

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 3-5810A

MANUFACTURER'S SPECIFICATIONS

GENERAL ELECTRIC MODEL 3-5810A

SERVICE SPECIFICATIONS			
RECEIVER		TRANSMITTER	
Sensitivity:	0.5uv for 500mw	Frequency Response:	400Hz to 2.5kHz
Frequency Coverage:	26.965 to 27.255MHz	Frequency Coverage:	26.965 to 27.255MHz
Adjacent Channel Selectivity:	Better than 45db	Transmit Power Output:	4 watts max. @ 13.8V DC
Audio Output Power:	2.2 watts @ 10% Dist.	Modulation:	Capable of 100%
Spurious Rejection:	Better than 40db	Frequency Tolerance:	Better than .005%
IF Frequencies:	455kHz, 10.695MHz	Microphone:	Dynamic, 500Ω
Squelch Range (Sensitivity):	0.5 to 5.000uv		
Image Rejection Ratio:	Better than 40db		
Delta Tune Range	Approx. ± 1kHz		
Built-in Speaker:	8Ω Impedance		

Courtesy of the Manufacturer

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

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Printed in U. S. of America 7CY610

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120V AC. Allow a 15-minute warm-up period.
Adjustments made with 13.8-volt DC input.
Connect low sides of test equipment to ground unless specified otherwise.
Connect 50-ohm dummy load or antenna before keying transmitter.
Suggested Alignment Tools: GC ELECTRONICS
L801, L803 thru L807, L809, T301 thru T3045009
L9069304
L101, L102, L901, L9039440

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP10. Q806 Emitter.	Ch. 13, Delta Tune - Center	L809	Adjust for 8.650MHz.
Input of frequency counter and RF VTVM to TP11. (L801 Secondary)	Ch. 13	L801	Adjust for maximum at 10.240MHz.
Input of frequency counter and RF VTVM to TP12. (L807 Secondary)	Ch. 13	L806, L807	Adjust for maximum at 37.810MHz. Repeat for all channels. Channel Frequency +10.695MHz = frequency on counter.
Input of DC meter to TP15. IC802, Pin 11.	Ch. 13	L803	Adjust for 3.30 volts.

RECEIVER ALIGNMENT

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.
Set generator output low enough to prevent AGC limiting.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP13. 455kHz, 1000Hz @ 30% modulation.	Ch. 13, Delta Tune-Center	T304, T303	Adjust for maximum output.
Output of signal generator thru .01uF to TP14. 10.695MHz, 1000Hz @ 30% modulation.	Ch. 13	T302, T301	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation.	Ch. 13	L102, L101	Adjust for maximum output. Repeat above steps if necessary.

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
No signal input of DC meter to TP1.	Ch. 13, Delta Tune - Center	VR1	IF GAIN Adjust VR1 for 1.45 volts.
Output of signal generator thru .01 to antenna jack. 27.115MHz, 1000Hz @ 30% modulation. Output 316uV.	Ch. 13	VR3	SQUELCH RANGE Set squelch control VR2 fully clockwise. Adjust VR3 so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.115MHz, 1000Hz @ 30% modulation. Output 200uV.	Ch. 13	VR4	S METER Adjust VR4 for 9 on S 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
	Ch. 13	L804,L805, L901,L903, L906	Adjust for maximum.
	Ch. 13	L906	Adjust for 4 watts maximum.

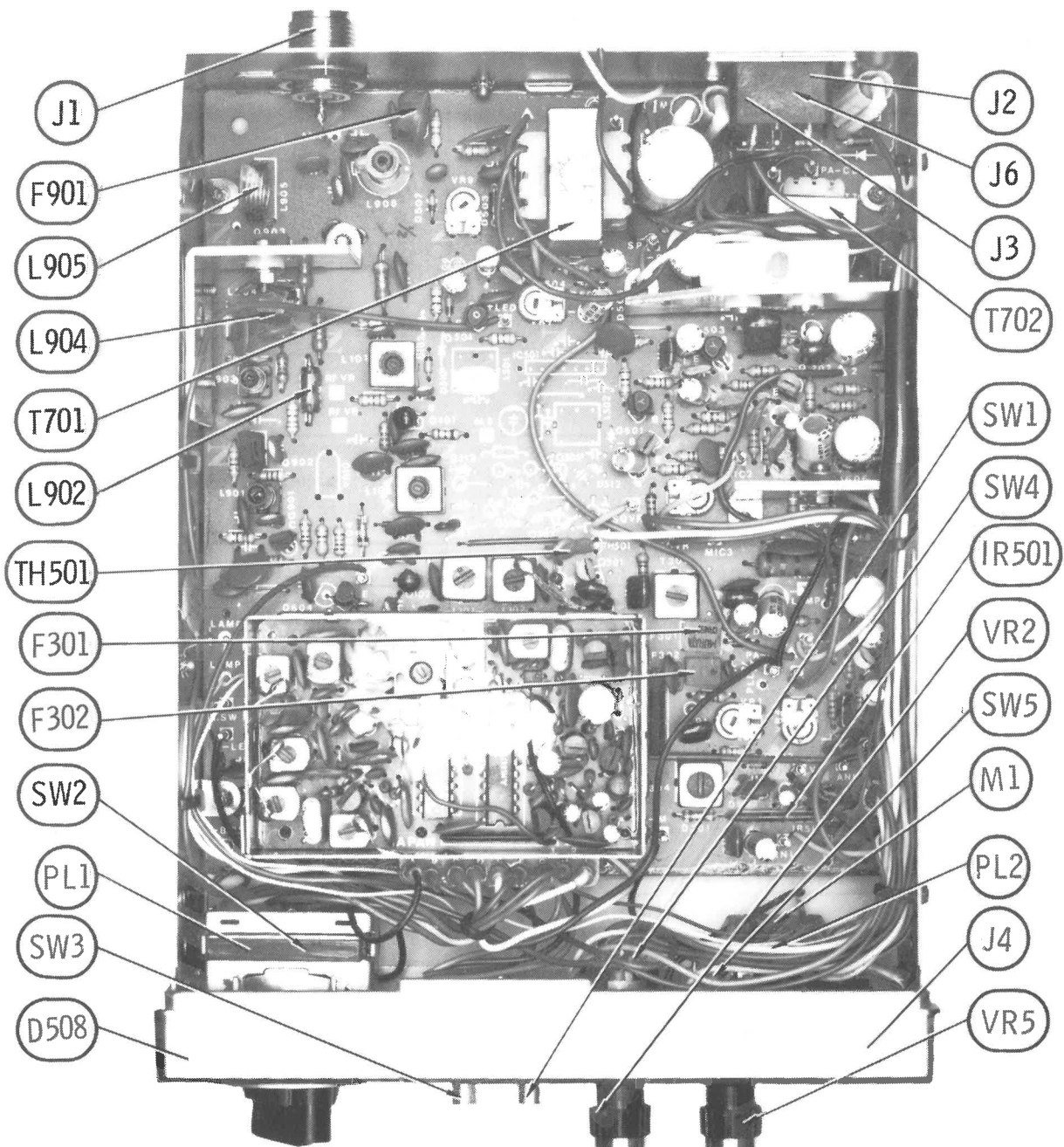
TRANSMITTER ADJUSTMENTS

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

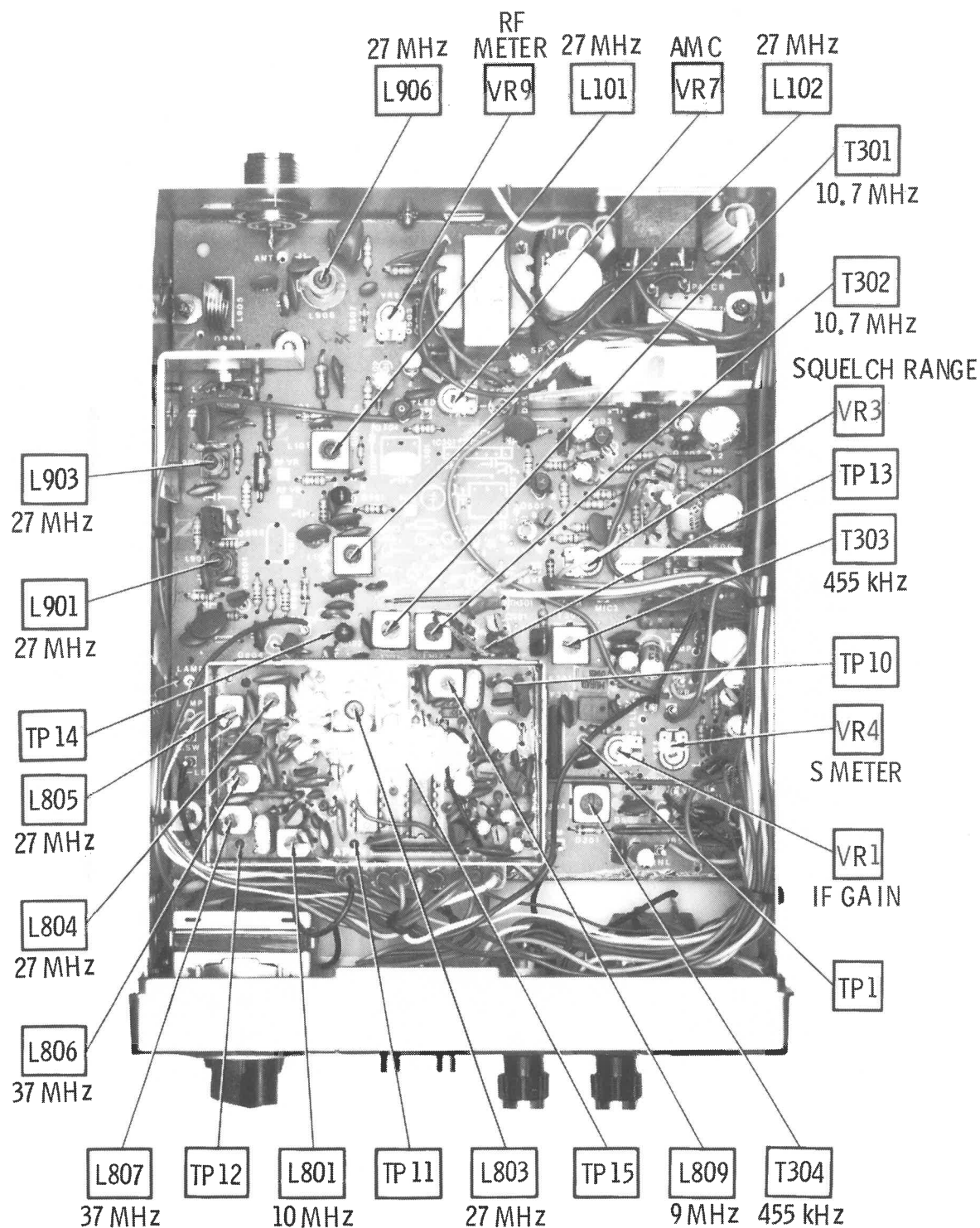
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment of transmitter.

