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" COMMAND (4007)

MANUFACTURER'S SPECIFICATIONS

GENERAL	
Channels	40
Frequency Range	26.965 MHz to 27.405 MHz
Frequency Control	PLL Synthesized
Clock	12 Hour, Digital
Antenna Impedance	50 ohm
Power Input	117V AC or 13.8V DC
Accessories	AC and DC Power Cord, Detachable Dynamic Microphone, Microphone Hanger
Size	15" (W) x 11-1/2" (D) x 4-3/4" (H)
TRANSMITTER	
Output Power	4 watts
Emission Type	6A3
Hum and Noise	Better than –60 dB
Frequency Tolerance	0.003%
Modulation Percentage (Peak)	100%
RECEIVER	
Sensitivity at 100 dB S + N/N	1.0μV
Sensitivity for 500 mW Audio Output	0.5μV
Squelch Threshold	1.0μV
Squelch Deepest Point	2000μV
"S" Meter S-9	50μV
Delta Tune	1500 Hz
Maximum AF Output Power	4 watts
AF Output Power/10% Distortion	3 watts
Selectivity BW @ 6 dB Down	7 KHz
Adjacent Channel Rejection	–65 dB
Image Rejection	–70 dB
Speaker Impedance	8 ohms
Headphone Impedance	8 ohms

Courtesy of the Manufacturer

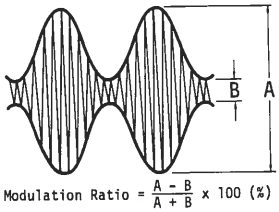
HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment.
Maintain line voltage at 120V AC. Allow a 15-minute warm-up period.
Adjust VR201 for 13.8 volts DC at TP13 in AC power supply.
Connect low sides of test equipment to ground unless specified otherwise.
Connect 50-ohm dummy load or antenna before keying transmitter.
Connect microphone.

Suggested Alignment Tools: GC ELECTRONICS

L1 thru L5, L16, L17, L18, L20, L21, L24, L27, L28 9440
L6, L7, L8 . . . . . 5000, 5009, 8276, 8728, 8728A
L10, L12, L15. . . . . 9304, 8728, 8728A
VC1. . . . . 5000, 8276



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

FIGURE 1

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope to TP1 (L5 secondary).	Ch. 19	L5	Adjust for maximum RF output.
Input of frequency counter to TP1 (L5 secondary).	Ch. 19 Delta Tune Midrange	VC1	Adjust for 10.240MHz.
Input of DC meter to TP5 (IC5 pin 5).	Ch. 1 Delta Tune Midrange	L20	Adjust for 2.00 volts.
Input of oscilloscope to TP6 (L21 secondary).	Ch. 19	L21	Adjust for maximum RF output.
Input of frequency counter to TP6 (L21 secondary).	Ch. 1		Check for 37.660MHz. Check all channels. (See truth chart for correct frequencies.)
Input of frequency counter to TP10 (L24 secondary).	Ch. 19	L24	Adjust for 36.570MHz.
Input of frequency counter to TP4 (IC3 pin 11).	Ch. 1		Check for 1.090MHz. Check all channels. (See truth chart for correct frequencies)
Input of oscilloscope to TP11 (TR9 gate 2).	Ch. 19 XMT	L18	Adjust for maximum RF output.
Input of frequency counter to TP11 (TR9 gate 2).	Ch. 19 XMT		Check for 10.695MHz.
Input of frequency counter to TP3 (TR8 base).	Ch. 19 XMT		Check for 27.185MHz. If necessary readjust L24 for 27.185MHz.

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.
Delta Tune Midrange, RF Gain Maximum, Squelch MINIMUM, NB Switch OFF.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP12. (TR3 base). 455kHz, 1000Hz @ 30% modulation	Ch. 19	L8,L7,L6	Adjust for maximum output.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% Mod.	Ch. 19	L4,L3,L2,L1	Adjust for maximum output. If necessary readjust L6, L7 and L8.
Output of signal generator thru .01uF to antenna input. 23.5MHz no modulation. Input of oscilloscope to TP7 (TR26 base).	Ch. 19	L27,L28	NOISE BLANKER Adjust for maximum RF output.

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% Mod. Output 50,000uV.	Ch. 19 Squelch MINIMUM	VR2	AGC Set volume (VR301) for 0db. Decrease generator output to 50uV. Adjust so that audio does not drop more than110db.
Output of signal generator thru .01uF to antenna input 27.185MHz, 1000Hz @ 30% mod. Output 1000uV.	Ch. 19 Squelch maximum	VR3	SQUELCH RANGE Adjust so that squelch just breaks.
Output of signal generator thru .01uF to antenna input. 27.185MHz, 1000Hz @ 30% mod. Output 100uV.	Ch. 19 Squelch MINIMUM	VR1	S METER Adjust for 9 on signal scale of panel meter.

TRANSMITTER ALIGNMENT

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

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

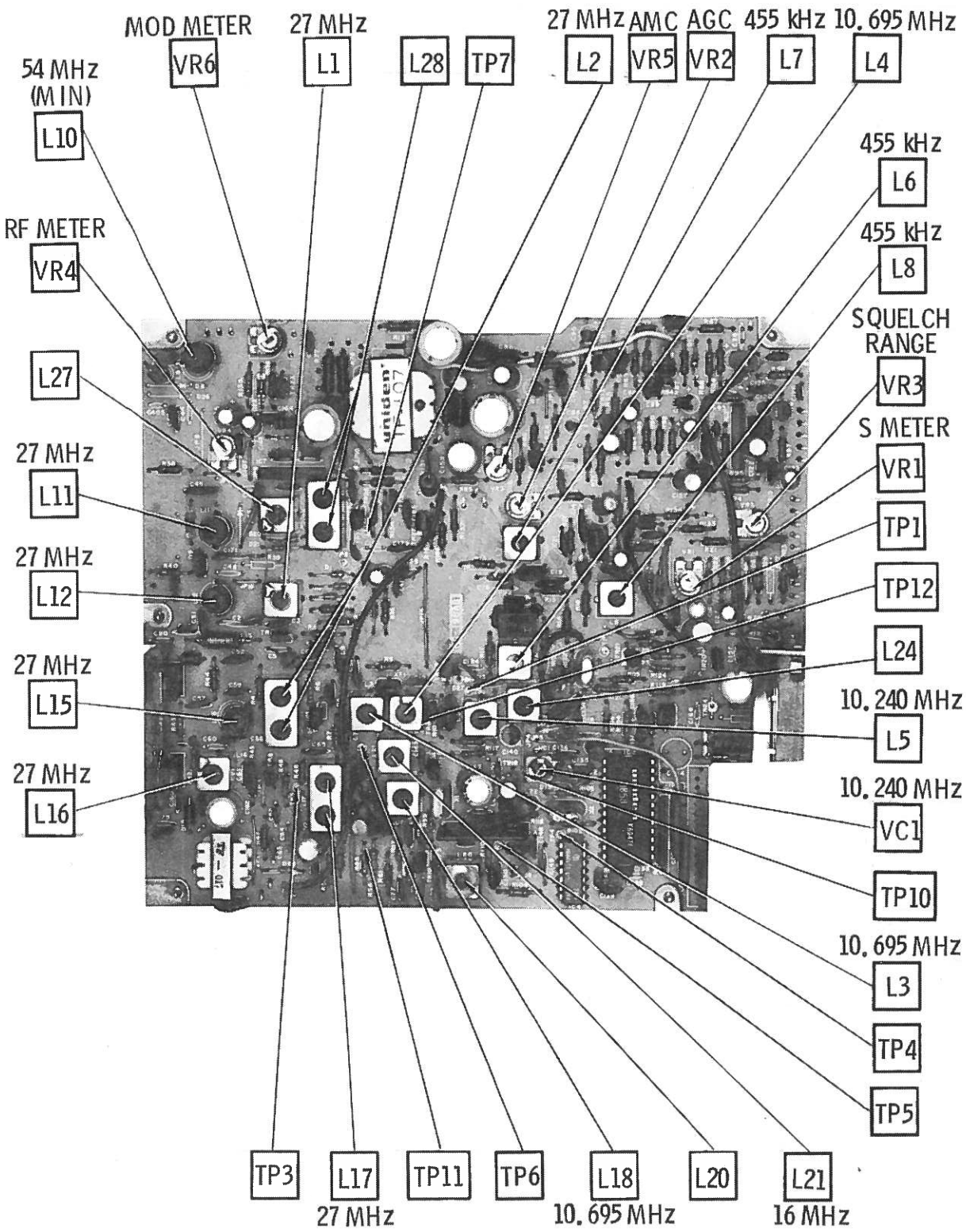
TRANSMITTER ADJUSTMENTS

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

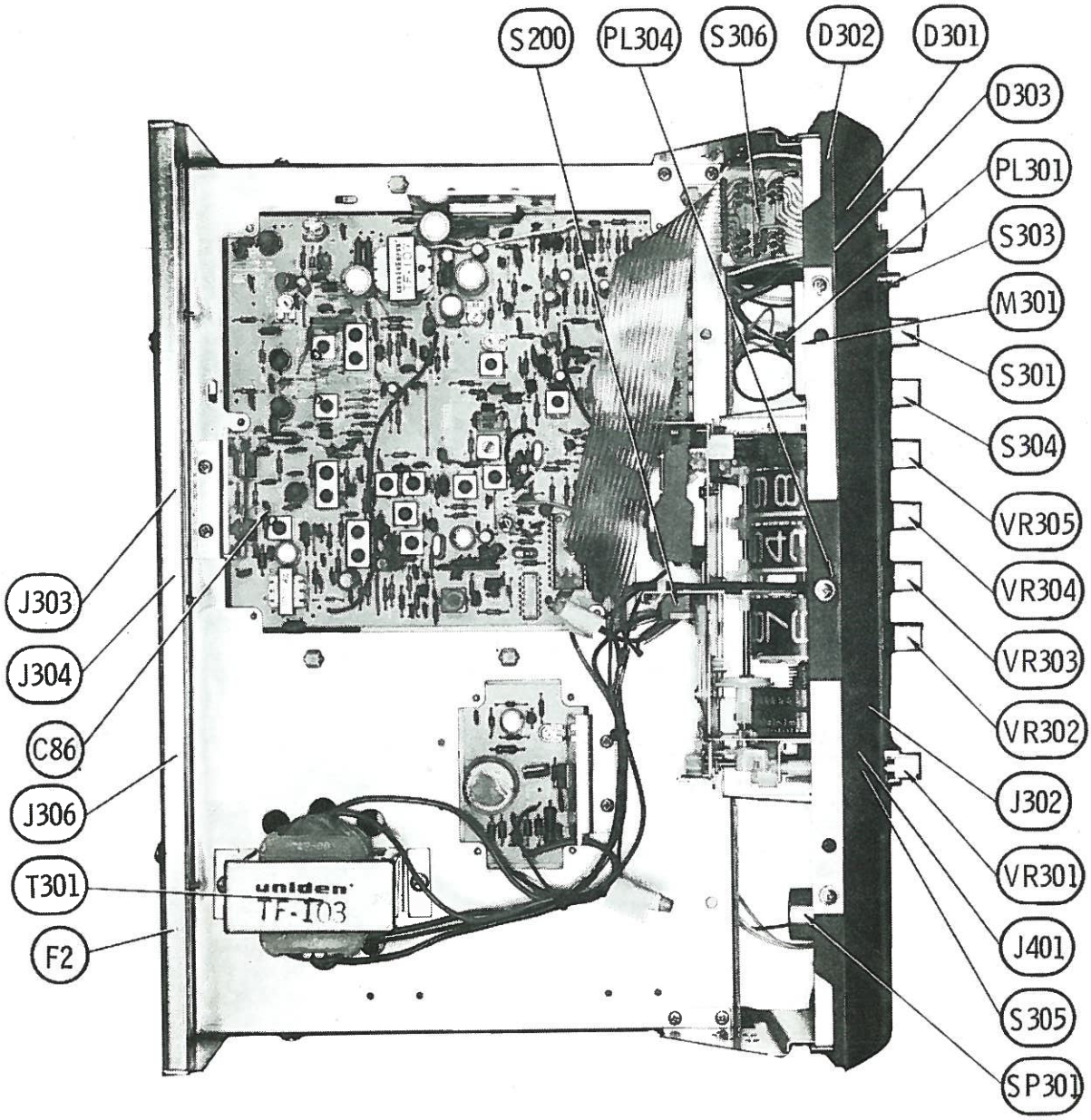
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 10mV signal at mic input.	Ch. 19 Mic Gain Maximum Mod/S-RF Mod	VR5	AMC Adjust for 100% modulation maximum. See Figure 1.
Input of oscilloscope or modulation meter to antenna input. Inject a 1000Hz, 10mV signal at mic input.	Ch. 19 Mic Gain Maximum MOD/S-RF Mod	VR6	MOD METER Adjust so that panel meter agrees with modulation meter or oscilloscope. See Figure 1.
Input of RF wattmeter and 50 ohm, 25 watt dummy load to antenna input.	Ch. 19 MOD/S-RF S/RF	VR4	RF METER Adjust so that panel meter agrees with RF wattmeter.

