



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 ADAMS

PRESIDENT MODEL ADAMS

GENERAL

Operating Temperature Range

MANUFACTURER'S SPECIFICATIONS

-20°C to +50°C

Input Voltage

13.8V DC nominal, 15.9 V max., 11.7V min.
(positive or negative ground).

Current Drain

Transmit: AM full mod., 3 A
SSB, 12 watts PEP output, 2.5 A
Receiver: squelched, 1 A
Maximum audio output, 2A

RECEIVER

Sensitivity

SSB: Better than .25 μ V for 10 dB (S+N)/N at greater than 1/2 watt of audio output.

AM: Better than .75 μ V for 10 dB (S+N)/N at greater than 1/2 watt of audio output.

Selectivity

SSB and AM: 6 dB @ 4.2 KHz, 60 dB @ 7.0 KHz.

Cross Modulation

Better than 60 dB

Image Rejection

Better than 70 dB

I.F. Frequency

AM and SSB: 7.8 MHz

AM and SSB RF Gain Control

Adjustable for optimum signal reception.

Automatic Gain Control

(AGC): Less than 10 dB change in audio output for inputs from 10 to 50,000 microvolts.

Squelch

Adjustable threshold less than .5 μ V.

Noise Blanker

RF type, effective on AM and SSB.

Clarifier Range

$\pm$ 1.25 KHz

Audio Output Power

3.5 watts into 8 ohms

Frequency Response

350 to 2500 Hz

Distortion

Less than 10% at 3 watts output.

Built-in Speaker

8 ohms, round

External Speaker (Not Supplied) 8 ohms; disables internal speaker when connected.

TRANSMITTER

Power Output

AM, 4 watts

SSB, 12 watts, P.E.P.

Modulation

AM, high and low level Class B.

Intermodulation Distortion

SSB: 3rd and 5th order, better than -25 dB.
7th and 9th order, better than -35 dB.

SSB Carrier Suppression

Better than -40 dB

Unwanted Sideband

Better than -45 dB

Frequency Response

AM and SSB: 450 to 2500 Hz.

Output Impedance

52 ohm, unbalanced

SSB Filter

7.8 MHz, crystal lattice type

6 dB @ 4.2 KHz

60 dB @ 7.0 KHz

Output Indicators

Meter shows relative RF output power; red transmit LED.

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 13.8-volt DC input. Connect low sides of test equipment to ground unless specified otherwise. Connect 50-ohm dummy load or antenna before keying transmitter.

Suggested Alignment Tools: GC ELECTRONICS:
 L27, L30, L32 5009
 L1 thru L8, L16, L17, L24, L37, L39 9440
 CT1 thru CT7 5000

SYNTHESIZER ALIGNMENT

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of RF VTVM to TP6.	Ch. 1 Clarifier Midrange AM	L24	Adjust for maximum.
Input of DC meter to TP7.	Ch. 1	L17	Adjust for 2.0 volts.
Input of RF VTVM to TP8.	Ch. 19	L16	Adjust for maximum.
Input of frequency counter to TP8.	Ch. 19	CT6	Adjust for 34.9850MHz $\pm$ 20Hz.
Input of frequency counter to TP8.	Ch. 19, USB	CT4	Adjust for 34.9875MHz $\pm$ 20Hz.
Input of frequency counter to TP8.	Ch. 19, LSB	CT5	Adjust for 34.9825MHz $\pm$ 20Hz.
Input of frequency counter to TP8.	Ch. 19, LSB, Xmt	VR9	Adjust for 34.9825MHz $\pm$ 20Hz.
Input of frequency counter to TP9.	Ch. 19, USB, Xmt	CT2	Adjust for 7.8025MHz $\pm$ 5Hz -0Hz.
Input of frequency counter to TP9.	Ch. 19, LSB, Xmt	CT3	Adjust for 7.7975MHz $\pm$ 0Hz -5Hz.

RECEIVER ALIGNMENT

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

AM

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 23.5MHz, no modulation. Output 200uV. Input of RF VTVM to TP5.	Ch. 19, AM RF Gain Maximum NB On	L1,L2	Adjust for maximum.

RECEIVER ALIGNMENT

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

SSB

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation. Output .25uV.	Ch. 19, USB RF Gain Maximum Clarifier Midrange Volume Maximum	L8,L7,L5, L6,L4,L3	Adjust for maximum output.
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation. Output .25uV.	Ch. 19	CT1	Adjust for .5 watts audio.

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. 27.186MHz, no modulation. Output 3uV.	Ch. 19, USB RF Gain MINIMUM Volume Maximum	VR2	RF GAIN RANGE Adjust VR2 for .5 watts audio.
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation. Output 100uV.	Ch. 19	VR1	S METER Adjust for 9 on S scale of meter.

RECEIVER ADJUSTMENTS(cont)

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of signal generator thru .01uF to antenna jack. 27.186MHz, no modulation. Output 500uV.	Ch. 19	VR3	SQUELCH RANGE Set squelch control VR404 fully clockwise. Adjust VR3 so that squelch just breaks.
Output of signal generator thru .01uF to antenna jack. 27.185MHz, 1000Hz @ 30% modulation. Output .5uV.	Ch. 19, AM	VR5	AM BALANCE Adjust VR5 for .5 watts audio.

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.

AM

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Input of spectrum analyzer to antenna jack.	Ch. 19	L27	Adjust for MINIMUM at 54MHz.

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.

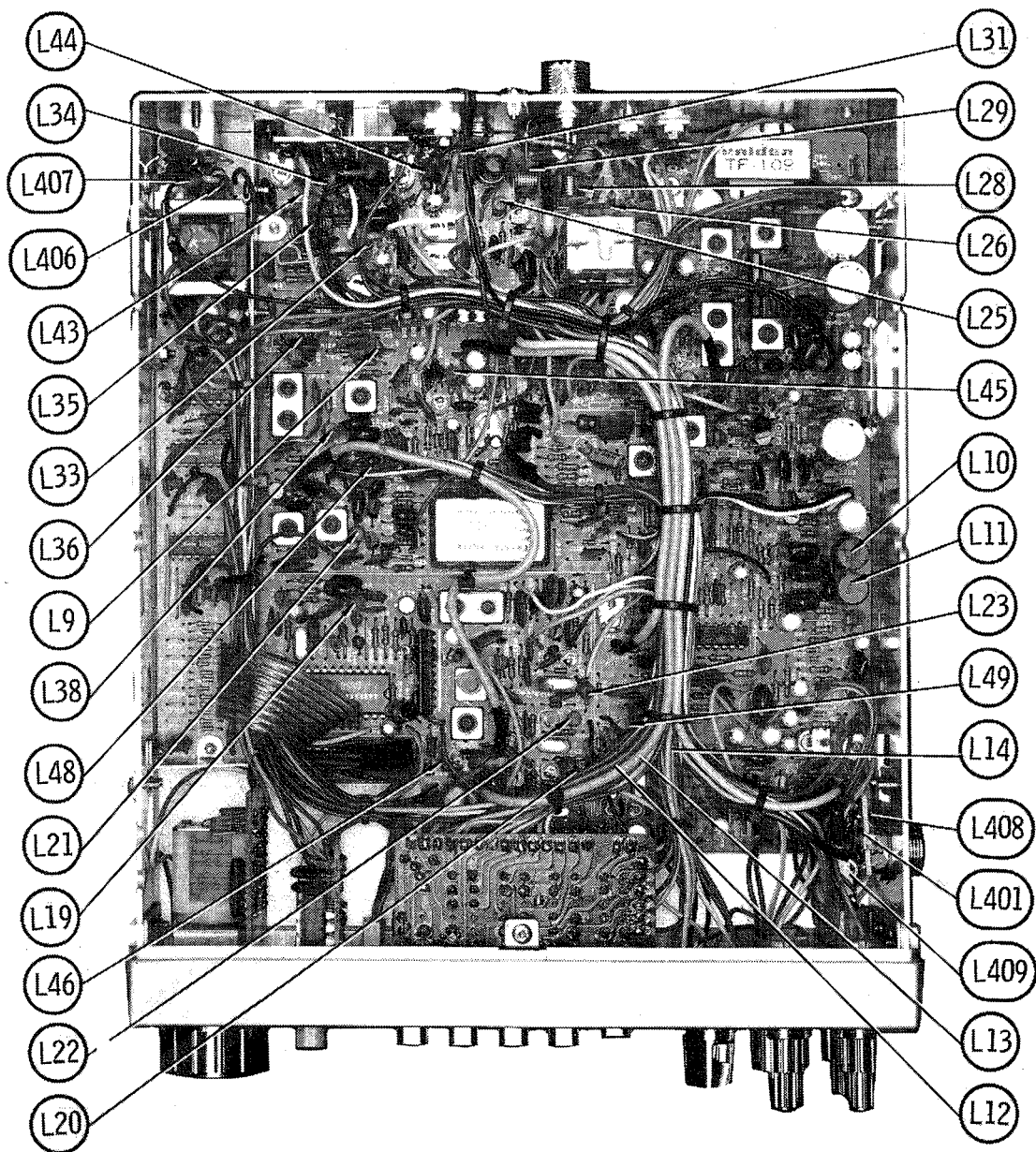
TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
Output of 2 tone generator to mike input. 500Hz and 2400Hz at .5 volts.	Ch. 19, USB Mike Gain Maximum	L39,L37, L32,L30	Adjust for maximum.
Output of 2 tone generator to mike input. 500Hz and 2400Hz at .5 volts.	Ch. 19, LSB Mike Gain Maximum	CT7	Adjust CT7 for 11.0 watts.

TRANSMITTER ADJUSTMENTS

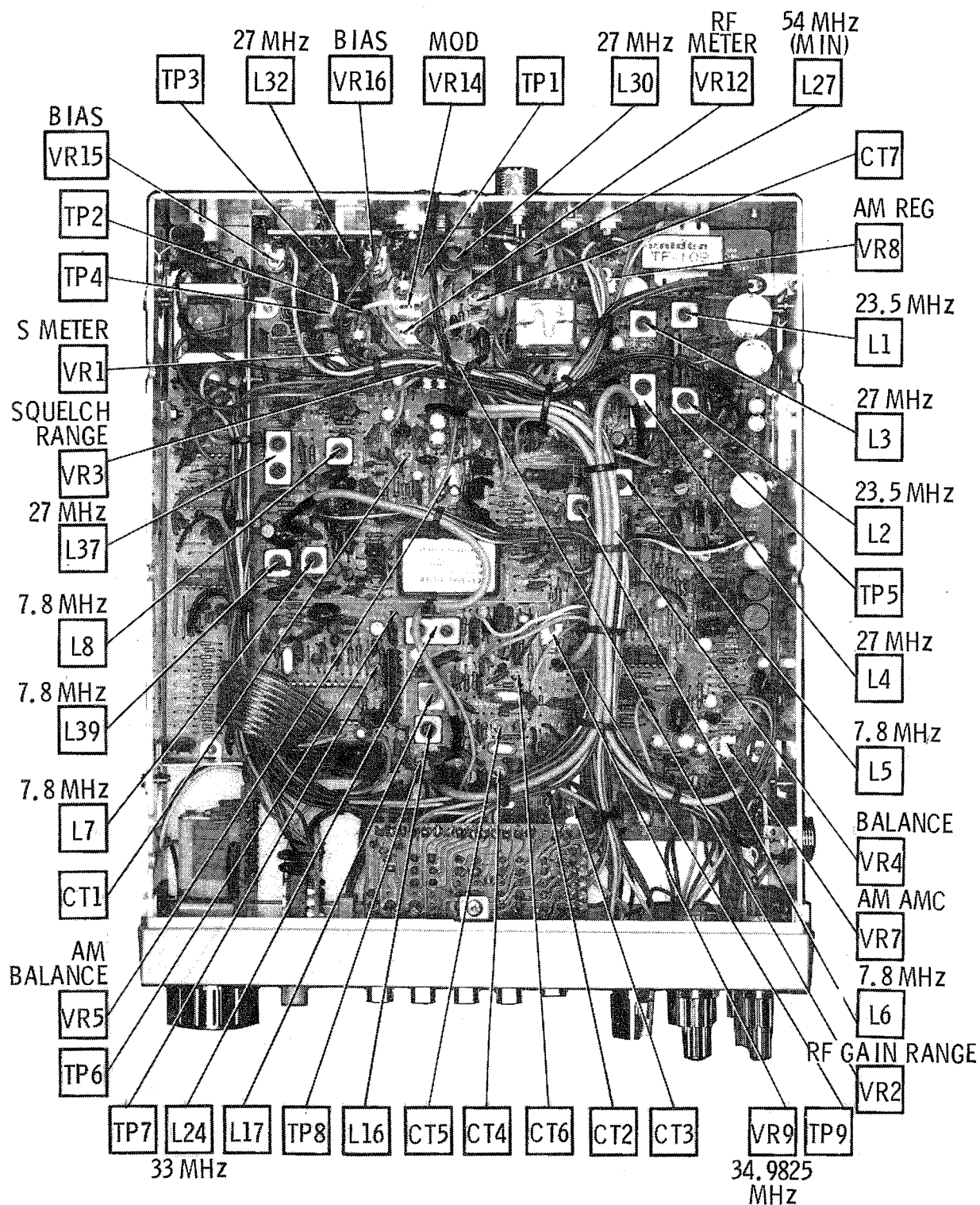
Connect an RF wattmeter and 50-ohm, 25-watt dummy load to antenna connector.
NOTE: Be sure to check transmit frequency and power on all active channels after adjustment of transmitter.
See page 4 for channel frequencies.

TEST EQUIPMENT	TRANSCEIVER	ADJUST	REMARKS
DC current meter to TP3 and TP4. No modulation.	Ch. 19, USB	VR15	BIAS Adjust VR15 for 40mA +10mA.
DC current meter to TP1 and TP2. No modulation.	Ch. 19, USB	VR16	BIAS Adjust VR16 for 15mA +1mA.
No modulation.	Ch. 19, USB	VR4	BALANCE Adjust for MINIMUM RF.
No modulation.	Ch. 19, AM	VR8	AM REG Adjust VR8 for 3.8 watts.
No modulation.	Ch. 19, AM	VR12	RF PANEL METER Adjust VR12 for 3.8 watts on RF scale of meter.
Inject a 1000Hz signal at mic input. Modulation meter to antenna jack.	Ch. 19, AM AMC Maximum	VR7	AM AMC Adjust signal for 50% modulation. Increase signal 630 times. Adjust VR7 for 95% modulation.
Modulation meter to antenna jack. Inject a 1000Hz signal at mic input.	Ch. 13, AM	VR14	MOD Adjust VR14 so that MOD panel meter agrees with external modulation meter.

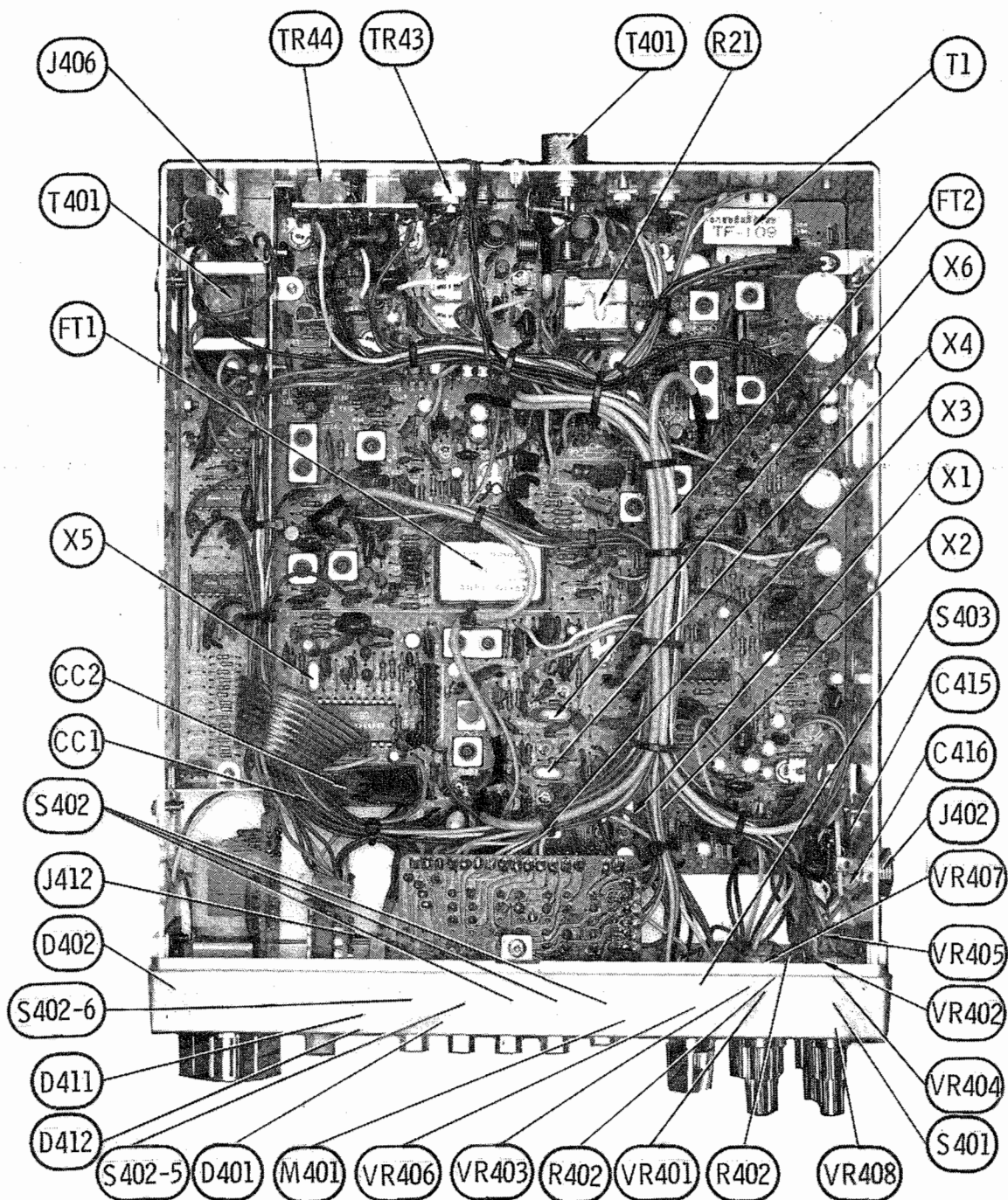
PRESIDENT MODEL ADAMS



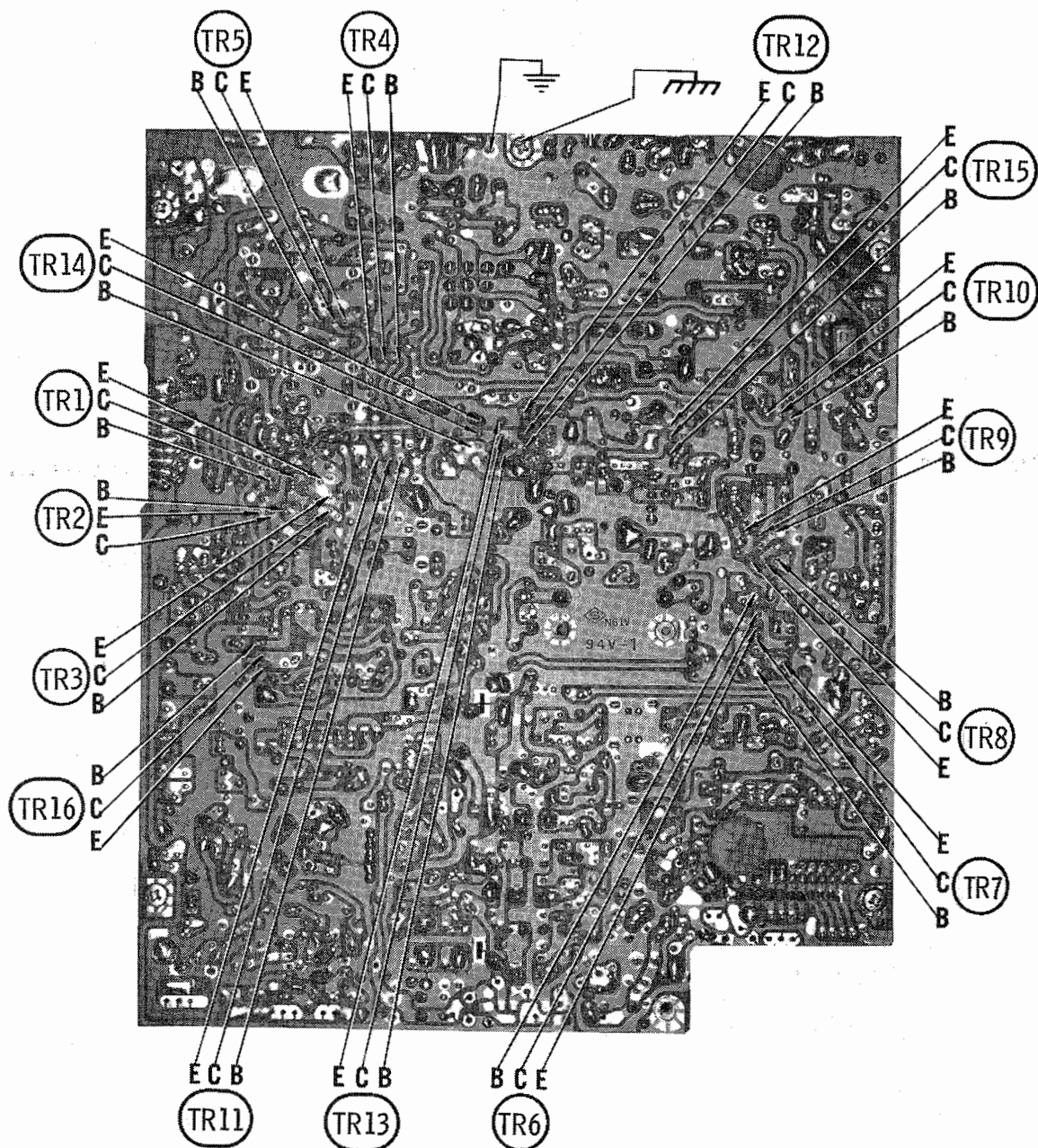
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CHASSIS-BOTTOM

