

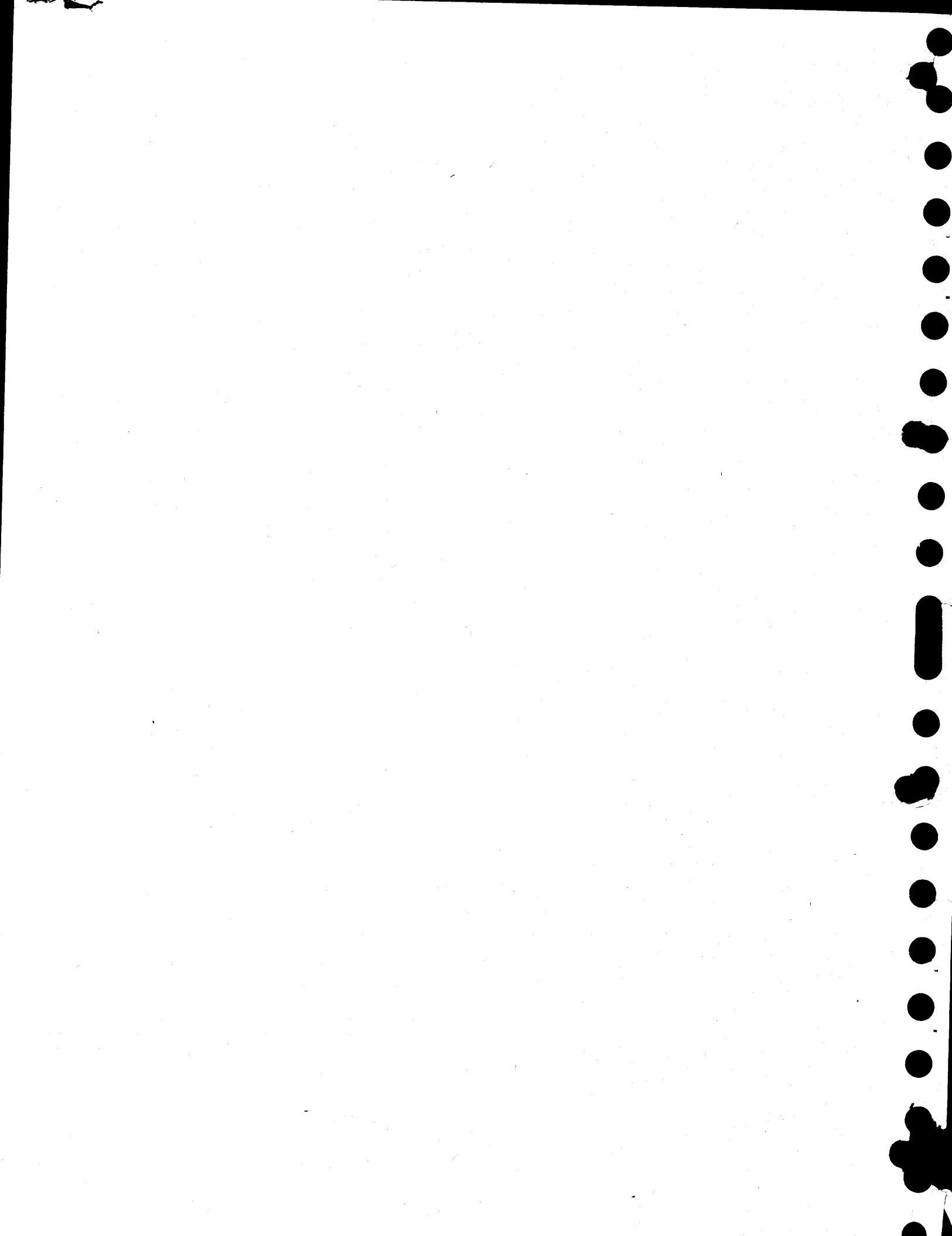
**CONTROL DATA<sup>®</sup>  
DISK STORAGE UNIT**

**BR5A1**

**DIAGRAMS  
WIRE LISTS**

**CONTROL DATA**  
CORPORATION

**CUSTOMER ENGINEERING MANUAL**



**CONTROL DATA<sup>®</sup>**  
**DISK STORAGE UNIT**

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CORPORATION

**CUSTOMER ENGINEERING MANUAL**



## PREFACE

Customer engineering material for the CONTROL DATA® BR5A1 Disk Storage Unit is contained in four separate manuals and provides all the information needed to install, operate, and maintain the unit.

Publication No.	70617800	General Description, Operation, Installation and Checkout, Theory of Operation, Maintenance.
Publication No.	70617900	Diagrams, Wire Lists
Publication No.	70618000	Parts Data
Publication No.	70616800	Maintenance Aids



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SECTION 1

GENERAL DESCRIPTION

SECTION 2

OPERATION

SECTION 3

INSTALLATION AND CHECKOUT

SECTION 4

THEORY OF OPERATION

Information for these sections is included in BR5A1  
Disk Storage Unit, Publication No. 70617800.



SECTION 5

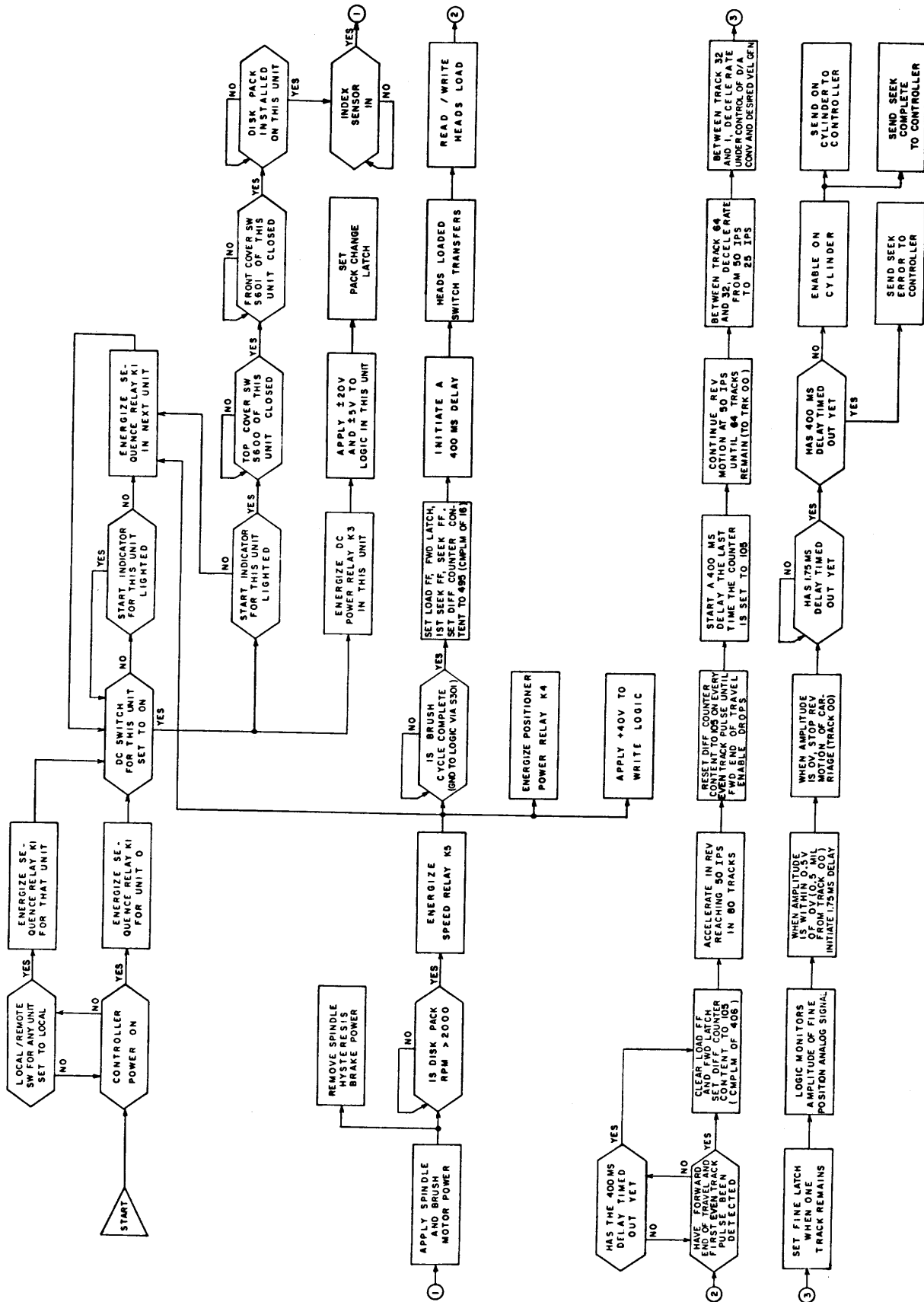
DIAGRAMS



## DIAGRAMS

### INTRODUCTION

This section contains diagrams that logically describe the DSU in terms of the functions which it performs. Figures 5-1 through 5-13 are flow charts, simplified circuits, and timing diagrams that describe the First Seek function, the Power Off sequence, the Direct Seek (forward and reverse) function, the Return to Zero function, the Read/Write operations, and Head Advance timing. The logic diagrams for the unit are provided on pages 5-15 through 5-37. The DSU signal distribution diagram is located on page 5-39. Panel (operator and maintenance) diagrams are on pages 5-40 and 5-41, and the unit power supply diagrams begin on page 5-42. Schematic diagrams for the position transducer preamplifier card and all other logic cards are located in the Maintenance Aids section (refer to Preface). Descriptive material for discrete component circuits is located in the same manual.



