

# SECTION 6

## DIAGRAMS AND CIRCUIT BOARD ILLUSTRATIONS

### Symbols and Reference Designators

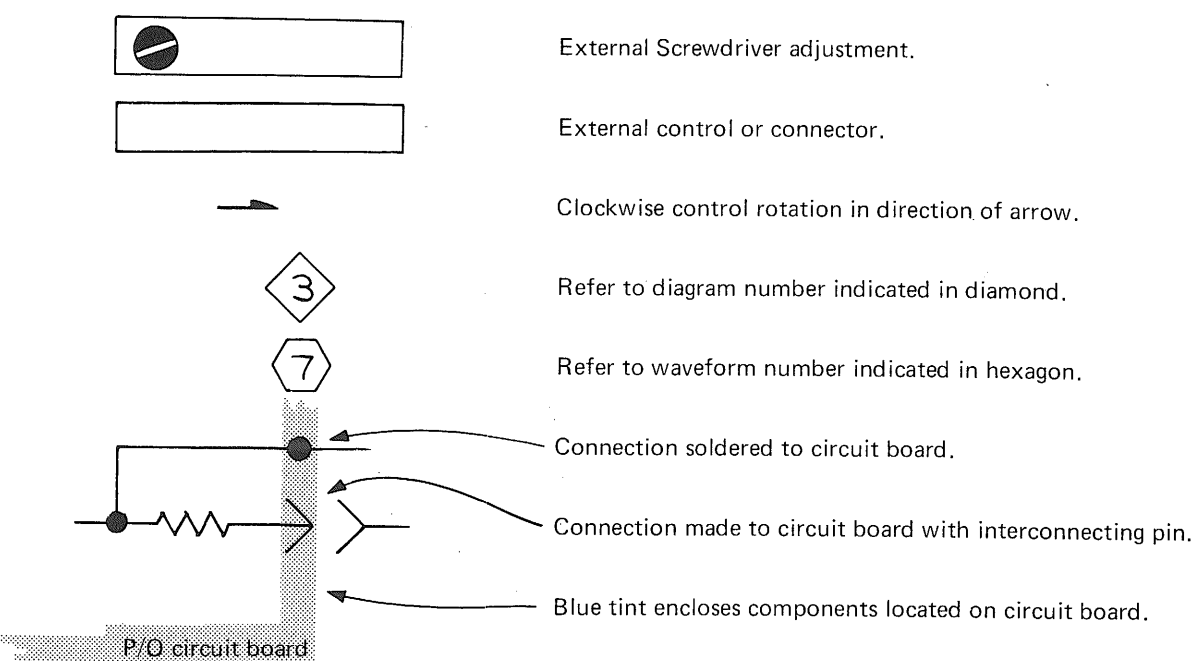
Electrical components shown on the diagrams are in the following units unless noted otherwise:

- Capacitors = Values one or greater are in picofarads (pF).  
 Values less than one are in microfarads ( $\mu$ F).  
 Resistors = Ohms ( $\Omega$ )

Symbols used on the diagrams are based on USA Standard Y32.2-1967.

Logic symbology is based on MIL-STD-806B in terms of positive logic. Logic symbols depict the logic function performed and may differ from the manufacturer's data.

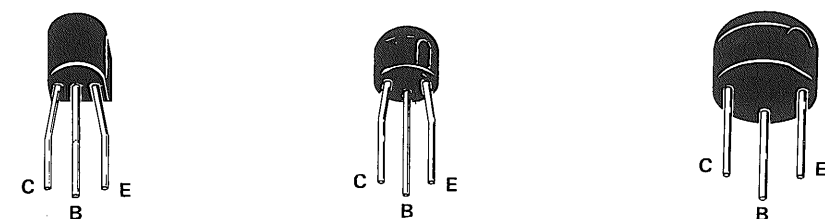
The following special symbols are used on the diagrams:



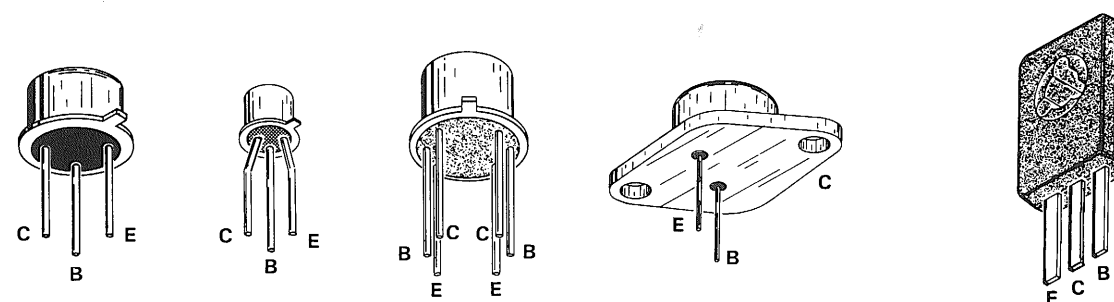
The following prefix letters are used as reference designators to identify components or assemblies on the diagrams.

A	Assembly, separable or repairable (circuit board, etc.)	LR	Inductor/resistor combination
AT	Attenuator, fixed or variable	M	Meter
B	Motor	Q	Transistor or silicon-controlled rectifier
BT	Battery	P	Connector, movable portion
C	Capacitor, fixed or variable	R	Resistor, fixed or variable
CR	Diode, signal or rectifier	RT	Thermistor
DL	Delay line	S	Switch
DS	Indicating device (lamp)	T	Transformer
F	Fuse	TP	Test point
FL	Filter	U	Assembly, inseparable or non-repairable (integrated circuit, etc.)
H	Heat dissipating device (heat sink, heat radiator, etc.)	V	Electron tube
HR	Heater	VR	Voltage regulator (zener diode, etc.)
J	Connector, stationary portion	Y	Crystal
K	Relay		
L	Inductor, fixed or variable		

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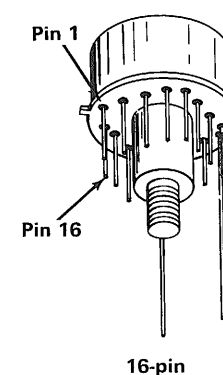


Plastic-Cased Transistors

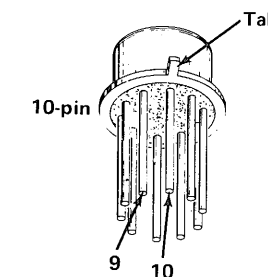


Metal-Cased Transistors

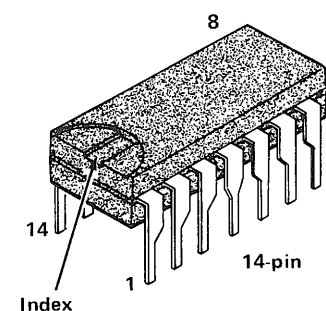
Plastic-Power Transistors



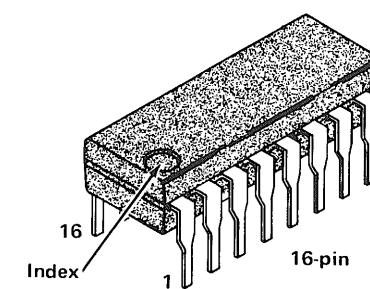
16-pin



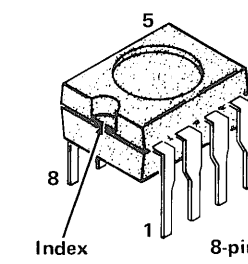
10-pin



14-pin



16-pin



8-pin

Integrated Circuits

NOTE: Circuit board is keyed with arrow (  $\blacktriangleright$  ) or dot to locate either pin 1 or tab of integrated circuit.

Fig. 6-1. Electrode configuration for semiconductors used in the 7704A.

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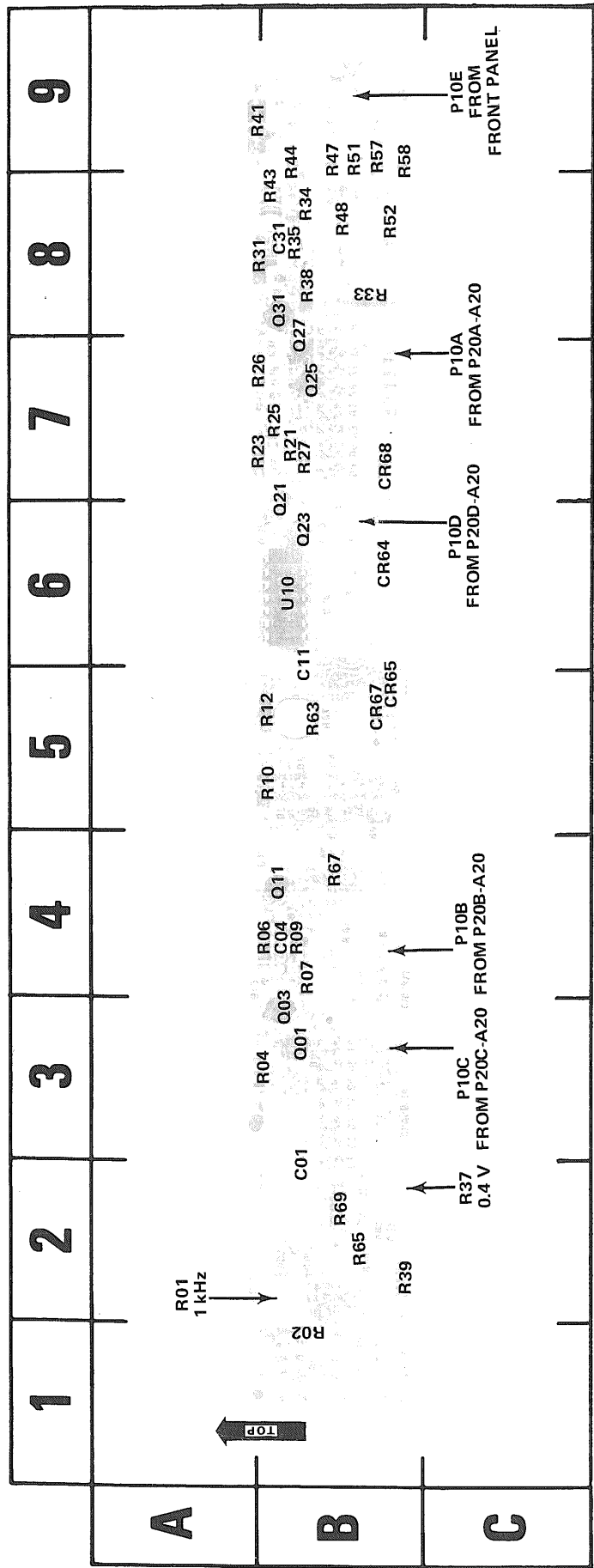
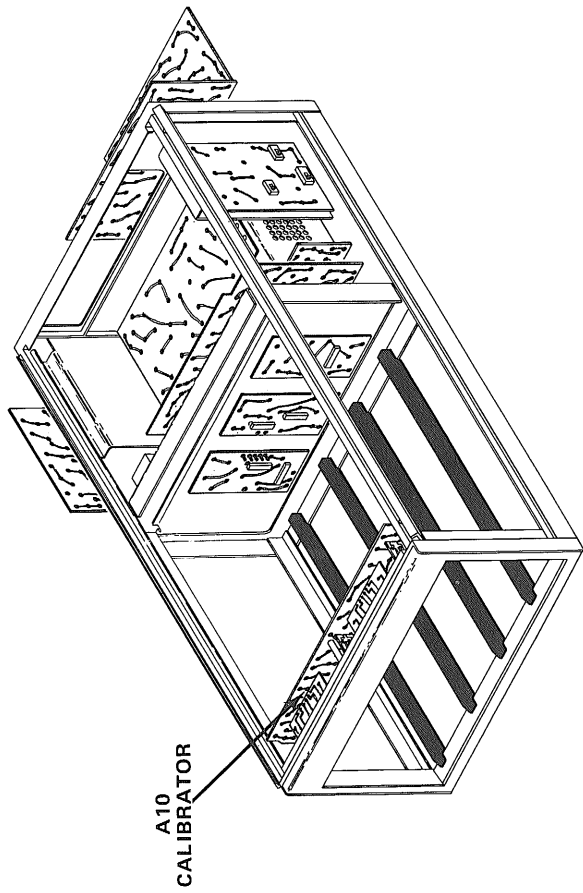


Fig. 6-3. A10 - Calibrator circuit board.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C01	2B	P10A	7B	Q11	4B	R02	1B	R21	7B	R34	8B	R44	9B
C04	4B	P10B	4B	Q21	6B	R04	3B	R23	7B	R35	8B	R47	9B
C11	6B	P10C	3B	Q23	6B	R06	4B	R25	7B	R37	2B	R48	8B
C31	8B	P10D	6B	Q25	7B	R07	4B	R26	7B	R38	8B	R51	9B
CR64	6B	P10E	9B	Q27	7B	R09	4B	R27	7B	R39	2B	R52	8B
CR65	5B	Q01	3B	Q31	8B	R10	5B	R31	8B	R41	9B	R57	9B
CR67	5B	Q03	3B	R01	2B	R12	5B	R33	8B	R43	8B	R58	9B
CR68	7B												



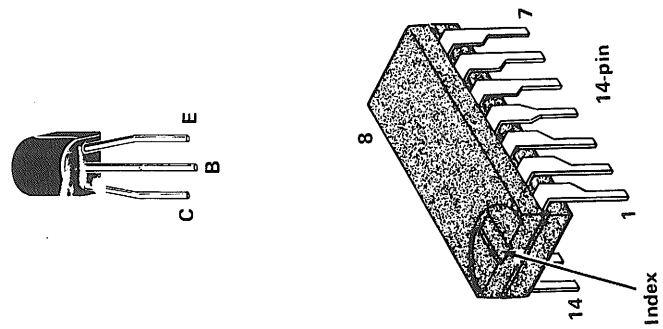
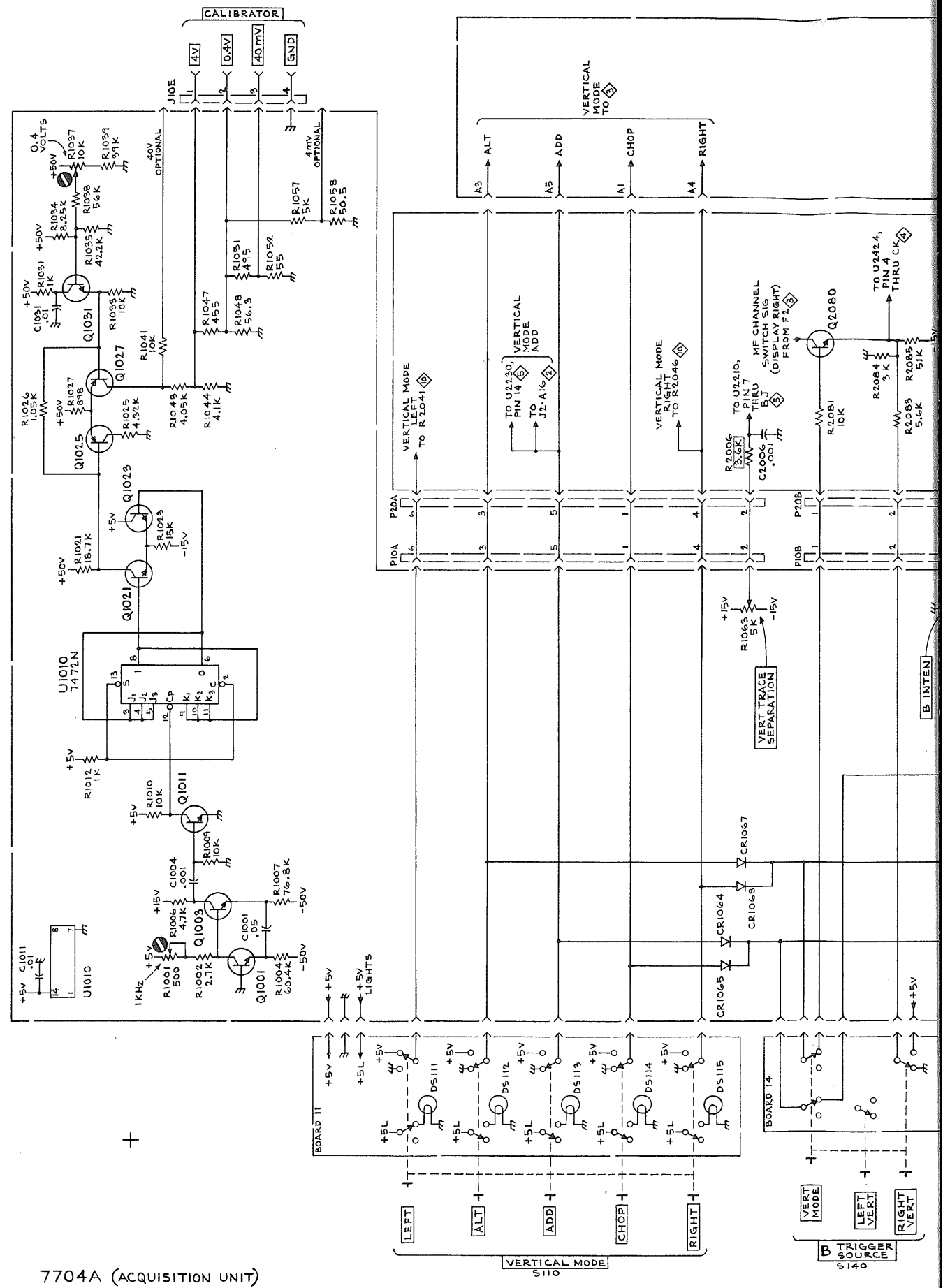
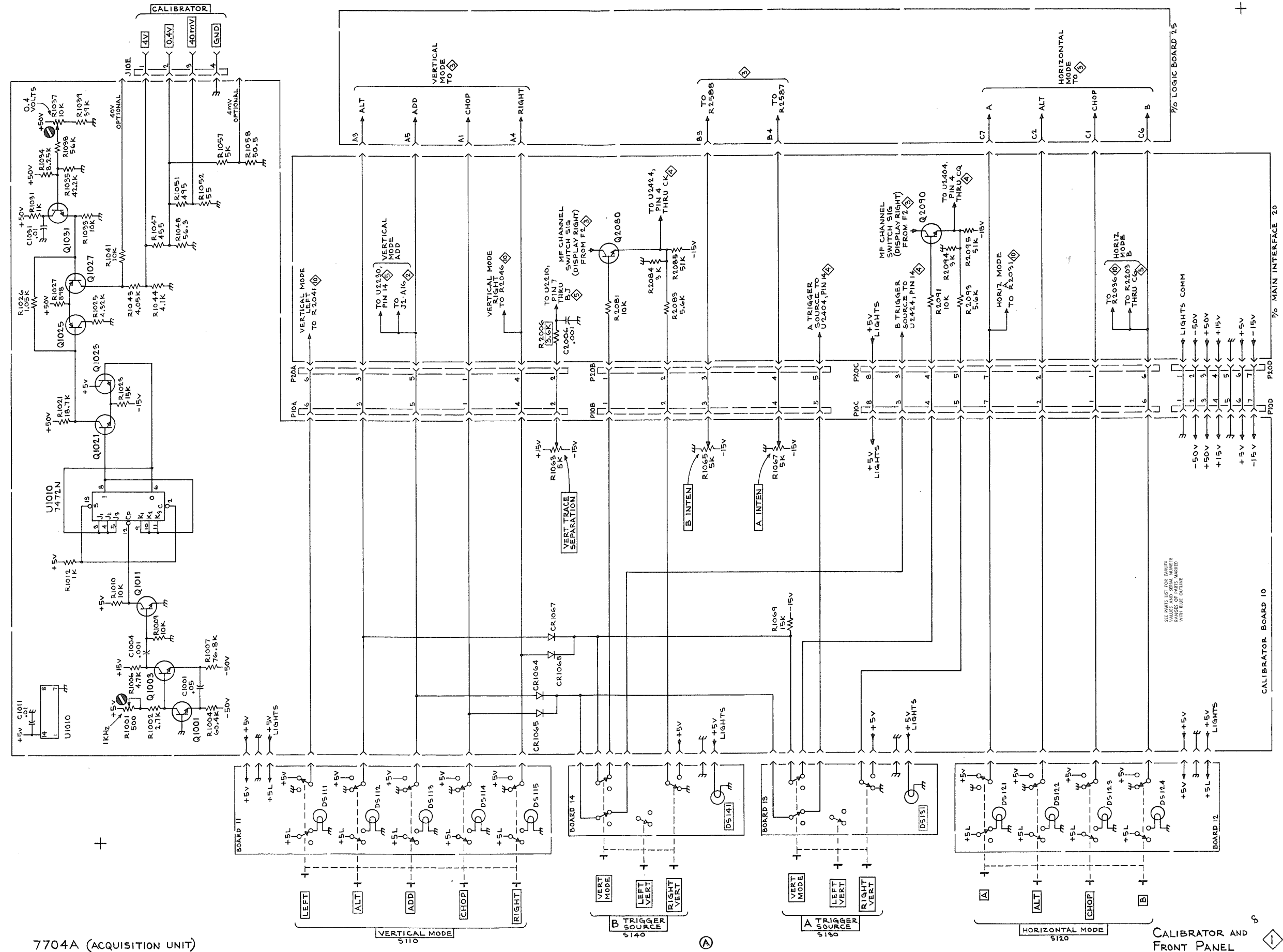


Fig. 6-4. Electrode configuration for semiconductors shown on diagram 1.



7704A (ACQUISITION UNIT)



7704A (ACQUISITION UNIT)

CALIBRATOR AND FRONT PANEL

GRID LOCATOR

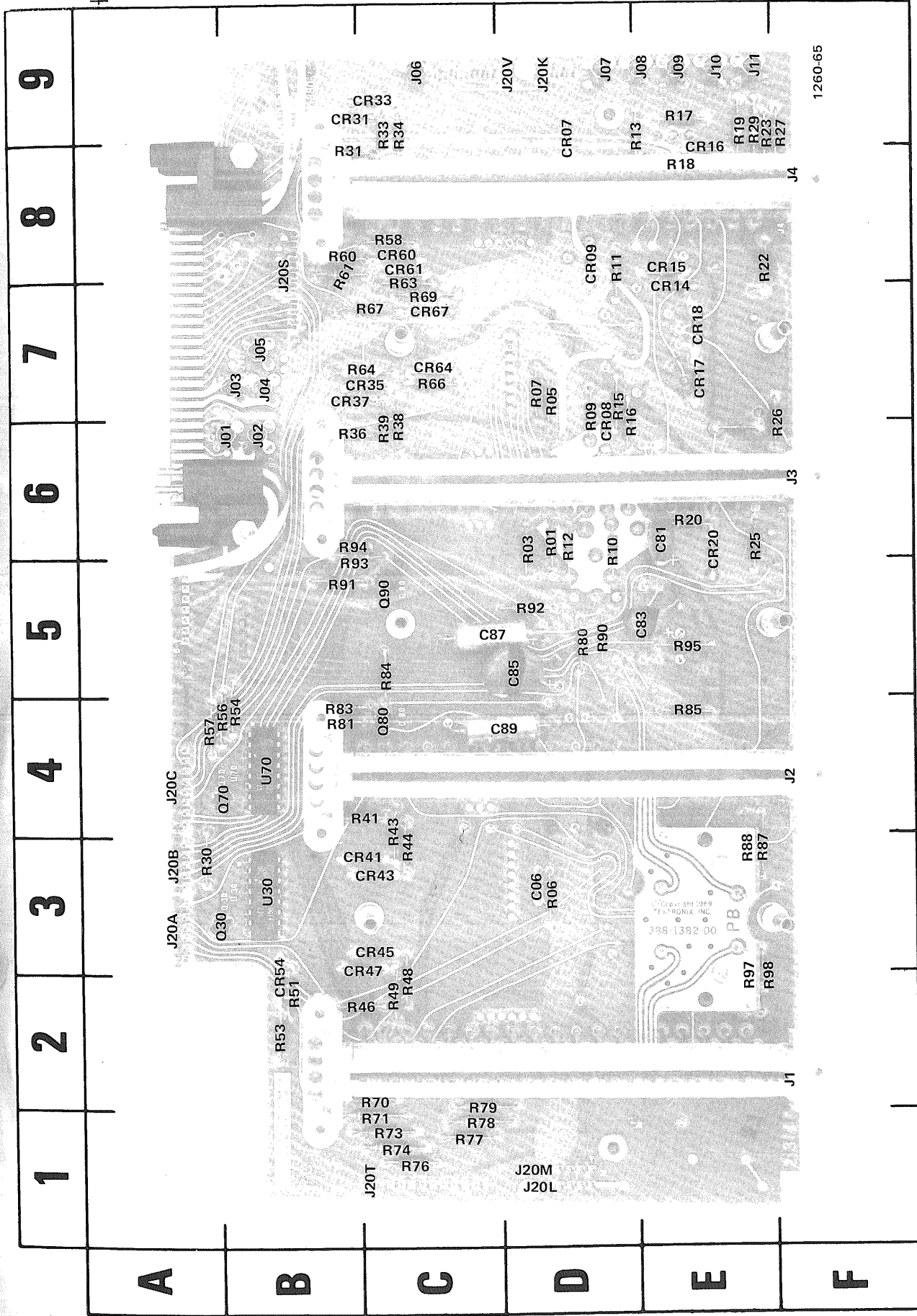
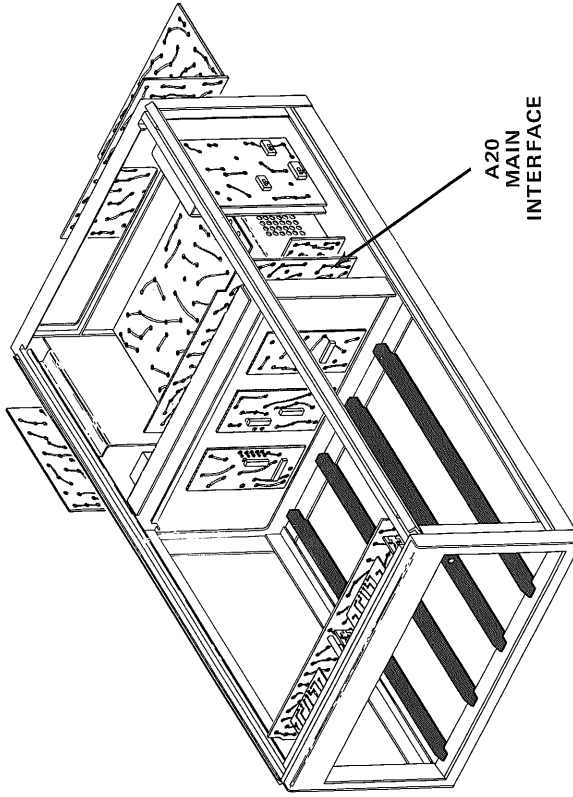


Fig. 6-5. A20 - Main Interface circuit board.

CKT NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO			
C06	3D	CR37	7C	J02	6B	R12	1C	R36	6B	R61	8B	R83	4B
C81	6E	CR41	3C	J03	7B	R13	9D	R38	6C	R63	7C	R84	5C
C83	5E	CR43	3C	J04	7B	R15	3A	R39	6C	R64	7C	R85	4E
C85	5D	CR45	3C	J05	7B	R16	4A	R41	4C	R66	7C	R87	3E
C87	5D	CR47	3C	J06	9C	R17	4A	R43	3C	R67	7C	R88	3E
C89	4D	CR54	2B	J08	9E	R18	4C	R44	3C	R69	7C	R90	5D
		CR60	8C	J09	9E	R20	5C	R46	3C	R70	2C	R91	5B
CR07	9D	CR61	8C	J10	9E	R22	6D	R48	3C	R71	1C	R92	5D
CR08	8E	CR64	7C	J11	9E	R23	6D	R49	3C	R73	1C	R93	6C
CR14	8E	CR67	7C	J20A	3A	R25	6D	R51	2B	R74	1C	R94	6C
CR15	8E	J1	2F	J20B	3A	R27	7D	R53	2B	R76	1C	R95	5E
CR16	8E	J2	4F	J20C	4A	R29	3D	R54	4B	R77	1C	R97	2E
CR20	9C	J3	6F	J20K	9D	R30	7D	R56	4A	R78	1C	R98	2E
CR31	9C	J4	8F	J20L	1D	R31	7D	R57	4A	R79	2C	U30	3B
CR33	9C	J4	8F	J20M	1D	R33	5D	R58	8C	R80	5D	U70	4B
CR35	7C	J01	6B	J20S	8B	R34	8D	R60	8B	R81	4B		

NOTE

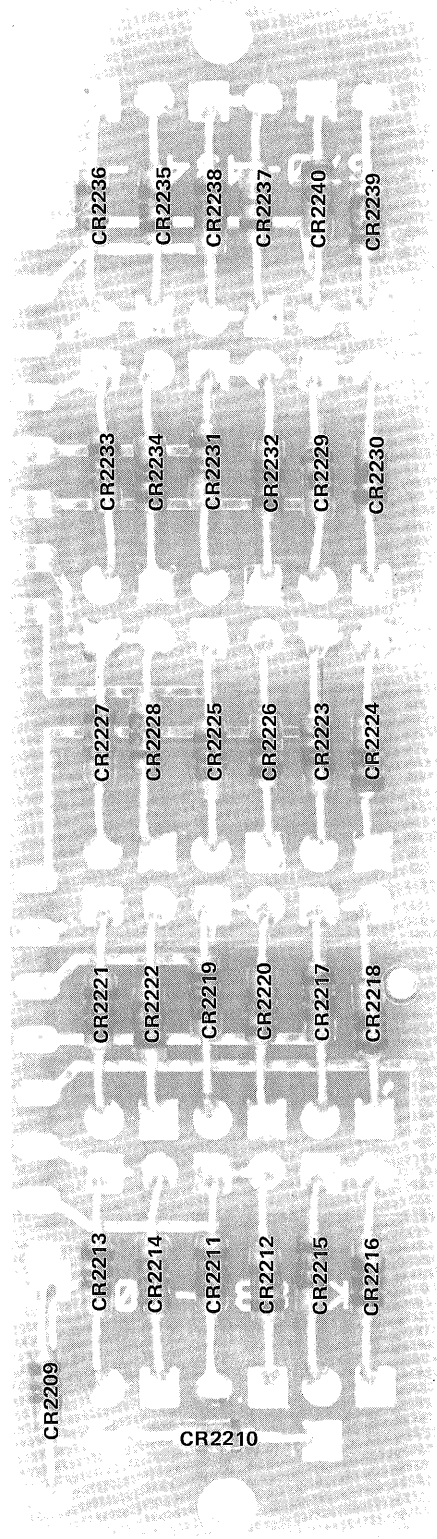
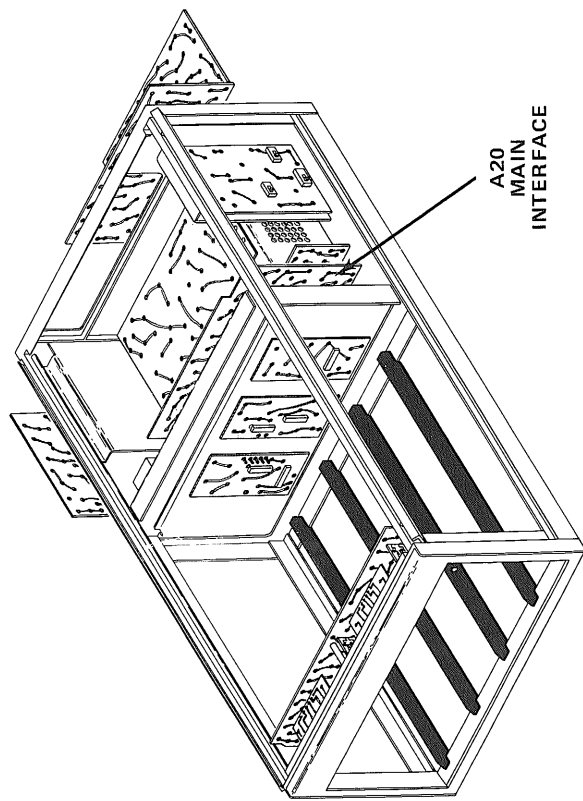
To conserve space, the circuit numbers on circuit boards and board photos show only the letter prefix and last two digits of the complete circuit number shown in parts list and schematic (R69 = R1069, etc.).