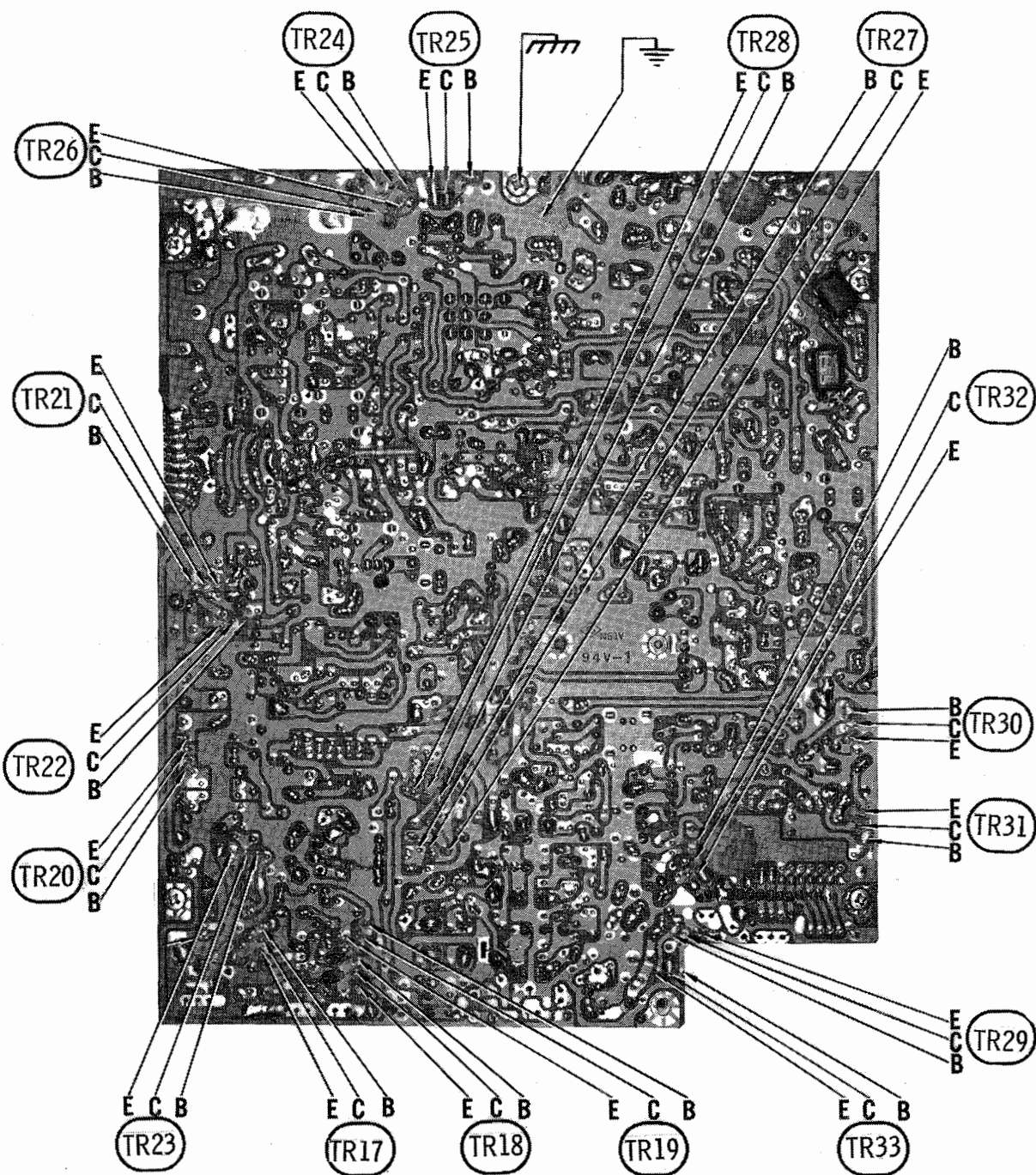


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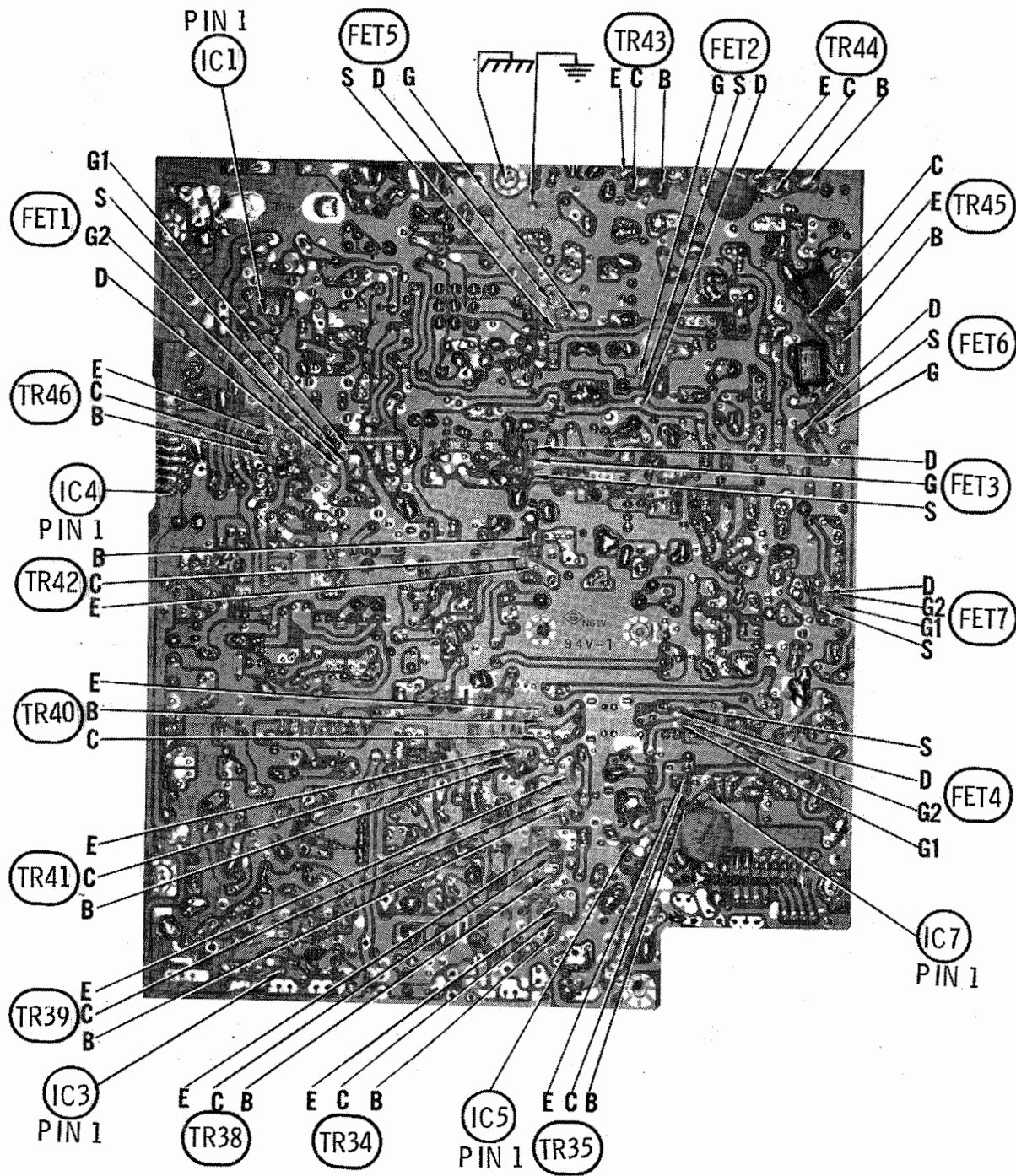


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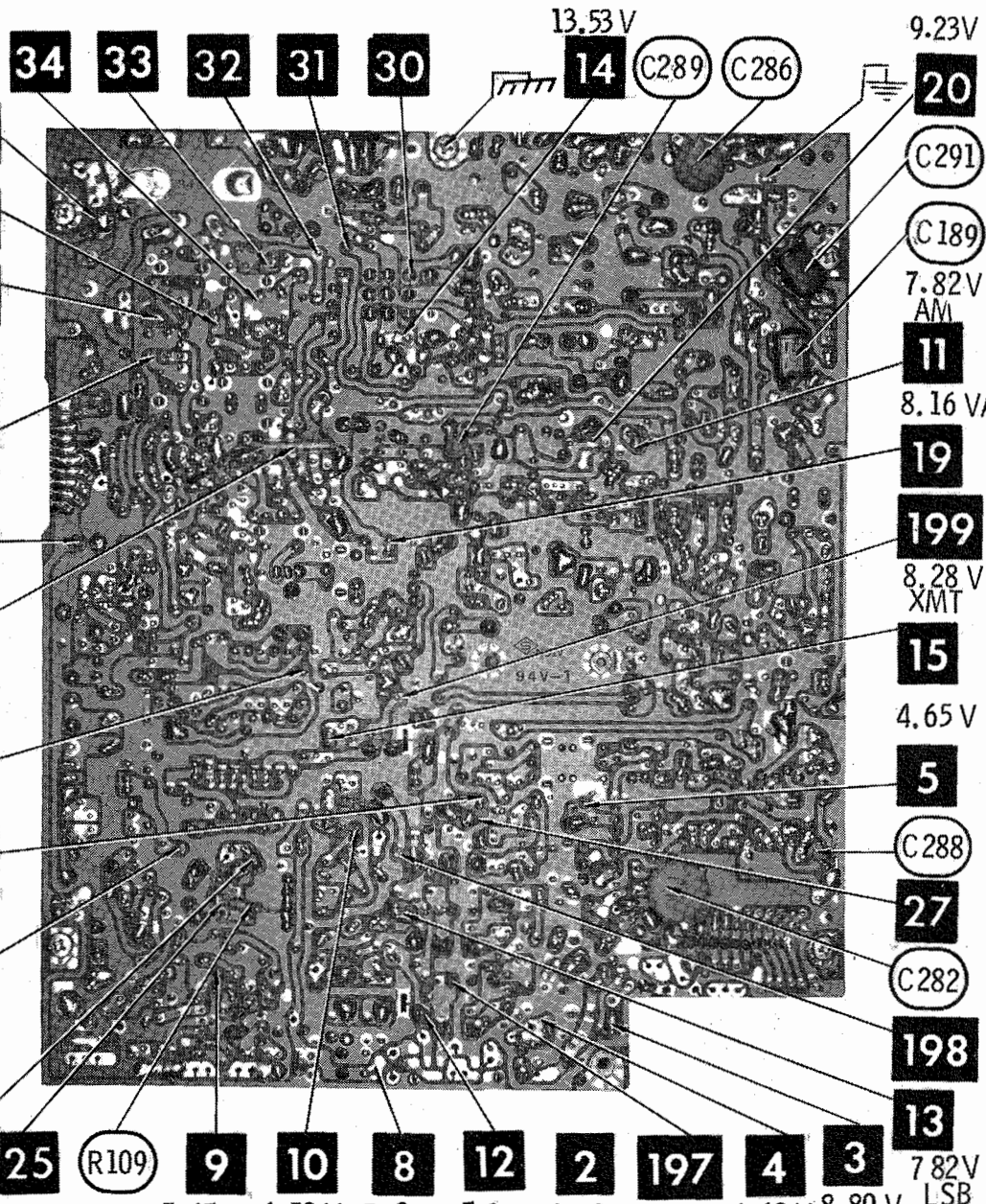
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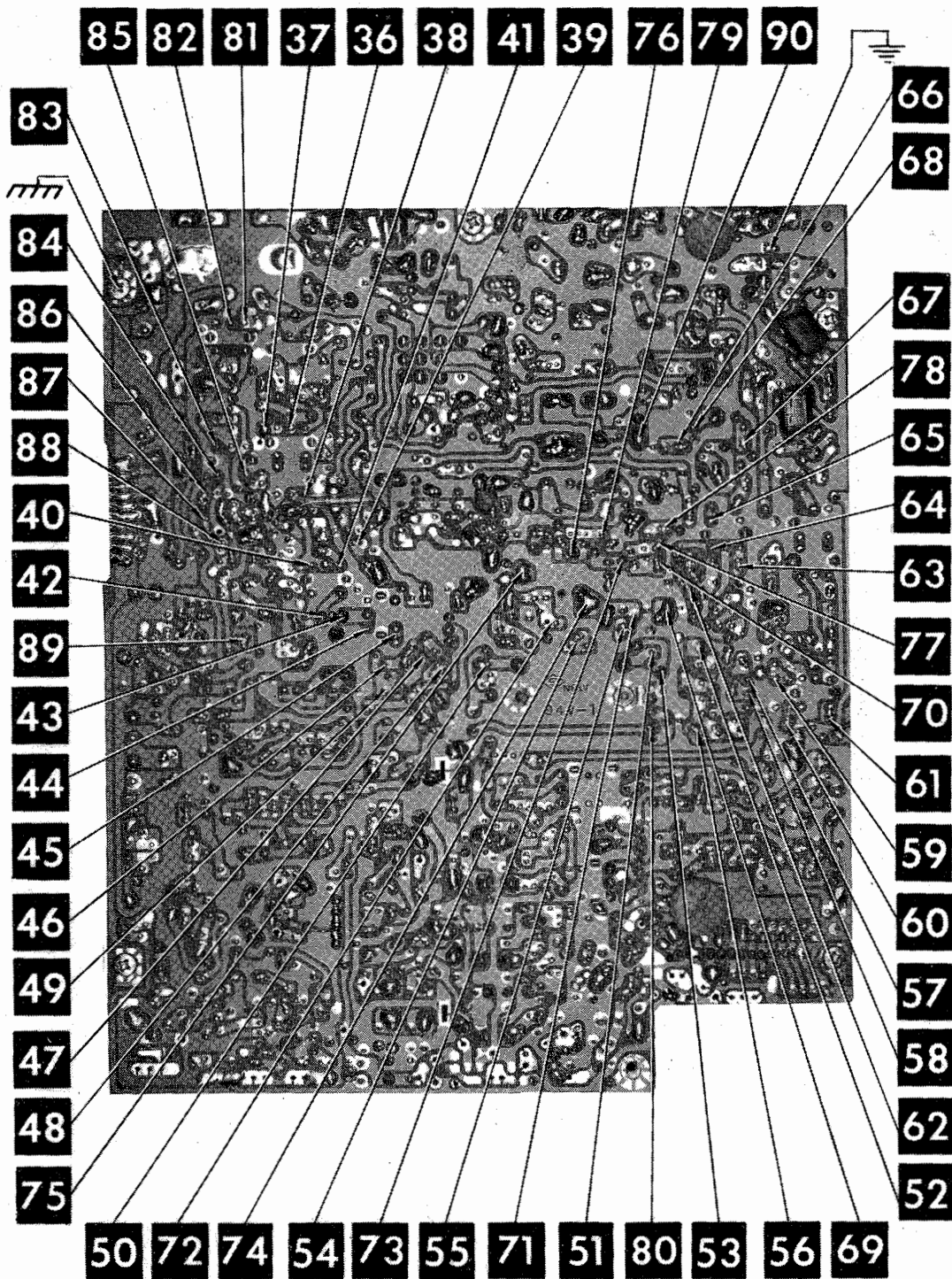
MAIN BOARD



MAINBOARD

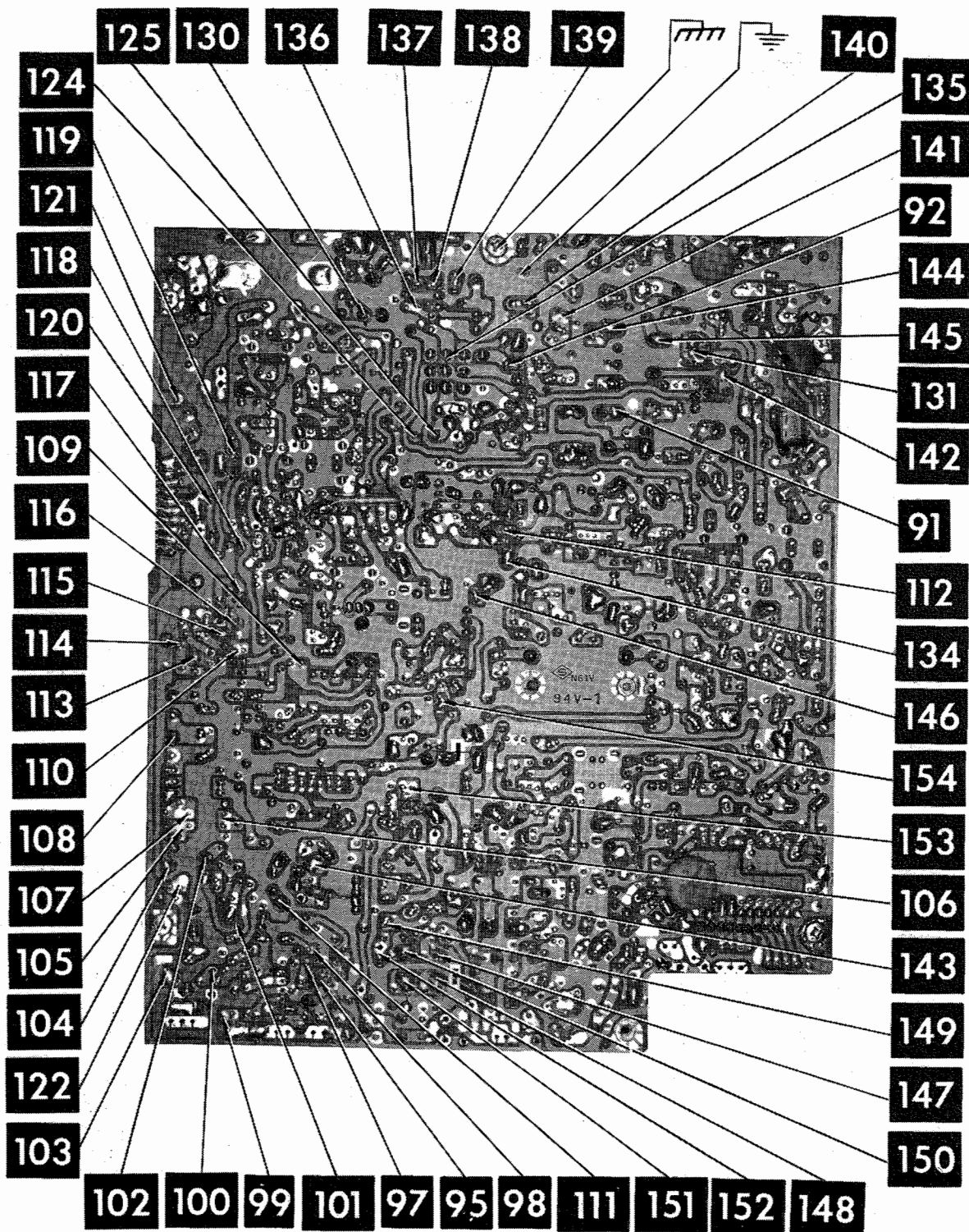


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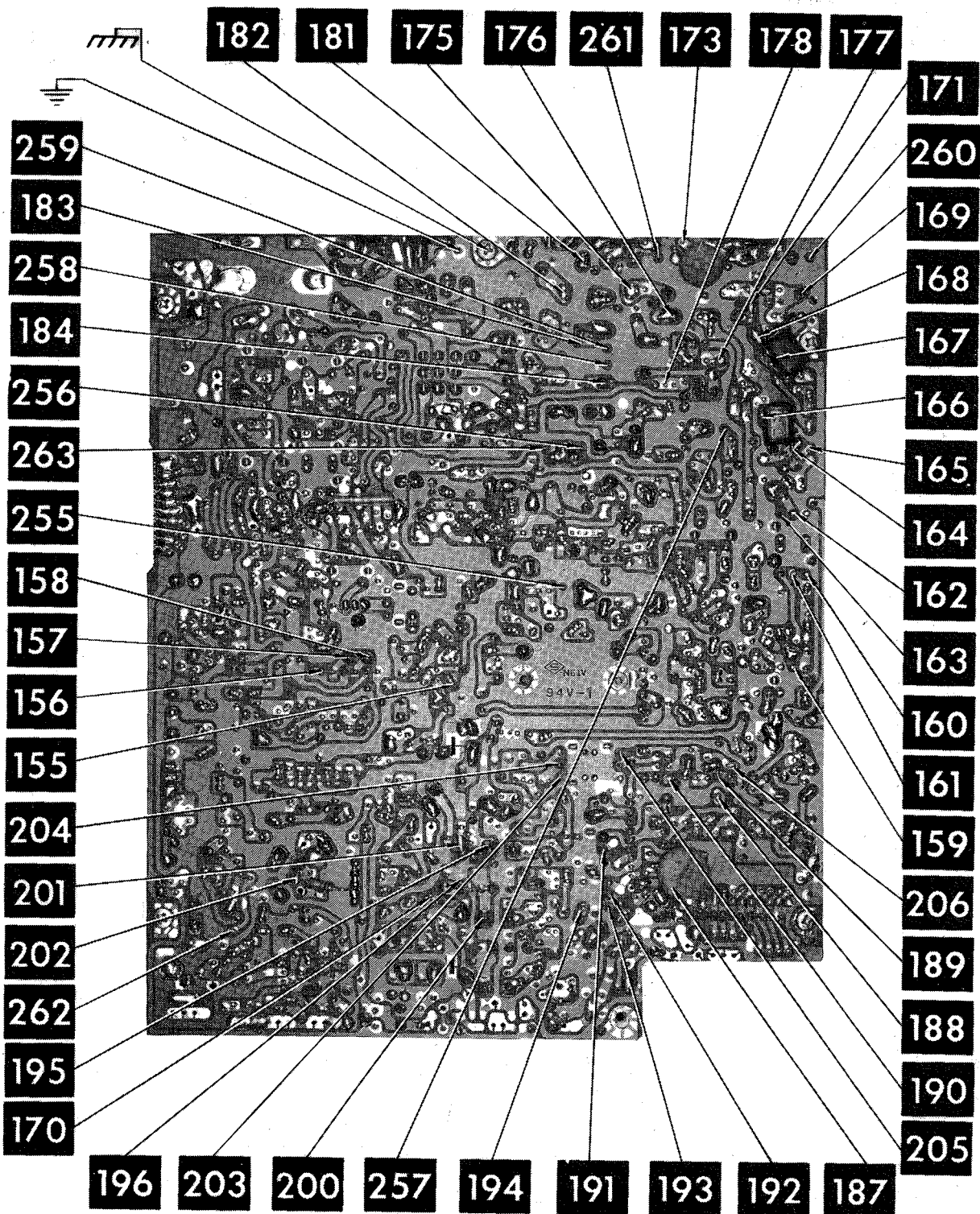


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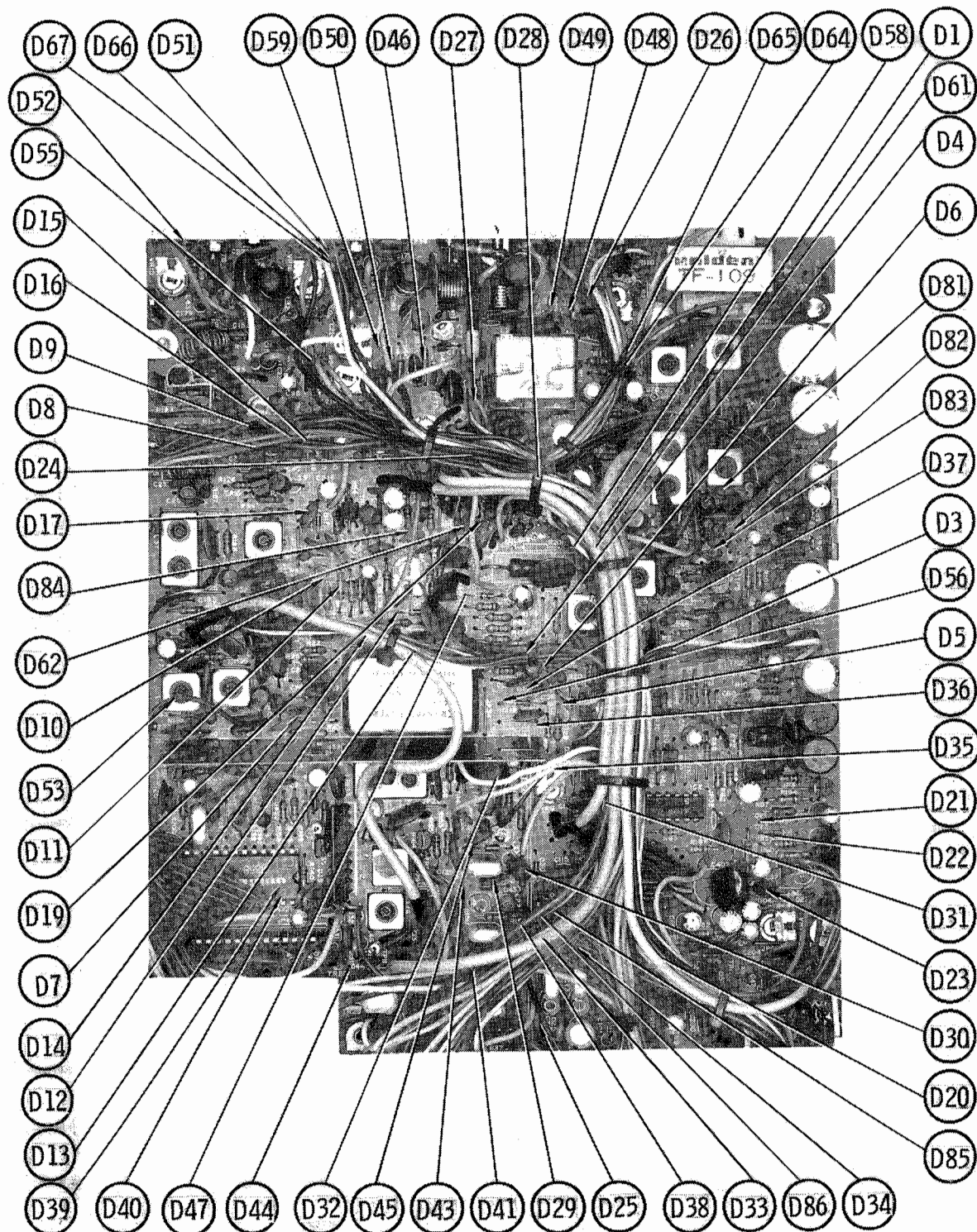


