

PHOTOFACT[®] with

CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

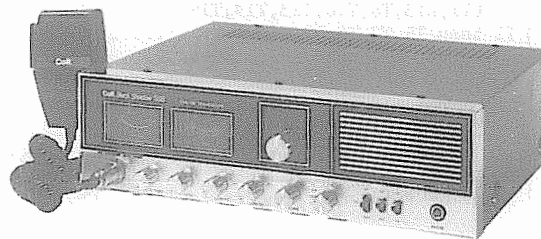
NOTE

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 1000 (Black Shadow)

MANUFACTURER'S SPECIFICATIONS

MODEL 480

TRANSMITTER

Power:	4 Watts — AM (max. allowed by FCC) 12 Watts PEP — SSB (max. allowed by FCC)
Modulation:	High and low level Class B amplitude modulation (AM)
Modulation Capability:	95% Typical (AM)
Harmonic Suppression and Spurious Emissions:	Better than FCC requirement
Frequency Response:	400 Hz to 5 kHz — AM 400 Hz to 3 kHz — SSB
Output Impedance:	50 Ohms, unbalanced
Output indicators:	Meter shows relative RF output power, receiving signal strength. Tx red lamp indicates transmit mode.

RECEIVER

Sensitivity — AM:	.7 μ V for 10 db S/N
Sensitivity — SSB:	.25 μ V for 10 db S/N

Selectivity:	5 db at 4 kHz (AM), 5 db at 2 kHz (SSB), 50 db at ± 10 kHz (AM and SSB)
Image Rejection:	More than 50 db
IF Rejection:	More than 80 db at 455 kHz
Automatic Gain Control (AGC):	Change in audio output less than 12 db from 10 μ V to .4 volts
Squelch:	Adjustable — threshold less than .5 μ V
Audio Frequency Response:	400 to 2.5 kHz
Distortion:	Less than 10% at 3.0 watts output
Adjacent Channel Rejection:	More than 50 db at .3 μ V
Cross Modulation:	More than 50 db
IF Frequency:	10.695 MHz, 455 kHz
Clarifier:	± 800 Hz
Noise Blanker:	IF single gate type
Audio Output Power:	More than 3 watts into 8 Ohms
Built-in Speaker:	8 Ohms, dynamic
External Speaker (optional):	Disables internal speaker when connected

COLT MODELS 480, 1000

MODEL 1000

RECEIVER

System	SSB: Single conversion superheterodyne AM: Double conversion superheterodyne
Sensitivity	SSB: 0.3 μ V for 10 db S/N AM: 1 μ V for 10 db S/N
Selectivity	SSB: 2 kHz at 6 db down AM: 6 kHz at 6 db down
Clarifier	± 800 Hz
Audio Output	3 W at 8 ohms
Squelch Range	SSB: 0.7 μ V to 300 μ V AM: 1 μ V to 300 μ V
Intermediate Frequency	SSB: 10.695 MHz AM: 1st/10.695 MHz, 2nd/455 kHz

SSB TRANSMITTER

Generation	Double balanced modulator with crystal lattice filter
RF Output Power	12 W PEP FCC maximum, at 13.8 V DC or 117 V AC 50/60 Hz
Carrier Suppression	More than 40 db down

Unwanted Sideband Suppression	More than 60 db down
Harmonic Suppression	More than 60 db down

AM TRANSMITTER

RF Output power	4 W FCC maximum, at 13.8 V DC or 117 V AC 50/60 Hz
Harmonic Suppression	More than 60 db down
Modulation	High level class B

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. Adjustments made with 13-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: GC Electronics:
 L7, L11, L13, T6, T10, T13, T14, T15.....5009
 T1 thru T5, T7, T8, T9, T11, T12.....9440
 CT1 thru CT5.....5000

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of frequency counter to TP2.	Ch. 19, USB	CT3	Adjust for 10.240MHz +50Hz.
Input of oscilloscope to TP3.	Ch. 19, USB	T3	Adjust for maximum.
Input of frequency counter to TP3.	Ch. 19, USB Clarifier Centered	CT1	Adjust for 20.105MHz +40Hz.
	Ch. 19, LSB Clarifier Centered	CT2	Adjust for 20.1035MHz +40Hz.
Input of frequency counter to TP5.	Ch. 19, USB	CT5	Adjust for 10.695MHz +50Hz.
	Ch. 19, LSB	CT4	Adjust for 10.692MHz +50Hz.
Input of DC meter to TP1	Ch. 1, USB	VCO	Adjust for 3.6 volt +0.1 volt.
Input of frequency counter to TP13 (IC3, Pin 4).	Ch. 1, USB		Check for 37.660MHz. Check all channels. (See Truth Chart for correct frequencies).
	Ch. 1, LSB		Check for 37.657MHz. Check all channels. (See Truth Chart for correct frequencies).
Inject a 2400Hz, 2.5mV signal at MIC input. Input of RF VTVM to antenna jack.	Ch. 40, USB XMT	T1	Adjust for maximum.
	Ch. 1, USB XMT	T2	Adjust for maximum.

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.

AM

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to TP11. 455kHz, 1000Hz @ 30% modulation.	Ch. 19, AM Clarifier Midrange LOC/DX DX Squelch MINIMUM NB & ANL Off	T14, T15	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation.	Ch. 19, AM Clarifier Midrange LOC/DX DX Squelch MINIMUM NB & ANL Off	T13, T10, T9, T8, T7	Adjust for maximum output. Repeat above steps, if necessary.

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.

SSB

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation.	Ch. 19, USB Clarifier Midrange LOC/DX DX Squelch MINIMUM NB & ANL Off	T12	Adjust for maximum output.

RECEIVER ADJUSTMENTS

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

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Input of DC meter to terminal 15. No signal input.	Ch. 19, USB LOC/DX DX Squelch MINIMUM NB & ANL Off	RV8	SSB AGC Adjust RV8 for 2 volts.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 500uV.	Ch. 19, AM LOC/DX DX NB & ANL Off	RV9	AM SQUELCH RANGE Set Squelch Control VR2 fully clockwise. Adjust RV9 so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation Output 500uV.	Ch. 19, USB LOC/DX DX NB & ANL Off	RV10	SSB SQUELCH RANGE Set Squelch Control VR2 fully clockwise. Adjust RV10 so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output 100uV.	Ch. 19, AM LOC/DX DX NB & ANL Off	RV6	AM S METER Adjust RV6 for 9 on S scale of meter.
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation Output 100uV.	Ch. 19, USB LOC/DX DX NB & ANL Off	RV7	SSB S METER Adjust RV7 for 9 on S scale of meter.

TRANSMITTER ALIGNMENT

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

SSB

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Inject a 2400Hz, 2.5mV signal at MIC input.	Ch. 40 Ch. 1	T4 T5	Adjust for maximum. Adjust for maximum.
Input of oscilloscope to TP10 (Q7 Emitter). Inject a 2400Hz, 25mV signal at MIC input.	Ch. 19, USB Ch. 19, USB	T11 RV11	Adjust for maximum. Turn core of T6 to tap. Adjust RV11 for .150 volt P-P.
Inject a 2400Hz, 25mV signal at MIC input.	Ch. 19, USB	T6, L7, L11, L13	Adjust for maximum RF output.

TRANSMITTER ADJUSTMENTS

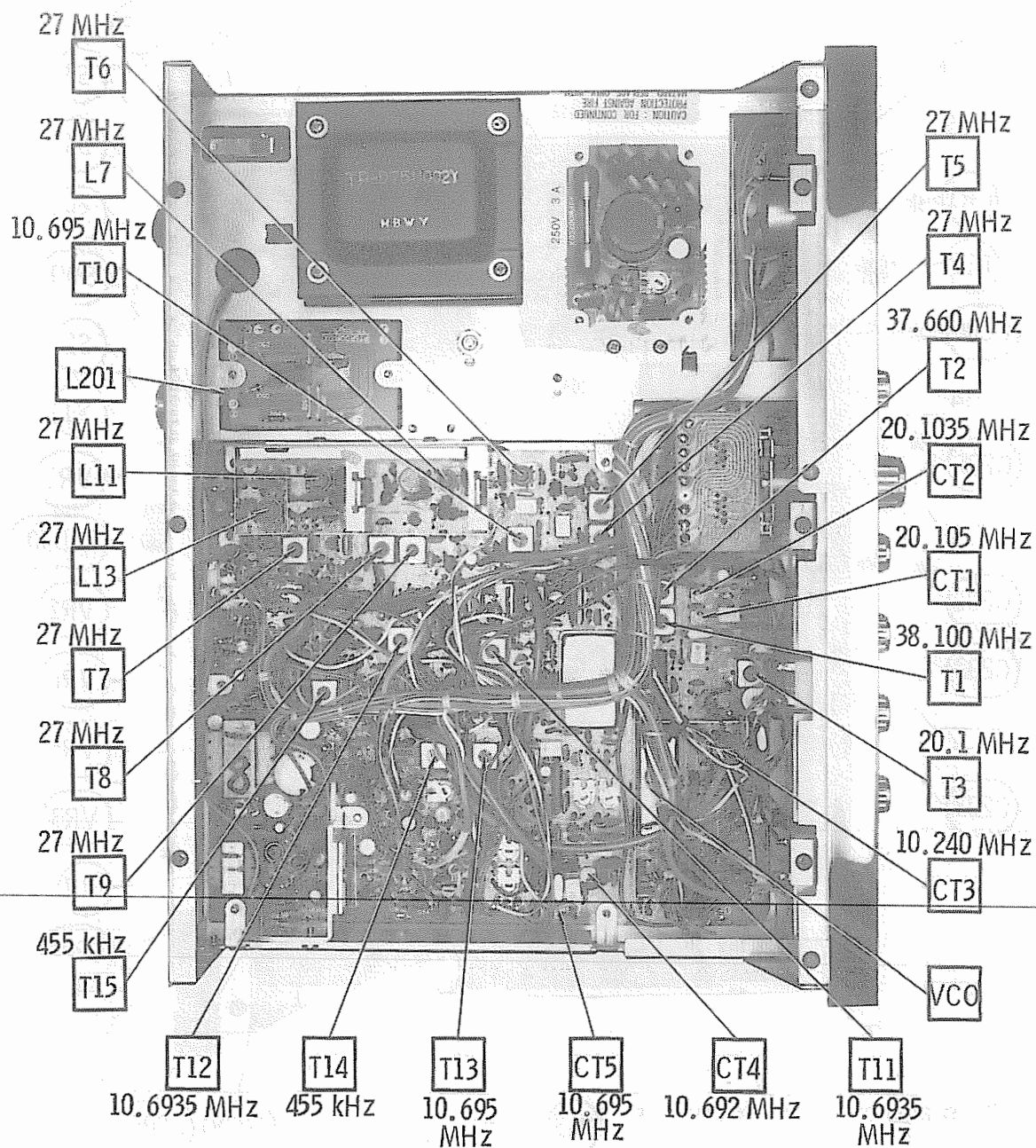
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment
of transmitter. See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCIVER	ADJUST	REMARKS
Input of DC meter to TP12 Q201 Emitter).	Ch. 19, AM (1)	RV1 (Power Supply Board)	AWI Adjust RV1 for 13.8V. Voltage should not vary when keying transmitter.
Connect a 100 Ohm 5 watt non- inductive resistor to antenna connector.	C19, AM (1)	RV501	SWR Set SWR-CAL switch to cal position. Adjust SWR CAL control to SET on an SWR scale of meter. Set SWR-CAL to SWR position. Adjust RV501 for 2 on SWR scale of meter.
Inject a 2400Hz, 2.5mV signal at MIC input. Connect a milliam- meter between Q10 emitter and ground.	Ch. 19, USB	RV1	BIAS Adjust for 35mA $\pm$ 10mA.
RF wattmeter (See connection above). No signal input.	Ch. 19, USB	RV4, RV5	BALANCE Adjust for MINIMUM RF
Output of 2 tone generator to MIC input 500Hz and 2400Hz. Output 25mV.	Ch. 19, USB	RV2	SSB POWER Adjust for 10 watts.
Connect an RF wattmeter and 50- Ohm, 25 watt dummy load to antenna connector.	Ch. 19, AM	VR4	AM POWER Adjust for 3.7 watts.
Modulation meter to antenna jack. Inject a 2500Hz, 25mV signal at MIC input.	Ch. 19, AM	RV12	AMC Adjust for 95% modulation.
Connect an RF wattmeter and 50- Ohm, 25 watt dummy load to antenna connector.	Ch. 19, AM	RV3	POWER METER Adjust RV3 so that RF panel meter agrees with RF wattmeter.

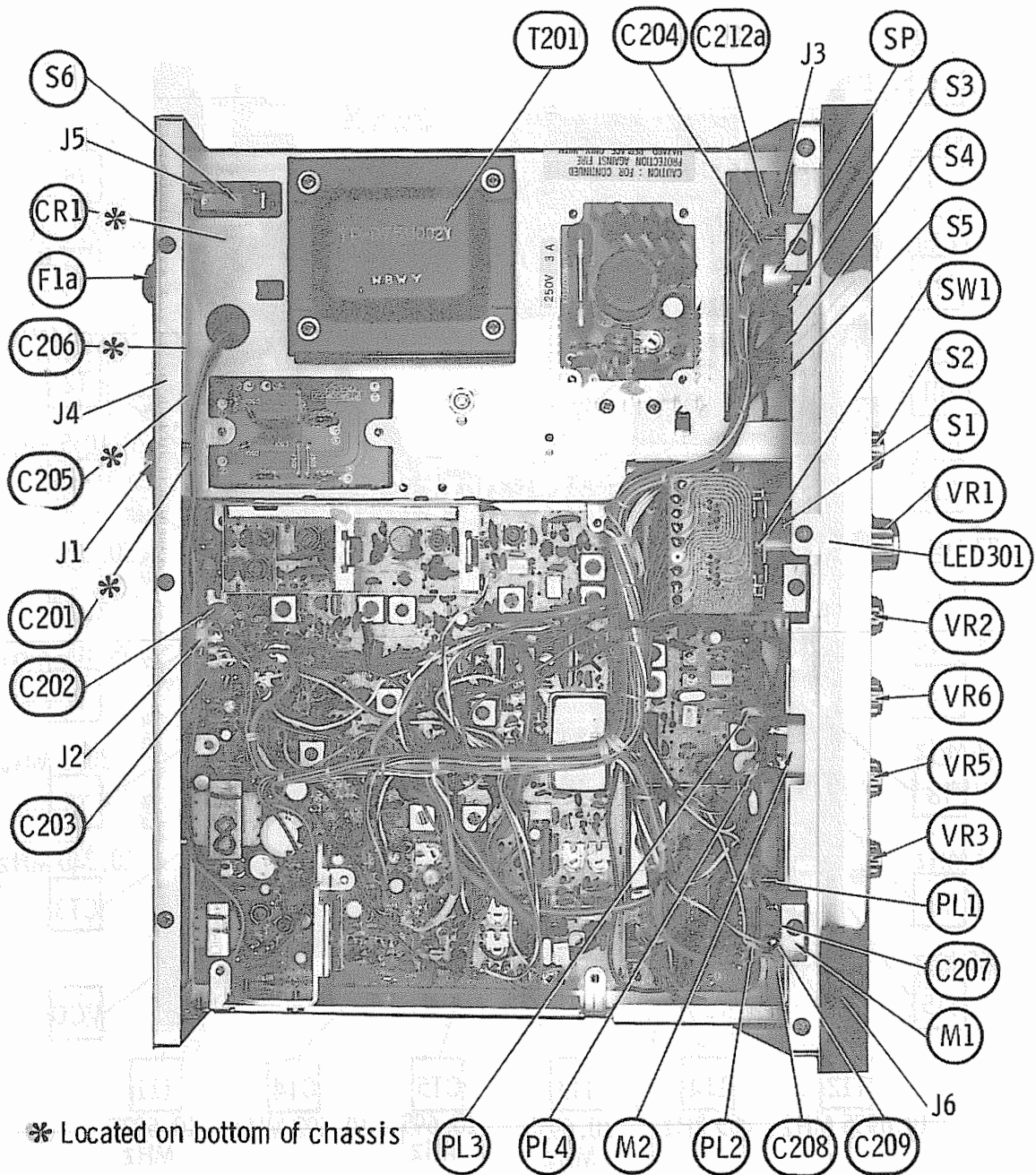
COLT MODELS 480, 1000

TRUTH CHART

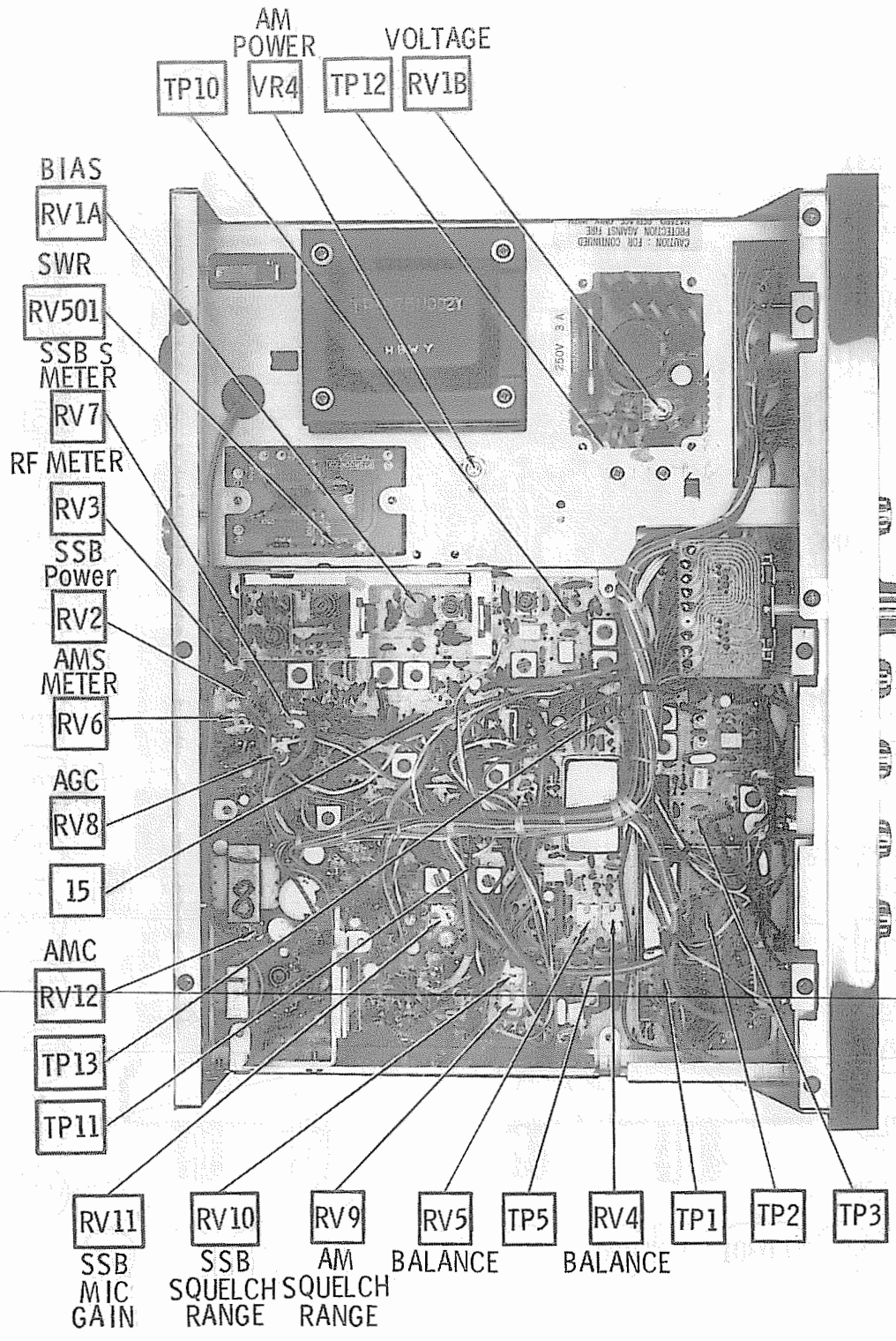
CHANNEL	1 = 5.40 Volts 0 = 0 Volts IC1 Program Divider								REC & XMT AM & USB VCO OUTPUT IN MHz AT TP13	REC & XMT LSB VCO OUTPUT IN MHz AT TP13	
	PINS										
	10	11	12	13	14	15					
1	1	1	1	1	1	1			37.660	37.657	
2	1	1	1	1	1	0			37.670	37.667	
3	1	1	1	1	0	1			37.680	37.677	
4	1	1	1	0	1	1			37.700	37.697	
5	1	1	1	0	1	0			37.710	37.707	
6	1	1	1	0	0	1			37.720	37.717	
7	1	1	1	0	0	0			37.730	37.727	
8	1	1	0	1	1	0			37.750	37.747	
9	1	1	0	1	0	1			37.760	37.757	
10	1	1	0	1	0	0			37.770	37.767	
11	1	1	0	0	1	1			37.780	37.777	
12	1	1	0	0	0	1			37.800	37.797	
13	1	1	0	0	0	0			37.810	37.807	
14	1	0	1	1	1	1			37.820	37.817	
15	1	0	1	1	1	0			37.830	37.827	
16	1	0	1	1	0	0			37.850	37.847	
17	1	0	1	0	1	1			37.860	37.857	
18	1	0	1	0	1	0			37.870	37.867	
19	1	0	1	0	0	1			37.880	37.877	
20	1	0	0	1	1	1			37.900	37.897	
21	1	0	0	1	1	0			37.910	37.907	
22	1	0	0	1	0	1			37.920	37.917	
23	1	0	0	0	1	0			37.950	37.947	
24	1	0	0	1	0	0			37.930	37.927	
25	1	0	0	0	1	1			37.940	37.937	
26	1	0	0	0	0	1			37.960	37.957	
27	1	0	0	0	0	0			37.970	37.967	
28	0	1	1	1	1	1			37.980	37.977	
29	0	1	1	1	1	0			37.990	37.987	
30	0	1	1	1	0	1			38.000	37.997	
31	0	1	1	1	0	0			38.010	38.007	
32	0	1	1	0	1	1			38.020	38.017	
33	0	1	1	0	1	0			38.030	38.027	
34	0	1	1	0	0	1			38.040	38.037	
35	0	1	1	0	0	0			38.050	38.047	
36	0	1	0	1	1	1			38.060	38.057	
37	0	1	0	1	1	0			38.070	38.067	
38	0	1	0	1	0	1			38.080	38.077	
39	0	1	0	1	0	0			38.090	38.087	
40	0	1	0	0	1	1			38.100	38.097	