CKT NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO	GRID/CKT LOC NO		
C06	3D	7C	J02	6B	J20T	1C	R12	6D	R36	6B	R61	8B	R83	4B
C81	6E	3C	J03	7B	J20V	9D	R13	9E	R38	6C	R63	7C	R84	5C
C83	5E	3C	J04	7B		7D	R15	7D	R39	6C	R64	7C	R85	4E
C85	5D	3C	J05	7B	Q30	3A	R16	6E	R41	4C	R66	7C	R87	3E
C87	5D	3C	J06	9C	Q70	4A	R17	9E	R43	3C	R67	7C	R88	3E
C89	4D	2B	J08	9E	Q80	4C	R18	8E	R44	3C	R69	7C	R90	5D
		8C	J09	9E	Q90	5C	R20	6E	R46	3C	R70	2C	R91	5B
CR07	9D	8C	J10	9E			R22	8F	R48	3C	R71	1C	R92	5D
CR08		7C	J11	9E	R01	6D	R23	9E	R49	3C	R73	1C	R93	6C
CR14	8E	7C	J20A	3A	R03	6D	R25	6E	R51	2B	R74	1C	R94	6C
CR15	8E		J20B	3A	R05	7D	R27	9F	R53	2B	R76	1C	R95	5E
CR16	8E	2F	J20C	4A	R06	3D	R29	9E	R54	4B	R77	1C	R97	2E
CR20	6E	4F	J20K	9D	R07	7D	R30	3A	R56	4A	R78	1C	R98	2E
CR31	9C	6F	J20L	1D	R09	7D	R31	8B	R57	4A	R79	2C		
CR33	9C	8F	J20M	1D	R10	5D	R33	9C	R58	8C	R80	5D	U30	3B
CR35	7C	J01	J20S	8B	R11	8D	R34	9C	R60	8B	R81	4B	U70	4B

**NOTE**

To conserve space, the circuit numbers on circuit boards and board photos show only the letter prefix and last two digits of the complete circuit number shown in parts list and schematic (R69 = R1069, etc.).



1260-111

Fig. 6-5A. A51—Protection circuit board assembly.  
(Eff. SN B160000 — up)





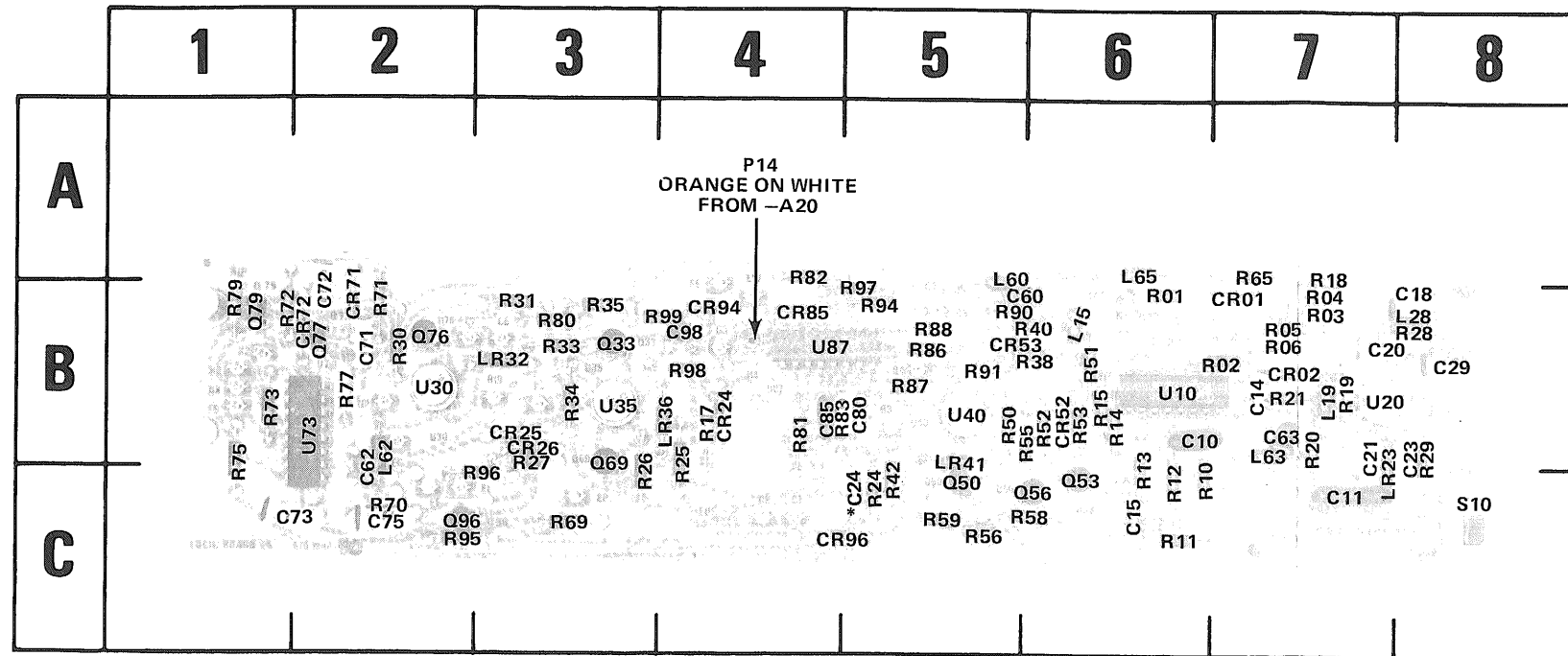


Fig. 6-6. A25 - Logic circuit board.

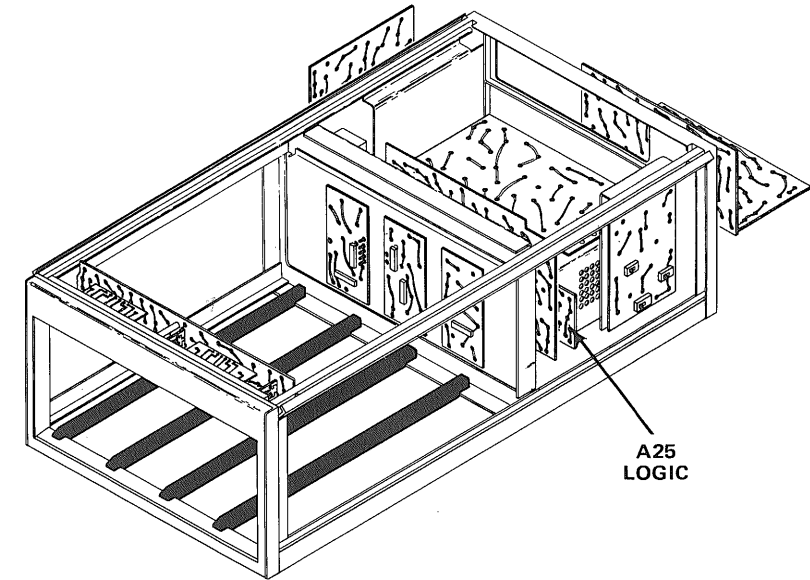
\*\*Relocated to back of board.

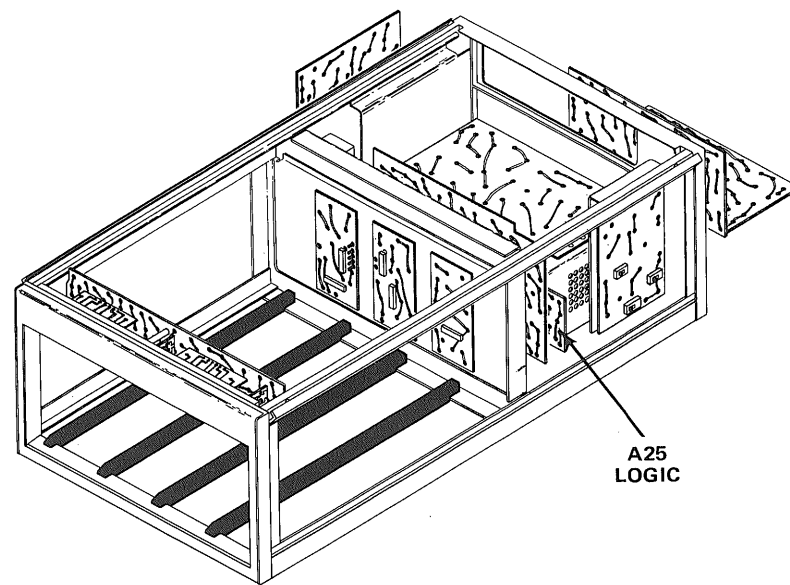
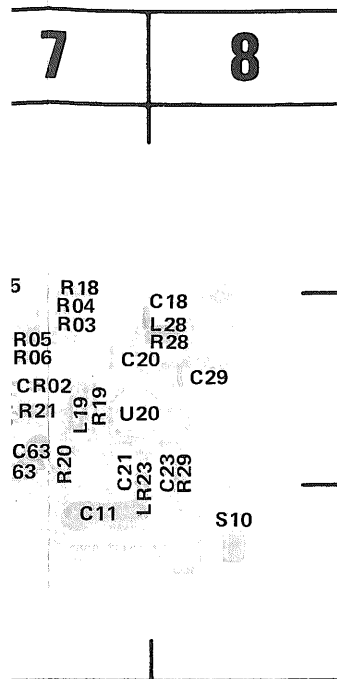
\*See Parts List for serial number ranges.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C10	6B	C85	4B	L28	8B	Q56	6C	R14	6B	R34	3B	R71	2B	R95	2C
C11	7C	C98	4B	L60	5A	Q69	3B	R15	6B	R35	3B	R72	1B	R96	3C
C14	7B			L62	2B	Q76	2B	R17	4B	R38	6B	R73	1B	R97	5B
C15	6C	CR01	7B	L63	7B	Q77	2B	R18	7A	R40	6B	R75	1B	R98	4B
C18 *	8B	CR02	7B	L65	6A	Q79	1B	R19	7B	R42	5C	R77	2B	R99	4B
C20	7B	CR25	3B			Q96	2C	R20	7B	R50	5B	R79	1B		
C21	7B	CR26	3B	LR23	7B			R21	7B	R51	6B	R80	3B	S10	8C
C23	8B	CR52	6B	LR32	3B	R01	6B	R24	5C	R52	6B	R81	4B		
C24	5C	CR53	5B	LR36	4B	R02	7B	R25	4B	R53	6B	R82	4A	U10	6B
C29 *	8B	CR71	2B	LR41	5B	R03	7B	R26	3C	R55	6B	R83	4B	U20	7B
C60	5B	CR72	2B			R04	7B	R27	3B	R56	5C	R86	5B	U30	2B
C62	2B	CR85	4B	P14	4B	R05	7B	R28	8B	R58	6C	R87	5B	U35	3B
C63	7B	CR96	5C			R06	7B	R29	8B	R59	5C	R88	5B	U40	5B
C65	8B			Q33	3B	R10	6C	R30	2B	R65 **	7A	R90*	5B	U73	2B
C71	2B	L15	6B	Q50	5C	R11	6C	R31	3B	R69	3C	R91*	5B	U87	4B
C72	2B	L19	7B	Q63	6C	R12	6C	R33	3B	R70	2C	R94	5B		
C73	2C					R13	6C								
C75	2C														

NOTE

To conserve space, the circuit numbers on circuit boards and board photos show only the letter prefix and last two digits of the complete circuit number shown in parts list and schematic (R69 = R1069, etc.).





for angles.

CKT NO	GRID LOC
R95	2C
R96	3C
R97	5B
R98	4B
R99	4B
S10	8C
U10	6B
U20	7B
U30	2B
U35	3B
U40	5B
U73	2B
U87	4B

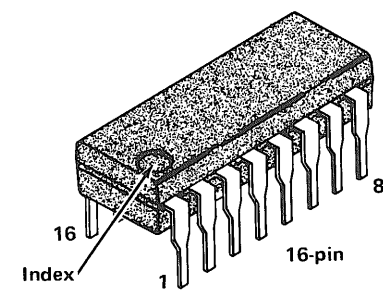
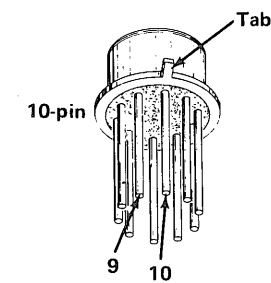
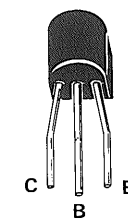
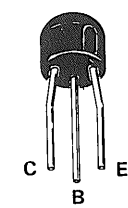
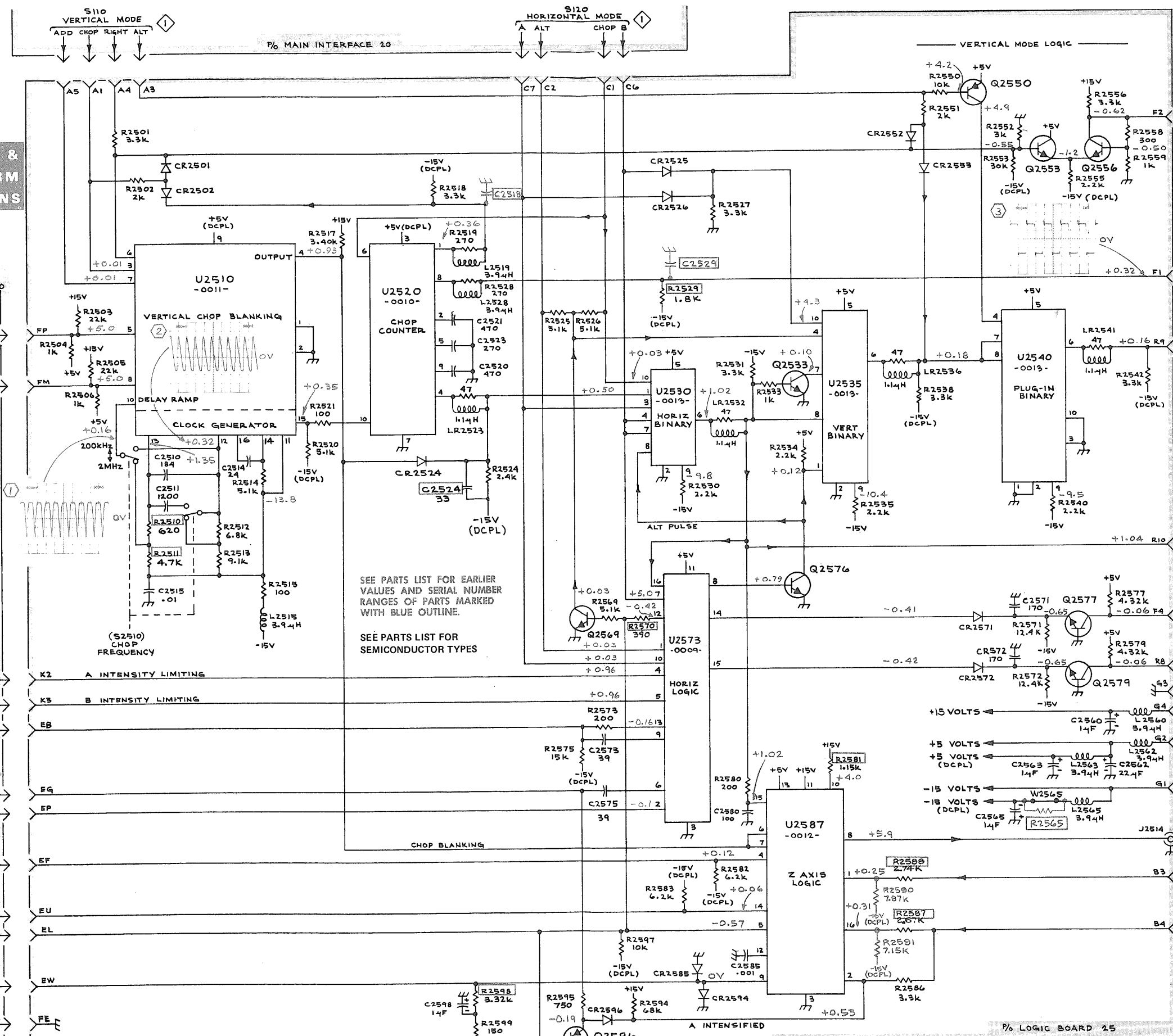


Fig. 6-7. Electrode configuration for semiconductors shown on diagram 3.



VOLTAGE & WAVEFORM CONDITIONS

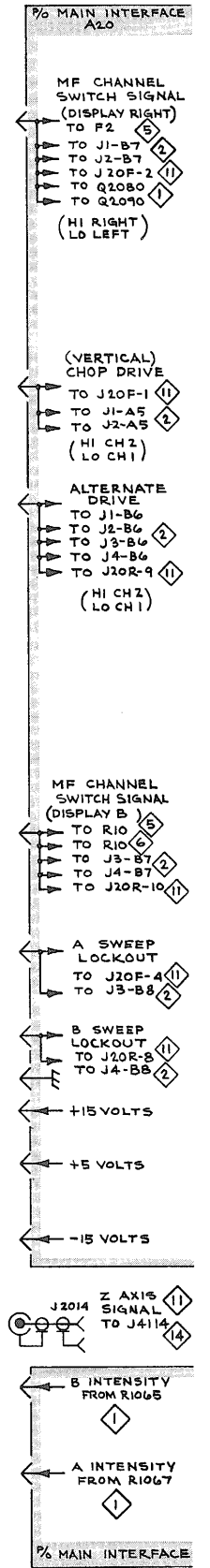
- 1 P/O MAIN INTERFACE 20
- 2 LEFT PLUG-IN MODE FROM J1-B35
- 2 RIGHT PLUG-IN MODE FROM J2-B35
- 2 FROM J3-B10
- 2 FROM J4-B10
- 2 B HOLDOFF FROM J4-B4
- 2 A HOLDOFF FROM J3-B4
- 2 A GATE FROM R2016
- 2 B GATE FROM R2022
- 2 A GATE FROM R2025
- 2 A GATE DELAY MODE CONTROL OUT FROM J3-B2
- 2 AUX Z AXIS FROM: R2010, R2012, R2080, R2092
- 2 AUX Z AXIS COMMON FROM B17-J1, J2, J3, J4



7704A (ACQUISITION UNIT)

1260-69 REV. G, SEP 1977

LOGIC CIRCUIT 3 DEH



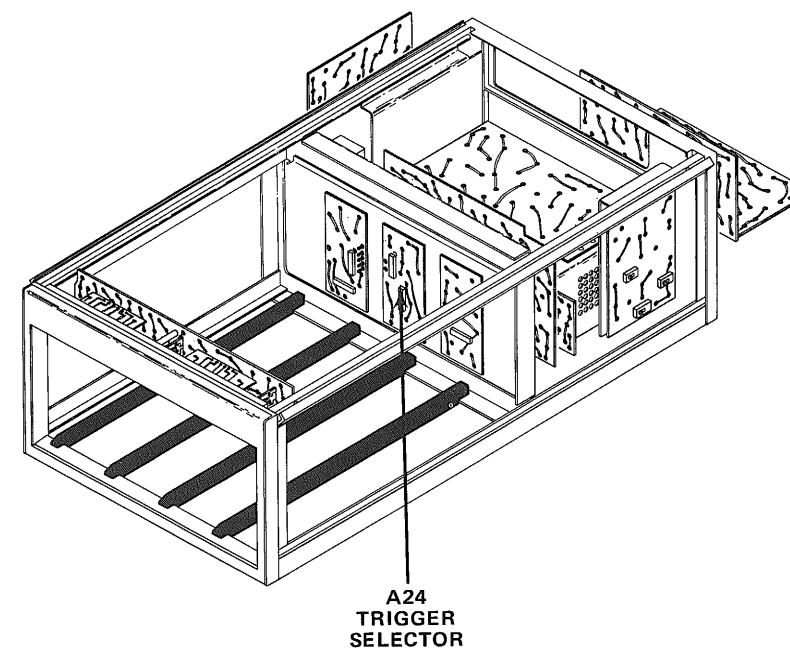
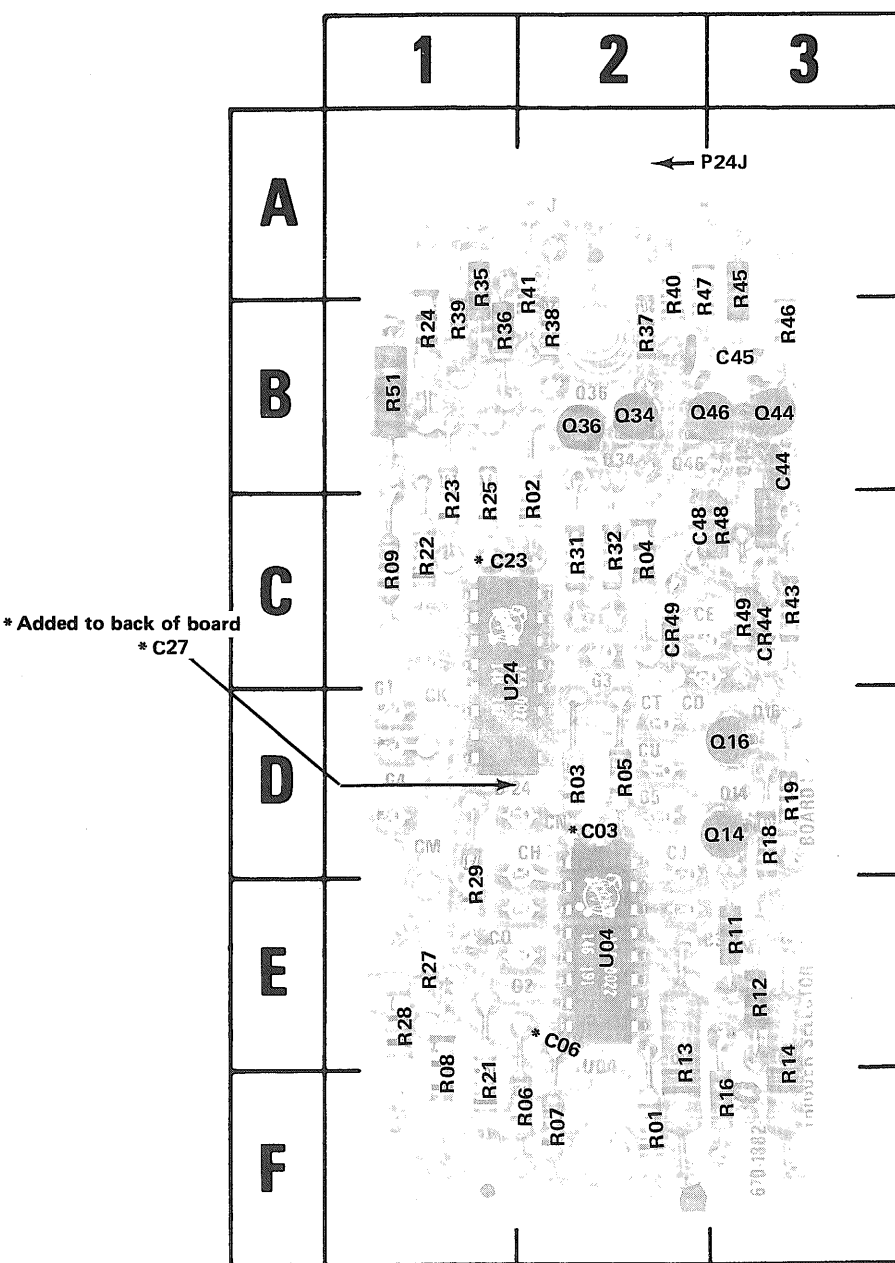


Fig. 6-8. A24 - Trigger Selector circuit board.

\*See Parts List for serial number ranges.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C03	2D	Q14	3D	R03	2D	R11	3E	R21	1F	R29	1D	R39	1B	R48	3C
C06	2F	Q16	3D	R04	2C	R12	3E	R22	1C	R31	2C	R40	2A	R49	3C
C23	1C	Q34	2B	R05	2D	R13	2E	R23	1C	R32	2C	R41	2A	R51	1B
C27	1D	Q36	2B	R06	2F	R14	3E	R24	1B	R35	1B	R43	3C		
C44	3B	Q44	3B	R07	2F	R16	3F	R25	1C	R36	1B	R45	3A	U04	2E
C48	2C	Q46	3B	R08	1E	R18	3D	R27	1E	R37	2B	R46	3B	U24	1C
C54	3B			R09	1C	R19	3D	R28	1E	R38	2B	R47	2A		
CR44	3C	R01	2F												
CR49	2C	R02	2C												

## VOLTAGE CONDITIONS

The voltages shown on this diagram were obtained with the test set-up and equipment listed below. These measurements are not absolute and may vary slightly between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 20 volts dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system). b. Fairchild Model 7050.

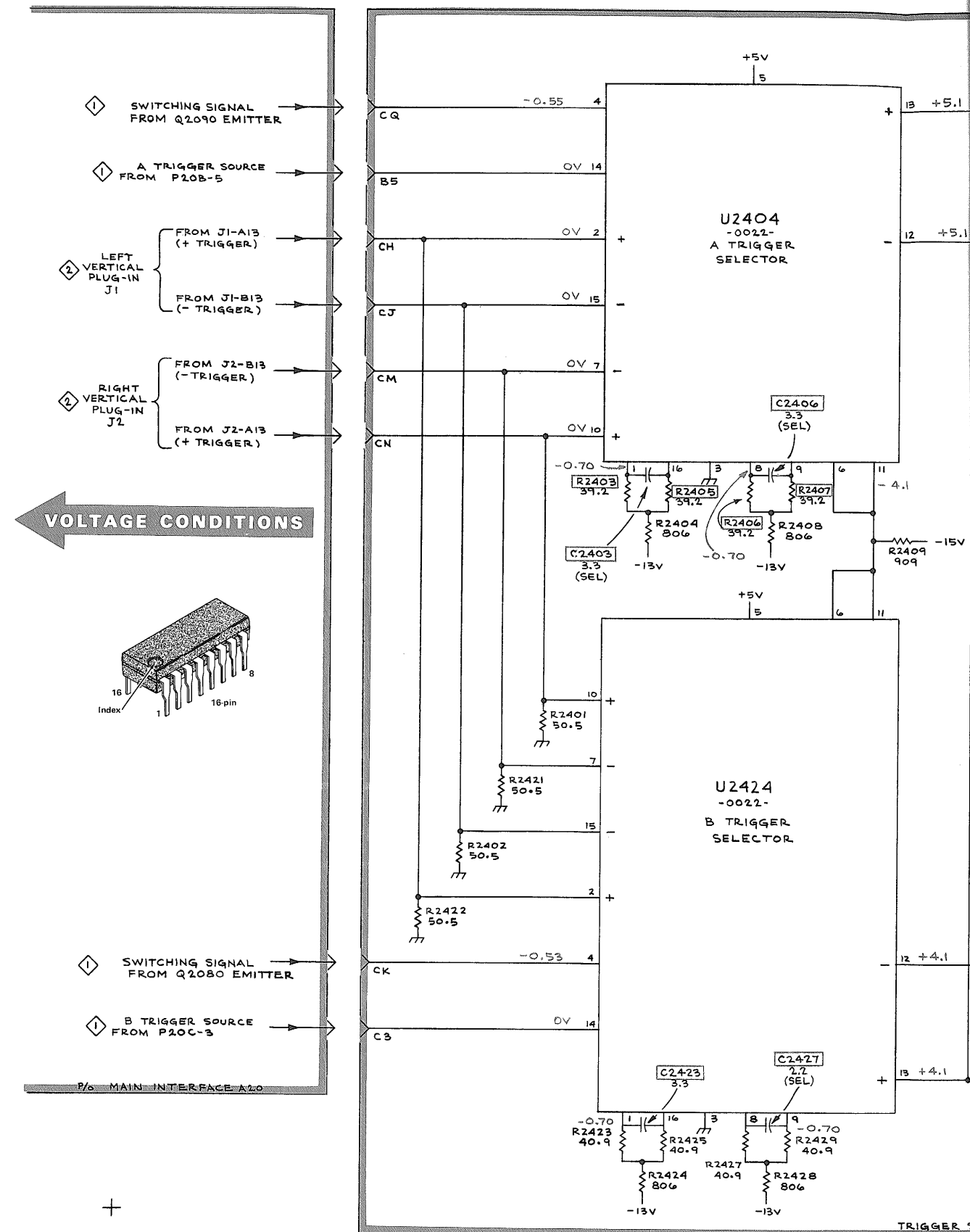
### Test Set-Up

7704A Under Test: No plug-in units installed.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

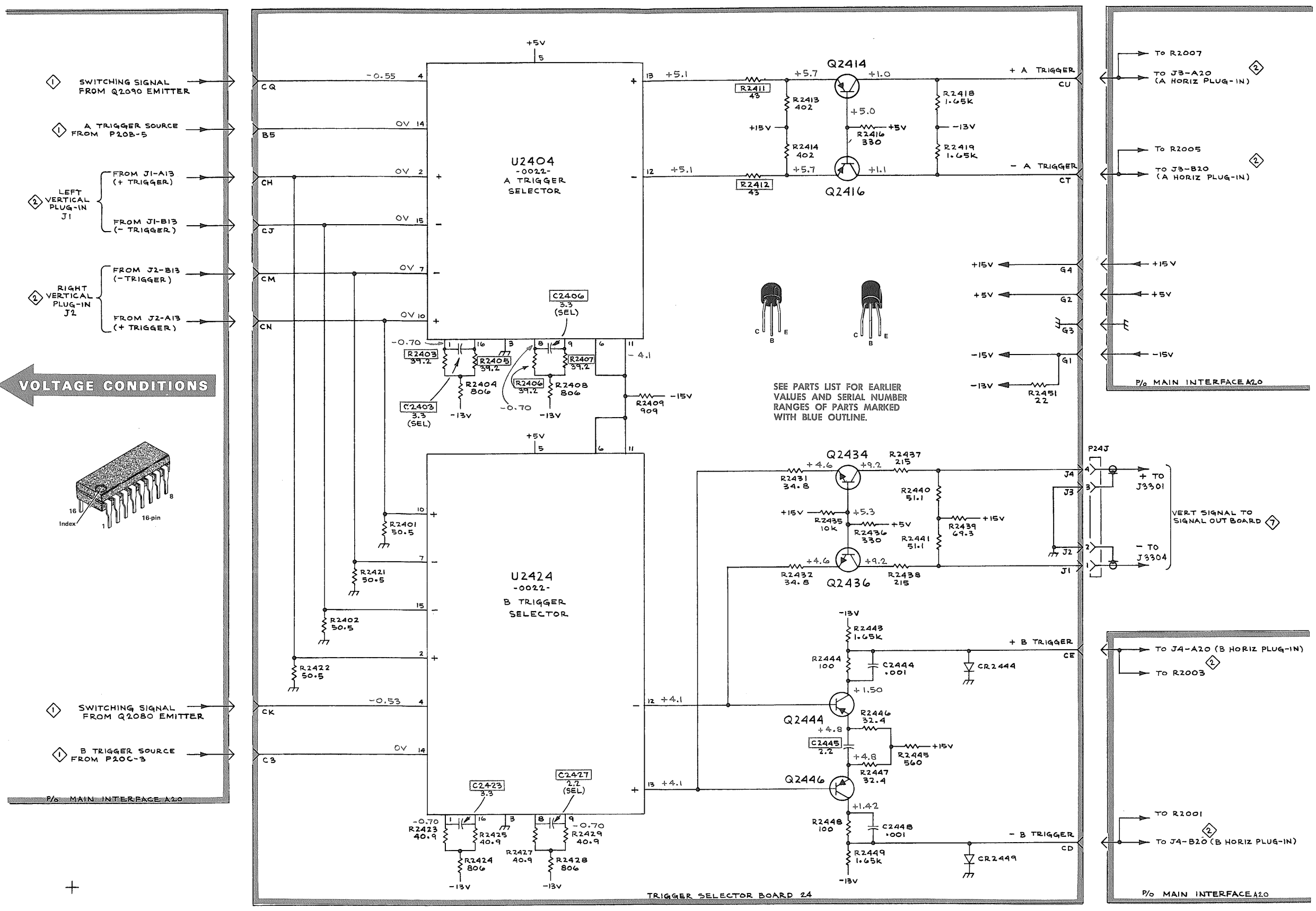
Test Equipment: Voltmeter common is connected to 7704A chassis ground.