TRUTH CHART

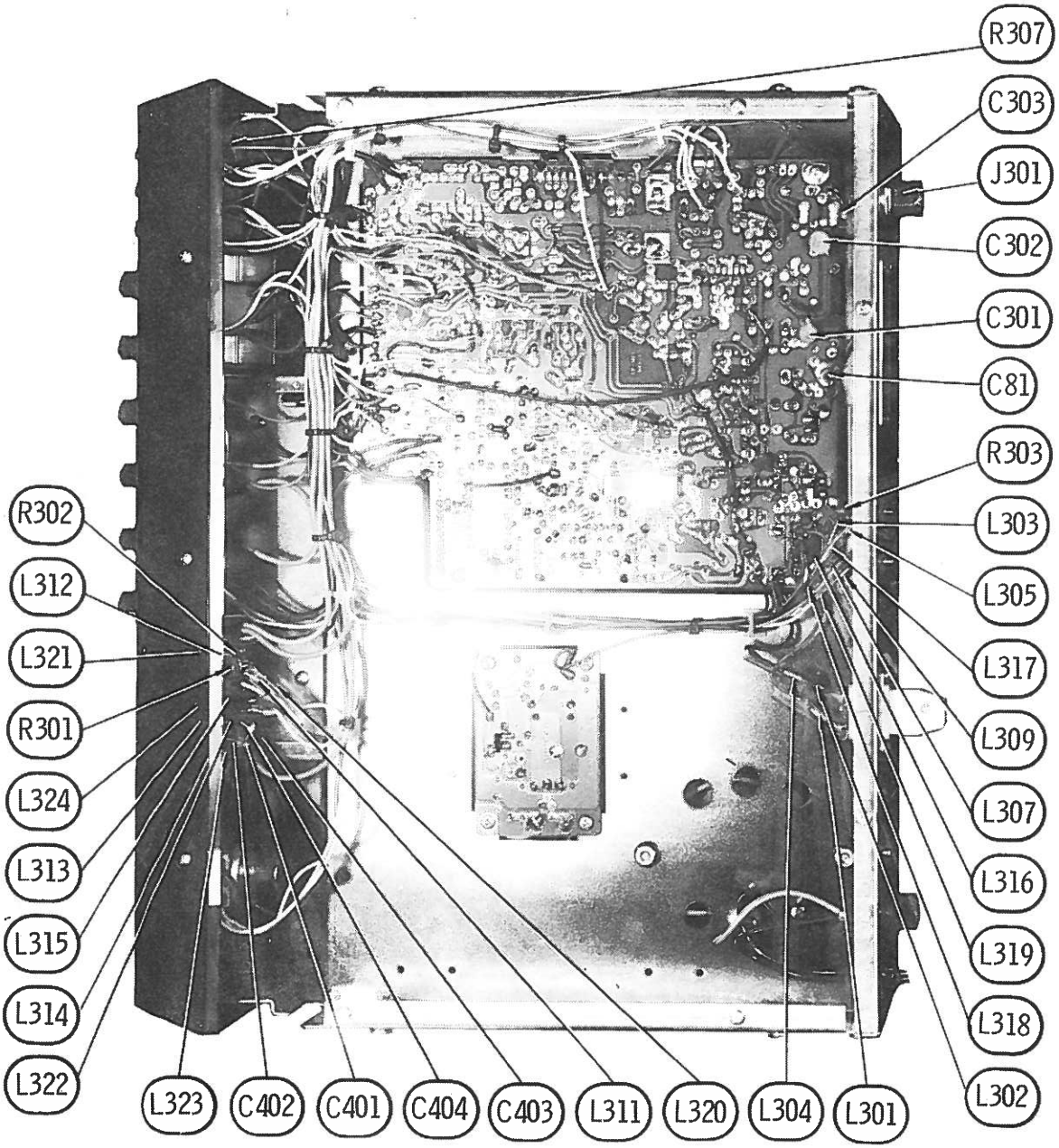
CHANNEL		1 = 4.84 Volts 0 = 0 Volts IC3 PROGRAM DIVIDER PINS							REC and XMT VCO OUTPUT IN MHz AT TP6	DIVIDER INPUT IN MHz AT TP4	
		19	18	17	16	15	14	13			
1		0	0	0	1	0	0	1	37.660	1.090	
2		0	0	1	0	0	0	0	37.670	1.100	
3		0	0	1	0	0	0	1	37.680	1.110	
4		0	0	1	0	0	1	1	37.700	1.130	
5		0	0	1	0	1	0	0	37.710	1.140	
6		0	0	1	0	1	0	1	37.720	1.150	
7		0	0	1	0	1	1	0	37.730	1.160	
8		0	0	1	1	0	0	0	37.750	1.180	
9		0	0	1	1	0	0	1	37.760	1.190	
10		0	1	0	0	0	0	0	37.770	1.200	
11		0	1	0	0	0	0	1	37.780	1.210	
12		0	1	0	0	0	1	1	37.800	1.230	
13		0	1	0	0	1	0	0	37.810	1.240	
14		0	1	0	0	1	0	1	37.820	1.250	
15		0	1	0	0	1	1	0	37.830	1.260	
16		0	1	0	1	0	0	0	37.850	1.280	
17		0	1	0	1	0	0	1	37.860	1.290	
18		0	1	1	0	0	0	0	37.870	1.300	
19		0	1	1	0	0	0	1	37.880	1.310	
20		0	1	1	0	0	1	1	37.900	1.330	
21		0	1	1	0	1	0	0	37.910	1.340	
22		0	1	1	0	1	0	1	37.920	1.350	
23		0	1	1	1	0	0	0	37.950	1.380	
24		0	1	1	0	1	1	0	37.930	1.360	
25		0	1	1	0	1	1	1	37.940	1.370	
26		0	1	1	1	0	0	1	37.960	1.390	
27		1	0	0	0	0	0	0	37.970	1.400	
28		1	0	0	0	0	0	1	37.980	1.410	
29		1	0	0	0	0	1	0	37.990	1.420	
30		1	0	0	0	0	1	1	38.000	1.430	
31		1	0	0	0	1	0	0	38.010	1.440	
32		1	0	0	0	1	0	1	38.020	1.450	
33		1	0	0	0	1	1	0	38.030	1.460	
34		1	0	0	0	1	1	1	38.040	1.470	
35		1	0	0	1	0	0	0	38.050	1.480	
36		1	0	0	1	0	0	1	38.060	1.490	
37		1	0	1	0	0	0	0	38.070	1.500	
38		1	0	1	0	0	0	1	38.080	1.510	
39		1	0	1	0	0	1	0	38.090	1.520	
40		1	0	1	0	0	1	1	38.100	1.530	


MOD METER
VR6
27 MHz
L1
L28
TP7
27 MHz
L2
AMC
VR5
AGC
VR2
455 kHz
L7
10.695 MHz
L4
54 MHz
(MIN)
L10
455 kHz
L6
RF METER
VR4
455 kHz
L8
SQUELCH
RANGE
VR3
L27
S METER
VR1
27 MHz
L11
TP1
27 MHz
L12
TP12
L24
27 MHz
L15
10.240 MHz
L5
27 MHz
L16
10.240 MHz
VC1
TP10
10.695 MHz
L3
TP4
TP5
TP3
L17
27 MHz
TP11
TP6
L18
10.695 MHz
L20
L21
16 MHz

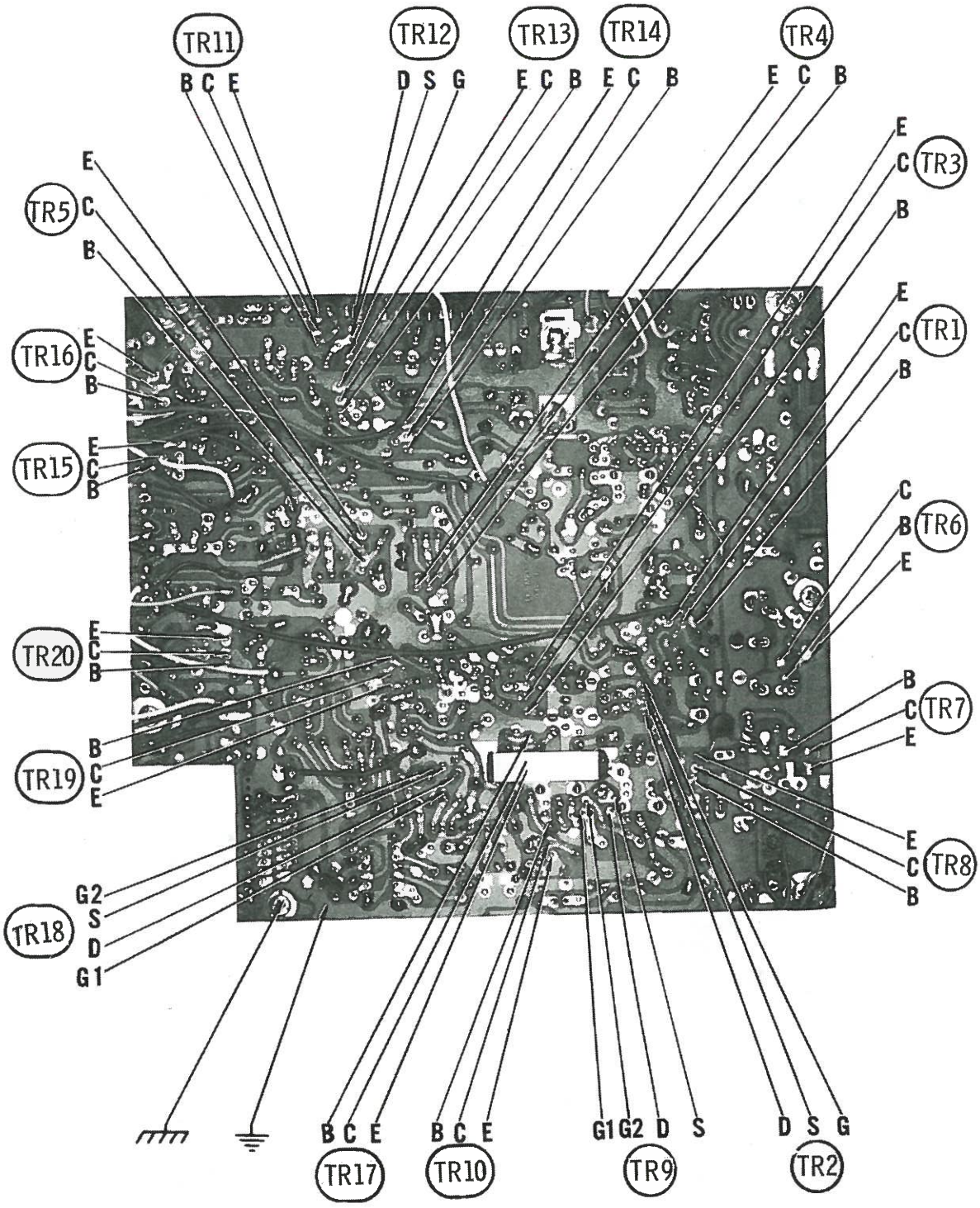
MAIN BOARD


S200
PL304
S306
D302
D301
D303
PL301
S303
M301
S301
S304
VR305
VR304
VR303
VR302
J302
VR301
J401
S305
SP301
J303
J304
C86
J306
T301
F2
uniden
TF-103

