

# PHOTOFACT<sup>®</sup> with

# CIRCUITRACE<sup>®</sup>

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 3-5817A

## MANUFACTURER'S SPECIFICATIONS

### RECEIVER

<b>MAXIMUM FREQUENCY COVERAGE:</b>	26.965 to 27.405 MHz.
<b>IF FREQUENCIES:</b>	455 kHz, 10.695 MHz.
<b>SENSITIVITY:</b>	To produce 500 MW audio output minimum; less than .5uV.
<b>ADJACENT CHANNEL SELECTIVITY:</b>	Better than 60 db at 10 kHz.
<b>IMAGE REJECTION RATIO:</b>	Better than 60 db.
<b>PA/AUDIO OUTPUT POWER [power to external speaker]:</b>	Better than 4.0 watts. At 10% THD
<b>SQUELCH RANGE [SENSITIVITY]:</b>	0.5 to 2000 uV nominal.
<b>VNS [Variable noise Suppression]:</b>	Signal to noise improvment; minimum 15 db.

### TRANSMITTER

<b>FREQUENCY RESPONSE:</b>	400 Hz to 2.5 kHz.
<b>FREQUENCY COVERAGE:</b>	26.965 to 27.405 MHz.
<b>TRANSMIT POWER OUTPUT [RF [Radio Frequency] power to antenna]:</b>	4 watts maximum as limited by FCC Rules and Regulations at 13.8 volt DC.
<b>MODULATION CAPABILITY:</b>	Factory pre-set limit 85-100% maximum.
<b>MIC POWER AMPLIFIER:</b>	Modulation sensitivity control range 20 db $\pm$ 3 db
<b>FREQUENCY TOLERANCE:</b>	Better than .003% max.

GENERAL ELECTRIC MODEL 3-5817A

Courtesy of the Manufacturer

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

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## ALIGNMENT INSTRUCTIONS

CAUTION: Use an 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 a 50-ohm dummy load or antenna before keying transmitter. Connect microphone.

Suggested Alignment Tools:

	GC ELECTRONICS:
CT1.....	5000
T1 thru T8.....	9440
L3.....	9300,9302,9304
T9,T10,T11.....	5000,8728,5009

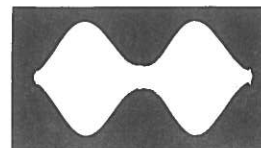


FIGURE 1

## SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (IC2 Pin 3).	Ch. 19		Check for 10.240MHz. $\pm 150\text{Hz}$ .
Input of DC meter to TP8 (Junction R11 and R15).	Ch. 1	T1	Adjust for $2.0 \pm .2$ volts. Check for approximately 4.3 volts on Ch. 40.
Input of DC meter to TP8 (Junction R11 and R15).	Ch. 1, XMT	CT1	Adjust for $2.0 \pm .2$ volts. Check for approximately 4.3 volts on Ch. 40.
Input of frequency counter to TP2 (Junction C14 and C28).	Ch. 19		Check for 16.490MHz. Check all channels. (See Truth Chart for correct frequencies).
Input of frequency counter to TP2 (Junction C14 and C28).	Ch. 19, XMT		Check for 13.5925MHz. 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: VNS MINIMUM, RF Gain maximum, Squelch MINIMUM, VFF Off.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Output of signal generator to TP3 (Q12 Base). 455kHz, 1000Hz @ 30% modulation	Ch. 19	T11, T10	Adjust for maximum output.
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T9, T8, T7, T6, T5	Adjust for maximum output. If necessary readjust T10 and T11 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:  
VNS MINIMUM, RF Gain maximum, Squelch MINIMUM, VFF Off.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator to antenna input. 27.185MHz, 1000Hz @ 30% modulation. Output 10uV.	Ch. 19 RF Gain MINIMUM	R94	RF GAIN RANGE Adjust for a signal to noise ratio of 10db.
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 Auto SWR/TX/RX in TX/RX position.	RV3	RX SIGNAL METER Adjust for 9 on RX SIGNAL scale 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 antenna input.	Ch. 19, XMT	T2, T3, T4, L3	Adjust for maximum.
Input of RF wattmeter to antenna input.	Ch. 19, XMT	L3	Adjust for 4 watts maximum.

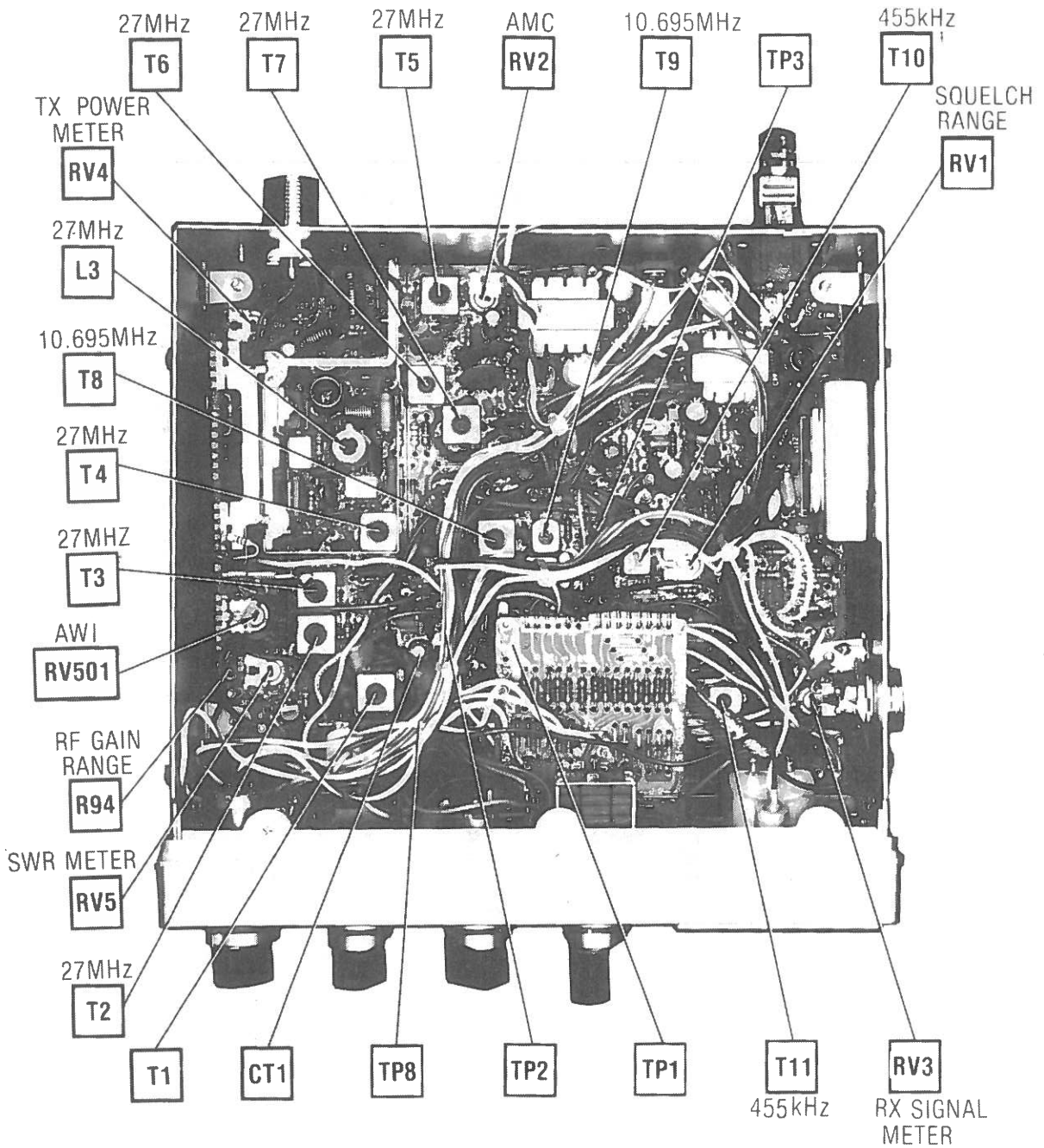
## TRANSMITTER ADJUSTMENTS

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.

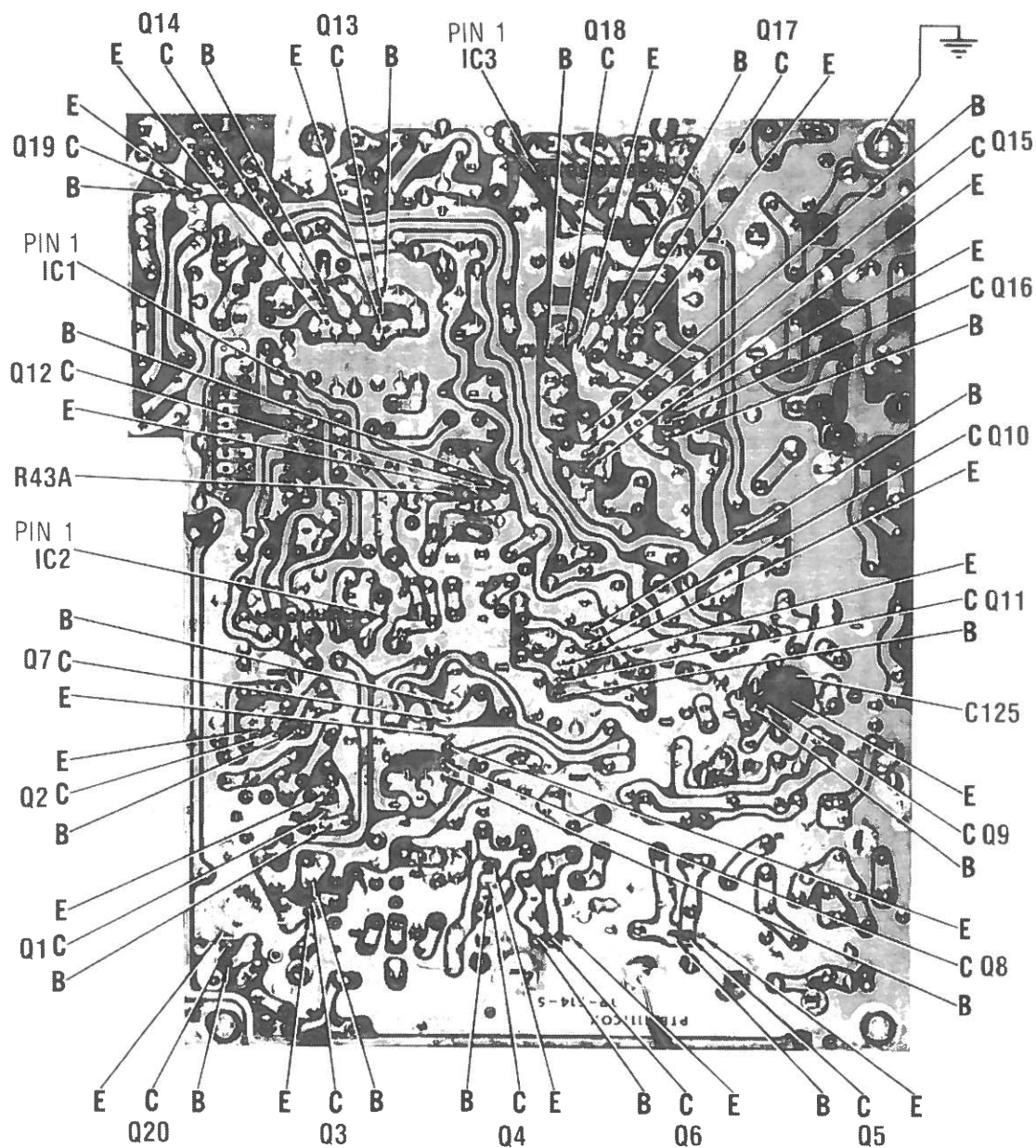
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 20mV signal at MIC input.	Ch. 19, XMT	RV2	AMC Adjust for 100% modulation maximum. (See Figure 1.)
Input of RF wattmeter to antenna input.	Ch. 19, XMT	RV4	TX POWER METER Adjust so TX POWER meter agrees with RF wattmeter.
Connect a 150 Ohm 5 watt non-inductive resistor to antenna input.	Ch. 19, XMT Auto SWR/TX/RX switch to TX/RX position.	RV501	AWI Adjust so AWI indicator just lights.
Connect a 150 Ohm 5 watt non-inductive resistor to antenna input.	Ch. 19, XMT Auto SWR/TX/RX switch to AUTO SWR position.	RV5	SWR METER Adjust for 3 on SWR scale on meter.

