



MANUAL DESCRIPTION

CHANGE DATE: August 4, 1981

<p>INSTRUMENT: 5451C System Hardware Manual</p> <p>SERIAL PREFIX:</p> <p>DATE PRINTED: APRIL 1981</p> <p>HP PART NO: 05451-90557</p> <p>MICROFICHE NO: 05451-90558</p>

(This change supersedes all earlier dated changes)

- Make all changes listed as ERRATA.
- Check the following table for your instrument's serial prefix or serial number and make listed change(s) to manual.

IF YOUR INSTRUMENT HAS SERIAL PREFIX OR SERIAL NUMBER	MAKE THE FOLLOWING CHANGES TO YOUR MANUAL	IF YOUR INSTRUMENT HAS SERIAL PREFIX OR SERIAL NUMBER	MAKE THE FOLLOWING CHANGES TO YOUR MANUAL

▶ **NEW OR REVISED ITEM**

▶ **ERRATA**

▶ **Page 3-1**, under current instruments, change manual applicability to Series "2112A and 2108A".

▶ **Page 3-1**, under Older Instruments:

Change first line to read: "For 5466B with serial prefix 2108 -----"

▶ **Page 3-11**, Figure 3-5:

Change Note 7 to read:

For series 2112A, R59 and C56 are installed as shown.

For series 2108, only C56 is installed.

For series 1944A, C56 and R59 are deleted.

▶ **Page 3-11**, Figure 3-5:

At the right side of the schematic, change R59 to 400 ohms. Change C56 to 150 pF.

▶ **Page 3-35**, Table 3-4:

Delete the 2nd listing for C56** (68 pF).

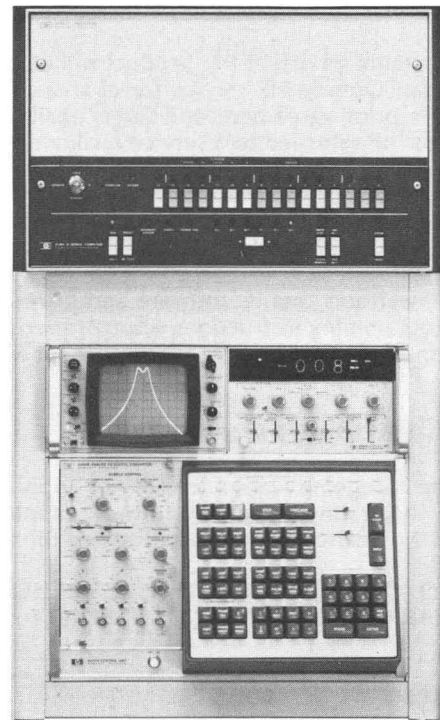
At the bottom of the page, change to read:

"C56 is installed in boards with series 2112A and 2108A. C56 is not installed prior to series 2108A."

FOURIER ANALYZER SYSTEM 5451C

This manual applies to the following:

1. 5460A DISPLAY PLUG-INS
2. 5466B ANALOG-TO-DIGITAL CONVERTER
3. 5475A CONTROL UNIT
4. 05451-60068 HIGH SPEED ADC INTERFACE



HEWLETT-PACKARD COMPANY
5305 STEVENS CREEK BOULEVARD, SANTA CLARA, CALIF. 95050

Printed: APRIL 1981

MANUAL PART NO. 05451-90557
Microfiche No. 05451-90558

Printed in U.S.A.

CERTIFICATION

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CONTENTS

SECTION I. INTEGRATED CIRCUIT DIAGRAMS	1-1
SECTION II. 5460A DISPLAY PLUG-IN	2-1
Introduction	2-1
Change Data	2-1
Current Instruments	2-1
Older Instruments	2-1
Replaceable Parts	2-29
SECTION III. 5466B ANALOG-TO-DIGITAL CONVERTER PLUG-IN	3-1
Introduction	3-1
Change Data	3-1
Current Instruments	3-1
Older Instruments	3-1
Replaceable Parts	3-29
SECTION IV. 5475A CONTROL UNIT	4-1
Introduction	4-1
Change Data	4-1
Current Instruments	4-1
Older Instruments	4-1
Replaceable Parts	4-37
SECTION V. 05451-60068 HIGH SPEED ADC INTERFACE	5-1
Replaceable Parts	5-9

TABLES

Table 2-1. 5460A Display Unit	2-31
Table 2-2. Vertical Amplifier Assembly — 05460-60001	2-33
Table 2-3. DAC Assembly — 05460-60002	2-34
Table 2-4. Word Storage Assembly — 05460-60003	2-37
Table 2-5. Control Assembly — 05460-60004 (Series 1632A)	2-38
Table 2-6. Reference Power Supply Assembly — 05460-60005	2-40
Table 2-7. Plotter Control Board — 05460-60020	2-41
Table 2-8. LED Display Assembly — 05460-60021	2-42
Table 2-9. Light Driver Assembly — 05460-60007	2-43
Table 2-10. Manufacturers Code List	2-44
Table 3-1. Abbreviations and Reference Designations	3-29
Table 3-2. 5466B Chassis Parts	3-31
Table 3-3. 05466-60013 Input Board Parts	3-33
Table 3-4. 05466-60014 100 kHz Digitizer Parts (Series 2112)	3-35
Table 3-5. 05466-60002 10-Bit 200 kHz Digitizer Parts	3-38
Table 3-6. 05466-60007 12-Bit 200 kHz Digitizer Parts	3-39
Table 3-7. 05466-60015 Error Board Parts	3-40
Table 3-8. 05466-60004 Trigger Board Parts	3-41
Table 3-9. 05466-60008 Control Board Parts	3-43
Table 3-10. 05466-60009 Control Board Parts (Series 1832A)	3-44
Table 3-11. 05466-60016 Control Board Parts (Series 1644A)	3-45
Table 3-12. 05466-60006 Sample Generator Board Parts	3-46
Table 3-13. Manufacturers Code List	3-47
Table 4-1. Keyboard Signals to Matrix A and B	4-2
Table 4-2. Signals From Computer to Terminal (via 5475A)	4-2
Table 4-3. Feedthru Signals — Computer to ADC	4-3
Table 4-4. Signal Outputs on Back of 5475A	4-3
Table 4-5. Abbreviations and Reference Designations	4-37
Table 4-6. 5475A Replaceable Parts	4-38
Table 4-7. 5475A Manufacturers Code List	4-50

Table 5-1. 05451-60068 ADC Interface Board Parts	5-10
Table 5-2. Manufacturers Code List	5-12

FIGURES

Figure 1-1. Integrated Circuits	1-2
1813-0009, Sample and Hold Module	1-2
1813-0010, 1813-0011, 10-Bit Digitizer, 12-Bit Digitizer	1-2
1820-0054, TTL Quad 2-Input NAND Gate	1-3
1820-0055, TTL Decade Counter, 10 MHz Min.	1-3
1820-0068, TTL Triple 3-Input NAND Gate	1-4
1820-0069, TTL Dual 4-Input NAND Gate	1-4
1820-0071, TTL Dual 4-Input NAND Buffer	1-4
1820-0072, TTL Dual 2-Wide 2-Input EXP AND-OR-INVERT	1-4
1820-0077, TTL Dual D Flip-Flop	1-5
1820-0084, TTL 4-Wide 2-Input EXP AND-OR-INVERT Gate	1-5
1820-0142, ECL Dual 4-Input OR/NOR	1-6
1820-0174, TTL Hex Inverter	1-6
1820-0175, TTL Hex Inverter Open Collector	1-6
1820-0201, Operational Amplifier	1-6
1820-0207, TTL Monostable Multivibrator, Retriggerable	1-7
1820-0261, TTL Monostable Multivibrator	1-7
1820-0269, TTL Quad 2-Input NAND Gate Open Collector	1-8
1820-0307, DTL Hex Inverter RL = 6K	1-8
1820-0327, TTL Quad 2-Input NAND Gate Open Collector	1-8
1820-0328, TTL Quad 2-Input NOR Gate	1-8
1820-0437, Quad Type D Flip-Flop	1-9
1820-0476, High Speed Operational Amplifier	1-9
1820-0515, TTL Dual Re-Trig/Re-Set Monostable Multivibrator	1-10
1820-0537, TTL Dual 4-Input NAND Gate Schmitt Trigger	1-10
1820-0538, TTL Dual 4-Input NOR Gate EXP W/Strobes	1-10
1820-0539, TTL Quad 2-Input NAND Gate Open Collector	1-10
1820-0574, TTL Quad D Flip-Flop W/PAR CLK and Clear	1-11
1820-0620, TTL Dual 4-Input Multiplexer W/Common Select	1-12
1820-0738, TTL Dual 1-of-4 Decoder W/Sep Enable Comm Select	1-13
1820-00743, TTL 4-Bit Bidirectional UNIV Shift Register	1-14
1820-0744, TTL 6-Bit Binary Counter, Synchro, 25 MHz Min.	1-14
1820-0846, TTL Quad Buffer (Tri State)	1-15
1820-0899, TTL Decade Counter W/Asynchro Clear, Shychro	1-15
1820-0956, Dual 2-Input Positive AND Gate $Z = A \cdot B$	1-15
1826-0081, High Speed FET Operational Amplifier	1-15
1826-0105, 4-Channel Driver with MOS Switches	1-16
1826-0106, +15V Regulator	1-16
1826-0108, High Speed FET Operational Amplifier	1-16
Figure 2-1. 5460A Display Unit Wiring Diagram	2-3
Figure 2-2. 5460A A1 Vertical Amplifier Assembly	2-5
Figure 2-3. 5460A A2 Vertical Digital-to-Analog Converter Assembly	2-7
Figure 2-4. 5460A A3 Horizontal DAC Assembly	2-9
Figure 2-5. 5460A A4 Word Storage Assembly	2-11
Figure 2-6. 5460A A5 Control Board Assembly	2-13
Figure 2-7. 5460A A6 Reference Power Supply	2-17
Figure 2-8. 5460A A7 Plotter Control Board Assembly (Part of Accessory 10640B)	2-19
Figure 2-9. 5460A A8 LED Display Board	2-21
Figure 2-10. 5460A A9 Light Driver	2-23
Figure 2-11. 5460A External Connections	2-25
Figure 2-12. 5460A Switch Assemblies	2-27

Figure 3-1.	5466B Analog-to-Digital Converter Block Diagram	3-3
Figure 3-2.	5466B ADC Wiring Diagram	3-5
Figure 3-3.	A1, A2 Input Board — 05466-60013 (Series 1842A)	3-7
Figure 3-4.	A3, A4, A5, A6 200 kHz Digitizer Board (05466-60002/60007) (Series 1644A)	3-9
Figure 3-5.	A3, A4, A5, A6 100 kHz Digitizer Board (05466-60014) (Series 1952A)	3-11
Figure 3-5.	A3, A4, A5, A6 100 kHz Digitizer Board (05466-60014) (Series 1644A, 1952A, 2108A, and 2112A)	3-11
Figure 3-6.	A7 Error Detect Board (05466-60015) (Series 1620A)	3-13
Figure 3-7.	A8 Trigger Board	3-15
Figure 3-8.	A9 Control Board without MUX (05466-60008)	3-17
Figure 3-9.	A9 Control Board with MUX (05466-60009) (Series 1832A)	3-19
Figure 3-10.	A9 Control Board, Universal (05466-60009)	3-21
Figure 3-11.	A10 Sample Generator Assembly	3-23
Figure 3-12.	Switch Wiring Diagram	3-24
Figure 3-13.	Switch Wiring Diagram	3-25
Figure 3-14.	Switch Wiring Diagram	3-26
Figure 3-15.	Switch Wiring Diagram	3-27
Figure 3-16.	Switch Wiring Diagram	3-28
Figure 4-1.	5475A Option 007 Control Unit Wiring Diagram	4-3
Figure 4-2.	5475A A1 thru A3 Rectifier, Ref. and Motherboard Assy. 007 and Assy. Locations	4-5
Figure 4-3.	5475A A4 thru A6 Regulator Assembly	4-11
Figure 4-4.	5475A A11 Front Panel and Keyboard Assembly	4-13
Figure 4-5.	5475A A12 Matrix A Assembly	4-15
Figure 4-6.	5475A A13 Matrix B Assembly	4-17
Figure 4-7.	5475A A14 Shift Register Board Assembly (05475-60204)	4-19
Figure 4-8.	5475A A15 Function Assembly	4-21
Figure 4-9.	5475A A16 Switch Register Assembly	4-23
Figure 4-10.	5475A A17 Light Driver Assembly	4-25
Figure 4-11.	5475A A18 Relay Board Assembly	4-27
Figure 4-12.	5475A XA12-XA15 Connectors Wiring Diagram	4-29
Figure 4-13.	5475A J11-J16 Connectors Wiring Diagram	4-33
Figure 5-1.	5451C ADC Interface Board	5-3

**FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE
STATEMENT**

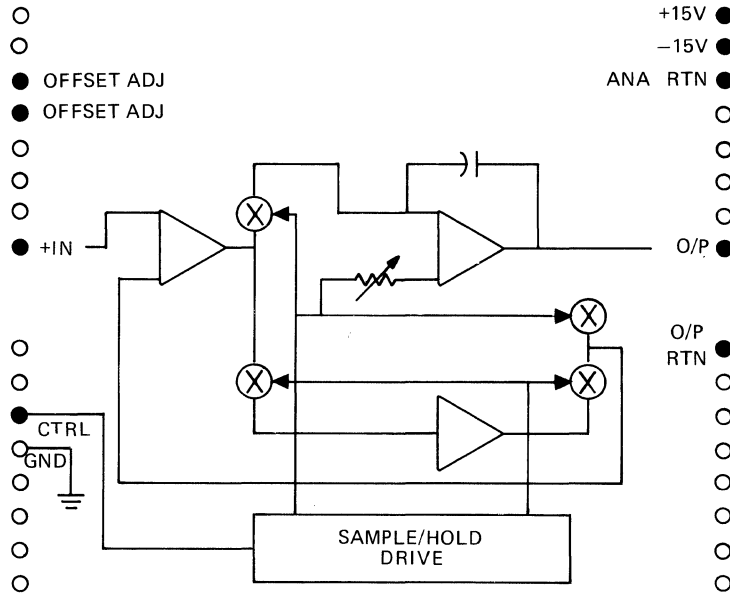
Warning: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. As temporarily permitted by regulation it has not been tested for compliance with the limits for Class A computing devices pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

SECTION I

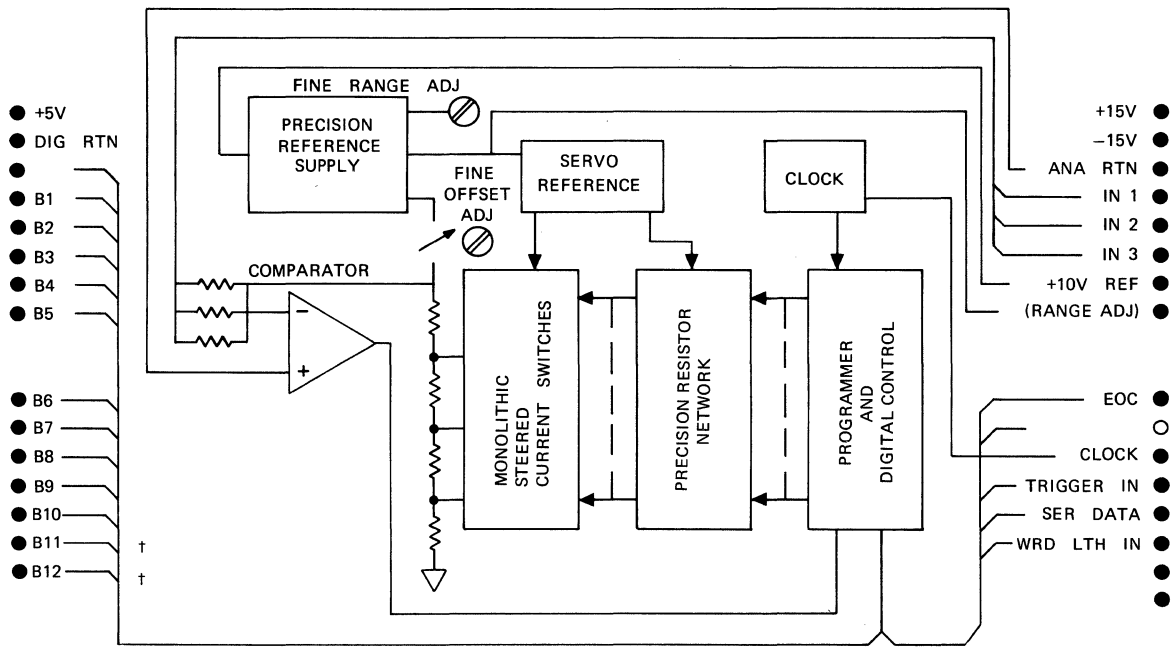
INTEGRATED CIRCUIT DIAGRAMS

This manual section contains detailed drawings of the integrated circuits used in the 5460A, 5466B, or 5475A units of the HP 5451A Fourier Analyzer System.

For circuit diagrams of a specific unit, see the appropriate section of this manual (refer, too, to the Table of Contents and Lists of Tables and Figures at the front of this manual).



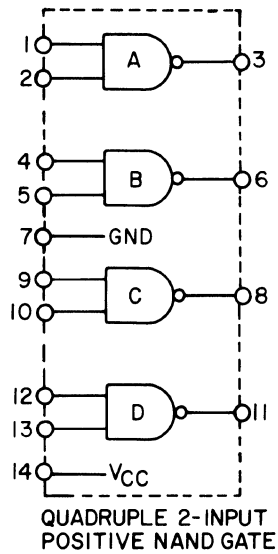
1813-0009
SAMPLE AND HOLD MODULE



† FOR PART NO. 1813-0010
DROP BIT'S 11 & 12

1813-0010, 1813-0011
10 BIT DIGITIZER,
12 BIT DIGITIZER

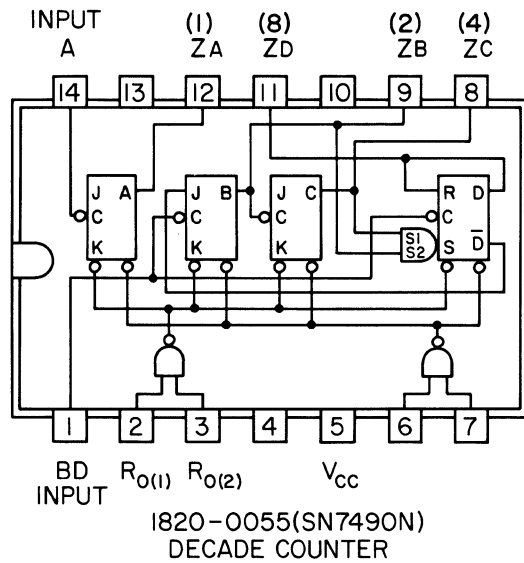
Figure 1-1. Integrated Circuits



TRUTH TABLE

INPUT	INPUT	OUTPUT
L	L	H
L	H	H
H	L	H
H	H	L

1820-0054
TTL QUAD 2-INPUT NAND GATE
(SN7400N)

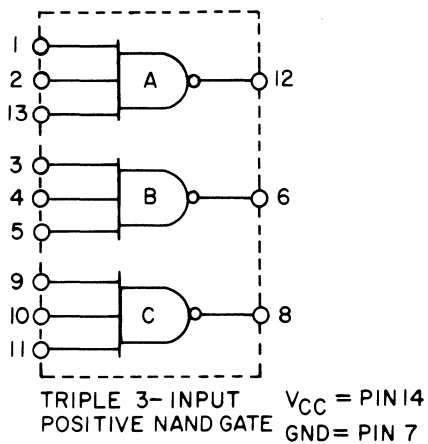


COUNT	OUTPUT			
	D	C	B	A
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1

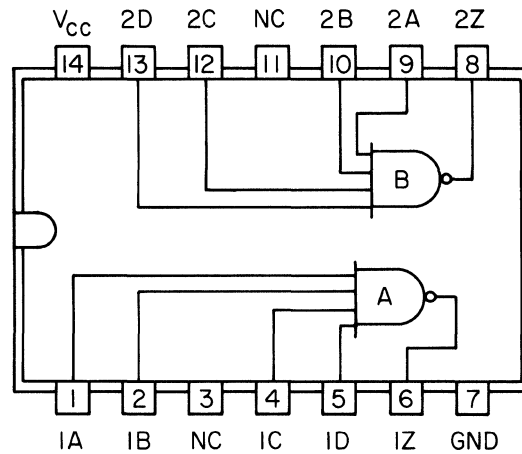
(1) (2) (4) (8)

1820-0055
TTL DECADE COUNTER
10 MHz MIN
(SN7490N)

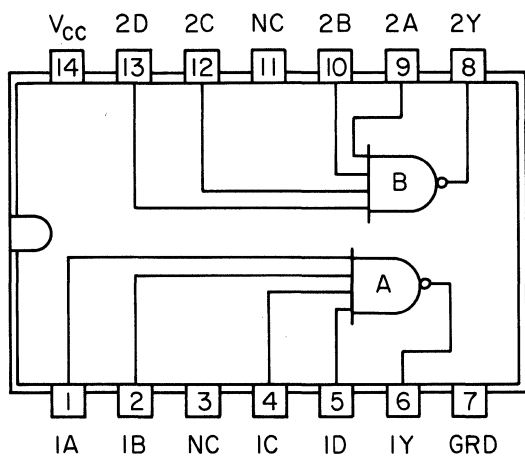
Figure 1-1. Integrated Circuits (Continued)



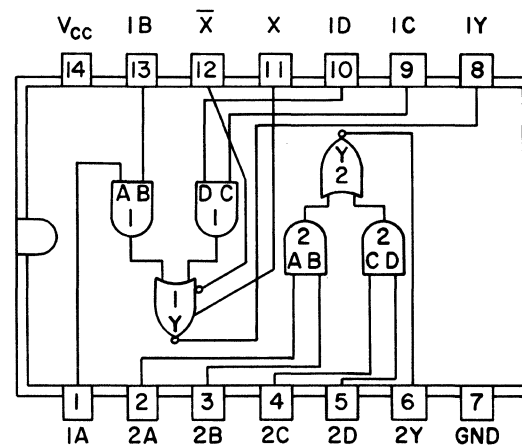
1820-0068
 TTL TRIPLE 3-INPUT NAND GATE
 (SN7410N)



1820-0069
 TTL DUAL 4-INPUT NAND GATE
 (SN7420N)

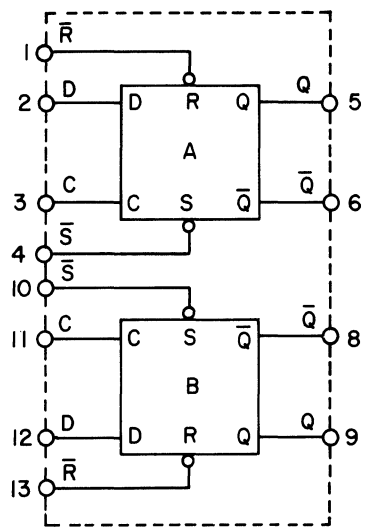


1820-0071
 TTL DUAL 4-INPUT NAND BUFFER
 (SN7440N)



1820-0072
 TTL DUAL 2-WIDE
 2-INPUT EXP AND-OR-
 INVERT GATE
 (SN7450N)

Figure 1-1. Integrated Circuits (Continued)



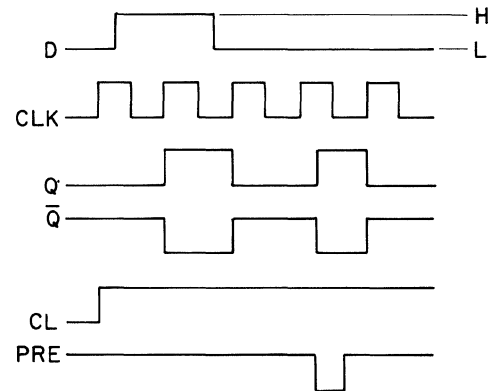
DUAL D-TYPE EDGE-TRIGGERED FLIP-FLOP POSITIVE LOGIC
 V_{CC} - PIN 14
 GND - PIN 7

TRUTH TABLE (EACH FLIP-FLOP)

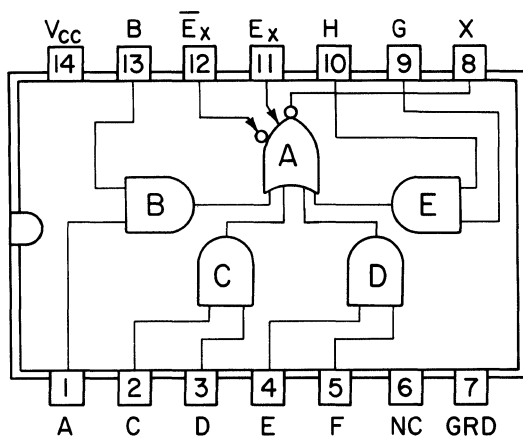
t_n	t_{n+1}	
INPUT D	OUTPUT Q	OUTPUT \bar{Q}
0	0	1
1	1	0

NOTES

1. t_n = BIT TIME BEFORE CLOCK PULSE
2. t_{n+1} = BIT TIME AFTER CLOCK PULSE
3. POSITIVE LOGIC:
 - A. LOW INPUT TO CLEAR SETS Q TO LOGICAL 0
 - B. LOW INPUT TO PRESET SETS Q TO LOGICAL 1
 - C. CLEAR OR PRESET INPUTS DOMINATE REGARDLESS OF CLOCK AND D INPUTS

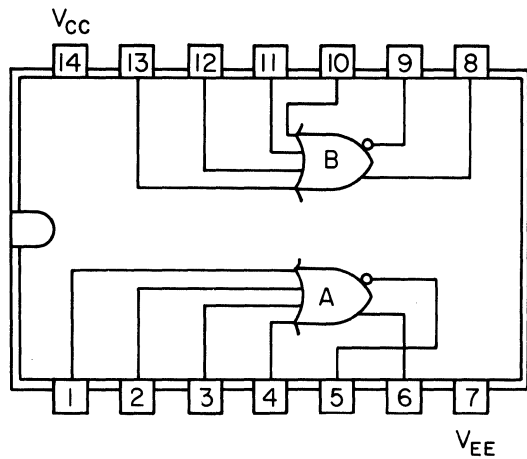


1820-0077
 TTL DUAL D FLIP-FLOP
 (SN7474N)



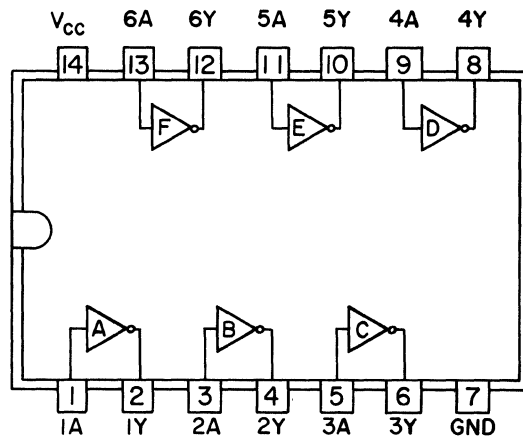
1820-0084
 TTL 4-WIDE 2-INPUT EXP
 AND-OR-INVERT GATE
 (SN7453N)

Figure 1-1. Integrated Circuits (Continued)



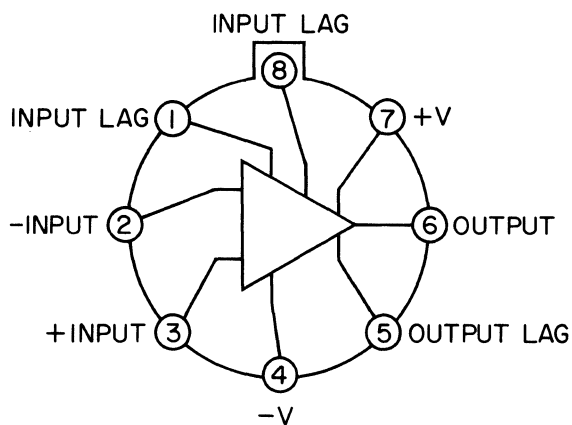
1820-0142
ECL DUAL 4-INPUT OR/NOR
(MC1004P)

POSITIVE LOGIC $Y = A$



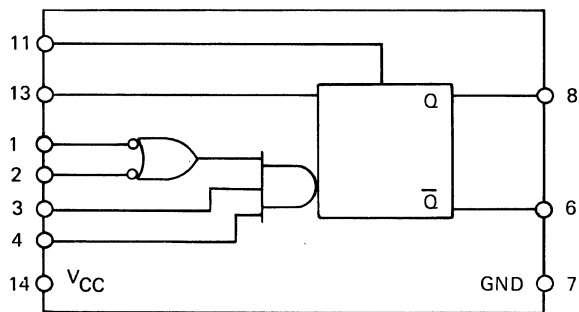
1820-0174
TTL HEX INVERTER
(SN7404N)

1820-0175
TTL HEX INVERTER OPEN COLLECTOR
(SN7405N)



1820-0201
OPERATIONAL AMPLIFIER
(MC 1439G)

Figure 1-1. Integrated Circuits (Continued)



TRIGGERING TRUTH TABLE

Pin Number				Operation
1	2	3	4	
H-L	H	H	H	Trigger
H	H-L	H	H	Trigger
L	X	L-H	H	Trigger
X	L	L-H	H	Trigger
L	X	H	L-H	Trigger
X	L	H	L-H	Trigger

$$T \text{ (trigger)} = (\bar{1} + \bar{2}) \cdot 3 \cdot 4$$

Change of T from FALSE to TRUE causes trigger.

H = HIGH voltage level $\geq V_{IH}$

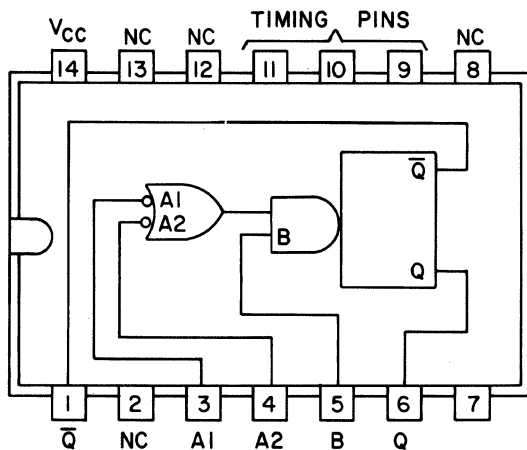
L = LOW voltage $\leq V_{IL}$

L-H = transition from LOW to HIGH voltage level

H-L = transition from HIGH to LOW voltage level

X = Don't care (either HIGH or LOW voltage level)

1820-0207
TTL MONOSTABLE MULTIVIBRATOR,
RETRIGGERABLE
(U6A960159X)



TRUTH TABLE

t_n INPUT			t_{n+1} INPUT			OUTPUT
A1	A2	B	A1	A2	B	
1	1	0	1	1	1	INHIBIT
0	X	1	0	X	0	INHIBIT
X	0	1	X	0	0	INHIBIT
0	X	0	0	X	1	ONE SHOT
X	0	0	X	0	1	ONE SHOT
1	1	1	X	0	1	ONE SHOT
1	1	1	0	X	1	ONE SHOT
X	0	0	X	1	0	INHIBIT
0	X	0	1	X	0	INHIBIT
X	0	1	1	1	1	INHIBIT
0	X	1	1	1	1	INHIBIT
1	1	0	X	0	0	INHIBIT
1	1	0	0	X	0	INHIBIT

$$1 = V_{in(1)} \quad 2V$$

$$0 = V_{in(0)} \quad 0.8V$$

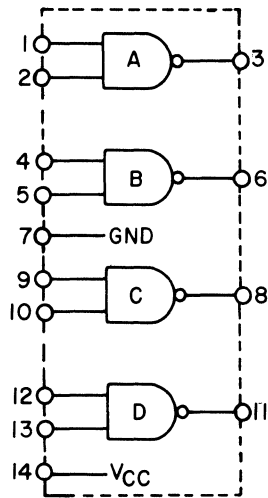
NOTES 1. t_n = TIME BEFORE INPUT TRANSITION.

2. t_{n+1} = TIME AFTER INPUT TRANSITION.

3. X INDICATES THAT EITHER A LOGICAL 0 OR 1 MAY BE PRESENT.

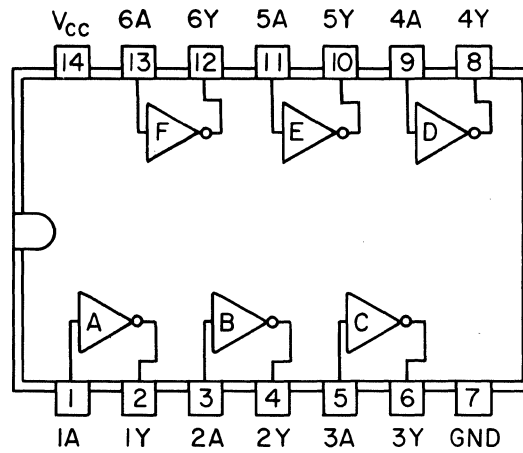
1820-0261
TTL MONOSTABLE MULTIVIBRATOR
(SN74121N)

Figure 1-1. Integrated Circuits (Continued)

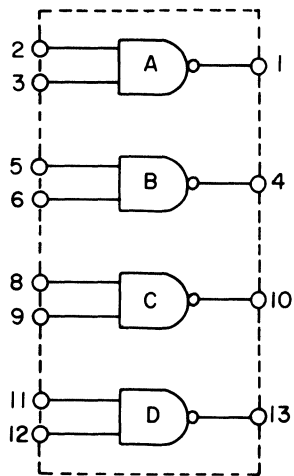


See 1820-0054 for Truth Tables.

1820-0269
TTL QUAD 2-INPUT NAND
GATE OPEN COLLECTOR
(SN7403N)

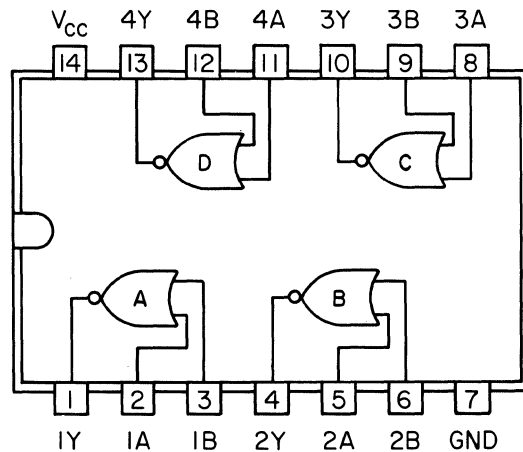


1820-0307
DTL HEX INVERTER RL=6K
(U6A993659X)



VCC = PIN 14
GND = PIN 7

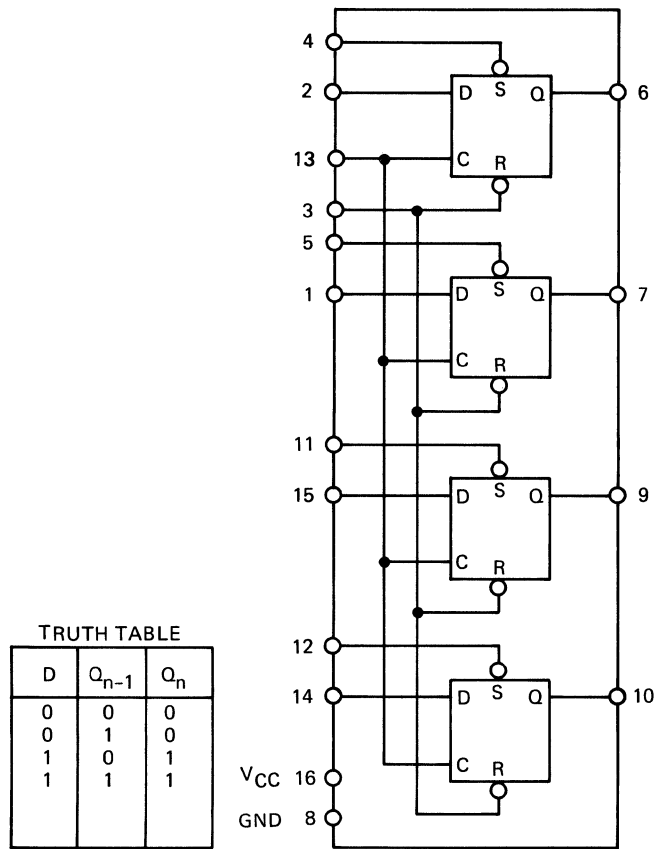
1820-0327
TTL QUAD 2-INPUT NAND
GATE OPEN COLLECTOR
(SN7401N)



POSITIVE LOGIC: $Y = \overline{A+B}$

1820-0328
TTL QUAD 2-INPUT NOR GATE
(SN7402N)

Figure 1-1. Integrated Circuits (Continued)

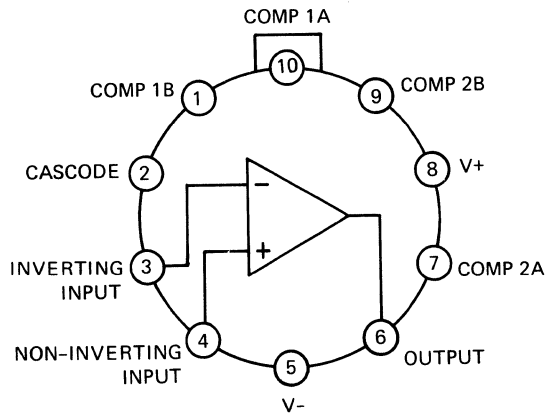


TRUTH TABLE

D	Q_{n-1}	Q_n
0	0	0
0	1	0
1	0	1
1	1	1

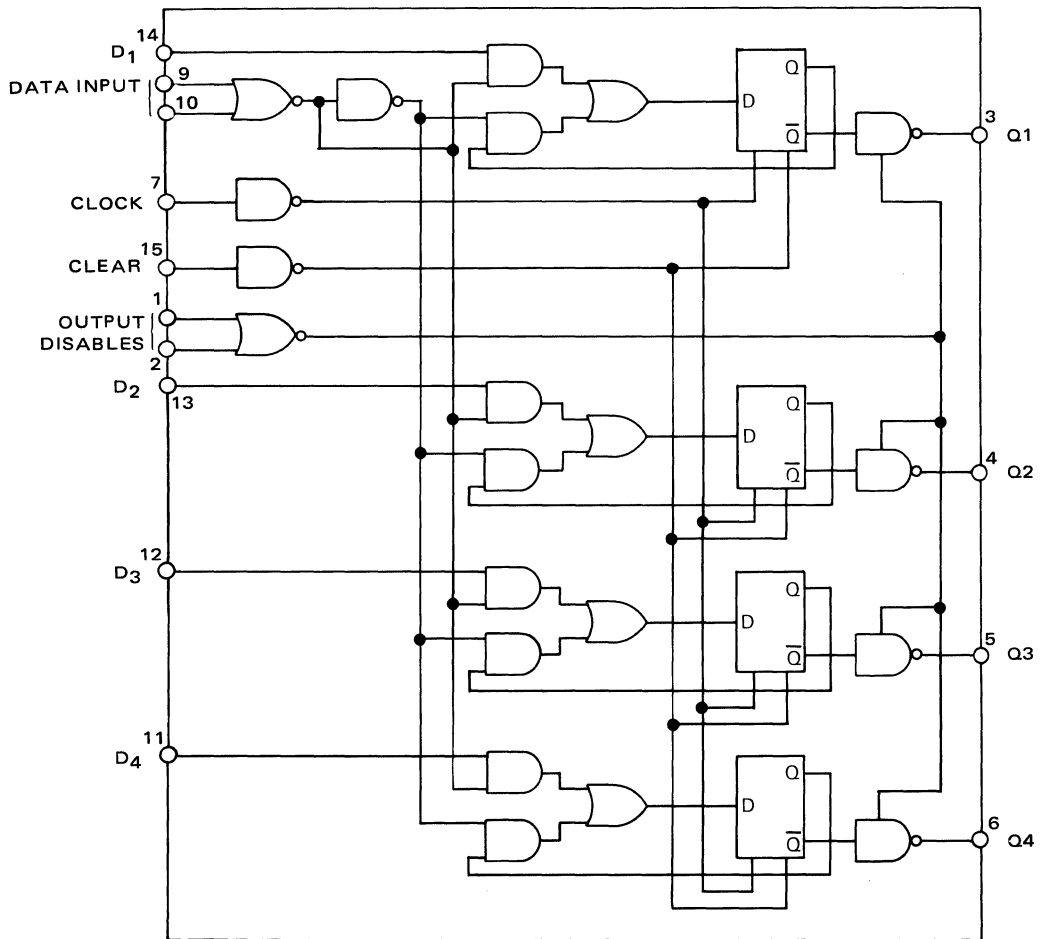
Q_{n-1} = TIME PERIOD PRIOR TO CLOCK PULSE
 Q_n = TIME PERIOD FOLLOWING CLOCK PULSE

1820-0437
 QUAD TYPE D FLIP-FLOP
 (MC4015LP)



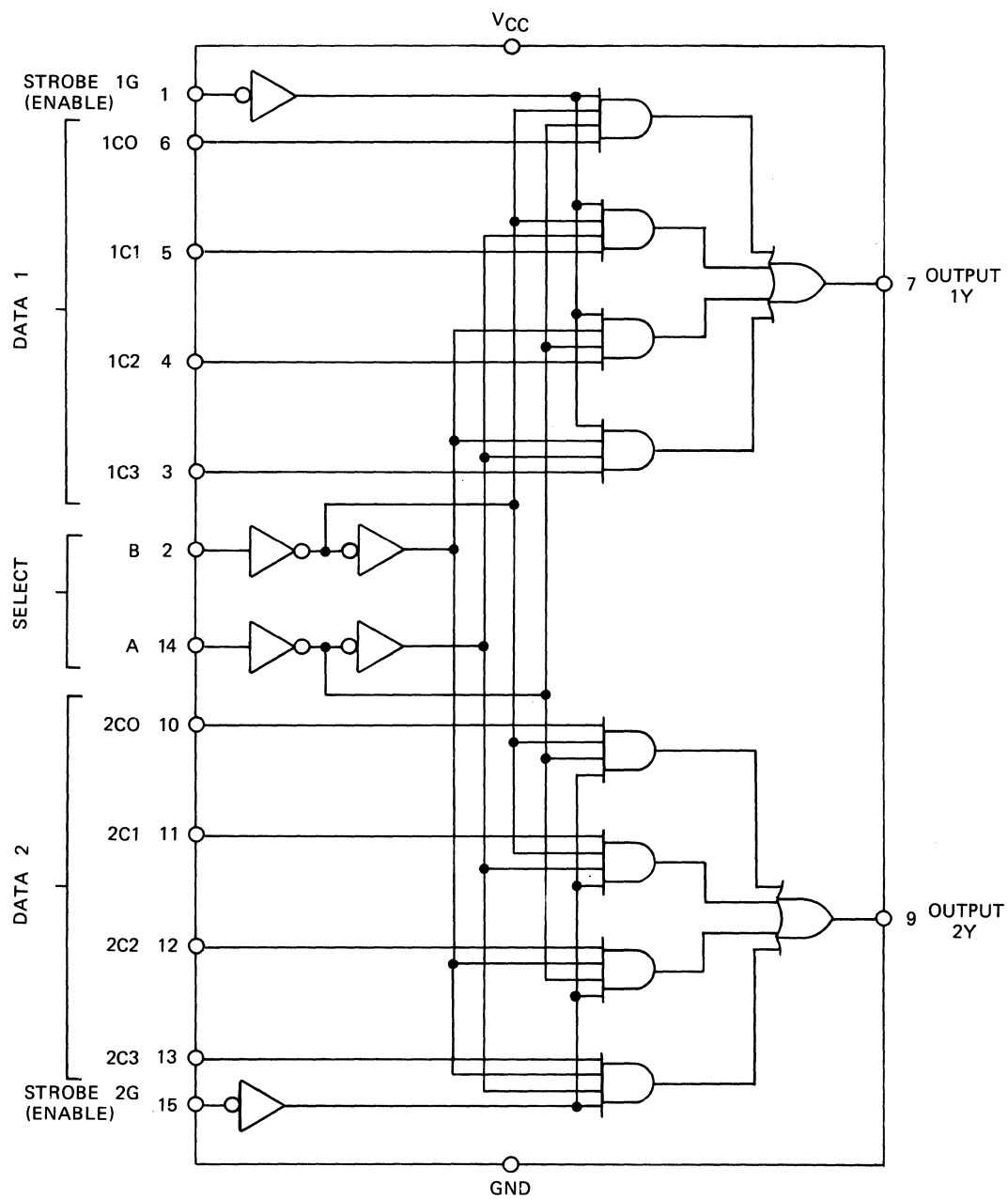
1820-0476
 HIGH SPEED OPERATIONAL AMPLIFIER
 (U5F7715393)

Figure 1-1. Integrated Circuits (Continued)



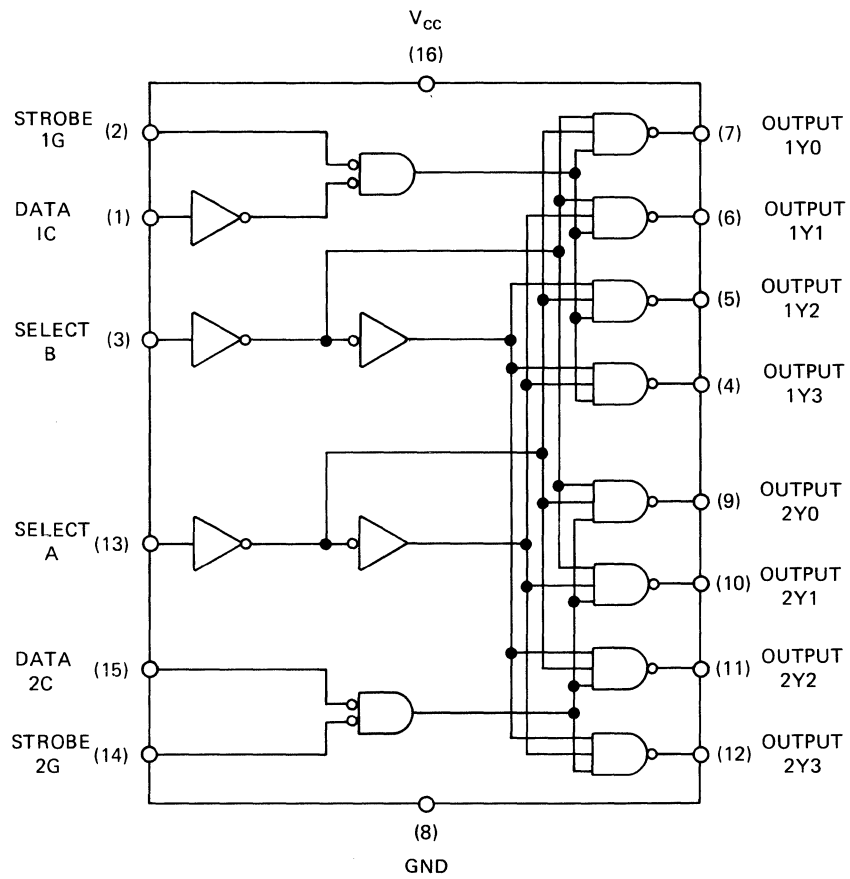
1820-0574
 TTL QUAD D FLIP-FLOP
 W/PAR CLK AND CLEAR
 (DM8551N)

Figure 1-1. Integrated Circuits (Continued)



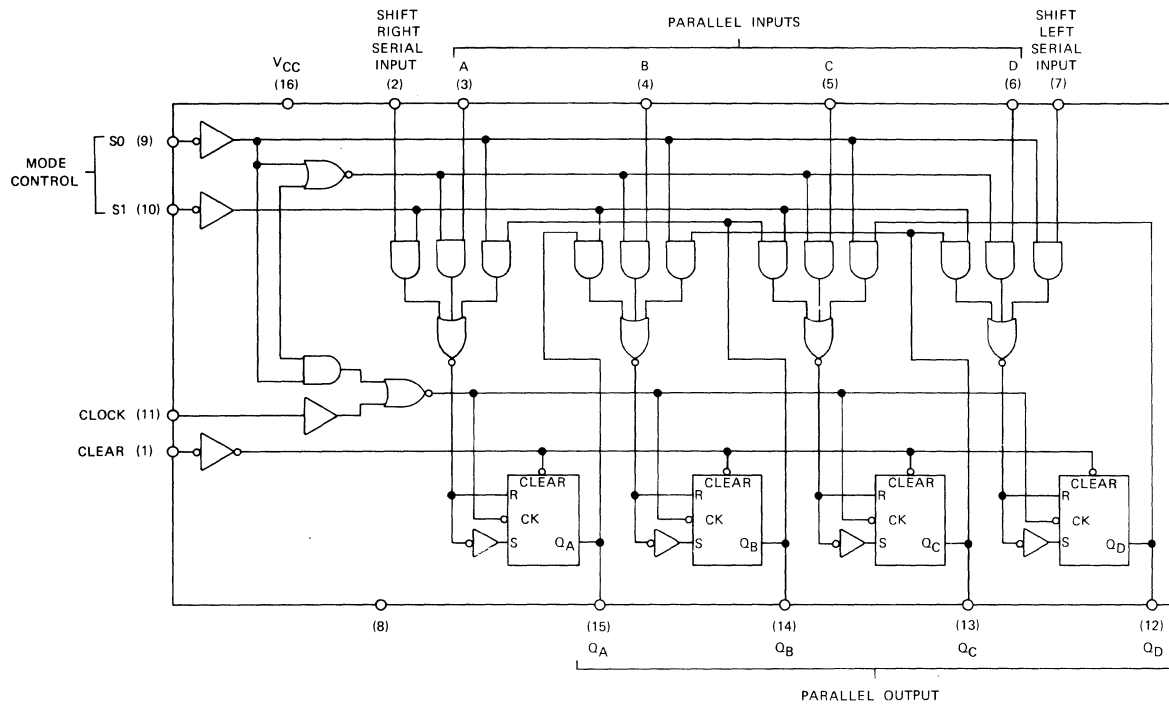
1820-0620
 TTL DUAL 4-INPUT
 MULTIPLEXER W/COMMON
 SELECT
 (SN74153N)

Figure 1-1. Integrated Circuits (Continued)

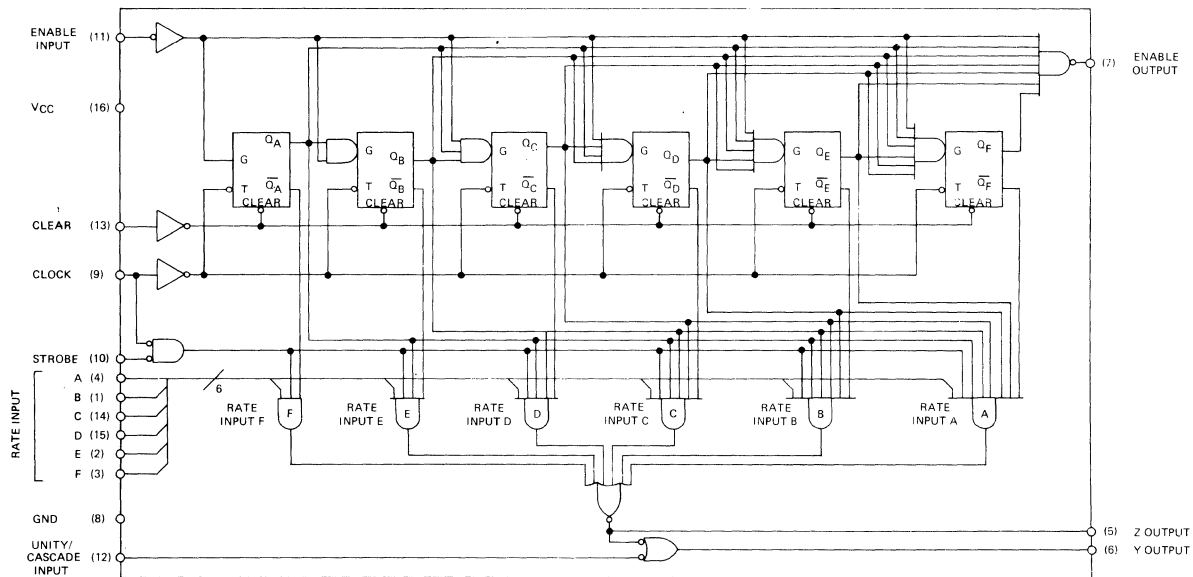


1820-0738
 TTL DUAL 1-OF-4 DECODER
 W/SEP ENABLE, COMM SELECT
 (SN74155N)

Figure 1-1. Integrated Circuits (Continued)

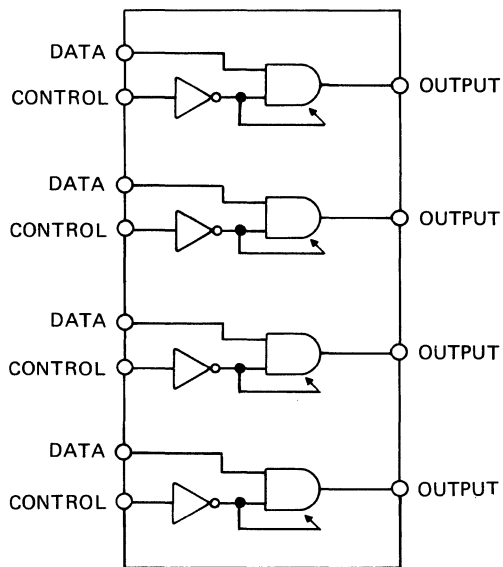


1820-0743
TTL 4-BIT BI-DIRECTIONAL
UNIV SHIFT REGISTER
(SN74194N)

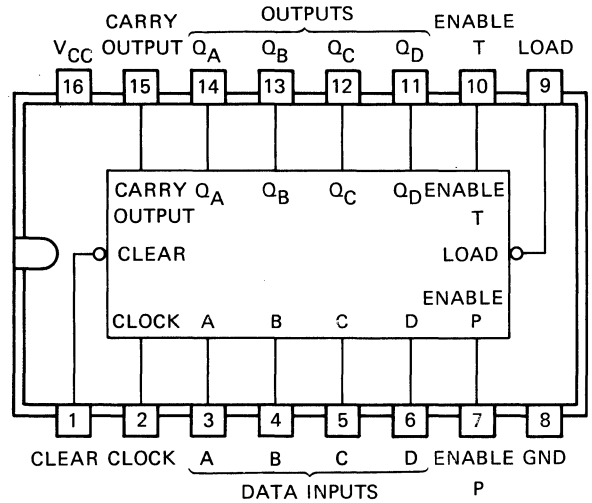


1820-0744
TTL 6-BIT BINARY COUNTER,
SYNCHRO, 25 MHz MIN
(SN7497N)

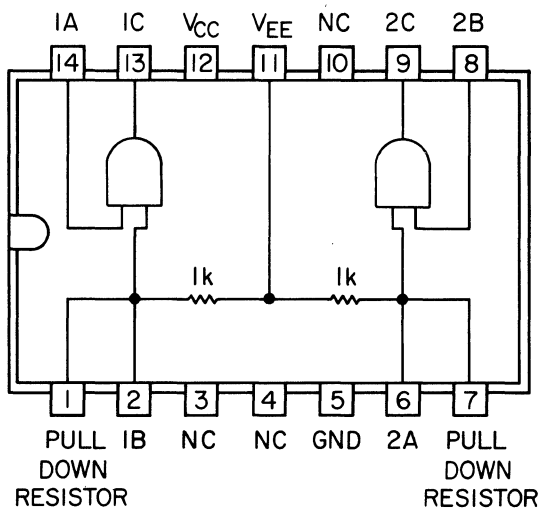
Figure 1-1. Integrated Circuits (Continued)



1820-0846
TTL QUAD BUFFER
(TRI STATE)
(DM8094N)

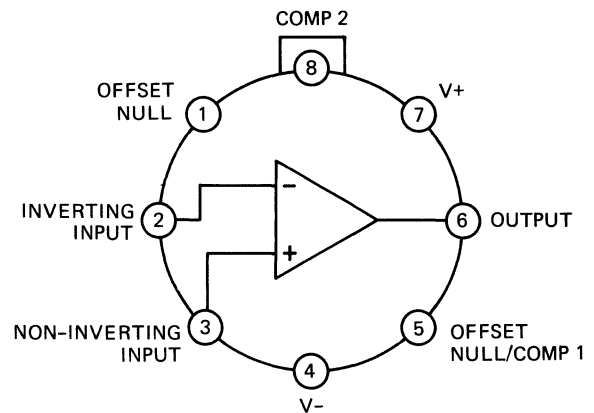


1820-0899
TTL DECADE COUNTER W/ASYNCHRO
CLEAR, SYNCHRO PRESET
(SN74160N)



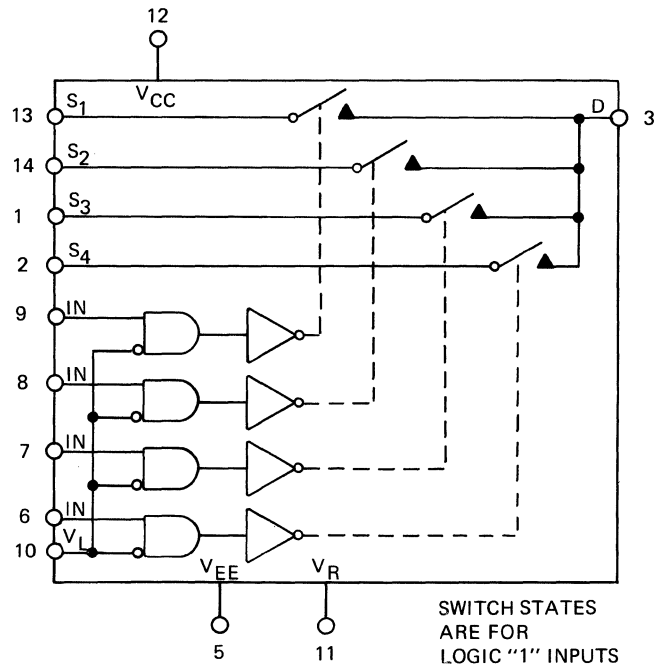
$$Z = A \cdot B$$

1820-0956
DUAL 2-INPUT POSITIVE AND
GATE $Z = A \cdot B$
(CT μ L9956)

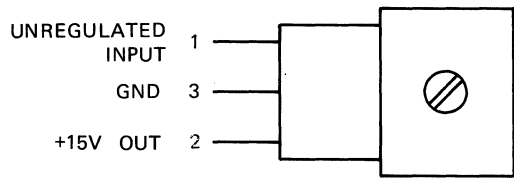


1826-0081
HIGH SPEED FET OPERATIONAL AMPLIFIER
(LH0062H or LH0062CH)

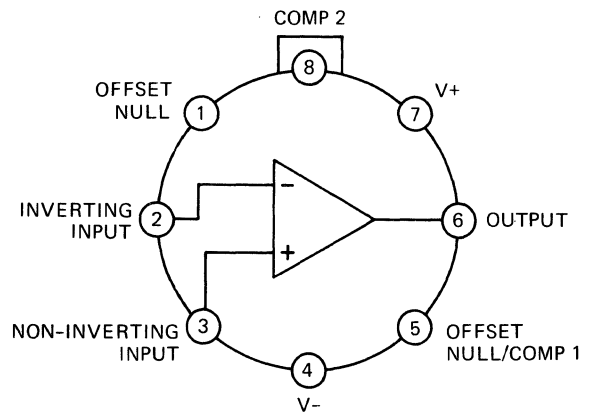
Figure 1-1. Integrated Circuits (Continued)



1826-0105
4-CHANNEL DRIVER
WITH MOS SWITCHES
(SDG7214)



1826-0106
+15V REGULATOR
(U6H7815393)



1826-0108
HIGH SPEED FET OPERATIONAL AMPLIFIER
(LH0062H or LH0062CH)

Figure 1-1. Integrated Circuits (Continued)

SECTION II

5460A DISPLAY PLUG-IN

INTRODUCTION

This section contains schematics, component locators, wiring, and change data for the Hewlett-Packard Model 5460A Display Plug-in. For theory of operation, maintenance and troubleshooting procedures, refer to the 5451C System Service Manual.

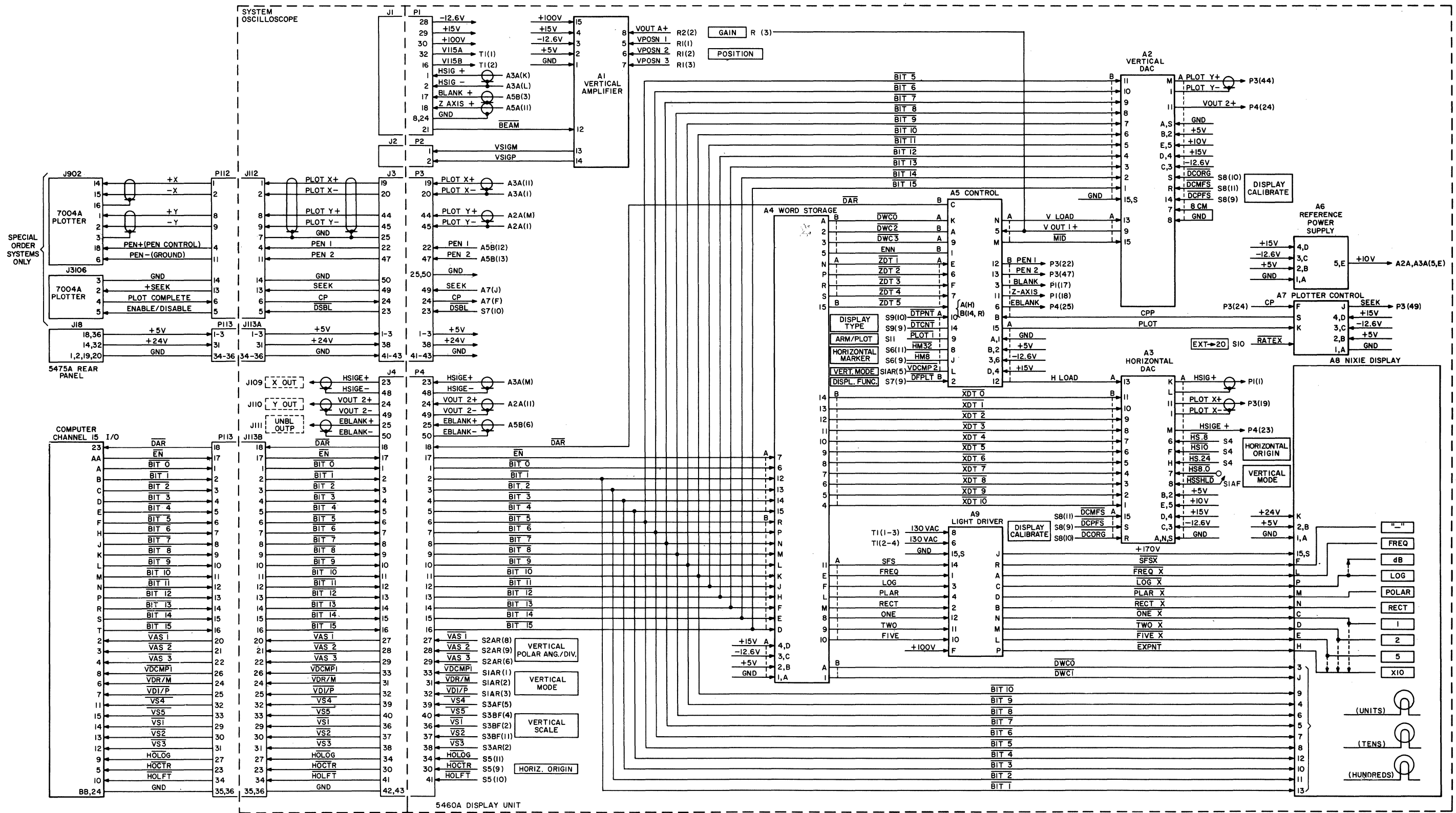
CHANGE DATA

Current Instruments

This manual section applies to HP Model 5460A Display Plug-ins having serial prefix 2020A.

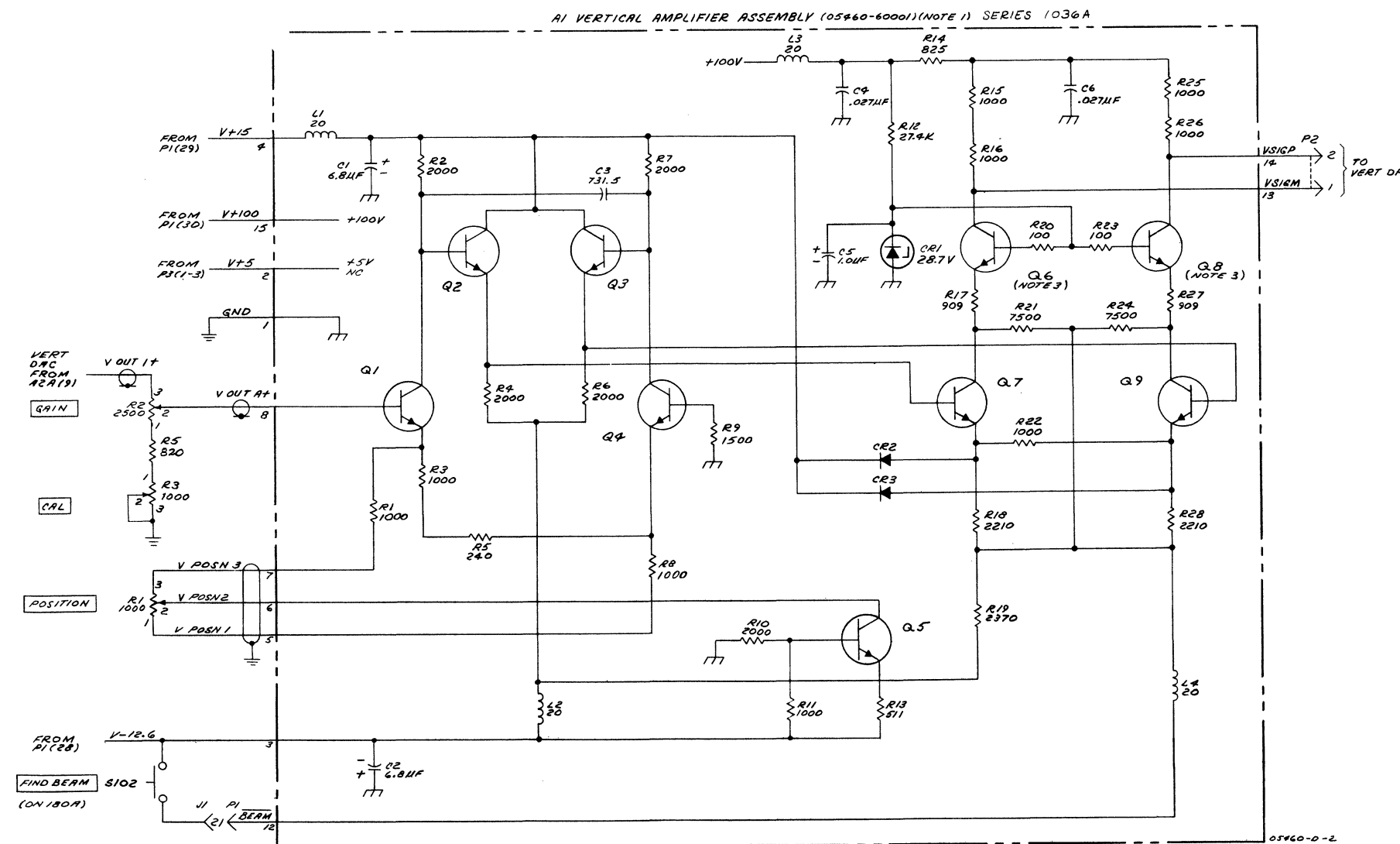
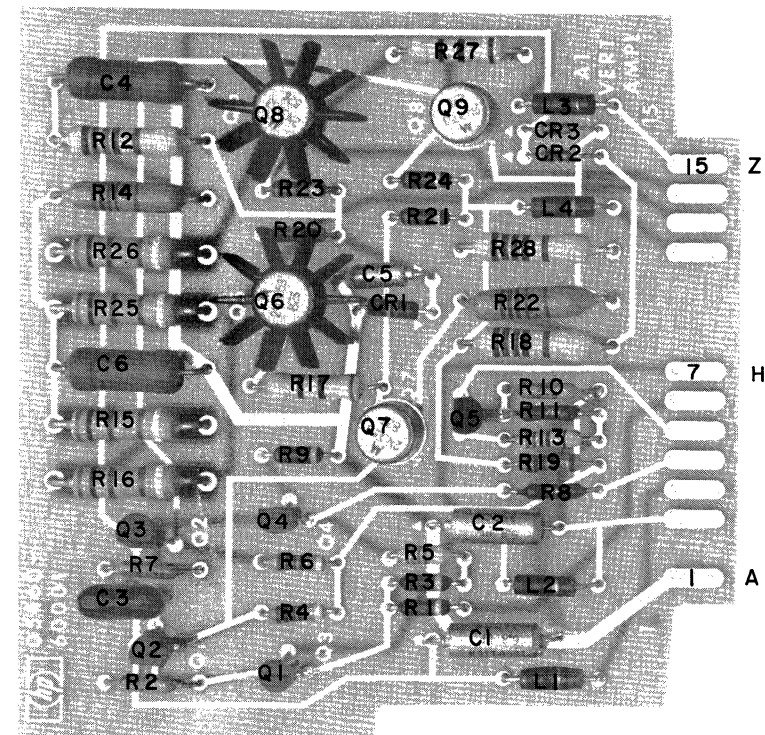
Older Instruments

For 5460A's with serial prefixes below 2020A, refer to 5451 System Hardware Manuals, HP Part Number 05451-90467 and 05451-90517.



