

PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

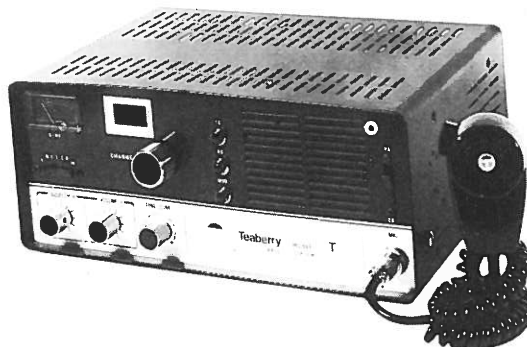
NOTE

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 "T" (4011)
(40 Ch.)

MANUFACTURER'S SPECIFICATIONS

GENERAL

Channels	40
Frequency Range	26.965 MHz to 27.405 MHz
Frequency Control	PLL Synthesized
Antenna Impedance	50 ohm
Power Input	117V AC
Accessories	Detachable Ceramic Microphone, AC Power Cord
Size	12" (W) x 8 1/4" (D) x 5" (H)

TRANSMITTER

Output Power	4 watts
Emission Type	6A3
Hum and Noise	Better than -60 dB
Frequency Tolerance	0.005%
Modulation Percentage (Peak)	100%

RECEIVER

Sensitivity at 10dB S + N/N	0.8 uV
Sensitivity for 500 mW Audio Output	0.4 uV
Squelch Threshold	0.25 uV
Squelch Deepest Point	200 uV
"S" Meter S-9	50 uV
Fine Tune	± 1500 Hz
Maximum AF Output Power	4 watts
AF Output Power/10% Distortion	3 watts
Selectivity BW @ 6 dB Down	6 KHz
Adjacent Channel Rejection	-55 dB
Image Rejection	-70 dB
Speaker Impedance	8 ohms

PUBLIC ADDRESS

Output Power @ 10% Distortion	3 watts
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TEABERRY MODEL "T" (40 Ch.)

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. 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:

L181.....9440
VC901,VC902.....8276,5000
L302,L303.....5009,8728-A,8728
L102,L201,L401,L402,L702,L703,L801,L904.....9440,8282,8606,9302

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1 (Q11, Collector).	Ch. 19, Delta Tune Detent	L181	Check for 10.240MHz.
Input of frequency counter to TP2 (Q14, Emitter).	Ch. 19, Delta Tune Detent		Check for 15.250MHz.
Input of DC meter to TP3 (Q12, Pin 6).	Ch. 1, Delta Tune Detent		Adjust for 1.80 volts.
Input of frequency counter to TP5 (V7b, Pin 2).	Ch. 1, Delta Tune Detent		Check for 17.180MHz. Check all channels. (See Truth Chart for correct frequencies).
Input of frequency counter to TP4 (Q17, Emitter).	Ch. 19, XMT		Check for 9.785MHz.

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. Fine Tune Detent, Squelch MINIMUM

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP6 (V2, Pin 2). 455kHz,1000Hz @ 30% modulation.	Ch. 19	L402,L401, L301	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.185MHz,1000Hz @ 30% modulation.	Ch. 19	L201,L102	Adjust for maximum output. If necessary readjust L301, L401, and L402.

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF wattmeter across speaker voice coil.
Adjust volume control to obtain a suitable indication.
S/RF Switch in S position.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19	VR1	S METER Adjust 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	TRANSCIVER	ADJUST	REMARKS
Input of spectrum analyzer or harmonic meter to antenna jack.	Ch. 19	L703, L702, L801, VC901, VC902	Adjust for maximum.
	Ch. 19	L702 (Top)	Adjust for 4 watts maximum.
	Ch. 19	L904	Adjust for MINIMUM at 54MHz.

TEABERRY MODEL "T" (40 Ch.)

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.

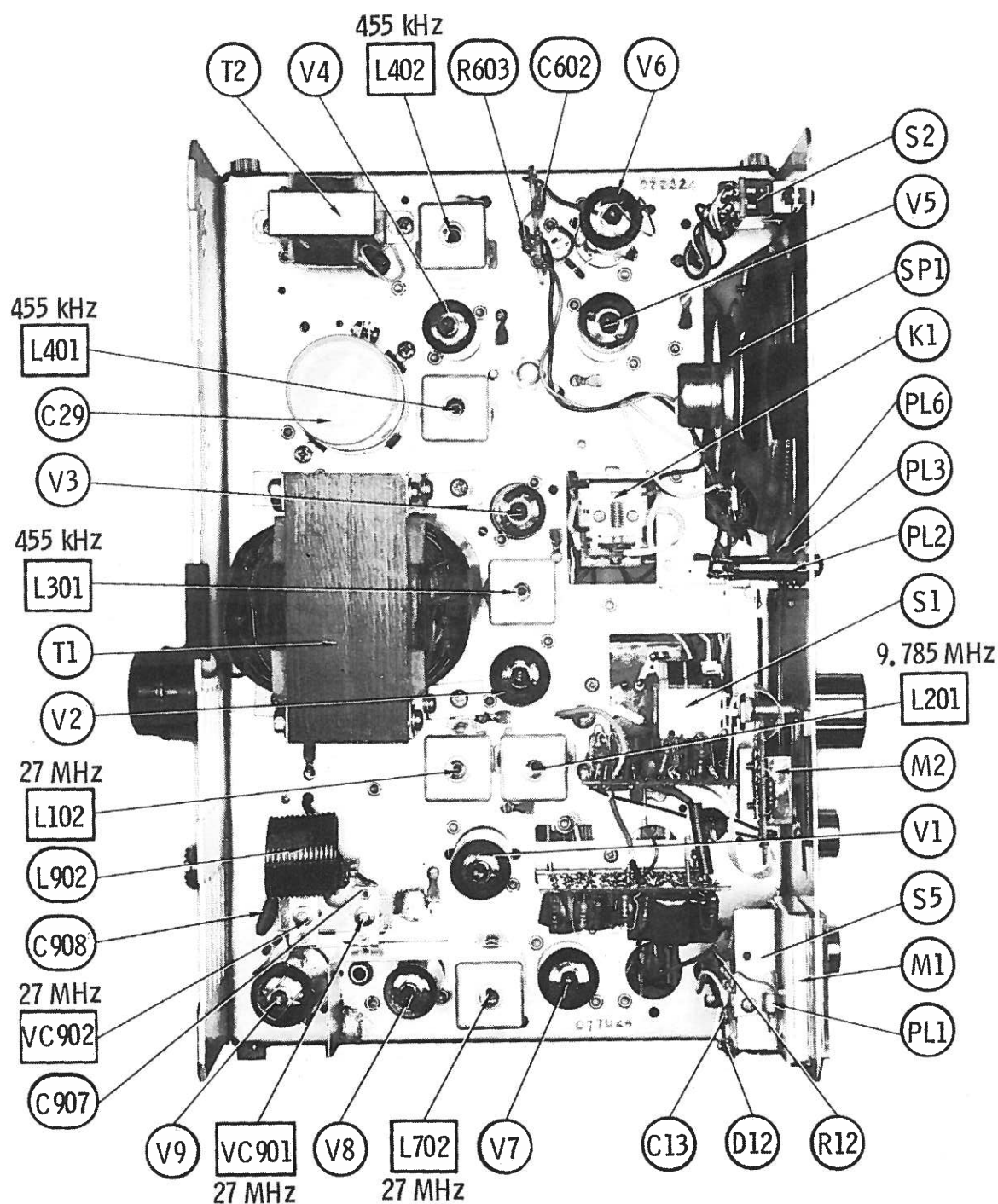
See page 4 for channel frequencies.

S/RF Switch in RF position.

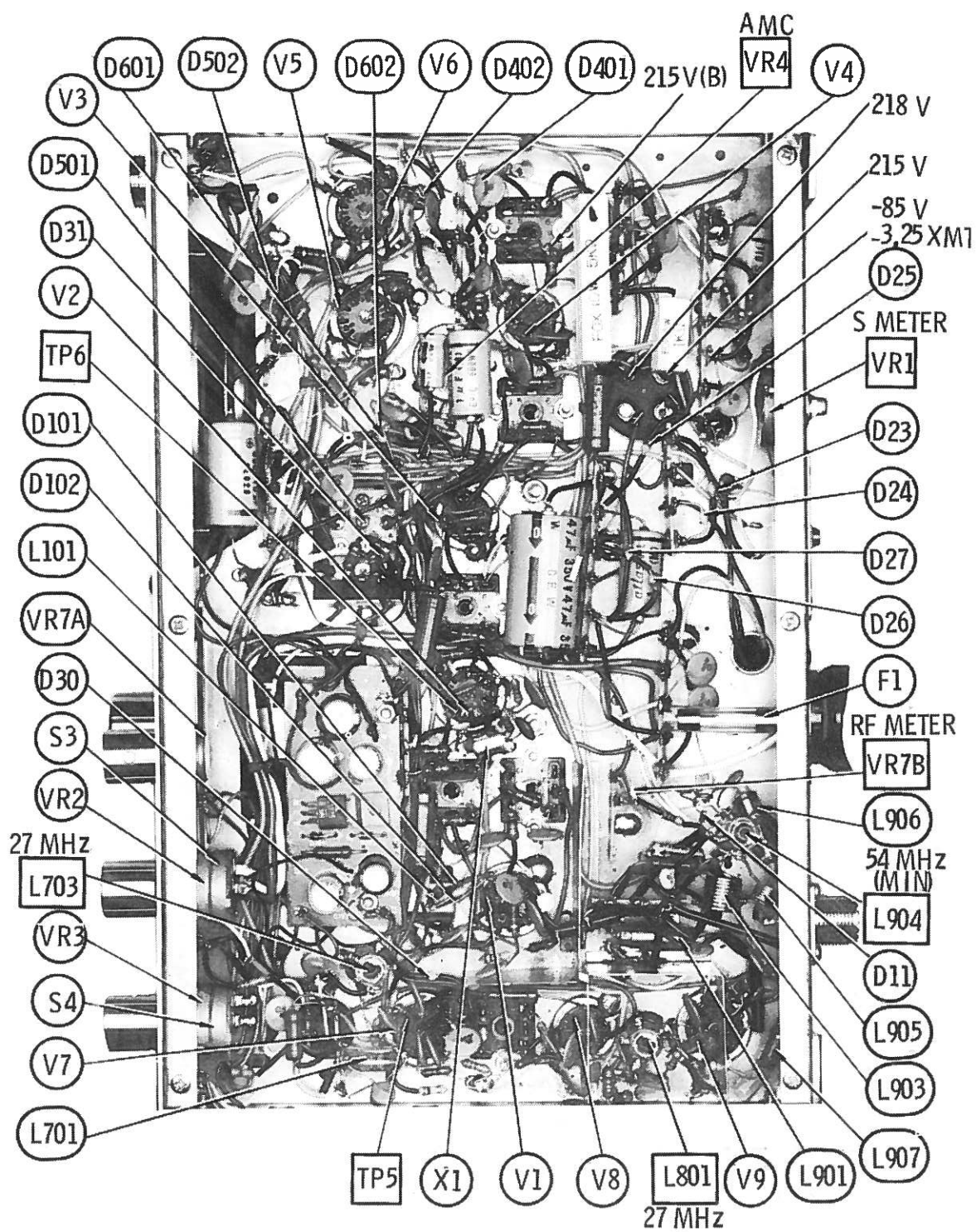
TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna jack. Inject a 1000Hz, 100mV signal at MIC input.	Ch. 19	VR4	AMC (MIC) Adjust VR4 for 100% modulation maximum.
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.	Ch. 19	VR7B	RF METER Adjust VR7B so that RF panel meter agrees with RF wattmeter.