See Page 4 for channel frequencies.

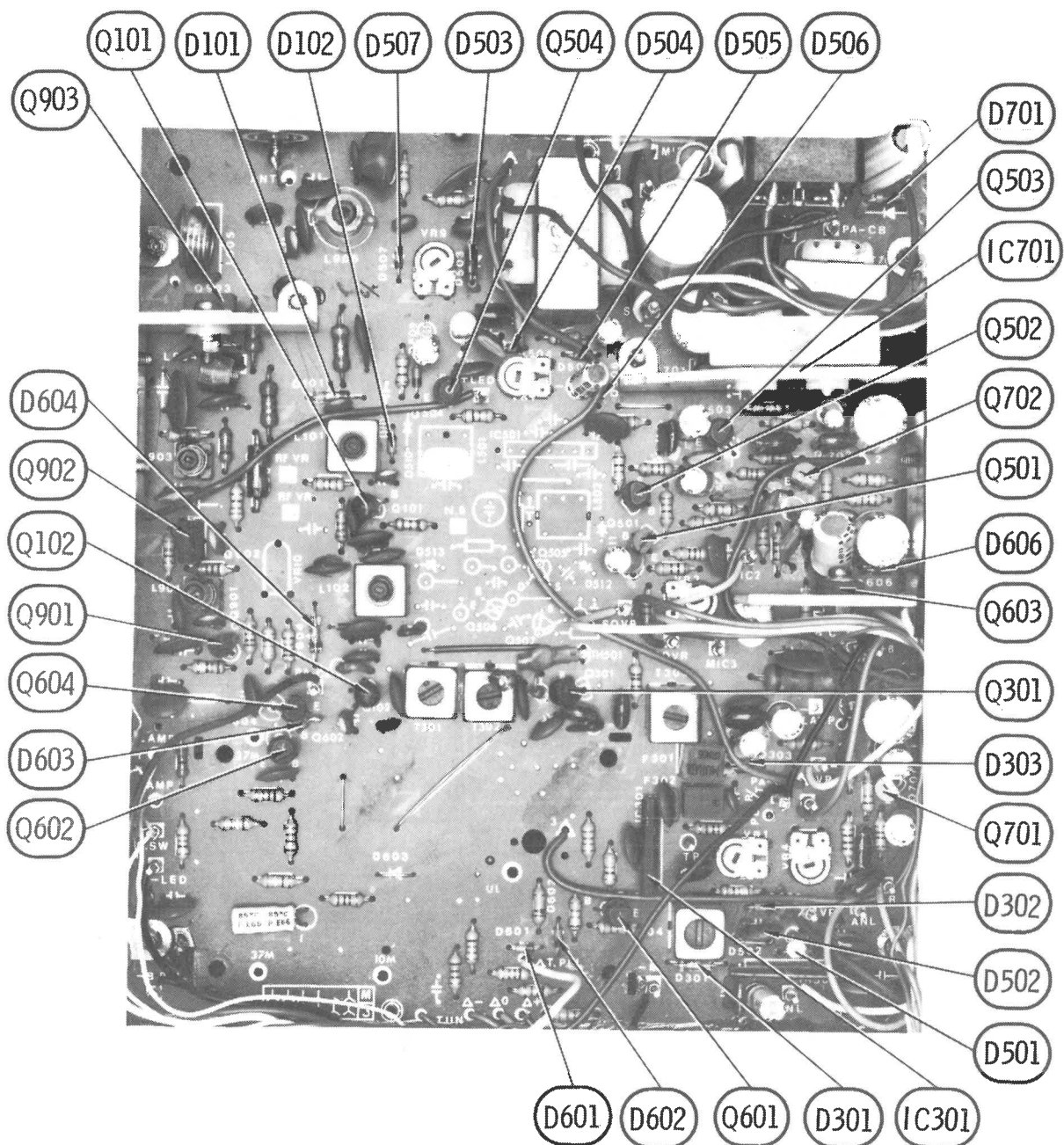
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Modulation meter to antenna jack. Inject a 1000Hz signal at Mic input.	Ch. 13	VR7	AMC Disconnect C511 to disable AMC. Adjust signal for overmodulation. Restore AMC operation. Adjust VR7 for 100% modulation maximum.
	Ch. 13	VR9	RF PANEL METER Adjust for 3/4 reading on RF scale of meter.