05480-D-2A

Figure 2-1
5460A DISPLAY UNIT WIRING DIAGRAM



NOTES

1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS; INDUCTANCE IN MICROHENRIES
3. Q6 AND Q8 USE HEAT SINK 1205-0033

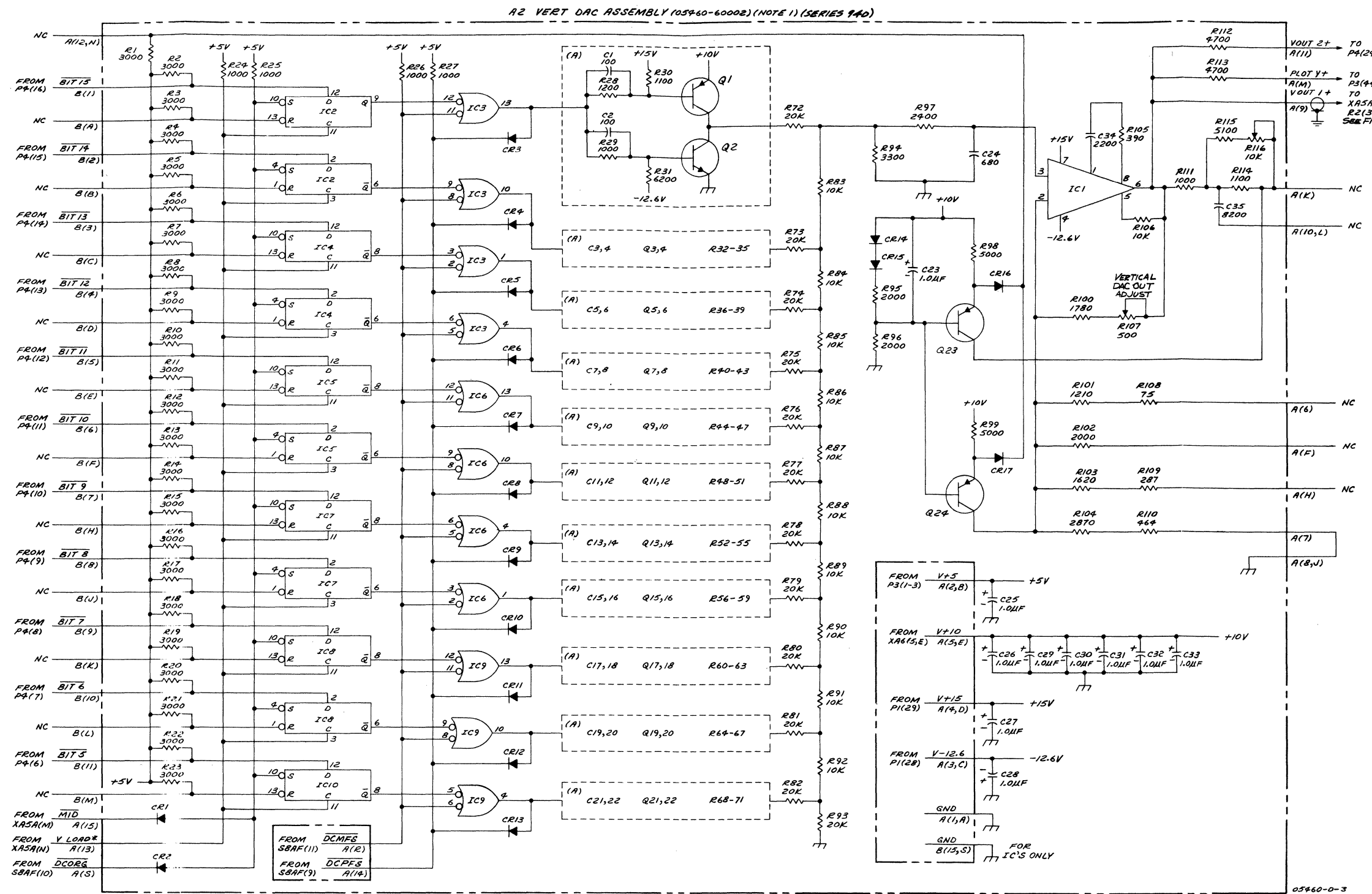
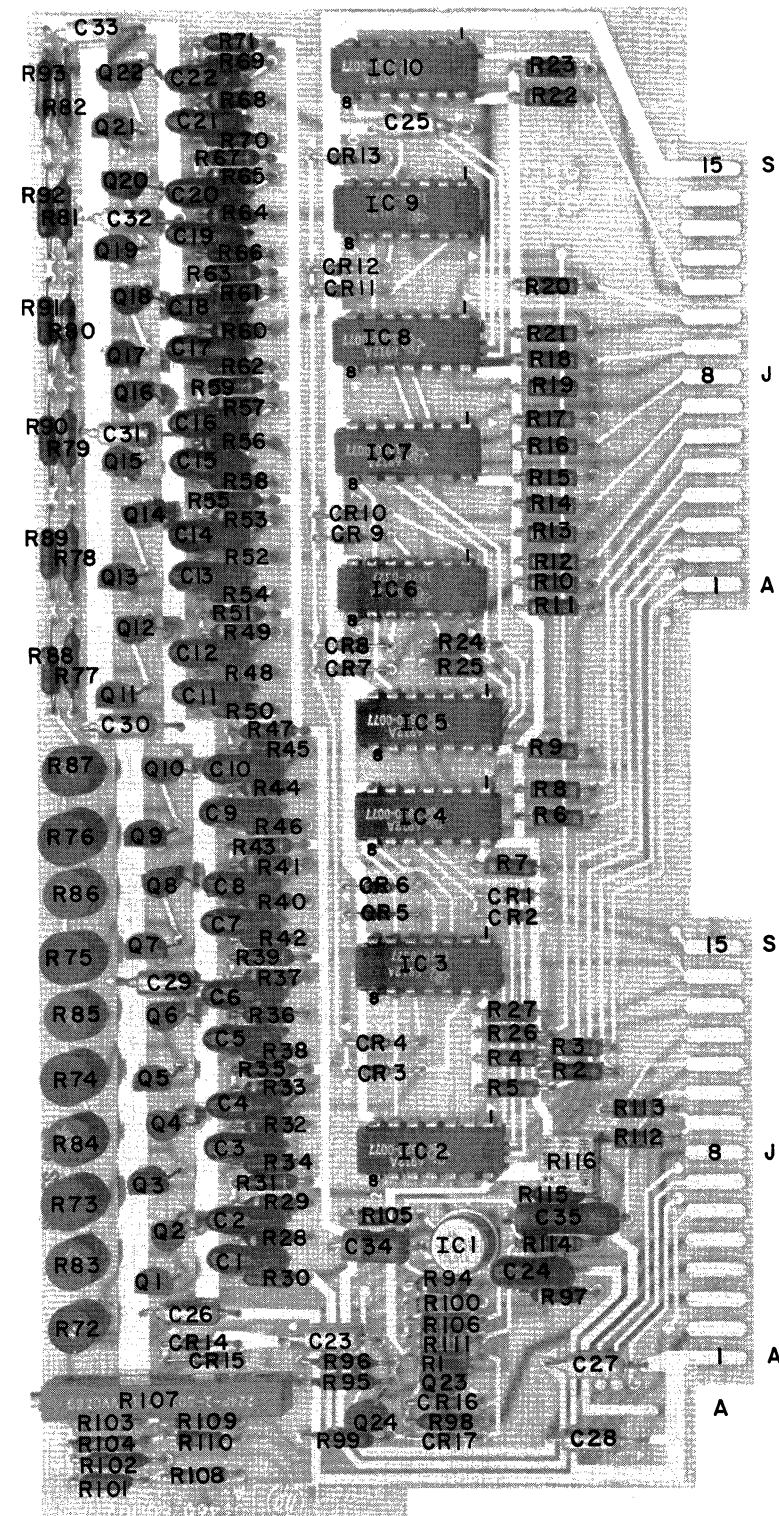
REFERENCE DESIGNATIONS

NO PREFIX	A1	18A
	C1-6	
J1	CR1-3	
P1,2	L1-4	
R1-3,5	Q1-9	
	R1-28	5102

TABLE

REFERENCE DESIGNATIONS	HP PART NO
CR1	1902-3279
CR2,3	1901-0040
Q6-9	1854-0039
	2N3053
Q2,3,5	1854-0071
Q1,4	1854-0215
	2N3904

Figure 2-2
5460A A1 VERTICAL AMPLIFIER ASSEMBLY



- NOTES**
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOSECONDS.

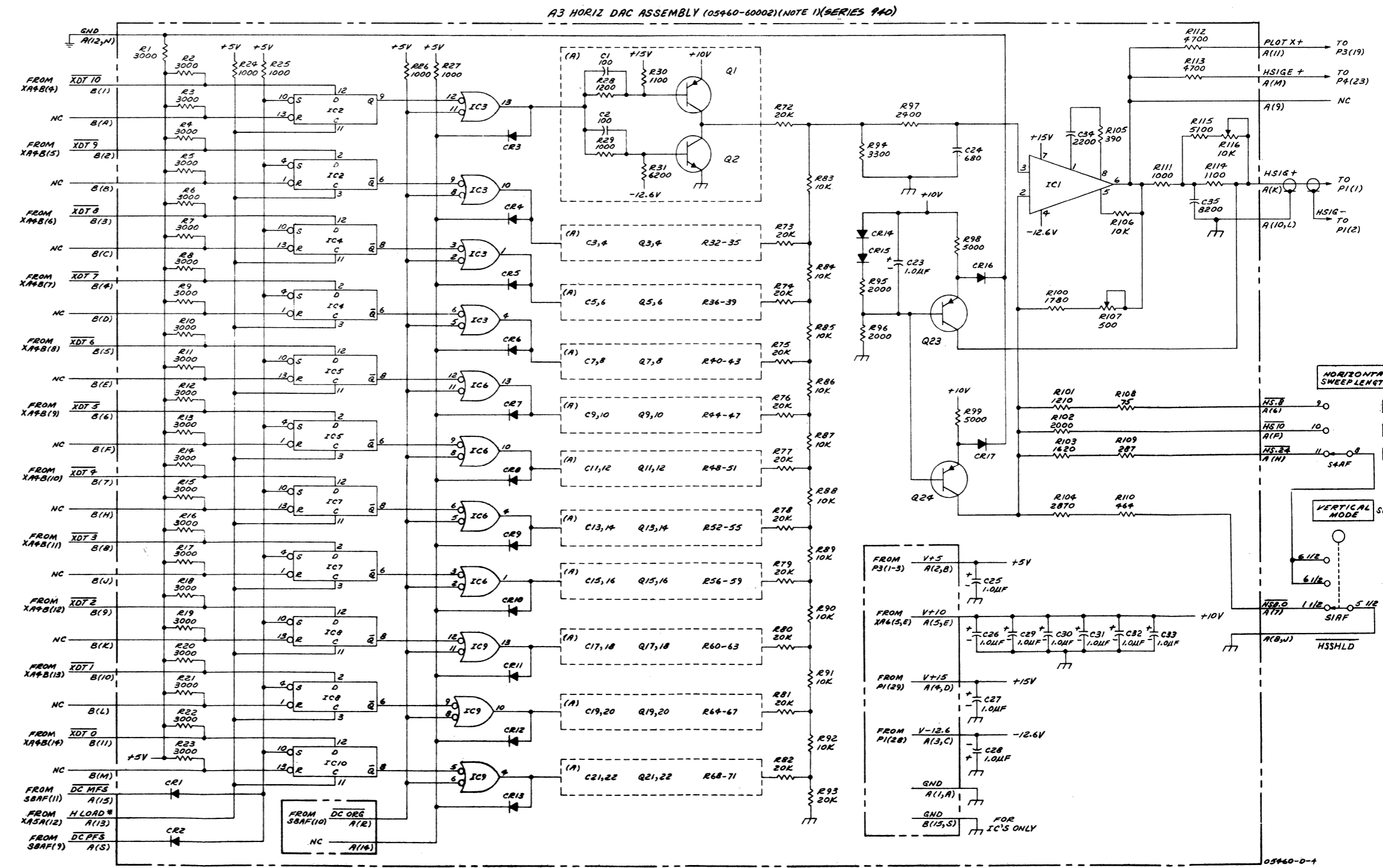
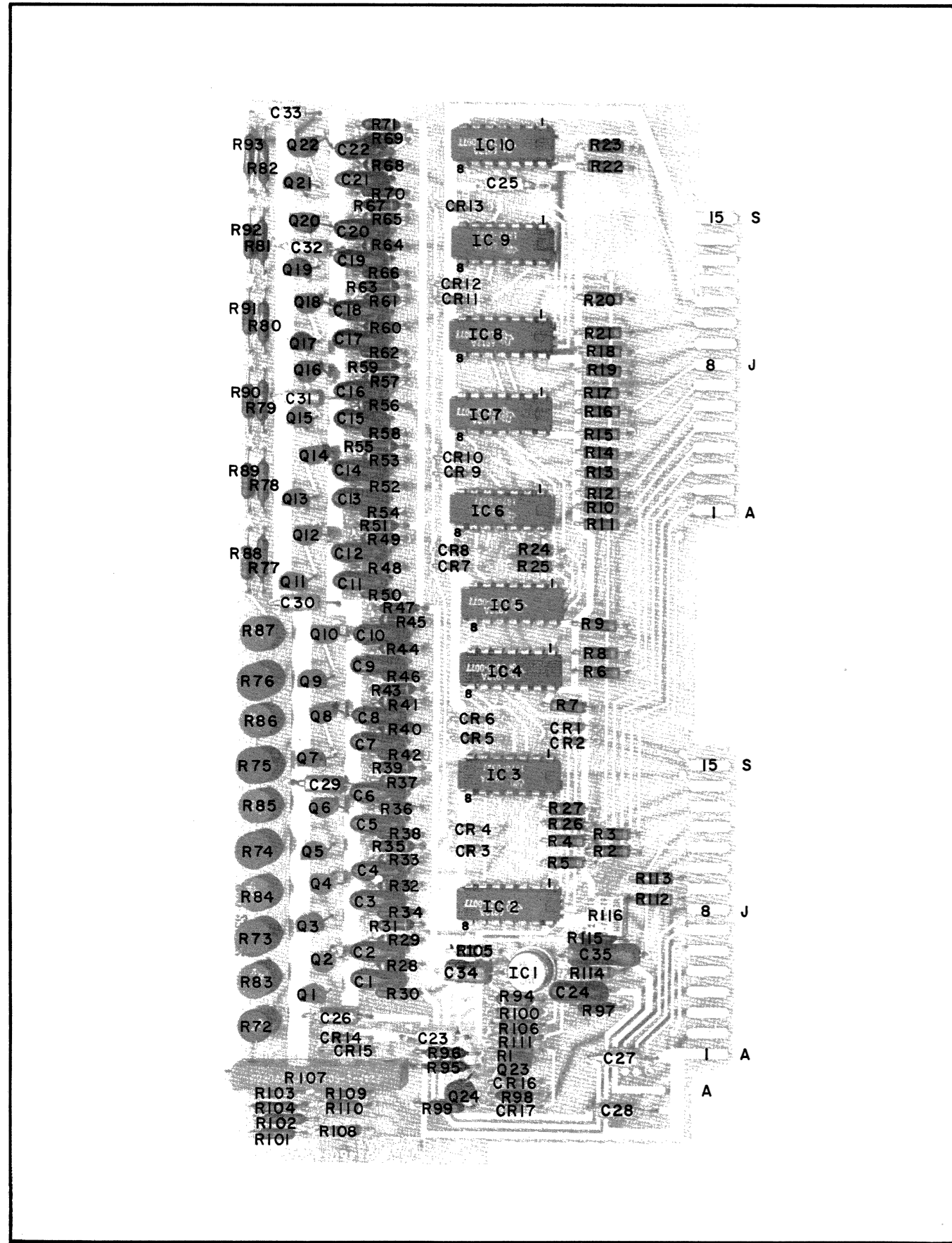
TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1-17	1301-0040
IC2, 4, 5, 7, 8, 10	1820-0077
IC1	1820-0201
IC3, 6, 9	1820-0327
Q1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 14, 16, 18, 20, 22	1853-0088
	1854-0326

REFERENCE DESIGNATIONS

A2
IC1-35
CR1-17
IC1-10
Q1-24
RI-16

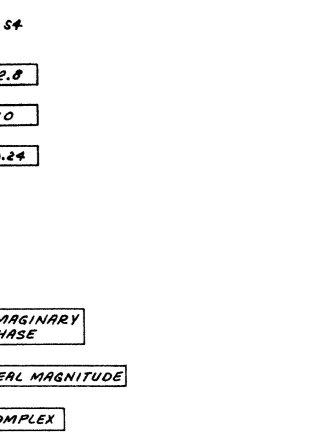
Figure 2-3
5460A A2 VERTICAL DIGITAL-TO-ANALOG
CONVERTER ASSEMBLY



TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1-17	1901-0090
IC 2, 4, 5, 7, 8, 10	1820-0077
IC 1	1820-0201
IC 3, 6, 9,	1820-0327
Q1, 3, 5, 7, 9, 11, 13,	1853-0088
15, 17, 19, 21	
Q2, 4, 6, 8, 10, 12	1859-0326
14, 16, 18, 20, 22	

- NOTES
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS;



REFERENCE DESIGNATIONS

NO PREFIX	A3
C1-35	
CR1-17	
IC1-10	
Q1-24	
R1-116	

Figure 2-4
5460A A3 HORIZONTAL DAC ASSEMBLY
2-9

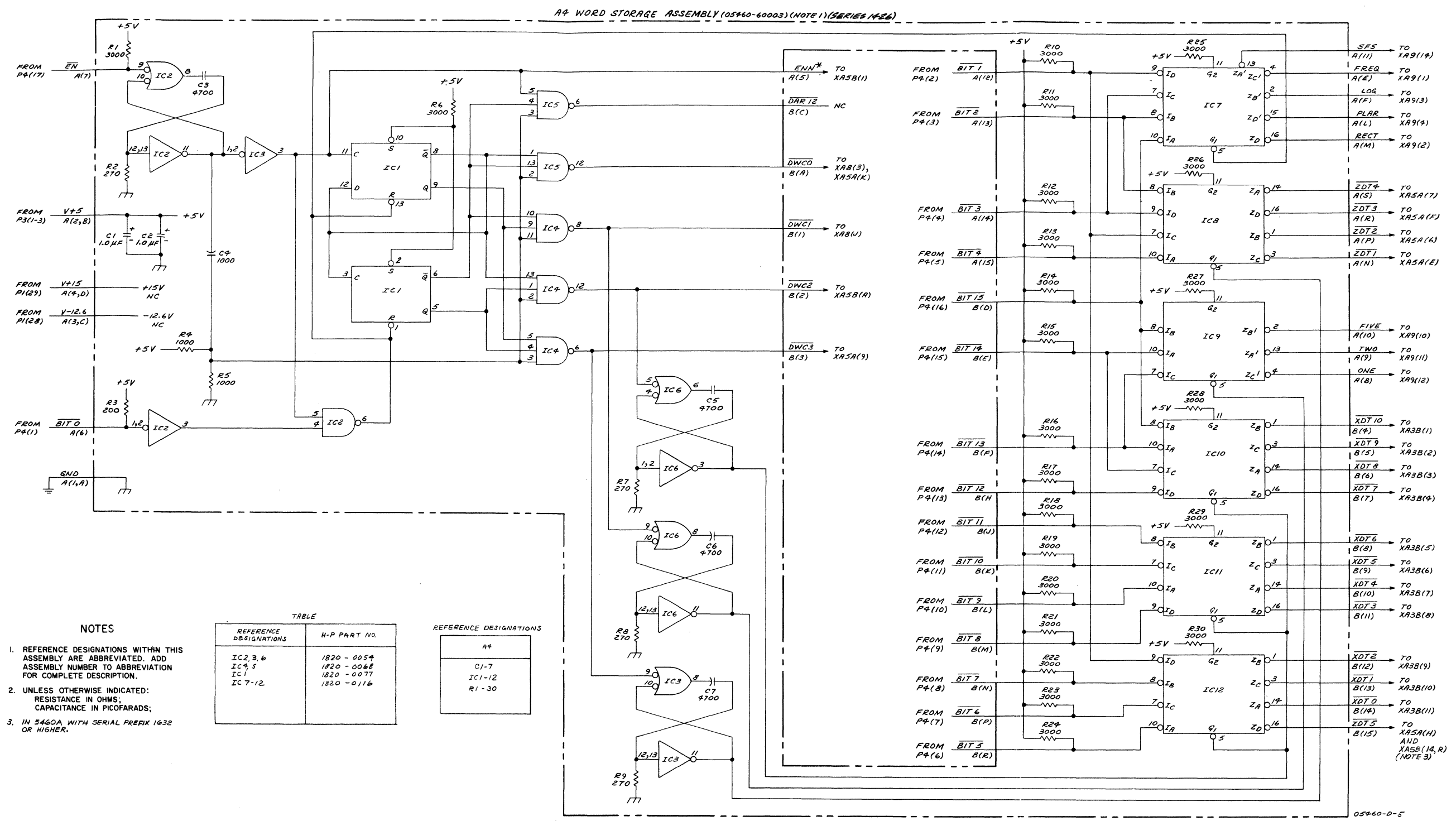
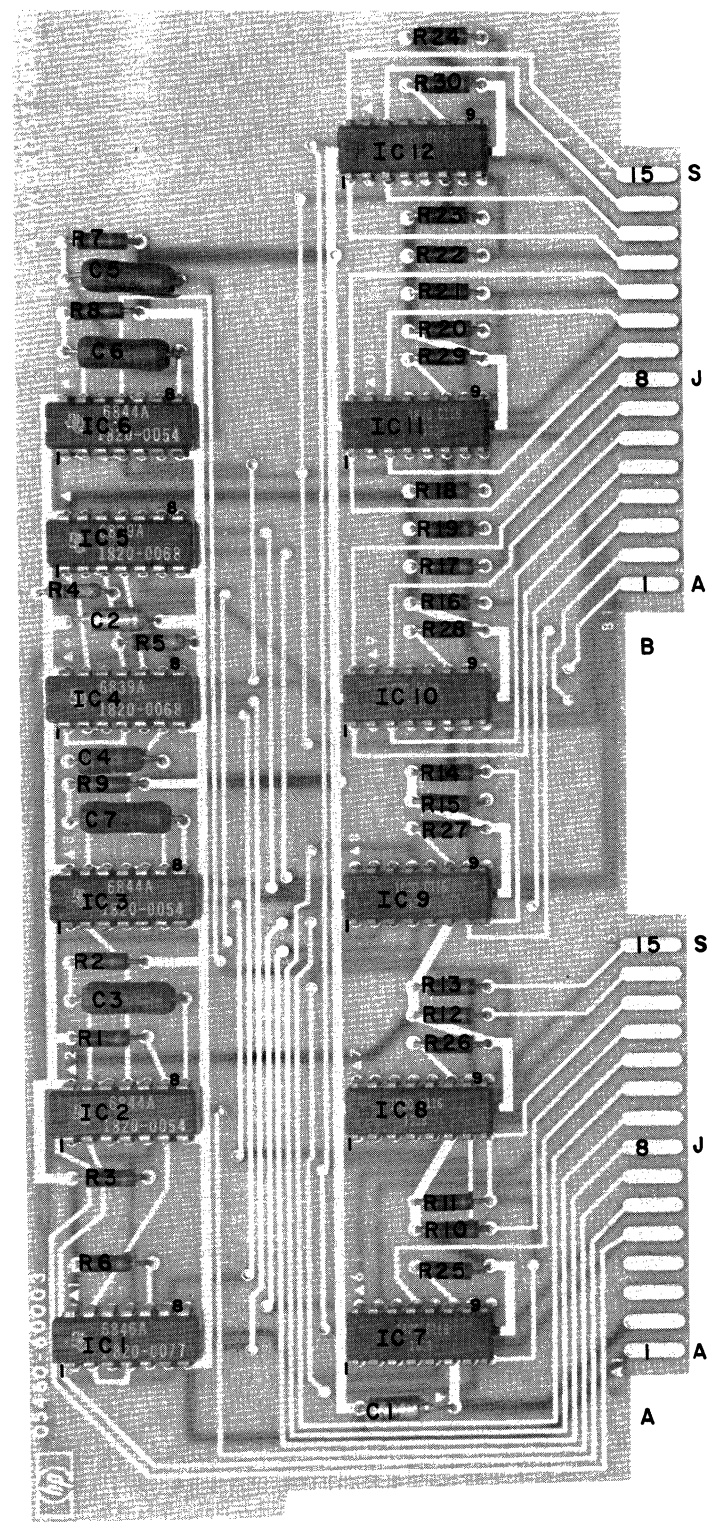
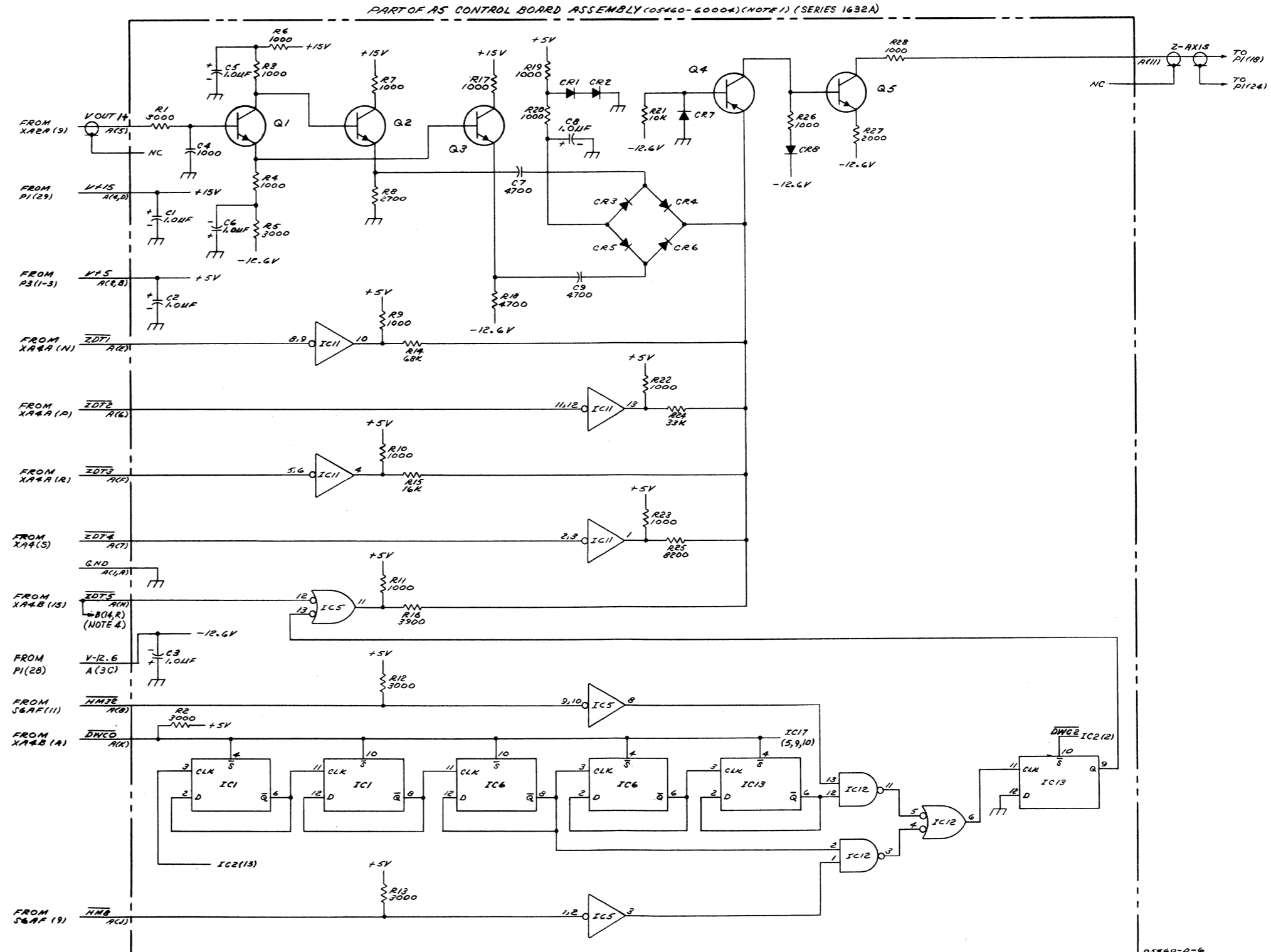
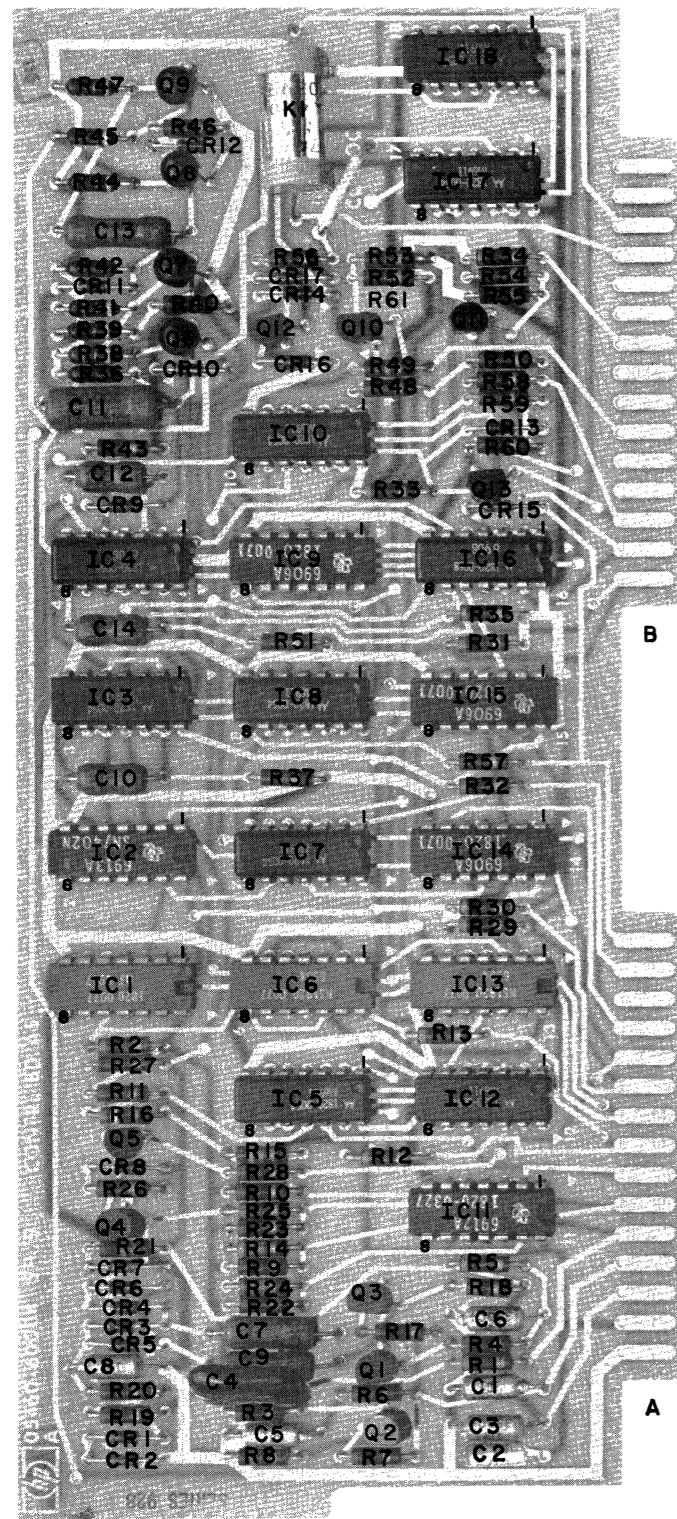


Figure 2-5
5460A A4 WORD STORAGE ASSEMBLY
2-11



NOTES

1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS;
3. JUMPER FOR CLOSED OR OPEN CONTACTS WHEN PLOTTER PIN IS DOWN.
4. IN 5460A WITH SERIAL PREFIX 1632 OR HIGHER

TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1-17	1901-0040
IC 3,4,5,7,8,9,12,17,18	1820-0054
IC 16	1820-0068
IC 9,14,15	1820-0071
IC 1,4,13	1820-0077
IC 11	1820-0327
IC 2	1820-0328
Q 4,10,11	1853-0020
Q 1-3,5,12,13	1854-0071
Q 6-9	1854-0092

REFERENCE DESIGNATIONS

NO PREFIX	A5
	C1-14
	CR1-17
	IC1-18
	K1
	Q1-13
	R1-60
S11	

Figure 2-6
5460A A5 CONTROL BOARD ASSEMBLY
(Sheet 1 of 2)

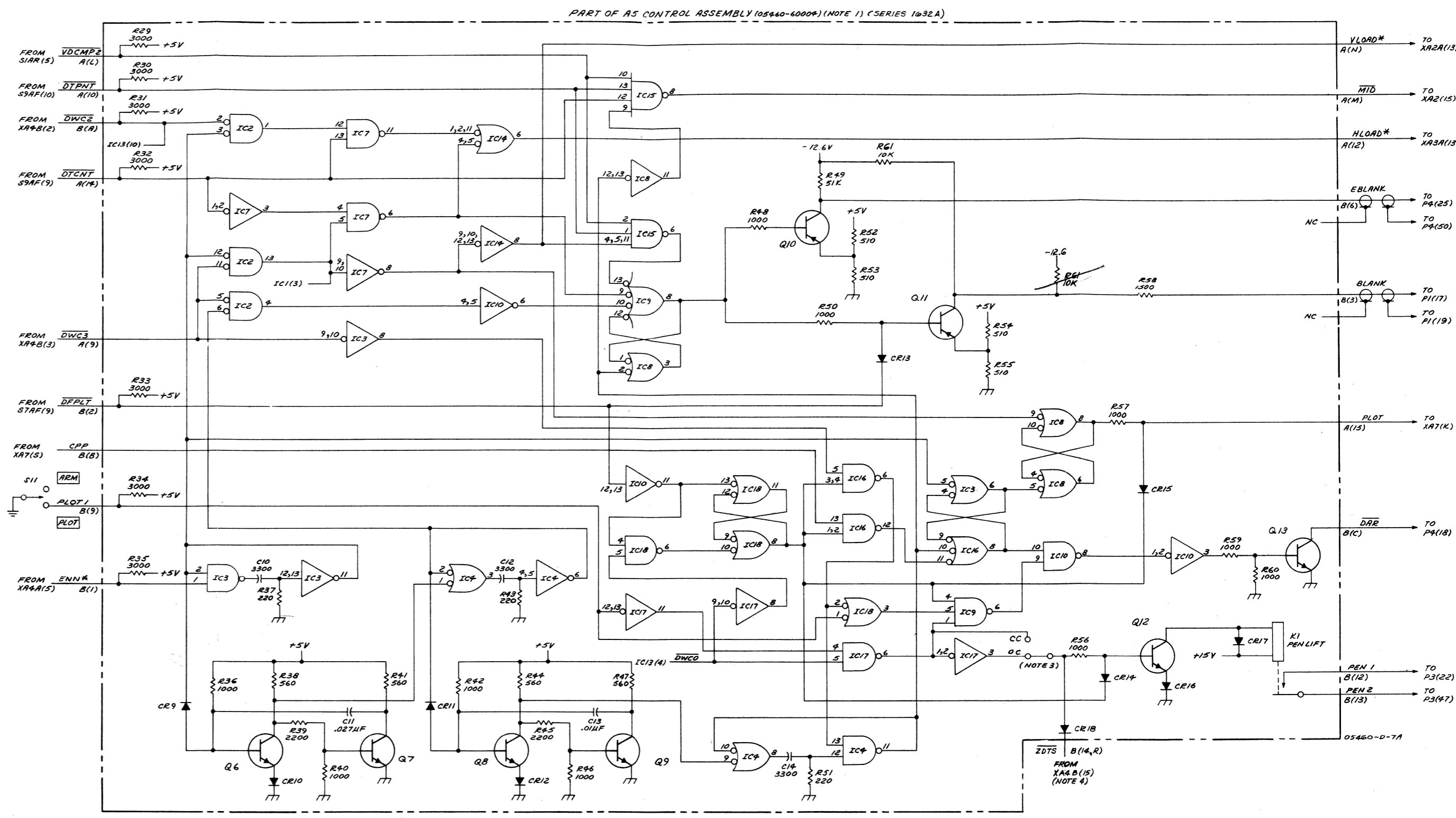
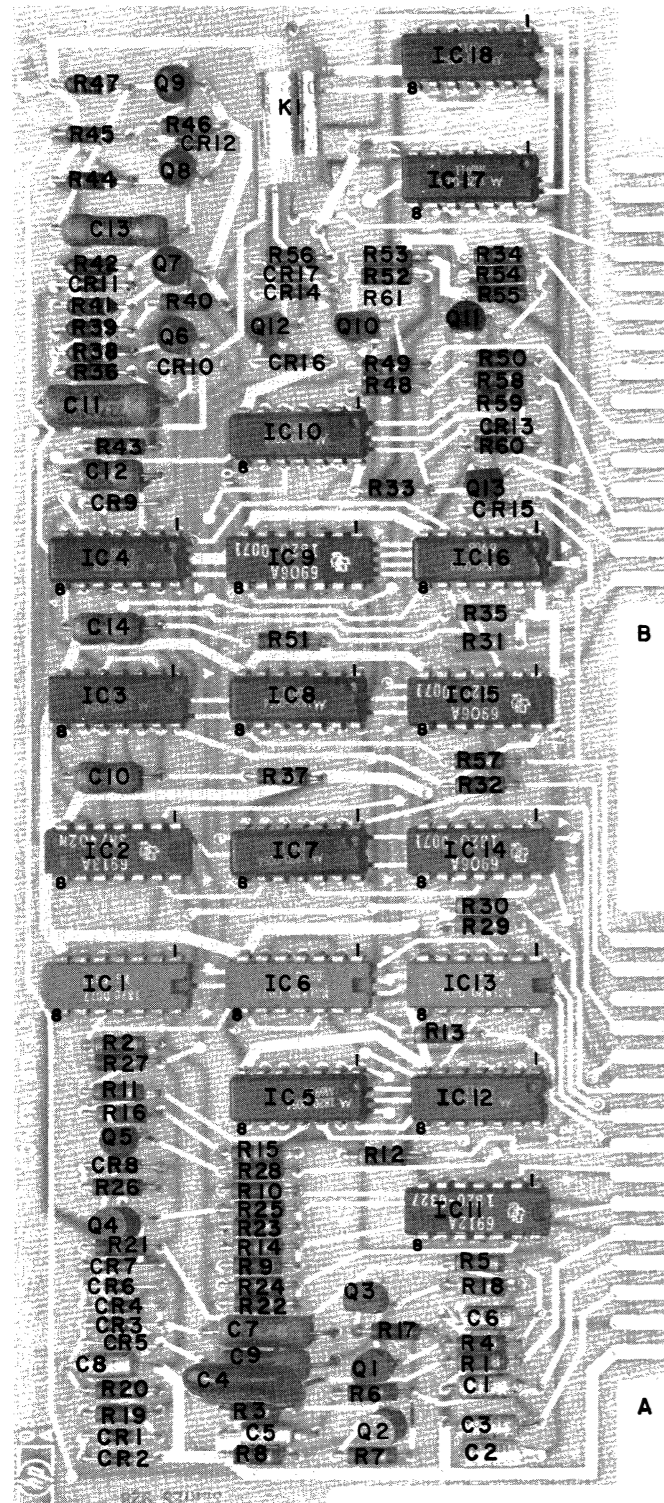
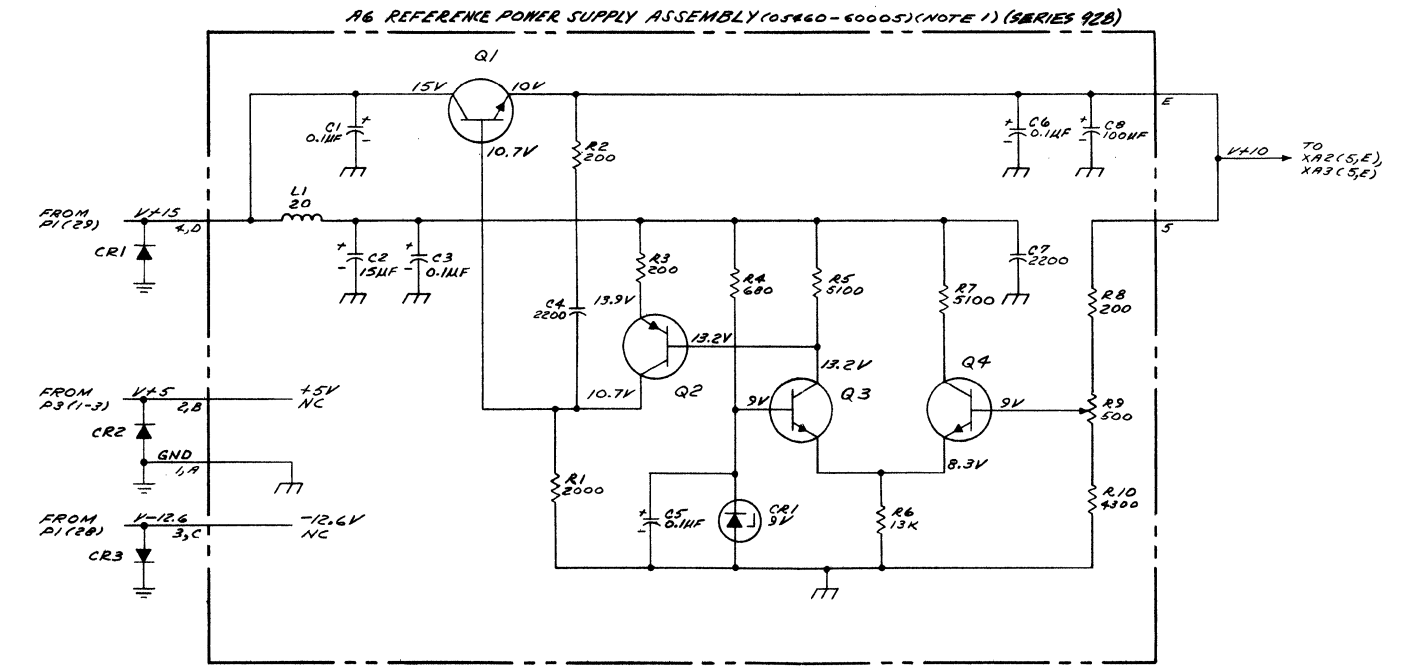
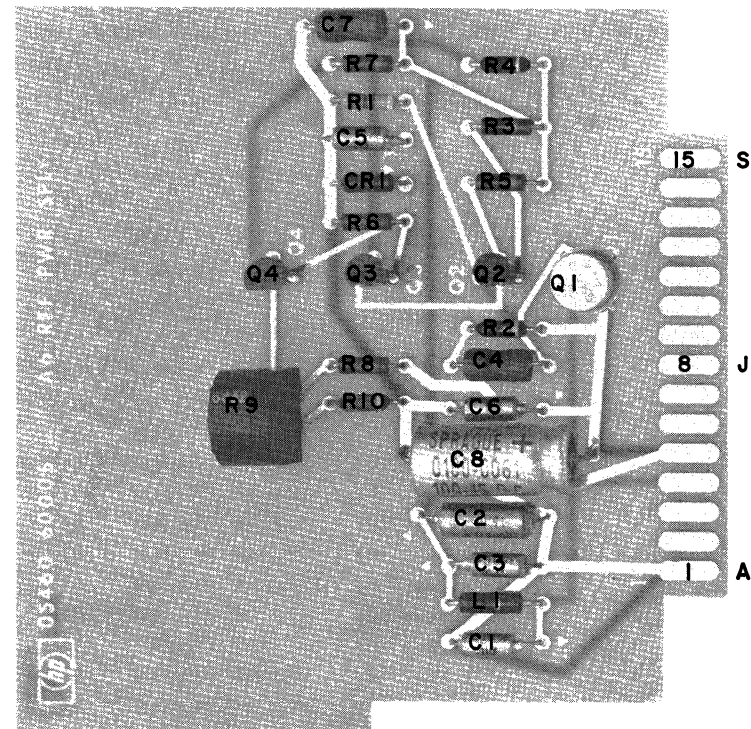


Figure 2-6
5460A A5 CONTROL BOARD ASSEMBLY
(Sheet 2 of 2)
2-15



NOTES

1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
2. UNLESS OTHERWISE INDICATED:
RESISTANCE IN OHMS;
CAPACITANCE IN MICROFARADS;
INDUCTANCE IN MICROHENRIES

REFERENCE DESIGNATIONS

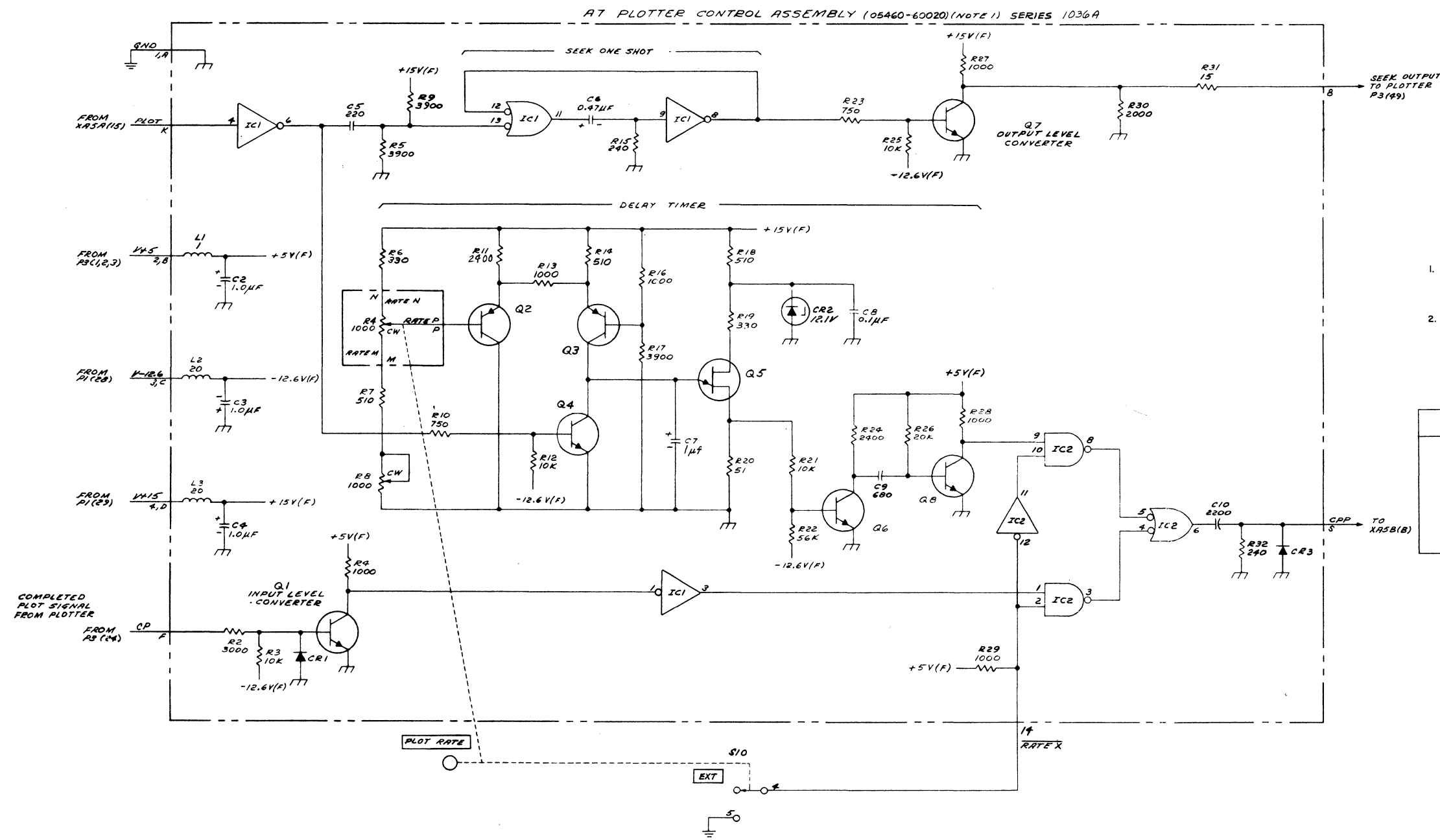
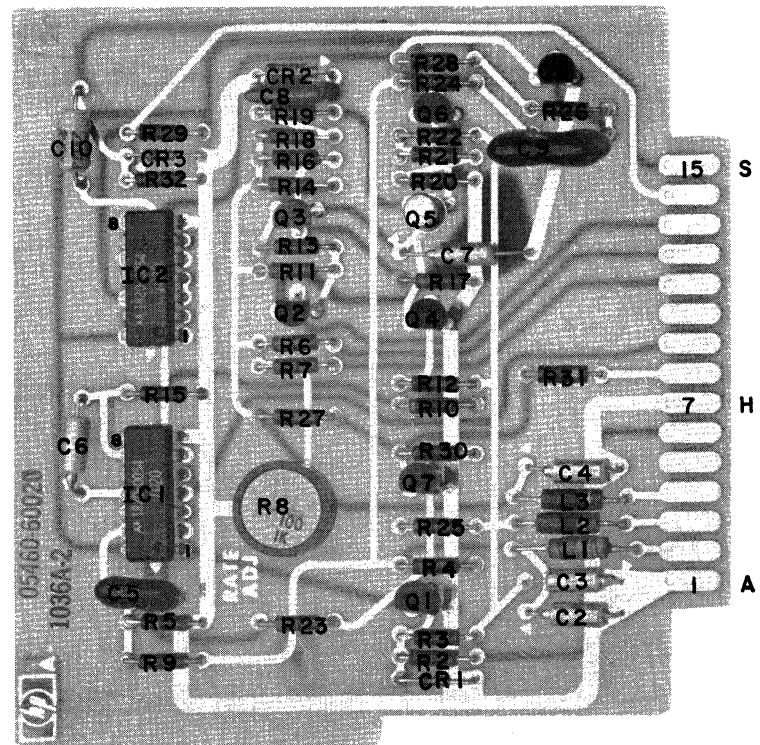
NO PREFIX	A6
CR1-3	CR1-8
	CR1
	LI-4
	RI-10

05460-0-8

TABLE

REF DESIGNATIONS	H-P PART NO.
CR1	1902 - 0071
Q2	1853 - 0020
Q1	1859 - 0003
Q3,4	1854 - 0071

5460A A6 REFERENCE POWER SUPPLY



- NOTES**
- REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 - UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS; INDUCTANCE IN MICROHENRIES

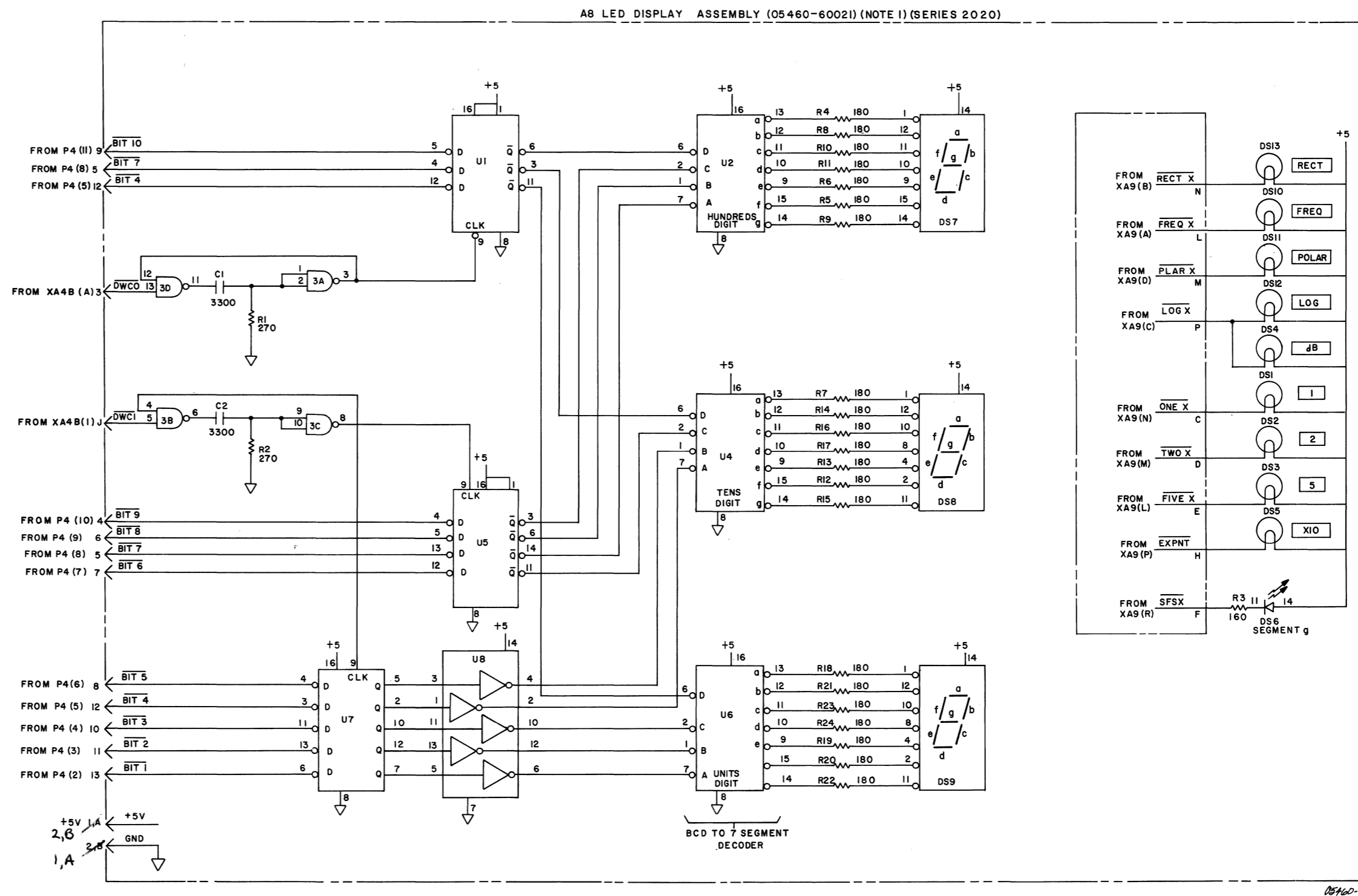
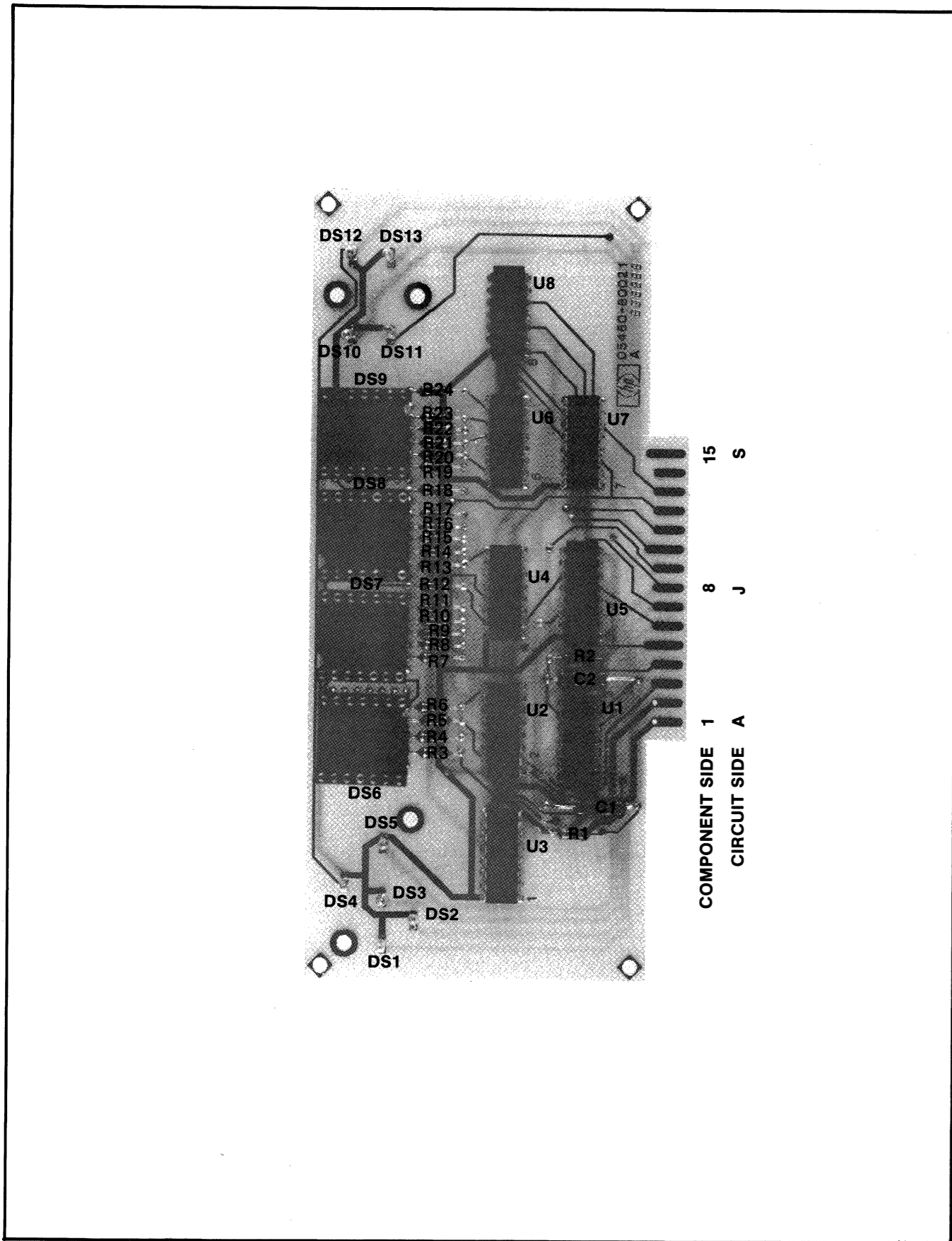
TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1,3	1901-0040
CR2	1902-3182
IC1,2	1820-0054
Q2,3	1853-0036
	2113909
Q1,4,6-8	1854-0071
Q5	1855-0010
	212640

REFERENCE DESIGNATIONS

NO PREFIX	A7
	C2-10
	CR1-3
	IC1,2
	L1-3
	Q1-8
R4	R2-32
S10	

Figure 2-8
5460A A7 PLOTTER CONTROL BOARD ASSEMBLY
(Part of Accessory 10640B)



- NOTES
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS.

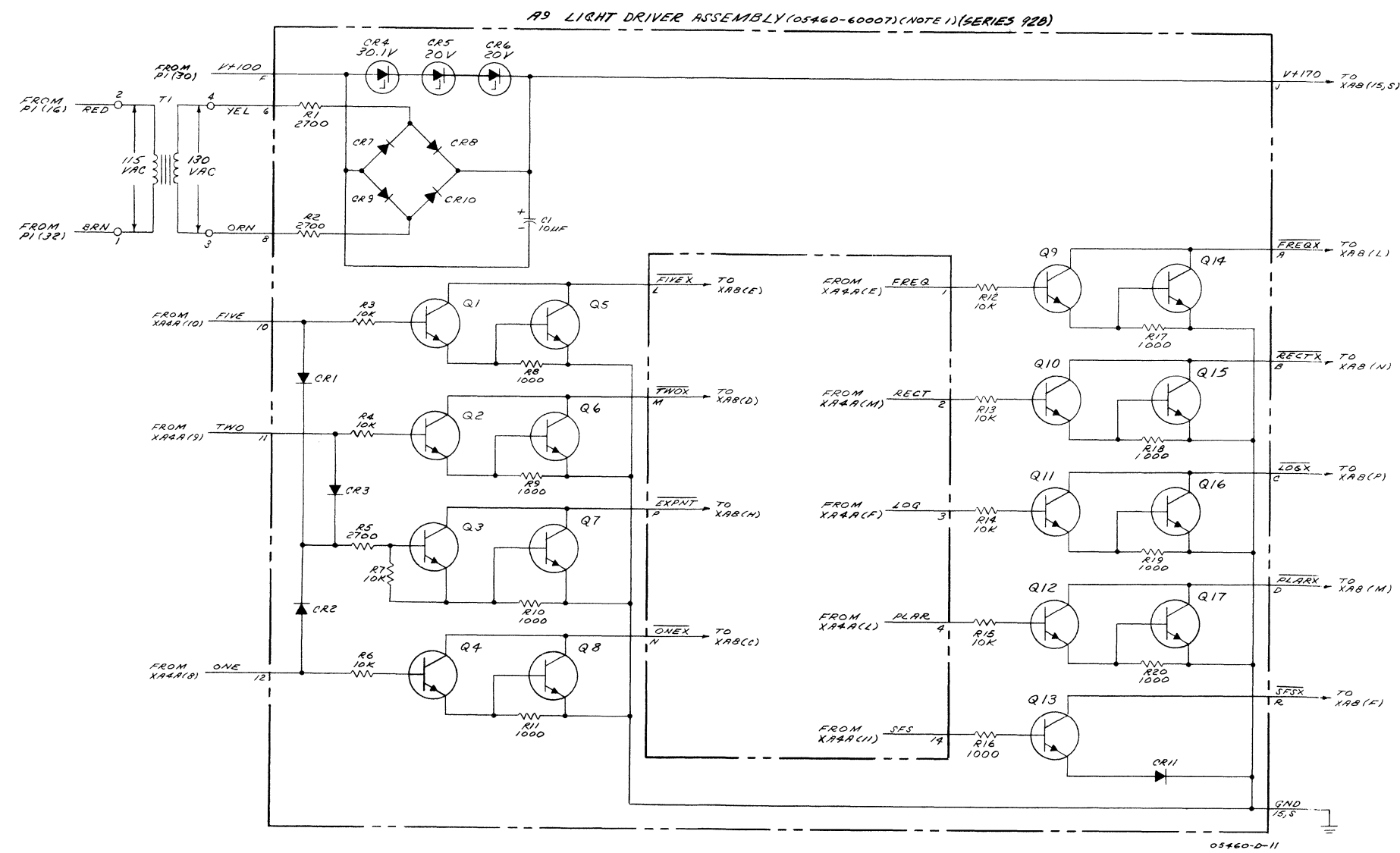
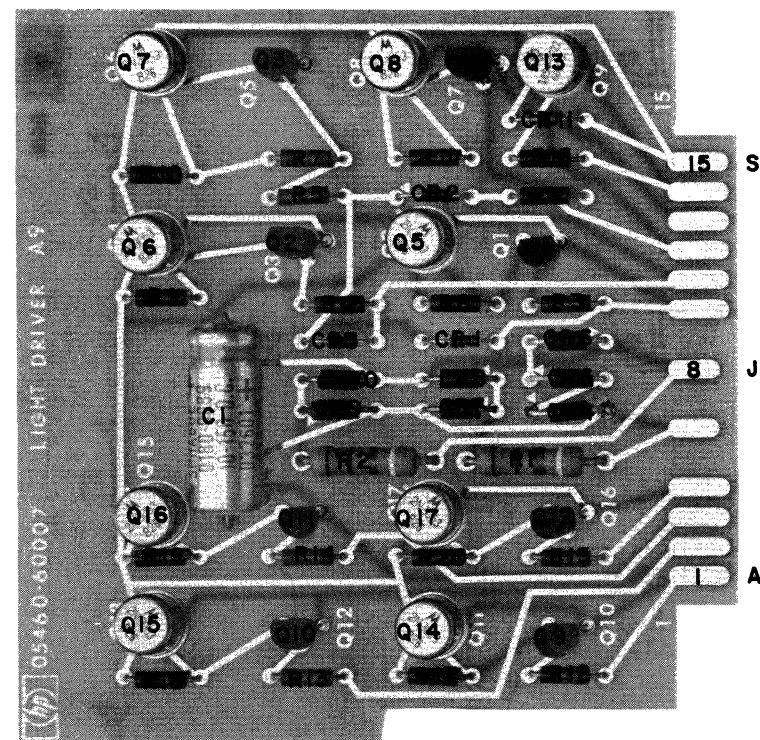
TABLE OF ACTIVE ELEMENTS

REFERENCE DESIGNATIONS	H-P PART NO.
U1, 5	1820-1195
U2, 4, 6	1820-1580
U3	1820-0054
U7	1820-1196
U8	1820-1199

REFERENCE DESIGNATION

A8
C1, 2
DS1-13
U1-8
R1-24

Figure 2-9
5460A A8 LED DISPLAY BOARD



NOTES

1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS.

REFERENCE DESIGNATIONS

NO PREFIX	A9
	C1
	CR1-11
	Q1-17
	R1-20
T1	

TABLE

REF. DESIGNATION	H-P PART NO.
CR7-10	1901-0028
CR1-3, 11	1901-0090
CR4	1902-0244
CR5, 6	1902-0556
Q13	1859-0022
Q5-8, 14-17	1859-0039
Q1-4, 9-12	1859-0071

Figure 2-10
5460A A9 LIGHT DRIVER

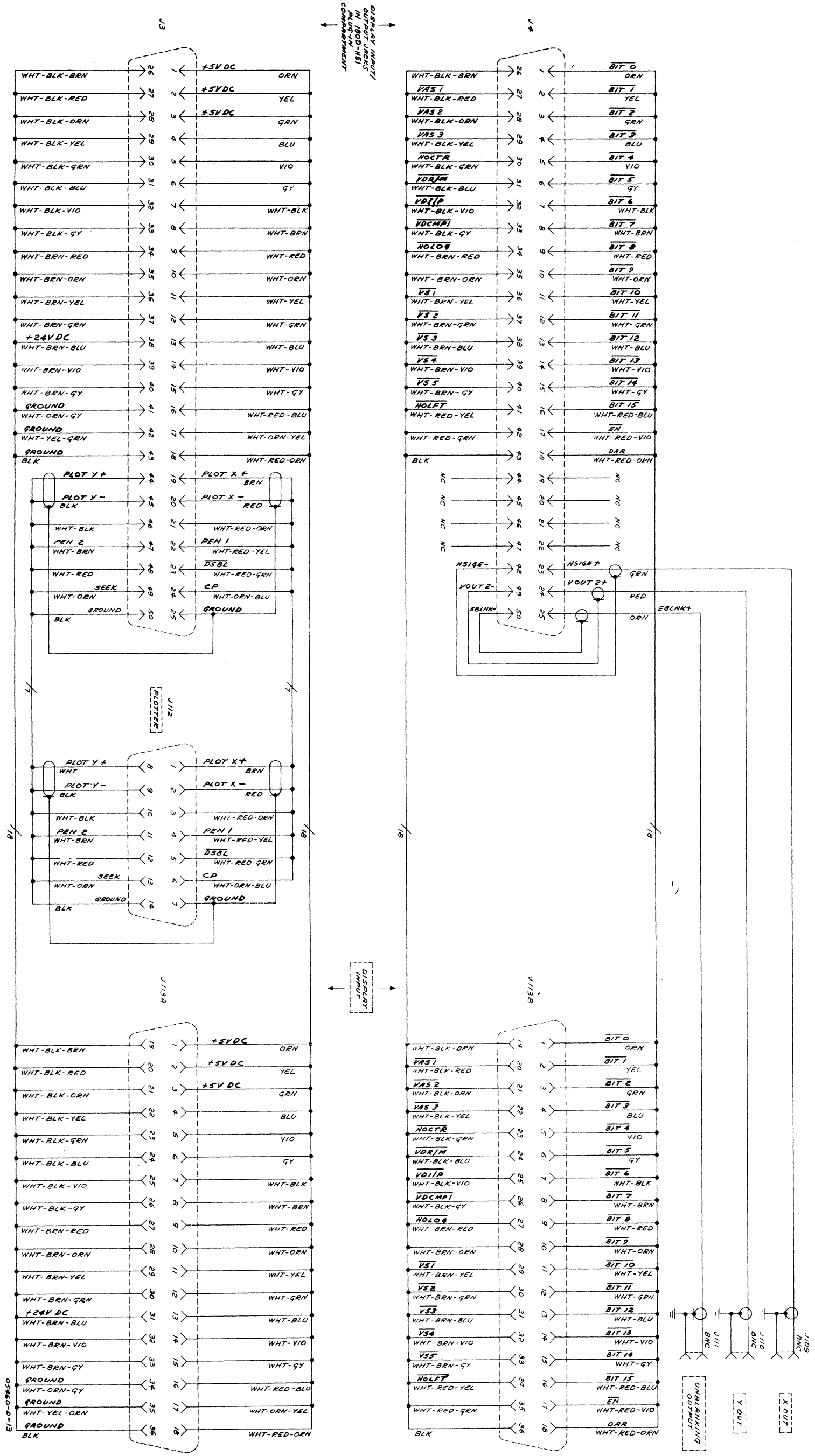
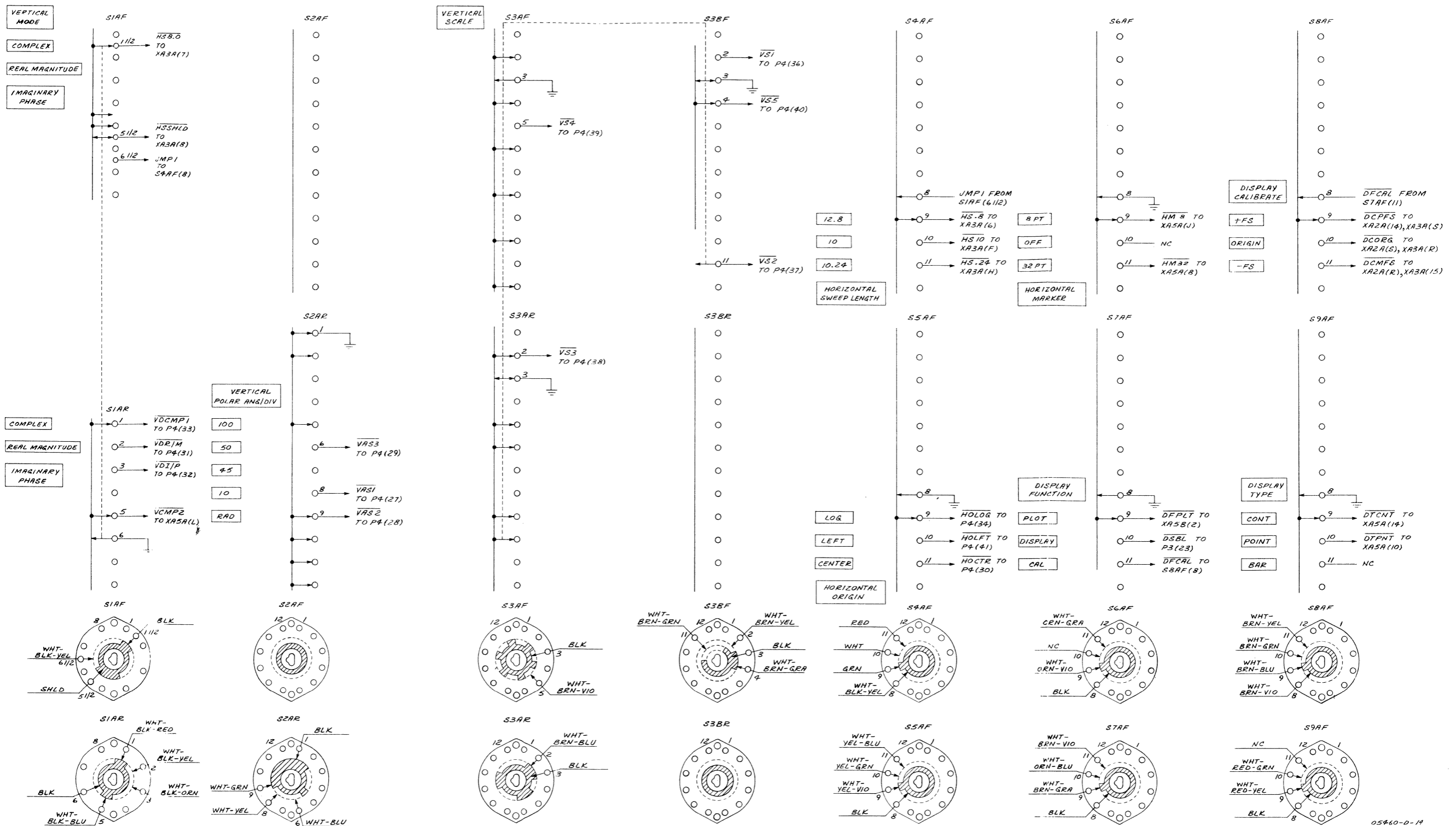


Figure 2-11
5460A EXTERNAL CONNECTIONS



05460-D-14

Figure 2-12
5460A SWITCH ASSEMBLIES

REPLACEABLE PARTS

This section contains the information required to order replacement parts for the Model 5460A Display Plug-in. To obtain replacement parts, address an order or inquiry to the nearest Hewlett-Packard Sales and Service Office. (Sales and Service offices are listed at the back of this manual.) Identify any required parts by the Hewlett-Packard part number. Note that not all parts are listed in these tables. Those parts that were deemed unlikely to ever require replacement were purposely excluded. To obtain a part that is not listed, include the following information in the inquiry:

- a. Instrument model number.
- b. Instrument serial number
- c. Description of part
- d. Function and location of part

Abbreviations and Reference Designations are listed in the chart that begins below and continues on the next page. Tables 2-1 through 2-10 list the parts of the unit. Table 2-11 lists the parts manufacturers by code.