TRUTH CHART

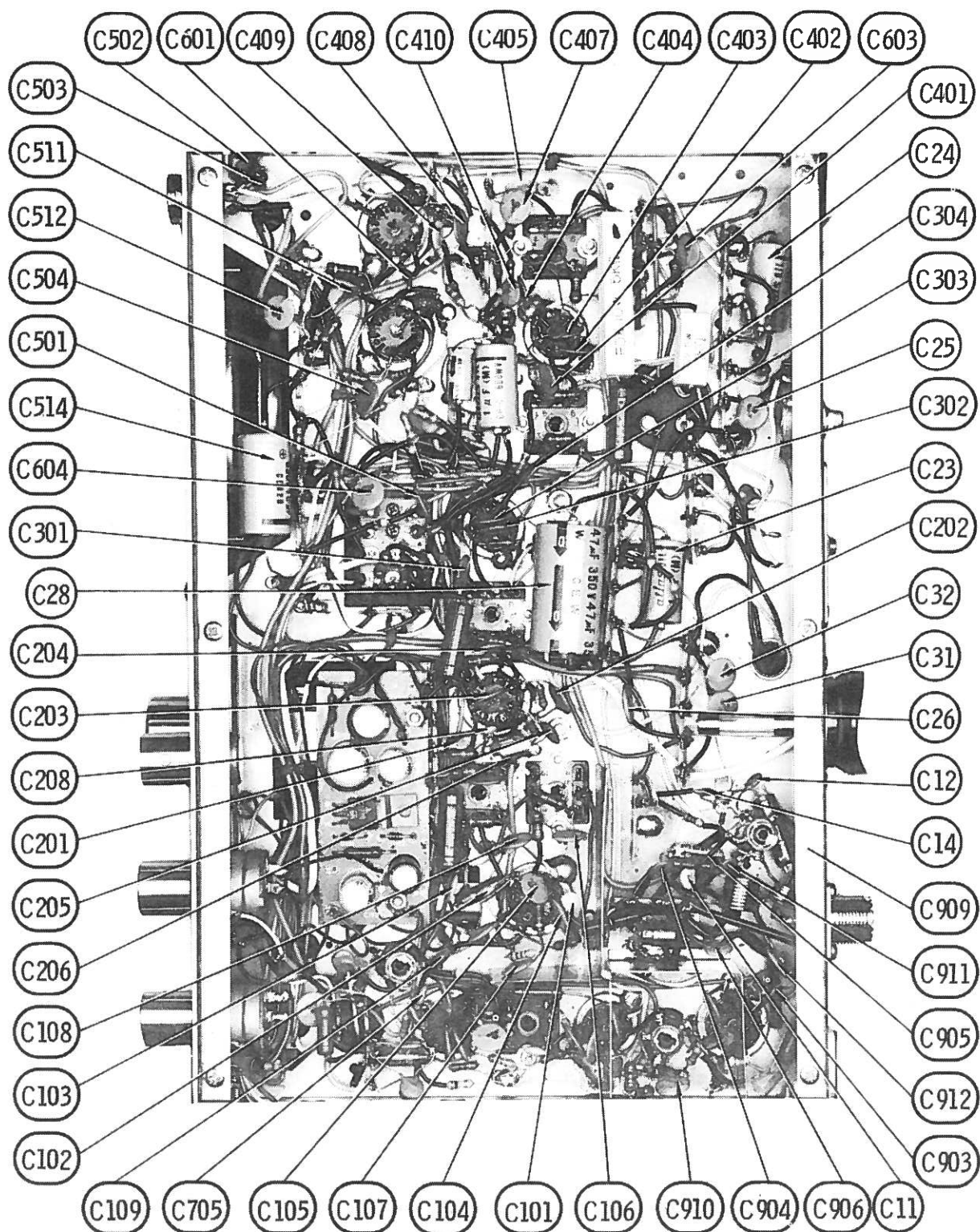
C H A N N E L	1 = 5.46 Volts 0 = 0 Volts Q13 PROGRAM DIVIDER							Rec & XMT VCO OUTPUT IN MHz AT TP5		
	PINS									
	3	2	1	15	14	13				
1	0	0	0	0	0	0			17.180	
2	0	0	0	0	0	1			17.190	
3	0	0	0	0	1	0			17.200	
4	0	0	0	1	0	0			17.220	
5	0	0	0	1	0	1			17.230	
6	0	0	0	1	1	0			17.240	
7	0	0	0	1	1	1			17.250	
8	0	0	1	0	0	1			17.270	
9	0	0	1	0	1	0			17.280	
10	0	0	1	0	1	1			17.290	
11	0	0	1	1	0	0			17.300	
12	0	0	1	1	1	0			17.320	
13	0	0	1	1	1	1			17.330	
14	0	1	0	0	0	0			17.340	
15	0	1	0	0	0	1			17.350	
16	0	1	0	0	1	1			17.370	
17	0	1	0	1	0	0			17.380	
18	0	1	0	1	0	1			17.390	
19	0	1	0	1	1	0			17.400	
20	0	1	1	0	0	0			17.420	
21	0	1	1	0	0	1			17.430	
22	0	1	1	0	1	0			17.440	
23	0	1	1	1	0	1			17.470	
24	0	1	1	0	1	1			17.450	
25	0	1	1	1	0	0			17.460	
26	0	1	1	1	1	0			17.480	
27	0	1	1	1	1	1			17.490	
28	1	0	0	0	0	0			17.500	
29	1	0	0	0	0	1			17.510	
30	1	0	0	0	1	0			17.520	
31	1	0	0	0	1	1			17.530	
32	1	0	0	1	0	0			17.540	
33	1	0	0	1	0	1			17.550	
34	1	0	0	1	1	0			17.560	
35	1	0	0	1	1	1			17.570	
36	1	0	1	0	0	0			17.580	
37	1	0	1	0	0	1			17.590	
38	1	0	1	0	1	0			17.600	
39	1	0	1	0	1	1			17.610	
40	1	0	1	1	0	0			17.620	



