

PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

NOTE

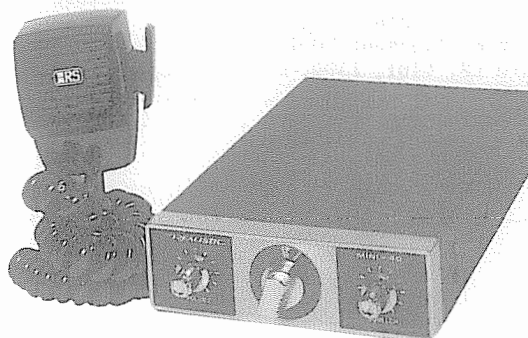
Repair or adjustment of transmitter circuits must be under supervision of a person with first-or second-class radiotelephone license.

(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 TRC-466 (21-1526)

MANUFACTURER'S SPECIFICATIONS

TRANSMITTER SPECIFICATIONS

Description	Nominal	Limit
RF power output	4.0 watts	3 – 4 watts
Emission	8A3	
Modulation Capabilities	+90%, –100%	
AMC Range at 1 kHz	40 dB	> 30 dB
Frequency accuracy	0.002%	0.005%
Spurious radiation & Harmonic		
signal radiation ratio from fundamental	–65 dB	–60 dB
Current consumption		
unmodulated	1200 mA	1800 mA
max. modulated	1800 mA	2000 mA
Envelope distortion	10% max. 1000 Hz, 50% mod.	
Hum and Noise level	40 dB min. below max. mod.	
Stability against variation of antenna impedance	Satisfactory when dummy antenna is varied from 40 ohms to 200 ohms.	

RECEIVER SPECIFICATIONS

Description	Nominal	Limit
Intermediate frequency		
1st IF	10.695 MHz	
2nd IF	455 kHz	
Sensitivity for 500 mW output	0.25 μ V	0.5 μ V
Sensitivity at 10 dB S + N/N	0.5 μ V	1.4 μ V
Adjacent Channel Rejection	80 dB	60 dB
Image Rejection (5.7 MHz)	50 dB	> 40 dB
Bandwidth (–6 dB)	7.6 kHz	5 – 9 kHz
Signal-to-Noise ratio		
at 1 mV input	40 dB	35 dB
Distortion at 5 mV input	2.5%	< 6%
AGC Figure of merit at 50 mV input	105 dB	> 90 dB
Power output at 500 μ V Input		
Undistorted (10% THD)	3.5 W	> 3.0 W
Maximum	5.0 W	> 4.0 W
Electrical fidelity compared to 1000 Hz		
400 Hz	–6 dB	–6 $\pm$ 5 dB
2000 Hz	–6 dB	–6 $\pm$ 5 dB
Cross Modulation	50 dB	> 46 dB
Squelch	Adjustable from 0.5 μ V to 1 mV	
Current consumption (no signal)	300 mA	< 450 mA

Courtesy of the Manufacturer

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

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REALISTIC MODEL TRC-466

ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment.
 Maintain line voltage at 120V AC. Allow a 15-minute warm-up period.
 Adjustments made with 13.8-volt DC input.
 Connect low sides of test equipment to ground unless specified otherwise.
 Connect 50-ohm dummy load or antenna before keying transmitter.
 Connect microphone

Suggested Alignment Tools: G.C. ELECTRONICS
 L1 thru L8, L101, L109, L110, L111, T101, T102 . . 9440
 T103 thru T106 5009, 8728-A, 8728
 L102, L104, L106 9091, 8728-A, 8728

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP1.	Ch. 19	CT1	Adjust for 10.240MHz +50Hz.
Input of oscilloscope to TP1.	Ch. 19	L1	Adjust for maximum RF.
Input of oscilloscope to TP14. (Q103, Q104 Emitter)	Ch. 19	L111	Adjust for maximum RF.
Input of DC meter to TP10. (IC1, Pin 19)	Ch. 1	L3	Adjust for 1.4 volts.
Input of oscilloscope to TP11 (IC1, Pin 13).	Ch. 19	L2	Adjust for symmetrical square wave.
Input of oscilloscope to TP2.	Ch. 19	L4,L6	Adjust for maximum output.
Input of frequency counter to TP2.	Ch. 1		Check for 16.270MHz. Check all channels. (See Truth Chart for correct frequencies)
Input of frequency counter to TP12 (Q10, source)	Ch. 19, XMT	CT2	Adjust for 10.695MHz.
Input of oscilloscope to TP13 (IC2 Pin 5).	Ch. 19, XMT	L5	Adjust for maximum RF.
Input of frequency counter to antenna jack.	Ch. 19, XMT	CT2	Check for 27.185MHz. If necessary readjust CT2 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.
Squelch MINIMUM

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP14 (Q103, Q104, Emitter). 455kHz, 1000Hz @ 30% modulation.	Ch. 19	T106, T105, T104	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19	T103, T102, T101, L110	Adjust for maximum output. If necessary readjust T104, T105, and T106.

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 0.125uV	Ch. 19 Squelch MINIMUM	VR1	IF GAIN Adjust for 2 volts audio.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 500uV	Ch. 19 Squelch Maximum	VR4	SQUELCH RANGE Adjust so that squelch just breaks.

REALISTIC MODEL TRC-466

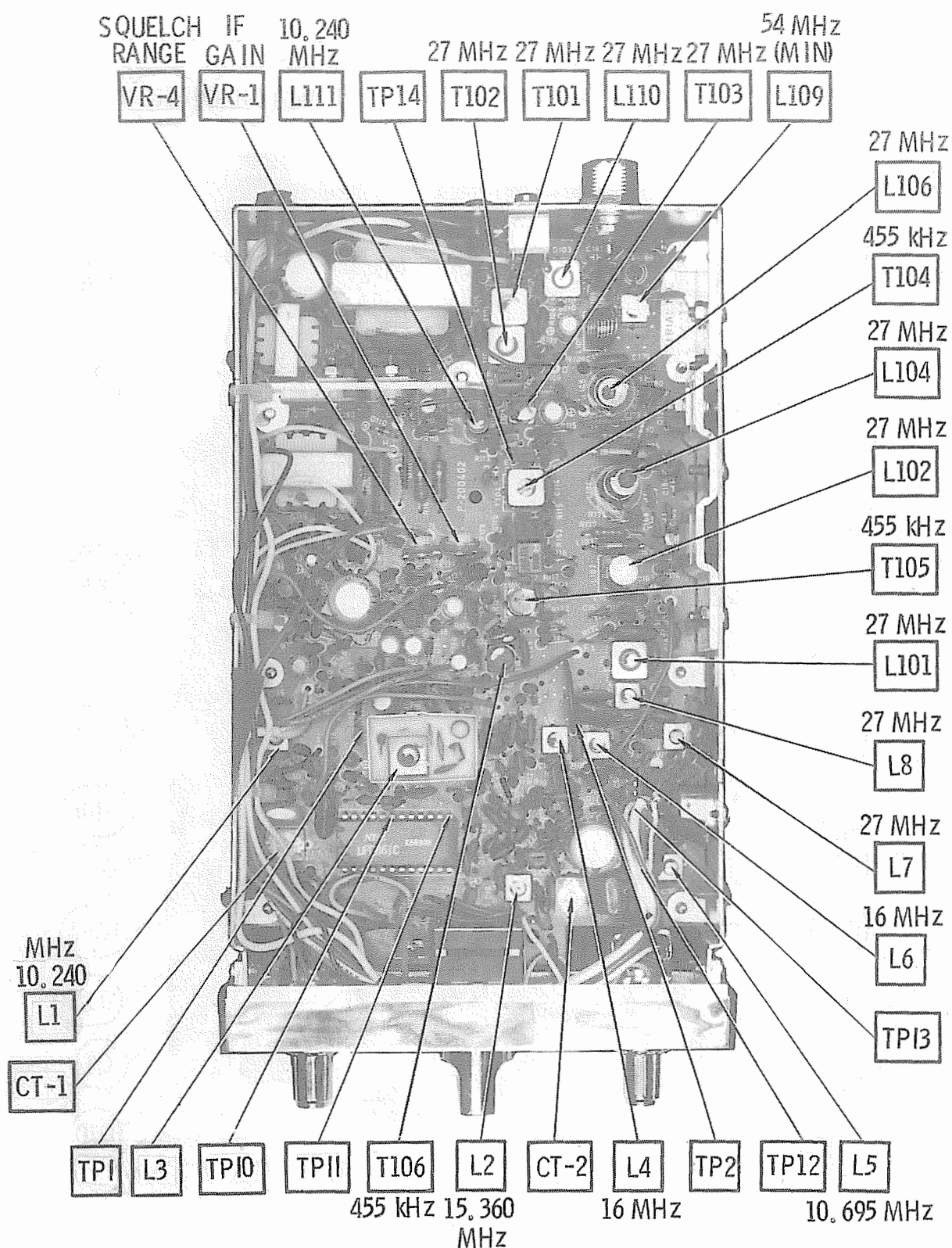
TRANSMITTER ALIGNMENT

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.

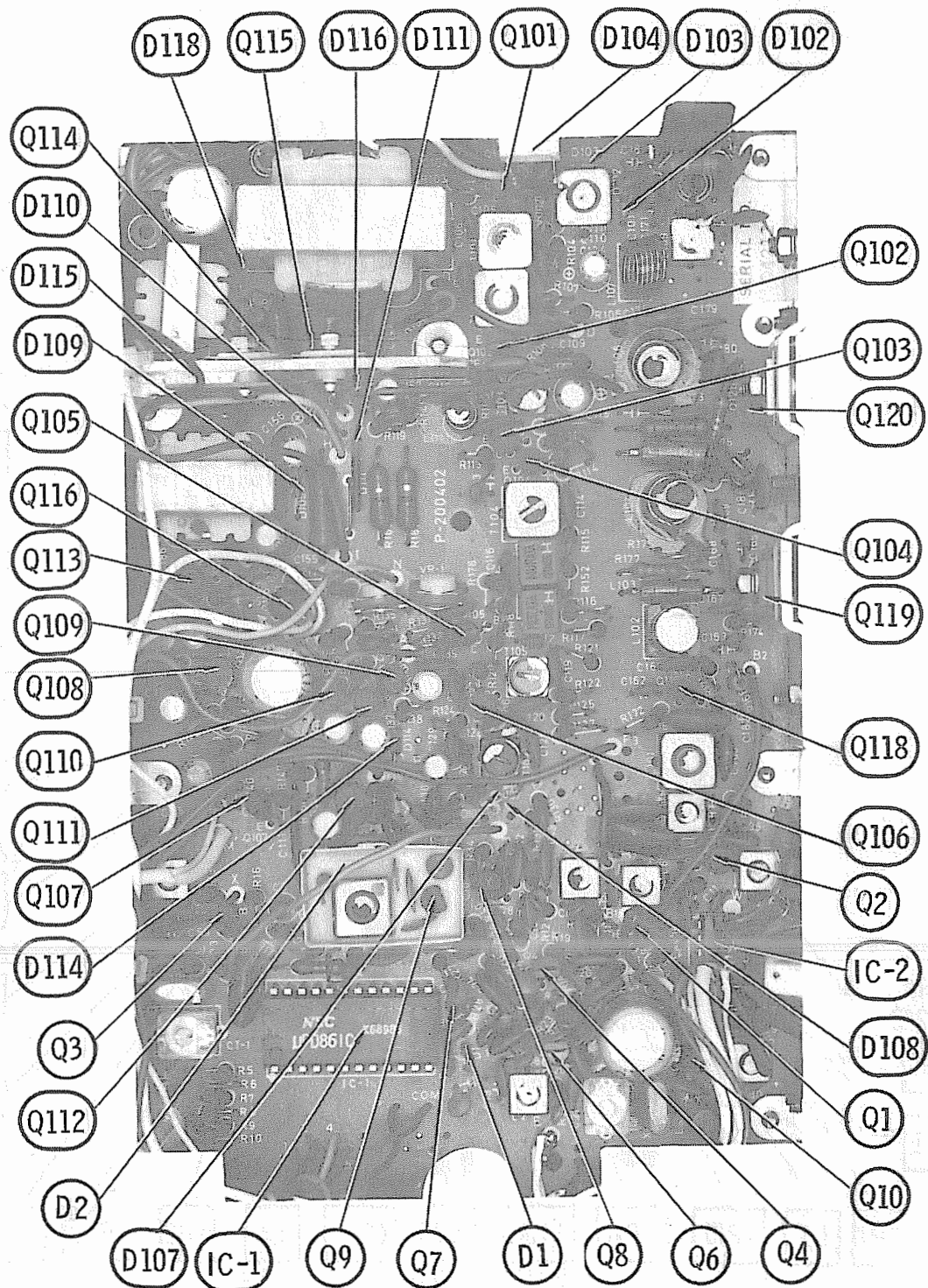
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of Spectrum analyzer or Harmonic meter to antenna jack.	Ch. 19	L7, L8, L101, L102, L104, L106	Adjust for maximum.
	Ch. 19	L104	Adjust for 4 watts maximum.
	Ch. 19	L109	Adjust for MINIMUM at 54MHz.