Abbreviations and Reference Designations

REFERENCE DESIGNATIONS			
A	= assembly	E	= miscellaneous electrical part
AT	= attenuator; isolator; termination	F	= fuse
B	= fan; motor	FL	= filter
BT	= battery	H	= hardware
C	= capacitor	HY	= circulator
CP	= coupler	J	= electrical connector (stationary portion); jack
CR	= diode; diode thyristor; varactor	K	= relay
DC	= directional coupler	L	= coil; inductor
DL	= delay line	M	= meter
DS	= annunciator; signaling device (audible or visual); lamp; LED		
		MP	= miscellaneous mechanical part
		P	= electrical connector (movable portion); plug
		Q	= transistor; SCR; triode thyristor
		R	= resistor
		RT	= thermistor
		S	= switch
		T	= transformer
		TB	= terminal board
		TC	= thermocouple
		TP	= test point
		U	= integrated circuit; microcircuit
		V	= electron tube
		VR	= voltage regulator; breakdown diode
		W	= cable; transmission path; wire
		X	= socket
		Y	= crystal unit-piezoelectric
		Z	= tuned cavity; tuned circuit

ABBREVIATIONS			
A	= ampere	BCD	= binary coded decimal
ac	= alternating current	BD	= board
ACCESS	= accessory	BE CU	= beryllium copper
ADJ	= adjustment	BFO	= beat frequency oscillator
A/D	= analog-to-digital	BH	= binder head
AF	= audio frequency	BKDN	= breakdown
AFC	= automatic frequency control	BP	= bandpass
AGC	= automatic gain control	BPF	= bandpass filter
AL	= aluminum	BRS	= brass
ALC	= automatic level control	BWO	= backward-wave oscillator
AM	= amplitude modulation	CAL	= calibrate
AMPL	= amplifier	ccw	= counterclockwise
APC	= automatic phase control	CER	= ceramic
ASSY	= assembly	CHAN	= channel
AUX	= auxiliary	cm	= centimeter
avg	= average	CMO	= coaxial
AWG	= american wire gauge	COEF	= coefficient
BAL	= balance	COM	= common
		COMP	= composition
		COMPL	= complete
		CONN	= connector
		CP	= cadmium plate
		CRT	= cathode-ray tube
		CTL	= complementary transistor logic
		CW	= continuous wave
		cw	= clockwise
		D/A	= digital-to-analog
		dB	= decibel
		dBm	= decibel referred to 1 mW
		dc	= direct current
		deg	= degree (temperature interval or difference)
		...°	= degree (plane angle)
		°C	= degree Celsius (centigrade)
		°F	= degree Fahrenheit
		°K	= degree Kelvin
		DEPC	= deposited carbon
		DET	= detector
		diam	= diameter
		DIA	= diameter (used in parts list)
		DIFF	= differential amplifier
		AMPL	= division
		div	= division
		DPDT	= double-pole, double-throw
		DR	= drive
		DSB	= double sideband
		DTL	= diode transistor logic
		DVM	= digital voltmeter
		ECL	= emitter coupled logic
		EMF	= electromotive force
		EDP	= electronic data processing
		ELECT	= electrolytic

ABBREVIATIONS (CONTINUED)

ENCAP	= encapsulated	min	= minute (time)	PIV	= peak inverse voltage	TFT	= thin-film transistor
EXT	= external	...'	= minute (plane angle)	pk	= peak	TGL	= toggle
F	= farad	MINAT	= miniature	PL	= phase lock	THD	= thread
FET	= field-effect transistor	mm	= millimeter	PLO	= phase lock oscillator	THRU	= through
F/F	= flip-flop	MOD	= modulator	PM	= phase modulation	TI	= titanium
FH	= flat head	MOM	= momentary	PNP	= positive-negative-positive	TOL	= tolerance
FOL H	= fillister head	MOS	= metal-oxide semiconductor	P/O	= part of	TRIM	= trimmer
FM	= frequency modulation	ms	= millisecond	POLY	= polystyrene	TSTR	= transistor
FP	= front panel	MTG	= mounting	PORC	= porcelain	TTL	= transistor-transistor logic
FREQ	= frequency	MTR	= meter (indicating device)	POS	= positive; position(s) (used in parts list)	TV	= television
FXD	= fixed	mV	= millivolt	POSN	= position	TVI	= television interference
g	= gram	mVac	= millivolt, ac	POT	= potentiometer	TWT	= traveling wave tube
GE	= germanium	mVdc	= millivolt, dc	p-p	= peak-to-peak	U	= micro (10 ⁻⁶) (used in parts list)
GHz	= gigahertz	mVpk	= millivolt, peak	PP	= peak-to-peak (used in parts list)	UF	= microfarad (used in parts list)
GL	= glass	mVp-p	= millivolt, peak-to-peak	PPM	= pulse-position modulation	UHF	= ultrahigh frequency
GND	= ground(ed)	mVrms	= millivolt, rms	PREAMPL	= preamplifier	UNREG	= unregulated
H	= henry	mW	= milliwatt	PRF	= pulse-repetition frequency	V	= volt
h	= hour	MUX	= multiplex	PRR	= pulse repetition rate	VA	= voltampere
HET	= heterodyne	MY	= mylar	ps	= picosecond	Vac	= volts ac
HEX	= hexagonal	μA	= microampere	PT	= point	VAR	= variable
HD	= head	μF	= microfarad	PTM	= pulse-time modulation	VCO	= voltage-controlled oscillator
HDW	= hardware	μH	= microhenry	PWM	= pulse-width modulation	Vdc	= volts dc
HF	= high frequency	μmho	= micromho	PWV	= peak working voltage	VDCW	= volts dc, working (used in parts list)
HG	= mercury	μs	= microsecond	RC	= resistance capacitance	V(F)	= volts, filtered
HI	= high	μV	= microvolt	RECT	= rectifier	VFO	= variable-frequency oscillator
HP	= Hewlett-Packard	μVac	= microvolt, ac	REF	= reference	VHF	= very-high frequency
HPF	= high pass filter	μVdc	= microvolt, dc	REG	= regulated	Vpk	= volts peak
HR	= hour (used in parts list)	μVpk	= microvolt, peak	REPL	= replaceable	Vp-p	= Volts peak-to-peak
HV	= high voltage	μVp-p	= microvolt, peak-to-peak	RF	= radio frequency	Vrms	= volts rms
Hz	= Hertz	μVrms	= microvolt, rms	RFI'	= radio frequency interference	VSWR	= voltage standing wave ratio
IC	= integrated circuit	μW	= microwatt	RH	= round head; right hand	VTO	= voltage-tuned oscillator
ID	= inside diameter	nA	= nanoampere	RLC	= resistance-inductance-capacitance	VTVM	= vacuum-tube voltmeter
IF	= intermediate frequency	NC	= no connection	RMO	= rack mount only	V(X)	= volts, switched
IMPG	= impregnated	N/C	= normally closed	rms	= root-mean-square	W	= watt
in	= inch	NE	= negative	RND	= round	W/	= with
INCD	= incandescent	NEG	= negative	ROM	= read-only memory	WIV	= working inverse voltage
INCL	= include(s)	nF	= nanofarad	R&P	= rack and panel	WW	= wirewound
INP	= input	NI PL	= nickel plate	RWV	= reverse working voltage	W/O	= without
INS	= insulation	N/O	= normally open	S	= scattering parameter	YIG	= yttrium-iron-garnet
INT	= internal	NOM	= nominal	s	= second (time)	Zo	= characteristic impedance
kg	= kilogram	NORM	= normal	..."	= second (plane angle)		
kHz	= kilohertz	NPN	= negative-positive-negative	S-B	= slow-blow (fuse (used in parts list))		
kΩ	= kilohm	NPO	= negative-positive zero (zero temperature coefficient)	SCR	= silicon controlled rectifier; screw		
kV	= kilovolt	NRFR	= not recommended for field replacement	SE	= selenium		
lb	= pound	NSR	= not separately replaceable	SECT	= sections		
LC	= inductance-capacitance	ns	= nanosecond	SEMICON	= semiconductor		
LED	= light-emitting diode	nW	= nanowatt	SHF	= superhigh frequency		
LF	= low frequency	OBD	= order by description	SI	= silicon		
LG	= long	OD	= outside diameter	SIL	= silver		
LH	= left hand	OH	= oval head	SL	= slide		
LIM	= limit	OP AMPL	= operational amplifier	SNR	= signal-to-noise ratio		
LIN	= linear taper (used in parts list)	OPT	= option	SPDT	= single-pole, double-throw		
lin	= linear	OSC	= oscillator	SPG	= spring		
LK WASH	= lockwasher	OX	= oxide	SR	= split ring		
LO	= low; local oscillator	oz	= ounce	SPST	= single-pole, single-throw		
LOG	= logarithmic taper (used in parts list)	Ω	= ohm	SSB	= single sideband		
log	= logarithm(ic)	P	= peak (used in parts list)	SST	= stainless steel		
LPF	= low pass filter	PAM	= pulse-amplitude modulation	STL	= steel		
LV	= low voltage	PC	= printed circuit	SQ	= square		
m	= meter (distance)	PCM	= pulse-code modulation; pulse-count modulation	SWR	= standing-wave ratio		
mA	= milliampere	PDM	= pulse-duration modulation	SYNC	= synchronize		
MAX	= maximum	pF	= picofarad	T	= timed (slow-blow fuse)		
MΩ	= megohm	PH BRZ	= phosphor bronze	TA	= tantalum		
MEG	= meg (10 ⁶) (used in parts list)	PHL	= Phillips	TC	= temperature compensating		
MET FLM	= metal film	PIN	= positive-intrinsic-negative	TD	= time delay		
MET OX	= metal oxide			TERM	= terminal		
MF	= medium frequency; microfarad (used in parts list)						
MFR	= manufacturer						
mg	= milligram						
MHz	= megahertz						
mH	= millihenry						
mho	= mho						
MIN	= minimum						

NOTE

All abbreviations in the parts list will be in upper case.

MULTIPLIERS

Abbreviation	Prefix	Multiple
T	tera	10 ¹²
G	giga	10 ⁹
M	mega	10 ⁶
k	kilo	10 ³
da	deka	10
d	deci	10 ⁻¹
c	centi	10 ⁻²
m	milli	10 ⁻³
μ	micro	10 ⁻⁶
n	nano	10 ⁻⁹
p	pico	10 ⁻¹²
f	femto	10 ⁻¹⁵
a	atto	10 ⁻¹⁸

Table 2-1. 5460A Display Unit (Part 1 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	5460A		DISPLAY UNIT SERIES 2020	28480	5460A
A1	05460-60001	1	BOARD ASSEMBLY, VERTICAL AMPLIFIER	28480	05460-60001
A2	05460-60002	2	BOARD ASSEMBLY, DAC	28480	05460-60002
A3	05460-60002		BOARD ASSEMBLY, DAC	28480	05460-60002
A4	05460-60003	1	BOARD ASSEMBLY, WORD STORAGE	28480	05460-60003
A5	05460-60004	1	BOARD ASSEMBLY, CONTROL	28480	05460-60004
A6	05460-60005	1	BOARD ASSEMBLY, REFERENCE POWER SUPPLY	28480	05460-60005
A7	05460-60020	1	BOARD ASSEMBLY, PLOT CONTROL	28480	05460-60020
A8	05460-60021	1	BOARD ASSEMBLY, LED DISPLAY	28480	05460-60021
A9	05460-60007	1	BOARD ASSEMBLY, LIGHT DRIVER	28480	05460-60007
CR1	1901-0028	2	DIODE-PWR RECT 400V 750MA DO-29	04713	SR1358-9
CR2	1901-0028		DIODE-PWR RECT 400V 750MA DO-29	04713	SR1358-9
CR3	1901-0200	1	DIODE-PWR RECT 100V 1.5A	04713	SR1846-9
R1	2100-2817	1	RESISTOR-VAR CONTROL CC 1K 20% LIN	12697	382
	0370-1097	2	KNOB-BASE-PTR .5 IN JGK SGI-DECAL	28480	0370-1097
R2	2100-2819	1	RESISTOR-VAR W/SW 2.5K 20% LIN SPST-NO	28480	2100-2819
	0370-1097		KNOB-BASE-PTR .5 IN JGK SGI-DECAL	28480	0370-1097
R3	2100-2661	1	RESISTOR-VAR CONTROL CC 1K 20% LIN	12697	382
	1410-0069	1	BUSHING-PNL .128-ID .343-LG 1/4-32-THD	28480	1410-0069
R4	2100-2818	1	RESISTOR-VAR W/SW 1K 20% LIN SPST-NO	28480	2100-2818
	0370-1005	1	KNOB-BASE-PTR .375 IN JGK SGI-DECAL	28480	0370-1005
R5	0757-0922	1	RESISTOR 820 2% .125W F TC=0+-100	24546	C4-1/8-T0-821-5
S1	3100-2628	1	SWITCH: ROTARY	28480	3100-2628
	3070-1099	1	KNOB-BASE-PTR .5 IN JGK SGI-DECAL	28480	3070-1099
S2	3100-2629	1	SWITCH: ROTARY	28480	3100-2629
	3070-1099	1	KNOB-BASE-PTR .5 IN JGK SGI-DECAL	28480	3070-1099
S3	3100-2630	1	SWITCH: ROTARY	28480	3070-1099
	3070-1099	1	KNOB-BASE-PTR .5 IN JGK SGI-DECAL	28480	3070-1099
S4	3100-2076	6	SWITCH:LEVER	28480	3100-2076
	0370-1879	6	KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S5	3100-2076		SWITCH:LEVER	28480	3100-2076
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S6	3100-2076		SWITCH:LEVER	28480	3100-2076
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S7	3100-2076		SWITCH:LEVER	28480	3100-2076
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S8	3100-2076		SWITCH:LEVER	28480	3100-2076
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S9	3100-2076		SWITCH:LEVER	28480	3100-2076
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S10			PART OF R4		
S11	3101-1541	1	SWITCH-SL DPDT-NS MINTR 1A 125VAC	28480	3101-1541
W1	05460-60012	1	CABLE ASSEMBLY, LACED	28480	05460-60012
XA1	1251-0160	3	CONNECTOR-PC EDGE 15-CONT/ROW 1-ROW	71785	250-15-30-210
XA2A	1251-0159	10	CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA2B	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA3A	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA3B	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA4A	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA4B	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA5A	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA5B	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA6	1251-0160		CONNECTOR-PC EDGE 15-CONT/ROW 1-ROW	71785	250-15-30-210
XA7	1251-0160		CONNECTOR-PC EDGE 15-CONT/ROW 1-ROW	71785	250-15-30-210
XA8	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
XA9	1251-0159		CONNECTOR-PC EDGE 15-CONT/ROW 2-ROWS	71785	251-15-30-261
	5040-0170	16	BOARD SUPPORT	28480	5040-0170
	05243-2015	1	KNOB	28480	05243-2015
	05431-0004	1	GUIDE, LEFT SIDE	28480	05431-0004
	05431-0005	1	GUIDE, RIGHT SIDE	28480	05431-0005
	05431-0011	1	PANEL, REAR	28480	05431-0011
	05431-2009	1	SUPPORT, BOTTOM	28480	05431-2009
	05431-2010	2	STRUT, BOTTOM	28480	05431-2010
	05431-2014	1	ROD, LATCH	28480	05431-2014
	05431-2020	1	BOARD, VERTICAL CONNECTOR	28480	05431-2020
	05431-6009	1	LATCH ASSEMBLY	28480	05431-6009
	05460-00001	1	PANEL, SUB	28480	05460-00001
	05460-00003	1	CHASSIS	28480	05460-00003
	05460-00004	1	COVER, BOTTOM	28480	05460-00004
	05460-00007	1	PANEL, FRONT	28480	05460-00007
	05460-20013	1	STRUT, TOP LEFT	28480	05460-20013

See introduction to this section for ordering information

Table 2-1. 5460A Display Unit (Part 2 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-20014	1	STRUT, TOP RIGHT	28480	05460-20014
	05460-20015	1	EXTRUSION, FRONT	28480	05460-20015
	05460-20016	2	SPACER, CHASSIS	28480	05460-20016
	05460-20023	1	WINDOW, FRONT PANEL	28480	05460-20023
	05460-20018	1	CLAMP BOARD	28480	05460-20018

See introduction to this section for ordering information

Table 2-2. Vertical Amplifier Assembly — 05460-60001

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60001		BOARD ASSY:VERTICAL AMPLIFIER (SERIES 1036A)	28480	05460-60001
C1	0180-0116	2	CAPACITOR-FXD; 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
C2	0180-0116		CAPACITOR-FXD; 6.8UF+-10% 35VDC TA	56289	150D685X9035B2
C3	0140-0150	1	CAPACITOR-FXD 731.5PF+-1% 300WVDC	72136	DM15F731R5F0300WV1CR
C4	0170-0066	2	CAPACITOR-FXD .027UF+-10% 200WVDC	56289	292P27392
C5	0180-0291	1	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2
C6	0170-0066		CAPACITOR-FXD .027UF+-10% 200WVDC	56289	292P27392
CR1	1902-3279	1	DIODE; ZENER; 28.7V VZ; .4W MAX PD	04713	SZ 10939-314
CR2	1901-0040	2	DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR3	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
L1	9140-0047	4	COIL, FXD, NON-MOLDED RF CHOKE, 20UH	24226	9410
L2	9140-0047		COIL, FXD, NON-MOLDED RF CHOKE, 20UH	24226	9410
L3	9140-0047		COIL, FXD, NON-MOLDED RF CHOKE, 20UH	24226	9410
L4	9140-0047		COIL, FXD, NON-MOLDED RF CHOKE, 20UH	24226	9410
Q1	1854-0215	2	TRANSISTOR NPN SI PD=310MW FT=300MHZ	04713	SPS 3611
Q2	1854-0071	3	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q3	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q4	1854-0215		TRANSISTOR NPN SI PD=310MW FT=300MHZ	04713	SPS 3611
Q5	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q6	1854-0039	4	TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q7	1205-0033	2	HEAT-DISSIPATOR, SGL, TO-5 PKG	28480	1205-0033
Q8	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q9	1205-0033		HEAT-DISSIPATOR, SGL, TO-5 PKG	28480	1205-0033
R1	0757-0280	3	RESISTOR-FXD 1K 1% .125W F TUBULAR	24546	C4-1/8-T0-1001-F
R2	0698-5490	3	RESISTOR-FXD 2K 1% .125W F TUBULAR	19701	MF4C1/8-T2-2001-F
R3	0757-0924	1	RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R4	0757-0931	2	RESISTOR-FXD 2K 2% .125W F TUBULAR	24546	C4-1/8-T0-2001-G
R5	0757-0909	1	RESISTOR-FXD 240 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-241-G
R6	0757-0931		RESISTOR-FXD 2K 2% .125W F TUBULAR	24546	C4-1/8-T0-2001-G
R7	0698-5490		RESISTOR-FXD 2K 1% .125W F TUBULAR	19701	MF4C1/8-T2-2001-F
R8	0757-0280		RESISTOR-FXD 1K 1% .125W F TUBULAR	24546	C4-1/8-T0-1001-F
R9	0757-0928	1	RESISTOR-FXD 1.5K 2% .125W F TUBULAR	24546	C4-1/8-T0-1501-G
R10	0698-5490		RESISTOR-FXD 2K 1% .125W F TUBULAR	19701	MF4C1/8-T2-2001-F
R11	0757-0280		RESISTOR-FXD 1K 1% .125W F TUBULAR	24546	C4-1/8-T0-1001-F
R12	0757-0847	1	RESISTOR-FXD 27.4K 1% .5W F TUBULAR	30983	MF7C1/2-T0-2742-F
R13	0757-0416	1	RESISTOR-FXD 511 OHM 1% .125W F TUBULAR	24546	C4-1/8-T0-511R-F
R14	0757-0818	1	RESISTOR-FXD 825 OHM 1% .5W F TUBULAR	30983	MF7C1/2-T0-825R-F
R15	0761-0021	4	RESISTOR-FXD 1K 5% 1W MO TUBULAR	24546	FP32-1-T00-1001-J
R16	0761-0021		RESISTOR-FXD 1K 5% 1W MO TUBULAR	24546	FP32-1-T00-1001-J
R17	0757-0732	2	RESISTOR-FXD 909 OHM 1% .25W F TUBULAR	24546	C5-1/4-T0-909R-F
R18	0757-0825	2	RESISTOR-FXD 2.21K 1% .5W F TUBULAR	30983	MF7C1/2-T0-2211-F
R19	0698-3150	1	RESISTOR-FXD 2.37K 1% .125W F TUBULAR	16299	C4-1/8-T0-2371-F
R20	0757-0900	2	RESISTOR-FXD 100 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-101-G
R21	0757-0945	2	RESISTOR-FXD 7.5K 2% .125W F TUBULAR	24546	C4-1/8-T0-7501-G
R22	0757-0159	1	RESISTOR-FXD 1K 1% .5W F TUBULAR	30983	MF7C1/2-T0-1R0-F
R23	0757-0900		RESISTOR-FXD 100 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-101-G
R24	0757-0945		RESISTOR-FXD 7.5K 2% .125W F TUBULAR	24546	C4-1/8-T0-7501-G
R25	0761-0021		RESISTOR-FXD 1K 5% 1W MO TUBULAR	24546	FP32-1-T00-1001-J
R26	0761-0021		RESISTOR-FXD 1K 5% 1W MO TUBULAR	24546	FP32-1-T00-1001-J
R27	0757-0732		RESISTOR-FXD 909 OHM 1% .25W F TUBULAR	24546	C5-1/4-T0-909R-F
R28	0757-0825		RESISTOR-FXD 2.21K 1% .5W F TUBULAR	30983	MF7C1/2-T0-2211-F

See introduction to this section for ordering information

Table 2-3. DAC Assembly — 05460-60002 (Part 1 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60002		BOARD ASSEMBLY, DAC	28480	05460-60002
C1	0160-2204	22	CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C2	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C3	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C4	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C5	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C6	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C7	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C8	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C9	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C10	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C11	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C12	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C13	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C14	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C15	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C16	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C17	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C18	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C19	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C20	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C21	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C22	0160-2204		CAPACITOR-FXD 100PF +-5% 300WVDC MICA	28480	0160-2204
C23	0180-0291	10	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C24	0140-0208	1	CAPACITOR-FXD 680PF +-5% 300WVDC MICA	72136	DM15F681J0300WV1CR
C25	0180-0291	1	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C26	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C27	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C28	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C29	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C30	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C31	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C32	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C33	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C34	0160-0154	1	CAPACITOR-FXD 2200PF +-10% 200WVDC POLYE	56289	292P22292
C35	0160-2415	1	CAPACITOR-FXD 8200PF +-5% 200WVDC POLYE	56289	292P82252
CR1	1901-0040	17	DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR2	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR3	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR4	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR5	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR6	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR7	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR8	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR9	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR10	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR11	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR12	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR13	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR14	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR15	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR16	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
CR17	1901-0040		DIODE-SWITCHING 30V 50NA 2NS DO-35	28480	1901-0040
IC1	1820-0201	1	IC MC 1439G AMPL	04713	MC1439G
IC2	1820-0077	6	IC SN74 74 N FLIP-FLOP	01295	SN7474N
IC3	1820-0327	3	IC SN74 01 N GATE	01295	SN7401N
IC4	1820-0077		IC SN74 74 N FLIP-FLOP	01295	SN7474N
IC5	1820-0077		IC SN74 74 N FLIP-FLOP	01295	SN7474N
IC6	1820-0327		IC SN74 01 N GATE	01295	SN7401N
IC7	1820-0077		IC SN74 74 N FLIP-FLOP	01295	SN7474N
IC8	1820-0077		IC SN74 74 N FLIP-FLOP	01295	SN7474N
IC9	1820-0327		IC SN74 01 N GATE	01295	SN7401N
IC10	1820-0077		IC SN74 74 N FLIP-FLOP	01295	SN7474N
Q1	1853-0088	11	TSTR:SI PNP	28480	1853-0088
Q2	1854-0326	11	TSTR:SI NPN	28480	1854-0326
Q3	1853-0088		TSTR:SI PNP	28480	1853-0088
Q4	1854-0326		TSTR:SI NPN	28480	1854-0326
Q5	1853-0088		TSTR:SI PNP	28480	1853-0088
Q6	1854-0326		TSTR:SI NPN	28480	1854-0326
Q7	1853-0088		TSTR:SI PNP	28480	1853-0088
Q8	1854-0326		TSTR:SI NPN	28480	1854-0326
Q9	1853-0088		TSTR:SI PNP	28480	1853-0088
Q10	1854-0326		TSTR:SI NPN	28480	1854-0326

See introduction to this section for ordering information

Table 2-3. DAC Assembly — 05460-60002 (Part 2 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
Q11	1853-0088		TSTR:SI PNP	28480	1853-0088
Q12	1854-0326		TSTR:SI NPN	28480	1854-0326
Q13	1853-0088		TSTR:SI PNP	28480	1853-0088
Q14	1854-0326		TSTR:SI NPN	28480	1854-0326
Q15	1853-0088		TSTR:SI PNP	28480	1853-0088
Q16	1854-0326		TSTR:SI NPN	28480	1854-0326
Q17	1853-0088		TSTR:SI PNP	28480	1853-0088
Q18	1854-0326		TSTR:SI NPN	28480	1854-0326
Q19	1853-0088		TSTR:SI PNP	28480	1853-0088
Q20	1854-0326		TSTR:SI NPN	28480	1854-0326
Q21	1853-0088		TSTR:SI PNP	28480	1853-0088
Q22	1854-0326		TSTR:SI NPN	28480	1854-0326
Q23	1853-0020	2	TRANSISTOR PNP SI PD=300MHZ FT=150MHZ	28480	1853-0020
Q24	1853-0020	2	TRANSISTOR PNP SI PD=300MHZ FT=150MHZ	28480	1853-0020
R1	0683-3025	23	RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R2	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R3	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R4	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R5	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R6	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R7	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R8	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R9	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R10	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R11	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R12	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R13	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R14	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R15	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R16	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R17	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R18	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R19	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R20	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R21	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R22	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R23	0683-3025		RESISTOR 3K 5% .25W FC TC=-400/+700	01121	CB3025
R24	0683-1025	4	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R25	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R26	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R27	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R28	0757-0926	11	RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R29	0757-0924	11	RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R30	0757-0925	11	RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R31	0757-0943	11	RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R32	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R33	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R34	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R35	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R36	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R37	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R38	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R39	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R40	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R41	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R42	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R43	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R44	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R45	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R46	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R47	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R48	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R49	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R50	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R51	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R52	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R53	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R54	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R55	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R56	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R57	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R58	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R59	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R60	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G

See introduction to this section for ordering information

Table 2-3. DAC Assembly — 05460-60002 (Part 3 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R61	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1001-G
R62	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R63	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R64	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R65	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1001-G
R66	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R67	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R68	0757-0926		RESISTOR 1.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1201-G
R69	0757-0924		RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1001-G
R70	0757-0925		RESISTOR 1.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1101-G
R71	0757-0943		RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R72	0811-1398	5	RESISTOR 20K .05% .031W PWH TC=0+-10	20940	415-1/32-E-2002-A
R73	0811-1398		RESISTOR 20K .05% .031W PWH TC=0+-10	20940	415-1/32-E-2002-A
R74	0811-1398		RESISTOR 20K .05% .031W PWH TC=0+-10	20940	415-1/32-E-2002-A
R75	0811-1398		RESISTOR 20K .05% .031W PWH TC=0+-10	20940	415-1/32-E-2002-A
R76	0811-1398		RESISTOR 20K .05% .031W PWH TC=0+-10	20940	415-1/32-E-2002-A
R77	0757-0449	7	RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R78	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R79	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R80	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R81	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R82	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R83	0811-1397	5	RESISTOR 10K .05% .031W PWH TC=0+-10	20940	415-1/32-E-1002-A
R84	0811-1397		RESISTOR 10K .05% .031W PWH TC=0+-10	20940	415-1/32-E-1002-A
R85	0811-1397		RESISTOR 10K .05% .031W PWH TC=0+-10	20940	415-1/32-E-1002-A
R86	0811-1397		RESISTOR 10K .05% .031W PWH TC=0+-10	20940	415-1/32-E-1002-A
R87	0811-1397		RESISTOR 10K .05% .031W PWH TC=0+-10	20940	415-1/32-E-1002-A
R88	0757-0442	5	RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R89	0757-0442		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R90	0757-0442		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R91	0757-0442		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R92	0757-0442		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R93	0757-0449		RESISTOR 20K 1% .125W F TC=0+-100	24546	C4-1/8-T0-2002-F
R94	0757-0936	1	RESISTOR 3.3K 2% .125W F TC=0+-100	24546	C4-1/8-T0-3301-G
R95	0698-5490	3	RESISTOR 2K 1% .125W F TC=0+-50	03888	PME55S
R96	0698-5490		RESISTOR 2K 1% .125W F TC=0+-50	03888	PME55S
R97	0757-0933	1	RESISTOR 2.4K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2401-G
R98	0698-4002	2	RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R99	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R100	0757-0278	1	RESISTOR 1.78K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1781-F
R101	0757-0274	1	RESISTOR 1.21K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1213-F
R102	0698-5490		RESISTOR 2K 1% .125W F TC=0+-50	03888	PME55S
R103	0757-0428	1	RESISTOR 1.62K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1621-F
R104	0698-3151	1	RESISTOR 2.87K 1% .125W F TC=0+-100	16299	C4-1/8-T0-2871-F
R105	0683-3915	1	RESISTOR 390 5% .25W FC TC=-400/+600	01121	C83915
R106	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
R107	2100-1656	1	RESISTOR-TRMR 500 5% WW SIDE-ADJ	32997	3057P-1-501
R108	0757-0398	1	RESISTOR 75 1% .125W F TC=0+-100	24546	C4-1/8-T0-75R0-F
R109	0698-3443	1	RESISTOR 287 1% .125W F TC=0+-100	16299	C4-1/8-T0-287R-F
R110	0698-0082	1	RESISTOR 464 1% .125W F TC=0+-100	16299	C4-1/8-T0-4640-F
R111	0757-0280	1	RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
R112	0683-4725	2	RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
R113	0683-4725		RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	C84725
R114	0757-0424	1	RESISTOR 1.1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1101-F
R115	0757-0941	1	RESISTOR 5.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-5101-G
R116	2100-2522	1	RESISTOR-TRMR 10K 10% C SIDE-ADJ 1-TURN	30983	ET50X103

See introduction to this section for ordering information

Table 2-4. Word Storage Assembly — 05460-60003

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60003		BOARD ASSY:WORD STORAGE	28480	05460-60003
C1	0180-0291	2	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2
C2	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	157D115X9035A2
C3	0160-0157	4	CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
C4	0160-0153	1	CAPACITOR-FXD .001UF+-10% 200WVDC	56289	292P10292
C5	0160-0157		CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
C6	0160-0157		CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
C7	0160-0157		CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
IC1	1820-0077	1	IC;DGTL;FLIP-FLOP	01295	SN7474N
IC2	1820-0054	3	IC;DGTL;GATE	01295	SN7400N
IC3	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC4	1820-0068	2	IC;DGTL;GATE	01295	SN7410N
IC5	1820-0068		IC;DGTL;GATE	01295	SN7410N
IC6	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC7	1820-0116	6	INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
IC8	1820-0116		INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
IC9	1820-0116		INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
IC10	1820-0116		INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
IC11	1820-0116		INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
IC12	1820-0116		INTEGRATED CIRCUIT, DGTL, TTL* 4-BIT	28480	1820-0116
R1	0683-3025	23	RESISTOR-FXD 270 OHM 5% .25W CC TUBULAR	01121	C83025
R2	0683-2715	4	RESISTOR-FXD 270 OHM 5% .25W CC TUBULAR	01121	C82715
R3	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R4	0683-1025	2	RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R5	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R6	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R7	0683-2715		RESISTOR-FXD 270 OHM 5% .25W CC TUBULAR	01121	C82715
R8	0683-2715		RESISTOR-FXD 270 OHM 5% .25W CC TUBULAR	01121	C82715
R9	0683-2715		RESISTOR-FXD 270 OHM 5% .25W CC TUBULAR	01121	C82715
R10	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R11	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R12	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R13	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R14	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R15	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R16	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R17	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R18	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R19	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R20	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R21	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R22	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R23	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R24	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R25	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R26	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R27	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R28	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R29	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R30	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025

See introduction to this section for ordering information

Table 2-5. Control Assembly — 05460-60004 (Series 1632A) (Part 1 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60004		BOARD ASSY:CONTROL	28480	05460-60004
C1	0180-0291	6	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C2	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C3	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C4	0160-2218	1	CAPACITOR-FXD .001UF+-5% 300WVDC	28480	0160-2218
C5	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C6	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C7	0160-0157	2	CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
C8	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	1500105X9035A2
C9	0160-0157		CAPACITOR-FXD .0047UF+-10% 200WVDC	56289	292P47292
C10	0160-0155	3	CAPACITOR-FXD .0033UF+-10% 200WVDC	56289	292P33292
C11	0170-0066	1	CAPACITOR-FXD .027UF+-10% 200WVDC	56289	292P27392
C12	0160-0155		CAPACITOR-FXD .0033UF+-10% 200WVDC	56289	292P33292
C13	0160-0161	1	CAPACITOR-FXD .01UF+-10% 200WVDC	56289	292P10392
C14	0160-0155		CAPACITOR-FXD .0033UF+-10% 200WVDC	56289	292P33292
CR1	1901-0040	18	DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR2	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR3	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR4	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR5	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR6	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR7	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR8	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR9	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR10	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR11	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR12	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR13	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR14	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR15	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR16	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR17	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR18	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
IC1	1820-0077	3	IC;DGTL;FLIP-FLOP	01295	SN7474N
IC2	1820-0328	1	IC;DGTL;GATE	01295	SN7400N
IC3	1820-0054	9	IC;DGTL;GATE	01295	SN7400N
IC4	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC5	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC6	1820-0077		IC;DGTL;FLIP-FLOP	01295	SN7474N
IC7	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC8	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC9	1820-0071	3	IC;DGTL;BUFFER/DRIVER/LINE DRIVER	01295	SN7440N
IC10	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC11	1820-0327	1	IC;DGTL;GATE	01295	SN7401N
IC12	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC13	1820-0077		IC;DGTL;FLIP-FLOP	01295	SN7474N
IC14	1820-0071		IC;DGTL;BUFFER/DRIVER/LINE DRIVER	01295	SN7440N
IC15	1820-0071		IC;DGTL;BUFFER/DRIVER/LINE DRIVER	01295	SN7440N
IC16	1820-0068	1	IC;DGTL;GATE	01295	SN7410N
IC17	1820-0054		IC;DGTL;GATE	01295	SN7400N
IC18	1820-0054		IC;DGTL;GATE	01295	SN7400N
K1	0490-0399	1	RELAY, REED, 1A .1A 250V CONT, 12V COIL	28480	0490-0399
Q1	1854-0071	6	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q2	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q3	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q4	1853-0020	3	TRANSISTOR PNP SI CHIP PD=300MW	28480	1853-0020
Q5	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q6	1854-0092	4	TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q7	1854-0092		TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q8	1854-0092		TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q9	1854-0092		TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q10	1853-0020		TRANSISTOR PNP SI CHIP PD=300MW	28480	1853-0020
Q11	1853-0020		TRANSISTOR PNP SI CHIP PD=300MW	28480	1853-0020
Q12	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q13	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
R1	0683-3025	12	RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R2	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R3	0683-1025	22	RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R4	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R5	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	C83025
R6	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R7	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025
R8	0683-2725	1	RESISTOR-FXD 2.7K 5% .25W CC TUBULAR	01121	C82725
R9	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	C81025

See introduction to this section for ordering information

Table 2-5. Control Assembly — 05460-60004 (Series 1632A) (Part 2 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R10	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R11	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R12	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R13	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R14	0683-6835	1	RESISTOR-FXD 68K 5% .25W CC TUBULAR	01121	CB6835
R15	0683-1635	1	RESISTOR-FXD 16K 5% .25W CC TUBULAR	01121	CB1635
R16	0683-3925	1	RESISTOR-FXD 3.9K 5% .25W CC TUBULAR	01121	CB3925
R17	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R18	0683-4725	1	RESISTOR-FXD 4.7K 5% .25W CC TUBULAR	01121	CB4725
R19	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R20	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R21	0683-1035	2	RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R22	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R23	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R24	0683-3335	1	RESISTOR-FXD 33K 5% .25W CC TUBULAR	01121	CB3335
R25	0683-8225	1	RESISTOR-FXD 8.2K 5% .25W CC TUBULAR	01121	CB8225
R26	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R27	0683-2025	1	RESISTOR-FXD 2K 5% .25W CC TUBULAR	01121	CB2025
R28	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R29	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R30	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R31	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R32	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R33	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R34	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R35	0683-3025		RESISTOR-FXD 3K 5% .25W CC TUBULAR	01121	CB3025
R36	0757-0924	2	RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R37	0683-2215	3	RESISTOR-FXD 220 OHM 5% .25W CC TUBULAR	01121	CB2215
R38	0698-4248	4	RESISTOR-FXD 560 OHM 5% .125W F TUBULAR	24546	C4-1/8-T0-560R-J
R39	0698-4262	2	RESISTOR-FXD 2.2K 5% .125W F TUBULAR	16299	C4-1/8-T0-2201-J
R40	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R41	0698-4248		RESISTOR-FXD 560 OHM 5% .125W F TUBULAR	24546	C4-1/8-T0-560R-J
R42	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R43	0683-2215		RESISTOR-FXD 220 OHM 5% .25W CC TUBULAR	01121	CB2215
R44	0698-4248		RESISTOR-FXD 560 OHM 5% .125W F TUBULAR	24546	C4-1/8-T0-560R-J
R45	0698-4262		RESISTOR-FXD 2.2K 5% .125W F TUBULAR	16299	C4-1/8-T0-2201-J
R46	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R47	0698-4248		RESISTOR-FXD 560 OHM 5% .125W F TUBULAR	24546	C4-1/8-T0-560R-J
R48	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R49	0683-5135	1	RESISTOR-FXD 51K 5% .25W CC TUBULAR	01121	CB5135
R50	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R51	0683-2215		RESISTOR-FXD 220 OHM 5% .25W CC TUBULAR	01121	CB2215
R52	0683-5115	4	RESISTOR-FXD 510 OHM 5% .25W CC TUBULAR	01121	CB5115
R53	0683-5115		RESISTOR-FXD 510 OHM 5% .25W CC TUBULAR	01121	CB5115
R54	0683-5115		RESISTOR-FXD 510 OHM 5% .25W CC TUBULAR	01121	CB5115
R55	0683-5115		RESISTOR-FXD 510 OHM 5% .25W CC TUBULAR	01121	CB5115
R56	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R57	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R58	0683-1525	1	RESISTOR-FXD 1.5K 5% .25W CC TUBULAR	01121	CB1525
R59	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R60	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R61	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035

See introduction to this section for ordering information

Table 2-6. Reference Power Supply Assembly — 05460-60005

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60005		BOARD ASSY:REFERENCE POWER SUPPLY	28480	05460-60005
C1	0180-1743	4	CAPACITOR-FXD; .1UF+-10% 35VDC TA-SOLID	56289	1500104X9035A2
C2	0180-1746	1	CAPACITOR-FXD; 15UF+-10% 20VDC TA-SOLID	56289	1500156X902092
C3	0180-1743	2	CAPACITOR-FXD; .1UF+-10% 35VDC TA-SOLID	56289	1500104X9035A2
C4	0160-0154		CAPACITOR-FXD .0022UF+-10% 200VDC	56289	292P22292
C5	0180-1743		CAPACITOR-FXD; .1UF+-10% 35VDC TA-SOLID	56289	1500104X9035A2
C6	0180-1743		CAPACITOR-FXD; .1UF+-10% 35VDC TA-SOLID	56289	1500104X9035A2
C7	0160-0154		CAPACITOR-FXD .0022UF+-10% 200VDC	56289	292P22292
C8	0180-0061	1	CAPACITOR-FXD; 100UF+75-10% 16VDC AL	56289	30D107G016DC2
CR1	1902-0071	1	DIODE; ZENER; 9V VZ; .5W MAX PD	28480	1902-0071
L1	9140-0047	1	COIL; FXD; NON-MOLDED RF CHOKE; 20UH	24226	9410
Q1	1854-0003	1	TRANSISTOR NPN SI PD=800MW FT=50MHZ	28480	1854-0003
Q2	1853-0020	1	TRANSISTOR PNP SI CHIP PD=300MW	28480	1853-0020
Q3	1854-0071	2	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q4	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
R1	0683-2025	1	RESISTOR-FXD 2K 5% .25W CC TUBULAR	01121	C82025
R2	0757-0907	3	RESISTOR-FXD 200 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-201-G
R3	0757-0907		RESISTOR-FXD 200 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-201-G
R4	0683-6815	1	RESISTOR-FXD 680 OHM 5% .25W CC TUBULAR	01121	C86815
R5	0683-5125	2	RESISTOR-FXD 5.1K 5% .25W CC TUBULAR	01121	C85125
R6	0683-1335	1	RESISTOR-FXD 13K 5% .25W CC TUBULAR	01121	C81335
R7	0683-5125		RESISTOR-FXD 5.1K 5% .25W CC TUBULAR	01121	C85125
R8	0757-0907		RESISTOR-FXD 200 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-201-G
R9	2100-1757	1	RESISTOR, VAR, TRMR, 500 OHM 5% WW	28480	2100-1757
R10	0757-0939	1	RESISTOR-FXD 4.3K 2% .125W F TUBULAR	24546	C4-1/8-T0-4301-G

See introduction to this section for ordering information

Table 2-7. Plotter Control Board — 05460-60020

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60020		BOARD ASSY:PLOT CONTROL (SERIES 1036)	28480	05460-60020
C2	0180-0291	4	CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2 /
C3	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2
C4	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2
C5	0160-0134	1	CAPACITOR-FXD 220PF+-5% 300WVDC	28480	7160-7134
C6	0180-0376	1	CAPACITOR-FXD; .47UF+-10% 35VDC TA	56289	150D474X9035A2
C7	0180-0291		CAPACITOR-FXD; 1UF+-10% 35VDC TA-SOLID	56289	150D105X9035A2
C8	0150-0121	2	CAPACITOR-FXD .1UF+80-20% 50WVDC	28480	0150-0121
C9	0160-2214	1	CAPACITOR-FXD 680PF+-5% 300WVDC	28480	0160-2214
C10	0160-0154	1	CAPACITOR-FXD .0022UF+-10% 200WVDC	56289	292P22292
CR1	1901-0040	2	DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR2	1902-3182	1	DIODE; ZENER; 12.1V VZ; .4W MAX PD	04713	SZ 10939-206
CR3	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
IC1	1820-0054	2	IC;DGTL;GATE	01295	SN7400N
IC2	1820-0054		IC;DGTL;GATE	01295	SN7400N
L1	9140-0018	1	COIL; FXD; NON-MOLDED RF CHOKE; 1UH	24226	9408
L2	9140-0047	2	COIL; FXD; NON-MOLDED RF CHOKE, 20UH	24226	9410
L3	9140-0047		COIL; FXD; NON-MOLDED RF CHOKE, 20UH	24226	9410
Q1	1854-0071	5	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q2	1853-0036	2	TRANSISTOR PNP SI CHIP PD=310MW	28480	1853-0036
Q3	1853-0036		TRANSISTOR PNP SI CHIP PD=310MW	28480	1853-0036
Q4	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q5	1855-0010	1	TRANSISTOR; UNIJUNCTION; P ON N 2N2646	03508	2N2646
Q6	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q7	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q8	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
R2	0757-0935	1	RESISTOR-FXD 3K 2% .125W F TUBULAR	24546	C4-1/8-T0-3001-G
R3	0757-0948	4	RESISTOR-FXD 10K 2% .125W F TUBULAR	24546	C4-1/8-T0-1002-G
R4	0757-0924	6	RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R5	0757-0938	3	RESISTOR-FXD 3.9K 2% .125W F TUBULAR	24546	C4-1/8-T0-3901-G
R6	0757-0912	2	RESISTOR-FXD 330 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-331-G
R7	0757-0917	3	RESISTOR-FXD 510 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-511-G
R8	2100-1773	1	RESISTOR, VAR, TRMR, 1KOHM 5% WW	28480	2100-1773
R9	0757-0938		RESISTOR-FXD 3.9K 2% .125W F TUBULAR	24546	C4-1/8-T0-3901-G
R10	0757-0921	2	RESISTOR-FXD 750 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-751-G
R11	0757-0933	2	RESISTOR-FXD 2.4K 2% .125W F TUBULAR	24546	C4-1/8-T0-2401-G
R12	0757-0948		RESISTOR-FXD 10K 2% .125W F TUBULAR	24546	C4-1/8-T0-1002-G
R13	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R14	0757-0917		RESISTOR-FXD 510 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-511-G
R15	0757-0909	2	RESISTOR-FXD 240 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-241-G
R16	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R17	0757-0938		RESISTOR-FXD 3.9K 2% .125W F TUBULAR	24546	C4-1/8-T0-3901-G
R18	0757-0917		RESISTOR-FXD 510 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-511-G
R19	0757-0912		RESISTOR-FXD 330 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-331-G
R20	0757-0893	1	RESISTOR-FXD 51 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-51R0-G
R21	0757-0948		RESISTOR-FXD 10K 2% .125W F TUBULAR	24546	C4-1/8-T0-1002-G
R22	0757-0966	1	RESISTOR-FXD 56K 2% .125W F TUBULAR	24546	C4-1/8-T0-5602-G
R23	0757-0921		RESISTOR-FXD 750 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-751-G
R24	0757-0933		RESISTOR-FXD 2.4K 2% .125W F TUBULAR	24546	C4-1/8-T0-2401-G
R25	0757-0948		RESISTOR-FXD 10K 2% .125W F TUBULAR	24546	C4-1/8-T0-1002-G
R26	0757-0955	1	RESISTOR-FXD 20K 2% .125W F TUBULAR	24546	C4-1/8-T0-2002-G
R27	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R28	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R29	0757-0924		RESISTOR-FXD 1K 2% .125W F TUBULAR	24546	C4-1/8-T0-1001-G
R30	0757-0931	1	RESISTOR-FXD 2K 2% .125W F TUBULAR	24546	C4-1/8-T0-2001-G
R31	0683-1505	1	RESISTOR-FXD 15 OHM 5% .25W CC TUBULAR	01121	C81505
R32	0757-0909		RESISTOR-FXD 240 OHM 2% .125W F TUBULAR	24546	C4-1/8-T0-241-G

See introduction to this section for ordering information

Table 2-8. LED Display Assembly — 05460-60021

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A8	05460-60021	3	1	BOARD ASSEMBLY-LED DISPLAY (SERIES 2020A)	28480	05460-60021
ABC1	0160-0155	6	2	CAPACITOR=FXD 3300PF +-10% 200VDC POLYE	28480	0160-0155
ABC2	0160-0155	6	6	CAPACITOR=FXD 3300PF +-10% 200VDC POLYE	28480	0160-0155
ABD91	2140-0094	2	9	LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD92	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD93	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD94	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD95	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD96	1990-0687	9	4	DISPLAY=NUM=SEG 1=CHAR .8=H	28480	1D81-3400
ABD97	1990-0687	9		DISPLAY=NUM=SEG 1=CHAR .8=H	28480	1D81-3400
ABD98	1990-0687	9		DISPLAY=NUM=SEG 1=CHAR .8=H	28480	1D81-3400
ABD99	1990-0687	9		DISPLAY=NUM=SEG 1=CHAR .8=H	28480	1D81-3400
ABD910	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD911	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD912	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABD913	2140-0094	2		LAMP=INCAND 7153 5VDC 115MA T=3/4=BULB	0000J	7153
ABR1	0683-2715	6	2	RESISTOR 270 5% .25W FC TC=-400/+600	01121	C82715
ABR2	0683-2715	6		RESISTOR 270 5% .25W FC TC=-400/+600	01121	C82715
ABR3	0683-1615	3	1	RESISTOR 160 5% .25W FC TC=-400/+600	01121	C81615
ABR4	0683-1815	5	21	RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR5	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR6	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR7	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR8	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR9	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR10	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR11	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR12	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR13	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR14	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR15	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR16	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR17	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR18	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR19	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABR20	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR21	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR22	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR23	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ARR24	0683-1815	5		RESISTOR 180 5% .25W FC TC=-400/+600	01121	C81815
ABU1	1820-1195	7	2	IC FF TTL LS D=TYPE POS=EDGE=TRIG COM	01295	SN74LS175N
ABU2	1820-1580	4	3	IC DCDR TTL BCD=TO=7=SEG 4=TO=7=LINE	01295	SN74247N
ABU3	1820-0054	5	1	IC GATE TTL NAND QUAD 2=INP	01295	SN7400N
ABU4	1820-1580	4		IC DCDR TTL BCD=TO=7=SEG 4=TO=7=LINE	01295	SN74247N
ABU5	1820-1195	7		IC FF TTL LS D=TYPE POS=EDGE=TRIG COM	01295	SN74LS175N
ABU6	1820-1580	4		IC DCDR TTL BCD=TO=7=SEG 4=TO=7=LINE	01295	SN74247N
ABU7	1820-1196	8	1	IC FF TTL LS D=TYPE POS=EDGE=TRIG COM	01295	SN74LS174N
ABU8	1820-1199	1	1	IC INV TTL LS HEX 1=INP	01295	SN74LS04N
ARXDS6	1200-0887	8	4	SOCKET=DSPL 14=CONT DIP DIP=SLDR	28480	1200-0887
ARXDS7	1200-0887	8		SOCKET=DSPL 14=CONT DIP DIP=SLDR	28480	1200-0887
ARXDS8	1200-0887	8		SOCKET=DSPL 14=CONT DIP DIP=SLDR	28480	1200-0887
ARXDS9	1200-0887	8		SOCKET=DSPL 14=CONT DIP DIP=SLDR	28480	1200-0887
A8 MISCELLANEOUS PARTS						
	05460-20011	7	1	SHIELD=DOMAIN-COORDINATE	28480	05460-20011
	05460-20012	8	1	SHIELD=MULTIPLIER	28480	05460-20012
	05460-20022	0	1	PROTECTOR=DISPLAY SOCKET	28480	05460-20022
	05460-80001	1	1	MASK=DOMAIN-COORDINATE	28480	05460-80001
	05460-80002	2	1	MASK=MULTIPLIER	28480	05460-80002
	05460-80003	3	1	INSULATOR=DOMAIN-COORDINATE	28480	05460-80003
	05460-80004	4	1	INSULATOR=MULTIPLIER	28480	05460-80004

See introduction to this section for ordering information
 *Indicates factory selected value

Table 2-9. Light Driver Assembly — 05460-60007

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05460-60007		BOARD ASSY:LIGHT DRIVER	28480	05460-60007
CI	0180-0089	1	CAPACITOR-FXD; 10UF+50-10% 150VDC AL	56289	30D106F1500D2
CR1	1901-0040	4	DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR2	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR3	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
CR4	1902-0244	1	DIODE; ZENER; 30.1V VZ; 1W MAX PD	04713	SZ11213-278
CR5	1902-0556	2	DIODE; ZENER; 20V VZ; 1W MAX PD	04713	SZ 11213-227
CR6	1902-0556	4	DIODE; ZENER; 20V VZ; 1W MAX PD	04713	SRI358-9
CR7	1901-0028		DIODE; PWR RECT; ; 400V MAX VRM 750MA	04713	SZ11213-227
CR8	1901-0028		DIODE; PWR RECT; ; 400V MAX VRM 750MA	04713	SRI358-9
CR9	1901-0028		DIODE; PWR RECT; ; 400V MAX VRM 750MA	04713	SRI358-9
CR10	1901-0028		DIODE; PWR RECT; ; 400V MAX VRM 750MA	04713	SRI358-9
CR11	1901-0040		DIODE; SWITCHING; ; 30V MAX VRM 50MA	28480	1901-0040
Q1	1854-0071	8	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q2	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q3	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q4	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q5	1854-0039	8	TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q6	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q7	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q8	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q9	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q10	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q11	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q12	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q13	1854-0022	1	TRANSISTOR NPN SI PD=700MW FT=50MHZ	07263	SL7843
Q14	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q15	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q16	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
Q17	1854-0039		TRANSISTOR NPN 2N3053 SI PD=1W	04713	2N3053
R1	0761-0027	2	RESISTOR-FXD 2.7K 5% 1W MO TUBULAR	24546	FP32-1-T00-2701-J
R2	0761-0027		RESISTOR-FXD 2.7K 5% 1W MO TUBULAR	24546	FP32-1-T00-2701-J
R3	0683-1035	8	RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R4	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R5	0683-2725	1	RESISTOR-FXD 2.7K 5% .25W CC TUBULAR	01121	CB2725
R6	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R7	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R8	0683-1025	9	RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R9	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R10	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R11	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R12	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R13	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R14	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R15	0683-1035		RESISTOR-FXD 10K 5% .25W CC TUBULAR	01121	CB1035
R16	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R17	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R18	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R19	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025
R20	0683-1025		RESISTOR-FXD 1K 5% .25W CC TUBULAR	01121	CB1025

See introduction to this section for ordering information

Table 2-10. Manufacturers Code List

MFR NO.	MANUFACTURER NAME	ADDRESS	ZIP CODE
00000	NO M/F DESCRIPTION FOR THIS MFG NUMBER		
01121	ALLEN BRADELY CO	MILWAUKEE WI	53212
01295	TEXAS INSTR INC SEMICOND CMPNT DIV	DALLAS TX	75231
03508	GE CO SEMICONDUCTOR PROD DEPT	SYRACUSE NY	13201
03888	PYROFILM CORP	WHIPPANY NJ	07981
04713	MOTOROLA SEMICONDUCTOR PRODUCTS	PHOENIX AZ	85008
07263	FAIRCHILD SEMICONDUCTOR DIV	MOUNTAIN VIEW CA	94040
08806	GE CO MINIATURE LAMP PROD DEPT	CLEVELAND OH	44112
12697	CLAROSTAT MFG CO INC	DOVER NH	03820
16299	CORNING GL WK ELEC CMPNT DIV	RALEIGH NC	27604
19701	MEPCO/ELECTRA CORP (MF RES)	MINERAL WELLS TX	76067
20940	MICRO-OHM CORP	EL MONTE CA	91731
24226	GOWANDA ELECTRONICS CORP	GOWANDA NY	14070
24546	CORNING GLASS WORDS (C STYLE RES)	BRADFORD PA	16701
28480	HEWLETT-PACKARD CO CORPORATE HQ	PALO ALTO CA	94304
30983	MEPCO/ELECTRA CORP	SAN DIEGO CA	92121
32997	BOURNS INC TRIMPOT PROD DIV	RIVERSIDE CA	92507
56289	SPRAGUE ELECTRIC CO	NORTH ADAMS MA	01247
71785	TRW ELEK COMPONENTS CINCH DIV	ELK GROVE VILLAGE IL	60007
72136	ELECTRO MOTIVE MFG CO INC	WILLIMANTIC CT	06226
83594	BURROUGHS CORP ELEK COMPONENTS DIV	PLAINFIELD NJ	07061

SECTION III

5466B ANALOG-TO-DIGITAL CONVERTER PLUG-INS

INTRODUCTION

This section contains schematics, component locators, wiring, and Option information for the 5466B Analog-to-Digital (ADC) Plug-in units. For theory of operation, maintenance and troubleshooting procedures, refer to the 5451C System Service Manual.

CHANGE DATA

Current Instruments

This manual section applies to HP 5466B ADC Plug-ins with serial prefix 1952A.

The standard 5466B is a two-channel 12-bit, 100 kHz sampling rate ADC. All wiring and controls for four-channel operation are included in the standard unit; the only additions required for four-channel work are a second two-channel input board assembly (in A2) and digitizer boards (in A4 and A6). Two different digitizer boards are available as options — one is a 10-bit, 200 kHz sampling rate ADC, the other is a 12-bit, 200 kHz sampling rate ADC.

A complete listing of 5466B Options is provided in the 5451C System Service Manual.

Older Instruments

For 5466B's with serial prefixes below 1952A and Model 5466A ADC's, refer to 5451 System Hardware Manuals, HP Part Number 05451-90467 and 05451-90517.

5466B Options

Option Number	Description	Board Complement ^{1 2}					
		A1	A2	A3	A4	A5	A6
None (Std.)	2-chan 12-bit 100 kHz	-60013	none	-60014	none	-60014	none
001	4-chan 12-bit 100 kHz	-60013	-60013	-60014	-60014	-60014	-60014
002	2-chan 10-bit 200 kHz	-60013	none	-60002	none	-60002	none
003	4-chan 10-bit 200 kHz	-60013	-60013	-60002	-60002	-60002	-60002
004	2-chan 12-bit 200 kHz	-60013	none	-60007	none	-60007	none
005	4-chan 12-bit 200 kHz	-60013	-60013	-60007	-60007	-60007	-60007
006	Control Board	A9 is 05466-60016					

¹ Prefix for all board numbers is 05466.

² A7 and A8 boards are not changed by Options.

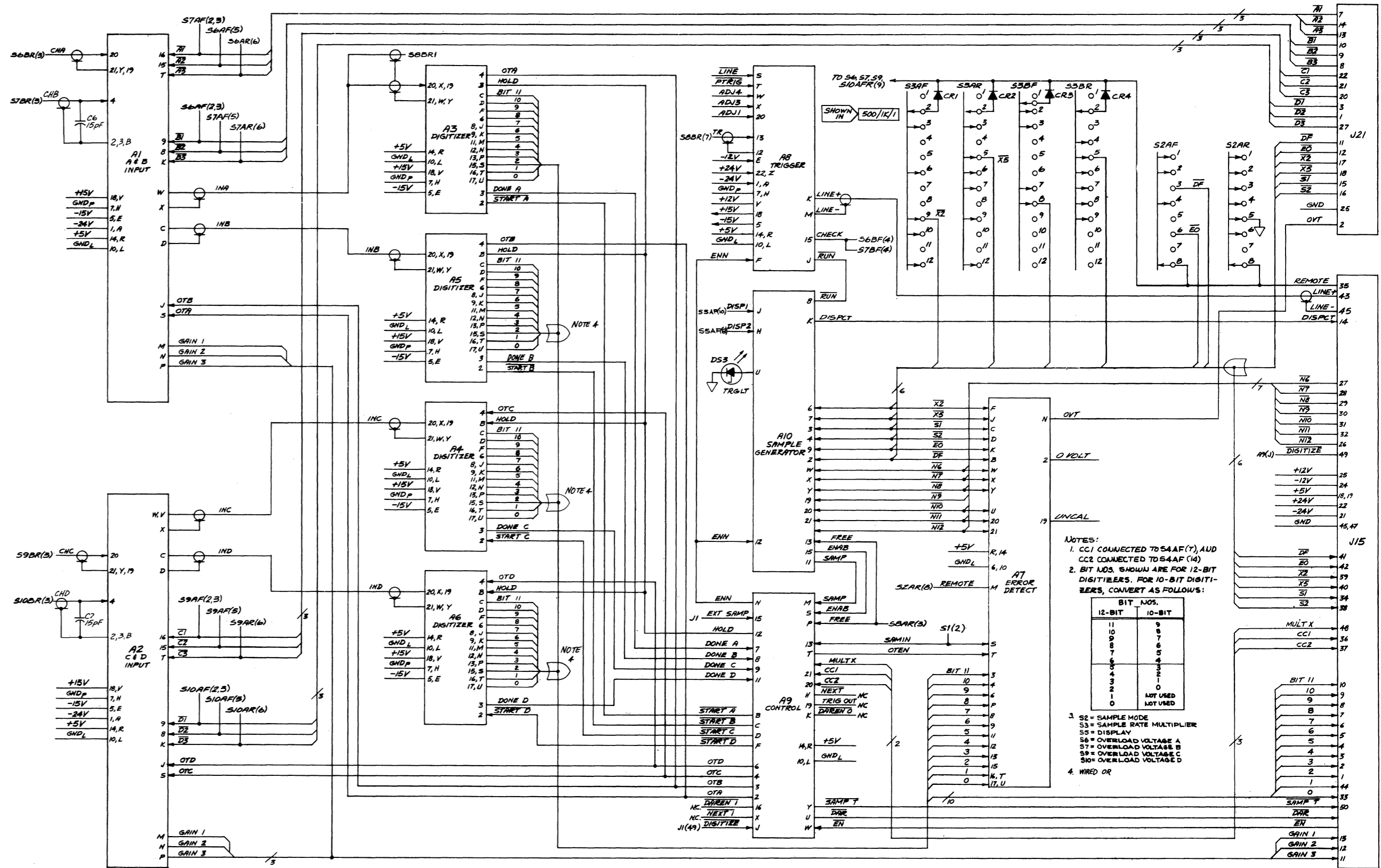
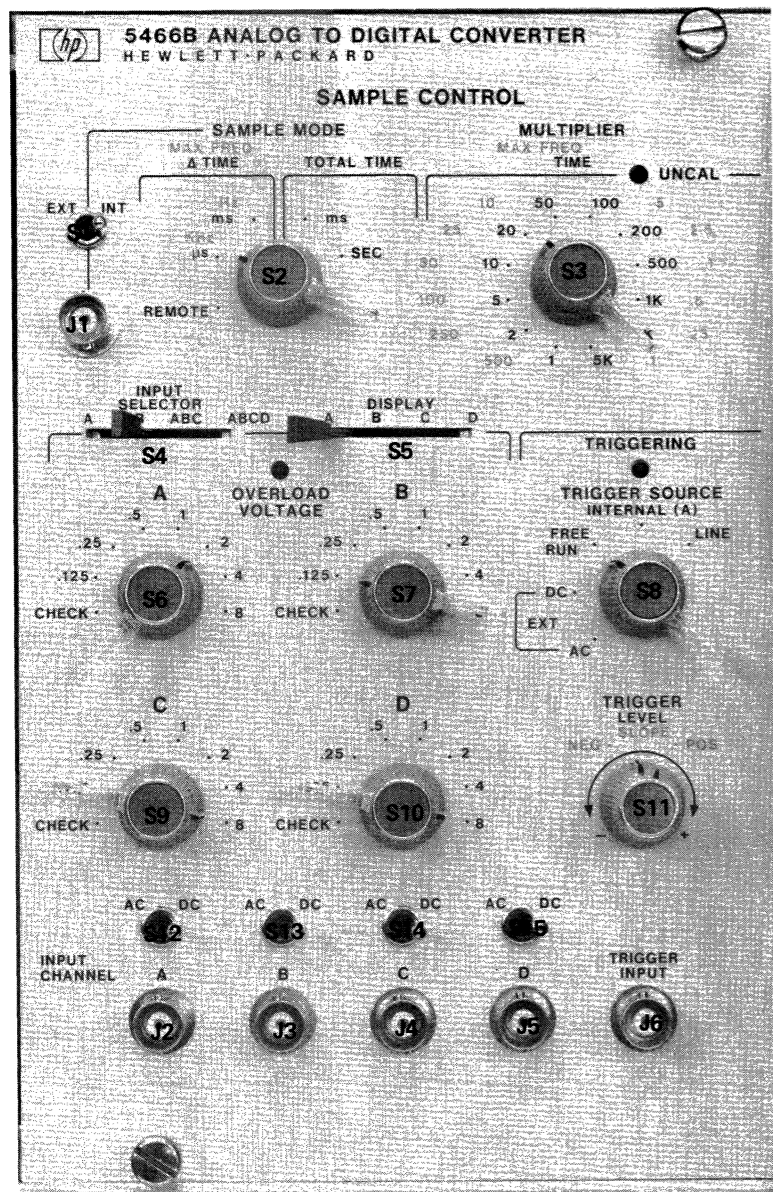
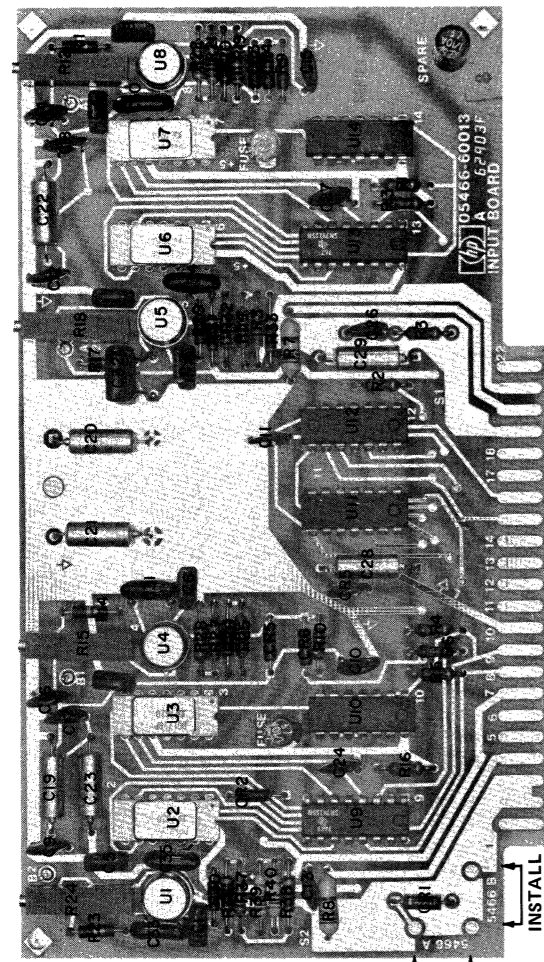


Figure 3-2
5466B ADC WIRING DIAGRAM
3-5



INSTALL JUMPER HERE FOR 5466A, 5478B, 5478C
 INSTALL JUMPER HERE FOR 5466B ONLY

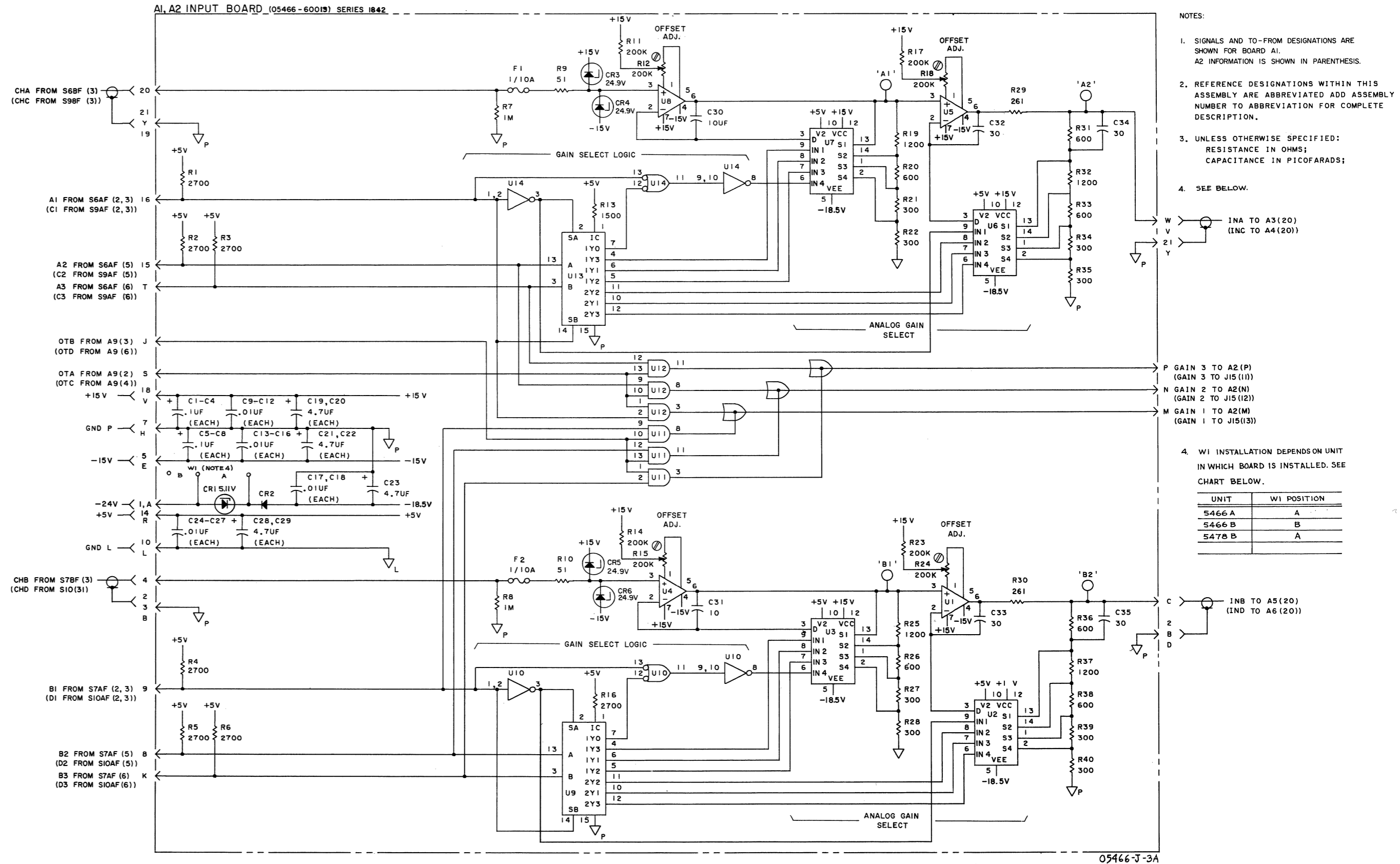
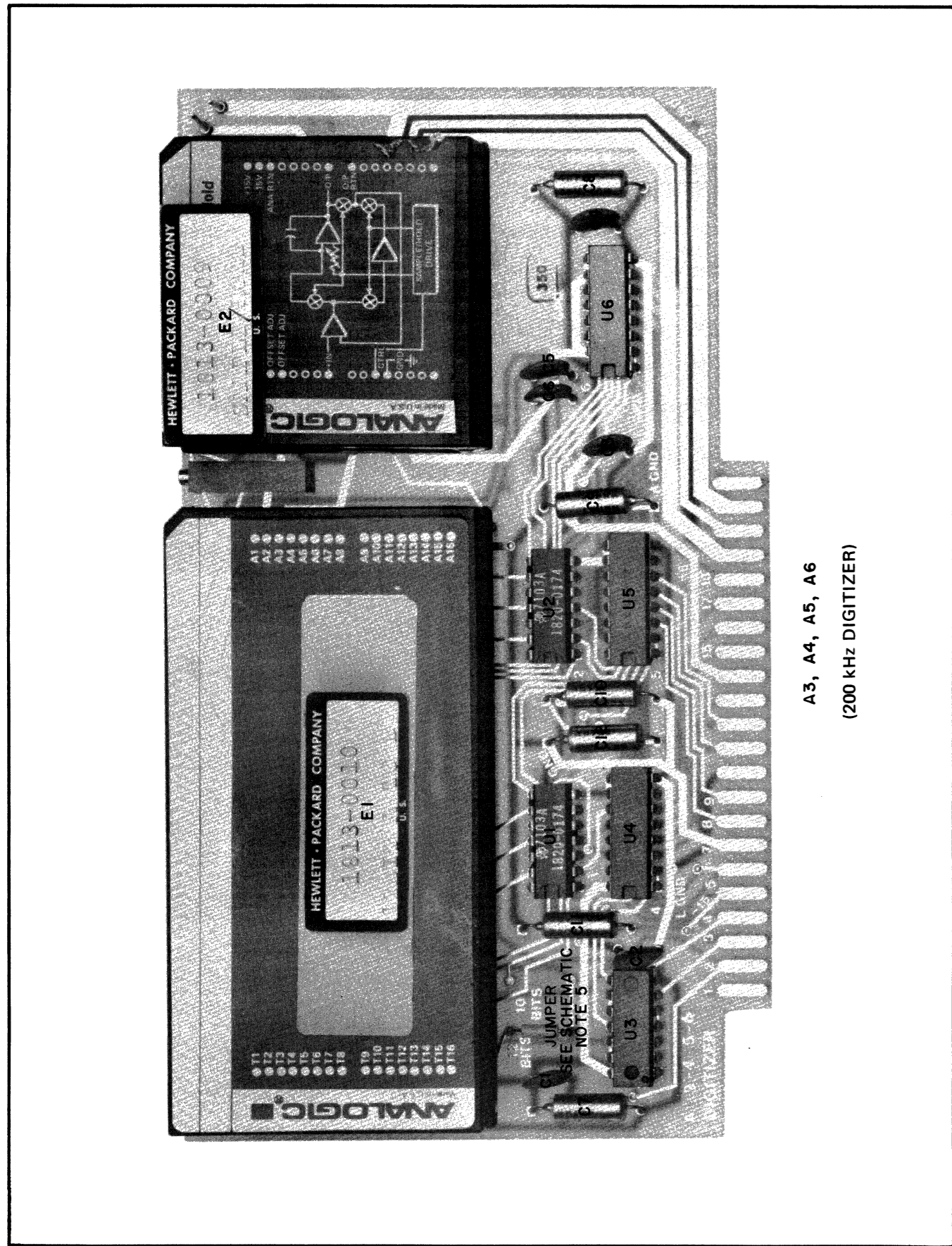
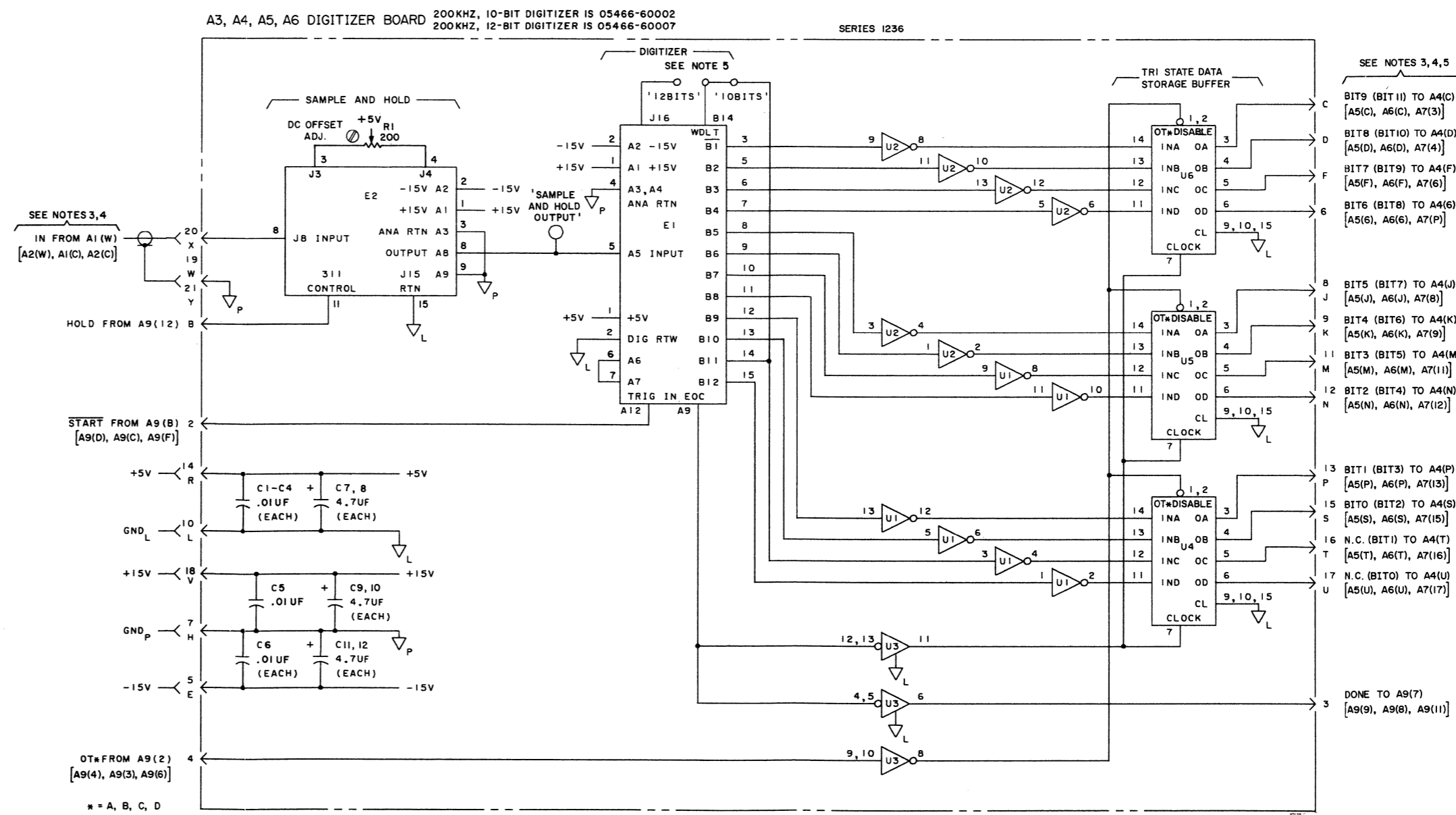


Figure 3-3
 AI, A2, INPUT BOARD
 (05466-60013) (Series 1842A)



A3, A4, A5, A6
(200 kHz DIGITIZER)

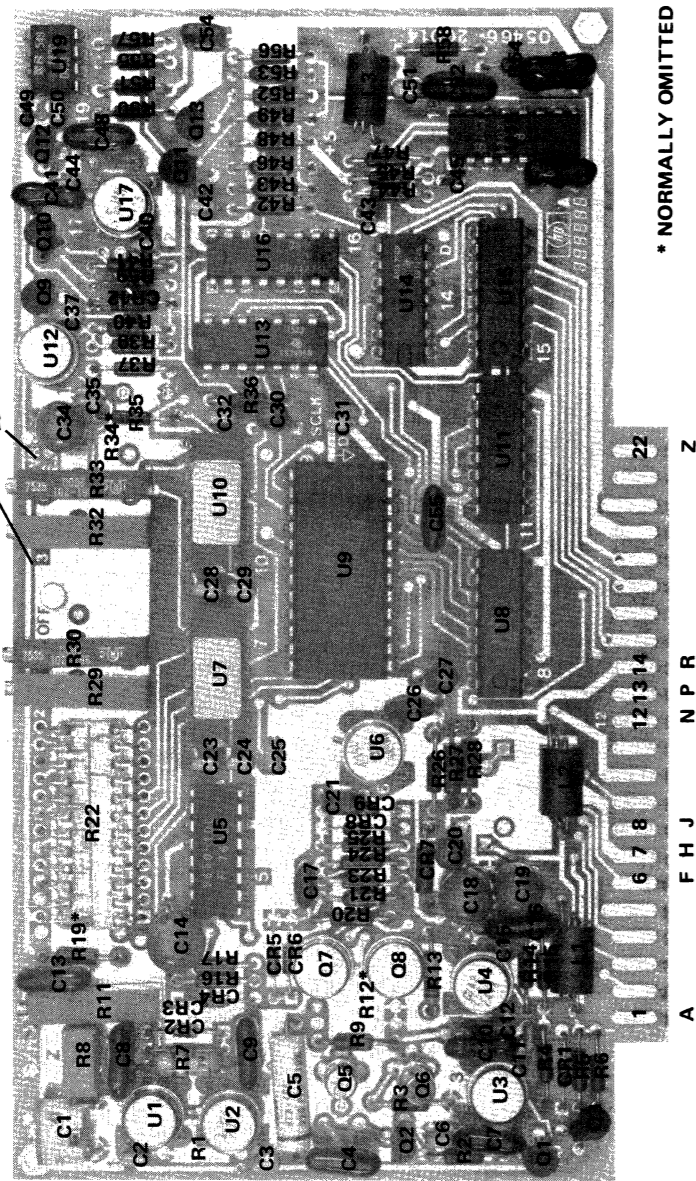


- NOTES:
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER (A3, A5, A6) TO ABBREVIATION FOR COMPLETE DESIGNATION.
 2. UNLESS OTHERWISE SPECIFIED: RESISTANCES ARE IN OHMS. CAPACITANCES ARE IN PICOFARADS (PF).
 3. DIGITIZERS ARE USED IN THE A3 AND A5 POSITIONS IN ALL INSTRUMENTS; ADDITIONAL DIGITIZERS ARE USED IN A4 AND A6 IN 4-CHANNEL INSTRUMENTS (ONLY).