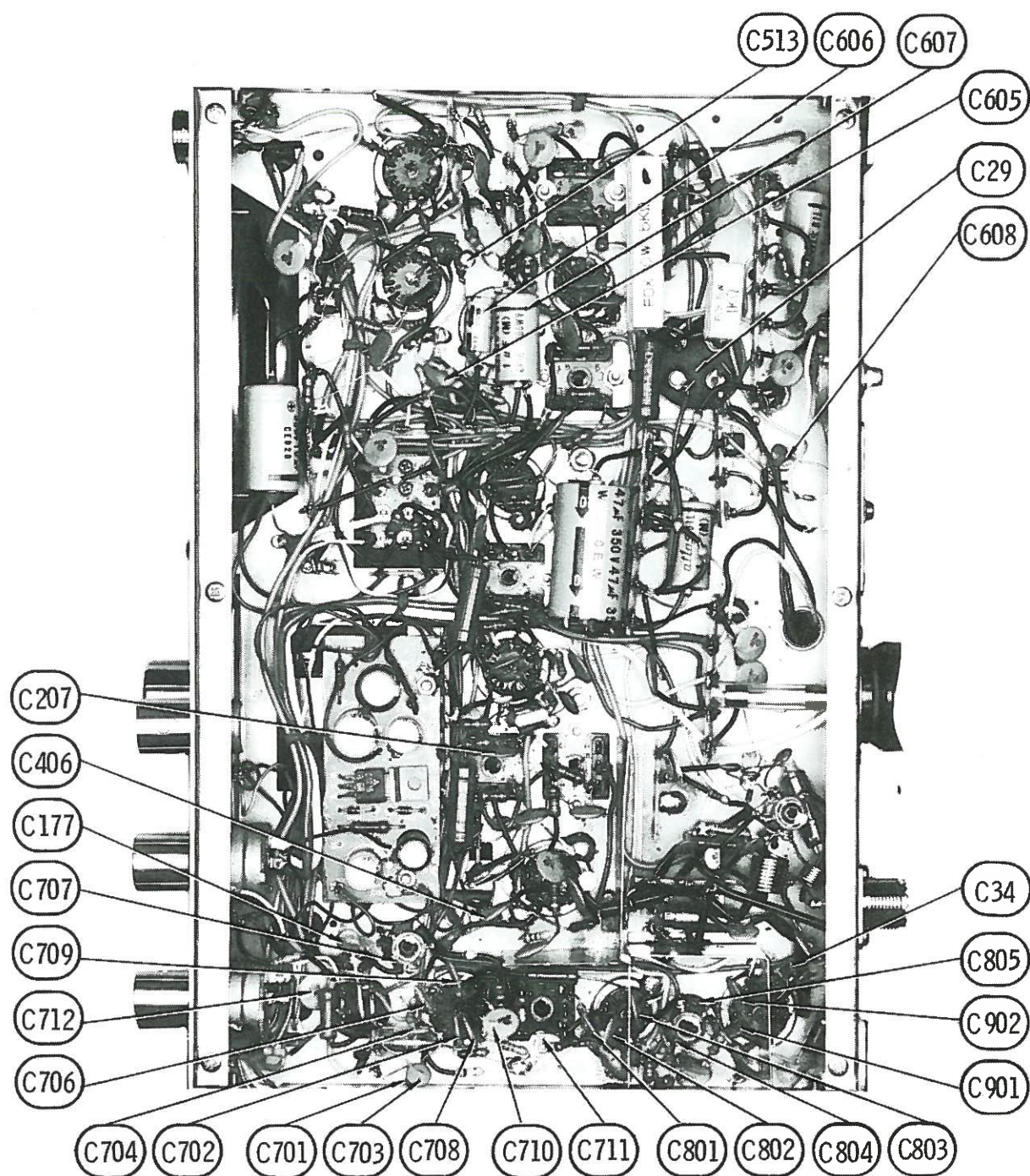
CHASSIS-TOP



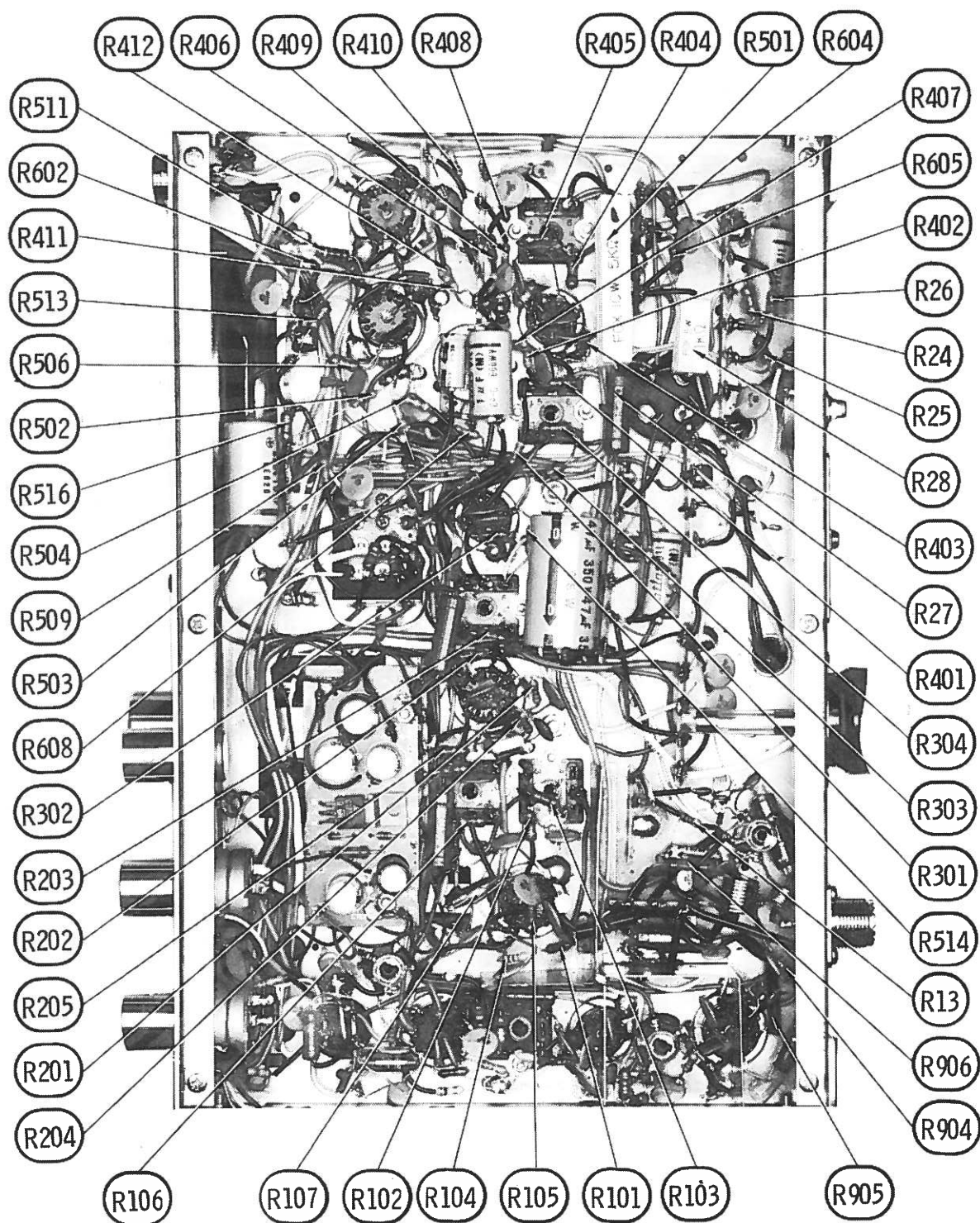
CHASSIS-BOTTOM



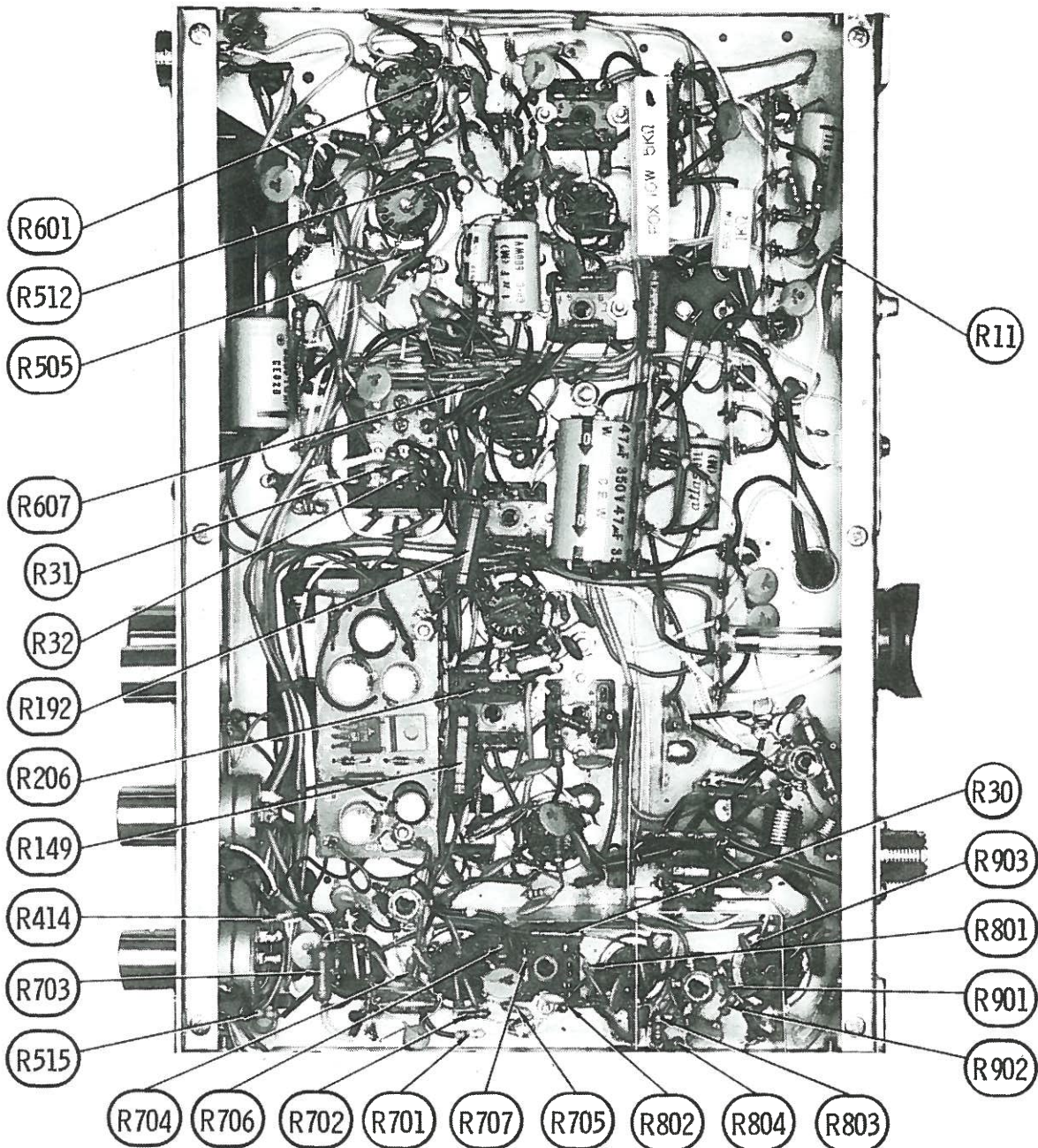
CHASSIS-BOTTOM



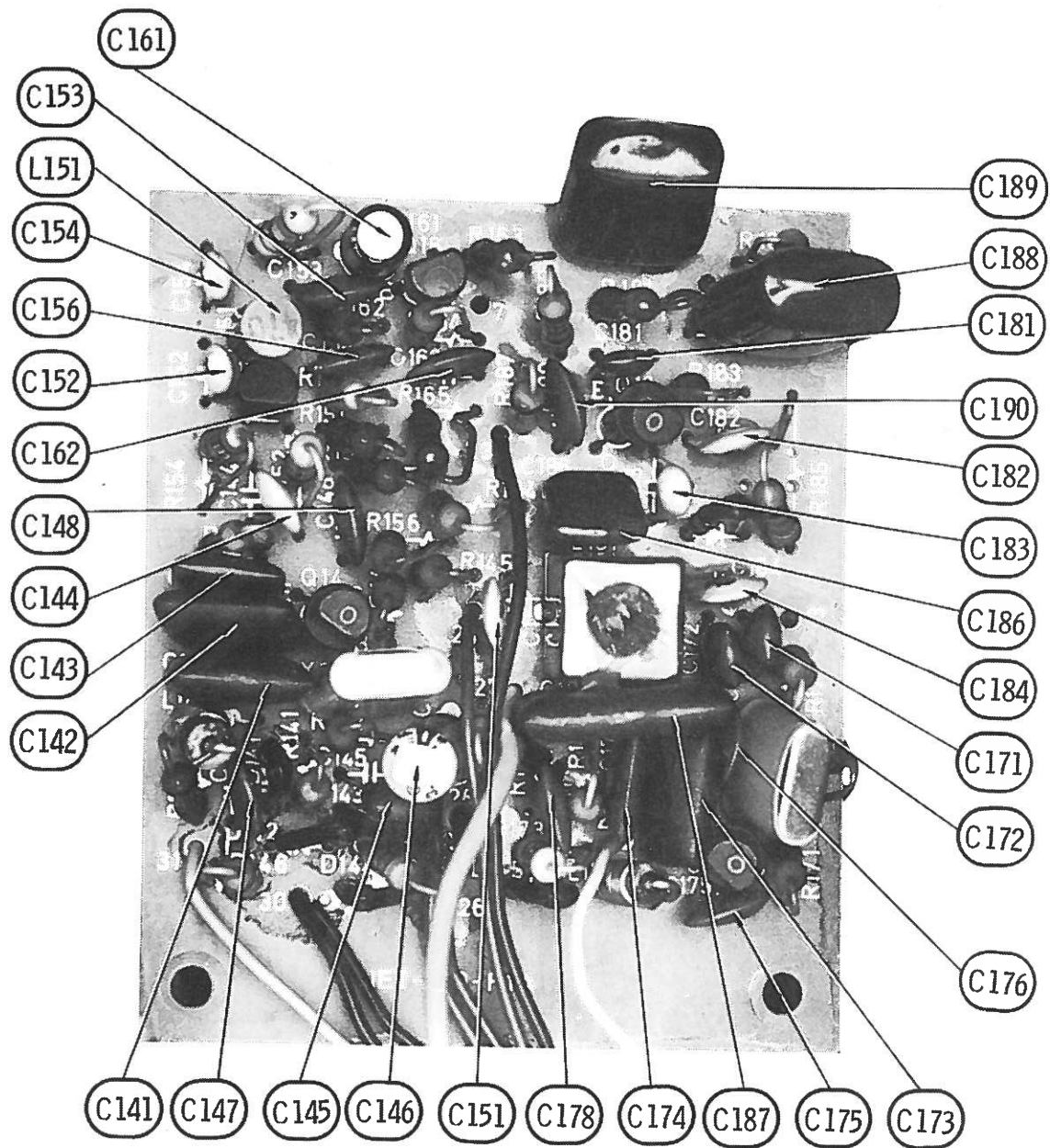
CHASSIS-BOTTOM