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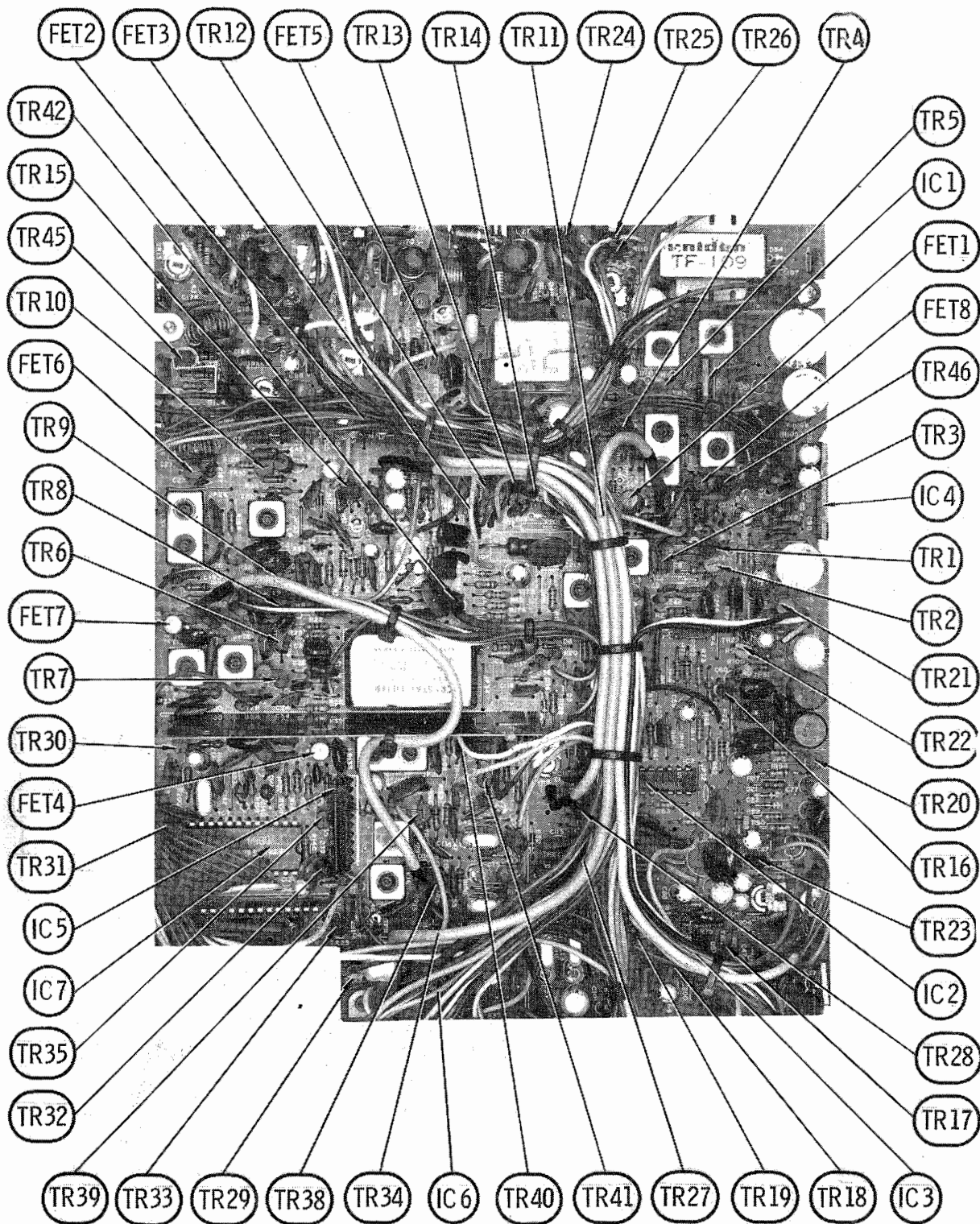


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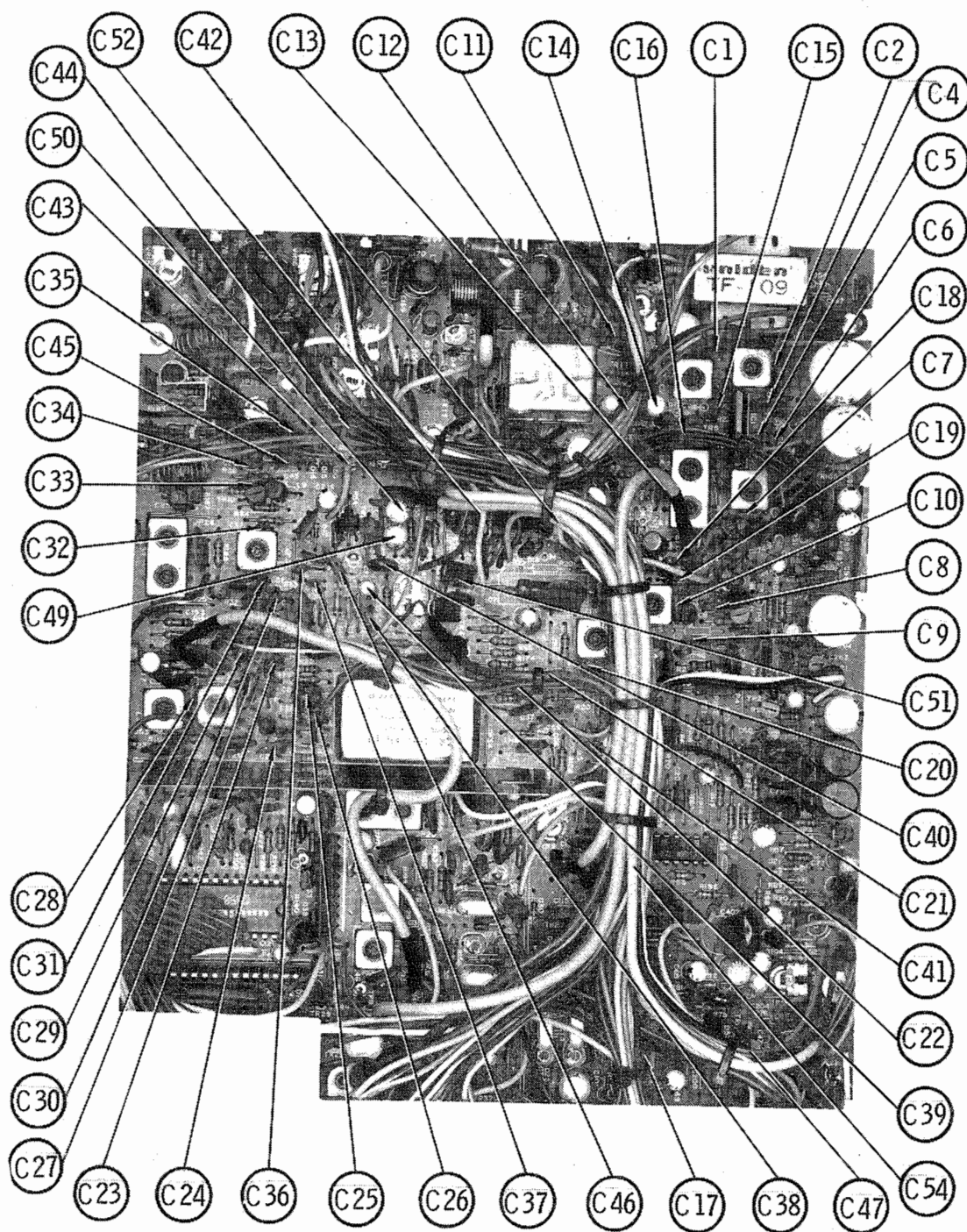


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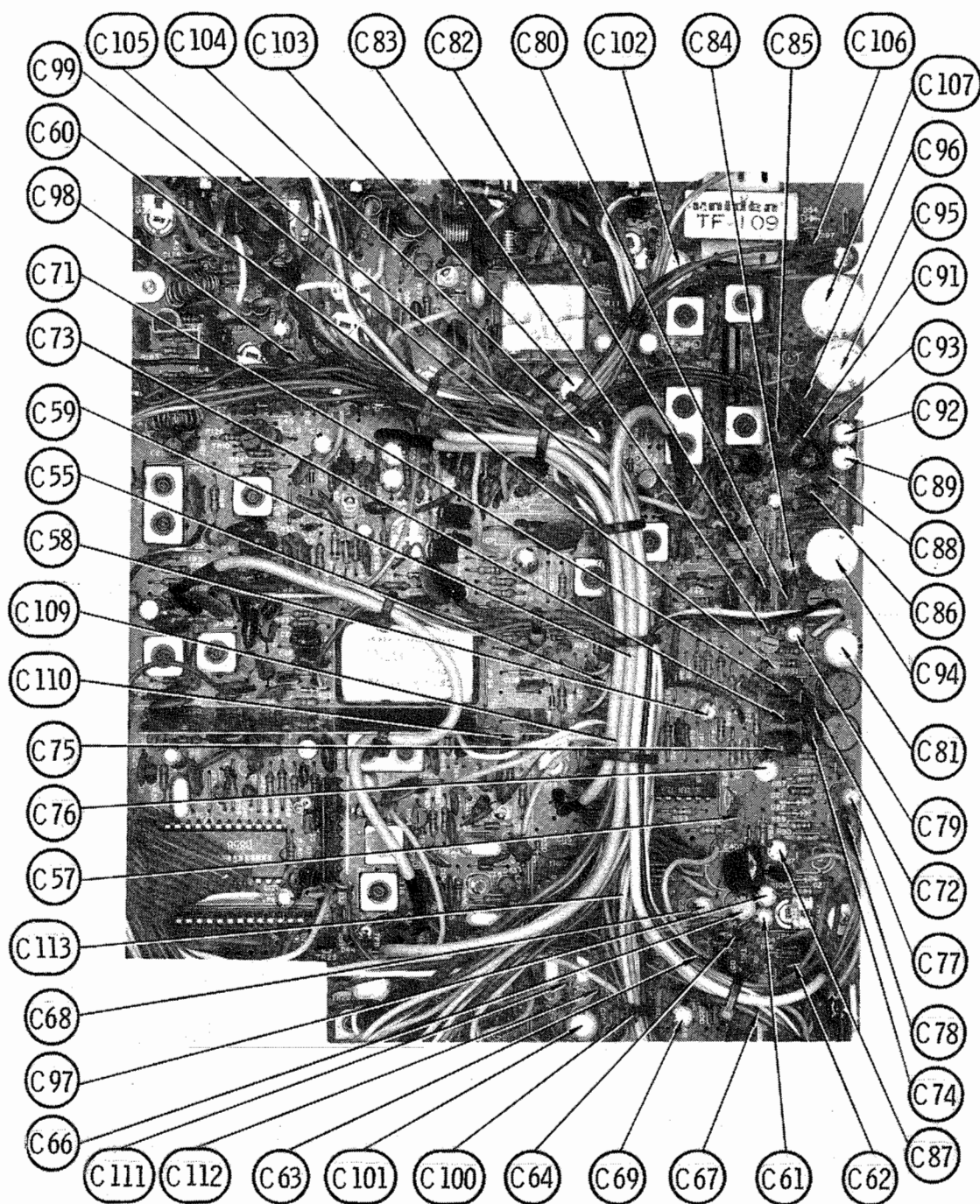


