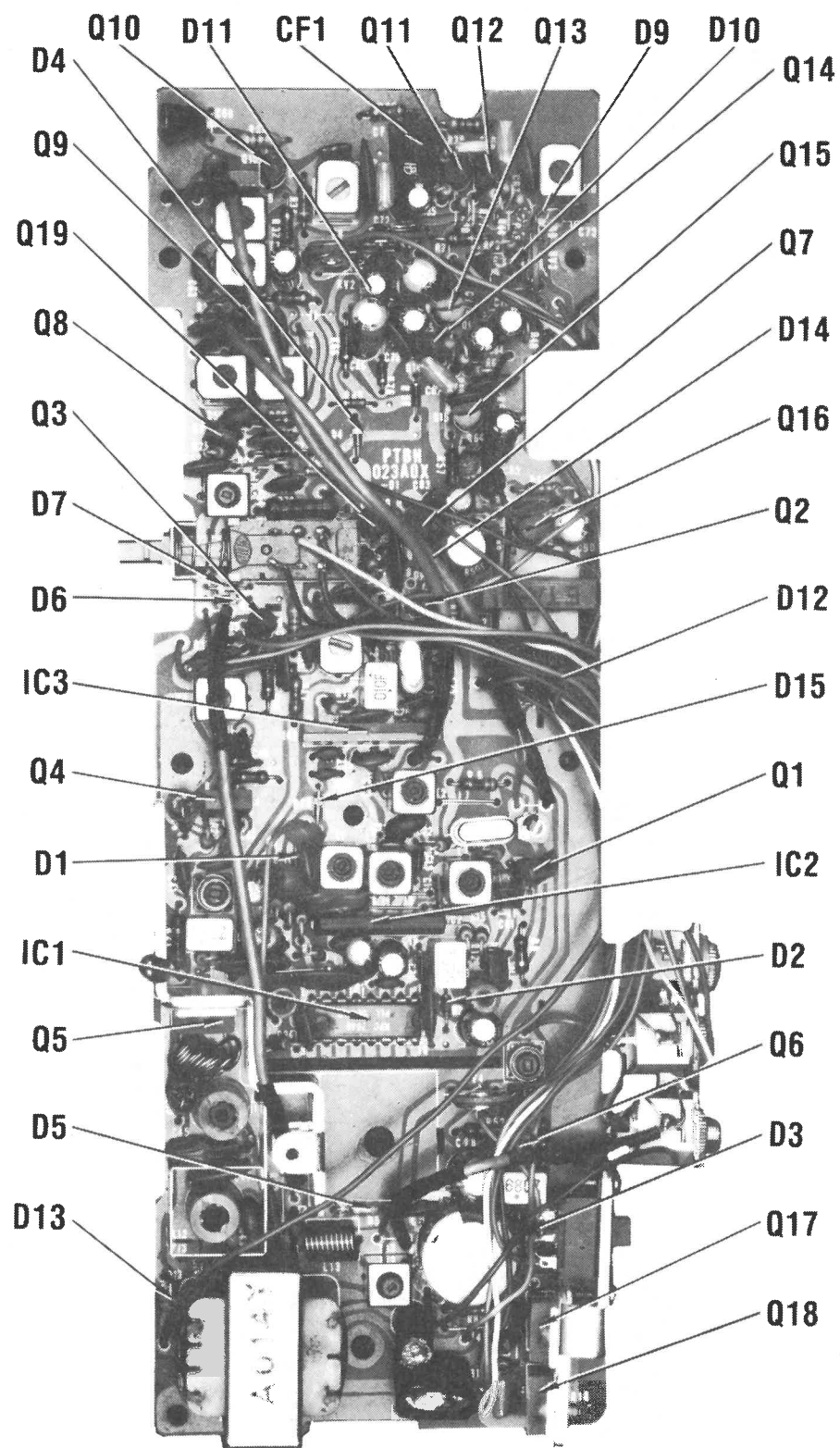
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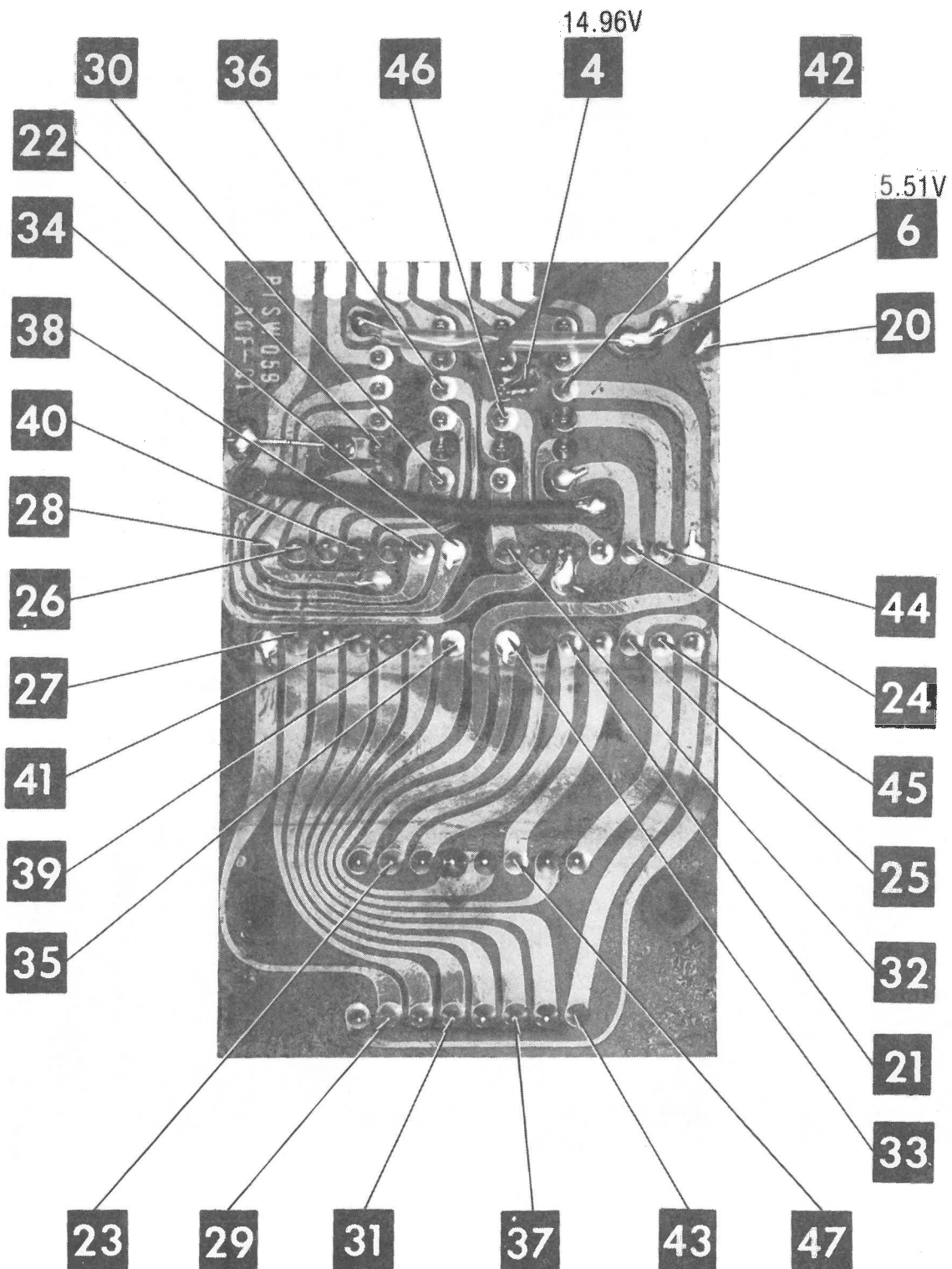
MAIN BOARD