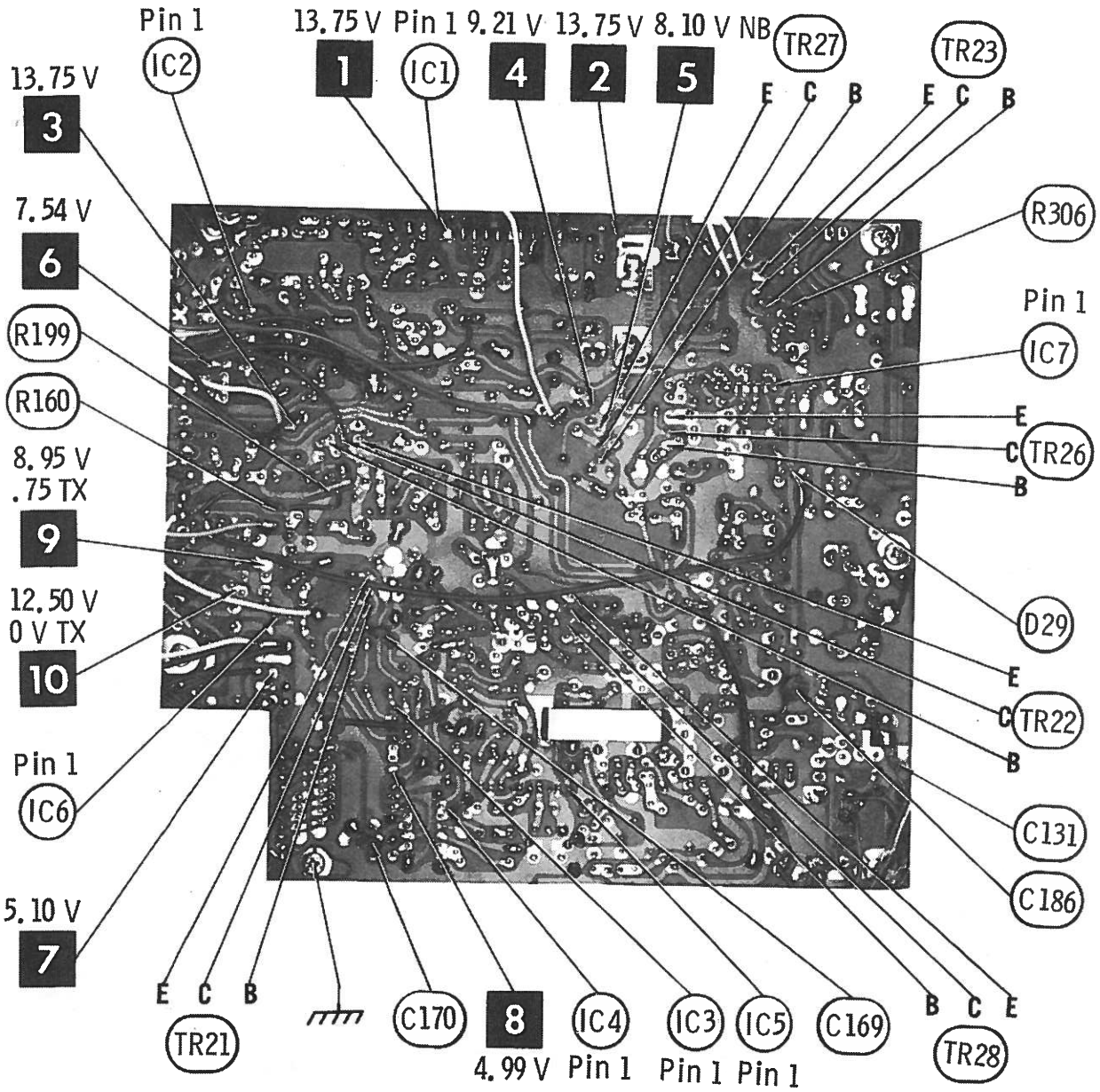
CHASSIS-TOP



CHASSIS-BOTTOM

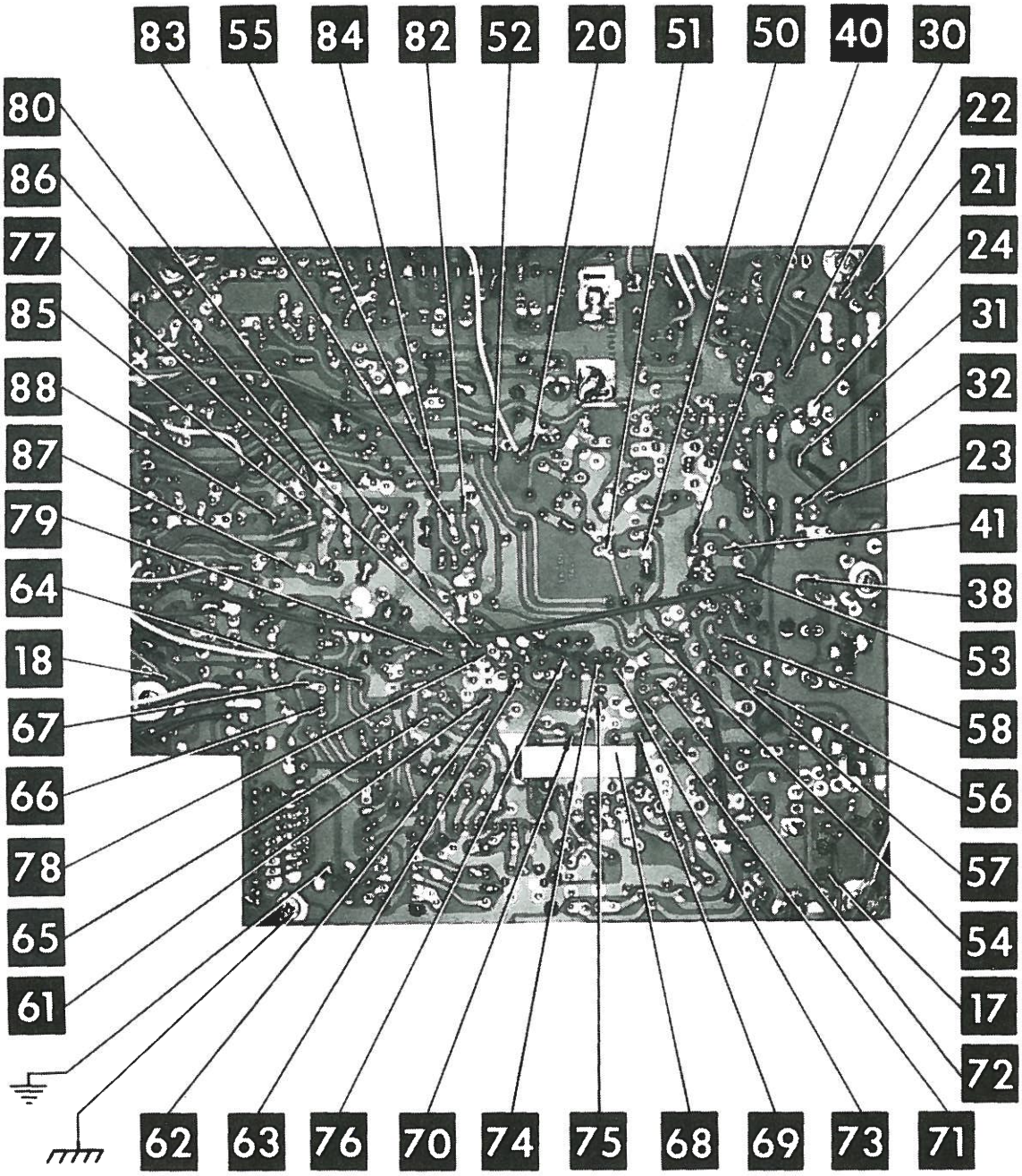

TR11
B C E
TR12
D S G
TR13
E C B
TR14
E C B
TR4
E C B
TR3
E C B
TR1
E C B
TR6
C B E
TR7
B C E
TR8
E C B
TR2
D S G
TR9
G1 G2 D S
TR10
B C E
TR17
B C E
TR18
G2 S D G1
TR19
B C E
TR20
E C B
TR15
E C B
TR16
E C B
TR5
E C B

MAIN BOARD

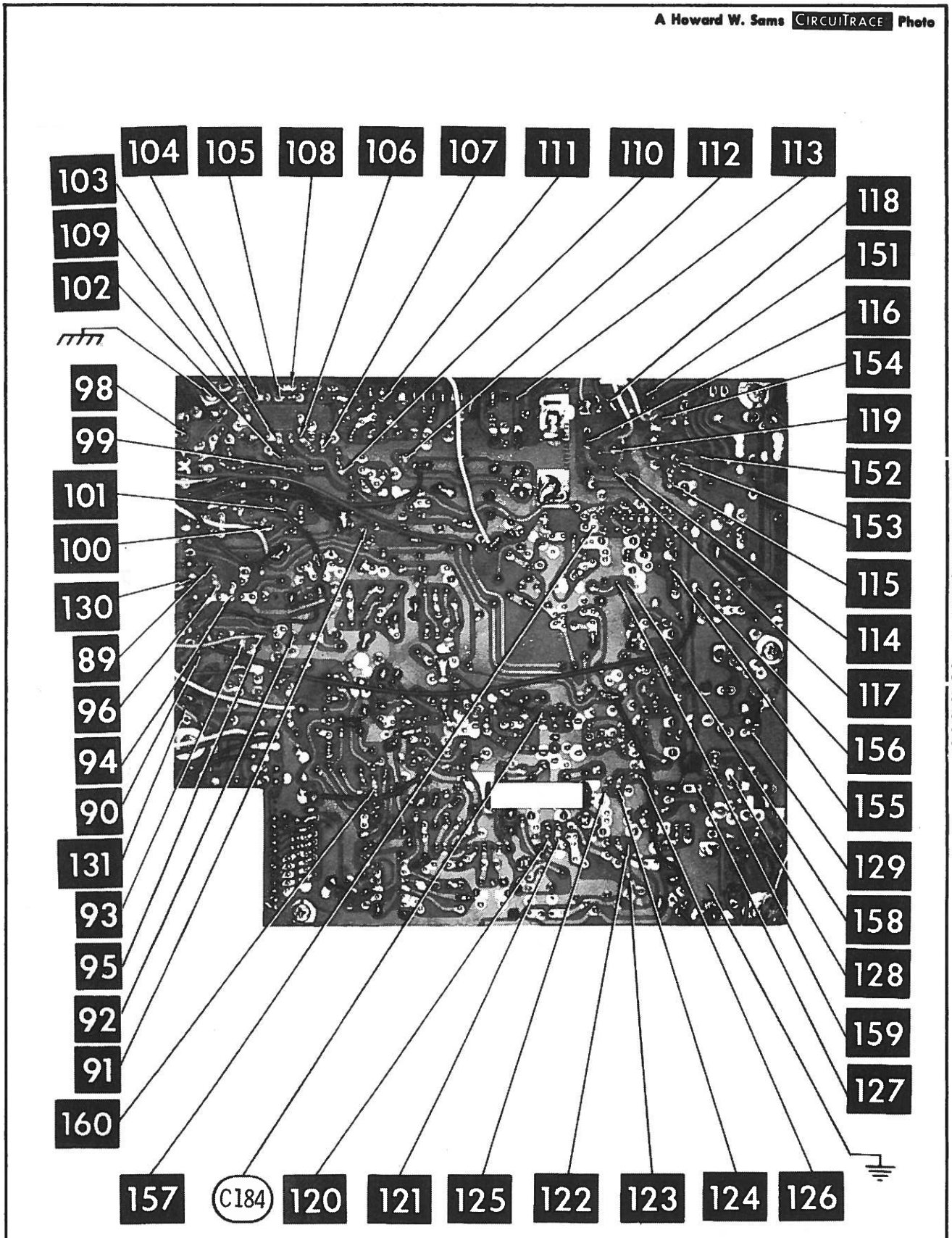

Pin 1
IC2
13.75 V
3
13.75 V Pin 1
1
IC1
9.21 V
4
13.75 V
2
8.10 V NB
5
TR27
E C B
TR23
E C B
7.54 V
6
R306
R199
Pin 1
IC7
R160
E
C
TR26
B
8.95 V
.75 TX
9
D29
12.50 V
0 V TX
10
E
C
TR22
B
Pin 1
IC6
C131
C186
5.10 V
7
E C B
TR21
C170
8
4.99 V
IC4
Pin 1
IC3
Pin 1
IC5
Pin 1
C169
B C E
TR28