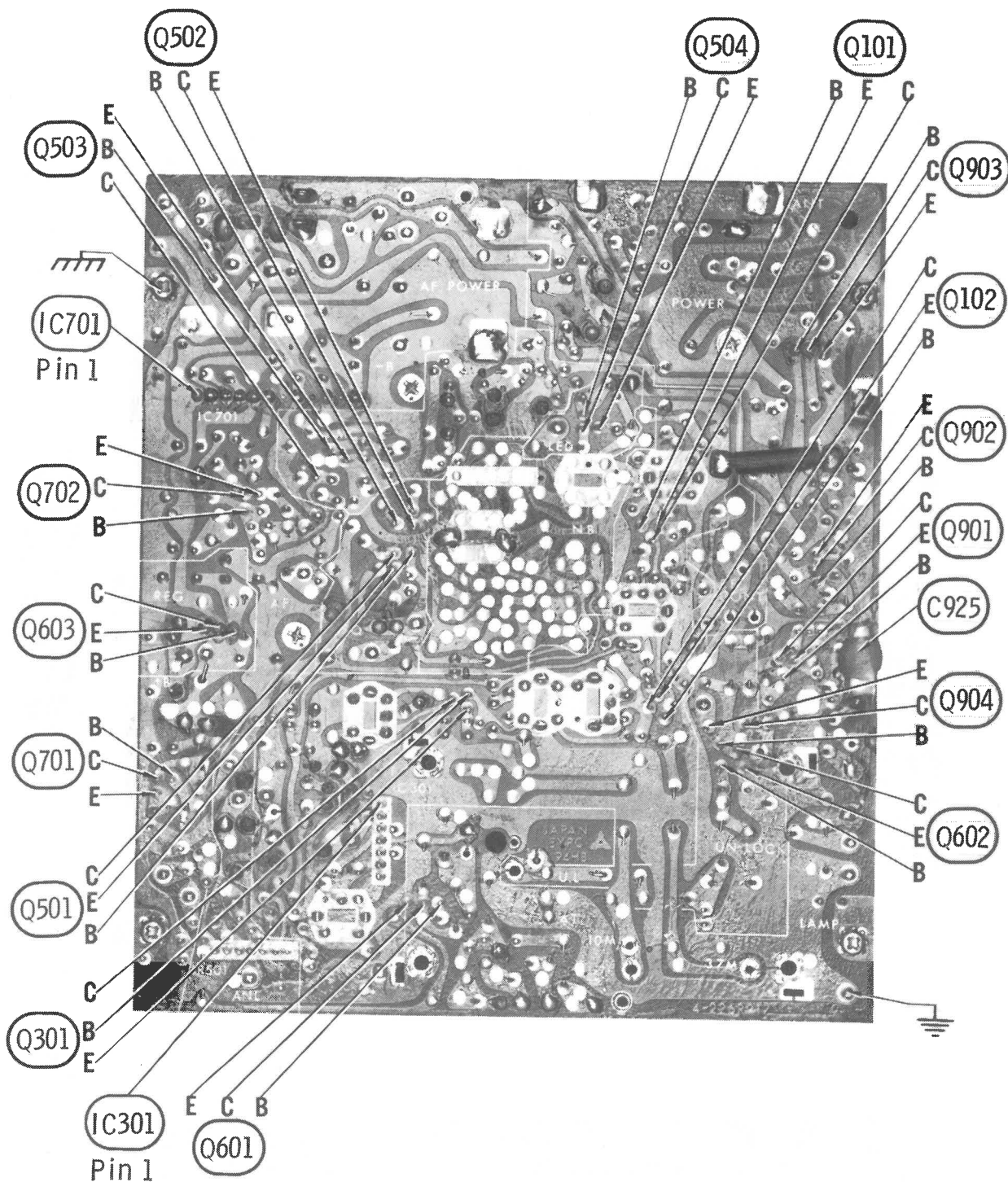
CHASSIS-BOTTOM



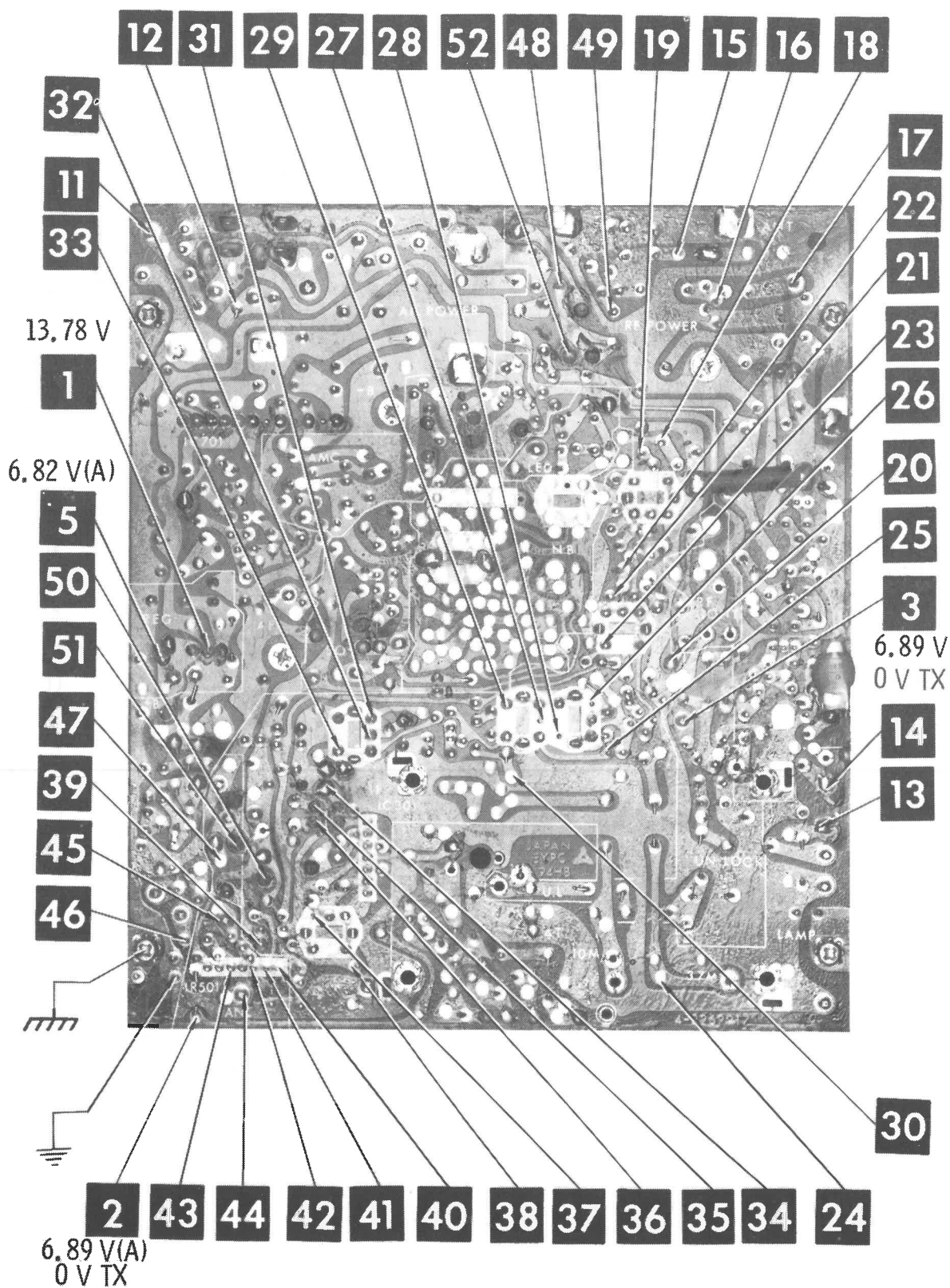
CHASSIS-BOTTOM



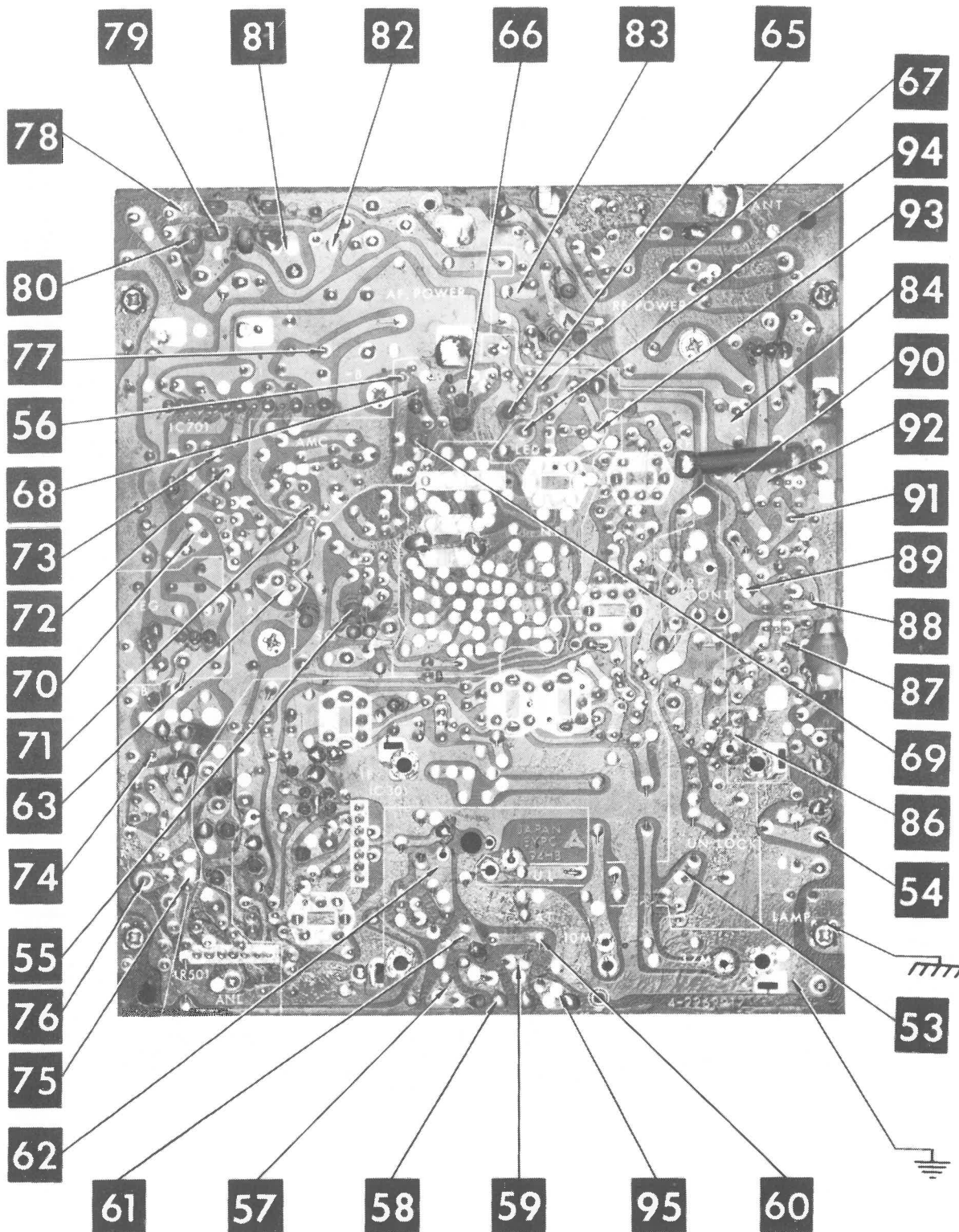
MAIN BOARD



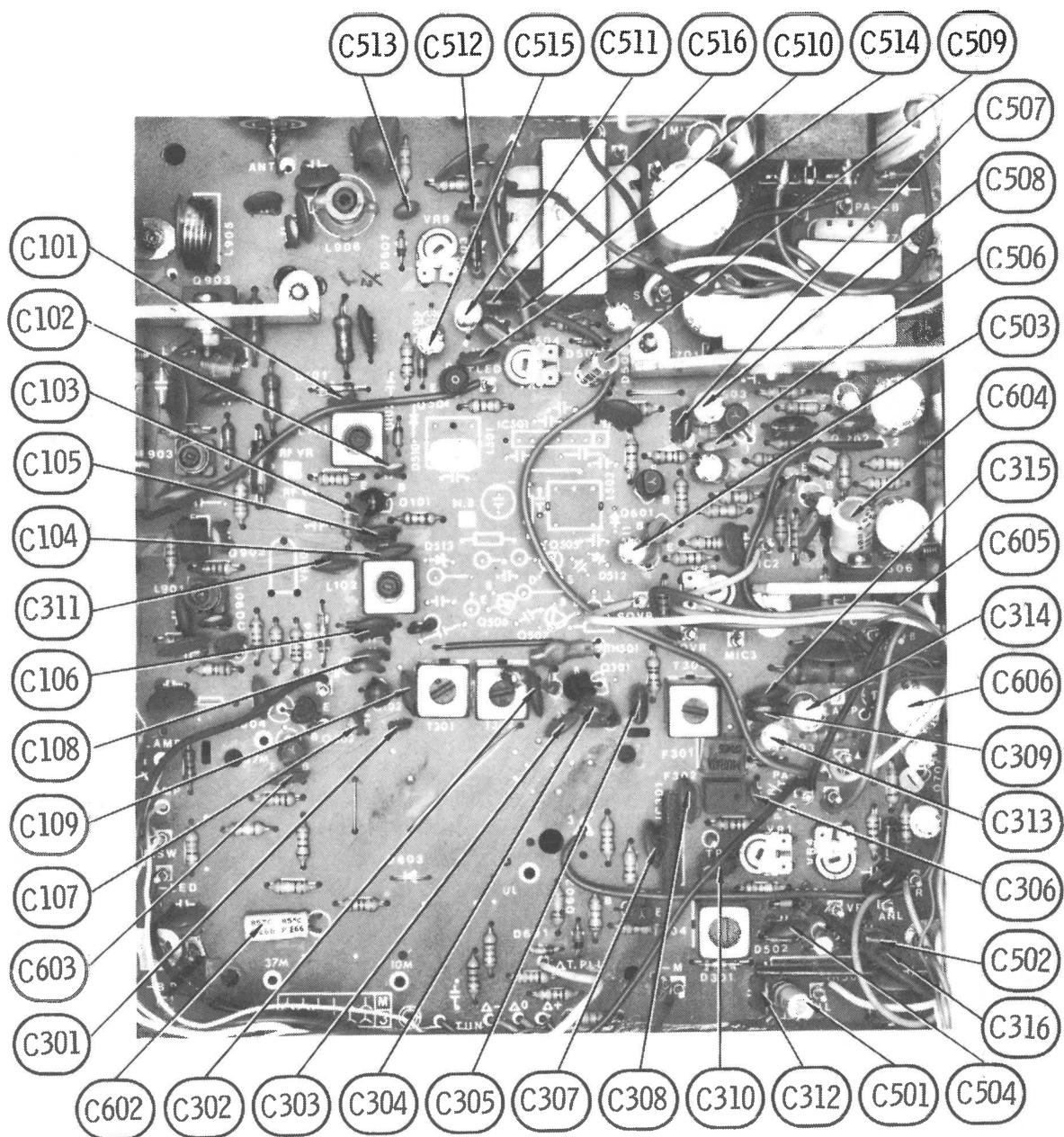
MAIN BOARD



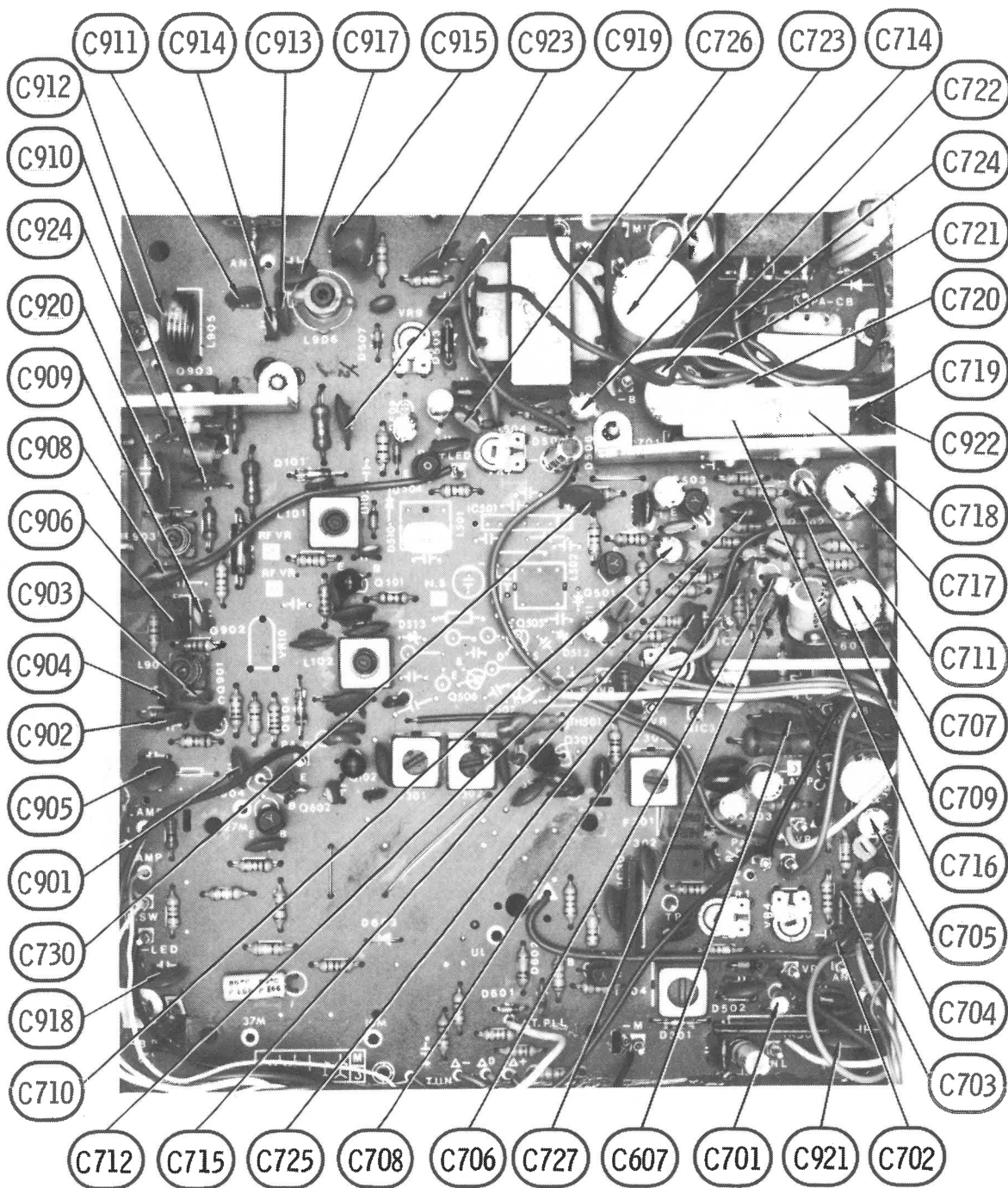