(ALL INSTRUMENTS HAVE AN INPUT AMPLIFIER BOARD IN THE A1 POSITION. FOUR-CHANNEL INSTRUMENTS ALSO HAVE AN INPUT AMPLIFIER BOARD IN THE A2 POSITION.)
 4. UNBRACKETED TO/FROM INFORMATION IS FOR THE A3 DIGITIZER BOARD. BRACKETED TO/FROM INFORMATION IS FOR A4, A5, A6, RESPECTIVELY.
 5. THE CIRCUITRY OF THE 10-BIT AND 12-BIT DIGITIZER BOARDS IS IDENTICAL. THE ONLY DIFFERENCE IS IN THE DIGITIZER MODULE USED. AND THE INSTALLATION OF THE "10-BIT/12-BIT" JUMPER
THE HP PART NUMBER OF THE 10-BIT DIGITIZER IS 1813-0011. THE HP PART NUMBER OF THE 12-BIT DIGITIZER IS 1813-0010.
- OUTPUT SIGNAL NAMES NOT IN PARENTHESES ARE FOR 10-BIT DIGITIZER BOARDS (MSB IS BIT 9), OUTPUT SIGNAL NAMES IN PARENTHESES ARE FOR 12-BIT DIGITIZER BOARDS (MSB IS BIT 11).

THE "10-BIT/12-BIT" JUMPER MUST BE IN THE "10 BITS" POSITION WHEN THE 10-BIT DIGITIZER IS USED. IT MUST BE IN THE "12-BITS" POSITION WHEN THE 12-BIT DIGITIZER IS USED.

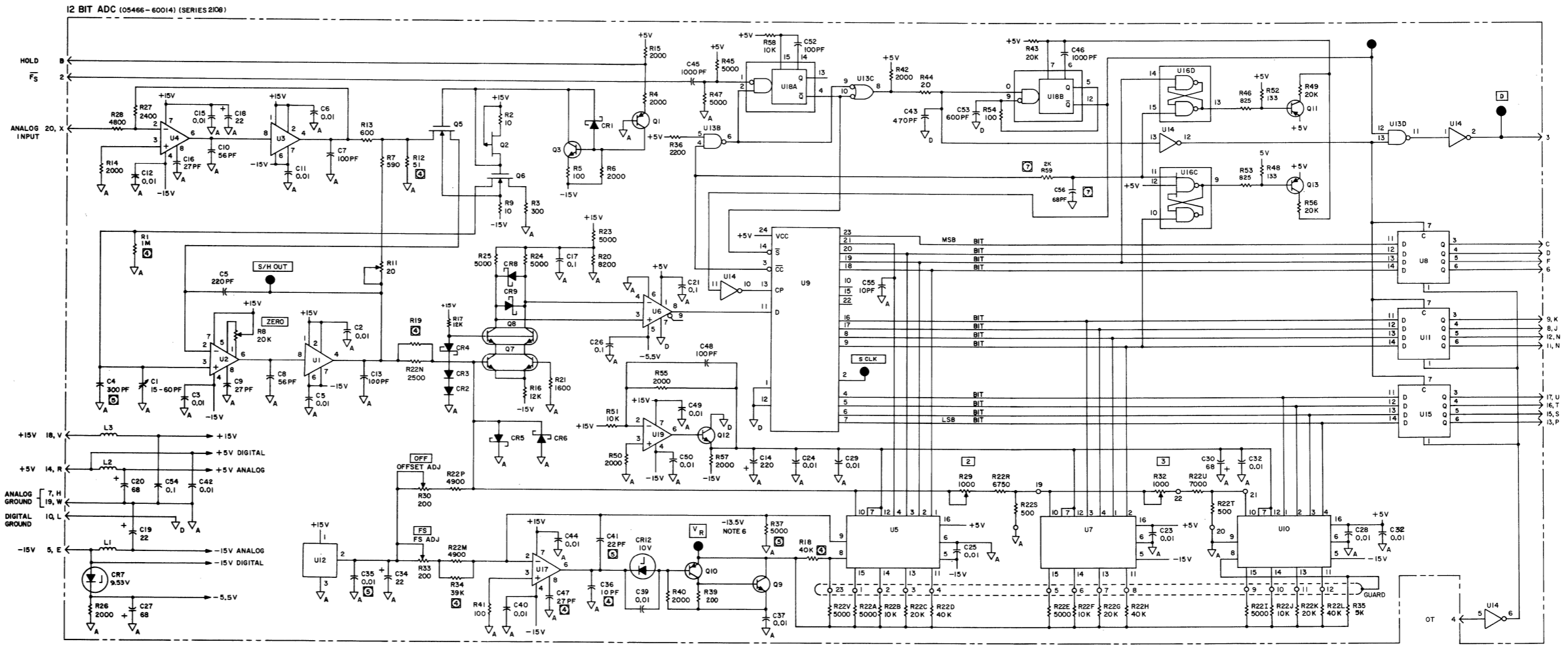
Figure 3-4
A3, A4, A5, A6 200 kHz DIGITIZER BOARD
(05466-60002/-60007)



* NORMALLY OMITTED

100 kHz DIGITIZER

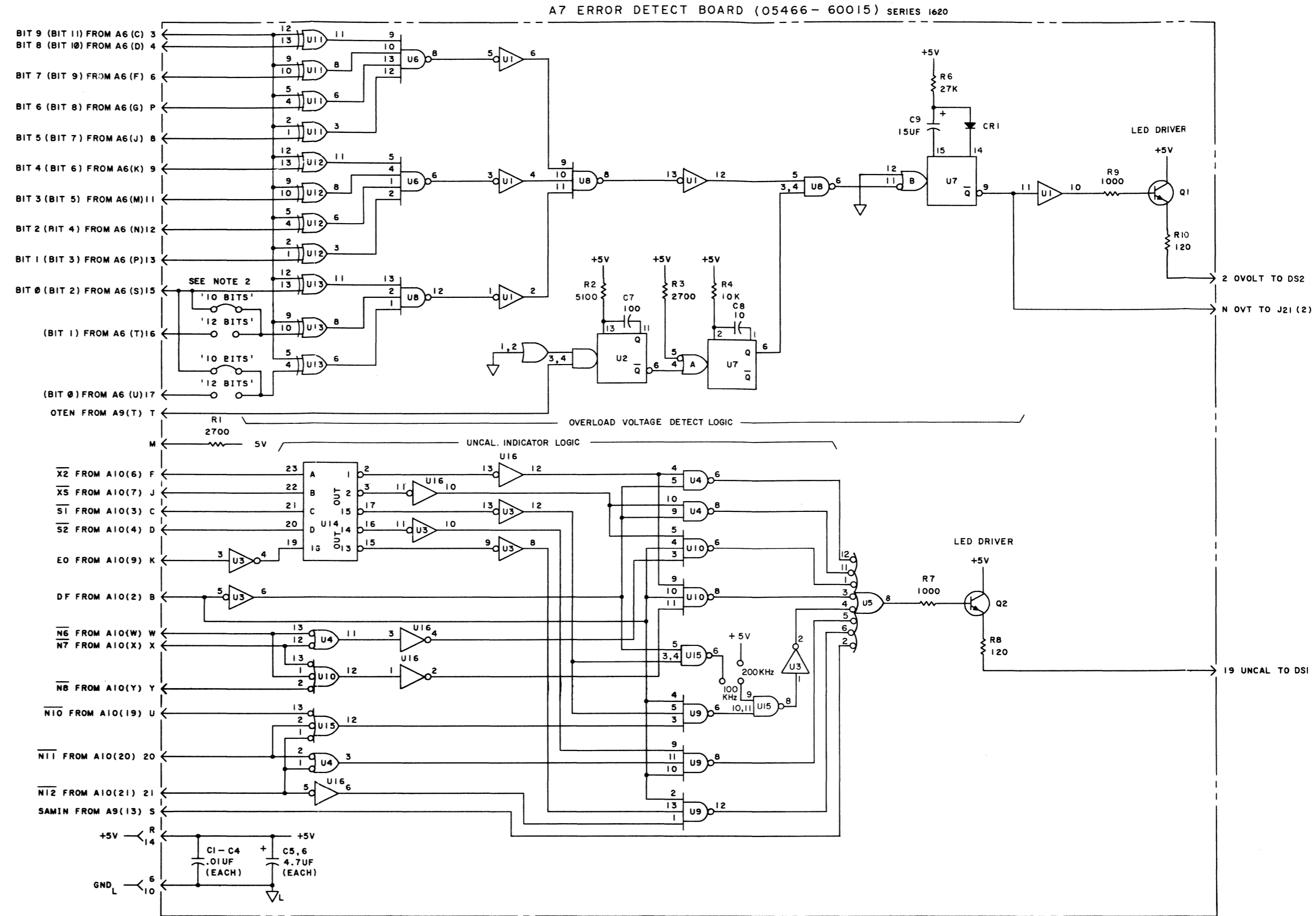
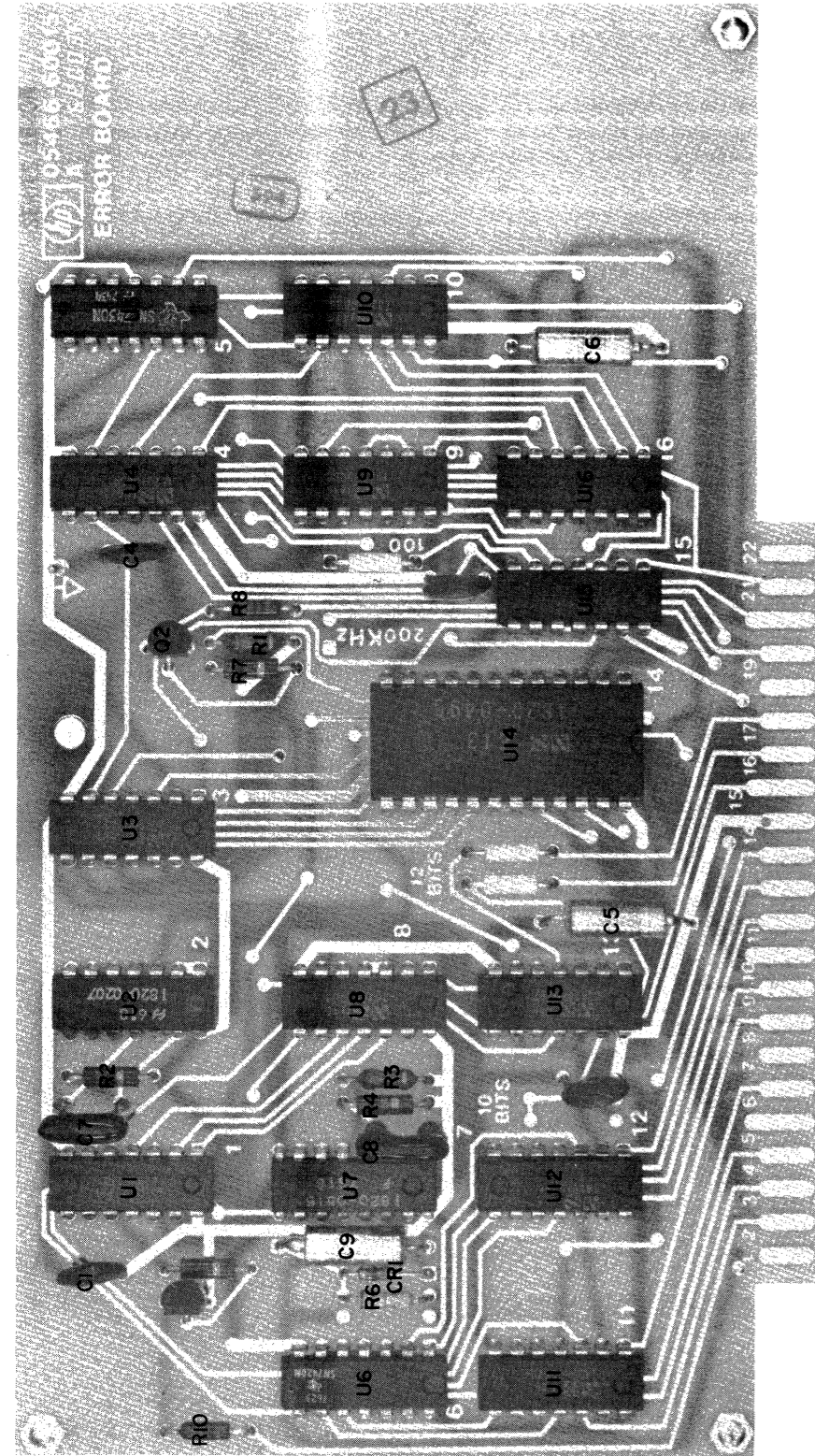
CAUTION
BE CAREFUL NOT TO GROUND TEST POINT VR OR THE UPPER TRACE TO GROUND—DAMAGE TO Q9 AND Q10 MAY RESULT.



- NOTES:
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 2. UNLESS OTHERWISE SPECIFIED:
RESISTANCE IN OHMS.
CAPACITANCE IN MICROFARADS.
 3. R22 CONNECTIONS:

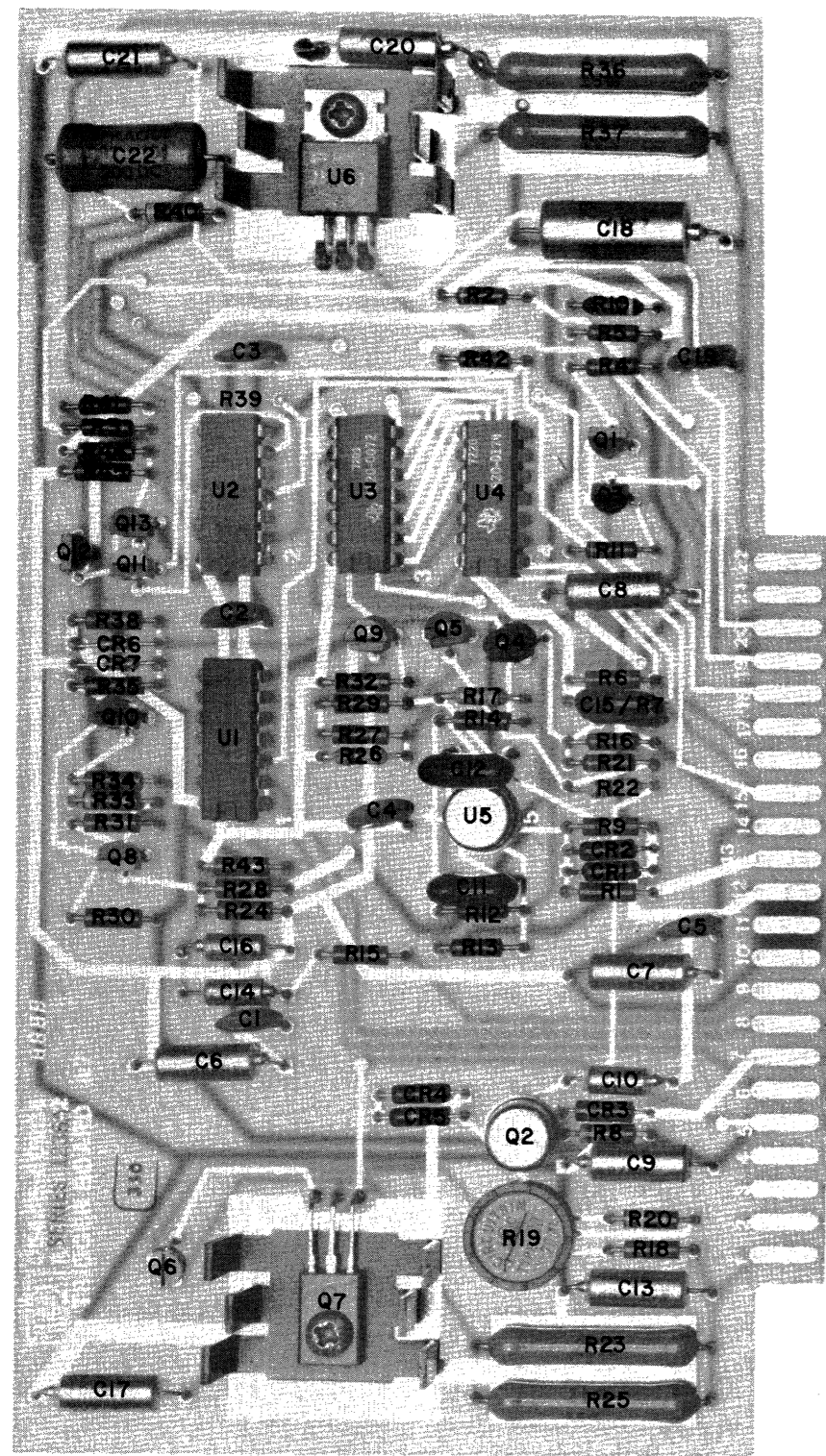
24	23	22	21	20	19	18	17	16	15	14	13
V	U	T	S	R	Q	P	O	N	M	L	K
5000	10K	20K	40K	5000	10K	20K	40K	5000	10K	20K	40K
2	3	4	5	6	7	8	9	10	11	12	
 4. R22M AND R22V ARE USED WHEN MC3850 IS USED AS U3. WHEN LM3340 IS USED AS U3, R22 PINS 14 AND 23 ARE REMOVED AND 40K AND 39K 0.01% RESISTORS ARE LOADED AS R18 AND R14. (CARE MUST BE TAKEN WHEN REMOVING PINS 14 AND 23 FROM PC BOARD NOT TO DAMAGE R22).
 5. FACTORY SELECTED PART. NORMALLY OMITTED.
 6. FACTORY SELECTED PART.
 6. NOMINAL LEVEL IS -13.5V ± 0.5V IF NOT CHECK Q9 AND Q10.
 7. FOR SERIES 2112A, R59 AND C56 ARE INSTALLED. FOR SERIES 2108, ONLY C56 IS INSTALLED AND THE VALUE CHANGES TO 150 PF. FOR SERIES 1952A AND 1644A, C56 AND R59 ARE DELETED.

Figure 3-5
A3, A4, A5, A6 100 kHz DIGITIZER BOARD
(05466-60014) (Series 1644A, 1952A, 2108A and 2112A)



- NOTES:
1. WHEN THE SYSTEM IS NOT OPT.001 OR OPT. 003 CONFIGURATION, THE SIGNAL NAMES IN PARENTHESIS ARE VALID.
 2. FOR THE STANDARD INSTRUMENT AND OPT. 002 THESE ARE JUMPED IN THE 10BIT POSITION; FOR OPT. 001 AND 003, THESE ARE JUMPED IN THE 12 BIT POSITION.
 3. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 4. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS. CAPACITANCE IN PICOFARADS.

Figure 3-6
 A7 ERROR DETECT BOARD
 (05466-60015) (Series 1620A)



A8

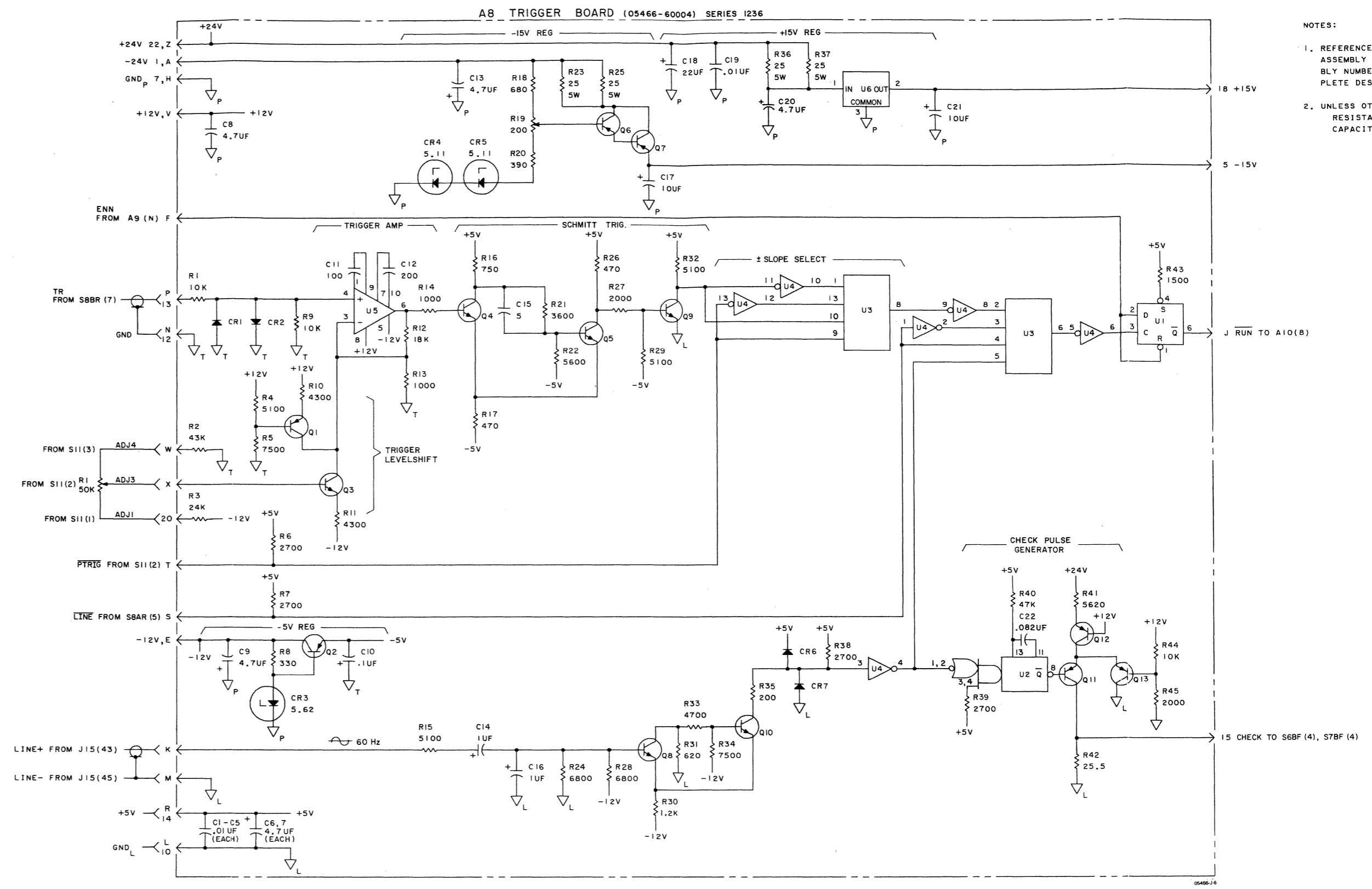
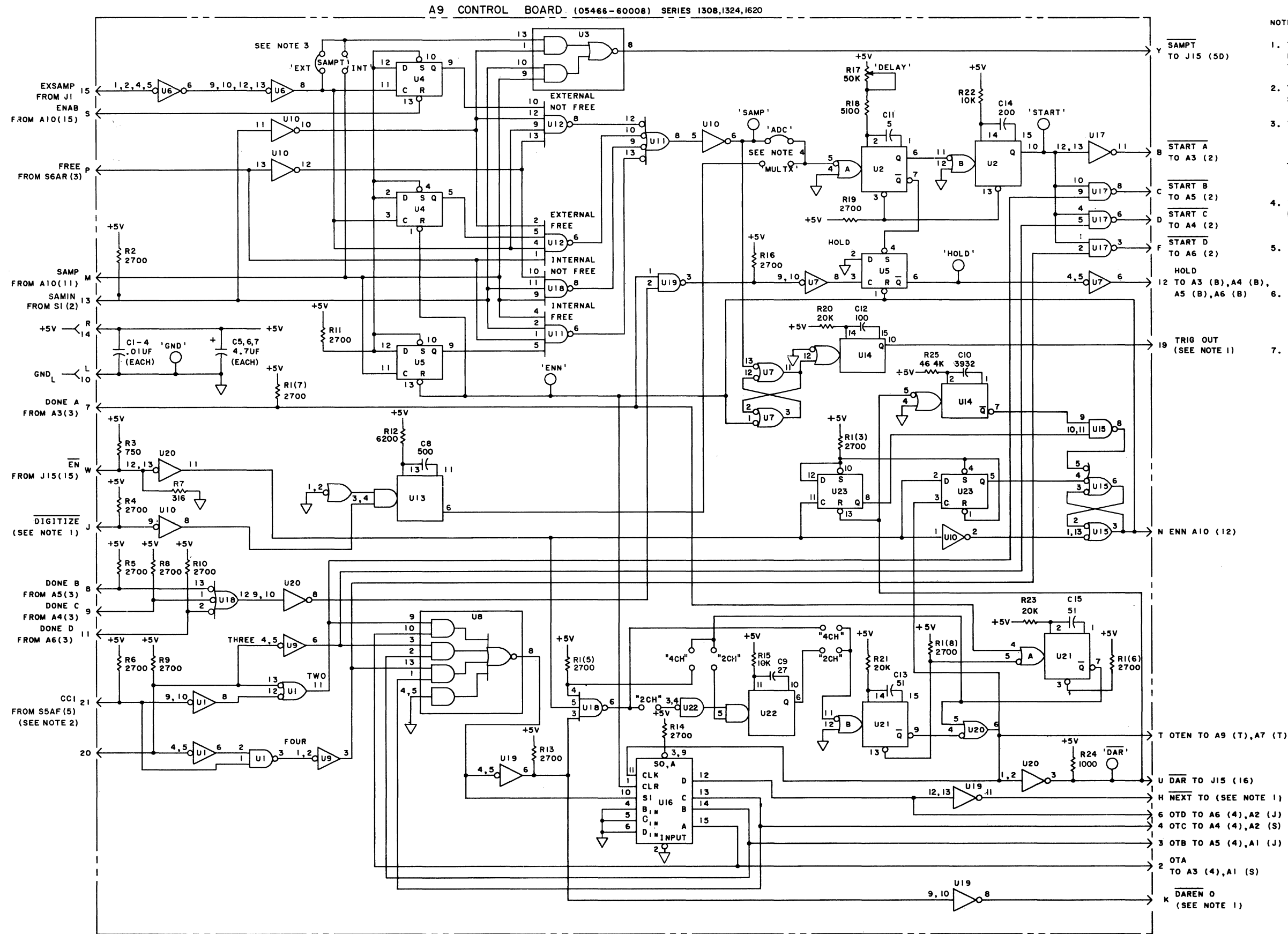
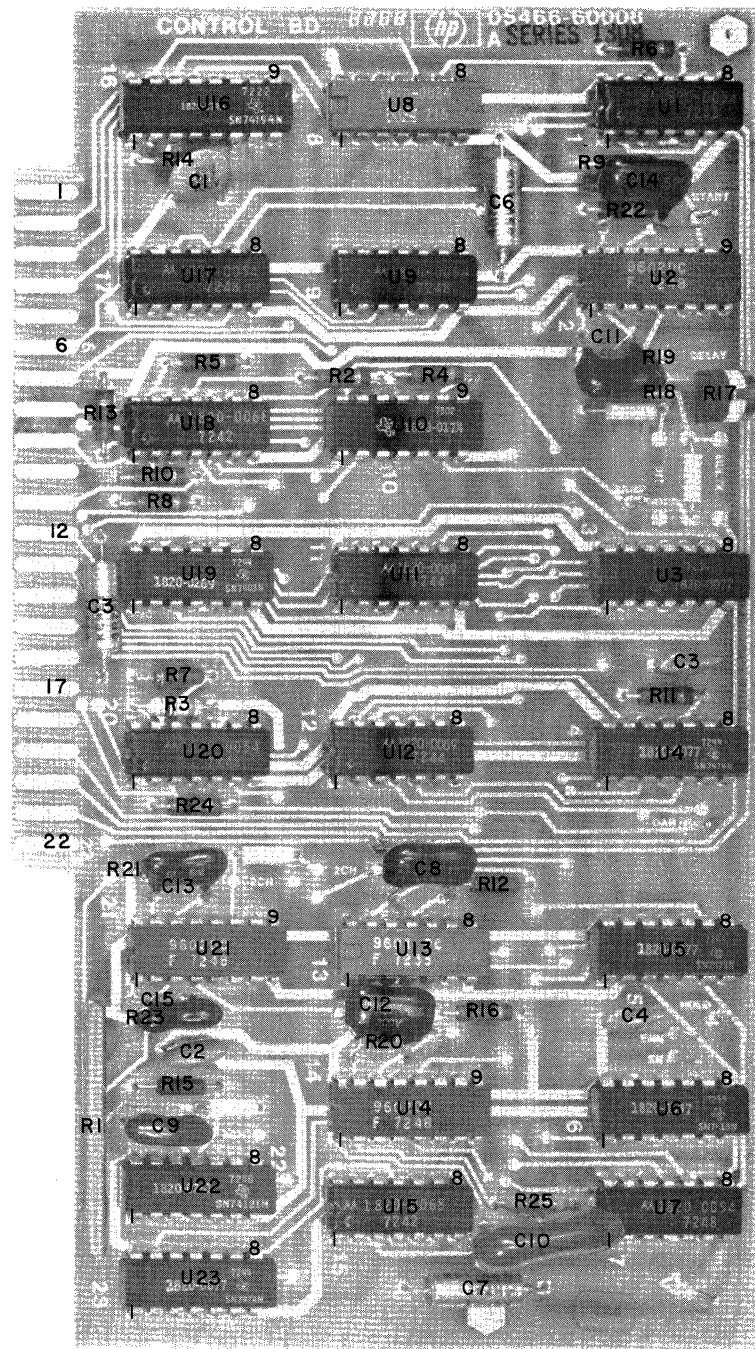


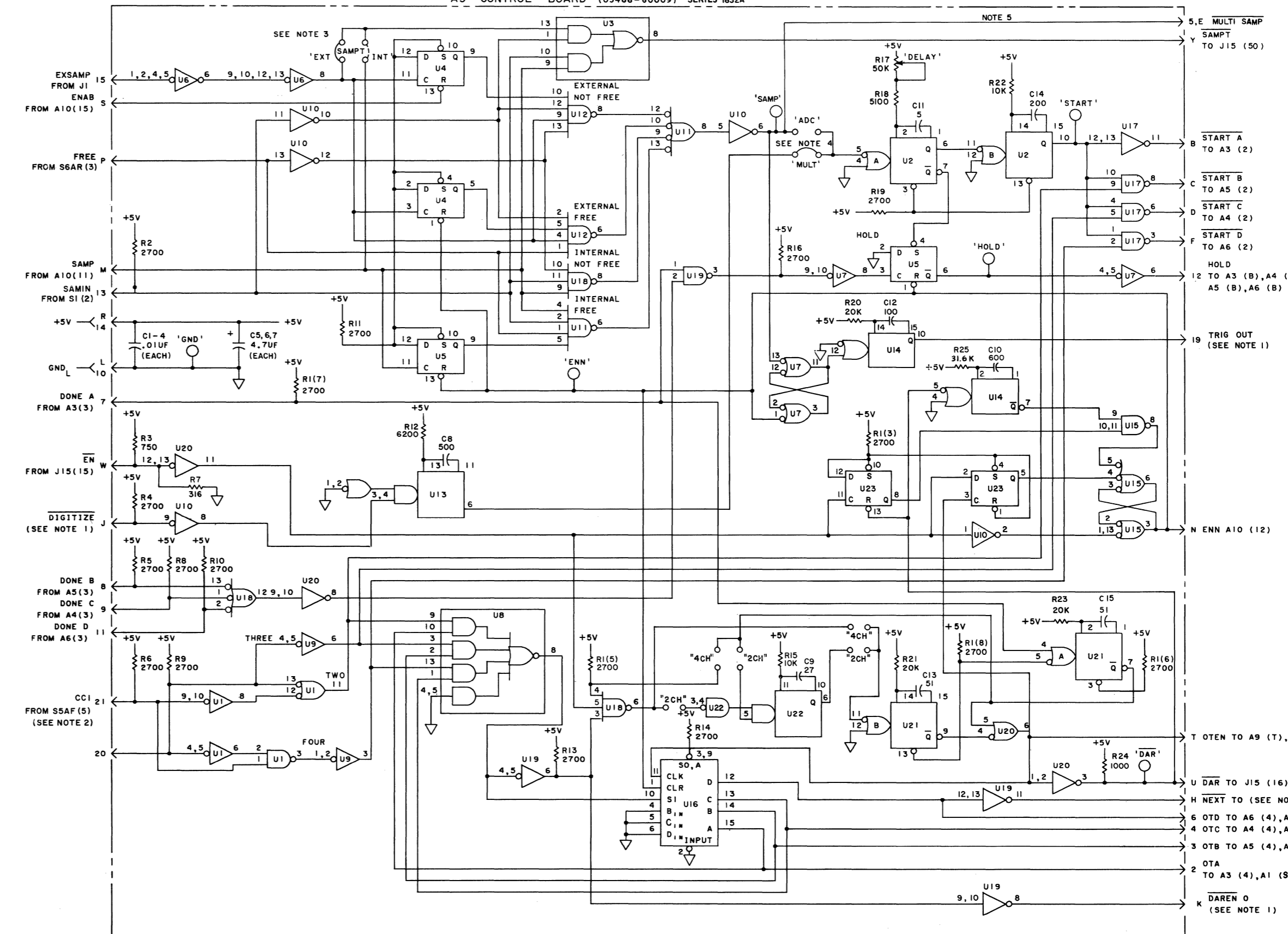
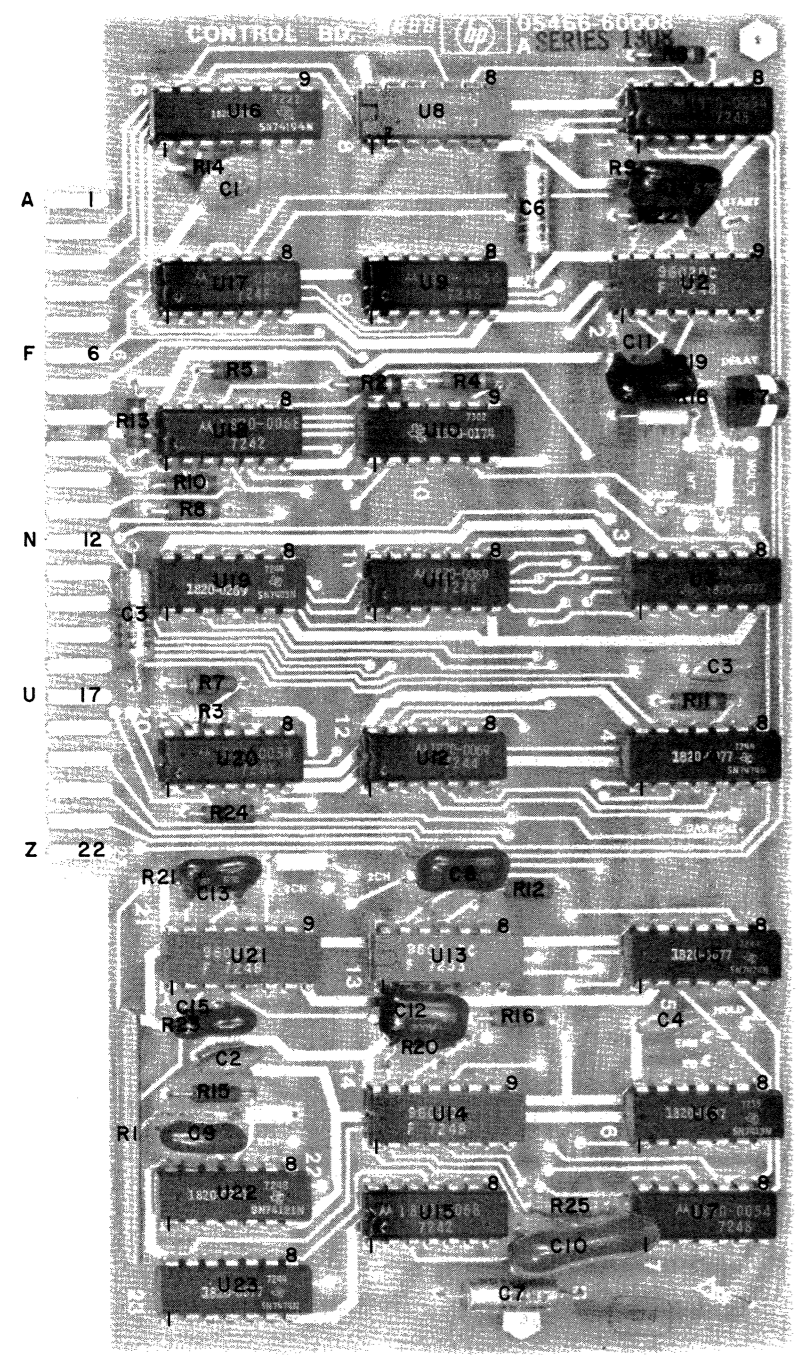
Figure 3-7
A8 TRIGGER BOARD
3-15



- NOTES:**
1. THESE CONNECTIONS ARE INTENDED FOR FUTURE MODIFICATIONS OF INSTRUMENT. THEY ARE NOT USED IN THE 5466A.
 2. THIS CONNECTED TO S4AF (7) FOR CC1 AND S4AF (14) FOR CC2 ON OPT.002 AND 003 ONLY.
 3. THIS JUMPER SELECTS WHETHER ONLY INTERNALLY GENERATED OR BOTH INTERNALLY AND EXTERNALLY GENERATED SAMPLE PULSES ARE OUTPUTTED FROM SAMP BNC ON 5475A, (NORMALLY EXT POSITION).
 4. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, (NORMALLY USED IN ADC POSITION).
 5. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, (NORMALLY NOT JUMPERED).
 6. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 7. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS. CAPACITANCE IN PICOFARADS.

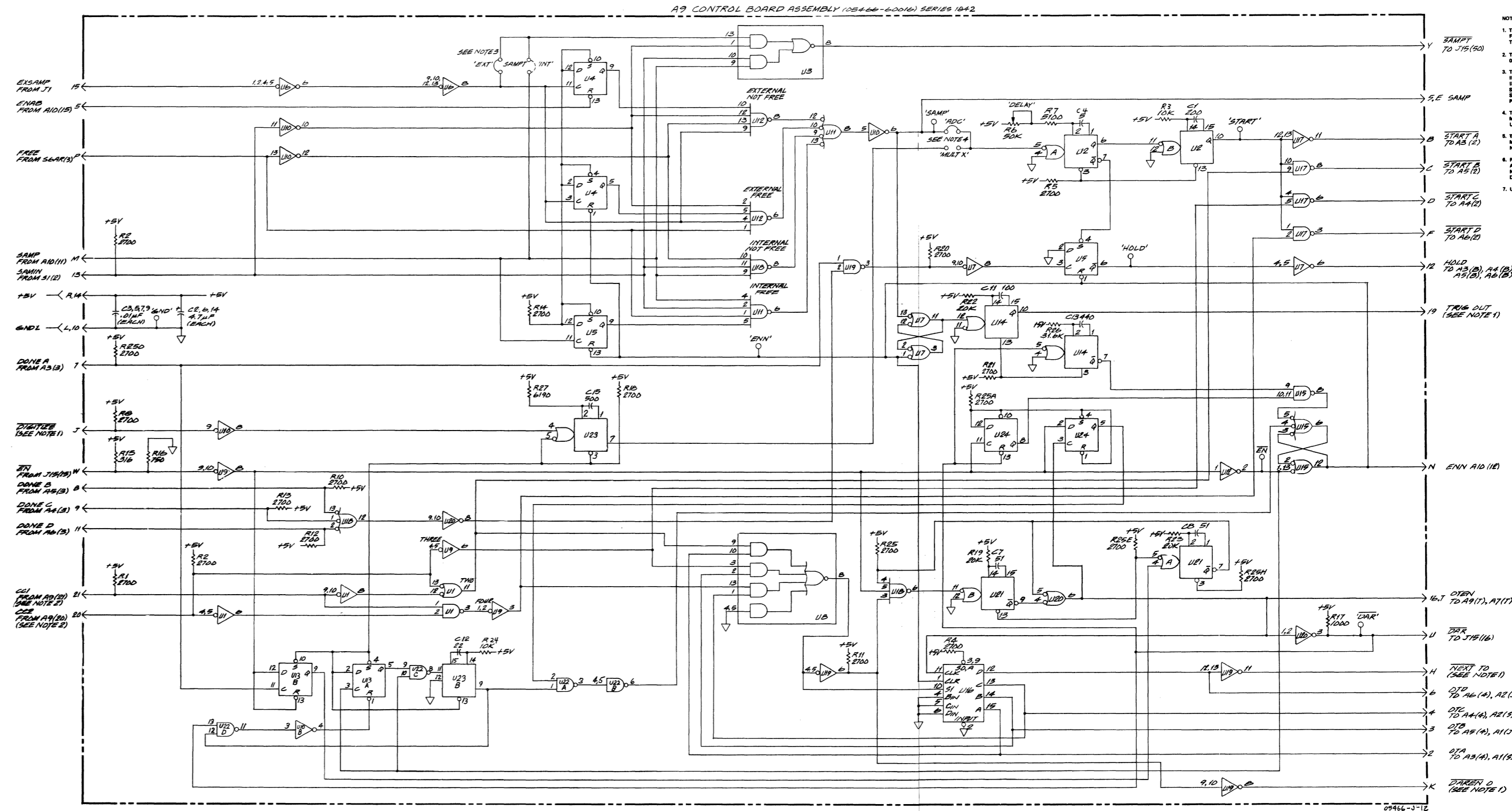
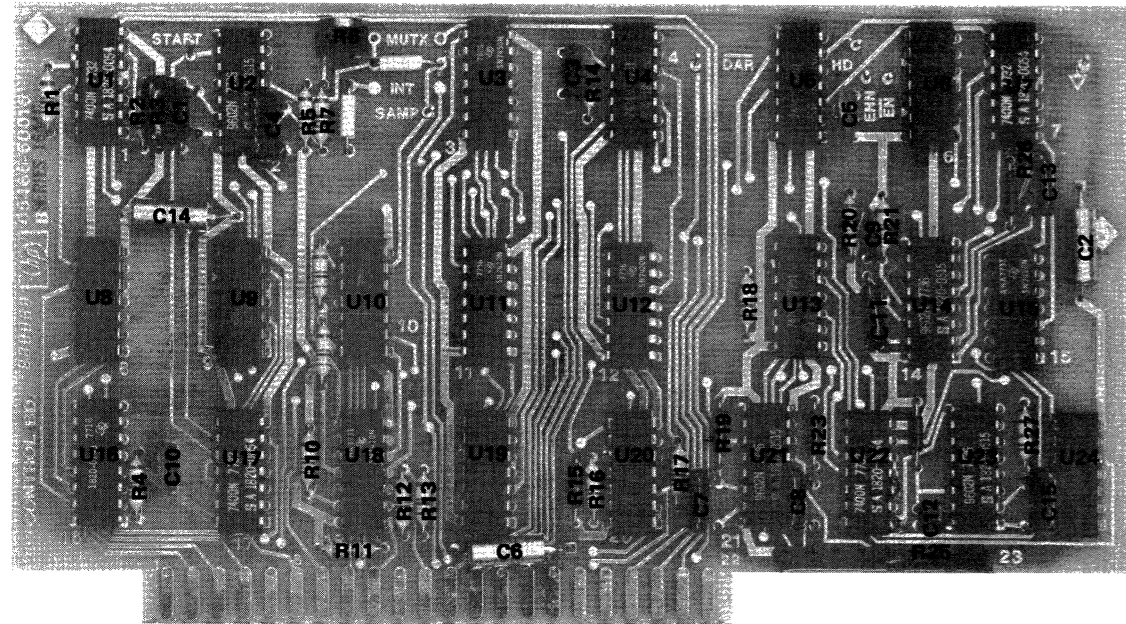
Figure 3-8
A9 CONTROL BOARD without MUX
(05466-60008)

A9 CONTROL BOARD (05466-60009) SERIES 1832A



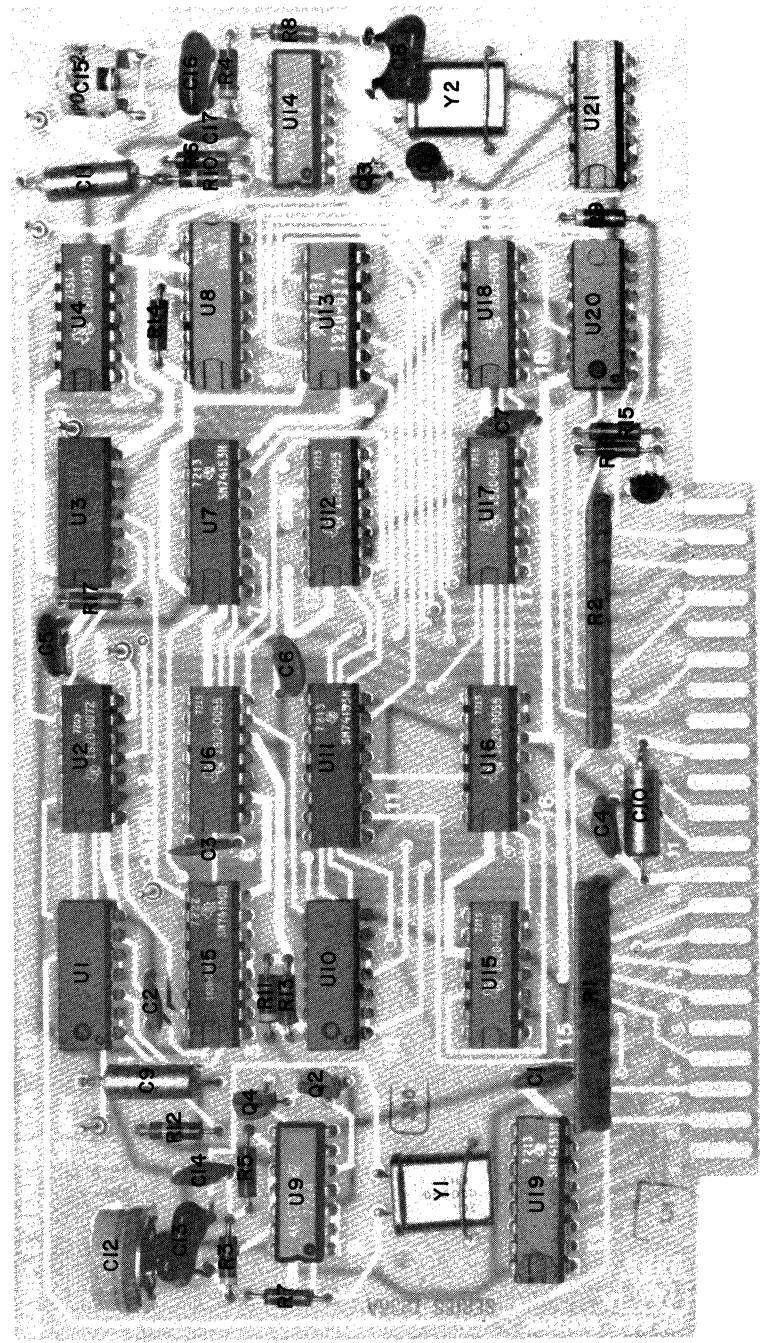
- NOTES:
1. THESE CONNECTIONS ARE INTENDED FOR FUTURE MODIFICATIONS OF INSTRUMENT. THEY ARE NOT USED IN THE 5466A.
 2. THIS CONNECTED TO S4AF (7) FOR CC1 AND S4AF (14) FOR CC2 ON OPT. 002 AND 003 ONLY.
 3. THIS JUMPER SELECTS WHETHER ONLY INTERNALLY GENERATED OR BOTH INTERNALLY AND EXTERNALLY GENERATED SAMPLE PULSES ARE OUTPUTTED FROM SAMPT BNC ON 5475A, (NORMALLY EXT POSITION).
 4. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, (NORMALLY USED IN ADC POSITION).
 5. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, (NORMALLY NOT JUMPED).
 6. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 7. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS. CAPACITANCE IN PICOFARADS.

Figure 3-9
A9 CONTROL BOARD with MUX
(05466-60009) (Series 1832A)



- NOTES:
1. THESE CONNECTIONS ARE INTENDED FOR FUTURE MODIFICATIONS OF INSTRUMENT. THEY ARE NOT USED IN THE SAMA.
 2. THIS CONNECTION IS MADE ON OPTION 002 AND OPTION 003.
 3. THIS JUMPER SELECTS WHETHER ONLY INTERNALLY GENERATED OR BOTH INTERNALLY AND EXTERNALLY GENERATED SAMPLE PULSES ARE OUTPUTTED FROM SEXT PBC ON AREA, NORMALLY EXT POSITION.
 4. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, NORMALLY USED IN ACC POSITION.
 5. THIS JUMPER ALLOWS A REMOTE MULTIPLEXER TO BE USED, NORMALLY NOT JUMPED.
 6. REFERENCE DESIGNATIONS WITHIN THE ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 7. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS. CAPACITANCE IN PICOFARADE.

Figure 3-10
A9 CONTROL BOARD, UNIVERSAL
(05466-60016)
(Supersedes 05466-60008 and 05466-60009)



A10

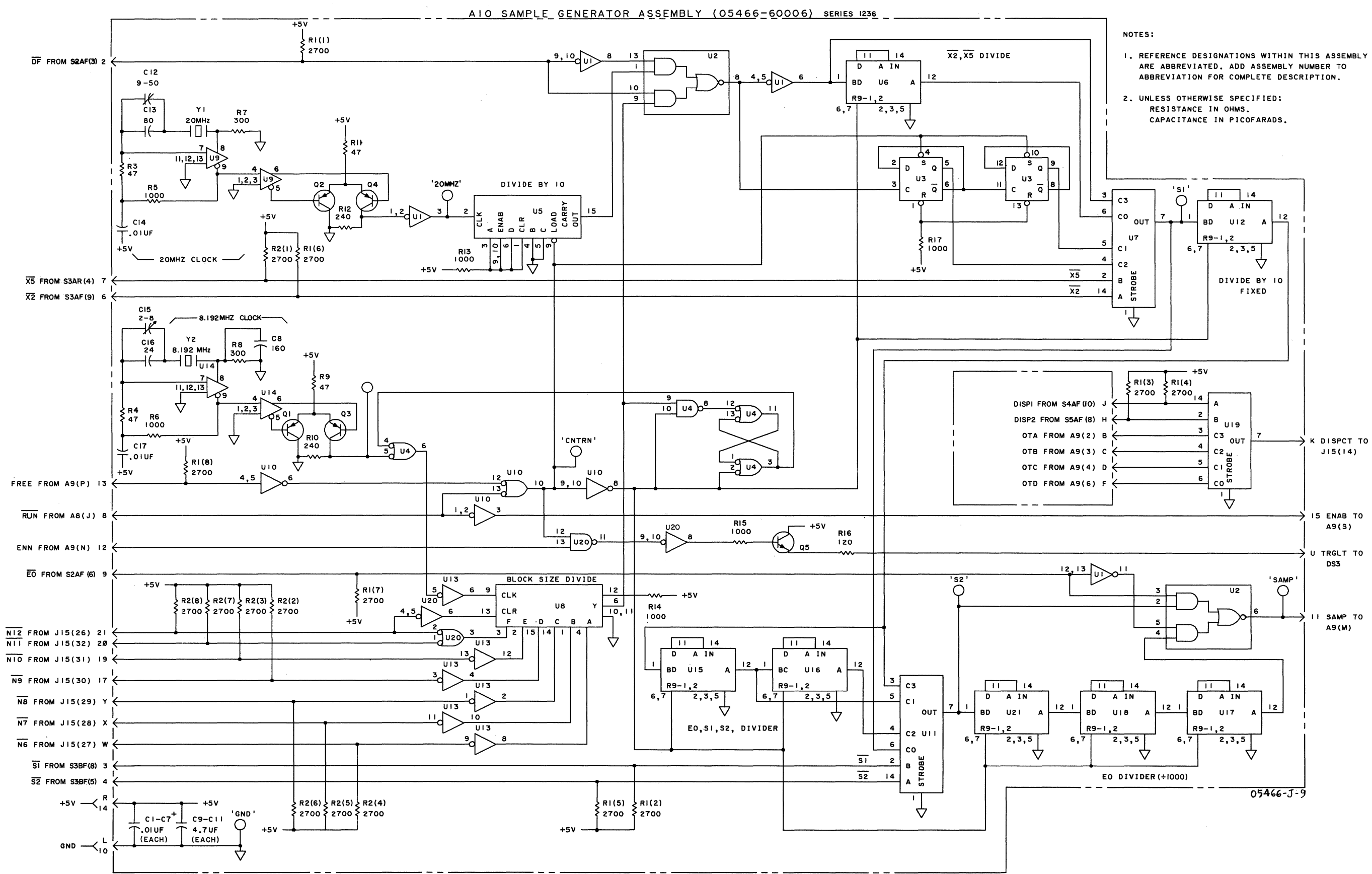


Figure 3-11
A10 SAMPLE GENERATOR ASSEMBLY
3-23

Figure 3-13. Switch Wiring Diagram

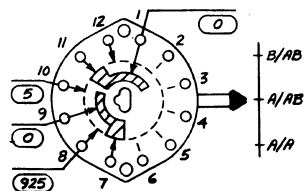
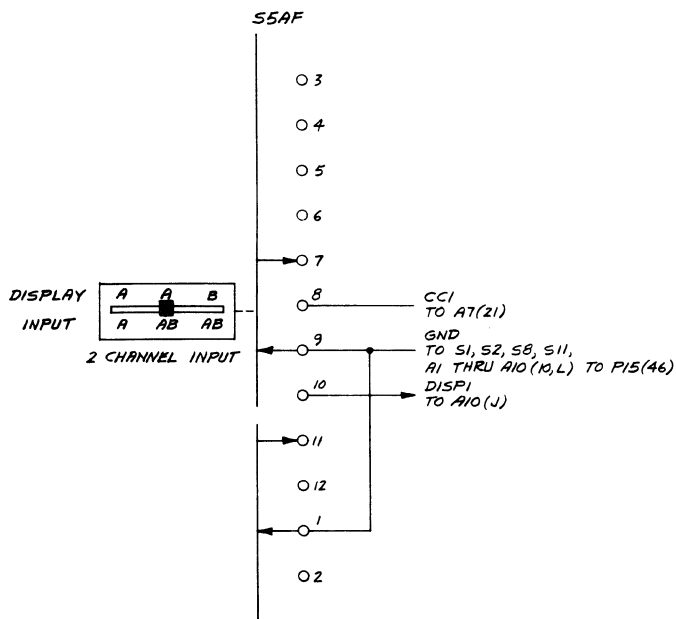
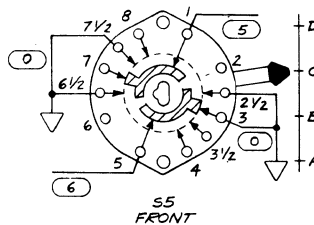
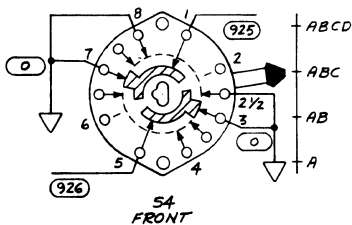
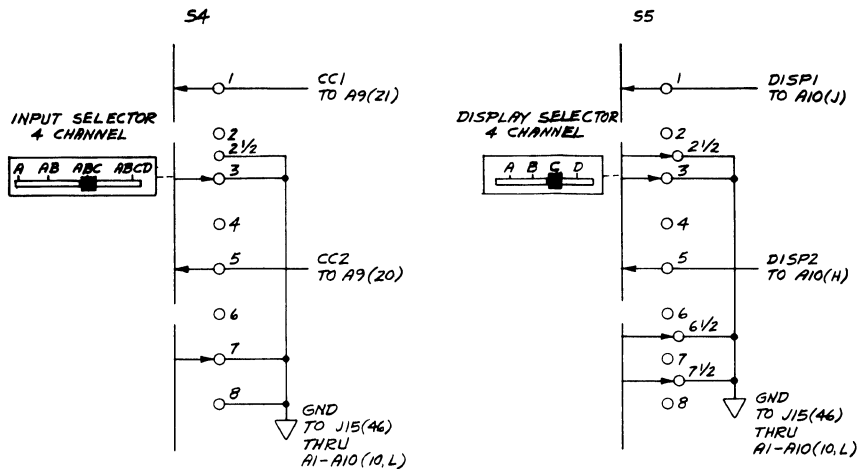


Figure 3-14. Switch Wiring Diagram

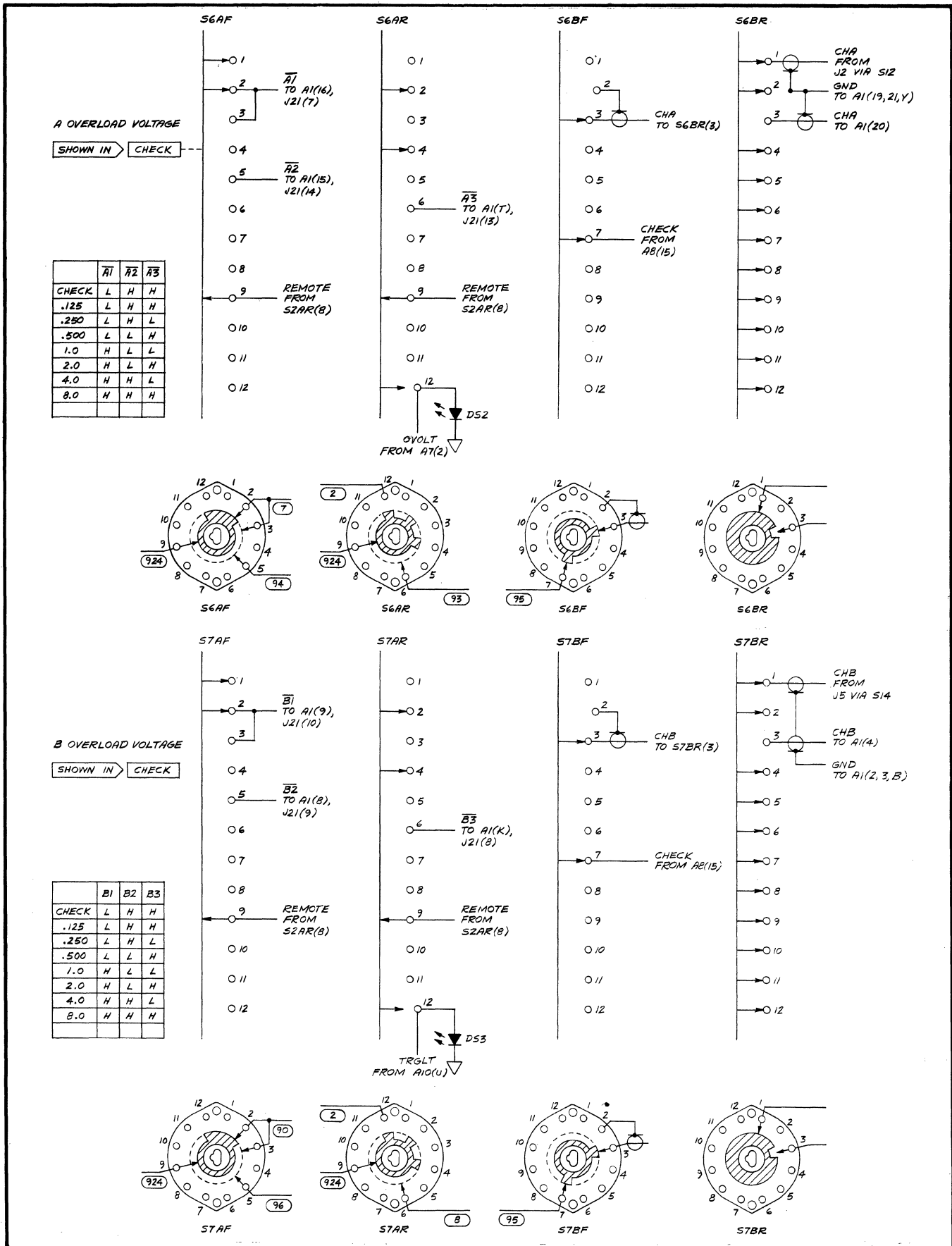


Figure 3-15. Switch Wiring Diagram

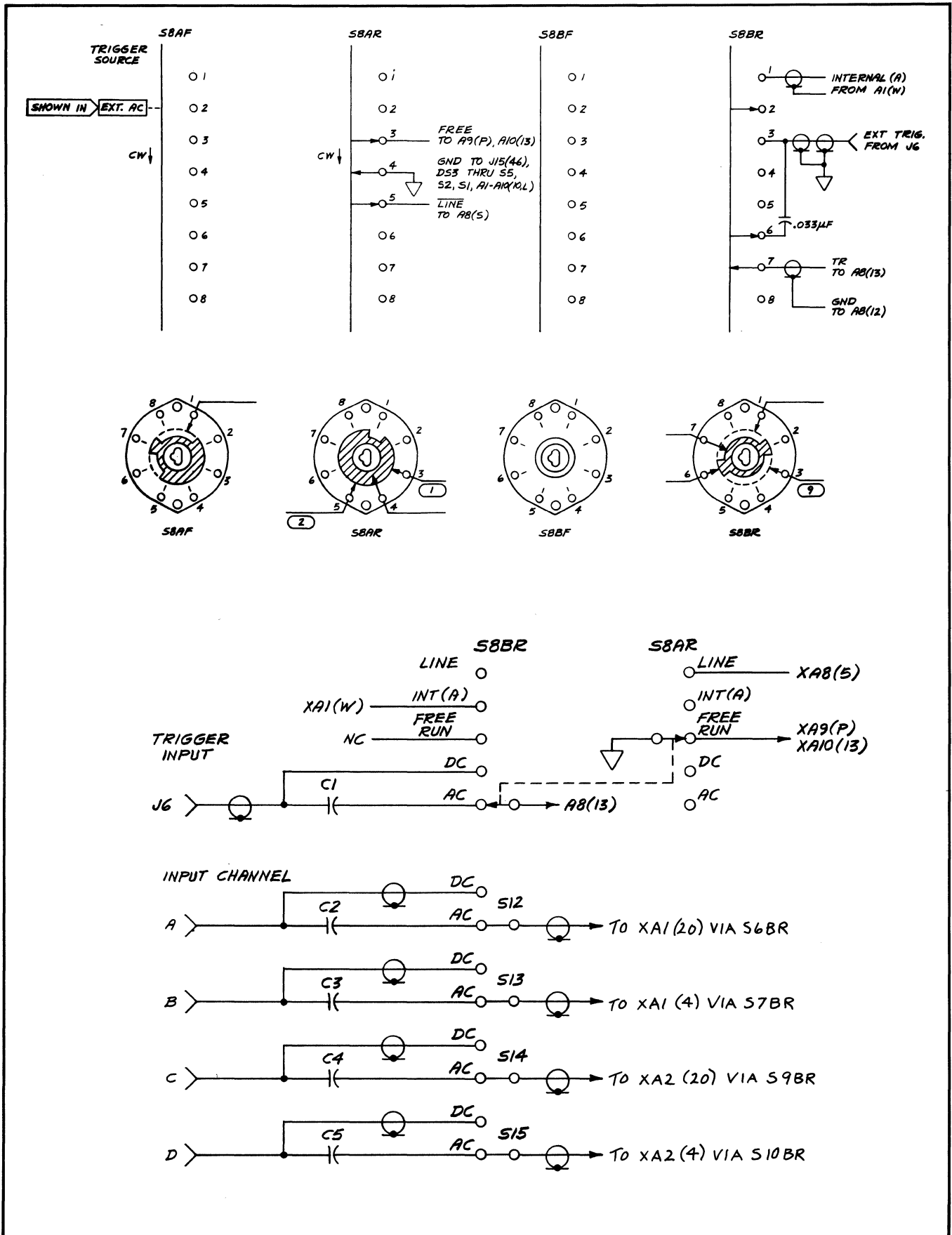


Figure 3-16. Switch Wiring Diagram

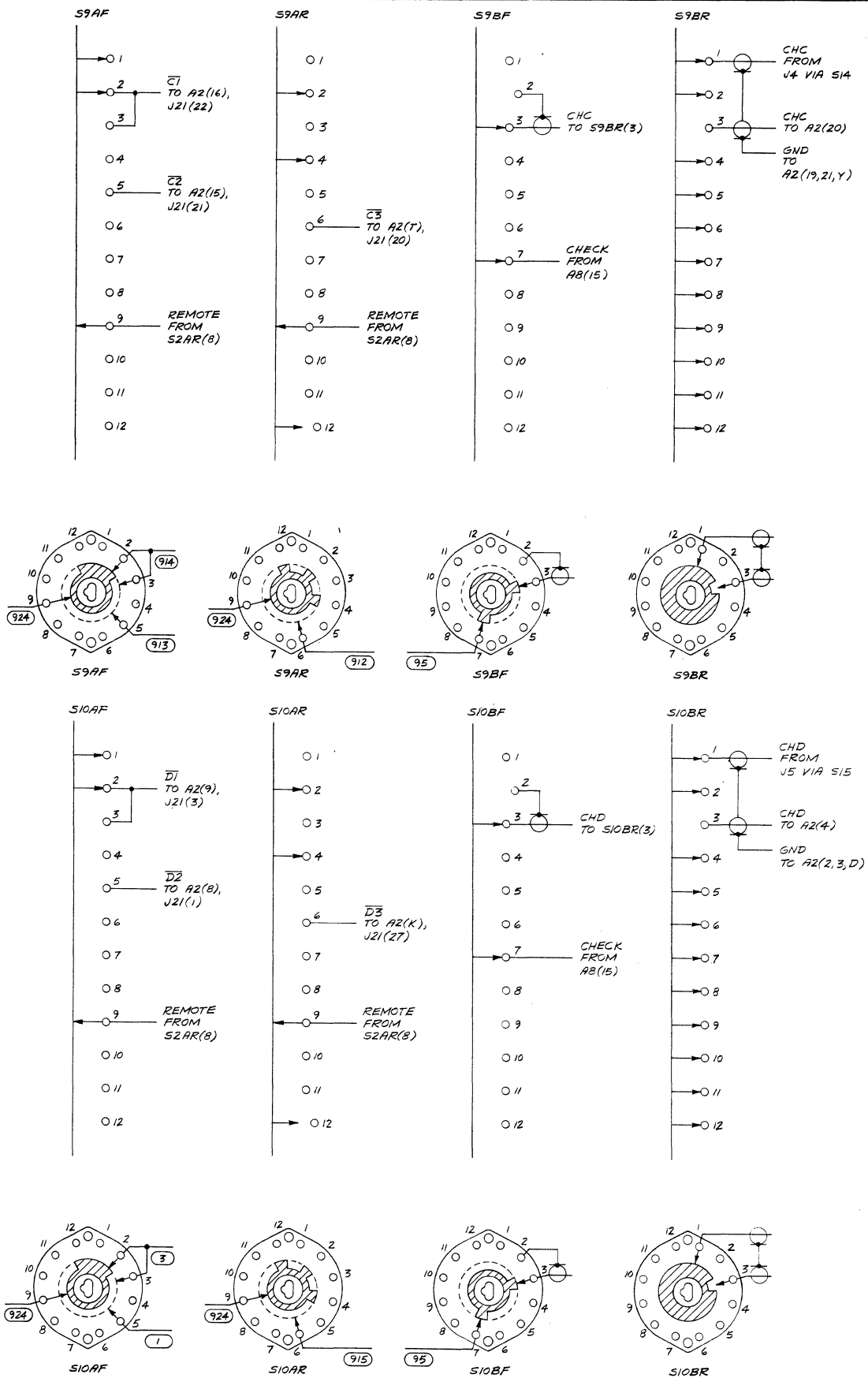


Table 3-1. Abbreviations and Reference Designations (Part 2 of 2)

ABBREVIATIONS (CONTINUED)

ENCAP	= encapsulated	min	= minute (time)	PIV	= peak inverse voltage	TFT	= thin-film transistor
EXT	= external	...'	= minute (plane angle)	pk	= peak	TGL	= toggle
F	= farad	MINAT	= miniature	PL	= phase lock	THD	= thread
FET	= field-effect transistor	mm	= millimeter	PLO	= phase lock oscillator	THRU	= through
F/F	= flip-flop	MOD	= modulator	PM	= phase modulation	TI	= titanium
FH	= flat head	MOM	= momentary	PNP	= positive-negative-positive	TOL	= tolerance
FOL H	= fillister head	MOS	= metal-oxide semiconductor	P/O	= part of	TRIM	= trimmer
FM	= frequency modulation	ms	= millisecond	POLY	= polystyrene	TSTR	= transistor
FP	= front panel	MTG	= mounting	PORC	= porcelain	TTL	= transistor-transistor logic
FREQ	= frequency	MTR	= meter (indicating device)	POS	= positive; position(s) (used in parts list)	TV	= television
FXD	= fixed	mV	= millivolt	POSN	= position	TVI	= television interference
g	= gram	mVac	= millivolt, ac	POT	= potentiometer	TWT	= traveling wave tube
GE	= germanium	mVdc	= millivolt, dc	p-p	= peak-to-peak	U	= micro (10 ⁻⁶) (used in parts list)
GHz	= gigahertz	mVpk	= millivolt, peak	PP	= peak-to-peak (used in parts list)	UF	= microfarad (used in parts list)
GL	= glass	mVp-p	= millivolt, peak-to-peak	PPM	= pulse-position modulation	UHF	= ultrahigh frequency
GND	= ground(ed)	mWrms	= milliwatt, rms	PREAMPL	= preamplifier	UNREG	= unregulated
H	= henry	mW	= milliwatt	PRF	= pulse-repetition frequency	V	= volt
h	= hour	MUX	= multiplex	PRR	= pulse repetition rate	VA	= voltampere
HET	= heterodyne	MY	= mylar	PT	= point	Vac	= volts ac
HEX	= hexagonal	μA	= microampere	PTM	= pulse-time modulation	VAR	= variable
HD	= head	μF	= microfarad	PWM	= pulse-width modulation	VCO	= voltage-controlled oscillator
HDW	= hardware	μH	= microhenry	PWV	= peak working voltage	Vdc	= volts dc
HF	= high frequency	μmho	= micromho	RC	= resistance capacitance	VDCW	= volts dc, working (used in parts list)
HG	= mercury	μs	= microsecond	RECT	= rectifier	V(F)	= volts, filtered
HI	= high	μV	= microvolt	REF	= reference	VFO	= variable-frequency oscillator
HP	= Hewlett-Packard	μVac	= microvolt, ac	REG	= regulated	VHF	= very-high frequency
HPF	= high pass filter	μVdc	= microvolt, dc	REPL	= replaceable	Vpk	= volts peak
HR	= hour (used in parts list)	μVpk	= microvolt, peak	RF	= radio frequency	Vp-p	= Volts peak-to-peak
HV	= high voltage	μVp-p	= microvolt, peak-to-peak	RFI	= radio frequency interference	Vrms	= volts rms
HZ	= Hertz	μVrms	= microvolt, rms	RH	= round head; right hand	VSWR	= voltage standing wave ratio
IC	= integrated circuit	μW	= microwatt	RLC	= resistance-inductance-capacitance	VTO	= voltage-tuned oscillator
ID	= inside diameter	nA	= nanoampere	RMO	= rack mount only	VTVM	= vacuum-tube voltmeter
ID	= inside diameter	NC	= no connection	rms	= root-mean-square	V(X)	= volts, switched
IF	= intermediate frequency	N/C	= normally closed	RND	= round	W	= watt
IMPG	= impregnated	NE	= neon	ROM	= read-only memory	W/	= with
in	= inch	NEG	= negative	R&P	= rack and panel	WIV	= working inverse voltage
INCD	= incandescent	nF	= nanofarad	RWV	= reverse working voltage	WW	= wirewound
INCL	= include(s)	NI PL	= nickel plate	S	= scattering parameter	W/O	= without
INP	= input	N/O	= normally open	S-B	= second (time)	YIG	= yttrium-iron-garnet
INS	= insulation	NOM	= nominal	..."	= second (plane angle)	Zo	= characteristic impedance
INT	= internal	NORM	= normal	S-B	= slow-blow (fuse (used in parts list)		
kg	= kilogram	NPN	= negative-positive-negative	SCR	= silicon controlled rectifier; screw		
kHz	= kilohertz	NPO	= negative-positive zero (zero temperature coefficient)	SE	= selenium		
kΩ	= kilohm	NRFR	= not recommended for field replacement	SECT	= sections		
kV	= kilovolt	NSR	= not separately replaceable	SEMICON	= semiconductor		
lb	= pound	ns	= nanosecond	SHF	= superhigh frequency		
LC	= inductance-capacitance	nW	= nanowatt	SI	= silicon		
LED	= light-emitting diode	OBD	= order by description	SIL	= silver		
LF	= low frequency	OH	= outside diameter	SL	= slide		
LG	= long	OH AMPL	= oval head operational amplifier	SNR	= signal-to-noise ratio		
LH	= left hand	OPT	= option	SPDT	= single-pole, double-throw		
LIM	= limit	OSC	= oscillator	SPG	= spring		
LIN	= linear taper (used in parts list)	OX	= oxide	SR	= split ring		
lin	= linear	oz	= ounce	SPST	= single-pole, single-throw		
LK WASH	= lockwasher	Ω	= ohm	SSB	= single sideband		
LO	= low; local oscillator	P	= peak (used in parts list)	SST	= stainless steel		
LOG	= logarithmic taper (used in parts list)	PAM	= pulse-amplitude modulation	STL	= steel		
log	= logarithm(ic)	PC	= printed circuit	SQ	= square		
LPF	= low pass filter	PCM	= pulse-code modulation; pulse-count modulation	SWR	= standing-wave ratio		
LV	= low voltage	PDM	= pulse-duration modulation	SYNC	= synchronize		
m	= meter (distance)	pF	= picofarad	T	= timed (slow-blow fuse)		
mA	= milliampere	PH BRZ	= phosphor bronze	TA	= tantalum		
MAX	= maximum	PHL	= Phillips	TC	= temperature compensating		
MΩ	= megohm	PIN	= positive-intrinsic-negative	TD	= time delay		
MEG	= meg (10 ⁶) (used in parts list)			TERM	= terminal		
MET FLM	= metal film						
MET OX	= metal oxide						
MF	= medium frequency; microfarad (used in parts list)						
MFR	= manufacturer						
mg	= milligram						
MHz	= megahertz						
mH	= millihenry						
mho	= mho						
MIN	= minimum						

NOTE

All abbreviations in the parts list will be in upper case.