# TRUTH CHART

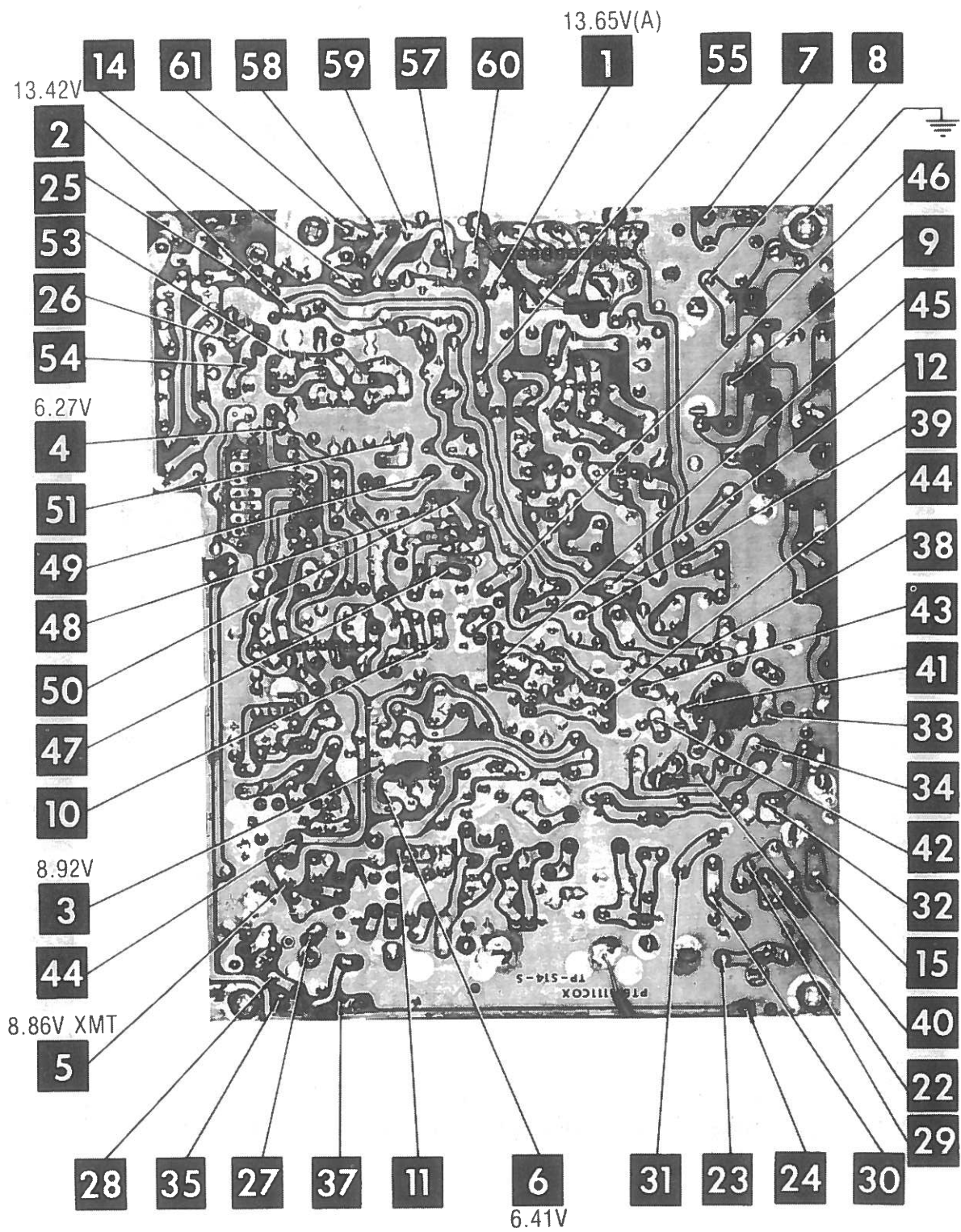
C H A N N E L	1 = 6.27 Volts                      0 = 0 Volts								REC VCO OUTPUT IN MHz AT TP2	XMT VCO OUTPUT IN MHz AT TP2	VCO OUTPUT IN MHz AT
	PROGRAM DIVIDER										
	IC1 PINS										
	9	10	11	12	13	14	15				
1	1	0	0	1	0	1	0		16.270	13.4825	
2	1	0	0	1	0	0	1		16.280	13.4875	
3	1	0	0	1	0	0	0		16.290	13.4925	
4	1	0	0	0	1	1	0		16.310	13.5025	
5	1	0	0	0	1	0	1		16.320	13.5075	
6	1	0	0	0	1	0	0		16.330	13.5125	
7	1	0	0	0	0	1	1		16.340	13.5175	
8	1	0	0	0	0	0	1		16.360	13.5275	
9	1	0	0	0	0	0	0		16.370	13.5325	
10	0	1	1	1	1	1	1		16.380	13.5375	
11	0	1	1	1	1	1	0		16.390	13.5425	
12	0	1	1	1	1	0	0		16.410	13.5525	
13	0	1	1	1	0	1	1		16.420	13.5575	
14	0	1	1	1	0	1	0		16.430	13.5625	
15	0	1	1	1	0	0	1		16.440	13.5675	
16	0	1	1	0	1	1	1		16.460	13.5775	
17	0	1	1	0	1	1	0		16.470	13.5825	
18	0	1	1	0	1	0	1		16.480	13.5875	
19	0	1	1	0	1	0	0		16.490	13.5925	
20	0	1	1	0	0	1	0		16.510	13.6025	
21	0	1	1	0	0	0	1		16.520	13.6075	
22	0	1	1	0	0	0	0		16.530	13.6125	
23	0	1	0	1	1	0	1		16.560	13.6275	
24	0	1	0	1	1	1	1		16.540	13.6175	
25	0	1	0	1	1	1	0		16.550	13.6225	
26	0	1	0	1	1	0	0		16.570	13.6325	
27	0	1	0	1	0	1	1		16.580	13.6375	
28	0	1	0	1	0	1	0		16.590	13.6425	
29	0	1	0	1	0	0	1		16.600	13.6475	
30	0	1	0	1	0	0	0		16.610	13.6525	
31	0	1	0	0	1	1	1		16.620	13.6575	
32	0	1	0	0	1	1	0		16.630	13.6625	
33	0	1	0	0	1	0	1		16.640	13.6675	
34	0	1	0	0	1	0	0		16.650	13.6725	
35	0	1	0	0	0	1	1		16.660	13.6775	
36	0	1	0	0	0	1	0		16.670	13.6825	
37	0	1	0	0	0	0	1		16.680	13.6875	
38	0	1	0	0	0	0	0		16.690	13.6925	
39	0	0	1	1	1	1	1		16.700	13.6975	
40	0	0	1	1	1	1	0		16.710	13.7025	