MAIN BOARD



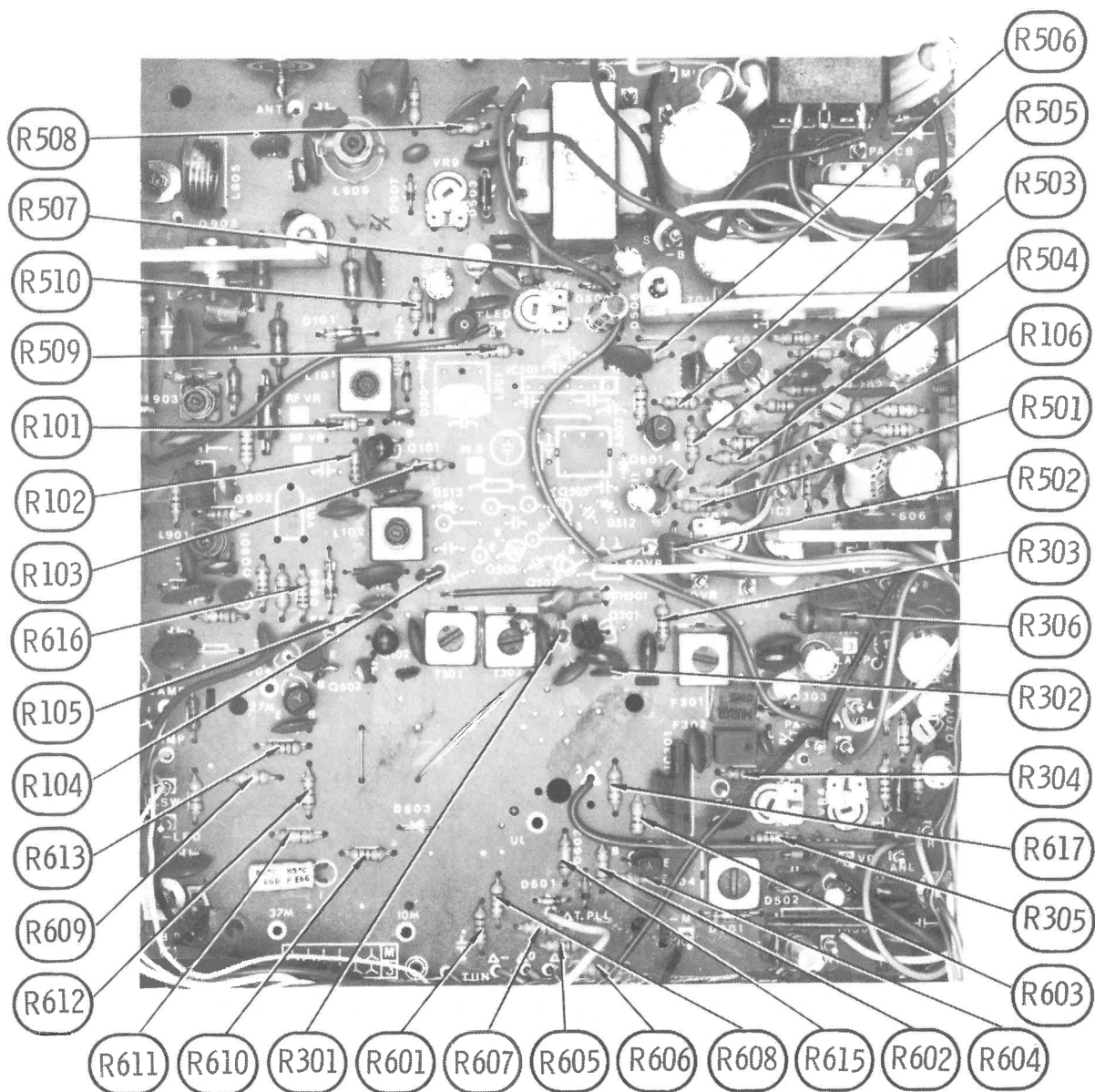
MAIN BOARD



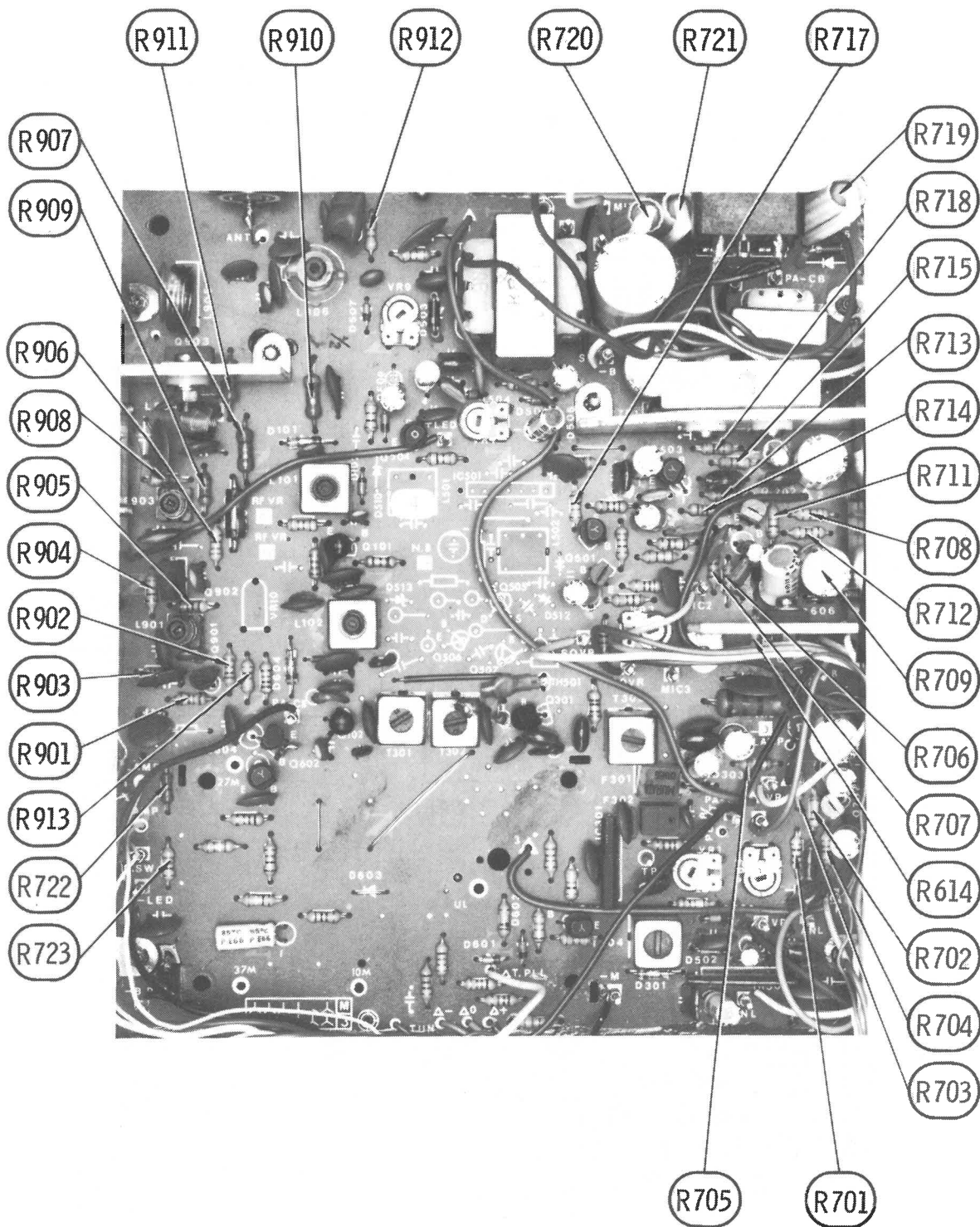
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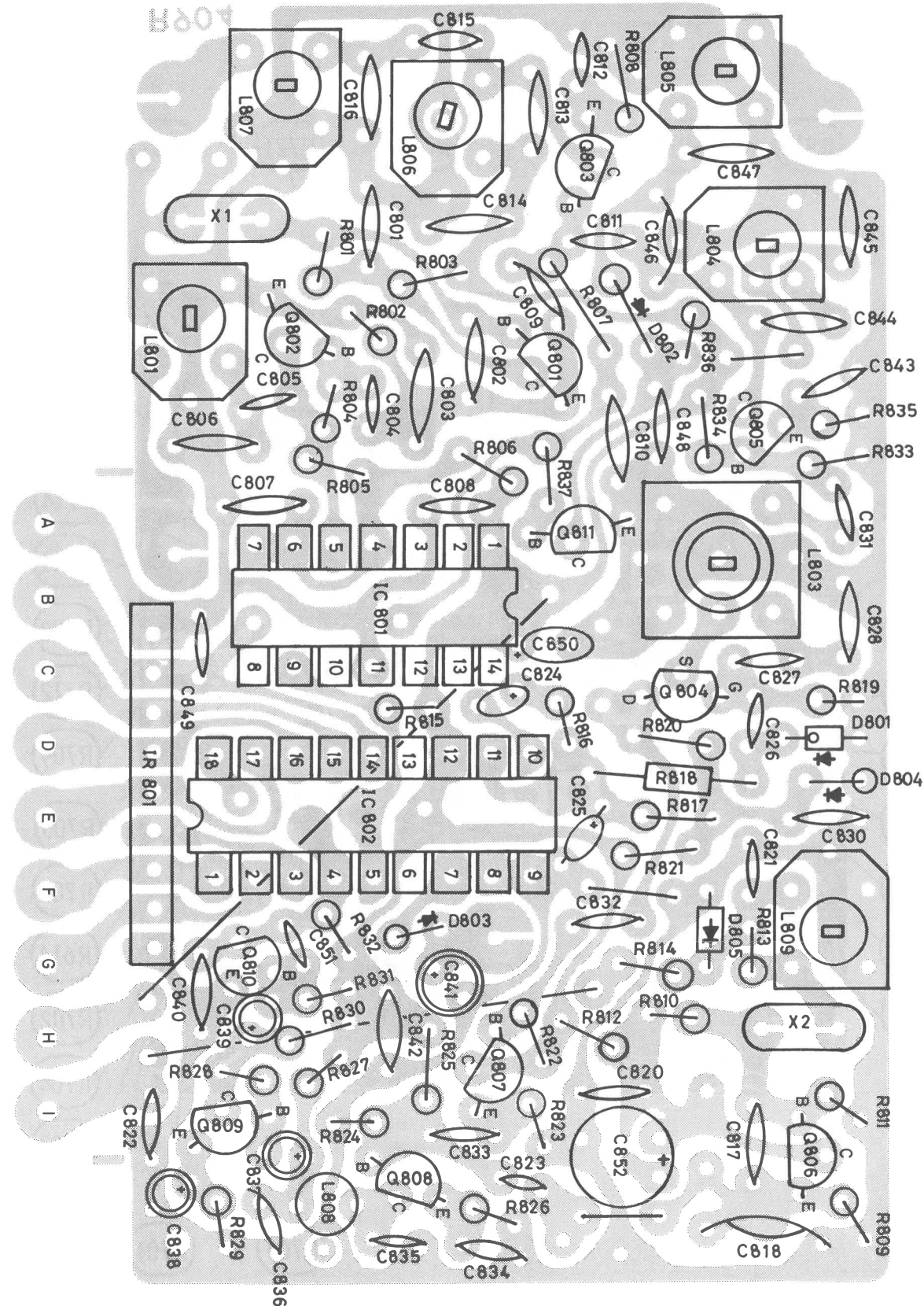
MAIN BOARD



MAIN BOARD

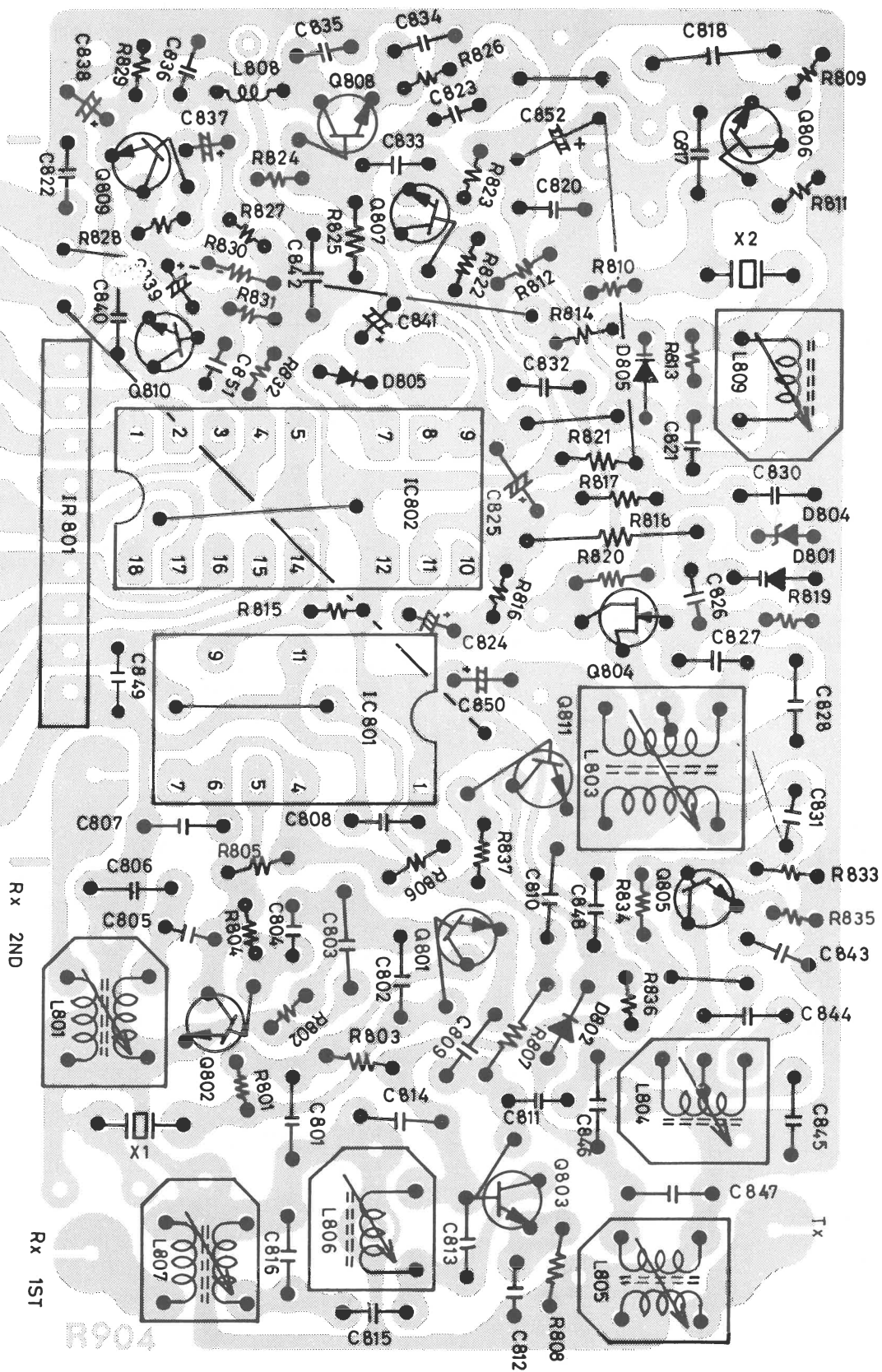