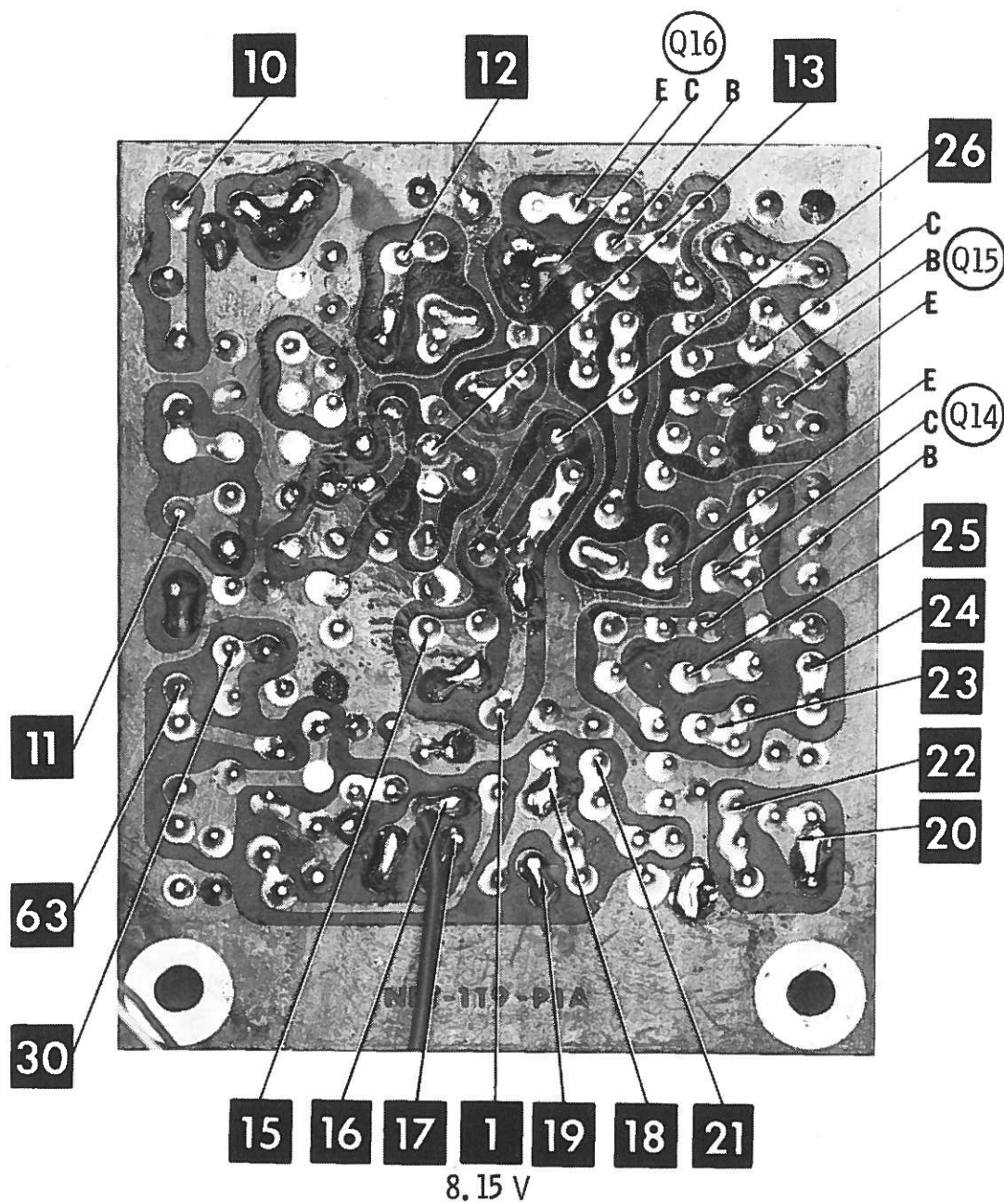
CHASSIS-BOTTOM



CHASSIS-BOTTOM

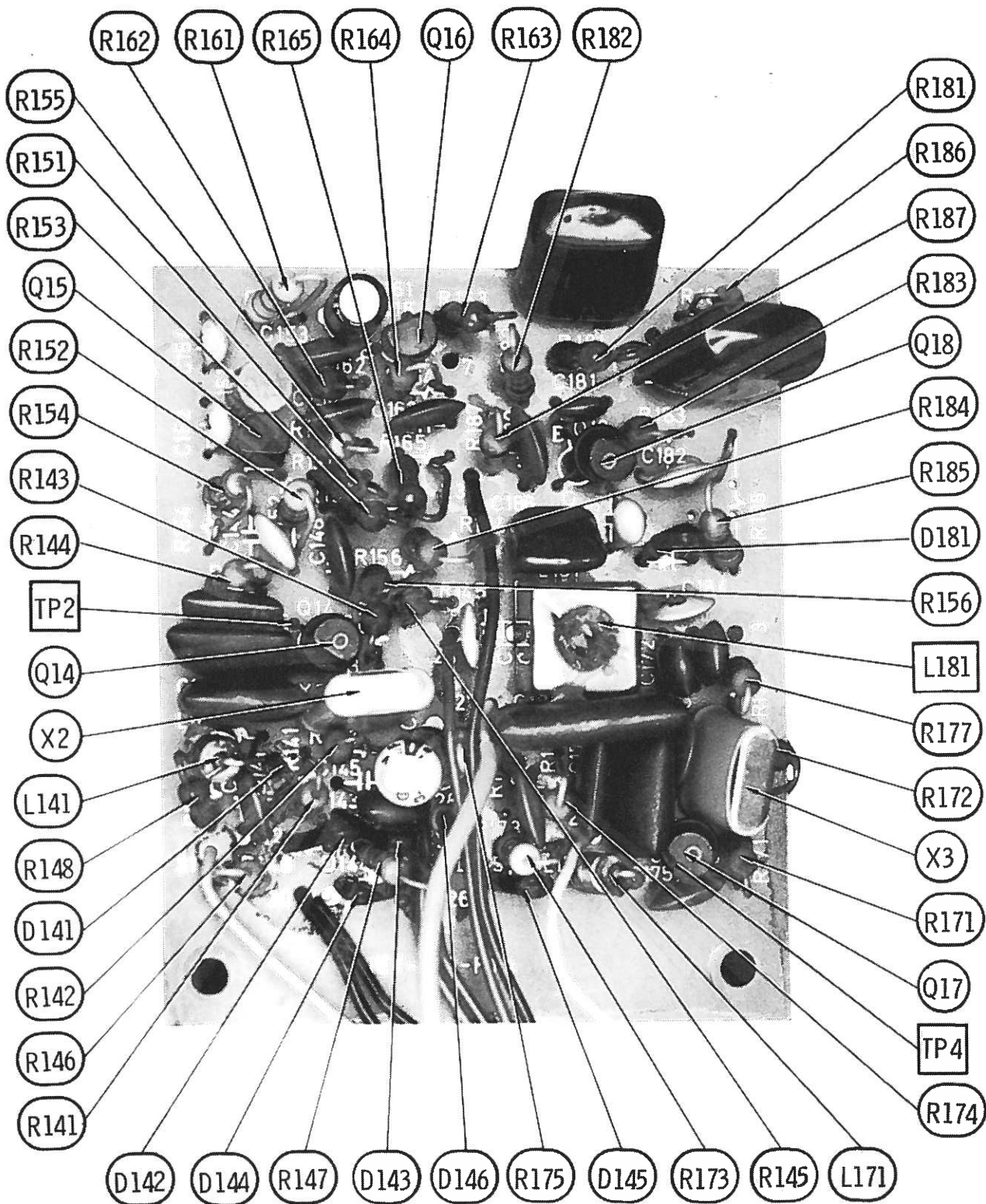


PLL BOARD

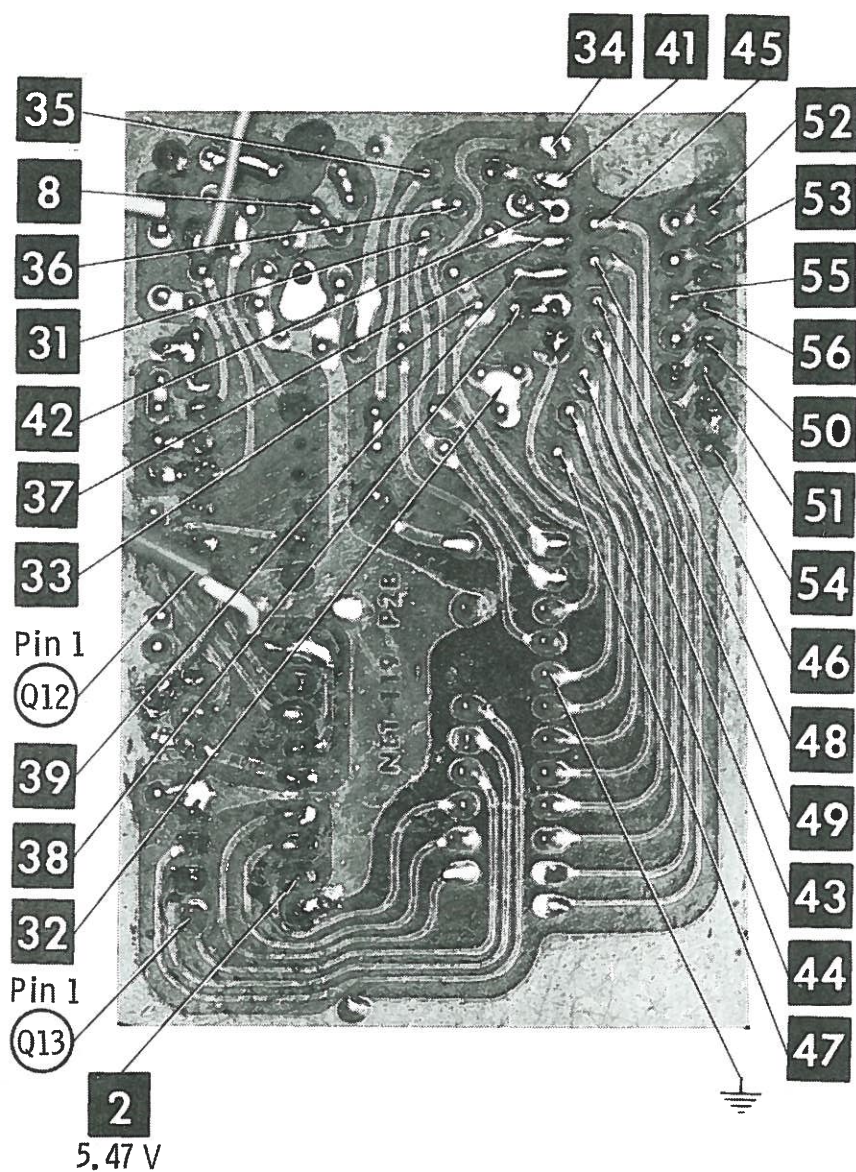


PLL BOARD

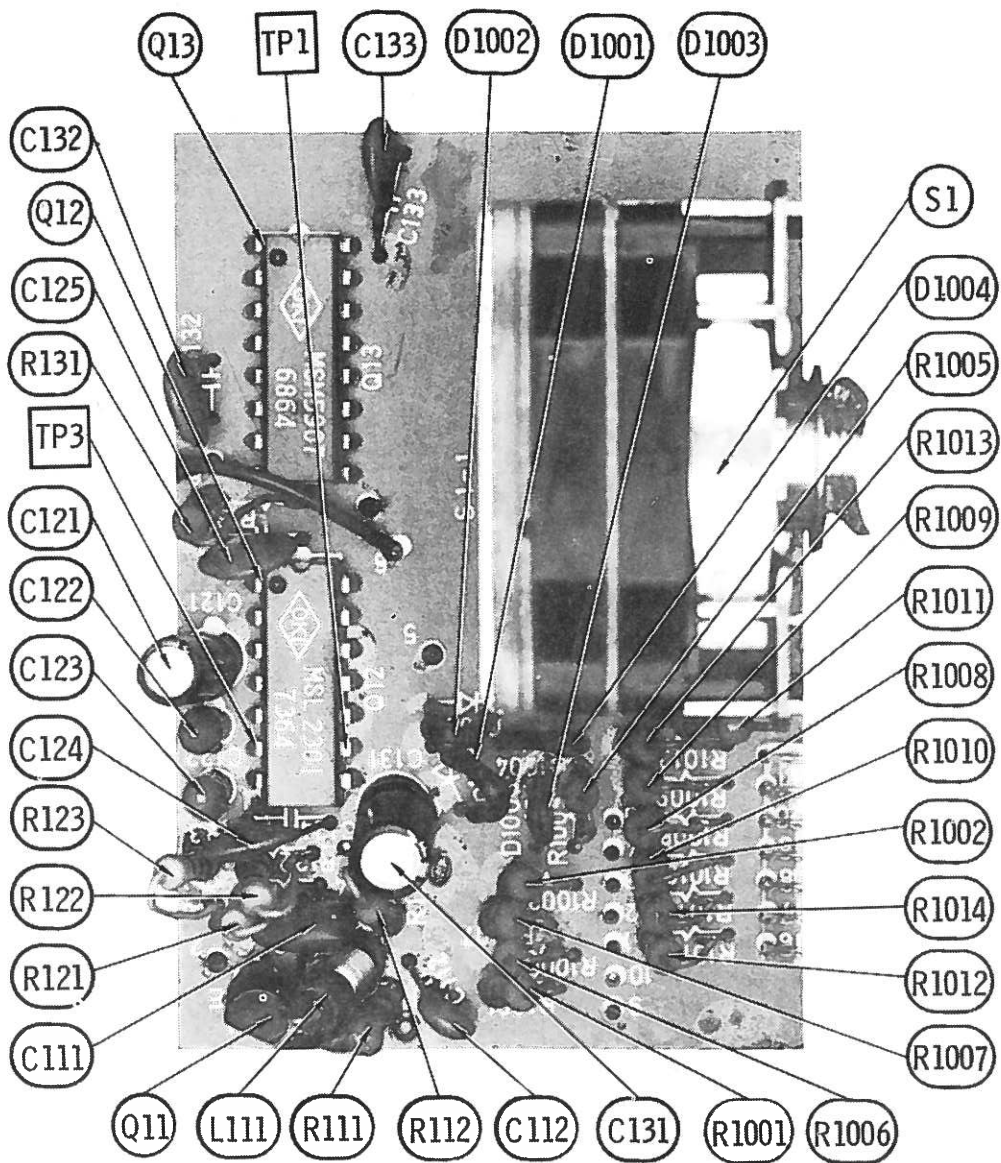
TEABERRY MODEL "T" (40 Ch.)