MAIN BOARD

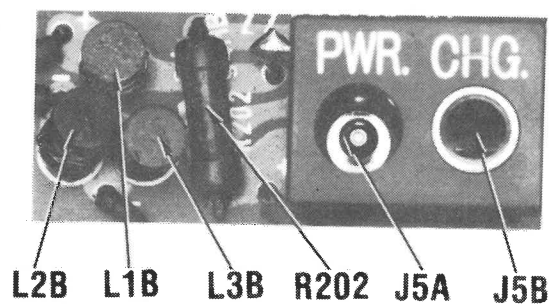
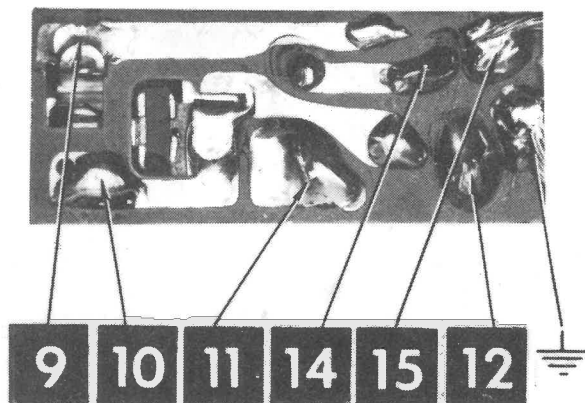


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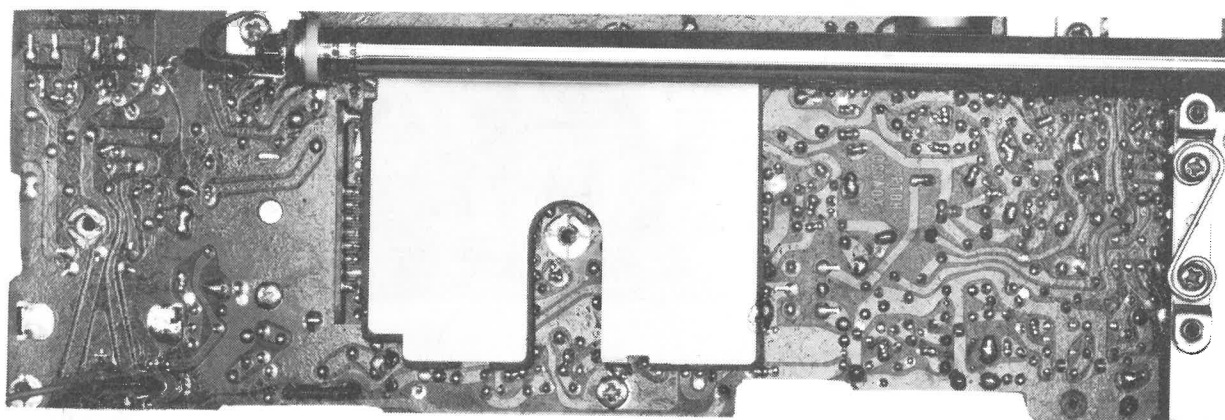