MAIN BOARD



COMPONENT LAYOUT (TOP VIEW) - DIGITAL FREQUENCY SYNTHESIZER BOARD

I
H
G
F
E
D
C
B
A

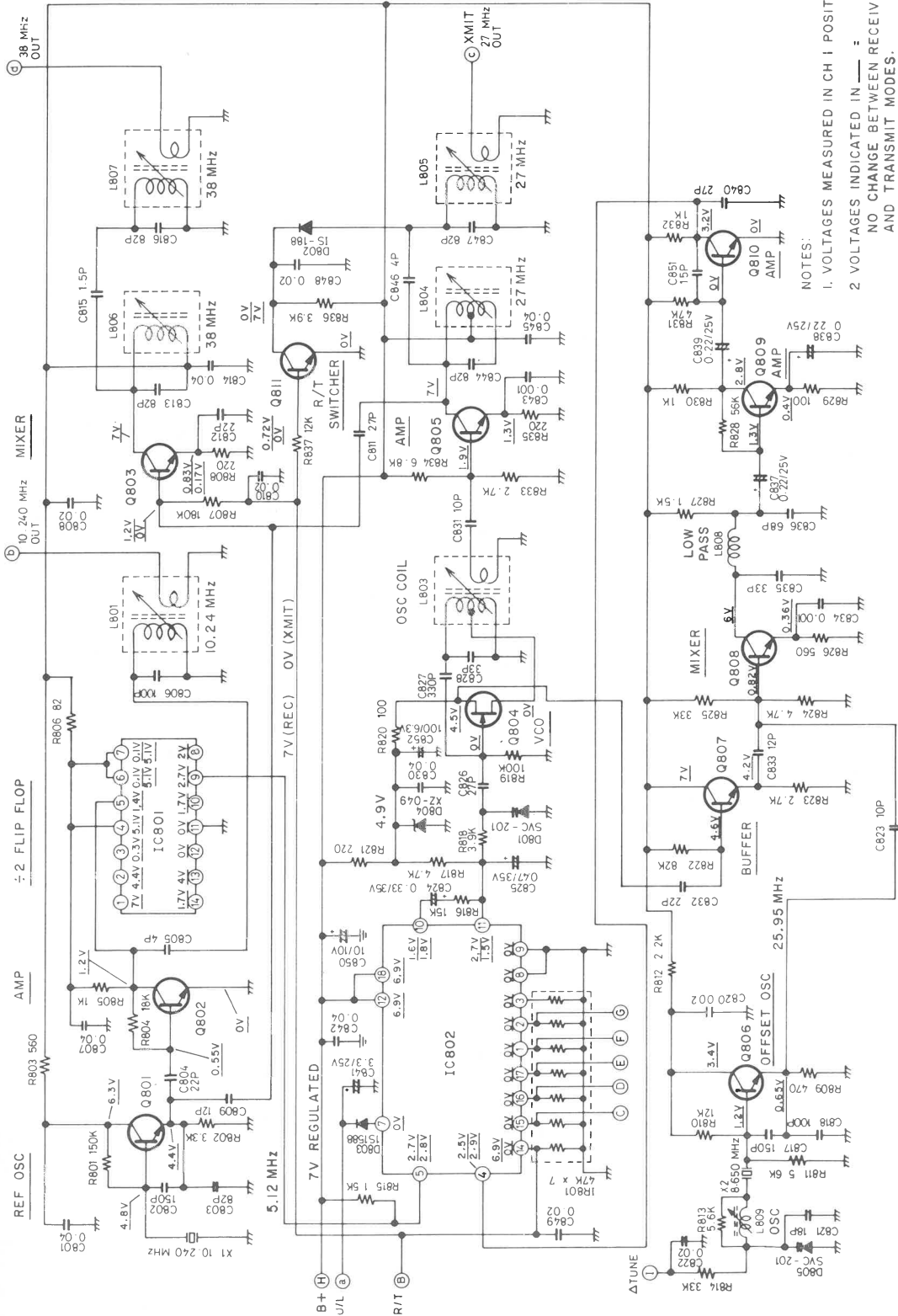


WIRING DIAGRAM (BOTTOM VIEW) - DIGITAL FREQUENCY SYNTHESIZER BOARD

REPLACEMENT PARTS LIST - MODEL 3-5810A

[illegible]