CHASSIS-BOTTOM



MAIN BOARD



GENERAL ELECTRIC MODEL 3-5817A

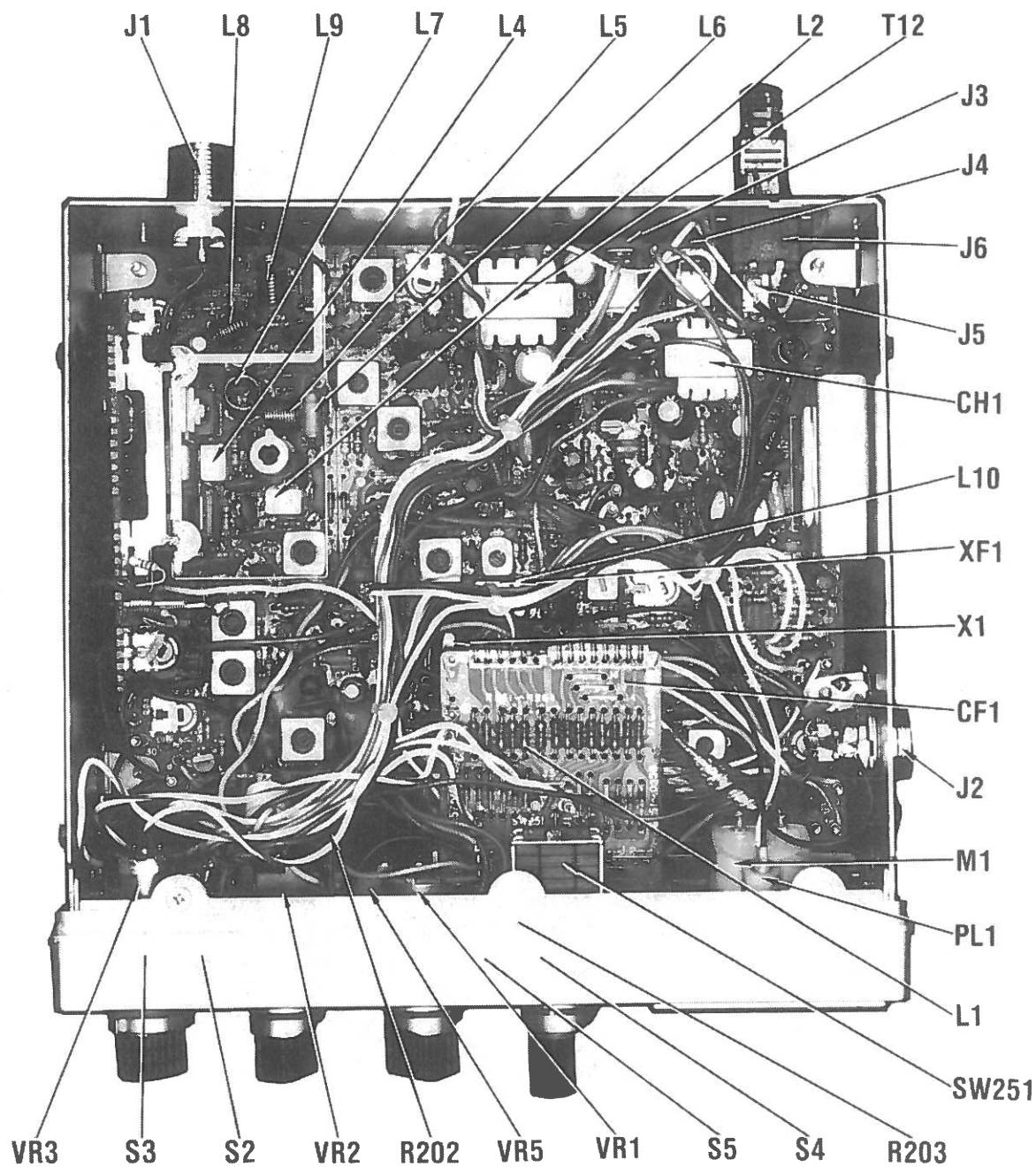
MAIN BOARD



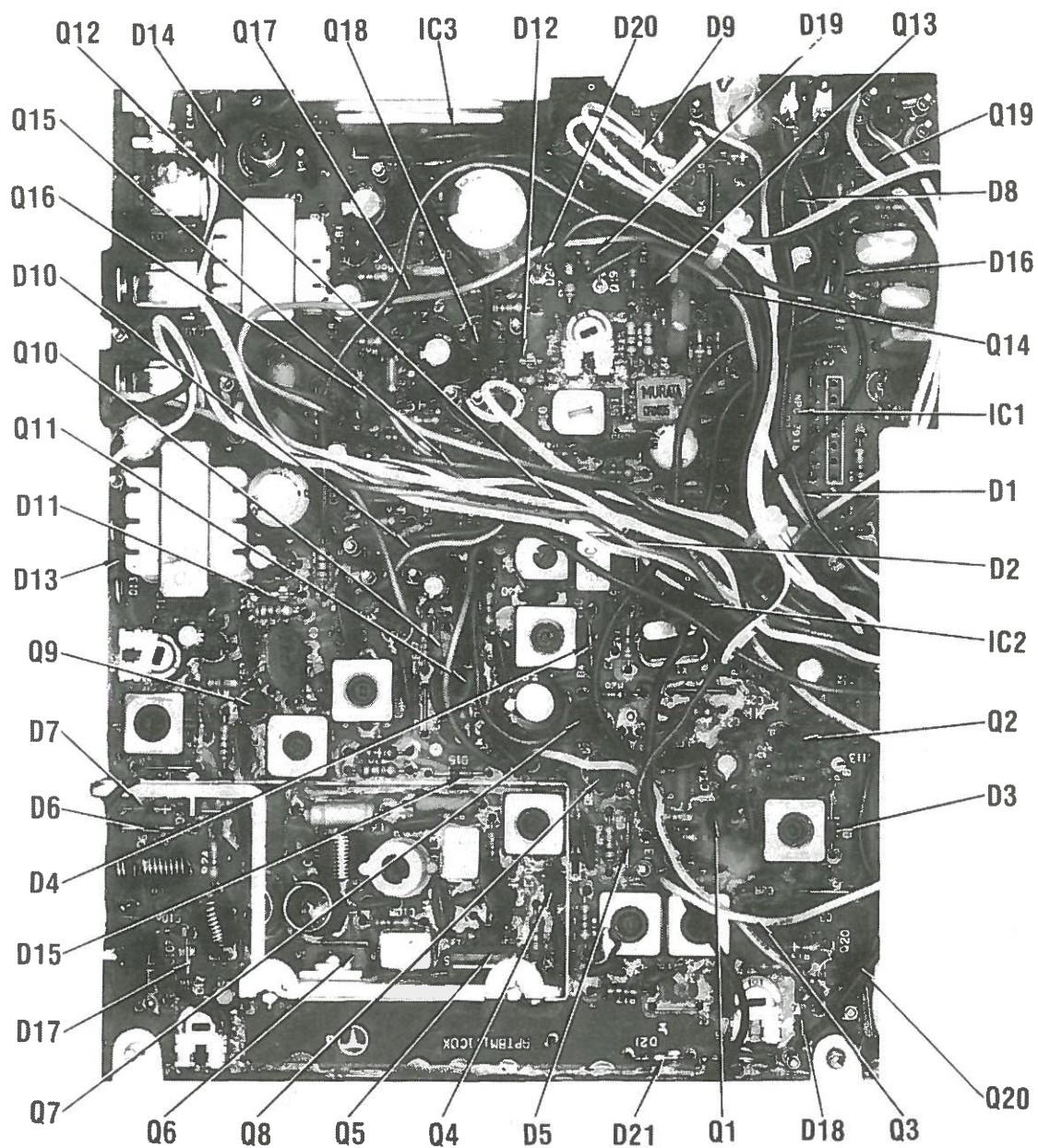


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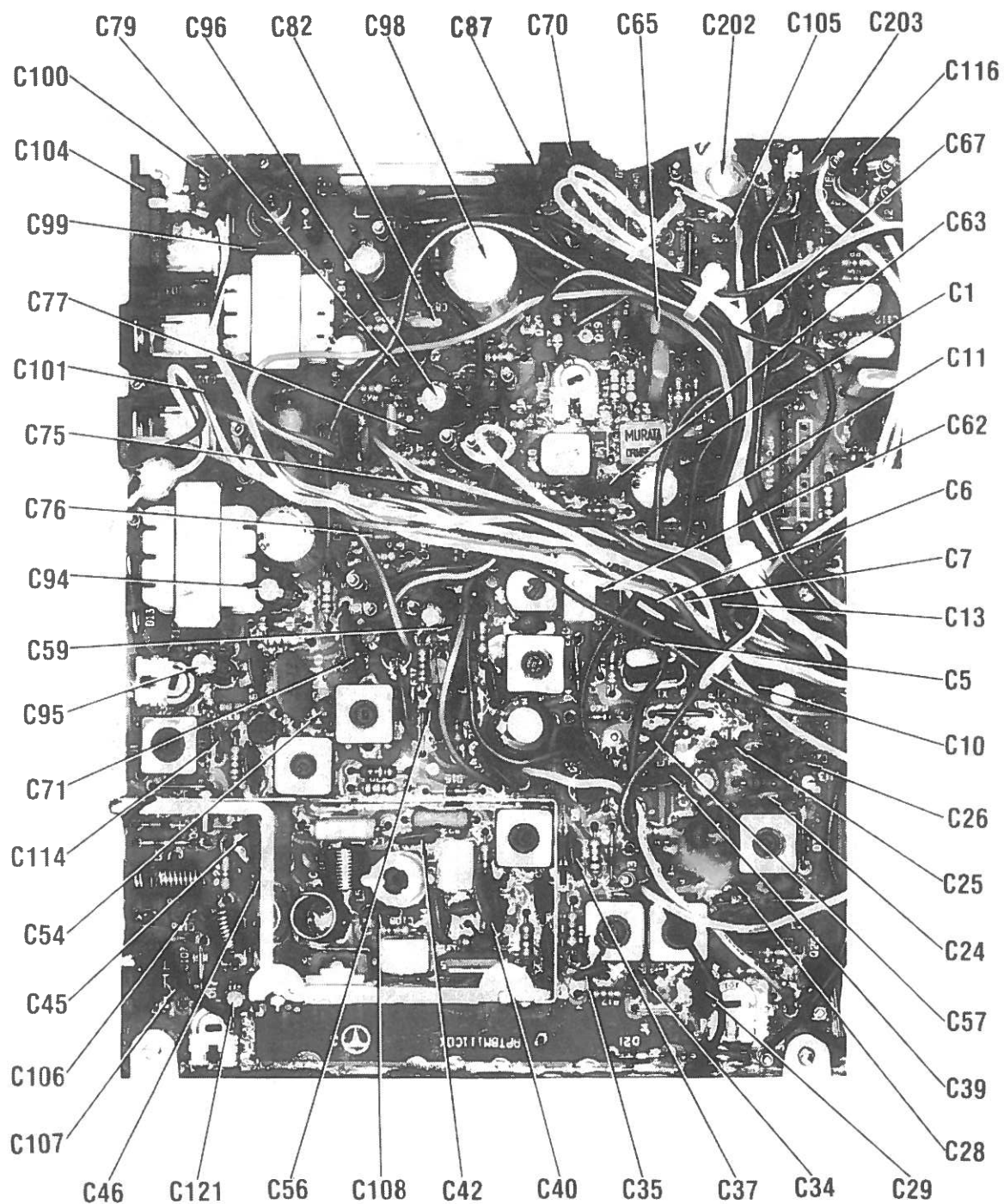




CHASSIS-BOTTOM

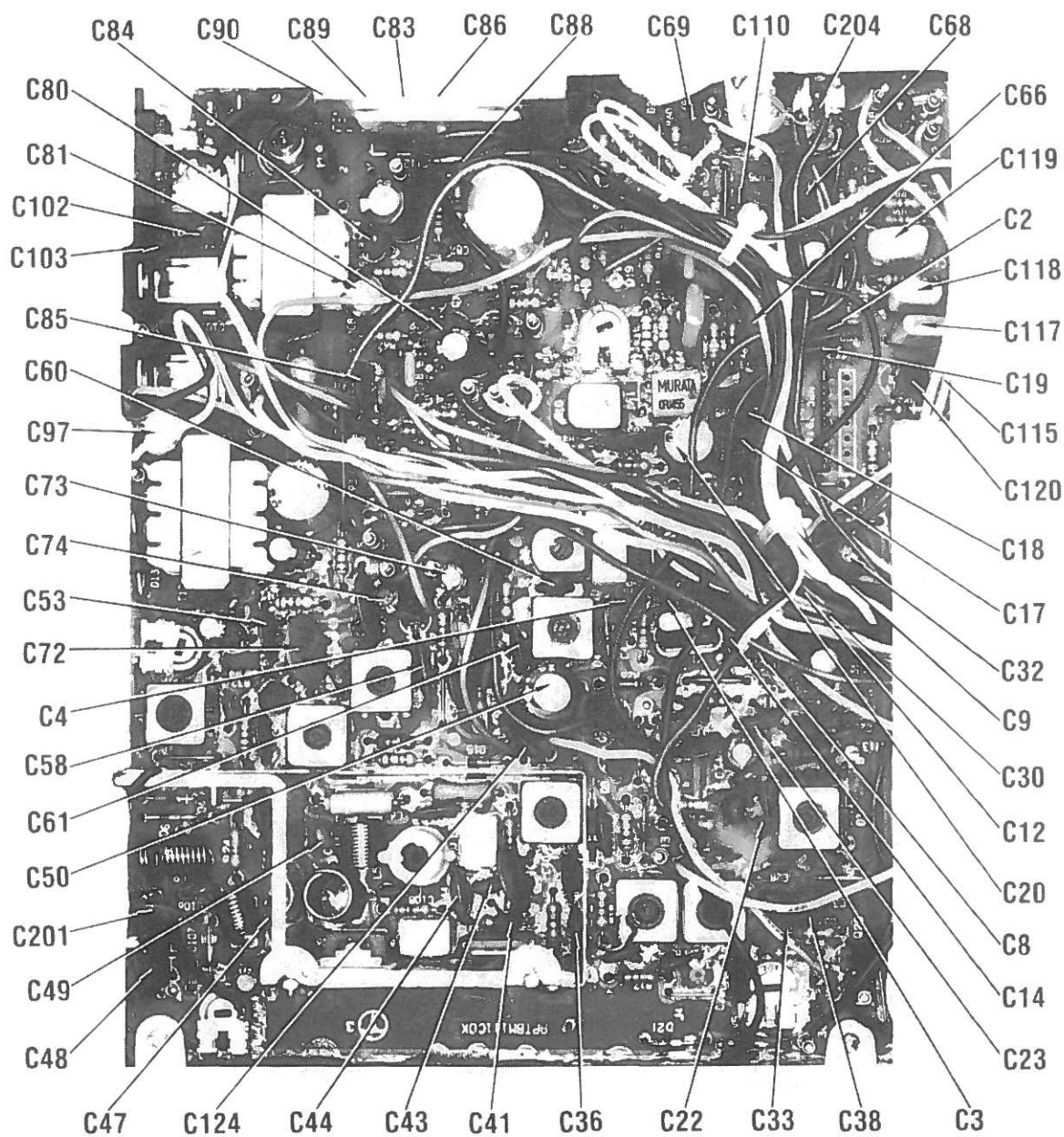


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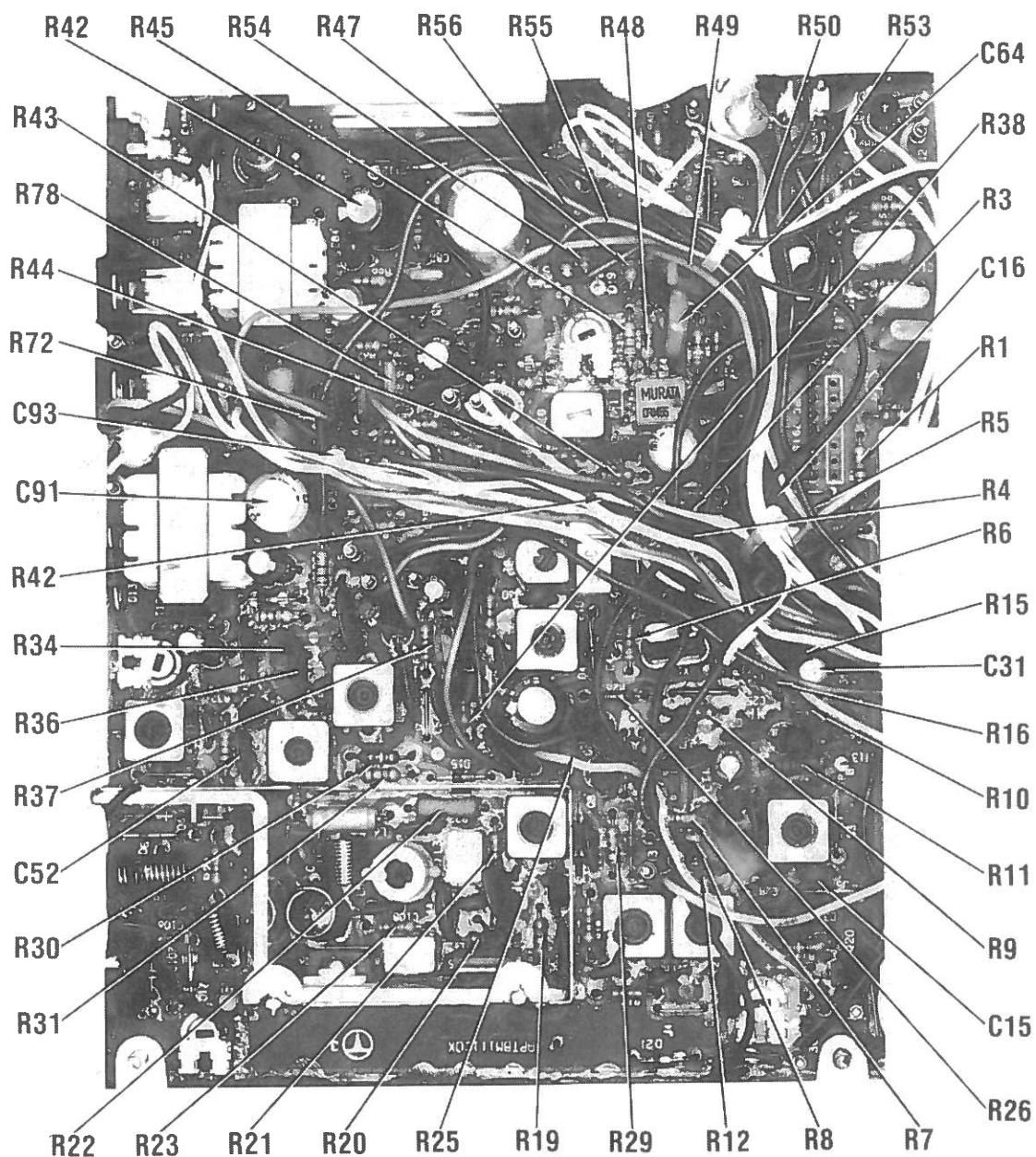