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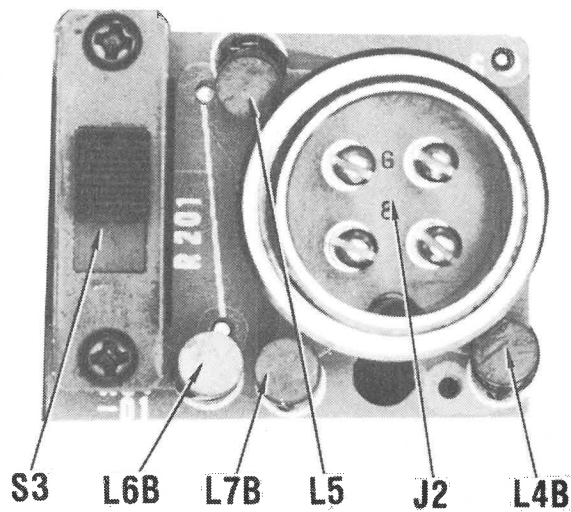
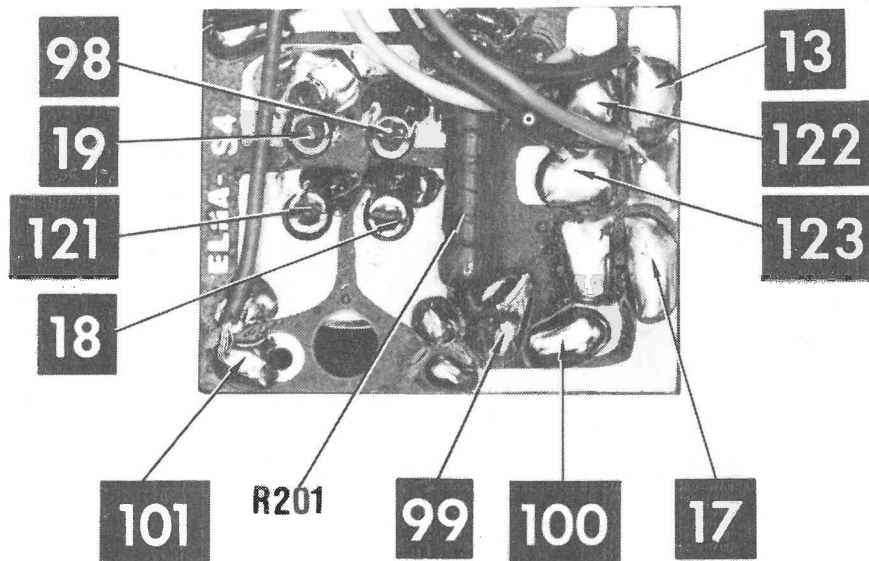
CHANNEL SWITCH DISPLAY BOARD