Courtesy of the Manufacturer



SCHEMATIC DIAGRAM - DIGITAL FREQUENCY SYNTHESIZER BOARD

GENERAL ELECTRIC MODEL 3-5810A

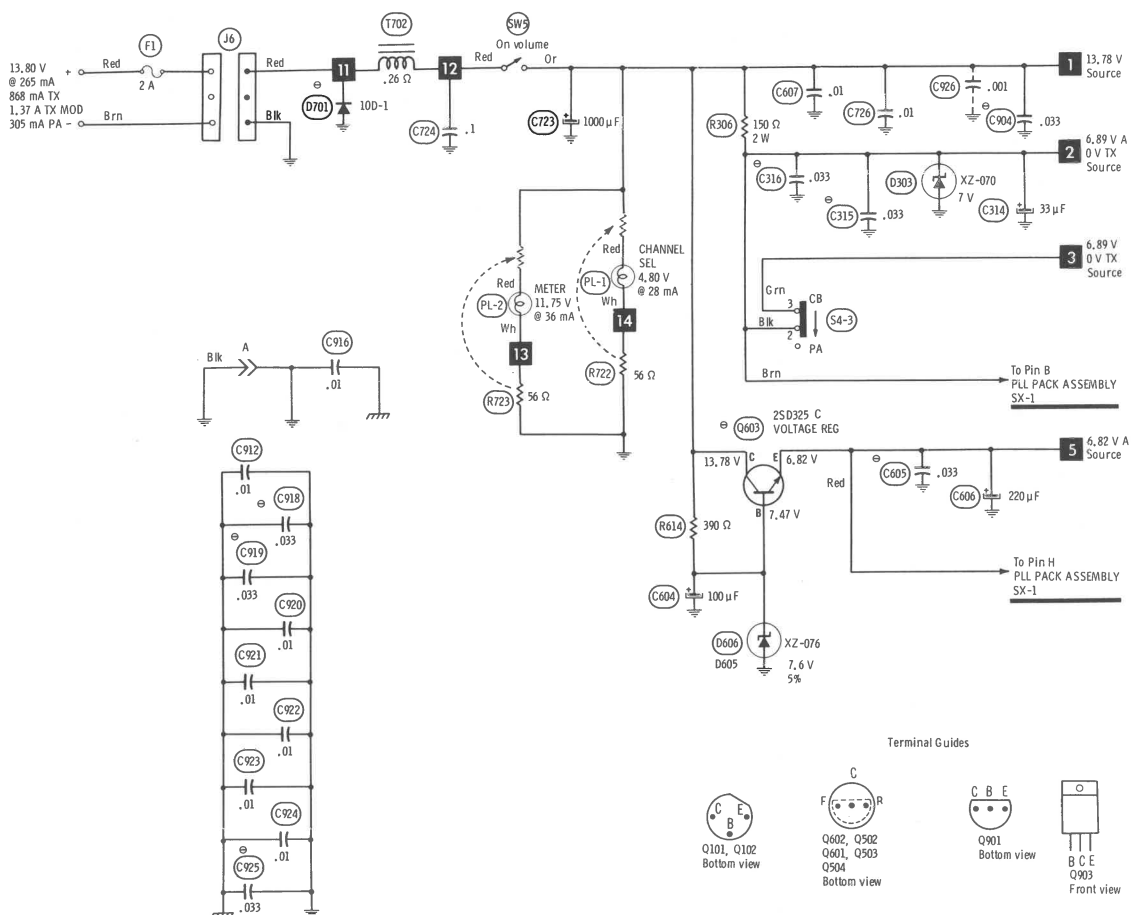
Courtesy of the Manufacturer

TRUTH CHART

1 = 6.84Volts 0 = 0 Volts

C H A N N E L	IC802 PROGRAM DIVIDER							REC VCO OUTPUT IN MHz AT TP12	XMIT VCO OUTPUT IN MHz AT TP15
	PINS								
	1	2	15	16	17				
1	0	0	0	0	0			37.660	26.965
2	0	0	1	0	0			37.670	26.975
3	0	0	0	1	0			37.680	26.985
4	0	0	0	0	1			37.700	27.005
5	0	0	1	0	1			37.710	27.015
6	0	0	0	1	1			37.720	27.025
7	0	0	1	1	1			37.730	27.035
8	1	0	1	0	0			37.750	27.055
9	1	0	0	1	0			37.760	27.065
10	1	0	1	1	0			37.770	27.075
11	1	0	0	0	1			37.780	27.085
12	1	0	0	1	1			37.800	27.105
13	1	0	1	1	1			37.810	27.115
14	0	1	0	0	0			37.820	27.125
15	0	1	1	0	0			37.830	27.135
16	0	1	1	1	0			37.850	27.155
17	0	1	0	0	1			37.860	27.165
18	0	1	1	0	1			37.870	27.175
19	0	1	0	1	1			37.880	27.185
20	1	1	0	0	0			37.900	27.205
21	1	1	1	0	0			37.910	27.215
22	1	1	0	1	0			37.920	27.225
23	1	1	1	0	1			37.950	27.255

GENERAL ELECTRIC MODEL 3-5810A



* 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.

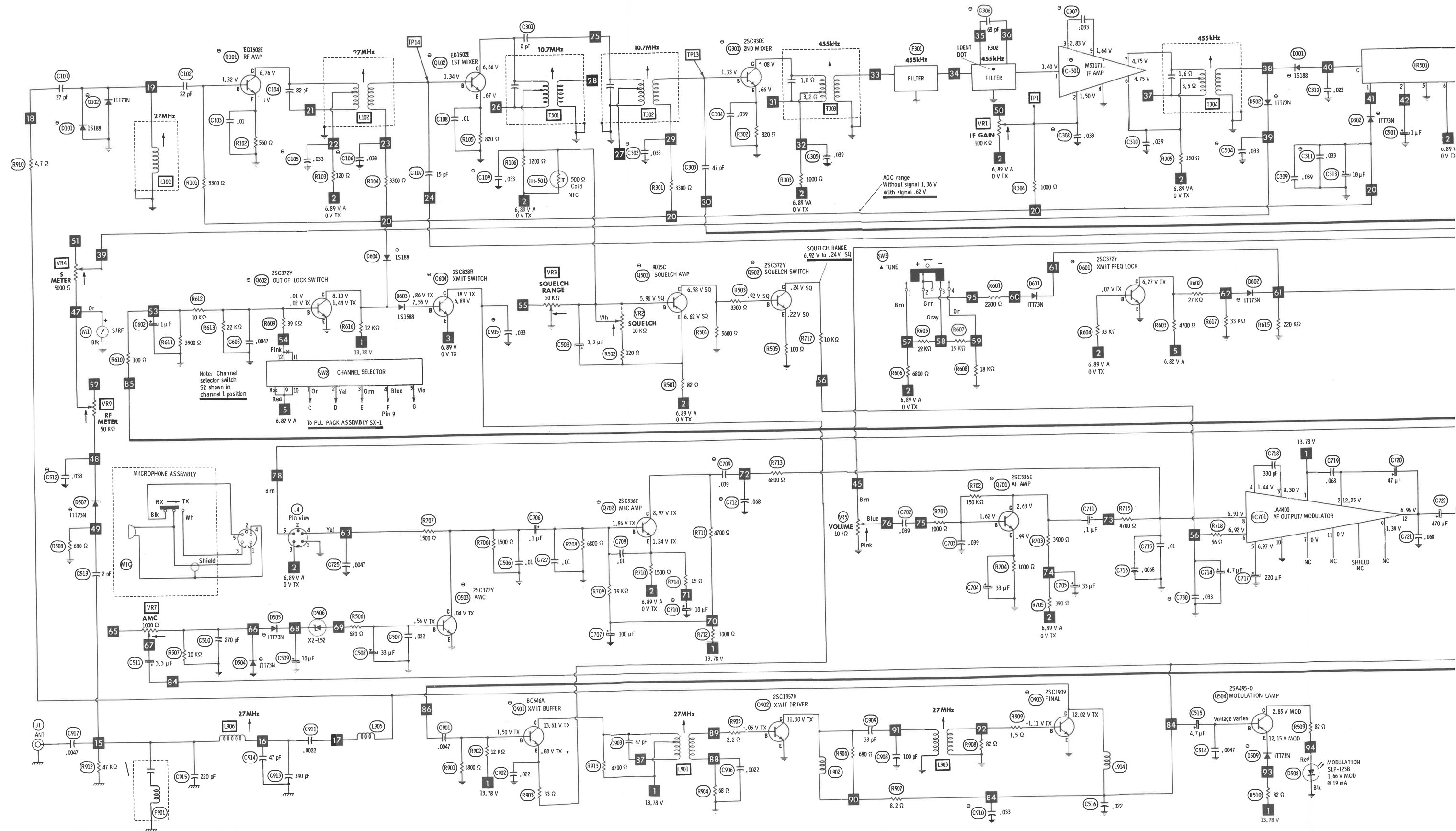
Resistors are 1/2W or less, 5% unless noted.