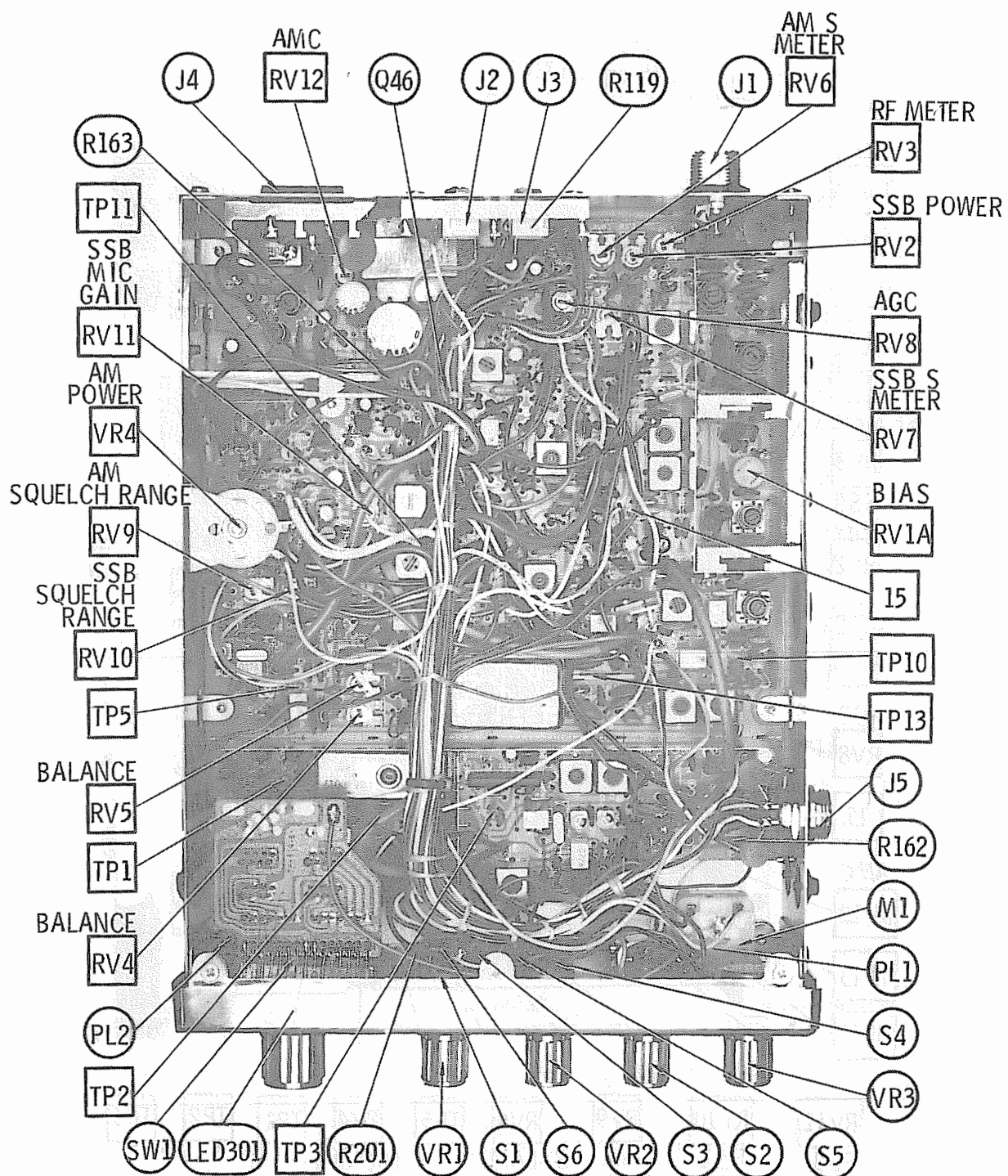
MODEL 1000 CHASSIS-TOP



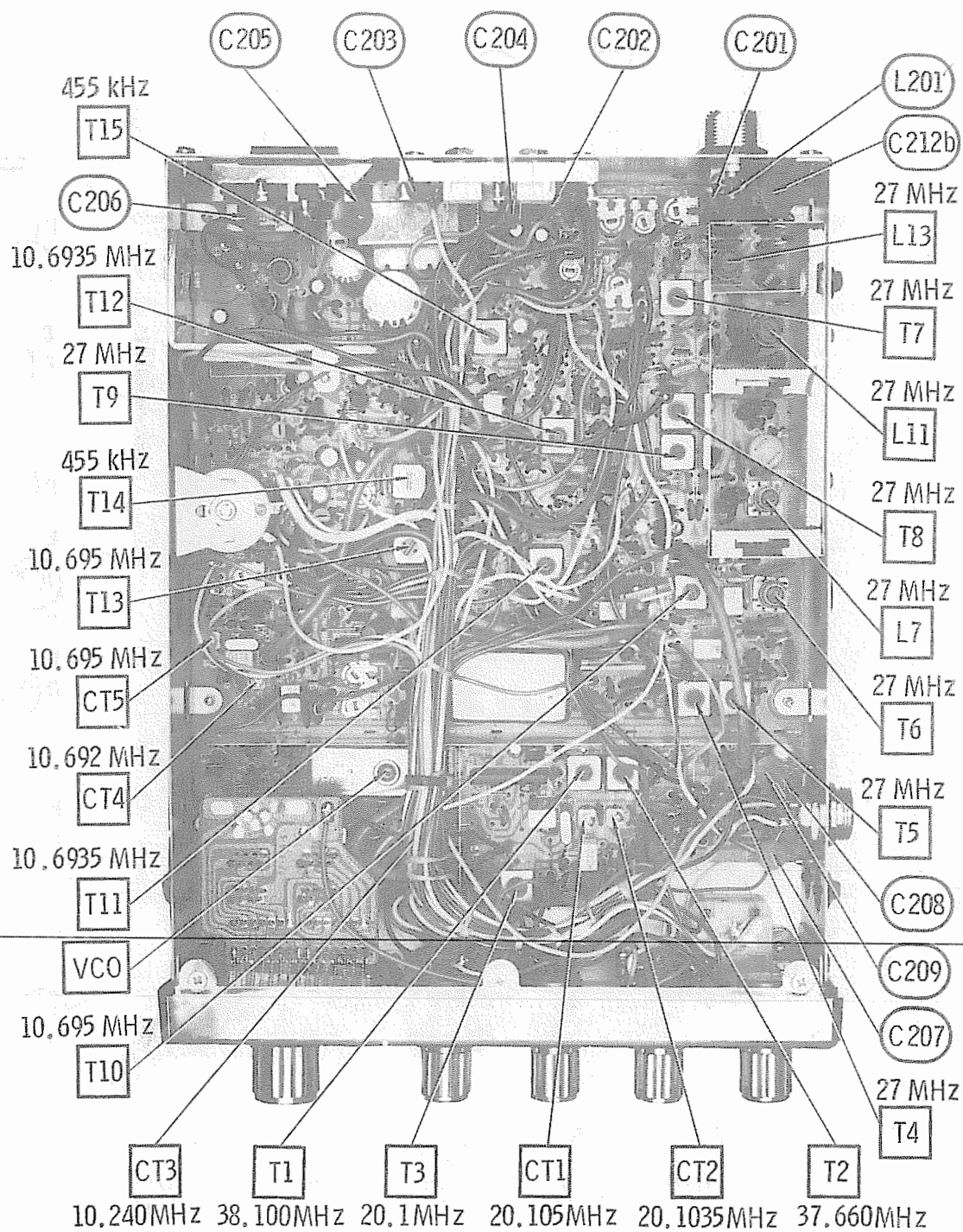
MODEL 1000 CHASSIS-TOP



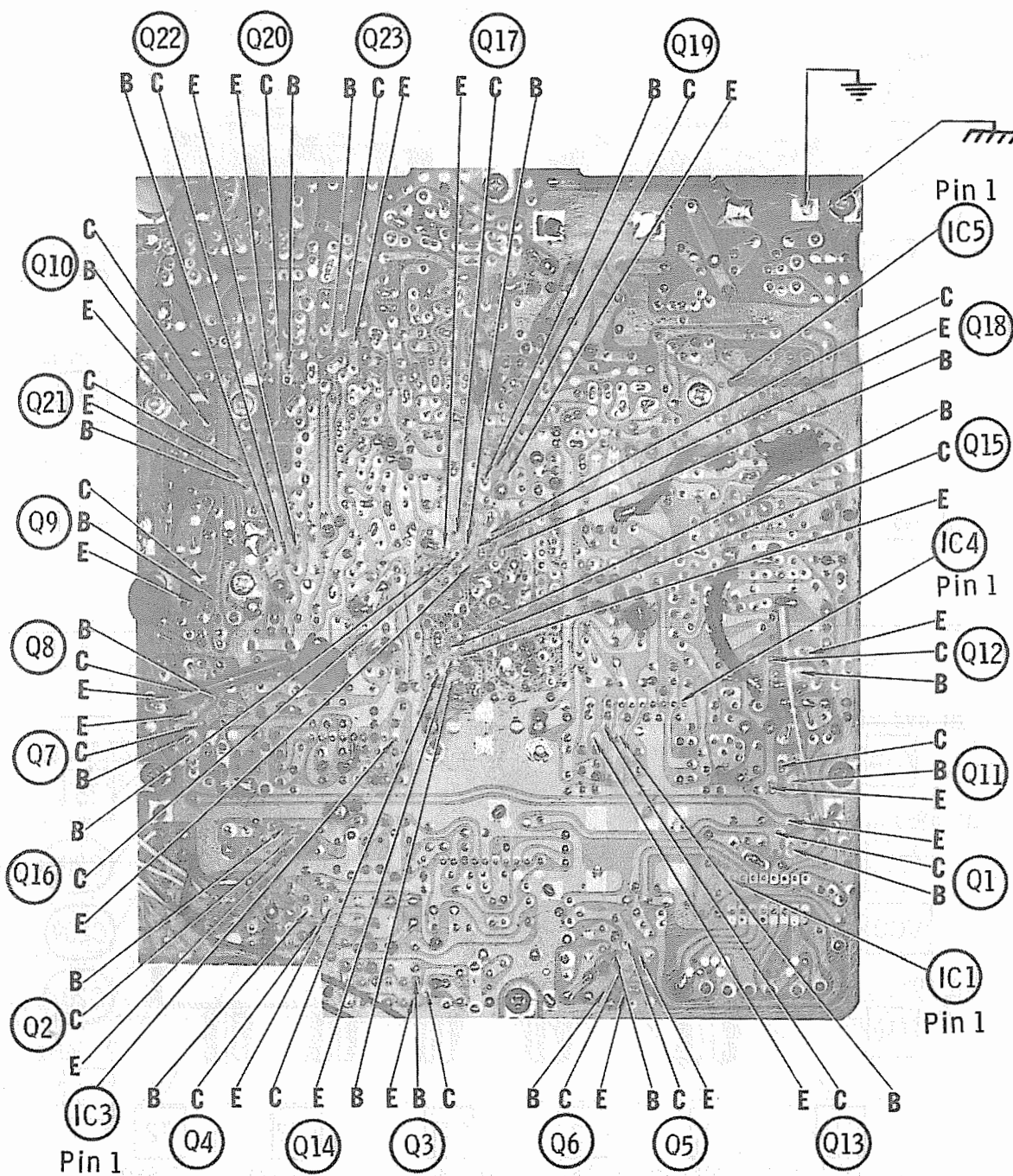
MODEL 1000 CHASSIS-TOP



MODEL 480 CHASSIS-BOTTOM

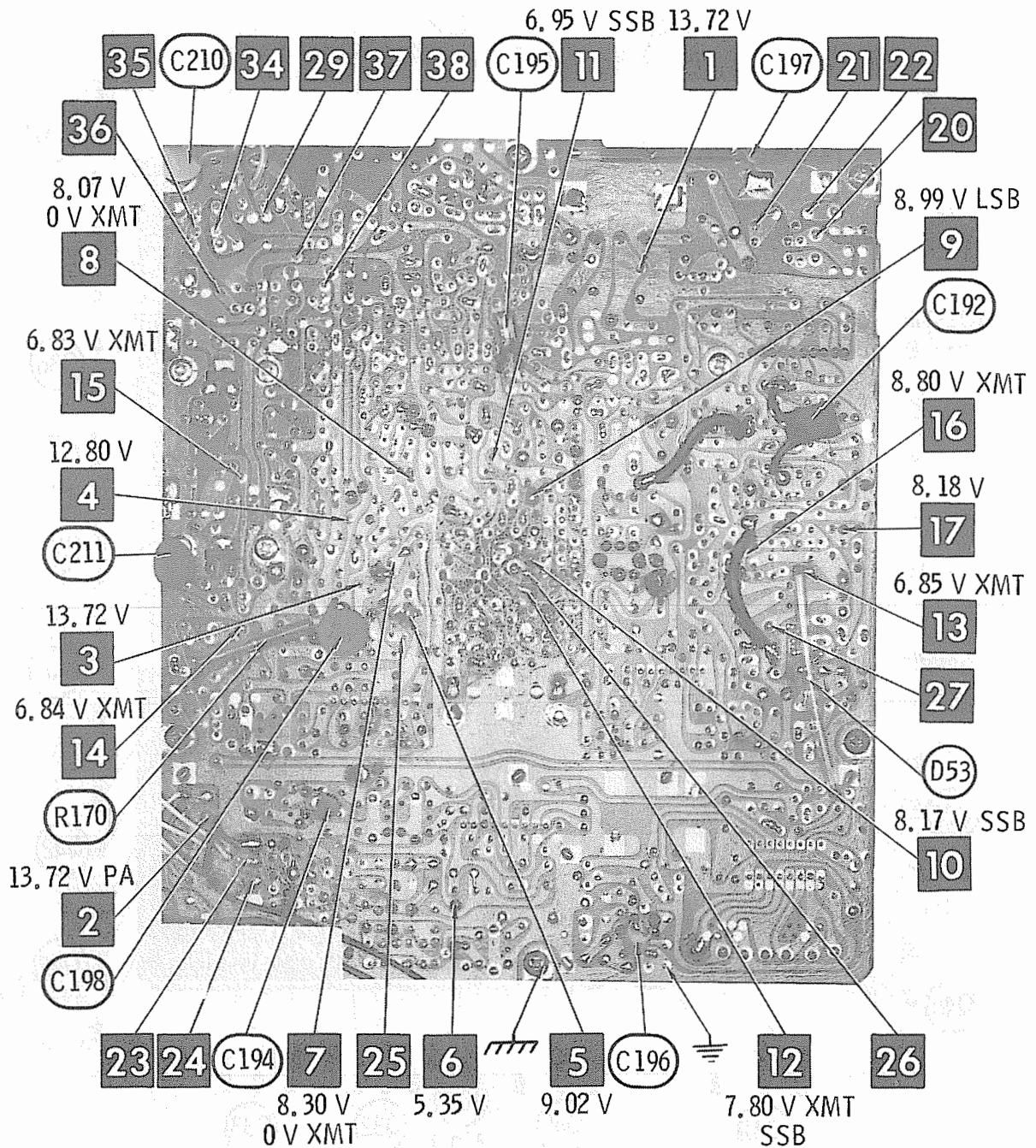


MODEL 480 CHASSIS-BOTTOM

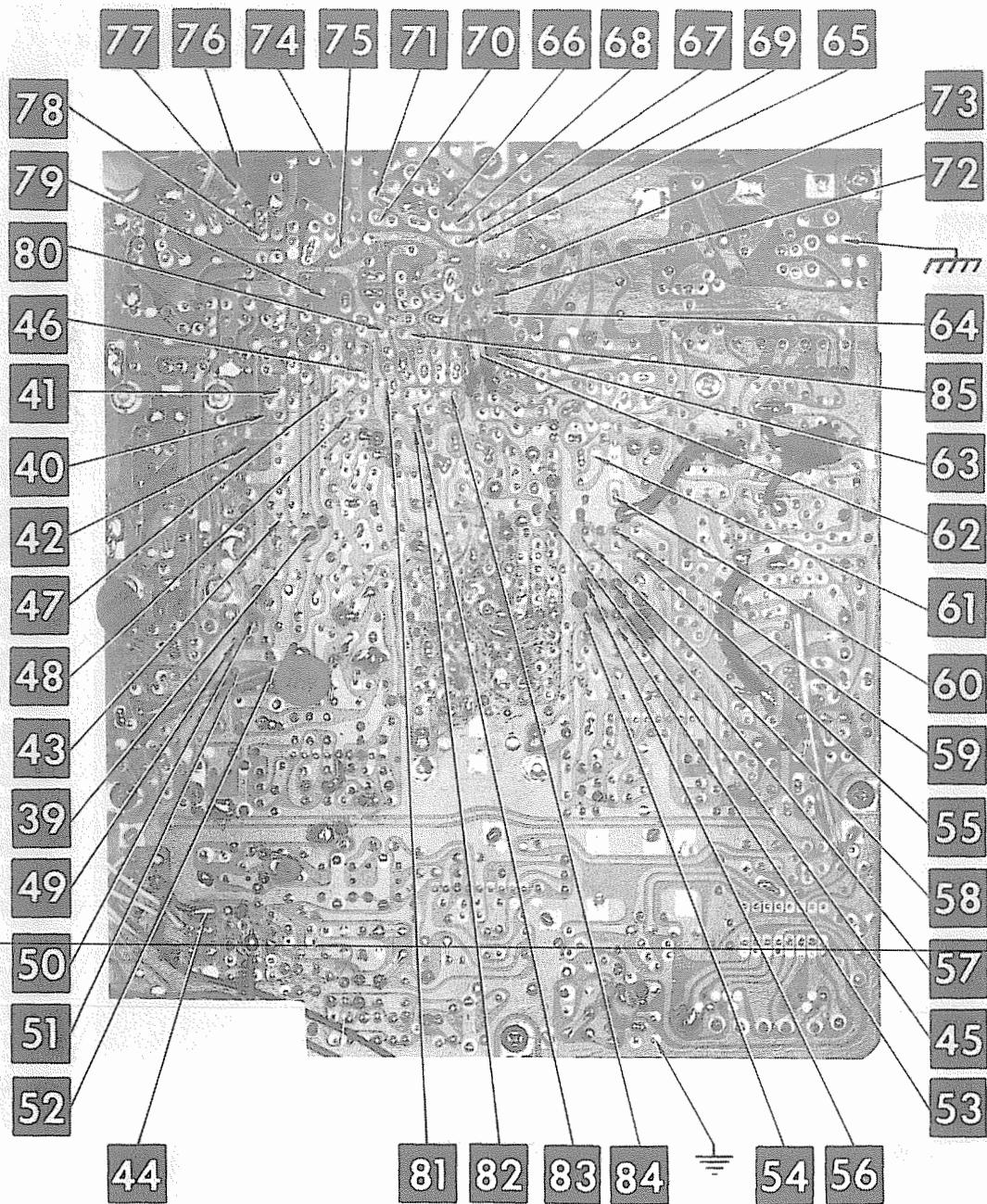


MAIN BOARD



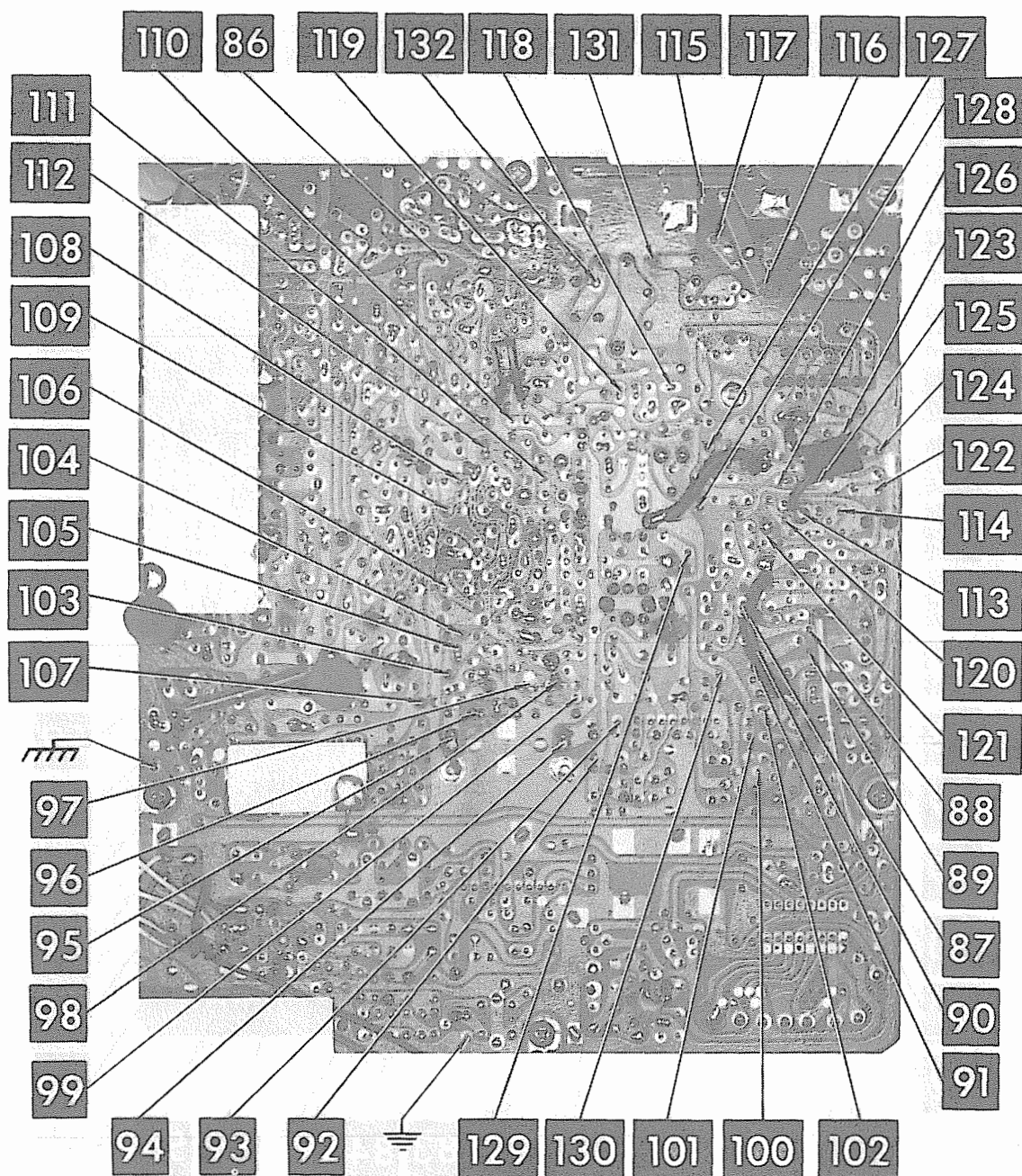