7417

Figure 5-1. Power On/First Seek Sequence

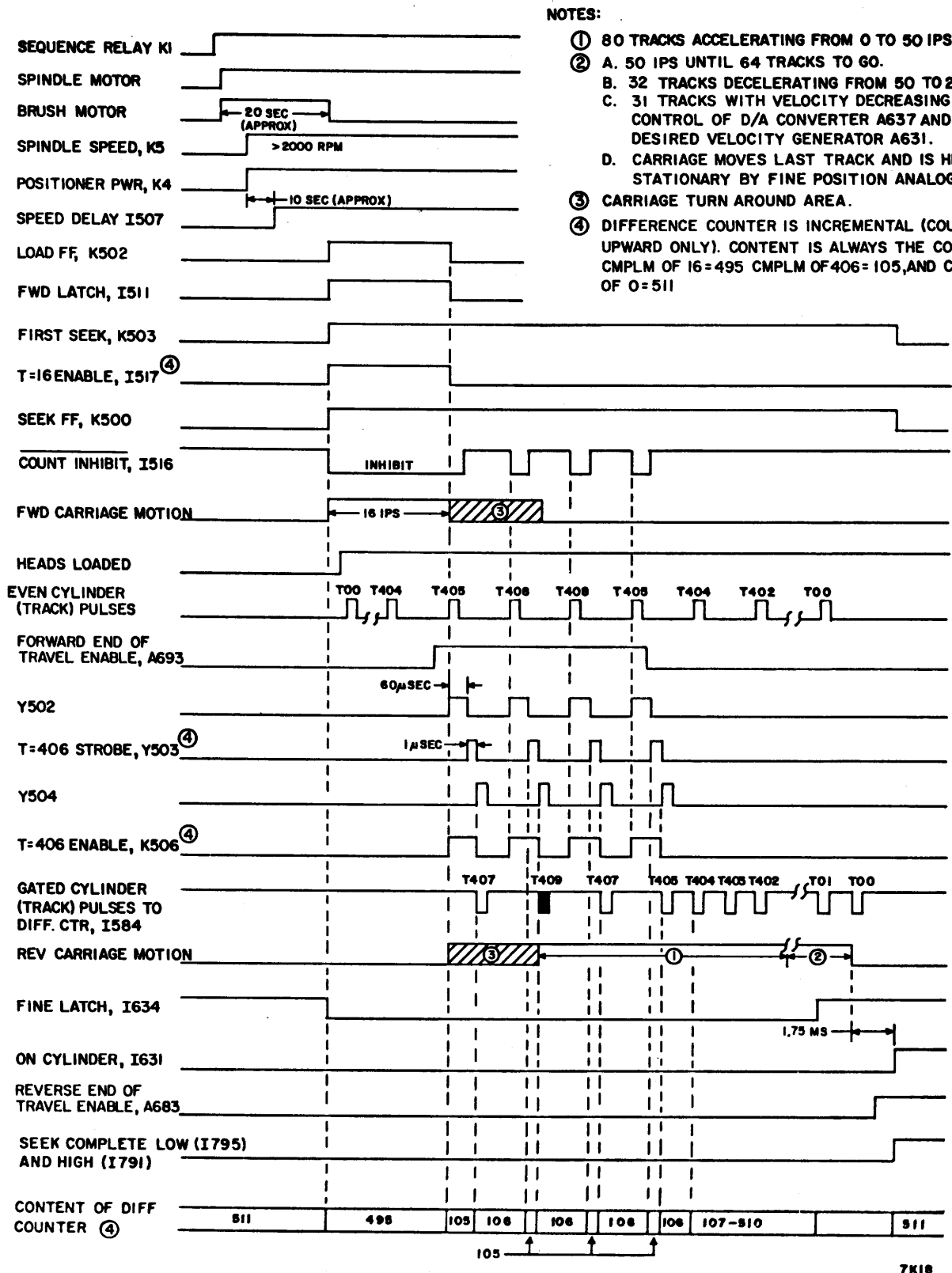


Figure 5-2. Power On/First Seek Timing

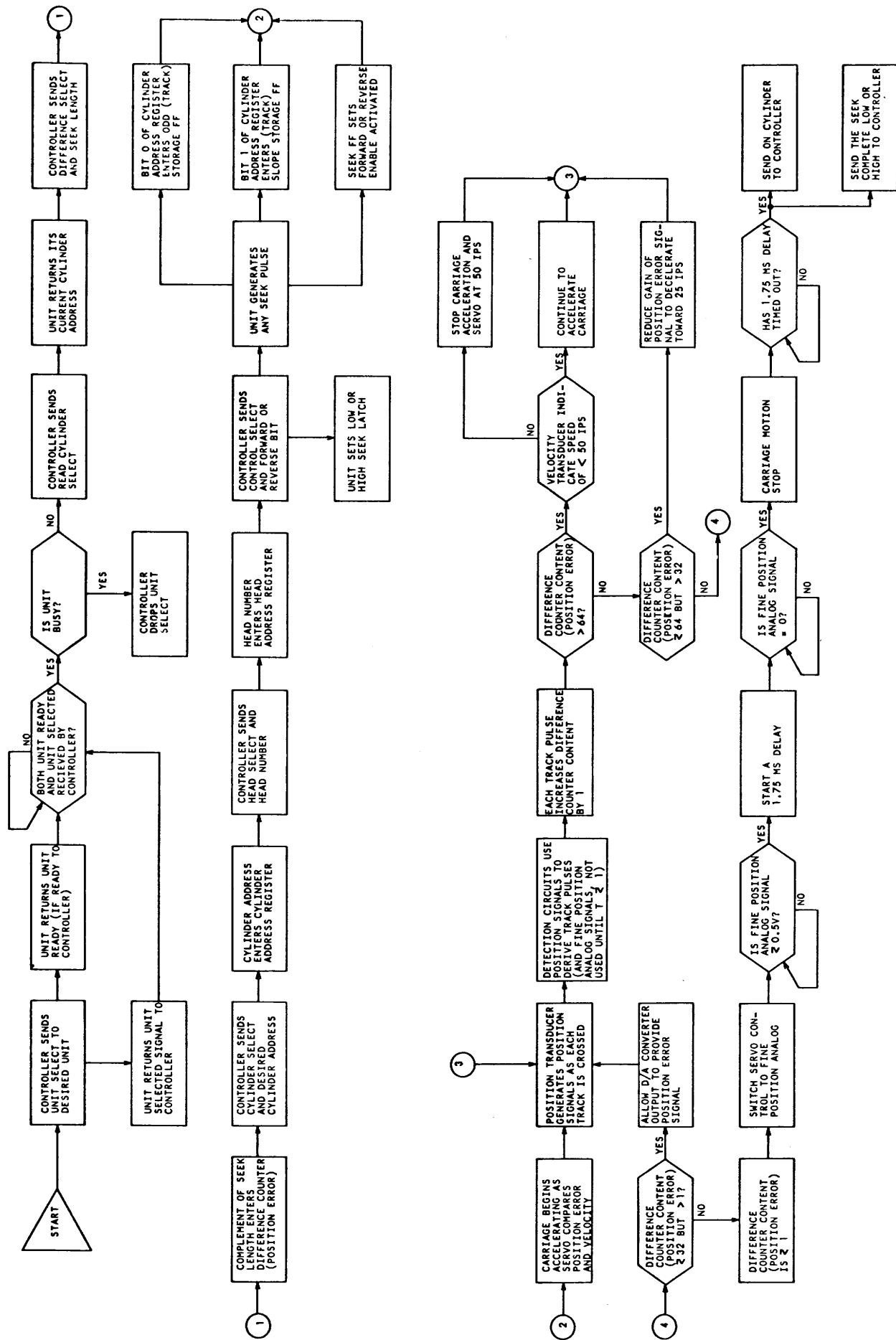


Figure 5-3. Direct Seek Sequence



FORWARD DIRECT SEEK FROM TRACK 120 TO 280 AND SELECT HEAD 01 (9)

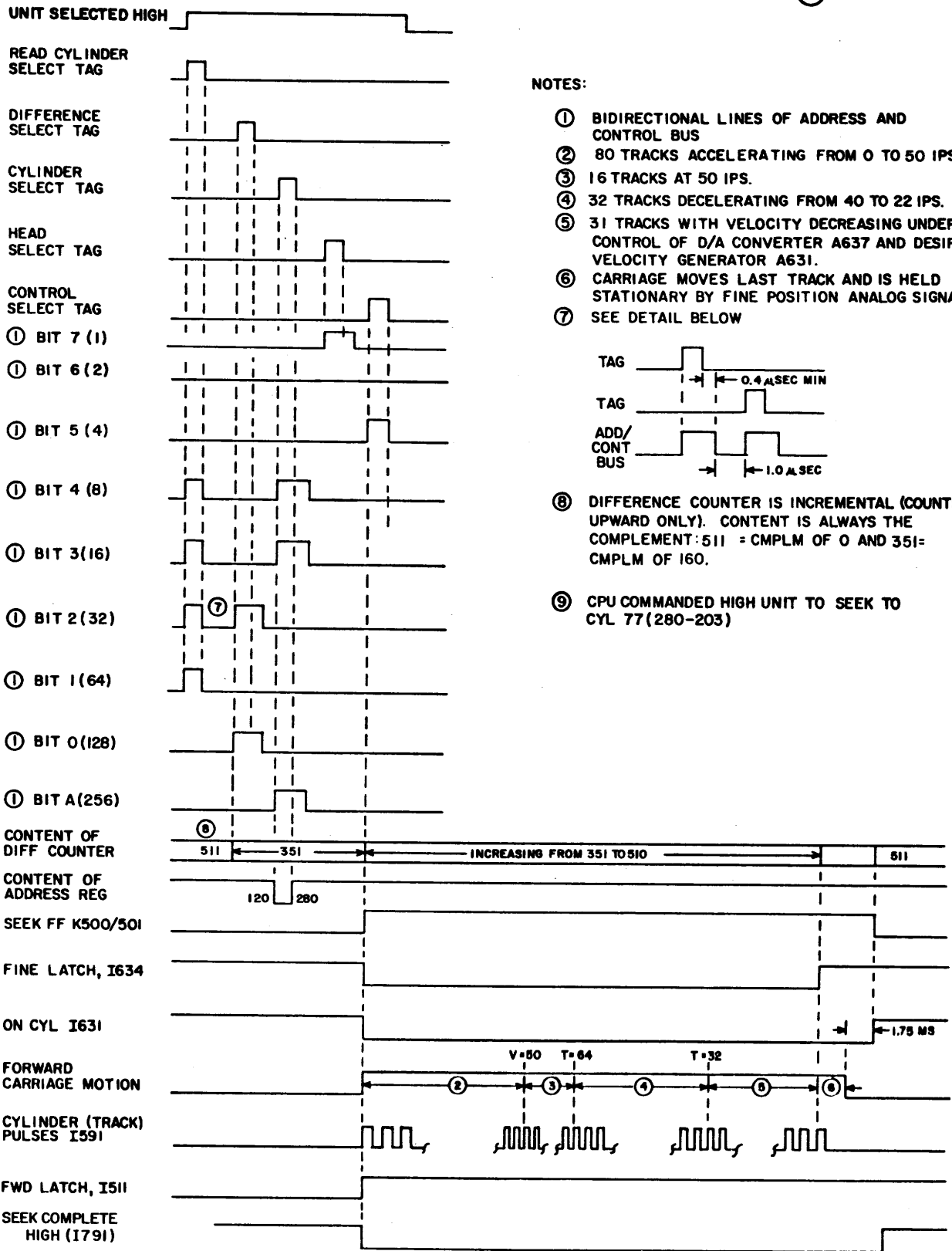
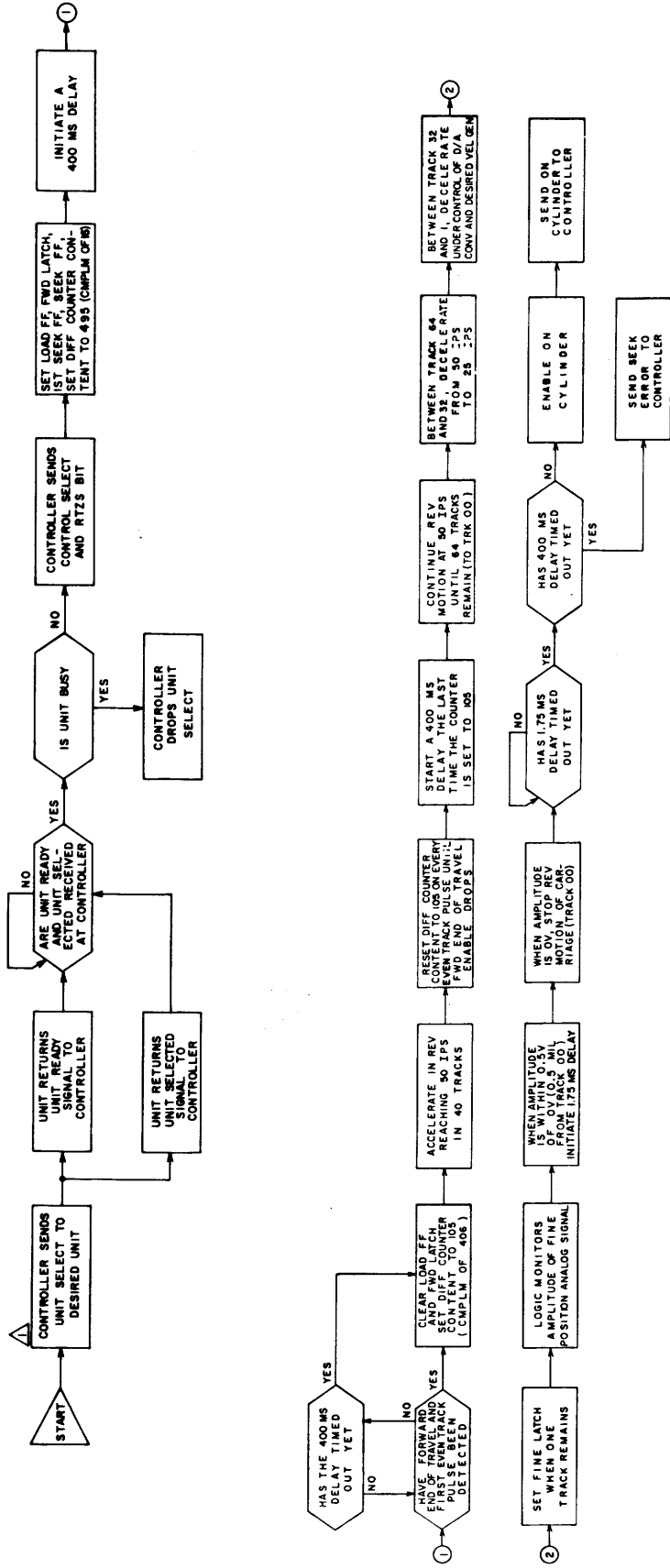


Figure 5-4. Direct Seek Timing

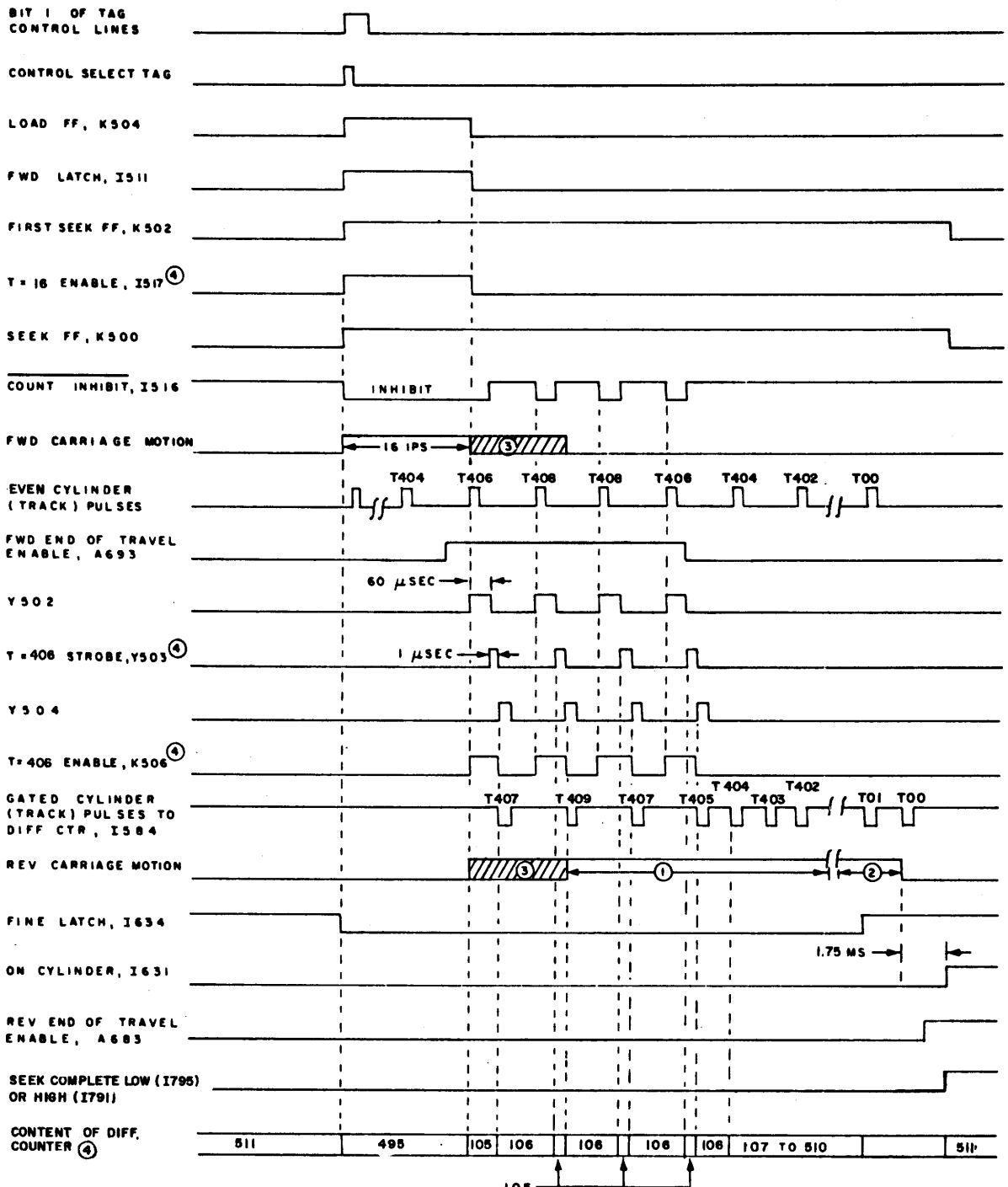
7K20A



NOTE:  
 △ UNIT SELECT ACCOMPANIED BY TRANSMISSION OF LOGIC NUMBER CODE FOR DESIRED UNIT.