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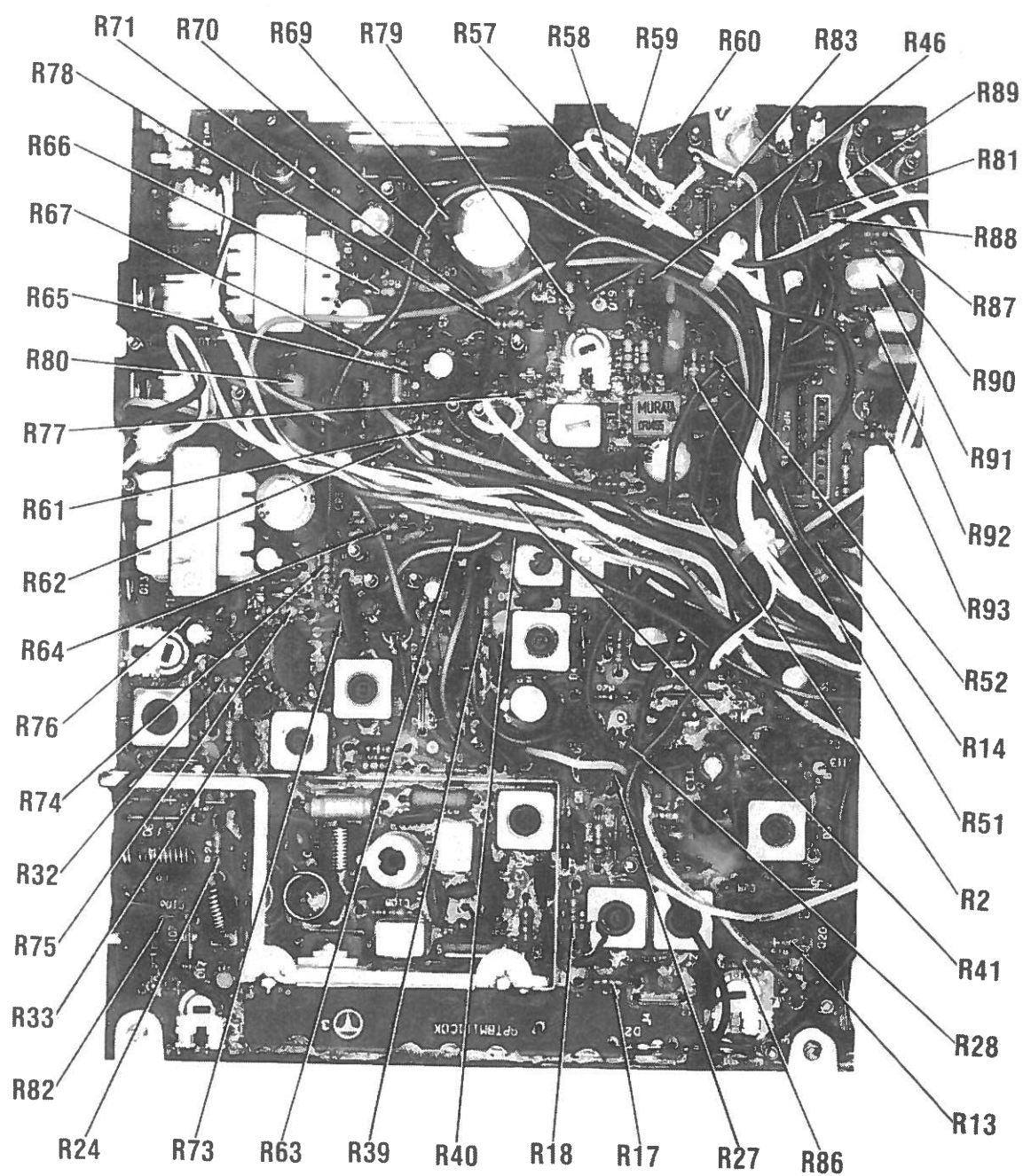




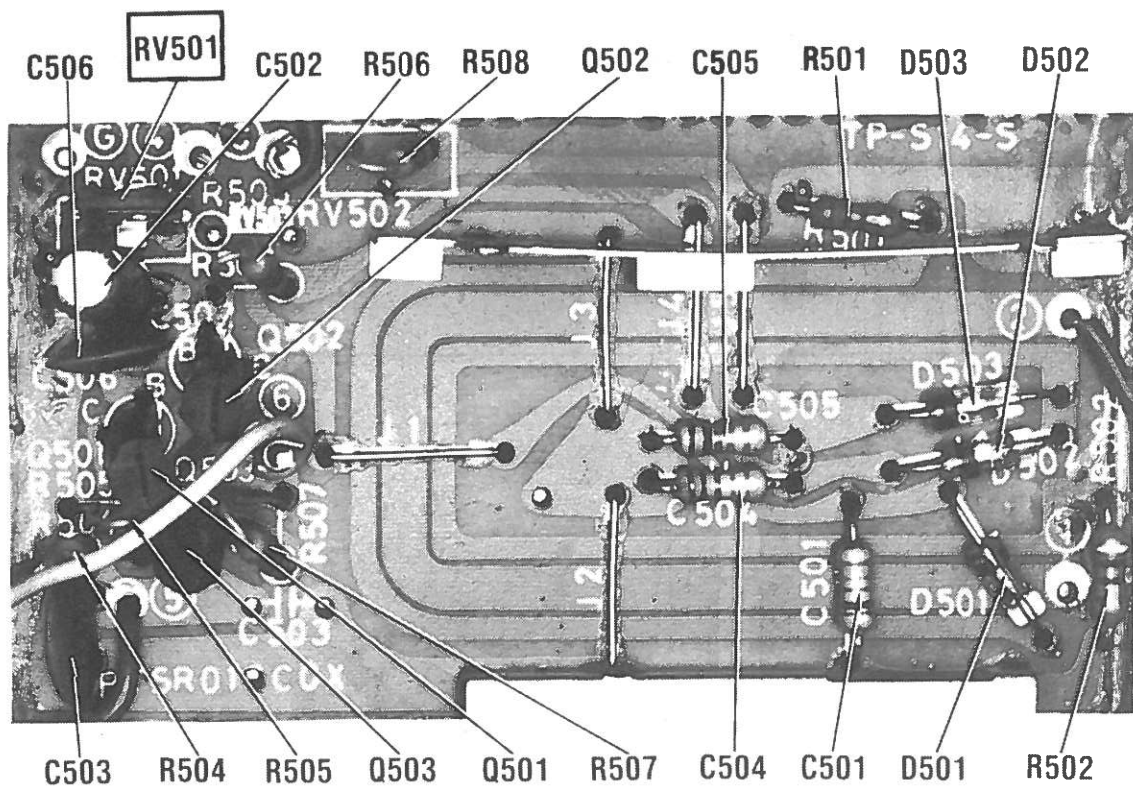
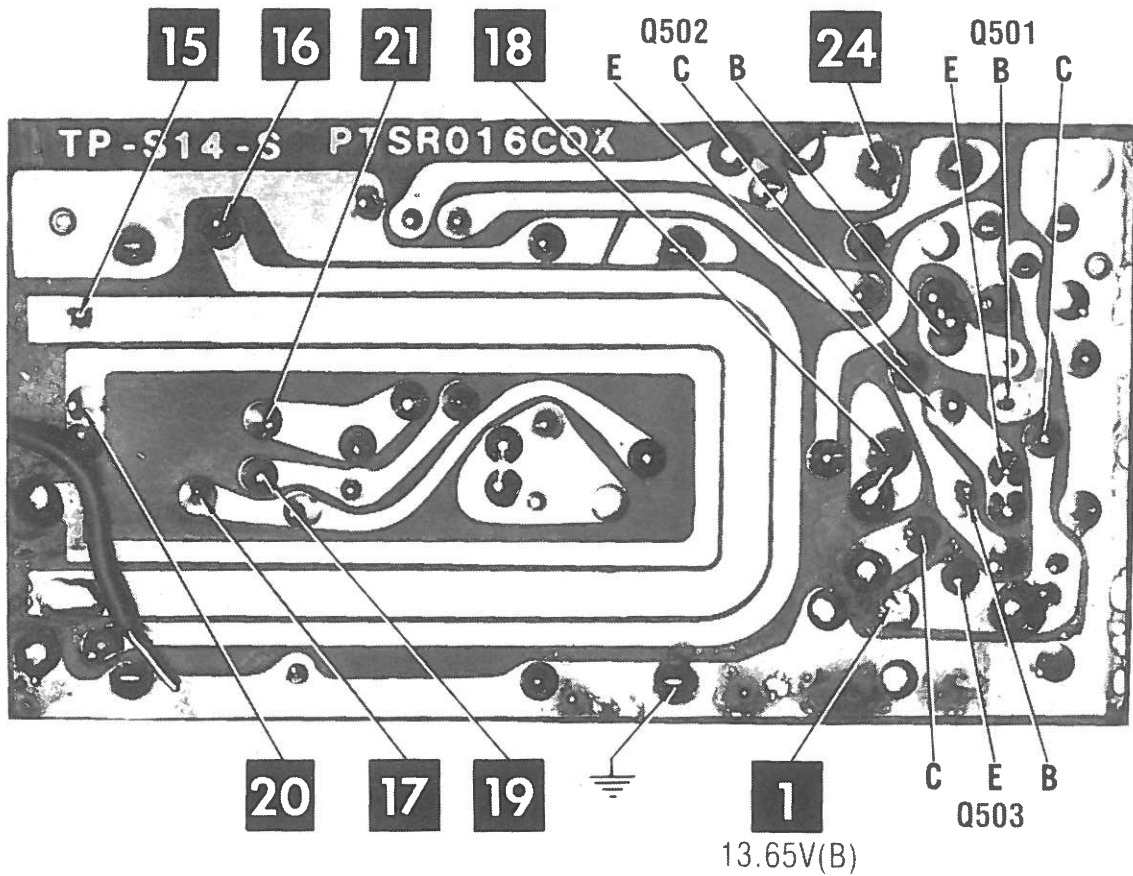
MAIN BOARD