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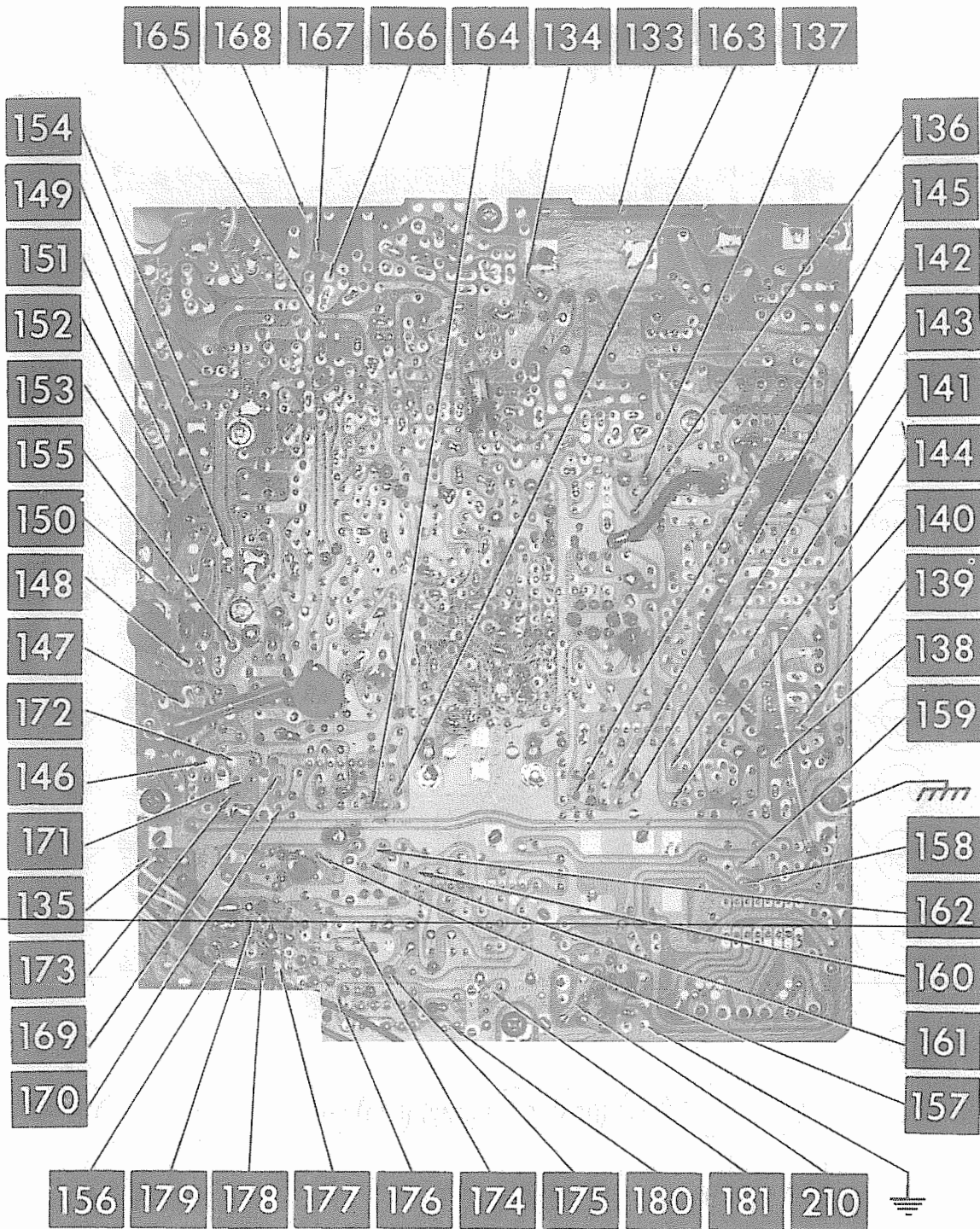


COLT MODELS 480, 1000

MAIN BOARD

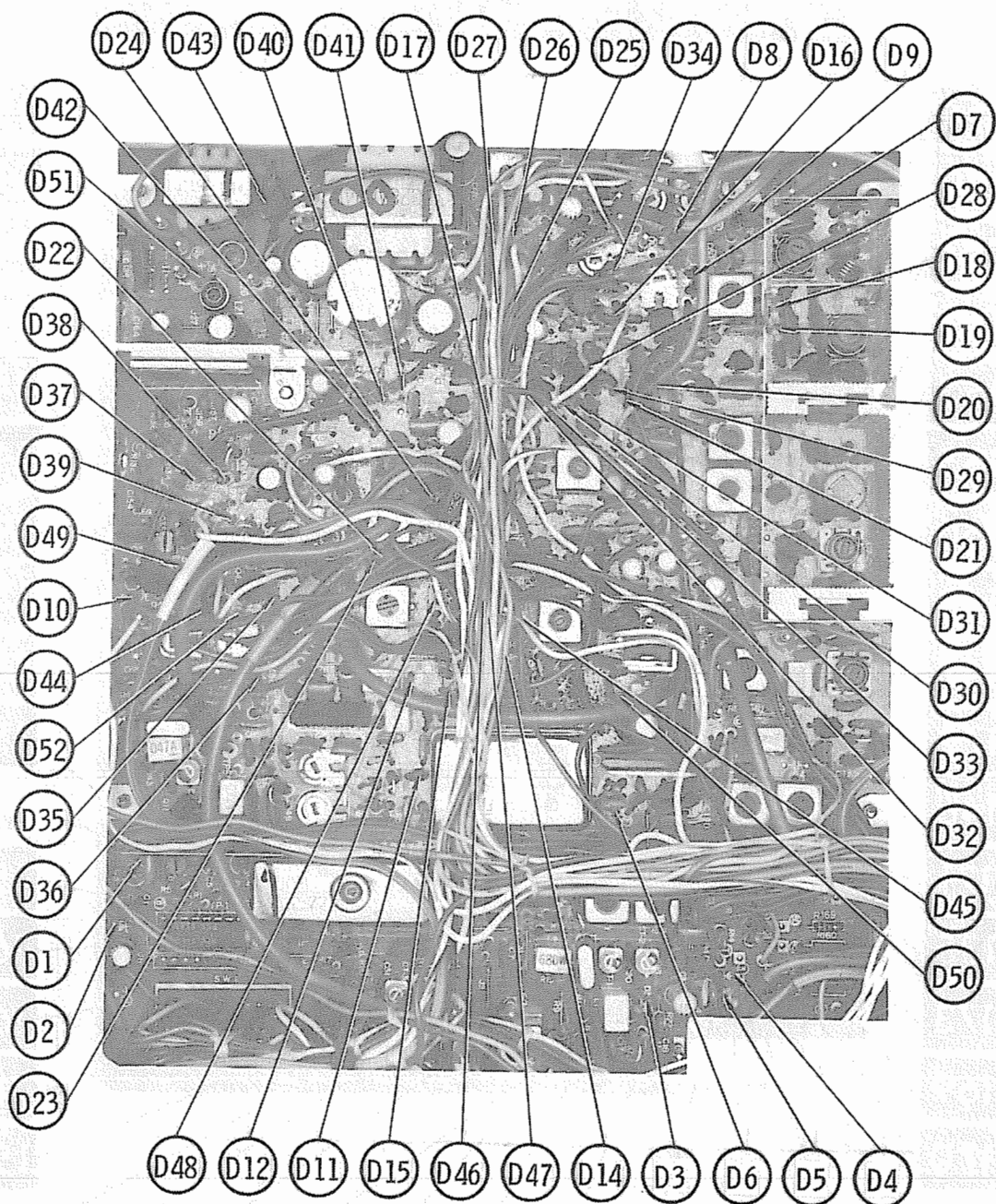


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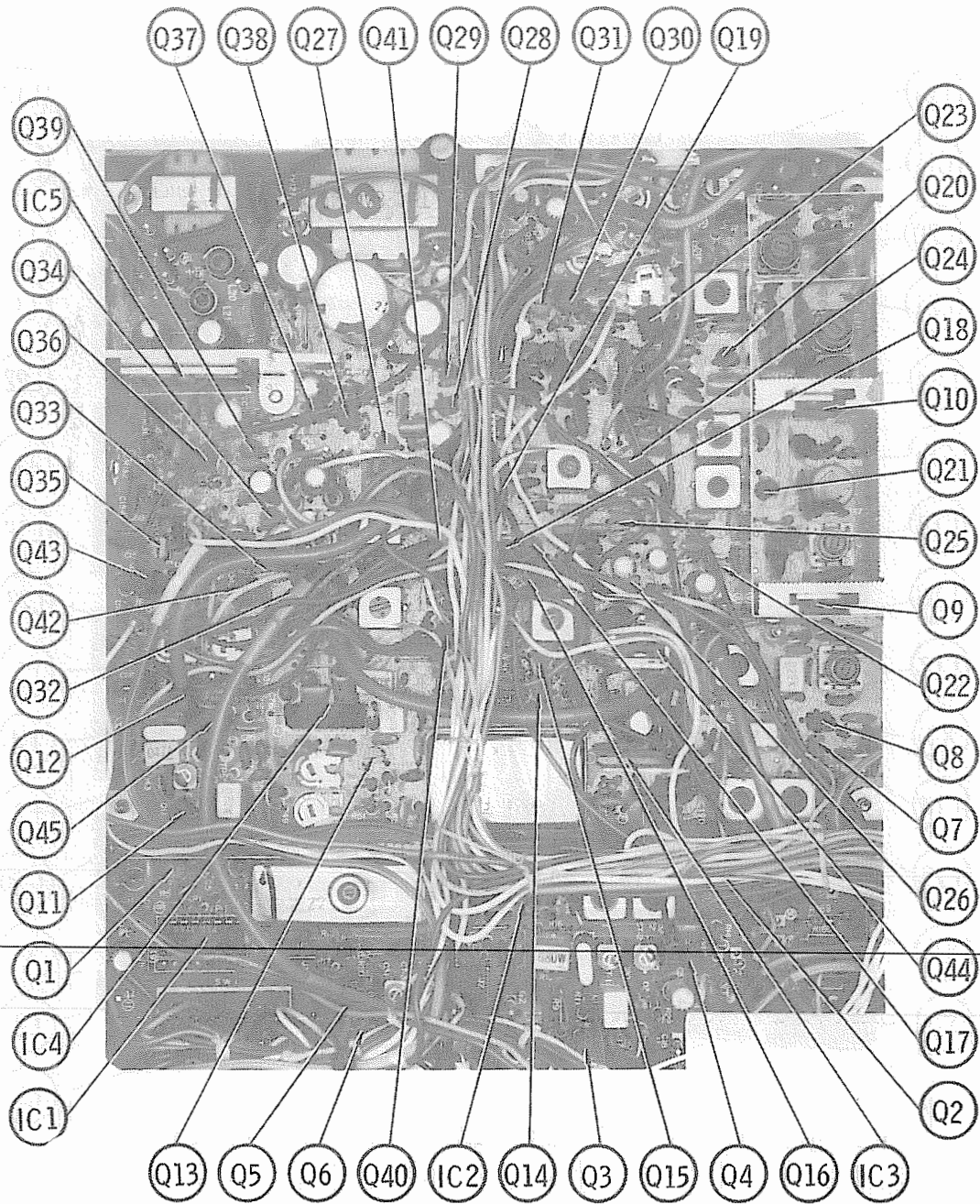


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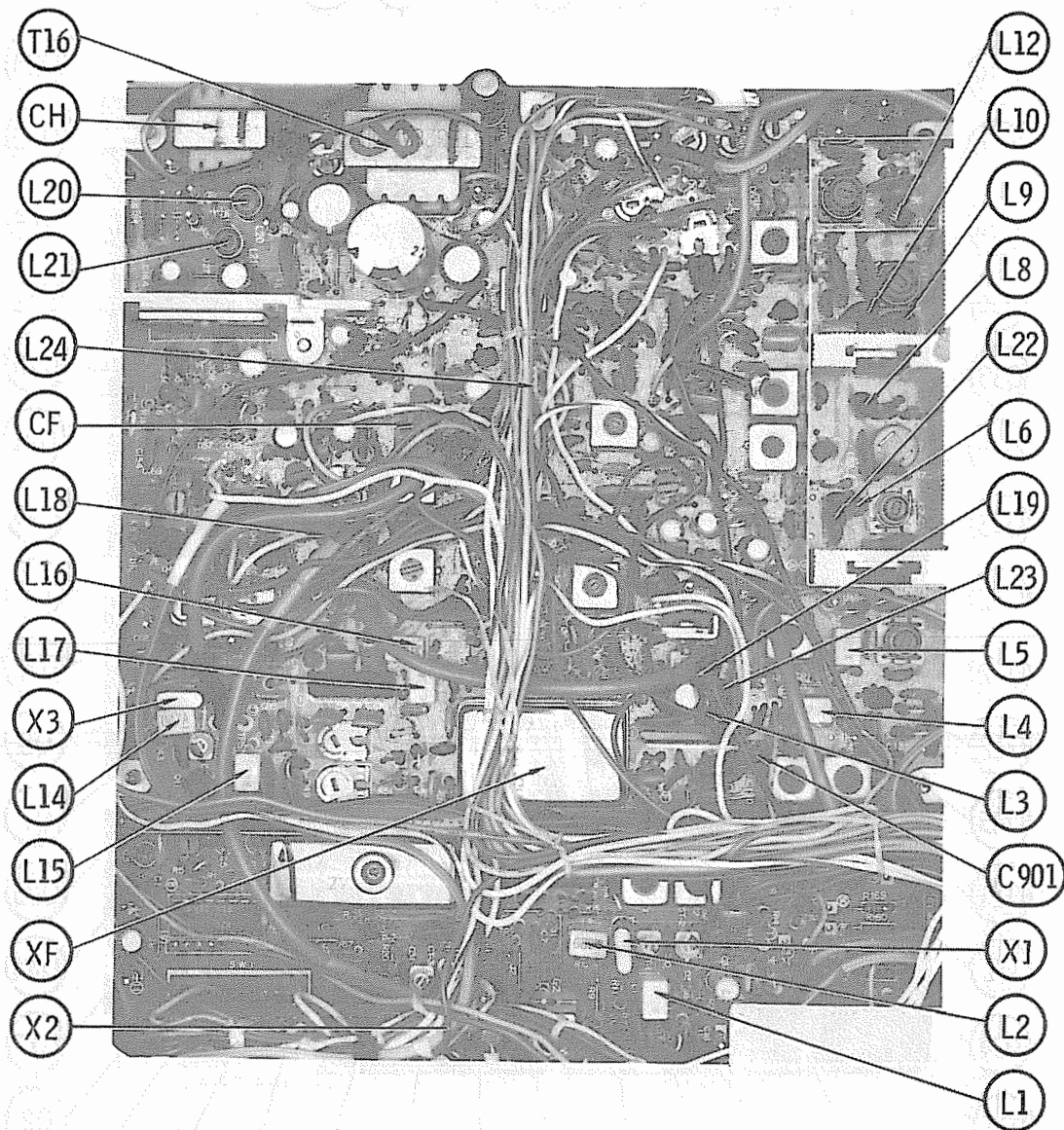
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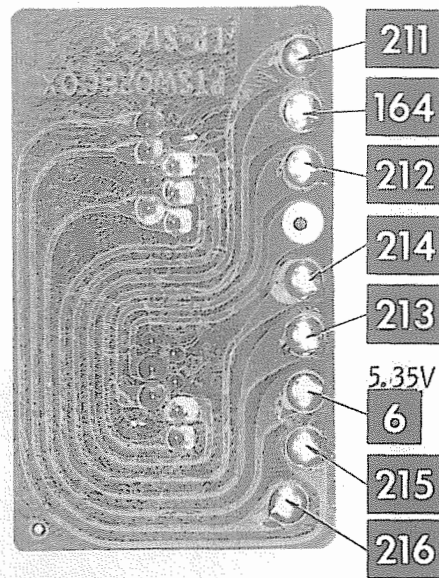
MAIN BOARD