TRUTH CHART

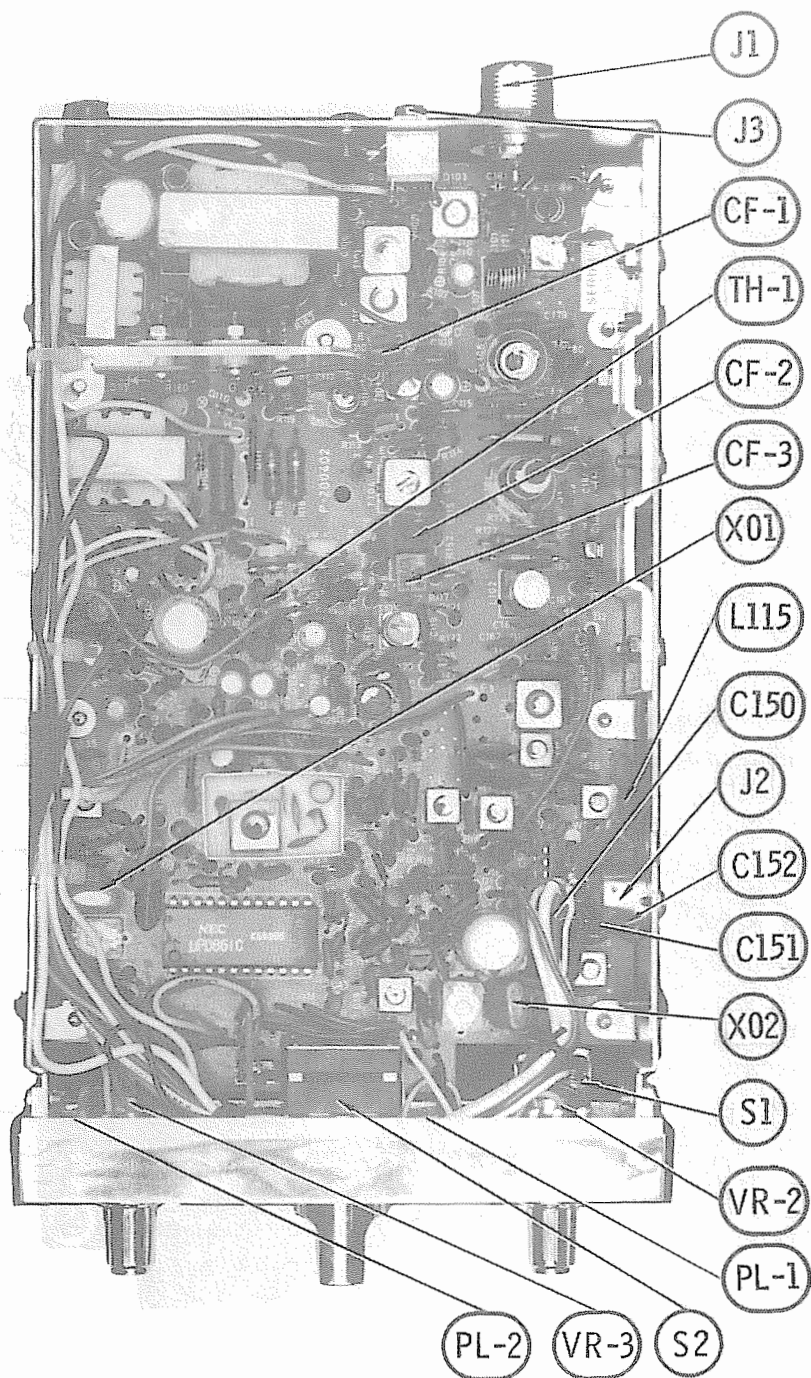
C H A N N E L	1 = 5.18 Volts 0 = 0 Volts IC1 PROGRAM DIVIDER							REC & XMT VCO OUTPUT IN MHz AT TP2			
	PINS										
			6	5	4	3	2				1
1			0	0	0	0	0	1	16.270		
2			0	0	0	0	1	0	16.280		
3			0	0	0	0	1	1	16.290		
4			0	0	0	1	0	0	16.310		
5			0	0	0	1	0	1	16.320		
6			0	0	0	1	1	0	16.330		
7			0	0	0	1	1	1	16.340		
8			0	0	1	0	0	0	16.360		
9			0	0	1	0	0	1	16.370		
10			0	1	0	0	0	0	16.380		
11			0	1	0	0	0	1	16.390		
12			0	1	0	0	1	0	16.410		
13			0	1	0	0	1	1	16.420		
14			0	1	0	1	0	0	16.430		
15			0	1	0	1	0	1	16.440		
16			0	1	0	1	1	0	16.460		
17			0	1	0	1	1	1	16.470		
18			0	1	1	0	0	0	16.480		
19			0	1	1	0	0	1	16.490		
20			1	0	0	0	0	0	16.510		
21			1	0	0	0	0	1	16.520		
22			1	0	0	0	1	0	16.530		
23			1	0	0	0	1	1	16.560		
24			1	0	0	1	0	0	16.540		
25			1	0	0	1	0	1	16.550		
26			1	0	0	1	1	0	16.570		
27			1	0	0	1	1	1	16.580		
28			1	0	1	0	0	0	16.590		
29			1	0	1	0	0	1	16.600		
30			1	1	0	0	0	0	16.610		
31			1	1	0	0	0	1	16.620		
32			1	1	0	0	1	0	16.630		
33			1	1	0	0	1	1	16.640		
34			1	1	0	1	0	0	16.650		
35			1	1	0	1	0	1	16.660		
36			1	1	0	1	1	0	16.670		
37			1	1	0	1	1	1	16.680		
38			1	1	1	0	0	0	16.690		
39			1	1	1	0	0	1	16.700		
40			0	0	0	0	0	0	16.710		