MAIN BOARD

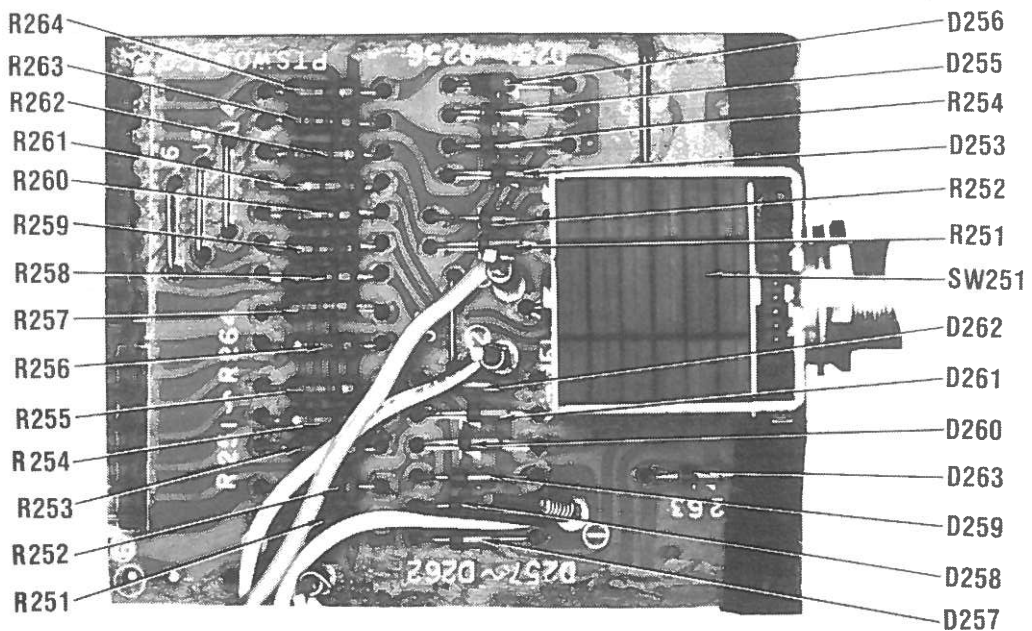
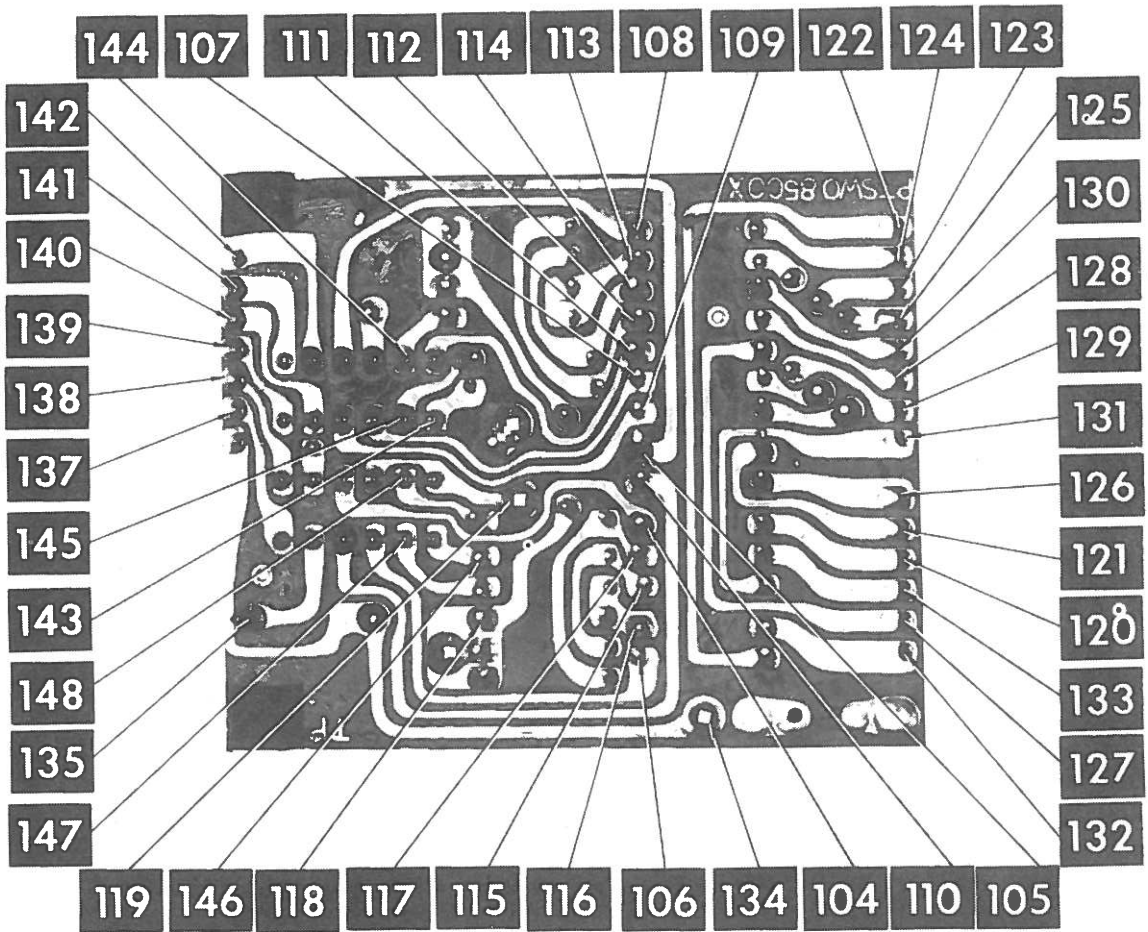