7704A (ACQUISITION UNIT)

REV.C, SEPT. 1975  
1260-71

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7704A (ACQUISITION UNIT)

REV.C, SEPT. 1975  
1260-71

TRIGGER SELECTOR 4

DEH

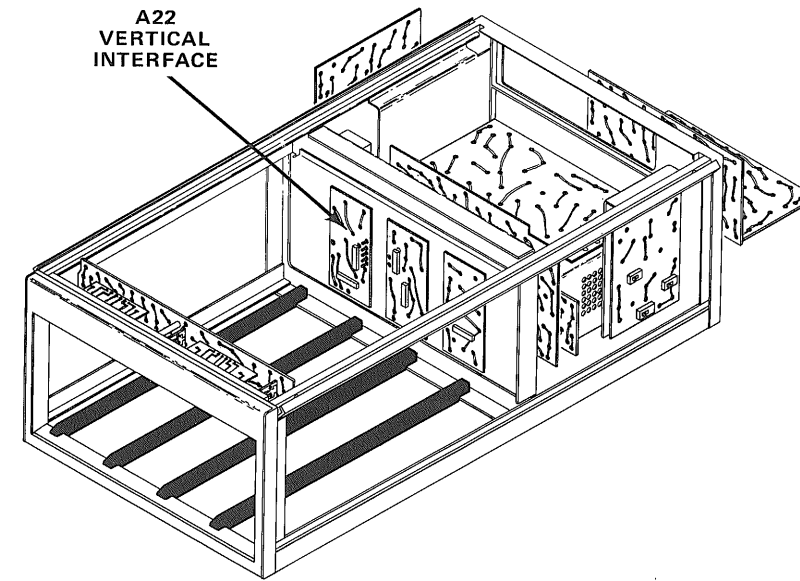
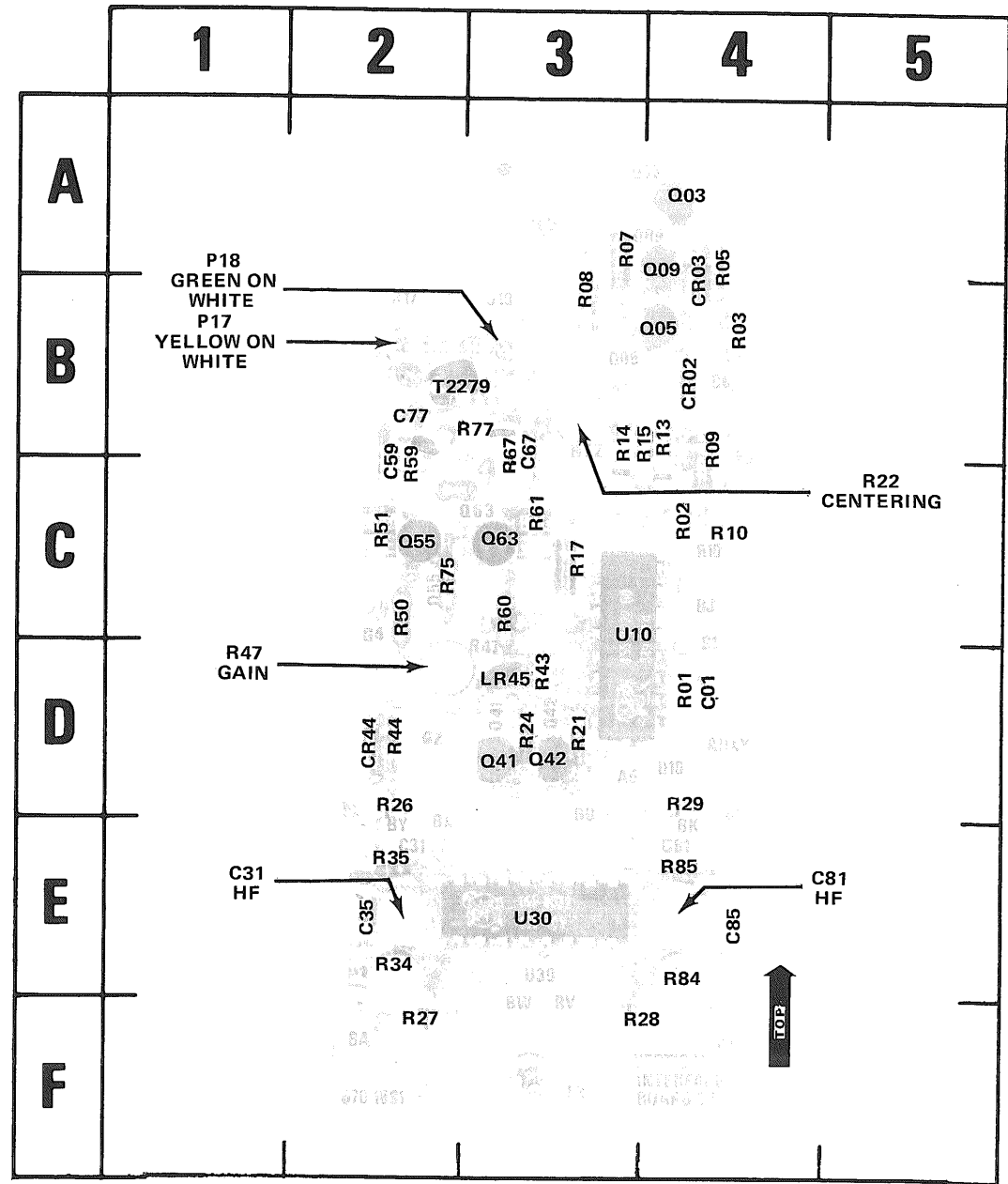


Fig. 6-9. A22 - Vertical Interface circuit board (front view).

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C01	4D	CR44	2D	Q41	3D	R05	4A	R17	3C	R34	2E	R60	3C	T2279	2B
C31	2E	CR45	3D	Q42	3D	R07	3A	R21	3D	R35	2E	R61	3C		
C35	2E			Q55	2C	R08	3A	R22	3B	R43	3D	R67	3B	U10	3C
C59	2B	P17	2B	Q63	3C	R09	4B	R24	3D	R44	2D	R75	2C	U30	3E
C67	3B					R10	4C	R26	2D	R47	2D	R77	2B		
C77	2B					R13	4B	R27	2F	R50	2C	R84	4E		
C81	4E	Q03	4A	R01	4D	R14	3B	R28	4F	R51	2C	R85	4E		
C85	4E	Q05	4B	R02	4C	R15	4B	R29	4D	R59	2B				
CR02	4B	Q09	4A	R03	4B										
CR03	4A														

NOTE

To conserve space, the circuit numbers on circuit boards and board photos show only the letter prefix and last two digits of the complete circuit number shown in parts list and schematic (R69 = R1069, etc.).



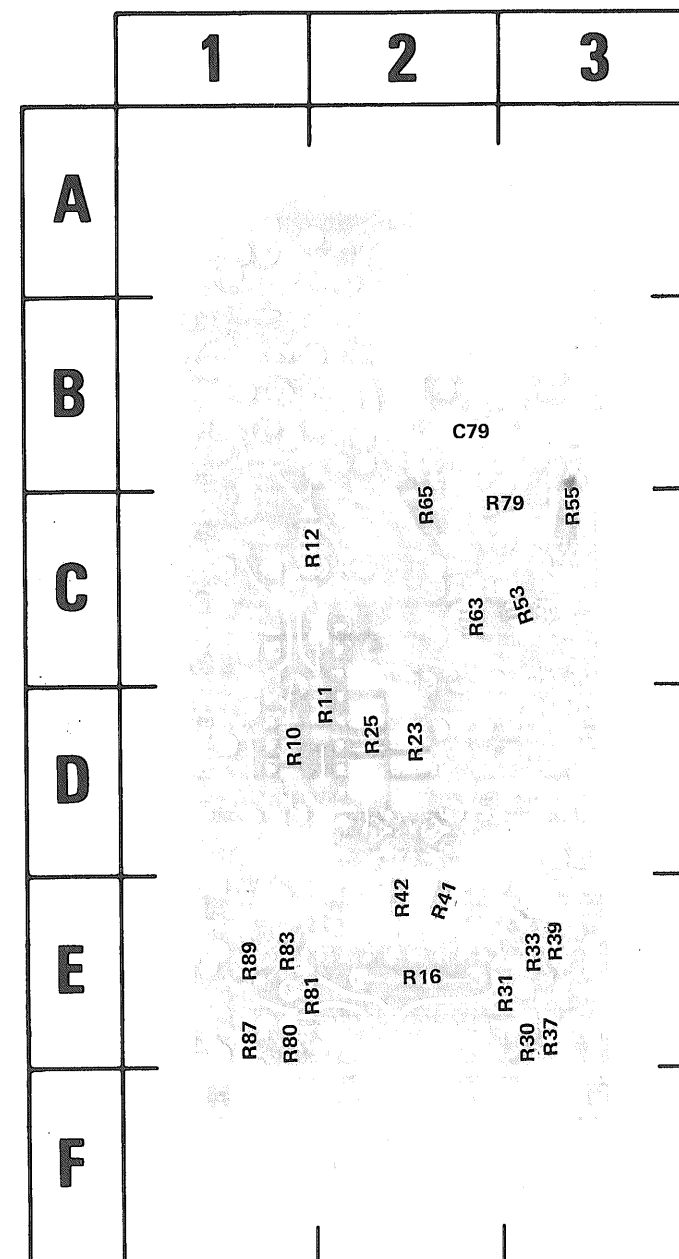
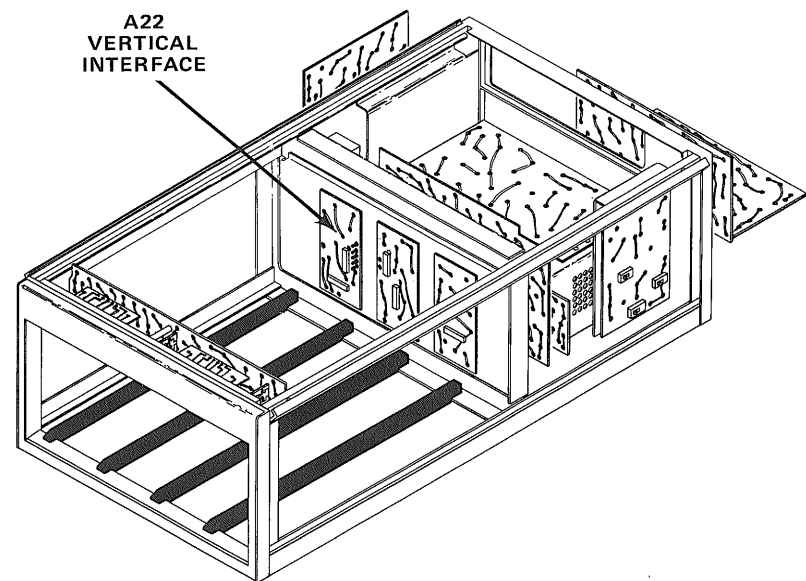


Fig. 6-10 A22 - Vertical Interface circuit board (rear view).

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C79	2B	R25	2D	R42	2E	R81	1E
		R30	3E	R53	3C	R83	1E
R10	1D	R31	3E	R55	3C	R87	1E
R11	2D	R33	3E	R63	2C	R89	1E
R12	1C	R37	3E	R65	2C		
R16	2E	R39	3E	R79	3C		
R23	2D	R41	2E	R80	1E		

## VOLTAGE CONDITIONS

The voltages shown on this diagram were obtained with the test set-up and equipment listed below. These measurements are not absolute and may vary slightly between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 20 volts dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system). b. Fairchild Model 7050.

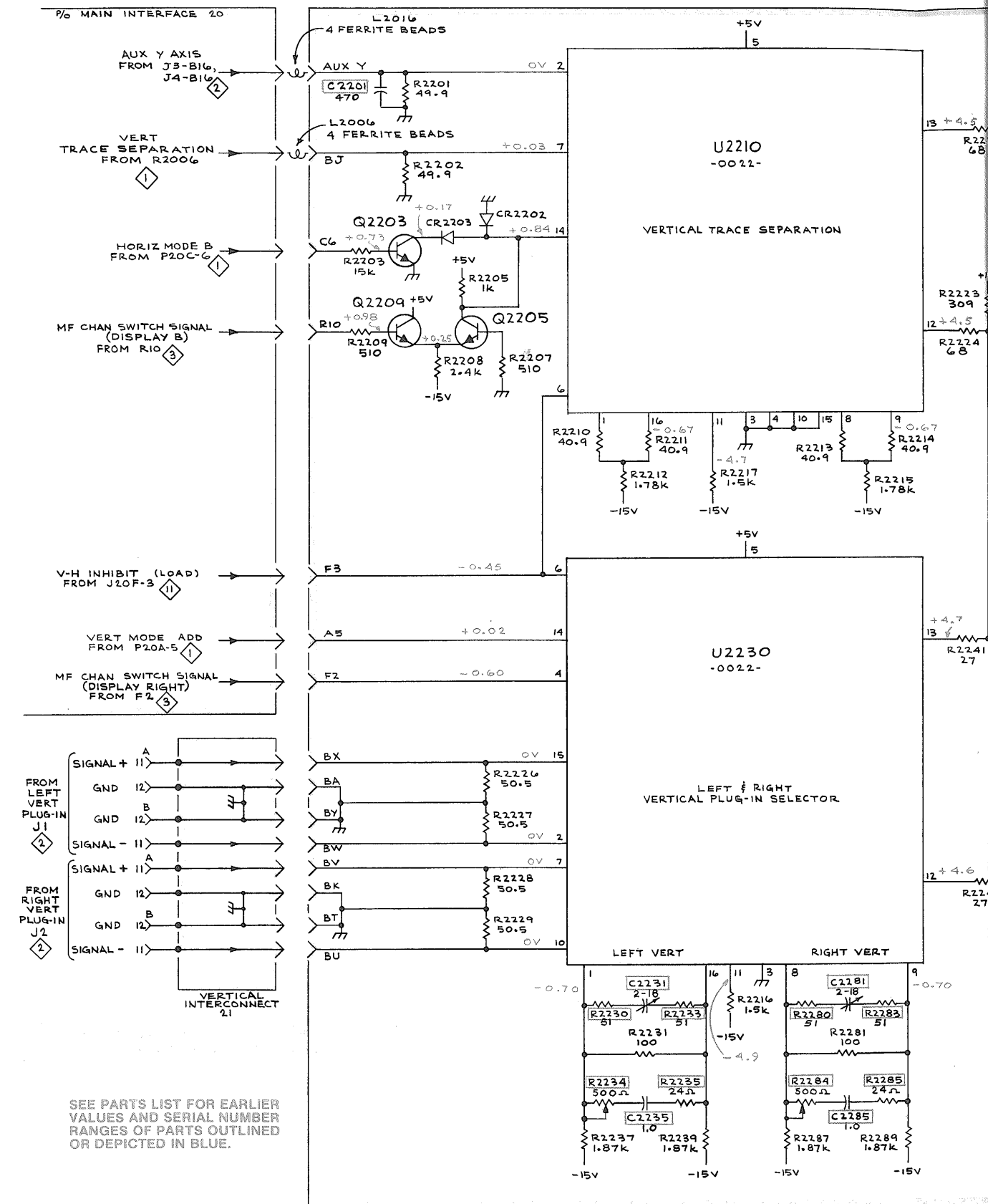
### Test Set-Up

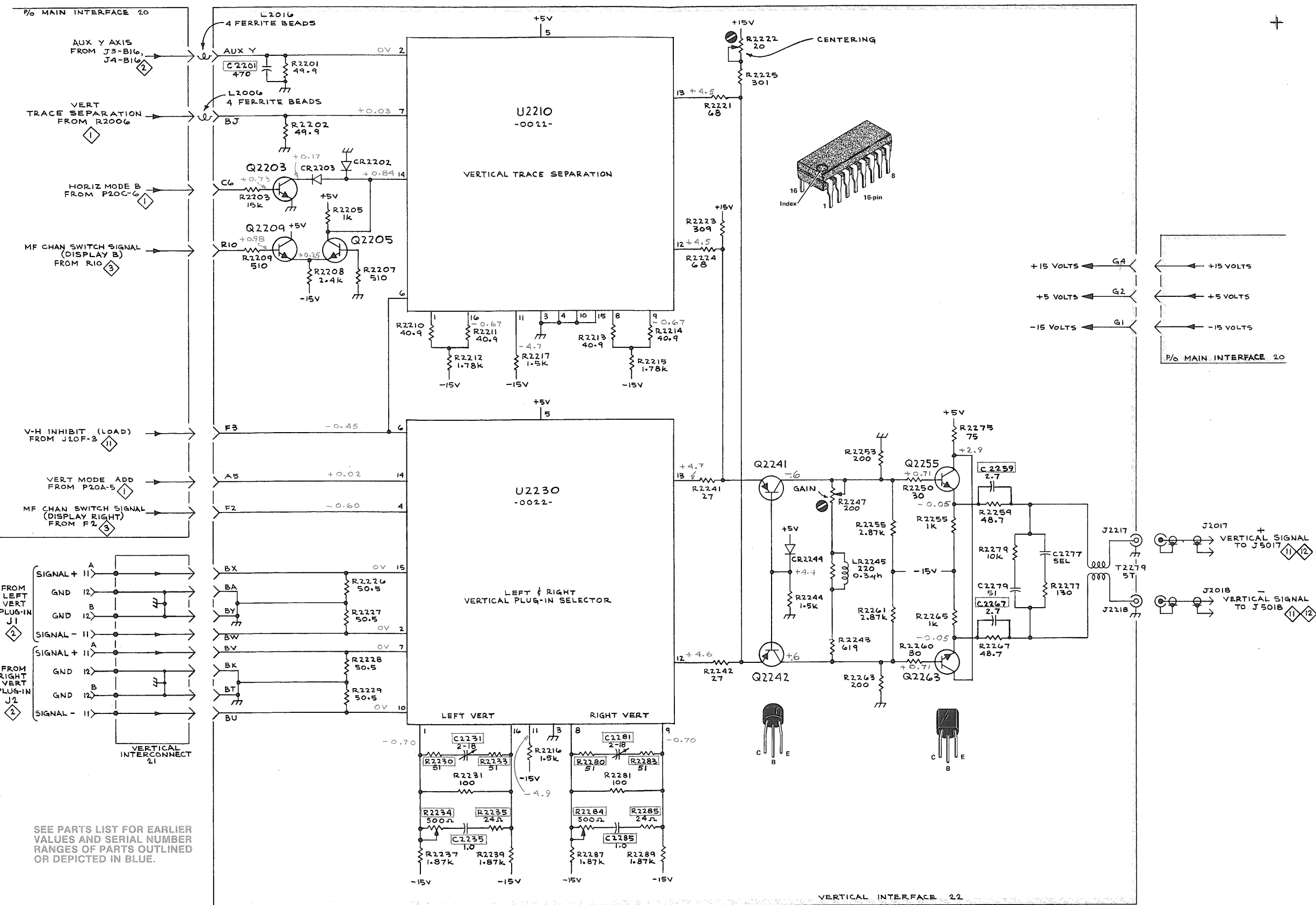
7704A Under Test: No plug-in units installed.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground.





SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN BLUE.

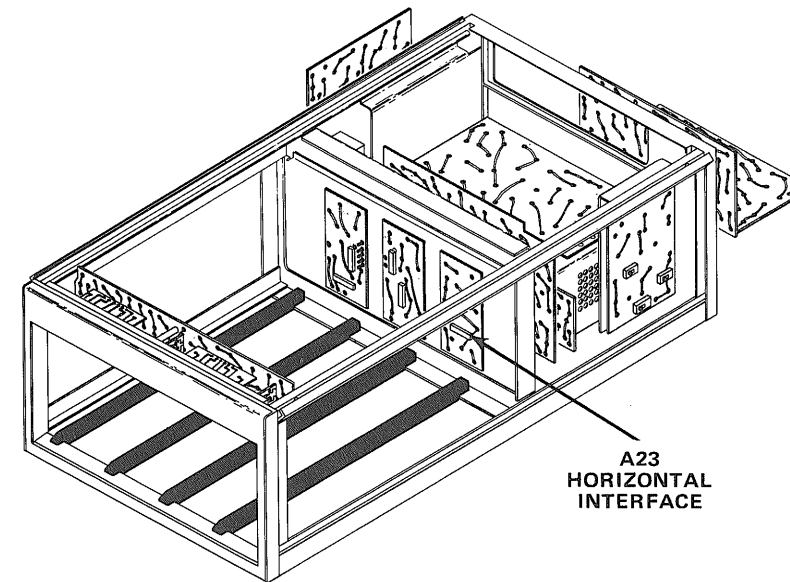
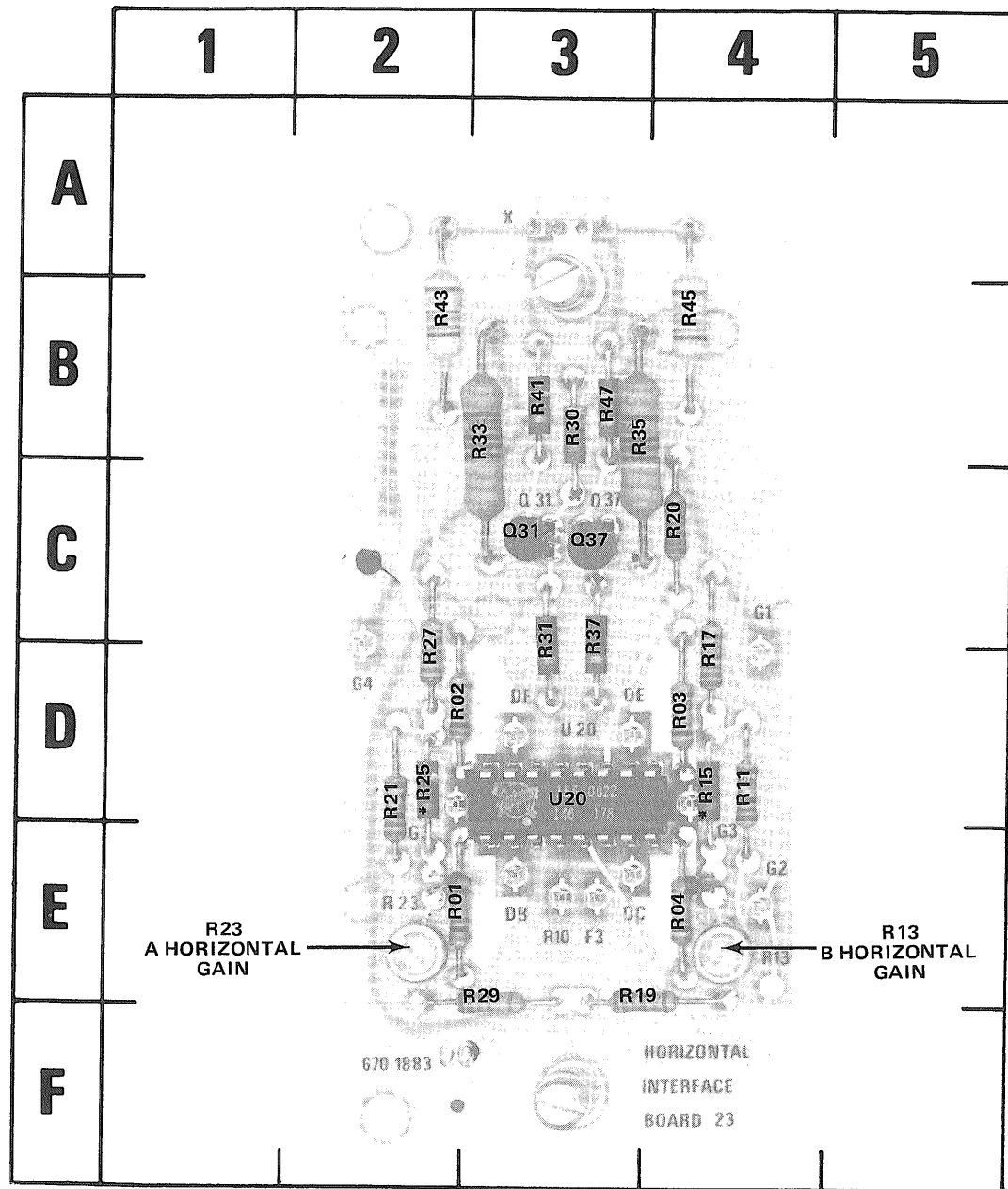


Fig. 6-11. A23 - Horizontal Interface circuit board.

\*See Parts List for serial number ranges.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
Q31	3C	R11	4D	R25	2D	R37	3C
Q37	3C	R13	4E	R27	2C	R41	3B
		R15	4D	R29	3E	R43	2B
R01	2E	R17	4C	R30	3B	R45	4B
R02	2D	R19	3E	R31	3C	R47	3B
R03	4D	R20	4C	R33	3B		
R04	4E	R21	2D	R35	3B	U20	3D
		R23	2E				

## VOLTAGE CONDITIONS

The voltages shown on this diagram were obtained with the test set-up and equipment listed below. These measurements are not absolute and may vary slightly between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 20 volts dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system). b. Fairchild Model 7050.

### Test Set-Up

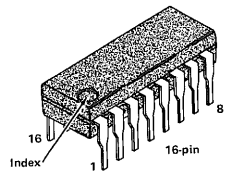
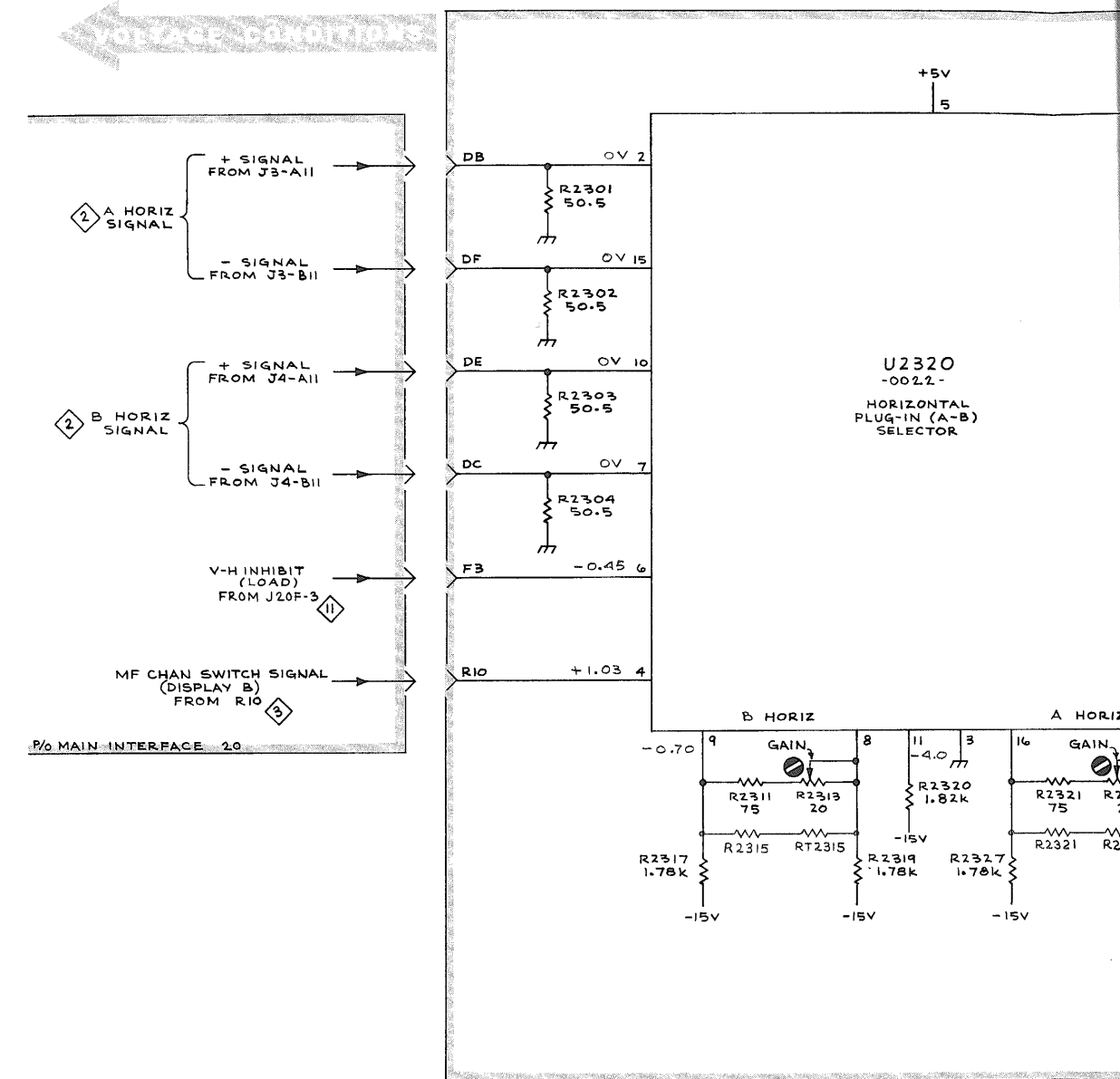
7704A Under Test: No plug-in units installed.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground.