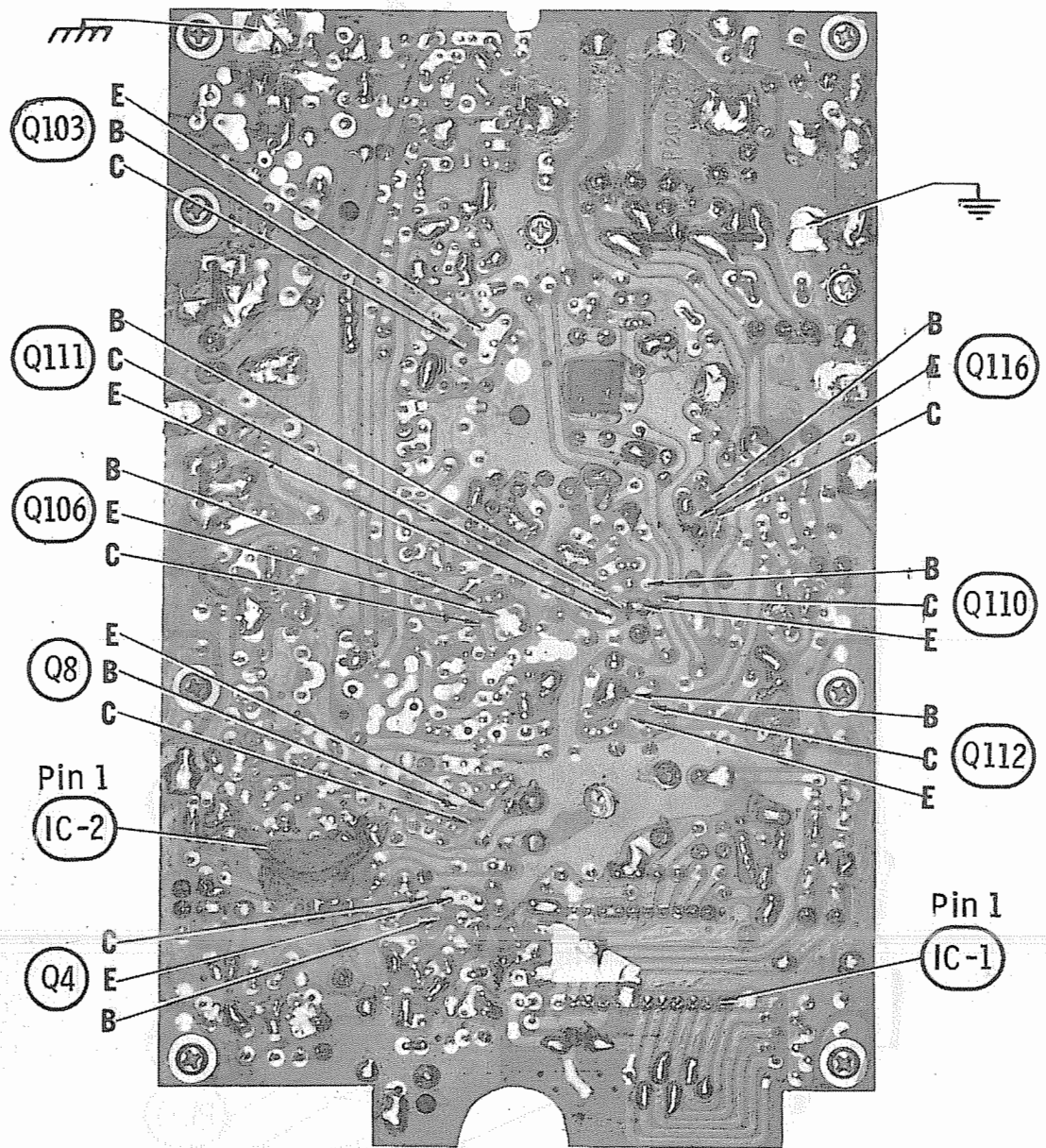
CHASSIS - BOTTOM



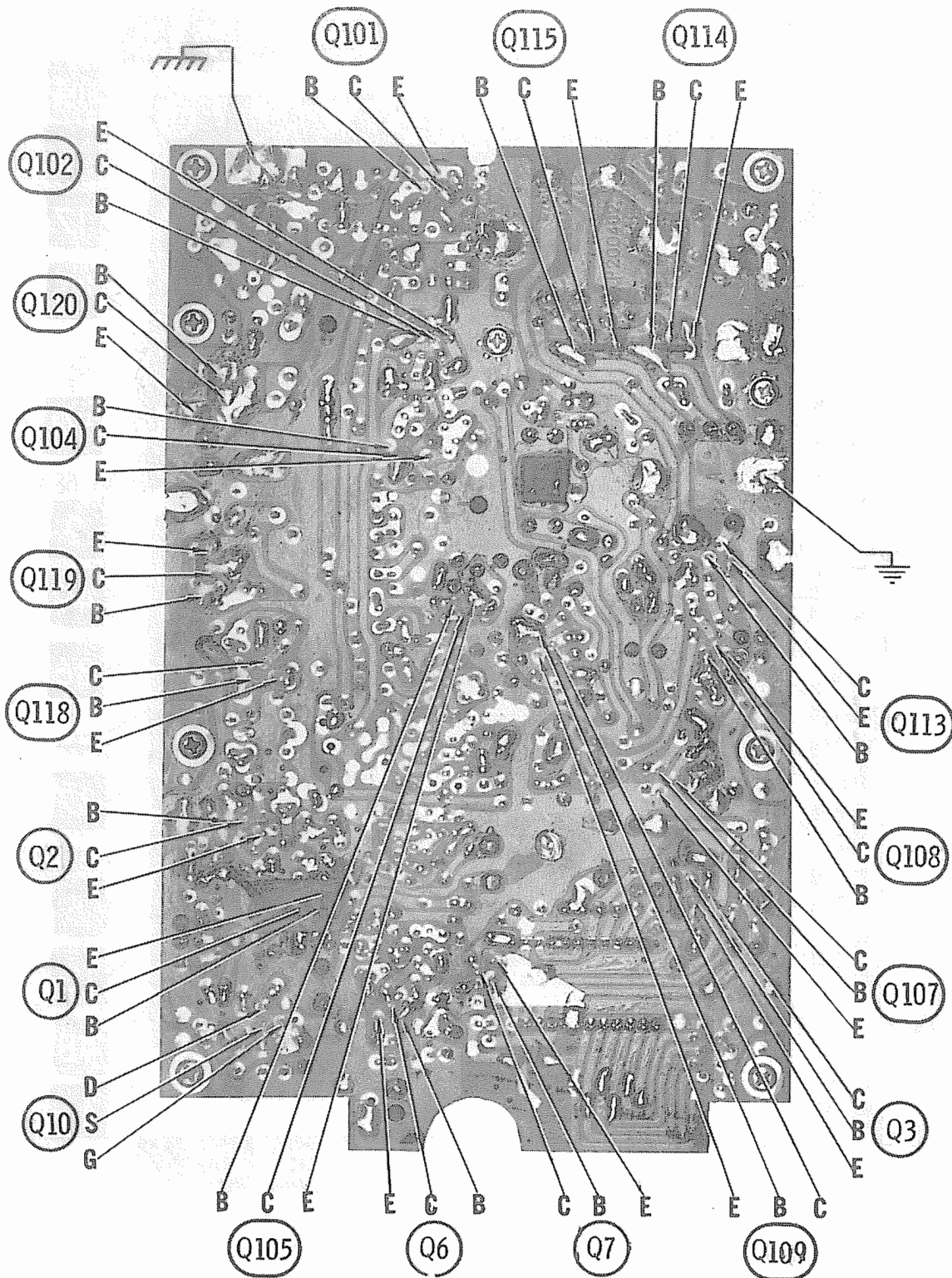
MAIN BOARD



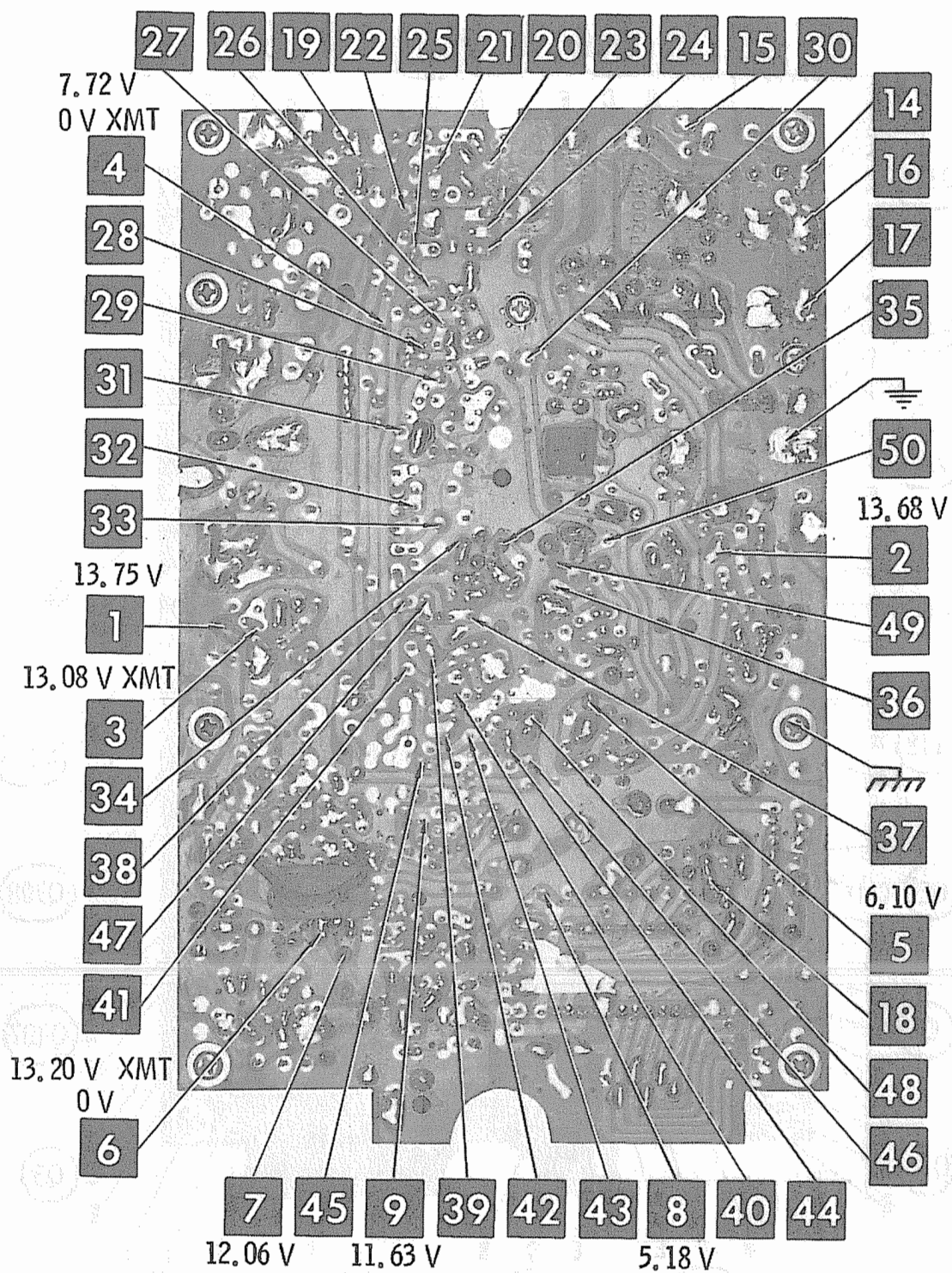
CHASSIS - BOTTOM



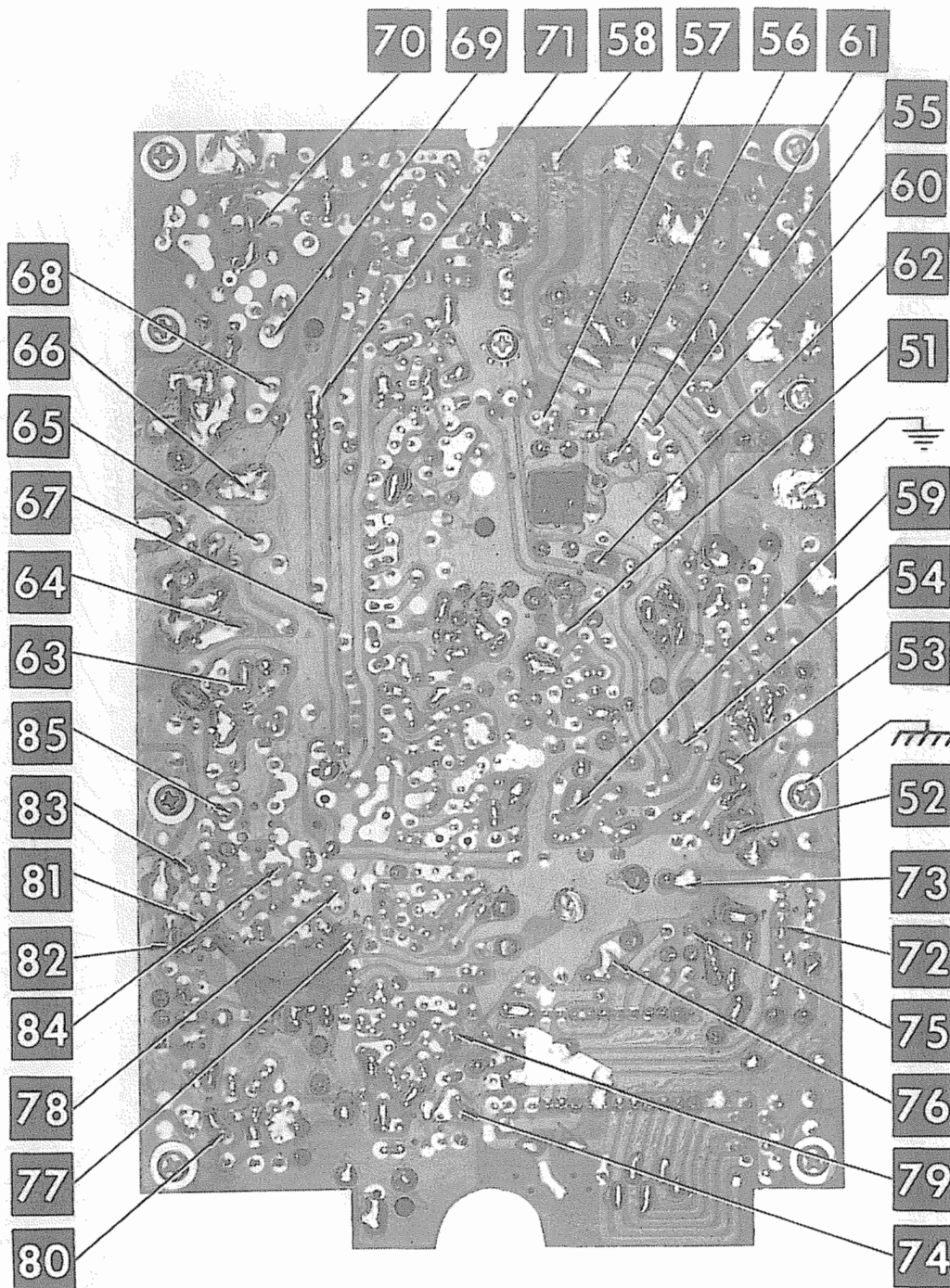