MAIN BOARD

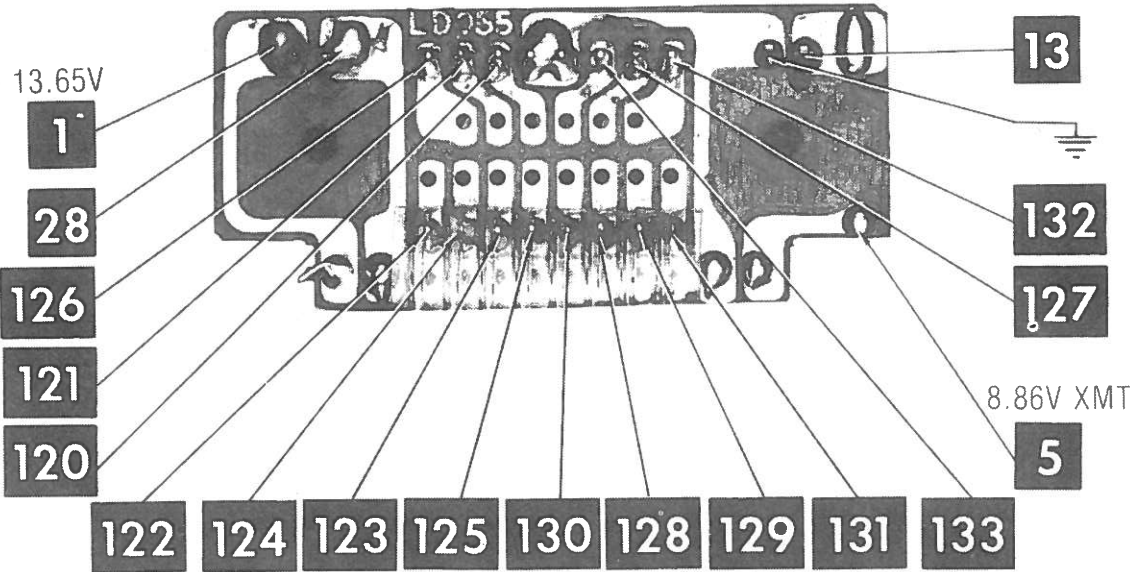


AWI BOARD

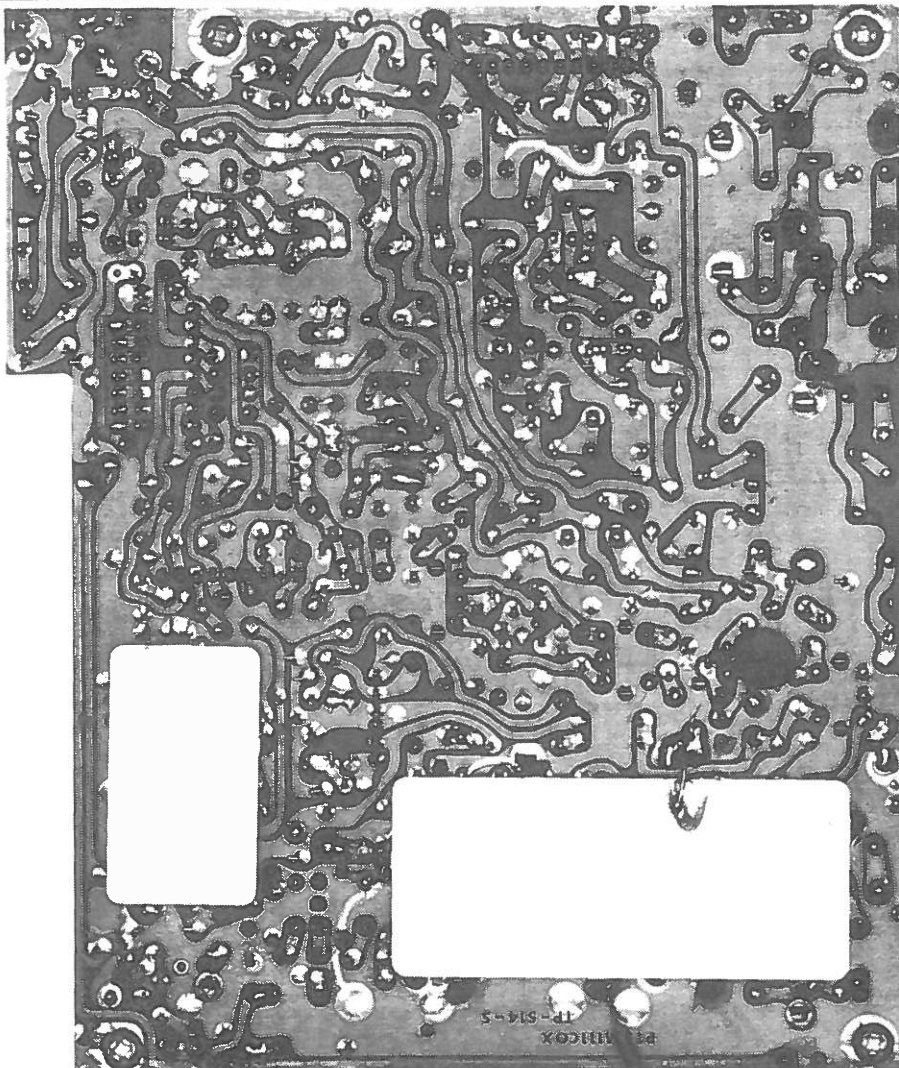




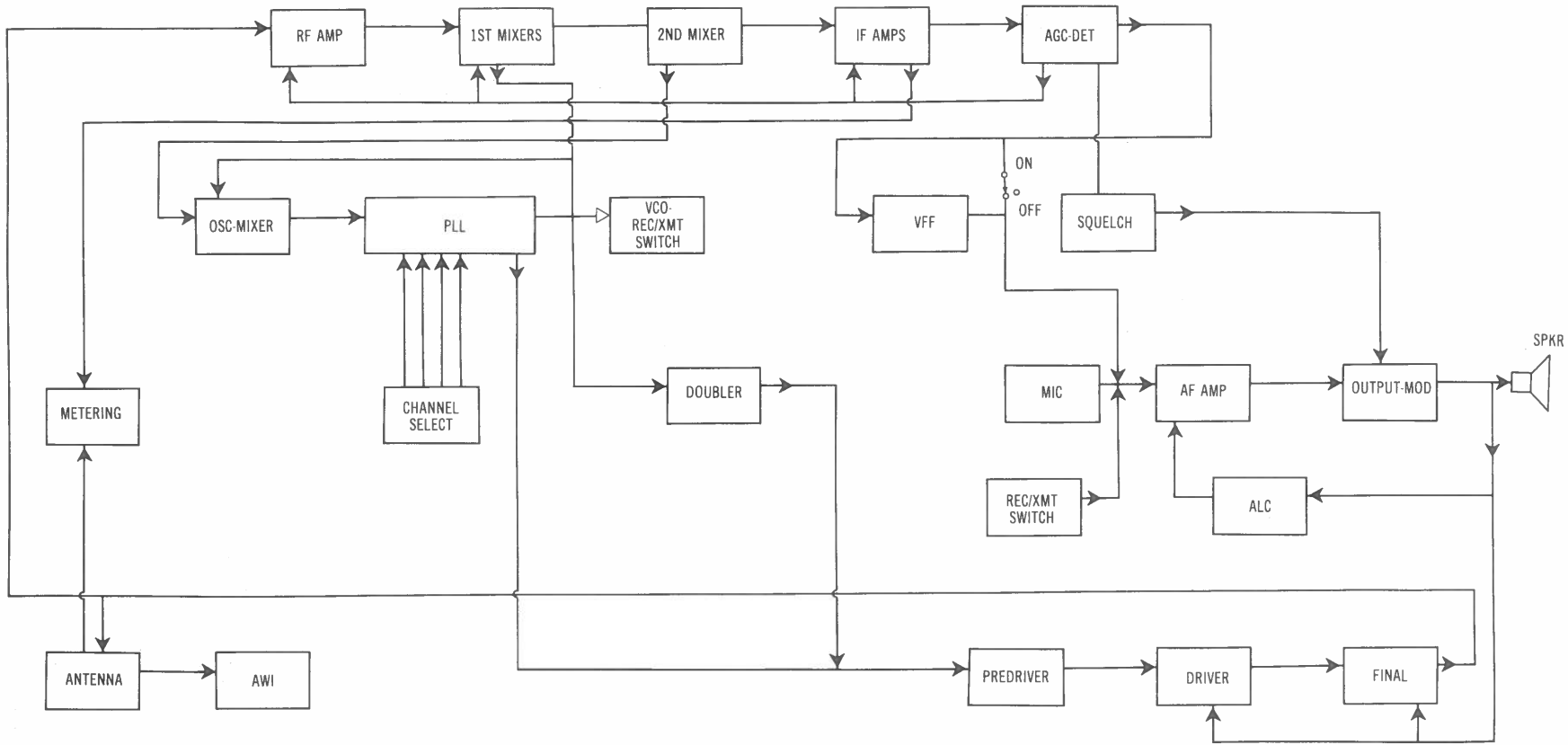
CHANNEL SELECTOR BOARD

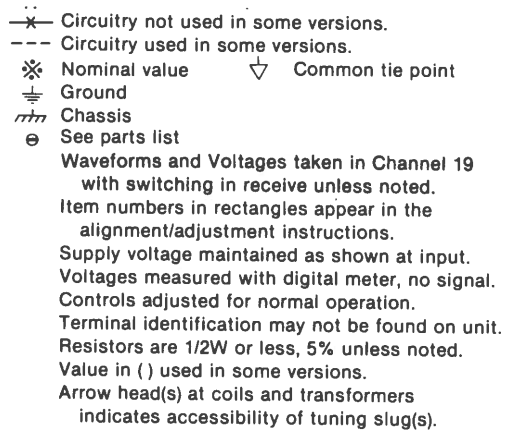


LED BOARD



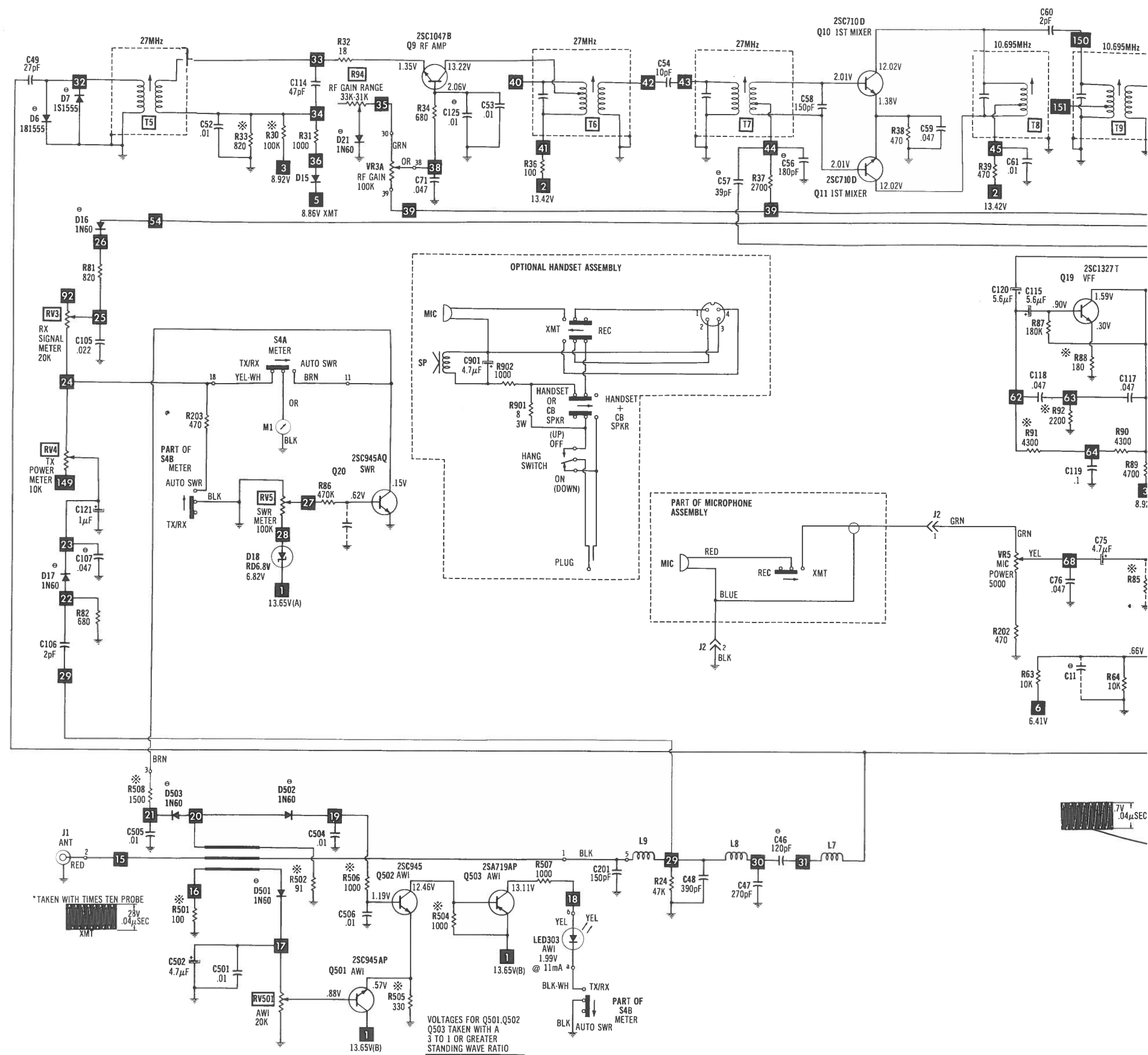
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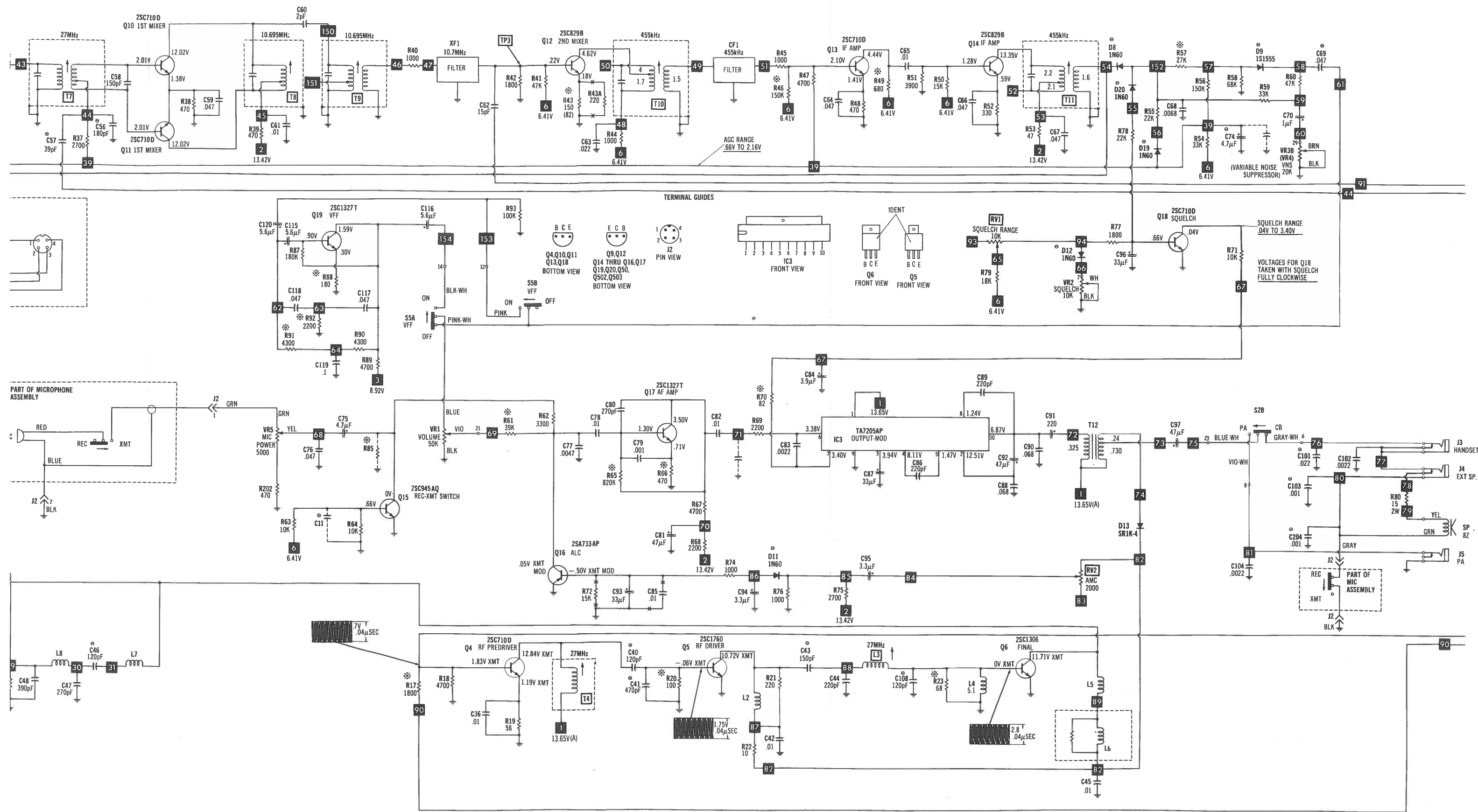




WITH **CIRCUITRACE<sup>®</sup>**

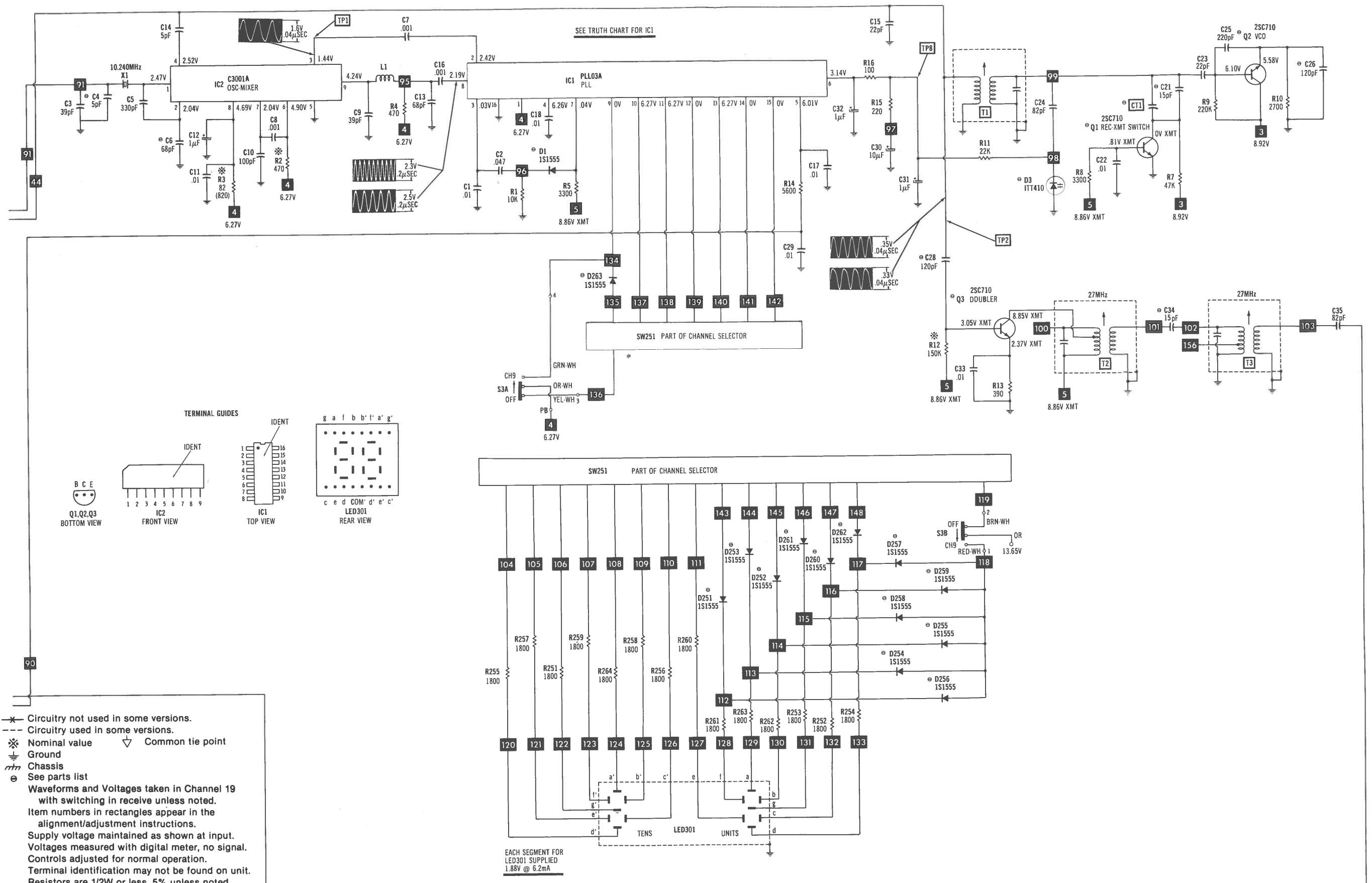
## POWER SUPPLY SCHEMATIC





MAIN SCHEMATIC

GENERAL ELECTRIC MODEL 3-5817A



— 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).