DC JACK BOARD

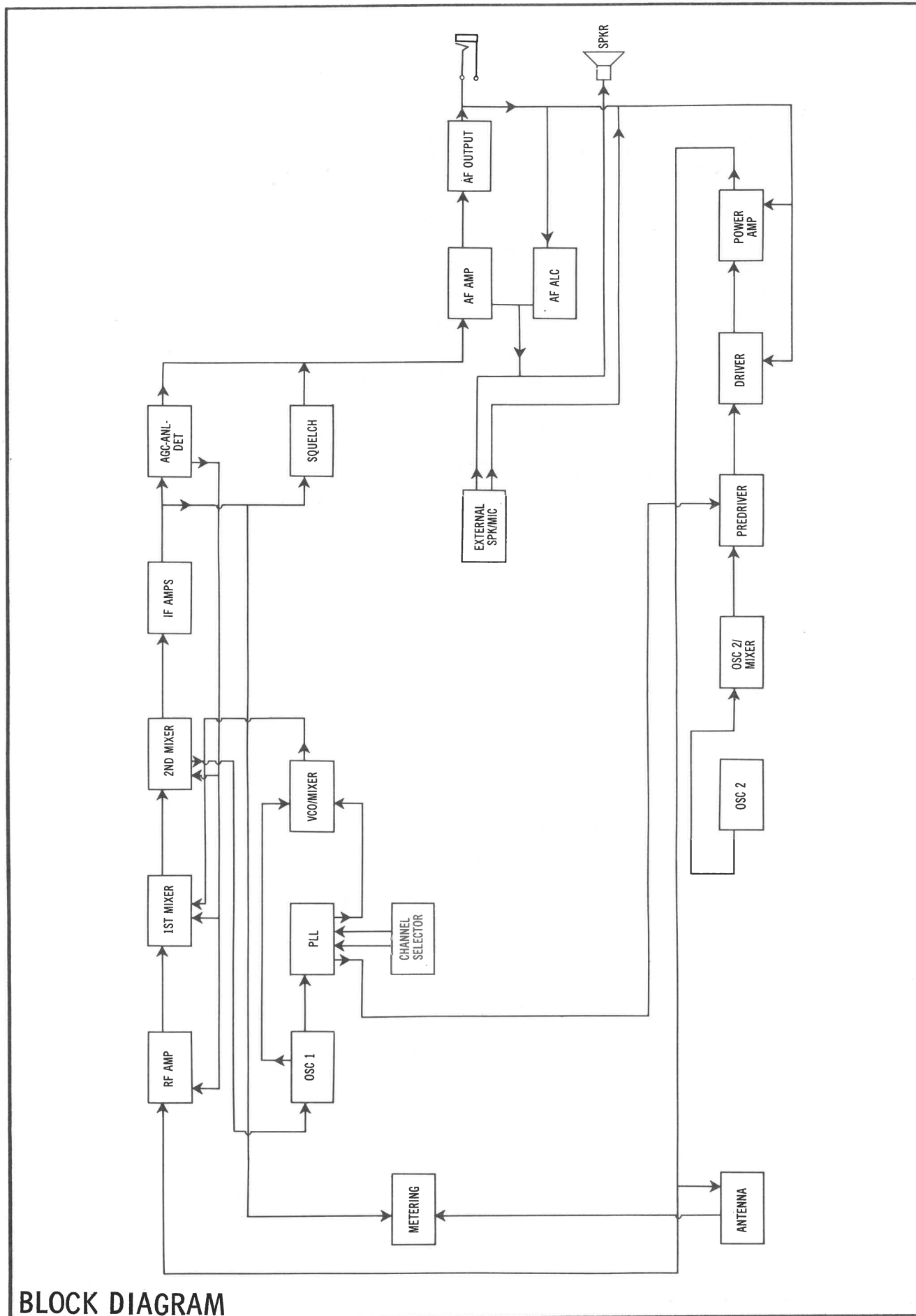


MAIN BOARD- SHIELD LOCATION

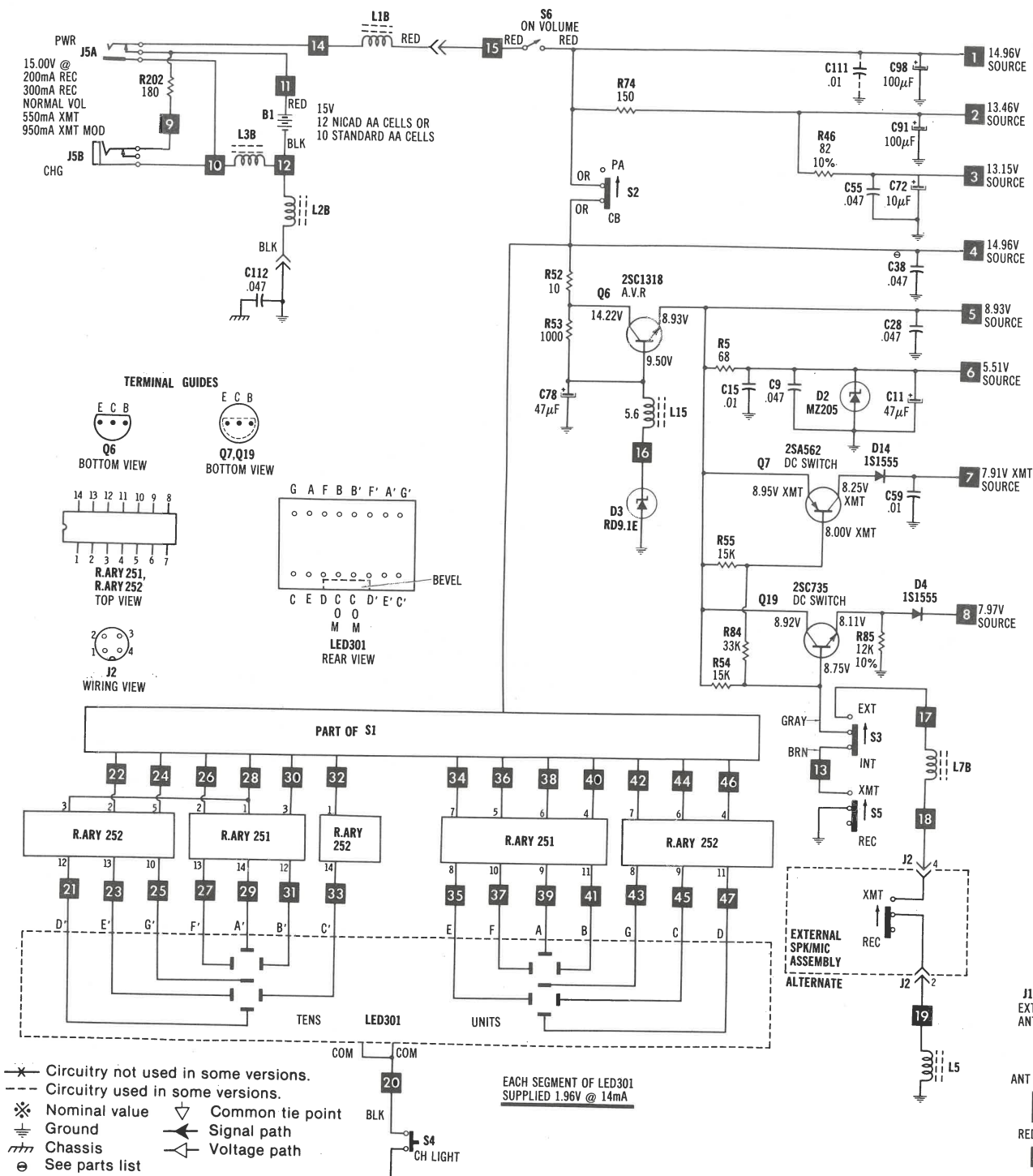


MIC JACK BOARD

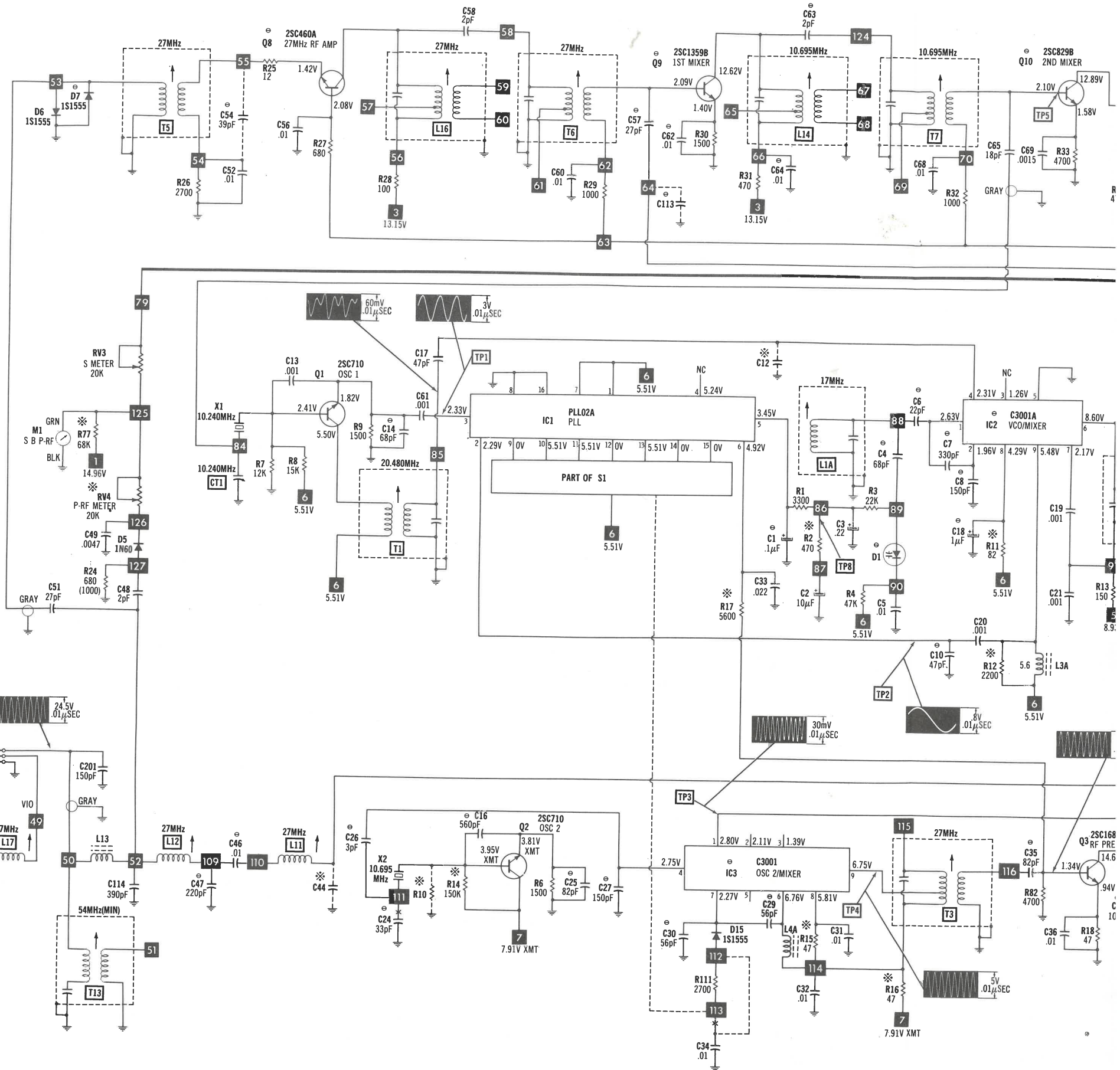
LAFAYETTE MODEL DYNA-COM 40



BLOCK DIAGRAM



--- Circuitry not used in some versions.
 --- Circuitry used in some versions.
 * Nominal value
 G Ground
 Ch 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).





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)
Coax (Transmission Line).....	Use BELDEN No. 8216 (RG-174/U, 50 ohms)