MAIN BOARD

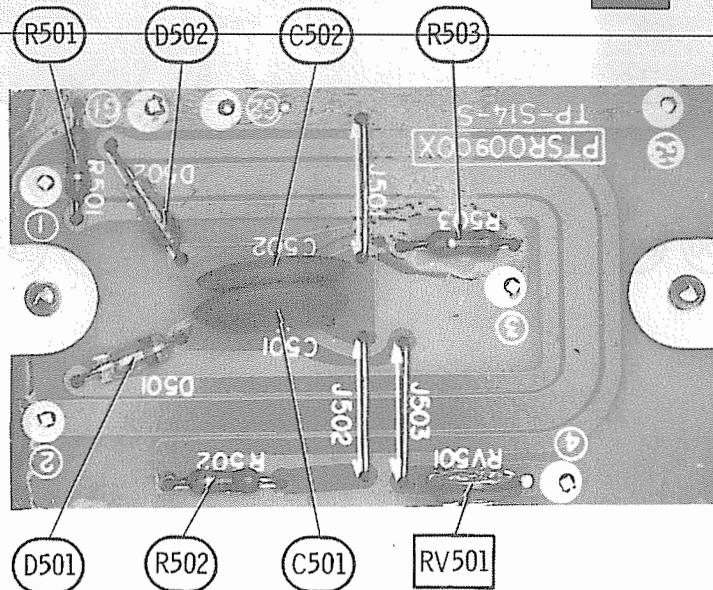
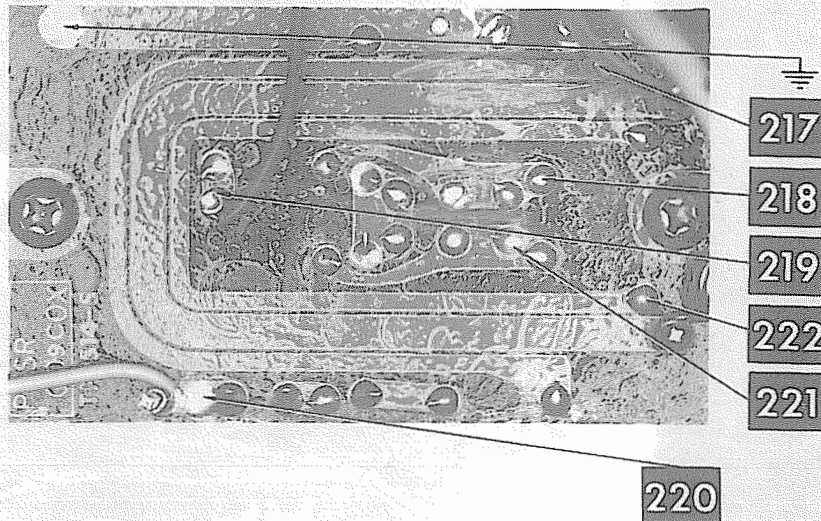


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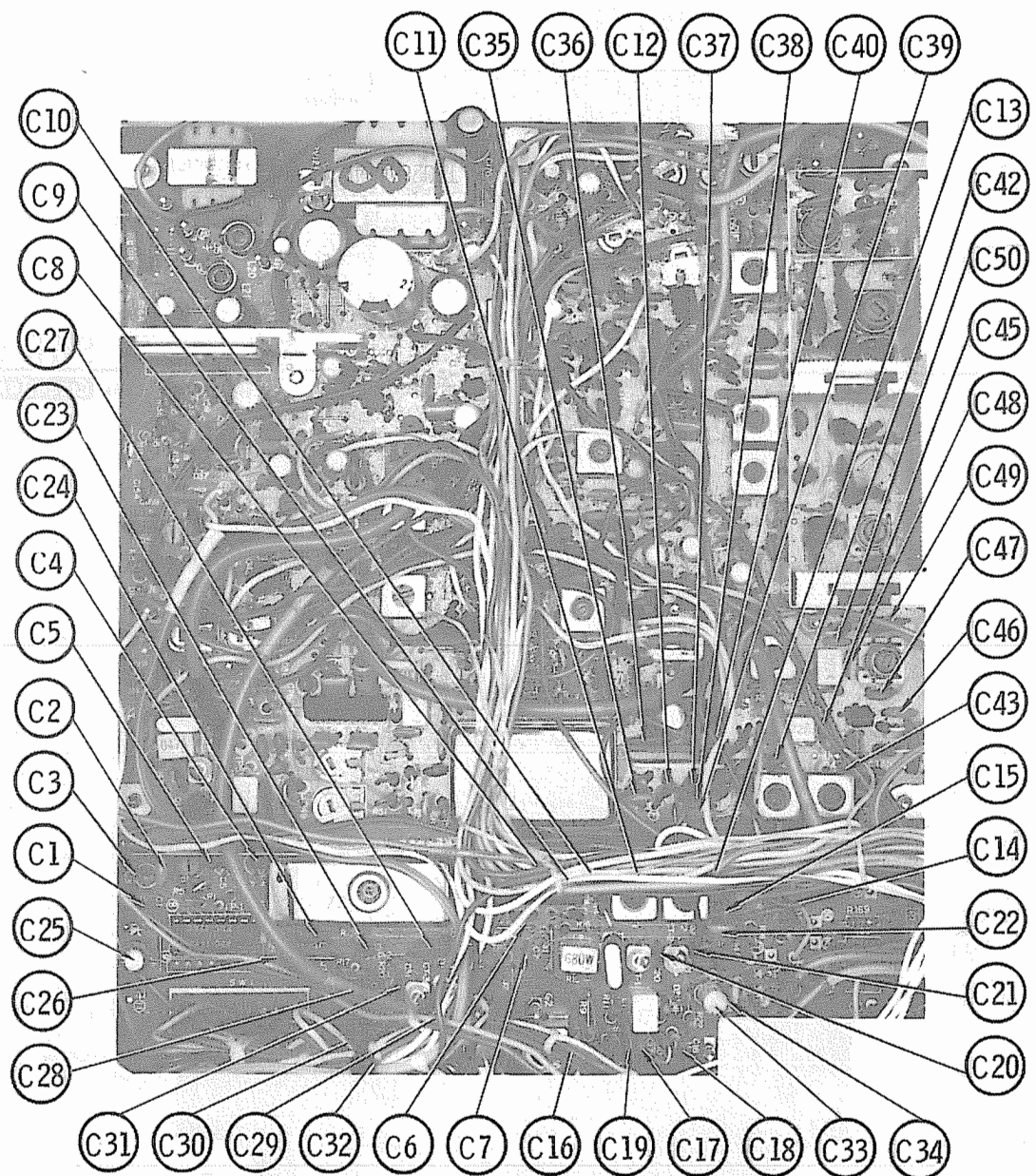


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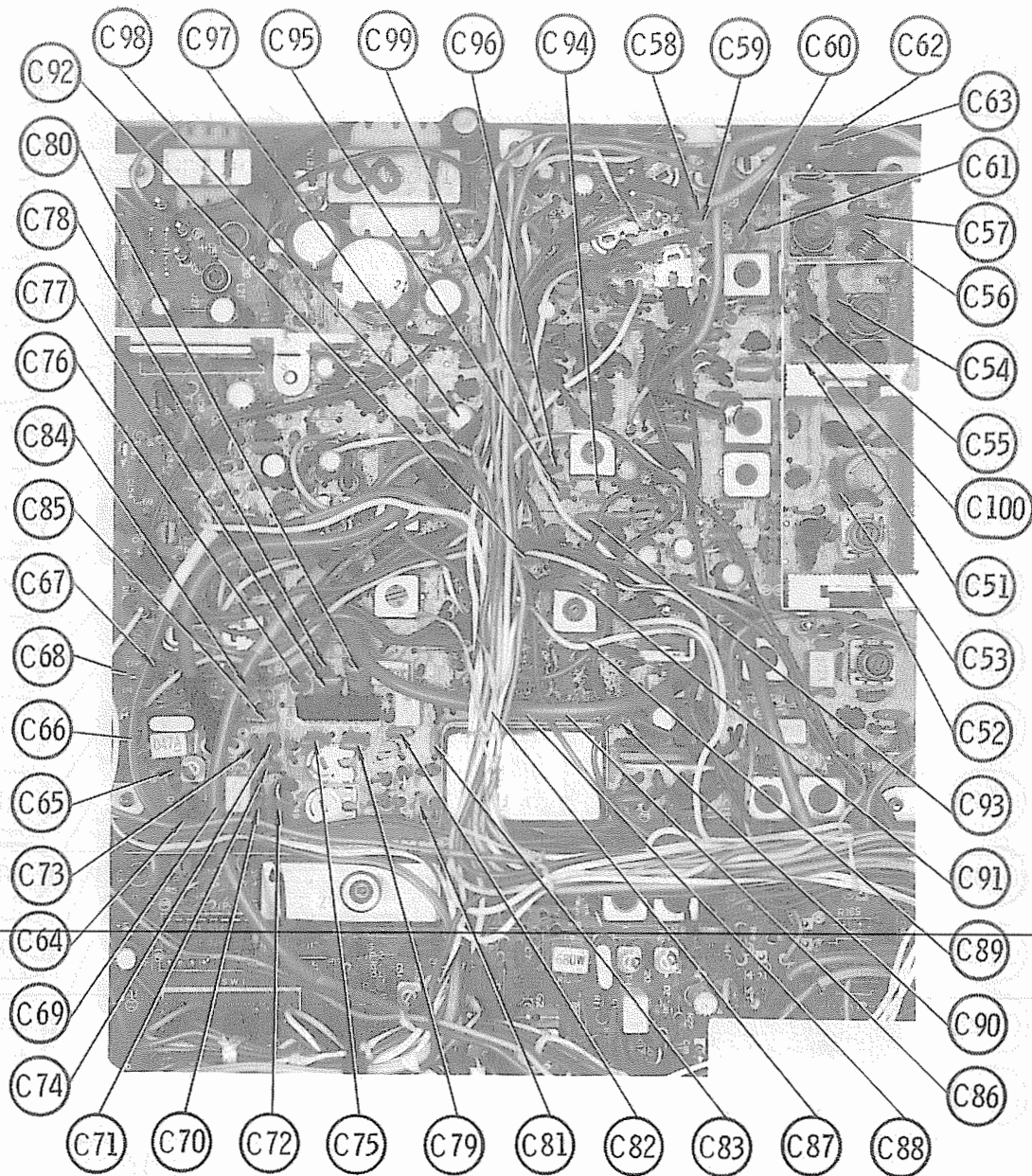
COLT MODELS 480, 1000