+



7704A (ACQUISITION UNIT)

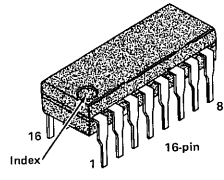
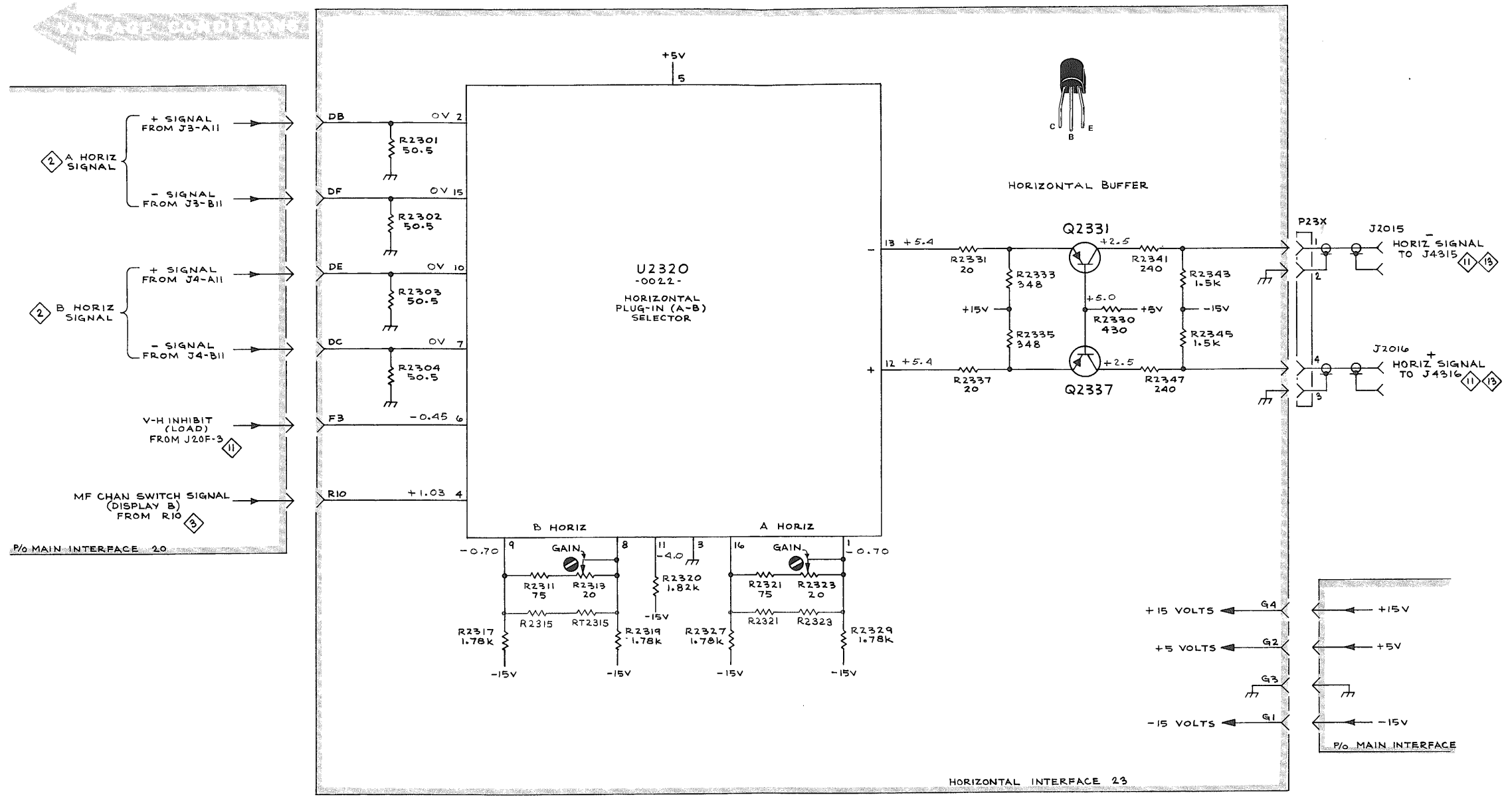
(B)

(A)

+

not absolute

eter (test  
1).



7704A (ACQUISITION UNIT)

Ⓟ

HORIZONTAL INTERFACE 6

REV. MAR 1974

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Ⓐ

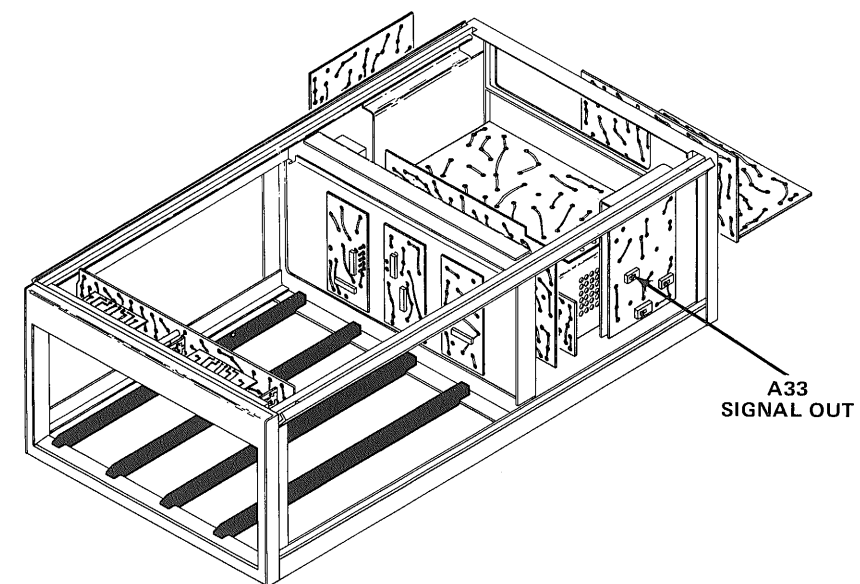
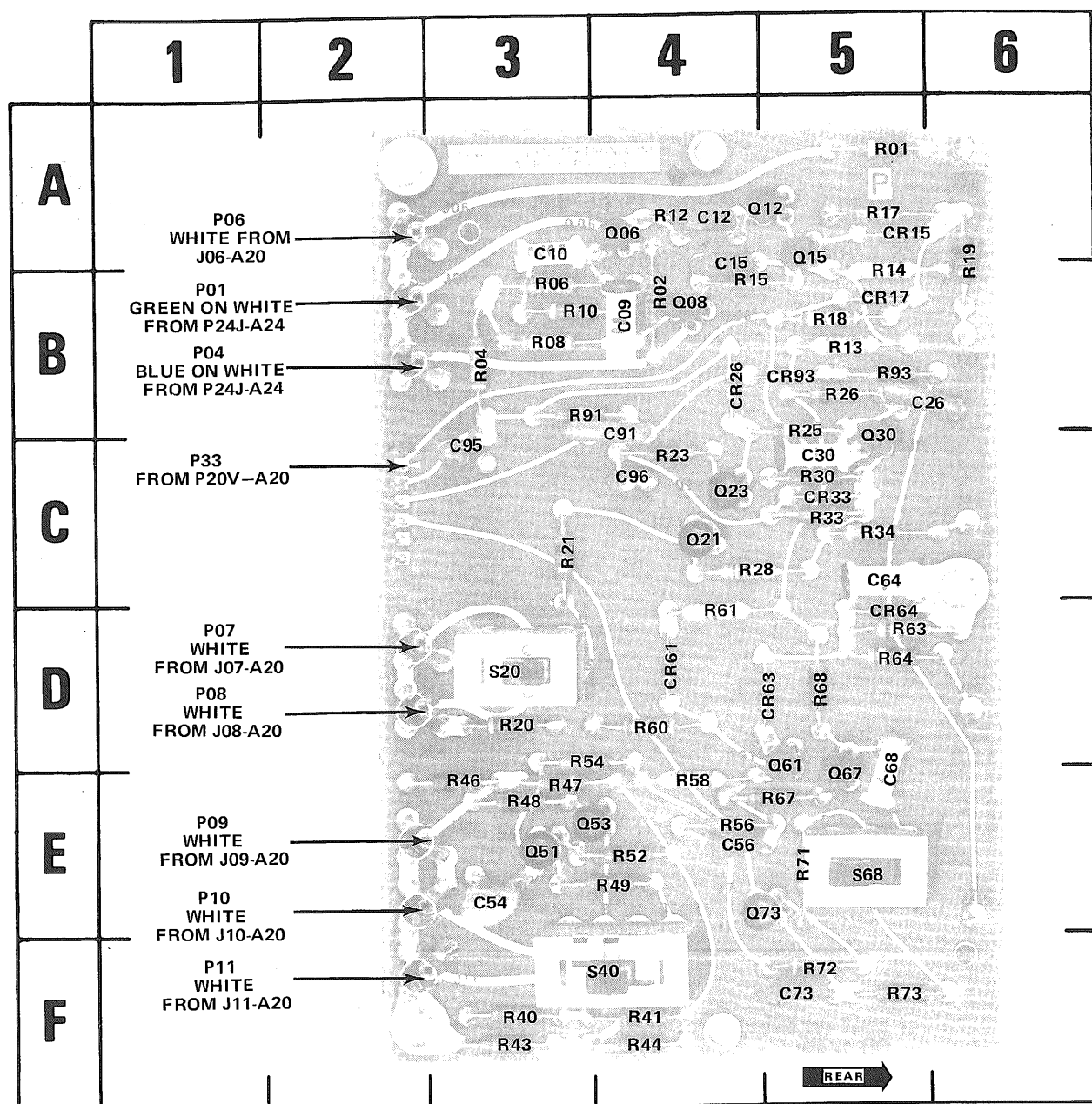


Fig. 6-12. A33 - Signal Out circuit board.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C09	4B	C95	3C	P04	2B	Q15	5A	R03	3B	R21	3C	R46	3E	R67	5E
C10	3A	C96	4C	P06	2A	Q21	4C	R06	3B	R23	4C	R47	3E	R68	5D
C12	4A			P07	2D	Q23	4C	R08	3B	R25	5B	R48	3E	R71	5E
C15	4A	CR15	5A	P08	2D	Q30	5C	R10	3B	R26	5B	R49	4E	R72	5F
C26	5B	CR17	5B	P09	2E	Q51	3E	R12	4A	R28	4C	R52	4E	R73	5F
C30	5C	CR26	4B	P10	2E	Q53	3E	R13	5B	R30	5C	R54	3D	R91	3B
C54	3E	CR33	5C	P11	2F	Q61	5E	R14	5B	R33	5C	R56	4E	R93	5B
C56	4E	CR61	4D	P33	2C	Q67	5E	R15	4B	R34	5C	R58	4E		
C64	5C	CR63	5D			Q73	5E	R17	5A	R40	3F	R60	4D	S20	3D
C68	5E	CR64	5D	Q06	4A			R18	5B	R41	4F	R61	4D	S40	4F
C73	5F	CR93	5B	Q08	4B	R01	5A	R19	5B	R43	3F	R63	5D	S68	5E
C91	4C	P01	2B	Q12	5A	R02	4B	R20	3D	R44	4F	R64	5D		





Measurements are

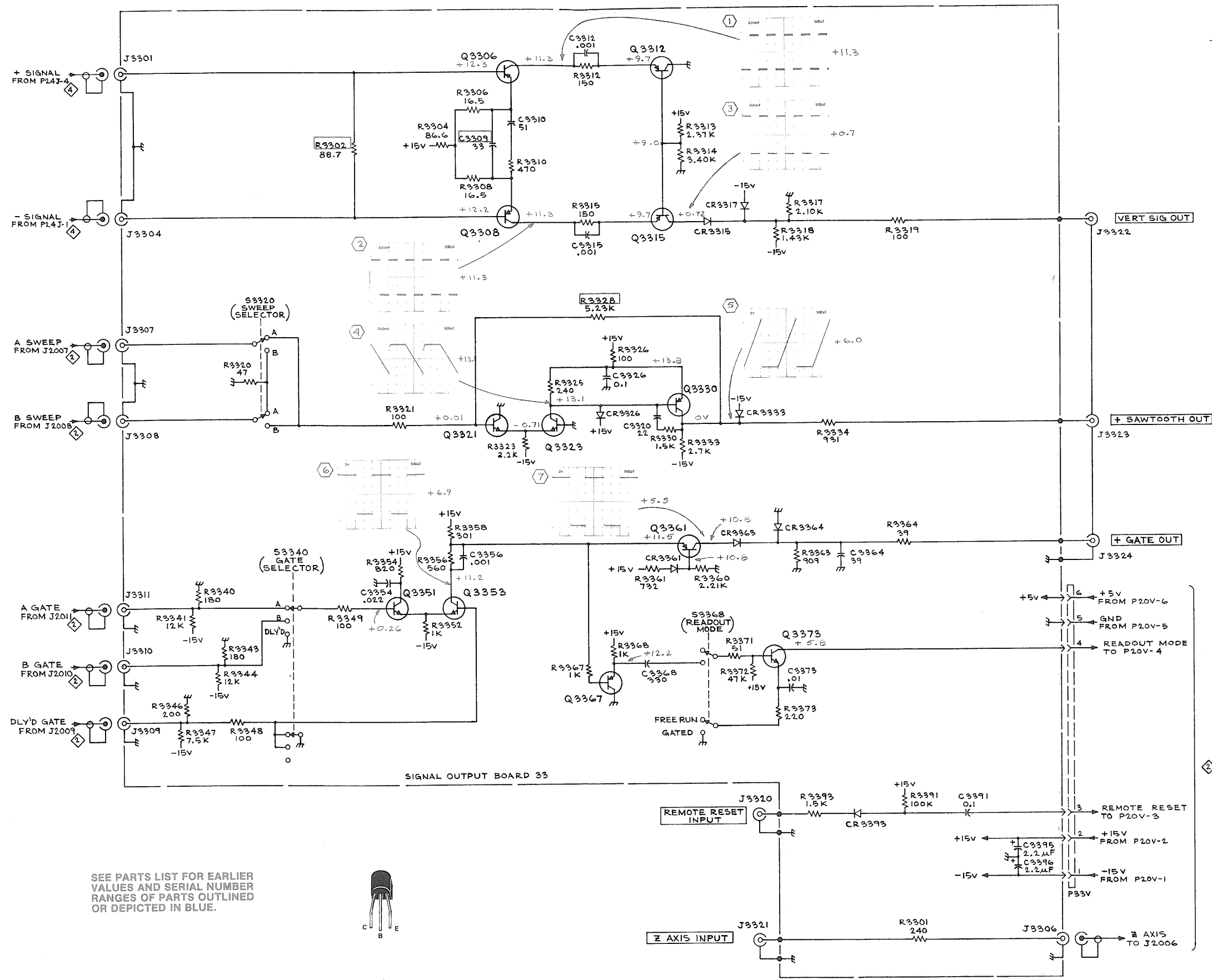
with 7A13  
base, and  
3 Differential  
offset).

Amplifier in

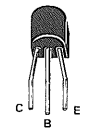
center (test  
stem), or

centered. For  
it is installed

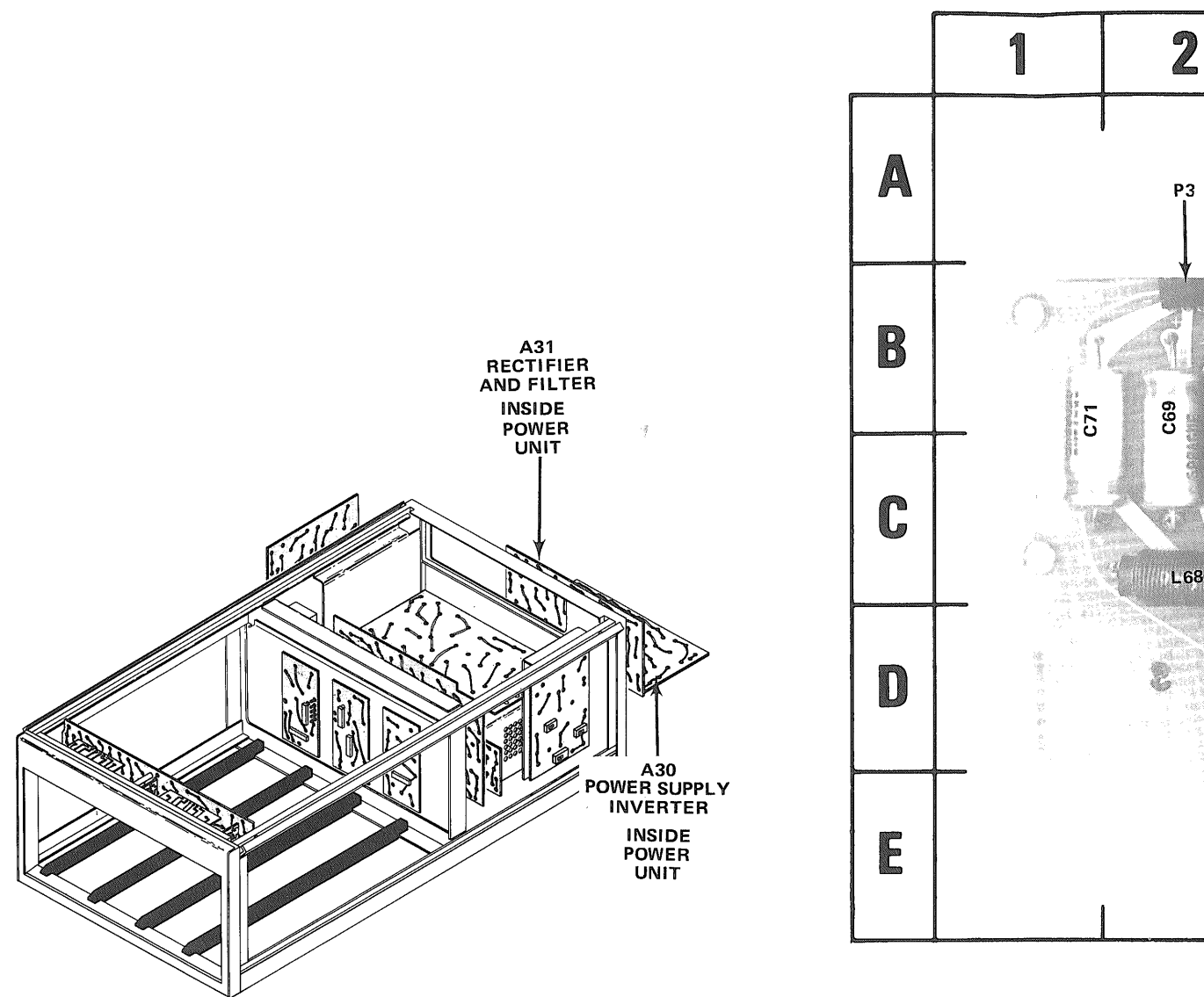
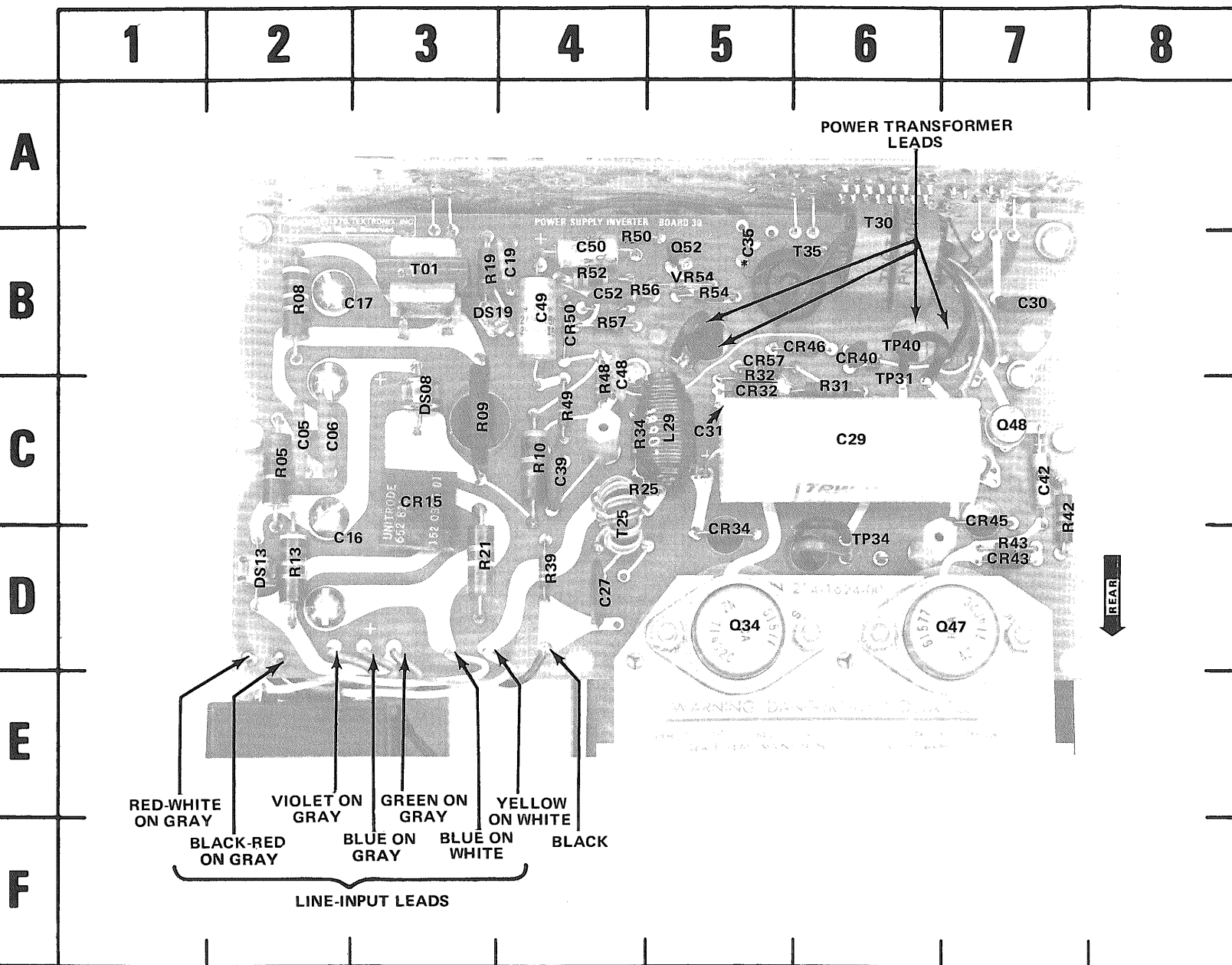
+GATE OUT



SEE PARTS LIST FOR EARLIER  
VALUES AND SERIAL NUMBER  
RANGES OF PARTS OUTLINED  
OR DEPICTED IN BLUE.



REV. C, MAY 1976  
1260-78



\*See Parts List for serial number ranges.

Fig. 6-13. A30 - Power Supply Inverter circuit board.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C05	2C	C42	7C	CR43	6B	Q34	5D	R19	3B	R43	7D	T01	3B	VR54	5B
C06	2C	C48	4B	CR45	7C	Q47	7D	R21	3D	R48	4C	T25	4C		
C16	2D	C49	4B	CR46	6B	Q48	7C	R25	4C	R49	4C	T30	6A		
C17	3B	C50	4B	CR50	4B	Q52	5B	R31	6C	R50	4B	T35	6B		
C19	4B	C52	4B	CR57	5B			R32	5B	R52	4B				
C27	4D			DS08	3C	R05	2C	R34	4C	R54	5B	TP31	6B		
C29	6C	CR15	3C	DS13	2D	R08	2B	R39	4D	R56	4B	TP34	6D		
C30	7B	CR32	5C	DS19	3B	R09	3C	R42	7C	R57	4B	TP40	6B		
C31	5C	CR34	5D			R10	3C								
C35	5B	CR40	6B	L29	5C	R13	2D								
C39	4C														

CKT NO	GRID LOC	CKT NO
C05	8D	C54
C06	6D	C68
C08	6D	C69
C13	7D	C70
C14	6D	C71
C17	6D	C72
C25	6D	C73
C26	6C	C74
C27	4D	C75
C29	4D	C78
C34	6C	C79
C43	6C	C81
C50	6D	C82
C53	5D	

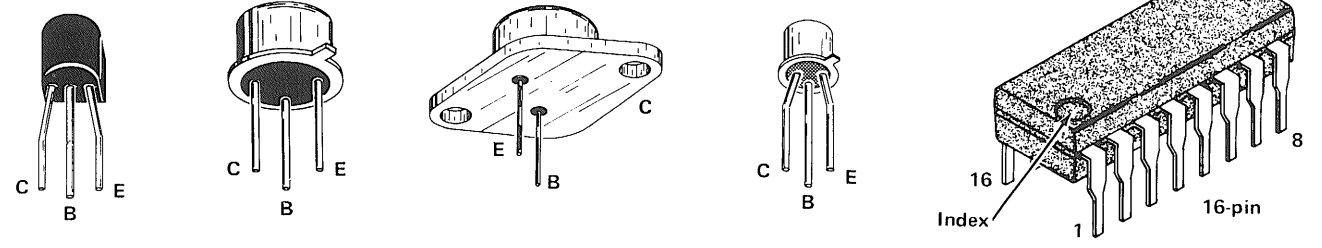


Fig. 6-15. Electrode configuration for semiconductors shown on diagram 8.

REV. MAR 1974

REV. C, NOV. 1974



## VOLTAGE AND WAVEFORM CONDITIONS

The voltages and waveforms shown on this diagram were obtained with the test set-ups and equipment given below. These measurements are not absolute and may vary between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Test oscilloscope	Frequency response, dc to 65 MHz; deflection factor (with 10X probe), 500 mV/division to five or 10 V/division; fastest sweep rate, 500 ns/division.	a. Tektronix 7603 Oscilloscope with 7A15A Amplifier or 7A13 Differential Comparator, 7B50 Time Base, and P6053A Probe, or equivalent.
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohm; range, 0 to 500 volts dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system), or equivalent. b. Fairchild Model 7050.

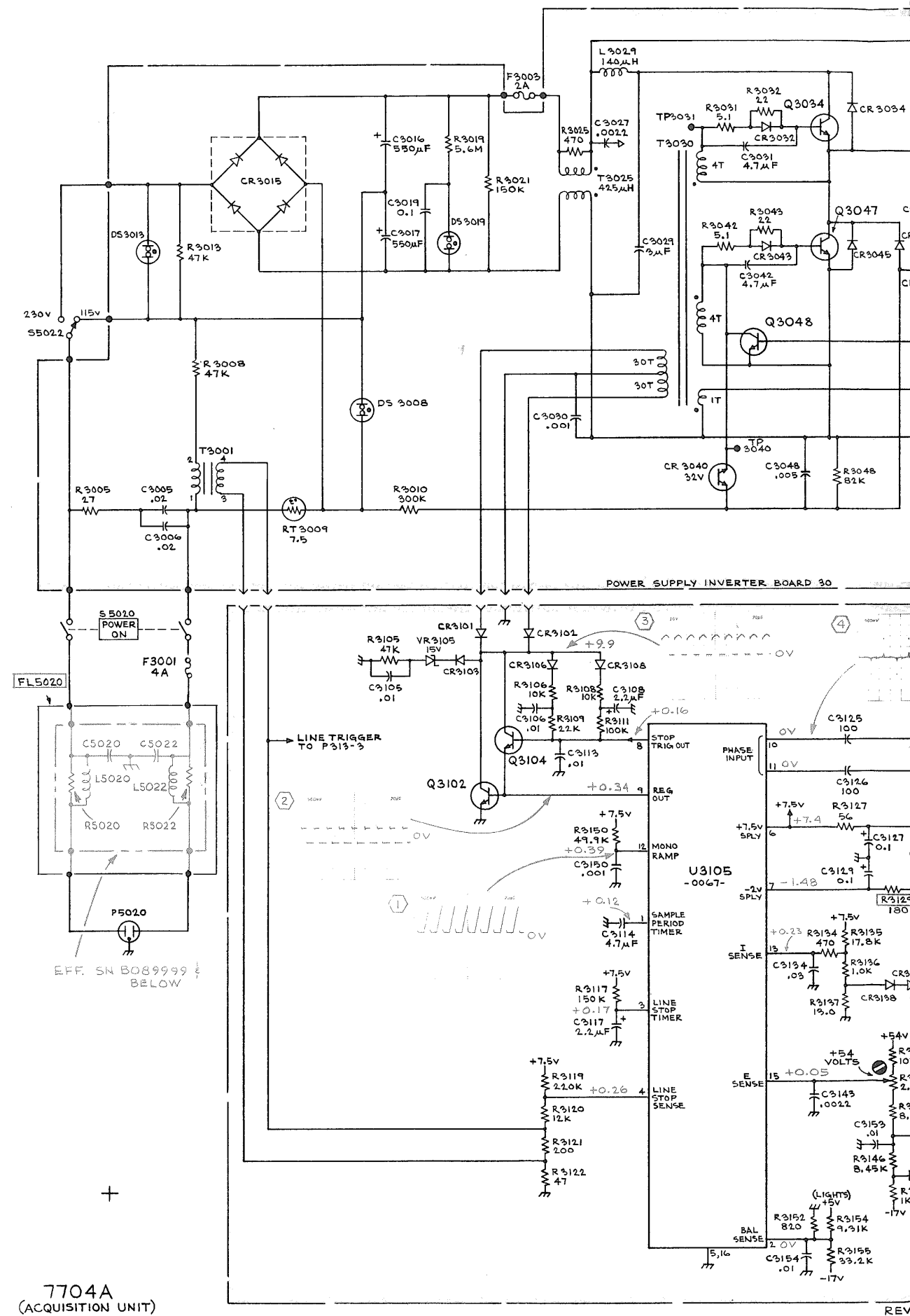
### Test Set-Up

7704A Under Test: Amplifier unit installed in LEFT VERT Compartment; no signal applied. Time-base unit installed in B HORIZ compartment. Time-base unit set for free-running sweep at 0.1-ms/division sweep rate. Line voltage source of 115 volts ac. Line Selector set for 90 to 132.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground except for voltages marked \*; for \*, voltmeter is connected between the two points. Test Oscilloscope is internally triggered.



7704A  
(ACQUISITION UNIT)

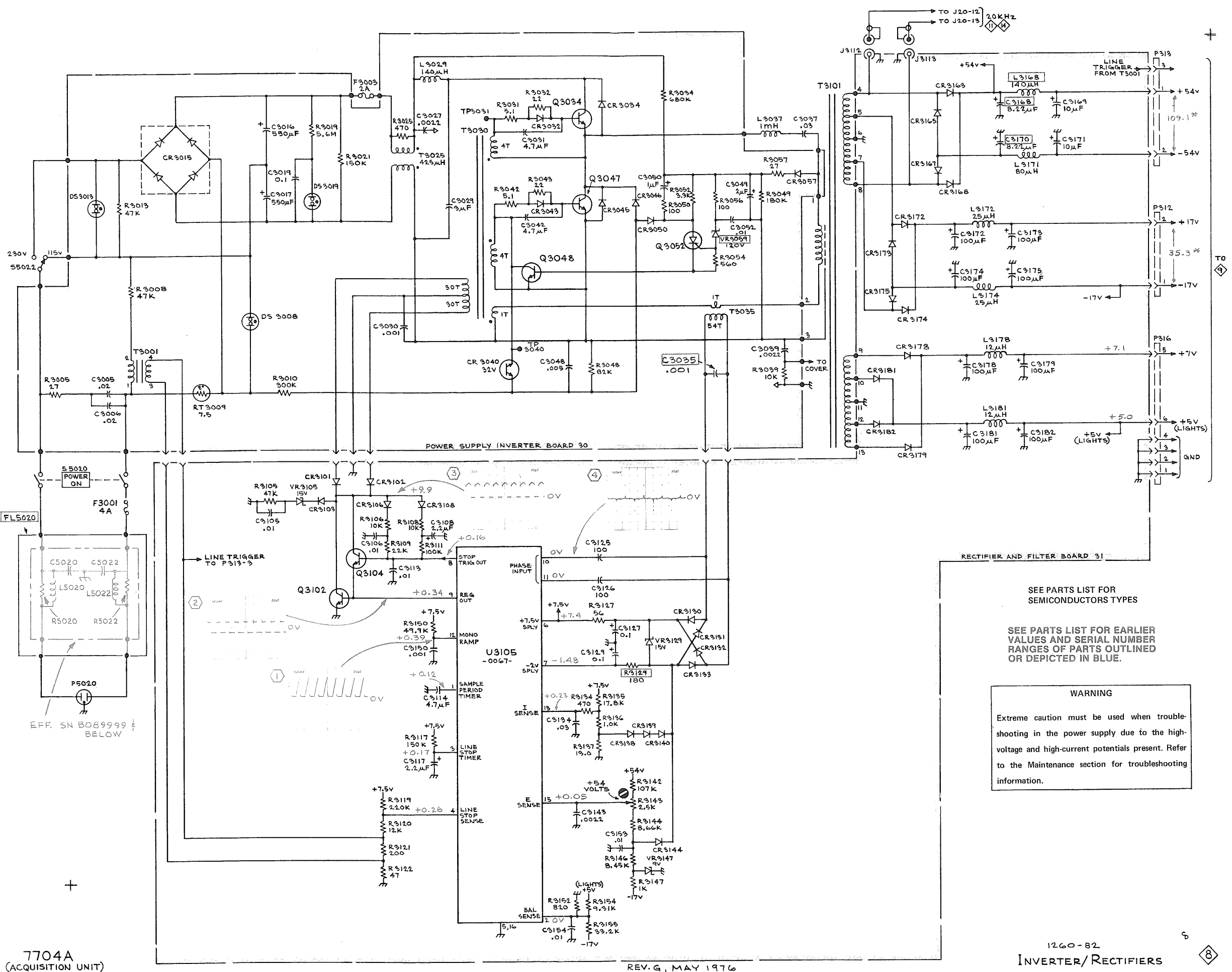
lements are

7A15A  
varator,  
be, or

r (test  
m), or

B HORIZ  
tor set for

connected



7704A  
(ACQUISITION UNIT)

REV. G, MAY 1976

1260-82  
INVERTER/RECTIFIERS

6-17

SEE PARTS LIST FOR SEMICONDUCTORS TYPES

SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN BLUE.