MULTIPLIERS

Abbreviation	Prefix	Multiple
T	tera	10 ¹²
G	giga	10 ⁹
M	mega	10 ⁶
k	kilo	10 ³
da	deka	10
d	deci	10 ⁻¹
c	centi	10 ⁻²
m	milli	10 ⁻³
μ	micro	10 ⁻⁶
n	nano	10 ⁻⁹
p	pico	10 ⁻¹²
f	femto	10 ⁻¹⁵
a	atto	10 ⁻¹⁸

Table 3-2. 5466B Chassis Parts (Part 1 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A1	05466-60013	2	INPUT BOARD ASSEMBLY, 2-CHANNELS FOR STANDARD, AND ALL OPTIONS	28480	05466-60013
A2	05466-60013	1+	NOT USED IN STD., OPT 002 AND OPT 004 INPUT BOARD ASSEMBLY, 2-CHANNELS (FOR OPTIONS 001, 003, AND 005)	28480	05466-60013
A3	05466-60014	2	12-BIT, 100KHZ SAMP RT. DIGITIZER BD. ASSY (STANDARD, OPTION 001)	28480	05466-60014
A3	05466-60002	2	10-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 002, 003)	28480	05466-60002
A3	05466-60007	2	12-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 004, 005)	28480	05466-60007
A4	05466-60014	2+	NOT USED IN STD., OPT 002 AND OPT 004 12-BIT, 100KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 001)	28480	05466-60014
A4	05466-60002	2+	10-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 003)	28480	05466-60002
A4	05466-60007	2+	12-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 005)	28480	05466-60007
A5	05466-60014		12-BIT, 100KHZ SAMP RT. DIGITIZER BD. ASSY (STANDARD, OPTION 001)	28480	05466-60014
A5	05466-60002		10-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 002, 003)	28480	05466-60002
A5	05466-60007		12-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 004, 005)	28480	05466-60007
A6	05466-60014		NOT USED IN STD., OPT 002 AND OPT 004 12-BIT, 100KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 001)	28480	05466-60014
A6	05466-60002		10-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 003)	28480	05466-60002
A6	05466-60007		12-BIT, 200KHZ SAMP RT. DIGITIZER BD. ASSY (OPTION 005)	28480	05466-60007
A7	05466-60015	1	ERROR BOARD ASSEMBLY (SERIES 1236A) FOR STANDARD, AND ALL OPTIONS	28480	05466-60015
A8	05466-60004	1	TRIGGER BOARD ASSEMBLY FOR STANDARD, AND ALL OPTIONS	28480	05466-60004
A9	05466-60008	1	CONTROL BOARD ASSEMBLY (SERIES 1324A) WITHOUT MUX	28480	05466-60008
A9	05466-60009	1	CONTROL BOARD ASSEMBLY (SERIES 1324A) WITH MUX	28480	05466-60009
A9	05466-60016		CONTROL BOARD ASSEMBLY, UNIVERSAL	28480	05466-60016
A10	05466-60006	1	SAMPLE GEN. BOARD ASSY FOR STANDARD, & ALL OPTIONS	28480	05466-60006
C1	0160-0180	5	CAPACITOR-FXD .033UF +-5% 200WVDC POLYE	56289	292P33352
C2	0160-0180		CAPACITOR-FXD .033UF +-5% 200WVDC POLYE	56289	292P33352
C3	0160-0180		CAPACITOR-FXD .033UF +-5% 200WVDC POLYE	56289	292P33352
C4	0160-0180		CAPACITOR-FXD .033UF +-5% 200WVDC POLYE	56289	292P33352
C5	0160-0180		CAPACITOR-FXD .033UF +-5% 200WVDC POLYE	56289	292P33352
C6	0140-0202		2 CAPACITOR-FXD 15PF +-5% 500VDC	04522	DM15C150J0500
C7	0140-0202		2 CAPACITOR-FXD 15PF +-5% 500VDC	04522	DM15C150WV1CR
CR1	1910-0016	4	DIODE-GE 60V 60NA 1US DO-7	28480	1910-0016
CR2	1910-0016		DIODE-GE 60V 60NA 1US DO-7	28480	1910-0016
CR3	1910-0016		DIODE-GE 60V 60NA 1US DO-7	28480	1910-0016
CR4	1910-0016		DIODE-GE 60V 60NA 1US DO-7	28480	1910-0016
DS1	1990-0486	3	LED-VISIBLE LUM-INT=IMCD IF=20MA-MAX CLAMP, L.E.D.	28480	1990-0486
DS2	5040-7626	3	LED-VISIBLE LUM-INT=IMCD IF=20MA-MAX CLAMP, L.E.D.	28480	5040-7626
DS3	1990-0486		LED-VISIBLE LUM-INT=IMCD IF=20MA-MAX CLAMP, L.E.D.	28480	1990-0486
DS3	5040-7626		LED-VISIBLE LUM-INT=IMCD IF=20MA-MAX CLAMP, L.E.D.	28480	5040-7626
J1	1250-0118	6	CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J2	1250-0118		CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J3	1250-0118		CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J4	1250-0118		CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J5	1250-0118		CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J6	1250-0118		CONNECTOR-RF BNC FEM SGL HOLE FR	90949	31-2221-1022
J15	1251-0101	2	CONNECTOR 50-PIN F MICRO RIBBON	71785	57-20500-375
J21	1251-0101		CONNECTOR 50-PIN F MICRO RIBBON	71785	57-20500-375
R1	2100-3321	1	RESISTOR-VAR W/SW 50K 20% CC DPST-SW (INCLUDES S11A)	28480	2100-3321
S1	3101-0163	2	SWITCH-TGL SUBMIN SPOT NS 5A 115VAC	09353	Z-11
S2	3100-2932	1	SWITCH:ROTARY	28480	3100-2932
S2	0370-2994	7	KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S3	3100-2933	1	SWITCH:ROTARY	28480	3100-2933
S3	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994

See introduction to this section for ordering information

Table 3-2. 5466B Chassis Parts (Part 2 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
S4	3100-2094	2	SWITCH-RTRY LVR DP4T-NS 1.25 IN CTR SPCG	28480	3100-2094
	0370-1879	2	KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S5	3100-2094		SWITCH-RTRY LVR DP4T-NS 1.25 IN CTR SPCG	28480	3100-2094
	0370-1879		KNOB:LEVER SWITCH, JADE GRAY	28480	0370-1879
S6	3100-2934	4	SWITCH:ROTARY	28480	3100-2934
	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S7	3100-2934		SWITCH:ROTARY	28480	3100-2934
	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S8	3100-2655	1	SWITCH:ROTARY	28480	3100-2655
	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S9	3100-2934		SWITCH:ROTARY	28480	3100-2934
	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S10	3100-2934		SWITCH:ROTARY	28480	3100-2934
	0370-2994		KNOB-BASE-PTR AND BAR .5 IN JGK	28480	0370-2994
S11	3101-0163		SWITCH-TGL SUBMIN SPDT NS 5A 115VAC (PART OF R1)	09353	Z-11
W1	05466-60101	1	CABLE ASSEMBLY, HARNESS	28480	05466-60101
W2	05466-60102	1	CABLE ASSEMBLY, REAR (INCLUDES J15)	28480	05466-60102
W3	05466-60103	1	CABLE ASSEMBLY, REMOTE	28480	05466-60103
W4	05466-60104	1	CABLE ASSEMBLY, INPUT, 4-CHANNEL	28480	05466-60104
W4	05466-60105	1	CABLE ASSEMBLY, INPUT, 2-CHANNEL	28480	05466-60105
W5	05466-60107	1	CABLE ASSEMBLY, "B"	28480	05466-60107
XA1	1251-0233	10	CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA2	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA3	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA4	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA5	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA6	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA7	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA8	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA9	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
XA10	1251-0233		CONNECTOR-PC EDGE 22-CONT/ROW 2-ROWS	71785	251-22-30-261
			MISCELLANEOUS		
	0370-1100	1	KNOB-BASE-CONC PTR .5 IN JGK	28480	0370-1100
	0370-1125	1	KNOB-CONC-PTR IN JGK SGI-DECAL	28480	0370-1125
	1390-0098	1	CAPTIVE SCREW ASSEMBLY	05628	51-18-206-24
	05465-00001	1	COVER, LEFT SIDE	28480	05465-00001
	05465-00002	1	COVER, RIGHT SIDE	28480	05465-00002
	05465-00006	2	COVER, TOP AND BOTTOM	28480	05465-00006
	05465-20021	1	STRUT, UPPER RIGHT	28480	05465-20021
	05465-20022	1	STRUT, LOWER RIGHT	28480	05465-20022
	05465-20023	1	STRUT, UPPER LEFT	28480	05465-20023
	05465-20024	1	STRUT, LOWER LEFT	28480	05465-20024
	05466-00001	1	PANEL, SUB	28480	05466-00001
	05466-00007	4	SHIELD	28480	05466-00007
	05466-00008	1	SHIELD, TOP	28480	05466-00008
	05466-00013	1	PANEL, FRONT	28480	05466-00013
	05466-00014	1	CHASSIS	28480	05466-00014
	05466-00015	1	PANEL, REAR	28480	05466-00015
	05466-20007	2	GUIDE, P.C. BOARD	28480	05466-20007

See introduction to this section for ordering information

Table 3-3. 05466-60013 Input Board Parts (Part 1 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60013	1	INPUT BOARD ASSEMBLY (SERIES 1842)	28480	05466-60013
C1	0160-3094	8	CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C2	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C3	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C4	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C5	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C6	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C7	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C8	0160-3094		CAPACITOR-FXD .1UF +-10% 100WVDC CER	28480	0160-3094
C9	0160-2055	14	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C10	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C11	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C12	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C13	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C14	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C15	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C16	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C17	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C18	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C19	0180-0100	7	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C20	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C21	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C22	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C23	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C24	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C25	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C26	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C27	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C29	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C30	0160-2197	2	CAPACITOR-FXD 10PF +-5% 300WVDC MICA	28480	0160-2197
C30	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C31	0160-2197		CAPACITOR-FXD 10PF +-5% 300WVDC MICA	28480	0160-2197
C32	0160-2199	2	CAPACITOR-FXD 30PF +-5% 300WVDC MICA	28480	0160-2199
C35	0160-2199		CAPACITOR-FXD 30PF +-5% 300WVDC MICA	28480	0160-2199
CR1	1902-0041	1	DIODE-ZNR 5.11V 5% DO-7 PD=.4W TC=-.009%	28480	1902-0041
CR2	1901-0033	1	DIODE-GEN PRP 180V 200MA DO-7	28480	1901-0033
CR3	1902-3263	4	DIODE-ZNR 24.9V 2% DO-7 PD=.4W TC=+.081%	02237	FZ7488
CR4	1902-3263		DIODE-ZNR 24.9V 2% DO-7 PD=.4W TC=+.081%	02237	FZ7488
CR5	1902-3263		DIODE-ZNR 24.9V 2% DO-7 PD=.4W TC=+.081%	02237	FZ7488
CR6	1902-3263		DIODE-ZNR 24.9V 2% DO-7 PD=.4W TC=+.081%	02237	FZ7488
F1	2110-0436	3	FUSE .1A 125V FAST-BLO .348X.25 UL	28480	2110-0436
F2	2110-0436		FUSE .1A 125V FAST-BLO .348X.25 UL	28480	2110-0436
F3	2110-0436		FUSE .1A 125V FAST-BLO .348X.25 UL	28480	2110-0436
R1	0683-2725	8	RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R2	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R3	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R4	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R5	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R6	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R7	0757-0344	4	RESISTOR 1M 1% .25W F TC=0+-100	24546	C5-1/4-T0-1004-F
R7	0757-0344		RESISTOR 1M 1% .25W F TC=0+-100	24546	C5-1/4-T0-1004-F
R8	0757-0344		RESISTOR 1M 1% .25W F TC=0+-100	24546	C5-1/4-T0-1004-F
R8	0757-0344		RESISTOR 1M 1% .25W F TC=0+-100	24546	C5-1/4-T0-1004-F
R9	0757-0893	2	RESISTOR 51 2% .125W F TC=0+-100	24546	C4-1/8-T0-51R0-G
R10	0757-0893		RESISTOR 51 2% .125W F TC=0+-100	24546	C4-1/8-T0-51R0-G
R11	0683-2045	4	RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
R12	2100-3162	4	RESISTOR-TRMR 200K 10% C SIDE-ADJ	32997	3006P-1-204
R13	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R14	0683-2045		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
R15	2100-3162		RESISTOR-TRMR 200K 10% C SIDE-ADJ	32997	3006P-1-204
R16	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R17	0683-2045		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
R18	2100-3162		RESISTOR-TRMR 200K 10% C SIDE-ADJ	32997	3006P-1-204
R19	0698-8275	4	RESISTOR 1.2K .1% .125W F TC=0+-50	19701	MF4C1/8-T2-1201-B
R20	0698-7408	6	RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R21	0698-6295	8	RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R22	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R23	0683-2045		RESISTOR 200K 5% .25W FC TC=-800/+900	01121	CB2045
R24	2100-3162		RESISTOR-TRMR 200K 10% C SIDE-ADJ	32997	3006P-1-204
R25	0698-8275		RESISTOR 1.2K .1% .125W F TC=0+-50	19701	MF4C1/8-T2-1201-B
R26	0698-7408		RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R27	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R28	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55

See introduction to this section for ordering information

Table 3-3. 05466-60013 Input Board Parts (Part 2 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R29	0698-3132	2	RESISTOR 261 1% .125W F TC=0+-100	16299	C4-1/8-T0-2610-F
R30	0698-3132		RESISTOR 261 1% .125W F TC=0+-100	16299	C4-1/8-T0-2610-F
R31	0698-7408		RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R32	0698-8275		RESISTOR 1.2K .1% .125W F TC=0+-50	19701	MF4C1/8-T2-1201-B
R33	0698-7408		RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R34	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R35	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R36	0698-7408		RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R37	0698-8275		RESISTOR 1.2K .1% .125W F TC=0+-50	19701	MF4C1/8-T2-1201-B
R38	0698-7408		RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R39	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
R40	0698-6295		RESISTOR 300 .1% .125W F TC=0+-50	24546	NC55
U1	1826-0081	2	IC LM 318 OP AMP	27014	LM318H
U2	1826-0105	4	IC-DIGITAL DG172BK TTL* 4-CHAN ANAL	17856	DG172BK
U3	1826-0105		IC-DIGITAL DG172BK TTL* 4-CHAN ANAL	17856	DG172BK
U4	1826-0108	2	IC LH 0062C OP AMP	27014	LH0062CH
U5	1826-0081		IC LM 318 OP AMP	27014	LM318H
U6	1826-0105		IC-DIGITAL DG172BK TTL* 4-CHAN ANAL	17856	DG172BK
U7	1826-0105		IC-DIGITAL DG172BK TTL* 4-CHAN ANAL	17856	DG172BK
U8	1826-0108		IC LH 0062C OP AMP	27014	LH0062CH
U9	1820-0738	2	IC-DIGITAL SN74155N TTL DUAL 2	01295	SN74155N
U10	1820-0054	2	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U11	1820-0846	2	IC-DIGITAL DM8094N TTL QUAD 1 NON-INV	27014	DM8094N
U12	1820-0846		IC-DIGITAL DM8094N TTL QUAD 1 NON-INV	27014	DM8094N
U13	1820-0738		IC-DIGITAL SN74155N TTL DUAL 2	01295	SN74155N
U14	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
			MISCELLANEOUS		
	0360-0124	4	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124
	1251-3205	6	CONNECTOR-SGL CONT SKT .022-DIA	28480	1251-3205
	5000-9043	1	PIN, EXTRACTOR	28480	5000-9043
	5000-6853	1	EXTRACTOR	28480	5000-6853

See introduction to this section for ordering information

Table 3-4. 05466-60014 100 kHz Digitizer Parts
(Series 2112A) (Part 1 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60014	1	12-BIT, 100KHZ SAMP RT DIGITIZER BD.ASSY (SERIES 2112A)	28480	05466-60014
C1	0121-0180	1	CAPACITOR-V TRMR-CER 15/60PF 200V PC-MTG	00865	304324 15/60PF N1500
C2	0160-3879	22	CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C3	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C4	0160-2207	1	CAPACITOR-FXD 300PF +-5% 300WVDC MICA	28480	0160-2207
C5	0160-4447	1	CAPACITOR-FXD 220PF +-10% 50WVDC POLYP	28480	0160-4447
C6	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C7	0160-2204	5	CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C8	0140-0191	2	CAPACITOR-FXD 56PF +-5% 300WVDC MICA	72136	DM15E560J030CWV1CR
C9	0160-2306	3	CAPACITOR-FXD 27PF +-5% 300WVDC MICA	28480	0160-2306
C10	0140-0191		CAPACITOR-FXD 56PF +-5% 300WVDC MICA	72136	DM15E560J030CWV1CR
C11	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C12	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C13	0160-2204		CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C14	0180-0552	1	CAPACITOR-FXD 220UF+-20% 10VDC TA	28480	0180-0552
C15	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C16	0160-2306		CAPACITOR-FXD 27PF +-5% 300WVDC MICA	28480	0160-2306
C17	0160-4084	4	CAPACITOR-FXD .1UF +-20% 50WVDC CER	28480	0160-4084
C18	0180-0553	3	CAPACITOR-FXD 22UF+-20% 25VDC TA	28480	0180-0553
C19	0180-0553		CAPACITOR-FXD 22UF+-20% 25VDC TA	28480	0180-0553
C20	0180-0490	3	CAPACITOR-FXD 68UF+-10% 6VDC TA	56289	1960626X9006KA1
C21	0160-4084		CAPACITOR-FXD .1UF +-20% 50WVDC CER	28480	0160-4084
C22			NOT ASSIGNED		
C23	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C24	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C25	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C26	0160-4084		CAPACITOR-FXD .1UF +-20% 50WVDC CER	28480	0160-4084
C27	0180-0490		CAPACITOR-FXD 68UF+-10% 6VDC TA	56289	1960626X9006KA1
C28	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C29	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C30	0180-0490		CAPACITOR-FXD 68UF+-10% 6VDC TA	56289	1960626X9006KA1
C31	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C32	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C33			NOT ASSIGNED		
C34	0180-0553		CAPACITOR-FXD 22UF+-20% 25VDC TA	28480	0180-0553
C35	0180-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0180-3879
C36	0160-2197	3	CAPACITOR-FXD 10PF +-5% 300WVDC MICA	28480	0160-2197
C37	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C38			NOT ASSIGNED		
C39	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C40	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C41	0160-2197		CAPACITOR-FXD 10PF +-5% 300WVDC MICA	28480	0160-2197
C42	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C43	0160-0571	1	CAPACITOR-FXD 470PF +-20% 100WVDC CER	28480	0160-0571
C44	0160-3879	1	CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C45	0160-3878		CAPACITOR-FXD 1000PF +-20% 100WVDC CER	28480	0160-3878
C46	0160-2204		CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C47	0160-2306		CAPACITOR-FXD 27PF +-5% 300WVDC MICA	28480	0160-2306
C48	0160-2204		CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C49	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C50	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C51	0160-3879		CAPACITOR-FXD .01UF +-20% 100WVDC CER	28480	0160-3879
C52	0160-2204		CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C53	0160-0340	1	CAPACITOR-FXD 600PF +-1% 300WVDC MICA	28480	0160-0340
C54	0160-4084		CAPACITOR-FXD .1UF +-20% 50WVDC CER	28480	0160-4084
C55	0160-2197		CAPACITOR-FXD 10PF +-5% 300WVDC MICA	28480	0160-2197
C56**	0160-4547	1	CAPACITOR-FXD 150PF +-5% 200VDC CER	04393	200-200-NPO-151J
C56**	0160-4350	1	CAPACITOR-FXD 68PF +-5% 200VDC CER	28480	0160-4350
CR1	1901-0518	1	DIODE-SCHOTTKY	28480	1901-0518
CR2	1901-0040	2	DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
CR3	1901-0040		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
CR4	1901-0535	5	DIODE-SCHOTTKY	28480	1901-0535
CR5	1901-0535		DIODE-SCHOTTKY	28480	1901-0535
CR6	1901-0535		DIODE-SCHOTTKY	28480	1901-0535
CR7	1902-0173	1	DIODE-ZNR 9.53V 5% DO-7 PD=.4W TC=.059%	04713	SZ 10939-176
CR8	1901-0535		DIODE-SCHOTTKY	28480	1901-0535
CR9	1901-0535		DIODE-SCHOTTKY	28480	1901-0535
CR10			NOT ASSIGNED		
CR11			NOT ASSIGNED		
CR12	1902-0025	1	DIODE-ZNR 10V 5% PD=.4W TC=+.06%	04713	SZ 10939-182

See introduction to this section for ordering information

**C56 is 0160-4547 (68PF for Series 2112. For Series 2108, C56 is 0160-4350 (150PF)).
C56 is not installed prior to Series 2108.

Table 3-4. 05466-60014 100 kHz Digitizer Parts
(Series 2112A) (Part 2 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
L1	9100-1788	3	COIL; FXD; NON-MOLDED RF CHOKE; .75UH	02114	VK200-20/4B
L2	9100-1788		COIL; FXD; NON-MOLDED RF CHOKE; .75UH	02114	VK200-20/4B
L3	9100-1788		COIL; FXD; NON-MOLDED RF CHOKE; .75UH	02114	VK200-20/4B
Q1	1853-0036	3	TRANSISTOR, PNP SI PD=310MW FT=250MHZ	04713	SPS-3612
Q2	1855-0082	1	TRANSISTOR MOSFET P-CHAN D-MODE SI	28480	1855-0082
Q3	1854-0215	3	TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	SPS 3611
Q4			NOT ASSIGNED		
Q5	1855-0241	2	TRANSISTOR MOSFET N-CHAN E-MODE TO-72 SI	18324	SD215
Q6	1855-0241		TRANSISTOR MOSFET N-CHAN E-MODE TO-72 SI	18324	SD215
Q7	1854-0221	2	TRANSISTOR-DUAL NPN PD=750MW	28480	1854-0221
Q8	1854-0221		TRANSISTOR-DUAL NPN PD=750MW	28480	1854-0221
Q9	1854-0215		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	SPS 3611
Q10	1853-0015	1	TRANSISTOR PNP SI PD=200MW FT=500MHZ	28480	1853-0015
Q11	1853-0036		TRANSISTOR, PNP SI PD=310MW FT=250MHZ	04713	SPS-3612
Q12	1854-0215		TRANSISTOR NPN SI PD=350MW FT=300MHZ	04713	SPS 3611
Q13	1853-0036		TRANSISTOR, PNP SI PD=310MW FT=250MHZ	04713	SPS-3612
R1	0698-7332	1	RESISTOR 1M 1% .125W F TC=0+-100	19701	MF5C1/8-T0-1004-F
R2	0757-0346	2	RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
R3	0757-0911	1	RESISTOR 300 2% .125W F TC=0+-100	24546	C4-1/8-T0-301-G
R4	0757-0931	11	RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R5	0757-0900	3	RESISTOR 100 2% .125W F TC=0+-100	24546	C4-1/8-T0-101-G
R6	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R7	0698-8052	1	RESISTOR 5% 0.1% .25W F TC=0+-25	19701	MF52C1/4-T9-590R-B
R8	2100-3353	1	RESISTOR-TRMR 20K 10% C SIDE-ADJ 1-TRN	32997	3386X-Y46-504
R9	0757-0346		RESISTOR 10 1% .125W F TC=0+-100	24546	C4-1/8-T0-10R0-F
R10			NOT ASSIGNED		
R11	2100-3053	1	RESISTOR-TRMR 20 20% C SIDE-ADJ 17-TURN	32997	3006P-1-200
R12	0757-0893	1	RESISTOR 51 2% .125W F TC=0+-100	24546	C4-1/8-T0-51R0-G
R13	0698-7408	1	RESISTOR 600 .1% .125W F TC=0+-50	19701	MF4C1/8-T2-600R-B
R14	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R15	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R16	0757-0950	2	RESISTOR 12K 2% .125W F TC=0+-100	24546	C4-1/3-T0-1202-G
R17	0757-0950		RESISTOR 12K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1202-G
R18			NOT ASSIGNED		
R19			NOT ASSIGNED		
R20	0757-0946	1	RESISTOR 8.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-8201-G
R21	0757-0929	3	RESISTOR 1.6K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1601-G
R22	1810-0260	1	NETWORK-RES 24-PIN-DIP .1-PIN-SPCG	28480	1810-0260
R23	0698-4002	7	RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R24	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R25	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R26	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R27	0698-8732	1	RESISTOR 2.4K .05% .1W F TC=0+-15	07716	MARS
R28	0698-8731	1	RESISTOR 4.8K .05% .1W F TC=0+-15	07716	MARS
R29	2100-3154	2	RESISTOR-TRMR 1K 1% C SIDE-ADJ 17-TURN	32997	3006P-1-102
R30	2100-3095	2	RESISTOR-TRMR 200 10% C SIDE-ADJ 17-TURN	32997	3006P-1-201
R31			NOT ASSIGNED		
R32	2100-3154		RESISTOR-TRMR 1K 1% C SIDE-ADJ 17-TURN	32997	3006P-1-102
R33	2100-3095		RESISTOR-TRMR 200 10% C SIDE-ADJ 17-TURN	32997	3006P-1-201
R34			NOT ASSIGNED		
R35	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R36	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R37	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R39	0757-0907	1	RESISTOR 200 2% .125W F TC=0+-100	24546	C4-1/8-T0-201-G
R40	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R41	0757-0900		RESISTOR 100 2% .125W F TC=0+-100	24546	C4-1/8-T0-101-G
R42	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R43	0757-0955	3	RESISTOR 20K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2002-G
R44	0757-0384	1	RESISTOR 20 1% .125W F TC=0+-100	19901	MF4C1/8-T0-20R0-F
R45	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R46	0757-0421		RESISTOR 825 1% .125W F TC=0+-100	28480	0757-0421
R47	0698-4002		RESISTOR 5K 1% .125W F TC=0+-100	16299	C4-1/8-T0-5001-F
R48	0698-3437	2	RESISTOR 133 1% .125W F TC=0+-100	24546	0698-3437
R49	0757-0955		RESISTOR 20K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2002-G
R50	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R51	0757-0948	2	RESISTOR 10K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1002-G
R52	0698-3437		RESISTOR 133 2% .125W F TC=0+-100	24546	0698-3437
R53	0757-0421		RESISTOR 825 1% .125W F TC=0+-100	24546	0757-0421
R54	0757-0900		RESISTOR 100 2% .125W F TC=0+-100	24546	C4-1/8-T0-101-G
R55	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R56	0757-0955		RESISTOR 20K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2002-G
R57	0757-0931		RESISTOR 2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2001-G
R58	0757-0948		RESISTOR 10K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1002-G
R59**	0757-0283	2	RESISTOR 2K 1% .125W		00746
U1	1820-0224	2	IC LH 0002C OP AMP	27014	LH0002CH
U2	1826-0089	3	IC HA 2525 OP AMP	34371	HA2-2525-5
U3	1820-0224		IC LH 0002C OP AMP	27014	LH0002CH
U4	1826-0089		IC HA 2525 OP AMP	34371	HA2-2525-5
U5	1826-0336	1	QUAD CURRENT SWITCH .01%	28480	1826-0336

See introduction to this section for ordering information

**R59 is not installed prior to series 2112.

Table 3-4. 05466-60014 100 kHz Digitizer Parts
(Series 2112A) (Part 3 of 3)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
U6	1826-0338	1	IC-COMPARATOR TTL	28480	1826-0338
U7	1826-0337	1	QUAD CURRENT SWITCH .05%	28480	1826-0337
U8	1820-0574	3	IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U9	1820-1720	1	IC-DIGITAL DM2504CN TTL	34335	AM2504PC
U10	1826-0339	1	QUAD CURRENT SWITCH .1%	28480	1826-0339
U11	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U12	1826-0316	1	IC LH 0070-1 REF AMPL	27014	LH0070-1H
U13	1820-0054	1	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U14	1820-1053	1	IC-DIGITAL SN7414N TTL HEX 1	01295	SN7414N
U15	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U16	1820-1089	1	IC-DIGITAL SN74279N TTL QUAD	01295	SN74279N
U17	1826-0089		IC HA 2525 OP AMP	34371	HA2-2525-5
U18	1820-0579	1	IC-DIGITAL SN74123N TTL DUAL	01295	SN74123N
U19	1820-0493	1	IC LM 307 OP AMP	27014	LM307N
			MISCELLANEOUS		
	4040-0753	1	EXTRACTOR-PC BD GRN POLYC .062-8D-THKNS	28480	4040-0753
	5000-9043	1	PIN, EXTRACTOR	28480	5000-9043

See introduction to this section for ordering information

Table 3-5. 05466-60002 10-Bit 200 kHz Digitizer Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60002	1	10-BIT, 200KHZ SAMP RT DIGITIZER BD.ASSY	28480	05466-60002
C1	0160-2055	6	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C6	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C7	0180-0100	6	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
C8	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
C9	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
C10	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
C11	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
C12	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	1500475X9035B2
E1	1813-0011	1	CONVERTER, A-D	28480	1813-0011
E2	1813-0009	1	AMPLIFIER-SAMPLER & HOLD	28480	1813-0009
R1	2100-3095	1	RESISTOR-TRMR 200 10% C SIDE-ADJ 17-TURN	32997	3006P-1-201
U1	1820-0174	2	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U2	1820-0174		IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U3	1820-0054	1	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U4	1820-0574	3	IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U5	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U6	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
			MISCELLANEOUS		
	0360-0124	2	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124
	1251-1998	45	CONNECTOR-SGL CDNT SKT .025-DIA	28480	1251-1998
	8159-0005	1	WIRE 22AWG W PVC 1X22 80C	00736	L-2007-1

See introduction to this section for ordering information

Table 3-6. 05466-60007 12-Bit 200 kHz Digitizer Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60007	1	12-BIT,200KHZ SAMP RT.DIGITIZER BD.ASSY	28480	05466-60007
C1	0160-2055	6	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C6	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C7	0180-0100	6	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C8	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C9	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C10	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C11	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C12	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
E1	1813-0010	1	CONVERTER-A-D	28480	1813-0010
E2	1813-0009	1	AMPLIFIER-SAMPLER & HOLD	28480	1813-0009
R1	2100-3095	1	RESISTOR-TRMR 200 10% C SIDE-ADJ 17-TURN	32997	3006P-1-201
U1	1820-0174	2	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U2	1820-0174		IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U3	1820-0054	1	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U4	1820-0574	3	IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U5	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
U6	1820-0574		IC-DIGITAL DM8551N TTL QUAD D-TYPE	27014	DM8551N
			MISCELLANEOUS		
	0360-0124	2	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124
	1251-1998	45	CONNECTOR-SGL CONT SKT .025-DIA	28480	1251-1998
	8159-0005	1	WIRE 22AWG W PVC 1X22 80C	00736	L-2007-1

See introduction to this section for ordering information

Table 3-7. 05466-60015 Error Board Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60015	1	ERROR BOARD ASSEMBLY (SERIES 1620)	28480	05466-60015
C1	0160-2055	4	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0180-0100	2	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C6	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C7	0160-2204	1	CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RDM15F101J3C
C8	0160-0205	1	CAPACITOR-FXD 10PF +-5% 500WVDC MICA	28480	0160-0205
C9	0180-1746	1	CAPACITOR-FXD 15UF+-10% 20VDC TA	56289	150D156X9020B2
CR1	1901-0040	1	DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
Q1	1854-0071	2	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q2	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
R1	0683-2725	2	RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R2	0683-5125	1	RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
R3	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R4	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
R6	0683-2735	1	RESISTOR 27K 5% .25W FC TC=-400/+800	01121	CB2735
R7	0683-1025	2	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R8	0757-0902	2	RESISTOR 120 2% .125W F TC=0+-100	24546	C4-1/8-T0-121-G
R9	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R10	0757-0902		RESISTOR 120 2% .125W F TC=0+-100	24546	C4-1/8-T0-121-G
U1	1820-0174	3	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U2	1820-0207	1	IC-DIGITAL 9601PC TTL	07263	9601PC
U3	1820-0174		IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U4	1820-0054	1	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U5	1820-0070	1	IC-DIGITAL SN7430N TTL 8 NAND	01295	SN7430N
U6	1820-0069	1	IC-DIGITAL SN7420N TTL DUAL 4 NAND	01295	SN7420N
U7	1820-0515	1	IC-DIGITAL 9602PC TTL DUAL	07263	9602PC
U8	1820-0068	4	IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U9	1820-0068		IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U10	1820-0068		IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U11	1820-0282	3	IC-DIGITAL SN7486N TTL QUAD 2 EXCL-OR	01295	SN7486N
U12	1820-0282		IC-DIGITAL SN7486N TTL QUAD 2 EXCL-OR	01295	SN7486N
U13	1820-0282		IC-DIGITAL SN7486N TTL QUAD 2 EXCL-OR	01295	SN7486N
U14	1820-0495	1	IC-DIGITAL 9311DC TTL 4 4-T0-16-LINE	07263	9311DC
U15	1820-0068		IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U16	1820-0174		IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
			MISCELLANEOUS		
	0360-0124	1	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124
	8159-0005	2	WIRE 22AWG W PVC 1X22 80C	0073G	L-2007-1
	5000-9043	1	PIN, EXTRACTOR	28480	5000-9043

See introduction to this section for ordering information

Table 3-8. 05466-60004 Trigger Board Parts (Part 1 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60004	1	TRIGGER BOARD ASSEMBLY	28480	05466-60004
C1	0160-2055	6	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C6	0180-0100	6	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C7	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C8	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C9	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C10	0180-1743	1	CAPACITOR-FXD .1UF+-10% 35VDC TA	56289	150D104X9035A2
C11	0160-2204	1	CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RD15F101J3C
C12	0140-0198	1	CAPACITOR-FXD 200PF +-5% 300WVDC MICA	72136	DM15F201J0300WV1CR
C13	0180-0100	1	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C14	0180-0230	2	CAPACITOR-FXD 1UF+-20% 50VDC TA	56289	150D105X0050A2
C15	0140-0209	1	CAPACITOR-FXD 5PF +-10% 500WVDC MICA	72136	DM15C050K0500WV1CR
C16	0180-0230		CAPACITOR-FXD 1UF+-20% 50VDC TA	56289	150D105X0050A2
C17	0180-0374	2	CAPACITOR-FXD 10UF+-10% 20VDC TA	56289	150D106X9020B2
C18	0180-0160	1	CAPACITOR-FXD 22UF+-20% 35VDC TA	56289	150D226X0035R2
C19	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C20	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C21	0180-0374		CAPACITOR-FXD 10UF+-10% 20VDC TA	56289	150D106X9020B2
C22	0160-0167	1	CAPACITOR-FXD .082UF +-10% 200WVDC POLYE	56289	292P82392
CR1	1901-0156	2	DIODE-GEN PRP 20V 100MA DO-7	28480	1901-0156
CR2	1901-0156		DIODE-GEN PRP 20V 100MA DO-7	28480	1901-0156
CR3	1902-3104	1	DIODE-ZNR 5.62V 5% DO-7 PD=.4W TC=+.016%	04713	SZ 10939-110
CR4	1902-0041	2	DIODE-ZNR 5.11V 5% DO-7 PD=.4W TC=-.009%	04713	SZ 10939-98
CR5	1902-0041		DIODE-ZNR 5.11V 5% DO-7 PD=.4W TC=-.009%	04713	SZ 10939-98
CR6	1901-0040	2	DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
CR7	1901-0040		DIODE-SWITCHING 30V 50MA 2NS DO-35	28480	1901-0040
Q1	1853-0020	5	TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q2	1853-0027	1	TRANSISTOR PNP SI TO-39 PD=1W FT=100MHZ	28480	1853-0027
Q3	1854-0071	3	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q4	1854-0092	3	TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q5	1854-0092		TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q6	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q7	1853-0073	1	TRANSISTOR PNP SI PD=25W FT=3MHZ	28480	1853-0073
Q8	1205-0219	2	HEAT-DISSIPATOR SGL SHUNT PKG	28480	1205-0219
Q9	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q9	1854-0092		TRANSISTOR NPN SI PD=200MW FT=600MHZ	28480	1854-0092
Q10	1854-0071		TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
Q11	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q12	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q13	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
R1	0683-1035	3	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
R2	0757-0963	1	RESISTOR 43K 2% .125W F TC=0+-100	24546	C4-1/8-T0-4302-G
R3	0757-0957	1	RESISTOR 24K 2% .125W F TC=0+-100	24546	C4-1/8-T0-2402-G
R4	0757-0941	1	RESISTOR 5.1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-5101-G
R5	0757-0945	1	RESISTOR 7.5K 2% .125W F TC=0+-100	24546	C4-1/8-T0-7501-G
R6	0683-2725	4	RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R7	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R8	0683-3315	1	RESISTOR 330 5% .25W FC TC=-400/+600	01121	CB3315
R9	0683-1035		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
R10	0757-0939	2	RESISTOR 4.3K 2% .125W F TC=0+-100	24546	C4-1/8-T0-4301-G
R11	0757-0939		RESISTOR 4.3K 2% .125W F TC=0+-100	24546	C4-1/8-T0-4301-G
R12	0757-0954	1	RESISTOR 18K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1802-G
R13	0757-0924	1	RESISTOR 1K 2% .125W F TC=0+-100	24546	C4-1/8-T0-1001-G
R14	0683-1025	1	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R15	0683-5125	3	RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
R16	0757-0921	1	RESISTOR 750 2% .125W F TC=0+-100	24546	C4-1/8-T0-751-G
R17	0757-0916	2	RESISTOR 470 2% .125W F TC=0+-100	24546	C4-1/8-T0-471-G
R18	0683-6815	1	RESISTOR 680 5% .25W FC TC=-400/+600	01121	CB6815
R19	2100-1771	1	RESISTOR-TRMR 200 5% WW TOP-ADJ 1-TURN	G8027	CT-100-4
R20	0683-3915	1	RESISTOR 390 5% .25W FC TC=-400/+600	01121	CB3915
R21	0757-0937	1	RESISTOR 3.6K 2% .125W F TC=0+-100	24546	C4-1/8-T0-3601-G
R22	0757-0942	1	RESISTOR 5.6K 2% .125W F TC=0+-100	24546	C4-1/8-T0-5601-G
R23	0811-1853	4	RESISTOR 25 5% 5W PW TC=0+-20	07088	KM-500
R24	0683-6825	2	RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
R25	0811-1853		RESISTOR 25 5% 5W PW TC=0+-20	07088	KM-500
R26	0757-0916		RESISTOR 470 2% .125W F TC=0+-100	24546	C4-1/8-T0-471-G
R27	0683-2025	2	RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
R28	0683-6825		RESISTOR 6.8K 5% .25W FC TC=-400/+700	01121	CB6825
R29	0683-5125		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
R30	0683-1225	1	RESISTOR 1.2K 5% .25W FC TC=-400/+700	01121	CB1225

See introduction to this section for ordering information

Table 3-8. 05466-60004 Trigger Board Parts (Part 2 of 2)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
R31	0683-6215	1	RESISTOR 620 5% .25W FC TC=-400/+600	01121	CB6215
R32	0683-5125		RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
R33	0683-4725	1	RESISTOR 4.7K 5% .25W FC TC=-400/+700	01121	CB4725
R34	0683-7525	1	RESISTOR 7.5K 5% .25W FC TC=-400/+700	01121	CB7525
R35	0683-2015	1	RESISTOR 200 5% .25W FC TC=-400/+600	01121	CB2015
R36	0811-1853		RESISTOR 25 5% 5W PW TC=0+-20	07088	KM-500
R37	0811-1853		RESISTOR 25 5% 5W PW TC=0+-20	07088	KM-500
R38	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R39	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R40	0683-4735	1	RESISTOR 47K 5% .25W FC TC=-400/+800	01121	CB4735
R41	0757-0200	1	RESISTOR 5.62K 1% .125W F TC=0+-100	24546	C4-1/8-T0-5621-F
R42	0698-4371	1	RESISTOR 25.5 1% .125W F TC=0+-100	03888	PME55-1/8-T0-25R5-F
R43	0683-1525	1	RESISTOR 1.5K 5% .25W FC TC=-400/+700	01121	CB1525
R44	0683-1035		RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
R45	0683-2025		RESISTOR 2K 5% .25W FC TC=-400/+700	01121	CB2025
U1	1820-0077	1	IC-DIGITAL SN7474N TTL DUAL D-TYPE	01295	SN7474N
U2	1820-0207	1	IC-DIGITAL 9601PC TTL	07263	9601PC
U3	1820-0072	1	IC-DIGITAL SN7450N TTL DUAL 2 AND-OR-INV	01295	SN7450N
U4	1820-0174	1	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U9	1820-0476	1	IC UA 715C OP AMP	07263	715HC
U6	1826-0106	1	IC 7815C V RGLTR	07263	7815UC
	1205-0219		HEAT-DISSIPATOR SGL SHUNT PKG	28480	1205-0219

See introduction to this section for ordering information

Table 3-9. 05466-60008 Control Board Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60008	1	CONTROL BOARD ASSEMBLY (SERIES 1324A)	28480	05466-60008
C1	0160-2055	4	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0180-0100	3	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C6	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C7	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X903582
C8	0140-0234	1	CAPACITOR-FXD 500PF +-1% 300WVDC MICA	72136	DM15F501F0300WVIC
C9	0160-2306	1	CAPACITOR-FXD 27PF +-5% 300WVDC MICA	28480	0160-2306
C10	0140-0161	1	CAPACITOR-FXD 3932PF +-1% 300WVDC MICA	72136	DM20F3932RF0300WVICR
C11	0140-0209	1	CAPACITOR-FXD 5PF +-10% 500WVDC MICA	72136	DM15C050K0500WVICR
C12	0160-2204	1	CAPACITOR-FXD 100PF+-5% 300WVDC MICA	09023	RD015F101J3C
C13	0160-2201	2	CAPACITOR-FXD 51PF +-5% 300WVDC MICA	28480	0160-2201
C14	0140-0198	1	CAPACITOR-FXD 200PF +-5% 300WVDC MICA	72136	DM15F201J0300WVICR
C15	0160-2201		CAPACITOR-FXD 51PF +-5% 300WVDC MICA	28480	0160-2201
R1	1810-0041	1	NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0041
R2	0683-2725	12	RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R3	0757-0420	1	RESISTOR 750 1% .125W F TC=0+-100	24546	C4-1/8-T0-751-F
R4	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R5	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R6	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R7	0698-3444	1	RESISTOR 316 1% .125W F TC=0+-100	16299	C4-1/8-T0-316R-F
R8	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R9	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R10	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R11	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R12	0757-0943	1	RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R13	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R14	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R15	0757-0442	1	RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R16	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R17	2100-2517	1	RESISTOR-TRMR 50K 10% C SIDE-ADJ 1-TURN	30983	E750X503
R18	0683-5125	1	RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	C85125
R19	0683-2725		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	C82725
R20	0683-2035	3	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
R21	0683-2035		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
R22	0683-1035	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	C81035
R23	0683-2035		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	C82035
R24	0683-1025	1	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R25	0698-3162	1	RESISTOR 46.4K 1% .125W F TC=0+-100	16299	C4-1/8-T0-4642-F
U1	1820-0054	5	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U2	1820-0515	3	IC-DIGITAL 9602PC TTL DUAL	07263	9602PC
U3	1820-0072	1	IC-DIGITAL SN7450N TTL DUAL 2 AND-OR-INV	01295	SN7450N
U4	1820-0077	2	IC-DIGITAL SN7474N TTL DUAL D-TYPE	01295	SN7474N
U5	1820-0077		IC-DIGITAL SN7474N TTL DUAL D-TYPE	01295	SN7474N
U6	1820-0537	1	IC-DIGITAL SN7413N TTL DUAL 4 NAND	01295	SN7413N
U7	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U8	1820-0084	1	IC-DIGITAL SN7453N TTL AND-OR-INV	01295	SN7453N
U9	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U10	1820-0174	1	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U11	1820-0069	2	IC-DIGITAL SN7420N TTL DUAL 4 NAND	01295	SN7420N
U12	1820-0069		IC-DIGITAL SN7420N TTL DUAL 4 NAND	01295	SN7420N
U13	1820-0207	1	IC-DIGITAL 9601PC TTL	07263	9601PC
U14	1820-0515		IC-DIGITAL 9602PC TTL DUAL	07263	9602PC
U15	1820-0068	2	IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U16	1820-0743	1	IC-DIGITAL SN74194N TTL R-S PRL-IN	01295	SN74194N
U17	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U18	1820-0068		IC-DIGITAL SN7410N TTL TPL 3 NAND	01295	SN7410N
U19	1820-0269	1	IC-DIGITAL SN7403N TTL QUAD 2 NAND	01295	SN7403N
U20	1820-0539		IC-DIGITAL SN7437N TTL QUAD 2 NAND	01295	SN7437N
U21	1820-0515		IC-DIGITAL 9602PC TTL DUAL	07263	9602PC
U22	1820-0261	1	IC-DIGITAL SN74121N TTL	01295	SN74121N
U23	1820-0596	1	IC-DIGITAL DM74L74N TTL L DUAL	27014	DM74L74N
			MISCELLANEOUS		
	0360-0124	7	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124
	8159-0005	5	WIRE 22AWG W PVC 1X22 80C	0073G	L-2007-1

See introduction to this section for ordering information

Table 3-10. 05466-60009 Control Board Parts (Series 1832A)

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1	05466-60009	3	1	CONTROL BOARD ASSEMBLY (SERIES 1832A)	28480	05466-60009
C1	0160-2055	9	8	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C2	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C3	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C4	0160-2055	9		CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C5	0180-0100	3		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C6	0180-0100	3		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C7	0180-0100	3		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C8	0140-0234	0	2	CAPACITOR-FXD 500PF +-1% 300VDC MICA	72136	DM15F501F0300HV1C
C9	0160-2306	3	1	CAPACITOR-FXD 27PF +-5% 300VDC MICA	28480	0160-2306
C10	0160-0340	7	2	CAPACITOR-FXD 600PF ±1% 300VDC MICA	28480	0160-0340
C11	0140-0209	9		CAPACITOR-FXD 5PF +-10% 500VDC MICA	72136	DM15C050K0500HV1CR
C12	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
C13	0160-2201	7		CAPACITOR-FXD 51PF +-5% 300VDC MICA	28480	0160-2201
C14	0140-0198	5		CAPACITOR-FXD 200PF +-5% 300VDC MICA	72136	DM15F201J0300HV1CR
C15	0160-2201	7		CAPACITOR-FXD 51PF +-5% 300VDC MICA	28480	0160-2201
R1	1810-0041	9	2	NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0041
R2	0683-2725	8	12	RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R3	0757-0420	3	2	RESISTOR 750 1% .125W F TC=0+-100	24546	C4-1/8-T0-751-F
R4	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R5	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R6	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R7	0698-3444	1	2	RESISTOR 316 1% .125W F TC=0+-100	24546	C4-1/8-T0-316R-F
R8	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R9	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R10	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R11	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R12	0757-0943	5	1	RESISTOR 6.2K 2% .125W F TC=0+-100	24546	C4-1/8-T0-6201-G
R13	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R14	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R15	0757-0442	9		RESISTOR 10K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1002-F
R16	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R17	2100-2517	4		RESISTOR-TRMR 50K 10% C SIDE-ADJ 1-TRN	30983	ET50X503
R18	0683-5125	8	1	RESISTOR 5.1K 5% .25W FC TC=-400/+700	01121	CB5125
R19	0683-2725	8		RESISTOR 2.7K 5% .25W FC TC=-400/+700	01121	CB2725
R20	0683-2035	3	3	RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
R21	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
R22	0683-1035	1	1	RESISTOR 10K 5% .25W FC TC=-400/+700	01121	CB1035
R23	0683-2035	3		RESISTOR 20K 5% .25W FC TC=-400/+800	01121	CB2035
R24	0683-1025	9	1	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
R25	0698-3160	8	2	RESISTOR 31.6K 1% .125W F TC=0+-100	24546	C4-1/8-T0-3162-F
TP1	0360-0124	3	14	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP2	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP3	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP4	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP5	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP6	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP7	0360-0124	3		CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
U1	1820-0054	5		IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U2	1820-0515	3		IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U3	1820-0072	7		IC GATE TTL AND-OR-INV DUAL 2-INP	01295	SN7450N
U4	1820-0077	2		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN7474N
U5	1820-0077	2		IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN7474N
U6	1820-0537	9	2	IC SCHMITT-TRIG TTL NAND DUAL 4-INP	01295	SN7413N
U7	1820-0054	5		IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U8	1820-0084	1		IC GATE TTL AND-OR-INV	01295	SN7453N
U9	1820-0054	5		IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U10	1820-0174	0	2	IC INV TTL HEX	01295	SN7404N
U11	1820-0069	2	4	IC GATE TTL NAND DUAL 4-INP	01295	SN7420N
U12	1820-0069	2		IC GATE TTL NAND DUAL 4-INP	01295	SN7420N
U13	1820-0207	0	1	IC MV TTL MONOSTBL RETRIG/RESET	04713	MC8601P
U14	1820-0515	3		IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U15	1820-0068	1	4	IC GATE TTL NAND TPL 3-INP	01295	SN7410N
U16	1820-0743	9		IC SHF-RGTR TTL R-S PRL-IN PRL-OUT 4-BIT	01295	SN74194N
U17	1820-0054	5		IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U18	1820-0068	1		IC GATE TTL NAND TPL 3-INP	01295	SN7410N
U19	1820-0269	4		IC GATE TTL NAND QUAD 2-INP	01295	SN7403N
U20	1820-0539	1		IC BFR TTL NAND QUAD 2-INP	01295	SN7437N
U21	1820-0515	3		IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U22	1820-0261	6	1	IC MV TTL MONOSTBL	01295	SN74121N
U23	1820-0596	0	2	IC FF TTL L D-TYPE POS-EDGE-TRIG	27014	DM74L74N

See introduction to this section for ordering information
 *Indicates factory selected value

Table 3-11. 05466-60016 Control Board Parts

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1	05466-60016	2	1	CONTROL BOARD ASSEMBLY (SERIES 1644)	28480	05466-60016
C1	0140-0198	5	2	CAPACITOR-FXD 200PF +/-5% 300VDC MICA	72136	DM15F201J0300MV1CR
C2	0180-0100	3	6	CAPACITOR-FXD 4.7UF+/-10% 35VDC TA	56289	150D475X9035B2
C3	0160-2055	9	9	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C4	0140-0209	9	2	CAPACITOR-FXD 5PF +/-10% 500VDC MICA	72136	DM15C050K0500MV1CR
C5	0160-2055	9	9	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C6	0180-0100	3	4	CAPACITOR-FXD 4.7UF+/-10% 35VDC TA	56289	150D475X9035B2
C7	0160-2201	7	4	CAPACITOR-FXD 51PF +/-5% 300VDC MICA	28480	0160-2201
C8	0160-2201	7	9	CAPACITOR-FXD 51PF +/-5% 300VDC MICA	28480	0160-2201
C9	0160-2055	9	7	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C10	0160-2055	9	9	CAPACITOR-FXD .01UF +80-20% 100VDC CER	28480	0160-2055
C11	0160-2204	0	2	CAPACITOR-FXD 100PF +/-5% 300VDC MICA	28480	0160-2204
C12	0160-3875	3	1	CAPACITOR-FXD 22PF +/-5% 200VDC CER 0+-30	28480	0160-3875
C13	0140-0231	7	7	CAPACITOR-FXD 440PF +/-1% 300VDC MICA	72136	DM15F441F0300MV1C
C14	0180-0100	3	3	CAPACITOR-FXD 4.7UF+/-10% 35VDC TA	56289	150D475X9035B2
C15	0140-0234	0	0	CAPACITOR-FXD 500PF +/-1% 300VDC MICA	72136	DM15F501F0300MV1C
R1	0757-0934	4	14	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R2	0757-0934	4	14	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R3	0757-0442	9	3	RESISTOR 10K 1% .125W F TC=0+-100	24546	C4=1/8-T0=1002-F
R4	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R5	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R6	2100-2517	4	2	RESISTOR-TRMR 50K 10% C SIDE-ADJ 1-TRN	30983	ET50X503
R7	0757-0438	3	1	RESISTOR 5.11K 1% .125W F TC=0+-100	24546	C4=1/8-T0=5111-F
R8	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R9	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R10	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R11	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R12	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R13	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R14	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R15	0698-3444	1	1	RESISTOR 316 1% .125W F TC=0+-100	24546	C4=1/8-T0=316R-F
R16	0757-0420	3	3	RESISTOR 750 1% .125W F TC=0+-100	24546	C4=1/8-T0=751-F
R17	0757-0280	3	1	RESISTOR 1K 1% .125W F TC=0+-100	24546	C4=1/8-T0=1001-F
R18	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R19	0757-0449	6	3	RESISTOR 20K 1% .125W F TC=0+-100	24546	C4=1/8-T0=2002-F
R20	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R21	0757-0934	4	4	RESISTOR 2.7K 2% .125W F TC=0+-100	24546	C4=1/8-T0=2701-G
R22	0757-0449	6	6	RESISTOR 20K 1% .125W F TC=0+-100	24546	C4=1/8-T0=2002-F
R23	0757-0449	6	6	RESISTOR 20K 1% .125W F TC=0+-100	24546	C4=1/8-T0=2002-F
R24	0757-0442	9	9	RESISTOR 10K 1% .125W F TC=0+-100	24546	C4=1/8-T0=1002-F
R25	1810-0041	9	9	NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0041
R26	0698-3160	8	8	RESISTOR 31.6K 1% .125W F TC=0+-100	24546	C4=1/8-T0=3162-F
R27	0757-0290	5	1	RESISTOR 6.19K 1% .125W F TC=0+-100	19701	MF4C1/8-T0=6191-F
TP1	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP2	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP3	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP4	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP5	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP6	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
TP7	0360-0124	3	3	CONNECTOR-SGL CONT PIN .04-IN-B8C-SZ RND	28480	0360-0124
U1	1820-0054	5	9	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U2	1820-0515	3	7	IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U3	1820-0072	2	2	IC GATE TTL AND-OR-INV DUAL 2-INP	01295	SN7450N
U4	1820-0077	7	5	IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN7474N
U5	1820-0077	2	2	IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN7474N
U6	1820-0537	9	9	IC SCHMITT-TRIG TTL NAND DUAL 4-INP	01295	SN7413N
U7	1820-0054	5	5	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U8	1820-0084	1	2	IC GATE TTL AND-OR-INV	01295	SN7453N
U9	1820-0054	5	5	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U10	1820-0174	0	0	IC INV TTL HEX	01295	SN7404N
U11	1820-0069	2	2	IC GATE TTL NAND DUAL 4-INP	01295	SN7420N
U12	1820-0069	2	2	IC GATE TTL NAND DUAL 4-INP	01295	SN7420N
U13	1820-0077	2	2	IC FF TTL D-TYPE POS-EDGE-TRIG CLEAR	01295	SN7474N
U14	1820-0515	3	3	IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U15	1820-0068	1	1	IC GATE TTL NAND TPL 3-INP	01295	SN7410N
U16	1820-0743	9	2	IC SHF-RGTR TTL R-S PRL-IN PRL-OUT 4-BIT	01295	SN74194N
U17	1820-0054	5	5	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U18	1820-0068	1	1	IC GATE TTL NAND TPL 3-INP	01295	SN7410N
U19	1820-0269	4	2	IC GATE TTL NAND QUAD 2-INP	01295	SN7403N
U20	1820-0539	1	2	IC BFR TTL NAND QUAD 2-INP	01295	SN7437N
U21	1820-0515	3	3	IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U22	1820-0054	5	5	IC GATE TTL NAND QUAD 2-INP	01295	SN7400N
U23	1820-0515	3	3	IC MV TTL MONOSTBL RETRIG/RESET DUAL	04713	MC8602P
U24	1820-0596	0	0	IC FF TTL L D-TYPE POS-EDGE-TRIG	27014	DM74L74N

See introduction to this section for ordering information
 *Indicates factory selected value

Table 3-12. 05466-60006 Sample Generator Board Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
	05466-60006	1	SAMPLE GENERATOR BOARD ASSEMBLY	28480	05466-60006
C1	0160-2055	9	CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C2	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C3	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C4	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C5	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C6	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C7	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C8	0160-0337	1	CAPACITOR-FXD 160PF +-1% 300WVDC MICA	28480	0160-0337
C9	0180-0100	3	CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C10	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C11	0180-0100		CAPACITOR-FXD 4.7UF+-10% 35VDC TA	56289	150D475X9035B2
C12	0130-0015	1	CAPACITOR-V TRMR-CER 9/50PF	72982	3192-000-V2PD-47R
C13	0140-0194	1	CAPACITOR-FXD 110PF +-5% 300WVDC MICA	72136	DM15F111J0300WV1CR
C14	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
C15	0121-0059	1	CAPACITOR-V TRMR-CER 2/8PF 350V PC-MTG	0086S	304324 2/8PF NPO
C16	0160-0196	1	CAPACITOR-FXD 24PF +-5% 300WVDC MICA	28480	0160-0196
C17	0160-2055		CAPACITOR-FXD .01UF +80-20% 100WVDC CER	28480	0160-2055
Q1	1853-0020	4	TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q2	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q3	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q4	1853-0020		TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
Q5	1854-0071	1	TRANSISTOR NPN SI PD=300MW FT=200MHZ	28480	1854-0071
R1	1810-0041	2	NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0041
R2	1810-0041		NETWORK-RES 9-PIN-SIP .15-PIN-SPCG	28480	1810-0041
R3	0683-4705	4	RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
R4	0683-4705		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
R5	0683-1025	6	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R6	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R7	0757-0911	2	RESISTOR 300 2% .125W F TC=0+-100	24546	C4-1/8-T0-301-G
R8	0757-0911		RESISTOR 300 2% .125W F TC=0+-100	24546	C4-1/8-T0-301-G
R9	0683-4705		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
R10	0683-2415	2	RESISTOR 240 5% .25W FC TC=-400/+600	01121	C82415
R11	0683-4705		RESISTOR 47 5% .25W FC TC=-400/+500	01121	C84705
R12	0683-2415		RESISTOR 240 5% .25W FC TC=-400/+600	01121	C82415
R13	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R14	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R15	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
R16	0757-0902	1	RESISTOR 120 2% .125W F TC=0+-100	24546	C4-1/8-T0-121-G
R17	0683-1025		RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
U1	1820-0054	3	IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U2	1820-0072	1	IC-DIGITAL SN7450N TTL DUAL 2 AND-OR-INV	01295	SN7450N
U3	1820-0077	1	IC-DIGITAL SN7474N TTL DUAL D-TYPE	01295	SN7474N
U4	1820-0370	1	IC-DIGITAL SN74H00N TTL H QUAD 2 NAND	01295	SN74H00N
U5	1820-0899	1	IC-DIGITAL SN74160N TTL DECD SYNCHRO	01295	SN74160N
U6	1820-0055	7	IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U7	1820-0620	3	IC-DIGITAL SN74153N TTL DUAL 4	01295	SN74153N
U8	1820-0744	1	IC-DIGITAL SN7497N TTL BIN SYNCHRO	01295	SN7497N
U9	1820-0142	2	IC-DIGITAL MC1004P ECL DUAL 4 OR-NOR	04713	MC1004P
U10	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U11	1820-0620		IC-DIGITAL SN74153N TTL DUAL 4	01295	SN74153N
U12	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U13	1820-0174	1	IC-DIGITAL SN7404N TTL HEX 1	01295	SN7404N
U14	1820-0142		IC-DIGITAL MC1004P ECL DUAL 4 OR-NOR	04713	MC1004P
U15	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U16	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U17	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U18	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
U19	1820-0620		IC-DIGITAL SN74153N TTL DUAL 4	01295	SN74153N
U20	1820-0054		IC-DIGITAL SN7400N TTL QUAD 2 NAND	01295	SN7400N
U21	1820-0055		IC-DIGITAL SN7490N TTL DECD SYNCHRO	01295	SN7490N
Y1	0410-0180	1	CRYSTAL:QUARTZ 20,000MHZ MISCELLANEOUS	00809	CR60A/U
Y2	0410-0473	1	CRYSTAL:QUARTZ	28480	0410-0473
	0360-0124	6	TERMINAL-STUD SGL-PIN PRESS-MTG	28480	0360-0124

See introduction to this section for ordering information

Table 3-13. Manufacturers Code List

Mfr. Number	Manufacturer Name	City	ZIP Code
GB027	Neohm	England	
0073G	Gettig Engineering and Mfg. Co., Inc.	Spring Mills, PA	16875
00809	Croven, Ltd.	Ontario, Canada	
0086S	Stettner-Trush, Inc.	Cazenovia, NY	13035
01121	Allen-Bradley Co.	Milwaukee, WI	53212
01295	Texas Instruments, Inc., Semiconductor Comp. Div.	Dallas, TX	75231
02114	Ferrocube Corp.	Saugerties, NY	12477
03888	KDI Pyrofilm Corp.	Whippany, NJ	07981
04062	Electro Motive Mfg. Co., Inc.	Willimantic, CT	06226
04713	Motorola Semiconductor Products	Phoenix, AZ	85008
07088	Kelvin Electric Co.	Van Nuys, CA	91401
07263	Fairchild Semiconductor Division	Mountain View, CA	94040
07716	TRW, Inc., Burlington Division	Burlington, IA	52601
09023	Cornell-Dubilier, Elek. Div., Fed Pac	Sanford, NC	27330
09353	C & K Components, Inc.	Watertown, MA	02172
12040	National Semiconductor Corp.	Danbury, CT	06810
16299	Corning Glass Works, Electronics Components Div.	Raleigh, NC	27604
17856	Siliconix, Inc.	Santa Clara, CA	95050
18324	Signetics Corp.	Sunnyvale, CA	94086
19701	Mepco/Electra Corp.	Mineral Wells, TX	76067
24546	Corning Glass Works (Bradford)	Bradford, PA	16701
24931	Specialty Connector Co., Inc.	Indianapolis, IN	46227
27014	National Semiconductor Corp.	Santa Clara, CA	95051
28480	Hewlett-Packard Company, Corporate Headquarters	Palo Alto, CA	94304
30983	Mepco/Electra Corp.	San Diego, CA	92121
32997	Bourns Inc., Trimpot Products Division	Riverside, CA	92507
34335	Advanced Micro Devices, Inc.	Sunnyvale, CA	94086
34371	Harris Semiconductor, Division Of Harris-Intertype	Melbourne, FL	32901
50443	Hewlett-Packard Company, Santa Clara Division	Santa Clara, CA	95050
56289	Sprague Electric Co.	North Adams, MA	01247
71785	TRW Electronic Components, Cinch Division	Elk Grove Village, IL	60007
72136	Electro Motive Mfg. Co., Inc.	Willimantic, CT	06226
72982	Erie Technological Products, Inc.	Erie, PA	16512
80131	Electronic Industries Association	Washington, D.C.	20006
90949	Amphenol Sales, Division of Bunker-Ramo	Hazelwood, MO	63042
94222	Southco, Inc.	Lester, PA	19113

SECTION IV

5475A CONTROL UNIT

INTRODUCTION

This section contains schematics, component locators, and wiring information for the HP 5475A Control Unit. For theory of operation, maintenance, and troubleshooting procedures, refer to the 5451C System Service Manual.