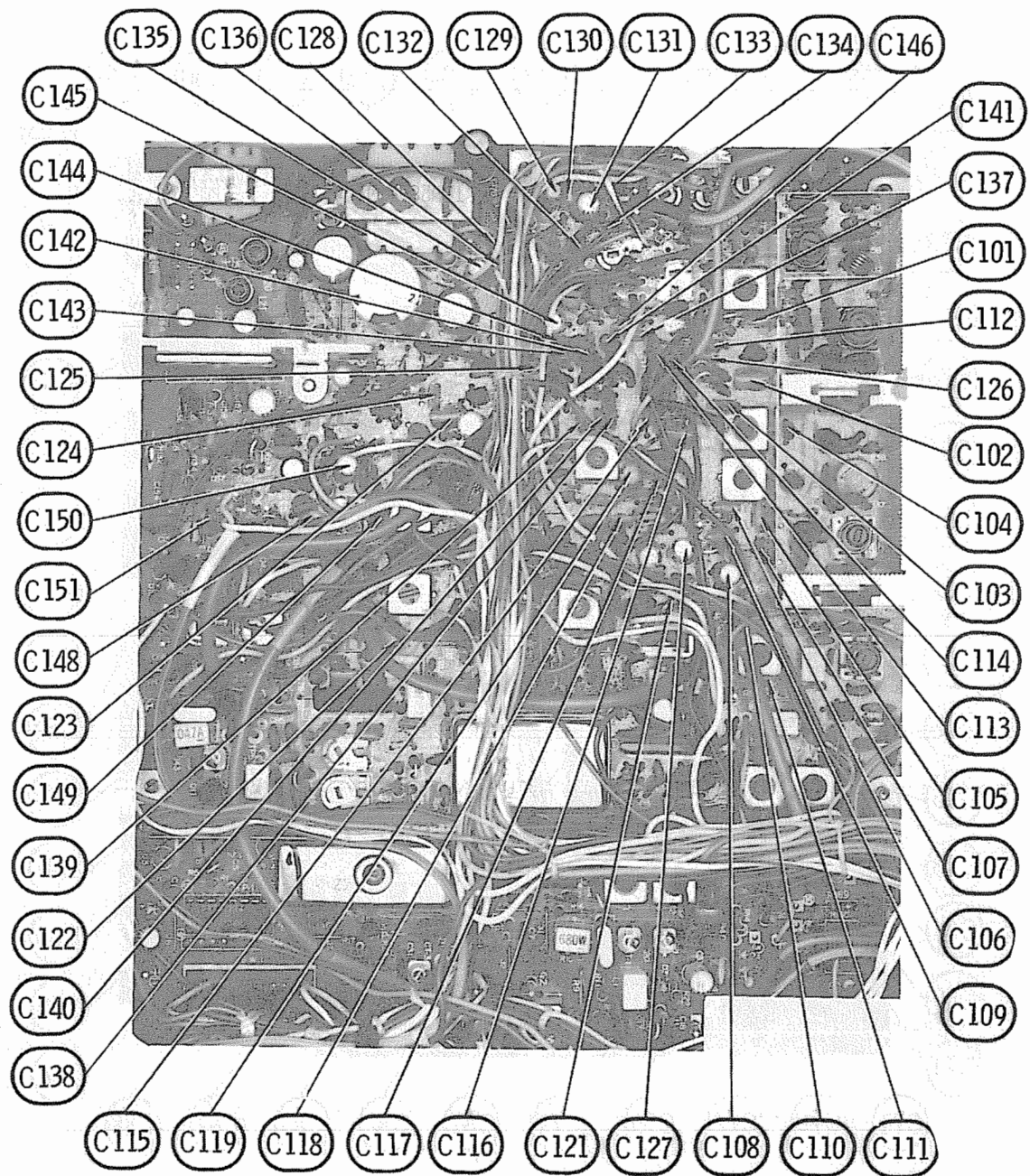
SWR BOARD



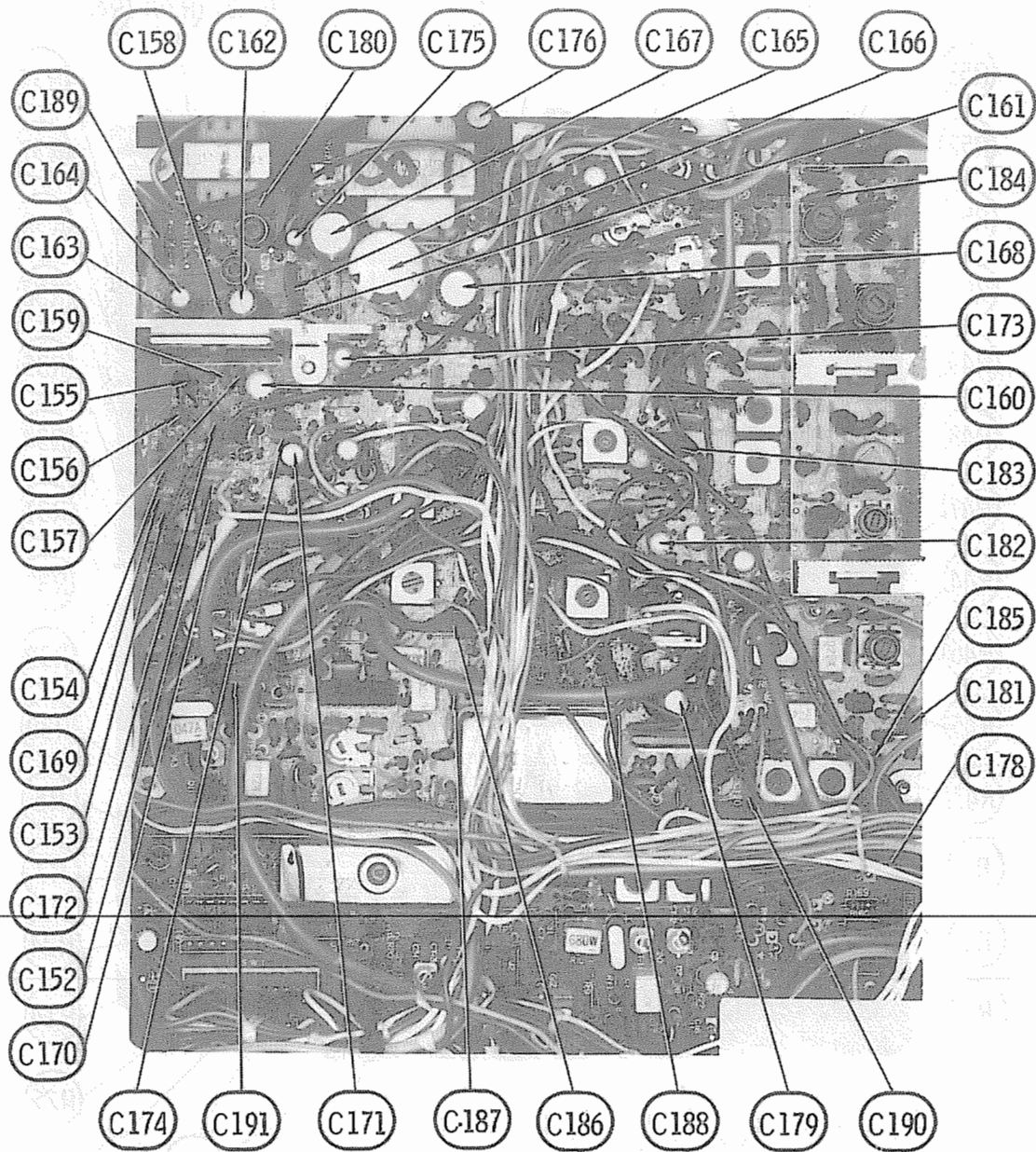
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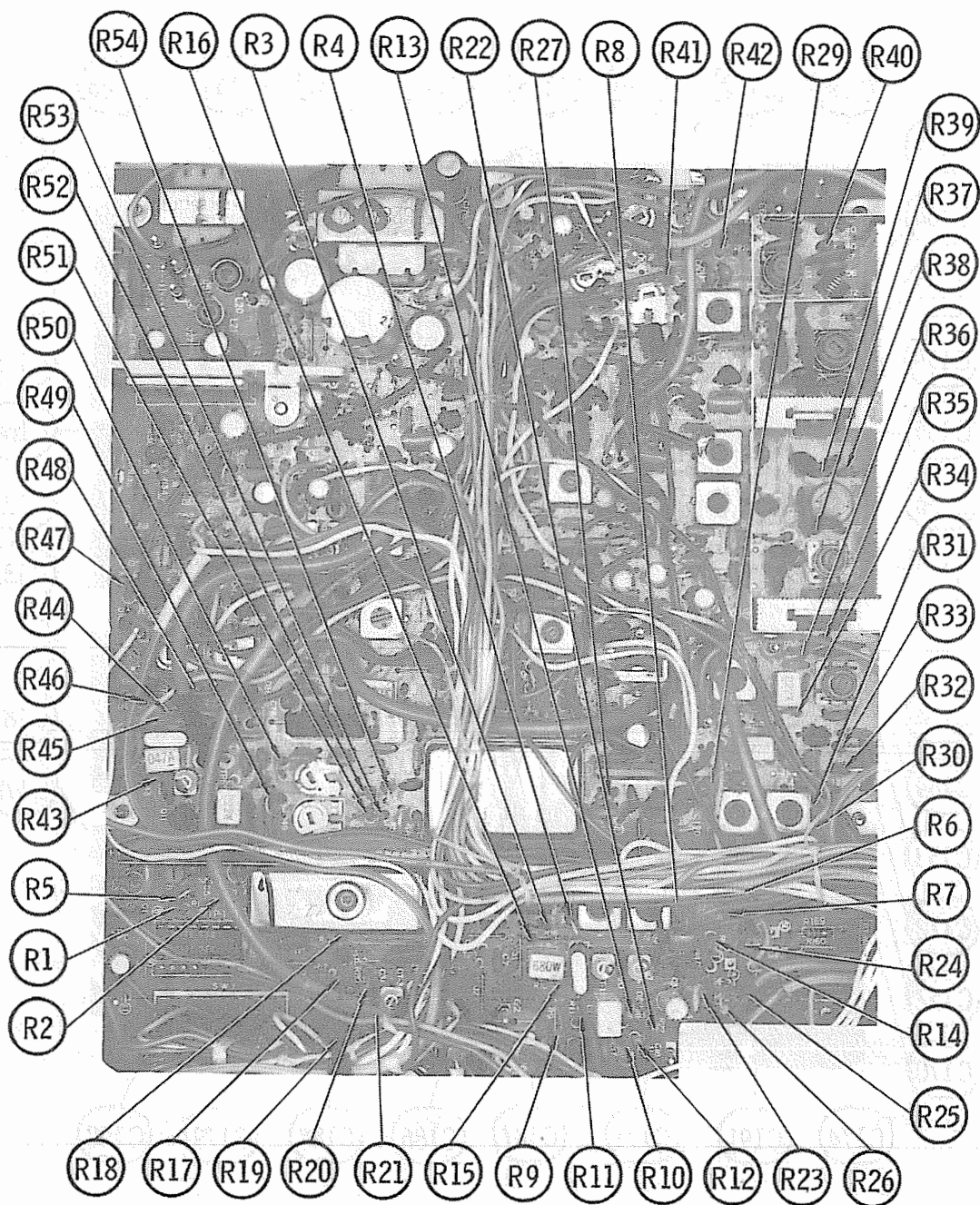
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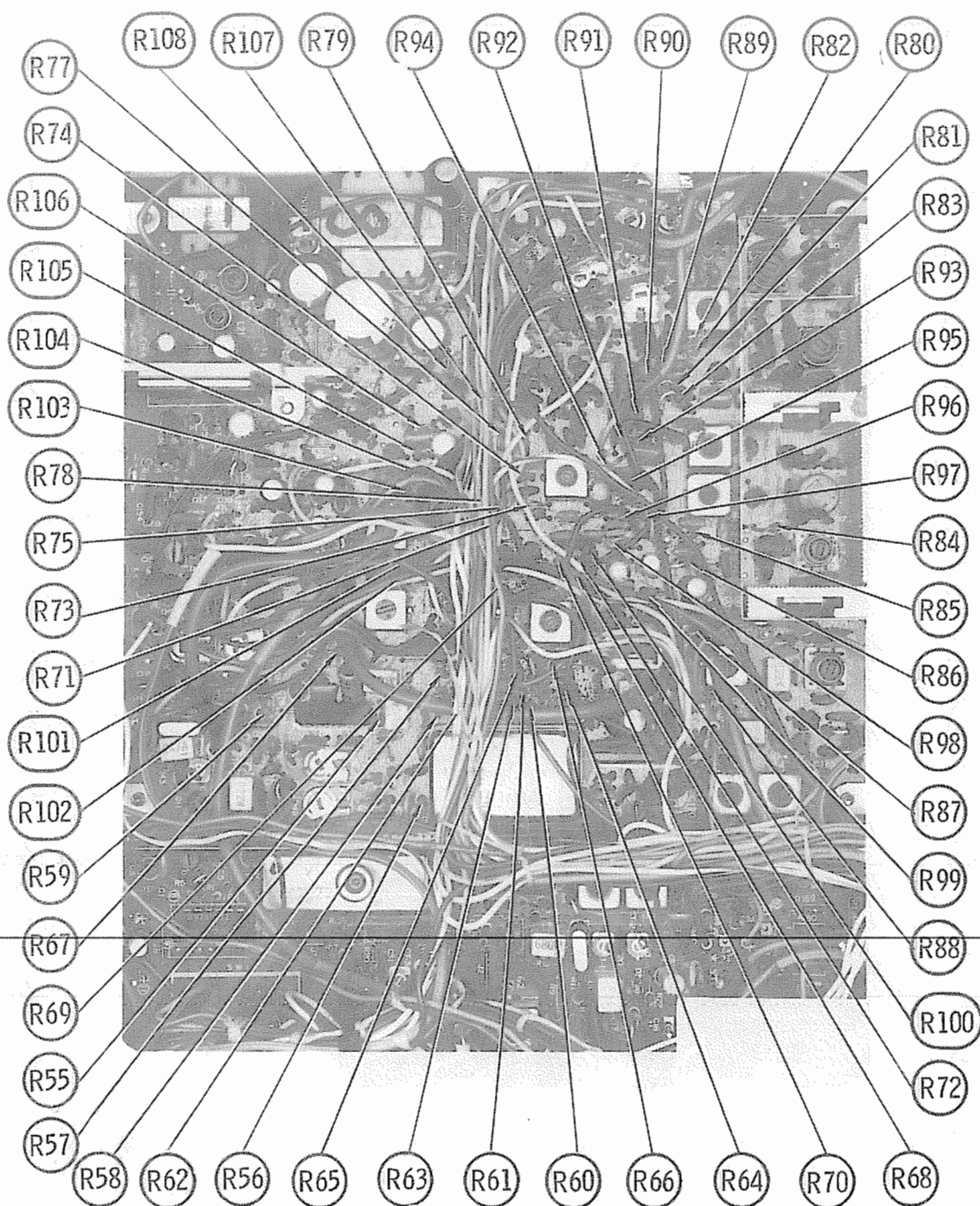
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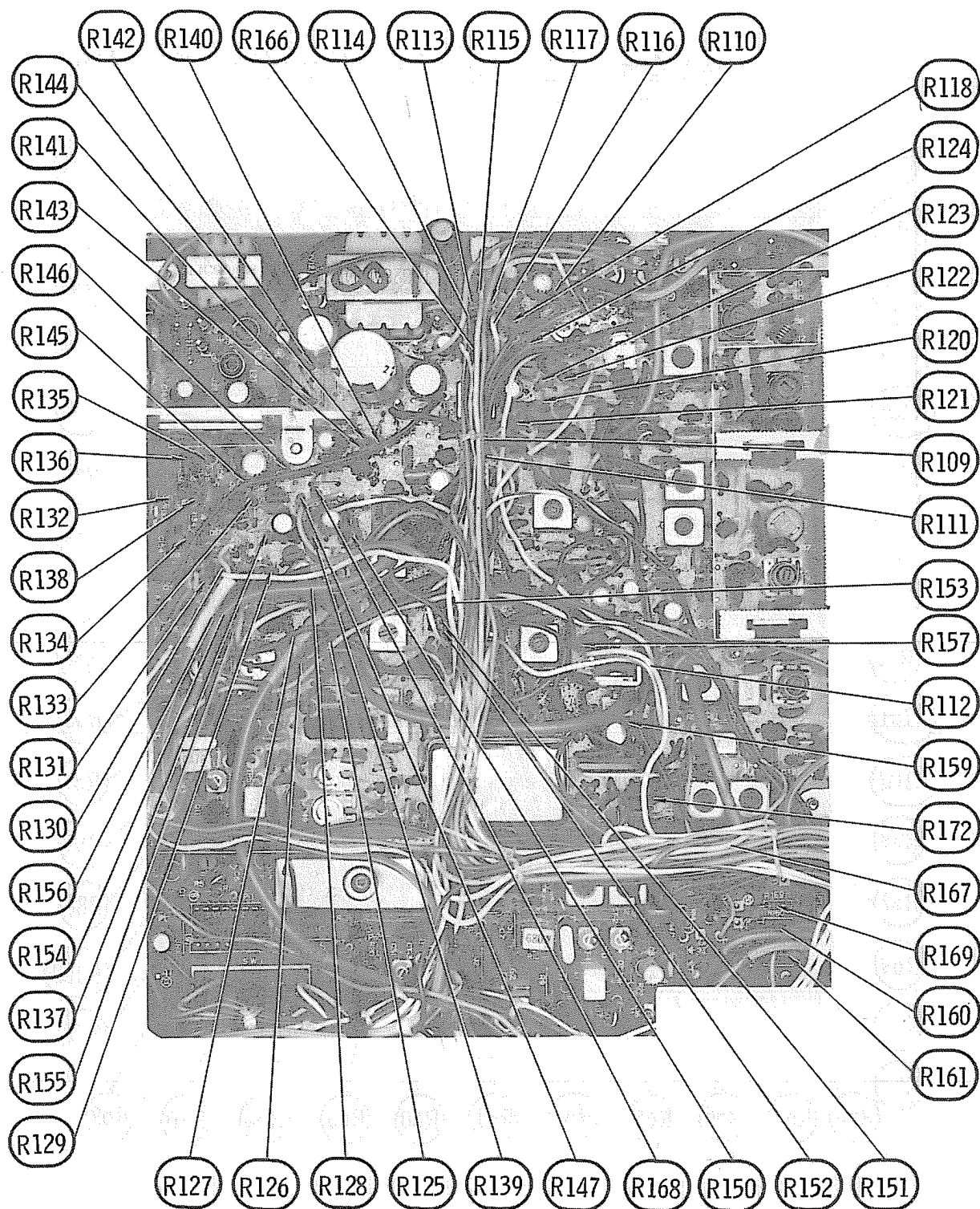
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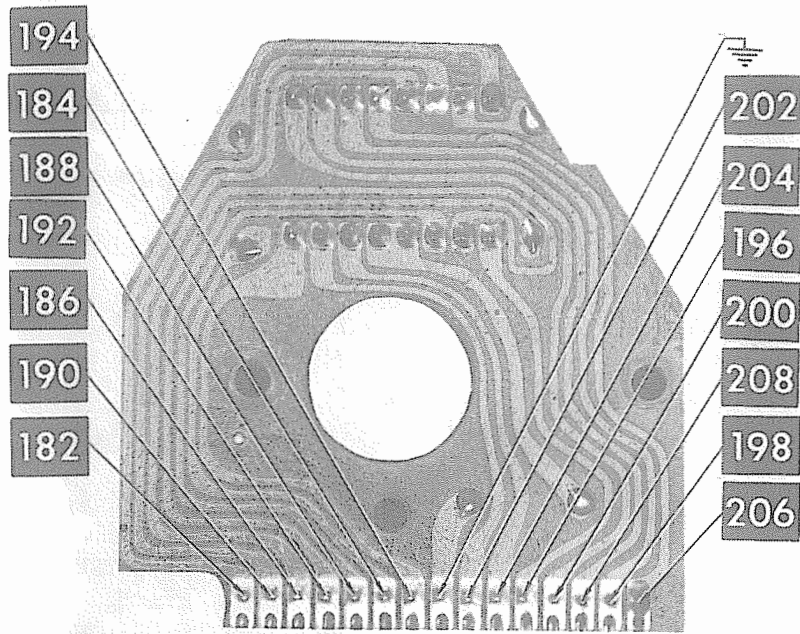
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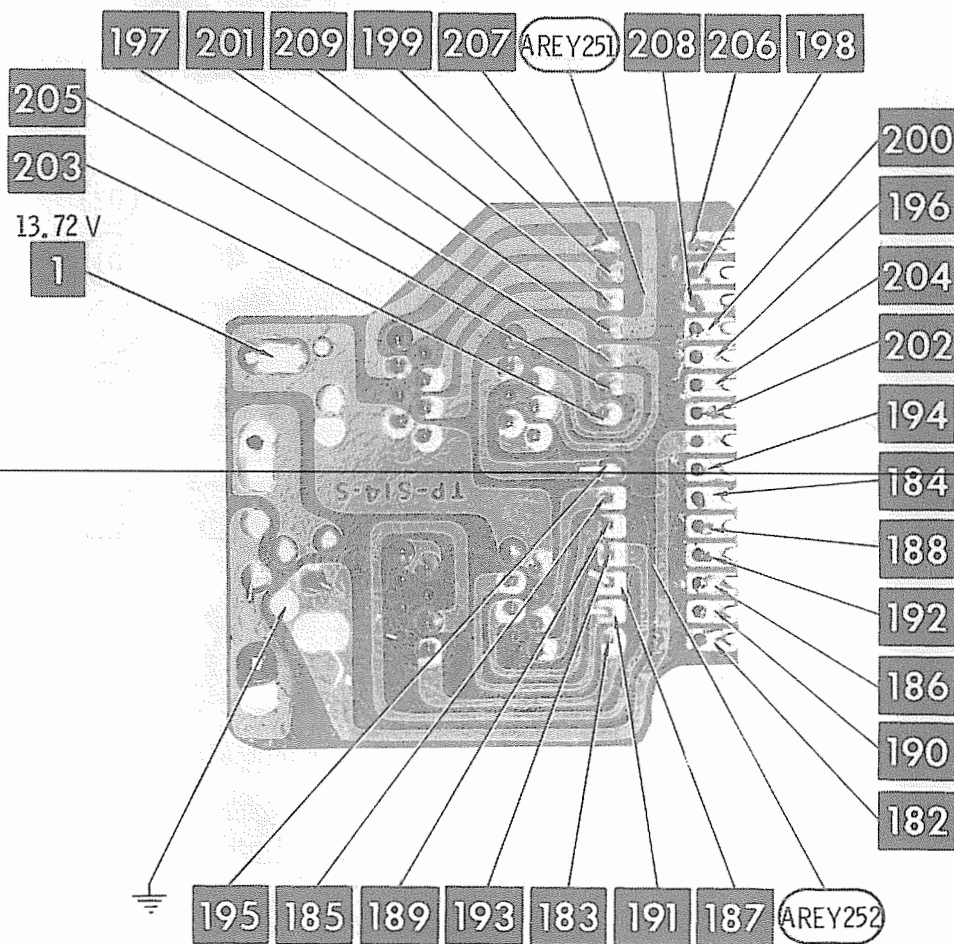
MAIN BOARD



MAIN BOARD

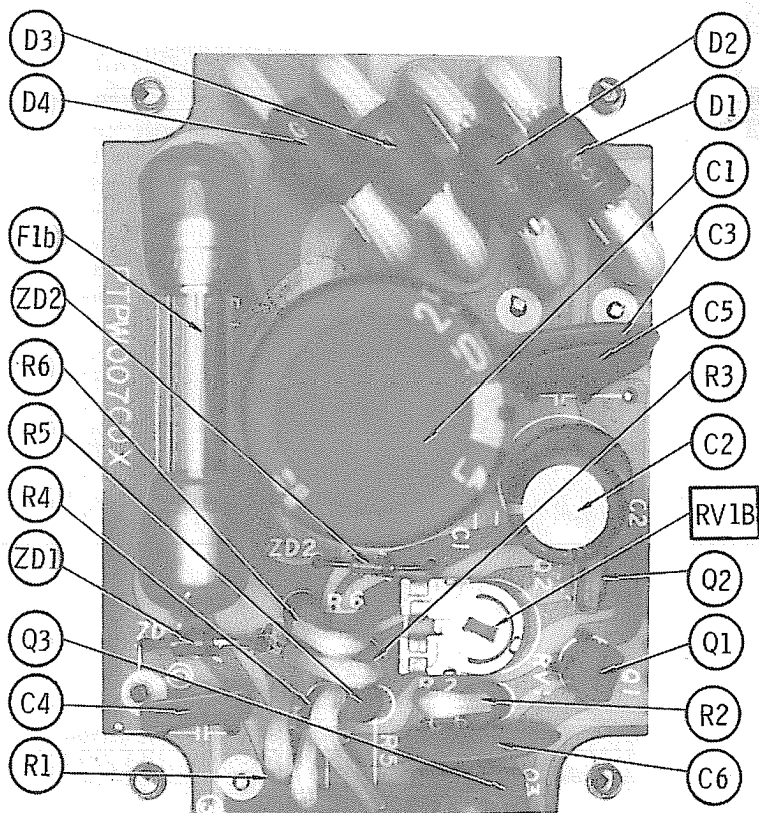
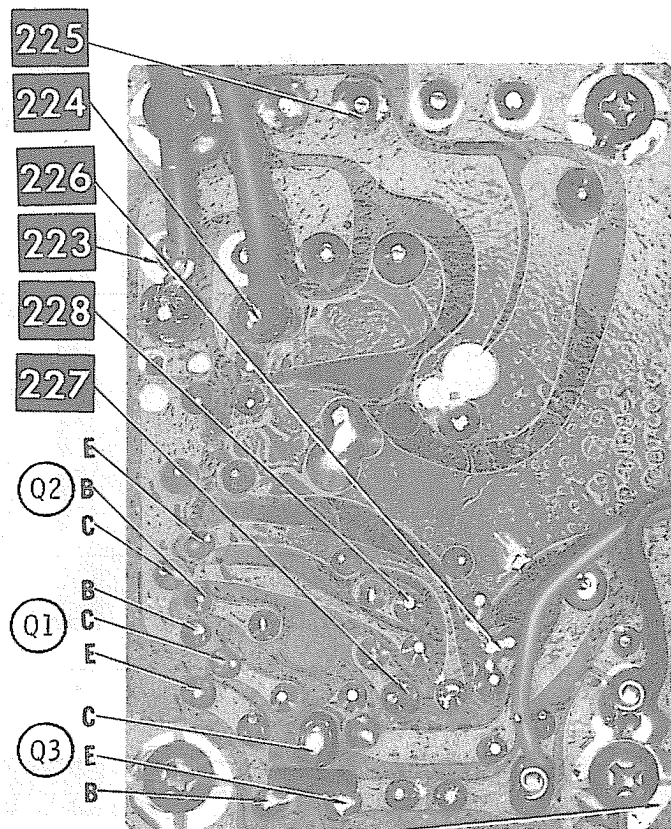