**WARNING**

Extreme caution must be used when troubleshooting in the power supply due to the high-voltage and high-current potentials present. Refer to the Maintenance section for troubleshooting information.

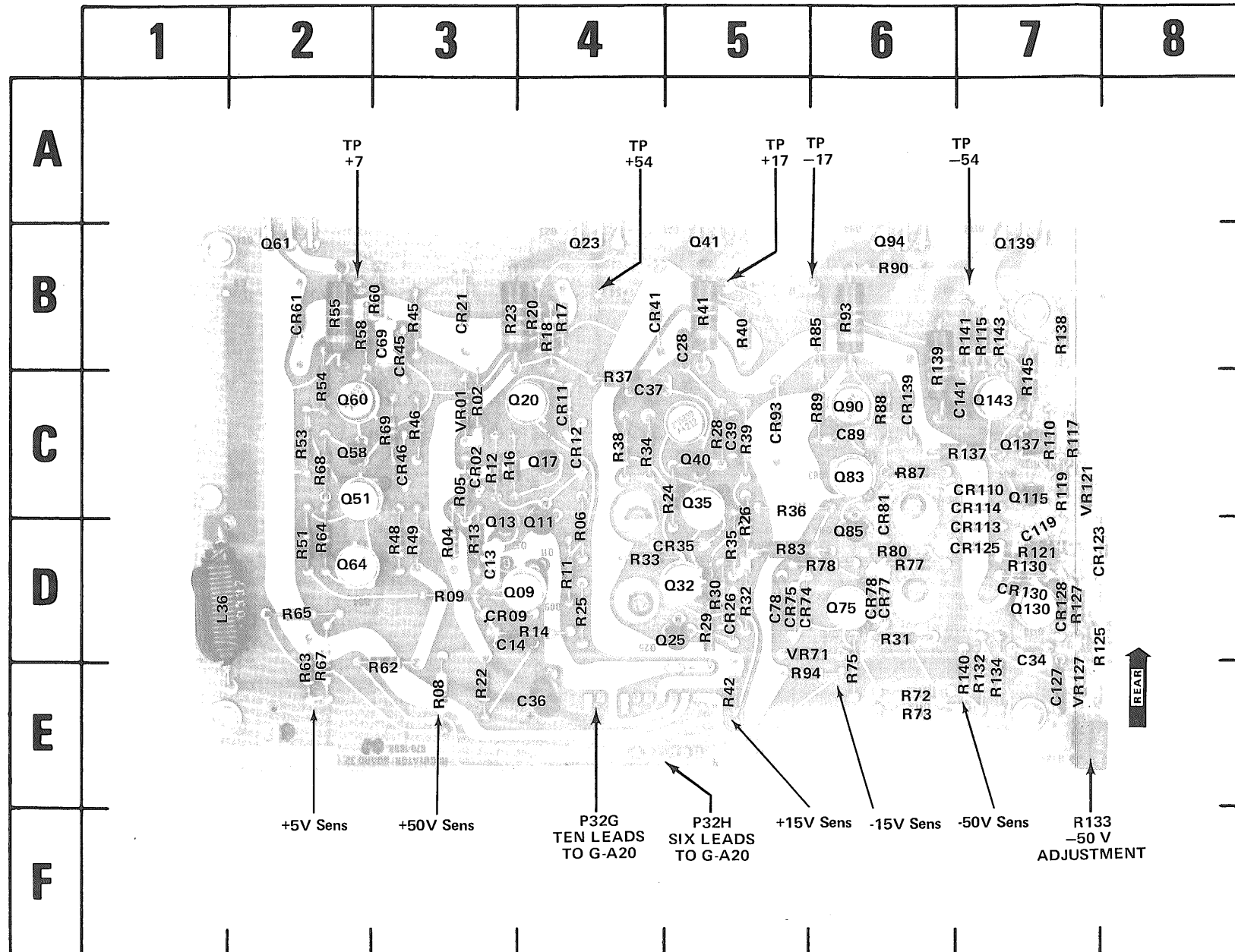
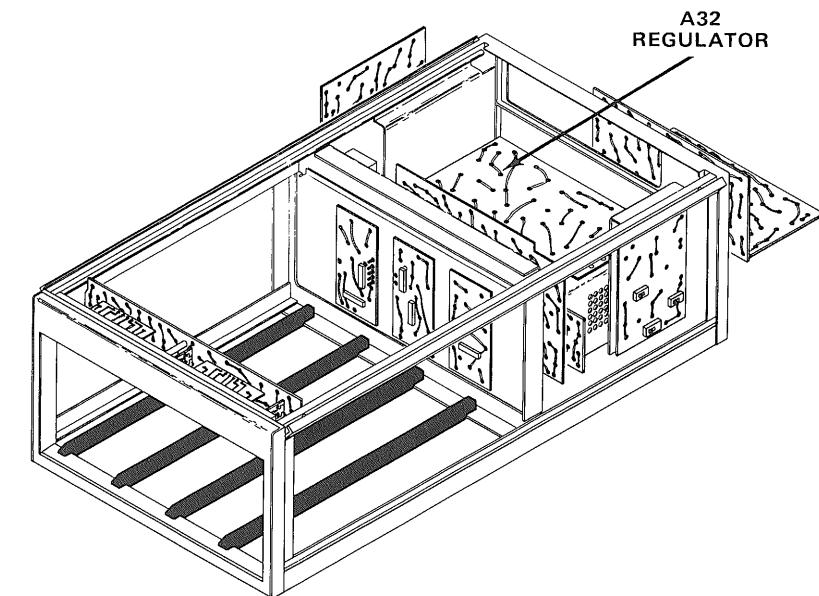
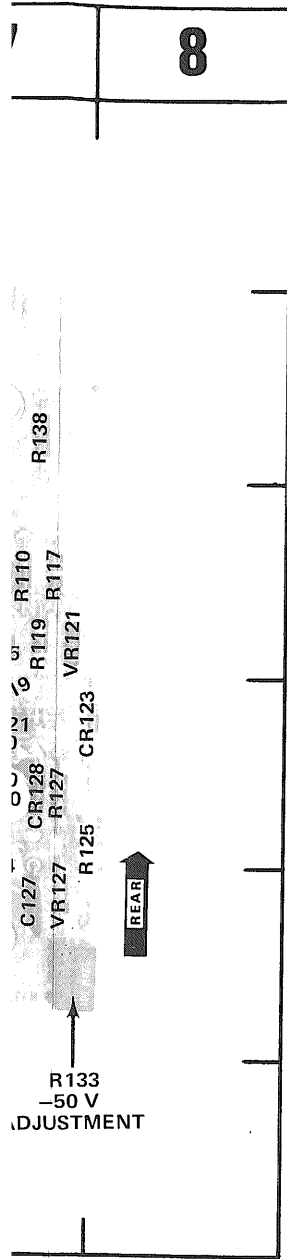


Fig. 6-16. A32-Regulator circuit board.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C13	3D	CR61	2B	Q09	4D	Q94	6B	R20	4B	R45	3B	R77	6D	R133	7E
C14	3D	CR74	5D	Q11	4D	Q115	7C	R22	3E	R46	3C	R78	6D	R134	7E
C28	5B	CR75	5D	Q13	3D	Q130	7D	R23	3B	R48	3D	R80	6D	R137	7C
C34	7D	CR77	6D	Q17	4C	Q137	7C	R24	5C	R49	3D	R83	5D	R138	7B
C36	4E	CR78	6D	Q20	4C	Q139	7B	R25	4D	R51	2D	R85	6B	R139	6C
C37	4C	CR81	6C	Q23	4B	Q143	7C	R26	5D	R53	2C	R87	6C	R140	7E
C39	5C	CR93	5C	Q25	5D			R28	5C	R54	2C	R88	6C	R141	7B
C69	3B	CR110	7C	Q32	5D	R02	3C	R29	5D	R55	2B	R89	6C	R143	7B
C78	5D	CR113	7D	Q35	5C	R04	3D	R30	5D	R58	2B	R90	6B	R145	7C
C89	6D	CR114	7C	Q40	5C	R05	3C	R31	6D	R60	3B	R93	6B		
C119	7D	CR123	7D	Q41	5B	R06	4D	R32	6D	R62	3E	R94	5E	TP +7	2B
C127	7D	CR125	7D	Q51	2C	R08	3E	R34	4C	R63	2E	R110	7C	TP +17	5B
C141	7C	CR128	7D	Q58	7C	R09	3D	R35	5D	R64	2D	R115	7B	TP -17	6B
		CR130	7D	Q60	2C	R11	4D	R36	5C	R65	2D	R117	7C	TP +54	4B
		CR139	6C	Q61	2B	R12	3C	R37	4C	R67	2E	R119	7C	TP -54	7B
CR02	3C			Q64	2D	R13	3D	R38	4C	R68	2C	R121	7D		
CR09	3D	L36	1D	Q75	6D	R14	4D	R39	5C	R69	3C	R125	7D	VR01	3C
CR11	4C			Q83	6C	R16	3C	R40	5B	R72	6E	R127	7D	VR71	5D
CR12	4C			Q85	6D	R17	4B	R41	5B	R73	6E	R130	7D	VR121	7C
CR21	3B	P32G	4E	Q90	6C	R18	4B	R42	5E	R75	6E	R132	7E	VR127	7E
CR26	5D	P32H	5E												
CR35	5D														
CR41	4B														
CR45	3B														
CR46	3C														





CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C13	3D	CR61	2B	Q09	4D	Q94	6B	R20	4B	R45	3B	R77	6D	R133	7E
C14	3D	CR74	5D	Q11	4D	Q115	7C	R22	3E	R46	3C	R78	6D	R134	7E
C28	5B	CR75	5D	Q13	3D	Q130	7D	R23	3B	R48	3D	R80	6D	R137	7C
C34	7D	CR77	6D	Q17	4C	Q137	7C	R24	5C	R49	3D	R83	5D	R138	7B
C36	4E	CR78	6D	Q20	4C	Q139	7B	R25	4D	R51	2D	R85	6B	R139	6C
C37	4C	CR81	6C	Q23	4B	Q143	7C	R26	5D	R53	2C	R87	6C	R140	7E
C39	5C	CR93	5C	Q25	5D			R28	5C	R54	2C	R88	6C	R141	7B
C69	3B	CR110	7C	Q32	5D	R02	3C	R29	5D	R55	2B	R89	6C	R143	7B
C78	5D	CR113	7D	Q35	5C	R04	3D	R30	5D	R58	2B	R90	6B	R145	7C
C89	6D	CR114	7C	Q40	5C	R05	3C	R31	6D	R60	3B	R93	6B		
C119	7D	CR123	7D	Q41	5B	R06	4D	R32	6D	R62	3E	R94	5E	TP +7	2B
C127	7D	CR125	7D	Q51	2C	R08	3E	R34	4C	R63	2E	R110	7C	TP +17	5B
C141	7C	CR128	7D	Q58	7C	R09	3D	R35	5D	R64	2D	R115	7B	TP -17	6B
		CR130	7D	Q60	2C	R11	4D	R36	5C	R65	2D	R117	7C	TP +54	4B
CR02	3C	CR139	6C	Q61	2B	R12	3C	R37	4C	R67	2E	R119	7C	TP -54	7B
CR09	3D			Q64	2D	R13	3D	R38	4C	R68	2C	R121	7D		
CR11	4C	L36	1D	Q75	6D	R14	4D	R39	5C	R69	3C	R125	7D	VR01	3C
CR12	4C			Q83	6C	R16	3C	R40	5B	R72	6E	R127	7D	VR71	5D
CR21	3B	P32G	4E	Q85	6D	R17	4B	R41	5B	R73	6E	R130	7D	VR121	7C
CR26	5D	P32H	5E	Q90	6C	R18	4B	R42	5E	R75	6E	R132	7E	VR127	7E
CR35	5D														
CR41	4B														
CR45	3B														
CR46	3C														

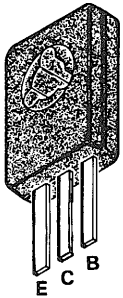
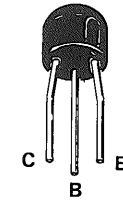
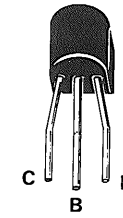
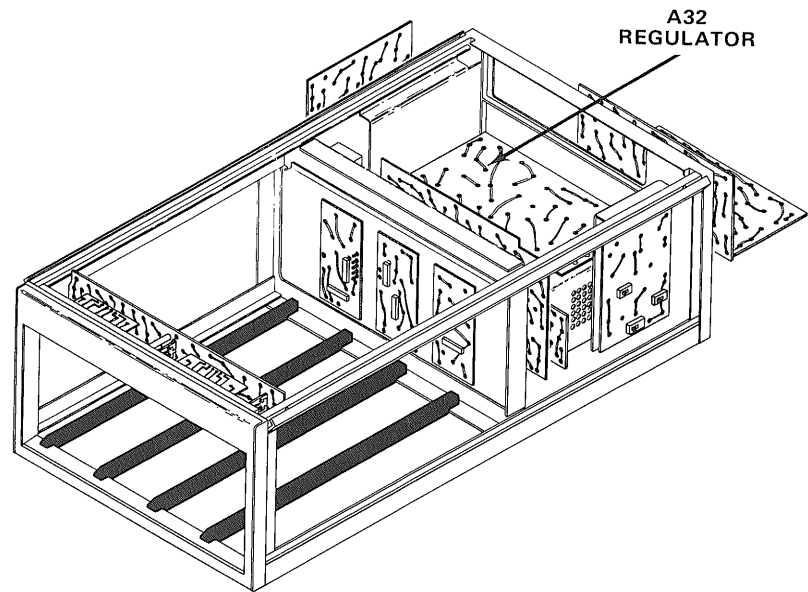


Fig. 6-17. Electrode configuration for semiconductors shown on diagram 9.





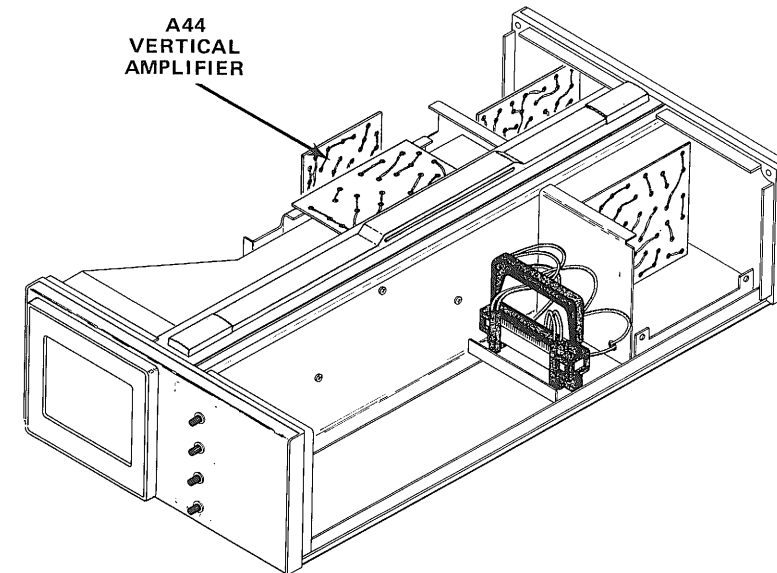
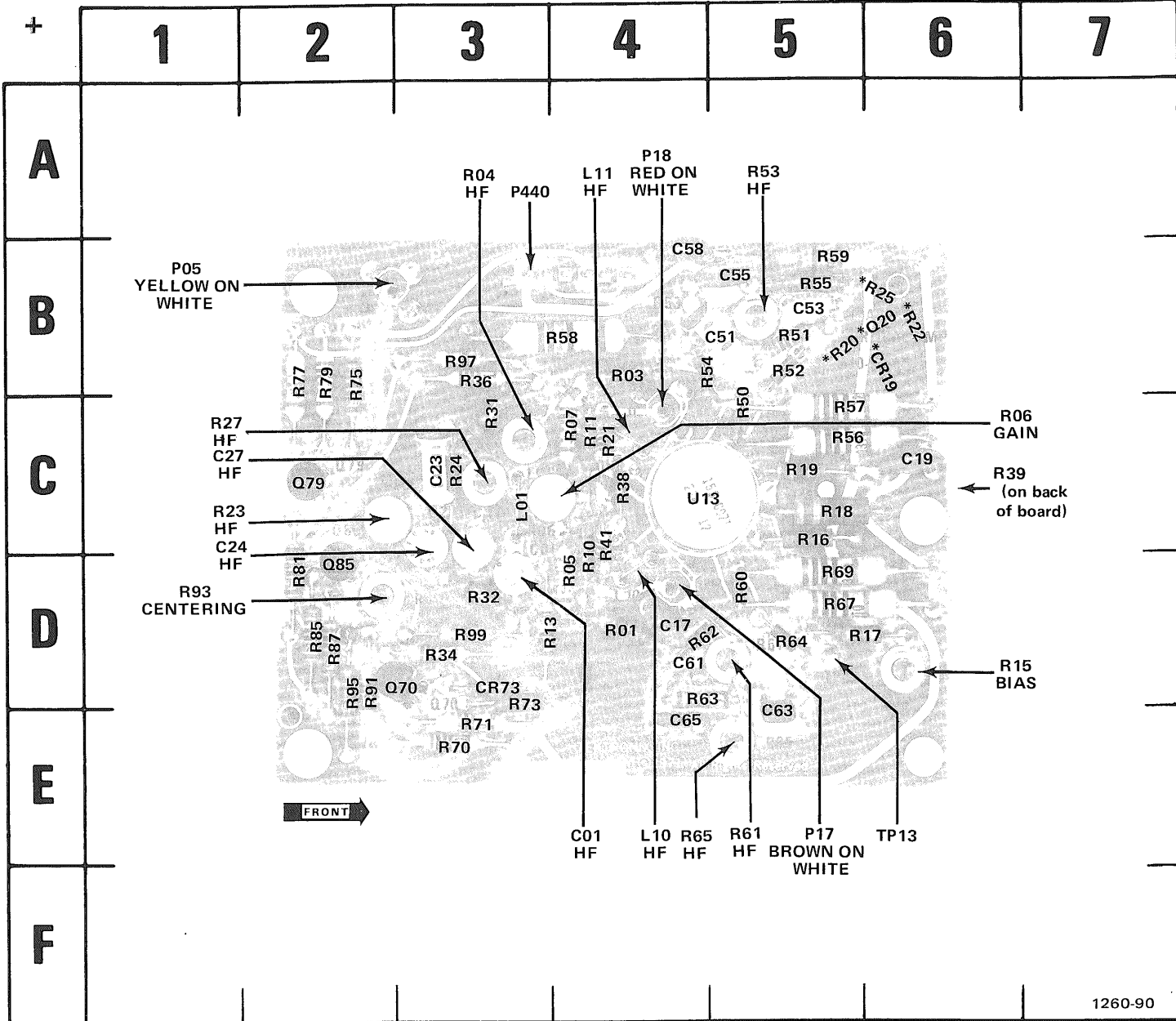












\*See Parts List for serial number ranges.

Fig. 6-20. A44 - Vertical Amplifier circuit board.

REV. C, JUNE 1975

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C01	3D	C63	5E	P18	4C	R06	4C	R23	2C	R52	5B	R63	4D	R81	2D
C17	4D	C65	4E	P44D	3B	R07	4C	R24	3C	R53	5B	R64	5D	R85	2D
C19	6C					R10	4C	R27	3C	R54	4B	R65	5E	R87	2D
C23	3C	CR73	3D	Q70	3D	R11	4C	R31	3D	R55	5B	R67	5D	R91	2D
C24	3C			Q79	2C	R13	3D	R32	3D	R56	5C	R69	5D	R93	2D
C27	3C	L01	3C	Q85	2D	R15	6D	R34	3D	R57	5C	R70	3E	R95	2D
C51	5B	L10	4D			R16	5C	R36	3B	R58	4B	R71	3E	R97	3B
C53	5B	L11	4C	R01	4D	R17	6D	R38	4C	R59	5B	R73	3D	R99	3D
C55	5B			R03	4B	R18	5C	R41	4C	R60	5D	R75	2B		
C58	4B	P05	2B	R04	3C	R19	5C	R50	5C	R61	5D	R77	2B	TP13	5D
C61	4D	P17	4D	R05	4D	R21	4C	R51	5B	R62	4D	R79	2B	U13	4C

## VOLTAGE AND WAVEFORM CONDITIONS

The voltages and waveforms shown on this diagram were obtained with the test set-ups and equipment given below. These measurements are not absolute and may vary between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Test oscilloscope	Frequency response, dc to 65 MHz and selectable reduced bandwidth to five or 10 MHz; deflection factor (with 10X probe), 20 mV to two V/division; sweep rate, 500 $\mu$ s/division.	a. Tektronix 7603 Oscilloscope with 7A13 Differential Comparator, 7B50 Time Base, and P6053A Probe, or equivalent. (7A13 Differential Comparator used to obtain dc offset). b. Use item (a) above with 7A15A Amplifier in place of 7A13.
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 100 V dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system), or equivalent. b. Fairchild Model 7050.

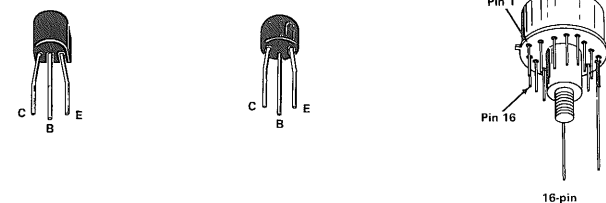
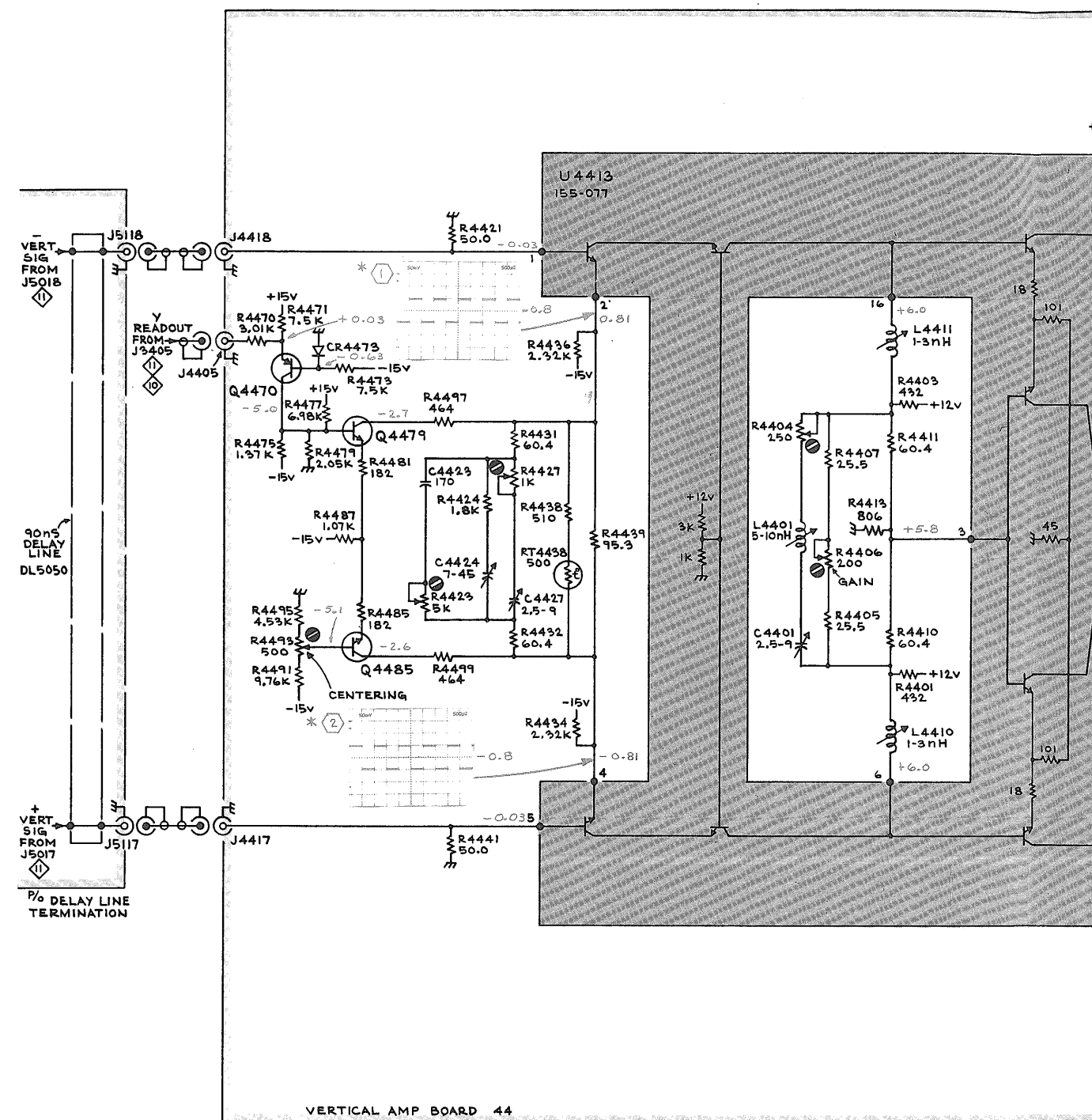
### Test Set-Up

7704A Under Test: Amplifier unit installed in LEFT VERT compartment. No signal applied for voltage measurements; trace is centered. For waveforms, the 7704A Calibrator signal is applied to the amplifier unit to obtain a centered, four-division display. A time-base unit is installed in the B HORIZ compartment. The time-base is set for auto triggering at a 0.1-ms/division sweep rate.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground. Test oscilloscope is externally triggered from 7704A +GATE OUT connector. \* by waveform indicates that test oscilloscope was set for reduced bandwidth.



7704A (DISPLAY UNIT)

REV. D, SEP 1960-9

Measurements are

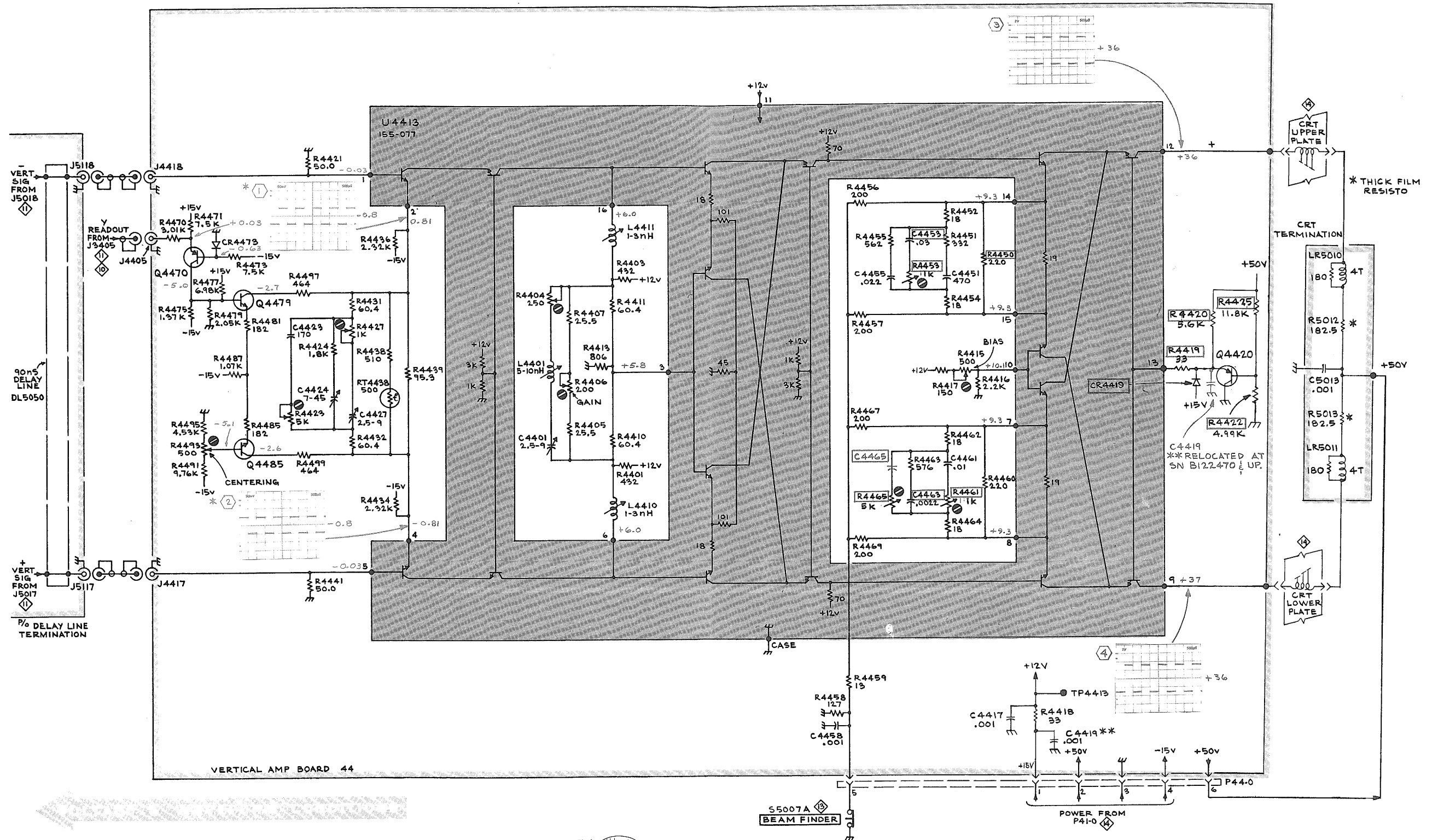
with 7A13 Base, and 3 Differential Offset).

Amplifier in

Center (test stem), or

Centered. For it is installed

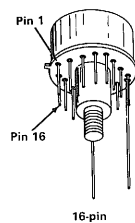
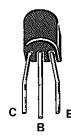
+GATE OUT



7704A (DISPLAY UNIT)

REV. D, SEP 1977  
1260-91

VERTICAL AMPLIFIER  
6-25



SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN BLUE.