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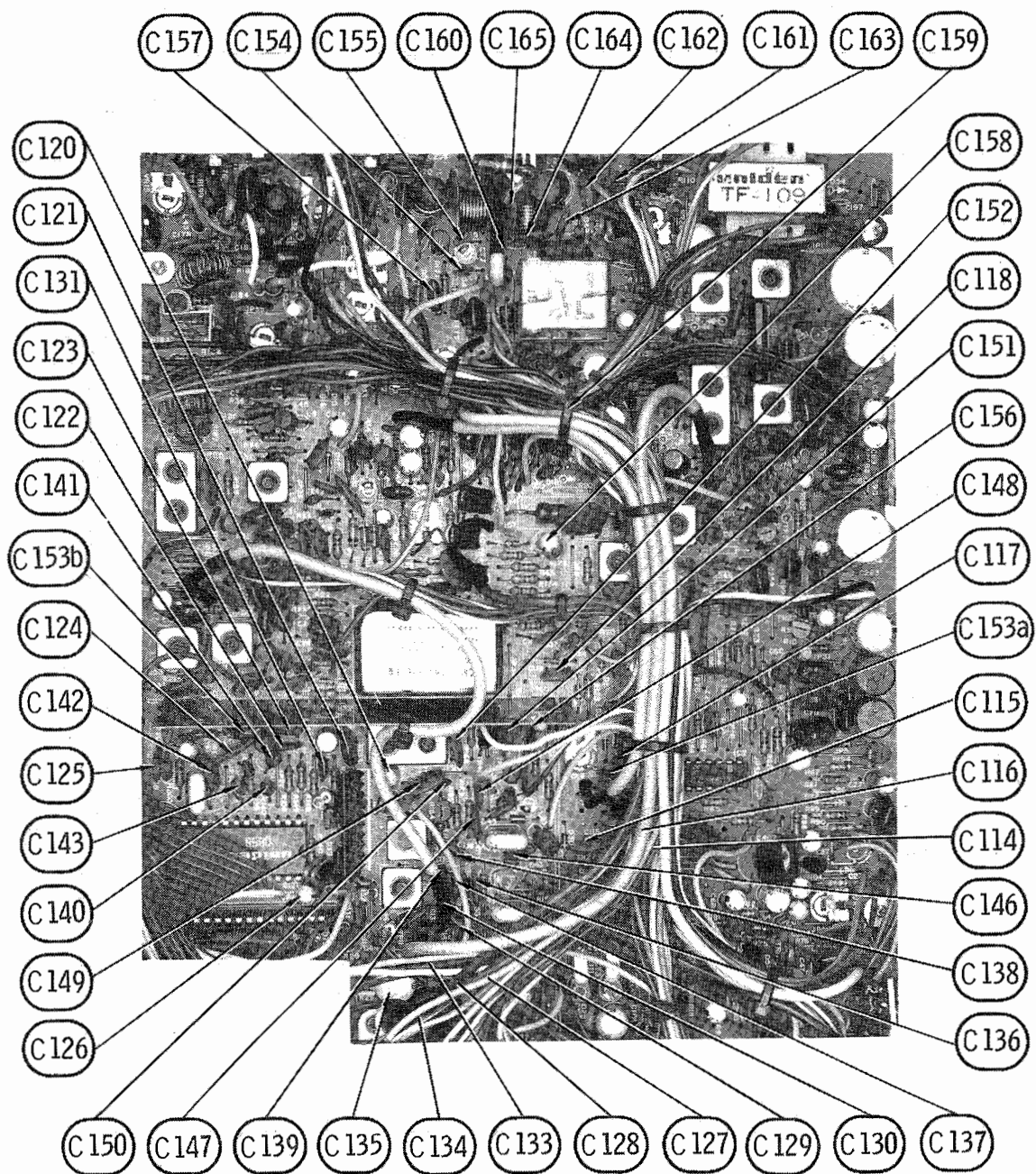
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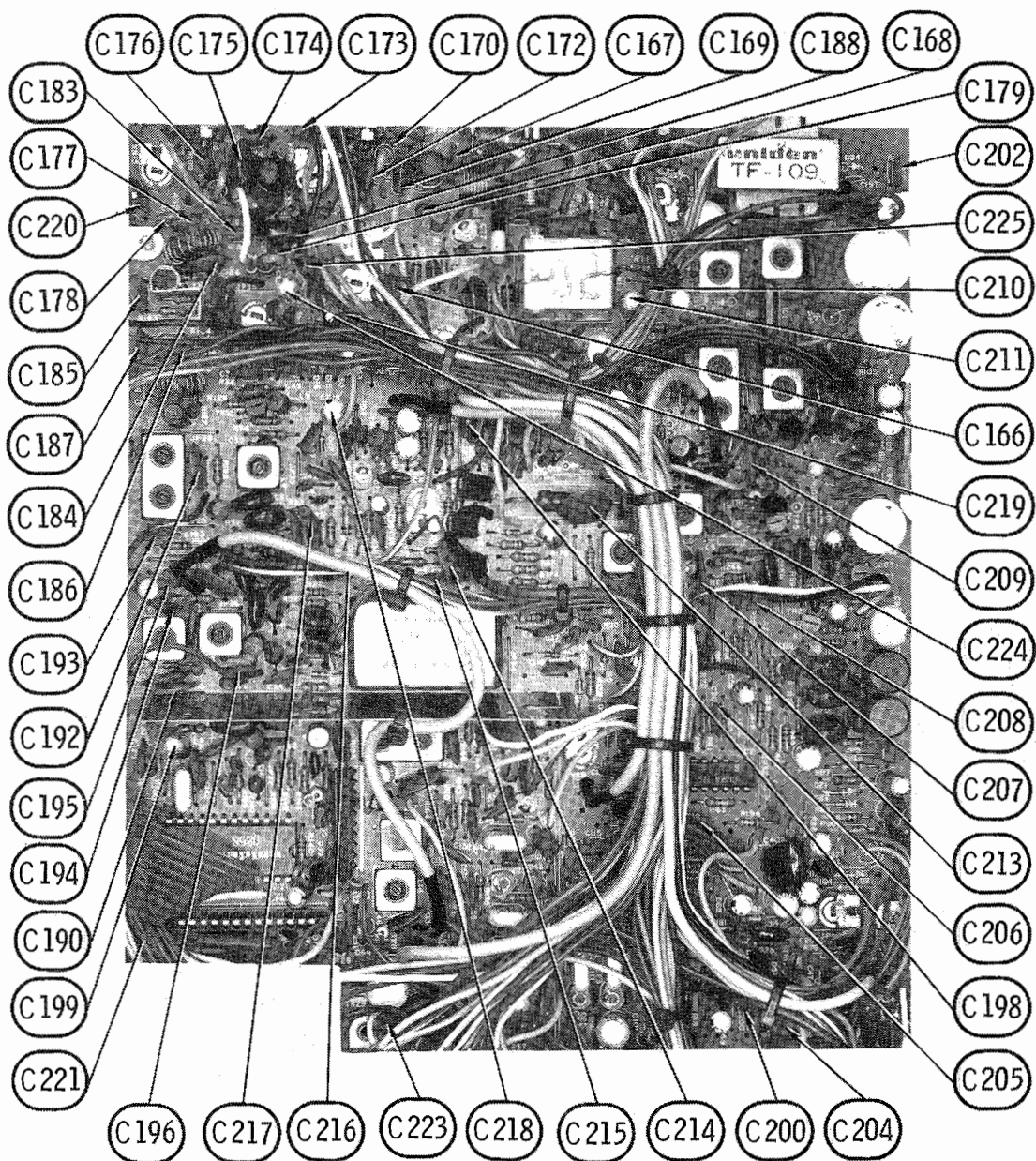
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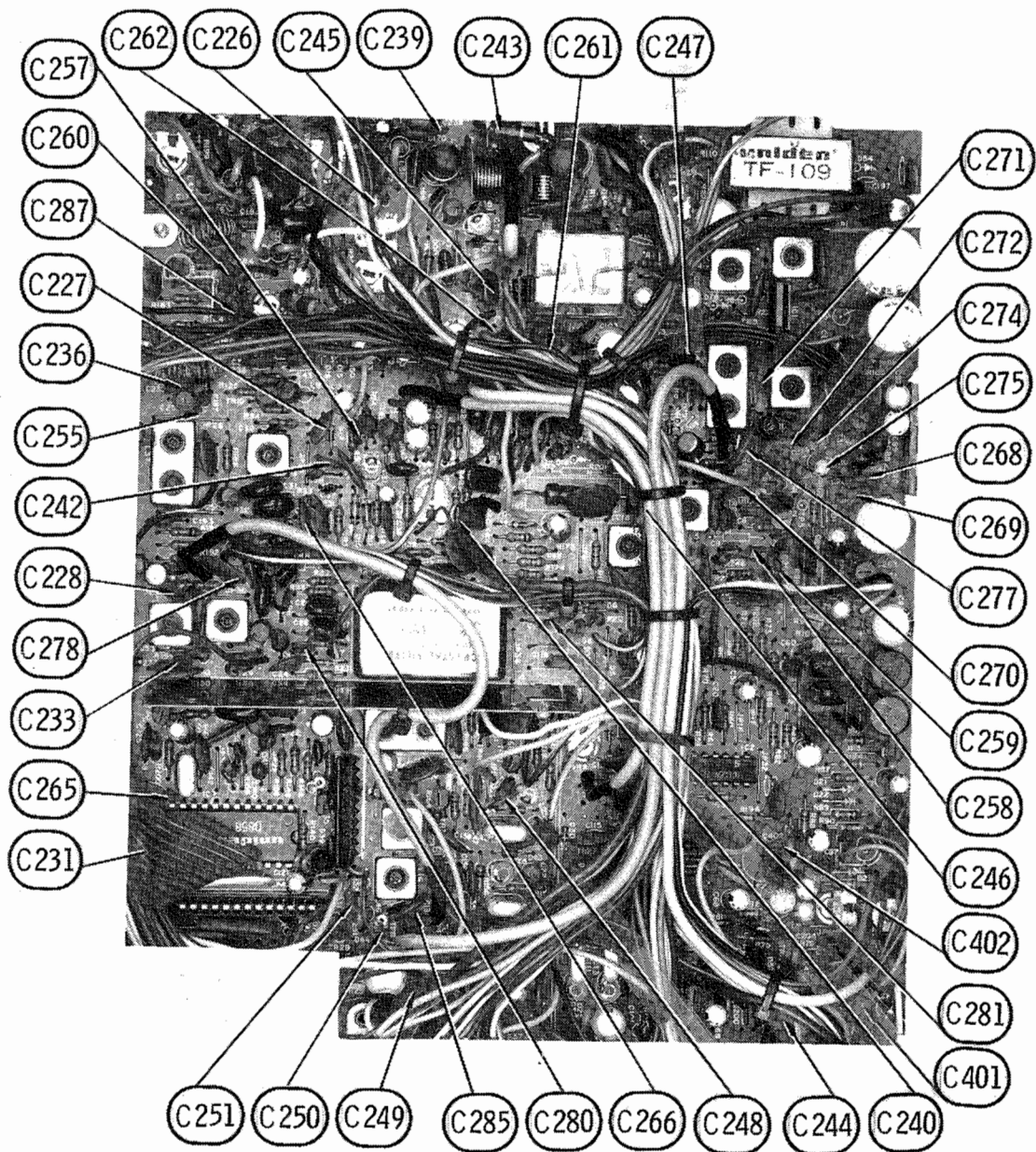
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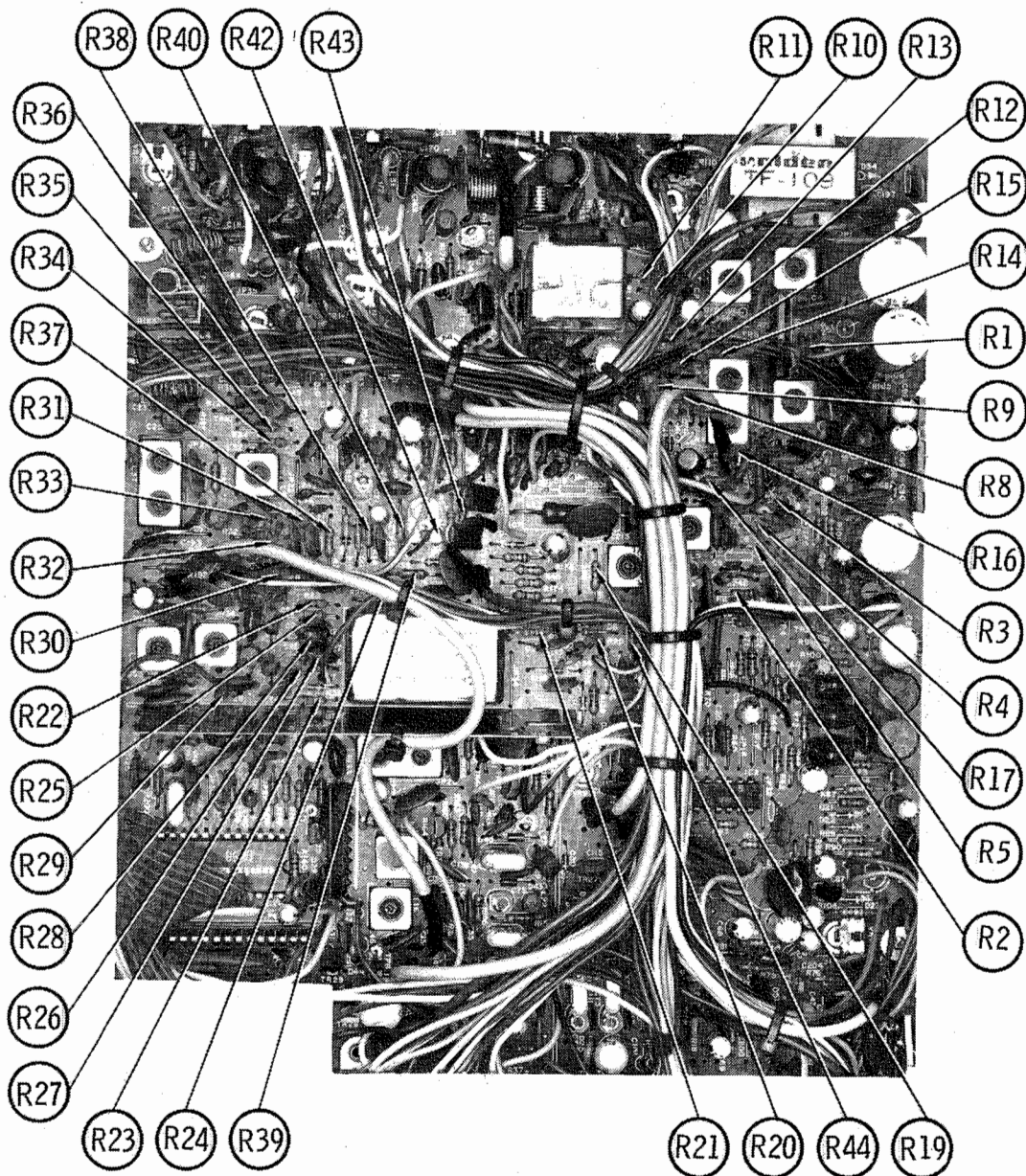
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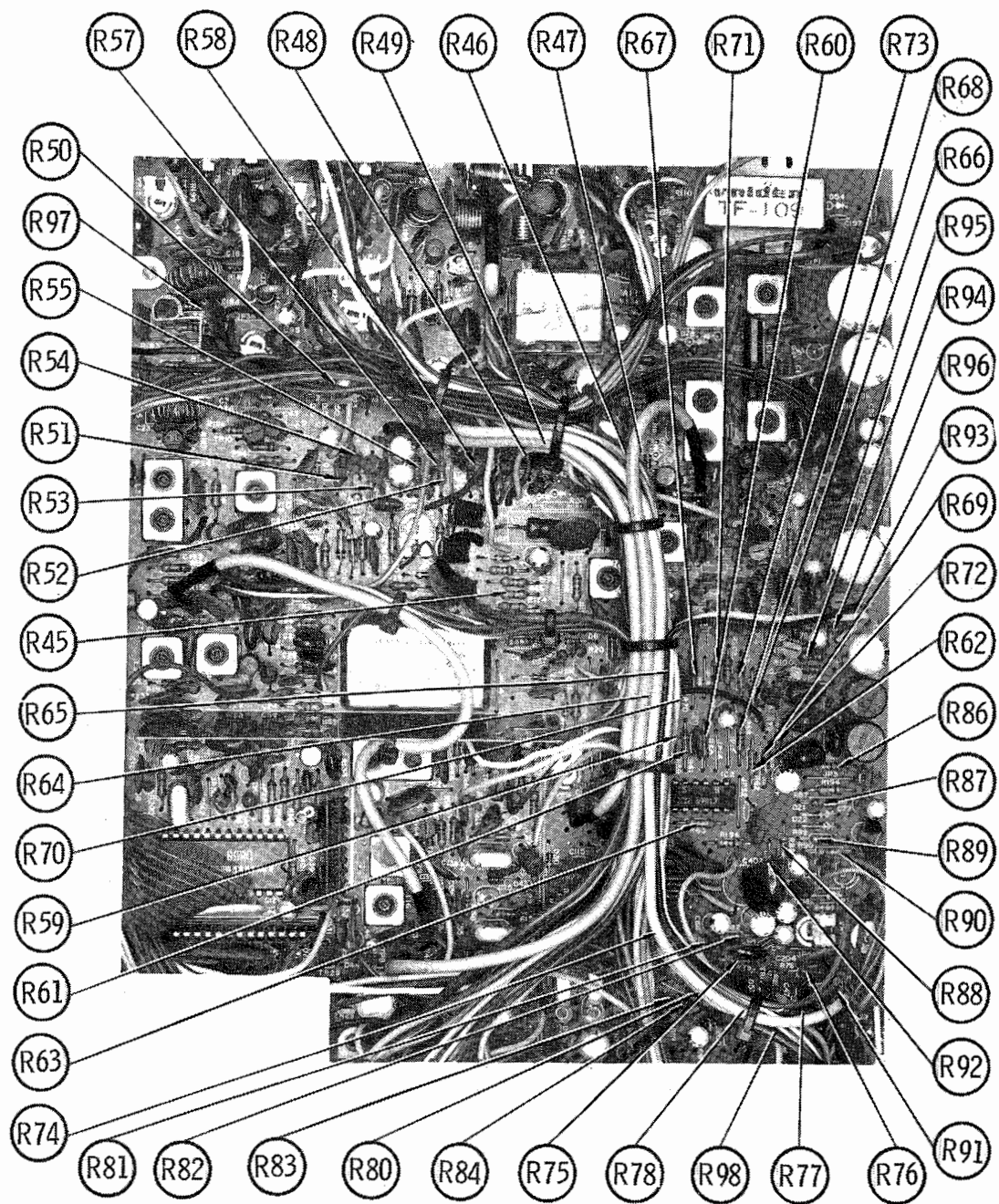
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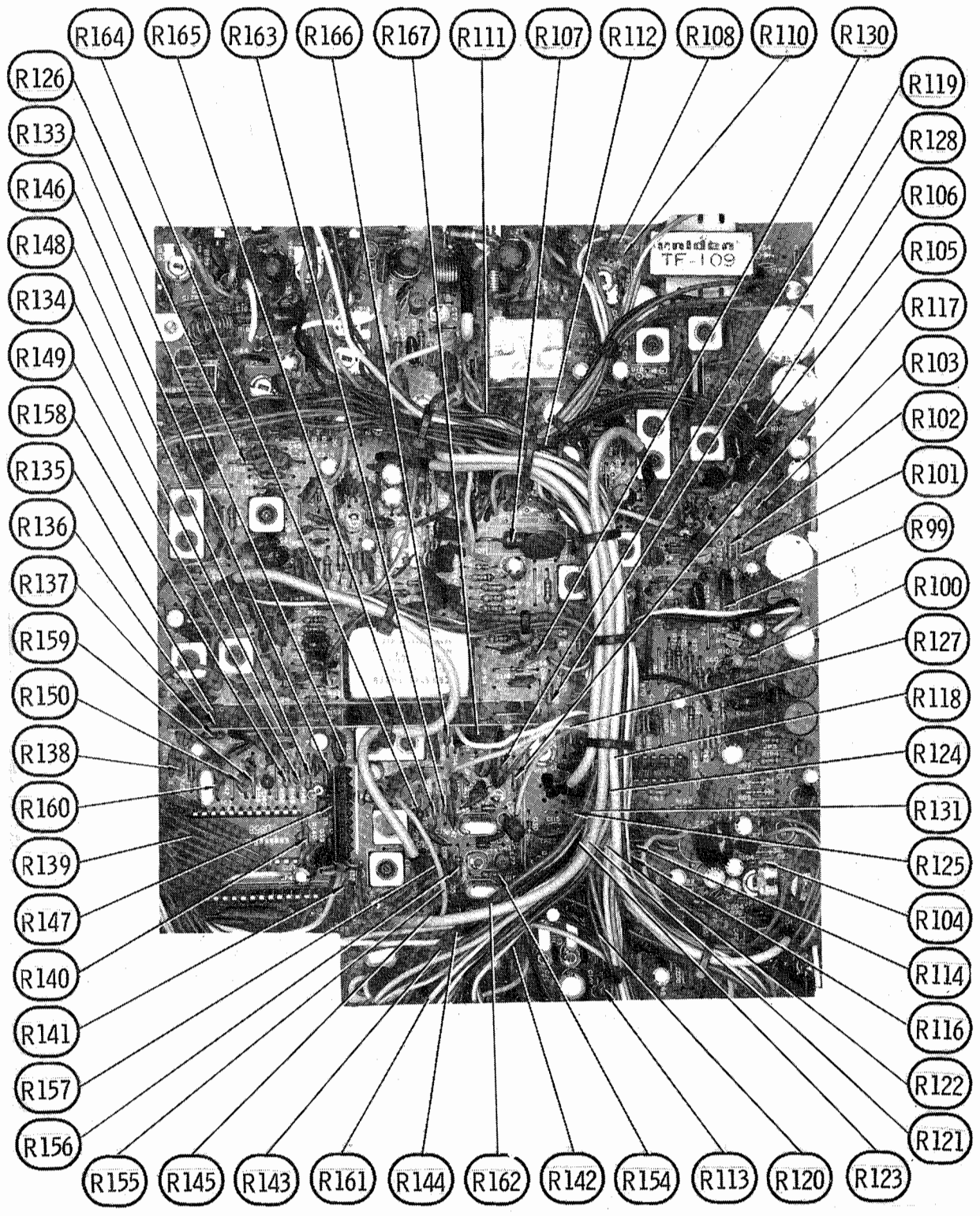
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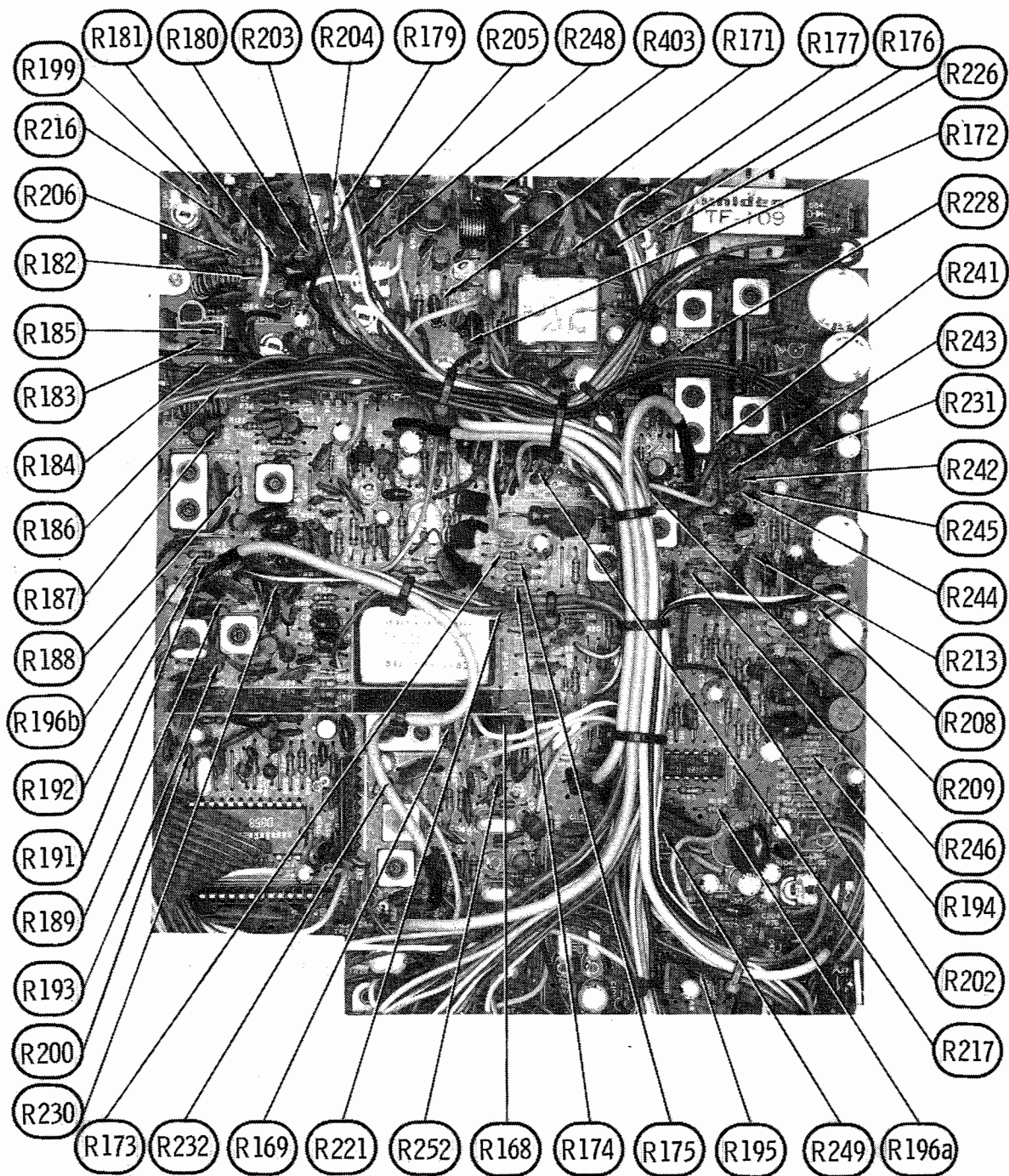
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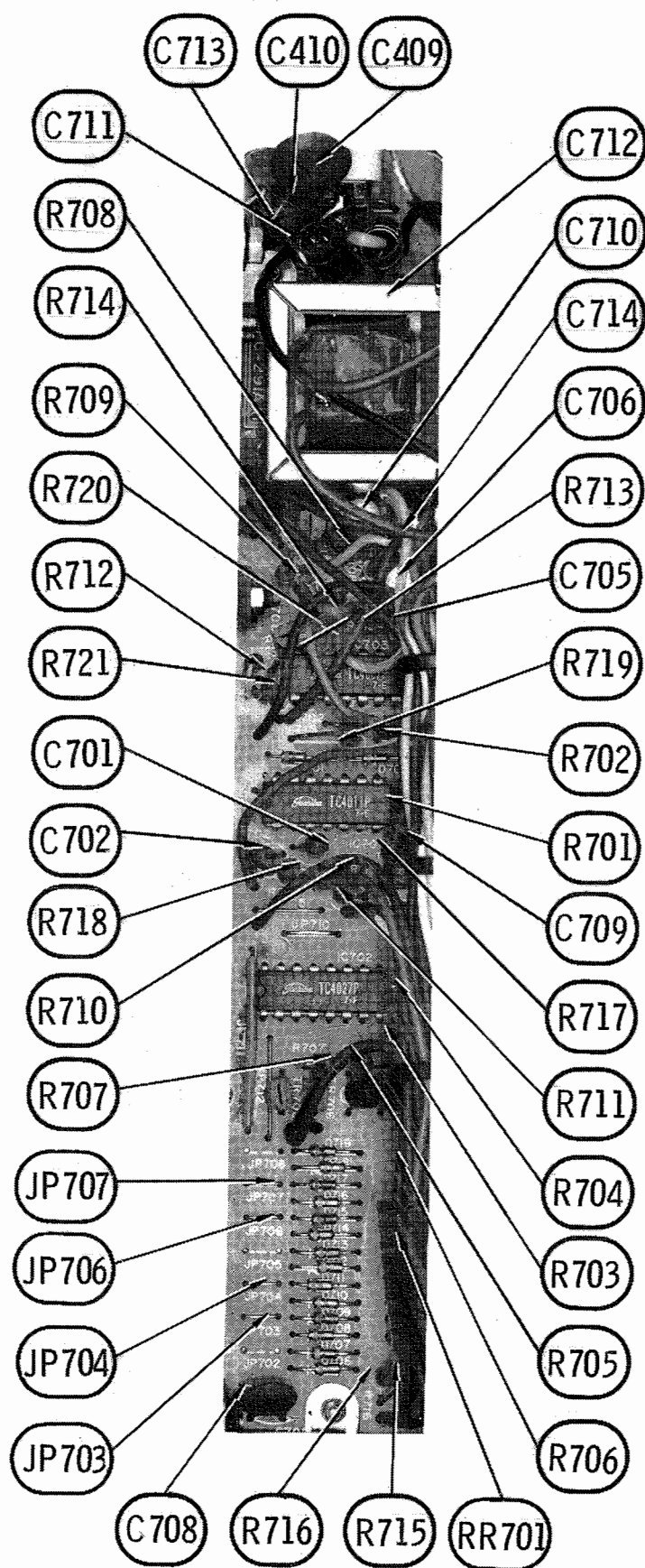
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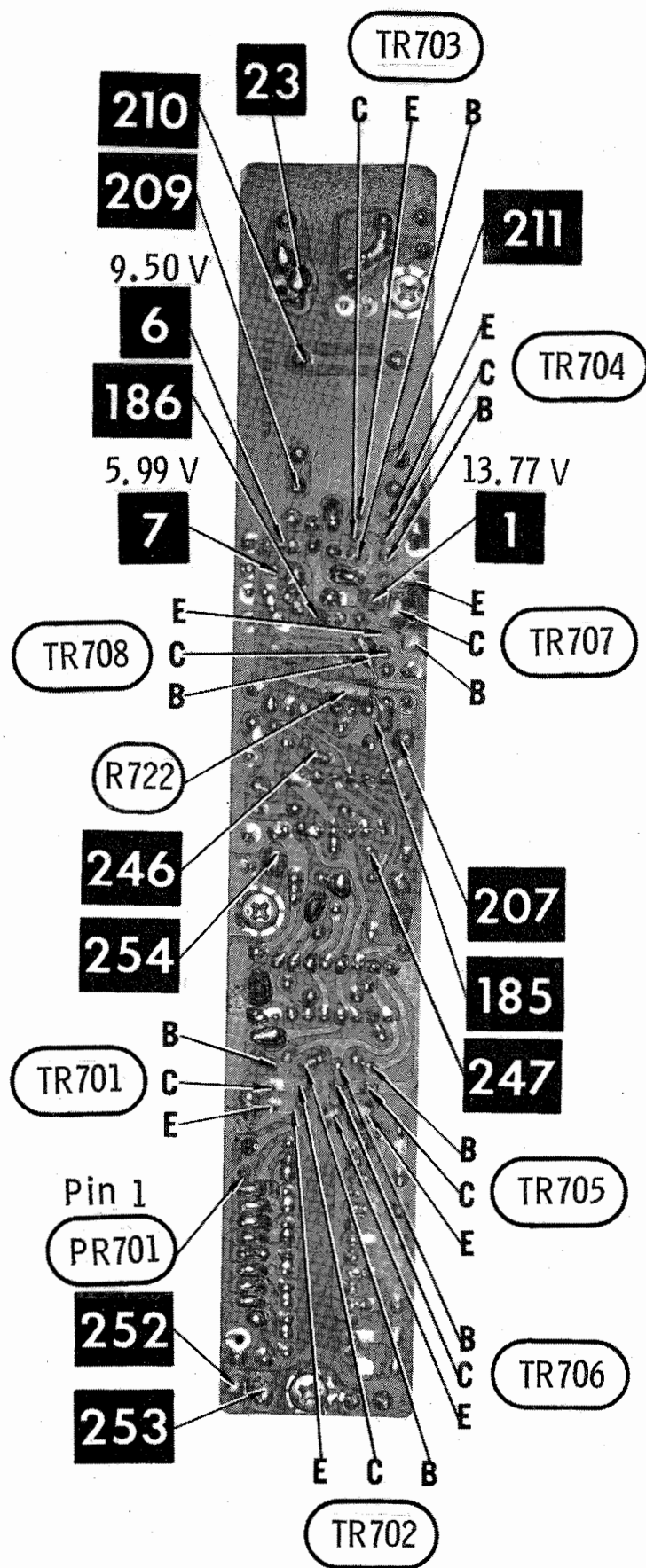
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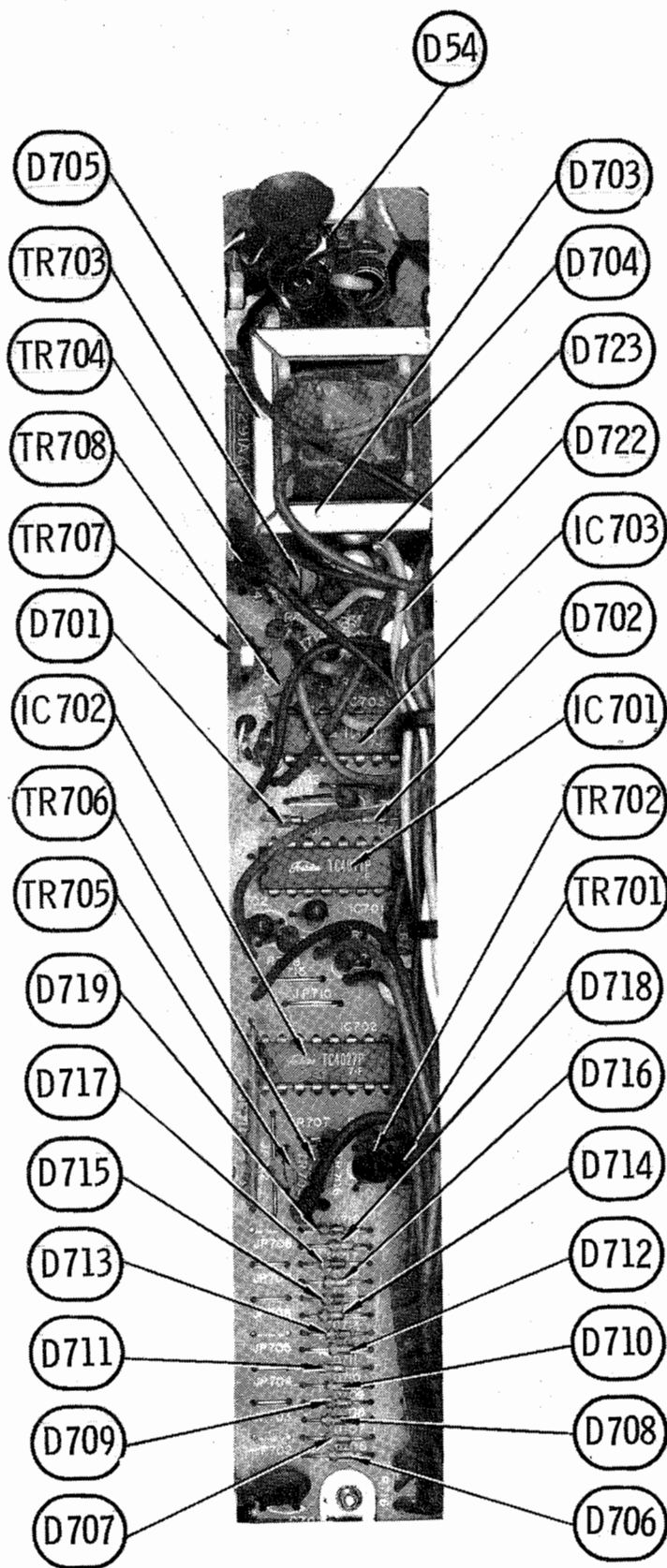
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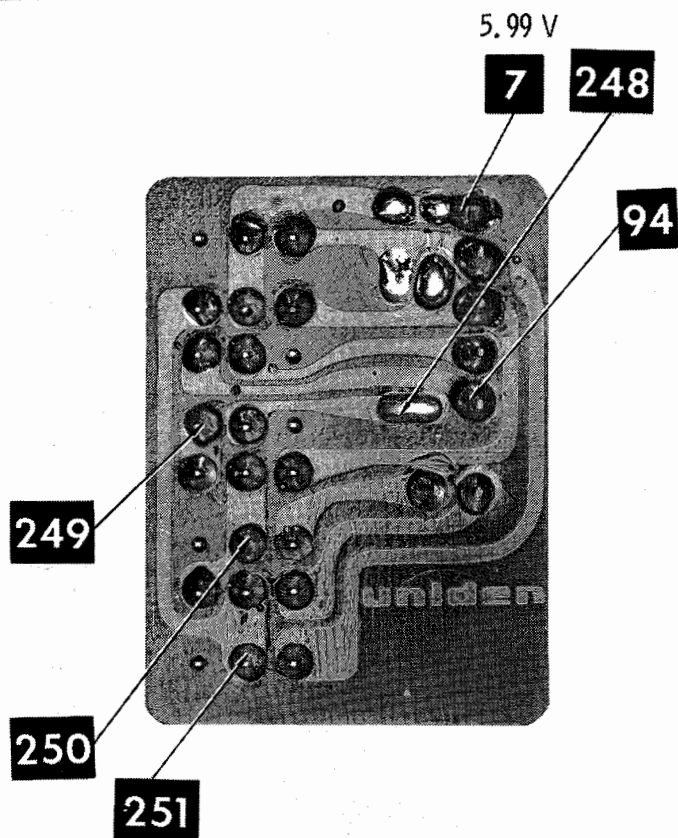
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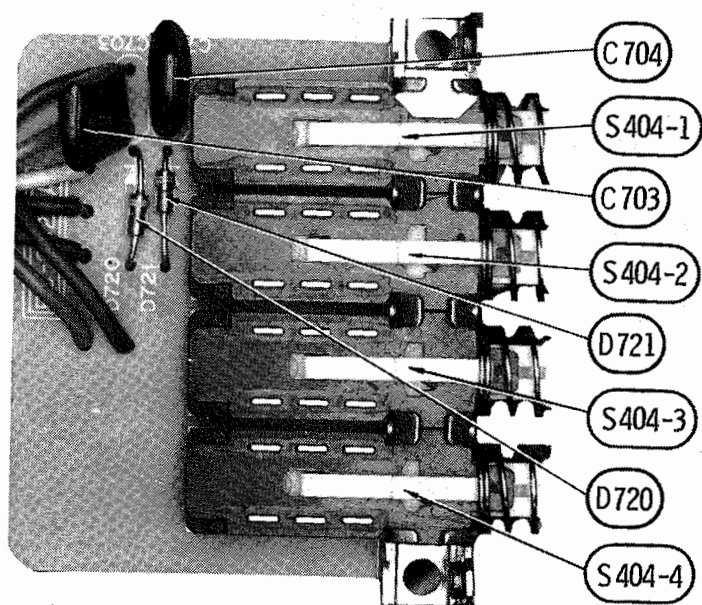
SCAN BOARD