LED BOARD

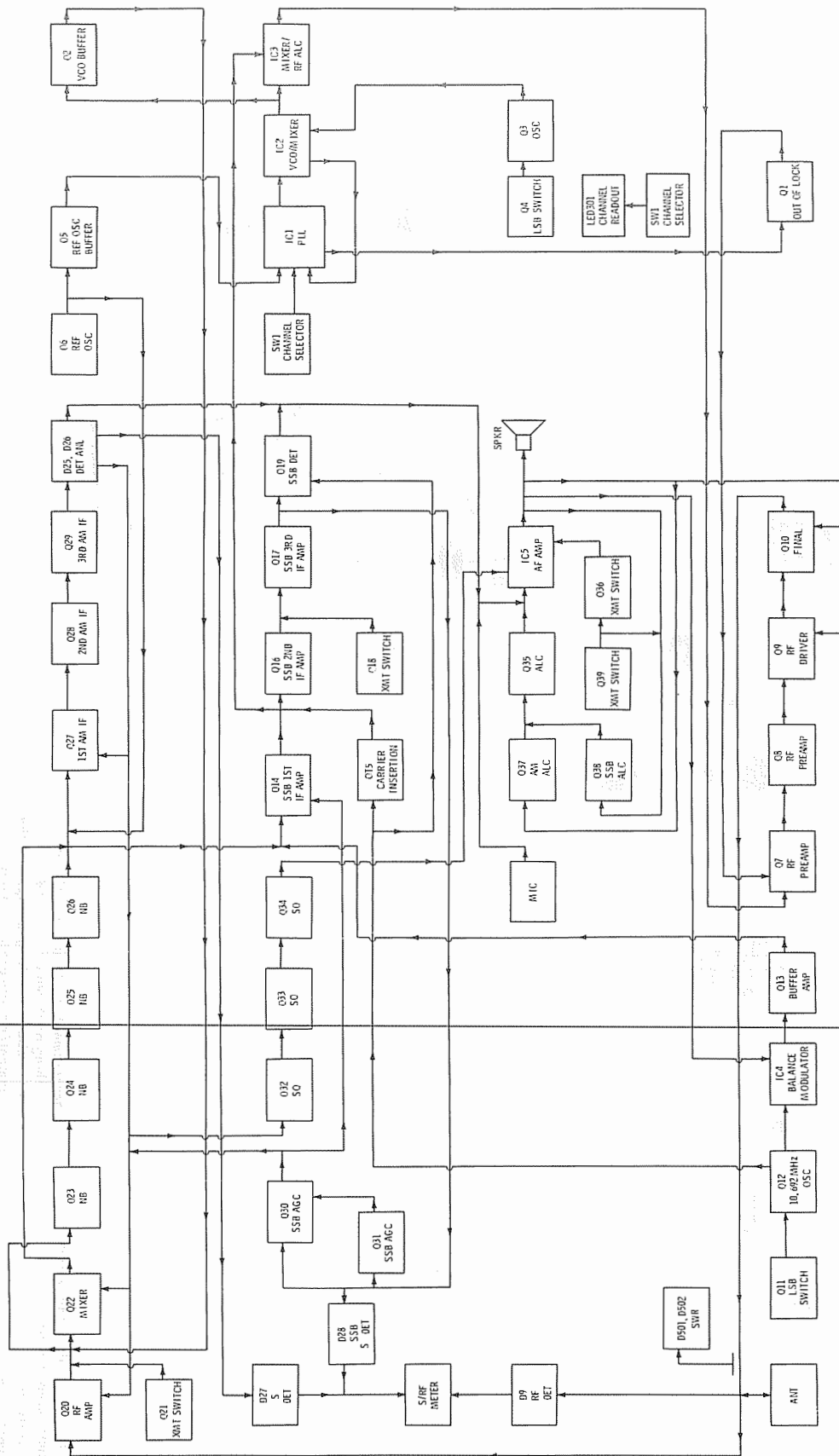


LED SWITCH BOARD

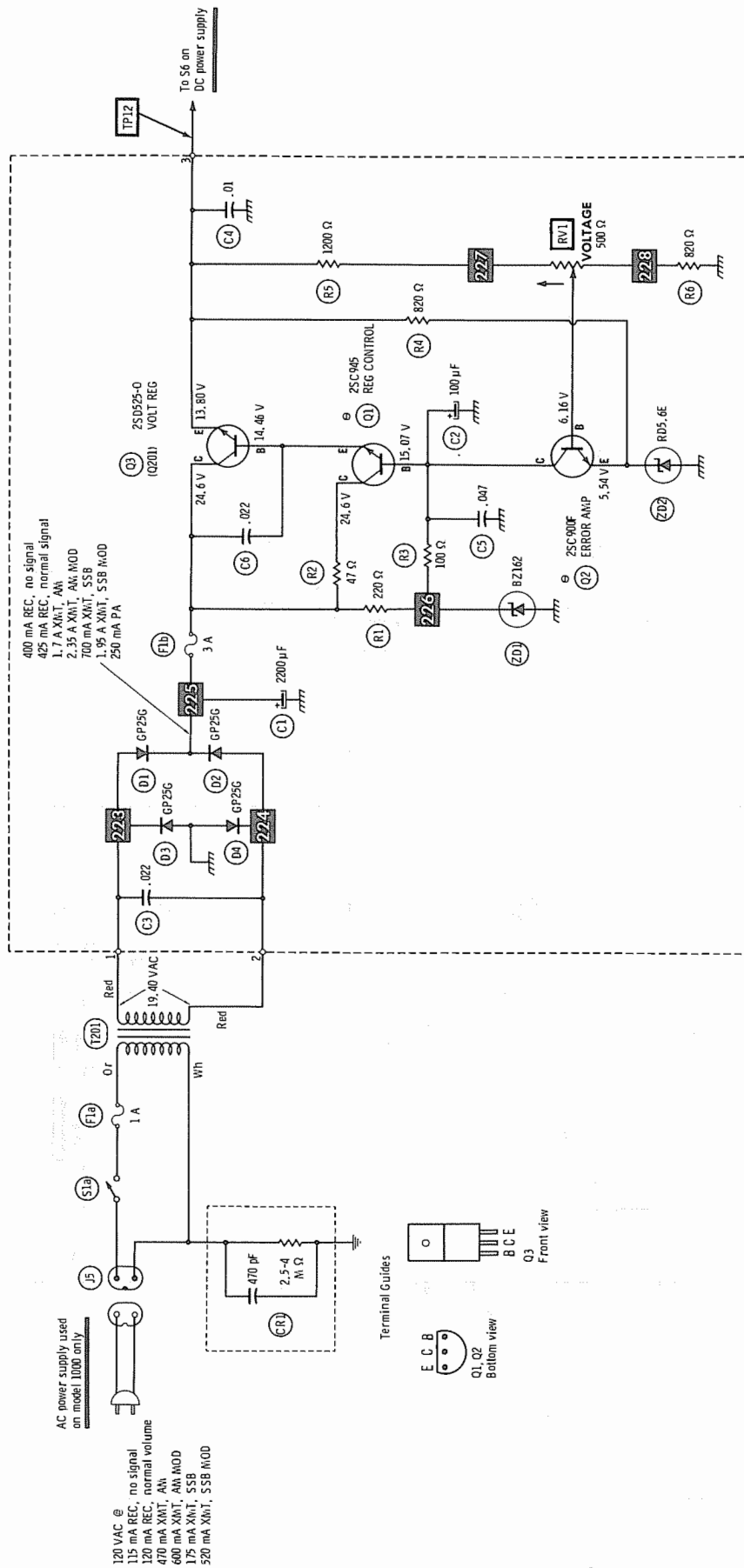
COLT MODELS 480, 1000



POWER SUPPLY BOARD



BLOCK DIAGRAM



* Circuitry not used in some versions

--- Circuitry used in some versions

See ports list

Nominal value

Ground

Chassis

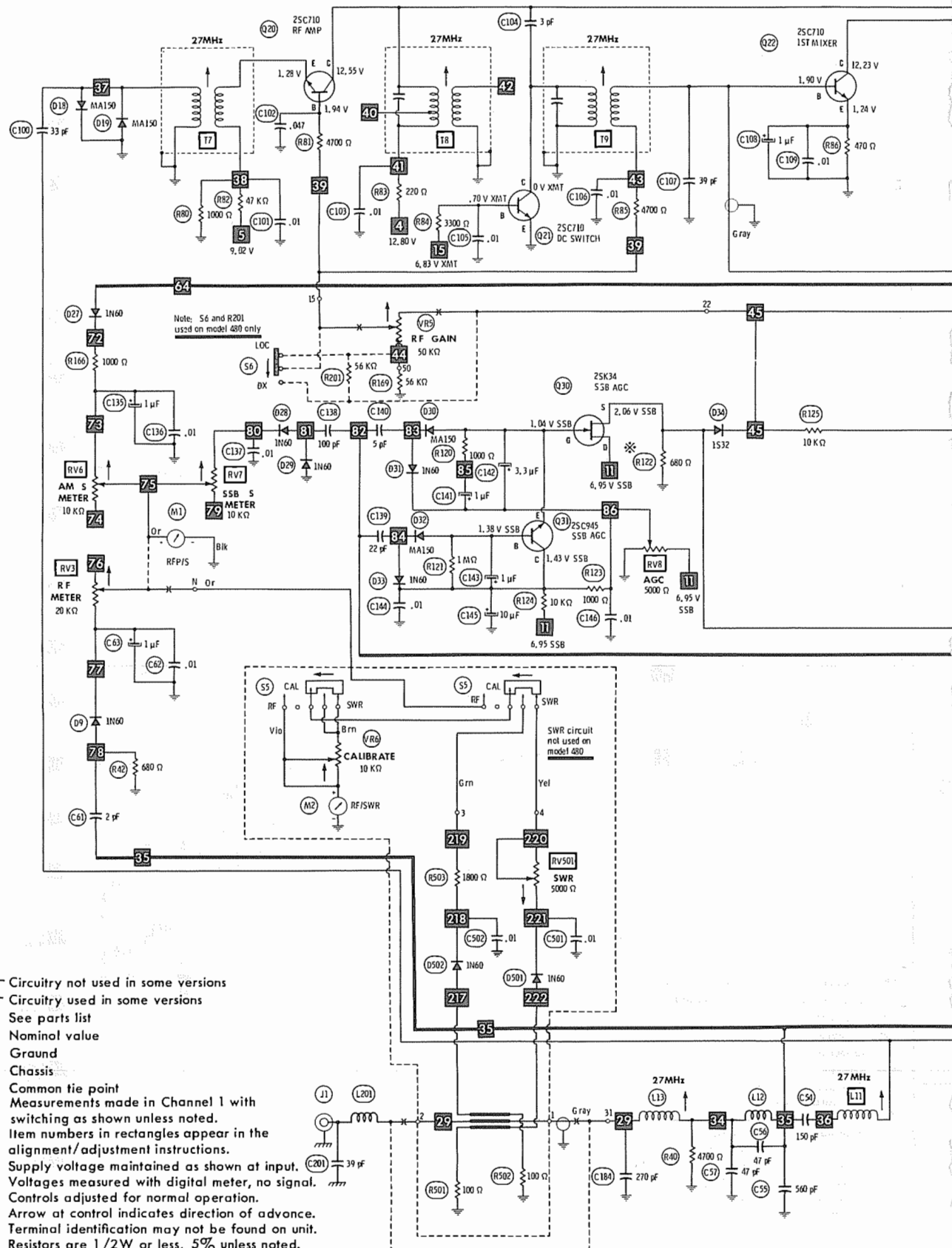
Common tie point

A PHOTOFACT STANDARD NOTATION SCHEMATIC

WITH CIRCUITRAGE

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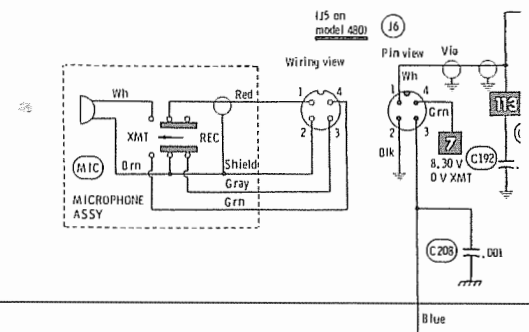
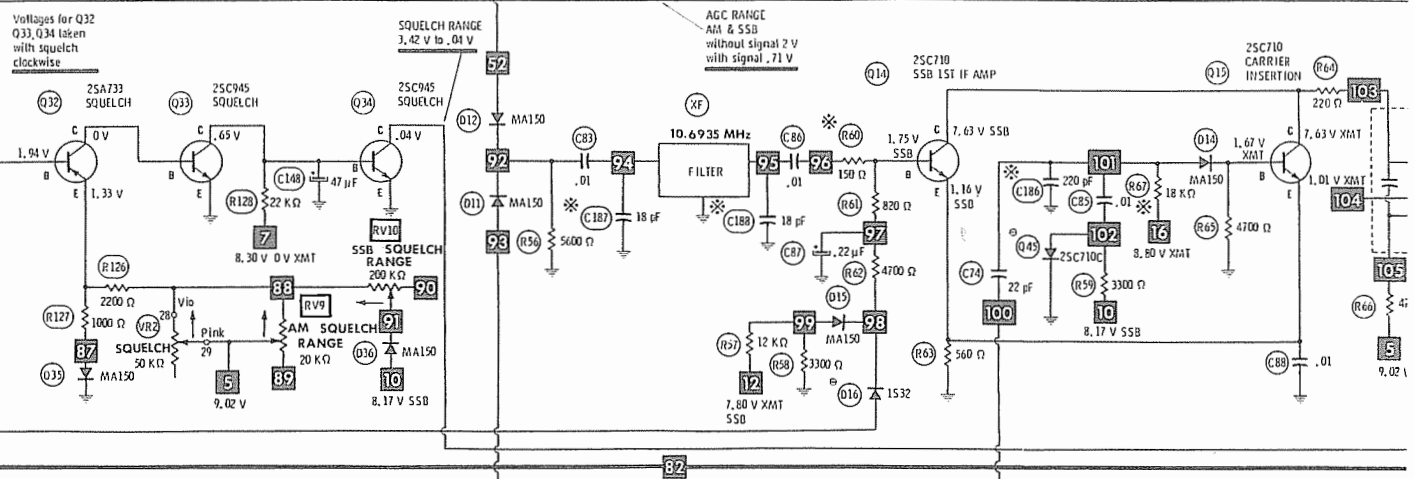
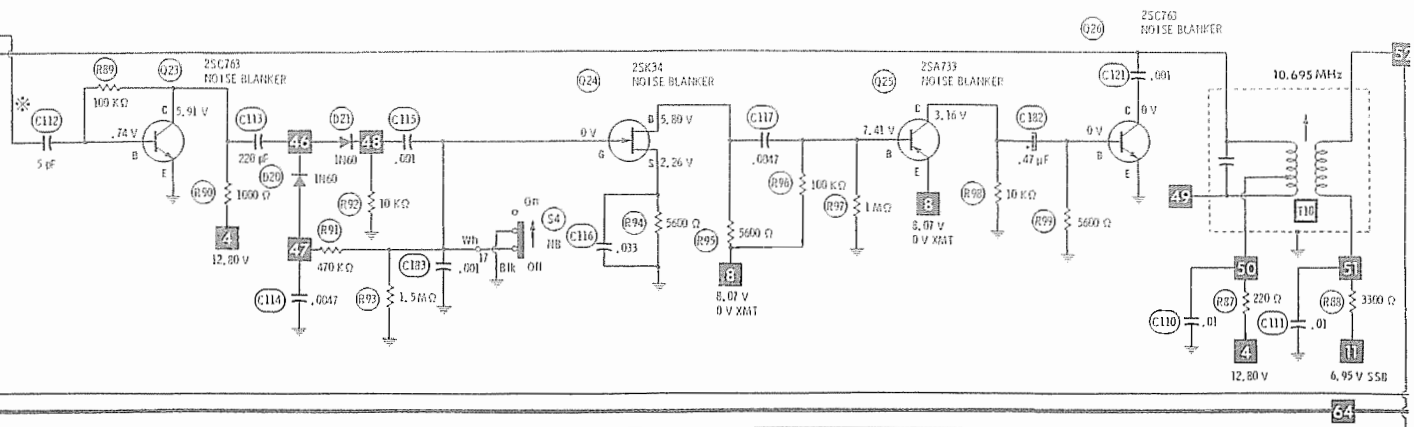
Measurements made in Channel 1 with switching as shown unless noted. Item numbers in rectangles appear in the alignment/adjustment instructions. Supply voltage maintained as shown at input. Voltages measured with digital meter, no signal. Controls adjusted for normal operation. Arrow at control indicates 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.