TKR1

Figure 5-5. Return to Zero Seek Sequence



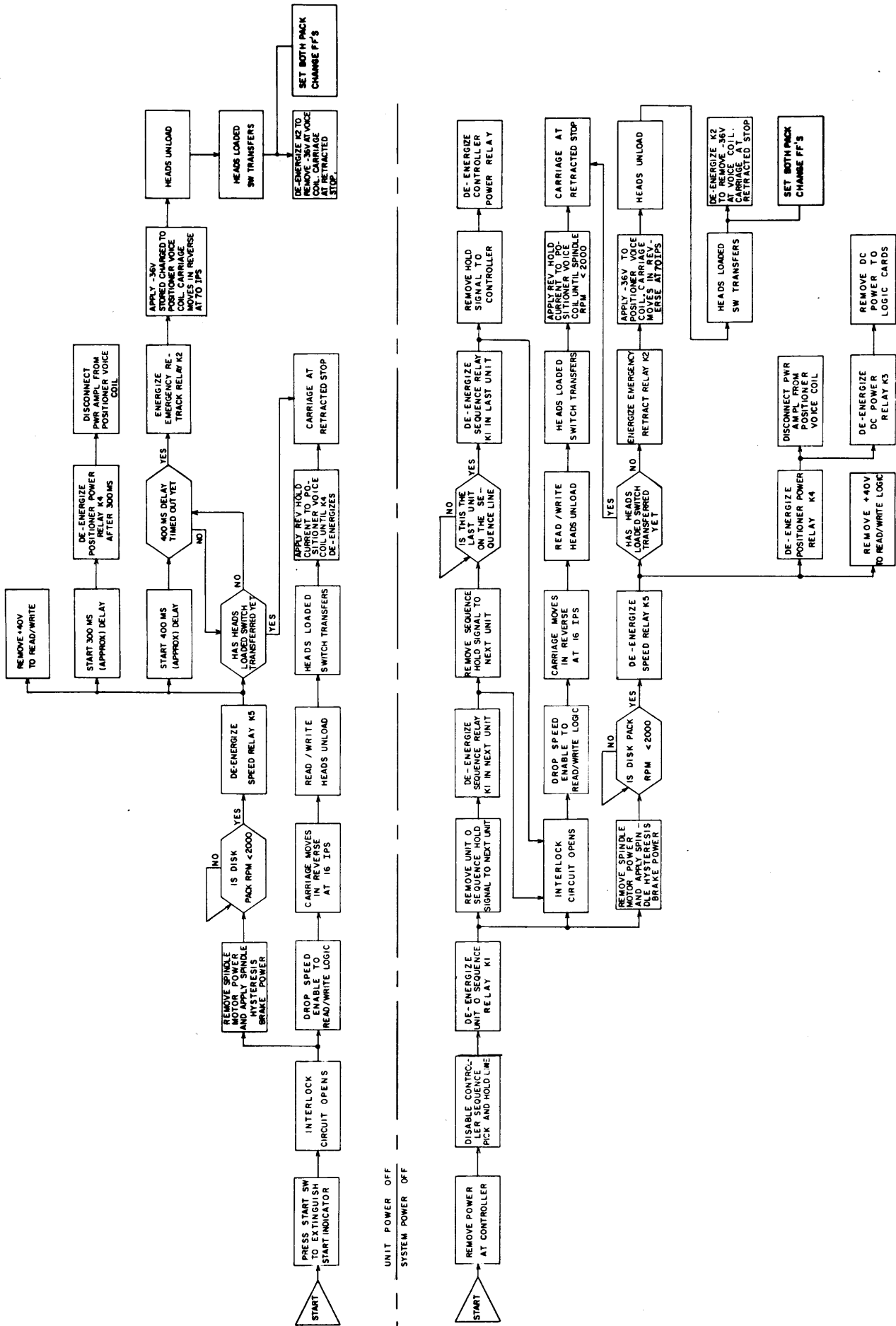
NOTES:

- ① 80 TRACKS ACCELERATING FROM 0 TO 50 IPS.
- ② A. 50 IPS UNTIL 64 TRACKS TO GO  
B. 32 TRACKS DECELERATING FROM 50 TO 25 IPS  
C. 31 TRACKS WITH VELOCITY DECREASING UNDER CONTROL OF D/A CONVERTER A637 AND DESIRED VOLOCITY GENERATOR A631
- D. CARRIAGE MOVES LAST TRACK AND IS HELD STATIONARY BY FINE POSITION ANALOG SIGNAL.

- ③ CARRIAGE TURN AROUND AREA.
  - ④ DIFFERENCE COUNTER IS INCREMENTAL (COUNTS UPWARD ONLY). CONTENT IS ALWAYS THE COMPLEMENT:
- CMPLM OF 16 = 495  
 CMPLM OF 406 = 105  
 CMPLM OF 0 = 511

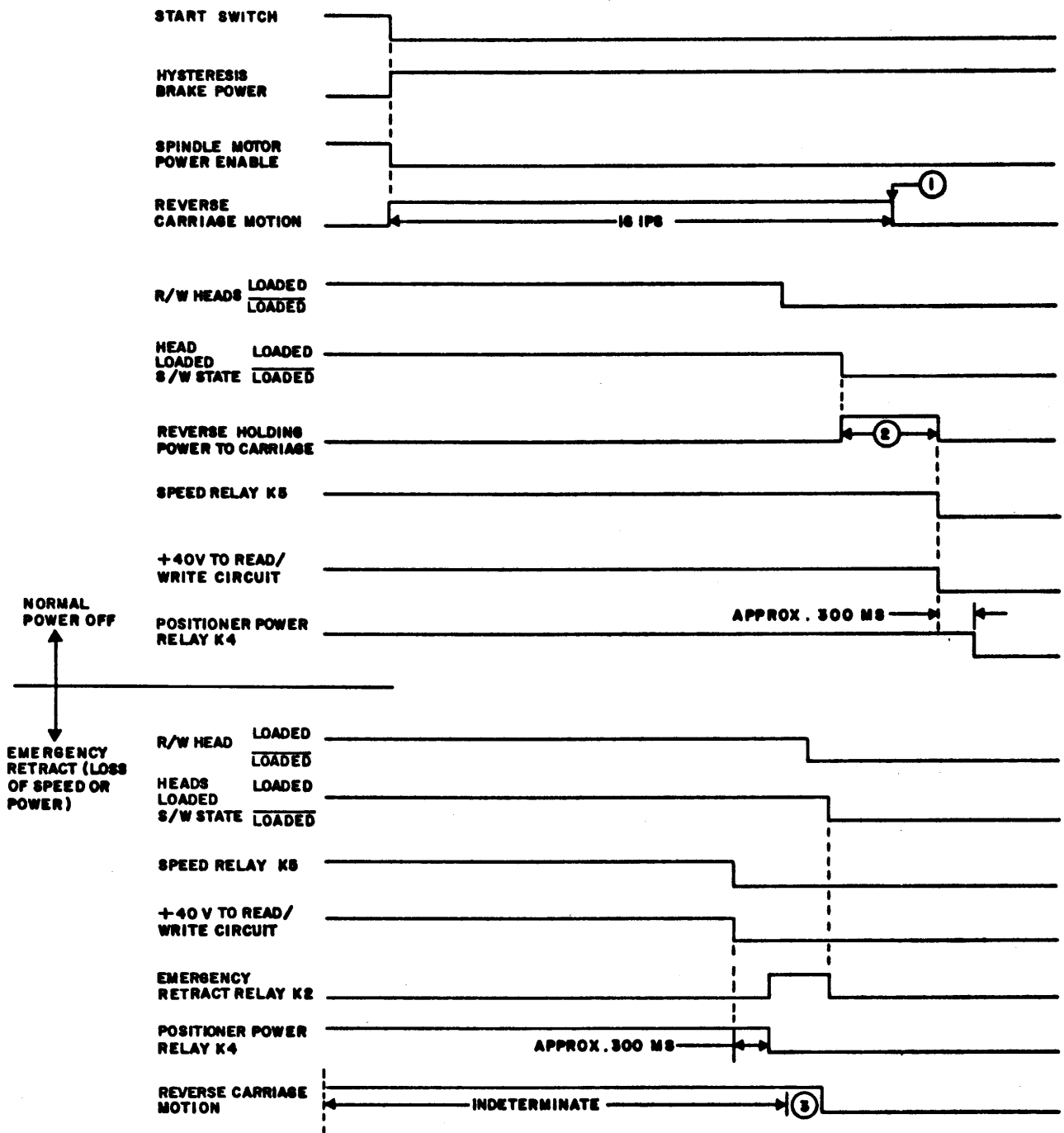
7K22

Figure 5-6. Return to Zero Seek Timing



7428

Figure 5-7. Unit or System Power Off Sequence

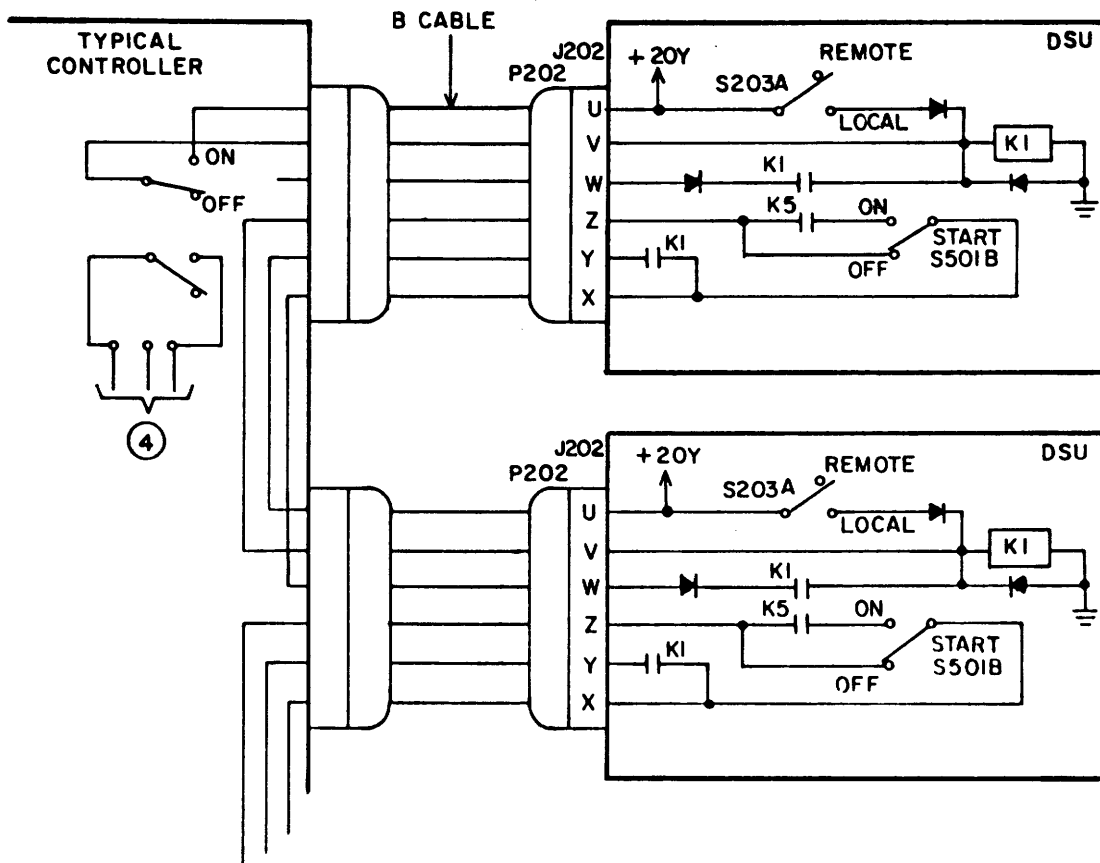


**NOTES:**

- 1 CARRIAGE ENCOUNTERS RETRACTED STOP.
- 2 ONE AMP (APPROX.) OF HOLDING CURRENT APPLIED TO POSITIONER UNTIL K8 DROPS.
- 3 CARRIAGE MOVES TO RETRACTED STOP AT 70 IPS.