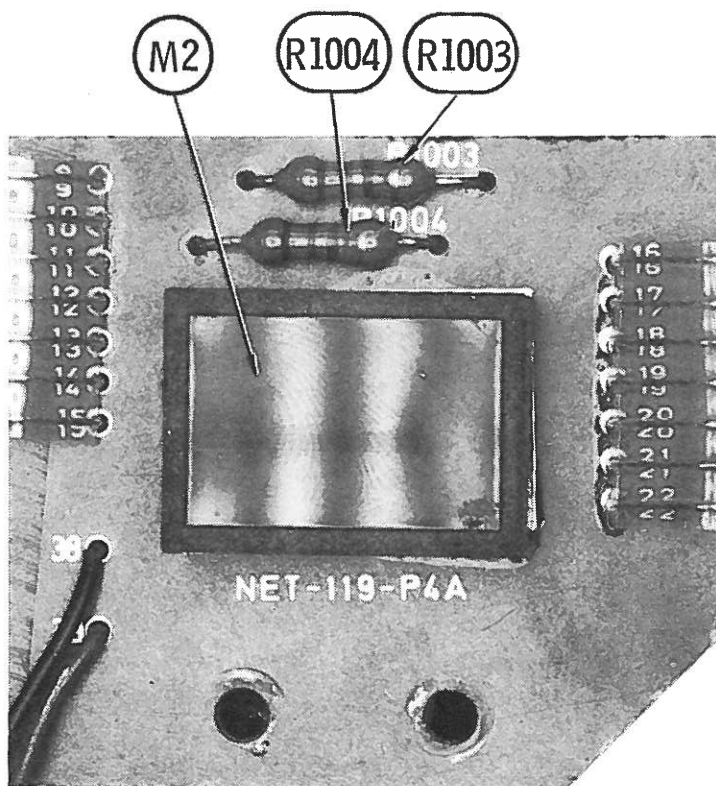
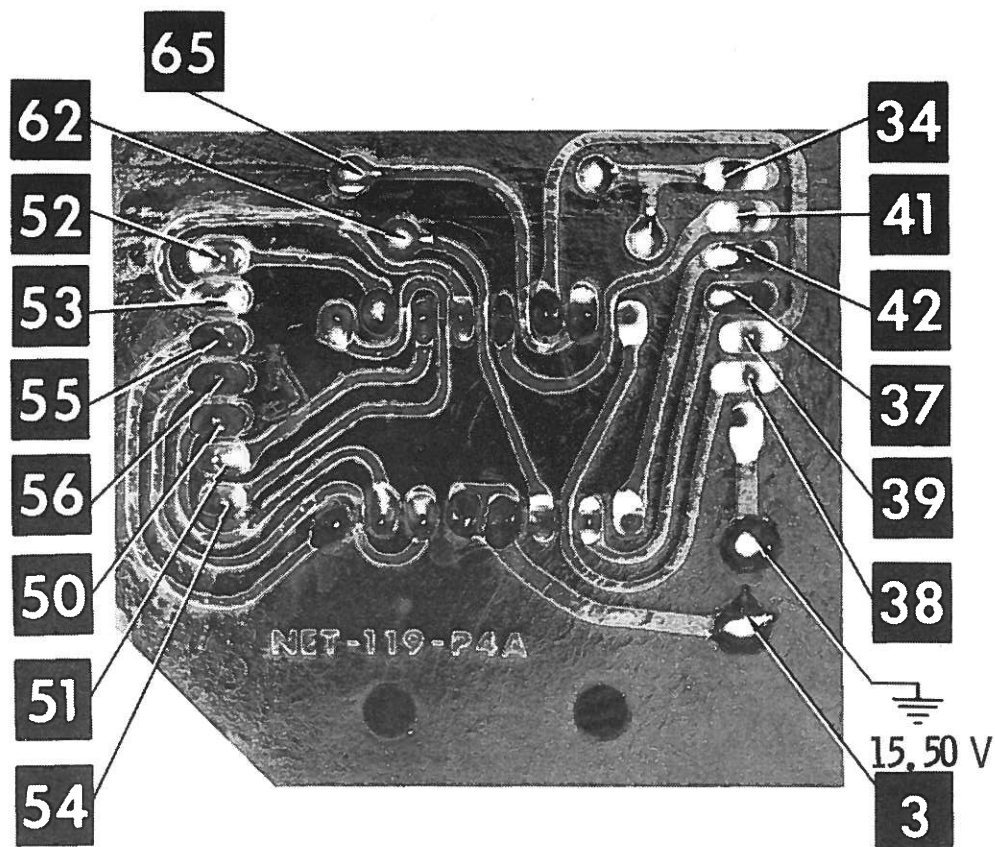
PLL BOARD