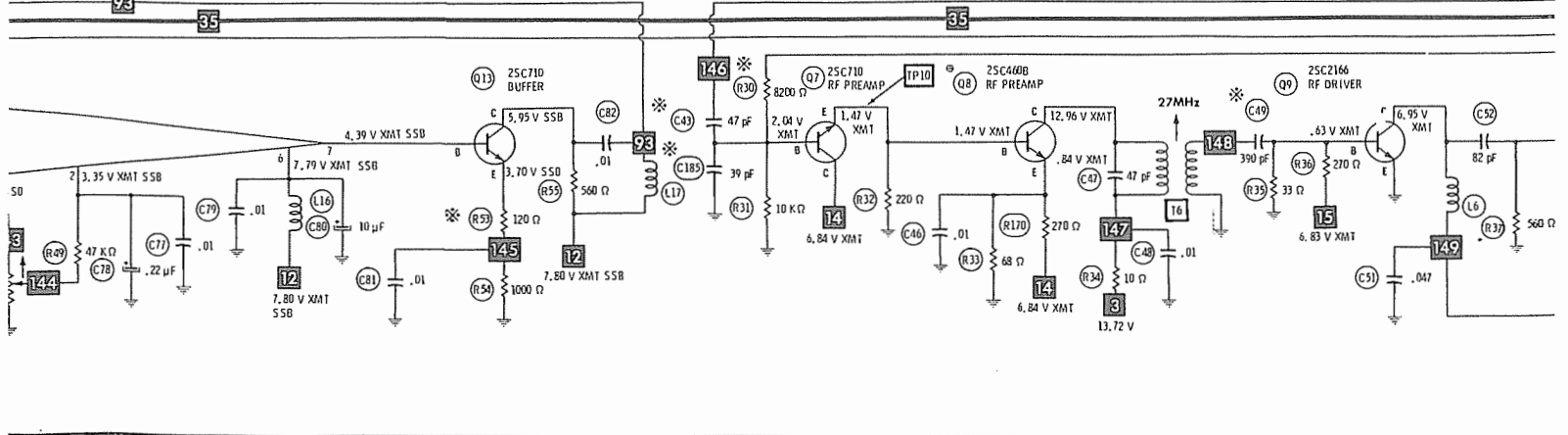
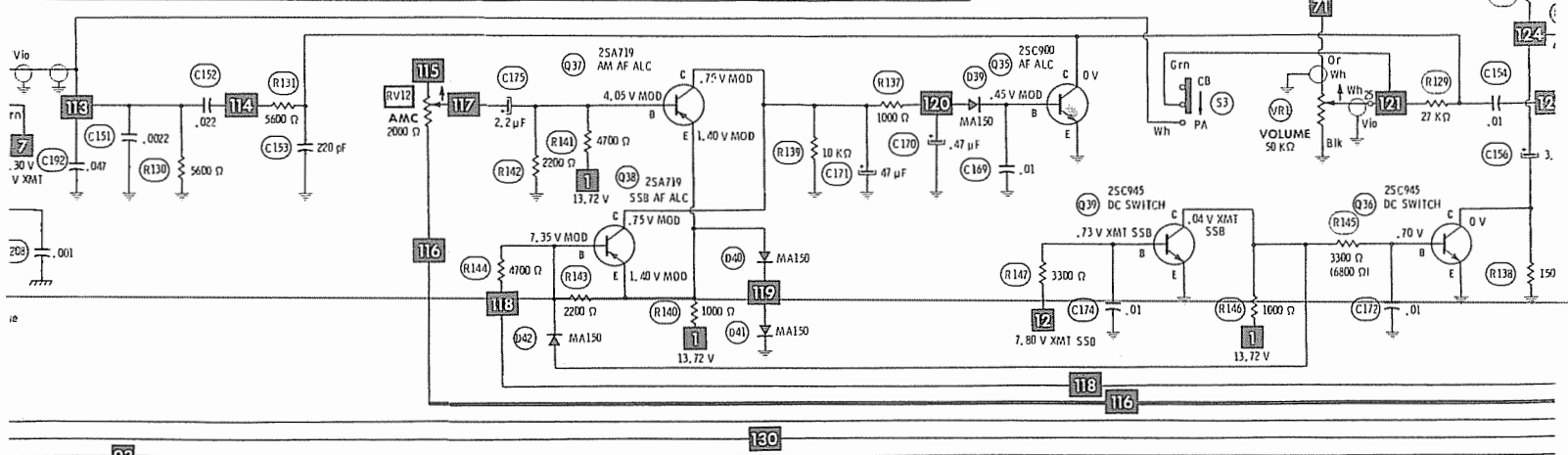
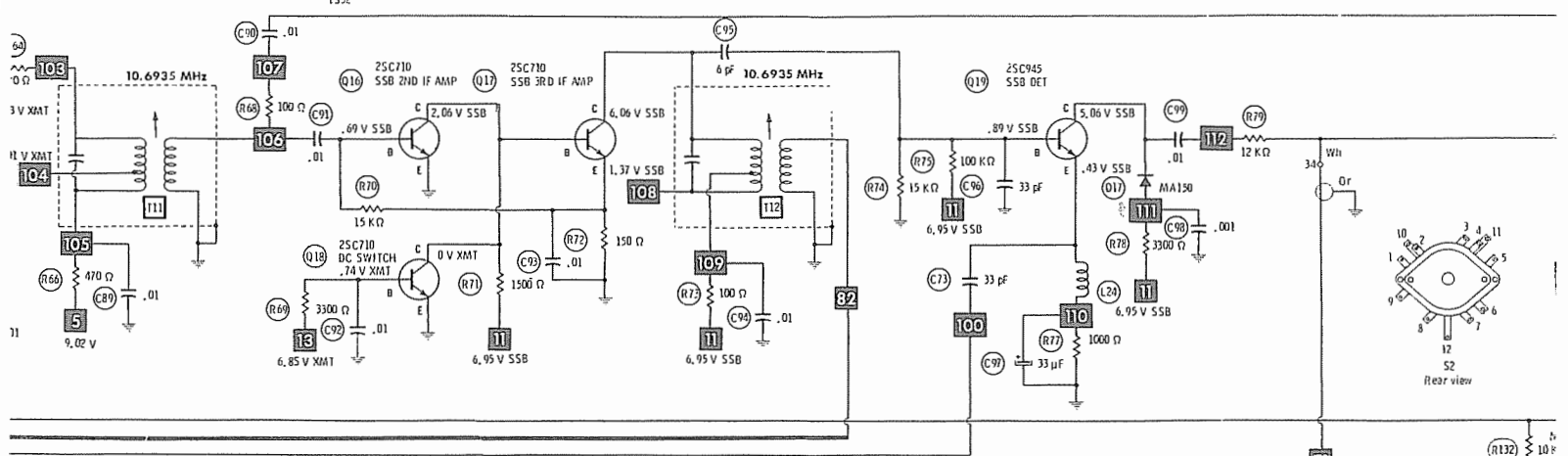
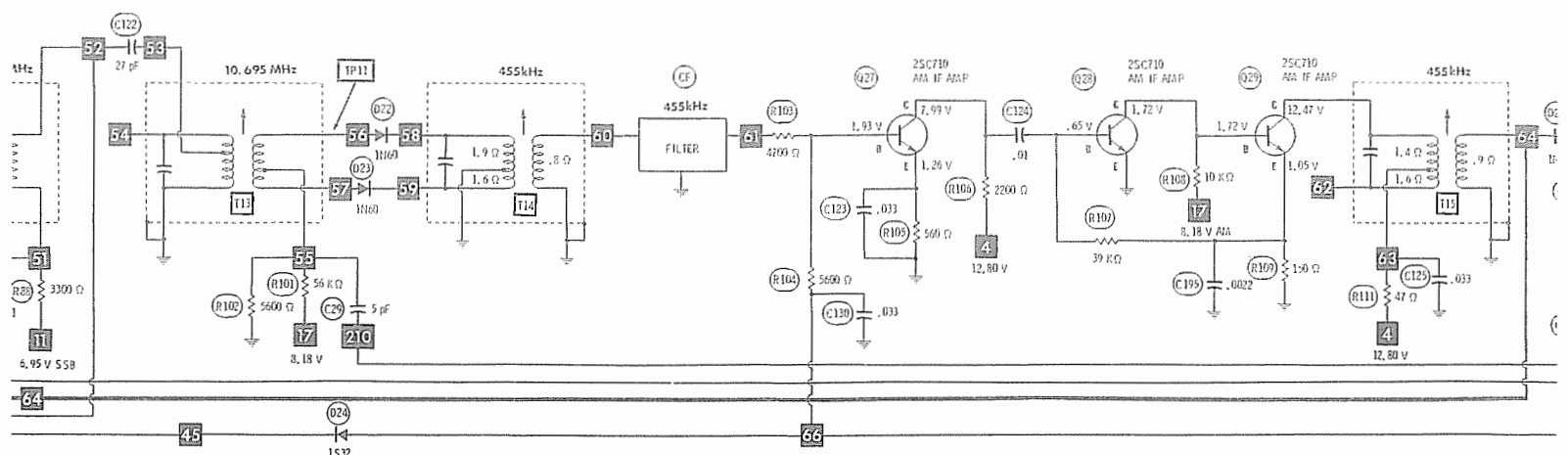


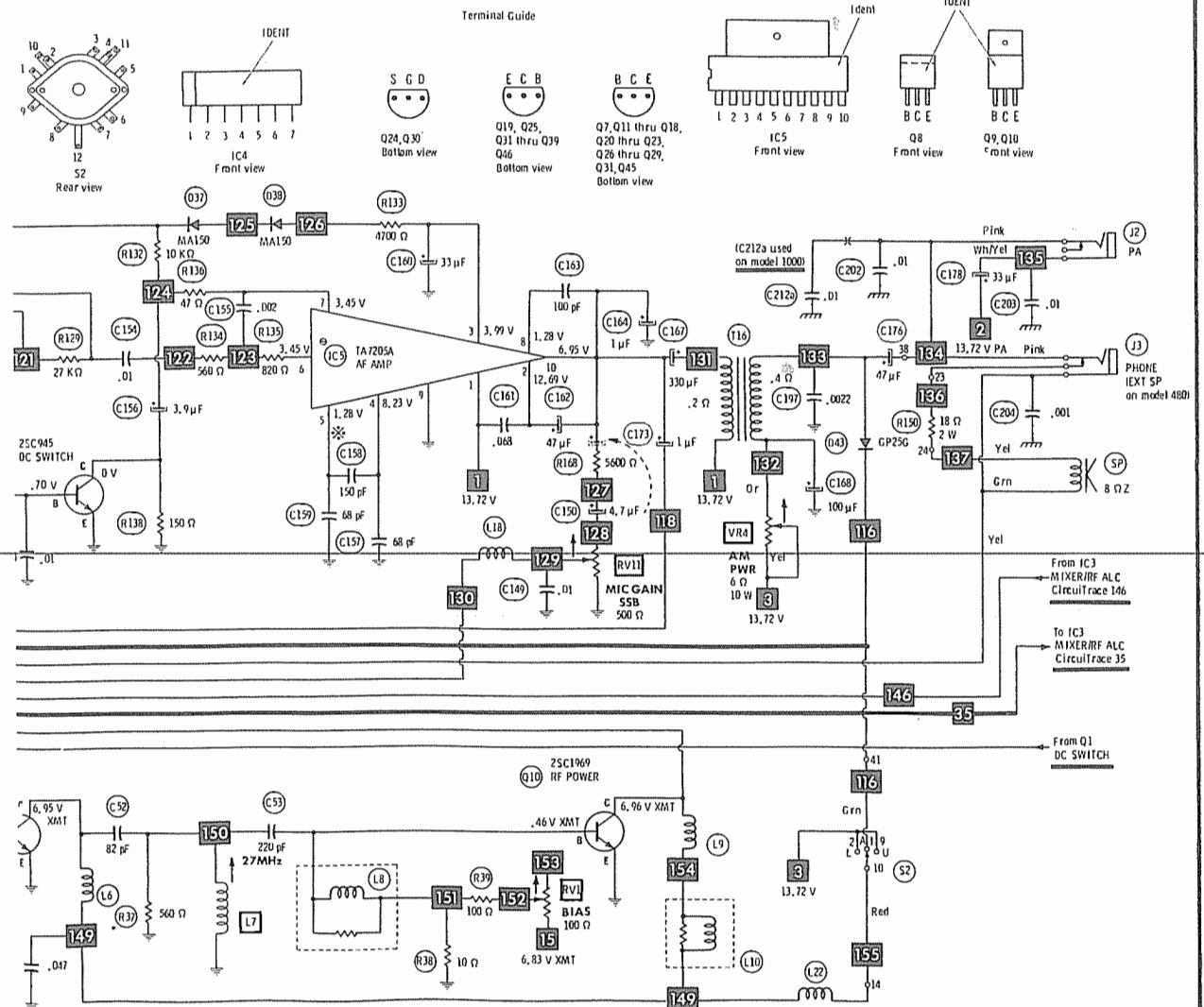
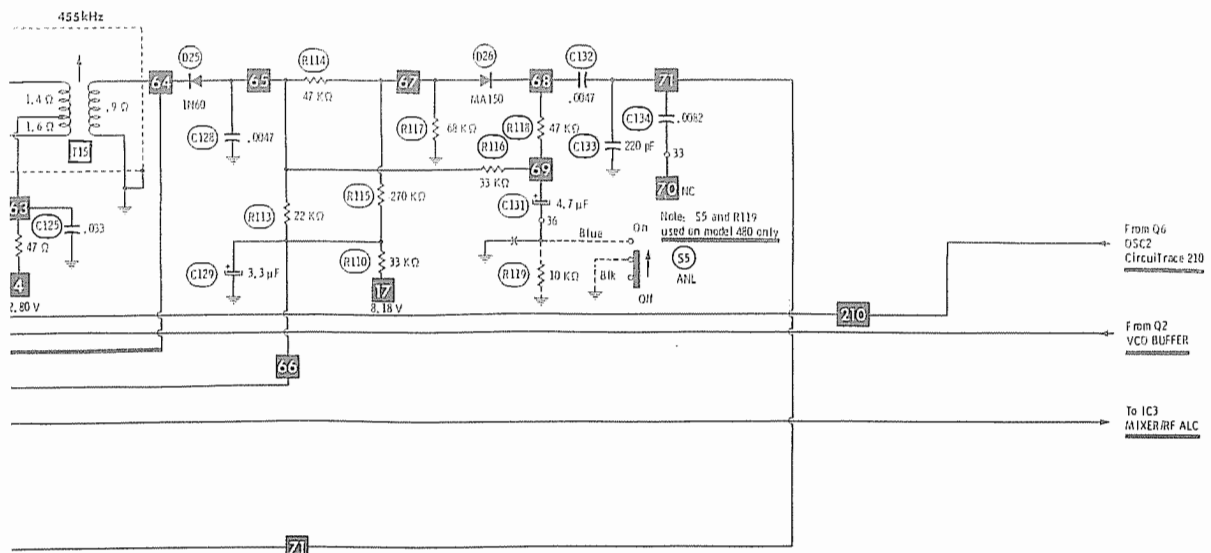
A PHOTOFACE STANDARD NOTATION SCHEMATIC

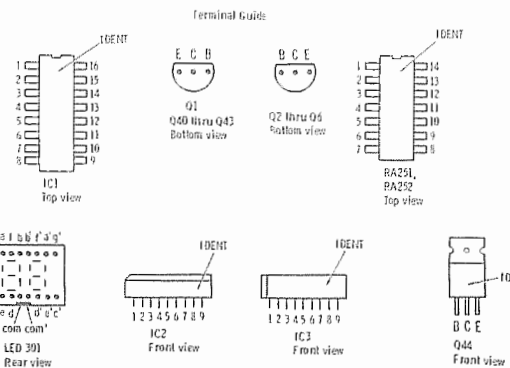
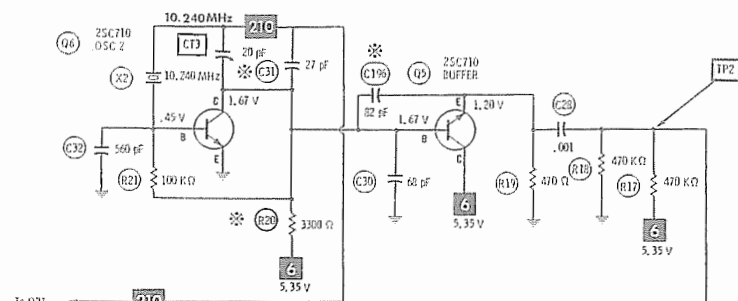
WITH **CIRCUITRACE®**

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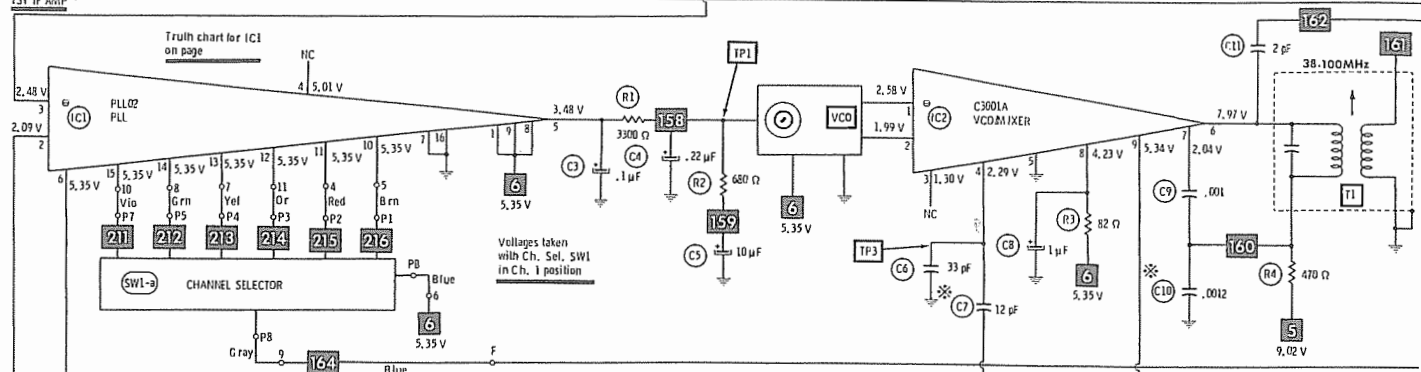




To Q27
AM IF AMP
CircuitTrace 210

To Q22
MIXER

From Q14
1ST IF AMP



To Q7
RF PREAMP
CircuitTrace 16

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

To Q7
RF PREAMP

From C54
CircuitTrace 35

✱ Circuitry not used in some versions

--- Circuitry used in some versions

⊖ See parts list

✱ Nominal value

⊥ Ground

⏏ Chassis

▽ Common tie point

Measurements made in Channel 1 with switching as shown unless noted.

Item numbers in rectangles appear in the alignment/adjustment instructions.

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Arrow at control indicates direction of advance.

Terminal identification may not be found on unit.

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

Value in () used in some versions.

A PHOTOFAC STANDARD NOTATION SCHEMATIC

WITH **CIRCUITRACE**

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PARTS LIST AND DESCRIPTION

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

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.
D1	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D2	MZ205					RE 105			ECG135			103-290
D3	ITT310		GE-90		HEPR2503			RT-262	ECG614		WEP200	ZEN-453
D4	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D5	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D6	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D7	MZ205		GE-300			RE 105			ECG135			103-290
D8	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D9	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D10	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D11	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D12	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D13	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D14	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D15	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D16	IS32		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
D17	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D18	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D19	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D20	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D21	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D22	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D23	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D24	IS32		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
D25	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D26	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D27	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D28	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D29	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D30	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D31	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D32	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D33	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D34	IS32		1N34AS	PTC207	HEPR9134A	RE 47	SK3087	RT-200	ECG109	1N34A	WEP134	ZEN-430
D35	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D36	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D37	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D38	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D39	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D40	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D41	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D42	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D43	GP25G		GE-512	PTC204	HEPRO098	RE 92	SK3051	RT-201	ECG156		WEP4008	
D44	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D45	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D46	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D47	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D48	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D49	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D50	MZ310		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D51	IS885		GE-204-100	ZB100A	HEP20438	RE 133			ECG5096		WEP1134	
D52	MA150		GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D53	MA150		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D501	1N60	(14)	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D502	1N60	(14)	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
IC1	PLLO2AG		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
IC2	PLLO2					RE 360-1C			ECG1233			
IC3	C3001A					RE 360-1C			ECG1192			
IC4	TA7310P								ECG1192			
IC5	TA7205P								ECG1192			
Q1	25C900	(14)	GEIC-179	PTC280	TA7205P	RE 357-1C	SK3231	TVM-81	ECG1155	TA7205P	WEP949	
Q2	25C710		GE-62	PTC139*	25C900	RE 192	SK3124	RT-302	ECG199	25C900	WEP66	ZEN-119
Q3	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q4	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q5	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q6	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q7	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q8	25C4608		GE-61*	PTC136*	25C460	RE 9	SK3122*	RT-134	ECG107	25C460	WEP460	121-722
Q9	25C2166	(12)	GE-61*	PTC136*	25C460	RE 9	SK3122*	RT-134	ECG107	25C460	WEP460	121-722
Q10	25C1969	(13)	GE-215	PTC186		RE 203	SK3197	RT-146	ECG235	25C1306	WEP785	
Q11	25C710		GE-216	PTC186		RE 201	SK3197	RT-158	ECG236		WEP840	
Q12	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q13	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q14	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q15	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q16	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q17	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q18	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q19	25C945		GE-212	PTC121*	25C945	RE 192	SK3124	RT-107A	ECG199	25C945	WEP1945	121-29000
Q20	25C710		GE-18	PTC117	HEP5025	RE 13	SK3044		ECG123A		WEP736	
Q21	25C710		GE-18	PTC117	HEP5025	RE 13	SK3044		ECG123A		WEP736	
Q22	25C710		GE-18	PTC117	HEP5025	RE 13	SK3044		ECG123A		WEP736	
Q23	25C763		GE-61*	PTC115	HEP50020*	RE 10*	SK3018*	RT-309	ECG108*	25C380*	WEP56	ZEN-127
Q24	25K34		GE-FET-2	PTC161	HEP50021	RE 45	SK3116	RT-175	ECG312		WEP920	ZEN-123
Q25	25A733		GE-48	PTC103*	25A733	RE 219	SK3138	RT-303	ECG294	25A733	WEP916	
Q26	25C763		GE-61*	PTC115	HEP50020*	RE 10*	SK3018*	RT-309	ECG108*	25C380*	WEP56	ZEN-127
Q27	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q28	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q29	25C710		GE-211*	PTC132	25C710	RE 13*	SK3444*	RT-308*	ECG123A*	25C710	WEP710	ZEN-114
Q30	25K34		GE-FET-2	PTC161	HEP50021	RE 45	SK3116	RT-175	ECG312		WEP920	ZEN-123
Q31	25C945		GE-212	PTC121*	25C945	RE 192	SK3124	RT-107A	ECG199	25C945	WEP1945	121-29000