7K24B

Figure 5-8. Unit or System Power Off Timing

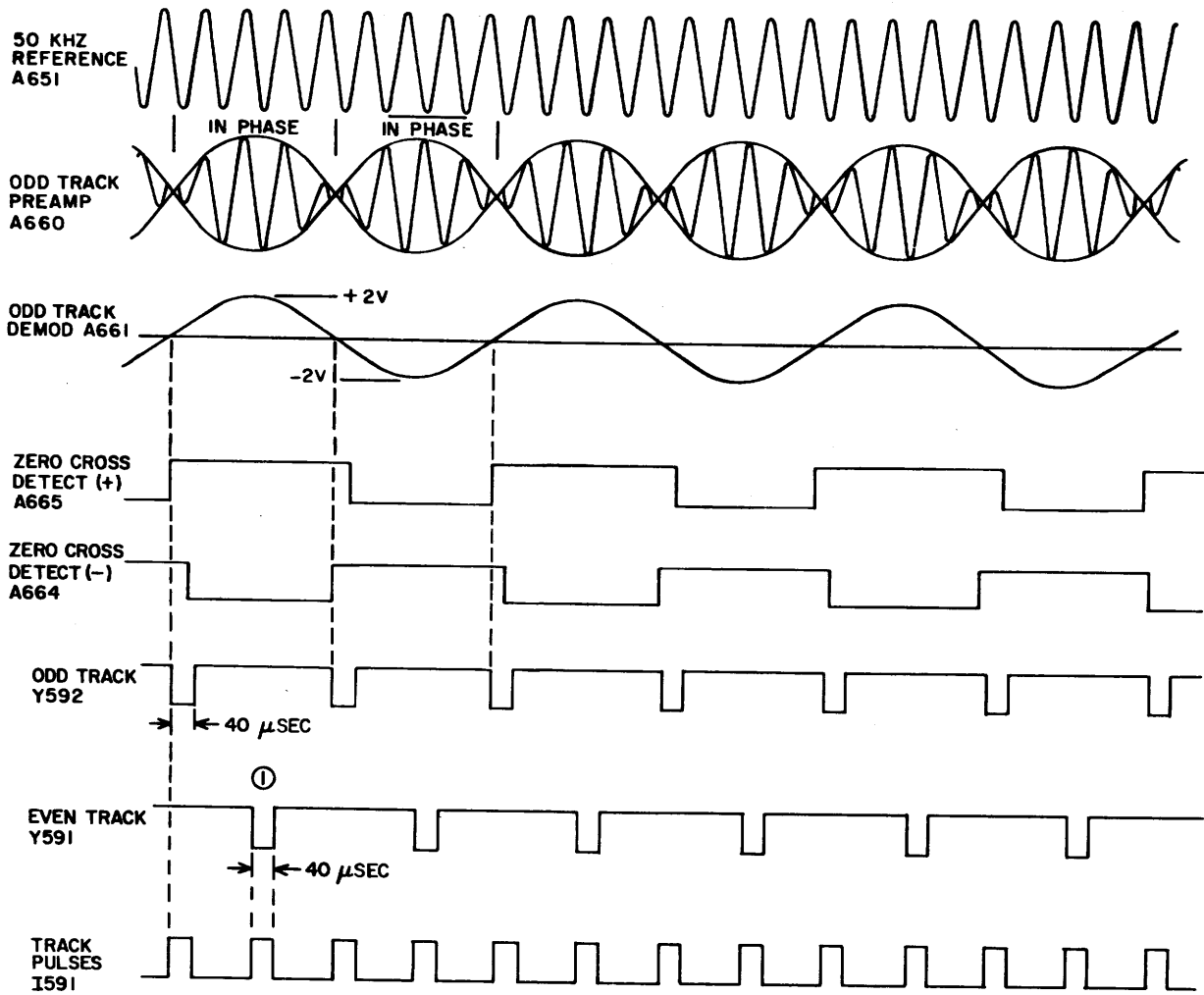


NOTES:

1. KI IS SEQUENCE RELAY.
2. K5 IS SPEED (OF SPINDLE) RELAY.
3. START SW IS LOCATED ON OPERATOR PANEL, ALL OTHER COMPONENTS IN POWER SUPPLY.
- ④ PINS Y AND Z OF LAST DSU MAY BE USED TO HOLD CONTROLLER POWER ON UNTIL ALL UNITS POWER DOWN.

Figure 5-9. System Power Sequence Lines

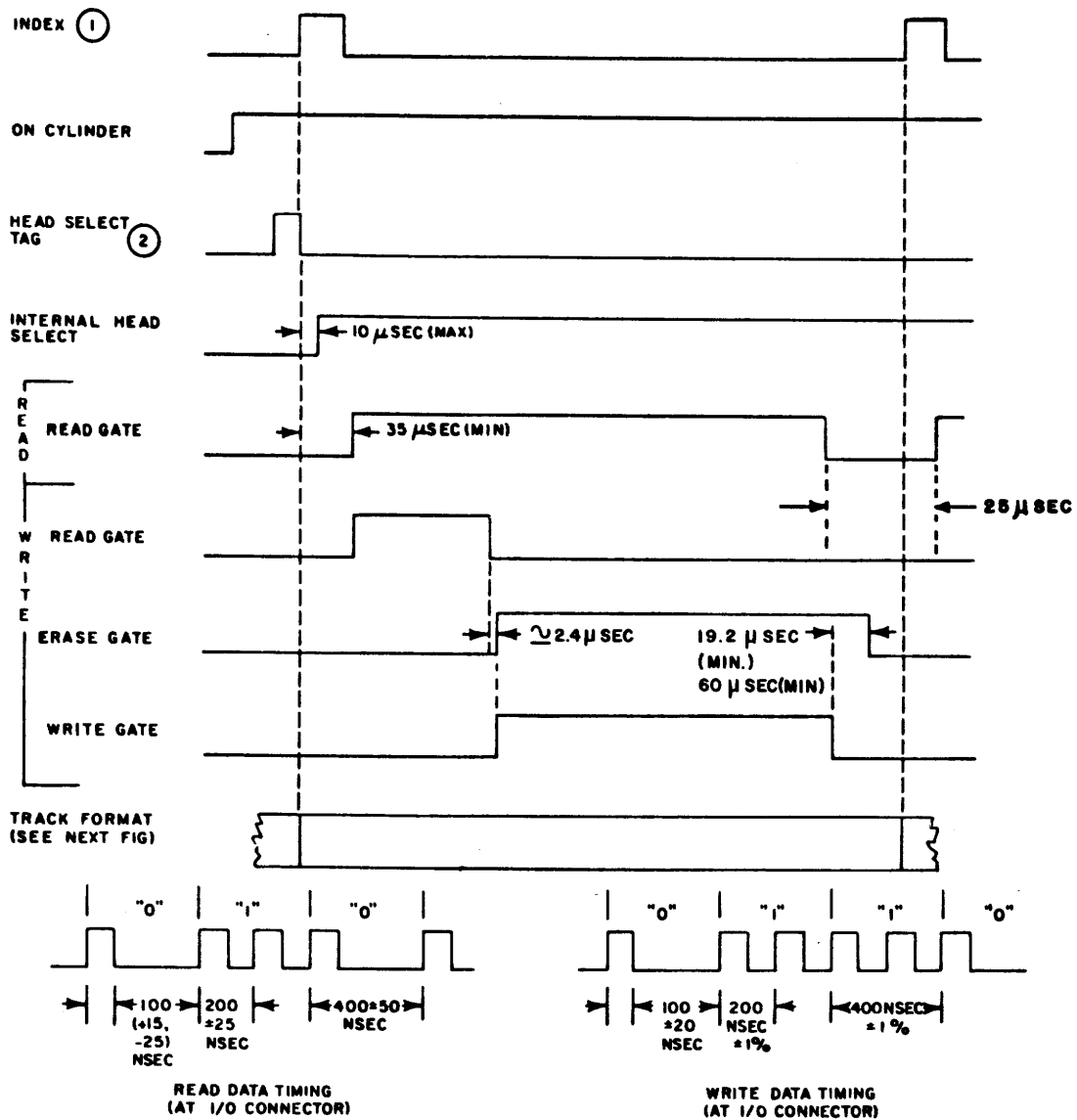
7K25A



NOTE:  
 ① EVEN TRACK PULSES DERIVED BY PARALLEL NETWORK BUT ARE SHIFTED 90 DEGREES.

6T13

Figure 5-10. Track Pulse Generation



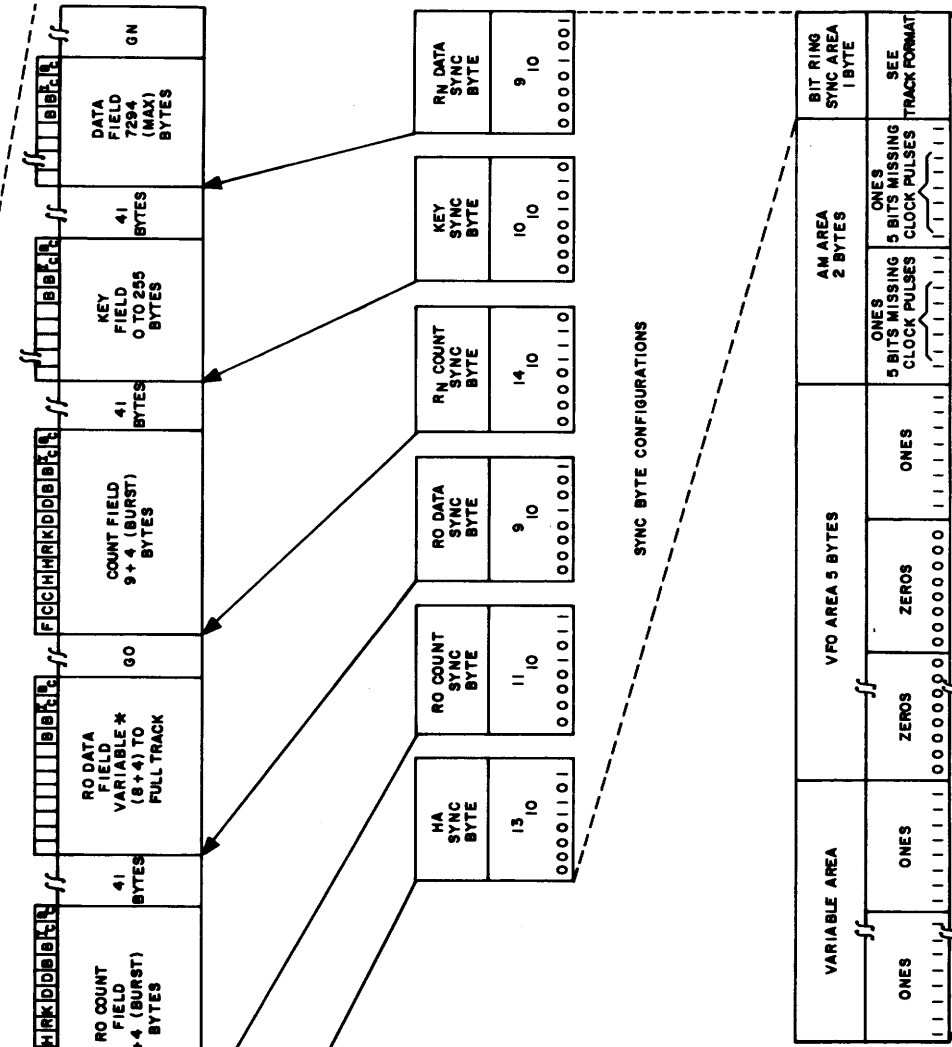
NOTES:

1. INDEX PULSE AVAILABLE TO CONTROLLER TO INDICATE BEGINNING OF TRACK OR CYLINDER.
2. HEAD SELECT TAG LINE SHOWN OCCURRING AT LATEST ACCEPTABLE TIME RELATIVE TO INDEX; NOT TO BE CONSIDERED A TYPICAL RELATIONSHIP.

7K48

Figure 5-11. Read/Write Timing



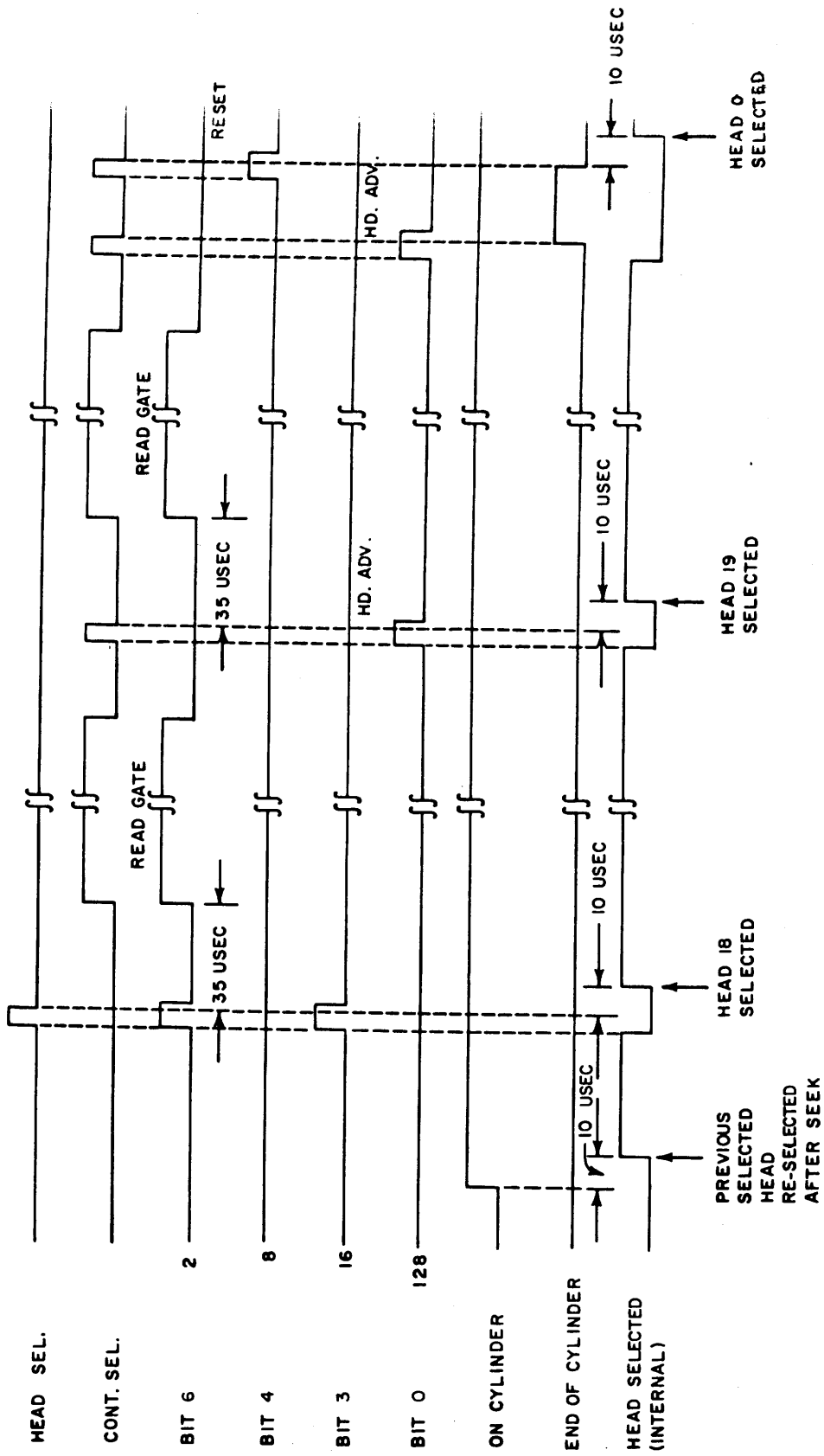


66118

- F = FLAG BYTE
- CC = CYLINDER NUMBER IN BINARY
- HH = HEAD NUMBER IN BINARY
- R = TRACK RECORD NUMBER IN BINARY
- K = KEY FIELD LENGTH IN BINARY
- DD = DATA FIELD LENGTH IN BINARY
- GO = 43 BYTES IF RO DATA LENGTH IS 8
- GO = 43+043 (DL) IF R DATA LENGTH IS 8 BYTES
- GN = 43+043 (KL+DL)
- BB = CYCLIC BURST BYTE
- IC = INDICATOR BYTE
- BC = BIT COUNT BYTE

\* EXTENDED DATA FIELD AND USE OF KEY FIELD FOR R<sub>0</sub> IS PERMITTED, BUT IS NOT COMPATIBLE WITH IBM PROGRAMMING SYSTEMS.