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFG. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RAYTHEON PART No.	RCA PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	ITT410 BB122 MV201				REN 612 REN 612 REN 612		ECG612 ECG612 ECG612	TM612 TM612 TM612		103-176 103-176 103-176
D2	MZ205		GEZD-5.0		REN 135	SK3056/135A	ECG135A	TM135A	WEP1103	103-Z9006
D3	RD9, 1E		GEZD-9.1	ZB9.1B	REN 139	SK3060/139A	ECG139A	TM139A/**	WEP1109	103-272
D4	1S1555		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D5	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D6	1S1555		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D7	1S1555		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D9	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D10	1S32		1N34AS	PTC207	REN 109	SK3087	ECG109	TM109/**	WEP134	103-Z9001
D11	1N60		1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134	103-Z9001
D12	1S1209			PTC301	REN 601	SK3463/601	ECG601	TM601		
D13	SR1K-4		GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D14	1S1555		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
D15	1S1555		GE-300	PTC214	REN 177	SK3175/177	ECG177	TM177	WEP1062	103-131
IC1	PLL02AG PLL02		GEIC-317 GEIC-317		REN 1167	SK3732/1167	ECG1167	TM1167	WEP2007	
IC2	C3001A C3001				REN 1167	SK3732/1167	ECG1167	TM1167	WEP2007	
IC3	TA7310P C3001-0 C3001				REN 1192	SK3445/1192	ECG1192	TM1192	WEP2120	
Q1	2SC710		GE-211*	PTC132*	REN 123A*	SK3356	ECG123A*	TM123A/**	WEP710	121-Z9000A
Q2	2SC710		GE-211*	PTC132*	REN 123A*	SK3356	ECG123A*	TM123A/**	WEP710	121-Z9000A
Q3	2SC1687		GE-20*	PTC121*	REN 123A*	SK3446/229	ECG123A*	TM123A*	WEP710*	121-Z9000A*
Q4	2SC1846R 2SC1846 2SC1760 2SC2074		GE-336 GE-336 GE-276 GE-275	PTC904 PTC904 PTC180	REN 295 REN 295 REN 306 REN 322	SK3253/295 SK3253/295 SK3251/306 SK3252/302	ECG295 ECG295 ECG306 ECG322	TM295 TM295 TM306 TM322	WEP913 WEP913 WEP771 WEP771	121-880 121-880 121-880 121-880
Q5	2SC1306 2SC2075 2SC1678 2SC1974		GE-215 GE-215 GE-322 GE-337	PTC186 PTC186 PTC186 PTC123	REN 235 REN 235 REN 235 REN 297	SK3197/235 SK3197/235 SK3239/236 SK3124/289	ECG235 ECG235 ECG235 ECG297	TM235 TM235 TM235 TM297	WEP785 WEP785 WEP785 WEP914	121-Z9039 121-Z9039 121-Z9039 121-Z9014
Q6	2SC1318Q 2SC1318		GE-210 GE-210	PTC123 PTC103*	REN 297 REN 290	SK3124/289 SK3114/290	ECG297 ECG290	TM297 TM290/**	WEP914 WEP911	121-Z9014 121-Z9046
Q7	2SA562Y 2SA562		GE-269 GE-269	PTC103*	REN 290 REN 290	SK3114/290 SK3124/289	ECG290 ECG107	TM290/** TM107/**	WEP911 WEP460	121-Z9046 121-Z9000*
Q8	2SC460A 2SC460 2SC710		GE-61* GE-61* GE-211*	PTC136* PTC136* PTC132*	REN 107 REN 107 REN 123A*	SK3124/289 SK3124/289 SK3356	ECG107 ECG107 ECG123A*	TM107/** TM107/** TM123A/**	WEP460 WEP460 WEP710	121-Z9000* 121-Z9000* 121-Z9000A
Q9	2SC1047 2SC1359B 2SC1359		GE-60* GE-212 GE-212	PTC132* PTC121* PTC121*	REN 229* REN 229* REN 229*	SK3132 SK3122 SK3122	ECG229* ECG229* ECG229*	TM229* TM229* TM229*	WEP63* WEP829 WEP829	121-Z9021 121-Z9021 121-Z9021
Q10	2SC710 2SC829B 2SC829		GE-211* GE-20* GE-20*	PTC132* PTC139* PTC139*	REN 123A* REN 229* REN 229*	SK3356 SK3122 SK3122	ECG123A* ECG229* ECG229*	TM123A/** TM229/** TM229/**	WEP710 WEP829 WEP829	121-Z9000A 121-Z9000A* 121-Z9000A*
Q11	2SC710 2SC829B 2SC829		GE-211* GE-20* GE-20*	PTC132* PTC139* PTC139*	REN 123A* REN 229* REN 229*	SK3356 SK3122 SK3122	ECG123A* ECG229* ECG229*	TM123A/** TM229/** TM229/**	WEP710 WEP829 WEP829	121-Z9000A 121-Z9000A* 121-Z9000A*
Q12	2SC710 2SC829B 2SC829		GE-211* GE-20* GE-20*	PTC132* PTC139* PTC139*	REN 123A* REN 229* REN 229*	SK3356 SK3122 SK3122	ECG123A* ECG229* ECG229*	TM123A/** TM229/** TM229/**	WEP710 WEP829 WEP829	121-Z9000A 121-Z9000A* 121-Z9000A*
Q13	2SC710 2SC945 2SC828		GE-211* GE-212 GE-61*	PTC132* PTC121* PTC139*	REN 123A* REN 199 REN 199	SK3356 SK3124/289 SK3122	ECG123A* ECG199 ECG199	TM123A/** TM199/** TM199/**	WEP710 WEP1945 WEP1945	121-Z9000A 121-972 121-972
Q14	2SC945 2SC828 2SA564R 2SA564		GE-65 GE-65 GE-48	PTC103* PTC103* PTC127	REN 234 REN 234 REN 294	SK3247/234 SK3247/234 SK3114/290	ECG234 ECG234 ECG294	TM234 TM234 TM294/**	WEP564 WEP564 WEP911	121-879 121-879 121-952
Q15	2SC945		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972
Q16	2SC945		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972
Q17	2SD325		GE-28	PTC110	REN 186	SK3197/235	ECG186	TM186/**	WEP745	121-Z9008
Q18	2SD325		GE-28	PTC110	REN 186	SK3197/235	ECG186	TM186/**	WEP745	121-Z9008
Q19	2SC735Y 2SC735		GE-210	PTC123*	REN 289	SK3122	ECG289	TM289/**	WEP735A	121-Z9000A*