CHANGE DATA

Current Instruments

This manual section applies to HP 5475A Option 007 Control Units with serial prefix 1940A. Option 007 is standard for the 5451C Fourier Analyzer System.

Older Instruments

For 5475A's with serial prefixes below 1940A or with option numbers not listed above, refer to 5451 System Hardware Manuals, HP Part Number 05451-90467 and 05451-90517.

Table 4-1. Keyboard Signals to Matrix A and B

KEYBOARD CONNECTOR P19A/J19A	SIGNAL	MATRIX CONNECTOR	KEYBOARD CONNECTOR P19B/J19B	SIGNAL	MATRIX CONNECTOR
7	BLOCK SIZE	A12A(3)	11	SKIP	A12A(12)
8	CURSR	A12A(4)	12	JUMP	A12A(13,P)
9	USER PROG	A12A(5)	13	COUNT	A12A(14,R)
11	DELET	A12A(6)	14	SUB RTRN	A12A(15)
12	RPLAC	A12A(7)	15	LABEL	A12A(S)
13	INSRT	A12A(8)	16	END	A12B(1,A)
14	LIST	A12A(9)	18	HISTOGRAM	A13A(C)
15	POINT	A12A(10)	19	RECT	A13A(D)
16	TERM	A12A(11)	20	LOAD	A13A(E)
18	MASS STORE	A12B(8,J)	21	STORE	A13A(F)
19	KEYBOARD	A12B(9,K)	22	LOG MAG	A13A(H)
20	PHOTO READR	A12B(10)	23	POLAR	A13A(J)
21	ANALG IN	A12B(11)	24	INTERCHNG	A13A(K)
22	ANALG OUT	A12B(12)	25	DSPLY	A13A(L)
23	PRINT	A12B(13)	36	+	A12B(2,B)
24	PUNCH	A12B(14)	37	+ (divide)	A12B(3,C)
25	BUFFD ANALG	A12B(15,S)	38	←	A12B(4,D)
35	ENTER	A13B(2)	39	- (Arithmetic)	A12B(5,E)
36	SPACE	A13B(3)	40	MULT	A12B(6,F)
37	CLEAR	A13B(4)	41	*MULT	A12B(7,H)
38	- (Address)	A13B(5)	43	∫	A13A(M)
39	RUB OUT	A13B(6)	44	HANN	A13A(N)
41	1	A13B(8)	45	CONV	A13A(13)
42	2	A13B(9)	46	F	A13A(R)
43	3	A13B(L)	47	d/dx	A13A(S)
44	4	A13B(M)	48	TRANS FCN	A13A(14)
45	5	A13B(N)	49	CORR	A13A(15)
46	6	A13B(P)	50	POWER SPECT	A13B(1)
47	7	A13B(R)			
48	8	A13B(S)			
49	9	A13B(15)			
50	0	A13B(7)			

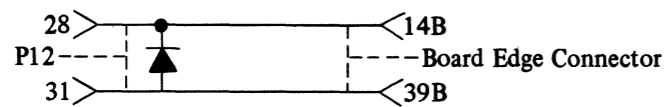
Table 4-2. Signals from Computer to Terminal (via 5475A)

Signal Name	Terminal I/O Conn.	5475A J14	5475A J13 From/to Terminal	5475A Internal	Teletypewriter or Terminal
DATA FROM TTY			4,D	A14B(15,S); A18(5,E)	4,D
MANUAL CLOCK CONTROL			23,AA	A14(9,K)	P13(24,BB) ¹ (ground)
PUNCH (NOT USED)	6,F	24,6	6,F	N.C.	N.C.
PRINT (NOT USED)	8,J	26,8	8,J	N.C.	NOT USED
EXT CLOCK (CLK IN)	1,A	20,2	10,L	A14B(12,N)	10,L
CLOCK OUT	10,L	28,10	N.C.	A14B(4,D)	
+12V	12,N	30,12	12	A18(3,C)	N.C.
+12V SENSE			N	A18(4,D)	N
READ	13,P	31,13	N.C.	N.C.	N.C.
-12V	14,R	32,14	14,R	N.C.	R,14
DATA TO TTY	16,T	34,16	16,T	N.C.	16,T
+12 FOR DATA PHONE (NOT USED)	17,U	37,17	17,U	N.C.	17,U
DATA FROM PINS 16,T	18,V	5,23	V	N.C.	V,18
DATA TO EIA DEVICE	19,W	19,1	W	N.C.	W
DATA FROM EIA DEVICE	N.C.	N.C.	X	A14A(M)	

¹When a Tektronix terminal (or other terminal providing its own clock) is used, the MANUAL CLOCK CONTROL line should be grounded. A good way to provide this ground connection is by a jumper from pins 23,AA to pins 24,BB of "P13", the connector on the cable from the terminal that mates with the 5475A's rear-panel J13 connector. Pins 24 and BB of J13 are ground. The Tektronix TEK 012-0257-00 cable makes the required connection.

Table 4-3. Feedthru Signals — Computer to ADC

SIGNAL NAME	J15/P15 ADC CONNECTIONS	J12/P12 5475A CONNECTIONS	2 CH. 12566B I/O EDGE CONNECTIONS ^①	4 CH. 12930A I/O CONNECTIONS ^②
Signals from Computer:				
N6 (BSI 64)	27	20	H	10
N7 (BSI 128)	28	21	J	9
N8 (BSI 256)	29	22	K	18
N9 (BSI 512)	30	23	L	7
N10 (BSI 1024)	31	24	M	6
N11 (BSI 2048)	32	25	N	5
N12 (BSI 4096)	26	8	P	4
READY	NC	26	A	16
WHAT	NC	27	B	15
GND	NC	19,1	24,BB	50
Signals to Computer:				
BIT 0 ^③	33	33	5	37B
BIT 1 ^③	44	35	6	36B
BIT 2 ^③ (BIT 0) ^④	1	18	7	35B
BIT 3 ^③ (BIT 1) ^④	2	17	8	34B
BIT 4 ^③ (BIT 2) ^④	3	16	9	33B
BIT 5 ^③ (BIT 3) ^④	4	15	10	32B
BIT 6 ^③ (BIT 4) ^④	5	14	11	31B
BIT 7 ^③ (BIT 5) ^④	6	13	12	30B
BIT 8 ^③ (BIT 6) ^④	7	12	13	29B
BIT 9 ^③ (BIT 7) ^④	8	11	14	28B
BIT 10 ^③ (BIT 8) ^④	9	10	15	27B
BIT 11 ^③ (BIT 9) ^④	10	9	16	26B
GAIN 1	11	29	1	41B
GAIN 2	12	30	2	40B
GAIN 3	13	31	C,3	14B,39B ^⑤
DISPCT	14	32	4	38B
EN	15	34	Z,22	24B
DAR	16	36	AA,23	49B

① Used with HP Cable No. 05451-60002. ⑤ 

② Used with HP Cable No. 05451-60004.

③ Bit 0—11 are used in 12-bit ADC.

④ Bit 0—9 are used in 10-bit ADC.

Table 4-4. Signal Outputs on Back of 5475A

SIGNAL	FROM	TO	5475A OPT.
SAMPLE OUT	J15(50)	J21	003, 004
EN OUT	J12(15)	J22	003, 004
DIGITIZE	J15(49)	J23	004
DAR	J15(16)	J24	004
MULTX SAMPLE	J15(48)	J25	006

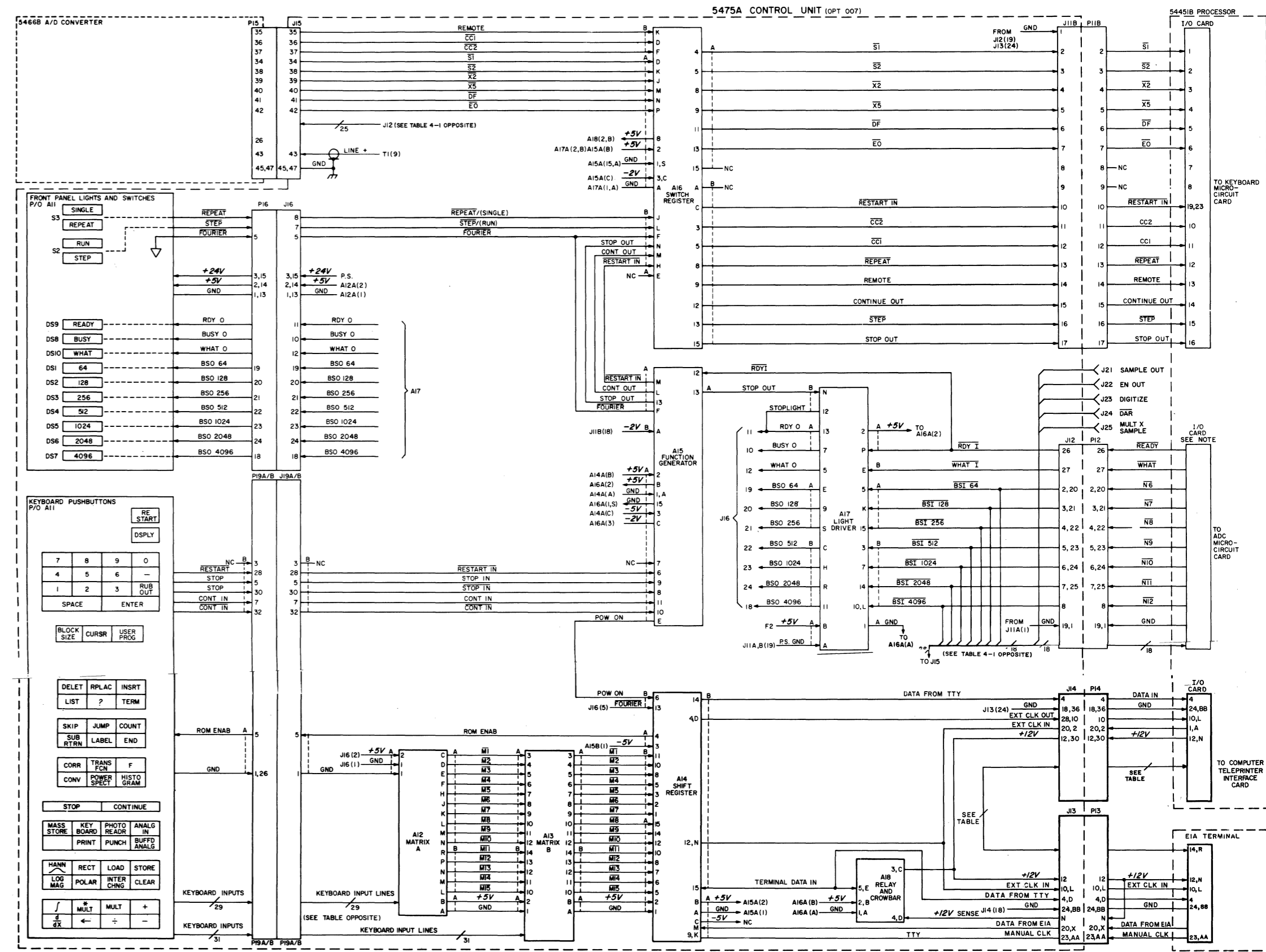
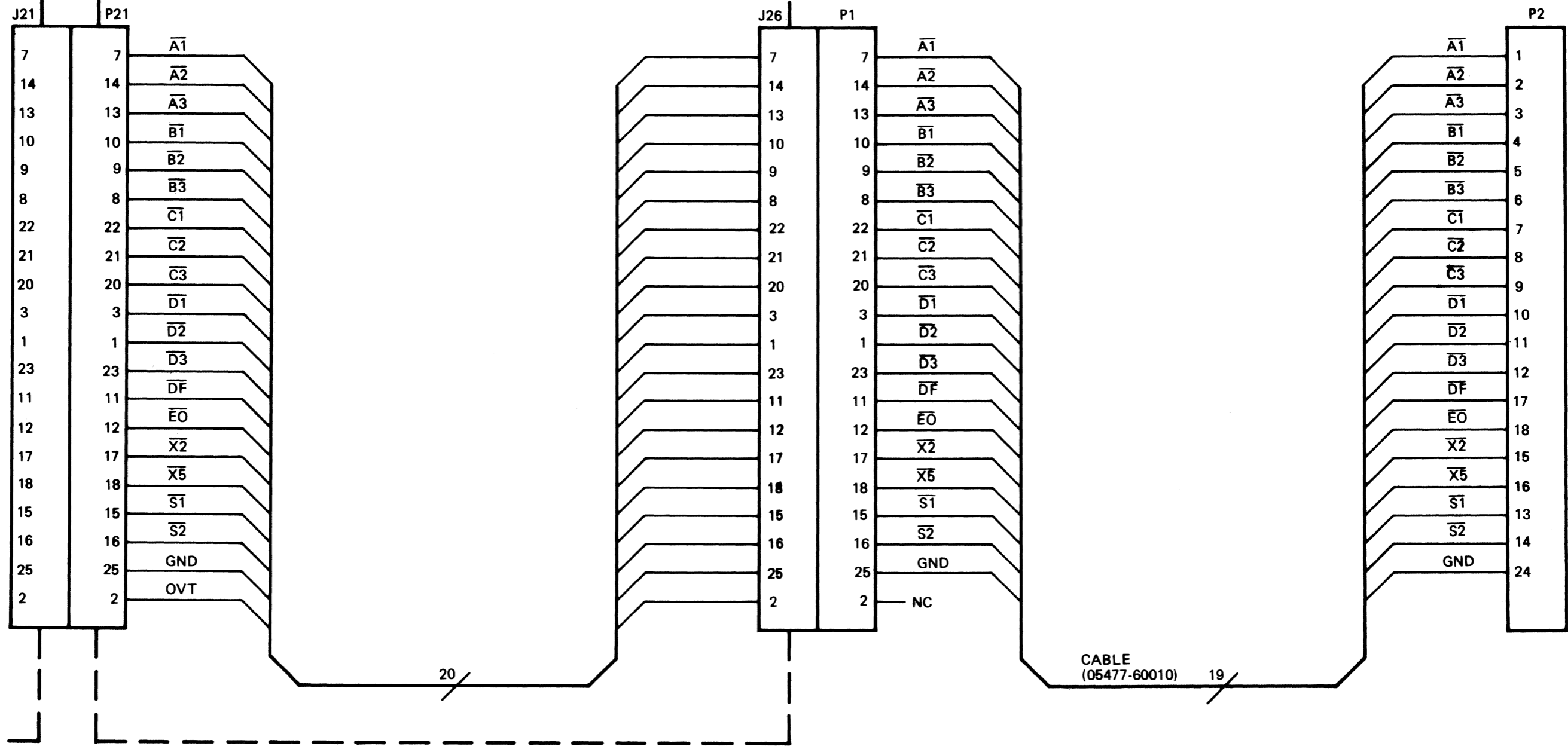


Figure 4-1
5475A OPTION 007 CONTROL UNIT
WIRING DIAGRAM (Sheet 1 of 2)

5466B A/D CONVERTER

P/O 5475A CONTROL UNIT (OPT 007)



TO 5477A FOR REMOTE

Figure 4-1
5475A OPTION 007 CONTROL UNIT
WIRING DIAGRAM (Sheet 2 of 2)

Figure 4-2. 5475A A1—A3 Rectifier, Ref., and Motherboard Assy. 007 and Assy. Locations

ASSEMBLY LOCATOR

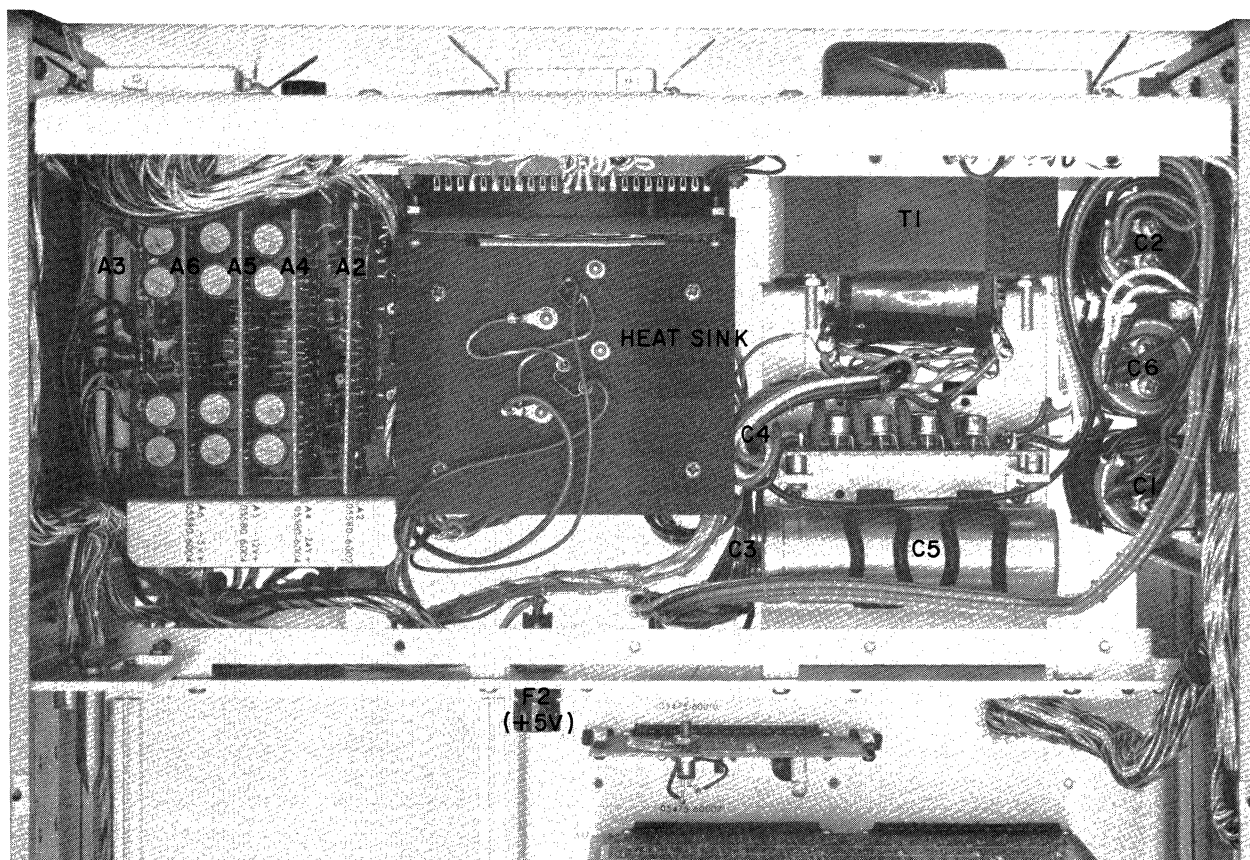


Figure 4-2. 5475A A1—A3 Rectifier, Ref., and Motherboard Assembly (Cont'd)

MOTHERBOARD, (A3) FRONT

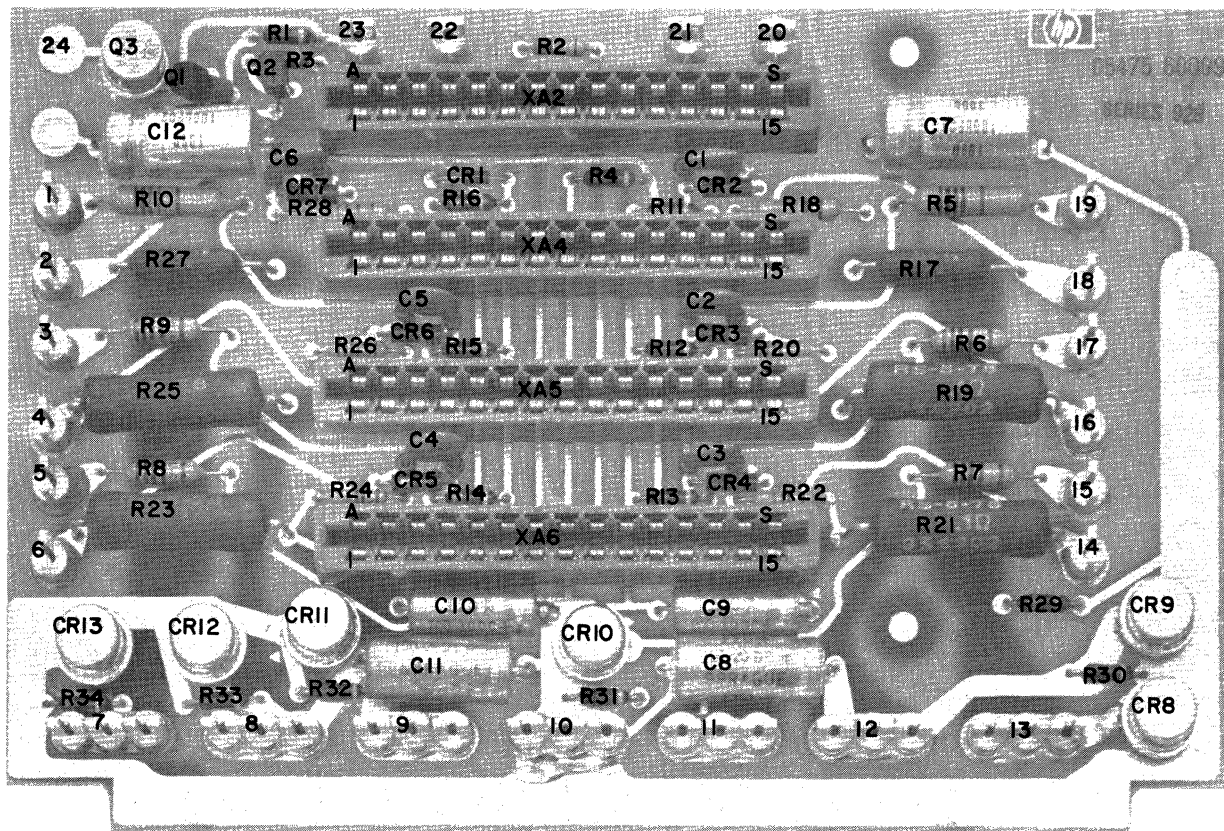


Figure 4-2. 5475A A1—A3 Rectifier, Ref., and Motherboard Assembly (Cont'd)

MOTHERBOARD, (A3) REAR

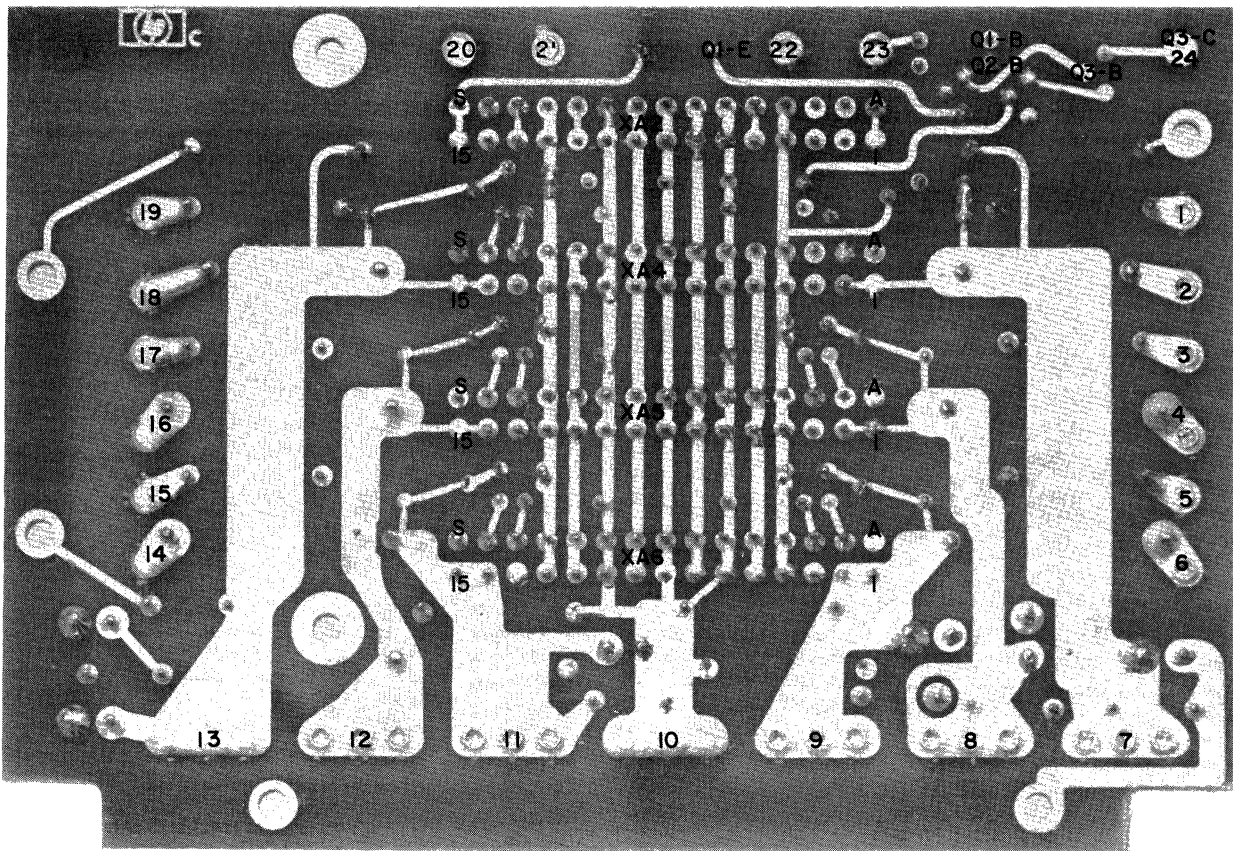
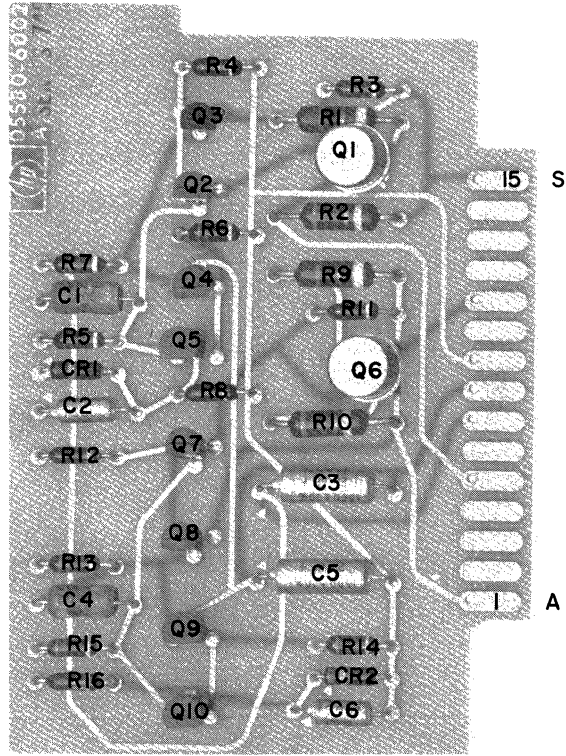


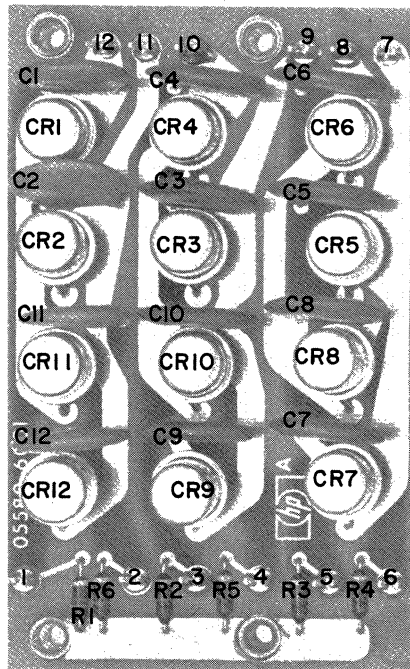
Figure 4-2. 5475A A1—A3 Rectifier, Ref., and Motherboard Assembly (Cont'd)

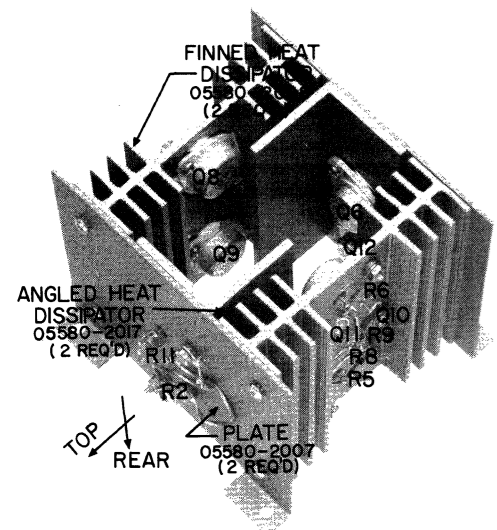
A2 REFERENCE BOARD



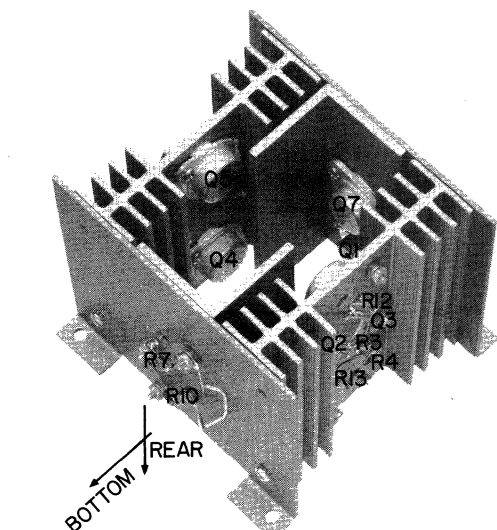
Note: Shown without heat dissipators on Q1 and Q6 for clarity.

A1 RECTIFIER BOARD





REGULATOR HEAT SINK ASSEMBLIES



REFERENCE DESIGNATIONS

NO PREFIX	A1	A2	A3
B1	C1-12	C1-6	C1-12
DS1,2	CR1-12	CR1,2	CR1-13
J1,2		Q1-10	Q1-3
Q1-12	R1-6	R1-10	R1-34
R1-13			
S1,2			
T1			
W1			

NOTES

- REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
- UNLESS OTHERWISE INDICATED:
RESISTANCE IN OHMS;
CAPACITANCE IN PICOFARADS;
INDUCTANCE IN MICROHENRIES
- VOLTAGE NOTATION AS FOLLOWS:
± NO LOAD/VOL (SINGLE VOLTAGE APPLICABLE TO BOTH).

ACTIVE COMPONENTS

A1 05580-6001		A2 05580-6002		A3 05580-6009	
REFERENCE DESIGNATIONS	H-P PART NO.	REFERENCE DESIGNATIONS	H-P PART NO.	REFERENCE DESIGNATIONS	H-P PART NO.
CR1-12	1901-0416	CR1,2	1902-0071	CR1	1901-0040
		Q7,8	1853-0036	CR8-13	1901-0415
		Q1	1853-0051	CR4,5	1902-0049
		Q6	1854-0039	CR3,6	1902-3193
		Q4,5,9,10	1854-0071	Q2,7	1902-3168
		Q2,3	1854-0215	Q1,2	1853-0036
				Q3	1854-0022

A1	A2	A3
REFERENCE DESIGNATIONS	REFERENCE DESIGNATIONS	REFERENCE DESIGNATIONS
C1-12	C1-6	C1-12
R1-6	R1-16	R1-34
CR1-12	Q1-10	XA2-6
	CR1,2	Q1-3
		CR1-13
		E1

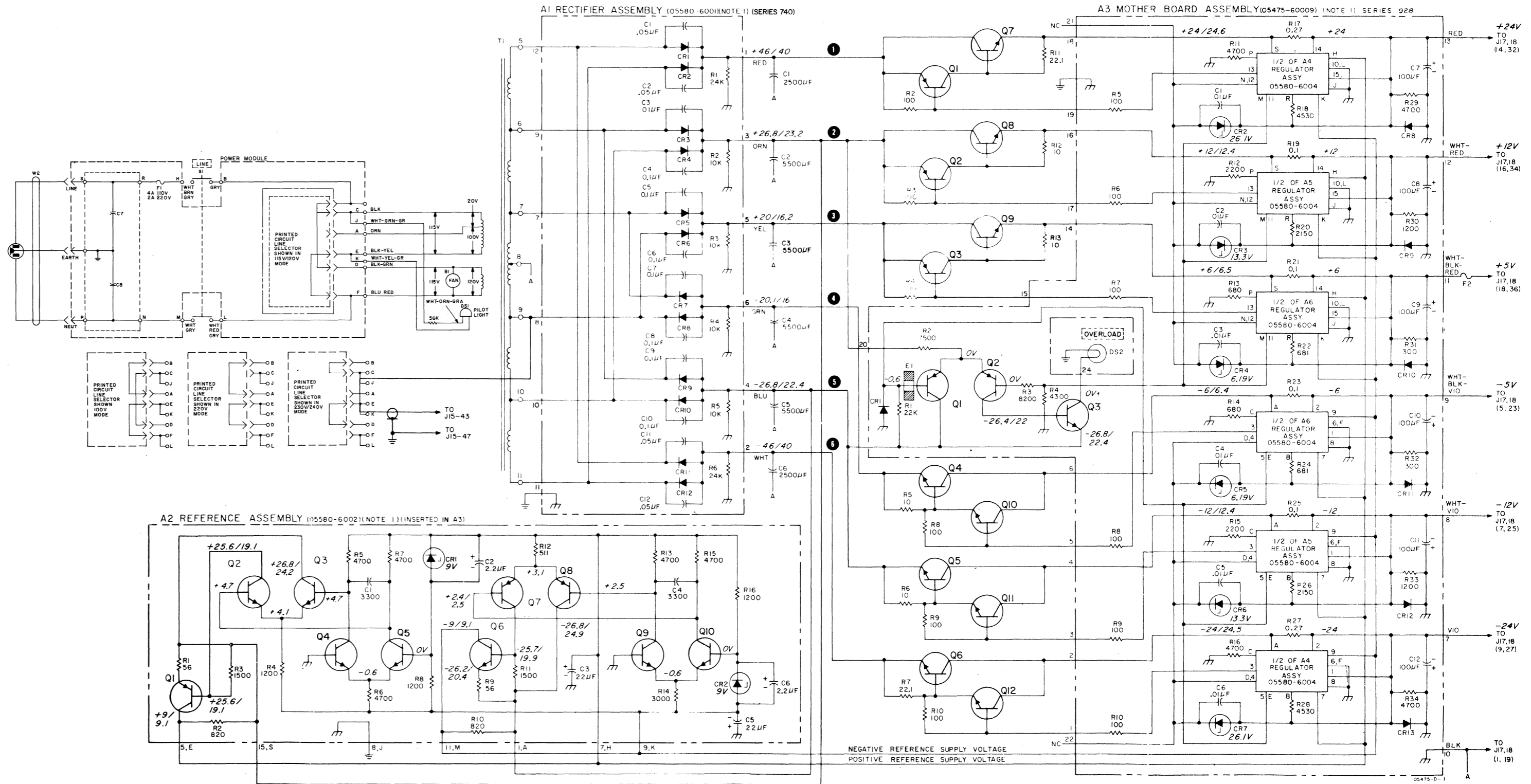
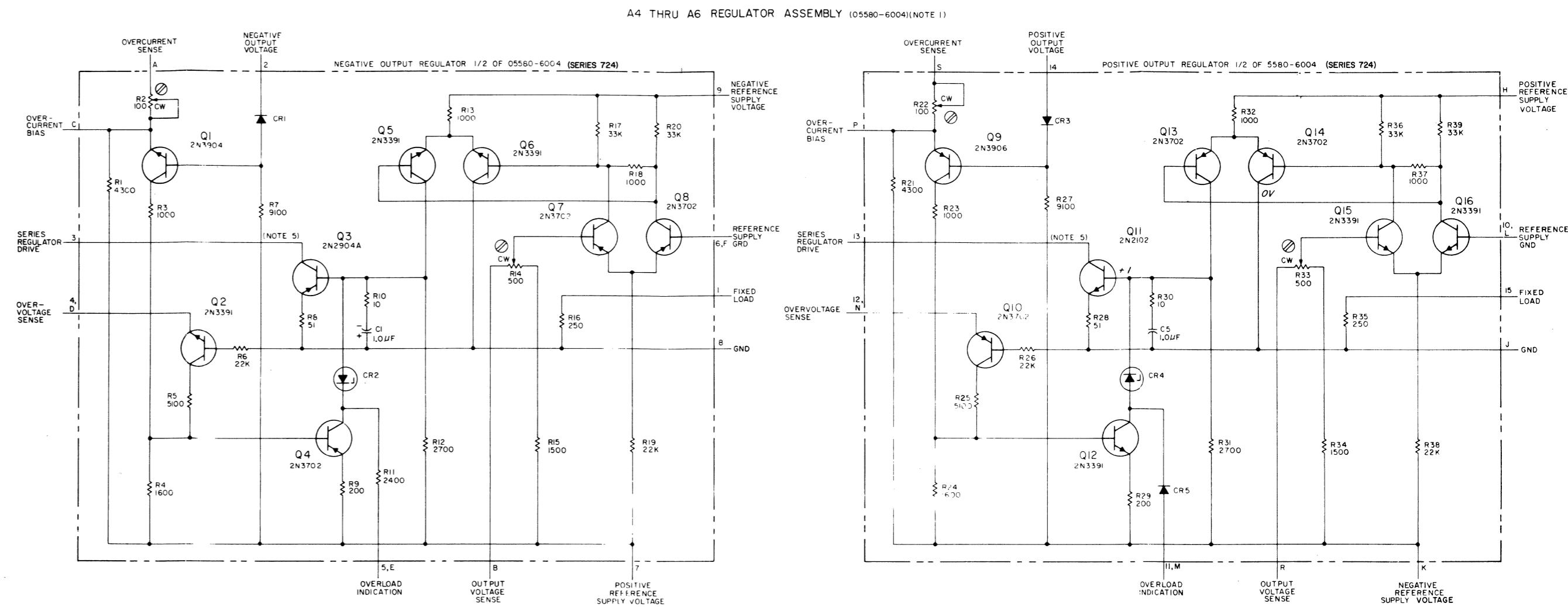
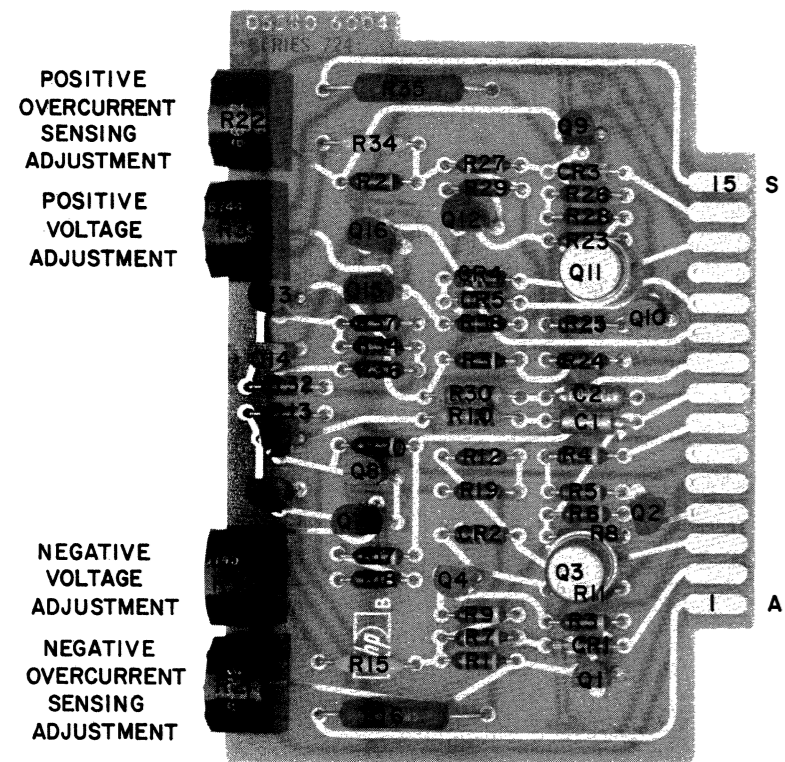


Figure 4-2
5475A A1, A2, A3 RECTIFIER,
REFERENCE AND MOTHER BOARD ASSEMBLIES



NOTES

- REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
- UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS;

TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1, 3, 5	1901 - 0040
CR2, 4	1902 - 0049
Q3	1853 - 0012
Q4, 7, 8, 10, 13, 14	1853 - 0020
Q9	1853 - 0036
Q11	1854 - 0022
Q2, 5, 6, 12, 15, 16	1854 - 0071
Q1	1854 - 0215

REFERENCE DESIGNATIONS

A4 THRU A6
C1, 5
CR1-5
Q1-16
R1-39

05475-D-3

Figure 4-3
5475A A4 thru A6 REGULATOR ASSEMBLY

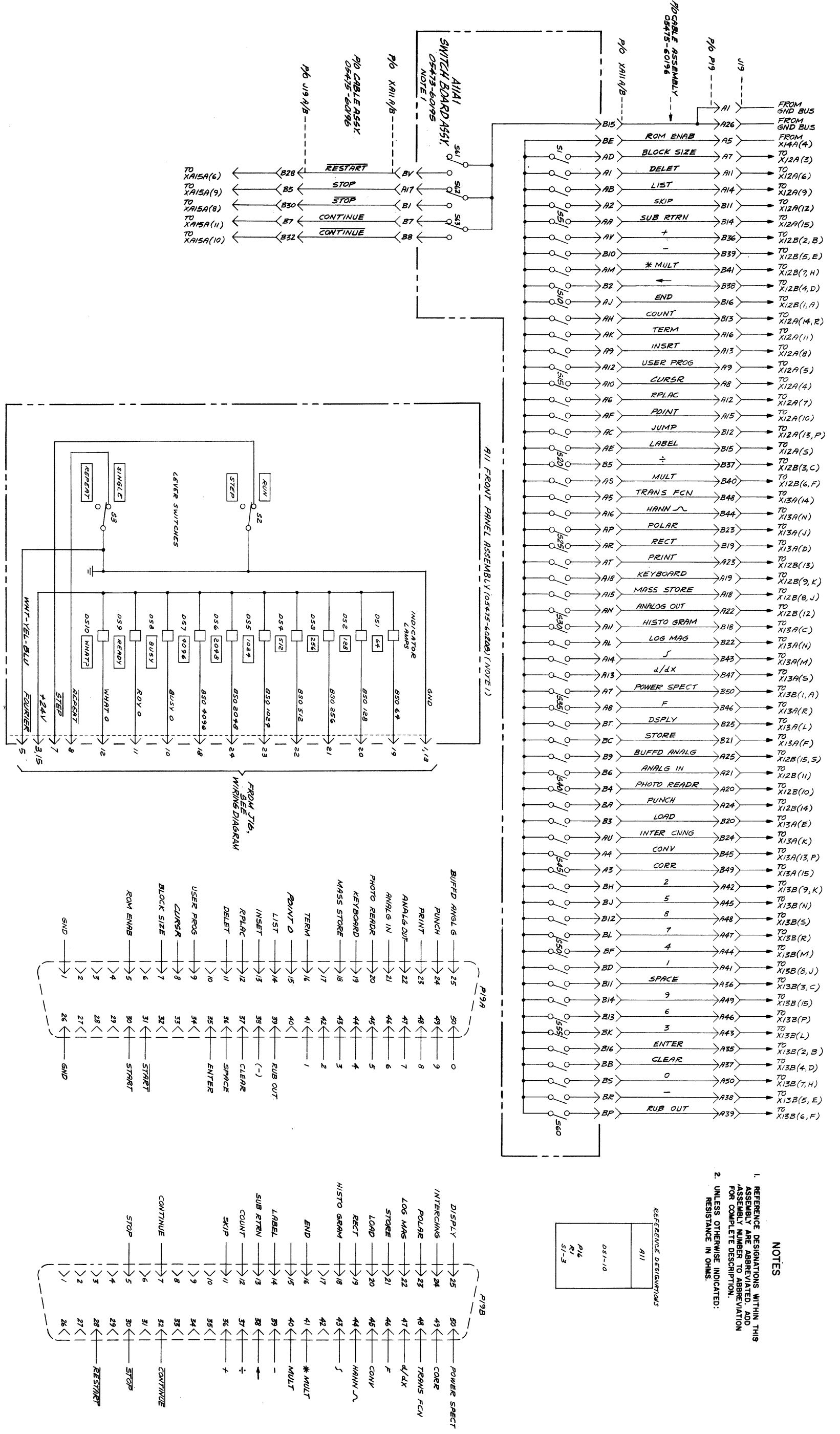
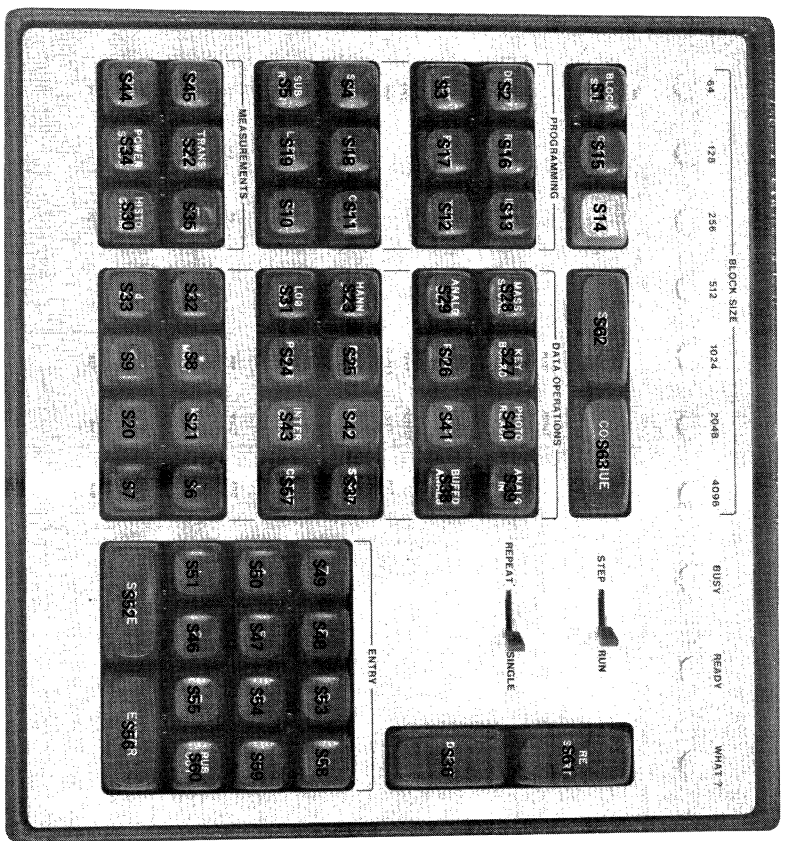


Figure 4-4
5475A A11 FRONT PANEL AND
KEYBOARD ASSEMBLY

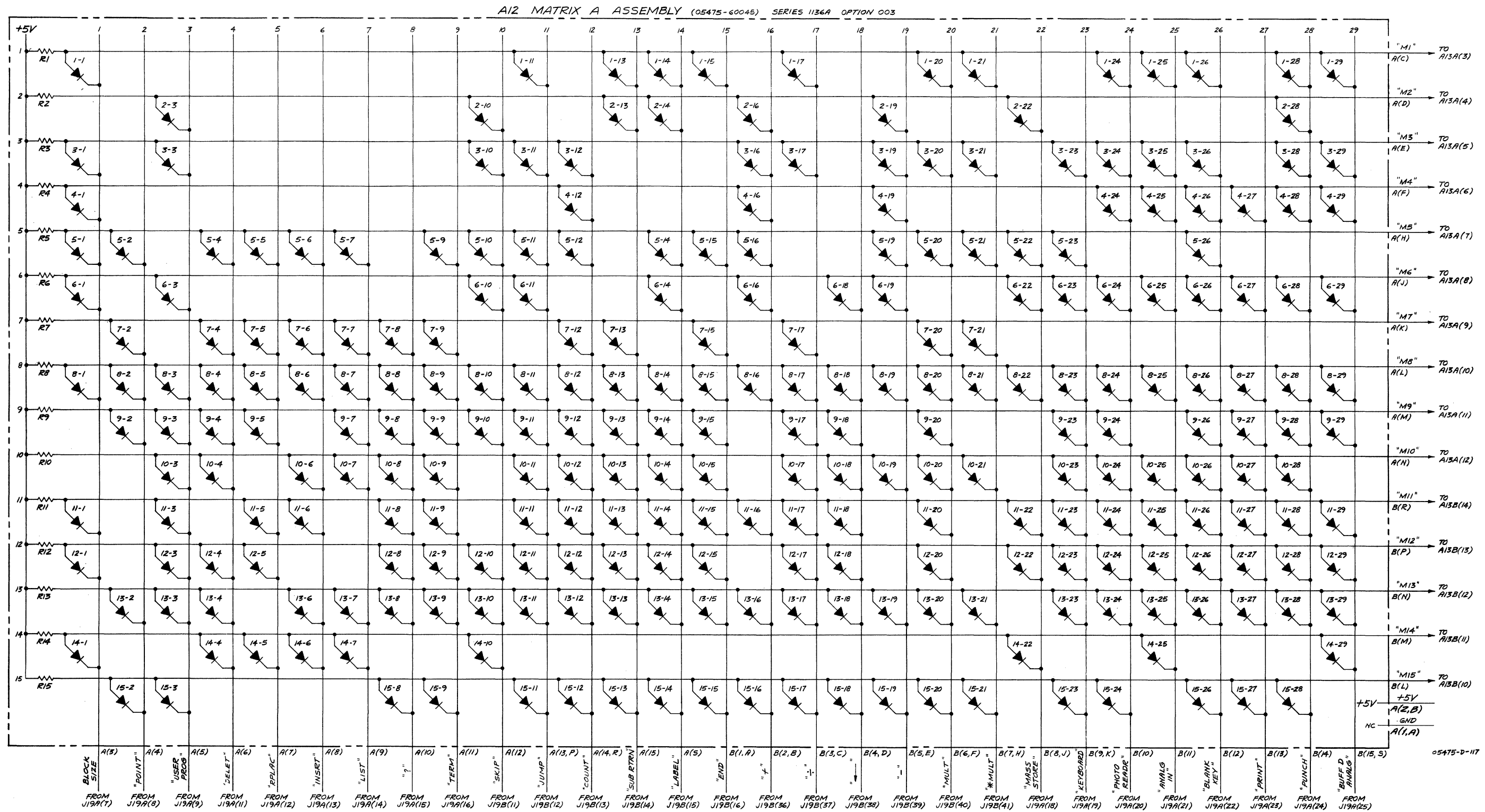
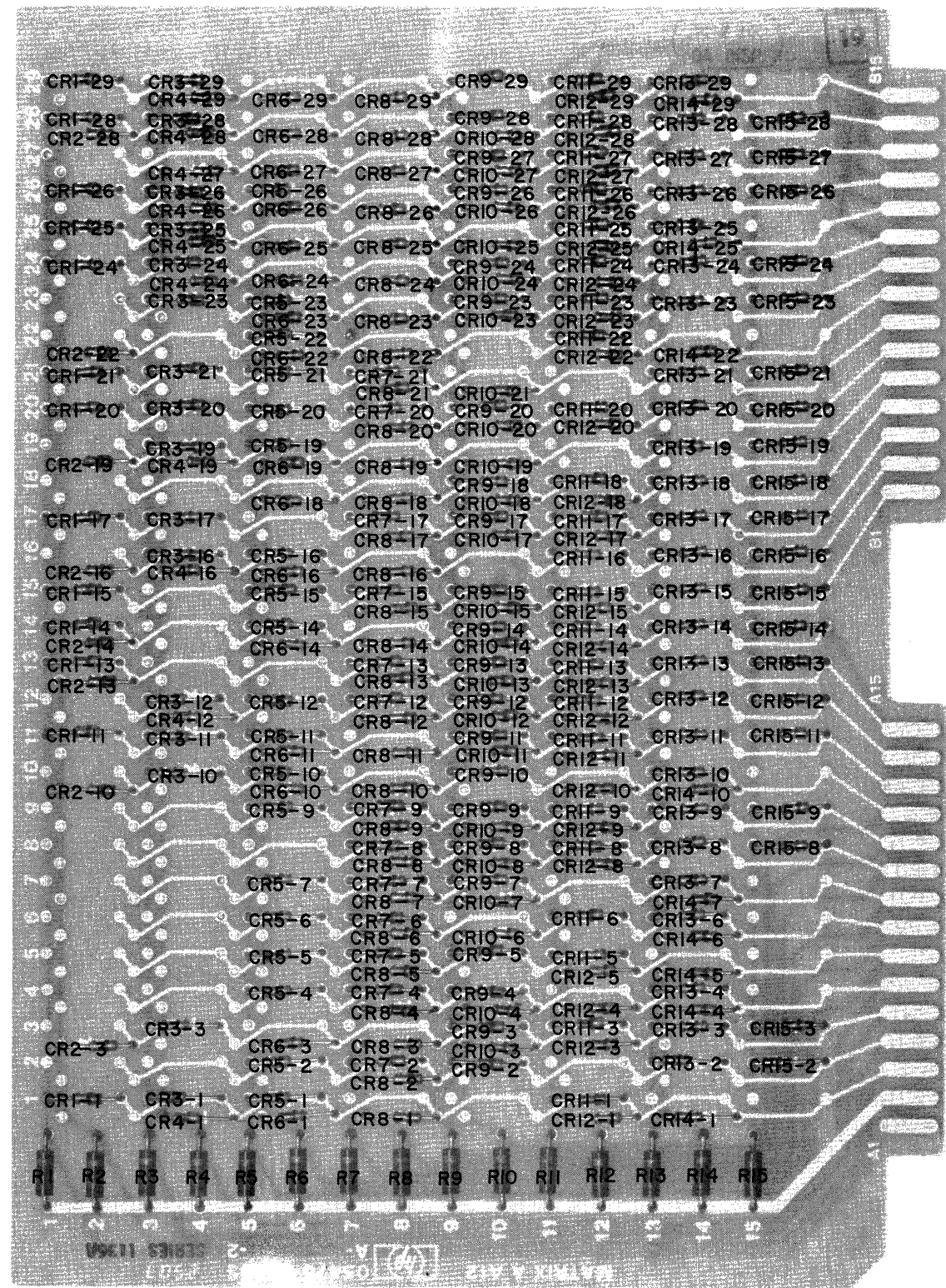


Figure 4-5
 5475A A12 MATRIX A ASSEMBLY
 4-15

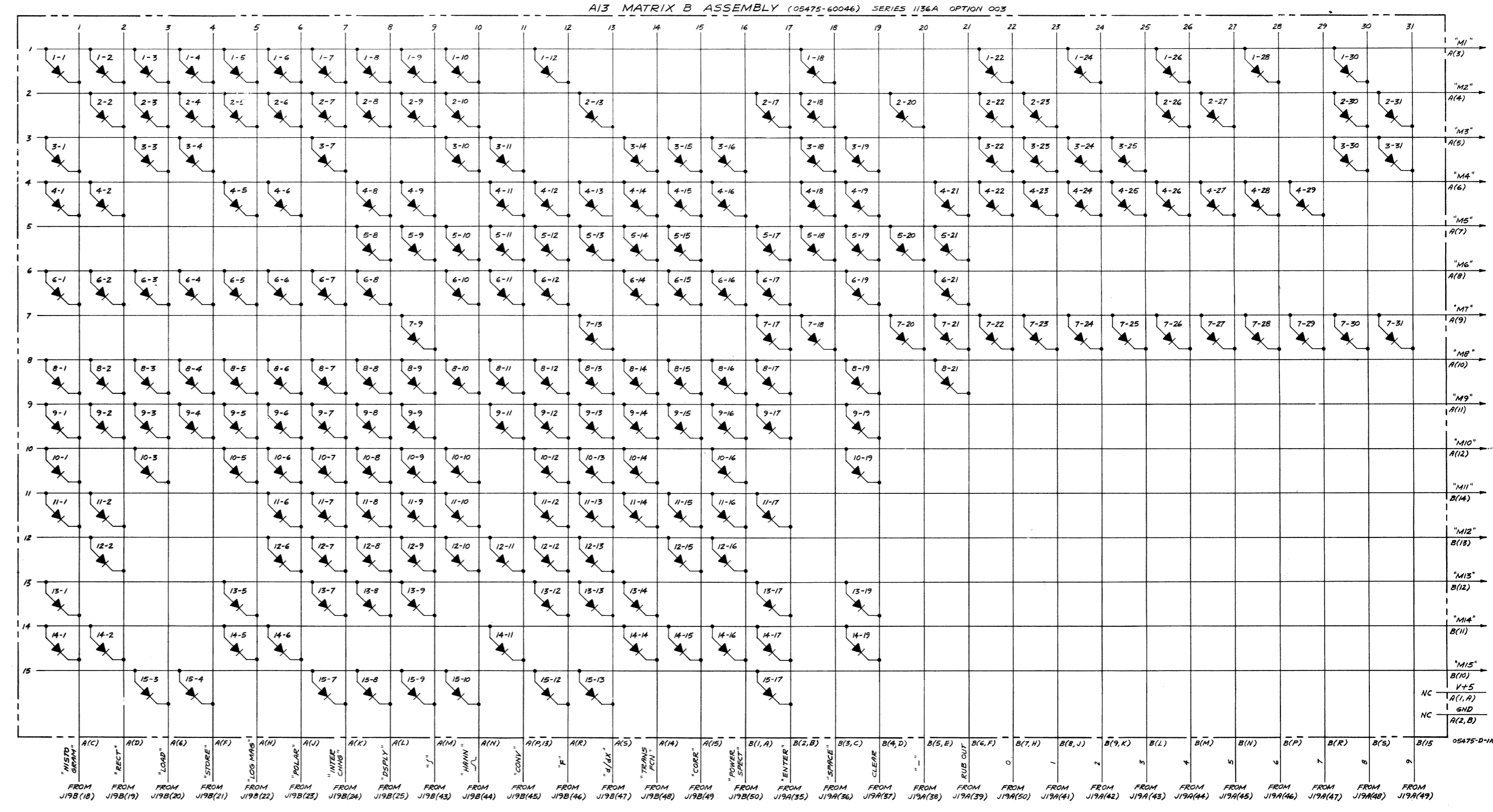
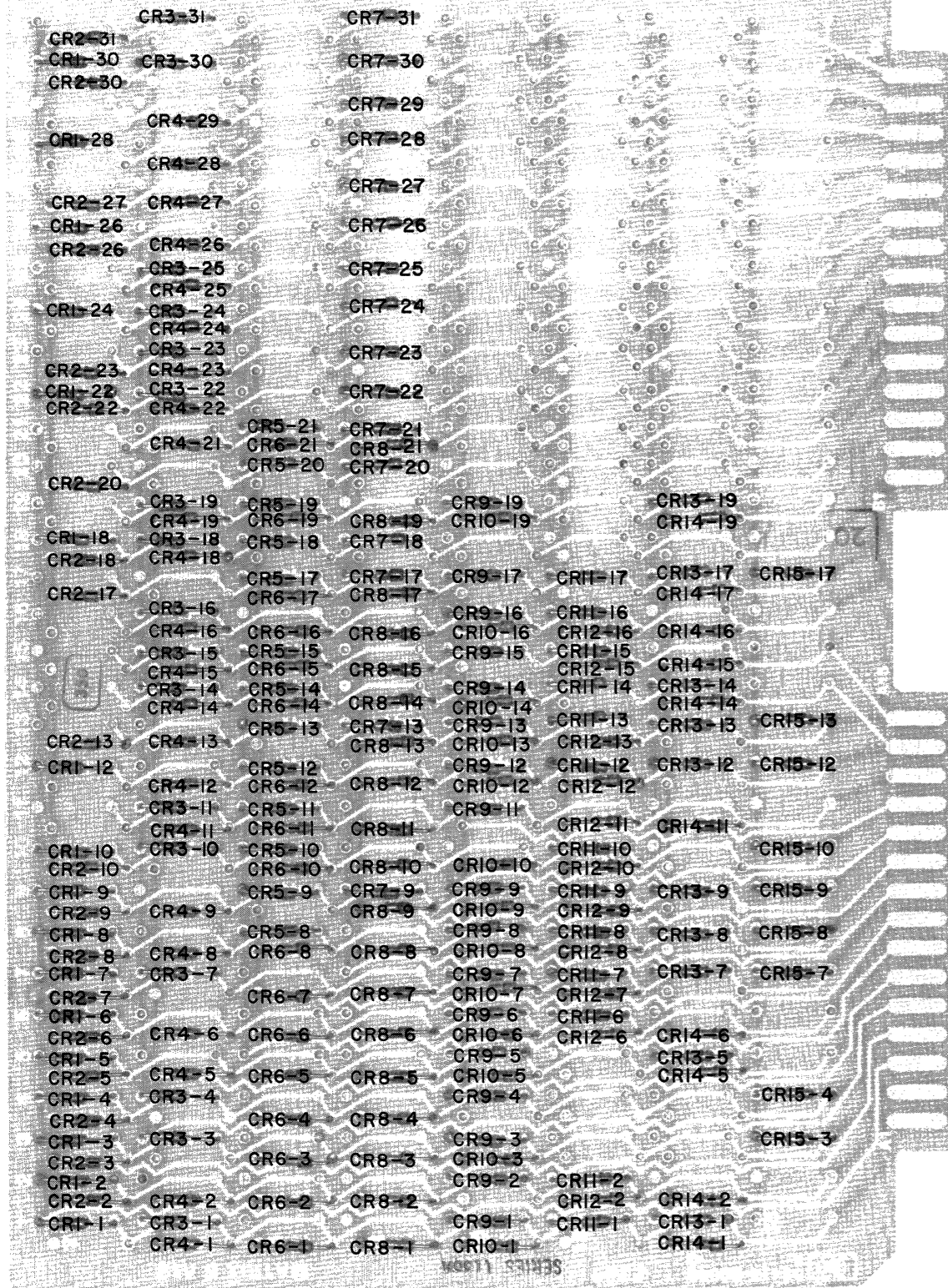


Figure 4-6
5475A A13 MATRIX B ASSEMBLY
4-17

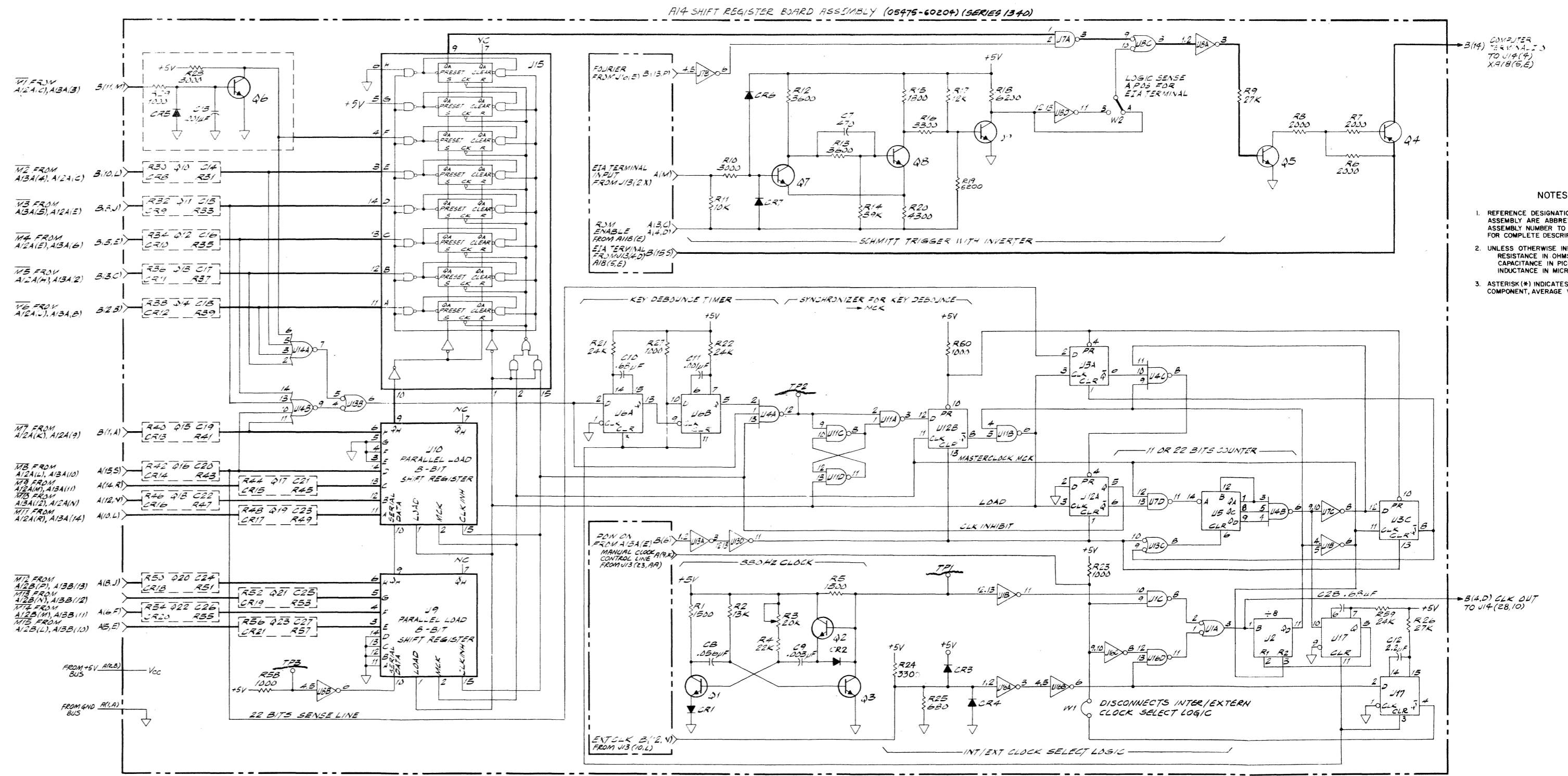
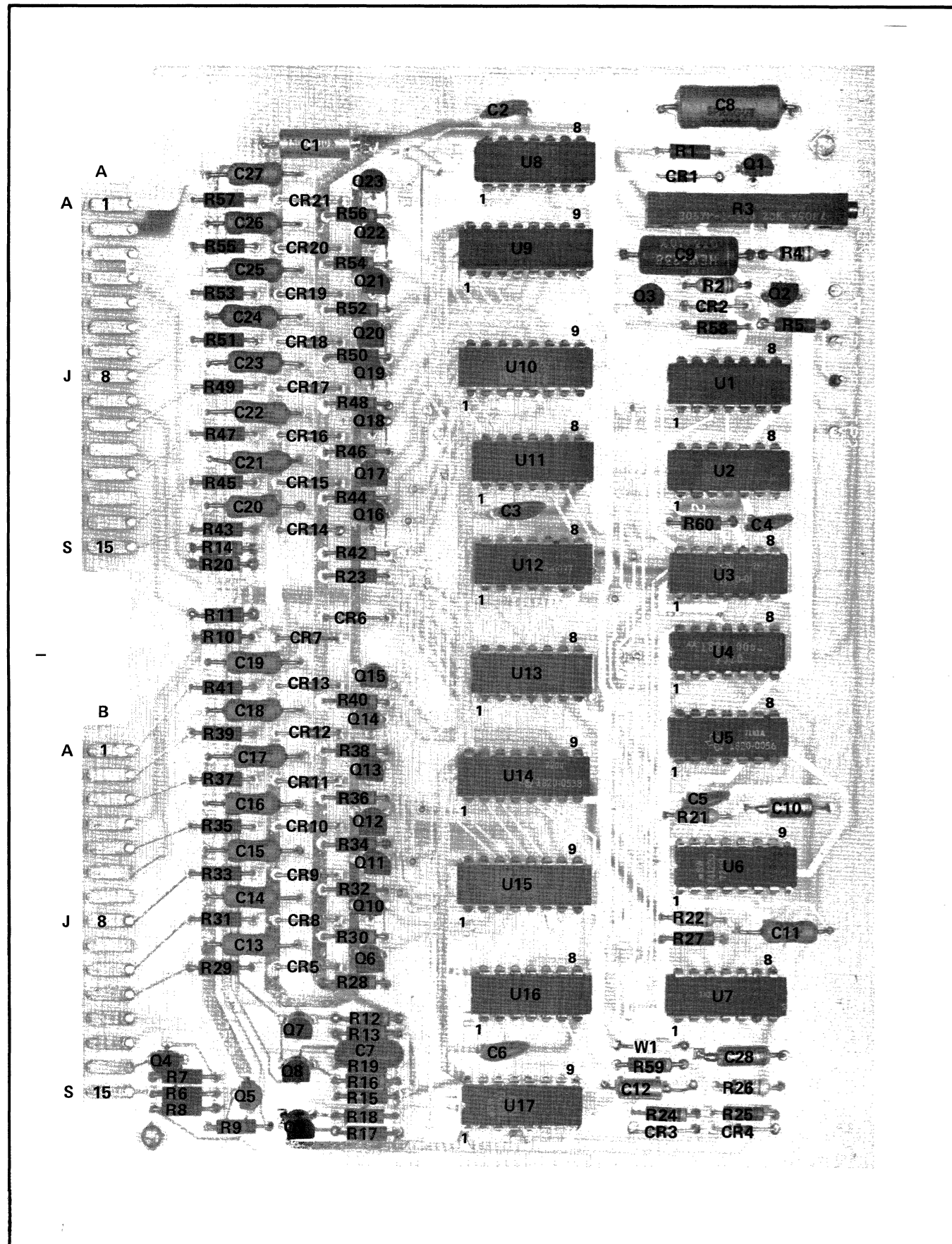
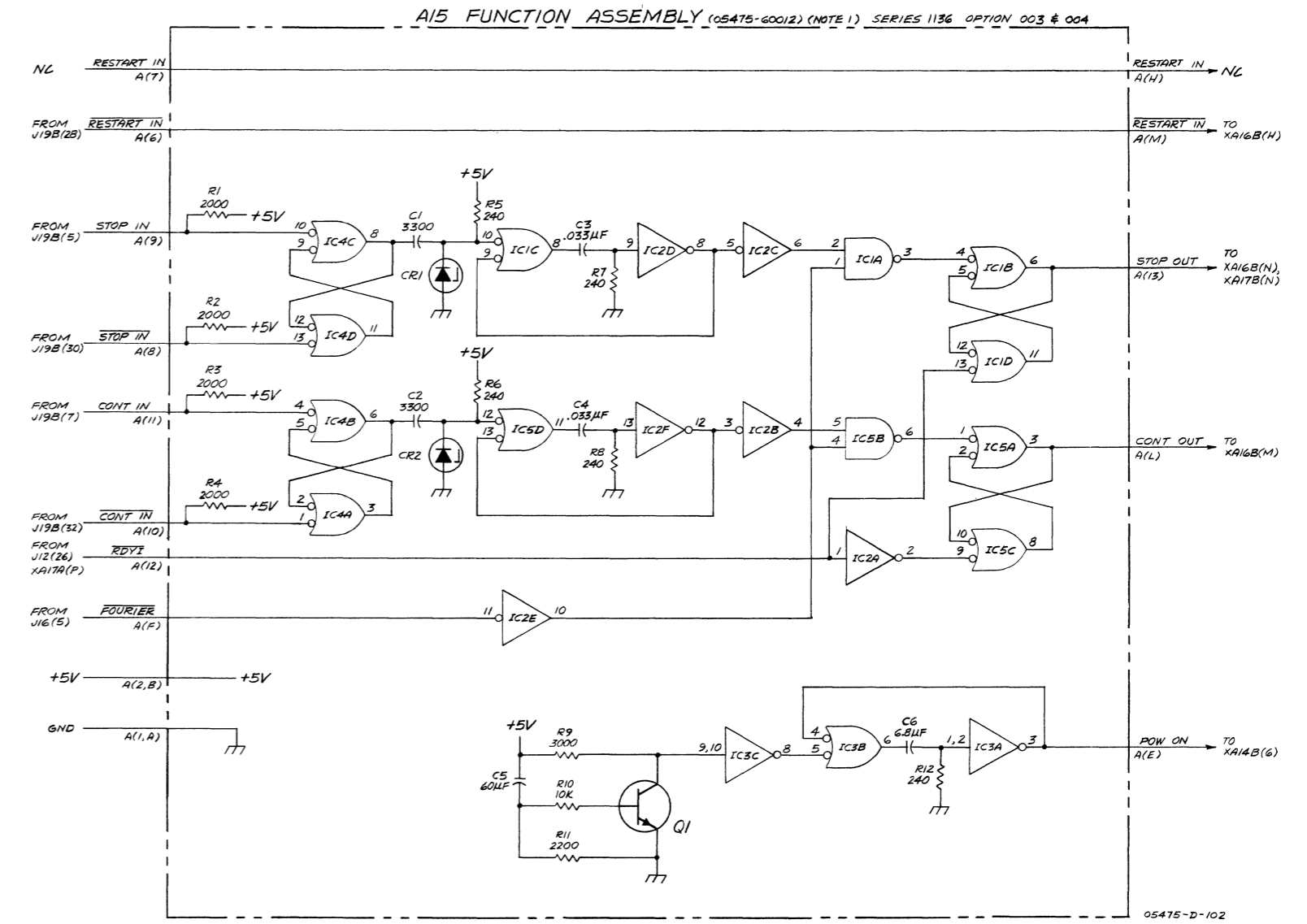
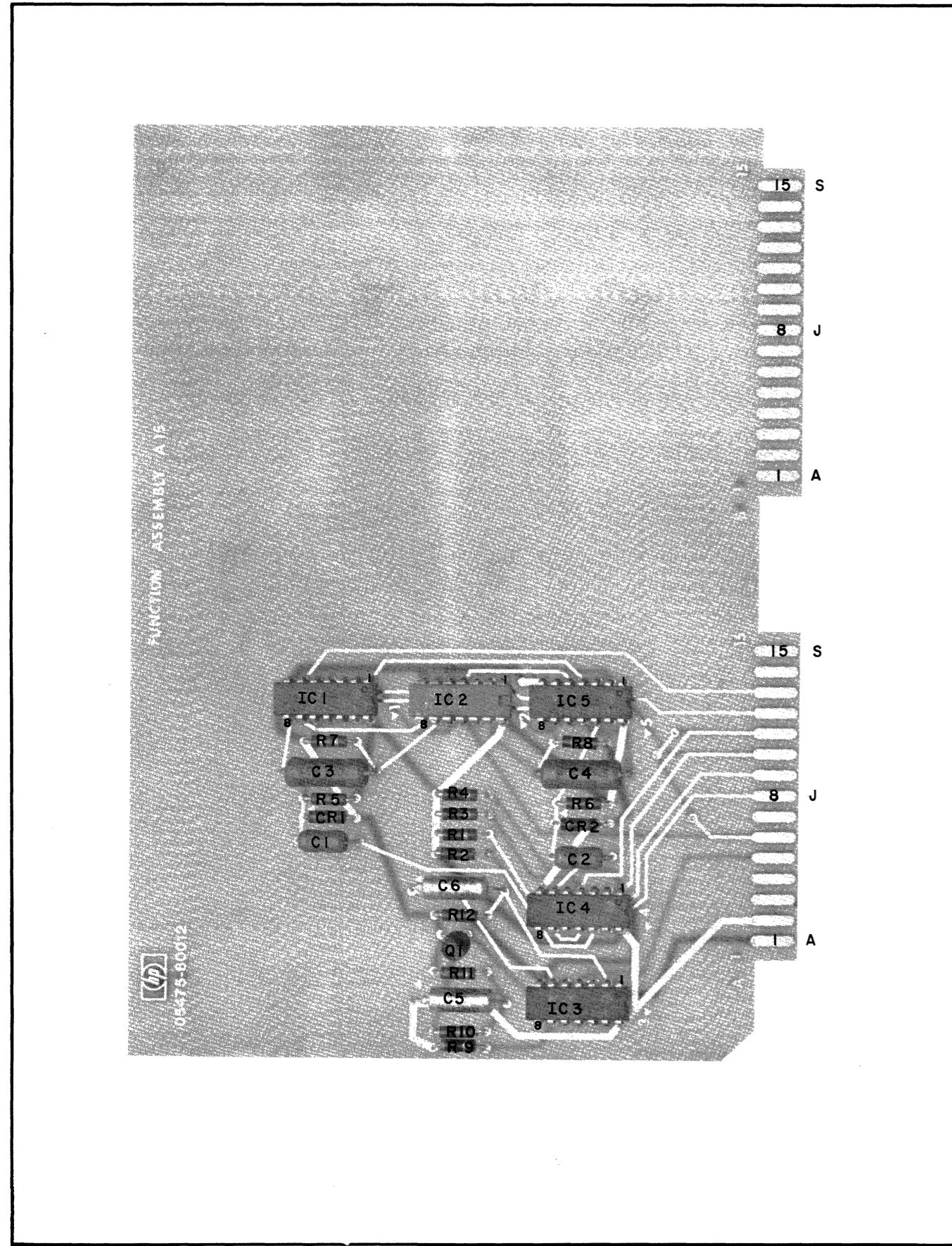


Figure 4-7
5475A A14 SHIFT REGISTER BOARD ASSEMBLY
(05475-60204)



- NOTES**
1. REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 2. UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS.