Figure 5-12. Track Format



6V17

Figure 5-13. Head Advance Timing

### DISCRETE COMPONENT

**DISCRETE COMPONENT CIRCUIT INFORMATION EXAMPLE:**

**FUNCTION SYMBOLS:**

- $\Delta$  AMPLIFIER
- $\Sigma X/\Delta$  DIGITAL TO ANALOG CONVERSION
- $X/Y$  DIGITAL TO ANALOG CONVERSION WITH ADJUSTABLE (ELECTRICALLY) GAIN
- $\text{Oscillator symbol}$  OSCILLATOR (FREQ NOTED OUTSIDE OF BOX)
- $\text{Demodulator symbol}$  DEMODULATOR
- $\text{Function symbol}$  FUNCTION GENERATOR
- $228.5 \text{ KHz}$  FREQUENCY SENSOR
- $\text{Absolute difference sensor symbol}$  ABSOLUTE DIFFERENCE SENSOR (VOLTAGE VALUE OF DIFFERENCE NOTED OUTSIDE OF BOX) WITH DIGITAL CONVERSION
- $\text{Single line multiple select symbol}$  SINGLE LINE MULTIPLE SELECT (EXCESSIVE VOLTAGE DROP OCCURS BUT MAKE THAN ONE SELECTION IS MADE)
- $\Sigma X/\Delta$  AND GATE OR INVERTER
- $\text{OR gate symbol}$  OR GATE OR INVERTER
- $\Delta/Y$  ANALOG TO DIGITAL CONVERTER
- $\text{Adjustable analog to digital converter symbol}$  ADJUSTABLE ANALOG TO DIGITAL CONVERTER
- $\text{Single shot symbol}$  SINGLE SHOT
- $\text{Adjustable single shot symbol}$  ADJUSTABLE SINGLE SHOT
- $\text{Adjustable ringing amplifier symbol}$  ADJUSTABLE RINGING AMPLIFIER (DESIRED RESONANT FREQ SPECIFIED ADJACENT TO BOX)
- $\text{Switch receiver symbol}$  SWITCH RECEIVER

### INTEGRATED

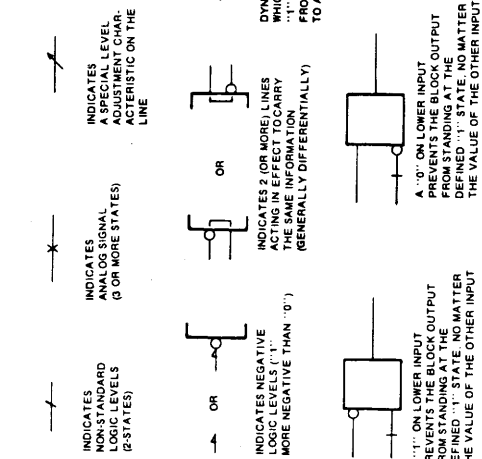
**INTEGRATED CIRCUIT (GATES) INFORMATION EXAMPLE:**

**INTEGRATED CIRCUIT (FF, COUNTER, TRANSMITTER, SINGLE SHOT) INFORMATION EXAMPLE:**

DATE	REV. NO.	PART NO.	REV.	REV.
19333	VCD-4780			
<b>KEY TO LOGIC SYMBOLS</b>			<b>TABLE</b>	<b>CD</b>
PART 1			1	J
DEVELOPMENT DIVISION			C	U

GENERAL INFORMATION AND SYMBOLOLOGY:

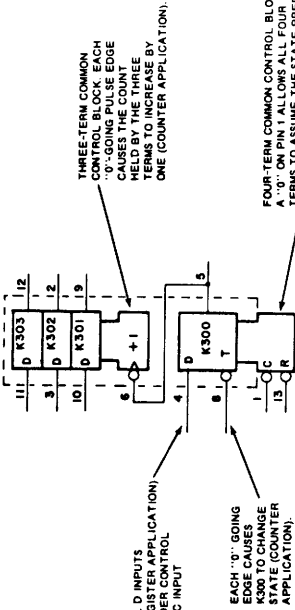
STANDARD LOGIC LEVEL: '1' = +3V, '0' = 0V  
 LOGIC DIAGRAMS DRAWN WITH INPUTS TO LEFT AND OUTPUTS TO RIGHT EXCEPT WHERE SPACE OR LAYOUT PROHIBITS. LOGIC TERM NUMBERS ASSIGNED IN SEQUENTIAL BLOCKS SO THAT LOWEST NUMBERED TERM (TO XX, J0XX, ETC) APPEAR ON SHEET 3 AND HIGHEST NUMBERED TERMS ARE FOUND AT THE END OF THE LOGIC SET.



GENERAL SIGNAL ANNOTATION, GATING, AND INHIBITING INFORMATION:

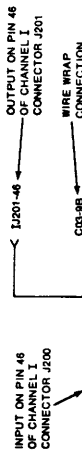
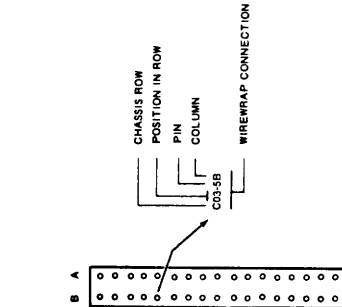
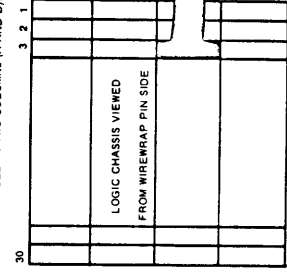
- S\* SET INPUT TO BISTABLE DEVICE.
- R\* RESET (CLEAR) INPUT TO BISTABLE DEVICE.
- G\* GATE INPUT. HAS NO DIRECT ACTION ON CIRCUIT, BUT MUST BE PRESENT BEFORE INPUTS AND/OR OUTPUT(S) CAN OCCUR. ON IF MORE THAN ONE IS USED, A NUMERICAL SUFFIX IS ADDED (G1, G2, ETC).
- D\* IDENTIFIES AN INPUT SIGNAL WHOSE ACTION IN THE BLOCK REQUIRES THE PRESENCE OF ANOTHER SIGNAL(S).
- C\* STROBE PULSE USUALLY USED TO GATE D INPUTS INTO A BISTABLE DEVICE.
- T\* TOGGLE INPUT. BISTABLE DEVICE CHANGES STATE EACH TIME T ASSUMES ITS SPECIFIED STATE.

\* THE SIGNAL STATE REQUIRED FOR THIS SIGNAL TO BE IN THE SPECIFIED FUNCTION IS ADDITIONALLY DESCRIBED AT POINTS WHICH ENTERS THE LOGIC TERM BOX. SEE ADJACENT EXAMPLE.

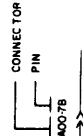


GENERAL WIREWRAP AND CONNECTOR INFORMATION:

LOGIC CHASSIS CARD LOCATIONS IDENTIFIED ACCORDING TO ALPHA-NUMERIC MATRIX. WIREWRAP PINS AT EACH CARD LOCATION ARRANGED IN TWO COLUMNS (A AND B).

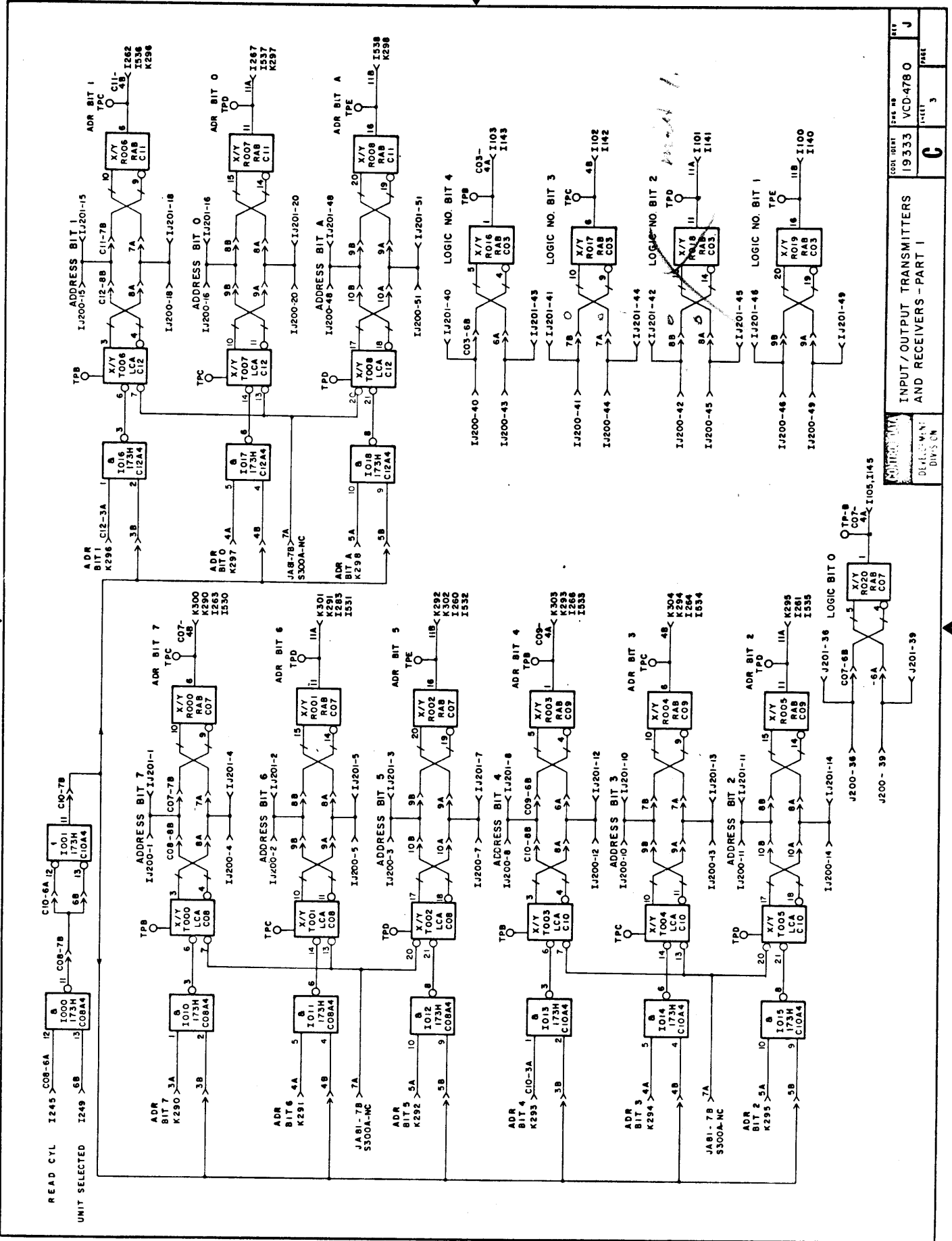


1934 ACCESS TESTER DENOTES CONNECTION TO ACCESSOR (R/W) TESTER CARD. USE OF THESE CARDS IS OPTIONAL DURING TESTS. SEE CHASSIS MAP.

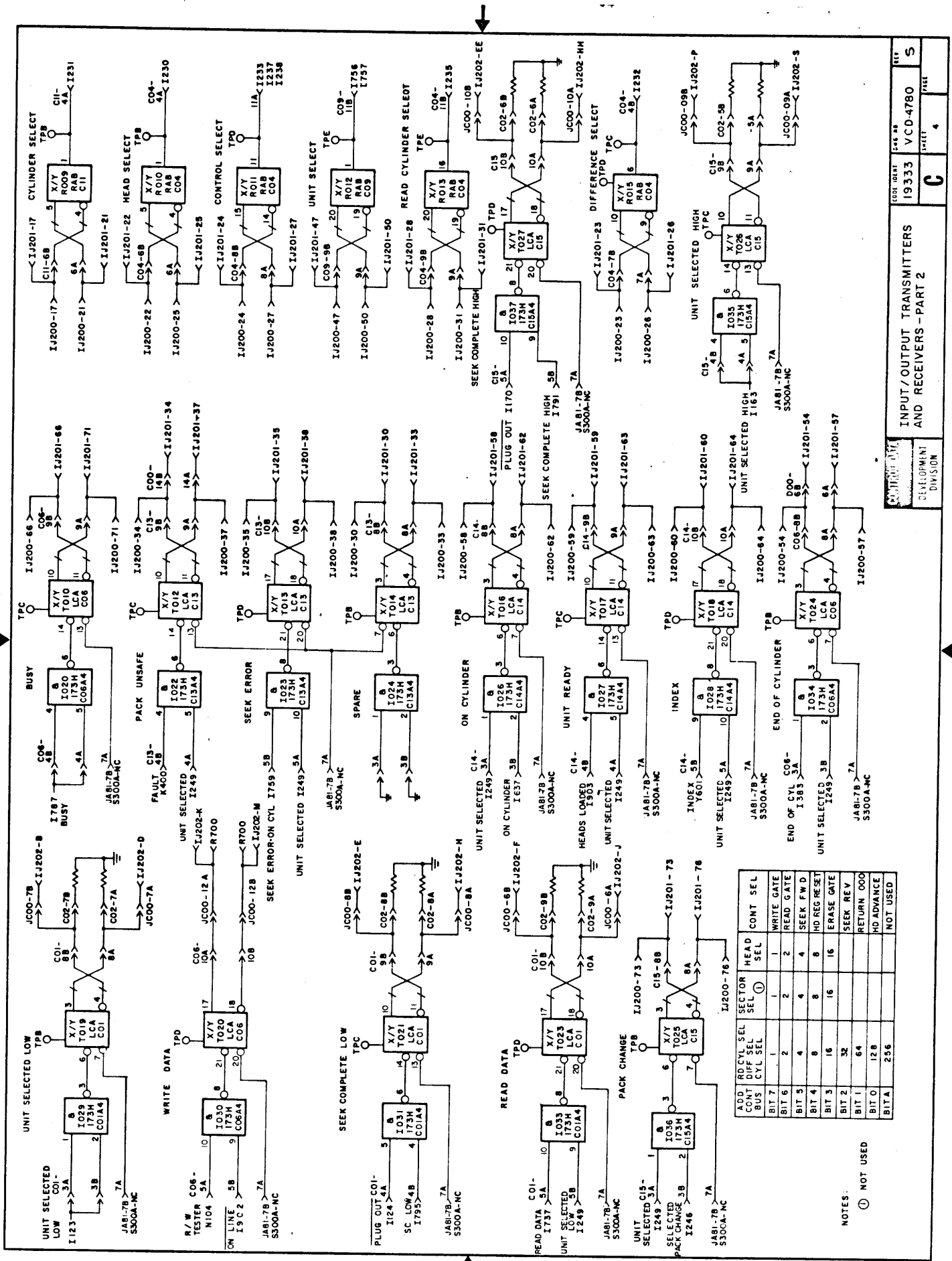


IF A LOGIC TERM IS LOCATED ON A FULL-SIZE CARD (A CARD THAT EXTENDS INTO A SECOND LOGIC ROW) THE FIRST LETTER OF THE LOCATION CODES MAY NOT AGREE.