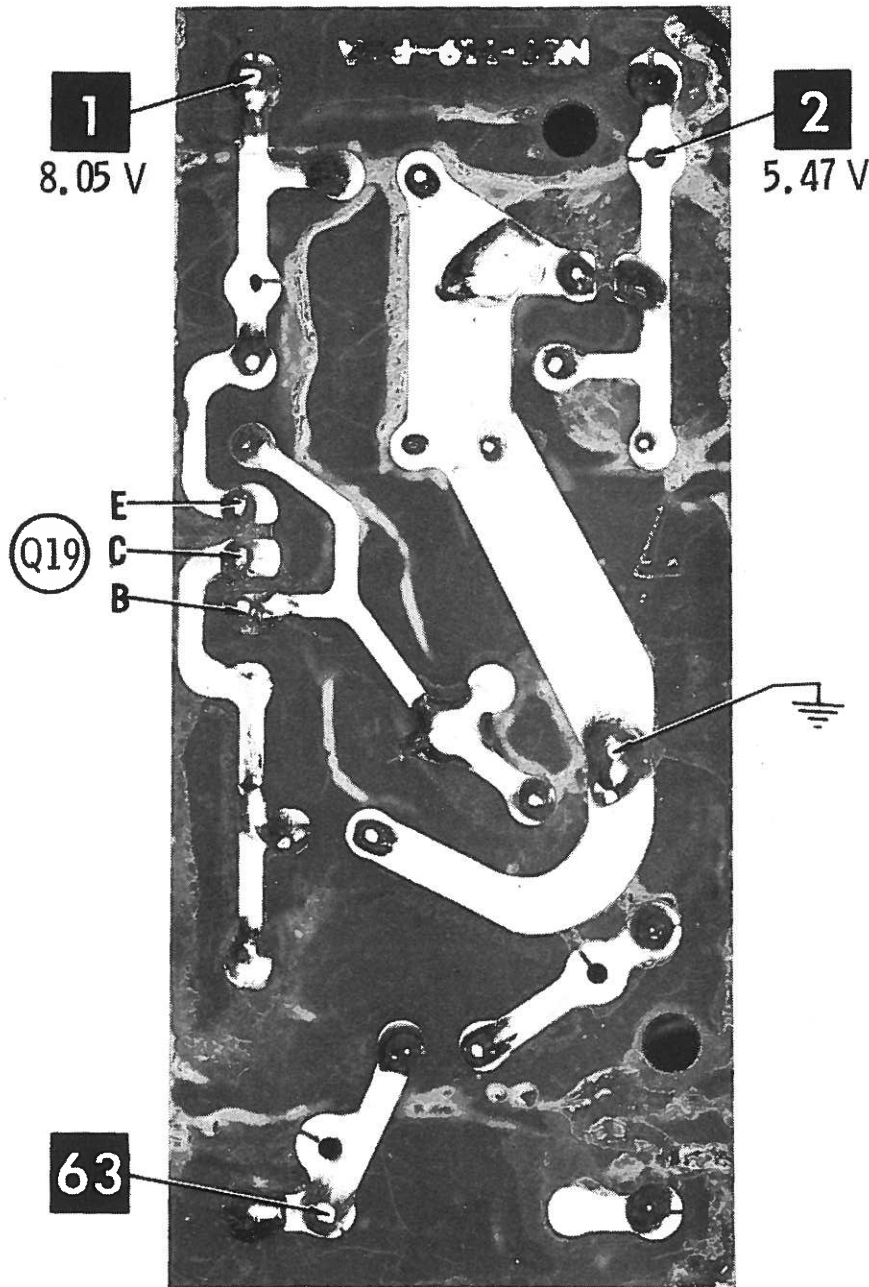
CH. SELECTOR BOARD



CH. SELECTOR BOARD

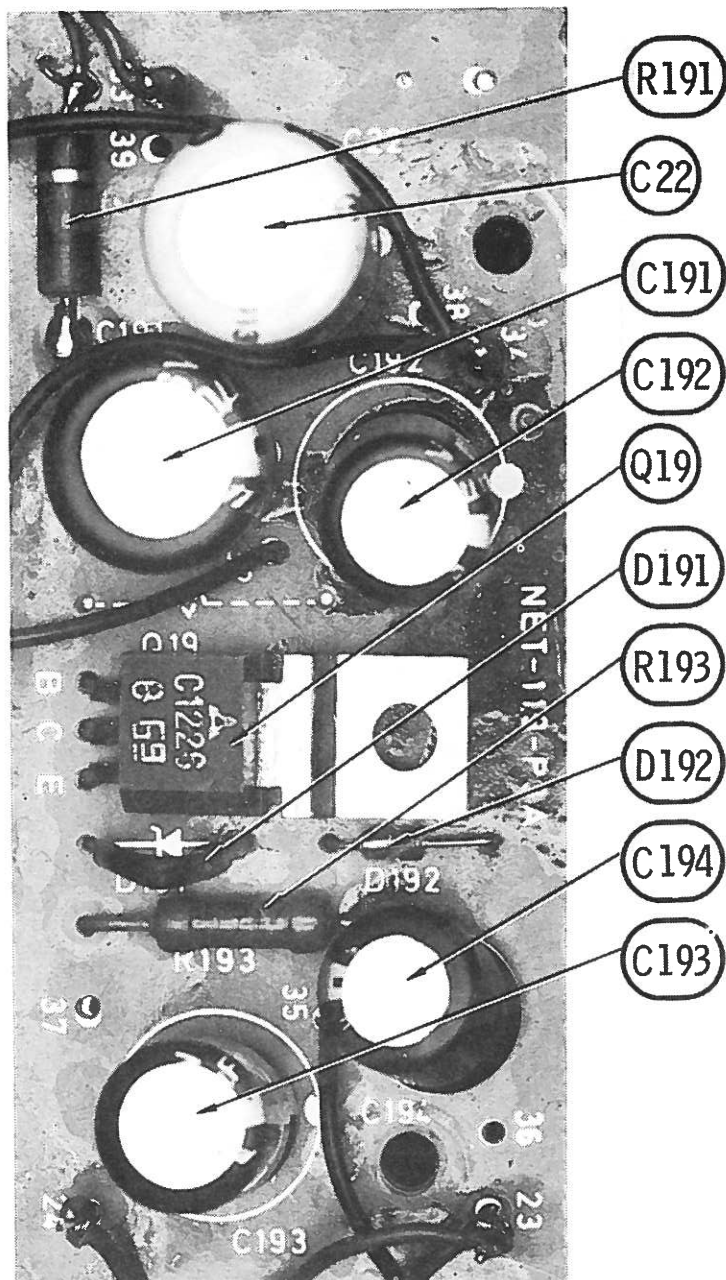


LED READOUT BOARD

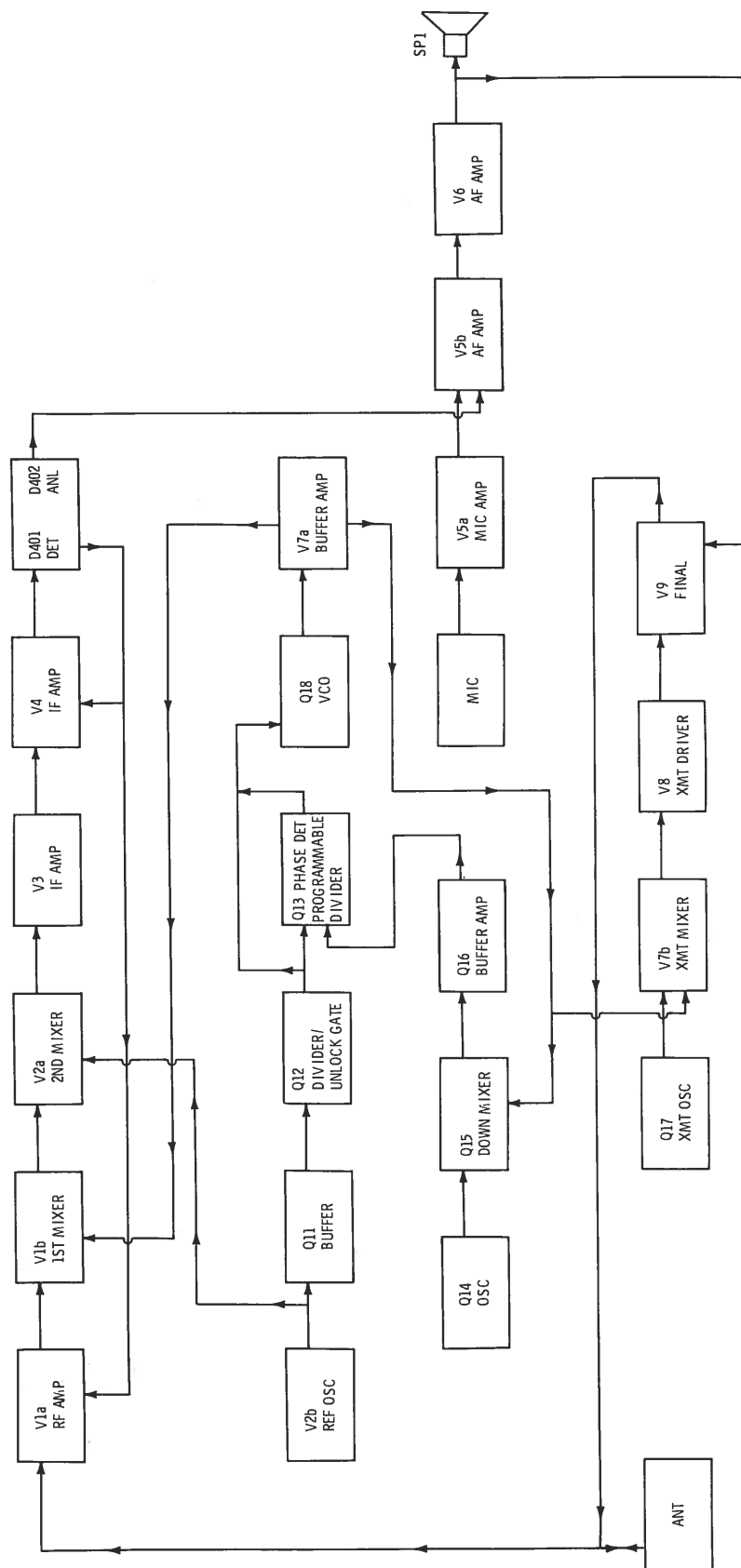


TEABERRY MODEL "T" (40 Ch.)

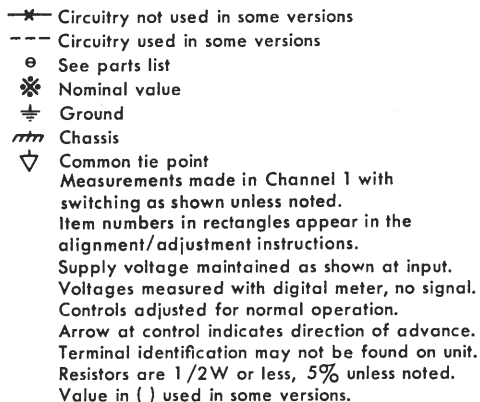
POWER SUPPLY BOARD



POWER SUPPLY BOARD



BLOCK DIAGRAM



PARTS LIST AND DESCRIPTION

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

TUBES

AMPEREX			GENERAL ELECTRIC		RCA		SYLVANIA	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	USE	TYPE
V1	RF Amp/1st Mixer	6BL8	V6	Output/Modulation	6BQ5	V1	RF Amp/1st Mixer	6BL8
V2	2nd Mixer/Ref Oscillator	6BL8	V7	Buffer Amp/XMT Mixer	6BH8	V2	2nd Mixer/Ref Oscillator	6BL8
V3	IF Amp	6BA6	V8	XMT Driver	6BA6	V3	IF Amp	6BA6
V4	IF Amp	6BA6	V9	Final	6BQ5	V4	IF Amp	6BA6
V5	Mic Amp/RF Amp	12AX7				V5	Mic Amp/RF Amp	12AX7

SEMICONDUCTORS (Select replacement transistor for best results)

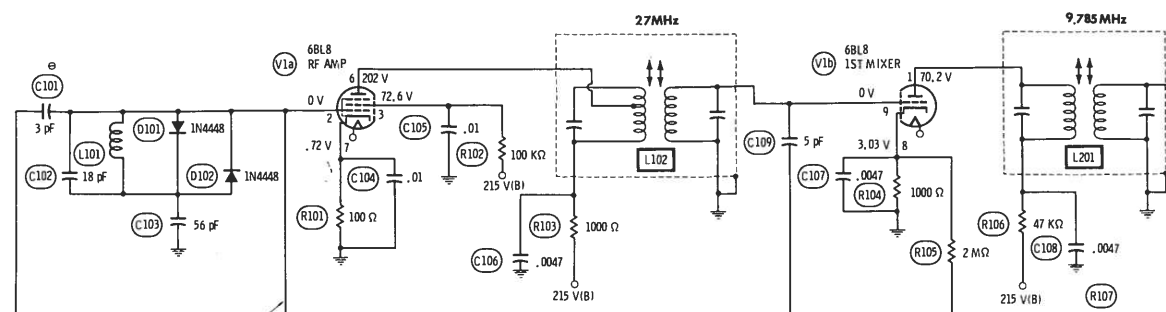
ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA									
			GENERAL ELECTRIC PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D11	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D12	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D23	V06B	D000149	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D24	V06B	D000149	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D25	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D26	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D27	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D30	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D31	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D101	1N4448	D090052	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D102	1N4448	D090052	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D141	1S2689	D260028	GE-90	HEPR2503	HEPR2503	RE 52	SK3100	RT-262	ECG614	1N4148	WEP200	ZEN-453
D142	1S2689	D260028	GE-90	HEPR2503	HEPR2503	RE 52	SK3100	RT-262	ECG614	1N4148	WEP200	ZEN-453
D143	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D144	WZ090	D160092	GE-514	PTC214	HEPR0602	RE 114	SK3060	RT-240	ECG5018	1N4733A	WEP1419	103-279-18
D145	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D146	V06B	D000149	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D181	1S2688	D260015	GE-90	HEPR2503	HEPR2503	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D191	WZ090	D160092	GE-514	PTC214	HEPR0602	RE 114	SK3060	RT-240	ECG5018	1N4733A	WEP1419	103-279-18
D192	WZ058	D160063	GE-514	PTC214	HEPR0602	RE 114	SK3060	RT-240	ECG5018	1N4733A	WEP1419	103-279-18
D401	1N60	D010045	GE-514	PTC214	HEPR0602	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D402	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D501	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D502	V06B	D000165	GE-504A	PTC202	HEPR0054	RE 49	SK3313	RT-215	ECG116	1N4007	WEP158	212-76
D601	V06E	D000149	GE-504A	PTC201	HEPR0053	RE 49	SK3312	RT-214	ECG116	1N4004	WEP157	212-96
D602	V06E	D000149	GE-504A	PTC201	HEPR0053	RE 49	SK3312	RT-214	ECG116	1N4004	WEP157	212-96
D1001	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D1002	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D1003	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D1004	1S1588	D010090	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
Q11	2SC1359B	Q321323	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC1359	Q321323	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC1675	Q331614	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC381	Q310347	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
Q12	MSL2301	Q840121	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
Q13	MSM5907	Q840134	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
Q14	2SC381-0	Q310347	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC381	Q331614	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC1359B	Q321323	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC1359	Q331614	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC1675	Q310347	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
	2SC381	Q310347	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC1359B	Q321323	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC1359	Q331614	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
	2SC1675	Q310347	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
	2SC381	Q310347	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
Q17	2SC381-0	Q310347	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
	2SC381	Q331614	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
	2SC1675	Q331614	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC1359	Q321323	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
Q18	2SC381-0	Q310347	GE-61*	PTC132*	HEPS0009*	RE 9	SK3039*	RT-107A	ECG107	2SC380	WEP535	ZEN-127
	2SC381	Q331614	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC710	WEP956*	ZEN-127
	2SC1675	Q331614	GE-212	PTC121*	HEPS0014*	RE 192	SK3122*	RT-308	ECG229*	2SC710	WEP66	121-Z9000
Q19	2SC1226	Q331034	GE-215	PTC186	HEPS3041	RE 203	SK3197	RT-166	ECG186A	2SC1226	WEP900	
	2SC1096	Q331034	GE-28	PTC110	HEPS3041	RE 42	SK3197	RT-166	ECG186A	2SC1096	WEP1096	

* Lead configuration may vary from original.