SCAN BOARD

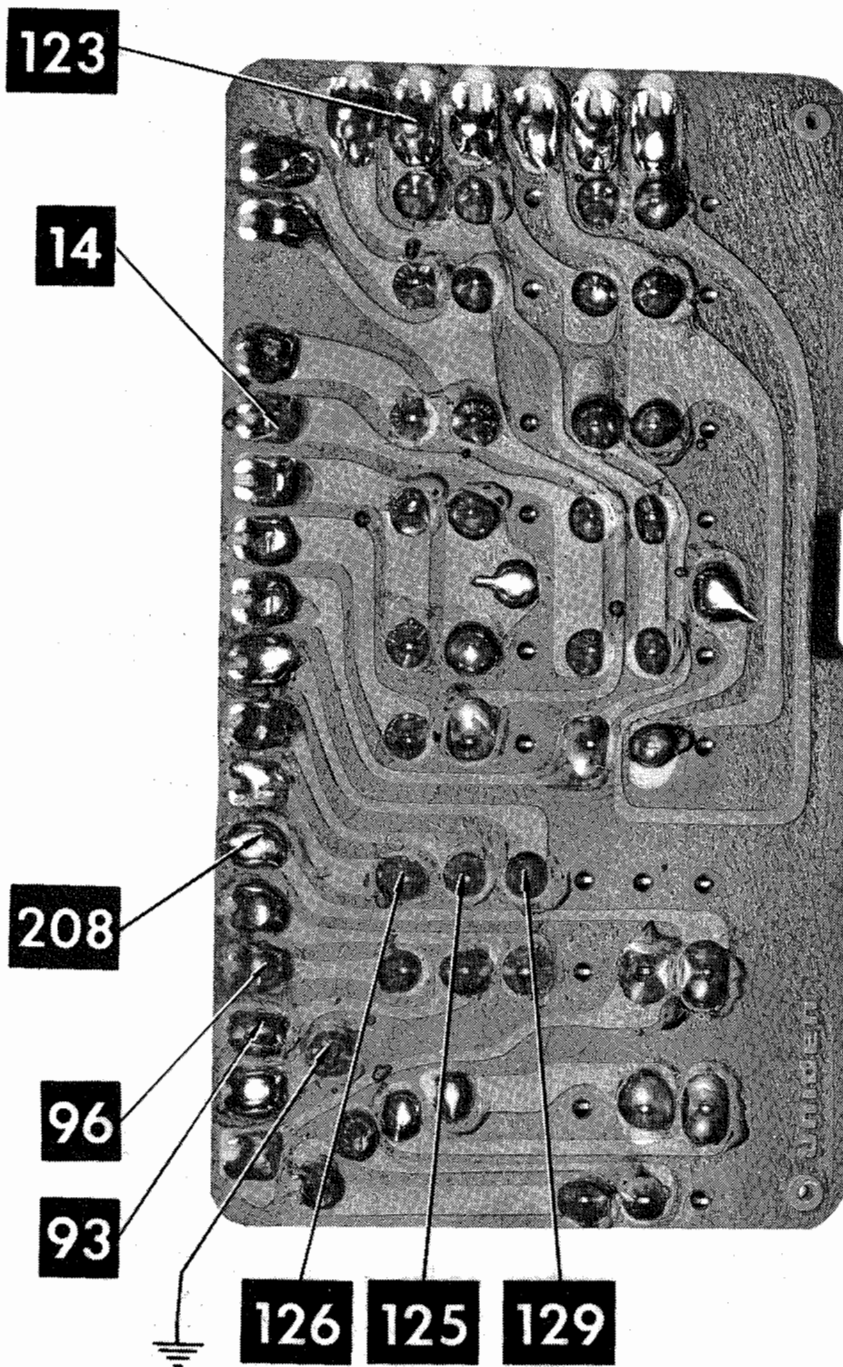


SCAN SWITCH BOARD

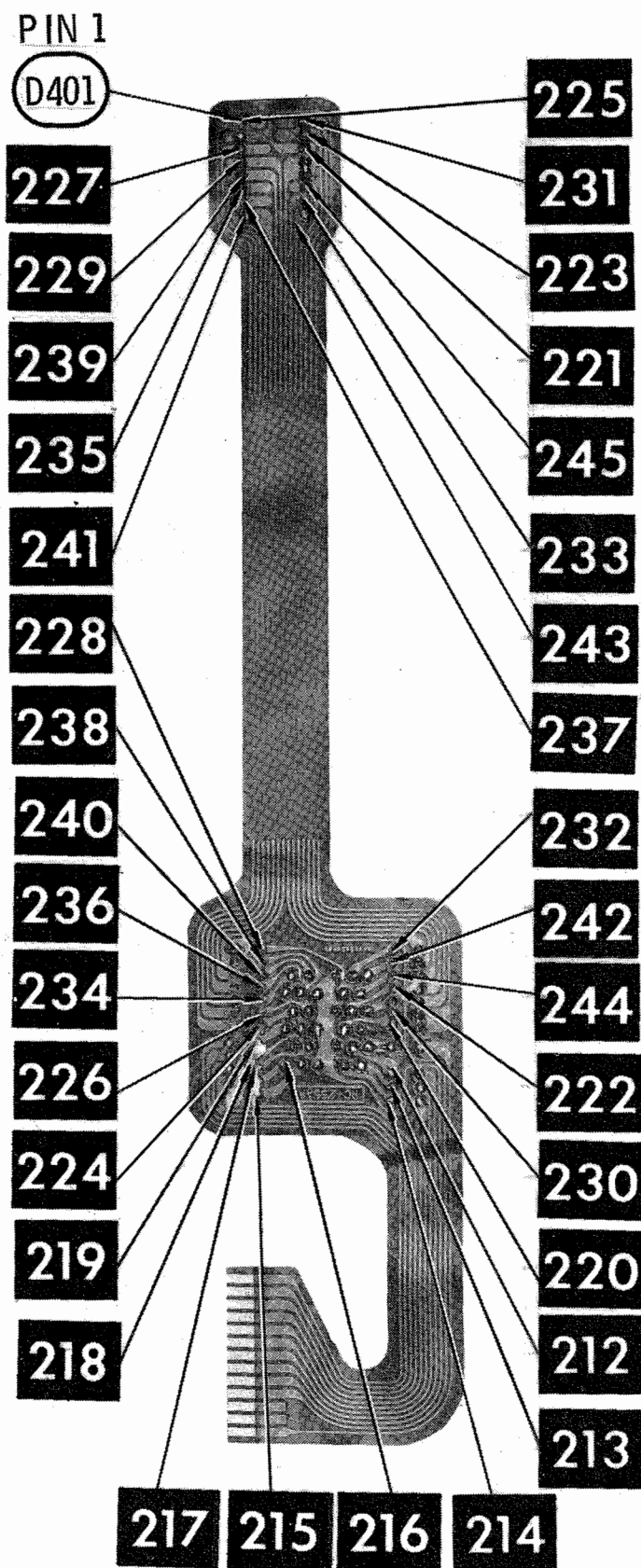


AM-LSB-USB SWITCH BOARD

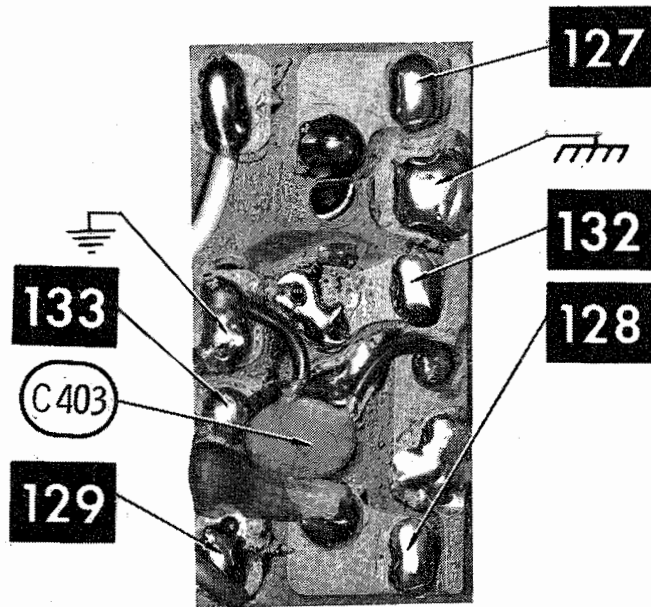
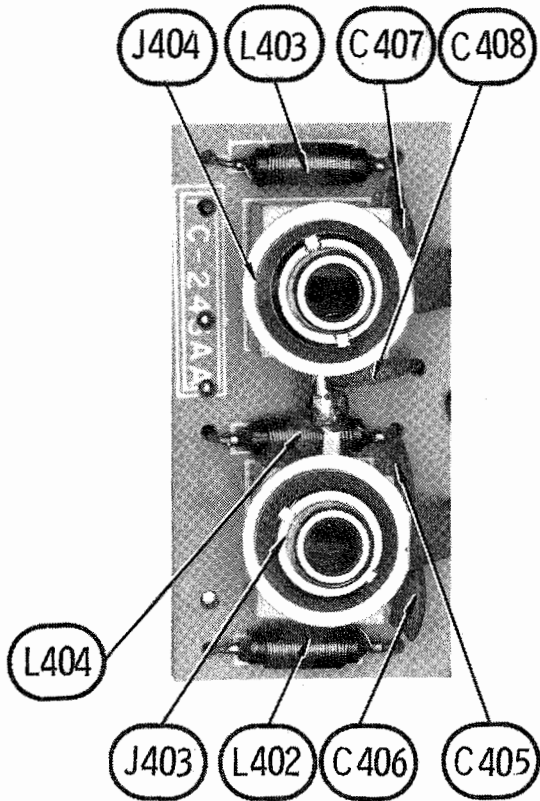
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AM-LSB-USB SWITCH BOARD

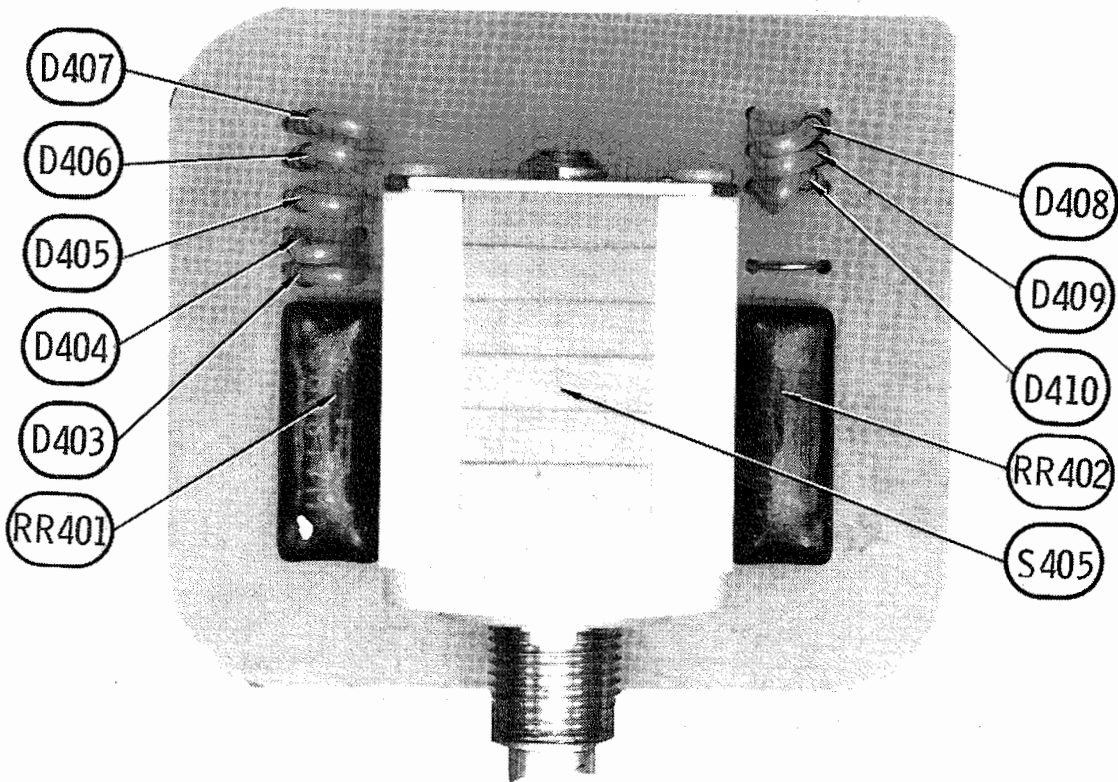


AM-LSB-USB SWITCH BOARD

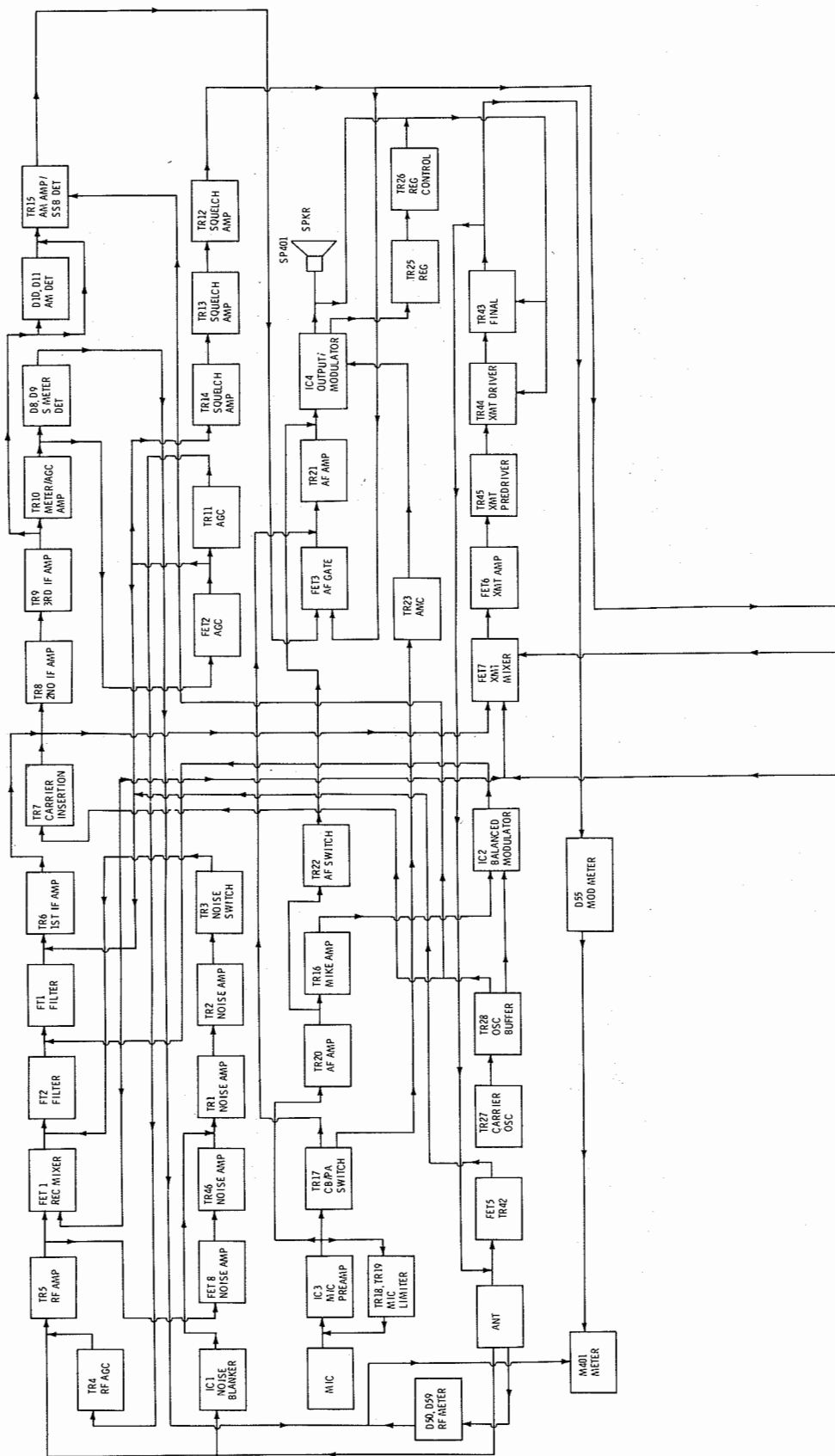


JACK BOARD

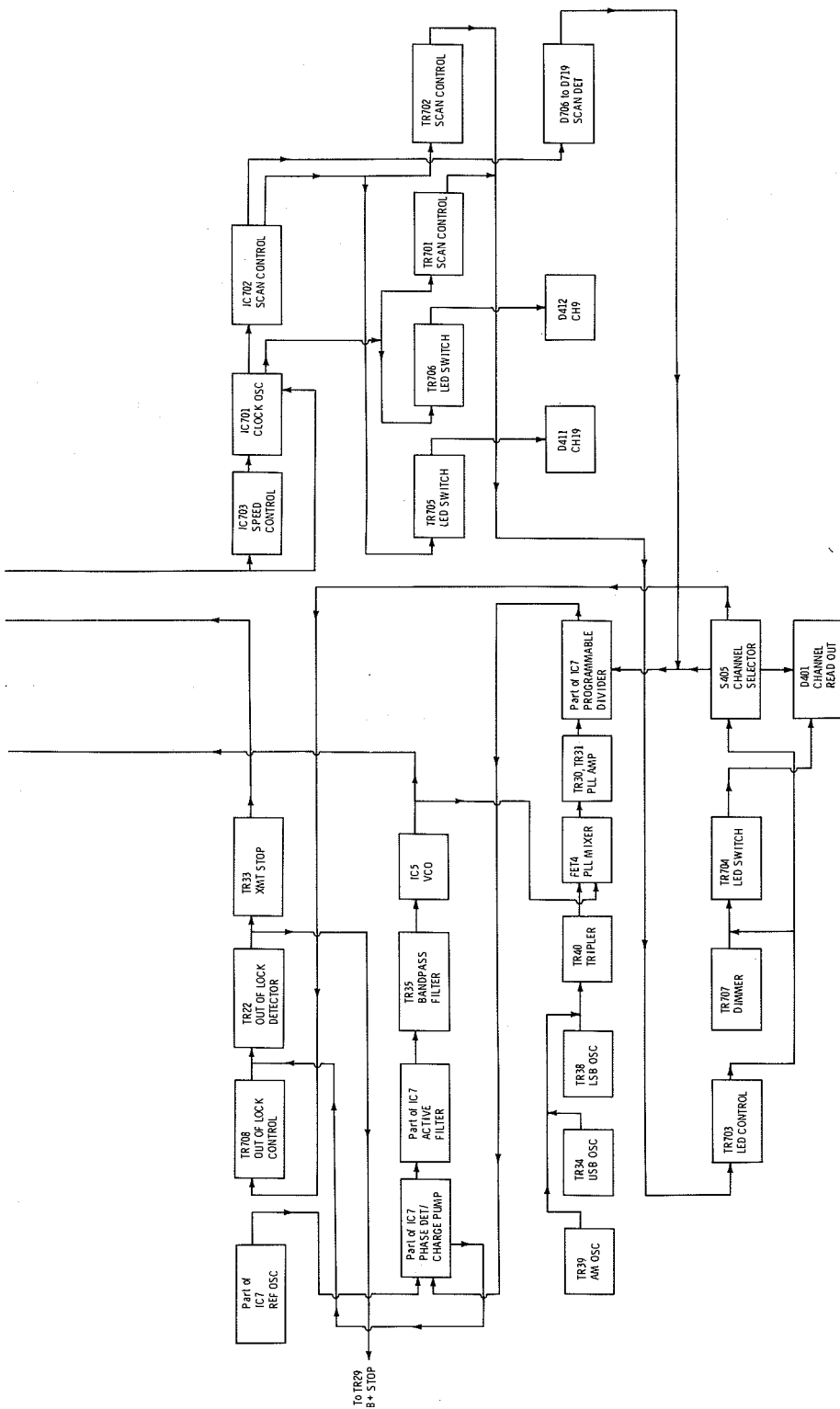
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CH. SELECTOR SWITCH BOARD