5

12



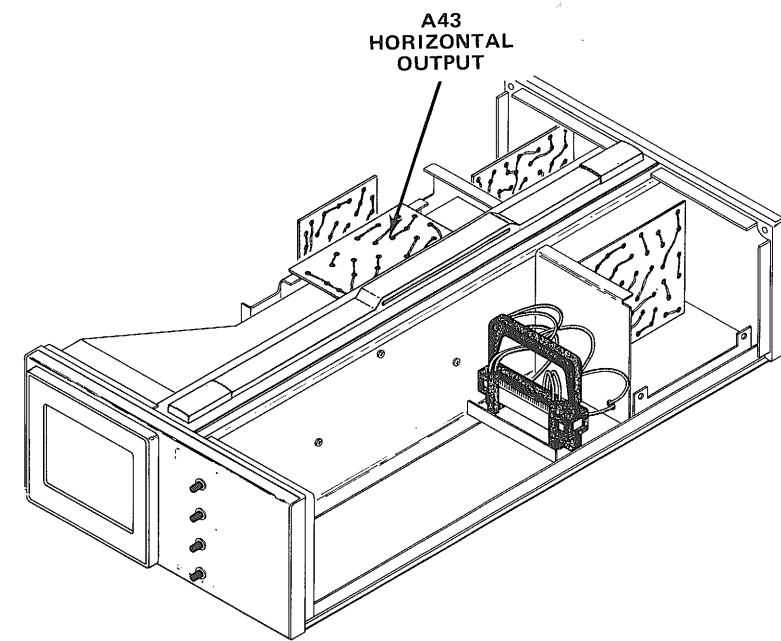
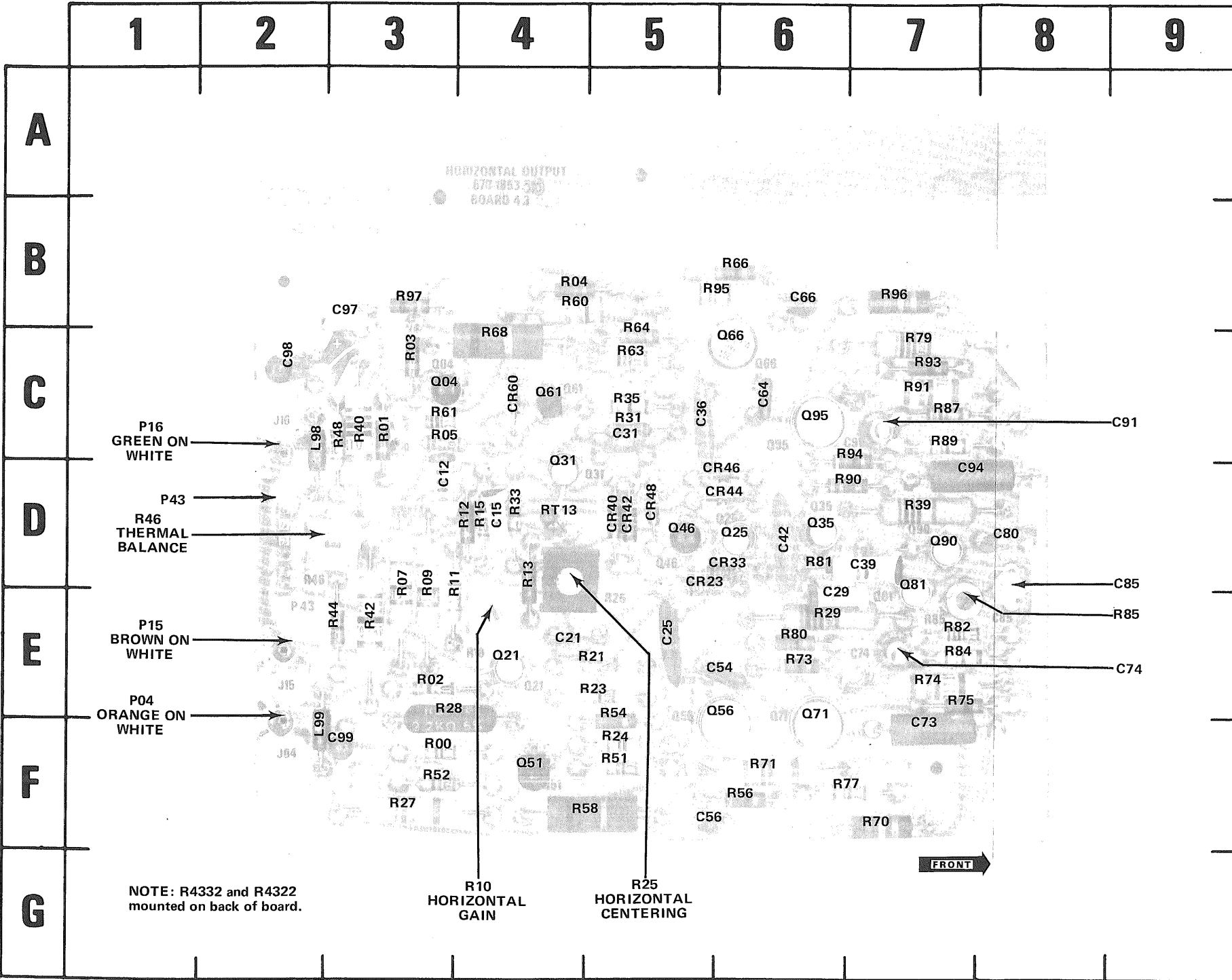


Fig. 6-21. A43-Horizontal Output circuit board.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C12	3D	C91	7C	P04	2E	R66	6C	R10	4E	R35	5C	R63	5C	R84	7E
C15	4D	C94	7D	P15	2E	Q71	6E	R11	3D	R39	7D	R64	5C	R85	7E
C21	4E	C97	3B	P16	2C	Q81	7D	R12	4D	R40	3C	R66	6B	R87	7C
C25	5E	C99	3F	P43	2D	Q90	7D	R13	4D	R42	3E	R68	4C	R89	7C
C31	5C					Q95	6C	R14	4D	R44	3E	R70	7F	R90	7D
C36	5C	CR23	5D	Q04	3C			R21	5E	R46	2D	R71	6F	R91	7C
C39	7D	CR33	6D	Q21	4E	R00	3F	R23	5E	R48	3C	R73	6E	R93	7C
C42	6D	CR40	5D	Q25	6D	R01	3C	R24	5F	R51	5F	R74	7E	R94	7C
C54	6E	CR42	5D	Q31	4C	R02	3E	R25	4D	R52	3F	R75	7E	R95	5B
C56	5F	CR44	6D	Q35	6D	R03	3C	R27	3F	R54	5E	R77	6F	R96	7B
C64	5F	CR46	6D	Q46	5D	R04	4B	R28	3E	R56	6F	R79	7C	R97	3B
C66	6B	CR48	5D	Q51	4F	R05	3C	R29	6E	R58	5F	R80	6E		
C73	7E	CR60	4C	Q56	6E	R07	3D	R31	5C	R60	4B	R81	6D	RT13	4D
C74	7E			Q61	4C	R09	3D	R33	4D	R61	3C	R82	7E		
C80	8D	L98	2C												
C85	8D	L99	2F												

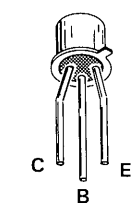
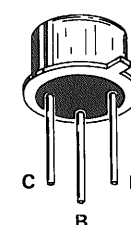
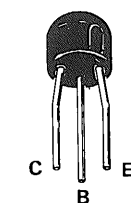
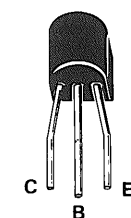
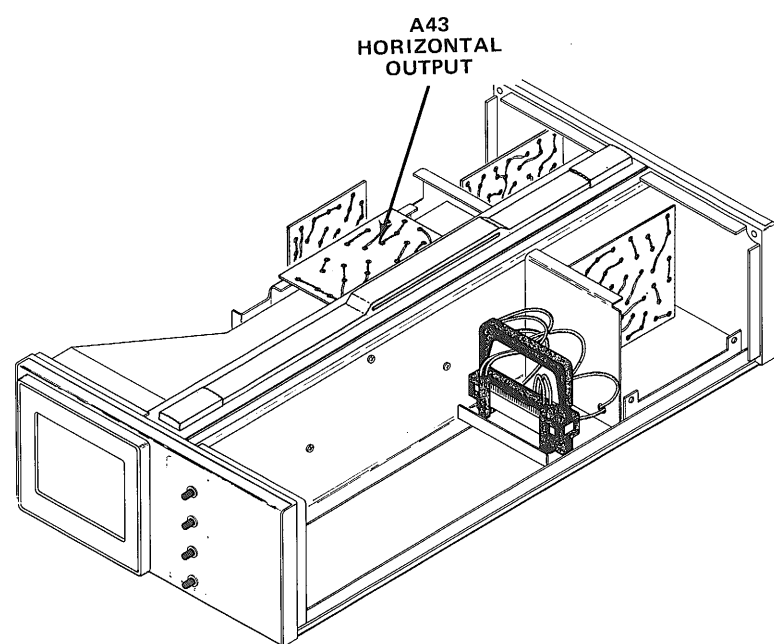
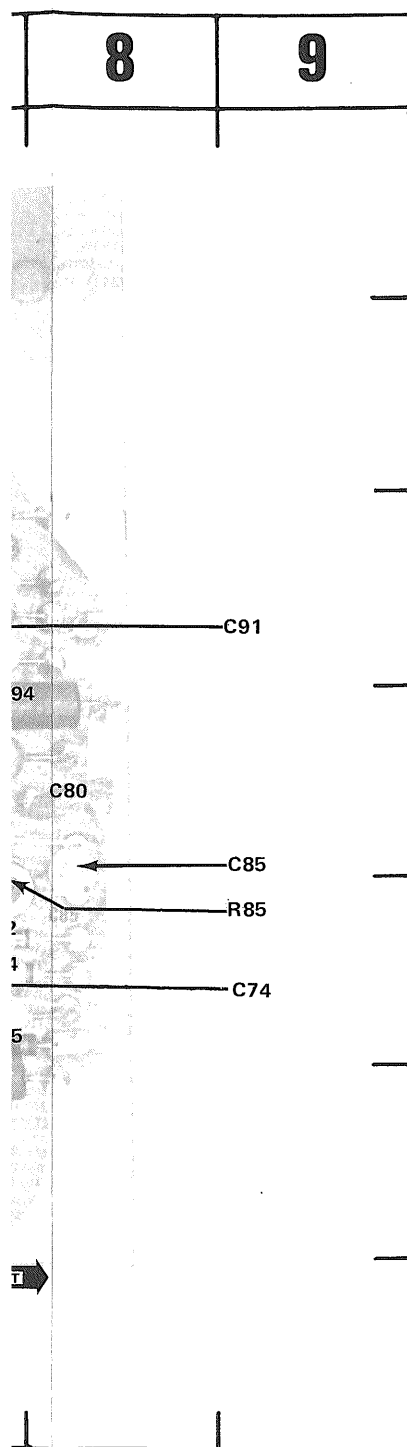


Fig. 6-22. Electrode configuration for semiconductors shown on diagram 13.

## VOLTAGE AND WAVEFORM CONDITIONS

The voltages and waveforms shown on this diagram were obtained with the test set-ups and equipment given below. These measurements are not absolute and may vary between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Test oscilloscope	Frequency response, dc to 65 MHz; deflection factor (with 10X probe), 100 mV to 10 V/division; sweep rate, 500 $\mu$ s/division.	a. Tektronix 7603 Oscilloscope with 7A13 Differential Comparator, 7B50 Time Base, and P6053A Probe, or equivalent. (7A13 Differential Comparator used to obtain dc offset).  b. Use item (a) above with 7A15A Amplifier in place of 7A13.
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 200 V dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system), or equivalent.  b. Fairchild Model 7050.

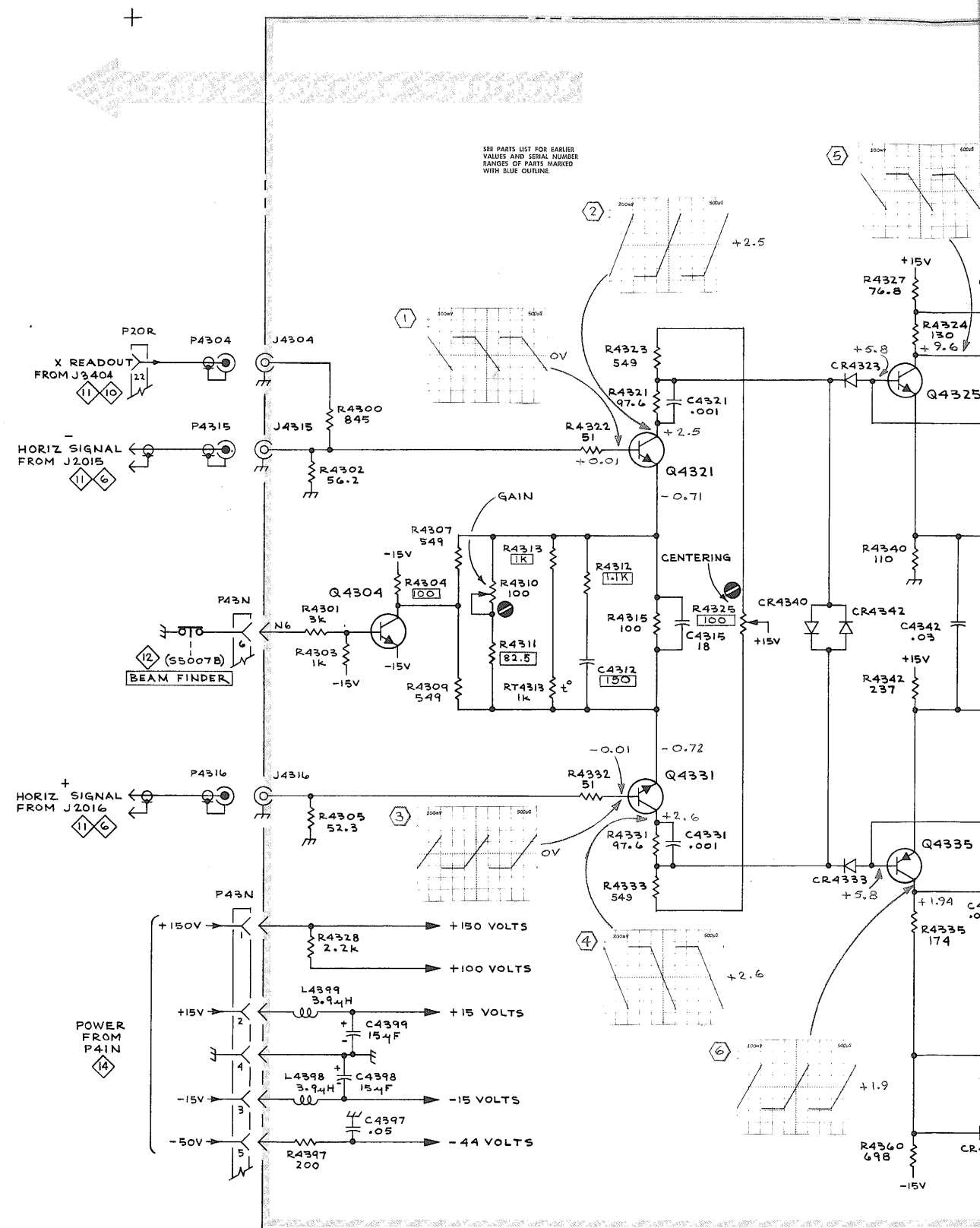
### Test Set-Up

7704A Under Test: Amplifier unit installed in LEFT VERT compartment. No signal applied for voltage measurements. For waveforms, the 7704A Calibrator signal is applied to the amplifier unit to obtain a four-division display. A time-base unit is installed in the B HORIZ compartment. The time-base is set for auto triggering at a 0.1-ms/division sweep rate.

#### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground. Test oscilloscope is externally triggered from 7704A +GATE OUT connector.



7704A (DISPLAY UNIT)

REV. D, NOV. 1974

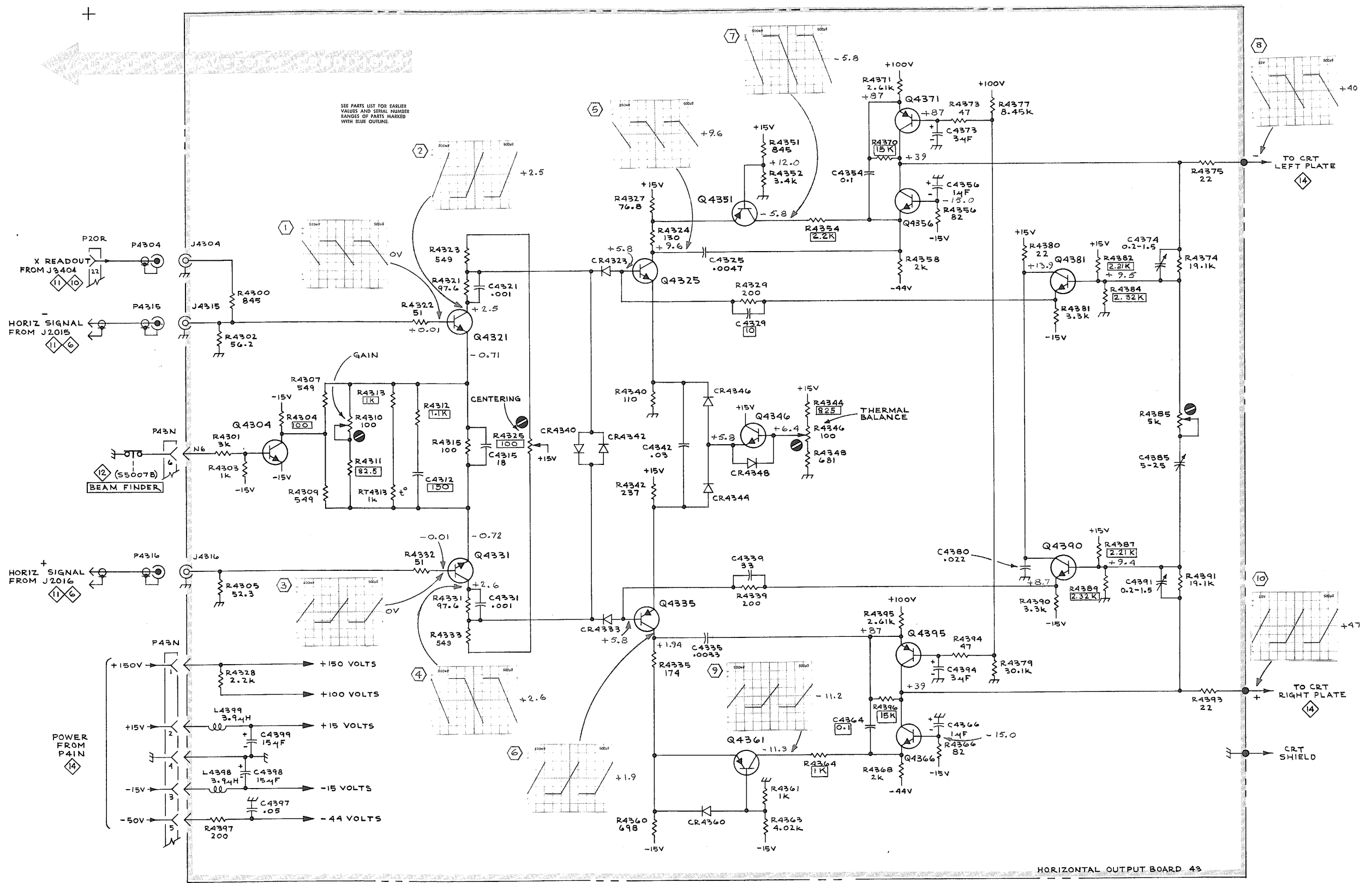
Requirements are

h 7A13 base, and 3 Differential Amplifier in

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reforms, the e B HORIZ

GATE OUT

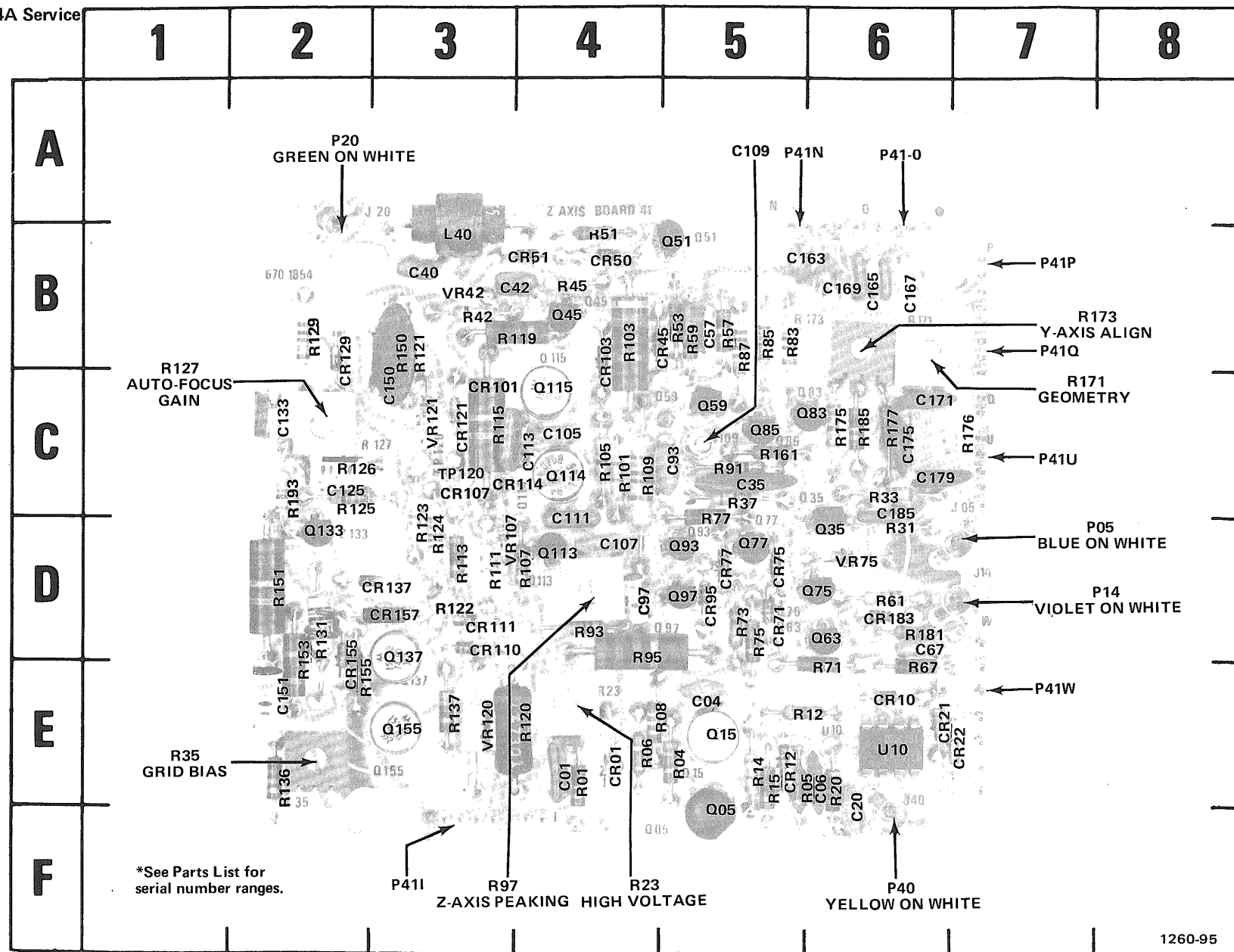


7704A (DISPLAY UNIT)

REV. D, NOV. 1974

HORIZONTAL AMPLIFIER 13 DEH

(A)



Added to back of board.

\*R63  
\*R154

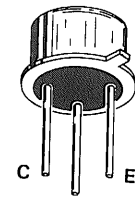
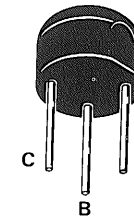
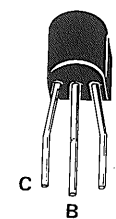
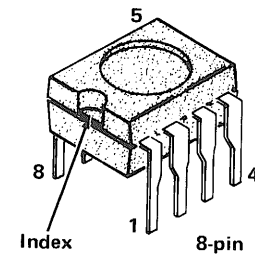
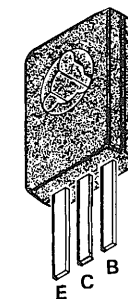
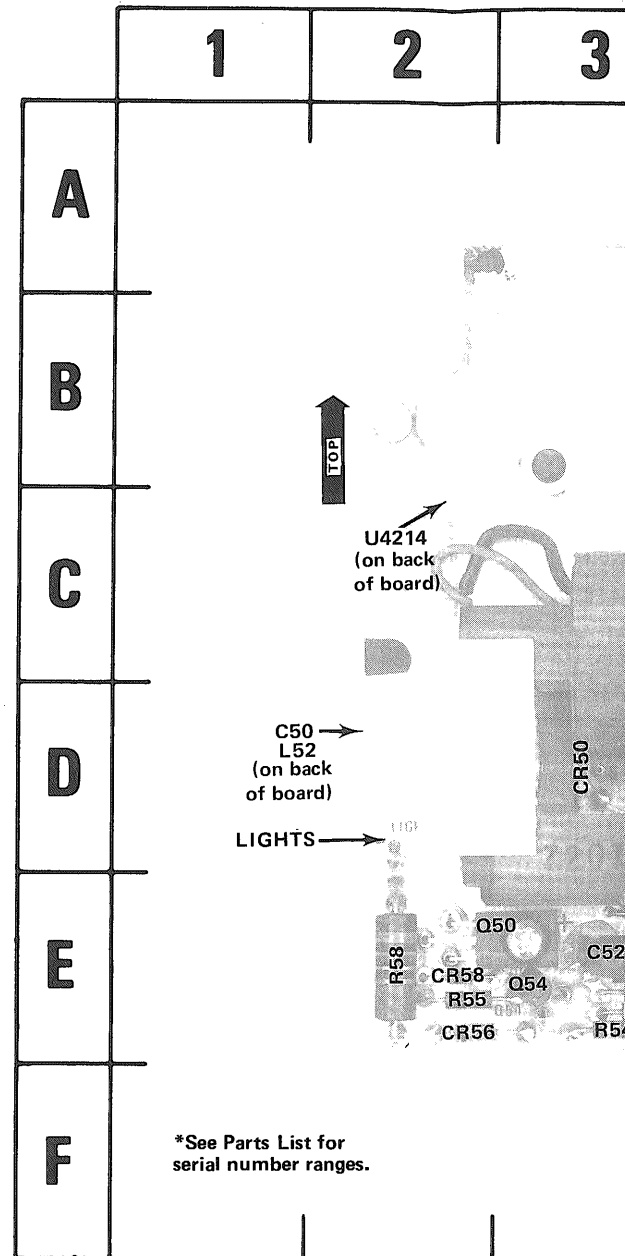
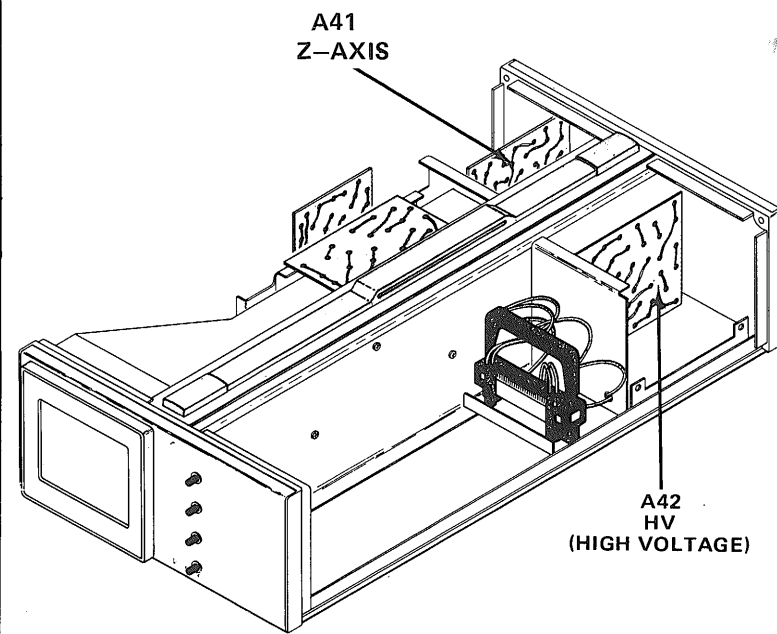
Fig. 6-23. A41-Z-Axis circuit board.

\*See Parts List for serial number ranges.

CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC	CKT NO	GRID LOC
C01	4E	C125	2C	CR21	6E	CR157	3D	Q15	5E	Q155	3E	R42	3B	R95	4D	R127	2C	TP120	3C
C04	5E	C133	2C	CR22	7E	CR183	6D	Q35	6D	R01	4E	R45	4B	R97	4D	R129	2B	U10	6E
C06	6E	C150	3C	CR45	4B	L40	3B	Q45	4B	R04	5E	R51	4B	R101	4C	R131	2D	VR42	3B
C20	6E	C151	2E	CR50	4B	P05	7D	Q51	5B	R05	5E	R53	5B	R103	4B	R133	2C	VR55	6D
C35	5C	C163	5B	CR71	5D	P14	7D	Q59	5C	R06	4E	R57	5B	R105	4C	R137	3E	VR107	3D
C40	3B	C165	6B	CR75	5D	P20	2A	Q75	6D	R08	4E	R59	5B	R107	4D	R150	3B	VR120	3E
C42	3B	C167	6B	CR77	5D	P40	6F	Q77	5D	R12	6E	R61	6D	R109	4C	R151	2D	VR121	3C
C57	5B	C169	6B	CR95	5D	P411	3F	Q83	5C	R14	5E	R67	6E	R111	3D	R153	2D		
C67	6D	C171	6C	CR101*	3C	P41N	5B	Q85	5C	R15	5E	R71	6E	R113	3D	R155	2E		
C93	5C	C175	6C	CR103*	4B	P41O	6B	Q85	5C	R20	6E	R73	5D	R115	3C	R161	5C		
C97*	4D	C179	6C	CR107*	3D	P41P	7B	Q93	5D	R23	4E	R75	5D	R119	3B	R171	6B		
C105	4C	C185	6C	CR111*	3D	P41Q	7B	Q97	5D	R23	4E	R77	5D	R120	4E	R173	6B		
C107	4D			CR114*	4D	P41U	7C	Q113	4D	R31	6D	R83	5B	R121	3B	R175	6C		
C109	5C	CR01	4E	CR121	3C	P41W	7E	Q114	4C	R33	6C	R85	5B	R122*	3D	R176*	7C		
C111	4C	CR10	6E	CR129	2B	Q05	5E	Q115	4C	R35	2E	R87	5B	R123	3D	R177	6C		
C113	4C	CR12	5E	CR137	3D	Q133	2D	Q133	2D	R36	2E	R87	5B	R124	3D	R181	6D		
				CR155	2E	Q137	3D	Q137	3D	R37	5C	R91	5C	R125	2C	R185	6C		
												R93	4D	R126	2C				

NOTE

To conserve space, the circuit numbers on circuit boards and board photos show only the letter prefix and last two digits of the complete circuit number shown in parts list and schematic (R69 = R1069, etc.).



CKT NO	GRID LOC
C01	5E
C04	5D
C05	5B
C06	6C
C08	6C
C17	6D
C19	6C
C21	7C
C30	8D
C31	7D
C52	3E

Fig. 6-25. Electrode configuration for semiconductors shown on diagram 14.



## VOLTAGE AND WAVEFORM CONDITIONS

The voltages and waveforms shown on this diagram were obtained with the test set-ups and equipment given below. These measurements are not absolute and may vary between instruments.

### Recommended Test Equipment

Item	Specifications	Examples of Applicable Test Equipment
Test oscilloscope	Frequency response, dc to 65 MHz; deflection factor (with 10X probe), 100 mV to 10 V/division; sweep rate, 500 $\mu$ s/division.	a. Tektronix 7603 Oscilloscope with 7A13 Differential Comparator, 7B50 Time Base, and P6053A Probe, or equivalent. (7A13 Differential Comparator used to obtain dc offset).  b. Use item (a) above with 7A15A Amplifier in place of 7A13.
Dc voltmeter (non-loading digital multimeter)	Input impedance, 10 megohms; range, 0 to 200 V dc.	a. Tektronix 7D13 Digital Multimeter (test oscilloscope must have readout system), or equivalent.  b. Fairchild Model 7050.