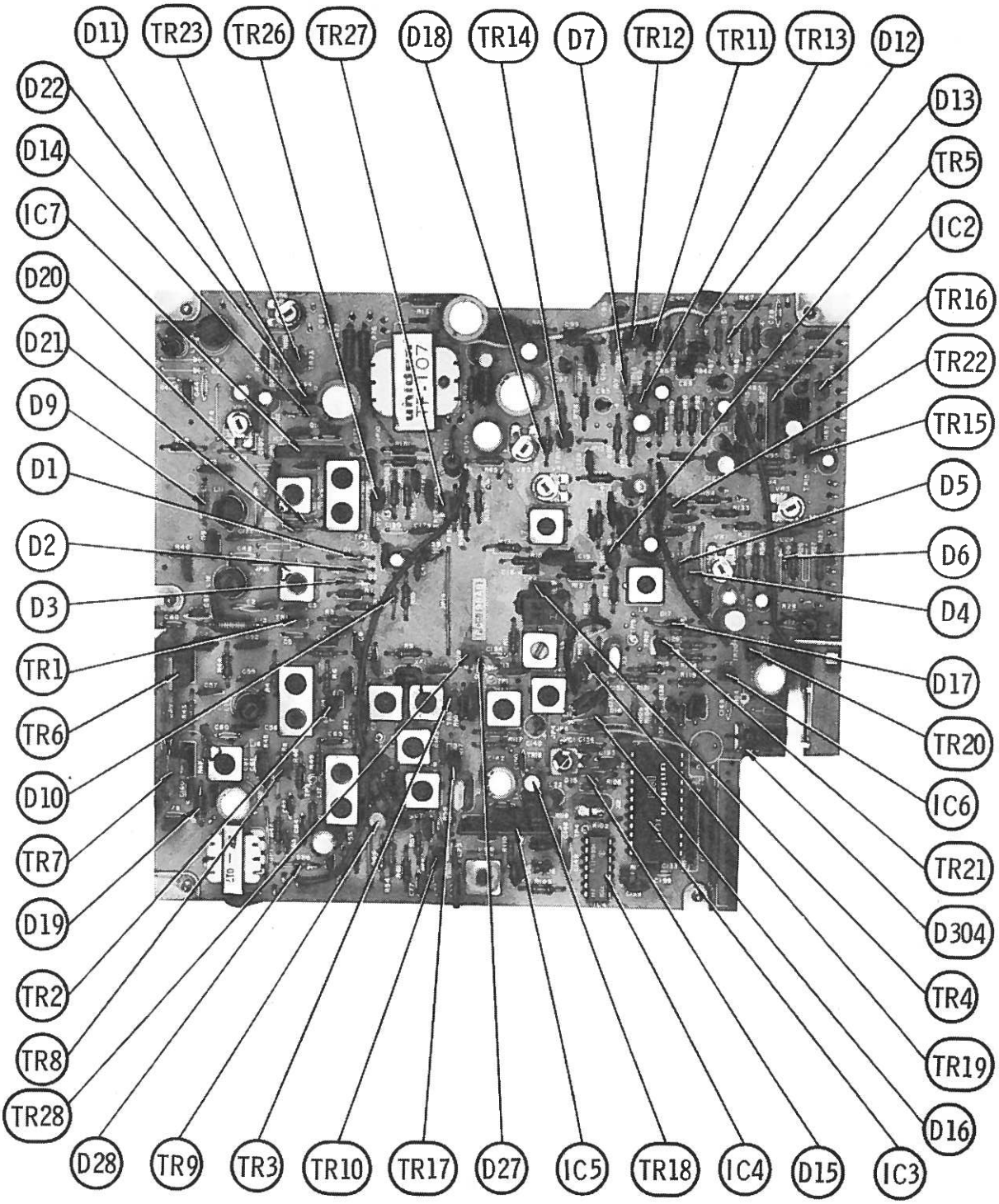
MAIN BOARD

A Howard W. Sams CIRCUITRACE® Photo

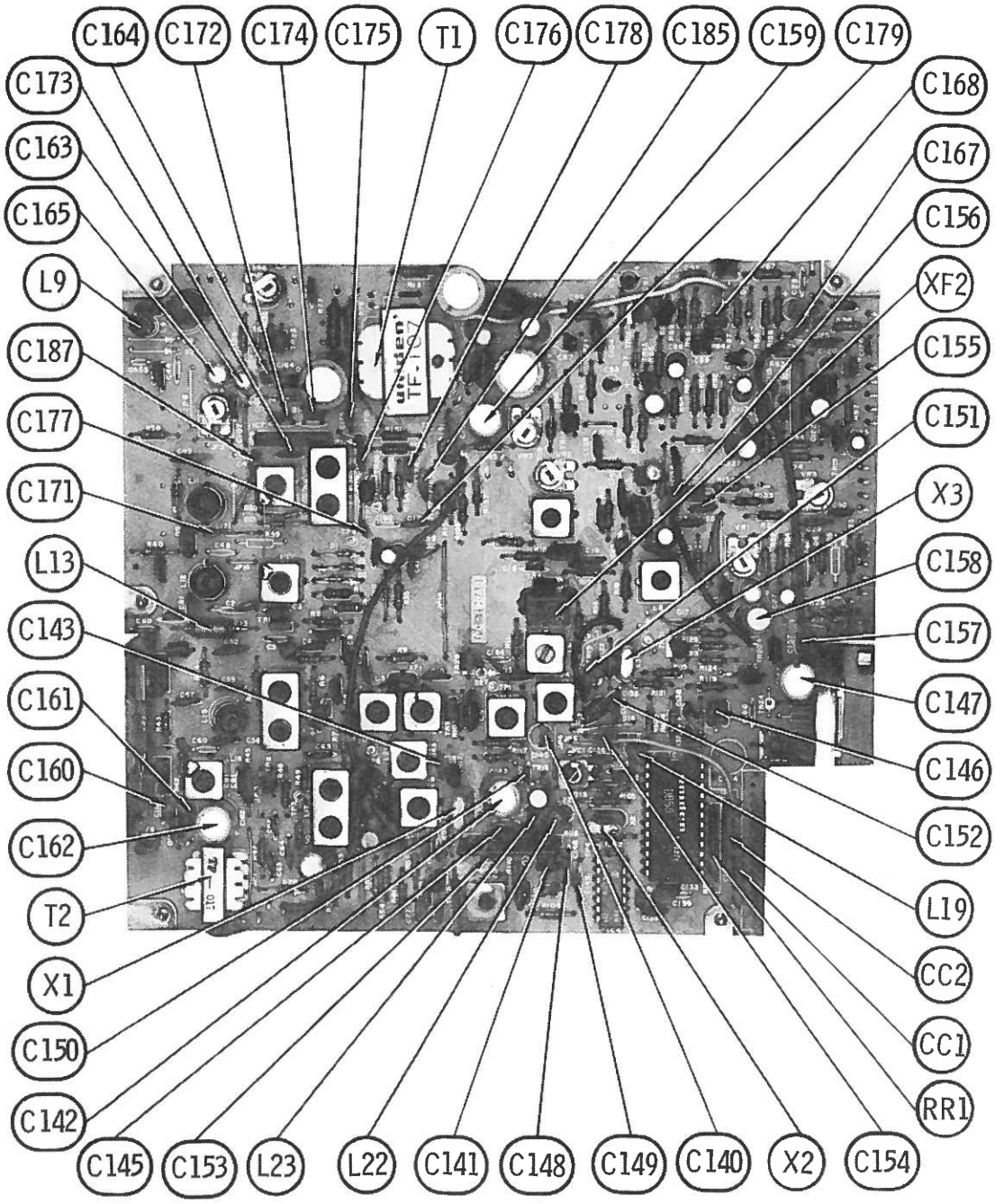


MAIN BOARD

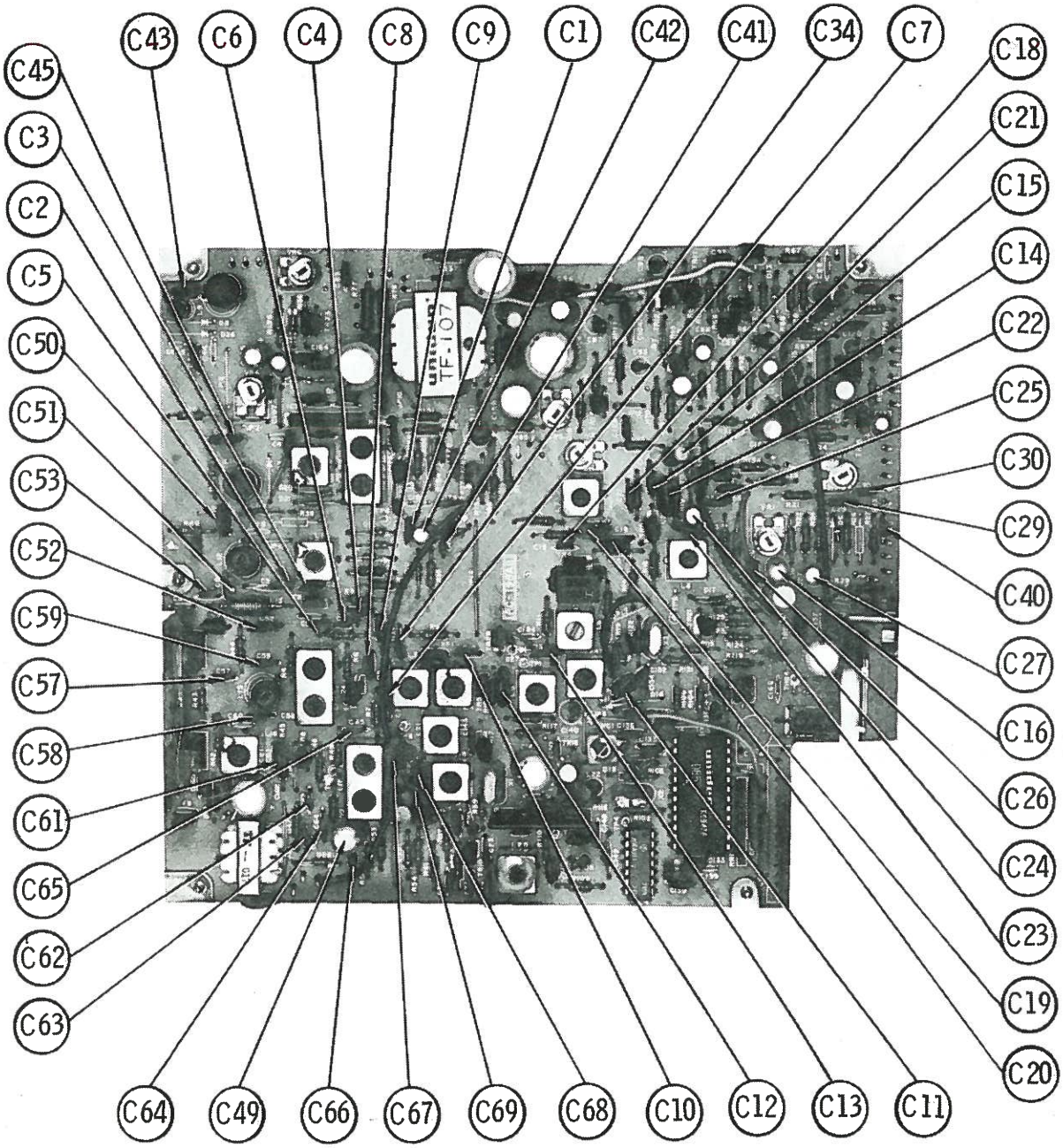

A Howard W. Sams CIRCUITRACE Photo
104
105
108
106
107
111
110
112
113
103
109
102
98
99
101
100
130
89
96
94
90
131
93
95
92
91
160
118
151
116
154
119
152
153
115
114
117
156
155
129
158
128
159
127
157
C184
120
121
125
122
123
124
126
MAIN BOARD


D11
TR23
TR26
TR27
D18
TR14
D7
TR12
TR11
TR13
D12
D22
D13
D14
TR5
IC7
IC2
D20
TR16
D21
TR22
D9
TR15
D1
D5
D2
D6
D3
D4
TR1
D17
TR6
TR20
D10
IC6
TR7
TR21
D19
D304
TR2
TR4
TR8
TR19
TR28
D16
D28
TR9
TR3
TR10
TR17
D27
IC5
TR18
IC4
D15
IC3

MAIN BOARD

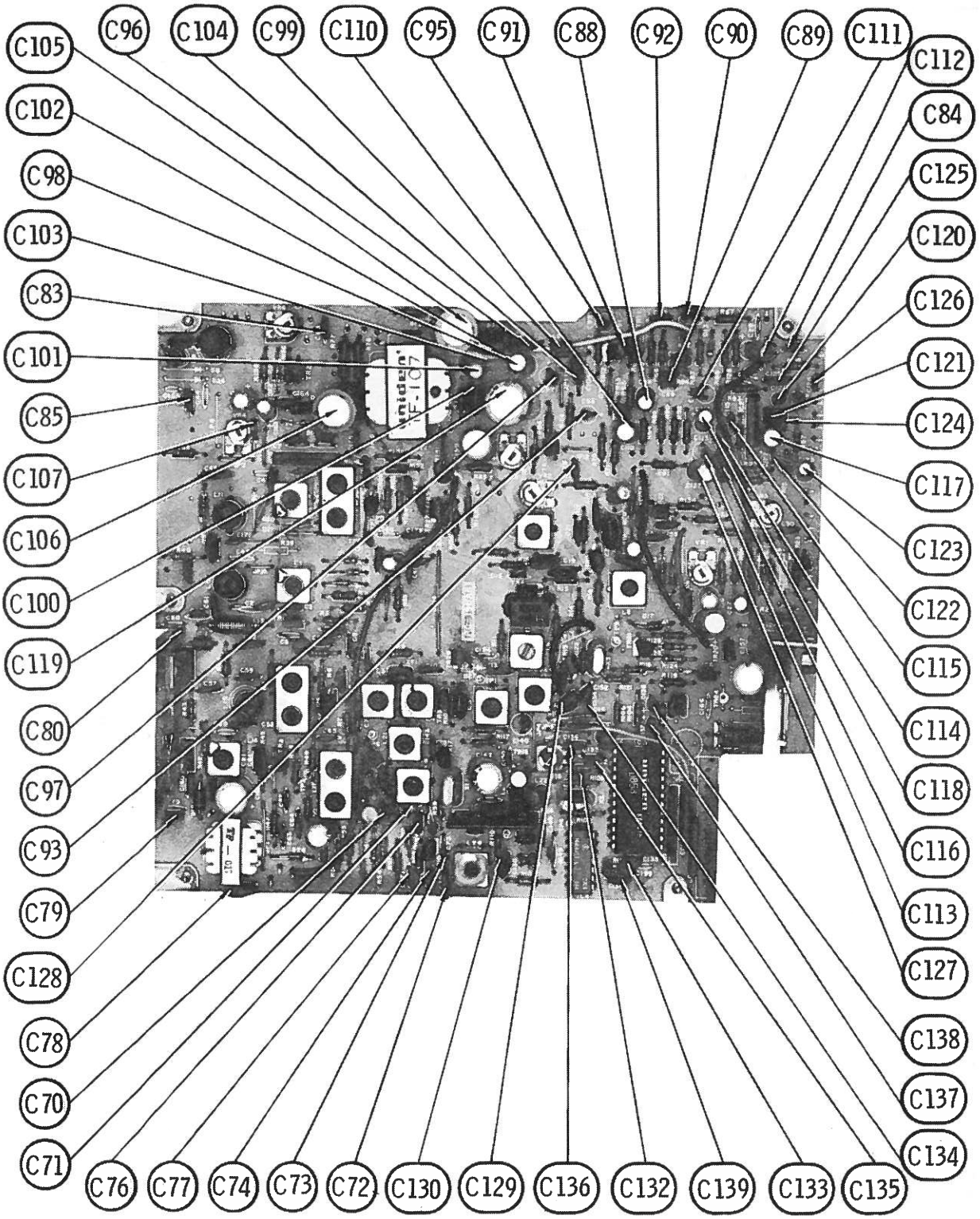

C164
C172
C174
C175
T1
C176
C178
C185
C159
C179
C173
C168
C163
C167
C165
C156
L9
XF2
C187
C155
C177
C151
C171
X3
L13
C158
C143
C157
C161
C147
C160
C146
C162
C152
T2
L19
X1
CC2
C150
CC1
C142
RR1
C145
C153
L23
L22
C141
C148
C149
C140
X2
C154

MAIN BOARD

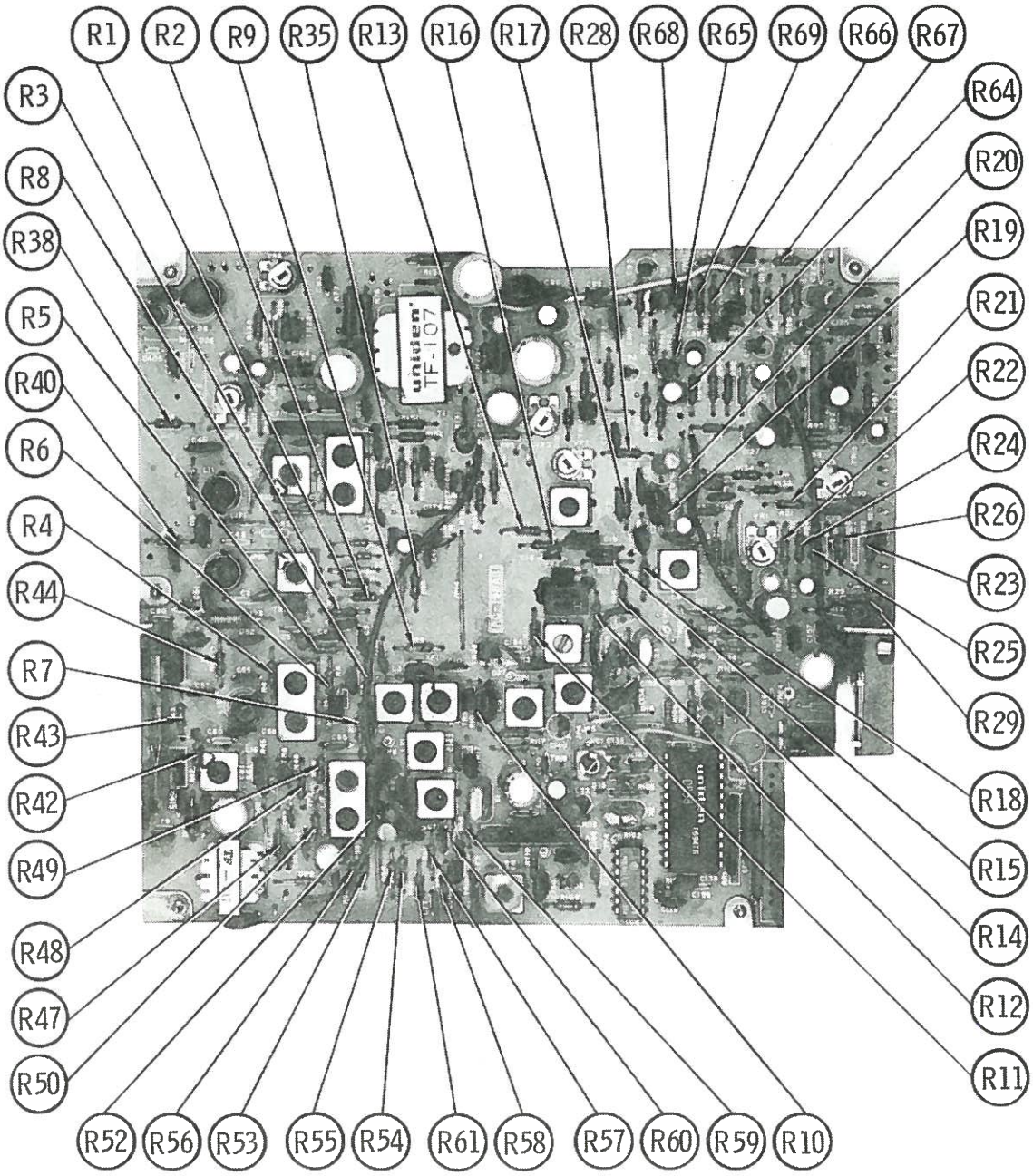

C43
C6
C4
C8
C9
C1
C42
C41
C34
C7
C45
C3
C2
C5
C50
C51
C53
C52
C59
C57
C58
C61
C65
C62
C63
C18
C21
C15
C14
C22
C25
C30
C29
C40
C27
C16
C26
C24
C23
C19
C20
C64
C49
C66
C67
C69
C68
C10
C12
C13
C11
TF-107