BLOCK DIAGRAM



BLOCK DIAGRAM

TRUTH CHART

1 = 4.68 Volts 0 = 0 Volts

C H A N N E L	IC7 PROGRAM DIVIDER									AM REC/XMT VCO OUTPUT IN MHz AT TP8	LSB REC/XMT VCO OUTPUT IN MHz AT TP8	USB REC/XMT VCO OUTPUT IN MHz AT TP8
	PINS											
	13	14	15	16	17	18	19	20	21			
1	1	0	0	0	1	0	0	1	0	34.765	34.7625	34.7675
2	0	1	0	0	1	0	0	1	0	34.775	34.7725	34.7775
3	1	1	0	0	1	0	0	1	0	34.785	34.7825	34.7875
4	1	0	1	0	1	0	0	1	0	34.705	34.8025	34.8075
5	0	1	1	0	1	0	0	1	0	34.815	34.8125	34.8175
6	1	1	1	0	1	0	0	1	0	34.825	34.8225	34.8275
7	0	0	0	1	1	0	0	1	0	34.835	34.8325	34.8375
8	0	0	0	0	0	0	0	0	1	34.855	34.8525	34.8575
9	1	0	0	0	0	0	0	0	1	34.865	34.8625	34.8675
10	0	1	0	0	0	0	0	0	1	34.875	34.8725	34.8775
11	1	1	0	0	0	0	0	0	1	34.885	34.8825	34.8875
12	1	0	1	0	0	0	0	0	1	34.905	34.9125	34.9075
13	0	1	1	0	0	0	0	0	1	34.915	34.9125	34.9175
14	1	1	1	0	0	0	0	0	1	34.925	34.9225	34.9275
15	0	0	0	1	0	0	0	0	1	34.935	34.9325	34.9375
16	0	0	0	0	1	0	0	0	1	34.955	34.9525	34.9575
17	1	0	0	0	1	0	0	0	1	34.965	34.9625	34.9675
18	0	1	0	0	1	0	0	0	1	34.975	34.9725	34.9775
19	1	1	0	0	1	0	0	0	1	34.985	34.9825	34.9875
20	1	0	1	0	1	0	0	0	1	34.005	35.0025	35.0075

TRUTH CHART

1 = <u>4.68</u> Volts 0 = <u>0</u> Volts												
C H A N N E L	IC7 PROGRAM DIVIDER									AM REC/XMT VCO OUTPUT IN MHz AT TP8	LSB REC/XMT VCO OUTPUT IN MHz AT TP8	USB REC/XMT VCO OUTPUT IN MHz AT TP8
	PINS											
	13	14	15	16	17	18	19	20	21			
21	0	1	1	0	1	0	0	0	1	34.015	35.0125	35.0175
22	1	1	1	0	1	0	0	0	1	34.025	35.0225	35.0275
23	0	0	0	0	0	1	0	0	1	34.055	35.0525	35.0575
24	0	0	0	1	1	0	0	0	1	34.035	35.0325	35.0375
25	1	0	0	1	1	0	0	0	1	34.045	35.0425	35.0475
26	1	0	0	0	0	1	0	0	1	34.065	35.0625	35.0675
27	0	1	0	0	0	1	0	0	1	34.075	35.0725	35.0775
28	1	1	0	0	0	1	0	0	1	34.085	35.0825	35.0875
29	0	0	1	0	0	1	0	0	1	34.095	35.0925	35.0975
30	1	0	1	0	0	1	0	0	1	34.105	35.1025	35.1075
31	0	1	1	0	0	1	0	0	1	34.115	35.1125	35.1175
32	1	1	1	0	0	1	0	0	1	34.125	35.1225	35.1275
33	0	0	0	1	0	1	0	0	1	34.135	35.1325	35.1375
34	1	0	0	1	0	1	0	0	1	34.145	35.1425	35.1475
35	0	0	0	0	1	1	0	0	1	34.155	35.1525	35.1575
36	1	0	0	0	1	1	0	0	1	34.165	35.1625	35.1675
37	0	1	0	0	1	1	0	0	1	34.175	35.1725	35.1775
38	1	1	0	0	1	1	0	0	1	34.185	35.1825	35.1875
39	0	0	1	0	1	1	0	0	1	34.195	35.1926	35.1975
40	1	0	1	0	1	1	0	0	1	34.205	35.2025	35.2075

PRESIDENT MODEL ADAMS

✱ Circuitry not used in some versions

--- Circuitry used in some versions

⊙ See parts list

⊛ Nominal value

⊥ Ground

⏏ Chassis

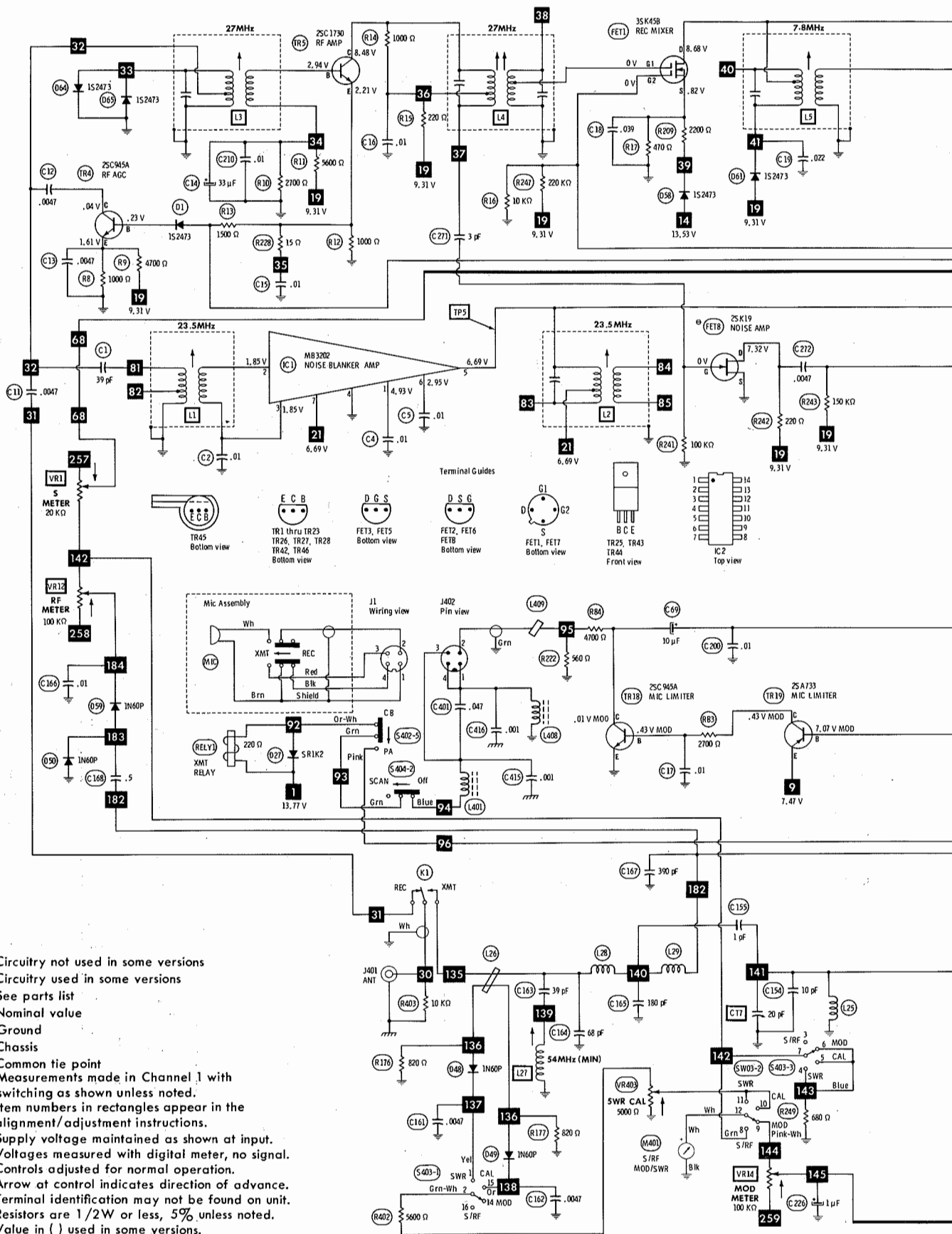
▽ Common tie point

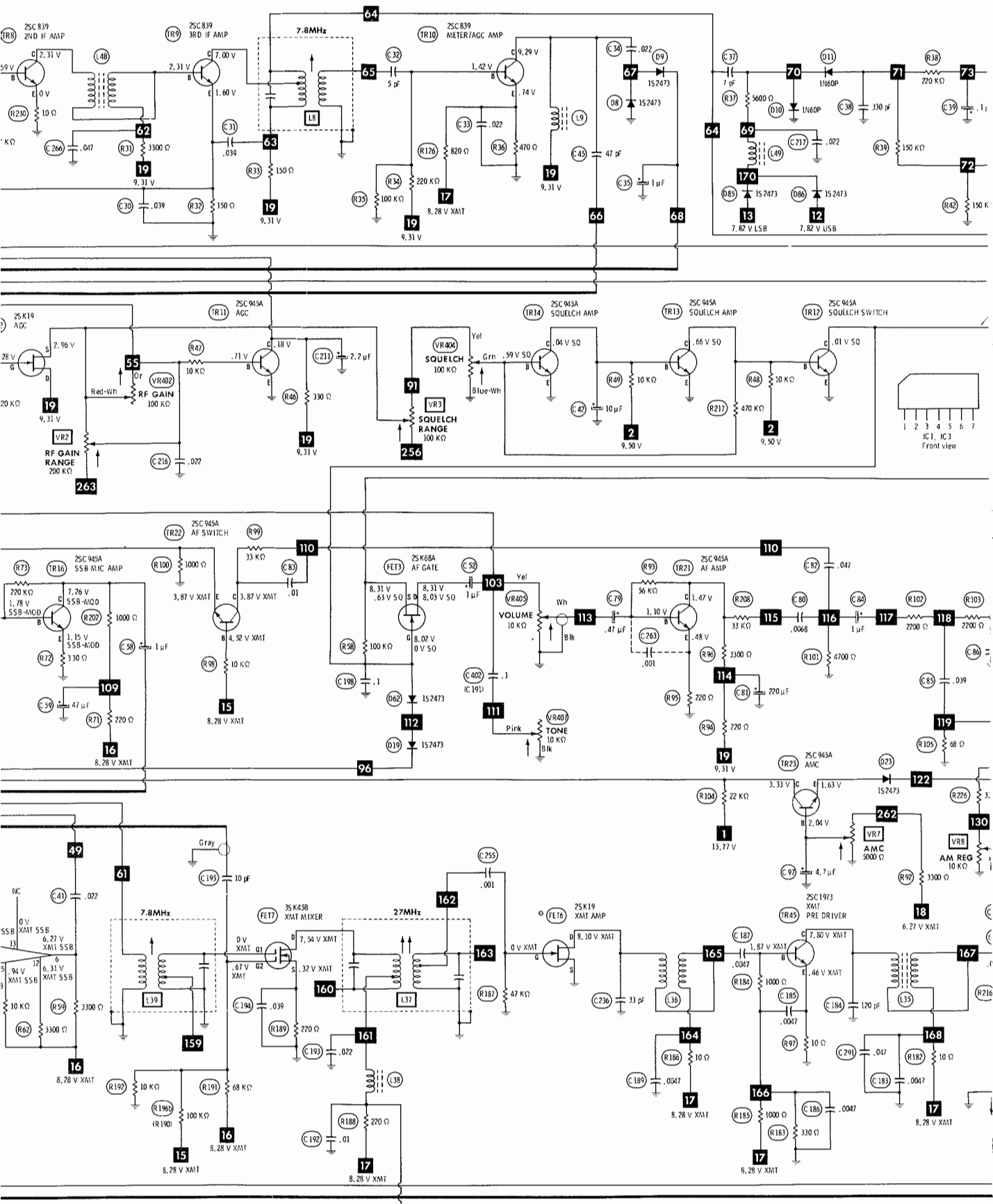
Measurements made in Channel 1 with switching as shown unless noted. Item numbers in rectangles appear in the alignment/adjustment instructions. Supply voltage maintained as shown at input. Voltages measured with digital meter, no signal. Controls adjusted for normal operation. Arrow at control indicates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

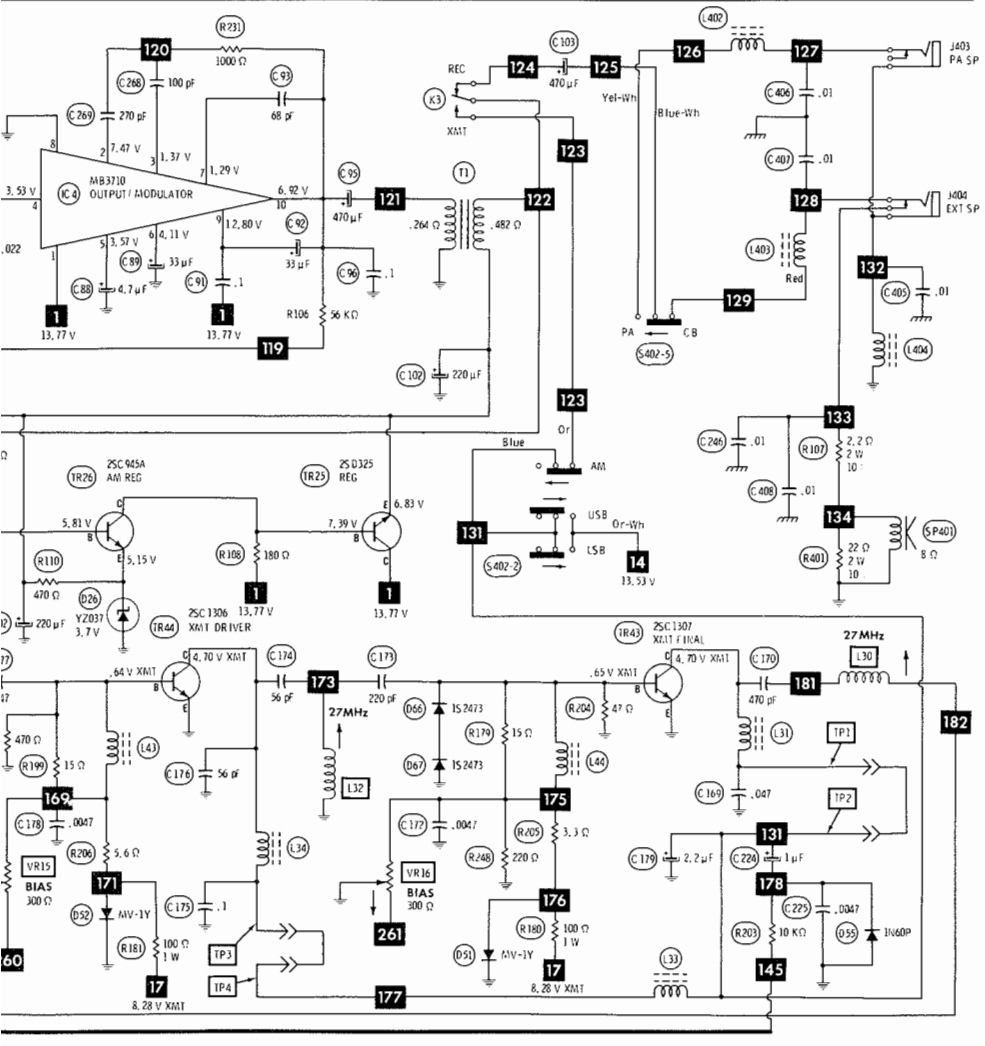
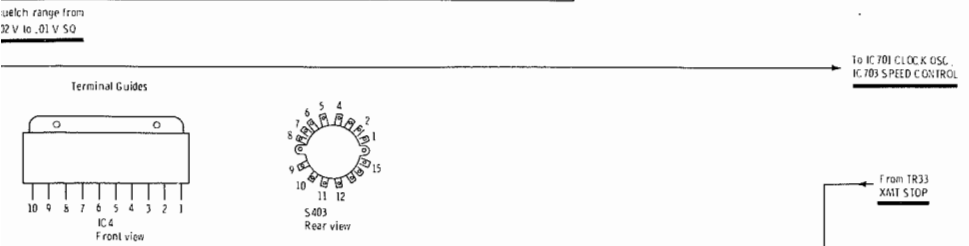
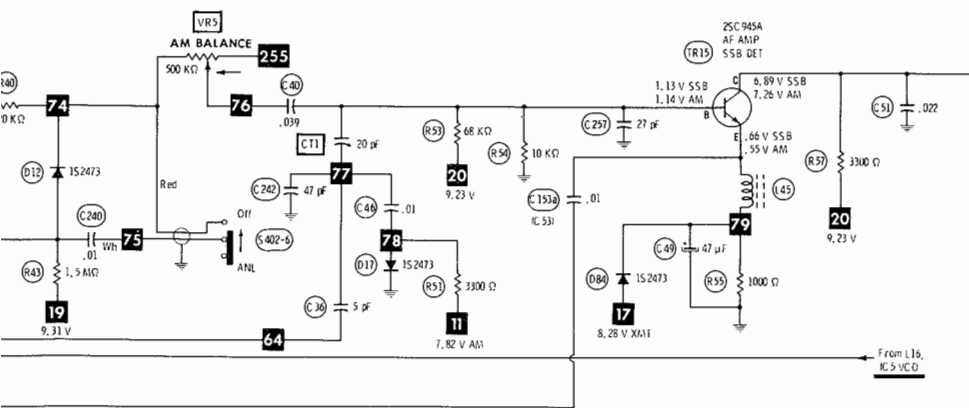
A PHOTOFACT STANDARD NOTATION SCHEMATIC

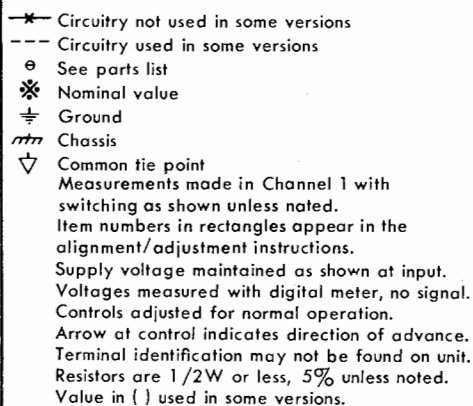
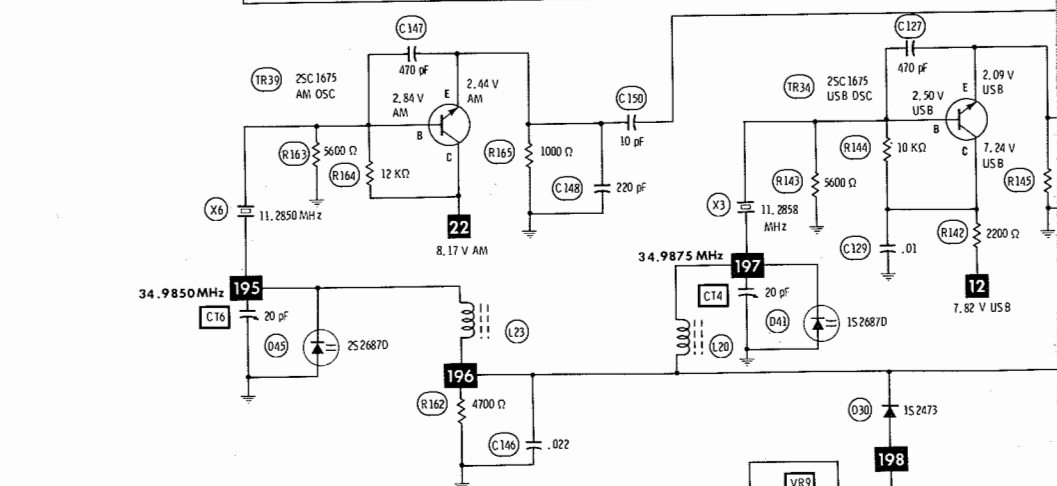
WITH **CIRCUITRACE®**

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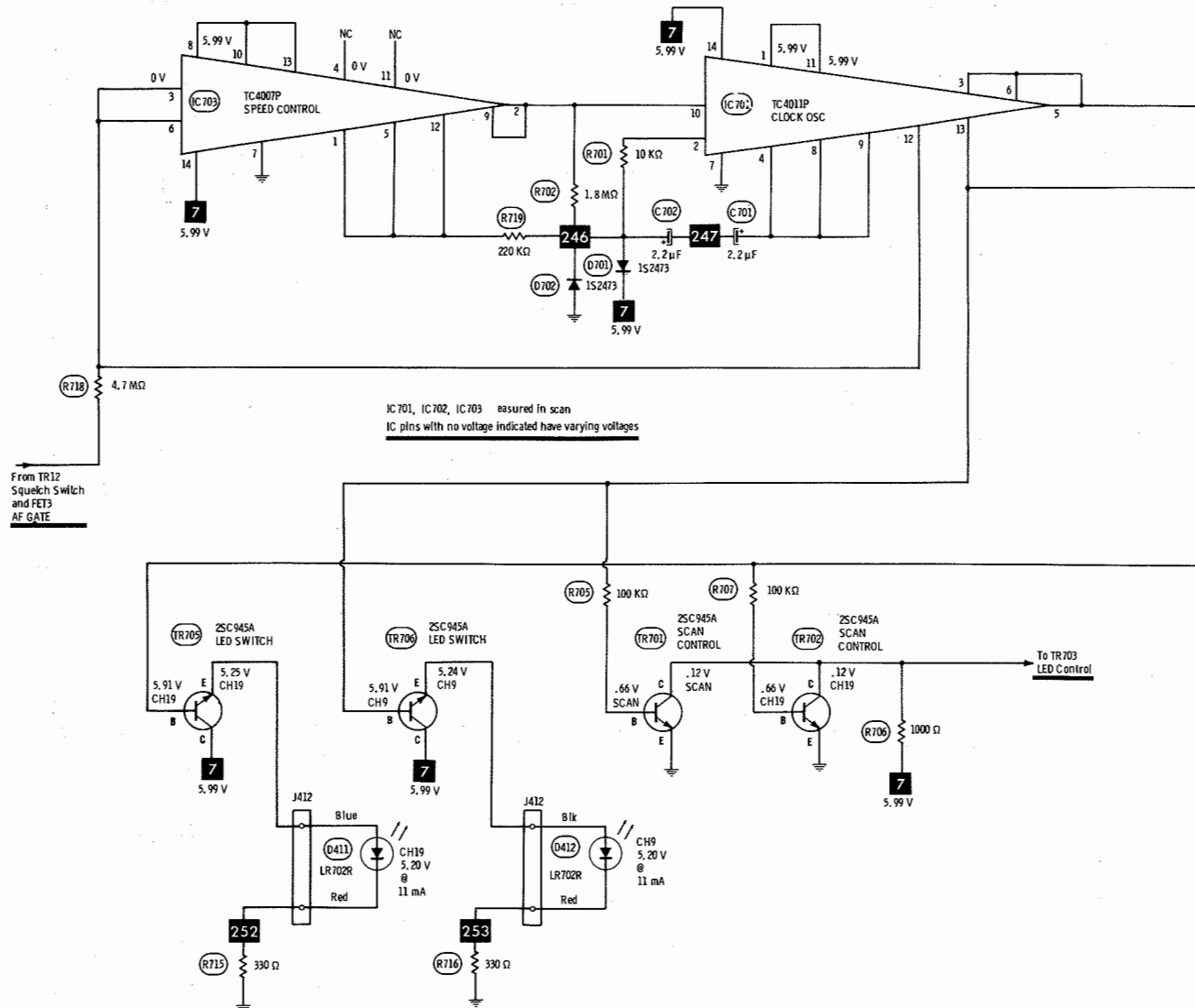






WITH **CIRCUITRACE®**

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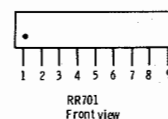
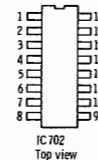
Terminal Guides