# PLL SCHEMATIC

# PARTS LIST AND DESCRIPTION

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

## SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RAYTHEON PART No.	RCA PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D2	MZ-306C ITT410 BB122 MV201	EA16X163 EA16X106		ZM68		SK3778/5012A	ECG5012A ECG612 ECG612 ECG611	TM5012 TM612 TM612 TM611	WEP1413/5012	103-176 103-176 103-146
D3				PTC311	REN 612 REN 612					
D4	UZ9.1B RD9.1	EA16X415	GEZD-9.1 GEZD-9.1	ZB9.1B ZB9.1B	REN 139 REN 139	SK3060/139A SK3060/139A	ECG139A ECG139A	TM139A/** TM139A/**	WEP1109/139A WEP1109/139A	103-272 103-272
D5	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D6	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D7	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D8	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D9	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D10	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D11	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D12	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D13	SR1K-4	EA16X430	GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D14	SR1K-4 1S1885	EA16X430	GE-504A GE-504A	PTC201 PTC201	REN 116 REN 116	SK3311 SK3311	ECG116 ECG116	TM116 TM116	WEP156 WEP156	212-76-02 212-76-02
D15	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D16	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D17	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D18	RD6.8V	EA16X435	GEZD-6.8	ZB6.88	REN 5071	SK3334/5071A	ECG5071A	TM5071A/**	WEP1106/5071A	103-Z9020
D19	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D20	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D21	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D251	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D252	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D253	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D254	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D255	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D256	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D257	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D258	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D259	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D260	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131

GENERAL ELECTRIC MODEL 3-5817A



# PARTS LIST AND DESCRIPTION (CONTINUED)

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

## SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE No.	MFR. 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.
D261	1S1555 1N4448 MA150	DA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D262	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
D263	1S1555 1N4448 MA150	EA16X429	GE-300 GE-514 GE-300	PTC214 PTC214 PTC214	REN 177 REN 177 REN 177	SK3175/177 SK3100/519 SK3175/177	ECG177 ECG519 ECG177	TM177 TM519 TM177	WEP1062/177 WEP925/519 WEP1062/177	103-131 103-131 103-131
O501	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
D502	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
O503	1N60 1K261 1K60	EA16X48	1N60 1N34AS 1N60	PTC206 PTC207 PTC206	REN 109 REN 109 REN 109	SK3088 SK3087 SK3088	ECG109 ECG109 ECG109	TM109/** TM109/** TM109/**	WEP134/109 WEP134/109 WEP134/109	103-Z9001 103-Z9001 103-Z9001
IC1	PLL03A	EA33X8501					ECG1272	TM1272		
IC2	C3001A C3001 TA7310P	EA33X8394			REN 1192 REN 1192 REN 1192	SK3445/1192 SK3445/1192 SK3445/1192	ECG1192 ECG1192 ECG1192	TM1192 TM1192 TM1192	WEP2120/1192 WEP2120/1192 WEP2120/1192	221-Z9061 221-Z9061 221-Z9061
IC3	TA7205AP	EA33X8394	GE1C-179	PTC780	REN 1155	SK3231/1155	ECG1155	TM1155	WEP949/1155	221-Z9051
Q1	TA7205A 2SC7100,E 2SC829	EA33X8396 EA15X364	GE1C-179 GE-211* GE-20*	PTC780 PTC132* PTC139*	REN 1155 REN 123AP* REN 229*	SK3231/1155 SK3356 SK3122	ECG1155 ECG123AP* ECG229*	TM1155 TM123AP/** TM229/**	WEP949/1155 WEP710 WEP829	221-Z9051 121-Z9000A* 121-Z9021*
Q2	2SC839 2SC7100,E	EA15X364	GE-61* GE-211*	PTC132* PTC132*	REN 123A* REN 123AP*	SK3124/289 SK3356	ECG123A* ECG123AP*	TM123A/** TM123AP/**	WEP1945 WEP710	121-Z9000A* 121-Z9000A*
Q3	2SC829 2SC839 2SC7100,E 2SC829 2SC839	EA15X364	GE-20* GE-61* GE-211* GE-20* GE-61*	PTC139* PTC132* PTC132* PTC139* PTC132*	REN 229* REN 123A* REN 123AP* REN 229* REN 123A*	SK3122 SK3124/289 SK3356 SK3122 SK3124/289	ECG229* ECG123A* ECG123AP* ECG229* ECG123A*	TM229/** TM123A/** TM123AP/** TM229/** TM123A/**	WEP829 WEP1945 WEP710 WEP829 WEP1945	121-Z9021* 121-Z9000A* 121-Z9000A* 121-Z9021* 121-Z9000A*
Q4	2SC7100,E 2SC1687	EA15X364	GE-211* GE-20*	PTC132* PTC121*	REN 123AP* REN 123A*	SK3356 SK3246/229	ECG123AP* ECG123*	TM123AP/** TM123A*	WEP710 WEP710*	121-Z9000A* 121-Z9000A*
Q5	2SC1760 2SC1846 2SC2036	EA15X380	GE-276 GE-336 GE-336	PTC180 PTC904	REN 306 REN 295 REN 306	SK3251/306 SK3253/295 SK3251/306	ECG306 ECG295 ECG306	TM306 TM295 TM306	WEP771/306 WEP913/295 WEP771/306	121-Z9069 121-880 121-Z9069
Q6	2SC1306 2SC1678 2SC1974 2SC2075	EA15X381	GE-215 GE-322 GE-337 GE-215	PTC186 PTC186 PTC186 PTC186	REN 235 REN 235 REN 235 REN 235	SK3239/236 SK3197/235 SK3239/236 SK3197/235	ECG235 ECG235 ECG235 ECG235	TM235/** TM235 TM235 TM235	WEP785/235 WEP785/235 WEP785/235 WEP785/235	121-Z9039 121-Z9039 121-Z9039 121-Z9039
Q7	2SC1318Q,R 2SC1318 2SC2002	EA15X378	GE-210 GE-210 GE-271	PTC123 PTC123 PTC123*	REN 297 REN 297 REN 297	SK3124/289 SK3124/289 SK3449/297	ECG297 ECG297 ECG297	TM297 TM297 TM297	WEP914/297 WEP914/297 WEP914/297	921-340 921-340 921-340
Q8	2SA719P,Q, R 2SA719 2SA564 2SA720 2SA952	EA15X395	GE-269 GE-269 GE-65 GE-272 GE-244*	PTC103* PTC103* PTC103* PTC142*	REN 290 REN 290 REN 234 REN 298 REN 129*	SK3114/290 SK3114/290 SK3247/234 SK3114/290 SK3114/290	ECG290 ECG290 ECG234 ECG298 ECG129*	TM290/** TM290/** TM234 TM298 TM129*	WEP911/290 WEP911/290 WEP495 WEP915/298 WEP60/129*	121-Z9003* 121-Z9003* 121-879* 121-879 121-Z9005*
Q9	2SC1047B,C 2SC1047 2SC460	EA15X450	GE-60* GE-60* GE-61*	PTC132* PTC132* PTC136*	REN 229* REN 229* REN 107	SK3132 SK3132 SK3122	ECG229* ECG229* ECG107	TM229* TM229* TM107/**	WEP63/161* WEP63/161* WEP460	121-Z9021* 121-Z9021* 121-522*
Q10	2SC7100,E 2SC829 2SC839	EA15X364	GE-211* GE-20* GE-61*	PTC132* PTC139* PTC132*	REN 123AP* REN 229* REN 123A*	SK3356 SK3122 SK3124/289	ECG123AP* ECG229* ECG123A*	TM123AP/** TM229/** TM123A/**	WEP710 WEP829 WEP1945	121-Z9000A* 121-Z9021* 121-Z9000A*
Q11	2SC7100,E 2SC829 2SC839	EA15X364	GE-211* GE-20* GE-61*	PTC132* PTC139* PTC132*	REN 123AP* REN 229* REN 123A*	SK3356 SK3122 SK3124/289	ECG123AP* ECG229* ECG123A*	TM123AP/** TM229/** TM123A/**	WEP710 WEP829 WEP1945	121-Z9000A* 121-Z9021* 121-Z9000A*
Q12	2SC829B,C 2SC829 2SC839	EA15X190	GE-20* GE-20* GE-61*	PTC139* PTC139* PTC132*	REN 229* REN 229* REN 123A*	SK3122 SK3122 SK3124/289	ECG229* ECG229* ECG123A*	TM229/** TM229/** TM123A/**	WEP829 WEP829 WEP1945	121-Z9021* 121-Z9021* 121-Z9000A*
Q13	2SC7100,E 2SC829 2SC839	EA15X364	GE-211* GE-20* GE-61*	PTC132* PTC139* PTC132*	REN 123AP* REN 229* REN 123A*	SK3356 SK3122 SK3124/289	ECG123AP* ECG229* ECG123A*	TM123AP/** TM229/** TM123A/**	WEP710 WEP829 WEP1945	121-Z9000A* 121-Z9021* 121-Z9000A*
Q14	2SC829B,C 2SC829 2SC839	EA15X190	GE-20* GE-20* GE-61*	PTC139* PTC139* PTC132*	REN 229* REN 229* REN 123A*	SK3122 SK3122 SK3124/289	ECG229* ECG229* ECG123A*	TM229/** TM229/** TM123A/**	WEP829 WEP829 WEP1945	121-Z9021* 121-Z9021* 121-Z9000A*
Q15	2SC945AQ 2SC945A 2SC945	EA15X335	GE-212 GE-212 GE-212	PTC121* PTC121* PTC121*	REN 199 REN 199 REN 199	SK3124/289 SK3124/289 SK3124/289	ECG199 ECG199 ECG199	TM199/** TM199/** TM199/**	WEP1945 WEP1945 WEP1945	121-972* 121-972* 121-972*
Q16	2SC828 2SA733AP 2SA733P,Q 2SA564 2SA719 2SA952	EA15X385	GE-48 GE-48 GE-65 GE-269 GE-244*	PTC127 PTC127 PTC103* PTC103* PTC142*	REN 199 REN 294 REN 234 REN 290 REN 129*	SK3114/290 SK3114/290 SK3247/234 SK3114/290 SK3114/290	ECG294 ECG294 ECG234 ECG290 ECG129*	TM294/** TM294/** TM234 TM290/** TM129*	WEP911/290 WEP911/290 WEP495 WEP911/290 WEP60/129*	121-972* 121-972* 121-879* 121-Z9067 121-Z9067
Q17	2SC1327T 2SC1327 2SC900	EA15X386	GE-85* GE-85* GE-62	PTC139* PTC139* PTC139*	REN 199 REN 199 REN 199	SK3245/199 SK3245/199 SK3250/315	ECG199 ECG199 ECG199	TM199 TM199 TM199/**	WEP634 WEP634 WEP66/199	121-972* 121-972* 121-972*
Q18	2SC7100,E 2SC945 2SC828	EA15X364	GE-211* GE-212 GE-61*	PTC132* PTC121* PTC139*	REN 123AP* REN 199 REN 199	SK3356 SK3124/289 SK3122	ECG123AP* ECG199 ECG199	TM123AP/** TM199/** TM199/**	WEP710 WEP1945 WEP828	121-Z9000A* 121-972* 121-972*

## PARTS LIST AND DESCRIPTION (CONTINUED)

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

### SEMICONDUCTORS (Select replacement transistor for best results) (cont)

ITEM No.	TYPE No.	MFR. 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.
Q19	2SC1327T	EA15X386	GE-85*	PTC139*	REN 199	SK3245/199	ECG199	TM199	WEP634	121-972*
	2SC1327		GE-85*	PTC139*	REN 199	SK3245/199	ECG199	TM199	WEP634	121-972*
Q20	2SC900	EA15X335	GE-62	PTC139*	REN 199	SK3250/315	ECG199	TM199/**	WEP66/199	121-972*
	2SC945AQ		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945A		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
Q501	2SC828	EA15X335	GE-61*	PTC139*	REN 199	SK3122	ECG199	TM199/**	WEP828	121-972*
	2SC945AP		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945A		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
Q502	2SC828	EA15X335	GE-61*	PTC139*	REN 199	SK3122	ECG199	TM199/**	WEP828	121-972*
	2SC945AP		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945A		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
	2SC945		GE-212	PTC121*	REN 199	SK3124/289	ECG199	TM199/**	WEP1945	121-972*
Q503	2SA719R	EA15X395	GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-29003*
	2SA719		GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290/**	WEP911/290	121-29003*
	2SA733		GE-48	PTC127	REN 294	SK3114/290	ECG294	TM294/**	WEP911/290	121-29067