MAIN BOARD



MAIN BOARD

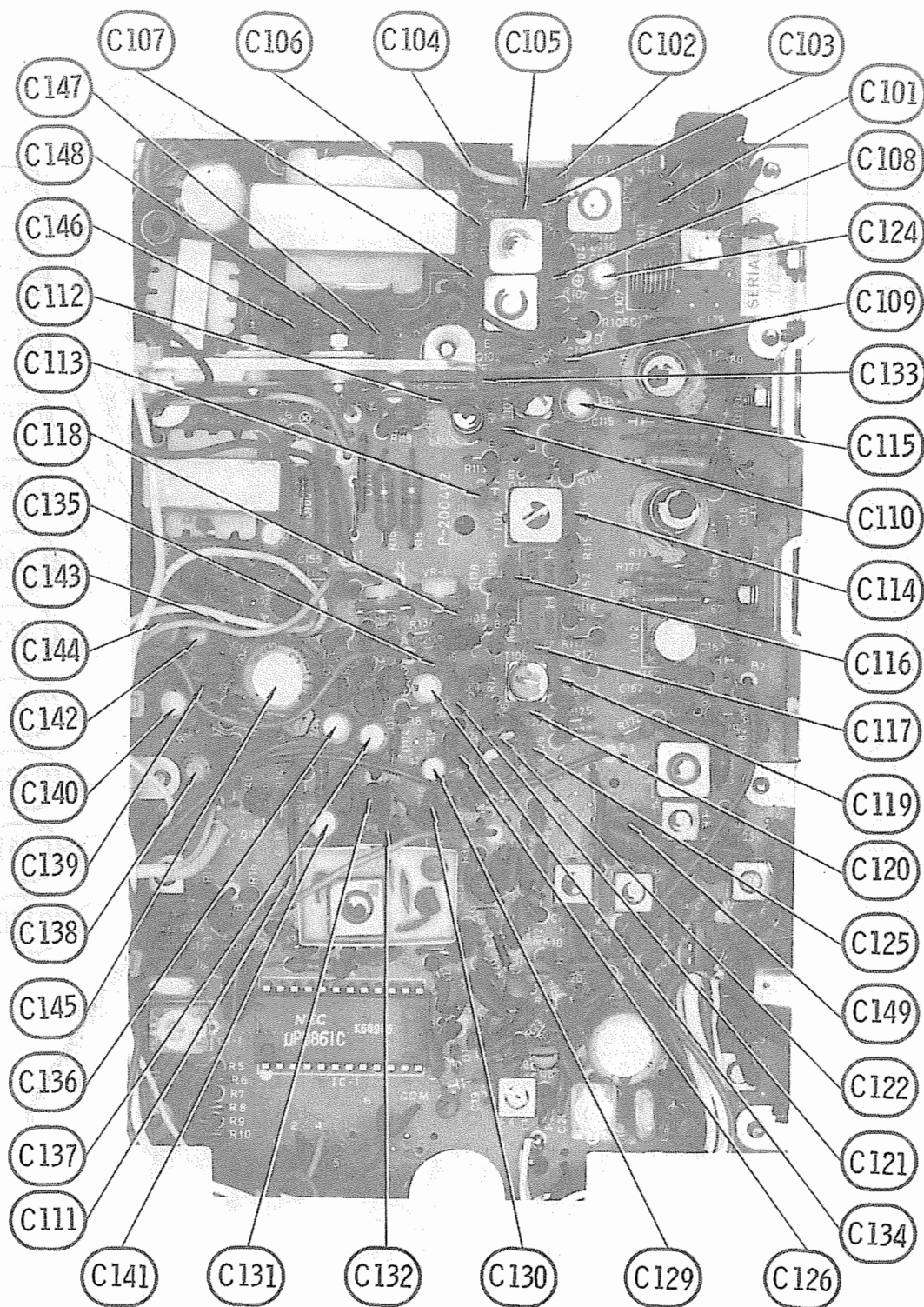


MAIN BOARD

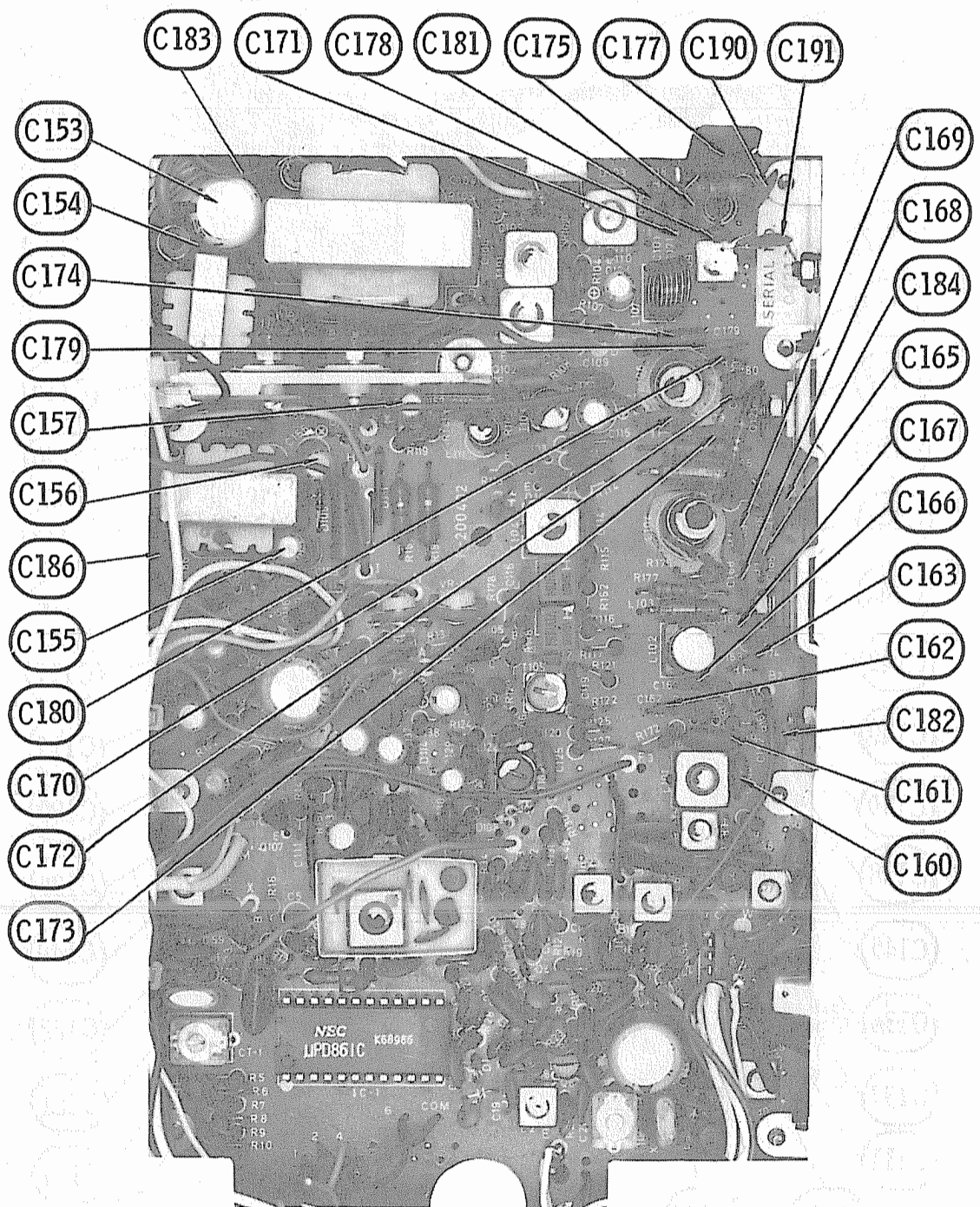


REALISTIC MODEL TRC-466

MAIN BOARD



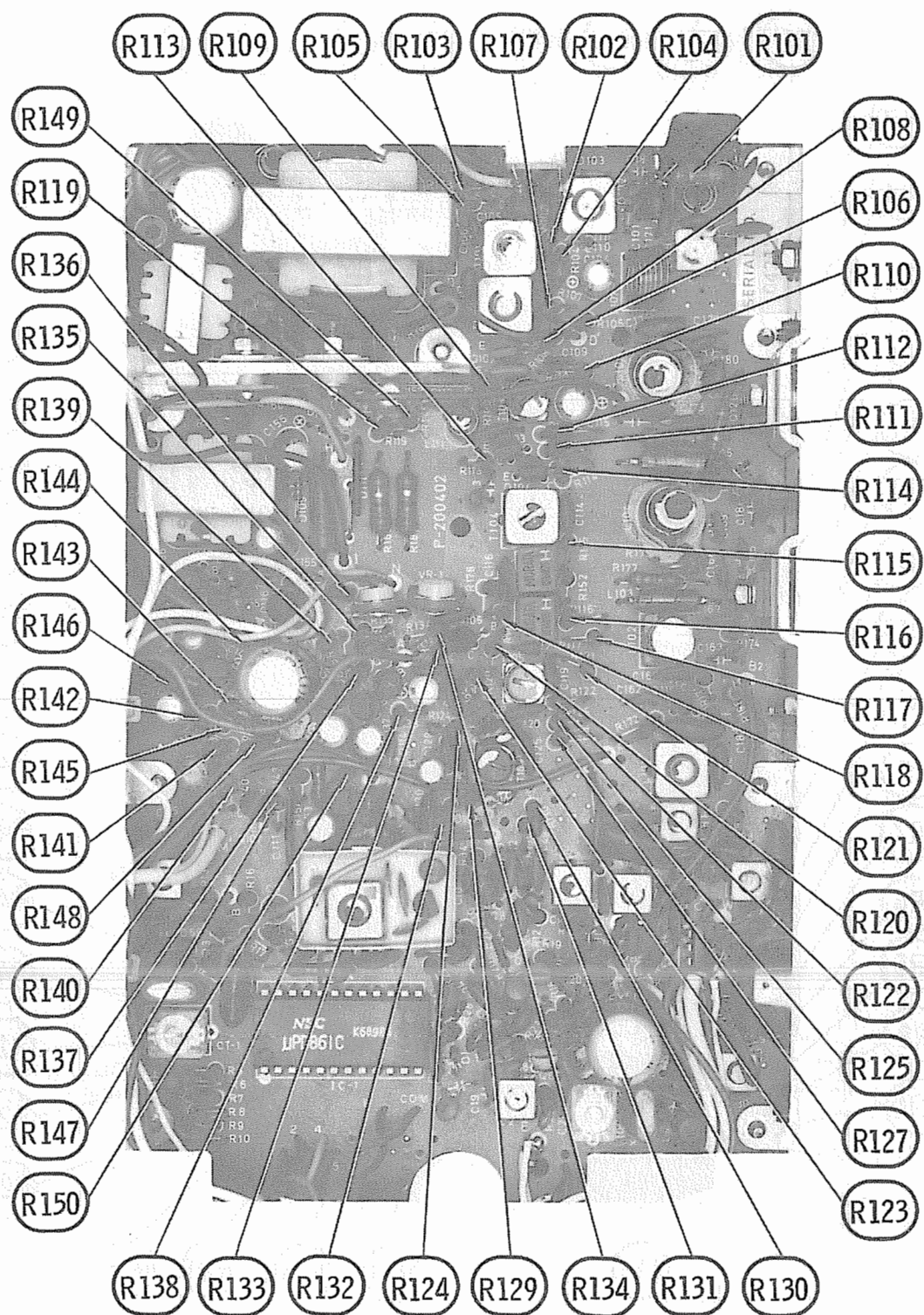