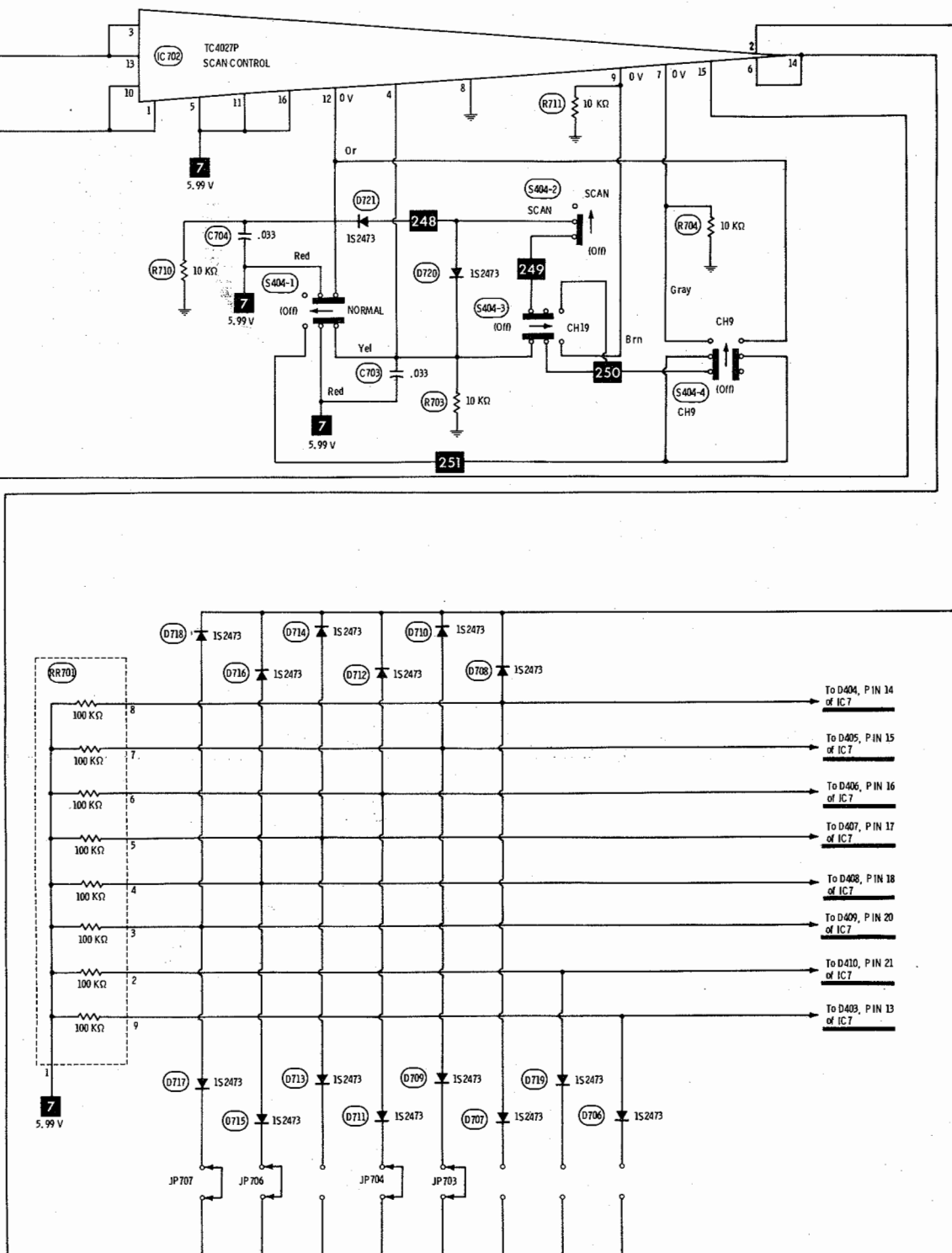
- ✱ Circuitry not used in some versions
 - Circuitry used in some versions
 - ⊕ See parts list
 - ✱ Nominal value
 - ⊕ Ground
 - ⊕ Chassis
 - ▽ Common tie point
- Measurements made in Channel 1 with switching as shown unless noted.
Item numbers in rectangles appear in the alignment/adjustment instructions.
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 PHOTOFACIT 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.	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	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D3	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2473		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D4	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D5	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D6	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D7	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D8	1S2473	2000-302	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D9	1S2473	2000-302	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D10	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D11	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D12	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D13	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D14	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D15	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D16	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D17	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D19	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D20	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D21	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D22	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D23	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D24	CZ092	2000-305	GEZD-9.1	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D25	BZ075	2000-325	GEZD-7.5	ZB7.5B		RE 111		RT-239	ECG138A	1N4737A	WEP1107	ZEN-505
D26	YZ037	2000-338	GEZD-3.9			RE 102	SK3331		ECG5067A		WEP1100	
D27	SR1K2	2000-320	GE-504A	PTC201	HEPRO052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D28	CZ092	2000-305	GEZD-9.1	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D29	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D30	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D31	WZ061	2000-329	GEZD-6.2	ZB6.2B		RE 109		RT-237	ECG137A	1N4735A	WEP1154	
D32	WZ061	2000-322	GEZD-6.2	ZB6.2B		RE 109		RT-237	ECG137A	1N4735A	WEP1154	
D33	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D34	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D35	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D36	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D37	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D38	1S2473	2000-317	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D39	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D40	1S2473	2000-239	GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPRO602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D41	1S2687D				HEPR2502	RE 52	SK3100	RT-218	ECG612		WEP200	ZEN-452
	1S2687				HEPR2502				ECG612		WEP200	ZEN-452
	1S2686				HEPR2502				ECG612		WEP200	ZEN-452
D43	1S2687D				HEPR2502				ECG612		WEP200	ZEN-452
	1S2687				HEPR2502				ECG612		WEP200	ZEN-452
	1S2686				HEPR2502				ECG612</			

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.
D44	C2092	2000-305	GEZD-9,1	ZB9.1A	HEP20412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
D45	1S2687D				HEPR2502				ECG612		WEP200	ZEN-452
	1S2687				HEPR2502				ECG612		WEP200	ZEN-452
	1S2686				HEPR2502				ECG612			ZEN-452
D46	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D47	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D48	1N60P	2000-337	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D49	1N60P	2000-337	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
O50	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D51	MV1Y	2000-339		PTC301		RE 250			ECG601			
D52	MV1Y	2000-339		PTC301		RE 250			ECG601			
D53	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D54	SR1K2	2000-320	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
	G2BJ		GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
	S3V		GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D55	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D56	1S2473	2000-302	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D58	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177	WEP200	WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D59	1N60P	2000-318	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D61	1S2473	2000-302	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D62	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D64	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D65	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D66	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D67	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D81	1N60P	2000-337	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D82	1N60P	2000-337	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
	1N60		1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109	1N60	WEP134	ZEN-430
D83	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D84	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D85	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D86	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D403	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D404	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D405	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D406	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D407	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D408	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D409	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D410	1S2473	2000-239	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D701	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D702	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	

PRESIDENT MODEL ADAMS

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.
D703	SR1K2	2000-320	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D704	SR1K2	2000-320	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D705	SR1K2	2000-320	GE-504A	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116	1N4004	WEP156	212-61
D706	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D707	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D708	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D709	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D710	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D711	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D712	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D713	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D714	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D715	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D716	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D717	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D718	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D719	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D720	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D721	1S2473	2000-317	GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S1588		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
	1S2472		GE-300	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177		WEP1062	
D722	CZ060	2000-340				RE 108			ECG5070A		WEP1153	
D723	CZ092	2000-305	GEZD-9.1	ZB9.1A	HEPZ0412	RE 114	SK3060	RT-240	ECG139	1N4739A	WEP1109	103-272
FET1	3SK45-B	2000-102	GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3N201		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK40		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK41		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
FET2	2SK19	2000-105	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	JF1033		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	2N3238		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	2SK33		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
FET3	2SK68A(M)	2000-104	GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
	2SK68		GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
	2SK30A		GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
FET4	3SK45	2000-103	GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK45B(09)		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3N201		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK40		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK41		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
FET5	2SK68A(M)	2000-104	GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
	2SK68		GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
	2SK30A		GE-FET-1	PTC151	HEPF0010	RE 46	SK3112	RT-176	ECG133		WEP801	ZEN-123
FET6	2SK19	2000-105	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	JF1033		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	2N3238		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	3SK45B	2000-102	GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK45		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK40		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
	3SK41		GE-FET-4	PTC182	HEPF2004	RE 199	SK3050	RT-181	ECG222		WEP905	121-826
FET8	2SK19	2000-105	GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	JF1033		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
	2N3238		GE-FET-2	PTC161	HEPF0021	RE 45	SK3116	RT-175	ECG312		WEP801	ZEN-123
IC1	MB3202	2000-019	GEIC-140			RE 341-M			ECG1082	UPC577H	WEP939	
	NJM2201		GEIC-140			RE 341-M			ECG1082	UPC577H	WEP939	
	UPC577H		GEIC-140			RE 341-M			ECG1082	UPC577H	WEP939	
IC2	MC1496N	2000-022			HEPC6050G							
	MC1496A				HEPC6050G							
	LM1496N				HEPC6050G							
IC3	MB3104	2000-024							ECG1195			
	UPC592H2								ECG1195			
IC4	MB3710	2000-025							ECG1194			
	NJM2016								ECG1194			
	UPC1156H2								ECG1194			
IC5	UHC005A	2000-026							ECG1204			
	UHC005								ECG1204			

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.
IC6	78L05AV 78L05	2000-020				RE 387-IC RE 387-IC RE 387-IC			ECG977 ECG977 ECG977			
IC7	NUM78L05A UPD858C D858 UPD858 KMB58C	2000-021							ECG1198 ECG1198 ECG1198 ECG1198			
IC701	TC4011P TC4011 MB4011 34011	2000-028							ECG4011B ECG4011B ECG4011B ECG4011B			
IC702	TC4027P TC4027 MB4027 34027	2000-027							ECG4027B ECG4027B ECG4027B ECG4027B			
IC703	TC4007P TC4007 MB4007 34007	2000-023							ECG4007B ECG4007B ECG4007B ECG4007B			
TR1	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC103*	HEPS0015* HEPS0015* HEPS0015* HEPS0019*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25A733	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR2	25A733(P) 25A495 25A564	2000-236	GE-48 GE-221* GE-65	PTC103* PTC103* PTC103*	HEPS0019* HEPS0013* HEPS0019*	RE 219 RE 26* RE 193	SK3138 SK3114 SK3114	RT-303 RT-303 RT-303	ECG294 ECG159* ECG234	25A733 25A495 25A564	WEP916 WEP495 WEP564 WEP535	ZEN-106 121-879 121-881
TR3	25C1730(L) 25C945 25C828 25C1740		GE-17* GE-212 GE-61* GE-62	PTC136* PTC121* PTC121* PTC121*	HEPS0025* HEPS0015* HEPS0015* HEPS0015*	RE 9 RE 192 RE 192 RE 13*	SK3018* SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG107 ECG199 ECG199 ECG123A*	25C945 25C828 25C945 25C828	WEP1945 WEP828 WEP1945 WEP736*	121-29000 ZEN-119 121-972 121-972
TR4	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR5	25C1730(L) 25C460 25C930 25C1675	2000-214	GE-17* GE-61* GE-60* GE-213	PTC136* PTC136* PTC132* PTC139*	HEPS0025* HEPS0014* HEPS0016* HEPS0025*	RE 9 RE 9 RE 9 RE 13*	SK3018* SK3018* SK3039* SK3124	RT-107A RT-134 RT-308 RT-308	ECG107 ECG107 ECG229* ECG229*	25C460 25C930	WEP535 WEP460 WEP956* WEP956*	121-881 121-722 ZEN-127 ZEN-127
TR6	25C1675(L) 25C460 25C839 25C829	2000-213	GE-213 GE-61* GE-61* GE-20*	PTC139* PTC136* PTC132* PTC121*	HEPS0025* HEPS0014* HEPS0015* HEPS0015*	RE 13* RE 9 RE 13* RE 9*	SK3124 SK3018* SK3018* SK3122	RT-308 RT-134 RT-308 RT-308	ECG229* ECG107 ECG123A* ECG229*	25C460 25C839 25C829	WEP956* WEP460 WEP736* WEP829	ZEN-127 121-722 ZEN-120 ZEN-127
TR7	25C1675(L) 25C460 25C839 25C829	2000-213	GE-213 GE-61* GE-61* GE-20*	PTC139* PTC136* PTC132* PTC121*	HEPS0025* HEPS0014* HEPS0015* HEPS0015*	RE 13* RE 9 RE 13* RE 9*	SK3124 SK3018* SK3018* SK3122	RT-308 RT-134 RT-308 RT-308	ECG229* ECG107 ECG123A* ECG229*	25C460 25C839 25C829	WEP956* WEP460 WEP736* WEP829	ZEN-127 121-722 ZEN-120 ZEN-127
TR8	25C839(H) 25C1675 25C829 25C460	2000-234	GE-213 GE-61* GE-20* GE-61*	PTC139* PTC136* PTC132* PTC121*	HEPS0025* HEPS0014* HEPS0015* HEPS0015*	RE 13* RE 9 RE 13* RE 9*	SK3124 SK3018* SK3018* SK3122	RT-308 RT-134 RT-308 RT-308	ECG229* ECG107 ECG123A* ECG229*	25C829 25C460 25C839	WEP956* WEP460 WEP736* WEP829	ZEN-127 121-722 ZEN-120 ZEN-127
TR9	25C839(H) 25C1675 25C829 25C460	2000-234	GE-213 GE-61* GE-20* GE-61*	PTC139* PTC136* PTC132* PTC121*	HEPS0025* HEPS0014* HEPS0015* HEPS0015*	RE 13* RE 9 RE 13* RE 9*	SK3124 SK3018* SK3018* SK3122	RT-308 RT-134 RT-308 RT-308	ECG229* ECG107 ECG123A* ECG229*	25C829 25C460 25C839	WEP956* WEP460 WEP736* WEP829	ZEN-127 121-722 ZEN-120 ZEN-127
TR10	25C839(H) 25C1675 25C829 25C460	2000-234	GE-213 GE-61* GE-20* GE-61*	PTC139* PTC136* PTC132* PTC121*	HEPS0025* HEPS0014* HEPS0015* HEPS0015*	RE 13* RE 9 RE 13* RE 9*	SK3124 SK3018* SK3018* SK3122	RT-308 RT-134 RT-308 RT-308	ECG229* ECG107 ECG123A* ECG229*	25C829 25C460 25C839	WEP956* WEP460 WEP736* WEP829	ZEN-127 121-722 ZEN-120 ZEN-127
TR11	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR12	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR13	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR14	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR15	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR16	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C828	WEP1945 WEP1945 WEP828 WEP736*	121-29000 121-29000 ZEN-119 121-972
TR17	25C458 25C900 25C372 25A733(P)	2000-236	GE-48 GE-48 GE-65 GE-61*	PTC103* PTC103* PTC103* PTC103*	HEPS0019* HEPS0019* HEPS0019* HEPS0019*	RE 219 RE 219 RE 193 RE 13*	SK3138 SK3138 SK3114 SK3124	RT-303 RT-303 RT-303 RT-107A	ECG294 ECG294 ECG234 ECG199	25A733 25A733 25A564 25C945	WEP916 WEP916 WEP564 WEP1945	121-879 121-879 121-881 121-29000
TR18	25C945A,P 25C945 25C828 25C1740	2000-235	GE-212 GE-212 GE-61* GE-62	PTC121* PTC121* PTC121* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13*	SK3124 SK3124 SK3122 SK3122	RT-107A RT-107A RT-302 RT-109*	ECG199 ECG199 ECG199 ECG123A*	25C945 25C945 25C828 25C458	WEP1945 WEP1945 WEP828 WEP458	121-29000 121-29000 ZEN-119 ZEN-114

PRESIDENT MODEL ADAMS

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.
TR19	2SA733(P) 2SA495 2SA564	2000-236	GE-48 GE-221*	PTC103*	HEPS0019*	RE 219 RE 26*	SK3138 SK3114	RT-303 RT-303	ECG294 ECG159*	2SA733 2SA495	WEP916 WEP495	ZEN-106 121-879
TR20	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0019* HEPS0019* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 193 RE 192 RE 192 RE 192 RE 13* RE 13* RE 192	SK3114 SK3124 SK3124 SK3122 SK3122 SK3124 SK3122	RT-303 RT-303 RT-107A RT-107A RT-302 RT-109* RT-187	ECG234 ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A*	2SA564 2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP564 WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR21	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 13* RE 192	SK3124 SK3124 SK3122 SK3122 SK3122 SK3124 SK3122	RT-107A RT-107A RT-302 RT-302 RT-109* RT-187 RT-302	ECG199 ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR22	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR23	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR24	2SD325(E2) 2SC1096 2SC1419 2SD235 2SD325(E2) 2SC1096 2SC1419 2SD235	2000-238	GE-28 GE-28 GE-66 GE-66 GE-28 GE-28 GE-66 GE-66	PTC110 PTC110 PTC167 PTC167	HEPS5027 HEPS3061 HEPS5027 HEPS5027	RE 42 RE 42 RE 21 RE 21	SK3197 SK3197 SK3054 SK3054	RT-197 RT-166 RT-197 RT-197	ECG186 ECG186A ECG152 ECG152	2SD325 2SD325 2SD325 2SD325	WEP751 WEP1096 WEP745 WEP745	ZEN-114 ZEN-114 ZEN-119 ZEN-114
TR25	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR26	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR27	2SC1675(L) 2SC460 2SC839 2SC828 2SC1675(L) 2SC460 2SC839	2000-213	GE-213 GE-61* GE-61* GE-20* GE-213 GE-61* GE-61*	PTC139* PTC136* PTC132* PTC121* PTC139* PTC136* PTC132*	HEPS0025* HEPS0014* HEPS0015* HEPS0015* HEPS0025* HEPS0014* HEPS0015*	RE 13* RE 9 RE 13* RE 9* RE 13* RE 9 RE 13*	SK3124 SK3018* SK3018* SK3122 SK3124 SK3018* SK3018*	RT-308 RT-308 RT-308 RT-308 RT-308 RT-134 RT-308	ECG229* ECG107 ECG123A* ECG229* ECG229* ECG107 ECG123A*	2SC839 2SC839 2SC829 2SC460 2SC839	WEP956* WEP460 WEP736* WEP829 WEP956* WEP460 WEP736*	ZEN-127 ZEN-120 ZEN-127 ZEN-127 ZEN-127 ZEN-120 ZEN-127
TR28	2SC1675(L) 2SC460 2SC839 2SC828 2SC1675(L) 2SC460 2SC839	2000-213	GE-213 GE-61* GE-61* GE-20* GE-213 GE-61* GE-61*	PTC139* PTC136* PTC132* PTC121* PTC139* PTC136* PTC132*	HEPS0025* HEPS0014* HEPS0015* HEPS0015* HEPS0025* HEPS0014* HEPS0015*	RE 13* RE 9 RE 13* RE 9* RE 13* RE 9 RE 13*	SK3124 SK3018* SK3018* SK3122 SK3124 SK3018* SK3018*	RT-308 RT-308 RT-308 RT-308 RT-308 RT-134 RT-308	ECG229* ECG107 ECG123A* ECG229* ECG229* ECG107 ECG123A*	2SC839 2SC460 2SC839	WEP956* WEP460 WEP736* WEP829 WEP956* WEP460 WEP736*	ZEN-127 ZEN-120 ZEN-127 ZEN-127 ZEN-127 ZEN-120 ZEN-127
TR29	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13* RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR30	2SC839(H) 2SC1675 2SC829 2SC460 2SC839(H) 2SC1675 2SC829	2000-234	GE-213 GE-61* GE-20* GE-61* GE-213 GE-61* GE-61*	PTC139* PTC136* PTC132* PTC121* PTC139* PTC136* PTC132*	HEPS0025* HEPS0014* HEPS0015* HEPS0015* HEPS0025* HEPS0014* HEPS0015*	RE 13* RE 9 RE 13* RE 9* RE 13* RE 9 RE 13*	SK3124 SK3018* SK3018* SK3122 SK3124 SK3018* SK3018*	RT-308 RT-308 RT-308 RT-308 RT-308 RT-134 RT-308	ECG229* ECG107 ECG123A* ECG229* ECG229* ECG107 ECG123A*	2SC839 2SC460 2SC839	WEP736* WEP460 WEP829 WEP956* WEP736* WEP460 WEP736*	ZEN-120 ZEN-127 ZEN-127 ZEN-127 ZEN-127 ZEN-120 ZEN-127
TR31	2SC839(H) 2SC1675 2SC829 2SC460 2SC839(H) 2SC1675 2SC829	2000-234	GE-213 GE-61* GE-20* GE-61* GE-213 GE-61* GE-61*	PTC139* PTC136* PTC132* PTC121* PTC139* PTC136* PTC132*	HEPS0025* HEPS0014* HEPS0015* HEPS0015* HEPS0025* HEPS0014* HEPS0015*	RE 13* RE 9 RE 13* RE 9* RE 13* RE 9 RE 13*	SK3124 SK3018* SK3018* SK3122 SK3124 SK3018* SK3018*	RT-308 RT-308 RT-308 RT-308 RT-308 RT-134 RT-308	ECG229* ECG107 ECG123A* ECG229* ECG229* ECG107 ECG123A*	2SC839 2SC460 2SC839	WEP956* WEP460 WEP736* WEP829 WEP956* WEP460 WEP736*	ZEN-127 ZEN-120 ZEN-127 ZEN-127 ZEN-127 ZEN-120 ZEN-127
TR32	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 13* RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR33	2SC945A,P 2SC945 2SC828 2SC1740 2SC458 2SC900 2SC372	2000-235	GE-212 GE-212 GE-61* GE-62 GE-210*	PTC121* PTC121* PTC121* PTC121* PTC121* PTC139* PTC121*	HEPS0015* HEPS0015* HEPS0015* HEPS0015* HEPS0009* HEPS0015* HEPS0015*	RE 192 RE 192 RE 192 RE 192 RE 13* RE 192 RE 192	SK3124 SK3124 SK3122 SK3122 SK3124 SK3124 SK3122	RT-107A RT-107A RT-302 RT-109* RT-187 RT-302 RT-302	ECG199 ECG199 ECG199 ECG123A* ECG123A* ECG123A* ECG123A*	2SC945 2SC945 2SC828 2SC458 2SC900 2SC372	WEP1945 WEP1945 WEP828 WEP736* WEP458 WEP66 WEP372	121-29000 121-29000 ZEN-119 121-972 ZEN-114 ZEN-119 ZEN-114
TR34	2SC1675(L) 2SC839 2SC829 2SC460 2SC839(H) 2SC1675 2SC829	2000-213	GE-213 GE-61* GE-20* GE-61* GE-213 GE-61* GE-61*	PTC139* PTC136* PTC132* PTC121* PTC139* PTC136* PTC132*	HEPS0025* HEPS0014* HEPS0015* HEPS0015* HEPS0025* HEPS0014* HEPS0015*	RE 13* RE 9 RE 13* RE 9* RE 13* RE 9 RE 13*	SK3124 SK3018* SK3018* SK3122 SK3124 SK3018* SK3018*	RT-308 RT-308 RT-308 RT-308 RT-308 RT-134 RT-308	ECG229* ECG107 ECG123A* ECG229* ECG229* ECG107 ECG123A*	2SC839 2SC460 2SC839	WEP956* WEP460 WEP736* WEP829 WEP956* WEP460 WEP736*	ZEN-127 ZEN-120 ZEN-127 ZEN-127 ZEN-127 ZEN-120 ZEN-127
TR35	2SC458(C) 2SC845 2SC828 2SC1740 2SC900 2SC372	2000-203	GE-210* GE-219 GE-61* GE-62 GE-62 GE-61*	PTC121* PTC191 PTC121* PTC121* PTC139* PTC121*	HEPS0009* HEPS3001 HEPS0015* HEPS0015* HEPS0015* HEPS0015*	RE 13* RE 79A RE 192 RE 13* RE 192 RE 13*	SK3124 SK3048 SK3122 SK3122 SK3124 SK3122	RT-187 RT-306 RT-302 RT-109* RT-302 RT-308	ECG123A* ECG195A ECG199 ECG123A* ECG199 ECG123A*	2SC458 2SC828 2SC900 2SC372	WEP458 WEP755 WEP828 WEP736* WEP66 WEP372	ZEN-114 ZEN-119 ZEN-119 121-972 ZEN-119 ZEN-114