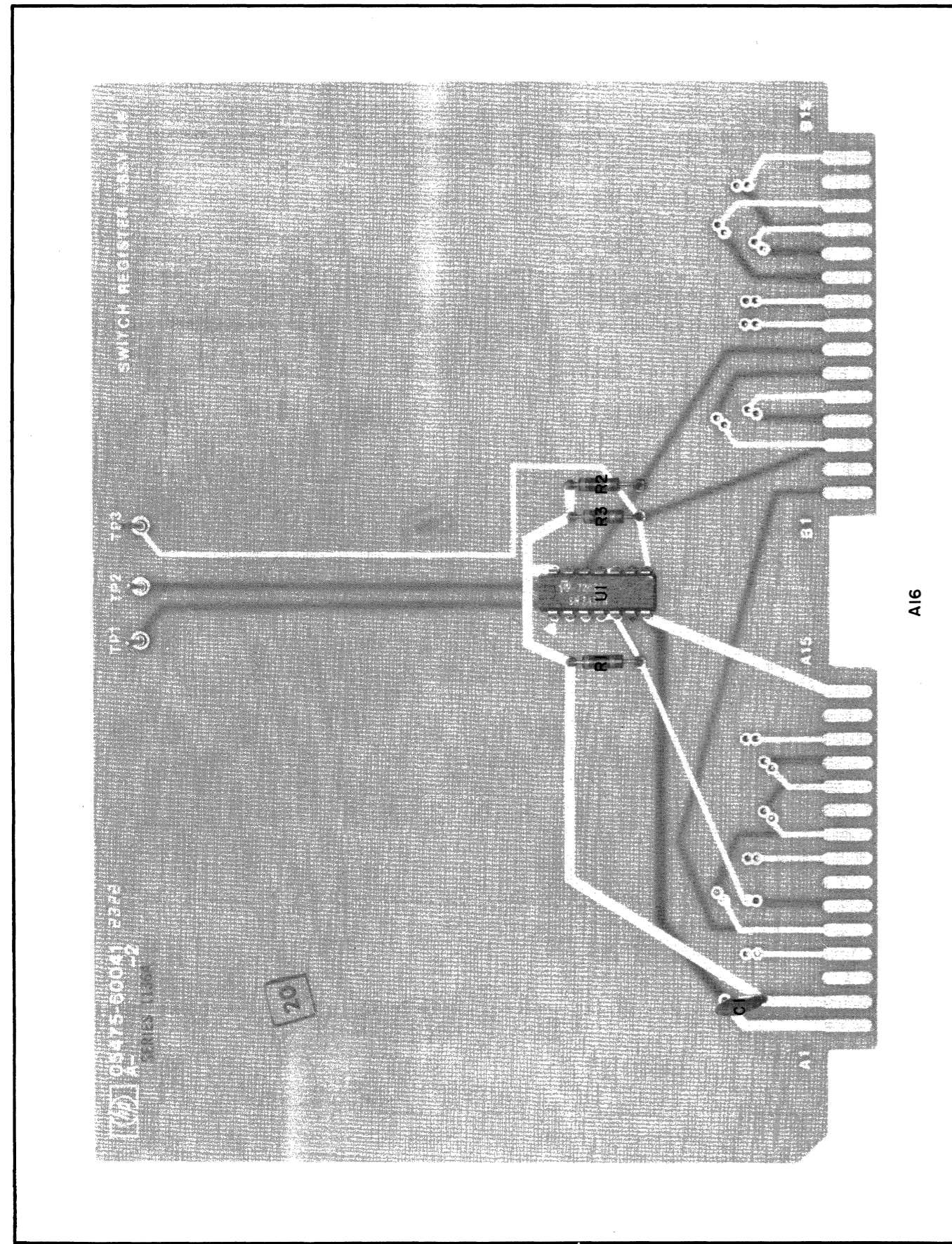
TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1, 2	1902 - 3024
IC1, 3-5	1820 - 0054
IC2	1820 - 0174
Q1	1854 - 0071

REFERENCE DESIGNATIONS

A15
C1 - 6
CR1, 2
IC1 - 5
Q1
R1 - 12

Figure 4-8
5475A A15 FUNCTION ASSEMBLY
4-21



A16

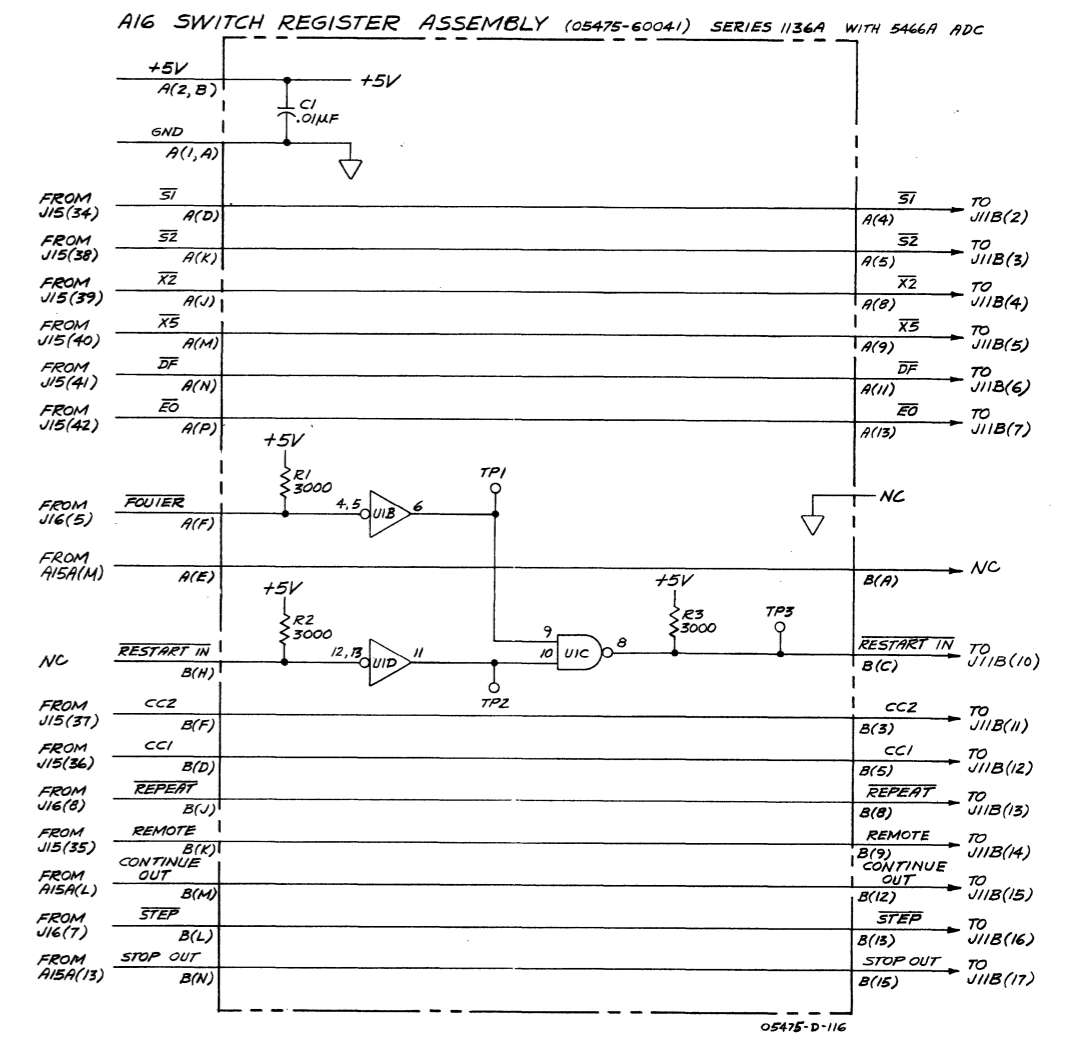
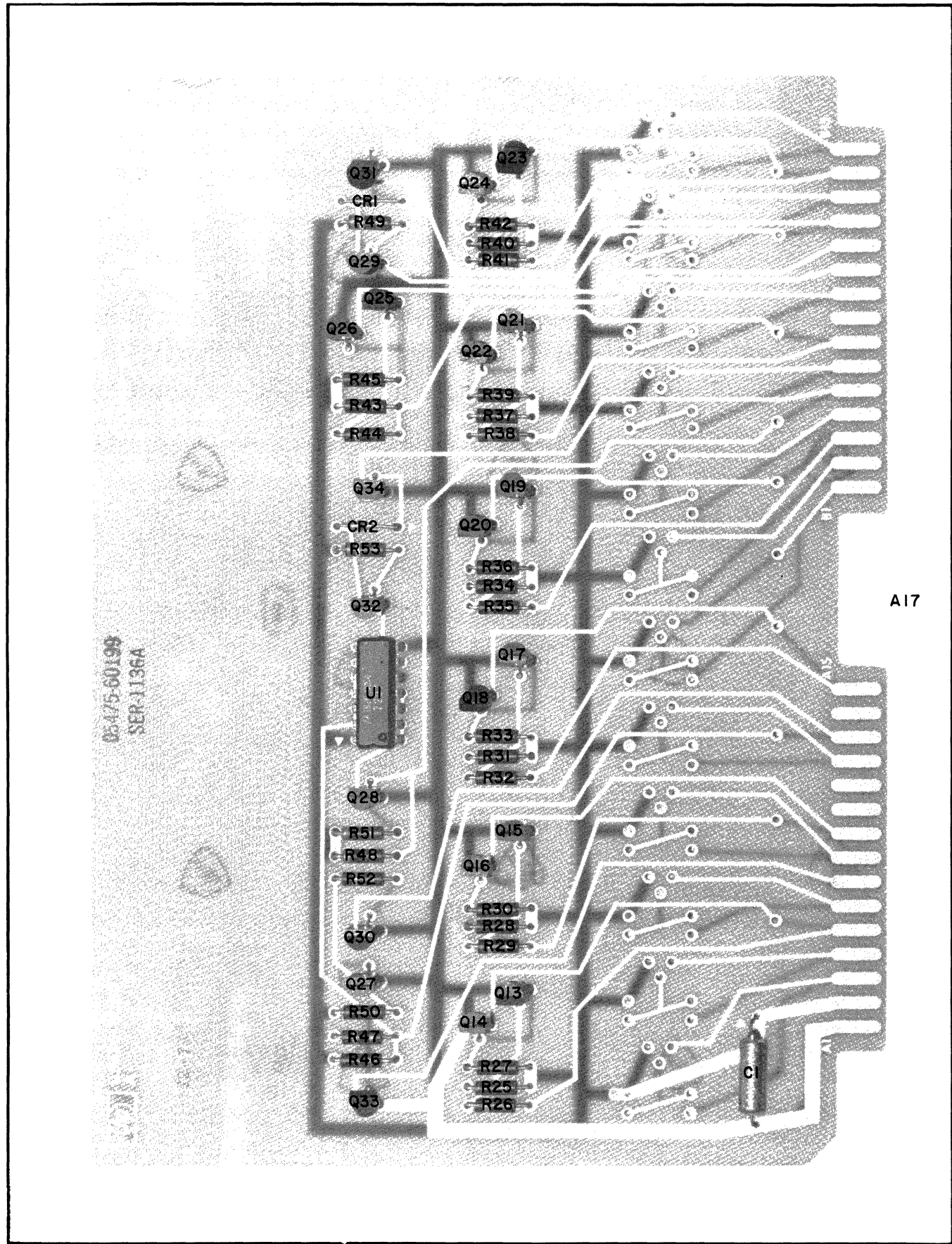
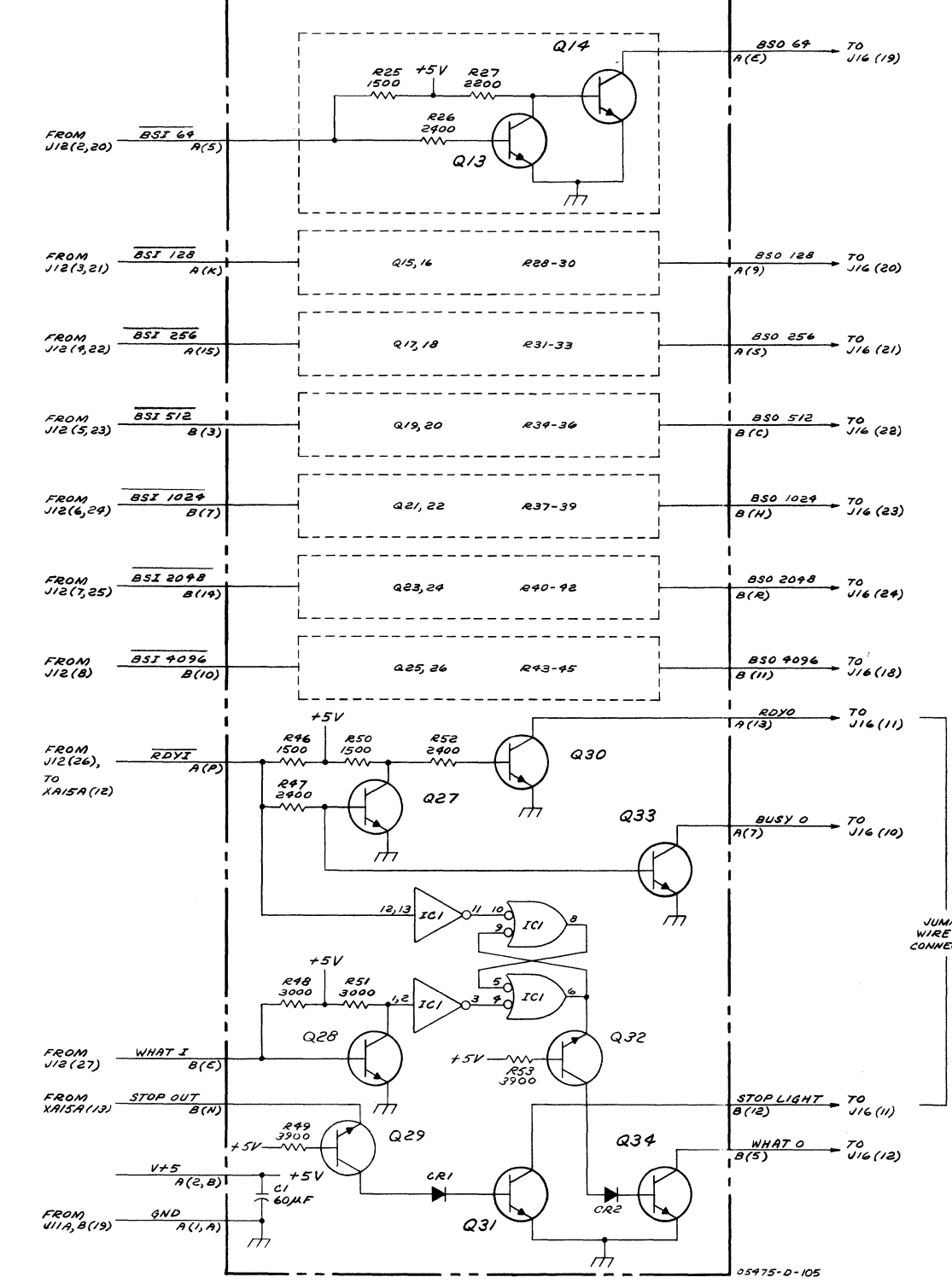


Figure 4-9
5475A A16 SWITCH REGISTER ASSEMBLY



A17 LIGHT DRIVER ASSEMBLY (05475-60199) (NOTE 1) SERIES 1136 (OPTION 001)



- NOTES**
- REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 - UNLESS OTHERWISE INDICATED: RESISTANCE IN OHMS; CAPACITANCE IN PICOFARADS;

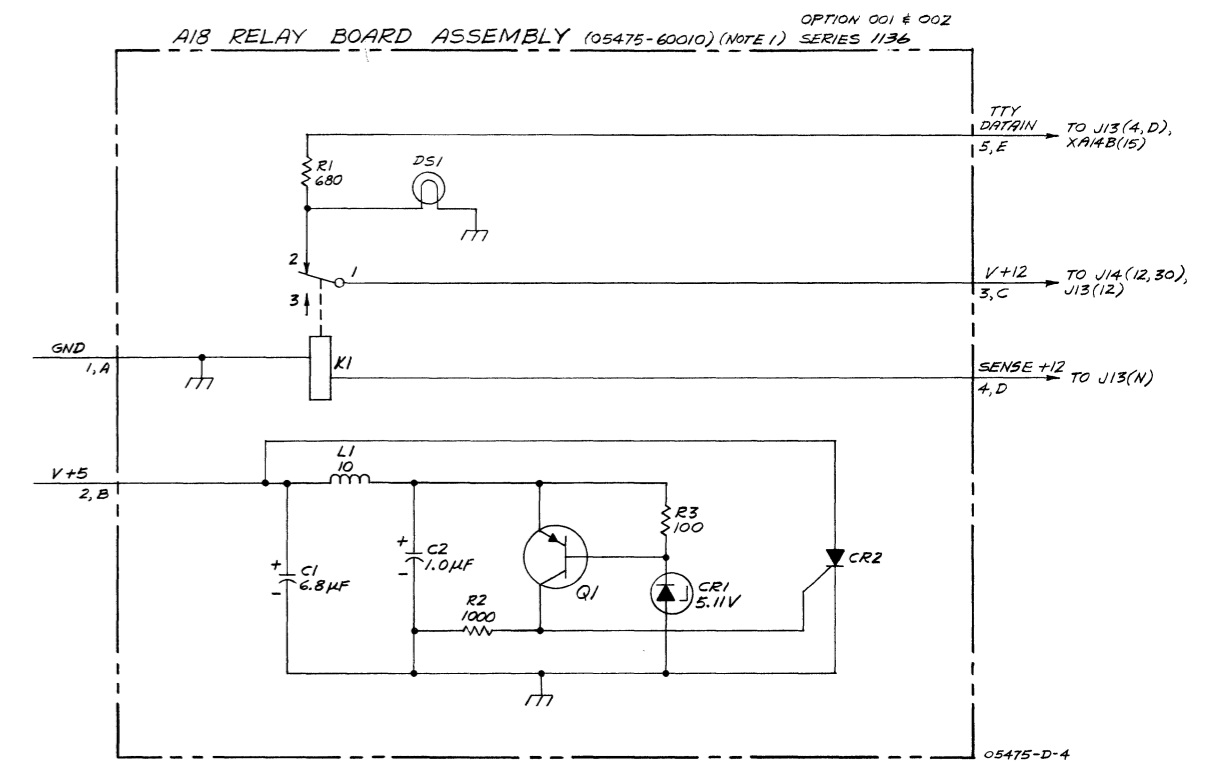
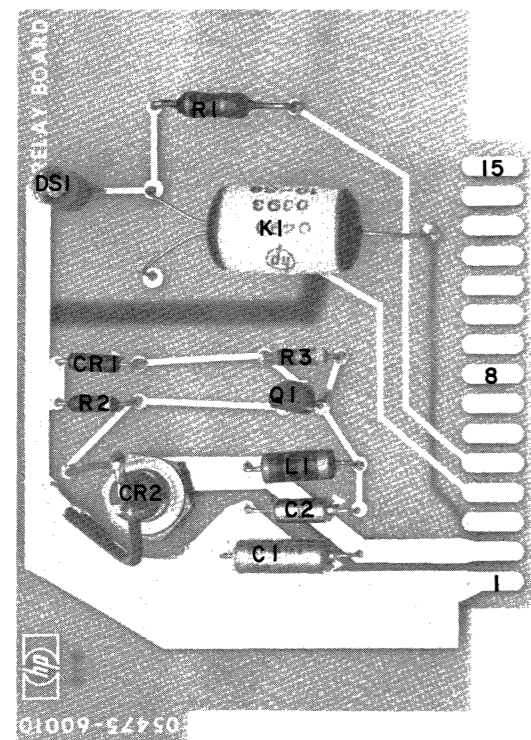
TABLE

REFERENCE DESIGNATIONS	H-P PART NO.
CR1,2	1901 - 0040
IC1	1820 - 0054
Q13-34	1854 - 0071

REFERENCE DESIGNATIONS

A17
C1
CR1,2
IC1
Q13-34
R25-53

Figure 4-10
5475A A17 LIGHT DRIVER ASSEMBLY
4-25



TABLE

REFERENCE DESIGNATIONS	HP PART NUMBER
CR1	1902-0041
CR2	1884-0063
Q1	1853-0020

- NOTES
- REFERENCE DESIGNATIONS WITHIN THIS ASSEMBLY ARE ABBREVIATED. ADD ASSEMBLY NUMBER TO ABBREVIATION FOR COMPLETE DESCRIPTION.
 - UNLESS OTHERWISE INDICATED:
RESISTANCE IN OHMS;
CAPACITANCE IN PICO FARADS;
INDUCTANCE IN MICROHENRIES

REFERENCE DESIGNATIONS

A18
C1, 2
CR1, 2
DS1
K1
L1
Q1
R1-3

Figure 4-11
5475A A18 RELAY BOARD ASSEMBLY

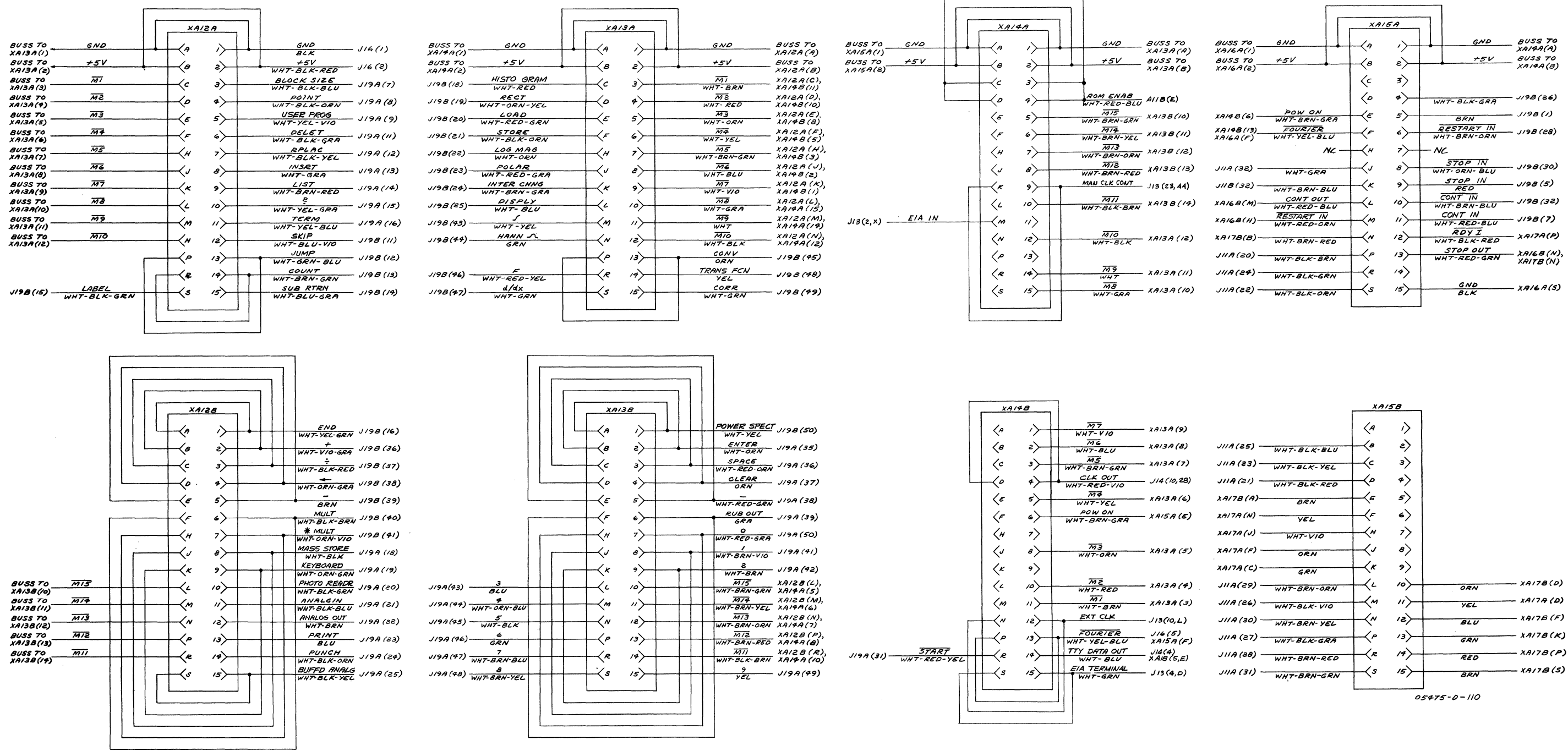
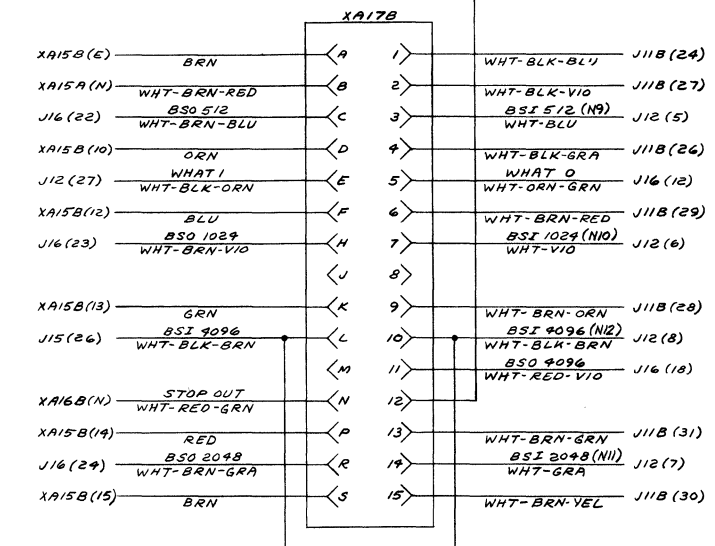
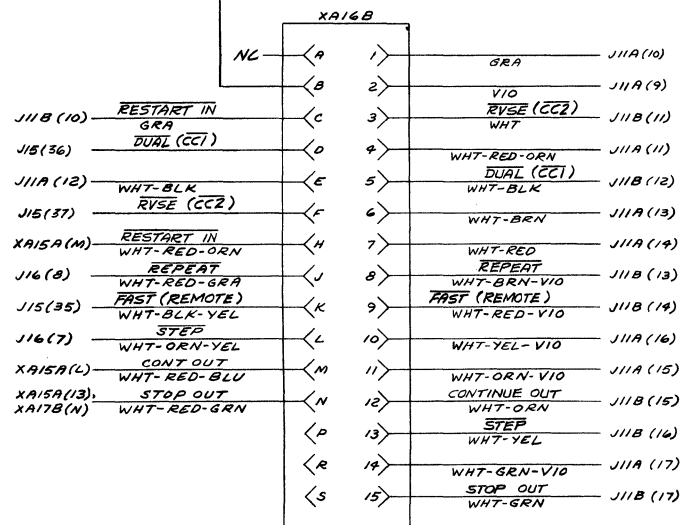
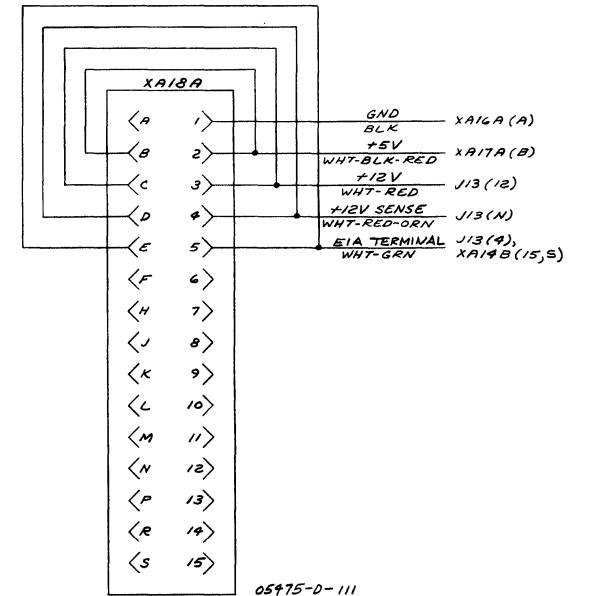
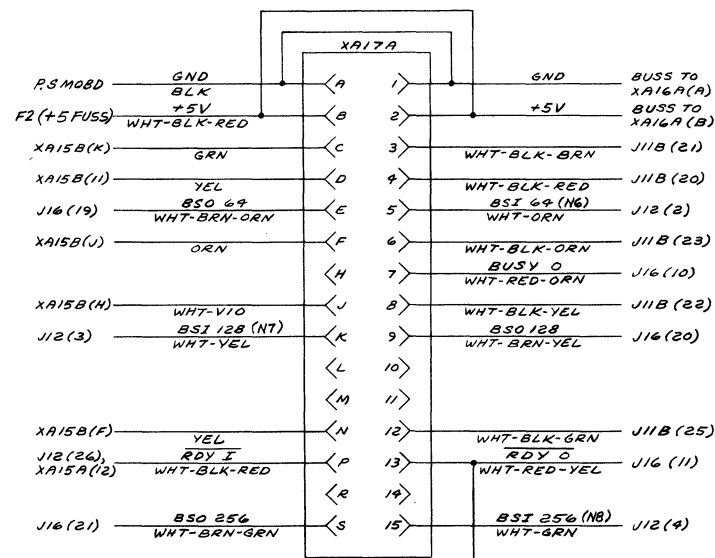
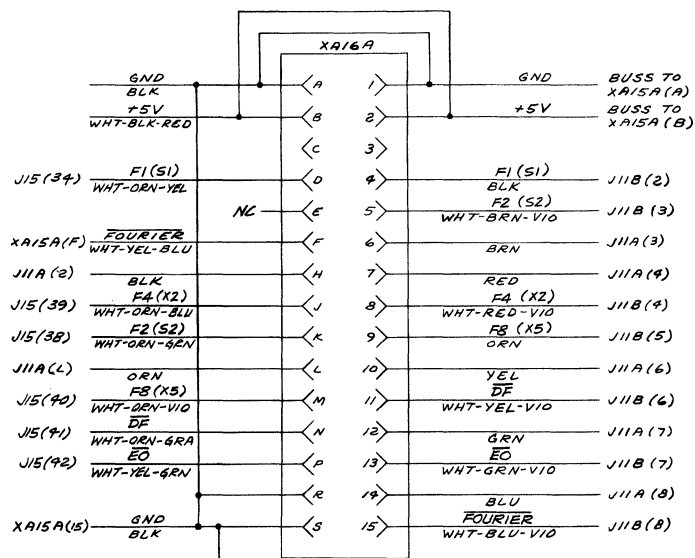
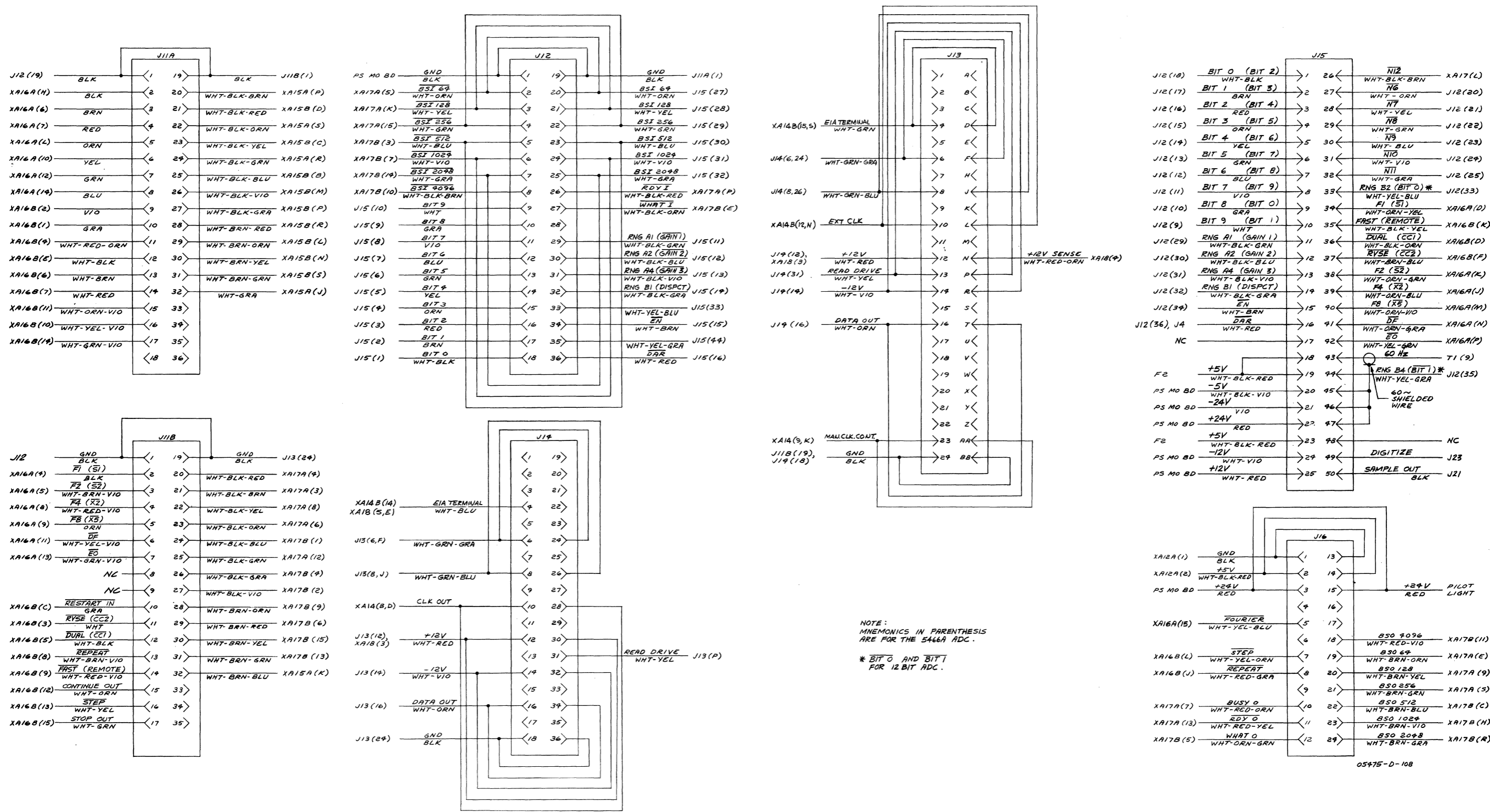


Figure 4-12
5475A XA12-XA15 CONNECTORS
WIRING DIAGRAM
(Sheet 1 of 2)



NOTE:
MNEMONICS IN PARENTHESIS
ARE FOR THE 5466A ADC.

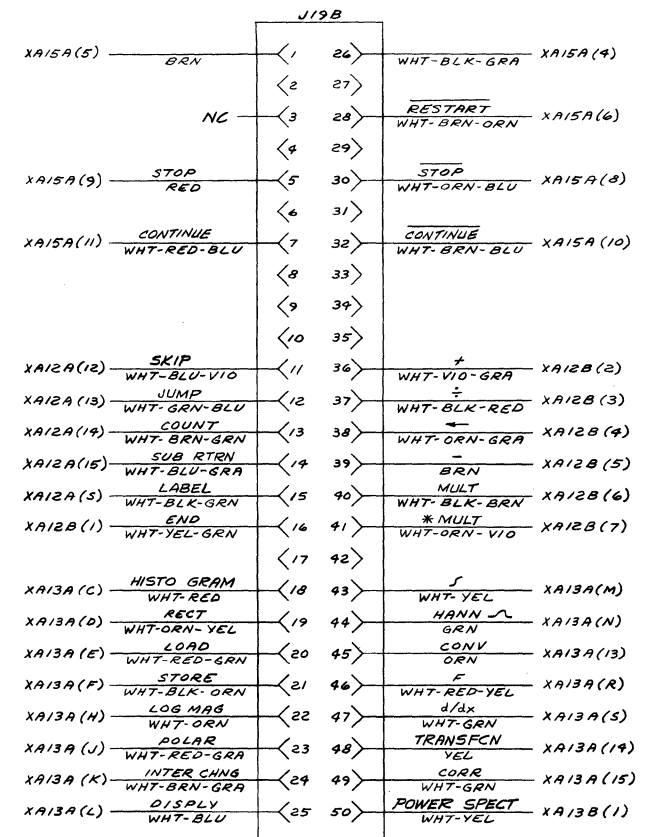
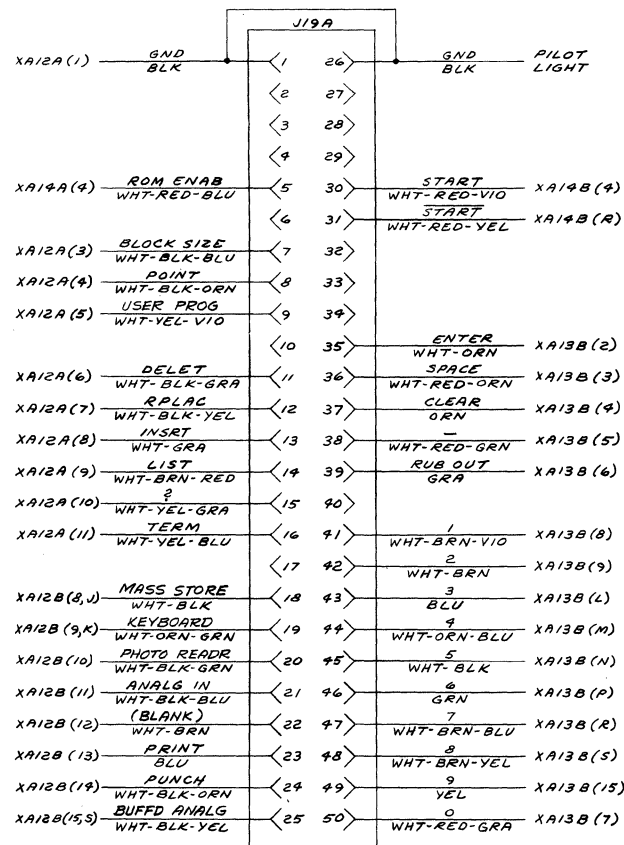
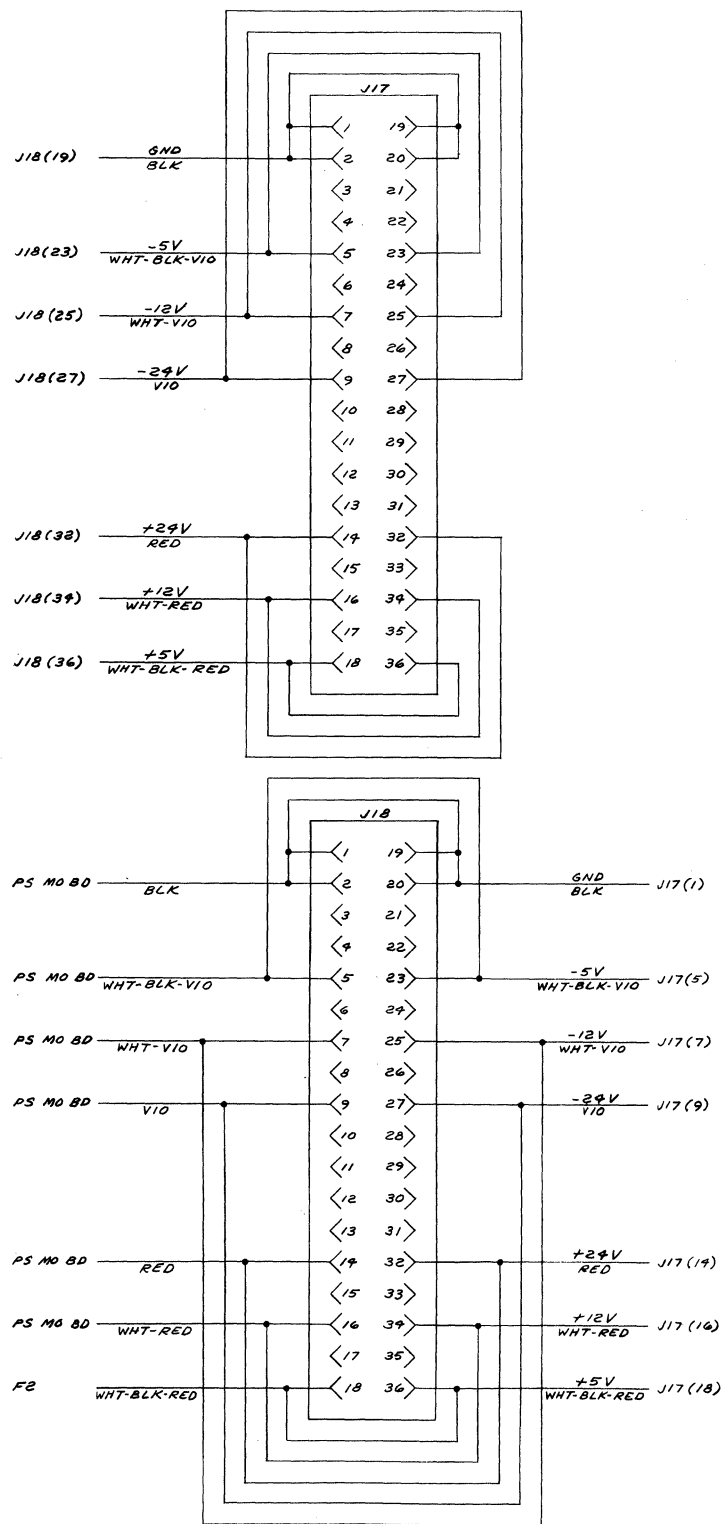
Figure 4-12
5475A XA16-XA18 CONNECTORS
WIRING DIAGRAM
(Sheet 2 of 2)



NOTE:
MNEMONICS IN PARENTHESIS
ARE FOR THE 5466A ADC.
* BIT 0 AND BIT 1
FOR 12 BIT ADC.

05475-D-108

Figure 4-13
5475A J11-J16 CONNECTORS
WIRING DIAGRAM
(Sheet 1 of 2)



05475-D-109

Figure 4-13
5475A J17-J19 CONNECTORS
WIRING DIAGRAM
(Sheet 2 of 2)

REPLACEABLE PARTS

This section contains the information required to order replacement parts for the Model 5475A Control Unit. To obtain replacement parts, address an order or inquiry to the nearest Hewlett-Packard Sales and Service Office. (Sales and Service offices are listed at the back of this manual.) Identify any required parts by the Hewlett-Packard part number. Note that not all parts are listed in these tables. Those parts that were deemed unlikely to ever require replacement were purposely excluded. To obtain a part that is not listed, include the following information in the inquiry:

- a. Instrument model number
- b. Instrument serial number
- c. Description of part
- d. Function and location of part.

Table 4-7 lists the reference designations and abbreviations, Table 4-8 lists the parts of the unit, and Table 4-9 lists the manufacturer by code.

Table 4-5. Abbreviations and Reference Designations

REFERENCE DESIGNATORS							
A	= assembly	F	= fuse	MP	= mechanical part	U	= integrated circuit
B	= motor	FL	= filter	P	= plug	V	= vacuum, tube, neon bulb, photocell, etc.
BT	= battery	IC	= integrated circuit	Q	= transistor	WR	= voltage regulator
C	= capacitor	J	= jack	R	= resistor	W	= cable
CP	= coupler	K	= relay	RT	= thermistor	X	= socket
CR	= diode	L	= inductor	S	= switch	Y	= crystal
DL	= delay line	LS	= loud speaker	T	= transformer	Z	= tuned cavity, network
DS	= device signaling (lamp)	M	= meter	TB	= terminal board		
E	= miscellaneous electronic part	MK	= microphone	TP	= test point		
ABBREVIATIONS							
A	= amperes	H	= henries	N/O	= normally open	RMO	= rack mount only
AFC	= automatic frequency control	HDW	= hardware	NOM	= nominal	RMS	= root-mean square
AMPL	= amplifier	HEX	= hexagonal	NPO	= negative positive zero (zero temperature coefficient)	RWV	= reverse working voltage
BFO	= beat frequency oscillator	HG	= mercury	NPN	= negative-positive-negative	S-B	= slow-blow
BE CU	= beryllium copper	HR	= hour(s)	NRFR	= not recommended for field replacement	SCR	= screw
BH	= binder head	HZ	= hertz	NSR	= not separately replaceable	SECT	= section(s)
BP	= bandpass	IF	= intermediate freq	OBD	= order by description	SEMICON	= semiconductor
BRS	= brass	IMPG	= impregnated	OH	= oval head	SI	= silicon
BWO	= backward wave oscillator	INCD	= incandescent	OX	= oxide	SIL	= silver
CCW	= counter-clockwise	INCL	= include(s)	P	= peak	SL	= slide
CER	= ceramic	INS	= insulation(ed)	PC	= printed circuit	SPG	= spring
CMO	= cabinet mount only	INT	= internal	PF	= picofarads = 10 ⁻¹² farads	SPL	= special
COEF	= coefficient	K	= kilo = 1000	PH BRZ	= phosphor bronze	SST	= stainless steel
COM	= common	LH	= left hand	PHL	= Phillips	SR	= split ring
COMP	= composition	LN	= linear taper	PIV	= peak inverse voltage	STL	= steel
COMPL	= complete	LK WASH	= lock washer	PNP	= positive-negative-positive	TA	= tantalum
CONN	= connector	LOG	= logarithmic taper	P/O	= part of	TD	= time delay
CP	= cadmium plate	LPF	= low pass filter	POLY	= polystyrene	TGI	= toggle
CRT	= cathode-ray tube	M	= milli = 10 ⁻³	PORC	= porcelain	THD	= thread
CW	= clockwise	MEG	= meg = 10 ⁶	POS	= position(s)	TI	= titanium
DEPC	= deposited carbon	MET FLM	= metal film	POT	= potentiometer	TOL	= tolerance
DR	= drive	MET OX	= metallic oxide	PP	= peak-to-peak	TRIM	= trimmer
ELECT	= electrolytic	MFR	= manufacturer	PT	= point	TWT	= traveling wave tube
ENCAP	= encapsulated	MHZ	= mega hertz	PWV	= peak working voltage	U	= micro = 10 ⁻⁶
EXT	= external	MINAT	= miniature	RECT	= rectifier	VAR	= variable
F	= farads	MOM	= momentary	RF	= radio frequency	VDCW	= dc working volts
FH	= flat head	MOS	= metal oxide substrate	RH	= round head or right hand	W /	= with
FIL H	= filler head	MTG	= mounting			W	= watts
FXD	= fixed	MY	= "mylar"			WIV	= working inverse voltage
G	= giga (10 ⁹)	N	= nano (10 ⁻⁹)			WW	= wirewound
GE	= germanium	N/C	= normally closed			W/O	= without
GL	= glass	NE	= neon				
GRD	= ground(ed)	NI PL	= nickel plate				

01194-14

Table 4-6. 5475A Replaceable Parts

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A1	05580-6001	1	BOARD ASSY:RECTIFIER	28480	05580-6001
A1C1	0150-0052	5	C:FXD CER 0.05 UF 20% 400VDCW	56289	33C17A
A1C2	0150-0052	5	C:FXD CER 0.05 UF 20% 400VDCW	56289	33C17A
A1C3	0150-0084	8	C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C4	0150-0084	8	C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C5	0150-0084	8	C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C6	0150-0084		C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C7	0150-0084		C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C8	0150-0084		C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C9	0150-0084		C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C10	0150-0084		C:FXD CER 0.1 UF +80-20% 100VDCW	72982	8131-100-651-104Z
A1C11	0150-0052		C:FXD CER 0.05 UF 20% 400VDCW	56289	33C17A
A1C12	0150-0052		C:FXD CER 0.05 UF 20% 400VDCW	56289	33C17A
A1CR1	1901-0416	12	DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR2	1901-0416	12	DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR3	1901-0416	12	DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR4	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR5	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR6	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR7	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR8	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR9	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR10	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR11	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1CR12	1901-0416		DIODE:SILICON 200PIV 3A	28480	1901-0416
A1R1	0757-0957	4	R:FXD FLM 24K OHM 2% 1/8W	28480	0757-0957
A1R2	0757-0948	4	R:FXD FLM 10K OHM 2% 1/8W	28480	0757-0948
A1R3	0757-0948	4	R:FXD FLM 10K OHM 2% 1/8W	28480	0757-0948
A1R4	0757-0948	4	R:FXD FLM 10K OHM 2% 1/8W	28480	0757-0948
A1R5	0757-0948	4	R:FXD FLM 10K OHM 2% 1/8W	28480	0757-0948
A1R6	0757-0957	4	R:FXD FLM 24K OHM 2% 1/8W	28480	0757-0957
A2	05580-6002	1	BOARD ASSY:REFERENCE	28480	05580-6002
A2C1	0160-0155	4	C:FXD MY 0.0033 UF 10% 200VDCW	56289	192P33292-PTS
A2C2	0180-0155	2	C:FXD ELECT 2.2 UF 20% 20VDCW	56289	150D225X0020A2-DYS
A2C3	0180-0228	2	C:FXD ELECT 22 UF 10% 15VDCW	56289	150D226X901582-DYS
A2C4	0160-0155	2	C:FXD MY 0.0033 UF 10% 200VDCW	56289	192P33292-PTS
A2C5	0180-0228	2	C:FXD ELECT 22 UF 10% 15VDCW	56289	150D226X901582-DYS
A2C6	0180-0155	2	C:FXD ELECT 2.2 UF 20% 20VDCW	56289	150D225X0020A2-DYS
A2CR1	1902-0071	2	DIODE:BREAKDOWN 9.0V 5%	28480	1902-0071
A2CR2	1902-0071	2	DIODE:BREAKDOWN 9.0V 5%	28480	1902-0071
A2Q1	1853-0051	1	TSTR:SI PNP	80131	2N4037
A2Q2	1854-0215	5	TSTR:SI NPN	80131	2N3904
A2Q3	1854-0215		TSTR:SI NPN	80131	2N3904
A2Q4	1854-0071	67	TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A2Q5	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A2Q6	1854-0039	1	TSTR:SI NPN	80131	2N3053
A2Q7	1853-0036	7	TSTR:SI PNP	80131	2N3906
A2Q8	1853-0036		TSTR:SI PNP	80131	2N3906
A2Q9	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A2Q10	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A2R1	0758-0093	2	R:FXD MET OX 56 OHM 5% 1/4W	28480	0758-0093
A2R2	0758-0032	2	R:FXD MET OX 820 OHM 5% 1/2W	28480	0758-0032
A2R3	0757-0928	2	R:FXD FLM 1.5K OHM 2% 1/8W	28480	0757-0928
A2R4	0757-0926	5	R:FXD FLM 1.2K OHM 2% 1/8W	28480	0757-0926
A2R5	0757-0940	9	R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A2R6	0757-0940	9	R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A2R7	0757-0940	9	R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A2R8	0757-0926		R:FXD FLM 1.2K OHM 2% 1/8W	28480	0757-0926
A2R9	0758-0093		R:FXD MET OX 56 OHM 5% 1/4W	28480	0758-0093
A2R10	0758-0032		R:FXD MET OX 820 OHM 5% 1/2W	28480	0758-0032
A2R11	0757-0928		R:FXD FLM 1.5K OHM 2% 1/8W	28480	0757-0928
A2R12	0757-0917	1	R:FXD FLM 510 OHM 2% 1/8W	28480	0757-0917
A2R13	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A2R14	0757-0935	1	R:FXD FLM 3K OHM 2% 1/8W	28480	0757-0935
A2R15	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A2R16	0757-0926		R:FXD FLM 1.2K OHM 2% 1/8W	28480	0757-0926

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A3	05475-60009	1	BOARD ASSY:MCTHER	28480	05475-60009
A3C1	0160-2055	12	C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C2	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C3	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C4	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C5	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C6	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A3C7	0180-0113	2	C:FXD ELECT TA 100UF +20-15% 30VDCW	56289	109D107C2030T2
A3C8	0180-0098	2	C:FXD ELECT 100 UF 20% 20VDCW	56289	150D107X0020S2-DYS
A3C9	0180-0137	2	C:FXD ELECT 100 UF 20% 10VDCW	56289	150D107X0010R2-DYS
A3C10	0180-0137		C:FXD ELECT 100 UF 20% 10VDCW	56289	150D107X0010R2-DYS
A3C11	0180-0098		C:FXD ELECT 100 UF 20% 20VDCW	56289	150D107X0020S2-DYS
A3C12	0180-0113		C:FXD ELECT TA 100UF +20-15% 30VDCW	56289	109D107C2030T2
A3CR1	1901-0040	526	DIODE:SILICON 50 MA 30 MV	07263	FD61088
A3CR2	1902-3268	2	DIODE BREAKDOWN:26.1V 5%	28480	1902-3268
A3CR3	1902-3193	2	DIODE BREAKDOWN:13.3V 5%	28480	1902-3193
A3CR4	1902-0049	8	DIODE:BREAKDOWN 6.19V 5%	04713	SZ10939-122
A3CR5	1902-0049		DIODE:BREAKDOWN 6.19V 5%	04713	SZ10939-122
A3CR6	1902-3193		DIODE BREAKDOWN:13.3V 5%	28480	1902-3193
A3CR7	1902-3268		DIODE BREAKDOWN:26.1V 5%	28480	1902-3268
A3CR8	1901-0415	6	DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3CR9	1901-0415		DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3CR10	1901-0415		DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3CR11	1901-0415		DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3CR12	1901-0415		DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3CR13	1901-0415		DIODE:SILICON 50 PIV 3A	28480	1901-0415
A3E1	9170-0029	1	CORE:FERRITE BEAD	02114	56-590-65A2/4A
A3Q1	1853-0036		TSTR:SI PNP	80131	2N3906
A3Q2	1853-0036		TSTR:SI PNP	80131	2N3906
A3Q3	1854-0022	4	TSTR:SI NRN	07263	S17843
A3R1	0757-0956	15	R:FXD FLM 22K OHM 2% 1/8W	28480	0757-0956
A3R2	0757-0945	1	R:FXD FLM 7.5K OHM 2% 1/8W	28480	0757-0945
A3R3	0757-0946	1	R:FXD FLM 8.2K OHM 2% 1/8W	28480	0757-0946
A3R4	0757-0939	7	R:FXD FLM 4.3K OHM 2% 1/8W	28480	0757-0939
A3R5	0757-0198	2	R:FXD MET FLM 100 OHM 1% 1/2W	28480	0757-0198
A3R6	0757-0178	4	R:FXD MET FLM 100 OHM 1% 1/4W	28480	0757-0178
A3R7	0757-0178		R:FXD MET FLM 100 OHM 1% 1/4W	28480	0757-0178
A3R8	0757-0178		R:FXD MET FLM 100 OHM 1% 1/4W	28480	0757-0178
A3R9	0757-0178		R:FXD MET FLM 100 OHM 1% 1/4W	28480	0757-0178
A3R10	0757-0198		R:FXD MET FLM 100 OHM 1% 1/2W	28480	0757-0198
A3R11	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A3R12	0757-0932	2	R:FXD MET FLM 2.2K OHM 2% 1/8W	28480	0757-0932
A3R13	0757-0920	2	R:FXD FLM 680 OHM 2% 1/8W	28480	0757-0920
A3R14	0757-0920		R:FXD FLM 680 OHM 2% 1/8W	28480	0757-0920
A3R15	0757-0932		R:FXD MET FLM 2.2K OHM 2% 1/8W	28480	0757-0932
A3R16	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A3R17	0812-0017	2	R:FXD WW 0.25 OHM 5% 3W	28480	0812-0017
A3R18	0698-3203	2	R:FXD MET FLM 4530 OHM 1% 1/4W	28480	0698-3203
A3R19	0811-2490	4	R:FXD WW 0.1 OHM 3% 5W	28480	0811-2490
A3R20	0698-0084	2	R:FXD MET FLM 2.15K OHM 1% 1/8W	28480	0698-0084
A3R21	0811-2490		R:FXD WW 0.1 OHM 3% 5W	28480	0811-2490
A3R22	0757-0419	2	R:FXD MET FLM 681 OHM 1% 1/8W	28480	0757-0419
A3R23	0811-2490		R:FXD WW 0.1 OHM 3% 5W	28480	0811-2490
A3R24	0757-0419		R:FXD MET FLM 681 OHM 1% 1/8W	28480	0757-0419
A3R25	0811-2490		R:FXD WW 0.1 OHM 3% 5W	28480	0811-2490
A3R26	0698-0084		R:FXD MET FLM 2.15K OHM 1% 1/8W	28480	0698-0084
A3R27	0812-0017		R:FXD WW 0.25 OHM 5% 3W	28480	0812-0017
A3R28	0698-3203		R:FXD MET FLM 4530 OHM 1% 1/4W	28480	0698-3203
A3R29	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A3R30	0757-0926		R:FXD FLM 1.2K OHM 2% 1/8W	28480	0757-0926
A3R31	0757-0911	2	R:FXD FLM 300 OHM 2% 1/8W	28480	0757-0911
A3R32	0757-0911		R:FXD FLM 300 OHM 2% 1/8W	28480	0757-0911
A3R33	0757-0926		R:FXD FLM 1.2K OHM 2% 1/8W	28480	0757-0926
A3R34	0757-0940		R:FXD FLM 4700 OHM 2% 1/8W	28480	0757-0940
A3XA2	1251-1388	4	CONNECTOR:PC (2 X 15) 30 CONTACT	71785	252-15-30-008
A3XA4	1251-1388		CONNECTOR:PC (2 X 15) 30 CONTACT	71785	252-15-30-008
A3XA5	1251-1388		CONNECTOR:PC (2 X 15) 30 CONTACT	71785	252-15-30-008
A3XA6	1251-1388		CONNECTOR:PC (2 X 15) 30 CONTACT	71785	252-15-30-008

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A4	05580-6004	3	BOARD ASSY:REGULATOR A5 AND A6, SAME AS A4.	28480	05580-6004
A4C1	0180-0230	6	C:FXD ELECT 1.0 UF 20% 50VDCW	56289	150D105X0050A2-DYS
A4C5	0180-0230		C:FXD ELECT 1.0 UF 20% 50VDCW	56289	150D105X0050A2-DYS
A4CR1	1901-0040		DIODE:SILICON 50 MA 30 WV	07263	FDG1088
A4CR2	1902-0049		DIODE:BREAKDOWN 6.19V 5%	04713	SZ10939-122
A4CR3	1901-0040		DIODE:SILICON 50 MA 30 WV	07263	FDG1088
A4CR4	1902-0049		DIODE:BREAKDOWN 6.19V 5%	04713	SZ10939-122
A4CR5	1901-0040		DIODE:SILICON 50 MA 30 WV	07263	FDG1088
A4Q1	1854-0215		TSTR:SI NPN	80131	2N3904
A4Q2	1854-0071	3	TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4Q3	1853-0012		TSTR:SI PNP	80131	2N2904A
A4Q4	1853-0020	20	TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q5	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4Q6	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4Q7	1853-0020		TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q8	1853-0020		TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q9	1853-0036		TSTR:SI PNP	80131	2N3906
A4Q10	1853-0020		TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q11	1854-0022		TSTR:SI NPN	07263	S17843
A4Q12	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4Q13	1853-0020		TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q14	1853-0020		TSTR:SI PNP(SELECTED FROM 2N3702)	28480	1853-0020
A4Q15	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4Q16	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A4R1	0757-0939		R:FXD FLM 4.3K OHM 2% 1/8W	28480	0757-0939
A4R2	2100-1755	6	R:VAR WW 100 OHM 5% TYPE V 1W	28480	2100-1755
A4R3	0757-0924	18	R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R4	0757-0929	6	R:FXD FLM 1.6K OHM 2% 1/8W	28480	0757-0929
A4R5	0757-0941	6	R:FXD FLM 5.1K OHM 2% 1/8W	28480	0757-0941
A4R6	0757-0956		R:FXD FLM 22K OHM 2% 1/8W	28480	0757-0956
A4R7	0757-0947	6	R:FXD FLM 9.1K OHM 2% 1/8W	28480	0757-0947
A4R8	0757-0893	6	R:FXD FLM 51 OHM 2% 1/8W	28480	0757-0893
A4R9	0757-0907	6	R:FXD FLM 200 OHM 2% 1/8W	28480	0757-0907
A4R10	0757-0346	10	R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
A4R11	0757-0933	3	R:FXD FLM 2.4K OHM 2% 1/8W	28480	0757-0933
A4R12	0757-0934	6	R:FXD FLM 2.7K OHM 2% 1/8W	28480	0757-0934
A4R13	0757-0924		R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R14	2100-1757	6	R:VAR WW 500 OHM 5% TYPE V 1W	28480	2100-1757
A4R15	0698-5669	6	R:FXD MET FLM 1.5K OHM 0.25% 1/8W	28480	0698-5669
A4R16	0811-1219	6	R:FXD WW 250 OHM 5% 3W	28480	0811-1219
A4R17	0757-0960	12	R:FXD FLM 33K OHM 2% 1/8W	28480	0757-0960
A4R18	0757-0924		R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R19	0757-0956		R:FXD FLM 22K OHM 2% 1/8W	28480	0757-0956
A4R20	0757-0960		R:FXD FLM 33K OHM 2% 1/8W	28480	0757-0960
A4R21	0757-0939		R:FXD FLM 4.3K OHM 2% 1/8W	28480	0757-0939
A4R22	2100-1755		R:VAR WW 100 OHM 5% TYPE V 1W	28480	2100-1755
A4R24	0757-0929		R:FXD FLM 1.6K OHM 2% 1/8W	28480	0757-0929
A4R25	0757-0924		R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R25	0757-0941		R:FXD FLM 5.1K OHM 2% 1/8W	28480	0757-0941
A4R26	0757-0956		R:FXD FLM 22K OHM 2% 1/8W	28480	0757-0956
A4R27	0757-0947		R:FXD FLM 9.1K OHM 2% 1/8W	28480	0757-0947
A4R28	0757-0893		R:FXD FLM 51 OHM 2% 1/8W	28480	0757-0893
A4R29	0757-0907		R:FXD FLM 200 OHM 2% 1/8W	28480	0757-0907
A4R30	0757-0346		R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
A4R32	0757-0924		R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R33	2100-1757		R:VAR WW 500 OHM 5% TYPE V 1W	28480	2100-1757
A4R34	0698-5669		R:FXD MET FLM 1.5K OHM 0.25% 1/8W	28480	0698-5669
A4R35	0811-1219		R:FXD WW 250 OHM 5% 3W	28480	0811-1219
A4R36	0757-0960		R:FXD FLM 33K OHM 2% 1/8W	28480	0757-0960
A4R37	0757-0934		R:FXD FLM 2.7K OHM 2% 1/8W	28480	0757-0934
A4R37	0757-0924		R:FXD MET FLM 1K OHM 2% 1/8W	28480	0757-0924
A4R38	0757-0956		R:FXD FLM 22K OHM 2% 1/8W	28480	0757-0956
A4R39	0757-0960		R:FXD FLM 33K OHM 2% 1/8W	28480	0757-0960
A5			SAME AS A4, USE PREFIX A5		
A6			SAME AS A4, USE PREFIX A6		