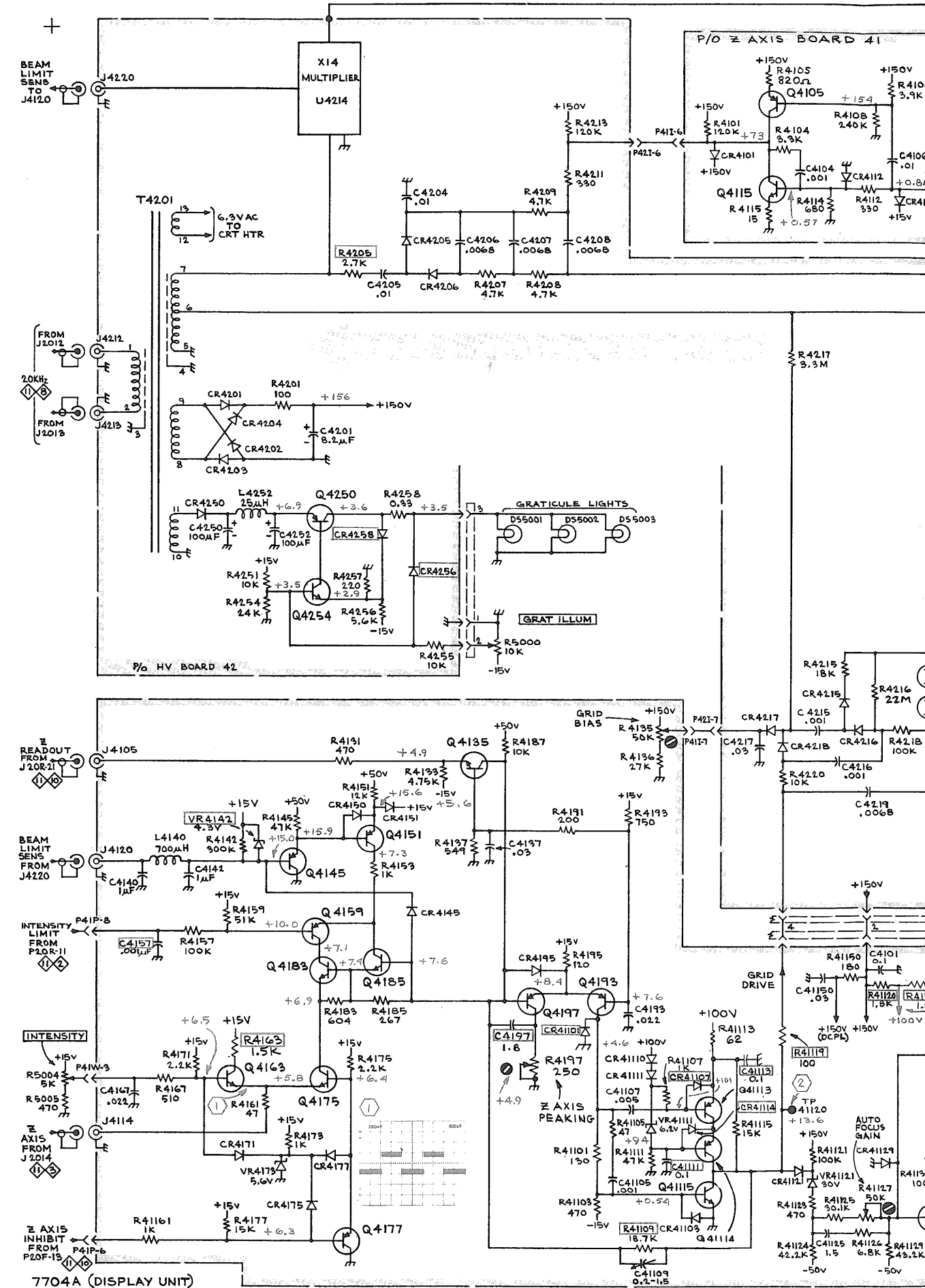
### Test Set-Up

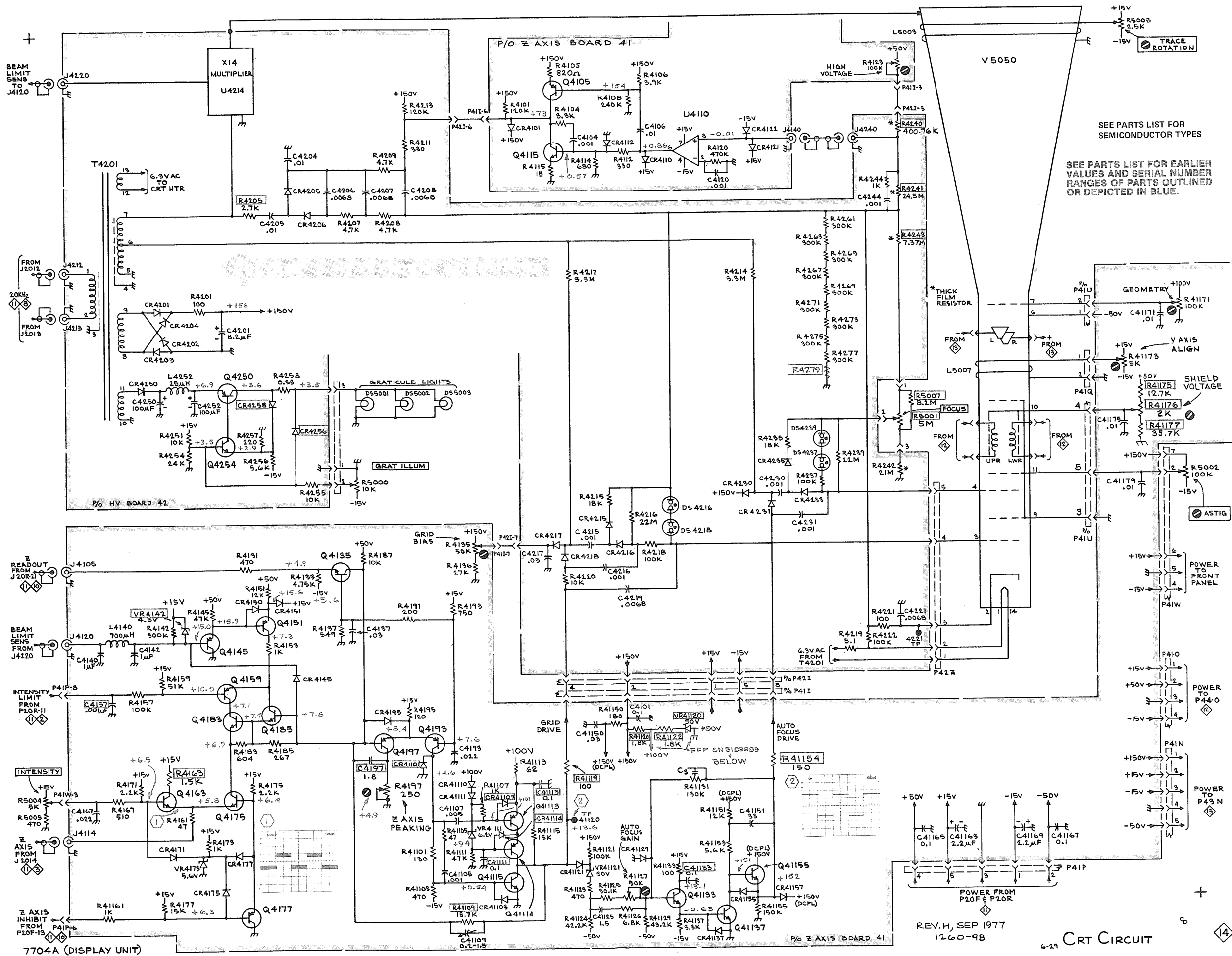
7704A Under Test: Amplifier unit installed in LEFT VERT compartment. No signal applied for voltage measurements. For waveforms, the 7704A Calibrator signal is applied to the amplifier unit to obtain a four-division display. A time-base unit is installed in the B HORIZ compartment. The time-base is set for auto triggering at a 0.1-ms/division sweep rate.

### Front-Panel Controls

Knob-type controls	Midrange
VERTICAL MODE	LEFT
A AND B TRIGGER SOURCE	VERT MODE
HORIZONTAL MODE	B

Test Equipment: Voltmeter common is connected to 7704A chassis ground. Test oscilloscope is externally triggered from 7704A +GATE OUT connector.





SEE PARTS LIST FOR SEMICONDUCTOR TYPES  
SEE PARTS LIST FOR EARLIER VALUES AND SERIAL NUMBER RANGES OF PARTS OUTLINED OR DEPICTED IN BLUE.

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B HORIZ

GATE OUT

7704A (DISPLAY UNIT)



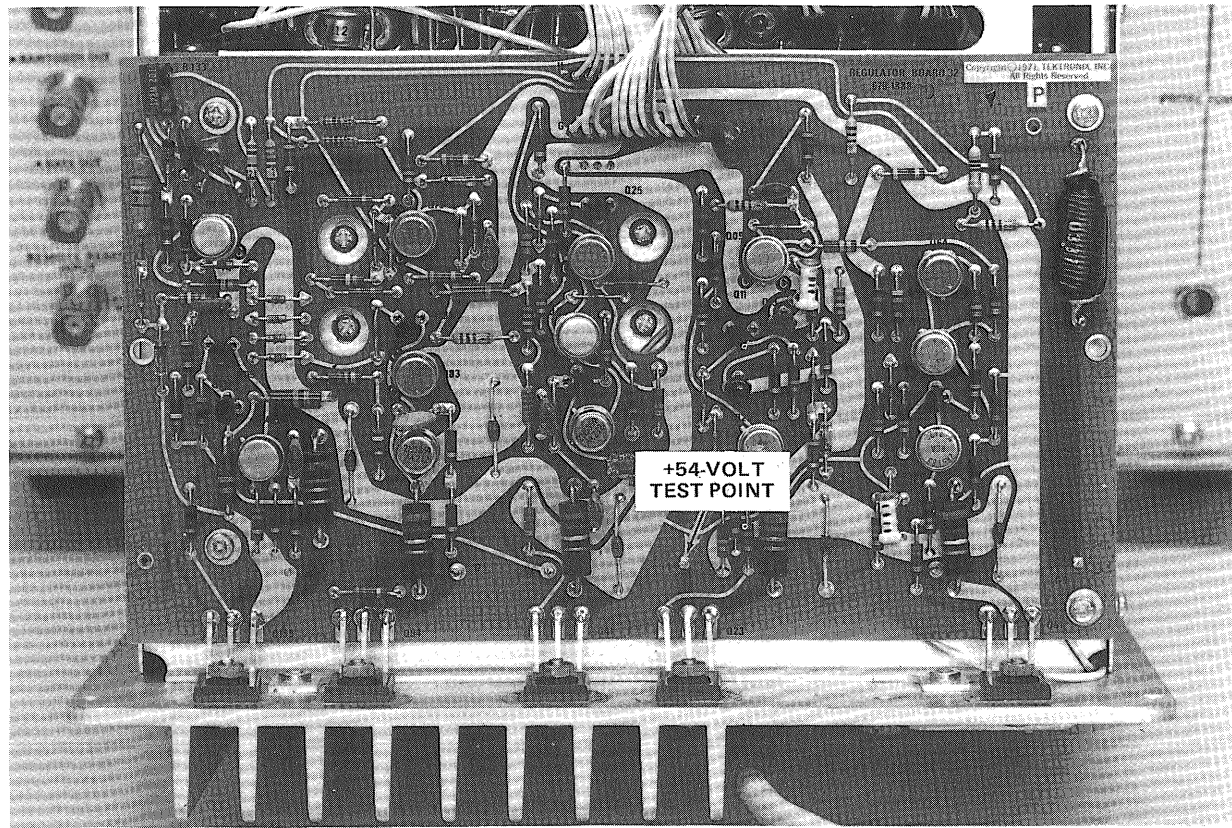


Fig. 6-26. +54-Volt test point location on A32 – Regulator board (top of power unit).

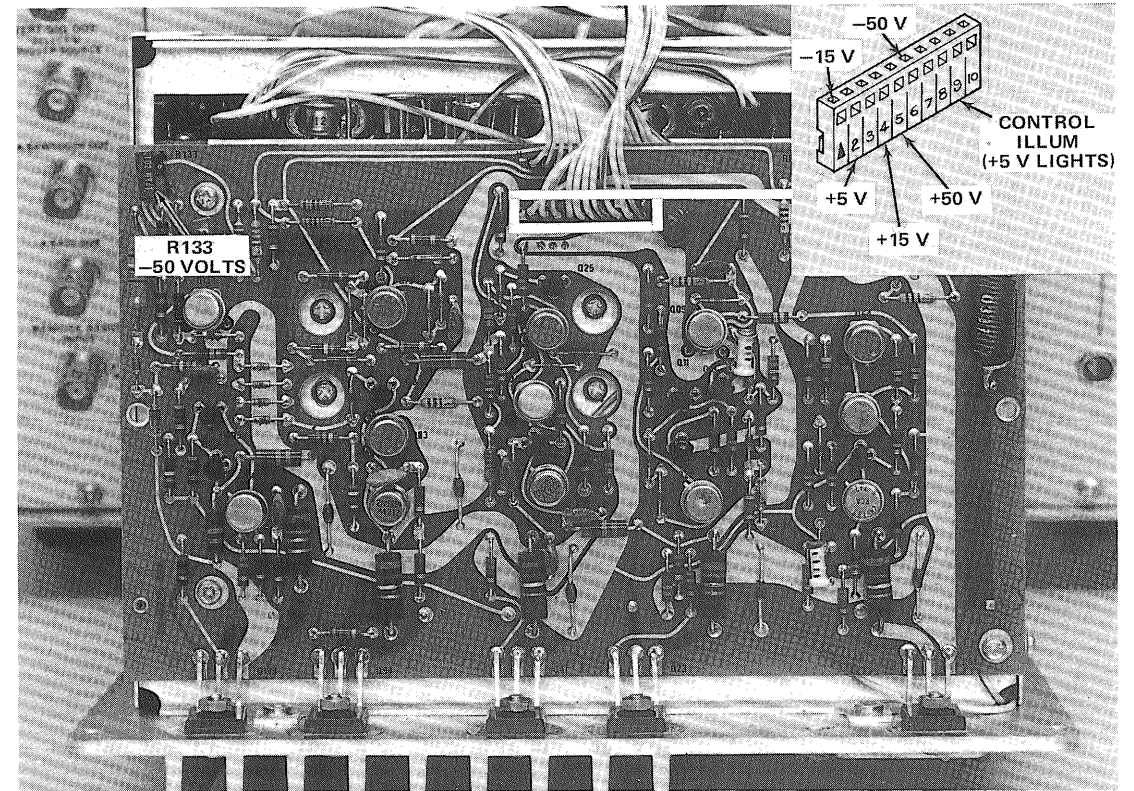


Fig. 6-28. Power-supply test points and -50 - Volt adjustment locations on A32 – Regulator board.

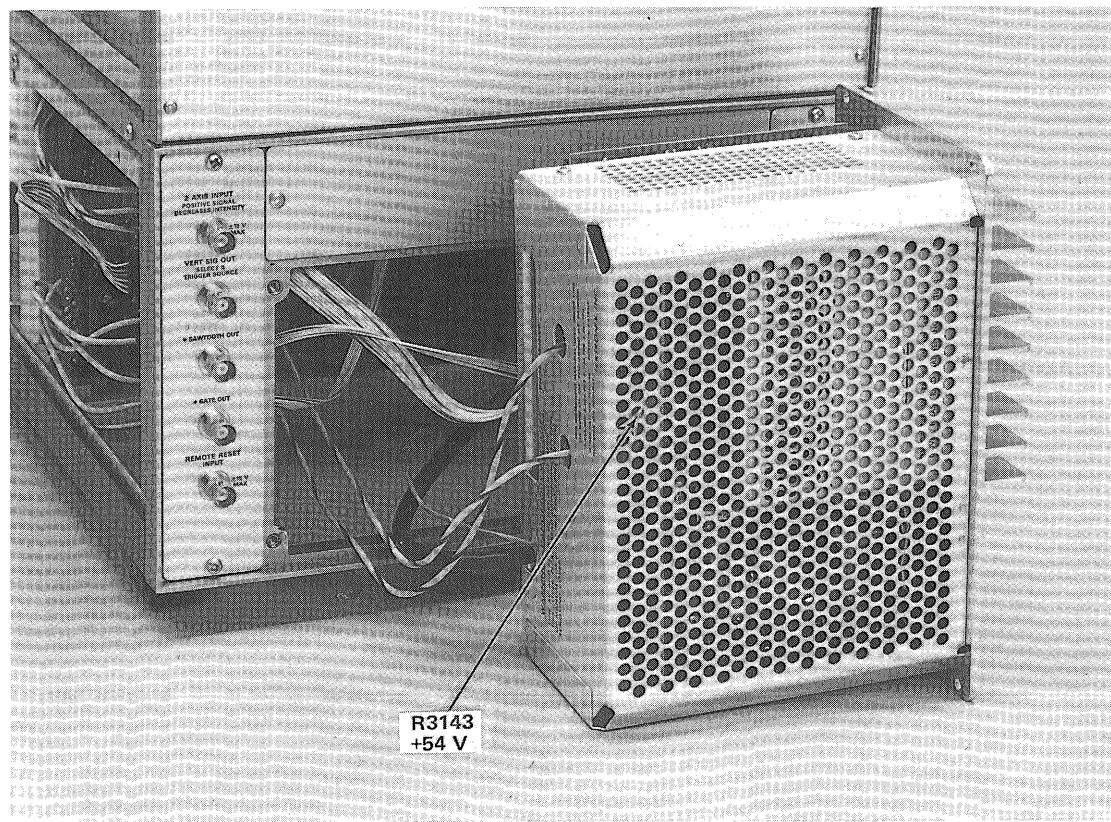


Fig. 6-27. +54-Volt adjustment, R3143, location in power unit.

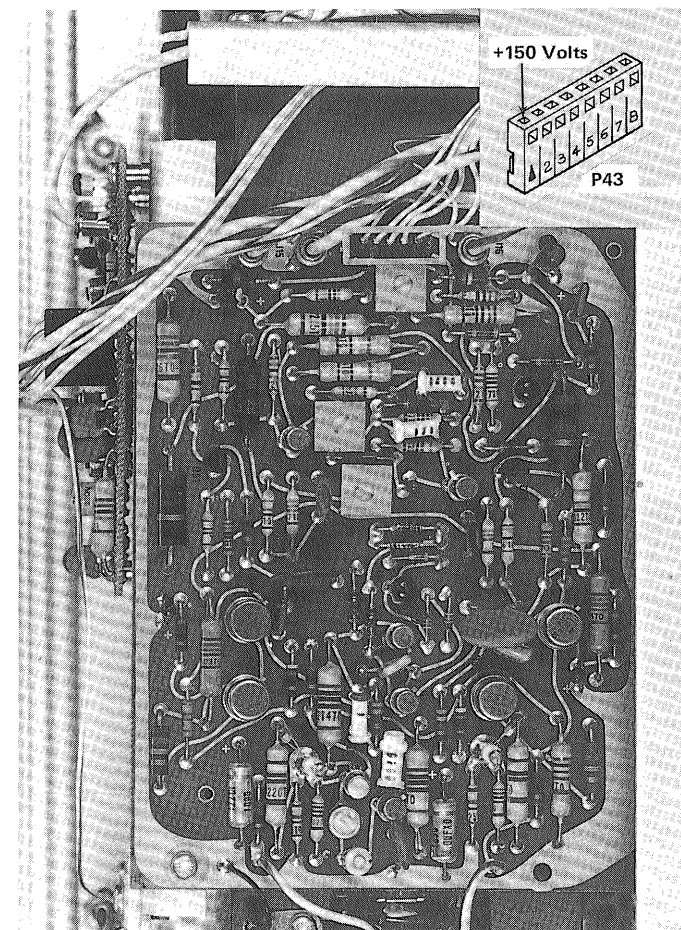


Fig. 6-29. +150-Volt test point location on A43 – Horizontal Output board.

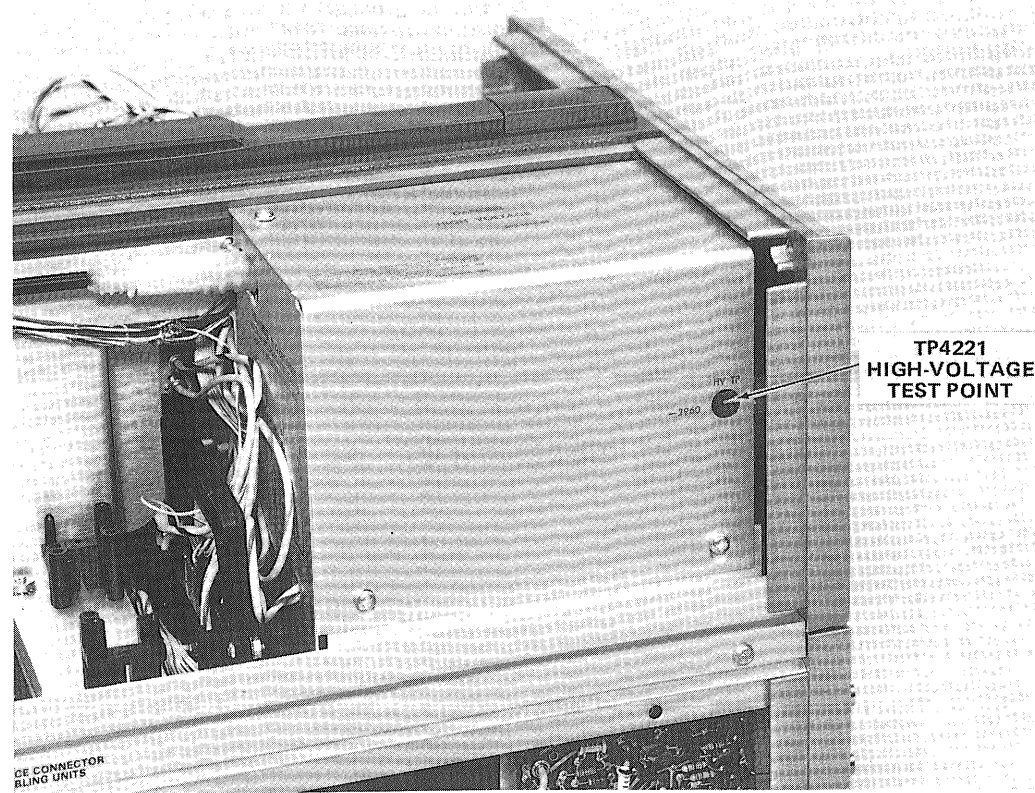


Fig. 6-30. TP4221, high-voltage test point location.

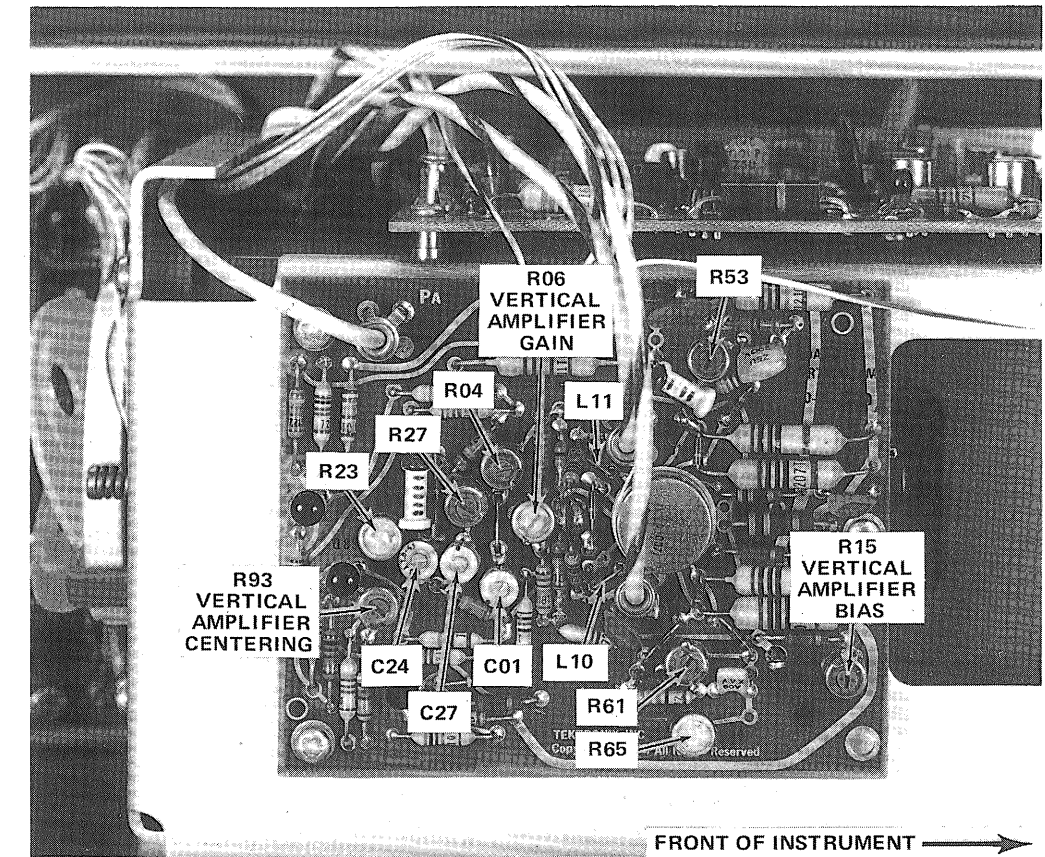


Fig. 6-32. Location of Vertical System calibration adjustments on A44 - Vertical Amplifier board.

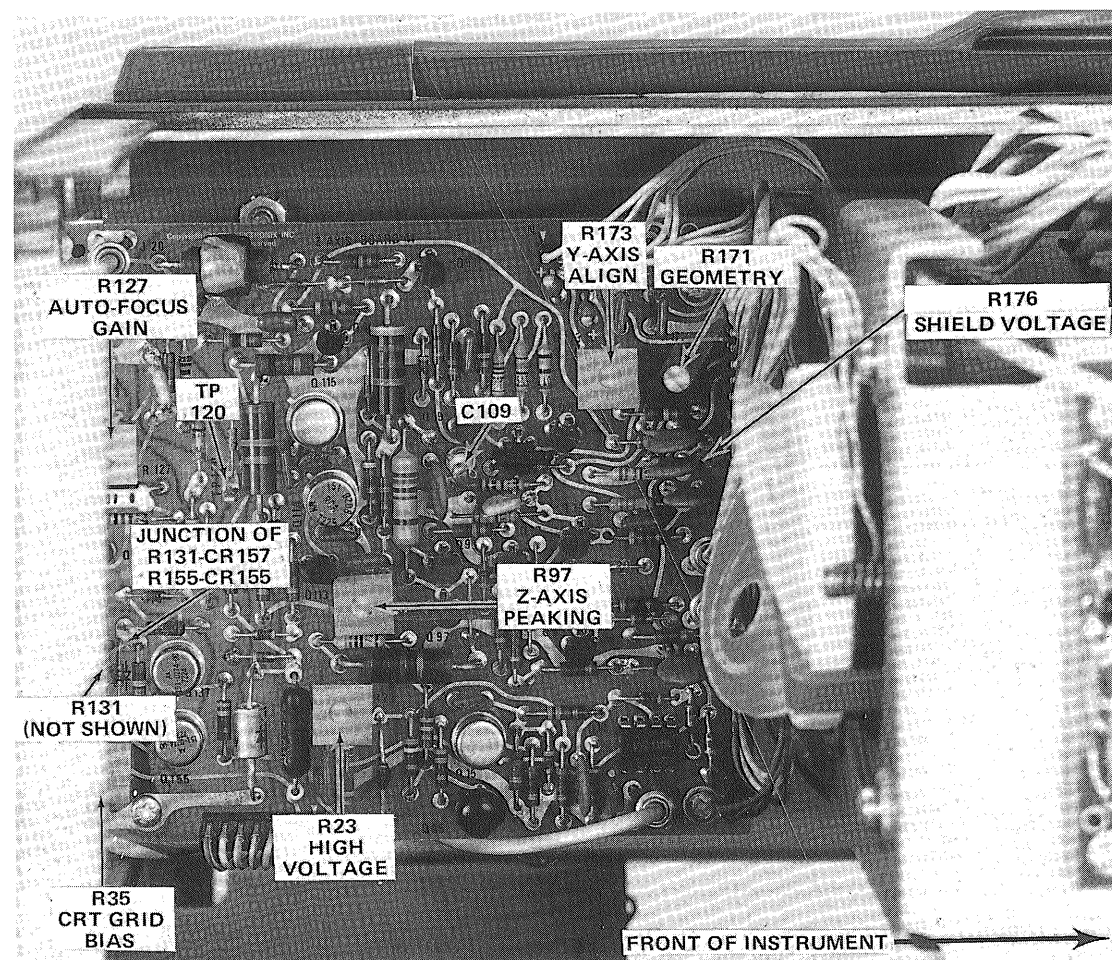


Fig. 6-31. Location of Z-Axis and Display calibration adjustments and test points on A41 - Z-Axis board.

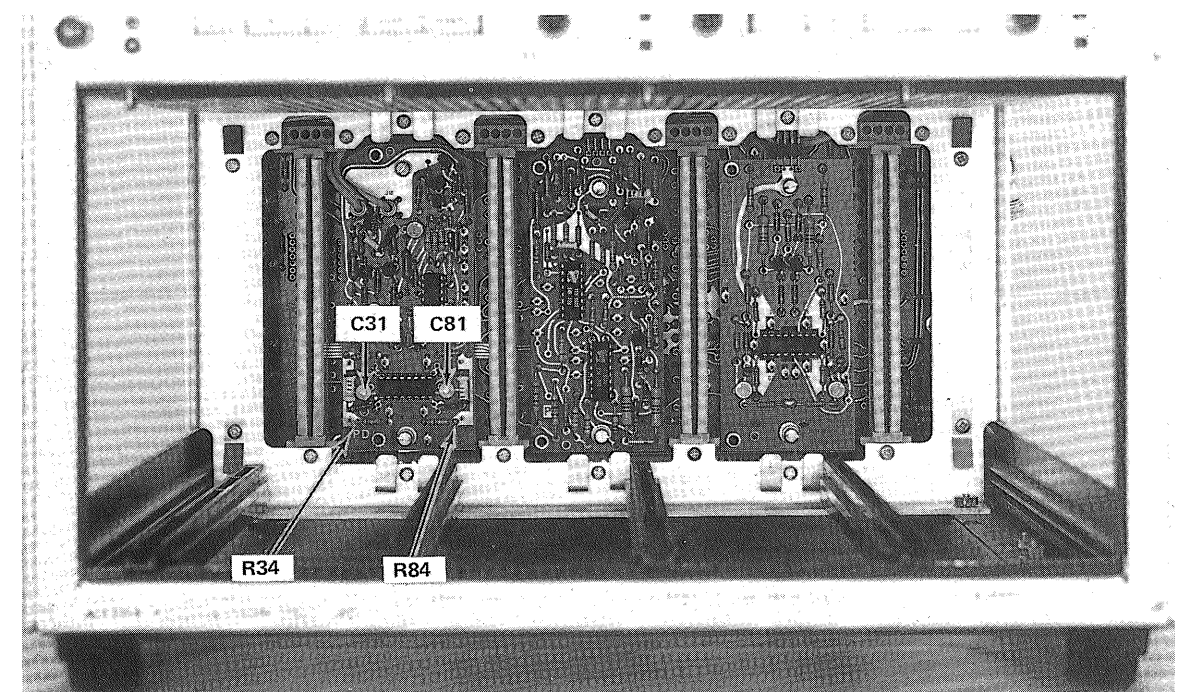


Fig. 6-33. Location of high-frequency compensation adjustments on A22 - Vertical Interface board.