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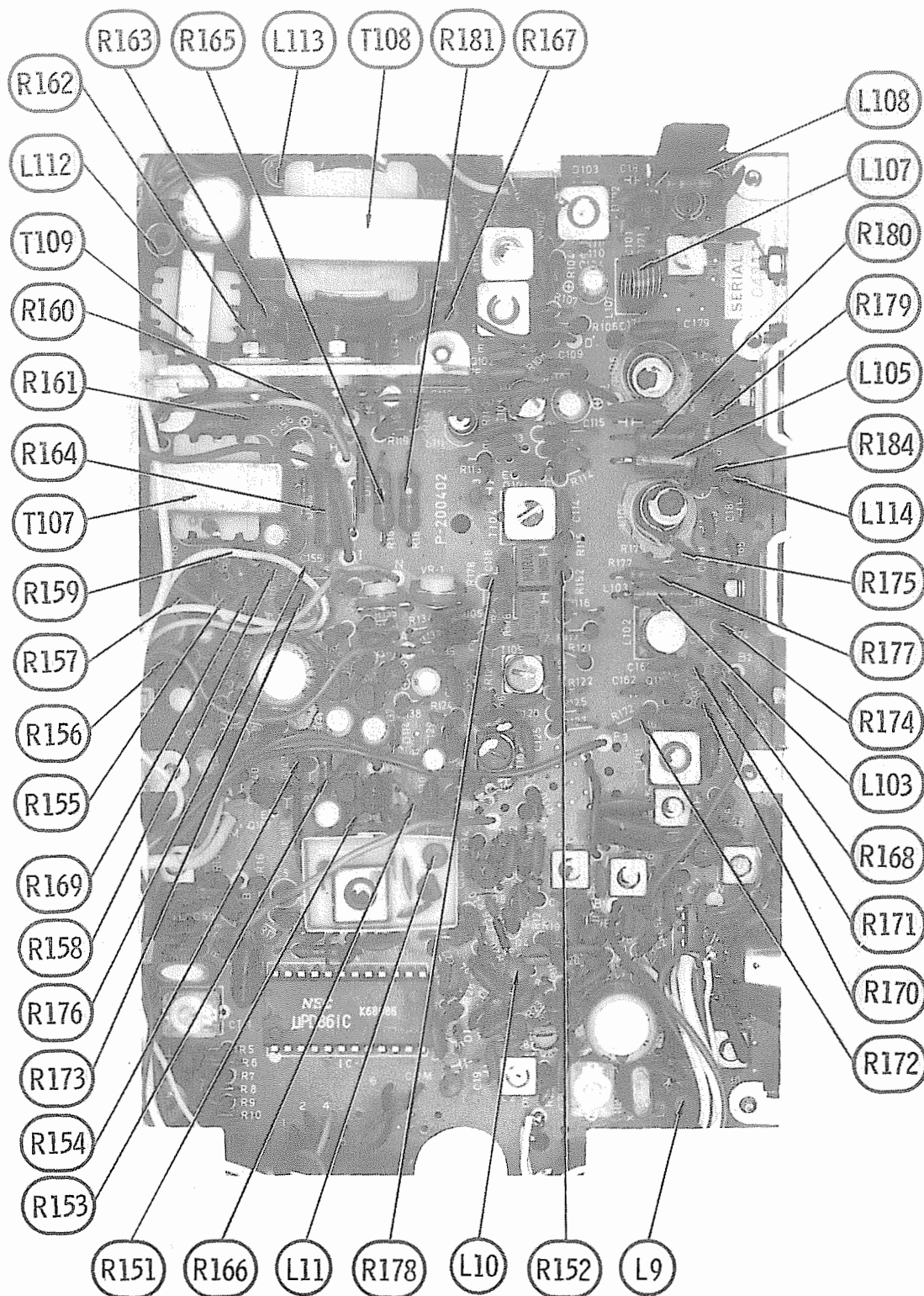
MAIN BOARD



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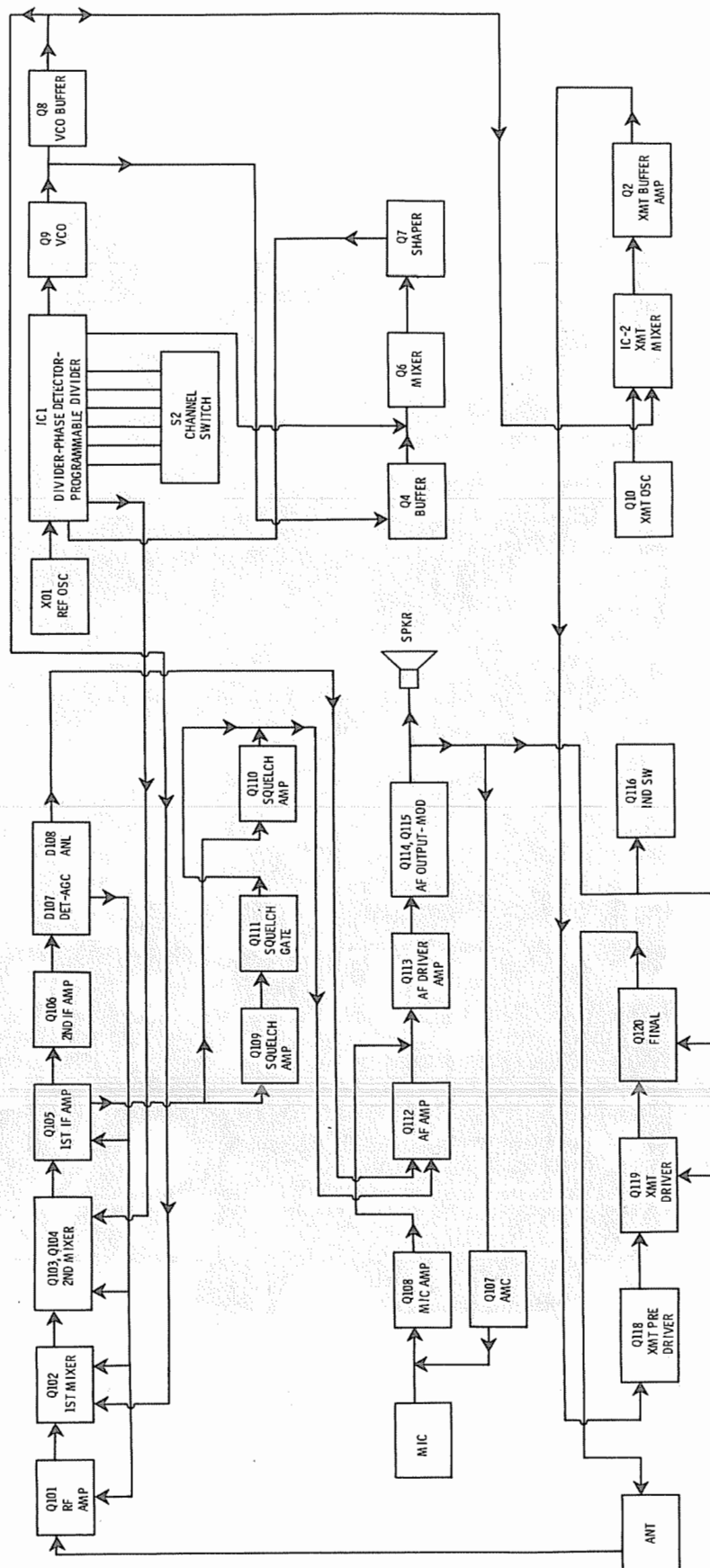