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
All	05475-60048	1	KEYBOARD ASSEMBLY	28480	05475-60048
A11A1	05475-60195	1	BCARD ASSEMBLY, SWITCH	28480	05475-60195
A11A1S1- A11A1S60	3101-1238	60	SWITCH-SENS SPST-NC MINTR .002A 15VDC	28480	3101-1238
A11A1S61- A11A1S63	3101-1626	3	SWITCH, SENSITIVE SPDT	28480	3101-1626
A11DS1-10A	1450-0745	10	LIGHT-IND INCANDESCENT WHT TL LENS	28480	1450-0745
	1450-0148	10	RETAINER-PUSH ON .28-DIA BLK STL	72765	763
A11J16 (P/O W1)	1251-0293	1	CONNECTOR 24-PIN M MICRO RIBBON	71785	57-30240
A11J19A (P/O W2)	1251-0102	2	CONNECTOR 50-PIN M MICRO RIBBON	71785	57-0993-01-375
A11J19B (P/O W2)	1251-0102	1	CONNECTOR 50-PIN M MICRO RIBBON	71785	57-0993-01-375
(P/O W2)	5040-5422	1	HCCD, CCONNECTOR	28480	5040-5422
(P/O W2)	5040-5423	1	HCCD, CCONNECTOR	28480	5040-5423
A11MP1	05475-60127	1	KEY ASSEMBLY, BLOCK-SIZE	28480	05475-60127
A11MP2	05475-60139	1	KEY ASSEMBLY, DELETE	28480	05475-60139
A11MP3	05475-60142	1	KEY ASSEMBLY, LIST	28480	05475-60142
A11MP4	05475-60182	1	KEY ASSEMBLY, SKIP	28480	05475-60182
A11MP5	05475-60132	1	KEY ASSEMBLY, SUB-RTRN	28480	05475-60132
A11MP6	05475-60160	1	KEY ASSEMBLY, PLUS SIGN	28480	05475-60160
A11MP7	05475-60165	2	KEY ASSEMBLY, MINUS SIGN	28480	05475-60165
A11MP8	05475-60136	1	KEY ASSEMBLY, * MULT	28480	05475-60136
A11MP9	05475-60162	1	KEY ASSEMBLY, LEFT ARROW	28480	05475-60162
A11MP10	05475-60152	1	KEY ASSEMBLY, END	28480	05475-60152
A11MP11	05475-60147	1	KEY ASSEMBLY, COUNT	28480	05475-60147
A11MP12	05475-60143	1	KEY ASSEMBLY, TERM	28480	05475-60143
A11MP13	05475-60141	1	KEY ASSEMBLY, INSRT	28480	05475-60141
A11MP14	05475-60176	1	KEY ASSEMBLY, USER PROGR	28480	05475-60176
A11MP15	05475-60138	1	KEY ASSEMBLY, POINT	28480	05475-60138
A11MP16	05475-60140	1	KEY ASSEMBLY, RPLAC	28480	05475-60140
A11MP17	05475-60159	1	KEY ASSEMBLY, QUESTION MARK	28480	05475-60159
A11MP18	05475-60146	1	KEY ASSEMBLY, JUMP	28480	05475-60146
A11MP19	05475-60151	1	KEY ASSEMBLY, LABEL	28480	05475-60151
A11MP20	05475-60161	1	KEY ASSEMBLY, DIVIDE SYMBOL	28480	05475-60161
A11MP21	05475-60156	1	KEY ASSEMBLY, MULT	28480	05475-60156
A11MP22	05475-60180	1	KEY ASSEMBLY, TRANS FCN	28480	05475-60180
A11MP23	05475-60179	1	KEY ASSEMBLY, HANN	28480	05475-60179
A11MP24	05475-60153	1	KEY ASSEMBLY, POLAR	28480	05475-60153
A11MP25	05475-60148	1	KEY ASSEMBLY, RECT	28480	05475-60148
A11MP26	05475-60144	1	KEY ASSEMBLY, PRINT	28480	05475-60144
A11MP27	05475-60128	1	KEY ASSEMBLY, KEY BOARD	28480	05475-60128
A11MP28	05475-60177	1	KEY ASSEMBLY, MASS STORE	28480	05475-60177
A11MP29	05475-60201	1	KEY ASSEMBLY, ANALG OUT	28480	05475-60201
A11MP30	05475-60131	1	KEY ASSEMBLY, HISTOGRAM	28480	05475-60131
A11MP31	05475-60133	1	KEY ASSEMBLY, LOG MAG	28480	05475-60133
A11MP32	05475-60163	1	KEY ASSEMBLY, INTEGRAL (SYMBOL)	28480	05475-60163
A11MP33	05475-60137	1	KEY ASSEMBLY, d/dx	28480	05475-60137
A11MP34	05475-60181	1	KEY ASSEMBLY, POWER SPECT	28480	05475-60181
A11MP35	05475-60164	1	KEY ASSEMBLY, F	28480	05475-60164
A11MP36	05475-60192	1	KEY ASSEMBLY, DSPLY	28480	05475-60192
A11MP37	05475-60150	1	KEY ASSEMBLY, STORE	28480	05475-60150
A11MP38	05475-60178	1	KEY ASSEMBLY, BUFFD ANALOG	28480	05475-60178
A11MP39	05475-60130	1	KEY ASSEMBLY, ANALG IN	28480	05475-60130
A11MP40	05475-60129	1	KEY ASSEMBLY, PHOTO READR	28480	05475-60129
A11MP41	05475-60145	1	KEY ASSEMBLY, PUNCH	28480	05475-60145
A11MP42	05475-60149	1	KEY ASSEMBLY, LOAD	28480	05475-60149
A11MP43	05475-60134	1	KEY ASSEMBLY, INTER-CHNG	28480	05475-60134
A11MP44	05475-60155	1	KEY ASSEMBLY, CONV	28480	05475-60155
A11MP45	05475-60157	1	KEY ASSEMBLY, CORR	28480	05475-60157
A11MP46	05475-60168	1	KEY ASSEMBLY, 2	28480	05475-60168
A11MP47	05475-60171	1	KEY ASSEMBLY, 5	28480	05475-60171
A11MP48	05475-60174	1	KEY ASSEMBLY, 8	28480	05475-60174
A11MP49	05475-60173	1	KEY ASSEMBLY, 7	28480	05475-60173
A11MP50	05475-60170	1	KEY ASSEMBLY, 4	28480	05475-60170
A11MP51	05475-60167	1	KEY ASSEMBLY, 1	28480	05475-60167
A11MP52	05475-60125	1	KEY ASSEMBLY, SPACE	28480	05475-60125
A11MP53	05475-60175	1	KEY ASSEMBLY, 9	28480	05475-60175
A11MP54	05475-60172	1	KEY ASSEMBLY, 6	28480	05475-60172
A11MP55	05475-60169	1	KEY ASSEMBLY, 3	28480	05475-60169

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A11MP56	05475-60124	1	KEY ASSEMBLY, ENTER	28480	05475-60124
A11MP57	05475-60154	1	KEY ASSEMBLY, CLEAR	28480	05475-60154
A11MP58	05475-60166	1	KEY ASSEMBLY, C	28480	05475-60166
A11MP59	05475-60165	1	KEY ASSEMBLY, MINUS SIGN	28480	05475-60165
A11MP60	05475-60135	1	KEY ASSEMBLY, RUB-CUT	28480	05475-60135
A11MP61	05475-60126	1	KEY ASSEMBLY, RE-START	28480	05475-60126
A11MP62	05475-60122	1	KEY ASSEMBLY, STOP	28480	05475-60122
A11MP63	05475-60123	1	KEY ASSEMBLY, CCNTINUE	28480	05475-60123
A11MP64- A11MP99			NCT ASSIGNED		
A11MP100	05475-00030	1	PANEL, FRCNT	28480	05475-00030
A11MP101	05475-00031	1	PANEL, SUB	28480	05475-00031
A11MP102	05475-00032	1	PLATE, SWITCH GUIDE	28480	05475-00032
A11MP103	05475-20167	1	BLCKK, 3K WVRT GD	28480	05475-20167
A11MP104	05475-20168	1	BLCKK, 3K HGRIZONTAL GUIDE	28480	05475-20168
A11MP105	05475-20169	1	BLCKK, 4K GUIDE	28480	05475-20169
A11MP106	05475-20170	3	BLCKK, 6K GUIDE	28480	05475-20170
A11MP107	05475-20171	3	BLCKK, 8K GUIDE	28480	05475-20171
A11MP108	05475-20172	1	BLCKK, 16K GUIDE	28480	05475-20172
A11MP109	05475-20184	1	FRAME, KEYBCARD	28480	05475-20184
A11R1	0683-1025	1	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	C81025
A11S1	3101-1593	1	SWITCH-SL DPCT-NS MINTR 1A 125VAC SLDR	28480	3101-1593
A11S2	3100-2625	2	SWITCH-LEVER	28480	3100-2625
A11S3	0370-1879	2	KNOB-LEVER SWITCH, JADE GRAY	28480	0370-1879
	3100-2625		SWITCH-LEVER	28480	3100-2625
	0370-1879		KNOB-LEVER SWITCH, JADE GRAY	28480	0370-1879
A11w1	05475-60194	1	CABLE ASSEMBLY, PANEL(INCL J16, XDS1-10)	28480	05475-60194
A11w2	05475-60196	1	CABLE ASSEMBLY, KEYBOARD(INCL J19,XA11)	28480	05475-60196
A11XA11A	1251-2702	2	XA11, PART OF W2	28480	1251-2702
A11XA11B	1251-2702		CONNECTOR-PC EDGE 18-CONT/ROW 2-ROWS	28480	1251-2702
A11XDS1- A11XDS10	1450-0745	10	CONNECTOR-PC EDGE 18-CONT/ROW 2-ROWS		
			LIGHT-IND 0.350-IN OD; 0.500-IN L; PHEN (PART CF W1)	72765	300-058

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
All	05475-60047	1	KEYBOARD ASSY THIS ASSY CONSISTS OF BLUE/LIGHT GRAY COLOR (OPTION X95).	28480	05475-60047
All MP1	0360-0011	1	STRIP:TERMINAL	06540	610-13
All MP1	0370-0432	2	KNOB:BEVER,OLIVE BLACK,OPT X95	28480	0370-0432
All MP1	05475-00029	1	PANEL:FRONT	28480	05475-00029
All MP1	05475-20183	1	FRMAE:KEYBOARD	28480	05475-20183
All MP1	05475-60051	1	KEY ASSY:STOP	28480	05475-60051
All MP1	05475-60052	1	KEY ASSY:CONT INUE	28480	05475-60052
All MP1	05475-60053	1	KEY ASSY:ENTER	28480	05475-60053
All MP1	05475-60054	1	KEY ASSY:SPACE	28480	05475-60054
All MP1	05475-60055	1	KEY ASSY:RE-START	28480	05475-60055
All MP1	05475-60056	1	KEY ASSY:BLOCK SIZE	28480	05475-60056
All MP1	05475-60057	1	KEY ASSY:KEY BOARD	28480	05475-60057
All MP1	05475-60058	1	KEY ASSY:RHOTO RDR	28480	05475-60058
All MP1	05475-60059	1	KEY ASSY:ANALOG IN	28480	05475-60059
All MP1	05475-60060	1	KEY ASSY:HSTO GRAM	28480	05475-60060
All MP1	05475-60061	1	KEY ASSY:SUB RETURN	28480	05475-60061
All MP1	05475-60062	1	KEY ASSY:LOG MAG.	28480	05475-60062
All MP1	05475-60063	1	KEY ASSY:INTER CHANGE	28480	05475-60063
All MP1	05475-60064	1	KEY ASSY:RUB OUT	28480	05475-60064
All MP1	05475-60065	1	KEY ASSY-	28480	05475-60065
All MP1	05475-60066	1	KEY ASSY:D/DX	28480	05475-60066
All MP1	05475-60067	1	KEY ASSY:POINT	28480	05475-60067
All MP1	05475-60068	1	KEY ASSY:BELETE	28480	05475-60068
All MP1	05475-60069	1	KEY ASSY:REPLACE	28480	05475-60069
All MP1	05475-60070	1	KEY ASSY:INSERT	28480	05475-60070
All MP1	05475-60071	1	KEY ASSY:LIST	28480	05475-60071
All MP1	05475-60072	1	KEY ASSY:TERM	28480	05475-60072
All MP2	05475-60073	1	KEY ASSY:PRINT	28480	05475-60073
All MP2	05475-60074	1	KEY ASSY:PUNCH	28480	05475-60074
All MP2	05475-60075	1	KEY ASSY:JUMP	28480	05475-60075
All MP2	05475-60076	1	KEY ASSY:COUNT	28480	05475-60076
All MP2	05475-60077	1	KEY ASSY:RECV	28480	05475-60077
All MP2	05475-60078	1	KEY ASSY:LOAD	28480	05475-60078
All MP2	05475-60079	1	KEY ASSY:STORE	28480	05475-60079
All MP2	05475-60080	1	KEY ASSY:LABEL	28480	05475-60080
All MP2	05475-60081	1	KEY ASSY:END	28480	05475-60081
All MP2	05475-60082	1	KEY ASSY:POLAR	28480	05475-60082
All MP2	05475-60083	1	KEY ASSY:CLEAR	28480	05475-60083
All MP2	05475-60084	1	KEY ASSY:CONV	28480	05475-60084
All MP2	05475-60085	1	KEY ASSY:MULT	28480	05475-60085
All MP2	05475-60086	1	KEY ASSY:CORR	28480	05475-60086
All MP2	05475-60088	1	KEY ASSY:QUESTION MARK	28480	05475-60088
All MP2	05475-60089	1	KEY ASSY:RLUS	28480	05475-60089
All MP2	05475-60090	1	KEY ASSY:DIVIDE	28480	05475-60090
All MP2	05475-60091	1	KEY ASSY:L SHIFT	28480	05475-60091
All MP2	05475-60092	1	KEY ASSY:INTEGRAL	28480	05475-60092
All MP2	05475-60093	1	KEY ASSY:F	28480	05475-60093
All MP2	05475-60094	1	KEY ASSY:MINUS	28480	05475-60094
All MP2	05475-60095	1	KEY ASSY:0	28480	05475-60095
All MP2	05475-60096	1	KEY ASSY:1	28480	05475-60096
All MP2	05475-60097	1	KEY ASSY:2	28480	05475-60097
All MP2	05475-60098	1	KEY ASSY:3	28480	05475-60098
All MP2	05475-60099	1	KEY ASSY:4	28480	05475-60099
All MP3	05475-60100	1	KEY ASSY:5	28480	05475-60100
All MP3	05475-60101	1	KEY ASSY:6	28480	05475-60101
All MP3	05475-60102	1	KEY ASSY:7	28480	05475-60102
All MP3	05475-60103	1	KEY ASSY:8	28480	05475-60103
All MP3	05475-60104	1	KEY ASSY:9	28480	05475-60104
All MP3	05475-60105	1	KEY ASSY:USER PROGRAM	28480	05475-60105
All MP3	05475-60106	1	KEY ASSY:MASS STORAGE	28480	05475-60106
All MP3	05475-60107	1	KEY ASSY:BUFFERED ANALOG	28480	05475-60107
All MP3	05475-60108	1	KEY ASSY:HANN	28480	05475-60108
All MP3	05475-60109	1	KEY ASSY:TRANS FCN	28480	05475-60109

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A12	05475-60045	1	BOARD ASSY: MATRIX A	28480	05475-60045
A12CR1 thru A12CR269	1901-0040	269	DIODES: SILICON 50 MA 30 MV	07263	FDG1088
A12R1 thru A12R15	0683-5125	15	R:FXD COMP 5100 OHM 5% 1/4W	01121	CB1525
A13	05475-60046	1	BOARD ASSY: MATRIX B	28480	05475-60046
A13 CR1 thru A13CR224	1901-0040	224	DIODES: SILICON 50 MA 30 WV	07263	FDG1088
A14	05475-60204	1	BOARD ASSY: SHIFT REGISTER	28480	05475-60204
A14C1	0180-0100	1	CF 4.7 μ f 35V		
A14C2	0160-2055		CF .01 μ f 100V		
A14C3	0160-2055		CF .01 μ f 100V		
A14C4	0160-2055		CF .01 μ f 100V		
A14C5	0160-2055		CF .01 μ f 100V		
A14C6	0160-2055		CF .01 μ f 100V		
A14C7	0140-0149	1	CF 470 Pf 5%		
A14C8	0160-0165	1	CF .056 μ f 10%		
A14C9	0160-0163	1	CF .033 μ f 10%		
A14C10	0180-0373	2	CF .68 μ f 35V		
A14C11	0160-0153	16	CF .001 μ f 200V		
A14C12	0180-0197	1	CF 2.2 μ f 10%		
A14C13 thru A14C27	0160-0153		CF .001 μ f 200V		
A14C28	0180-0373		CF .68 μ f 35V		
A14CR1 thru A14CR21	1901-0040		DIODE — SIL 30 WV		
A14IC1	1820-0054	6	IC 7400		
A14IC2	1820-0099	1	IC 7493		
A14IC3	1820-0077	2	IC 7494		
A14IC4	1820-0068	1	IC 7410		
A14IC5	1820-0056	1	IC 7492		
A14IC6	1820-0579	2	IC 74123		
A14IC7	1820-0054		IC 7400		
A14IC8	1820-0054		IC 7400		
A14IC9	1820-0262	3	IC 74165		
A14IC10	1820-0262		IC 74165		
A14IC11	1820-0054		IC 7400		
A14IC12	1820-0077		IC 7494		
A14IC13	1820-0054		IC 7400		
A14IC14	1820-0538	1	IC 7423		
A14IC15	1820-0262		IC 74165		
A14IC16	1820-0054		IC 7400		
A14IC17	1820-0579		IC 74123		
A14Q1	1854-0092	1	TRANSISTOR 4-092		
A14Q2 and Q3	1854-0071		TRANSISTOR 4-071		
A14Q4	1853-0020		TRANSISTOR 3-020		
A14Q5 thru Q23	1854-0071		TRANSISTOR 4-071		

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A14R1	0683-1525	11	RF 1500 5% .25W		
A14R2	0757-0951	1	RF 13K 2% .25W		
A14R3	2100-1661	1	RV 20K 10%		
A14R4	0757-0956		RF 22K 2% .25W		
A14R5	0683-1525		RF 1500 5% .25W		
A14R6	0683-2025	7	RF 2K 5% .25W		
A14R7	0683-2025		RF 2K 5% .25W		
A14R8	0683-2025		RF 2K 5% .25W		
A14R9	0683-2725	1	RF 2700 5% .25W		
A14R10	0683-3025	22	RF 3K 5% .25W		
A14R11	0683-1035	2	RF 10K 5% .25W		
A14R12	0683-3625	2	RF 3600 5% .25W		
A14R13	0683-3625		RF 3600 5% .25W		
A14R14	0683-3935	1	RF 39K 5% .25W		
A14R15	0683-1825	1	RF 1800 5% .25W		
A14R16	0683-3325	1	RF 3300 5% .25W		
A14R17	0683-1235	1	RF 12K 5% .25W		
A14R18	0683-6225	2	RF 6200 5% .25W		
A14R19	0683-6225		RF 6200 5% .25W		
A14R20	0683-4325	1	RF 4300 5% .25W		
A14R21	0757-0957		RF 24K 2% .25W		
A14R22	0757-0957		RF 24K 2% .25W		
A14R23	0683-1025		RF 1K 5% .25W		
A14R24	0683-3315	1	RF 330 5% .25W		
A14R25	0683-6815	1	RF 680 5% .25W		
A14R26	0757-0958	1	RF 27K 2% .25W		
A14R27	0683-1025		RF 1K 5% .25W		
A14R28	0683-3025		RF 3K 5% .25W		
A14R29	0683-1025		RF 1K 5% .25W		
A14R30	0683-3025		RF 3K 5% .25W		
A14R31	0683-1025		RF 1K 5% .25W		
A14R32	0683-3025		RF 3K 5% .25W		
A14R33	0683-1025		RF 1K 5% .25W		
A14R34	0683-3025		RF 3K 5% .25W		
A14R35	0683-1025		RF 1K 5% .25W		
A14R36	0683-3025		RF 3K 5% .25W		
A14R37	0683-1025		RF 1K 5% .25W		
A14R38	0683-3025		RF 3K 5% .25A		
A14R39	0683-1025		RF 1K 5% .25W		
A14R40	0683-3025		RF 3K 5% .25W		
A14R41	0683-1025		RF 1K 5% .25W		
A14R42	0683-3025		RF 3K 5% .25W		
A14R43	0683-1025		RF 1K 5% .25W		
A14R44	0683-3025		RF 3K 5% .25W		
A14R45	0683-1025		RF 1K 5% .25W		
A14R46	0683-3025		RF 3K 5% .25W		
A14R47	0683-1025		RF 1K 5% .25W		
A14R48	0683-3025		RF 3K 5% .25W		
A14R49	0683-1025		RF 1K 5% .25W		
A14R50	0683-3025		RF 3K 5% .25W		
A14R51	0683-1025		RF 1K 5% .25W		
A14R52	0683-3025		RF 3K 5% .25W		
A14R53	0683-1025		RF 1K 5% .25W		
A14R54	0683-3025		RF 3K 5% .25W		
A14R55	0683-1025		RF 1K 5% .25W		
A14R56	0683-3025		RF 3K 5% .25W		
A14R57	0683-1025		RF 1K 5% .25W		
A14R58	0683-1025		RF 1K 5% .25W		
A14R59	0757-0957		RF 24K 2% .25W		
A14R60	0683-1025		RF 1K 5% .25W		
A14TP1 thru TP4	0360-0124	7	TERMINAL .04D		
A14W1	8159-0005	2	LEAD		
A14W2	8159-0005		LEAD		
	05475-20185	1	BOARD BLANK		

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A15	05475-60012	1	BOARD ASSY:FUNCTION	28480	05475-60012
A15C1	0160-0155		C:FXD MY 0.0033 UF 10% 200VDCW	56289	192P33292-PTS
A15C2	0160-0155		C:FXD MY 0.0033 UF 10% 200VDCW	56289	192P33292-PTS
A15C3	0160-0180	2	C:FXD MY 0.033 UF 5%	28480	0160-0180
A15C4	0160-0180		C:FXD MY 0.033 UF 5%	28480	0160-0180
A15C5	0180-0106	2	C:FXD ELECT 60 UF 20% 6VDCW	28480	0180-0106
A15C6	0180-0116	1	C:FXD ELECT 6.8 UF 10% 35VDCW	56289	1500685X903582-DYS
A15CR1	1902-3024	2	DIODE:BREAKDOWN 2.87V 5%	04713	SZ10939-26
A15CR2	1902-3024		DIODE:BREAKDOWN 2.87V 5%	04713	SZ10939-26
A15IC1	1820-0054		IC:TTL QUAD 2-INPT NAND GATE	01295	SN7400N
A15IC2	1820-0174	1	IC:TTL HEX INVERTER	01295	SN7404N
A15IC3	1820-0054		IC:TTL QUAD 2-INPT NAND GATE	01295	SN7400N
A15IC4	1820-0054		IC:TTL QUAD 2-INPT NAND GATE	01295	SN7400N
A15IC5	1820-0054		IC:TTL QUAD 2-INPT NAND GATE	01295	SN7400N
A15Q1	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A15R1	0683-2025		R:FXD COMP 2000 OHM 5% 1/4W	01121	CB 2025
A15R2	0683-2025		R:FXD COMP 2000 OHM 5% 1/4W	01121	CB 2025
A15R3	0683-2025		R:FXD COMP 2000 OHM 5% 1/4W	01121	CB 2025
A15R4	0683-2025		R:FXD COMR 2000 OHM 5% 1/4W	01121	CB 2025
A15R5	0683-2415	5	R:FXD COMR 240 OHM 5% 1/4W	01121	CB 2415
A15R6	0683-2415		R:FXD COMP 240 OHM 5% 1/4W	01121	CB 2415
A15R7	0683-2415		R:FXD COMP 240 OHM 5% 1/4W	01121	CB 2415
A15R8	0683-2415		R:FXD COMR 240 OHM 5% 1/4W	01121	CB 2415
A15R9	0683-3025		R:FXD COMR 3000 OHM 5% 1/4W	01121	CB 3025
A15R10	0683-1035	1	R:FXD COMR 10K OHM 5% 1/4W	01121	CB 1035
A15R11	0683-2225	8	R:FXD COMR 2.2K OHM 5% 1/4W	01121	CB 2225
A15R12	0683-2415		R:FXD COMR 240 OHM 5% 1/4W	01121	CB 2415
A16	05475-60041	1	BOARD ASSY:SWITCH REGISTER	28480	05475-60041
A16C1	0160-2055		C:FXD CER 0.01 UF +80-20% 100VDCW	56289	C023F101F103ZS22-CDH
A16IC1	1820-0539		IC:TTL QUAD 2-INPT NAND BUFFER GATE	01295	SN7437N
A16R1	0683-3025		R:FXD COMR 3000 OHM 5% 1/4W	01121	CB 3025
A16R2	0683-3025		R:FXD COMP 3000 OHM 5% 1/4W	01121	CB 3025
A16R3	0683-3025		R:FXD COMR 3000 OHM 5% 1/4W	01121	CB 3025
A16TP1	0360-0124		TERMINAL:SOLDER LUG	28480	0360-0124
A16TP2	0360-0124		TERMINAL:SOLDER LUG	28480	0360-0124
A16TP3	0360-0124		TERMINAL:SOLDER LUG	28480	0360-0124
A17	05475-60199	1	BOARD ASSY:LIGHT DRIVER	28480	05475-60199
A17C1	0180-0106		C:FXD ELECT 60 UF 20% 6VDCW	28480	0180-0106
A17CR1	1901-0040		DIODE:SILICON 50 MA 30 WV	07263	FDG1088
A17CR2	1901-0040		DIODE:SILICON 50 MA 30 WV	07263	FDG1088
A17IC1	1820-0054		IC:TTL QUAD 2-INPT NAND GATE	01295	SN7400N
A17Q13	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q14	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q15	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q16	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q17	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q18	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q19	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q20	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q21	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q22	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q23	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q24	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q25	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q26	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q27	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q28	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q29	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q30	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q31	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q32	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q33	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17Q34	1854-0071		TSTR:SI NPN(SELECTED FROM 2N3704)	28480	1854-0071
A17R25	0683-1525		R:FXD COMR 1500 OHM 5% 1/4W	01121	CB 1525
A17R26	0683-2425	9	R:FXD COMR 2400 OHM 5% 1/4W	01121	CB 2425
A17R27	0683-2225		R:FXD COMR 2.2K OHM 5% 1/4W	01121	CB 2225
A17R28	0683-1525		R:FXD COMR 1500 OHM 5% 1/4W	01121	CB 1525

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
A17R29	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R30	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R31	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R32	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R33	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R34	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R35	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R36	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R37	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R38	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R39	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R40	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R41	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R42	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R43	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R44	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R45	0683-2225		R:FXD COMP 2.2K OHM 5% 1/4W	01121	CB 2225
A17R46	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R47	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R48	0683-3025		R:FXD COMP 3000 OHM 5% 1/4W	01121	CB 3025
A17R49	0683-3925	2	R:FXD COMP 3900 OHM 5% 1/4W	01121	CB 3925
A17R50	0683-1525		R:FXD COMP 1500 OHM 5% 1/4W	01121	CB 1525
A17R51	0683-3025		R:FXD COMP 3000 OHM 5% 1/4W	01121	CB 3025
A17R52	0683-2425		R:FXD COMP 2400 OHM 5% 1/4W	01121	CB 2425
A17R53	0683-3925		R:FXD COMP 3900 OHM 5% 1/4W	01121	CB 3925
A18	05475-60010	1	BOARD ASSEMBLY-RELAY	28480	05475-60010
A18C1	0180-0116	1	CAPACITOR-FXD 6.9 UF+-10% 35VDC TA	56289	150D685X9035B2
A18C2	0180-0291	1	CAPACITOR-FXD 1 UF+-10% 35VDC TA	56289	150D105X9035A2
A18CR1	1902-3082	1	DIODE-ZNR 4.99V 2% D0-7 PD=.4W TC=.012%	04713	SZ10939-96
A18CR2	1884-0063	1	THYRISTOR-SCR	03508	C15F
A18DS1	2140-0300	1	LAMP-INCAND T-1-3/4-BULB 18V	08806	7370
A18K1	0490-0393	1	RELAY-REED 1C .1A 250V 10V-COIL	28480	0490-0393
A18L1	9140-0114	1	COIL-MLD 10UH 10% Q=55 .155DX .375LG	24226	15/102
A18Q1	1853-0020	1	TRANSISTOR PNP SI PD=300MW FT=150MHZ	28480	1853-0020
A18R1	0686-6815	1	RESISTOR 680 5% .5W CC TC=0+529	01121	EB6815
A18R2	0683-1025	1	RESISTOR 1K 5% .25W FC TC=-400/+600	01121	CB1025
A18R3	0683-1015	1	RESISTOR 100 5% .25W FC TC=-400/+500	01121	CB1015

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
			CHASSIS MOUNTED PARTS		
B1	3160-0097	1	FAN:TUBE AXIAL	23936	4500A
B2	3160-0092	1	FAN BLADE GUARD	92702	65-175
C1	0180-2115	6	C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C2	0180-2115		C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C2	0180-1949	4	C:FXD ELECT 5500 UF -10+75% 40VDCW	56289	360552G040AC2A-DQB
C3	0180-1949		C:FXD ELECT 5500 UF -10+75% 40VDCW	56289	360552G040AC2A-DQB
C3	0180-2115		C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C4	0180-1949		C:FXD ELECT 5500 UF -10+75% 40VDCW	56289	360552G040AC2A-DQB
C4	0180-2115		C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C5	0180-2115		C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C5	0180-1949		C:FXD ELECT 5500 UF -10+75% 40VDCW	56289	360552G040AC2A-DQB
C6	0180-2115		C:FXD ELECT 2500 UF +50-10% 75VDCW	56289	360252K075AC2A-DQB
C7	0160-3043	2	C:FXD CER 2 X 0.005 UF 20% 250VAC	56289	29C147A-COH
C7	0160-3043		C:FXD CER 2 X 0.005 UF 20% 250VAC	56289	29C147A-COH
DS1					
DS2	1450-0494	1	LIGHT:INDICATOR, AMBER	72765	599-172-YELLOW
F1	2110-0006	1	FUSE:CARTRIDGE 2AMP 125V SLOW BLOW	71400	MDL2
F1	2110-0014	1	FUSE:CARTRIDGE 4 AMP 125V SLOW BLOW	71400	MDX-4
F2	2110-0010	1	FUSE:CARTRIDGE 3 AG 5 AMP 250V MAX	75915	312005
J11A	1251-0484	3	CONNECTOR:R & P 36 CONTACT RECEPTACLE	28480	1251-0484
J11B	1251-0484		CONNECTOR:R & P 36 CONTACT RECEPTACLE	28480	1251-0484
J12	1251-0085	4	CONNECTOR:FEMALE 36-PIN MINAT	28480	1251-0085
J13	1251-2518	1	CONNECTOR:PC 48 (2X24) CONTACT	71785	251-24-30-261
J14	1251-0085		CONNECTOR:FEMALE 36-PIN MINAT	28480	1251-0085
J15	1251-0099	1	CONNECTOR:R & P 50 CONTACT	02660	57-10500-375
J16	1251-0484		CONNECTOR:R & P 36 CONTACT RECEPTACLE	28480	1251-0484
J17	1251-0085		CONNECTOR:FEMALE 36-PIN MINAT	28480	1251-0085
J18	1251-0085		CONNECTOR:FEMALE 36-PIN MINAT	28480	1251-0085
J19A	1251-0101		CONNECTOR:R & P 50 CONTACT	02660	57-20500-375
J19B	1251-0101	2	CONNECTOR:R & P 50 CONTACT	02660	57-20500-375
J20	1250-0118	3	CONNECTOR:BNC	24931	28JR 128-1
J21	1250-0118		CONNECTOR:BNC	24931	28JR 128-1
J22	1250-0118		CONNECTOR:BNC	24931	28JR 128-1
			CHASSIS PARTS - LIGHT GRAY/OLIVE GRA		
MP1	5000-0054	2	TRIM STRIP	28480	5000-0054
MP2	5000-0221	2	SUPPORT	28480	5000-0221
MP3	5000-8553	2	COVER:SIDE	28480	5000-8553
MP3			(FOR OPTION A85 ONLY)		
MP3	5000-0170	2	COVER:SIDE	28480	5000-0170
MP3			(FOR OPTION X95 ONLY)		
MP4	5020-0242	2	SUPPORT	28480	5020-0242
MP5	5040-0170	2	GUIDE:PLUG-IN PC BOARD	28480	5040-0170
MP6	5060-0767	5	FOOT ASSY:FM	28480	5060-0767
MP7	5060-8507	1	COVER ASSY:TOP, 19L	28480	5060-8507
MP7			(FOR OPTION A85 ONLY)		
MP7	5060-0061	1	COVER ASSY:TOP	28480	5060-0061
MP7			(FOR OPTION X95 ONLY)		
MP8	5060-8513	1	COVER:BOTTOM	28480	5060-8513
MP8			(FOR OPTION A85 ONLY)		
MP8	5060-0064	1	COVER ASSY:BOTTOM	28480	5060-0064
MP8			(FOR OPTION X95 ONLY)		
MP9	05210-4001	1	GUIDE:BOARD	28480	05210-4001
MP10	05421-0010	4	RETAINER:CONNECTOR	28480	05421-0010
MP11	05475-00007	1	CHASSIS	28480	05475-00007
MP12	05475-00009	1	PANEL:POWER SUPPLY	28480	05475-00009
MP13	05475-00010	2	PANEL:CONTROL	28480	05475-00010
MP13			(FOR OPTION A85 ONLY)		
MP13	05475-00010		PANEL:CONTROL	28480	05475-00010
MP13			(FOR OPTION X95 ONLY)		
MP14	05475-00012	1	BRACKET:CONNECTOR	28480	05475-00012
MP15	05475-00015	1	INSULATOR:POWER SUPPLY COVER	28480	05475-00015
MP16	05475-00016	1	INSULATOR:POWER SUPPLY COVER	28480	05475-00016
MP17	05475-00017	1	BRACKET:IDENTIFICATION	28480	05475-00017
MP18	05475-00020	1	PANEL:REAR	28480	05475-00020
MP19	05475-00021	1	BRACKET:MOTHER BOARD	28480	05475-00021
MP20	05475-00022	1	CHASSIS:TRANSFORMER	28480	05475-00022
MP21	05475-00023	1	BRACKET COVER	28480	05475-00023
MP22	05475-00024	1	COVER:LEFT POWER SUPPLY	28480	05475-00024
MP23	05475-00025	1	COVER:RIGHT POWER SUPPLY	28480	05475-00025
MP24	05475-00027	1	PANEL CONTROL	28480	05475-00027
MP25	05475-00035	1	PLATE:COVER	28480	05475-00035
MP26	05475-20022	2	GUIDE:PC	28480	05475-20022

See introduction to this section for ordering information

Table 4-6. 5475A Replaceable Parts (Cont'd)

Reference Designation	HP Part Number	Qty	Description	Mfr Code	Mfr Part Number
MP27	05475-20023	1	BAR:TIE	28480	05475-20023
MP28	05475-20024	1	TRIM:UPPER	28480	05475-20024
MP29	05475-20025	1	TRIM:CENTER	28480	05475-20025
MP30	05475-20026	1	TRIM:POWER	28480	05475-20026
MP31	05475-20027	2	FRAME:MODIFIED	28480	05475-20027
MP32	05475-20028	1	ANGLE:CONNECTOR MOUNTING	28480	05475-20028
MP33	05475-20030	1	BRACKET:UPPER LEFT	28480	05475-20030
MP34	05475-20031	1	BRACKET:UPPER RIGHT	28480	05475-20031
MP35	05475-20097	1	SPACER	28480	05475-20097
MP36	05475-60036	1	KIT:RACK MOUNTING	28480	05475-60036
MR36			(FOR OPTION A85 ONLY)		
MR36	05580-6012	1	KIT:RACK MOUNTING	28480	05580-6012
MP36			(FOR OPTION X95 ONLY)		
MP37	05480-20035	1	GUIDE:PLUG-IN	28480	05480-20035
MP38	05580-0004	1	BRACKET:POWER SUPPLY	28480	05580-0004
MP39	05580-0007	2	PLATE	28480	05580-0007
MP40	05580-0808	1	BRACKET:REAR PANEL	28480	05580-0008
MP41	05580-0010	1	BRACKET:CASTING	28480	05580-0010
MP42	05580-0013	1	BRACKET:MOUNTING	28480	05580-0013
MP43	05580-2007	2	GUIDE RAIL	28480	05580-2007
MP44	05580-2008	2	HEAT DISSIPATOR:FINNED	28480	05580-2008
MP45	05580-2014	2	BRACKET:LOWER	28480	05580-2014
MR46	05580-2017	2	HEAT DISSIPATOR:ANGLED	28480	05580-2017
MR47	05580-2018	1	SUPPORT:RIGHT	28480	05580-2018
MP50	05580-2019	1	SUPPORT:LEFT	28480	05580-2019
Q1	1853-0052	1	TSTR:SI PNP	80131	2N3740
Q2	1853-0073	2	TSTR:SI PNP	28480	1853-0073
Q3	1853-0073	1	TSTR:SI PNP	28480	1853-0073
Q4	1854-0313	4	TSTR:SI NPN	80131	2N3771
Q5	1854-0313	1	TSTR:SI NPN	80131	2N3771
Q6	1854-0063	2	TSTR:SI NPN	80131	2N3055
Q7	1854-0063	1	TSTR:SI NPN	80131	2N3055
Q8	1854-0313	1	TSTR:SI NPN	80131	2N3771
Q9	1854-0313	1	TSTR:SI NPN	80131	2N3771
Q10	1854-0300	2	TSTR:SI NPN	28480	1854-0300
Q11	1854-0300	1	TSTR:SI NPN	28480	1854-0300
Q12	1854-0072	1	TSTR:SI NPN	80131	2N3054
R1	0757-0966	1	R:FXD FLM 56K OHM 2% 1/8W	28480	0757-0966
R2	0757-0900	6	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R3	0757-0900	1	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R4	0757-0900	1	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R5	0757-0346	1	R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
R6	0757-0346	1	R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
R7	0757-0385	2	R:FXD MET FLM 22.1 OHM 1% 1/8W	28480	0757-0385
R8	0757-0900	1	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R9	0757-0900	1	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R10	0757-0900	1	R:FXD MET FLM 100 OHM 2% 1/8W	28480	0757-0900
R11	0757-0385	1	R:FXD MET FLM 22.1 OHM 1% 1/8W	28480	0757-0385
R12	0757-0346	1	R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
R13	0757-0346	1	R:FXD MET FLM 10 OHM 1% 1/8W	28480	0757-0346
S1	3101-1395	1	SWITCH:PUSHBUTTON DPDT-DB	76854	53-67280-121/A1H
S2	3101-1234	1	SWITCH:SLIDE DPDT	82389	11A-1242
T1	9100-2470	1	TRANSFORMER	28480	9100-2470
T1	9100-2470	2	TRANSFORMER	28480	9100-2470
XA12	1251-0159	7	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA13	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA14	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA15	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA16	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA17	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XA18	1251-0159	1	CONNECTOR:PC EDGE 2 X 15 CONTACT	71785	251-15-30-261
XF1A	2110-0464	2	FUSEHOLDER-EXTR POST 20A 300V UL/IEC	75915	345002-010
XF1B	2110-0465	2	FUSEHOLDER-EXTR POST UL/IEC .25X1.25 FUSE	28480	2110-0465
XF2A	2110-0464	1	FUSEHOLDER-EXTR POST 20A 300V UL/IEC	75915	345002-010
XF2B	2110-0465	1	FUSEHOLDER-EXTR POST UL/IEC .25X1.25 FUSE	28480	2110-0465
XJ13	02116-8176	1	BOARD:ETCHED	28480	02116-8176

See introduction to this section for ordering information

Table 4-7. 5475A Manufacturers Code List

MFR. No.	MANUFACTURER NAME	ADDRESS	ZIP CODE
01121	Allen Bradley Co.	Milwaukee, Wis.	53204
01295	Texas Instruments Inc. Semiconductor Components Div.	Dallas, Tex.	75231
02660	Amphenol Corp.	Broadview, Ill.	60153
03508	General Electric Co., Semiconductor Products Div.	Syracuse, NY	13201
04713	Motorola Semiconductor Prod. Inc.	Phoenix, Ariz.	85008
07263	Fairchild Camera and Inst. Corp. Semiconductor Div.	Mountain View, Calif.	94040
12040	National Semiconductor Corp.	Danbury, Conn.	06810
24931	Specialty Connector Co. Inc.	Indianapolis, Ind.	46227
28480	Hewlett-Packard Co. Corporate Hq.	Your nearest HP Office	
56289	Sprague Electric Co.	N. Adams, Mass.	01247
71400	Bussmann Mfg. Div. Mc Graw-Edison Co.	St. Louis, Mo.	63017
71785	Cinch Mfg. Co. Div. TRW. Inc.	Elk Grove Village, Ill.	
75915	Littelfuse Inc.	Des Plaines, Ill.	60016
76854	Oak Mfg. Co. Div. Oak Electro/Netics Corp.	Crystal Lake, Ill.	60014
80131	Electronic Industries Association	Washington D.C.	20006
82389	Switchcraft Inc.	Chicago, Ill.	60630

SECTION V
05451-60068
HIGH SPEED ADC INTERFACE

INTRODUCTION

This section contains schematics, component locators and wiring information for the HP 05451-60068 High Speed ADC Interface. For operation, theory, maintenance, and troubleshooting procedures, refer to the 5451C System Service Manual.

CHANGE DATA

This manual section applies to HP 05451-60068 High Speed ADC Interface boards with series number 1840.

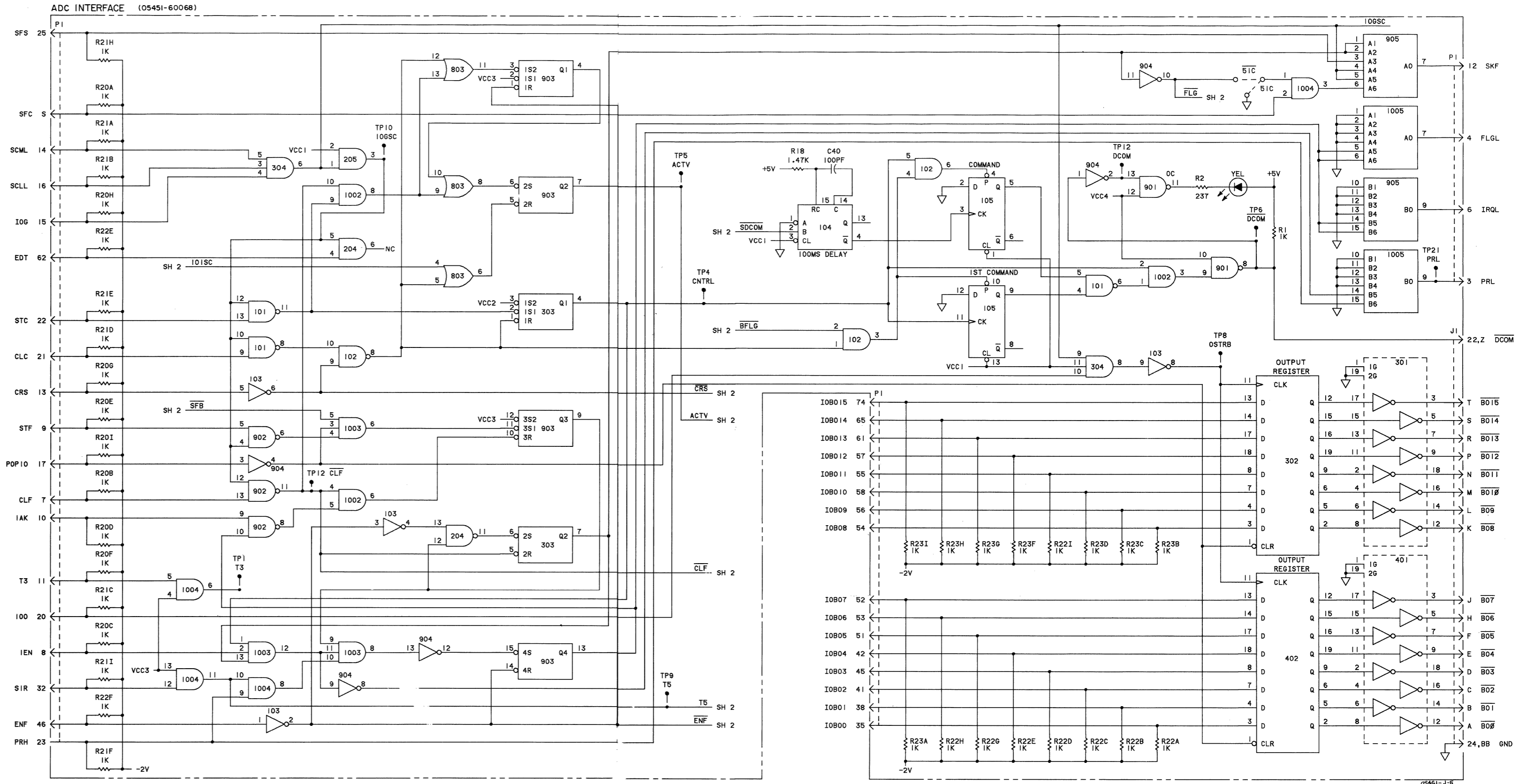
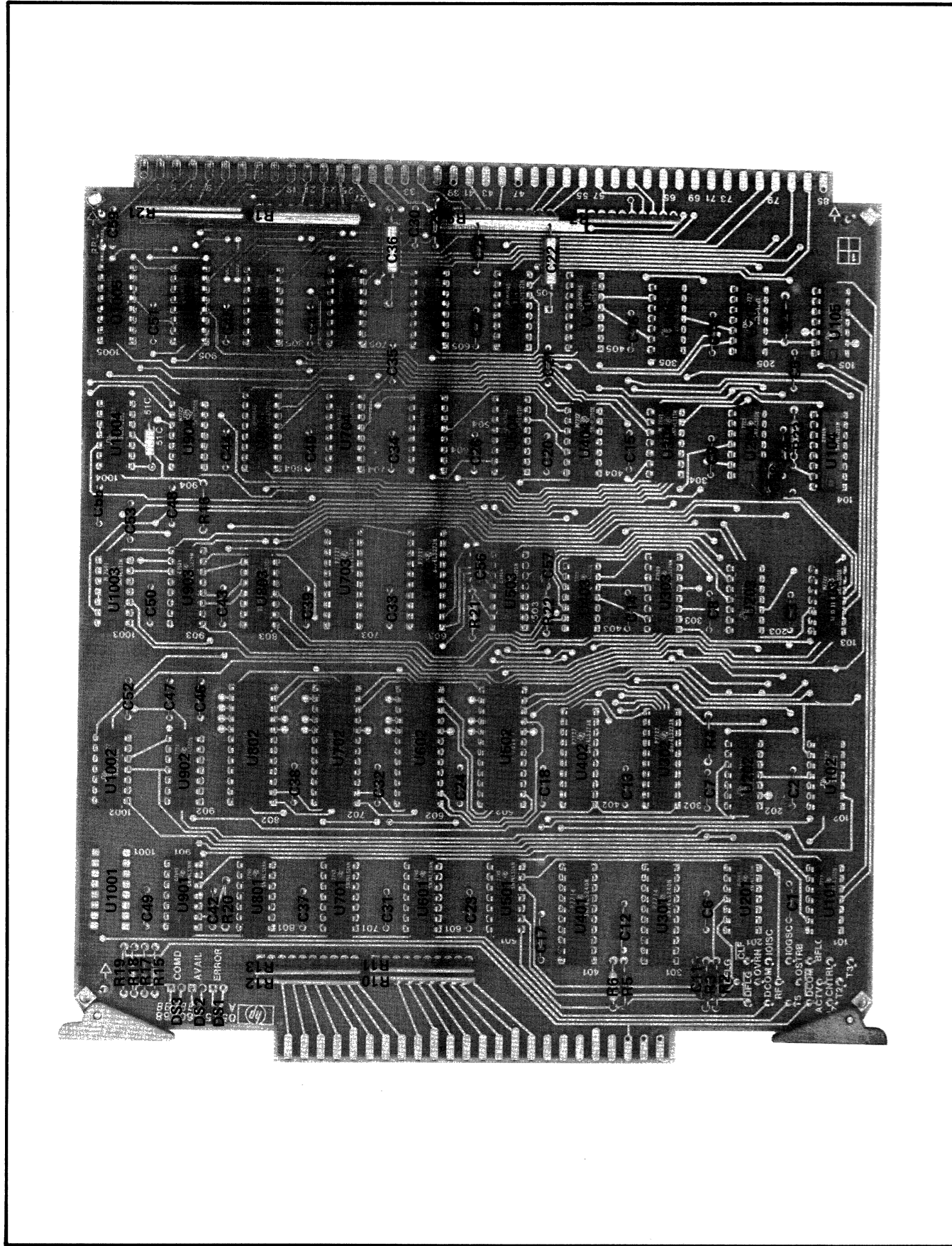


Figure 5-1
ADC INTERFACE BOARD
(Sheet 1 of 3)

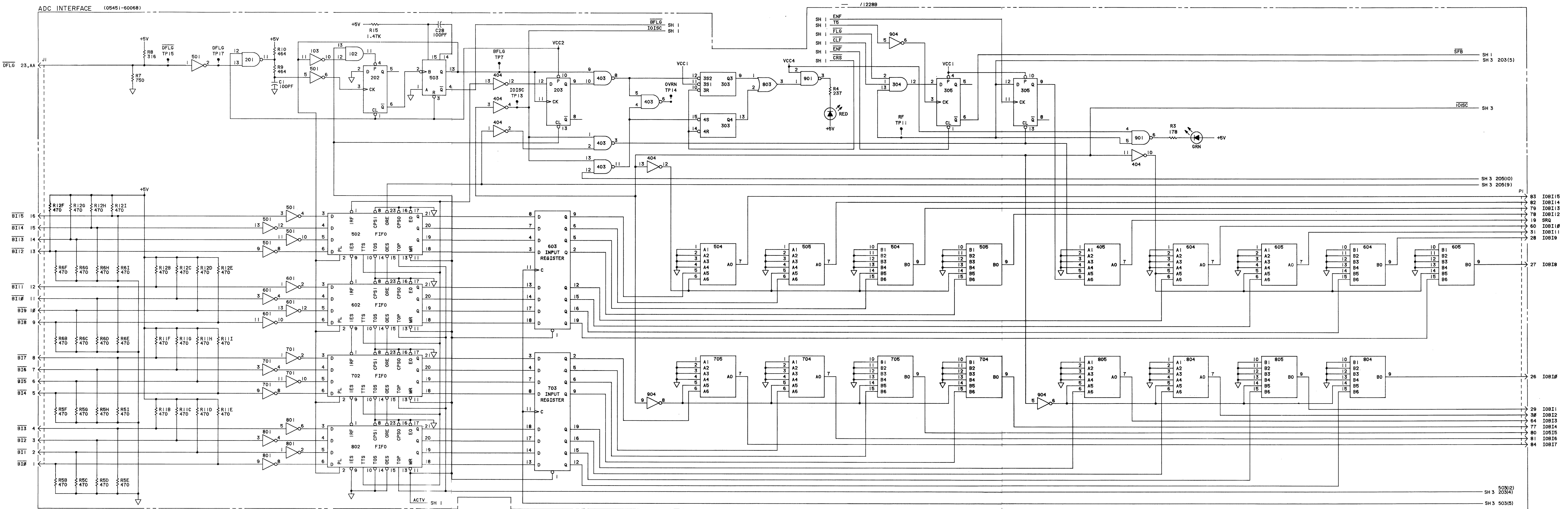
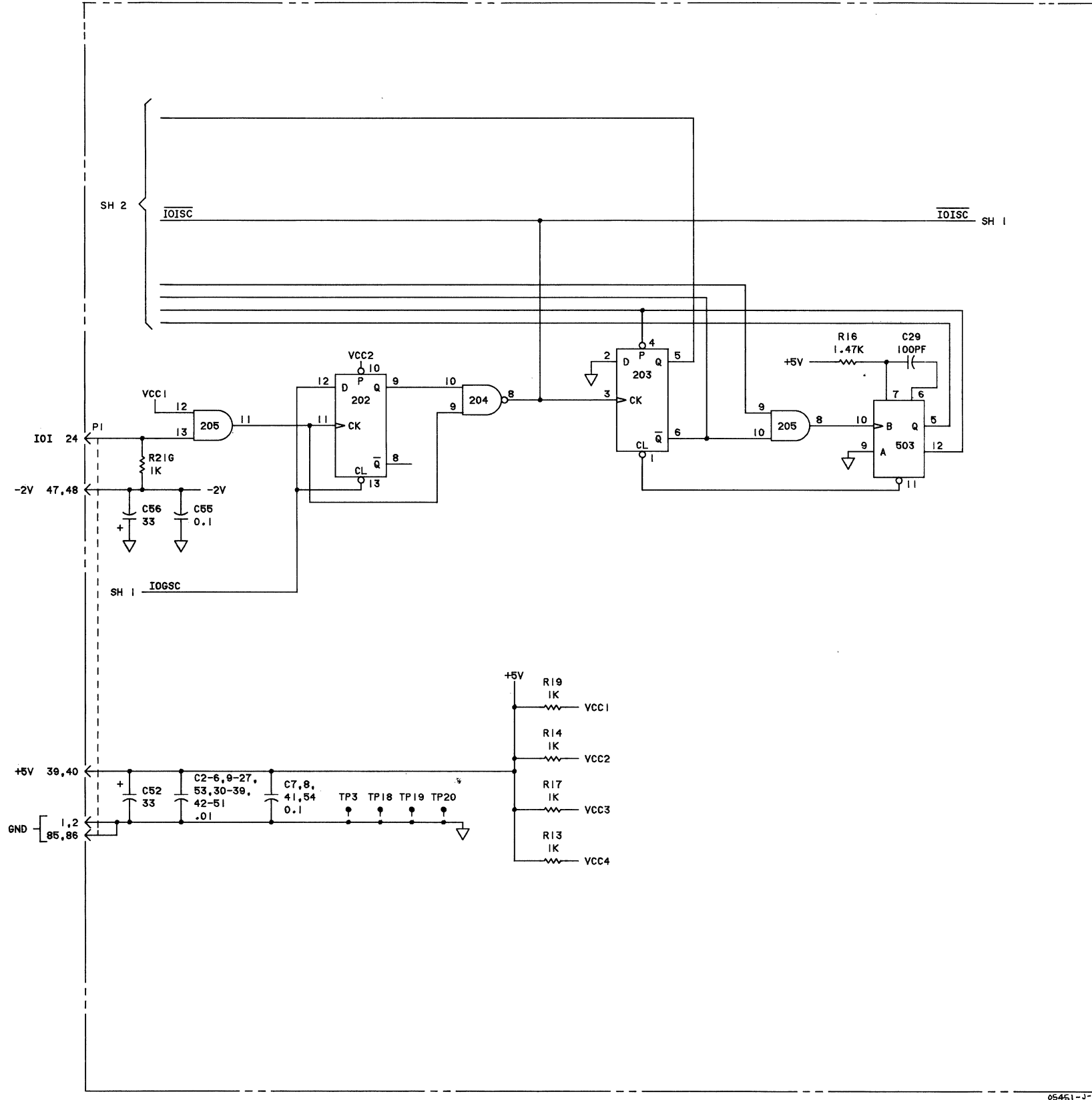


Figure 5-1
ADC INTERFACE BOARD
(Sheet 2 of 3)

ADC INTERFACE (05451-60068)



NOTES: UNLESS OTHERWISE SPECIFIED

1. RESISTANCE VALUES ARE IN OHMS

2. CAPACITANCE VALUES ARE IN MICROFARADS

05451-J-6

Figure 5-1
ADC INTERFACE BOARD
(Sheet 3 of 3)

REPLACEABLE PARTS

This section contains the information required to order replacement parts for the HP 05451-60068 High Speed ADC Interface board. To obtain replacement parts, address an order or inquiry to the nearest Hewlett-Packard Sales and Service Office listed at the back of this manual. Identify any required parts by the Hewlett-Packard part number. Note that not all parts are listed in these tables. Those parts that were deemed unlikely to ever require replacement were purposely excluded. To obtain a part that is not listed, include the following information in the inquiry:

- a. Instrument model number
- b. Instrument serial number
- c. Description of part
- d. Function and location of part.

Abbreviations and Reference Designations are listed in the chart that begins below and continues on the next page. Table 5-1 lists the parts of the unit. Table 5-2 lists the parts manufacturers by code.

REFERENCE DESIGNATORS			
A = assembly	F = fuse	MP = mechanical part	U = integrated circuit
B = motor	FL = filter	P = plug	V = vacuum, tube, neon bulb, photocell, etc.
BT = battery	IC = integrated circuit	Q = transistor	VR = voltage regulator
C = capacitor	J = jack	R = resistor	W = cable
CP = coupler	K = relay	RT = thermistor	X = socket
CR = diode	L = inductor	S = switch	Y = crystal
DL = delay line	LS = loud speaker	T = transformer	Z = tuned cavity, network
DS = device signaling (lamp)	M = meter	TB = terminal board	
E = misc electronic part	MK = microphone	TP = test point	
ABBREVIATIONS			
A = amperes	H = henries	N/O = normally open	RMO = rack mount only
AFC = automatic frequency control	HDW = hardware	NOM = nominal	RMS = root-mean square
AMPL = amplifier	HEX = hexagonal	NPO = negative positive zero (zero temperature coefficient)	RWV = reverse working voltage
BFO = beat frequency oscillator	HG = mercury		
BE CU = beryllium copper	HR = hour(s)	NPN = negative-positive-negative	S-B = slow-blow
BH = binder head	HZ = hertz		SCR = screw
BP = bandpass		NRFR = not recommended for field replacement	SE = selenium
BRS = brass	IF = intermediate freq	NSR = not separately replaceable	SECT = section(s)
BWO = backward wave oscillator	IMPG = impregnated		SEMICON = semiconductor
CCW = counter-clockwise	INCD = incandescent	OBD = order by description	SI = silicon
CER = ceramic	INCL = include(s)	OH = oval head	SIL = silver
CMO = cabinet mount only	INS = insulation(ed)	OX = oxide	SL = slide
COEF = coefficient	INT = internal	P = peak	SPG = spring
COM = common	K = kilo = 1000	PC = printed circuit	SPL = special
COMP = composition	LH = left hand	PF = picofarads = 10 ⁻¹² farads	SST = stainless steel
COMPL = complete	LN = linear taper	PH BRZ = phosphor bronze	SR = split ring
CONN = connector	LK WASH = lock washer	PHL = Phillips	STL = steel
CP = cadmium plate	LOG = logarithmic taper	PIV = peak inverse voltage	TA = tantalum
CRT = cathode-ray tube	LPF = low pass filter	PNP = positive-negative-positive	TD = time delay
CW = clockwise		P/O = part of	TGI = toggle
DEPC = deposited carbon	M = milli = 10 ⁻³	POLY = polystyrene	THD = thread
DR = drive	MEG = meg = 10 ⁶	PORC = porcelain	TI = titanium
ELECT = electrolytic	MET FLM = metal film	POS = position(s)	TOL = tolerance
ENCAP = encapsulated	MET OX = metallic oxide	POT = potentiometer	TRIM = trimmer
EXT = external	MFR = manufacturer	PP = peak-to-peak	TWT = traveling wave tube
F = farads	MHZ = mega hertz	PT = point	U = micro = 10 ⁻⁶
FH = flat head	MINAT = miniature	PWV = peak working voltage	VAR = variable
FIL H = fillister head	MOM = momentary		VDCW = dc working volts
FXD = fixed	MOS = metal oxide substrate	RECT = rectifier	W / = with
G = giga (10 ⁹)	MTG = mounting	RF = radio frequency	W = watts
GE = germanium	MY = "mylar"	RH = round head or right hand	WIV = working inverse voltage
GL = glass	N = nano (10 ⁻⁹)		WW = wirewound
GRD = ground(ed)	N/C = normally closed		W/O = without
	NE = neon		
	NI PL = nickel plate		

01194-14

Table 5-1. 05451-60068 ADC Interface Board Parts (Part 1 of 2)

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
A1	05451-60068	7	1	HIGH SPEED ADC INTERFACE	28480	05451-60068
C1	0160-2204	0	4	CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
C2	0160-4554	7	45	CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C3	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C4	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C5	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C6	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C7	0160-4554	0	5	CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-4557
C8	0160-4557	0		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-4557
C9	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C10	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C11	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C12	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C13	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C14	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C15	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C16	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C17	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C18	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C19	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C20	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C21	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C22	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C23	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C24	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C25	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C26	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C27	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C28	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
C29	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
C30	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C31	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C32	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C33	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C34	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C35	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C36	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C37	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C38	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C39	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C40	0160-2204	0		CAPACITOR-FXD 100PF +-5% 300VDC MICA	28480	0160-2204
C41	0160-4557	0		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-4557
C42	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C43	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C44	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C45	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C46	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C47	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C48	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C49	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C50	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C51	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C52	0180-0229	7	2	CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X901082
C53	0160-4554	7		CAPACITOR-FXD .01UF +-20% 50VDC CER	28480	0160-4554
C54	0160-4557	0		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-4557
C55	0160-4557	0		CAPACITOR-FXD .1UF +-20% 50VDC CER	28480	0160-4557
C56	0180-0229	7		CAPACITOR-FXD 33UF+-10% 10VDC TA	56289	150D336X901082
D81	1990-0486	6	1	LED=VISIBLE LUM=INT=IMCD IF=20MA=MAX	28480	5082-4684
D82	1990-0485	5	1	LED=VISIBLE LUM=INT=800UCD IF=30MA=MAX	28480	5082-4984
D83	1990-0487	7	1	LED=VISIBLE LUM=INT=IMCD IF=20MA=MAX	28480	5082-4584
R1	0757-0280	3	5	RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0-1001-F
R2	0698-3442	9	2	RESISTOR 237 1% .125W F TC=0+-100	24546	C4-1/8-T0-237R-F
R3	0698-3439	4	1	RESISTOR 178 1% .125W F TC=0+-100	24546	C4-1/8-T0-178R-F
R4	0698-3442	9		RESISTOR 237 1% .125W F TC=0+-100	24546	C4-1/8-T0-237R-F
R5	1810-0273	9	4	NETWORK=RES 10-PIN-SIP .1-PIN-SPCG	11236	750-101-R470
R6	1810-0273	9		NETWORK=RES 10-PIN-SIP .1-PIN-SPCG	11236	750-101-R470
R7	0757-0420	3	1	RESISTOR 750 1% .125W F TC=0+-100	24546	C4-1/8-T0-751-F
R8	0698-3444	1	1	RESISTOR 316 1% .125W F TC=0+-100	24546	C4-1/8-T0-316R-F
R9	0698-0082	7	2	RESISTOR 464 1% .125W F TC=0+-100	24546	C4-1/8-T0-4640-F
R10	0698-0082	7		RESISTOR 464 1% .125W F TC=0+-100	24546	C4-1/8-T0-4640-F

See introduction to this section for ordering information
 *Indicates factory selected value

Table 5-1. 05451-60068 ADC Interface Board Parts (Part 2 of 2)

Reference Designation	HP Part Number	C D	Qty	Description	Mfr Code	Mfr Part Number
R11	1810-0273	9		NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R470
R12	1810-0273	9		NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R470
R13	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
R14	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
R15	0757-1094	9	3	RESISTOR 1,47K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1471-F
R16	0757-1094	9		RESISTOR 1,47K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1471-F
R17	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
R18	0757-1094	9		RESISTOR 1,47K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1471-F
R19	0757-0280	3		RESISTOR 1K 1% .125W F TC=0+-100	24546	C4-1/8-T0=1001-F
R20	1810-0275	1	4	NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R1K
R21	1810-0275	1		NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R1K
R22	1810-0275	1		NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R1K
R23	1810-0275	1		NETWORK-RES 10-PIN-SIP ,1-PIN-SPCG	11236	750-101-R1K
TP1- TP21	1251-4704	3	21	CONNECTOR 25-PIN M HDF	28480	1251-4704
U101	1820-1197	9	4	IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
U102	1820-1201	6	4	IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
U103	1820-1199	1	3	IC INV TTL LS HEX 1-INP	01295	SN74LS04N
U104	1820-1437	0	2	IC MV TTL LS MONOSTBL DUAL	01295	SN74LS221N
U105	1820-1112	8	4	IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
U201	1820-1209	4	2	IC BFR TTL LS NAND QUAD 2-INP	01295	SN74LS38N
U202	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
U203	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
U204	1820-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
U205	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
U301	1820-1917	1	2	IC BFR TTL LS LINE DRVR OCTL	01295	SN74LS240N
U302	1820-1730	6	4	IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
U303	1820-1440	5	2	IC LCH TTL LS QUAD	01295	SN74LS279N
U304	1820-1203	8	2	IC GATE TTL LS AND TPL 3-INP	01295	SN74LS11N
U305	1820-1112	8		IC FF TTL LS D-TYPE POS-EDGE-TRIG	01295	SN74LS74N
U401	1820-1917	1		IC BFR TTL LS LINE DRVR OCTL	01295	SN74LS240N
U402	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
U403	1820-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
U404	1820-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
U405	1820-1080	9	11	IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U501	1820-1416	5	4	IC SCHMITT-TRIG TTL LS INV HEX 1-INP	01295	SN74LS14N
U502	1816-9034	0	1	IC TTL 64-BIT MEM 3-S	07263	9403PC
U503	1820-1437	1		IC MV TTL LS MONOSTBL DUAL	01295	SN74LS221N
U504	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U505	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U601	1820-1416	5		IC SCHMITT-TRIG TTL LS INV HEX 1-INP	01295	SN74LS14N
U602	1816-9034	0	3		28480	1816-9034
U603	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
U604	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U605	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U701	1820-1416	5		IC SCHMITT-TRIG TTL LS INV HEX 1-INP	01295	SN74LS14N
U702	1816-9034	0			28480	1816-9034
U703	1820-1730	6		IC FF TTL LS D-TYPE POS-EDGE-TRIG COM	01295	SN74LS273N
U704	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U705	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U801	1820-1416	5		IC SCHMITT-TRIG TTL LS INV HEX 1-INP	01295	SN74LS14N
U802	1816-9034	0			28480	1816-9034
U803	1820-1208	3	1	IC GATE TTL LS OR QUAD 2-INP	01295	SN74LS32N
U804	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U805	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U901	1820-1209	4		IC BFR TTL LS NAND QUAD 2-INP	01295	SN74LS38N
U902	1820-1197	9		IC GATE TTL LS NAND QUAD 2-INP	01295	SN74LS00N
U903	1820-1440	5		IC LCH TTL LS QUAD	01295	SN74LS279N
U904	1820-1199	1		IC INV TTL LS HEX 1-INP	01295	SN74LS04N
U905	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
U1002	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
U1003	1820-1203	8		IC GATE TTL LS AND TPL 3-INP	01295	SN74LS11N
U1004	1820-1201	6		IC GATE TTL LS AND QUAD 2-INP	01295	SN74LS08N
U1005	1820-1080	9		IC DRVR TTL LINE DRVR DUAL 6-INP	18324	N8T13B
MISCELLANEOUS PARTS						
	5040-6001	4	1	EXTRACTOR, PC BOARD	28480	5040-6001
	5040-6065	0	1	EXTRACTOR, RED	28480	5040-6065

See introduction to this section for ordering information
 *Indicates factory selected value

Table 5-2. Manufacturers Code List

MFR. No.	MANUFACTURER NAME	ADDRESS	ZIP CODE
01295	Texas Instruments, Inc. Semiconductor Components Div.	Dallas, TX	75222
07263	Fairchild Semiconductor Division	Mountain View, CA	94042
11236	CTS of Berne, Inc.	Berne, IN	46711
18324	Signetics Corp.	Sunnyvale, CA	94086
24546	Corning Glass Works (Bradford)	Bradford, PA	16701
28480	Hewlett-Packard Company, Corporate Headquarters	Palo Alto, CA	94304
56289	Sprague Electric Co.	North Adams, MA	01247



Product Line Sales/Support Key

Key	Product Line
A	Analytical
CM	Components
C	Computer Systems
CP	Computer Systems Primary Service Responsible Office (SRO)
CS	Computer Systems Secondary SRO
E	Electronic Instruments & Measurement Systems
M	Medical Products
MP	Medical Products Primary SRO
MS	Medical Products Secondary SRO
P	Consumer Calculators

* Sales only for specific product line
 ** Support only for specific product line

IMPORTANT: These symbols designate general product line capability. They do not insure sales or support availability for all products within a line, at all locations. Contact your local sales office for information regarding locations where HP support is available for specific products.

HP distributors are printed in italics.

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Telectra
Empresa Técnica de Equipamentos
Eléctricos, S.A.R.L.
R. Barbosa Rodrigues, 41-1 DT.
Caixa Postal 6487
LUANDA
Tel: 35515,35516
A,E,M,P*

ARGENTINA

Hewlett-Packard Argentina S.A.
 Avenida Santa Fe 2035
 Martínez 1640 BUENOS AIRES
 Tel: 798-5735, 792-1293
 Telex: 122443 AR CIGY
 Cable: HEWPACKARG
 A,E,CP,P

Biotron S.A.C.I.y.M
Avenida Paseo Colon 221
9 Piso
1399 BUENOS AIRES
Tel: 30-4846, 30-1851, 30-8384
Telex: (33)17595 BIONAR
 Cable: BIOTRON Argentina
 M

Fate S.A. Electronica
Bartolomeu Mitre 833
1036 BUENOS AIRES
Tel: 74-41011, 74-49277,
74-43459
Telex: 18137, 22754
 P

AUSTRALIA

Adelaide, South Australia
Pty. Ltd.
 Hewlett-Packard Australia Pty.Ltd.
 153 Greenhill Road
PARKSIDE, S.A. 5063
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 Telex: 82536
 Cable: HEWPARAD Adelaide
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 Hewlett-Packard Australia Pty.Ltd.
 5th Floor
 Teachers Union Building
 495-499 Boundary Street
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 Telex: 42133
 Cable: HEWPARAD Brisbane
 A,CM,CS,E,MS,P

Canberra, Australia Capital Office

Hewlett-Packard Australia Pty.Ltd.
 121 Wollongong Street
FYSHWICK, A.C.T. 2609
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 Telex: 62650
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Perth, Western Australia Office

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 141 Stirling Highway
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Sydney, New South Wales Office

Hewlett-Packard Australia Pty.Ltd.
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 Telex: 32375
 CM,C*,E*

Hewlett-Packard Ges.m.b.h.
 Wehistrasse 29
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BAHRAIN

Green Salon
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BAHRAIN
 Tel: 5503
 Telex: 88419
 P

Wael Pharmacy
P.O. Box 648
BAHRAIN
 Tel: 54886, 56123
 Telex: 8550 WAEI GJ
 M

BELGIUM

Hewlett-Packard Belgium S.A./N.V.
Blvd de la Woluwe, 100
Woluweled
B-1200 BRUSSELS
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 Telex: 23-494 paloben bru
 A,CM,CP,E,MP,P

BRAZIL

Hewlett-Packard do Brasil I.e.C.
 Ltda.
 Alameda Rio Negro, 750
ALPHAVILLE 06400 Barueri SP
 Tel: 421-1311
 Telex: 011 23602 HPBR-BR
 Cable: HEWPACK Sao Paulo
 A,CM,CP,E,MS

Hewlett-Packard do Brasil I.e.C.
 Ltda.
 Rua Padre Chagas, 32
90000-PORTO ALEGRE-RS
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22471 RIO DE JANEIRO-RJ
 Tel: 286-0237
 Telex: 021-21905 HPBR-BR
 Cable: HEWPACK Rio de Janeiro
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BURUNDI

Typomeca S.P.R.L.
B.P. 553
BUJUMBURA
 Tel: 2659
 P

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 P

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Arranged alphabetically by country

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3



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Telex: 31231 TEIL NG
A,E,M,P
The Electronics Instrumentations
Ltd.
144 Agege Motor Road, Mushin
P.O. Box 6645
Mushin, **LAGOS**
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NORTHERN IRELAND

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M

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Hewlett-Packard Norge A/S
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N-5033 **FYLLINGSDALEN (BERGEN)**
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CM,CS,E
Hewlett-Packard Norge A/S
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N-1345 **OESTERAAS**
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A*,CM,CP,E,MS,P

OMAN

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MUSCAT
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Telex: 3289 BROKER MB MUSCAT
P

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Tel: 28624
Cable: FEMUS Rawalpindi
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Oosman Chambers
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P.O. Box 512927
Telex: 2894 MUSHKO PW
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Panama 5
Cable Samuel Lewis
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Telex: 3480380
Cable: ELECTRON Panama
A,E,M
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P.O. Box 2068
Free Zone of Colon
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Telex: 3485126
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Cómpania Electro Médica
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LIMA 1
Tel: 41-4325
Telex: Pub. Booth 25424 SISIDRO
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PHILIPPINES

The Online Advanced Systems
Corporation
Rico House, Amorsolo Cor. Herrera
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P.O. Box 1510
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Tel: 85-35-81, 85-34-91, 85-32-21
Telex: 3274 ONLINE
A,C,E,M



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P

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Telectra-Empresa Técnica de Equipamentos Eléctricos S.a.r.l.
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P.O. Box 2531
P-LISBON 1
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A,C,E,P
Mundinter
Intercambio Mundial de Comércio S.a.r.l.
P.O. Box 2761
Avenida Antonio Augusto de Aguiar 138
P-LISBON
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M

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P.O. Box 1563
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Telex: 4439 NASSER
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Scitecharabia
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!DOHA
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AL-KHOBAR
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Cable: ELECTA AL-KHOBAR
C,E,M,P
Modern Electronic Establishment
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JEDDAH
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RIYADH
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CM,MS

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SO. SAN FRANCISCO, CA 94080
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