* 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			
		MFG. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	.1 50V			TDC104M050EL	QDT1-2
C2	10 16V		PC10-25	VTT10B25	QV1-41
C3	.22 50V			TDC224M050EL	QDT1-10
C11	47 10V		PC50-16	VTT47D16	QV1-73
C18	1 50V		PC1-50	VTT1A50	QV1-11
C72	10 16V		PC10-25	VTT10B25	QV1-41
C74	3.3 25V		PC5-50	VTT3R3A50	QV1-25
C76	1 50V		PC1-50	VTT1A50	QV1-11
C78	47 16V		PC50-16	VTT47D16	QV1-73
C83	.47 50V		PC1-50	VTT47A63	QV1-3
C85	10 16V		PC10-25	VTT10B25	QV1-41
C86	33 10V		PC30-25	VTT33B10	
C87	.47 50V		PC1-50	VTT47A63	QV1-3
C90	33 10V		PC30-25	VTT33B10	
C91	100 16V		PC100-16	VTT100F16	QV1-95
C94	10 16V		PC10-25	VTT10B25	QV1-41
C95	3.3 25V		PC5-50	VTT3R3A50	QV1-25
C96	3.3 25V		PC5-50	VTT3R3A50	QV1-25
C97	33 16V		PC30-25	VTT33D25	QV1-63
C98	1000 16V		PC1000-16	VTT1000L16	QV1-183
C99	33 10V		PC30-25	VTT33B10	

CAPACITORS

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA			
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	68 N150 50V 10%		UK50-103		*	10TCP-Q68
C5	.01 50V				MAG5011	
C6	22 N150 50V				*	10TCP-Q22
C7	330 50V 10%		DD-331	GP330	GP333	10TS-T33
C8	150 50V 10%		DTZ-150		CN0315	10TCC-T15
C9	.047 50V			DPMS2S47	EWF1A147	1PB-S47
C10	47 50V			NP047	CN0447	10TCC-Q47
C12	(1)					
C13	.001 50V 10%			DPMS6D1	M192P10292	QFT2-1
C14	68 N150 50V 10%				*	1FT-D10
C15	.01 50V		UK50-103		MAG5011	10TCP-Q68
C16	560 50V		DD-561		GP356	
C17	47 N150 50V 10%				*	10TS-T56
C19	.001 50V 10%			DPMS6D1	M192P10292	10TCP-Q47
C20	.001 50V 10%			DPMS6D1	M192P10292	1FT-D10
C21	.001 50V 10%			DPMS6D1	M192P10292	QFT2-1
C22	2 50V +.25				CN0522	1FT-D10
C23	33 50V		DTZ-33	NP033	CN0433	
C24	33 N150 50V 10%				*	10TCC-Q33
C25	82 50V 10%		DTZ-82	NP082	CN0482	10TCP-Q33
C26	3 50V		DTZ-3R3	NP03P3	CN0533	10TCC-Q82
C27	150 50V 10%		DTZ-150		CN0315	10TCC-V33
C28	.047 50V			DPMS2S47	EWF1A147	10TCC-T15
C29	56 50V				CN0456	1PB-S47
C30	56 50V				CN0456	10TCC-Q56
C31	.01 50V		UK50-103		MAG5011	10TCC-Q56
C32	.01 50V		UK50-103		MAG5011	
C33	.022 50V				M192P2239R8	
C34	.01 50V		UK50-103		MAG5011	192P2239R8
C35	82 50V 10%		DTZ-82	NP082	CN0482	10TCC-Q82
C36	.01 50V		UK50-103		MAG5011	
C37	100 N150 50V 10%				*	10TCP-T10
C38	.047 50V			DPMS2S47	EWF1A147	1PB-S47
C39	.01 50V		UK50-103		MAG5011	
C40	560 50V		DD-561		GP356	10TS-T56
C41	.01 50V		UK50-103		MAG5011	
C42	150 50V 10%		DTZ-150		CN0315	10TCC-T15
C43	150 50V 10%		DTZ-150		CN0315	10TCC-T15
C44	(1)					
C45	.01 50V		UK50-103		MAG5011	
C46	.01 50V		UK50-103		MAG5011	
C47	220 50V 10%		DTZ-220			10TCC-T22
C48	2 50V +.25					
C49	.0047 50V		DD-472	GP4700	CN0522	5GA-D47
C51	27 50V				GP247	10TCC-Q27
C52	.01 50V		UK50-103		CN0427	
C53	.047 50V			DPMS2S47	EWF1A147	1PB-S47
C54	39 50V				CN0439	10TCC-Q39
C55	.047 50V 10%		UK50-103		M192P4739R8	1FT-S47
C56	.01 50V				MAG5011	
C57	27 50V				CN0427	10TCC-Q27
C58	2 50V +.25				CN0522	
C59	.01 50V		UK50-103		MAG5011	
C60	.01 50V		UK50-103		MAG5011	
C61	.001 50V 10%			DPMS6D1	M192P10292	QFT2-1
C62	.01 50V				MAG5011	1FT-D10
C63	2 50V +.25		UK50-103		CN0522	
C64	.01 50V				MAG5011	
C65	18 N150 50V				*	10TCP-Q18

PARTS LIST AND DESCRIPTIC

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

CAPACITORS (cont)