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.
TR38	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR39	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR40	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR41	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR42	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR43	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR44	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR45	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR46	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR47	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR48	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR49	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR50	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR51	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR52	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR53	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR54	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR55	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR56	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR57	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR58	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR59	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR60	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR61	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR62	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR63	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR64	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0015*	RE 13*	SK3018*	RT-308	ECG123A*	2SC839	WEP736*	ZEN-120	
	GE-20*		PTC121*	HEPS0015*	RE 9*	SK3122	RT-308	ECG229*	2SC829	WEP829	ZEN-127	
	GE-61*		PTC136*	HEPS0014*	RE 9	SK3018*	RT-134	ECG107	2SC460	WEP460	121-722	
TR65	2SC1675(L)	2000-213	GE-213	PTC139*	HEPS0025*	RE 13*	SK3124	RT-308	ECG229*		WEP956*	ZEN-127
	GE-61*		PTC132*	HEPS0								

PARTS LIST AND DESCRIPTION (CONTINUED)

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

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C14	33 10V	1800-323	PC30-25	VTT33B10	QV1-61	EV-1125
C35	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C39	.1 16V	1800-501				
C42	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C43	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C44	1 50V	1800-302		TDC105M050EL	QDT1-25	SD50-19
C47	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C49	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C50	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C52	1 25V	1800-606		TDC105M035EL		SD35-19
C55	2.2 25V	1800-303	PC2-100	VTT2R2A50	QV1-19	EV-1517
C58	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C59	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C60	.1 16V	1800-501				
C61	.47 50V	1800-301	PC1-50	VTT47A63	QV1-3	EV-1610
C63	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C66	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C67	4.7 25V	1800-304	PC5-50	VTT47B50	QV1-27	EV-1319
C68	4.7 25V	1800-304	PC5-50	VTT47B50	QV1-27	EV-1319
C69	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C76	47 10V	1800-324	PC10-50	VTT10D63	QV1-45	EV-1622
C77	.47 50V	1800-301	PC1-50	VTT47A63	QV1-3	EV-1610
C79	.47 50V	1800-301	PC1-50	VTT47A63	QV1-3	EV-1610
C81	220 16V	1800-314	PC250-25	VTT220H16	QV1-117	EV-1240
C84	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C87	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C88	4.7 25V	1800-607		TDC475M010EL	QDT1-48	SD10-4R79
C89	33 16V	1800-307	PC30-25	VTT33D25	QV1-63	EV-1325
C92	33 16V	1800-307	PC30-25	VTT33D25	QV1-63	EV-1325
C94	470 16V	1800-309	PC500-16	VTT470K16	QV1-151	EV-1250
C95	470 16V	1800-309	PC500-16	VTT470K16	QV1-151	EV-1250
C97	4.7 25V	1800-304	PC5-50	VTT47B50	QV1-27	EV-1319
C98	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C99	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C101	100 10V	1800-310	PC100-10	VTT100E10	QV1-93	EV-1130
C102	220 10V	1800-325	PC250-10	VTT220F10	QV1-115	EV-1140
C103	470 10V	1800-330	PC500-16	VTT470K16	QV1-149	EV-1150
C104	330 10V	1800-326	WBR300-35	VTT330G10	QV1-131	EV-1145
C107	1000 16V	1800-328	PC1000-16	VTT1000L16	QV1-183	EV-1260
C110	.1 16V	1800-501				
C120	47 10V	1800-324	PC50-16	VTT47D16	QV1-73	EV-1226
C126	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C135	220 10V	1800-325	PC250-10	VTT220F10	QV1-115	EV-1140
C140	10 6.3V	1800-602		TDC106M025FL	QDT1-64	SD25-109
C141	10 6.3V	1800-602		TDC106M025FL	QDT1-64	SD25-109
C158	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C179	2.2 25V	1800-603		TDC225M035FL		SD35-2R29
C199	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C211	2.2 25V	1800-303	PC2-100	VTT2R2A50	QV1-19	EV-1517
C218	4.7 25V	1800-304	PC5-50	VTT47B50	QV1-27	EV-1319
C224	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C226	1 50V	1800-302	PC1-50	VTT1A50	QV1-11	EV-1615
C275	.1 16V	1800-501				
C701	2.2 25V	1800-603		TDC225M035FL		SD35-2R29
C702	2.2 25V	1800-603		TDC225M035FL		SD35-2R29
C706	33 10V	1800-323	PC30-25	VTT33B10	QV1-61	EV-1125
C710	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222
C714	10 16V	1800-306	PC10-25	VTT10B25	QV1-41	EV-1222

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 50V	128			CN0439		10TCC-Q39
C2	.01 50V	451	UK50-103		MAG5011		
C4	.01 50V	451	UK50-103		MAG5011		
C5	.01 50V	451	UK50-103		MAG5011		
C6	.01 50V	451	UK50-103		MAG5011		
C7	47 50V	130	DTZ-47	NP047	CN0447		10TCC-Q47
C8	100 50V	145	DTZ-100	NP0100	CN0310		10TCC-T10
C9	.001 50V	170	DD-102		GP210		10TS-D10
C10	.0047 50V	189	DD-472	GP4700	GP247		5GA-U47
C11	.0047 50V	189	DD-472	GP4700	GP247		5GA-D47
C12	.0047 50V	189	DD-472	GP4700	GP247		5GA-D47
C13	.0047 50V	451	UK50-103		MAG5011		
C15	.01 50V	451	UK50-103		MAG5011		
C16	.01 50V	451	UK50-103		MAG5011		
C17	.01 10X 50V			WMF151	EWFI110	QFT2-91	1FT-S10
C18	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C19	.022 50V	509	UK25-223				HY-725
C20	.022 50V	509	UK25-223				HY-725
C21	.022 50V	509	UK25-223				HY-725
C22	.022 50V	509	UK25-223				HY-725
C23	.022 50V				M192P2239R8	QFT2-127	1FT-S22
C24	.56 50V	134			CN0456		10TCC-Q56
C25	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C26	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C27	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C28	.022 50V	509	UK25-223				HY-725
C29	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C30	.039 50V				M192P3939R8	QFT2-159	1FT-S39

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
C31	.039 50V		DTZ-4R7	NP04P7	M192P3939R8	QFT2-159	1FT-S39
C32	5 NPO 50V		UK25-223		CN0547		10TCC-V47
C33	.022 50V		UK25-223				HY-725
C34	.022 50V						HY-725
C36	3 NPO 50V		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C37	2 NPO 50V		DTZ-2R2	NP02P2	CN0522		10TCC-V22
C38	330 N750 50V		DTN-330	N330	CN7333		10TCU-T33
C40	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C41	.022 50V						HY-725
C45	47 NPO 50V		UK25-223	NP047	CN0447		10TCC-Q47
C46	.01 50V		DTZ-47		MAG5011		
C51	.022 50V		UK50-103		M192P2239R8	QFT2-127	1FT-S22
C53	.01 50V				MAG5011		
C54	22 NPO 50V		UK50-103	NP022	CN0422		10TCC-Q22
C57	.022 50V		UK25-223				HY-725
C62	.047 50V			DPMS2S47	EWFI1A17	QFT2-171	1FT-S47
C64	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C71	.068 50V			WMF1S68	EWFI1A168	QF1-195	1PB-S68
C72	.022 50V				M192P2239R8	QFT2-127	1FT-S22
C73	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C74	.022 50V				M192P2239R8	QFT2-127	1FT-S22
C75	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C78	.47 50V			WMF05P47	EWFO5047	QFT2-287	1FT-P47
C80	.01 50V			WMF1S1	EWFI1A110	QFT2-91	1FT-S10
C82	.047 50V			DPMS2S47	EWFI1A17	QFT2-171	1FT-S47
C83	.01 50V			WMF1S1	EWFI1A110	QFT2-91	1FT-S10
C85	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C86	.022 50V				M192P2239R8	QFT2-127	1FT-S22
C91	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C93	68 50V		DTZ-68	NP068	CN0468		10TCC-Q68
C96	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C100	.022 50V				M192P2239R8		192P2239R8
C105	.022 50V				M192P2239R8		192P2239R8
C106	.022 50V				M192P2239R8		192P2239R8
C109	.022 50V				M192P2239R8		192P2239R8
C111	18 NPO 50V				CN0418		10TCC-Q18
C112	18 NPO 50V				CN0418		10TCC-Q18
C113	.001 50V		DD-102		GP210		10TS-D10
C114	.001 50V		DD-102		GP210		10TS-D10
C115	100 50V		DTZ-100	NP0100	CN0310		10TCC-T10
C116	10 NPO 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C117	1 NPO 50V				CN0510		10TCC-V10
C118	.022 50V		UK25-223				HY-725
C121	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C122	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C123	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C124	.01 50V		UK50-103		MAG5011		
C125	270 50V		DD-271	GP270	GP327		10TS-T27
C127	470 50V		DD-471	GP470	GP347		10TS-T47
C128	220 50V		DTZ-220				10TCC-T22
C129	.01 50V		UK50-103				
C130	10 NPO 50V		DTZ-10	NP010	MAG5011		10TCC-Q10
C131	.01 50V			WMF1S1	CN0410		1FT-S10
C133	.1 50V			WMF05P1	EWFO5010	QFT2-91	1FT-P10
C134	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C136	470 50V		DD-471	GP470	GP347		10TS-T47
C137	220 50V		DTZ-220				10TCC-T22
C138	.01 50V		UK50-103				
C139	10 NPO 50V		DTZ-10	NP010	MAG5011		10TCC-Q10
C142	68 50V		DTZ-68	NP068	CN0468		10TCC-Q68
C143	7 NPO 50V		DTZ-68	NP068	CN0568		10TCC-V68
C146	.022 50V		UK25-223				HY-725
C147	470 50V		DD-471	GP470	GP347		10TS-T47
C148	220 50V		DTZ-220				10TCC-T22
C149	.01 50V		UK50-103				
C150	10 NPO 50V		DTZ-10	NP010	MAG5011		10TCC-Q10
C151	.01 50V		UK50-103		CN0410		
C152	.01 50V		UK50-103		MAG5011		
C153	.1 50V		CK-104		MAG5001		
C154	10 NPO 50V		DTZ-10	NP010	CN0410		10TCC-Q10
C155	1 NPO 50V				CN0510		10TCC-V10
C156	.022 50V		UK25-223				HY-725
C157	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C159	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C160	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C161	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C162	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C163	39 50V				CN0439		10TCC-Q39
C164	68 50V		DTZ-68	NP068	CN0468		10TCC-Q68
C165	180 50V		DTZ-180				10TCC-T18
C166	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C167	390 50V		DD-391	GP390	GP339		10TS-T39
C168	.5 NPO 50V	1800-002					
C169	.047 50V			DPMS2S47	EWFI1A17	QFT2-171	1FT-S47
C170	470 50V		DD-471	GP470	GP347		10TS-T47
C172	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C173	220 50V		DTZ-220				10TCC-T22
C174	56 50V				CN0456		10TCC-Q56
C175	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C176	56 50V				CN0456		10TCC-Q56
C177	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C178	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C183	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C184	82 50V		DTZ-82	NP082	CN0482		10TCC-Q82
C185	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C186	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C187	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C188	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10

PRESIDENT MODEL ADAMS

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
C189	.0047 50V		UK50-103		M192P4729R8	QFT2-63	1FT-047
C190	.01 50V				MAG5011		
C191	.1 50V		UK50-103	WMF05P1	EWFO5010	QFT2-215	1FT-P10
C192	.01 50V		UK25-223		MAG5011		
C193	.022 50V						HY-725
C194	.039 50V		UK50-103		M192P3939R8	QFT2-159	1FT-S39
C195	.01 NPO 50V		UK25-223		MAG5011		
C196	.022 50V						HY-725
C198	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C200	.01 50V			WMF1S1	EWFTA110	QFT2-91	1FT-S10
C202	.022 50V		UK25-223				HY-725
C204	.01 50V		UK50-103		MAG5011		
C205	.01 50V		UK50-103		MAG5011		
C206	.022 50V		UK25-223				HY-725
C207	.01 50V		UK50-103		MAG5011		
C208	.01 50V		UK50-103		MAG5011		
C209	.01 50V		UK50-103		MAG5011		
C210	.01 50V			WMF1S1	EWFTA110	QFT2-91	1FT-S10
C213	.1 50V		CK-104		MAG5001		
C214	.01 50V		UK50-103		MAG5011		
C215	.022 50V				M192P2239R8	QFT2-127	1FT-S22
C216	.022 50V		UK25-223				HY-725
C217	.022 50V		UK25-223				HY-725
C219	.022 50V		UK25-223				HY-725
C220	.022 50V						1FT-S22
C221	.1 50V		CK-104		M192P2239R8	QFT2-127	
C222	.0047 50V		DD-472	GP4700	MAG5001		5GA-D47
C223	.022 50V		UK25-223		GP247		HY-725
C225	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C227	.022 50V		UK25-223				HY-725
C228	.022 50V		UK25-223				HY-725
C231	.1 50V			WMF05P1	EWFO5010	QFT2-215	1FT-P10
C233	.1 50V		CK-104		MAG5001		
C236	33 50V		DTZ-33	NP033	CN0433		10TCC-Q33
C239	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C240	.01 50V			WMF1S1	EWFTA110	QFT2-91	1FT-S10
C242	47 50V		DTZ-47	NP047	CN0447		10TCC-Q47
C243	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C244	33 50V		DTZ-33	NP033	CN0433		10TCC-Q33
C245	.047 50V			DPMS2S47	EWFTA147	QFT2-171	1FT-S47
C246	.01 50V		UK50-103		MAG5011		
C247	.01 50V		UK50-103		MAG5011		
C248	.022 50V		UK25-223				HY-725
C249	.01 50V		UK50-103		MAG5011		
C250	.01 25V		UK50-103		MAG5011		
C251	.01 25V		UK50-103		MAG5011		
C255	.001 50V		DD-102		GP210		10TS-D10
C257	68 50V		DTZ-68	NP068	CN0468		10TCC-068
C258	330 50V		DD-331	GP330	GP333		10TS-T33
C259	.039 50V				M192P3939R8	QFT2-159	1FT-S39
C260	.047 50V		UK25-503		MAG2515		HY-735
C261	.01 50V		UK50-103		MAG5011		
C262	.01 50V		UK50-103		MAG5011		
C265	.047 50V		UK25-503		MAG2515		HY-735
C266	.047 50V		UK25-503		MAG2515		HY-735
C268	100 50V		DTZ-100	NP0100	CN0310		10TCC-T10
C269	250 50V		DTZ-270				10TCC-T27
C270	470 50V		DD-471	GP470	GP347		10TS-T47
C271	3 NPO 50V		DTZ-3R3	NP03P3	CN0533		10TCC-V33
C272	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C274	39 50V				CN0439		10TCC-Q39
C277	.047 50V		UK25-503		MAG2515		HY-735
C278	.047 50V		UK25-503		MAG2515		HY-735
C280	27 NPO 50V				CN0427		10TCC-Q27
C282	.047 50V				MAG2515		HY-735
C285	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C286	.0047 50V		DD-472	GP4700	GP247		5GA-D47
C287	.1 50V		CK-104		MAG5001		
C288	5 NPO 50V		DTZ-4R7	NP04P7	CN0547		10TCC-V47
C401	.047 50V			DPMS2S47	EWFTA147	QFT2-171	1FT-S47
C403	.01 50V			WMF1S1	EWFTA110	QFT2-91	1FT-S10
C405	.01 50V		UK50-103		MAG5011		
C406	.01 50V		UK50-103		MAG5011		
C407	.01 50V		UK50-103		MAG5011		
C408	.01 50V		UK50-103		MAG5011		
C409	.1 50V		CK-104		MAG5001		
C410	.1 50V		CK-104		MAG5001		
C415	.001 50V		DD-102		GP210		10TS-D10
C416	.001 50V		DD-102		GP210		10TS-D10
C703	.033 50V				M192P3339R8	QFT2-149	1FT-S33
C704	.033 50V				M192P3339R8	QFT2-149	1FT-S33
C705	.01 50V		UK50-103		MAG5011		
C708	.022 50V		UK25-223				HY-725
C709	.022 50V		UK25-223				HY-725
C711	.001 50V		DD-102				
C712	.001 50V		DD-102		GP210		10TS-D10
C713	.022 50V		UK25-223		GP210		10TS-D10
CC1		1800-103 (1)					HY-725
CC2		1800-103 (1)					
CT1		1800-203					
CT2		1800-203					
CT3		1800-203					
CT4		1800-203					
CT5		1800-203					
CT6		1800-203					
CT7		1800-203					

(1) Capacitor network consisting of four .01pF 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	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR1	S Meter	20K	1900-223				U260R253B
VR2	RF Gain Range	200K	1900-224				U260R254B
VR3	Squelch Range	100K	1900-219				U260R104B
VR4	Balance	50K	1900-218				U260R503B
VR5	AM Balance	500K	1900-225				U260R504B
VR7	AM AMC	5000	1900-216				U260R502B
VR8	AM Reg	10K	1900-217				U260R103B
VR9	Xmt Frequency	5000	1900-216				U260R502B
VR12	RF Meter	100K	1900-219				U260R104B
VR14	MOD Meter	100K	1900-219				
VR15	Bias	300	1900-222				
VR16	Bias	300	1900-220				
VR401	Clarifier	20K	1900-125				
VR402	RF Gain	100K	1900-122(18)				
VR408	Mic Gain	20K					
VR403	SWR/CAL	5000	1900-123(19)				
VR407	Tone	10K					
VR404	Squelch	100K	1900-121(20)				
VR405	Volume/Switch	10K					
VR406	Dimmer	10K	1900-124				

(18) Includes VR402 and VR408.

(20) Includes VR404 and VR405.

(19) Includes VR403 and VR407.

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.
RR401	Resistor Network		1900-402(1)	RR701	Resistor Network		1900-404(2)
RR402	Resistor Network		1900-402(1)				

(1) Consists of seven 680-ohm resistors.

(2) Consists of eight 100K-ohm resistors.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	Input Noise Blanker (23.5MHz)	2200-001			
L2	Output Noise Blanker (23.5MHz)	2200-054			
L3	Rec Antenna (27MHz)	2200-024			
L4	RF Amp (27MHz)	2200-026			
L5	Rec Mixer (7.8MHz)	2200-033			
L6	Rec Mixer (7.8MHz)	2200-029			
L7	Carrier Insertion (7.8MHz)	2200-022			
L8	IF Amp (7.8MHz)	2200-023			
L9	RF Choke (470uH)	2200-040			
L10	RF Choke (56mH)	2200-041			
L11	RF Choke (68mH)	2200-042			
L12	RF Choke (470uH)	2200-040			
L13	RF Choke (470uH)	2200-040			
L14	RF Choke (470uH)	2200-040			
L16	VCO Output	2200-055			
L17	VCO Input	2200-031			
L19	RF Choke (100uH)	2200-202			
L20	RF Choke (470uH)	2200-040			
L21	RF Choke (470uH)	2200-040			
L22	RF Choke (470uH)	2200-040			
L23	RF Choke (470uH)	2200-040			
L24	Tripler (33MHz)	2200-030			
L25	RF Choke (470uH)	2200-040			
L27	TVI Trap (54MHz)	2200-056			
L28	RF Choke	2200-038			
L29	RF Choke	2200-038			
L30	Xmt Final (27MHz)	2200-056			
L31	RF Choke	2200-036			
L32	Xmt Driver (27MHz)	2200-020			
L33	RF Choke	2200-036			
L34	RF Choke	2200-036			
L35	Xmt Predriver	2200-037			
L36	Xmt Amp	2200-037			
L37	Xmt Mixer (27MHz)	2200-063			
L38	RF Choke (470uH)	2200-040			
L39	Xmt Mixer (7.8MHz)	2200-022			
L43	RF Choke (1uH)	2200-039			
L44	RF Choke (1uH)	2200-039			
L45	RF Choke (100uH)	2200-202			
L46	RF Choke	2200-059			
L48	IF Amp	2200-061			
L49	RF Choke (220uH)	2200-207			
L401	RF Choke	2200-059			
L402	RF Choke	2200-059			
L403	RF Choke	2200-059			
L404	RF Choke	2200-059			
L406	RF Choke	2200-035			
L407	RF Choke	2200-035			
L408	RF Choke	2200-059			

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.	
T401	2.6A	.238	2.85mH	2300-003 TF-122(1)			(1) Number on unit.

PRESIDENT MODEL ADAMS

PARTS LIST AND DESCRIPTION (CONTINUED)

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

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	5.12	8	2600-003 TF-109(1)			(1) Number on unit.

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP401	3 1/2" PM, 8 Ohms	3100-006	3A05Z8	

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	3200-003	18-032	18-034	18-010	18-092	2	1	3	4	NC	1

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	
F401	4A Quick Acting	2800-005		AGC4	HDJ	312-004	150145		

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
D401	LED	2000-306	(TLR-321)
D402	LED	2000-307	(LR-0702R)
D411	LED	2000-307	(LR-0702R)
D412	LED	2000-307	(LR-0702R)
FT1	Filter	2100-001	7.8MHz
FT2	Filter	2100-002	7.8MHz
J401	Jack	1100-018	Antenna
J402	Socket	1100-007	Mic
J403	Jack	1100-001	PA
J404	Jack	1100-001	External Speaker
J406	Jack	1100-003	Power
L26	Ferrite Bead	2200-057	
L51	Ferrite Bead	2200-058	
L409	Ferrite Bead	2200-058	
M401	Meter	2900-008	
PL401	Lamp		Meter (8.50V @ 40mA Bright-4.50V @ 28mA Dim)
RELY1	Relay	2400-002	Xmt
S402	Switch	3000-006	Mode-PA-ANL
S403	Switch	3000-109	SWR-CAL-MOD-S/RF (Meter) (Rotary)
S404	Switch	3000-007	Scan
S405	Switch	3000-108	Channel Selector
X1	Crystal	2100-004	7.8025MHz
X2	Crystal	2100-005	7.7975MHz
X3	Crystal	2100-008	11.2858MHz
X4	Crystal	2100-006	11.2842MHz
X5	Crystal	2100-009	10.240MHz
X6	Crystal	2100-007	11.2850MHz
	Cord	2700-001	DC
	Printed Circuit Board	3500-014	Main (PC346AA)
	Printed Circuit Board	3500-016	PA-External Speaker (PC243AA)
	Printed Circuit Board	3500-017	Mic Input (PC275AB)
	Printed Circuit Board	3500-018	Scan (PC291AA)
	Printed Circuit Board	3500-019	CH9-CH19-Scan-Normal (PC292AA)
	Printed Circuit Board	3500-020	AM-USB-LSB-PA/CB-ANL/NB (PC293AA)
	Printed Circuit Board	3500-021	Channel Selector (PC255AA)-Flexible

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

ITEM	PART No.	ITEM	PART No.
Case, Bottom	3300-113	Knob, Push (Black)	1300-016
Case, Top	3300-112	Knob, Push (Orange)	1300-017
Chassis	3300-821	Knob, Channel	1300-004
Chassis Front	3300-822	Panel, Buffer	3400-229
Knob, Push	1300-010	Panel, Front (Silver)	3400-230
		Plate, Control	3400-513

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	BELOEN 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')
			BELOEN No. 9465 (7-1/2')