CONTROL DATA DEVELOPMENT DIVISION	FORM SHEET		REV
	19355	VCD-4780	
KEY TO LOGIC SYMBOLS		1	J
PART 2		2	CO



DEV. W. N. DIVISION	CODE 1041	FILE NO.	REV.
	19333	VCD-4780	J
	<b>C</b>	1-111	3
INPUT / OUTPUT TRANSMITTERS AND RECEIVERS - PART 1			



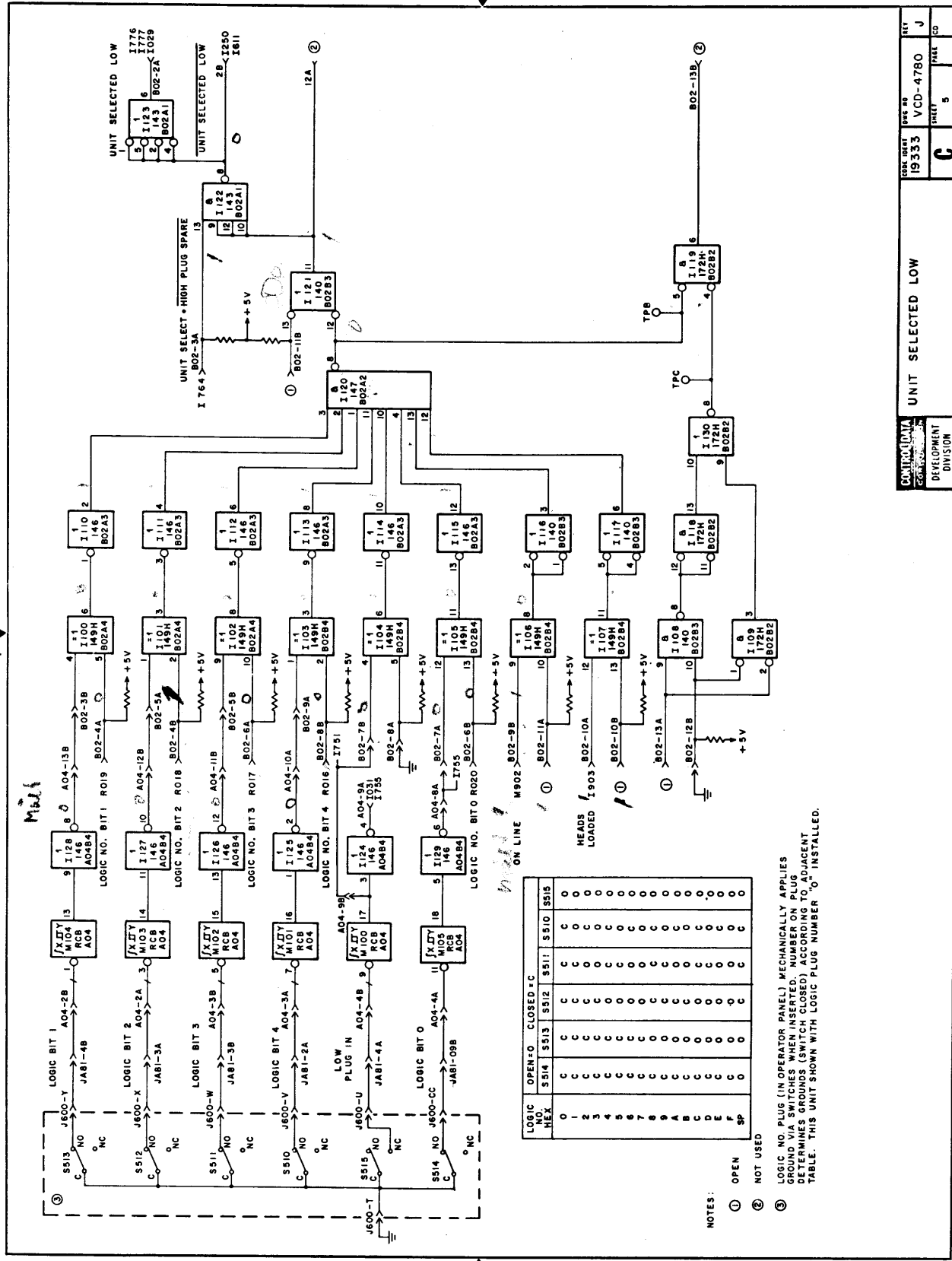
INPUT/OUTPUT TRANSMITTERS  
AND RECEIVERS - PART 2

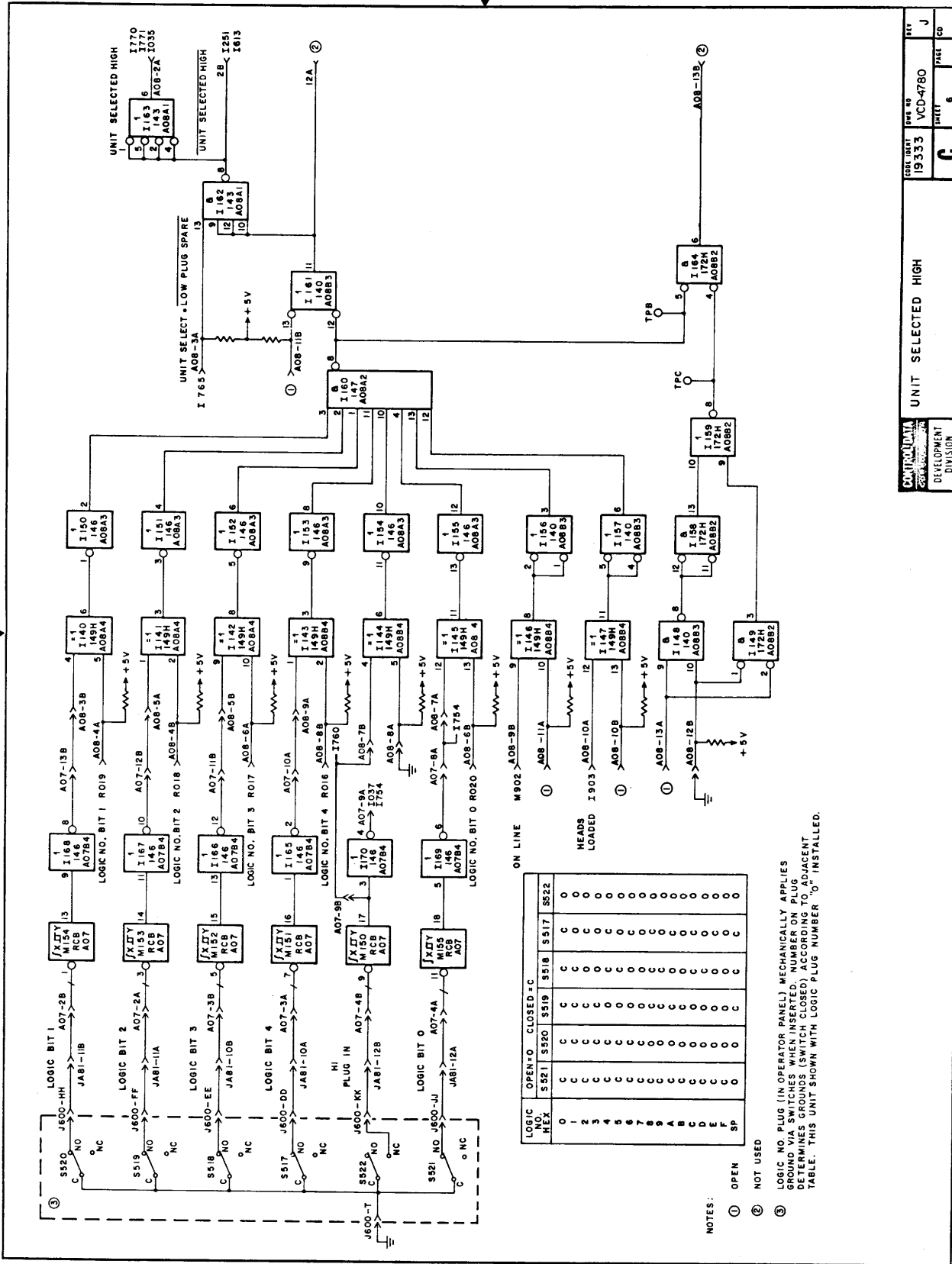
DEVELOPMENT  
DIVISION

CODE 1041  
19333  
PAGE 4  
REV S

ADD BUS CYL SEL	DIFF CYL SEL	SECTOR SEL	HEAD SEL	CONT SEL
BIT 7	1	1	1	WRITE GATE
BIT 6	2	2	2	READ GATE
BIT 5	4	4	4	SEEK FWD
BIT 4	8	8	8	HD REG RESET
BIT 3	16	16	16	ERASE GATE
BIT 2	32			SEEK REV
BIT 1	64			RETURN OOO
BIT 0	128			HD ADVANCE
BIT A	256			NOT USED

NOTES:  
⊙ NOT USED





- NOTES:
- ① OPEN
  - ② NOT USED
  - ③ LOGIC NO. PLUG (IN OPERATOR PANEL) MECHANICALLY APPLIES WHEN INSERTED. NUMBER ON PLUG DETERMINES GROUNDS (S) LOGIC. ACCORDING TO ADJACENT TABLE. THIS UNIT SHOWN WITH LOGIC PLUG NUMBER 0 INSTALLED.