MAIN BOARD

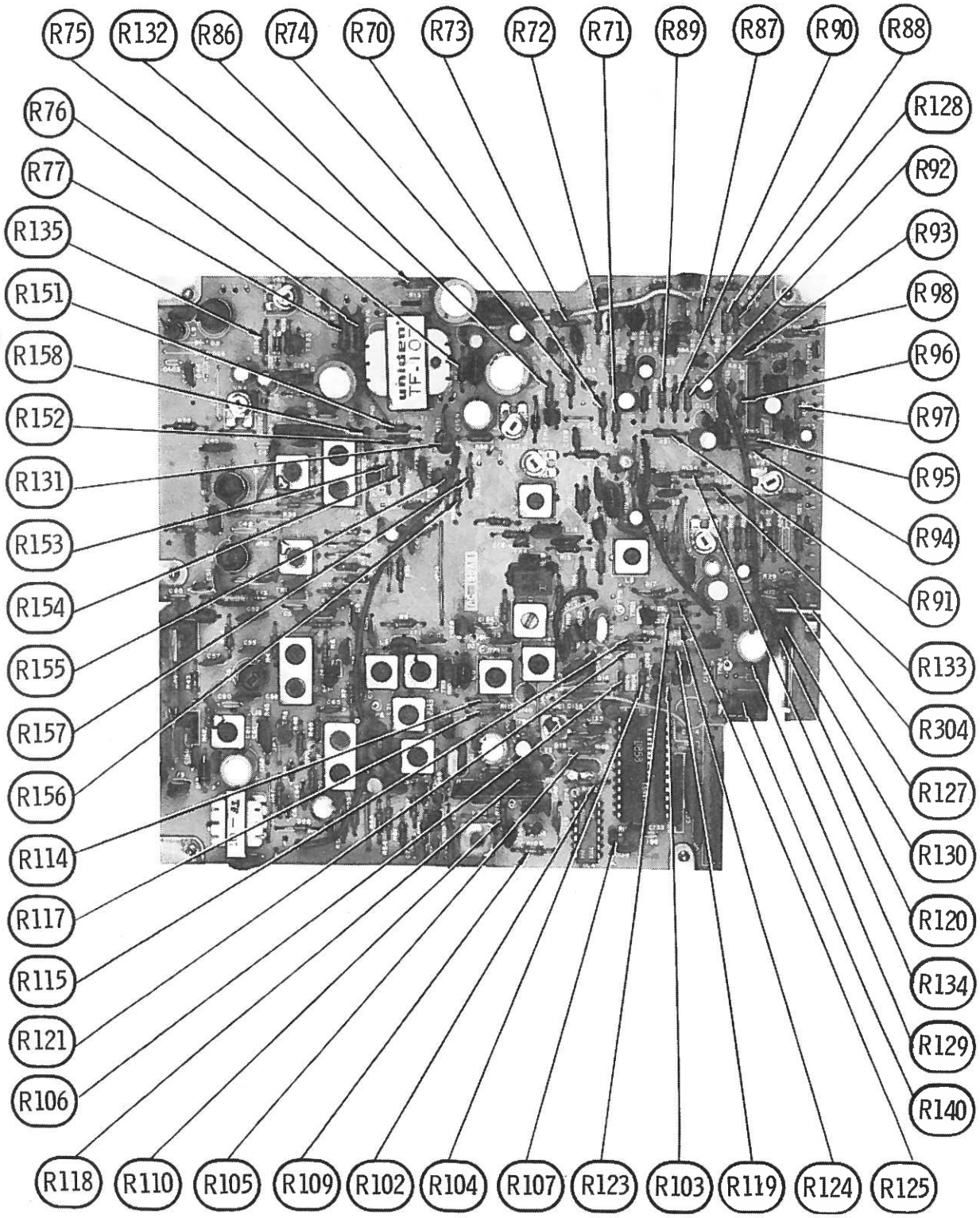
A Howard W. Sams CIRCUITRACE® Photo



MAIN BOARD

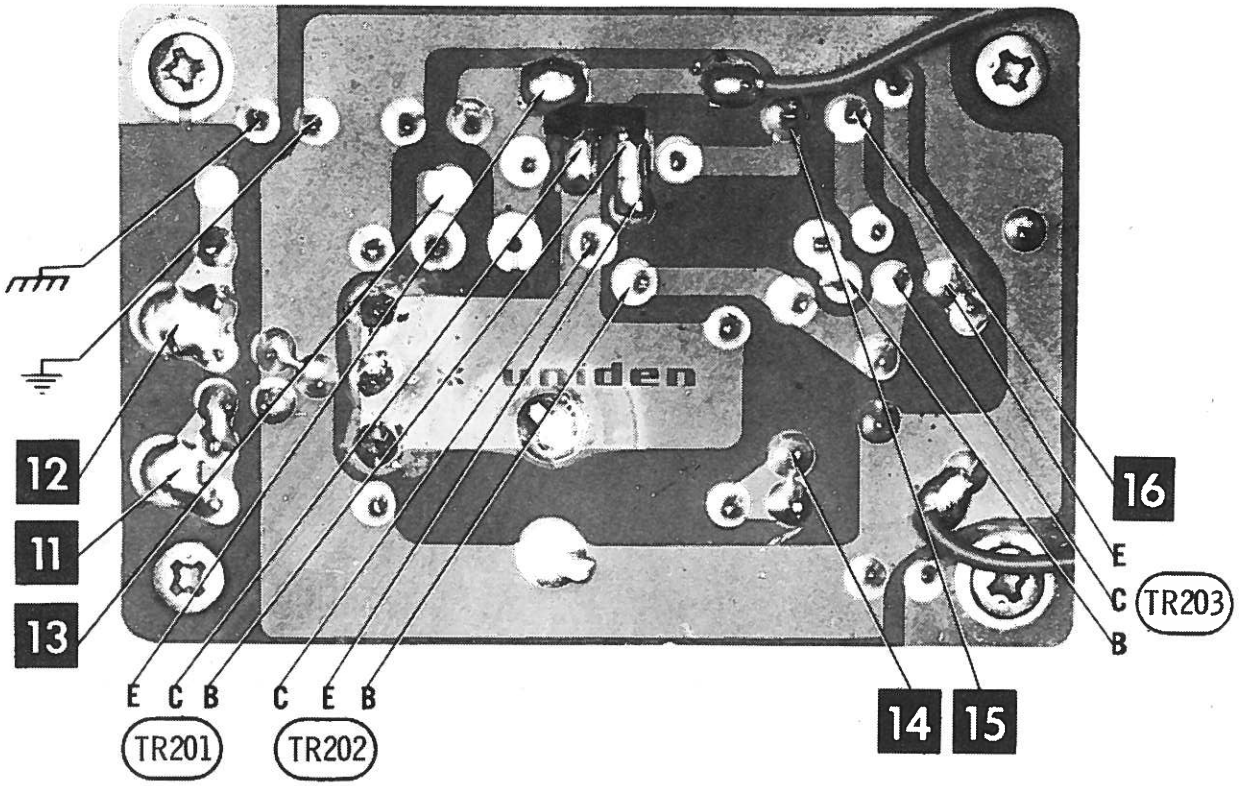

R1
R2
R9
R35
R13
R16
R17
R28
R68
R65
R69
R66
R67
R64
R20
R19
R21
R22
R24
R26
R23
R25
R29
R18
R15
R14
R12
R11
R10
R59
R60
R57
R58
R61
R54
R55
R53
R56
R52
R50
R47
R48
R49
R42
R43
R7
R44
R4
R6
R40
R5
R38
R8
R3
uniden
TF-107

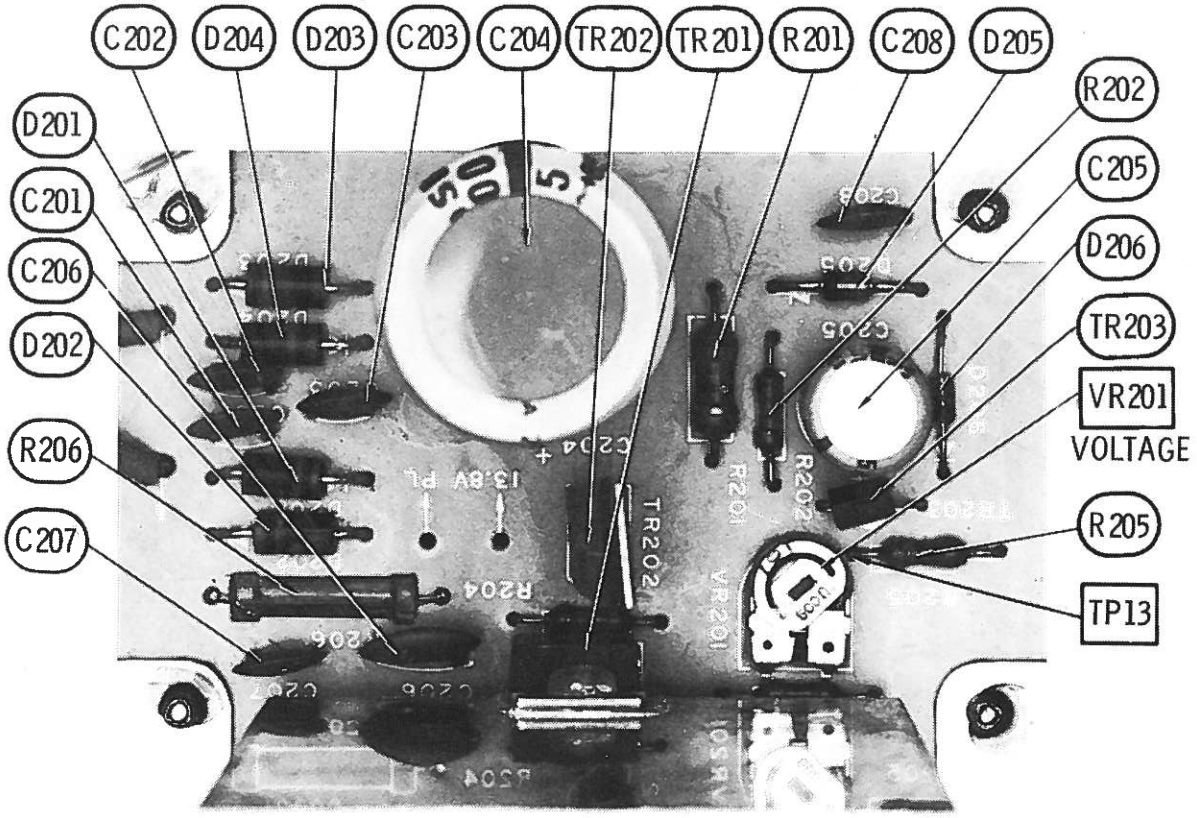
MAIN BOARD


R75
R132
R86
R74
R70
R73
R72
R71
R89
R87
R90
R88
R76
R77
R135
R151
R158
R152
R131
R153
R154
R155
R157
R156
R114
R117
R115
R121
R106
R118
R110
R105
R109
R102
R104
R107
R123
R103
R119
R124
R125
R128
R92
R93
R98
R96
R97
R95
R94
R91
R133
R304
R127
R130
R120
R134
R129
R140
unidenTF-10