ITEM No.	RATING	MFG. PART No.
C66	.022 50V 10%	
C67	100 N150 50V 10%	
C68	.01 50V	
C69	.0015 50V 10%	
C70	.01 50V 10%	
C71	.047 50V 10%	
C73	.0047 50V 10%	
C75	.0047 50V 10%	
C77	.001 50V 10%	
C79	.01 50V	
C80	.0047 50V	
C81	.047	
C82	.01 50V	
C84	.0047 50V 10%	
C88	.0047 50V 10%	
C89	(1)	
C92	.022 50V 10%	
C93	.022 50V 10%	
C100	.22 50V 10%	
C111	.01 50V	
C112	.047 50V	
C113	(1)	
C114	390 50V 10%	
C201	150 50V 10%	
C202	.01 50V	
C203	.01 50V	
C204	.01 50V	

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
C66	.022 50V 10%		UK50-103	DPMS2S22	M192P2239R8	QFT2-127	1FT-S22
C67	100 N150 50V 10%				*		10TCP-T10
C68	.01 50V				MAG5011		
C69	.0015 50V 10%			DPMS6D15	EWF1A225	QFT2-13	1FT-D15
C70	.01 50V 10%			WMF1S1	M192P1039R8	QFT2-91	1FT-S10
C71	.047 50V 10%			DPMS2S47	M192P4739R8	QFT2-171	1FT-S47
C73	.0047 50V 10%			WMF1D47	M192P4729R8	QFT2-63	1FT-D47
C75	.0047 50V 10%			WMF1D47	M192P4729R8	QFT2-63	1FT-D47
C77	.001 50V 10%			DPMS6D1	M192P10292	QFT2-1	1FT-D10
C79	.01 50V				MAG5011		
C80	.0047 50V		UK50-103	GP4700	GP247		56A-D47
C81	.047		DD-472	DPMS2S47	M192P4739R8	QFT2-171	1FT-S47
C82	.01 50V		UK50-103		MAG5011		
C84	.0047 50V 10%				M192P4729R8		192P4729R8
C88	.0047 50V 10%				M192P4729R8		192P4729R8
C89	(1)						
C92	.022 50V 10%			DPMS2S22	M192P2239R8	QFT2-127	1FT-S22
C93	.022 50V 10%			DPMS2S22	M192P2239R8	QFT2-127	1FT-S22
C100	.22 50V 10%			WMF05P22	M192P2249R8	QFT2-253	1FT-P22
C111	.01 50V				MAG5011		
C112	.047 50V			DPMS2S47	EWF1A147	QF1-171	1PB-S47
C113	(1)						
C114	390 50V 10%		DD-391	GP390	GP339		10TS-T39
C201	150 50V 10%		DTZ-150		CN0315		10TCC-T15
C202	.01 50V		UK50-103		MAG5011		
C203	.01 50V		UK50-103		MAG5011		
C204	.01 50V		UK50-103		MAG5011		

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.
(1) Value varies, replace with same value as original.

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA			
			MFR. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
RV1	Squelch Range	10K				X260R103B
RV2	AMC	2000				X260R252B
RV3	S Meter	20K				X260R253B
RV4	P-RF Meter	20K				X260R253B
VR1	Volume/Power Switch	50K				
VR2	Squelch	10K				

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		MFR. PART No.	WORKMAN PART No.			MFR. PART No.	WORKMAN PART No.
RARY251	Resistor Array	(1)		RARY252	Resistor Array	(1)	

(1) Consists of seven 1800-ohm resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1A	PLL (17MHz)		0700002M80G9		
L1B	RF Choke		07M0001M80C9		
L2A	VCO (37MHz)				
L2B	RF Choke				
L3A	RF Choke				
L3B	RF Choke				
L4A	RF Choke				
L4B	RF Choke				
L5	RF Choke				
L6A	RF Choke				
L6B	RF Choke				
L7A	Driver (27MHz)				
L7B	RF Choke				
L8	RF Choke				
L9	RF Choke				
L10	RF Choke				
L11	Loading Final (27MHz)				
L12	Pi Filter (27MHz)				
L13	RF Choke				
L14	1st Mixer (10.695MHz)				
L15	RF Choke				
L16	RF Amp (27MHz)				
L17	Antenna Matching (27MHz)				
T1	Oscillator (20.480MHz)		07DB004M80J9		
T2	VCO/Mixer (37MHz)		07MB009M80C9		
T3	XMT Osc/Mixer (27MHz)				

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF) (cont)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
T4	Pre-driver (27MHz)		86HV		
T5	Rec RF (27MHz)		07MP001S		
T6	Rec Amp (27MHz)				
T7	1st Mixer (10.695MHz)				
T8	2nd Mixer (455kHz)		ET1012260F3		
T10	IF Amp (455kHz)		ET1012969AT		
T13	54MHz Trap		07NM001S		

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T11	278CT	100	A014Y(1)			(1) Number on unit.

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T12	1	.4CT		ETA-41(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFR. PART No.	QUAM PART No.	
SP	2 3/4" PM, 100 Ohms			

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Filter		455kHz
J1	Jack		External Antenna
J3	Jack		PA
J4	Jack		External Speaker
J5A	Jack		Power
J5B	Jack		Charge
M1	Meter		
S2	Switch		PA-CB
S3	Switch		EXT-INT
S4	Switch		Ch. Light
S5	Switch		XMT REC
S6	Switch		On Volume Control
X1	Crystal		10.240MHz
X2	Crystal		10.695MHz
	Antenna		Telescopic