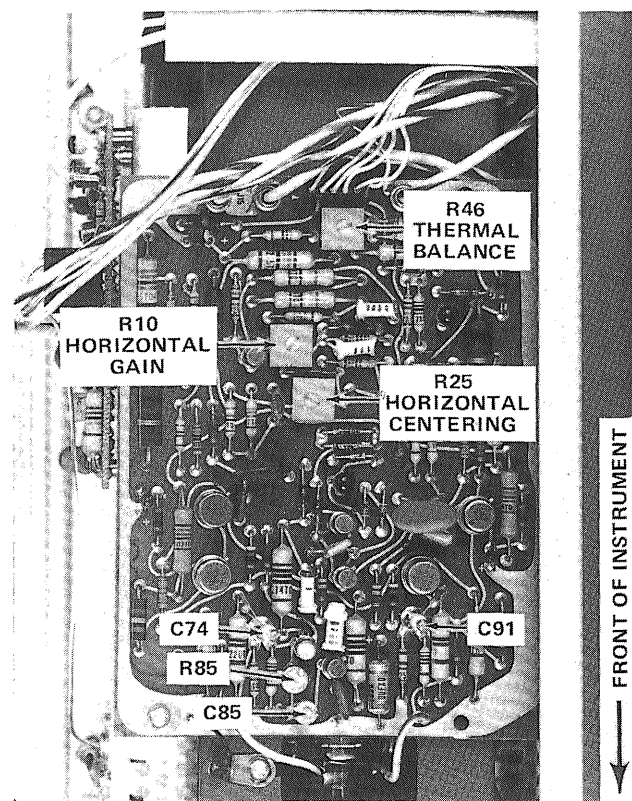


Fig. 6-34. Location of Horizontal System calibration adjustments on A43 – Horizontal Output board.

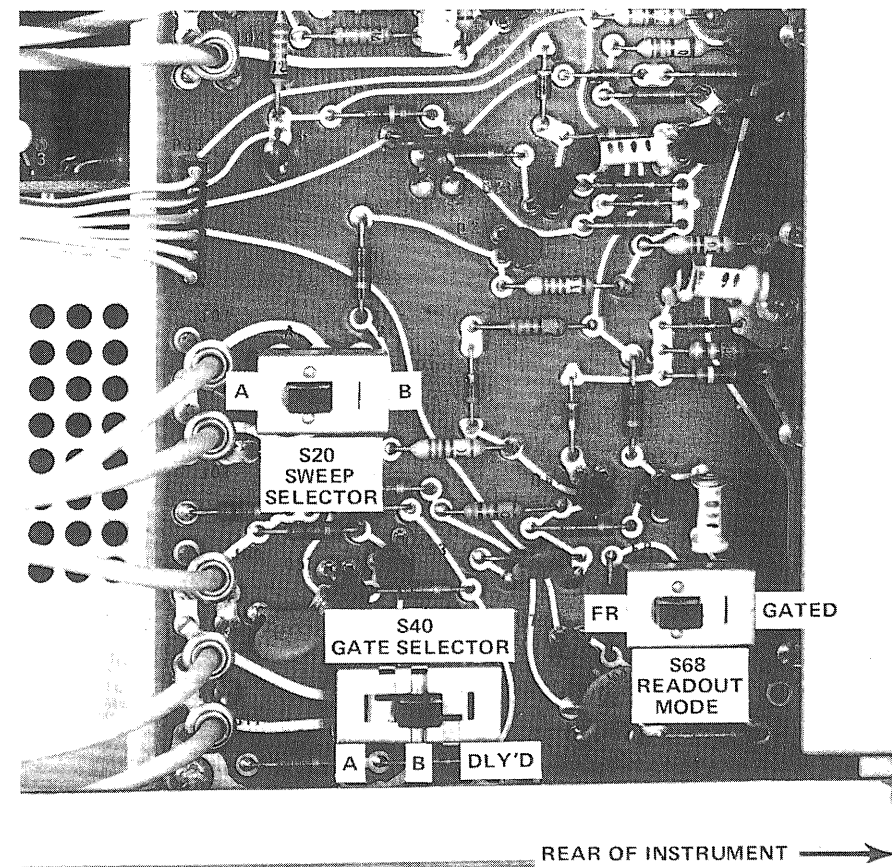


Fig. 6-36. Location of signal selector switches on A33 – Output Signals board.

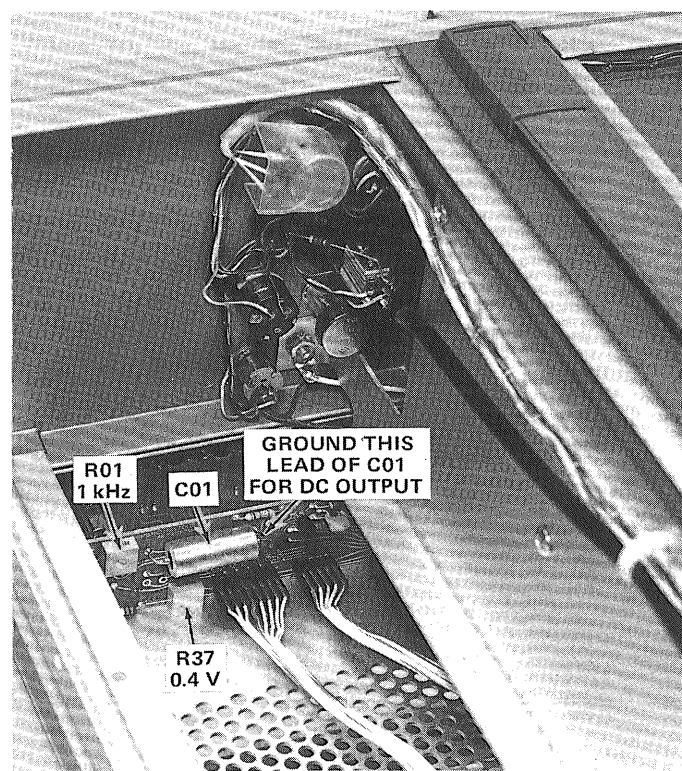


Fig. 6-35. Location of Calibrator adjustments on A10 – Calibrator board.

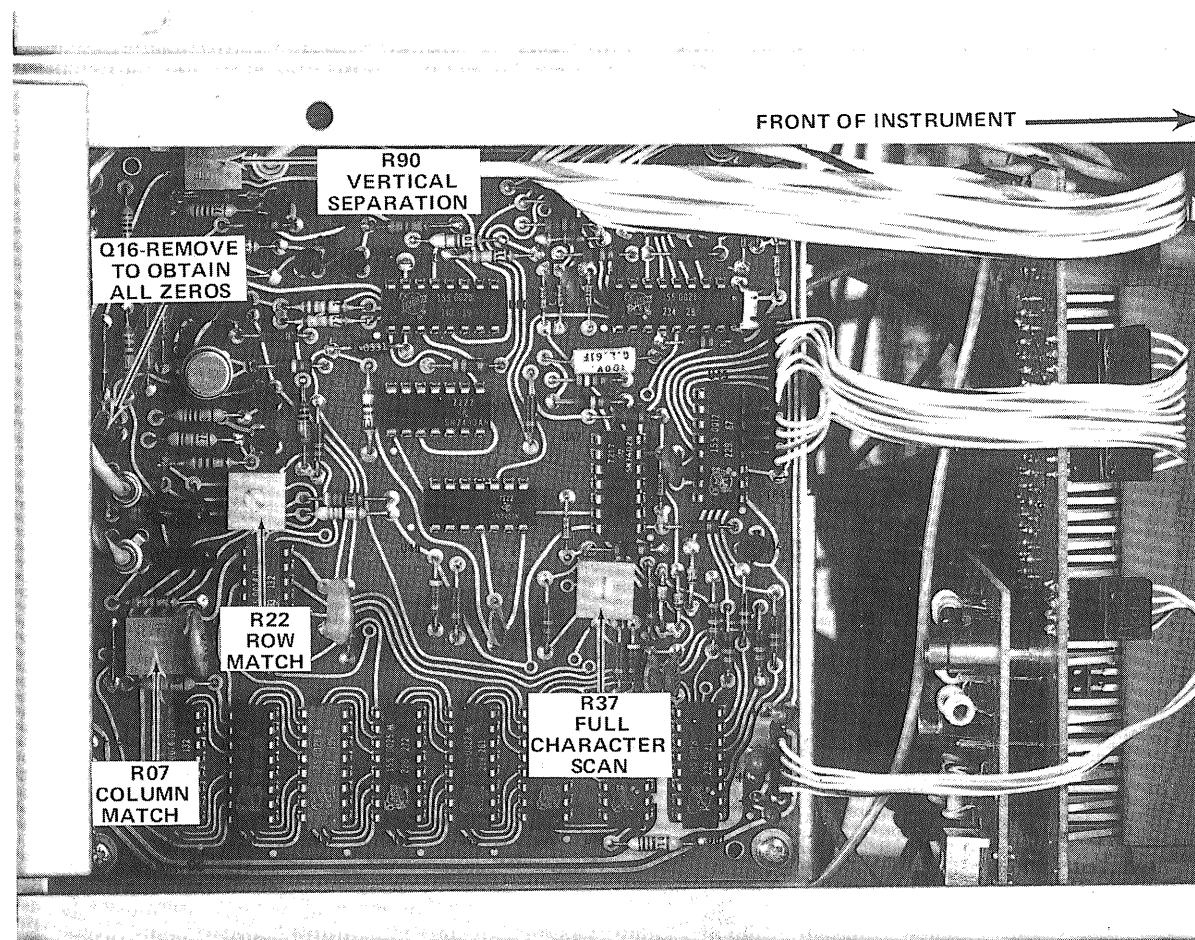
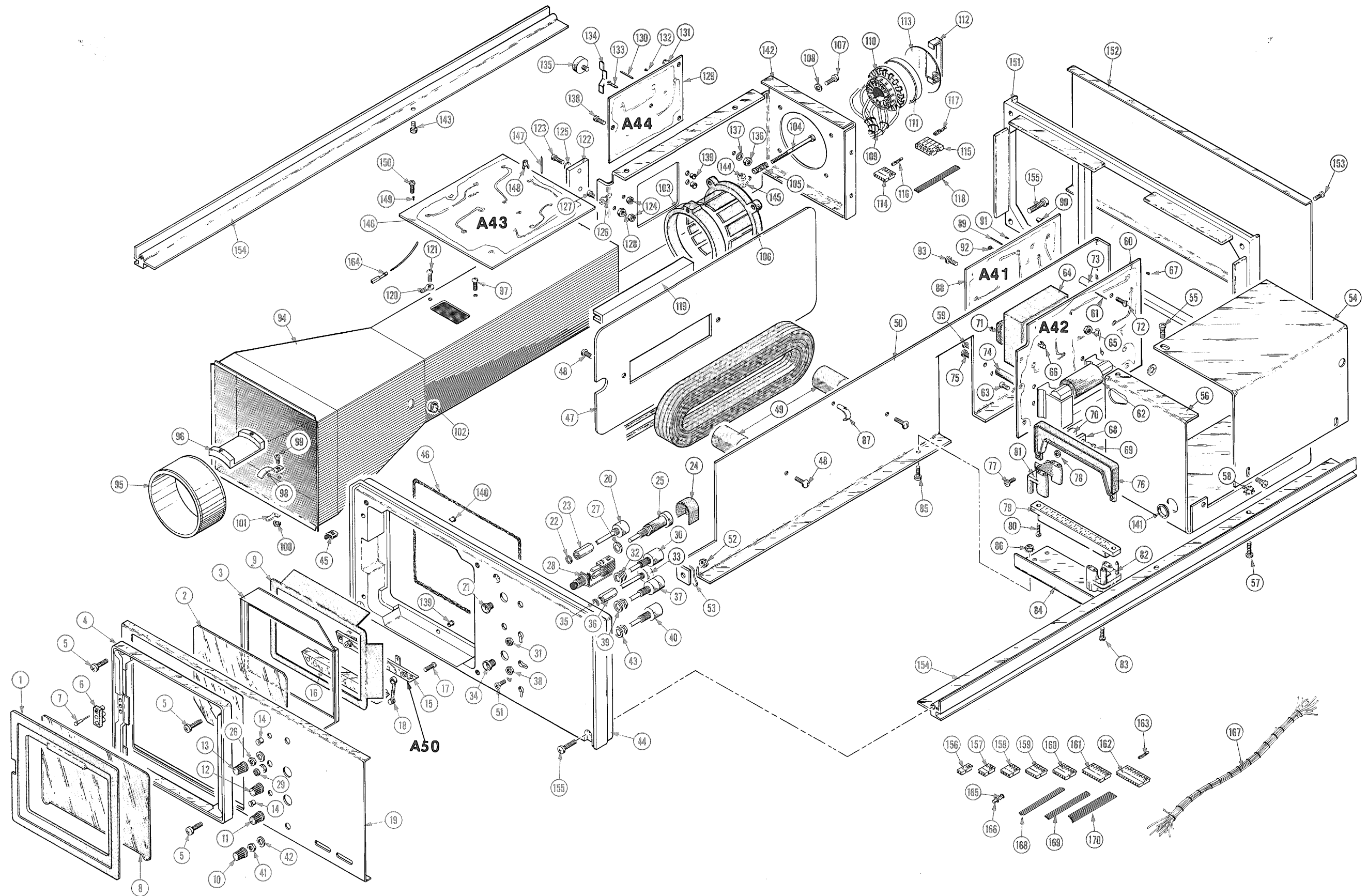


Fig. 6-37. Location of Readout System calibration adjustments on A34 – Readout board.

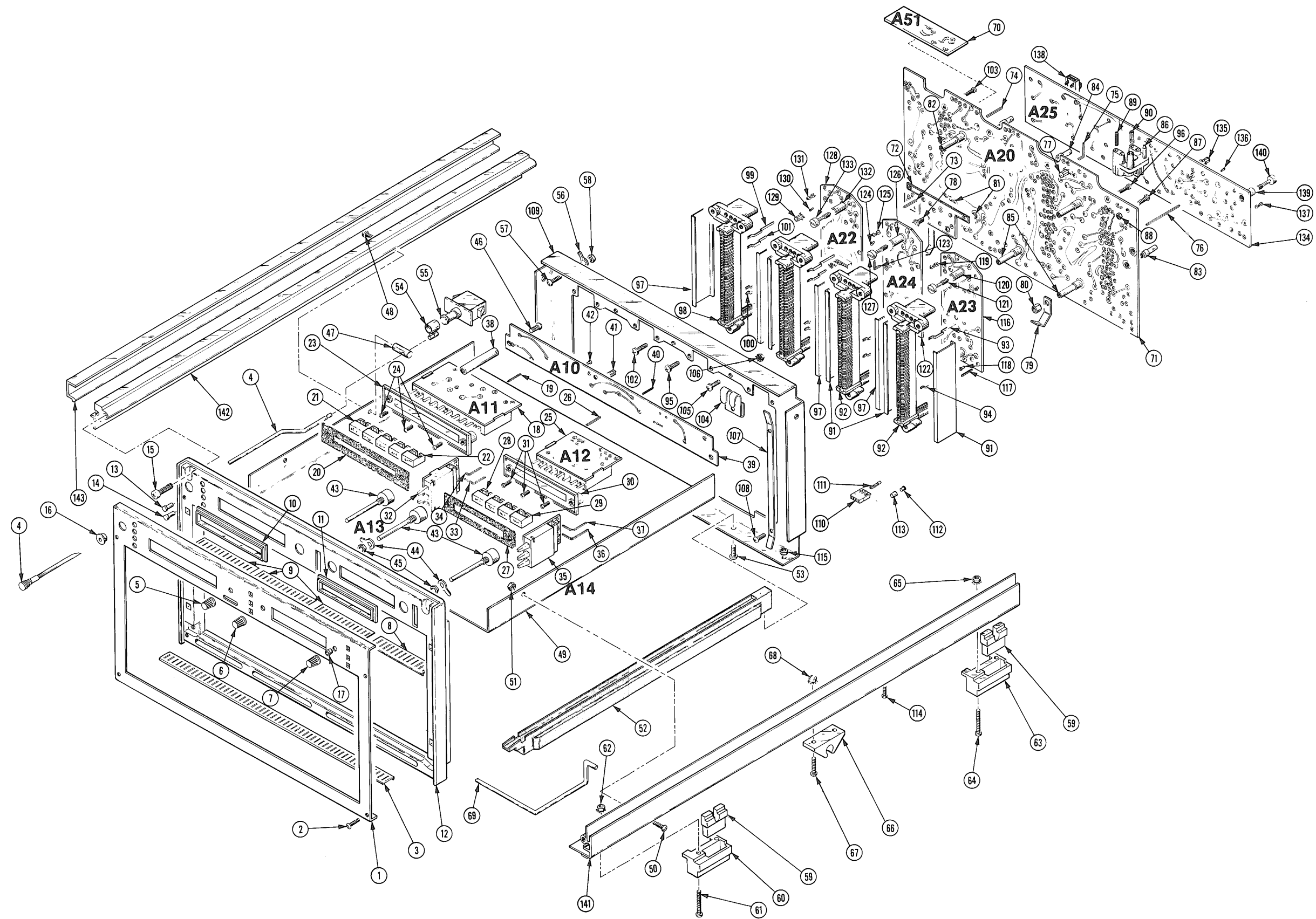
Replaceable Mechanical Parts—7704A

FIGURE 1 D7704 (CONT)

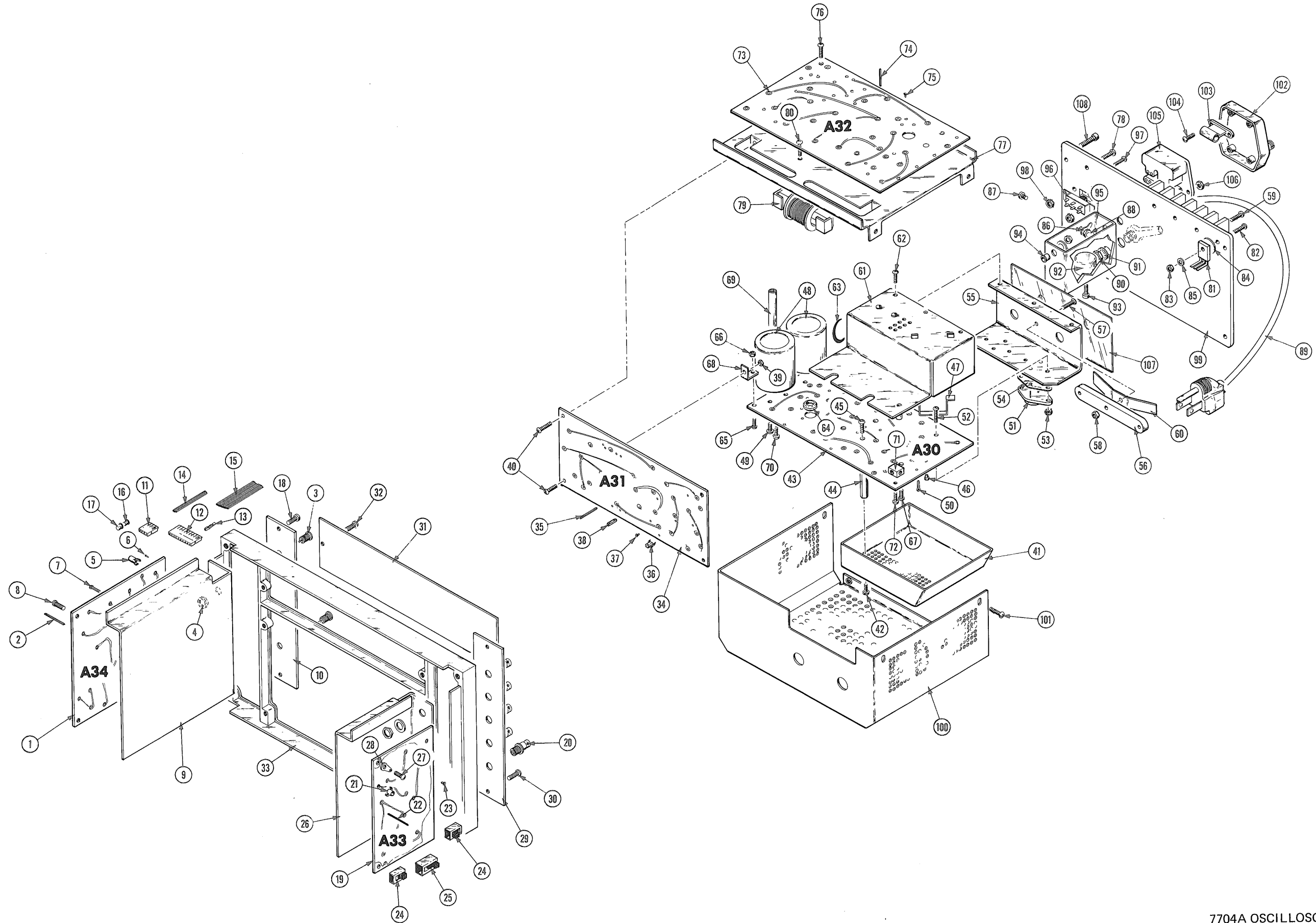
Fig. & Index No.	Tektronix Part No.	Serial/Model No. Eff Dscont	Qty	1 2 3 4 5	Name & Description	Mfr Code	Mfr Part Number
1-158	352-0162-00		1		CONN BODY, PL, EL:4 WIRE BLACK	80009	352-0162-00
	200-1167-00	XB101891	1		COVER, XSTR:TEMP STAB FOR 2 TO-18 CS STYLE	80009	200-1167-00
-159	352-0163-00		2		CONN BODY, PL, EL:5 WIRE BLACK	80009	352-0163-00
-160	352-0164-00		2		CONN BODY, PL, EL:6 WIRE BLACK	80009	352-0164-00
-161	352-0166-00		3		CONN BODY, PL, EL:8 WIRE BLACK	80009	352-0166-00
-162	352-0168-00		3		CONN BODY, PL, EL:10 WIRE BLACK	80009	352-0168-00
-163	131-0707-00		54		CONTACT, ELEC:0.48" L, 22-26 AWG, WIRE	22526	5999-00-396-6331
-164	195-0121-00		1		LEAD SET, CRT DE:	80009	195-0121-00
-165	210-0775-00		12		EYELET, METALLIC:0.126 OD X 0.23 INCH L, BRS	80009	210-0775-00
-166	210-0774-00		12		EYELET, METALLIC:0.152 OD X 0.245 INCH L, BRS	80009	210-0774-00
-167	179-1744-00		1		WIRING HARNESS, :FRONT PANEL	80009	179-1744-00
-168	175-0827-00		IN		WIRE, ELECTRICAL:4 WIRE RIBBON	80009	175-0827-00
-169	175-0828-00		IN		WIRE, ELECTRICAL:5 WIRE RIBBON	08261	0BD
-170	175-0831-00		IN		WIRE, ELECTRICAL:8 WIRE RIBBON	08261	0BD



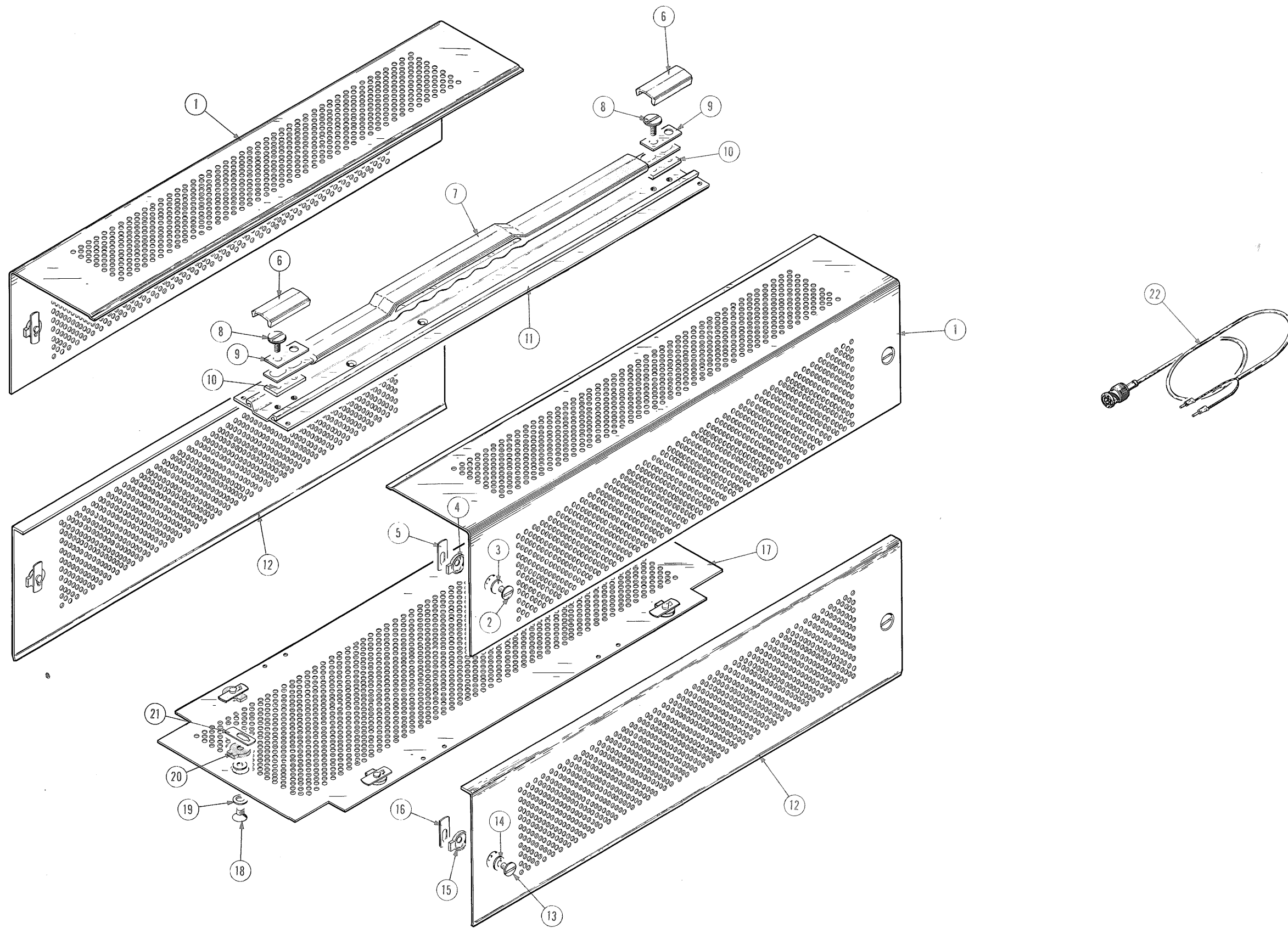
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# REPLACEABLE PARTS FOR FACTORY INSTALLED OPTIONS

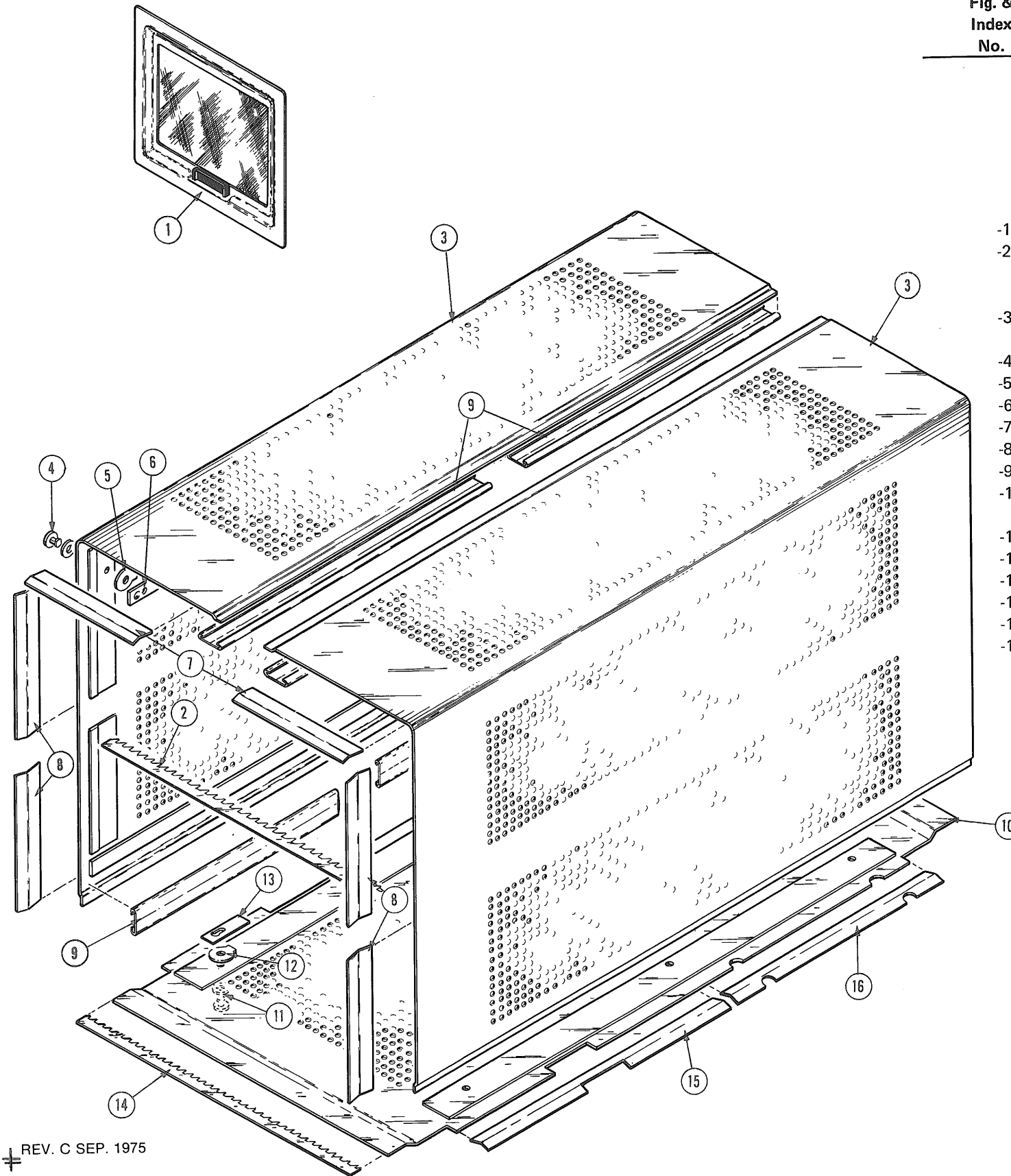


Fig. & Index No.	Tektronix Part No.	Serial/Model No. Eff	Disc	Qty					Description
				1	2	3	4	5	
<b>OPTION 1 WITHOUT READOUT</b>									
	200-1352-00			1					COVER, accessory cavity
<b>OPTION 3 EMI MODIFICATION</b>									
-1	378-0603-00			1					FILTER, mesh, CRT
-2	348-0274-00			1					SHIELDING GASKET, electronic, 24 inches long
	200-0678-00			5					COVER, BNC connector, non-shorting
	346-0045-00			5					STRAP, connector cover, plastic
-3	390-0294-00			2					CABINET SIDE
									each cabinet side includes:
-4	214-0603-02			4					PIN, securing, w/spring
-5	386-1634-00			4					PLATE, latch index
-6	386-1633-00			4					PLATE, latch locking
-7	348-0332-00			2					SHIELDING GASKET, electronic, 4.285 inches long
-8	348-0333-00			4					SHIELDING GASKET, electronic, 4.80 inches long
-9	348-0336-00			4					SHIELDING GASKET, electronic, 9.625 inches long
-10	390-0295-00			1					CABINET BOTTOM
									cabinet bottom includes:
-11	214-0603-02			6					PIN, securing, w/spring
-12	386-1634-00			6					PLATE, latch index
-13	386-1633-00			6					PLATE, latch locking
-14	348-0274-01			2					SHIELDING GASKET, electronic, 24 inches long
-15	348-0335-00			2					SHIELDING GASKET, electronic, 8.65 inches long
-16	348-0334-00			2					SHIELDING GASKET, electronic, 7.64 inches long
	016-0155-00			1					PANEL, BLANK, plug-in housing (not shown)
<b>OPTION 7 WITHOUT SIGNAL OUTPUT</b>									
	200-1352-00			1					COVER, accessory cavity