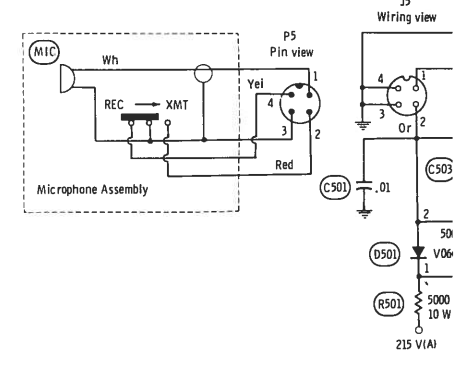
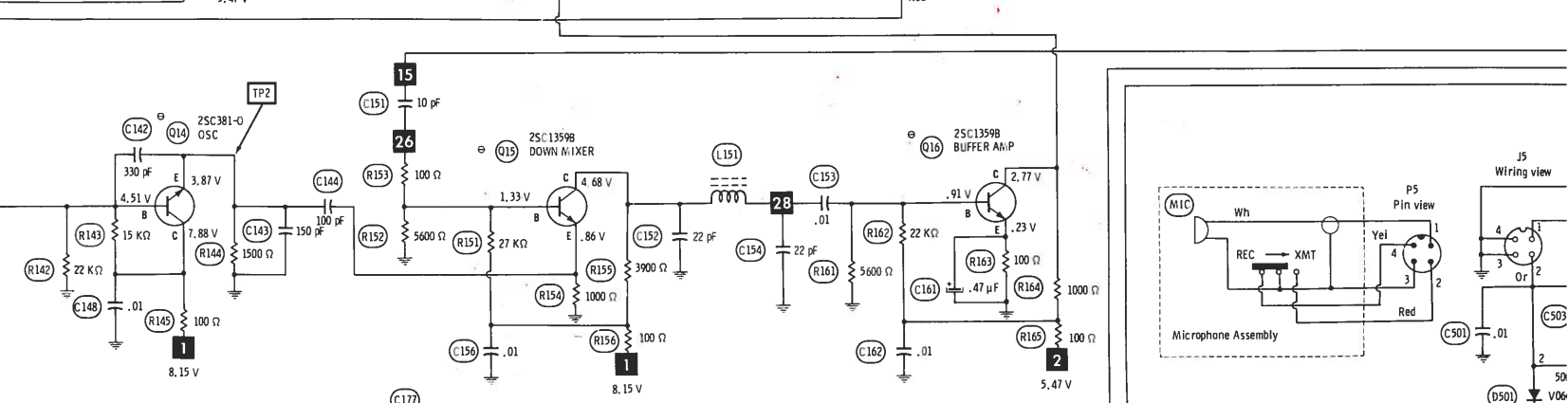
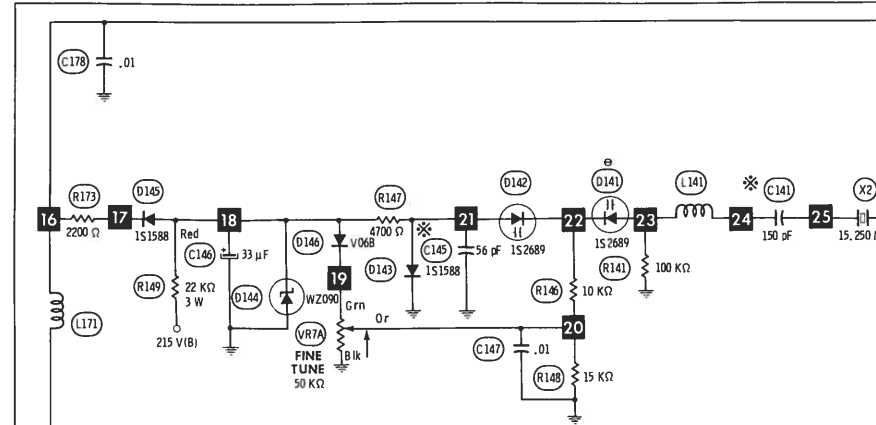
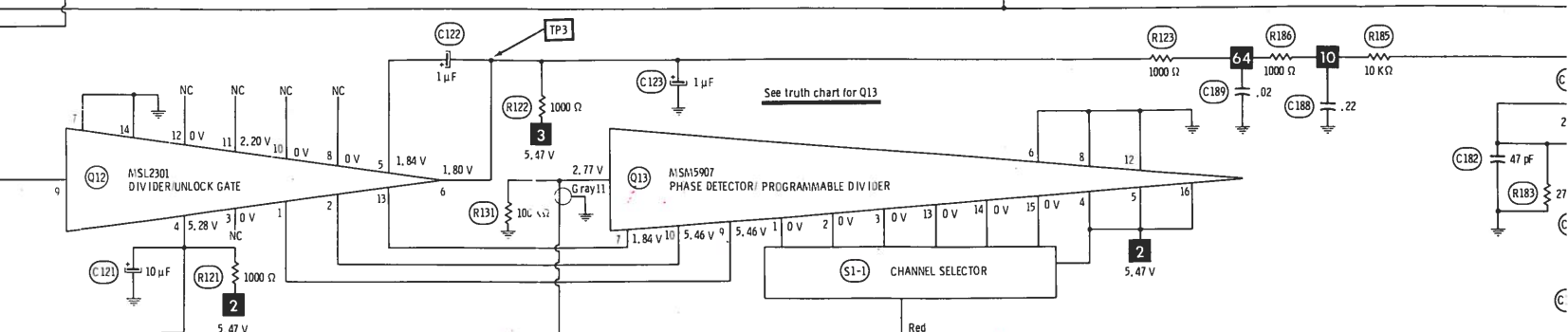
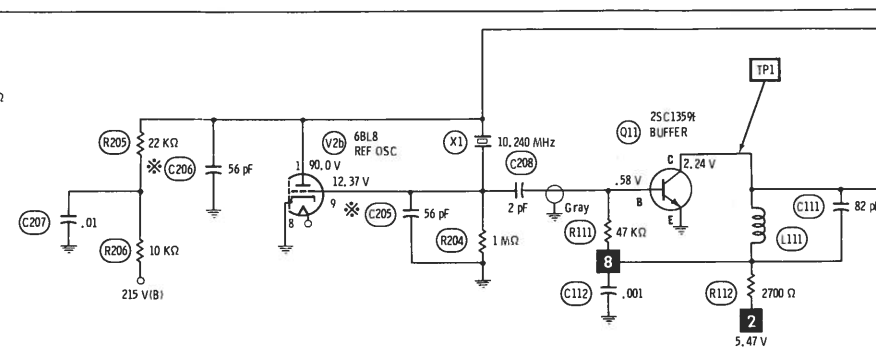
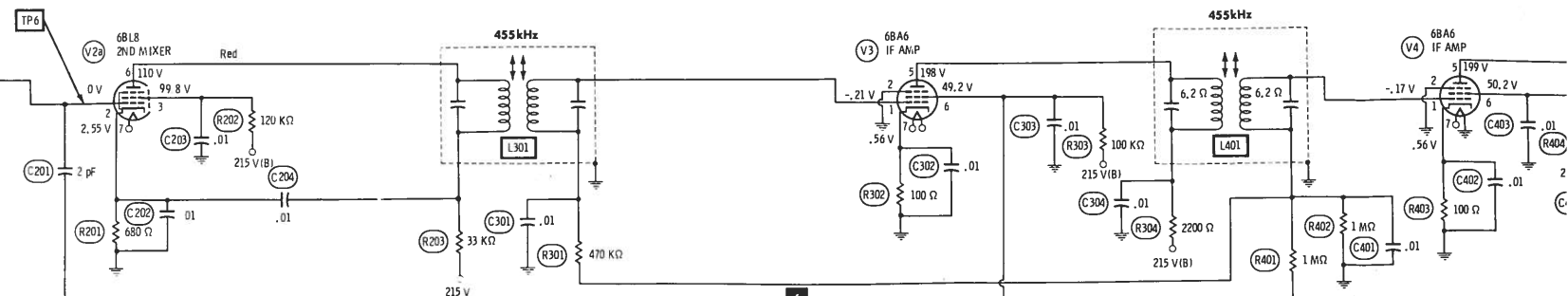
ELECTROLYTIC CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C22	470 16V	C620171	PC500-16	VTT470K16	QV1-151	EV-1250
C28	47 350V	C760104	WBR50-450	TC79B		TVA-1713
29a	47 350V	C960014	CC0236A	PPF330.8A		TVLU-3530
b	47 350V				QV1-41	EV-1222
c	47 350V					SD35-19
C121	10 16V	C620079	PC10-25	VTT10B25		SD35-19
C122	1 25V	C530017		TDC105M035EL	QV1-61	EV-1125
C123	1 25V	C530017		TDC105M035EL		EV-1325
C131	33 6.3V	C600044	PC30-25	VTT33B10		EV-1610
C146	33 16V	C620095	PC30-25	VTT33B25	QV1-151	EV-1250
C161	.47 50V	C640017	PC1-50	VTT470K16		EV-1150
C191	470 16V	C620171	PC500-16	VTT470K16		EV-1150
C192	470 10V	C610209	PC500-16	VTT470K16	QV1-149	EV-1140
C193	470 10V	C610209	PC500-16	VTT470K16		EV-1222
C194	220 10V	C610092	PC250-10	VTT220F10		EV-1322
C513	10 16V	C620079	PC10-25	VTT10B25	QV1-41	EV-1250
C514	10 350V	C760072	PC10-25	VTT10B25		EV-1322
C605	1 160V	C750017	WBR1-450	TC56A		TVA-1500
C606	1 160V	C750017	WBR1-450	TC56A	QV1-43	TVA-1500
C905	1 160V	C750017	WBR1-450	TC56A		TVA-1500

TEABERRY MODEL "T" (40 Ch.)