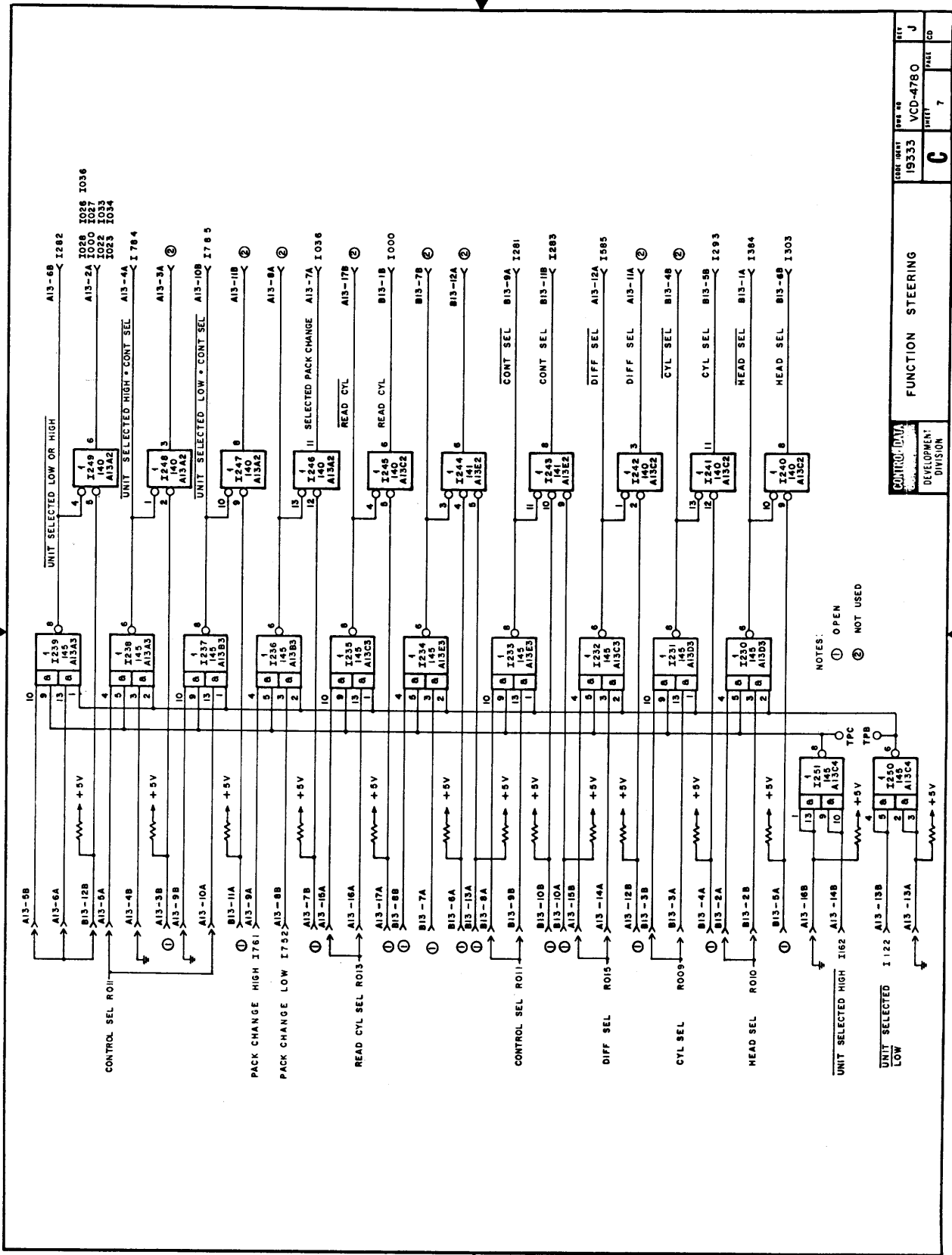
**UNIT SELECTED HIGH**

CONTROL DATA CORPORATION  
DEVELOPMENT DIVISION

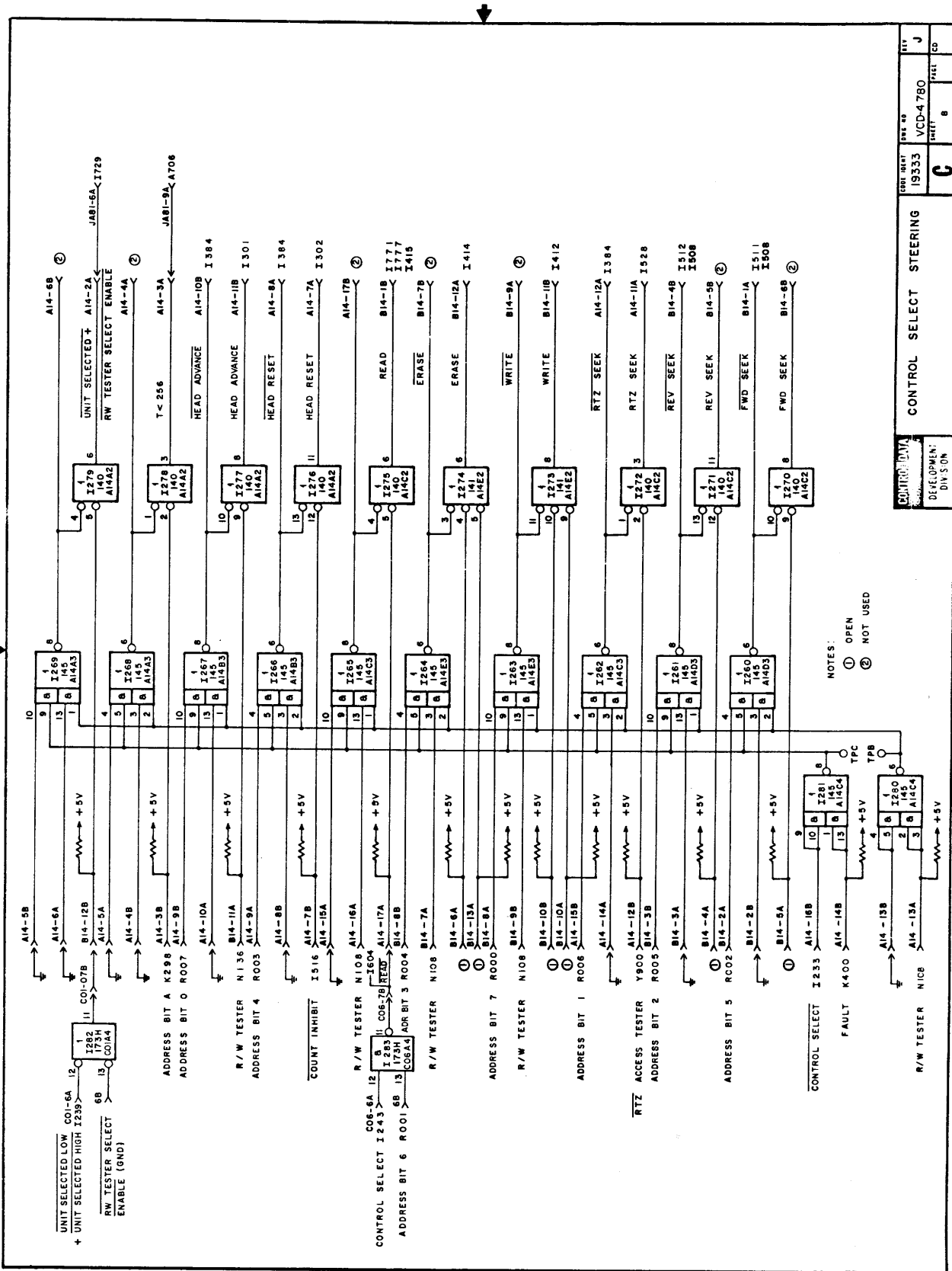
FORM NO.	19333	REV. NO.	VCD-4780
SHEET	6	PAGE	6

REV. J

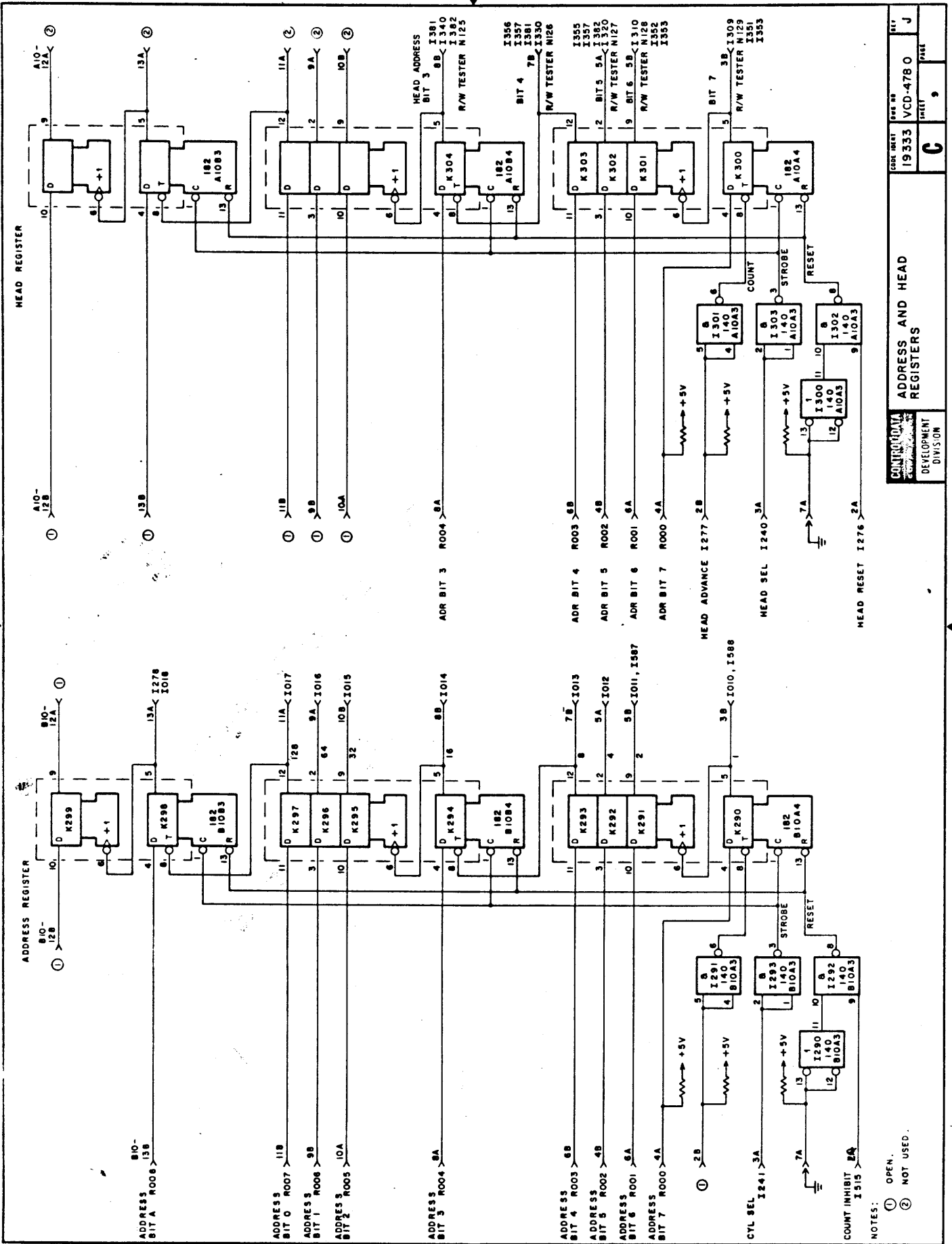




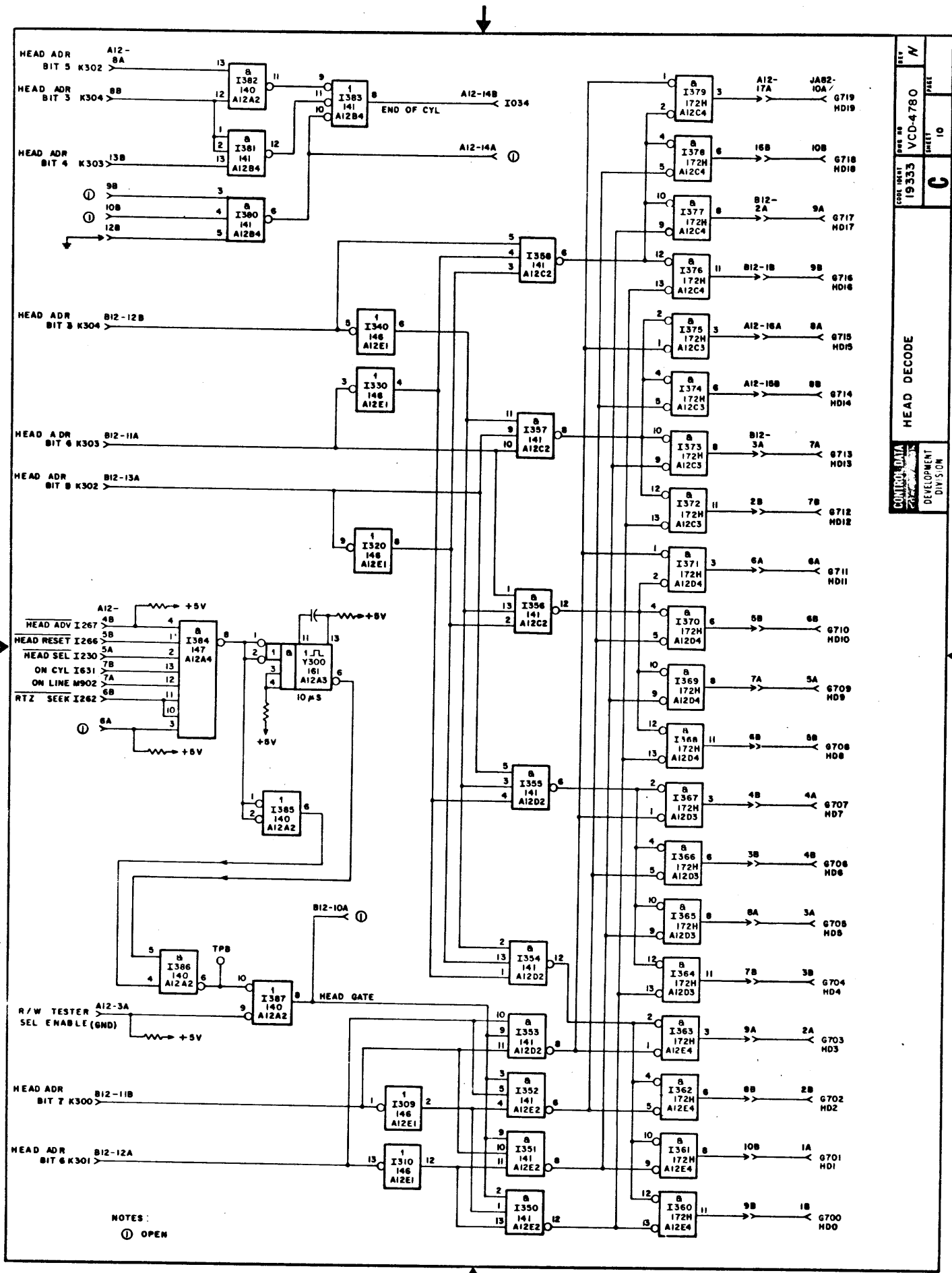
CONTROL DATA	DEVELOPMENT DIVISION	FUNCTION STEERING
19333	VCD-4780	J
C	7	CD



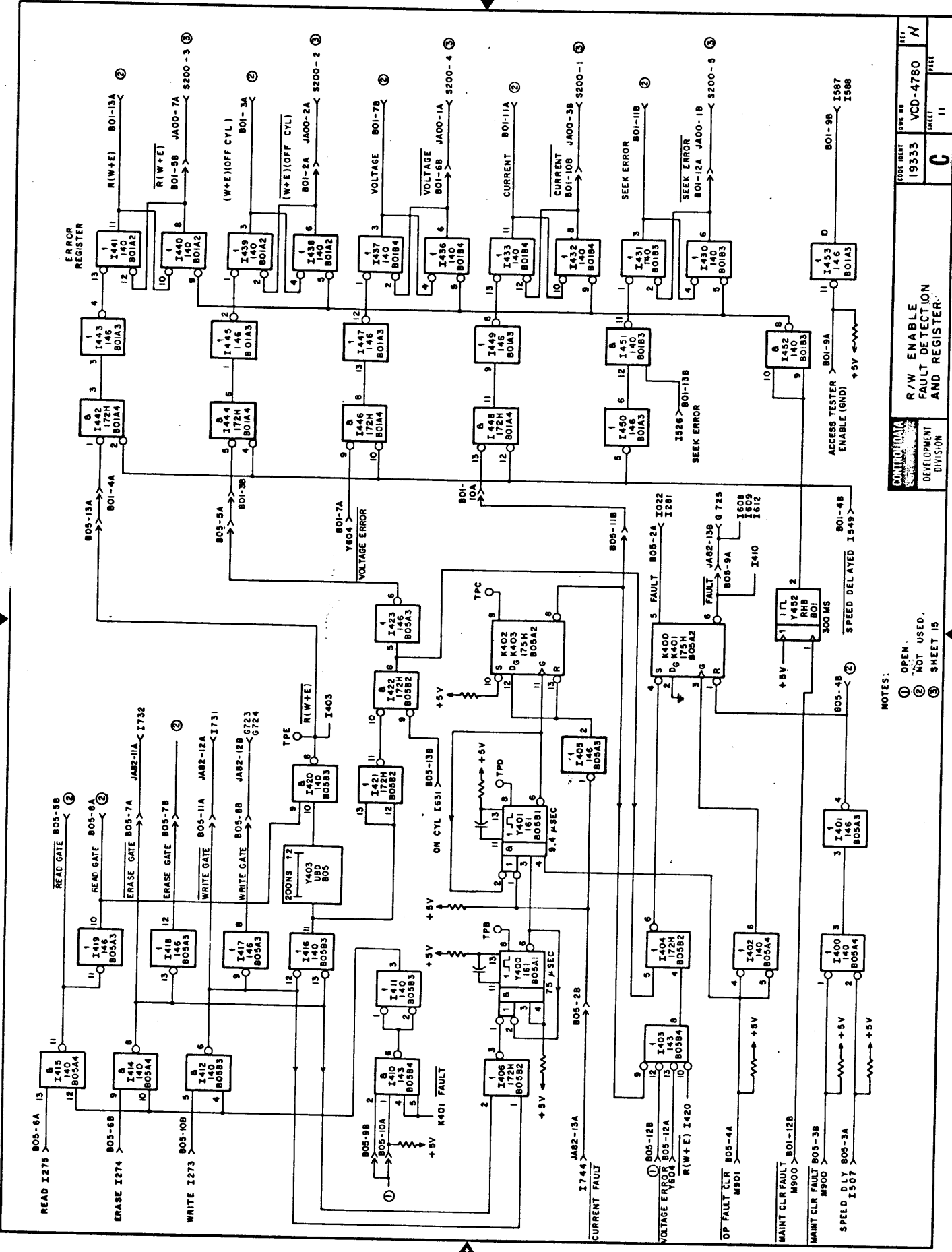
CONTROL DIVISION	DEVELOPMENT DIVISION
UNIT NO. 19333	REV. NO. VCD-4780
PROJECT C	SHEET 6
CONTROL SELECT STEERING	
REV. J	DATE



- NOTES:
- ① OPEN.
  - ② NOT USED.