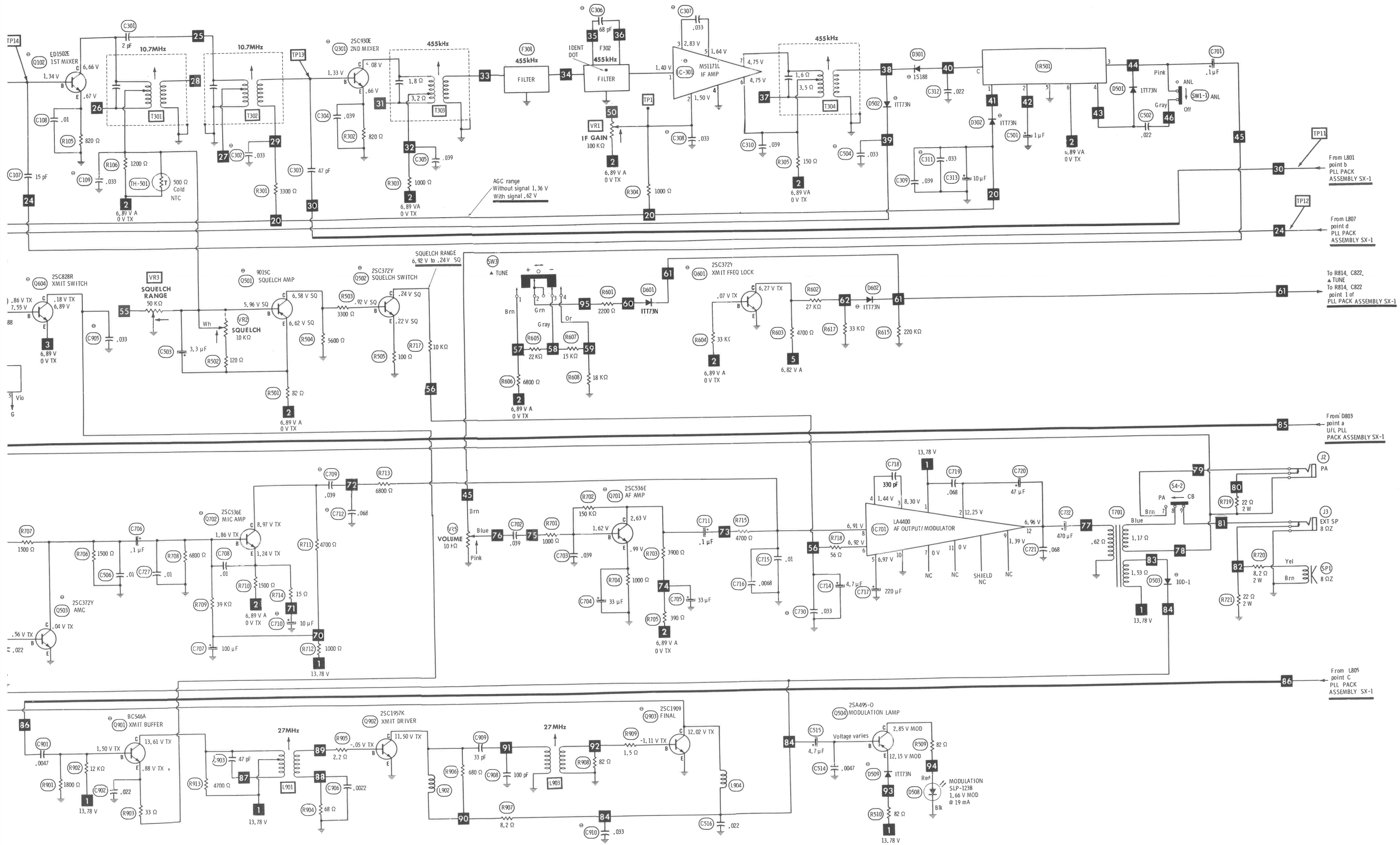
Value in () used in some versions.

A PHOTOFAC[®] STANDARD NOTATION SCHEMATIC

WITH CIRCUITRACE[®]

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PARTS LIST AND DESCRIPTION

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

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	IR WORKMAN PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D101	IS188A	RT7636	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D102	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D301	IS188A	RT7636	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D302	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D303	IS188A	RT7636	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D501	ITT73N	EA16X135	GE-90	D201	PTC311	HEPR2503	RE 195	SK3126	RT-262	ECG610
D502	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D503	10D-1	EA16X36	GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D504	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D505	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D506	XZ-152	EA16X124	GEZD-15	Z1214	ZB15A	HEPZ0418	RE 121	SK3063	RT-245	ECG145
D507	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D509	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D601	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D602	IS1588	EA16X122	GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D603	IS1588	EA16X122	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D604	IS188A	RT-7636	1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D605	XZ-076	EA16X125	GEZD-7.5		ZB7.5B		RE 111		RT-239	ECG138A
D606	XZ-076	EA16X125	GEZD-7.5		ZB7.5B		RE 111		RT-239	ECG138A
D701	10D-1	EA16X36	GE-504A	5A4D	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
IC301	CX-075B	EA33X8383								
IC701	LA4400	EA33X8384								
Q101	ED1502E		GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
	2SC930E	RT6787(1)	GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
Q102	ED1502E		GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
	2SC930E	RT6787(1)	GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
Q301	2SC930		GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
	2SC930D	RT8333(1)	GE-60 *	(IR)2SC772	PTC132 *	HEPS0016 *	RE 9	SK3039 *	RT-308	ECG229 *
Q501	9015		GE-48	TR-31	PTC103 *	HEPS0019 *	RE 26 *	SK3138	RT-303	ECG294
	2SA733Q	EA15X185(1)	GE-48	TR-31	PTC103 *	HEPS0019 *	RE 26 *	SK3138	RT-303	ECG294
Q502	2SC372Y		GE-61 *	(IR)2SC372	PTC121 *	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG123A *
	2SC945Q	RT5905(1)	GE-212	(IR)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q503	2SC372Y		GE-61 *	(IR)2SC372	PTC121 *	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG123A *
	2SC945Q	RT5905(1)	GE-212	(IR)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q504	2SA495-0		GE-221 *	(IR)2SA495	PTC103 *	HEPS0013 *	RE 26 *	SK3114	RT-303	ECG159 *
	2SA495Q(1)		GE-221 *	(IR)2SA495	PTC103 *	HEPS0013 *	RE 26 *	SK3114	RT-303	ECG159 *
Q601	2SC372Y		GE-61 *	(IR)2SC372	PTC121 *	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG123A *
	2SC945Q	RT5905(1)	GE-212	(IR)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q602	2SC372Y		GE-61 *	(IR)2SC372	PTC121 *	HEPS0015 *	RE 13 *	SK3122	RT-308	ECG123A *
	2SC945Q	RT509(1)	GE-212	(IR)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q603	2SD325E	EA4085	GE-28	WEP1306	PTC110	HEPS0027	RE 42	SK3197	RT-197	ECG186
Q604	2SC828R		GE-61 *	(IR)2SC828A	PTC121 *	HEPS0015 *	RE 192	SK3122	RT-302	ECG199
	2SC945Q	RT5905(1)	GE-212	(IR)2SC945	PTC121 *	HEPS0015 *	RE 192	SK3124	RT-107A	ECG199
Q701	2SC536E	RT7326	GE-212	(IR)2SC536	PTC121 *	HEPS0016 *	RE 192	SK3124	RT-107A	ECG199
Q702	2SC536E	RT7326	GE-212	(IR)2SC536	PTC121 *	HEPS0016 *	RE 192	SK3124	RT-107A	ECG199
Q901	BC546A	EA15X361	GE-61 *	TR-24	PTC132 *	HEPS0015 *	RE 13	SK3018	RT-308	ECG123A
Q902	2SC1957K	EA15X362	GE-270	WEP913	PTC180	HEPS3044	RE 209			ECG295
Q903	2SC1909	EA15X363	GE-215	WEP1306	PTC186		RE 203	SK3197	RT-146	ECG235

* Lead configuration may vary from original.

(1) Used in some versions.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA					
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
					Q-LINE	GENERAL LINE	
C313	10 10V						
	4.7 10V	EA31X150(1)	PC10-25	VTT10B25	QV1-41	EV-1222	
C314	33 10V	RT2315	PC5-50	VTT4R7B50	QV1-27	EV-1319	
C501	1 50V	EA31X204	PC30-25	VTT33B10	QV1-61	EV-1125	
C503	3.3 16V	EA2552	PC1-50	VTT1A50	QV1-11	EV-1615	
C508	33 10V	RT2315	PC5-50	VTT3R3A50	QV1-23	EV-1318	
C509	10 16V	EA31X221	PC30-25	VTT33B10	QV1-61	EV-1125	
C511	3.3 50V	EA31X239	PC10-25	VTT10B25	QV1-41	EV-1222	
C515	4.7 16V	EA31X150	PC5-50	VTT3R3A50	QV1-25	EV-1618	
C602	1 10V	EA31X204	PC5-50	VTT4R7B50	QV1-27	EV-1319	
C604	100 10V	EA31X198	PC1-50	VTT1A50	QV1-11	EV-1615	
C606	220 10V	EA2777	PC100-10	VTT100E10	QV1-93	EV-1130	
C701	.1 10V	RT7332	PC250-10	VTT220F10	QV1-115	EV-1140	
C704	33 6.3V	RT5269		TDC104M050EL	QDT1-2	SD50-R109	
C705	33 10V	RT2315	PC30-25	VTT33B10	QV1-61	EV-1125	
C706	.1 10V	RT7332		VTT33B10	QV1-61	EV-1125	
C707	100 16V	RT4769		TDC104M050EL	QDT1-2	SD50-R109	
C710	10 10V		PC100-16	VTT100F16	QV1-95	EV-1230	
C711	.1 10V	RT7332	PC10-25	VTT10B25	QV1-41	EV-1222	
C714	4.7 10V	EA31X150		TDC104M050EL	QDT1-2	SD50-R109	
C717	220 10V	EA2277	PC5-50	VTT4R7B50	QV1-27	EV-1319	
C720	47 16V	EA31X214	PC250-10	VTT220F10	QV1-115	EV-1140	
C722	470 16V	RT4768	PC50-16	VTT47D16	QV1-73	EV-1226	
C723	1000 16V	EA31X200	PC500-16	VTT470K16	QV1-151	EV-1250	
			PC1000-16	VTT1000L16	QV1-183	EV-1260	

(1) Used in some versions.