MAIN BOARD



REALISTIC MODEL TRC-466

MAIN BOARD



BLOCK DIAGRAM

PARTS LIST AND DESCRIPTION

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

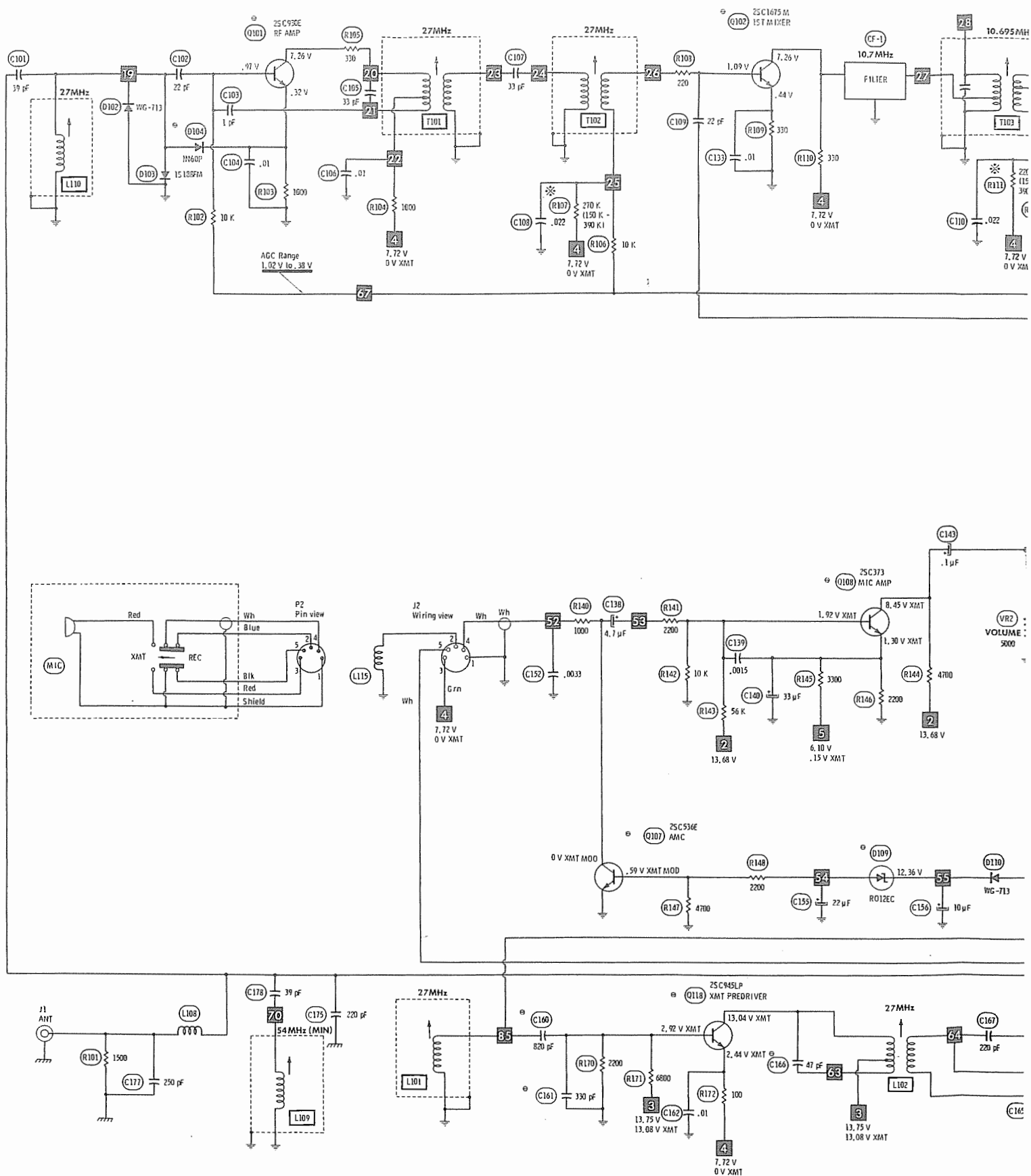
WIRING DATA

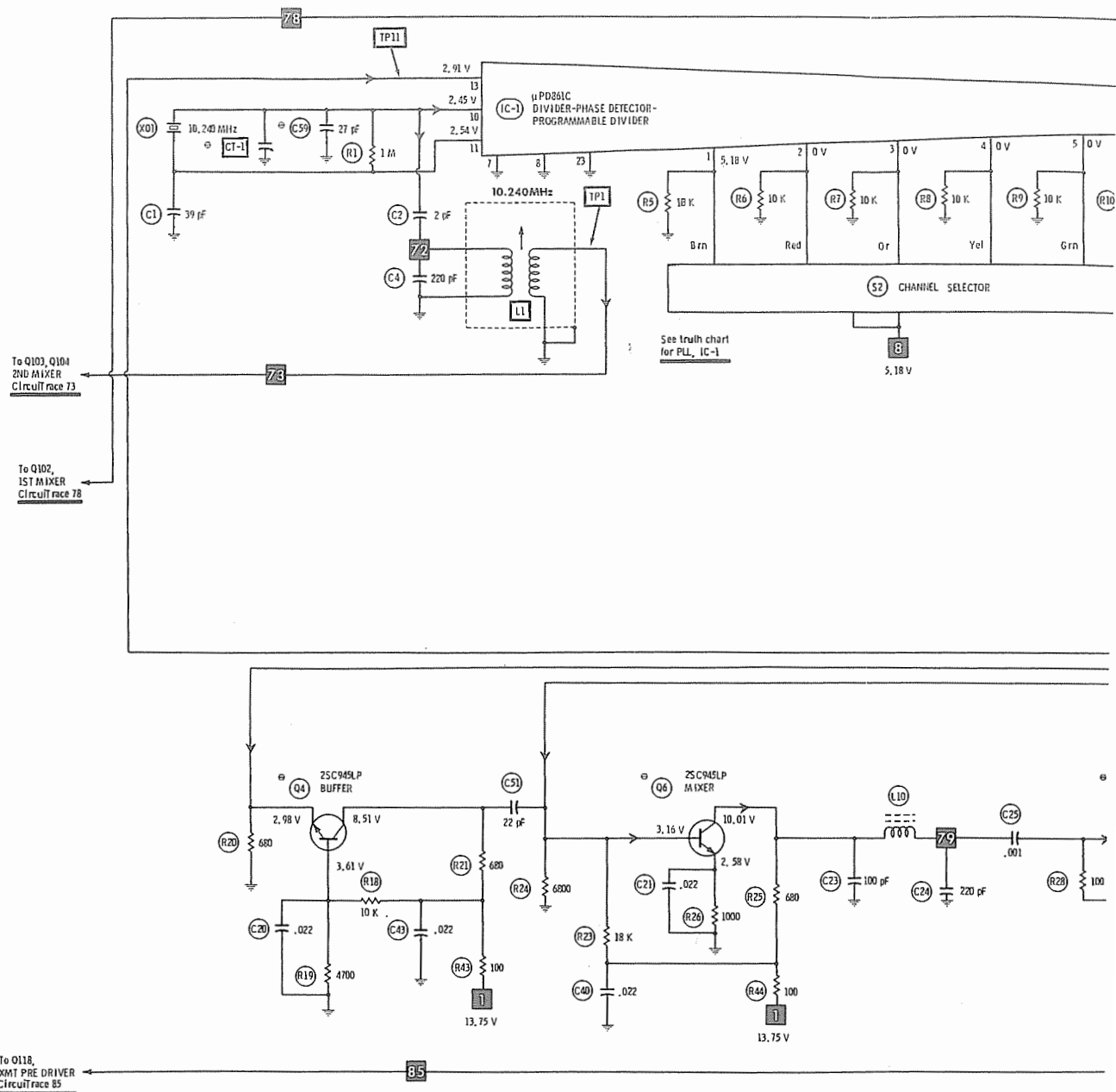
General-use Hook-up Wire (available in 5 colors)	BELDEN No. 8523	Coiled Microphone Cable	
Shielded Hook-up Wire (spiral wrapped)	BELDEN No. 8421	3-conductor (1 shielded) 23AWG	BELDEN No. 9471 (5')
(braided)	BELDEN No. 8401		BELDEN No. 8497 (6')
Speaker Cable (available in 4 colors)	BELDEN No. 8782		BELDEN No. 9472 (7-1/2')
Bonding Strap	BELDEN No. 8672		28AWG BELDEN No. 9466 (6')
AC Power Cord	BELDEN No. 17106	4-conductor (unshielded) 23AWG	BELDEN No. 8415 (6')
	(6')	5-conductor (1 shielded) 28AWG	BELDEN No. 9467 (6')
	(9')		BELDEN No. 9465 (7-1/2')

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFG. 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	RD5.1E UZ5.1B RD5AN		GEZD-5.1		HEPZ0406		SK3056	RT-235		1N4733A	WEP1103	
D2	ITT310 1S2688		GEZD-5.1		HEPZ0406		SK3056	RT-235		1N4733A	WEP1103	
D102	WG713		GE-90		HEPR2503			RT-262	ECG614		WEP200	ZEN-453
D103	WG713		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG614		WEP200	ZEN-453
D104	1N60P		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG614		WEP200	ZEN-453
	1S188FM1		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D107	1N60P		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
	1S188FM1		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D108	1N60P		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
	1S188FM1		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D109	RD72EC		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
	UZ13B		GEZD-12	ZM12B		RE 118	SK3062	RT-243	ECG5021	1N4742A	WEP1423	103-279-21
D110	WZ13B		GEZD-13	ZB13A	HEPZ0416	RE 119	SK3093	RT-244	ECG143	1N4743A	WEP1158	ZEN-506
D111	WG713		GEZD-13	ZB13A	HEPZ0416	RE 119	SK3093	RT-244	ECG143	1N4743A	WEP1158	ZEN-506
D114	RD6.2EB UZ6.2B WZ061		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	AW01-06		GEZD-6.2	ZM6.2B		RE 109	SK3058	RT-237	ECG5013	1N4735A	WEP1414	
D115	WG713		GEZD-6.2	ZB6.2A	HEPZ0408	RE 109	SK3058	RT-237	ECG137	1N4735A	WEP1154	
D116	SR1K		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177	1N4735A	WEP1414	
	1001		GE-504A	PTC201	HEPR0052	RE 49	SK3017A*	RT-210*	ECG116	1N4004	WEP158*	ZEN-401*
D118	SR1K		GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
	1001		GE-504A	PTC201	HEPR0052	RE 49	SK3017A*	RT-210*	ECG116	1N4004	WEP158*	ZEN-401*
IC1	UP0861C		GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-76
IC2	SN76514N SN76514											
Q1	2SA733P 2SA733Q 2SA495Y 2SA673C 2SA673D		GE-48	PTC103*	HEPS0019*	RE 219	SK3138	RT-303	ECG294	2SA733	WEP916	
	2SC380Y		GE-48	PTC103*	HEPS0019*	RE 219	SK3138	RT-303	ECG294	2SA733	WEP916	
Q2	2SC380-0		GE-221*	PTC103*	HEPS0013*	RE 26*	SK3466	RT-303	ECG159*	2SA495	WEP995	ZEN-106
	2SC945LP		GE-269	PTC103*	HEPS0026*	RE 197*	SK3114	RT-115*	ECG290		WEP911	ZEN-774
	2SC945LQ		GE-269	PTC103*	HEPS0026*	RE 197*	SK3114	RT-115*	ECG290		WEP911	ZEN-774
	2SC458C		GE-61*	PTC136*	HEPS0016*	RE 9	SK3018*	RT-107A	ECG229	2SC380	WEP380	ZEN-127
	2SC458D		GE-61*	PTC136*	HEPS0016*	RE 9	SK3018*	RT-107A	ECG229	2SC380	WEP380	ZEN-127
Q3	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945LQ		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458D		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q4	2SC372Y		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC372	WEP372	ZEN-114
	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945LQ		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458D		GE-61*	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC372	WEP372	ZEN-114
Q6	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945LQ		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458D		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q7	2SC372Y		GE-61*	PTC121*	HEPS0015*	RE 13*	SK3444	RT-308	ECG123A*	2SC372	WEP372	ZEN-114
	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945LQ		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458D		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q8	2SC372Y		GE-61*	PTC121*	HEPS0015*	RE 13*	SK3444	RT-308	ECG123A*	2SC372	WEP372	ZEN-114
	2SC380Y		GE-61*	PTC136*	HEPS0016*	RE 9	SK3018*	RT-107A	ECG229	2SC380	WEP380	ZEN-127
	2SC380-0		GE-61*	PTC136*	HEPS0016*	RE 9	SK3018*	RT-107A	ECG229	2SC380	WEP380	ZEN-127
	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945LQ		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458D		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q9	2SK41E		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312	2SK41E	WEP458	ZEN-114
Q10	2SK41E		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312	2SK41E	WEP458	ZEN-114
Q101	2SC930D		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC930E		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC461B		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC461B	WEP736*	ZEN-127
	2SC461C		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC461C	WEP736*	ZEN-127
Q102	2SC1675M		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC1675M	WEP956*	ZEN-127
	2SC1675L		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC1675L	WEP956*	ZEN-127
	2SC1342A		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*	2SC1342A	WEP956*	ZEN-127
	2SC1342B		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*	2SC1342B	WEP956*	ZEN-127
Q103	2SC1675M		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC1675M	WEP956*	ZEN-127
	2SC1675L		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*	2SC1675L	WEP956*	ZEN-127
	2SC1342A		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*	2SC1342A	WEP956*	ZEN-127
	2SC1342B		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*	2SC1342B	WEP956*	ZEN-127