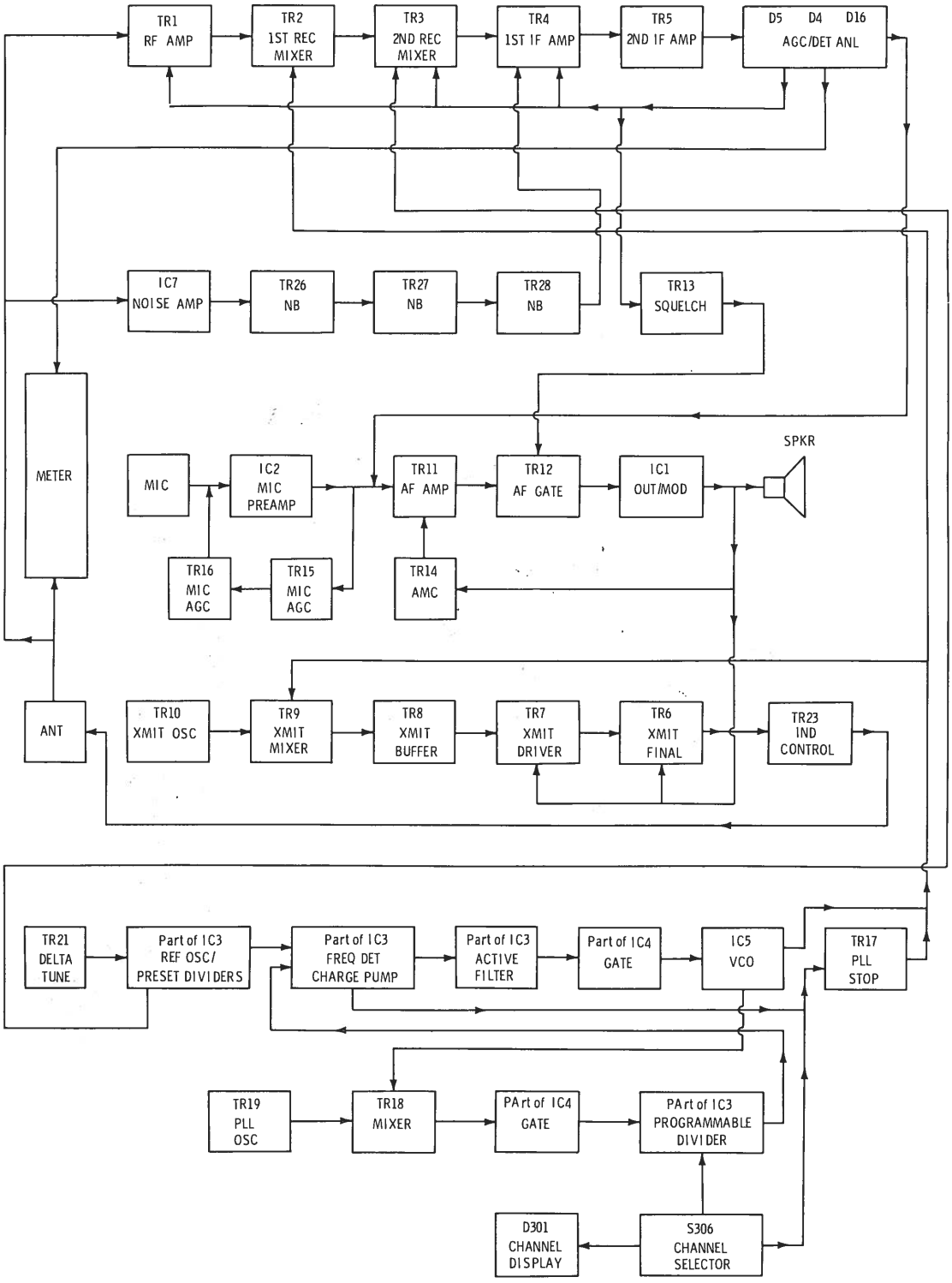
MAIN BOARD

A Howard W. Sams CIRCUITRACE® Photo

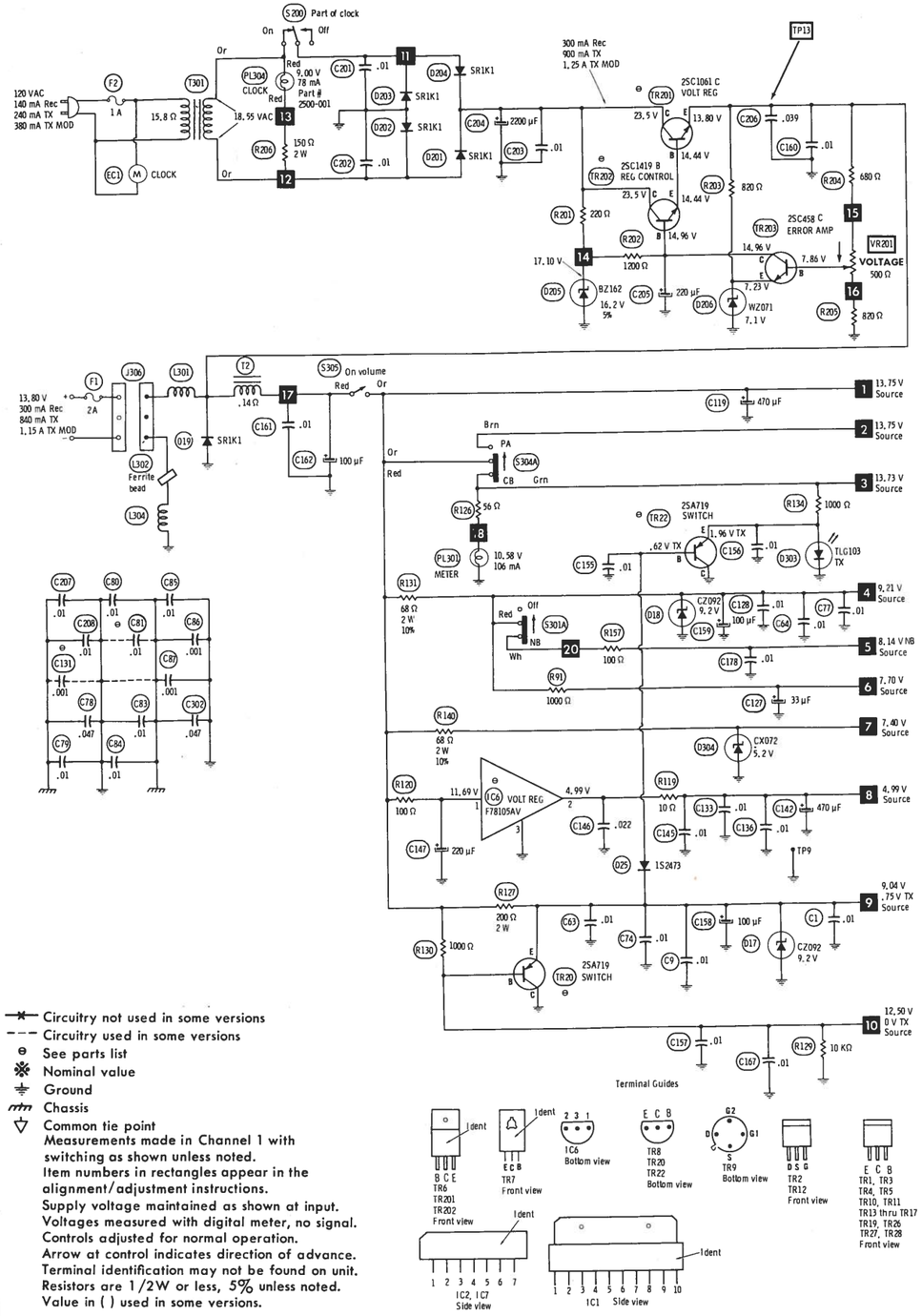




POWER SUPPLY BOARD

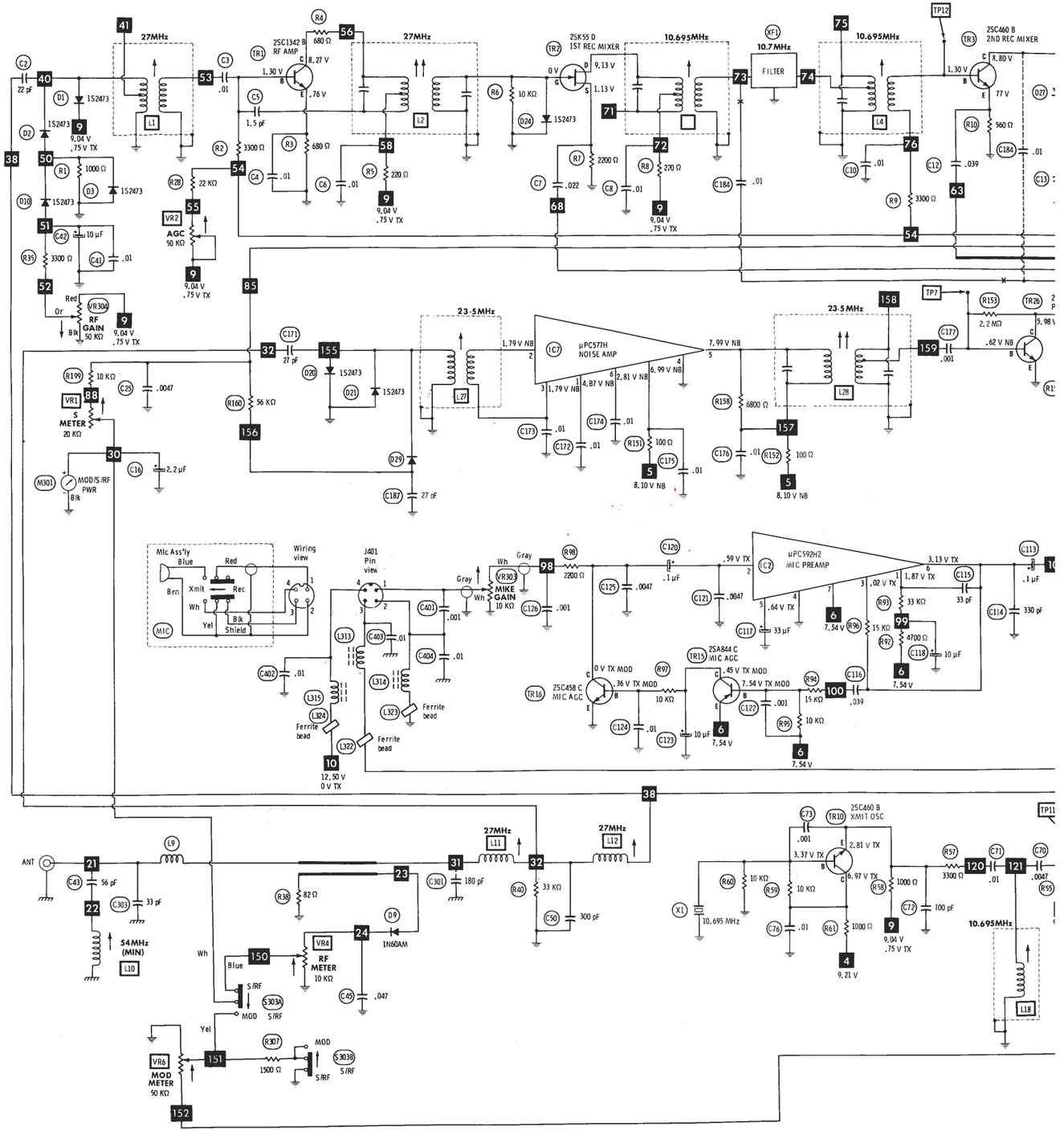


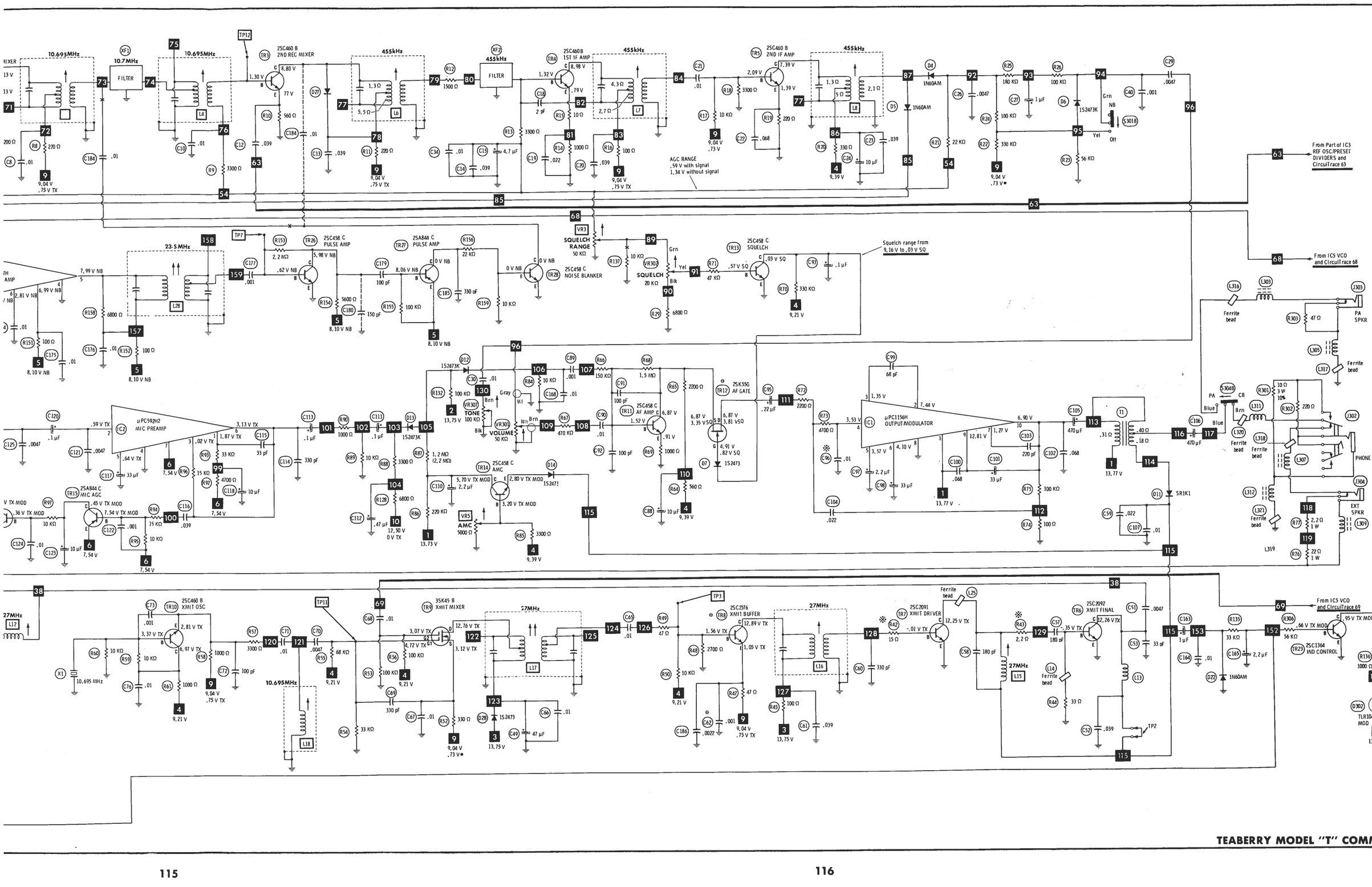
BLOCK DIAGRAM

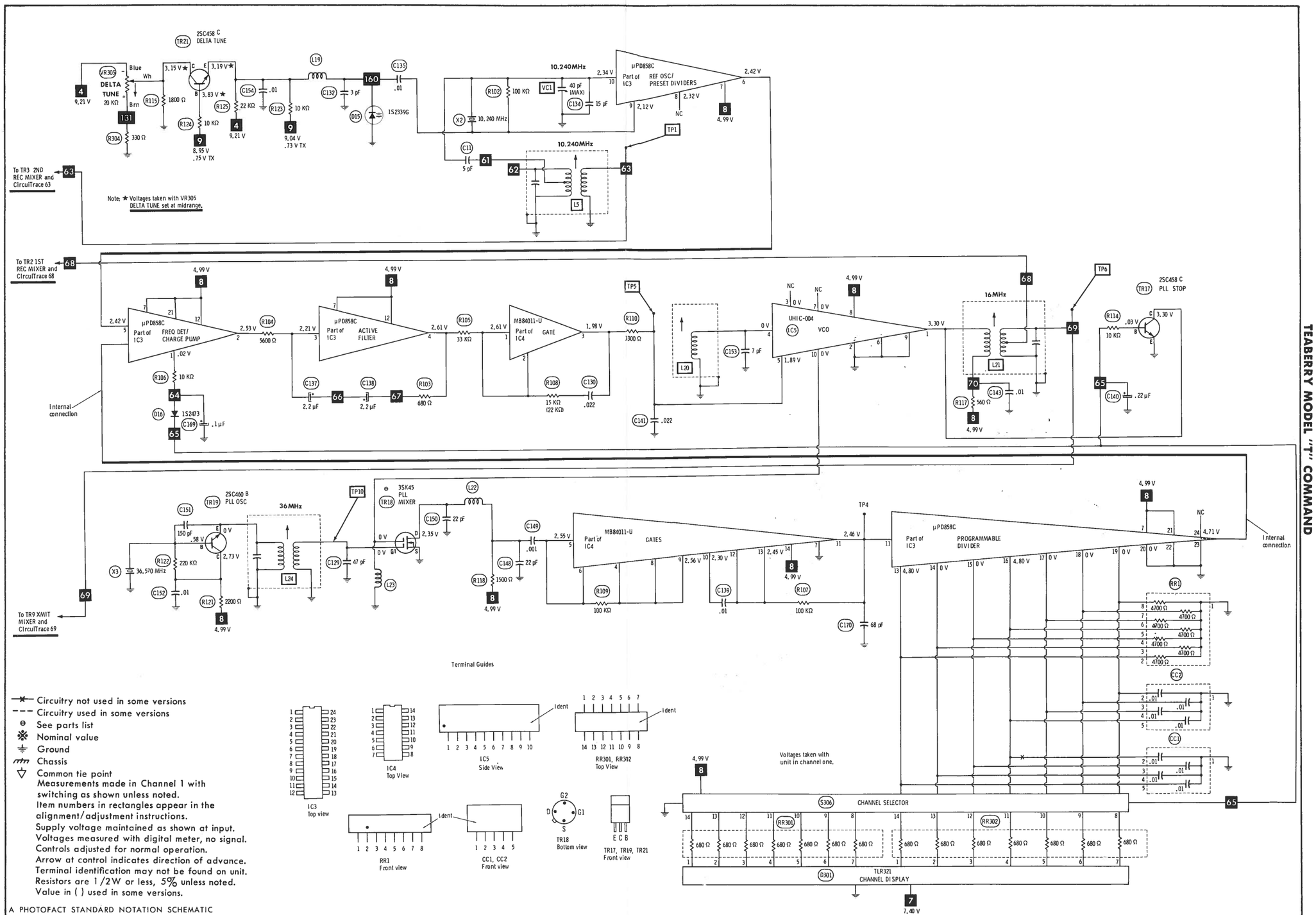


— Circuitry not used in some versions
– – – Circuitry used in some versions
⊖ See parts list
※ Nominal value
⏚ Ground
Chassis
▽ Common tie point
Measurements made in Channel 1 with switching as shown unless noted.
Item numbers in rectangles appear in the alignment/adjustment instructions.
Supply voltage 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 PHOTOFACT STANDARD NOTATION SCHEMATIC
WITH CIRCUITRACE®




10.695MHz
10.7MHz FILTER
10.695MHz
455kHz
455kHz FILTER
455kHz
455kHz
2SC460 B 2ND REC MIXER
2SC460B 1ST IF AMP
2SC460 B 2ND IF AMP
1N60AM
1N60AM
1S2473K
Grn NB
Yel Off
S301B
From Part of IC3 REF OSC/PRESET DIVIDERS and CircuiTrace 63
From IC5 VCO and CircuiTrace 68
AGC RANGE .59 V with signal 1.34 V without signal
SQUELCH RANGE 50 KΩ
SQUELCH 20 KΩ
2SC458 C SQUELCH
Squelch range from 9.16 V to .03 V SQ
23-5MHz
2SA844 C PULSE AMP
2SC458 C PULSE AMP
2SC458 C NOISE BLANKER
μPC592H2 MIC PREAMP
2SA844 C MIC AGC
μPC1156H OUTPUT MODULATOR
SR1K1
PA SPKR
PHONE
EXT SPKR
Ferrite bead
10.695MHz
27MHz
35K45 B XMIT MIXER
2SC460 B XMIT OSC
2SC2376 XMIT BUFFER
2SC2091 XMIT DRIVER
2SC2092 XMIT FINAL
2SC1364 IND CONTROL
TLR104 MOD
From IC5 VCO and CircuiTrace 69
TONE 100 KΩ
VOLUME 50 KΩ
AMC 5000 Ω
2SK55G AF GATE
2SC458 C AF AMP
2SC458 C AMC
1S2473
TP2
TEABERRY MODEL "T" COMMAND



- 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 PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE®

PARTS LIST AND DESCRIPTION

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

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFGR. PART No.	REPLACEMENT DATA									
			GENERAL ELECTRIC PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D1	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N414B	WEP925	
D2	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D3	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D4	1N60AM	DDAY001022	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D5	1N60AM	DDAY001022	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D6	1S2473K	DDAY048013	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D7	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D9	1N60AM	DDAY001022	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D10	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D11	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D12	1S2473K	DDAY048013	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D13	1S2473K	DDAY048013	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D14	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D15	1S2339G	DDAY030002	GE-90		HEPR2503			RT-262	ECG614		WEP200	ZEN-453
D16	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D17	CZ092	DDAY010006	GEZD-9.1	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D18	CZ092	DDAY010006	GEZD-9.1	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D19	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D20	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D21	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D22	1N60AM	DDAY001022	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D27	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D28	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D29	1S2473	DDAY048012	GE-514	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG519	1N4148	WEP925	
D201	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D202	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D203	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D204	SRIK-1	DDAY002001	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
D205	BZ-162	DDAY009007	GEZD-16	ZB16B		RE 122		RT-246	ECG5075A	1N4745A	WEP1160	
D206	WZ-071	DDAY008020	GEZD-7.5	ZM7.5B		RE 111		RT-239	ECG5015	1N4737A	WEP1416	
D304	CZ072	DDAY010007	GEZD-7.5	ZM7.5B		RE 111		RT-239	ECG5015	1N4737A	WEP1416	
IC1	UPC1156H	DDEY091001							ECG1194			
IC2	UPC592H2	DDEY097001					SK3469		ECG1195			
IC3	UPD858								ECG1198			
	UPD858C	DDEY055001							ECG1198			
IC4	MB840114	DDEY089001							ECG4011B			
IC5	UHIC004	DDEY087001							ECG1203			
IC6	78L05A					RE 387-IC	SK8462		ECG977			
	NJM78L05A	DDEY088001				RE 387-IC	SK3462		ECG977			
IC7	UPC577H	DDEY064001	GEIC-140			RE 341-M	SK3461		ECG1082	UPC577H	WEP939	
TR1	2SC1342B	DDBY287001	GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
	2SC1342		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
TR2	2SK55D	DDCY006001	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
	2SK55		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
TR3	2SC460B	DDBY277002	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
TR4	2SC460B	DDBY277002	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