AGC Range
-7.59 V with signal
-0.03 V without signal

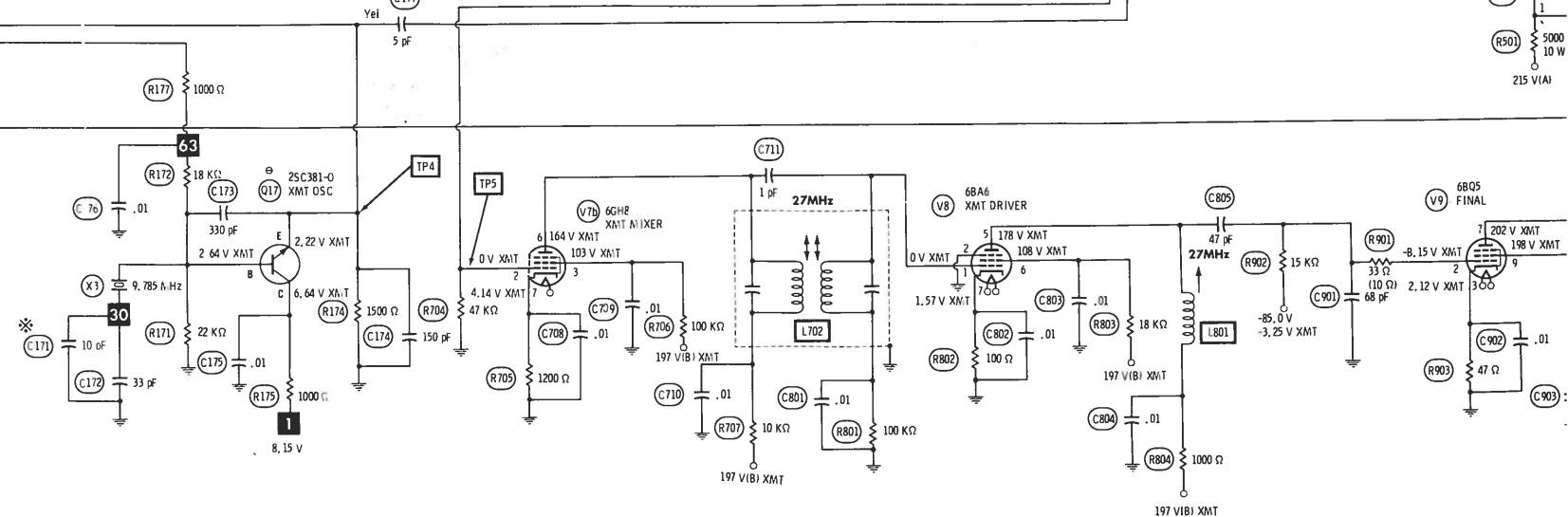


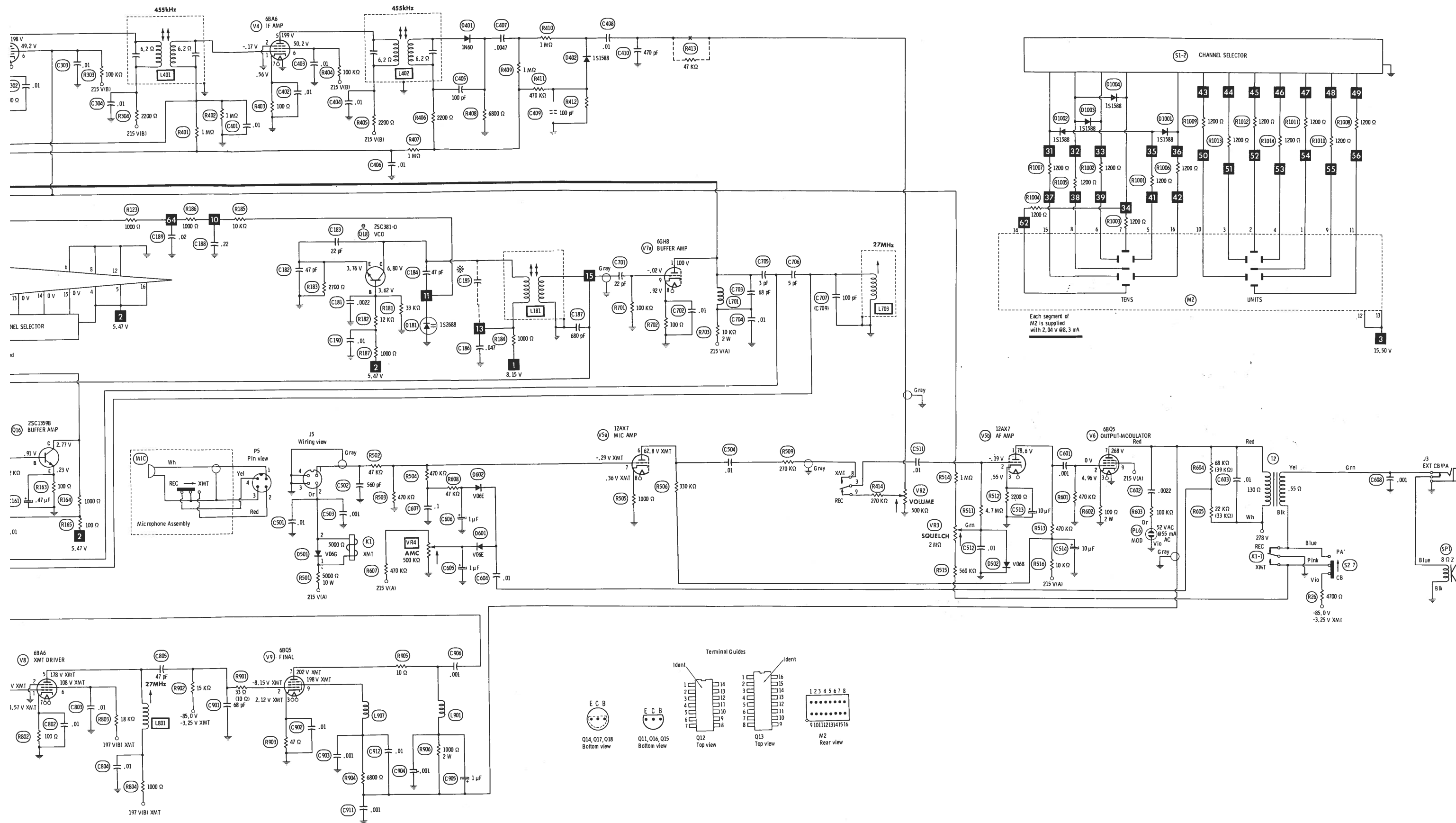
- ✖ Circuitry not used in some versions
 - Circuitry used in some versions
 - ⊙ See parts list
 - ✱ Nominal value
 - ⊥ Ground
 - Chassis
 - ▽ Common tie point
- Measurements made in Channel 1 with switching as shown unless noted. Item numbers in rectangles appear in the alignment/adjustment instructions. 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 (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
C11	2 500V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C12	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C13	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C14	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C23	.1 600V			DPMS6P1	EPF6010		6PS-P10
C24	.1 600V			DPMS6P1	EPF6010		6PS-P10
C25	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C26	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C31	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C32	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C34	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C36	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C101	3 500V		DTZ-3R3	NP03P3	CN0533		10TCC-V33
	5 500V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C102	18 500V				CN0418		10TCC-Q18
C103	56 500V		DD-560		GP456		10TS-Q56
C104	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C105	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C106	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C107	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C108	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C109	5 +.5 500V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C111	82 50V			CD15ED820J03	SX482	QW1-25	MMA-820
C112	.001 50V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C124	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C125	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C132	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C133	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C141	150 50V			CD15FD151J03	SX315	QW1-31	MMA-151
C142	330 50V			CD15FD331J03	SX333	QW1-39	MMA-331
C143	150 50V			CD15FD151J03	SX315	QW1-31	MMA-151
C144	100 50V		DD-101	GP100	GP310		10TS-T10
C145	56 50V			CD15ED560J03	SX456	QW1-21	MMA-560
C147	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C148	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C151	10 500V		DTZ-10	NP010	CN0410		10TCC-Q10
C152	22 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C153	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C154	22 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C156	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C162	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C171	10 50V			CD15CD100J03		QW1-6	MMA-100
C172	33 50V			CD15ED330J03	SX433	QW1-15	MMA-330
C173	330 50V			CD15FD331J03	SX333	QW1-39	MMA-331
C174	150 50V			CD15FD151J03	SX315	QW1-31	MMA-151
C175	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C176	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C177	5 N470 500V				*		10TCT-V50
C178	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C181	.0022 50V			DPMS6D22	EPF6222		6PS-D22
C182	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C183	22 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C184	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C186	.047 50V			DPMS2S47	EPF1A147	QF1-171	1PB-S47
C187	470 50V			CD15FD471J03	SX347	QW1-42	MMA-471
C188	.22 50V			DPMS2P22	EPF1A022	QF1-253	1PB-P22
C189	.02 50V			DPMS2S2	PVC212		2PS-S20
C190	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C201	2 500V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C202	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C203	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C204	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C205	56 500V			CD15ED560J03	SX456	QW1-21	MMA-560
C206	56 500V			CD15ED560J03	SX456	QW1-21	MMA-560
C207	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C208	2 500V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C301	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C302	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C303	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C304	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C401	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C402	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C403	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C404	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C405	100 50V		DD-101	GP100	GP310		10TS-T10
C406	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C407	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C408	.0047 500V		DD-472	GP4700	GP247		5GA-D47
C409	100 500V		DD-101	GP100	GP310		10TS-T10
C410	470 500V		DD-471	GP470	GP347		10TS-T47
C501	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C502	560 500V		DD-561		GP356		10TS-T56
C503	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C504	.01 50V		DD-1032	GP10000	GP110		5GA-S10
C511	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C512	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C601	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C602	.0022 1KV		DD-222		GP222	QC2-97	5GA-D22
C603	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C604	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C607	.1 600V			DPMS6P1	EPF6P1		6PS-P10
C608	.001 500V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C701	22 NPO 500V		DTZ-22	NP022	CN0422		10TCC-Q22
C702	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C703	68 500V		DD-680	GP68	GP468		10TS-Q68
C704	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C705	3 500V		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C706	5 N470 500V				*		10TCT-V50
C707	100 500V			CD15FD101J03	SX310	QW1-27	MMA-101

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
C708	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C709	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C710	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C711	1 500V				CN0510		10TCC-V10
C712	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C801	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C802	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C803	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C804	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C805	47 500V			CD15ED470J03	SX447	QW1-19	MWA-470
C901	68 500V			CD15ED680J03	SX468	QW1-23	MWA-680
C902	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C903	.001 500V		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C904	.001 500V		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C906	.001 1KV		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C907	22 500V			CD15ED220J03	SX422	QW1-11	MWA-220
C908	330 500V			CD15FD331J03	SX333	QW1-39	MWA-331
C909	68 500V			CD15ED680J03	SX468	QW1-23	MWA-680
C910	.01 500V		DD-1032	GP10000	GP110		5GA-S10
C911	.001 500V		DD-1026	GP1000	GP210	QC2-81	5GA-D10
C912	.01 500V		DD-1032	GP10000	GP110		5GA-S10
VC901	50	C890058					
VC902	350	C890061					

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

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.
VR1	S Meter	30K	R890223	F1-50K (1), SRS006	UA34L (1), SK750	BU1 (1), CF12, SS5, DC1
VR2	Volume/Power Switch	500K	R890249	F1-500K (1), SRS012, KR1	UA55L (1), SK750, US26	BU1 (1), CF16, SS5, GC
VR3	Squelch/Switch	2M	R890252	F1-2Meg (1), SRS012, KR1	UA24L (1), SK750, US26	BU1 (1), CF19, SS5, GC
VR4	AMC	500K	R890236	F1-500K (1), SRS006	UA55L (1), SK750	BU1 (1), CF16, SS5, DC1
VR7A	Fine Tune	50K	R890139			
VR7B	RF Meter	10K	R890029	T-10K (2)	MT14L1 (2)	X201R103B (2)

(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.	MFR. PART No.			WORKMAN PART No.	MFR. PART No.
R27	100 3W	20-003	R161017	R192	22K 3W	20-042	R162236
R28	1000 5W	5W-SQ1K	R990110	R501	5000 10W	10W-SQ5K	R990259
R149	22K 3W	20-042	R162236				

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	RF Choke	L085025			
L102	Rec RF (27MHz)	L215086			
L111	RF Choke	L085025			
L141	RF Choke	L085025			
L151	RF Choke	L990026			
L171	RF Choke	L083030			
L181	VCO	L015011			
L201	IF (9.785MHz)	L005021			
L301	IF (455kHz)	L215109			
L401	IF (455kHz)	L215112			
L402	IF (455kHz)	L215125			
L701	RF Choke	L085025			
L702	XMT Mixer (27MHz)	L215138			
L703	XMT Buffer (27MHz)	L005021			
L801	XMT Driver (27MHz)	L005034			
L901	RF Choke	L085041			
L902	RF Choke	L025043			
L903	RF Choke	L005050			
L904	TVI Trap (54MHz)	L005076			
L905	RF Choke	L005063			
L906	RF Choke	L085038			
L907	RF Choke	L085018			

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	120V AC @ 750mA AC	106V AC @ 520mA AC	T995034			
	SEC. 2	SEC. 3				
	29.70V AC @ 140mA AC					

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	5000	8	T995018			

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	4" PM 8 Ohms	A105044	4A1Z8	

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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 Pigtail			GJV2		318002		FG2-2 & 33-125

MICROPHONE

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	A015011	18-032	18-034	18-000	18-092	1	3	2	NC	NC	4

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Ceramic Filter		455kHz
J1	Jack	J190017	Antenna
J2	Jack	J290043	Power
J3	Jack	J090010	External Speaker/PA
J5	Jack	J090023	Microphone
K1	Relay	K002011	XMT/REC
M1	Moter	M005018	S/RF
M2	LED	D310062	Channel Display TLR321
PL1	Lamp		Meter (11.90V AC @ 70mA)
PL2	Lamp		TX (53.7V)
PL3	Lamp		RX (62V)
PL6	Lamp		MOD (52V)
S1	Switch	S005042	Channel Selector
S2	Switch	S365321	CB/PA
S3	Switch		Power (Part of Volume Control)
S4	Switch		Standby (Part of Squelch Control)
S5	Switch	S365318	Meter
X1	Crystal	X002406	10.240MHz
X2	Crystal	X002503	15.250MHz
X3	Crystal	X007854	9.785MHz

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')