REALISTIC MODEL TRC-466



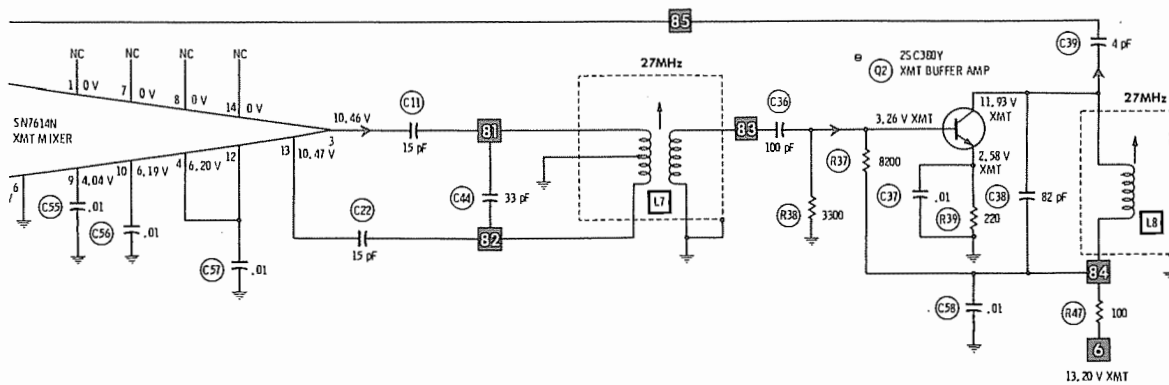
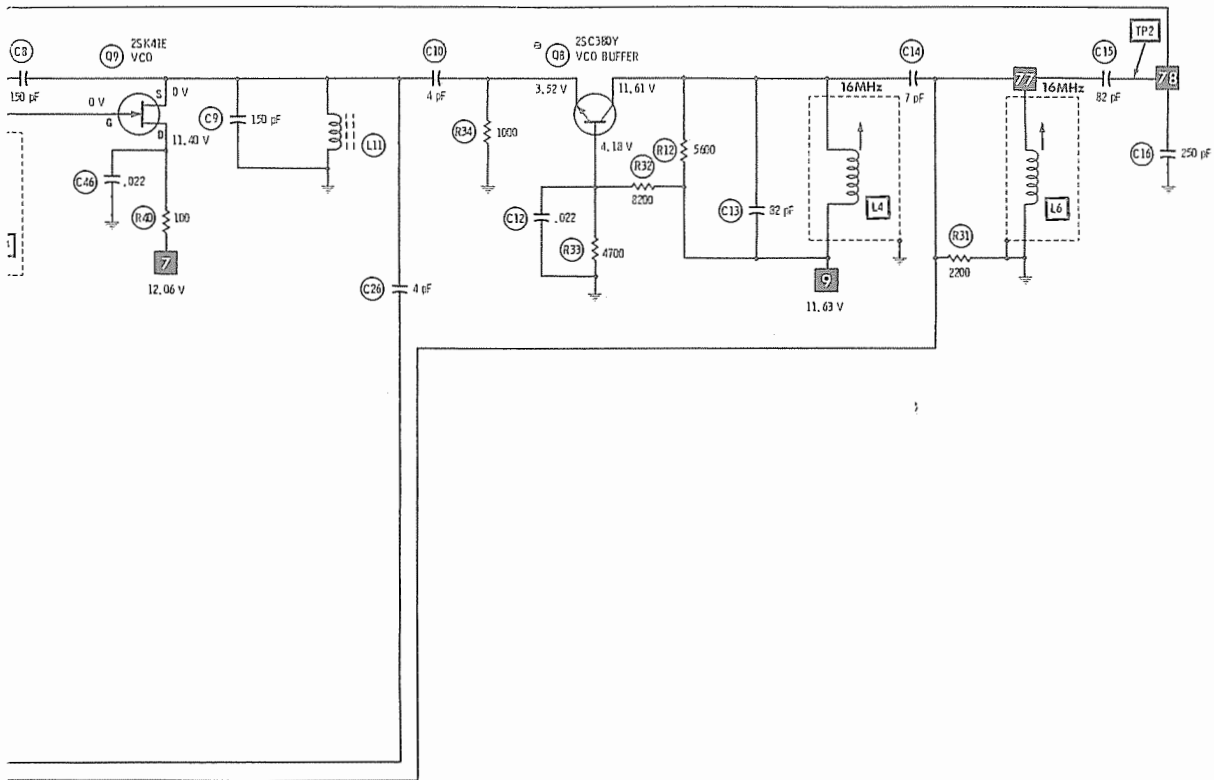


- /— Circuitry not used in some versions
- Circuitry used in some versions
- ⊕ See parts list
- ⊗ Nominal value
- ⊥ Ground
- ⏏ Chassis
- ▽ Common tie point
- Measurements made in Channel 1 with switching as shown unless noted.
- Item numbers in rectangles appear in the alignment/adjustment instructions.
- 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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REALISTIC MODEL TRC-466

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.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
Q104	2SC1675M		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	2SC1675L		GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	2SC1342A		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
	2SC1342B		GE-61*	PTC136*	HEPS0014*	RE 9*	SK3018*	RT-108A*	ECG229*		WEP956*	ZEN-127
Q105	2SC930D		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC930E		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC461B		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC372*	WEP736*	ZEN-127
	2SC461C		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC372*	WEP736*	ZEN-127
Q106	2SC930D		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC930E		GE-60*	PTC132*	HEPS0016*	RE 9	SK3122*	RT-308	ECG229*	2SC930	WEP956*	ZEN-127
	2SC461B		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC372*	WEP736*	ZEN-127
	2SC461C		GE-61*	PTC121*	HEPS0014*	RE 10*	SK3018*	RT-107A	ECG108*	2SC372*	WEP736*	ZEN-127
Q107	2SC536E		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
	2SC536D		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q108	2SC373		GE-212	PTC121*	HEPS0015*	RE 192	SK3122	RT-105	ECG199	2SC373	WEP373	ZEN-119
	2SC693F		GE-62	PTC136*	HEPS0024*	RE 192	SK3124	RT-107A	ECG199	2SC373*	WEP66	121-29000
	2SC693G		GE-62	PTC136*	HEPS0024*	RE 192	SK3124	RT-107A	ECG199	2SC373*	WEP66	121-29000
	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
Q109	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC372Y		GE-61*	PTC121*	HEPS0015*	RE 13*	SK3444	RT-308	ECG123A*	2SC372	WEP372	ZEN-114
	2SC536D		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
	2SC536E		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
Q110	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC373		GE-212	PTC121*	HEPS0015*	RE 192	SK3122	RT-105	ECG199	2SC373	WEP373	ZEN-119
	2SC536E		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
Q111	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC373		GE-212	PTC121*	HEPS0015*	RE 192	SK3122	RT-105	ECG199	2SC373	WEP373	ZEN-119
	2SC536E		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
Q112	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC373		GE-212	PTC121*	HEPS0015*	RE 192	SK3122	RT-105	ECG199	2SC373	WEP373	ZEN-119
	2SC536E		GE-212	PTC121*	HEPS0016*	RE 192	SK3122	RT-107A	ECG199	2SC945	WEP536	ZEN-119
Q113	2SC458B		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC458C		GE-210*	PTC121*	HEPS0009*	RE 13*	SK3124	RT-187	ECG289	2SC458	WEP458	ZEN-114
	2SC735Y		GE-210*	PTC123*	HEPS0014*	RE 13*	SK3122	RT-308*	ECG289	2SC735	WEP735A	ZEN-127
	2SC735-0		GE-210*	PTC123*	HEPS0014*	RE 13*	SK3122	RT-308*	ECG289	2SC735	WEP735A	ZEN-127
Q114	2SC1175D		GE-210*	PTC123*	HEPS0025*	RE 17*	SK3122	RT-300	ECG123A*		WEP59*	ZEN-120
	2SC1175E		GE-210*	PTC123*	HEPS0025*	RE 17*	SK3122	RT-300	ECG123A*		WEP59*	ZEN-120
	2SC1213B		GE-268	PTC123*	HEPS0014*	RE 17*	SK3024*	RT-134	ECG289		WEP910	121-1014
	2SC1213C		GE-268	PTC123*	HEPS0014*	RE 17*	SK3024*	RT-134	ECG289		WEP910	121-1014
Q115	2SD325D		GE-28	PTC110	HEPS0027	RE 42	SK3197	RT-197	ECG186	2SD325	WEP751	
	2SD325E		GE-28	PTC110	HEPS0027	RE 42	SK3197	RT-197	ECG186	2SD325	WEP751	
	2SD325D		GE-28	PTC110	HEPS0027	RE 42	SK3197	RT-197	ECG186	2SD325	WEP751	
	2SD325E		GE-28	PTC110	HEPS0027	RE 42	SK3197	RT-197	ECG186	2SD325	WEP751	
Q116	2SC735Y		GE-210*	PTC123*	HEPS0014*	RE 13*	SK3122	RT-308*	ECG289	2SC735	WEP735A	ZEN-127
	2SC735-0		GE-210*	PTC123*	HEPS0014*	RE 13*	SK3122	RT-308*	ECG289	2SC735	WEP735A	ZEN-127
	2SC1175D		GE-210*	PTC123*	HEPS0025*	RE 17*	SK3122	RT-300	ECG123A*		WEP59*	ZEN-120
	2SC1175E		GE-210*	PTC123*	HEPS0025*	RE 17*	SK3122	RT-300	ECG123A*		WEP59*	ZEN-120
Q118	2SC460B		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC460C		GE-61*	PTC136*	HEPS0014*	RE 9	SK3122*	RT-134	ECG233	2SC460	WEP460	121-722
	2SC945LP		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC945P		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
Q119	2SC945Q		GE-212	PTC121*	HEPS0015*	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	121-29000
	2SC1906A		GE-86	PTC132*	HEPS0016*	RE 10*	SK3039*	RT-113*	ECG108*	2SC454*	WEP56*	ZEN-104
	2SC1906B		GE-86	PTC132*	HEPS0016*	RE 10*	SK3039*	RT-113*	ECG108*	2SC454*	WEP56*	ZEN-104
	2SC1957 (12)		GE-270	PTC180	HEPS3044	RE 209	SK3197		ECG295		WEP913	
Q120	2SC1957K		GE-270	PTC180		RE 209	SK3197		ECG295		WEP913	
	2SC2091D		GE-215	PTC186		RE 203	SK3197	RT-146	ECG235		WEP785	
	2SC1909K (13)											
	2SC2092D		GE-337	PTC186		RE 203	SK3197	RT-146	ECG235	2SC1306	WEP785	

REALISTIC MODEL TRC-466

* Lead configuration may vary from original.
(12) Rating, 750MW @ 1.0A.
(13) Rating, 10W @ 3.0A.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C5	3.3 25V			TDC225M035FL	QV1-183	S035-2R29
C50	1000 16V		PC1000-16	VTT1000L16	QV1-63	EV-1260
C115	33 16V		PC30-25	VTT33025	QV1-29	EV-1325
C124	4.7 50V		PC5-50	VTT4R7B50	QV1-11	EV-1519
C129	1 50V		PC1-50	VTT1A50	QV1-25	EV-1615
C134	3.3 50V		PC5-50	VTT3R3A50	QV1-55	EV-1618
C136	22 16V		PC25-25	VTT22B16	QV1-27	EV-1224
C137	4.7 10V		PC5-50	VTT4R7B50	QV1-29	EV-1319
C138	4.7 10V		PC5-50	VTT4R7B50	QV1-61	EV-1519
C140	33 10V		PC30-25	VTT33B10	QV1-61	EV-1125
C141	33 10V		PC30-25	VTT33B10	QV1-3	EV-1125
C142	.47 50V		PC1-50	VTT4R7A63	QV1-2	EV-1610
C143	.1 25V			TDC104M050EL	QV1-93	S050-R109
C144	100 10V		PC100-10	VTT100E10	QV1-133	EV-1130
C145	330 16V		WBR300-35	VTT330H16	QV1-149	EV-1245
C153	470 16V		PC500-16	VTT470K16	QV1-55	EV-1150
C155	22 16V		PC25-25	VTT22B16	QV1-43	EV-1224
C156	10 25V		PC10-25	VTT10B25	QV1-11	EV-1322
C157	1 50V		PC1-50	VTT1A50		EV-1615