TR5	2SC460B	DDBY277002	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
TR6	2SC2092	DDBY289001(12)	GE-337	PTC186		RE 203	SK3197	RT-146	ECG235	2SC1306	WEP785	
TR7	2SC2091	DDBY288001(13)	GE-270	PTC180		RE 209			ECG295		WEP913	
TR8	2SC2076C	DDBY270001	GE-210*	PTC121*	HEPS0015*	RE 13*	SK3122	RT-308	ECG295		WEP736	121-722
	2SC2076		GE-210*	PTC121*	HEPS0015*	RE 13*	SK3122	RT-308	ECG295		WEP736	121-722
TR9	3SK45B	DDCY104001	GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
	3SK45		GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
TR10	2SC460B	DDBY277002	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
TR11	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR12	JF1033G		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
	JF1033	DDCY202002	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312			ZEN-123
TR13	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR14	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR15	2SA844C	DDBY008001	GE-244*	PTC103*	HEPS0019*	RE 18*	SK3114	RT-126A*	ECG129*		WEP60*	
	2SA844		GE-244*	PTC103*	HEPS0019*	RE 18*	SK3114	RT-126A*	ECG129*		WEP60*	
TR16	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR17	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR18	3SK45		GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
	3SK45B-09	DDCY104003	GE-FET-4	PTC182	HEPF2007	RE 199	SK3065	RT-181	ECG222		WEP905	121-826
TR19	2SC360B	DDBY277002	GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
TR20	2SA673C	DDBY007002	GE-269	PTC103*	HEPS0026*	RE 197*	SK3114	RT-115*	ECG290		WEP911	121-774
	2SA673		GE-269	PTC103*	HEPS0026*	RE 197*	SK3114	RT-115*	ECG290		WEP911	121-774
TR21	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR22	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR23	2SC1364-6	DDBY233001	GE-210	PTC121*	HEPS0015*	RE 13*	SK3124	RT-308	ECG123A*	2SC1364	WEP736*	121-Z9000
	2SC1364		GE-210	PTC121*	HEPS0015*	RE 13*	SK3124	RT-308	ECG123A*	2SC1364	WEP736*	121-Z9000
TR26	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR27	2SA844C	DDBY008001	GE-244*	PTC103*	HEPS0019*	RE 18*	SK3114	RT-126A*	ECG129*		WEP60*	
	2SA844		GE-244*	PTC103*	HEPS0019*	RE 18*	SK3114	RT-126A*	ECG129*		WEP60*	
TR28	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
TR201	2SC1061C	DDBY290001	GE-66	PTC154	HEPS3061	RE 21	SK3054	RT-197	ECG152	2SC1061	WEP745	921-1009
	2SC1061		GE-66	PTC154	HEPS3061	RE 21	SK3054	RT-197	ECG152	2SC1061	WEP745	921-1009
TR202	2SC1419C	DDBY278002	GE-66	PTC167	HEPS5027	RE 21	SK3054	RT-197	ECG152		WEP745	
	2SC1419		GE-66	PTC167	HEPS5027	RE 21	SK3054	RT-197	ECG152		WEP745	
TR203	2SC458C	DDBY273001	GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114

* Lead Configuration may vary from original.

(12) 12 watts @ 3 amps.

(13) 5 watts @ 1 amps.

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFGR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C15	4.7 25V	CELZ514790	PC5-50	VTT4R7B50	QV1-27	EV-1319
C16	2.2 25V	CELZ512290	PC2-100	VTT2R2A50	QV1-19	EV-1517
C24	10 16V	CELZ311000	PC10-25	VTT10B25	QV1-41	EV-1222
C27	1 50V	CELZ811090	PC1-50	VTT1A50	QV1-11	EV-1615
C42	10 16V	CELZ311000	PC10-25	VTT10B25	QV1-41	EV-1222
C49	47 16V	CELZ314700	PC50-16	VTT47D16	QV1-73	EV-1226
C88	10 16V	CELZ311000	PC10-25	VTT10B25	QV1-41	EV-1222
C93	.1 10V	CAAZ111086		TDC104M050EL	QDT1-2	SD50-R109
C95	.22 10V	CAAZ112286		TDC224M050EL	QDT1-10	SD50-R229
C97	2.2 16V	CSEZ312296		TDC225M035FL		SD35-2R29
C98	33 16V	CELZ313300	PC30-25	VTT33D25	QV1-63	EV-1325
C101	33 16V	CELZ313300	PC30-25	VTT33D25	QV1-63	EV-1325
C105	470 16V	CELZ314710	PC500-16	VTT470K16	QV1-151	EV-1250
C106	470 16V	CELZ314710	PC500-16	VTT470K16	QV1-151	EV-1250
C110	2.2 16V	CELZ312290	PC2-100	VTT2R2A50	QV1-19	EV-1517
C111	.1 10V	CAAZ111086		TDC104M050EL	QDT1-2	SD50-R109
C112	.47 50V	CELZ814780	PC1-50	VTTR47A63	QV1-3	EV-1610
C113	.1 10V	CAAZ111086		TDC104M050EL	QDT1-2	SD50-R109
C117	33 16V	CELZ313300	PC30-25	VTT33D25	QV1-63	EV-1325
C118	10 16V	CELZ311000	PC10-25	VTT10B25	QV1-41	EV-1222
C119	470 16V	CELZ314710	PC500-16	VTT470K16	QV1-151	EV-1250
C120	.1 10V	CAAZ111086		TDC104M050EL	QDT1-2	SD50-R109
C123	10 16V	CELZ311000	PC10-25	VTT10B25	QV1-41	EV-1222
C127	33 16V	CELZ313300	PC30-25	VTT33D25	QV1-63	EV-1325
C137	2.2 16V	CSEZ312296		TDC225M035FL		SD35-2R29
C138	2.2 16V	CSEZ312296		TDC225M035FL		SD35-2R29
C140	.22 10V	CAAZ112286		TDC224M050EL	QDT1-10	SD50-R229
C142	470 6.3V	CELZ904710	PC500-16	VTT470K16	QV1-149	EV-1150
C147	220 16V	CELZ312210	PC250-25	VTT220H16	QV1-117	EV-1240
C158	100 10V	CELZ111010	PC100-10	VTT100E10	QV1-93	EV-1130
C159	100 16V	CELZ311010	PC100-16	VTT100F16	QV1-95	EV-1230
C162	100 25V	CELZ511010	PC100-25	VTT100G25	QV1-97	EV-1330
C163	1 50V	CELZ811090	PC1-50	VTT1A50	QV1-11	EV-1615
C165	2.2 50V	CELZ812290	PC2-100	VTT2R2A50	QE1-35*	TVA-1301*
C169	.1 10V	CAAZ111086		TDC104M050EL	QDT1-2	SD50-R109
C204	2200 25V	CELZ512220	WBR2000-25*	TC2520A*	QE1-645*	TV1213.5*
C205	220 16V	CELZ312210	PC250-25	VTT220H16	QV1-117	EV-1240

* Axial replacement for radial device.