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
C101	27 +5% N220	EA18X181			*		10TCR-Q27
C102	22 ±5% N220	EA18X151			*		10TCR-Q22
C103	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C104	82 +5% N220	EA18X234			*		10TCR-Q82
C105	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C106	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C107	15 +5% N220	EA18X201			*		10TCR-Q15
C108	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C109	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C301	2 +.25pF NPO		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C302	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C303	47 +5% N220	RT3281			*		10TCR-Q47
C304	.039			DPMS6S39	PVC6139		6PS-S39
C305	.039			DPMS6S39	PVC6139		6PS-S39
C306	68 +5%		DTZ-68	NP068	CN0468		10TCC-Q68
C307	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C308	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C309	.039			DPMS6S39	PVC6139		6PS-S39
C310	.039			DPMS6S39	PVC6139		6PS-S39
C311	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C312	.022			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C315	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C316	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C502	.022			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C504	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C506	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C507	.022			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C510	270		DD-271	GP270	GP327		10TS-T27
C512	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C513	2 +.25pF NPO		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C514	.0047		DD-472	GP4700	GP247		5GA-D47
C516	.022			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C603	.0047		DD-472	GP4700	GP247		5GA-D47
C605	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C607	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C702	.039			DPMS6S39	PVC6139		6PS-S39
C703	.039			DPMS6S39	PVC6139		6PS-S39
C708	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C709	.039			DPMS6S39	PVC6139		6PS-S39
C712	.068			WMF1S68	EWF1A168	QF1-195	1PB-S68
C715	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C716	.0068			WMF1D68	EWF1A268	QF1-73	1PB-D68
C718	330		DD-331	GP330	GP333		10TS-T33
C719	.068			WMF1S68	EWF1A168	QF1-195	1PB-S68
C721	.068			WMF1S68	EWF1A168	QF1-195	1PB-S68
C724	.1		DC-104	MGP1	TA010	QC2-233	TG-P10
C725	.0047		DD-472	GP4700	GP247		5GA-D47
C726	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C727	.01			WMF1S1	EWF1A110	QF1-91	1PB-S10
C730	.033		UK50-333		MAG50133		
	.01	(1)			GP140		5GA-S40
C901	.0047		DD-472	GP4700	GP247		5GA-D47
C902	.022		DC-203	MGP02	TA120	QC2-157	TG-S20
C903	47 +5% N220	RT3281			*		10TCR-Q47
C904	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C905	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C906	.0022		DD-222		GP222	QC2-97	5GA-D22
C908	100 +5% N220	EA18X186			*		10TCR-T10
C909	33 +5% N220	EA18X232			*		10TCR-Q33
C910	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C911	.0022		DD-222		GP222	QC2-97	5GA-D22
C912	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C913	390		DD-391	GP390	GP339		10TS-T39
C914	47 +5% N220	RT3281			*		10TCR-Q47
C915	220		DD-221		GP322		10TS-T22
C916	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C917	.0047		DD-472	GP4700	GP247		5GA-D47
C918	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40

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

SPRAGUE PART No.	
Q-LINE	GENERAL LINE
-41	EV-1222
-27	EV-1319
-61	EV-1125
-11	EV-1615
-23	EV-1318
-61	EV-1125
-41	EV-1222
-25	EV-1618
-27	EV-1319
-11	EV-1615
-93	EV-1130
-115	EV-1140
1-2	SD50-R109
-61	EV-1125
-61	EV-1125
1-2	SD50-R109
-95	EV-1230
-41	EV-1222
1-2	SD50-R109
-27	EV-1319
-115	EV-1140
-73	EV-1226
-151	EV-1250
-183	EV-1260

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE	PART No.
						Q-LINE	GENERAL LINE
C101	27 +5% N220	EA18X181			*		10TCR-Q27
C102	22 ±5% N220	EA18X151			*		10TCR-Q22
C103	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C104	82 +5% N220	EA18X234			*		10TCR-Q82
C105	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C106	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C107	15 +5% N220	EA18X201			*		10TCR-Q15
C108	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C109	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C301	2 +.25pF NPO		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C302	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C303	47 +5% N220	RT3281			*		10TCR-Q47
C304	.039			DPMS6S39	PVC6139		6PS-S39
C305	.039			DPMS6S39	PVC6139		6PS-S39
C306	68 +5%		DTZ-68	NP068	CN0468		10TCC-Q68
C307	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C308	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C309	.039			DPMS6S39	PVC6139		6PS-S39
C310	.039			DPMS6S39	PVC6139		6PS-S39
C311	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C312	.022			DPMS2S22	EWFTA122	QF1-127	1PB-S22
C315	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C316	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C502	.022			DPMS2S22	EWFTA122	QF1-127	1PB-S22
C504	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C506	.01			WMFTS1	EWFTA110	QF1-91	1PB-S10
C507	.022			DPMS2S22	EWFTA122	QF1-127	1PB-S22
C510	270		DD-271		GP327		10TS-T27
C512	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C513	2 +.25pF NPO		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C514	.0047		DD-472	GP4700	GP247		5GA-D47
C516	.022			DPMS2S22	EWFTA122	QF1-127	1PB-S22
C603	.0047		DD-472	GP4700	GP247		5GA-D47
C605	.033		UK50-333		MAG50133		
	.039	(1)			GP140		5GA-S40
C607	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C702	.039			DPMS6S39	PVC6139		6PS-S39
C703	.039			DPMS6S39	PVC6139		6PS-S39
C708	.01			WMFTS1	EWFTA110	QF1-91	1PB-S10
C709	.039			DPMS6S39	PVC6139		6PS-S39
C712	.068			WMFTS68	EWFTA168	QF1-195	1PB-S68
C715	.01			WMFTS1	EWFTA110	QF1-91	1PB-S10
C716	.0068			WMFTD68	EWFTA268	QF1-73	1PB-D68
C718	330		DD-331	GP330	GP333		10TS-T33
C719	.068			WMFTS68	EWFTA168	QF1-195	1PB-S68
C721	.068			WMFTS68	EWFTA168	QF1-195	1PB-S68
C724	.1		DC-104	MGP1	TA010	QC2-233	TG-P10
C725	.0047		DD-472	GP4700	GP247		5GA-D47
C726	.01			WMFTS1	EWFTA110	QF1-91	1PB-S10
C727	.01			WMFTS1	EWFTA110	QF1-91	1PB-S10
C730	.033		UK50-333		MAG50133		
	.01	(1)			GP140		5GA-S40
C9							

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

ITEM No.	RATING	MFG. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PART No.	
						Q-LINE	GENERAL LINE
C919	.033	(1)	UK50-333		MAG50133		
	.039				GP140		5GA-S40
C920	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C921	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C922	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C923	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C924	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C925	.033	(1)	UK50-333		MAG50133		
	.039				GP140		5GA-S40
C926	.001		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C927	.01		DC-103	MGP01	TA110	QC2-141	TG-S10

*Not normally in distributor's stock. Available thru distributor on order to manufacturer.
(1) Used in some versions.

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR1	IF Gain	100K	EA49X325				
VR2	Squelch/PA Switch	10K	EA49X326				
VR3	Squelch Range	50K	EA49X313				
VR4	S Meter	5000	EA49X327				
VR5	Volume/Power Switch	10K	EA49X315				
VR7	AMC	1000	EA49X316				
VR9	RF Meter	50K	EA49X313				

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFG. PART No.			WORKMAN PART No.	MFG. PART No.
IR501			EA42X1	TH501	500 Co1d NTC		EA16X121

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	Rec Antenna (27MHz)	EA36X201			
L102	Rec RF (27MHz)	EA36X202			
L901	XMT Buffer (27MHz)	EA36X206			
L902	RF Choke	EA36X207			
L903	XMT Driver (27MHz)	EA36X208			
L904	RF Choke	EA36X210			
L905	RF Choke	EA36X209			
L906	Final (27MHz)	EA36X211			
T301	IF (10MHz)	EA56X48			
T302	IF (10MHz)	EA56X49			
T303	IF (455kHz)	EA56X50			
T104	IF (455kHz)	EA56X51			

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~)	MFG. PART No.	THORDARSON PART No.	TRIAD PART No.	
T702	1.22A	.26	1.13mH	EA36X204 R810 (1)	TR574		(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFG. PART No.	THORDARSON PART No.	TRIAD PART No.	
T701	3.9	1 8 2 39	EA64X26 4R809 (1)	TR836		(1) Number on unit

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFG. PART No.	QUAM PART No.	
SP1	3" PM 8 ohms	EA95X110	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	2A	EA68X64	EA68X58	AGC2	HDJ	312002	150145	FG2-2

MICROPHONE

ITEM No.	REPLACEMENT DATA				CONNECTION DATA						
	MFG. 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	EA68X63	18-032	18-034	18-010	18-105	4	1	3	5	NC	1

GENERAL ELECTRIC MODEL 3-5810A

PARTS LIST AND DESCRIPTION (CONTINUED)

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

Replacement parts shown may be superseded by the availability of newly introduced replacements.

Have your local distributor check Sams COUNTER FACTS® for the most up-to-date replacement.

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFR. PART No.	CTS KNIGHTS PART No.	CHANNEL	ITEM No.	CRYSTAL FREQUENCY IN MHz	MFR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X1	10.240	EA75X1	CA55W10240	Ref Osc	X2	8.650	EA75X2	CB80W8650	PLL

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
D508	Led	EA16X209	Modulation Indicator (19mA @ 1.66V)
F301	Filter	EA36X203	455kHz
F302	Filter	EA36X231	455kHz
F901	TVI Filter	EA36X205	54MHz
J1	Jack	EA38X24	Antenna
J2	Jack	EA41X131	PA
J3	Jack	EA41X131	Ext. Speaker
J4	Jack	EA41X124	Microphone
J6	Jack	EA41X136	Power
M1	Meter	EA62X144	S/R
PL1	Lamp	EA41X132	Channel Indicator (28mA @ 4.80V)
PL2	Lamp	EA41X132	Meter (36mA @ 11.75V)
SW1	Switch	EA93X278	ANL
SW2	Switch	EA55X128	Channel Selector
SW3	Switch	EA93X278	Delta Tune
SW4	Switch		PA (Part of Squelch Control)
SW5	Switch		Power (Part of Volume Control)

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

ITEM	PART No.	ITEM	PART No.
Cabinet, Top	EA98X452	Knob, Control	EA43X599
Cabinet, Bottom	EA98X453	Microphone Holder	EA68X65
Channel Indicator Disc	EA90X179	Mounting Bracket	EA68X56
Knob, Channel Selector	EA43X598	Escutcheon	EA89X249

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')