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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

REPLACEMENT DATA												
ITEM No.	TYPE No.	MFR. PART No.	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.
Q32	2SA733	(15)	GE-48	PTC103*	2SA733	RE 219	SK3138	RT-303	ECG294	2SA733	WEP916	121-Z9000 121-Z9000 ZEN-119 121-Z9000 121-879 121-879 121-Z9000
Q33	2SC945		GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
Q34	2SC945		GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
Q35	2SC900		GE-62	PTC139*	2SC900	RE 192	SK3124	RT-302	ECG199	2SC900	WEP66	
Q36	2SC945		GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
Q37	2SA719		GE-269	PTC103*	HEPS0019*	RE 26*	SK3114	RT-305	ECG290		WEP911	
Q38	2SA719		GE-269	PTC103*	HEPS0019*	RE 26*	SK3114	RT-305	ECG290		WEP911	
Q39	2SC945		GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
Q40	2SA683		GE-48			RE 219			ECG294		WEP916	
Q41	2SC1303		GE-47	PTC143*	HEPS3001*	RE 220	SK3024*	RT-302	ECG293		WEP912	
Q42	2SA683		GE-48			RE 219			ECG294		WEP916	
Q43	2SC1383		GE-47	PTC143*	HEPS3001*	RE 220	SK3024*	RT-302	ECG293		WEP912	
Q44	2SC1398		GE-66	PTC154	HEPS5000	RE 21	SK3054	RT-197	ECG152		WEP745	
Q45	2SC710		GE-211*	PTC132	2SC710	RE 13*	SK3444*	RT-308*	ECG123A*	2SC710	WEP710	
Q46	2SC945		GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
POWER SUPPLY BOARD												
D1	GP25G	(14)	GE-512	PTC204	HEPRO098	RE 92	SK3051	RT-201	ECG156		WEP4008	121-Z9000 ZEN-119
D2	GP25G	(14)	GE-512	PTC204	HEPRO098	RE 92	SK3051	RT-201	ECG156		WEP4008	
D3	GP25G	(14)	GE-512	PTC204	HEPRO098	RE 92	SK3051	RT-201	ECG156		WEP4008	
D4	GP25G	(14)	GE-512	PTC204	HEPRO098	RE 92	SK3051	RT-201	ECG156		WEP4008	
Q1	2SC945	(14)	GE-212	PTC121*	2SC945	RE 192	SK3124	RT-107A	ECG199	2SC945	WEP1945	
Q2	2SC900	(14)	GE-62	PTC139*	2SC900	RE 192	SK3124	RT-302	ECG199	2SC900	WEP66	
Q3	2SD525-0	(14)	GE-66	PTC167	HEPS5000	RE 21	SK3054	RT-197	ECG152		WEP745	
	2SD525	(14)	GE-66	PTC167	HEPS5000	RE 21	SK3054	RT-197	ECG152		WEP745	
ZD1	BZ162	(14)	GEZ0-16	ZB16B		RE 122		RT-246	ECG5075A	1N4745A	WEP1160	
ZD2	RD5.6E	(14)	GEZ0-5.6	ZH5.6B		RE 107		RT-236	ECG5011	1N4734A	WEP1412	

COLT MODELS 480, 1000

- * Lead configuration may vary from original.
(12) 1.5 WATTS @ 4 AMPS.
(13) 20 WATTS @ 6 AMPS.
(14) Use in Model 1000 Base only.
(15) 15 WATTS @ 3 AMPS.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C3	.1 35V			TDC104M050EL	QDT1-2	S050-R109
C4	.22 35V			TDC224M050EL	QDT1-10	S050-R229
C5	10 16V			TDC106M025FL	QDT1-64	SD25-109
C8	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C25	47 6.3V		PC50-16	VTT47D16	QV1-73	EV-1226
C33	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C58	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
C63	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C76	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
C78	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
C80	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C87	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
C97	33 6.3V		PC30-25	VTT33B10	QV1-61	EV-1125
C108	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C119	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C127	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C129	3.3 25V		PC5-50	VTT3R3A50	QV1-23	EV-1318
C131	4.7 25V		PC5-50	VTT4R7B50	QV1-27	EV-1319
C135	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C141	1 25V			TDC105M035EL	QDT1-25	SD35-19
C142	3.3 25V		PC5-50	VTT3R3A50	QV1-23	EV-1318
C143	1 25V			TDC105M035EL	QDT1-25	SD35-19
C145	10 16V		PC10-25	VTT10B25	QV1-41	EV-1222
C148	47 10V		PC50-16	VTT47D16	QV1-73	EV-1226
C150	4.7 25V		PC5-50	VTT4R7B50	QV1-27	EV-1319
C156	3.9 10V			TDC475M010EL	QDT1-44	SD15-3R99
C160	33 6.3V		PC30-25	VTT33B10	QV1-61	EV-1125
C162	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C164	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C166	2200 16V		WBR20D0-16	TC1520C	QE1-643	TVA-1175.3
C167	330 16V		WBR30D-35	VTT330H16	QV1-133	EV-1245
C168	10D 16V		PC10D-16	VTT100F16	QV1-95	EV-1230
C170	.47 50V		PC1-50	VTT4R7A63	QV1-3	EV-1610
C171	47 6.3V		PC50-16	VTT47D16	QV1-73	EV-1226
C173	1 50V		PC1-50	VTT1A50	QV1- 1	EV-1615
C175	2.2 25V		PC2-100	VTT2R2A50	QV1-19	EV-1517
C176	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C178	33 16V		PC30-25	VTT33D25	QV1-63	EV-1325
C179	47 16V		PC50-16	VTT47D16	QV1-73	EV-1226
C182	.47 50V		PC1-50	VTT4R7A63	QV1-3	EV-1610
C9D1	.22 35V			TDC224M050EL	QDT1-10	SD50-R229
POWER SUPPLY BOARD						
C1	2200 25V	(1)	WBR20D0-25	TC2520A	QE1-645	TVA-1213.5
C2	100 25V	(1)	PC100-25	VTT100G25	QV1-97	EV-1330

(1) Used in Model 1000

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	.0047			WMF1D47	EWFA1A247	QF1-57	1PB-047
C2	.022			DPMS2S22	EWFA1A122	QF1-127	1PB-S22
C5	33 N150			*	*		10TCP-Q33
C7	12 N150						10TCP-Q12
C9	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10
C10	.0012			DPMS6D12	PVC6212		6PS-D12
C11	2 N150			*	*		10TCP-V22
C12	33 N150	(1)		*	*		10TCP-Q33
C13	33 N150			*	*		10TCP-Q33
C14	10 N150			*	*		10TCP-Q10
C15	.01	(1)		WMF1S1	EWFA1A110	QF1-91	1PB-S10
C16	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C17	33 N150			*	*		10TCP-Q33
C18	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10
C19	220 N150			*	*		10TCP-T22
C20	22 N150			*	*		10TCP-Q22
C21	15 NP0		DTZ-15	NP015	CN0415		10TCC-Q15
C22	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C23	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10
C24	68 N150			*	*		10TCP-Q68
C26	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C27	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C28	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10
C29	5 N150			*	*		10TCP-V50
C30	68 N150			*	*		10TCP-Q68
C31	27 NP0				CN0427		10TCC-Q27
C32	560		DD-561		GP356		10TS-T56
C34	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C35	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C36	150 N150			*	*		10TCP-T15
C37	82 N150			*	*		10TCP-Q82
C38	56 N150			*	*		10TCP-Q56
C39	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C40	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C42	3 N150			*	*		10TCP-V30
C43	47 N150						10TCP-Q47
C45	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C46	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C47	47 N150			*	*		10TCP-Q47
C48	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C49	390		DD-391	GP390	GP339		10TS-T39
C50	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C51	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C52	82 N150			*	*		10TCP-Q82
C53	220 N150			*	*		10TCP-T22
C54	150 N150			*	*		10TCP-T15
C55	560		DD-561		GP356		10TS-T56
C56	47 N150			*	*		10TCP-Q47
C57	470		DD-471	GP470	GP347		10TS-T47
C59	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C60	5 N150			*	*		10TCP-V50
C61	2 N150			*	*		10TCP-V22
C62	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C64	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C65	39 N150			*	*		10TCP-Q39
C66	10 NP0		DTZ-10	NP010	CN0410		10TCC-Q10
C67	.001			DPMS6D1	EWFA1A210	QF1-1	1PB-D10
C68	22 N150			*	*		10TCP-Q22
C69	220 N150			*	*		10TCP-T22
C70	220 N150			*	*		10TCP-T22
C71	8 N150			*	*		10TCP-V82
C72	100 N150			*	*		10TCP-T10
C73	33 N150			*	*		10TCP-Q33
C74	22 N150			*	*		10TCP-Q22
C75	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C77	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C79	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C81	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C82	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C83	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C84	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C85	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C86	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C88	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C89	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C90	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C91	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C92	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C93	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C94	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C95	6 N150			*	*		10TCP-V56
C96	33 N150			*	*		10TCP-Q33
C98	.001			OPMS601	EWFA1A210	QF1-1	1PB-D10
C99	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C100	33 N150			*	*		10TCP-Q33
C101	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C102	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C103	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C104	3 N150			*	*		10TCP-V30
C105	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C106	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C107	39 N150			*	*		10TCP-Q39
C109	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C110	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C111	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C112	5 N150			*	*		10TCP-V50
C113	220			*	*		10TCP-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
C114	.0047			WMF1047	EWFA1A247	QF1-57	1PB-D47
C115	.001			DPMS601	EWFA1A210	QF1-1	1PB-D10
C116	.033			DPMS6S33	EWFA1A210		6PS-S33
C117	.0047			WMF1047	EWFA1A247	QF1-57	1PB-D47
C118	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C121	.001			DPMS601	EWFA1A210	QF1-1	1PB-D10
C122	27 N150				*		10TCP-Q27
C123	.033			DPMS6S33	EWFA1A210		6PS-S33
C124	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C125	.033			DPMS6S33	EWFA1A210		6PS-S33
C126	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C128	.0047			WMF1047	EWFA1A247	QF1-57	1PB-D47
C130	.033			DPMS6S33	EWFA1A210		6PS-S33
C132	.0047			WMF1047	EWFA1A247	QF1-57	1PB-D47
C133	220		00-221		GP322		10TS-T22
C134	.0082			WMF10B2	EWFA1A2B2		1PB-D82
C136	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C137	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C138	100 N150				*		10TCP-T10
C139	22 N150				*		10TCP-Q22
C140	5 N150				*		10TCP-V50
C144	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C146	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C149	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C151	.0022			DPMS6D22	EWFA1A122	QF1-127	6PS-D22
C152	.022			DPMS2S22	EWFA1A122		1PB-S22
C153	220		DD-221		GP322		10TS-T22
C154	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C155	.002			DPMS6D22	EWFA1A122		6PS-D22
C157	68		DD-680		GP468		10TS-Q68
C158	150		DD-151		GP315		10TS-T15
C159	68		DD-680		GP468		10TS-Q68
C161	.068			GP68	EWFA1A168	QF1-195	1PB-S68
C163	100		DD-101		GP310		10TS-T10
C165	.047			OPMS2S47	EWFA1A147	QF1-171	1PB-S47
C169	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C172	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C174	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C180	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C181	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C183	.001			DPMS601	EWFA1A210	QF1-1	1PB-D10
C184	270		DD-271		GP327		10TS-T27
C185	39 N150				*		10TCP-Q39
C186	220 N150				*		10TCP-T22
C187	18 N150				*		10TCP-Q18
C188	18				*		10TCP-Q18
C189	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C190	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C191	.01			WMF1S1	EWFA1A110	QF1-91	1PB-S10
C192	.047			DPMS2S47	EWFA1A147	QF1-171	1PB-S47
C194	100		DD-101		GP310		10TS-T10
C195	.0022			DPMS6D22	EWFA1A122		6PS-D22
C196	82		DD-820		GP482		10TS-Q82
C197	.0022		DC-203	MGP02	TA120	QC2-157	TG-S20
C198	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C201	39 N150				*		10TCP-Q39
C202	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C203	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C204	.001		DD-102G	GP1000	GP210	QC2-81	5GA-010
C205	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C206	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C207	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C208	.001		DD-102G	GP1000	GP210	QC2-81	5GA-010
C209	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
C210	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C211	.047		DC-503	MGP05	TA150	QC2-207	TG-S50
C212	.01		DC-103	MGP01	TA110	QC2-141	TG-S10
	.047	(1)	DC-503	MGP05	TA150	QC2-207	TG-S50
C501	.01	(1)	DC-103	MGP01	TA110	QC2-141	TG-S10
C502	.01	(1)	DC-103	MGP01	TA110	QC2-141	TG-S10
CT1	20						
CT2	20						
CT3	20						
CT4	20						
CT5	20						
POWER SUPPLY BOARD							
C3	.022	(1)	DC-203	MGP02	TA120	QC2-157	TG-S20
C4	.01	(1)	DC-103	MGP01	TA110	QC2-141	TG-S10
C5	.047	(1)	DC-503	MGP05	TA150	QC2-207	TG-S50
C6	.022	(1)	DC-203	MGP02	TA120	QC2-157	TG-S20

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

(1) Used in Model 1000 only.

(2) Used in Model 480 only.

COLT MODELS 480, 1000

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
RV1A	Bias	100	(18)				U260R5018
RV1B	Voltage	500					U260R5028
RV2	SSB Power	5000					U260R2528
RV3	RF Meter	20K					U260R1028
RV4	Balance	1000					U260R1038
RV5	Balance	10K					U260R1038
RV6	AM S Meter	10K					U260R1038
RV7	SSB S Meter	10K					U260R1038
RV8	AGC	5000					U260R5028
RV9	AM Squelch Range	20K					U260R2538
RV10	SSB Squelch Range	200K	(18)				U260R2548
RV11	SSB Mic Gain	500					U260R5018
RV12	AMC	2000					U260R2528
RV501	SWR	5000					U260R5028
VR1	Volume/Power Switch	50K					
VR2	Squelch	50K					
VR3	Slide-0-Tune	50K					
VR3	Clarifier	50K					
VR4	AM Power	6 10W					
VR5	RF Gain	50K	(18)				
VR6	Calibrate	10K	(18)				

(18) Used in Model 1000.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.			WORKMAN PART No.	MFGR. PART No.
AREY 251	Resistor Network		(1)	AREY 252	Resistor Network		(1)

(1) Consists of Seven 1800 Ohm Resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	RF Choke (2.2uH)				
L2	RF Choke (68uH)				
L3	RF Choke (.75uH)				
L4	RF Choke (2.2uH)				
L5	RF Choke (2.2uH)				
L6	RF Choke (1.95uH)				
L7	Xmit Driver (27MHz)				
L8	RF Choke (.75uH)				
L9	RF Choke (.75uH)				
L10	RF Choke (.75uH)				
L11	Final (27MHz)				
L12	RF Choke (.11uH)				
L13	Pi Filter (27MHz)				
L14	RF Choke (4.7uH)				
L15	RF Choke (2.2uH)				
L16	RF Choke (1uH)				
L17	RF Choke (68uH)				
L18	RF Choke (1mH)				
L19	RF Choke (68uH)				
L20	RF Choke (1.15uH)				
L21	RF Choke (1.15uH)				
L22	RF Choke (.75uH)				
L23	RF Choke (.75uH)				
L24	RF Choke (68uH)				
L201	RF Choke (.1uH)				
T1	VCO Mixer (38.100MHz)				
T2	VCO Mixer (38.100MHz)				
T3	OSC (20.100MHz)				
T4	Mixer (27MHz)				
T5	Mixer (27MHz)				
T6	Xmit Buffer (27MHz)				
T7	Rec Antenna (27MHz)				
T8	Rec RF (27MHz)				
T9	Rec RF (27MHz)				
T10	IF (10.695MHz)				
T11	IF (10.6935MHz)				
T12	IF (10.6935MHz)				
T13	IF (10.695MHz)				
T14	IF (455kHz)				
T15	IF (455kHz)				

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.	
CH	2.125A	.241	3.72mH	LJ119H004W			

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T16	8	8	TB6-28A004W			

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T201	120V AC @ 600mA	19.40V AC @ 2350mA OC	TP-D75U0024 (1)			(1) Model 1000 only.

SPEAKER MODEL 1000

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	2" X 3 3/4" PM 8 Ohms 3" PM 8 Ohms		30A05ZBR	Model 1000 Model 480

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	
F1a	1 Amp	(1)	(1)	AGC1	HXP	312001	342001L	FG1-2	
F1b	3 Amp	(1)		GJV3		318003			
F1c	3 Amp			AGC3	HDJ	312003	150145	FG3-2	

(1) Used in Model 1000 only.

COLT MODELS 480, 1000

PARTS LIST AND DESCRIPTION (CONTINUED)

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

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	18-092	1	2	4	3	NC	2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF	Ceramic Filter		455kHz
CR1	A.C. Isolation		470PF/2.5-4meg (Model 1000 only)
LED301	LED		Channel Display
M1	Meter		S (Model 1000)
	Meter		S/Rf (Model 480)
M2	Meter		RF/SWR (Model 1000)
PL1	Lamp		S Meter (Model 1000)(5.60V @ 34mA)
	Lamp		S/Rf Meter (Model 480)(5.60V @ 34mA)
PL2	Lamp		S Meter (Model 1000)(5.60V @ 34mA)
	Lamp		TX Indicator (Model 480)(5.13V @ 30mA)
PL3	Lamp		RF/SWR Meter (Model 1000 only)(5.50V @ 34mA)
PL4	Lamp		RF/SWR Meter (Model 1000 only)(5.50V @ 34mA)
S1	Switch		Power (Part of Volume Control)
S2	Switch		Mode AM-USB-LSB
S3	Switch		CB/PA
S4	Switch		NB
S5	Switch		RF-CAL-SWR (Model 1000)
	Switch		ANL (Model 480)
S6	Switch		Power Conversion (Part of J5) (Model 1000)
	Switch		DX/LOC (Model 480)
SW1	Switch		Channel Selector
VCO	VCO Oscillator		
X1	Crystal		10.0525MHz
X2	Crystal		10.240MHz
X3	Crystal		10.692MHz
XF	Crystal Filter		10.6935MHz (SC-107A)
	Printed Circuit Board		Main (PTBM058COX, Model 1000)
	Printed Circuit Board		Main (PTBM048AOX, Model 480)
	Printed Circuit Board		Channel Display (PTLD010COX)
	Printed Circuit Board		Channel Switch (PTSW020COX)
	Printed Circuit Board		Channel Switch Sub (PTSW026COX, Model 1000 only)
	Printed Circuit Board		SWR (PTSR009COX, Model 1000 only)
	Printed Circuit Board		Power Supply (PTPW007COX, Model 1000 only)

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')