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C1	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C2	22 N220 50V	CCRZ812204			*		10TCR-Q22
C3	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C4	.01 25V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C5	1.5 NPO 50V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C6	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C7	.022 25V		DC-203	MGP02	TA120	QC2-157	TG-S20
C8	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C9	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C10	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C11	5 50V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C12	.039 50V			DPMS6S39	PVC6139		6PS-S39
C13	.039 25V				GP140		5GA-S40
C14	.039 25V				GP140		5GA-S40
C18	2 N220 50V	CCRZ812091			*		
C19	.022 50V			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C20	.039 25V				GP140		5GA-S40
C21	.01 50V		DC-103	MGP01	TA110	QC2-141	TG-S10
C22	.068 50V			WMF1S68	EWF1A168	QF1-195	1PB-S68
C23	.039 25V				GP140		5GA-S40
C25	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C26	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C29	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C30	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C34	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C40	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C41	.01 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C43	56 N220 50V	CCRZ815604			*		10TCR-Q56
C45	.047 25V		DC-503	MGP05	TA150	QC2-207	TG-S50
C50	300 50V		DD-301	GP300	GP330		10TS-T30
C51	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C52	.039 25V				GP140		5GA-S40
C53	33 50V		DTZ-33	NP033	CN0433		10TCC-Q33
C57	180 50V		DD-181		GP318		10TS-T18
C58	180 50V		DD-181		GP318		10TS-T18
C59	.022 25V		DC-203	MGP02	TA120	QC2-157	TG-S20
C61	.039 25V				GP140		5GA-S40
C62	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C63	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C64	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C65	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C66	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C67	.01 50V						
C68	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C69	330 N220 50V	CCRZ813304			*		10TCR-T33
C70	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C71	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C72	100 N220 50V	CCRZ811014			*		10TCR-T10
C73	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C74	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C76	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS (cont)

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
						Q-LINE	GENERAL LINE
C77	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C78	.047 25V		DC-503	MGP05	TA150	QC2-207	TG-S50
C79	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C80	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C81	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C83	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C84	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C85	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C86	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C87	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C89	.001 50V			DPMS6D1	EWF1A210	QF1-1	1PB-D10
C90	.01 50V			WMF1S1	EWF1A110	QF1-91	1PB-S10
C91	100 50V		DD-101	GP100	GP310		10TS-T10
C92	100 50V		DD-101	GP100	GP310		10TS-T10
C96	.01 50V			WMF1S1	EWF1A110	QF1-91	1PB-S10
C99	68 50V		DD-680	GP68	GP468		10TS-Q68
C100	.068 50V			WMF1S68	EWF1A168	QF1-195	1PB-S68
C102	.068 50V			WMF1S68	EWF1A168	QF1-195	1PB-S68
C103	220 50V		DD-221		GP322		10TS-T22
C104	.022 50V			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C107	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C114	330 50V		DD-331	GP330	GP333		10TS-T33
C115	33 NPO 50V				CN0439		10TCC-Q39
C116	.039 50V			DPMS6S39	PVC6139		6PS-S39
C121	.0047 50V			WMF1D47	EWF1A247	QF1-57	1PB-D47
C122	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C124	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C125	.0047 25V		DD-472	GP4700	GP247		5GA-D47
C126	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C128	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C129	47 N220 50V	CCRZ814704			*		10TCR-Q47
C130	.022 50V			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C131	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C132	3 N220 50V	CCRZ813091			*		10TCR-V30
C133	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C134	15 N220 50V	CCRZ811504			*		10TCR-Q15
C135	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C136	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C139	.01 25V		DC-103	MGP01	TA110	QU2-141	TG-S10
C141	.022 50V			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C143	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C145	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C146	.022 50V			DPMS2S22	EWF1A122	QF1-127	1PB-S22
C148	22 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C149	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C150	22 50V		DTZ-22	NP022	CN0422		10TCC-Q22
C151	150 50V		DD-151		GP315		10TS-T15
C152	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C153	7 N220 50V	CCRZ817091			*		10TCR-V68
C154	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C155	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C156	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C157	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C160	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C161	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C164	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C167	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C168	.01 50V			WMF1S1	EWF1A110	QF1-91	1PB-S10
C170	68 50V		DD-680	GP68	GP468		10TS-Q68
C171	27 N220 50V	CCRZ812704			*		10TCR-Q27
C172	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C173	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C174	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C175	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C176	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C177	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C178	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C179	100 50V		DD-101	GP100	GP310		10TS-T10
C180	150 50V		DD-181		GP318		10TS-T18
C184	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C185	330 50V		DD-331	GP330	GP333		10TS-T33
C186	.0022 25V		DD-222		GP222	QC2-97	5GA-D22
C187	27 NPO 50V				CN0427		10TCC-Q27
C201	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C202	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C203	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C206	.039 25V				GP140		5GA-S40
C207	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C208	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C301	180 50V		DD-181		GP318		10TS-T18
C302	.047 25V		DC-503	MGP05	TA150	QC2-207	TG-S50
C303	33 50V		DTZ-33	NP033	CN0433		10TCC-Q33
C401	.001 25V		DD-102G	GP1000	GP210	QC2-81	5GA-D10
C402	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C403	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
C404	.01 25V		DC-103	MGP01	TA110	QC2-141	TG-S10
CC1		HHAY003001(1)					
CC2		HHAY003001(1)					
VC1	40 50V	CCVY024005					

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

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	RESIST-ANCE	REPLACEMENT DATA			
			MFGR. PART No.	CENTRALAB PART No.	MALLORY PART No.	TRW PART No.
VR1	S Meter	20K	RRVY135008			U260R253B
VR2	AGC	50K	RRVY135010			U260R503B
VR3	Squelch Range	20K	RRVY135008			U260R253B
VR4	RF Meter	10K	RRVY135007			U260R103B
VR5	AMC	5000	RRVY135006			U260R502B
VR6	Mod Meter	50K	RRVY135010			U260R503B
VR201	Voltage	5000	RRVY135003			U260R501B
VR301	Volume/Switch	50K	RRVY197001 RV-197(5)			
VR302	Squelch	20K	RRVY049001 RV-049(5)			
VR303	Mike Gain	10K	RRVY055001 RV-055(5)			
VR304	RF Gain	50K	RRVY071001 RV-071(5)			
VR305	Delta Tune	20K	RRVY064001 RV-064(5)			
VR307	Tone	100K	RRVY048001 RV-048(5)			

(5) Number on unit.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
RR1	Resistor ARREY		HHAY006001(1)
RR301	Resistor ARREY		HHAY008001(2)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
RR302	Resistor ARREY		HHAY008001(2)

(1) Consists of seven 4700 ohm resistors
(2) Consists of seven 680 ohm resistors

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Rec Ant (27MHz)	LLAY029001	LA-029	CBS740-T	
L2	Rec RF (27MHz)	LLAY194001	LA-194		
L3	IF (10.695MHz)	LLAY180001	LA-180	CBS715-TC	
L4	IF (10.695MHz)	LLAY181001	LA-181		
L5	Rec OSC (10.240MHz)	LLAY182001	LA-182		
L6	IF (455kHz)	LLAY163001	LA-163		
L7	IF (455kHz)	LLAY183001	LA-183		
L8	IF (455kHz)	LLAY184001	LA-184		
L9	RF Choke	LLDY073001	LD-073		
L10	TVI Trap (54MHz)	LLCY017001	LC-017	CB303	
L11	Pi Filter (27MHz)	LLCY119001	LC-119		
L12	Final (27MHz)	LLCY018001	LC-018	CB304	
L13	RF Choke	LLDY012001	LD-012	4588	
L15	XMT Driver (27MHz)	LLCY017001	LC-017	CB303	
L16	XMT Buffer (27MHz)	LLAY189001	LA-189		
L17	XMT Mixer (27MHz)	LLAY185001	LA-185		
L18	XMT OSC (10.695MHz)	LLAY193001	LA-193		
L19	RF Choke (33uH)	LLZY001007	LZ-001		
L20	VCO (37.8MHz)	LLAY187001	LA-187		
L21	VCO (37.8MHz)	LLAY188001	LA-188		
L22	RF Choke (100uH)	LLZY001013	LZ-001		
L23	RF Choke (1.5uH)	LLZY002003	LZ-002		
L24	PLL OSC (36MHz)	LLAY186001	LA-186		
L27	Noise Amp (23.5MHz)	LLAY029001	LA-029	CBS740-T	
L28	Noise Amp (23.5MHz)	LLAY155001	LA-155		
L301	RF Choke	LLDY012001	LD-012	4588	
L303	RF Choke	LLDY046001	LD-046		
L304	RF Choke	LLDY012001	LD-012	4588	
L305	RF Choke	LLDY046001	LD-046		
L307	RF Choke	LLDY046001	LD-046		
L309	RF Choke	LLDY046001	LD-046		
L311	RF Choke	LLDY046001	LD-046		
L312	RF Choke	LLDY046001	LD-046		
L313	RF Choke	LLDY046001	LD-046		
L314	RF Choke	LLDY046001	LD-046		
L315	RF Choke	LLDY046001	LD-046		

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	1.25A	114	1mH	TTFY017001 TF017(1)	TR507		(1) Number on unit

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	8	8	TTFY107001 TF107(1)			(1) Number on unit

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T301	120V AC @ 380mA AC	19.0V AC @ 1.25A AC	TTFY103001 TF103(1)			(1) Number on unit

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP301	3 5/8" PM 8 ohms	ASPY029001	3A05Z8	

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	ZFSY001005	WZDZ070088	AGC2	HDJ	312002	150145	FG2-2
F2	1 amp	ZFSY001003	ZFHY009001	AGC1	HKP	312001	341001AL	FG1-2

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	AMKY041001	18-032	18-034	18-010	18-092	1	2	4	3	NC	2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
D301	LED	DDAY078001	Channel Display TLR321 (1.95V @ 5.7mA)
D302	LED	DDAY007001	Mod TLR104 (1.97V @ 10mA)
D303	LED	DDAY032001	TX TLG103 (1.91V @ 10mA)
EC1	Clock	ZCKY007001	Digital
FC1	Cable	WWFY007127	Flat (Switch Connector)
J301	Jack	JJKY068001	Antenna
J302	Jack	JJKY005002	Phone
J303	Jack	JJKY010001	PA
J304	Jack	JJKY010001	Ext Sp
J306	Jack	JJKY052001	DC Power
J401	Jack	JJKY058001	Microphone
L14	Ferrite Bead	LLDY075001	
L25	Ferrite Bead	LLDY075001	
L302	Ferrite Bead	ZYYY043001	
L316 Thru L324	Ferrite Bead	LLDY077001	
M301	Meter	ZMTY092001	S/RF/MOD
PL301	Lamp	VPLY065005	Meter (11.30V @ 40mA)
PL304	Lamp		Clock (9.00V @ 78mA)
S200	Switch		Automatic (Part of clock)
S301	Switch	SSWY093001	NB
S303	Switch	SSWY093001	Mod-S/RF
S304	Switch	SSWY093001	CB/PA
S305	Switch		Power (Part of Volume Control)
S306	Switch	SSRY155001	Channel Selector
X1	Crystal	QQXY078001	10.695MHz
X2	Crystal	QQXY077001	10.240MHz
X3	Crystal	QQXY079001	36.570MHz
XF1	Crystal Filter	FFLY048001	10.7MHz
XF2	Crystal Filter	FFLY050001	453kHz
	PC Board	PPCY198011	Main (PC-198AB)
	PC Board	PPCY191011	Power Supply (PC-191AA)
	PC Board	PPCY217011	Selector Switch - LED (PC-217AA)
	PC Board	PPCY181011	Microphone - Input (PC-181AA)

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

ITEM	PART No.
Cabinet Top	MDBP204583
Cabinet Bottom	MDBP204592
Mic Hanger	MDBP402919
Escutcheon	MDMP104577
Knob, Channel	MDMP404296

ITEM	PART No.
Knob, Control	MDMP402825
Knob, Push	MDMP404319
Knob, Clock (Alarm Set)	MDMP404586
Knob, Clock (Sleep)	MDMP404584
Knob, Clock (Select)	MDMP404585

WIRING DATA

General-use Hook-up Wire (available in 5 colors) BELDEN No. 8523
Shielded Hook-up Wire (spiral wrapped) . . . . . BELDEN No. 8421
(braided) . . . . . BELDEN No. 8401
Speaker Cable (available in 4 colors) . . . . . BELDEN No. 8782
Bonding Strap . . . . . BELDEN No. 8672
AC Power Cord . . . . . (6') BELDEN No. 17106
(9') BELDEN No. 17109

Coiled Microphone Cable
3-conductor (1 shielded) 23AWG BELDEN No. 9471 (5')
BELDEN No. 8497 (6')
BELDEN No. 9472 (7-1/2')
28AWG BELDEN No. 9466 (6')
31AWG BELDEN No. 9468 (10')
4-conductor (unshielded) 23AWG BELDEN No. 8415 (6')
5-conductor (1 shielded) 28AWG BELDEN No. 9467 (6')
BELDEN No. 9465 (7-1/2')