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

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C12	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C20	47 25V		PC50-25	VTT47E25	QV1-77	EV-1426.1
C30	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C31	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C32	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C50	220 10V		PC250-10	VTT220F10	QV1-115	EV-1140
C70	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C73	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C74	4.7 25V		PC5-50	VTT47B50	QV1-31	EV-1619.1
C75	4.7 25V		PC5-50	VTT47B50	QV1-31	EV-1619.1
C81	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C84	3.9 25V			TDC475M010EL	QDT1-48	SD10-4R79
C87	33 6.3V		PC30-25	VTT33B10		EV-1225
C91	220 16V		PC250-25	VTT220H16	QV1-117	EV-1240
C92	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C93	33 6.3V		PC30-25	VTT33B10		EV-1225
C94	3.3 25V		HLW4-50	VTT33R3A50	QV1-25	EV-1618.1
C95	3.3 25V		HLW4-50	VTT33R3A50	QV1-25	EV-1618.1
C96	33 6.3V		PC30-25	VTT33B10		EV-1225
C97	47 25V		PC50-25	VTT47E25	QV1-77	EV-1426.1
C98	1000 16V		PC1000-16	VTT1000M16	QV1-183	EV-1261
C115	5.6 25V			TDC686M025FL	QDT1-55	SD25-6R89
C116	5.6 25V			TDC686M025FL	QDT1-55	SD25-6R89
C120	5.6 25V			TDC686M025FL	QDT1-55	SD25-6R89
C121	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C502	4.7 25V		PC5-50	VTT47B50	QV1-31	EV-1619.1
C901	4.7 25V		PC5-50	VTT47B50	QV1-31	EV-1619.9

### CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C1	.01 50V			MAG5011		1PB-S47
C2	.047 50V			EWFI1A147	QF1-171	10TCC-Q39
C3	39 50V 10%		DPMS2S47	CN0439		10TCP-Y50
C4	5 50V N150	(1)		*		10TS-T33
C5	330 50V 10%	(1)	GP330	GP333	QCT2-33	10TCC-068
C6	68 50V 10%	(1)	NP068	CN0468		1FT-D10
C7	.001 50V 10%		DPMS6D1	M192P10292	QFT2-1	1FT-D10
C8	.001 50V 10%		DPMS6D1	M192P10292	QFT2-1	10TCC-Q39
C9	39 50V 10%			CN0439		10TCC-T10
C10	100 50V 10%		NP0100	CN0310		
C11	.01 50V			MAG5011		10TCC-Q68
C13	68 50V 10%		NP068	CN0468		
C14	5 50V +.25			CN0568		10TCC-Q22
C15	22 50V 10%		NP022	CN0422	QFT2-1	1FT-D10
C16	.001 50V 10%		DPMS6D1	M192P10292		
C17	.01 50V			MAG5011		
C18	.01 50V			MAG5011		
C19	.047 50V		DPMS2S47	EWFI1A147	QF1-171	1PB-S47
C21	15 50V 10%	(1)	NP015	CN0415		10TCC-Q15
C22	.01 50V			MAG5011		
C23	22 50V 10%		NP022	CN0422		10TCC-Q22
C24	82 50V 10%		NP082	CN0482		10TCC-Q82
C25	220 50V 10%					10TCC-T22
C26	120 50V 10%	(1)		CN0312		10TCC-T12

# PARTS LIST AND DESCRIPTION (CONTINUED)

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

## CAPACITORS (cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C28	120 50V 10%	(1)		CN0312		10TCC-T12
C29	.01 50V			MAG5011		
C33	.01 50V			MAG5011		
C34	15 50V 10%	(1)	NP015	CN0415		10TCC-Q15
C35	82 50V 10%		NP082	CN0482		10TCC-Q82
C36	.01 50V			MAG5011		
C37	.01 50V			MAG5011		
C38	.01 50V			MAG5011		
C39	.01 50V			MAG5011		
C40	120 N150 50V 5%	(1)		*		10TCP-T12
C41	470 50V 10%		GP470	GP347	QCT2-35	10TS-T47
C42	.01 50V			MAG5011		
C43	150 50V 10%			CN0315		10TCC-T15
C44	220 50V 10%					10TCC-T22
C45	.01 50V			MAG5011		
C46	120 50V 10%			CN0312		10TCC-T12
C47	270 500V 10%					10TCC-T27
C48	39 500V 10%			CN0439		10TCC-Q39
C49	27 50V 10%			CN0427		10TCC-Q27
C52	.01 50V			MAG5011		
C53	.01 50V			MAG5011		
C54	10 50V +.5			*		10TCC-Q10
C56	180 50V					10TCC-T18
	150 50V 10%	(1)		CN0315		10TCC-T15
C57	39 50V 10%	(1)		CN0439		10TCC-Q39
C58	150 N150 50V 10%			*		10TCP-T15
C59	.047 50V		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C60	2 50V +.25			CN0522		
C61	.01 50V			MAG5011		
C62	15 50V 10%		NP015	CN0415		10TCC-Q15
C63	.022 50V			M192P2239R8		192P2239R8
C64	.047 50V 10%		DPMS2S47	M192P4739R8	QFT2-171	1FT-S47
C65	.01 50V 10%		WMF1S1	EWFA1A110	QF1-91	1PR-S10
C66	.047 50V 10%		DPMS2S47	M192P4739R8	QFT2-171	1FT-S47
C67	.047 50V		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C68	.0068 50V 10%		WMF1D68	M192P6829R8	QFT2-73	1FT-D68
C69	.047 50V 10%		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
	.0047 50V		GP4700	GP247		5GA-D47
C71	.047 50V		DPMS2S47	EWFA1A147	QF1-171	1PR-S47
C72	.047 50V		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C76	.047 50V 10%		DPMS2S47	M192P4739R8	QFT2-171	1FT-S47
C77	.0047 50V		GP4700	GP247		5GA-D47
C78	.01 50V 10%		WMF1S1	EWFA1A110	QF1-91	1PB-S10
C79	.001 50V			GP210	QCT2-41	10TS-D10
C80	270 50V 10%					10TCC-T27
C82	.01 50V 10%		WMF1S1	EWFA1A110	QF1-91	1PB-S10
C83	.0022 50V			GP222	QCT2-46	10TS-D22
C85	.01 50V			MAG5011		
C86	220 50V 10%					10TCC-T22
C88	.068 50V			MAG50168		10TCC-T22
C89	220 50V 10%					
C90	.068 50V 10%			MAG50168		
C99	.01 50V			MAG5011		
C100	.01 50V			MAG5011		
C101	.022 50V			M192P2239R8		192P2239R8
C102	.0022 50V			GP222	QCT2-46	10TS-D22
C103	.001 50V 10%			GP210	QCT2-41	10TS-D10
C104	.0022 50V			GP222	QCT2-46	10TS-D22
C105	.022 50V			M192P2239R8		192P2239R8
C106	2 50V +.25			CN0522		
C107	.047 50V		OPMS2S47	EWFA1A147	QF1-171	1PB-S47
	.0047 50V		GP4700	GP247		5GA-D47
C108	120 50V 10%	(1)		CN0312		10TCC-T12
C110	.01 50V	(1)		MAG5011		
C114	47 50V 10%		NP047	CN0447	QCC2-26	10TCC-Q47
C117	.047 50V 10%		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C118	.047 50V 10%		DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C119	.1 50V 10%			MAG5001		
C124	.01 50V	(1)		MAG5011		
C125	.01 50V	(1)		MAG5011		
C201	150 500V 10%			CN0315		10TCC-T15
C202	.047 50V			MAG5011		
	.0047 50V		GP4700	GP247		5GA-D47
C203	.0047 50V		GP4700	GP247		5GA-D47
C204	.001 50V 10%			GP210	QCT2-41	10TS-D10
C501	.01 50V			MAG5011		
C503	.01 50V			MAG5011		
C504	.01 50V			MAG5011		
C505	.01 50V			MAG5011		
C506	.01 50V			MAG5011		
CT1	Trimmer	EA30XB5				

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

(1) Value varies, replace with valve found in set.

## 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.	MALLORY PART No.	TRW PART No.
RV1	Squelch Range	10K	EA49X528	RVA0911H103	U260R103B
RV2	AMC	2000	EA49X530	RVA0911H252	U260R252B
RV3	RX Signal Meter	20K	EA49X531	RVA0911H253	U260R253B
RV4	TX Power Meter	10K	EA49X528	RVA0911H103	U260R103B
RV5	SWR Meter	100K	EA49X529	RVA0911V104 (2)	X260R104B (2)
RV501	AWI	20K	EA49X490	RVA0911V253	X260R253B
VR1	Volume/Power Switch	50K	EA49X392		
VR2	Squelch	10K	EA49X393		
VR3A	RF Gain	100K	EA49X533 (18)		
VR3B	Variable Noise Suppressor	20K			
VR5	Mic Power	5000	EA49X532		

(2) Cut off one of the end terminals and bend to fit P.C. Board.

(18) Includes VR3A and VR3B.

### 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.
R901	8 3W Carbon						

### COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	RF Choke	EA36X334			
L2	RF Choke	EA36X237			
L3	RF Driver (27MHz)	EA36X519			
L4	RF Choke	EA36X239			
L5	RF Choke	EA36X245			
L6	RF Choke	EA36X240			
L7	RF Choke	EA36X522			
L8	Pi Filter	EA36X521			
L9	RF Choke	EA36X336			
L10	RF Choke	EA36X239			
L11	RF Choke	EA36X263			
T1	VCO	EA36X337			
T2	Doubler (27MHz)	EA36X283	10C8003		
T3	Doubler (27MHz)	EA36X283			
T4	RF Predriver (27MHz)	EA36X248			
T5	Receive Antenna (27MHz)	EA36X249			
T6	RF Amp (27MHz)	EA36X265	TR10CA0035		
T7	RF Amp (27MHz)	EA36X339	TR10CM003M		
T8	1st Mixer (10.695MHz)	EA36X340	TR10MA018M		
T9	1st Mixer (10.695MHz)	EA61X204			
T10	IF (455kHz)	EA61X188	ET10I122		
T11	IF (455kHz)	EA61X190	ET10I129		

### 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.	
CH1	1.35A	.23	3.3mH	EA36X256			

### TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T12	2	1 2 8 12.5	EA64X30	TR723	MCB-16	

# PARTS LIST AND DESCRIPTION (CONTINUED)

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

## SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM 8 Ohm	EA95X137	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
AC4	2A Quick-acting	5-1725		AGC2	HRK	312-002	150-145	FG2-2

## MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Filter	EA36X520	455kHz
D301	LED	EA62X242	Channel Indicator (Each segment supplied 1.88V @ 6.2mA)
D302	LED	EA16X224	TX (Red) (1.98V @ 9.4mA)
O303	LED	EA16X225	A.W.I. (Yellow) (1.99V @ 11mA)
J1	Jack	EA41X203	Antenna
J2	Jack	EA41X176	Mike
J3	Jack	EA41X235	Handset
J4	Jack	EA41X235	External Speaker
J5	Jack	EA41X235	PA
J6	Jack	EA41X236	DC Receptacle
M1	Meter	EA62X244	Assembly
PL1	Lamp	EA41X237	Meter (9.37V @ 60mA)
PL2	Lamp	EA41X238	Panel (13.70V @ 74mA)
PL3	Lamp	EA41X238	Dial (13.70V @ 70mA)
S2	Switch	EA55X183	CB/PA
S3	Switch	EA55X183	Ch 9
S4	Switch	EA55X183	TX-RX/Auto SWR
S5	Switch	EA55X183	VFF
SW251	Switch	EA62X243	Channel Selector (w/P.C. Board)
X1	Crystal	EA75X6	10.240MHz
XF1	Filter	EA36X333	10.7MHz
	Microphone Handset	5-1278	
		5-1825	Telephone

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

ITEM	PART No.	ITEM	PART No.
Escutcheon Assembly	EA98X750	Knob, Mic Power	EA43X917
Knob, Channel Selector	EA43X1031	Knob, VNS (Outer)	EA43Y852
Knob, RF Gain (Inner)	EA43X853	Knob, Volume/Squelch	EA43X855

## 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)
Microphone Cable (Coiled).....	Use BELDEN No. 8497 (3 conductor-1 shielded)(6 ft.)(AWG22)
Microphone Cable (Coiled).....	Use BELDEN No. 9466 (3 conductor-1 shielded)(6 ft.)(AWG28)
Microphone Cable (Coiled).....	Use BELDEN No. 9468 (3 conductor-1 shielded)(6 ft.)(AWG31)