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
C1	39 NPO 5%				CN0439		10TCC-039
C2	2 +.25						
C3	.1 10%			WMF05P1	EWFO5010	QFT2-91	1FT-S10
C4	220 10%		DTZ-220				10TCC-T22
C6	.022				M192P2239R8		192P2239R8
C7	100 N330 5%				*		10TCS-T10
C8	150 H220 5%				*		10TCR-T15
C9	150 H220 5%				*		10TCR-T15
C10	4 +.5						
C11	15 5%		DTZ-15	NP015	CN0415		10TCC-Q15
C12	.022				M192P2239R8		192P2239R8
C13	82 5%		DTZ-82	NP082	CN0482		10TCC-Q82
C14	7 +.5						
C15	82 5%		DTZ-82	NP082	CN0482		10TCC-Q82
C16	250 10%						
C17	2 +.25						
C18	5 -.25						
C19	82 5%		DTZ-82	CD15CD050003	CN0482	QW1-2	MWA-050
C20	.022			NP082	M192P2239R8		10TCC-Q82
C21	.022				M192P2239R8		192P2239R8
C22	15 5%		DTZ-15	NP015	CN0415		10TCC-Q15
C23	100 10%			CD15FD101J03	SX310	QW1-27	MWA-101
C24	220 10%			CD15FD221J03	SX322	QW1-35	MWA-221
C25	.001 10%			DPMS601	EWFA210	QFT2-1	1FT-010
C26	4 +.5						
C27	3 +.25 (2-7)						
C28	33 5%		DTZ-33	NP033	CN0433		10TCC-Q33
C29	.001 10%			DPMS601	EWFA210	QFT2-1	1FT-010
C30	220 10%		DTZ-220				10TCC-T22
C32	82 5%		DTZ-82	NP082	CN0482		10TCC-Q82
C33	33 5% NPO		DTZ-33	NP033	CN0433		10TCC-Q33
C34	.01 25V		UK25-103		MAG2511		HY-520
C35	.01 25V		UK25-103		MAG2511		HY-520
C36	100 10%			CD15FD101J03	SX310	QW1-27	MWA-101
C37	.01		UK50-103		MAG5011		
C38	82 5%		DTZ-82	NP082	CN0482		10TCC-Q82
C39	4 +.5						
C40	.022				M192P2239R8		192P2239R8
C41	.022				M192P2239R8		192P2239R8
C43	.022				M192P2239R8		192P2239R8
C44	33 5%		DTZ-33	NP033	CN0433		10TCC-Q33
C45	.022				M192P2239R8		192P2239R8
C46	.022				M192P2239R8		192P2239R8
C48	.022				M192P2239R8		192P2239R8
C51	22 10%			CD15E0220J03	SX422	QW1-11	MWV-220
C53	.022				M192P2239R8		192P2239R8
C54	.01		UK50-103		MAG5011		
C55	.01		UK50-103		MAG5011		
C56	.01		UK50-103		MAG5011		
C57	.01		UK50-103		MAG5011		
C58	.01		UK50-103		MAG5011		
C59	27 (24-33) 5% NPO				CN0427		10TCC-Q27
C60	1 (1-2) +.25						
C101	39 10%			CD15E0390J03	SX439	QW1-17	MWA-390
C102	22 10%			CD15E0220J03	SX422	QW1-11	MWA-220
C103	1 +.25						
C104	.01 25V		UK25-103		MAG2511		HY-520
C105	33 10%			CD15E0330J03	SX433	QW1-15	MWA-330
C106	.01 25V		UK25-103		MAG2511		HY-520
C107	33 10%			CD15E0330J03	SX433	QW1-15	MWA-330
C108	.022 25V		UK25-223				HY-725
C109	22 NPO 5%		DTZ-22	NP022	CN0422		10TCC-Q22
C110	.022 20% 25V		UK25-223				HY-725
C111	33 5%		DTZ-33	NP033	CN0433		10TCC-Q33
C112	330 10%		00-331	GP330	GP333		10TS-T33
C113	.0022 25V				GP222		10TS-022
C114	.022 20% 25V		UK25-223				HY-725
C116	330 5%		DD-331	GP330	GP333		10TS-T33
C117	1 +.25						
C118	.022 20% 25V		UK25-223				HY-725
C119	.022 20% 25V		UK25-223				HY-725
C120	.022 20% 25V		UK25-223				HY-725
C121	.022 20% 25V		UK25-223				HY-725
C122	.047 20%			OPMS2547	EWFA147	QFT2-171	1FT-S47
C125	.022 20% 25V		UK25-223				HY-725
C126	.01 10%			WMF1S1	EWFA110	QFT2-91	1FT-S10
C130	.01 10%			WMF1S1	EWFA110	QFT2-91	1FT-S10
C131	.033 20%				M192P3339R8	QFT2-149	1FT-S33
C132	.01 10% 50V			WMF1S1	EWFA110	QFT2-91	1FT-S10
C133	.01		UK25-103		MAG2511		HY-520
C135	.01		UK50-103		MAG5011		
C139	.0015 10%			DMPS6015	EWFA215	QFT2-13	1FT-D15
C146	.047			OPMS2547	EWFA147	QFT2-171	1FT-S47
C147	.047 10%			DMPS2547	EWFA147	QFT2-171	1FT-S47
C148	.047			DMPS2547	EWFA147	QF1-171	1PB-S47
C149	.047			DMPS2547	EWFA147	QF1-171	1PB-S47
C150	.0047 10%				M192P4729R8	QFT2-63	1FT-047
C151	.0047 10%				M192P4729R8	QFT2-63	1FT-047
C152	.0033 10%				M192P3329R8	QFT2-43	1FT-D33
C154	.022						
C160	82 (82-100) 10%			CD19FD821J03	SX382		MWC-821
C161	330 (100-470) 10%			CD15FD331J03	SX333	QW1-39	MWA-331
C162	.01 25V		UK25-103		MAG2511		HY-520
C163	.01 25V		UK25-103		MAG2511		HY-520
C165	.01 25V		UK25-103		MAG2511		HY-520
C166	47 NPO (33-47) 5%		DTZ-47	NP047	CN0447		10TCC-Q47
C167	220 10%		DTZ-220				10TCC-T22

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
C168	56 5%				CN0456		10TCC-Q56
C169	82 5%				CN0482		10TCC-Q82
C170	.047		DTZ-82	NP082	MAG2515		HY-735
C171	.01 25V		UK25-503		MAG2511		HY-520
C172	33 10%		UK25-103		SX433	QW1-15	MWA-330
C173	.0047			CD15ED330J03	GP4700		5GA-047
C174	220 10%		DD-472	CD15FD221J03	GP247	QW1-35	MWA-221
C175	220 10%			CD15FD221J03	SX322	QW1-35	MWA-221
C177	220 10%			CD15FD241J03	SX324	QW1-36	MWA-241
C178	39 10%			CD15ED300J03	SX430	QW1-14	MWA-300
C180	.01 25V		UK25-103		MAG2511		HY-520
C181	.01 25V		UK25-103		MAG2511		HY-520
C182	.01 25V		UK25-103		MAG2511		HY-520
C183	.047			DPMS4547	EW4147		4PB-547
C184	.022				M192P239R8		192P239R8
C186	.047			DPMS4547	EW4147		4PB-547
C190	.0033 10%				M192P3329R8		192P3329R8
C191	.0033 10%				M192P3329R8		192P3329R8

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.
TH1	4.5K Cold ITC						

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR1	IF Gain	500	P-6353	T-500		HTC52L1	X201R501B
VR2	Volume/Power Switch	5000	P-1749				
VR3	Squelch	10K	P-1750				
VR4	Squelch Range	20K	P-6407	T-20K		HTC24L1	X201R253B

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Detector Input(10.24MHz)	CA-3683	D-380081		
L2	Detector Output (15.360MHz)	CA-3584	P-380082		
L3	VCO		P-380083		
L4	VCO Buffer (16MHz)	CA-3684	P-380082		
L5	IF (10.675MHz)	CA-3684	P-380082		
L6	VCO Buffer (16MHz)	CA-3684	P-380082		
L7	Xmt Mixer (27MHz)	CA-3685	P-380084		
L8	Xmt Buffer (27MHz)	CA-3686	P-380085		
L9	RF Choke	CB-2319	P-360026		
L10	RF Choke	CB-2319	P-360026		
L11	RF Choke	CB-2319	P-360026		
L101	Xmt Pre Driver(27MHz)	CA-3687	P-380089		
L102	Xmt Driver (27MHz)	CA-3545	P-380046		
L103	RF Choke		P-380047		
L104	Final (27MHz)	CA-3546	P-380045		
L105	RF Choke	CB-2284	P-380048		
L106	Antenna Load (27MHz)	C-0755	P-380092		
L107	RF Choke	CA-3547	P-380044		
L108	Pi Filter	CA-3548	P-380043		
L109	TVI Trap (54MHz)	CA-3688	P-380086		
L110	Rec RF (27MHz)	CA-3687	P-380089		
L111	Mixer (10.240MHz)	CA-4725	P-380040		
L112	RF Choke	CB-2341	P-380104		
L113	RF Choke	CB-2341	P-380104		
L114	RF Choke	CB-2318	P-380098		
L115	RF Choke	CB-2283	P-380047		
T101	Mixer (27MHz)	CA-3687			
T102	Mixer (27MHz)	CA-4799			
T103	IF (10.695MHz)	CA-7602			
T104	IF (455kHz)	CA-7603			
T105	IF (455kHz)	CA-7513	P-130026		
T106	IF (455kHz)	CA-7514	P-130027		

REALISTIC MODEL TRC-466

PARTS LIST AND DESCRIPTION (CONTINUED)

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

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T109	1.5A	.09	223	TA-0561 P-100345(1)			(1) Number on unit.

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T107	1	1		TN-0100 P-100346(1)			(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T108	32	1 8 2 20	TD-0139 P-100347(1)			(1) Number on unit

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PH 8 ohms	S-4645 77P06(1)	30A05ZBR	(1) Number on unit

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F1	2A Quick acting	HB-111	F-1120	AGC	HDJ	312002	150145	FG2-2

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		18-032	18-034	18-010	18-105	4	1	3	5	2	1

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF1	Filter	C-0752	10.7MHz
CF2	Filter	C-0754	455kHz
CF3	Filter	C-0754	455kHz
J1	Jack	J-6470	Antenna
J2	Jack	J-6397	Microphone
J3	Jack	J-0683	External Speaker
PL1	Lamp	L-0021	13.75 V @ 77mA
PL2	Lamp	L-0681	XMT Mod 5.56V @ 32mA
S1	Switch		Power (Part of Volume Control)
S2	Switch	S-1272	Channel Selector
X01	Crystal	MX-2295	10.240MHz
X02	Crystal	MX-2296	10.695MHz

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

ITEM	PART No.	ITEM	PART No.
Case, Bottom	Z-3445	Knob, Control	K-2533
Case, Top	Z-3444	Knob, Channel Selector	K-2532
Channel Plate	HB-6019	Mounting Bracket	HB-6022
Front Panel	Z-3446		