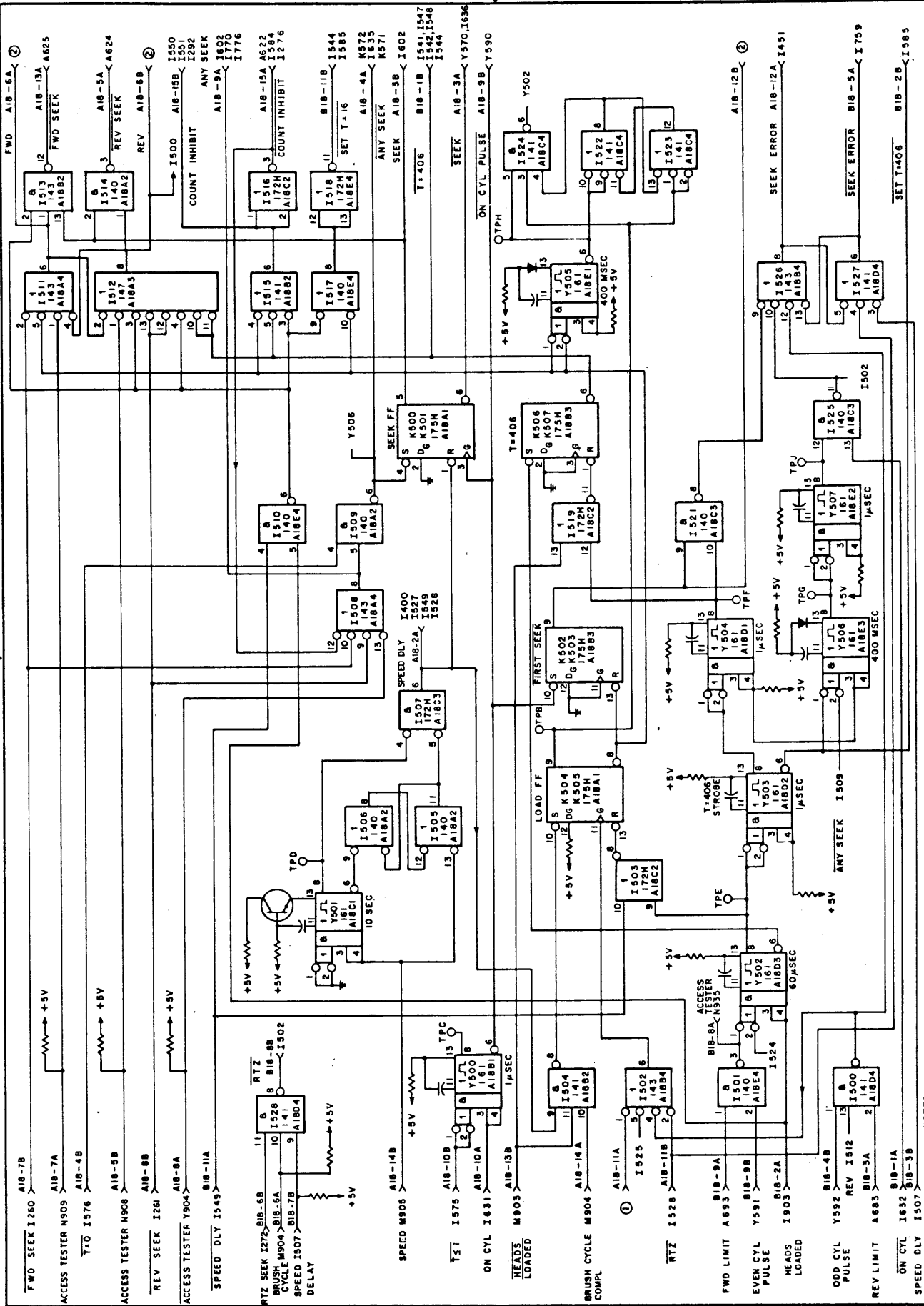


CONTROL DATA  
 DEVELOPMENT DIVISION  
 HEAD DECODE  
 CORE UNIT 19333  
 VCD-4780  
 SHEET 10  
 REV N



NOTES:  
 ① OPEN  
 ② NOT USED  
 ③ SHEET 15

CONTROL DATA		CODE INSTR	DATE	REV
DEVELOPMENT DIVISION		19333		N
R/W ENABLE FAULT DETECTION AND REGISTER		C	11	11
		VCD-4780		
		INLET		

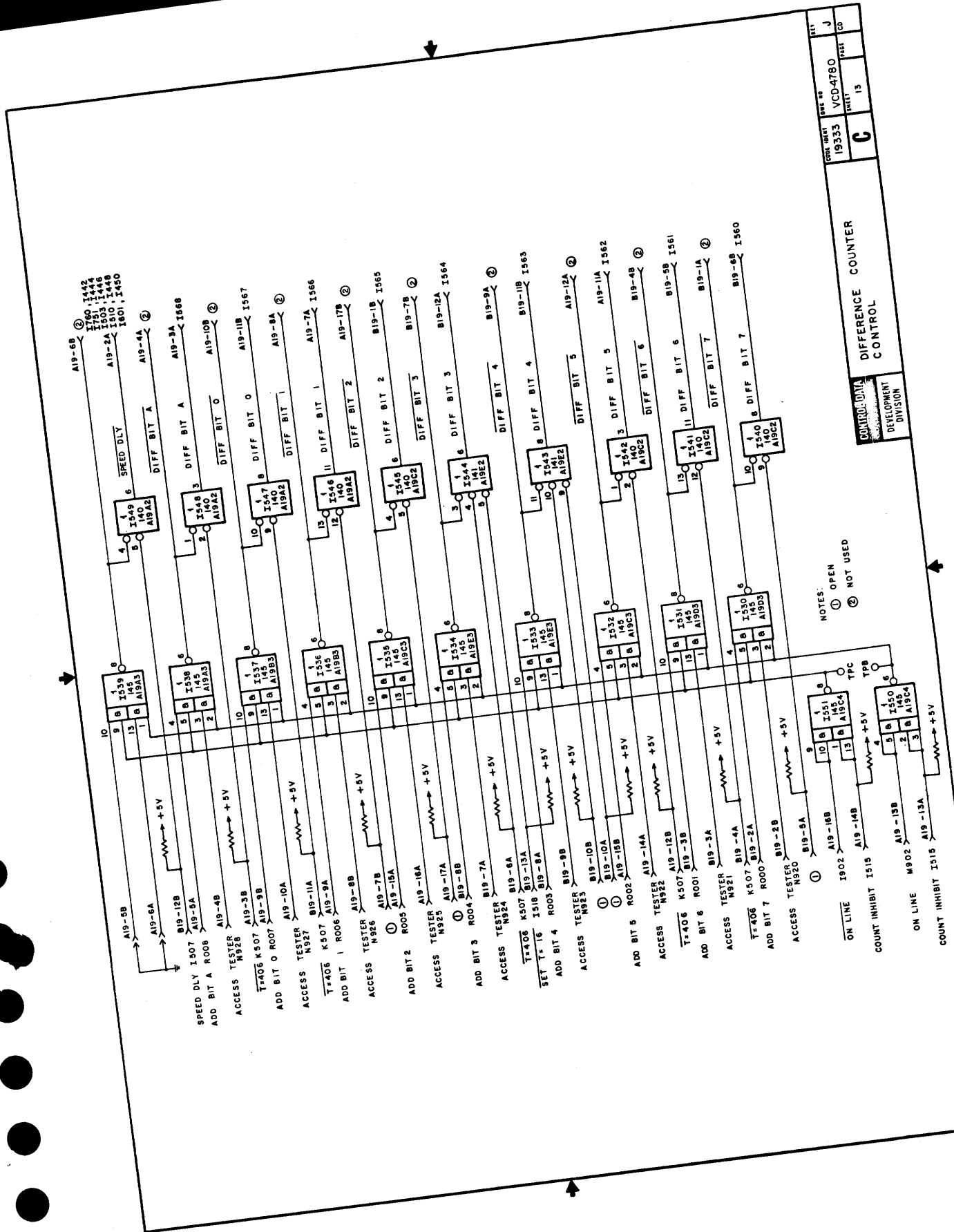


ACCESS CONTROL

CODE SHEET	DATE	REV
19333	VC D-4780	S
C		12
DIVISION		PAGE

NOTES:  
 ① OPEN  
 ② NOT USED

70617900 A

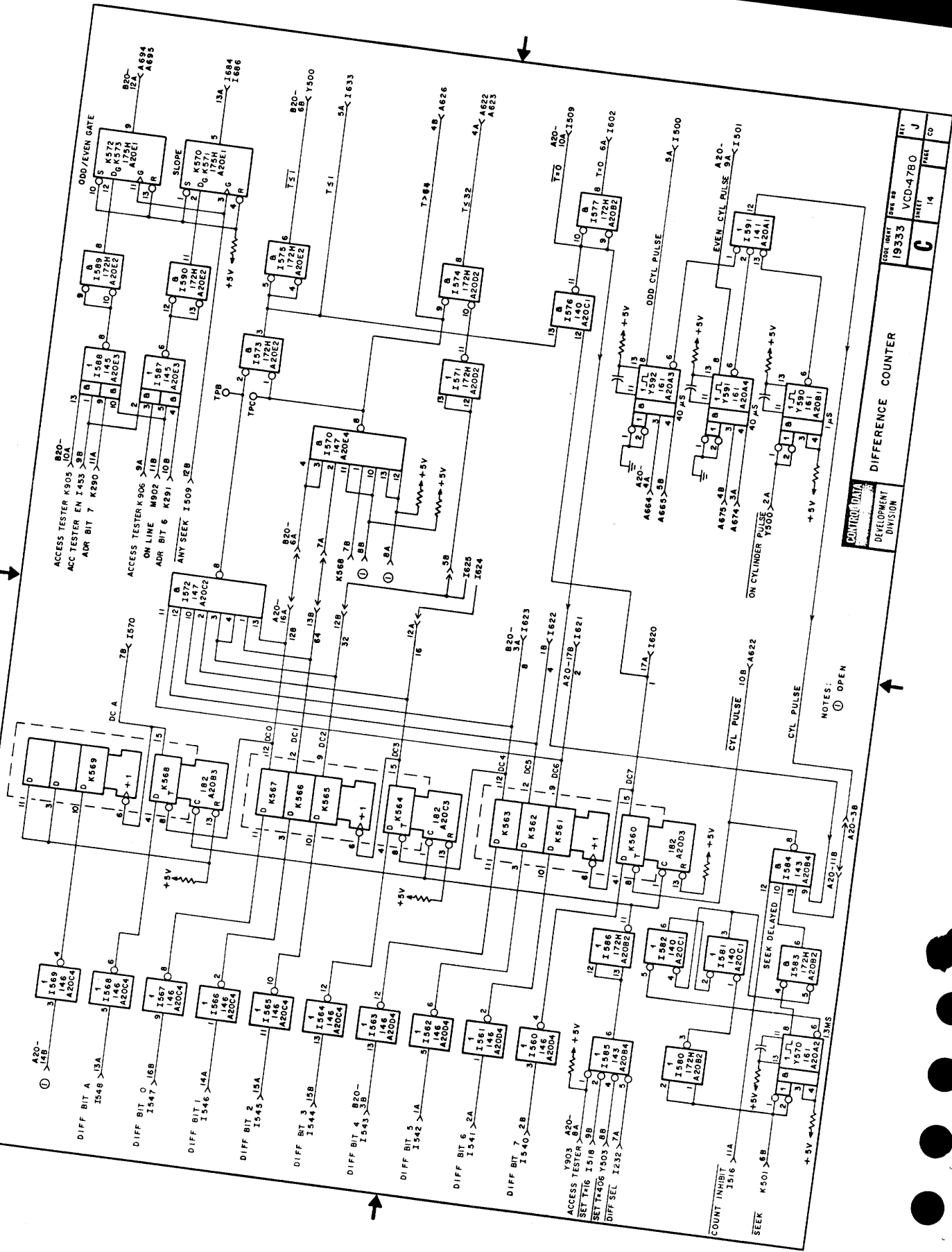


NOTES:  
① OPEN  
② NOT USED

CONTROL DATA  
DEVELOPMENT  
DIVISION

DIFFERENCE COUNTER  
CONTROL

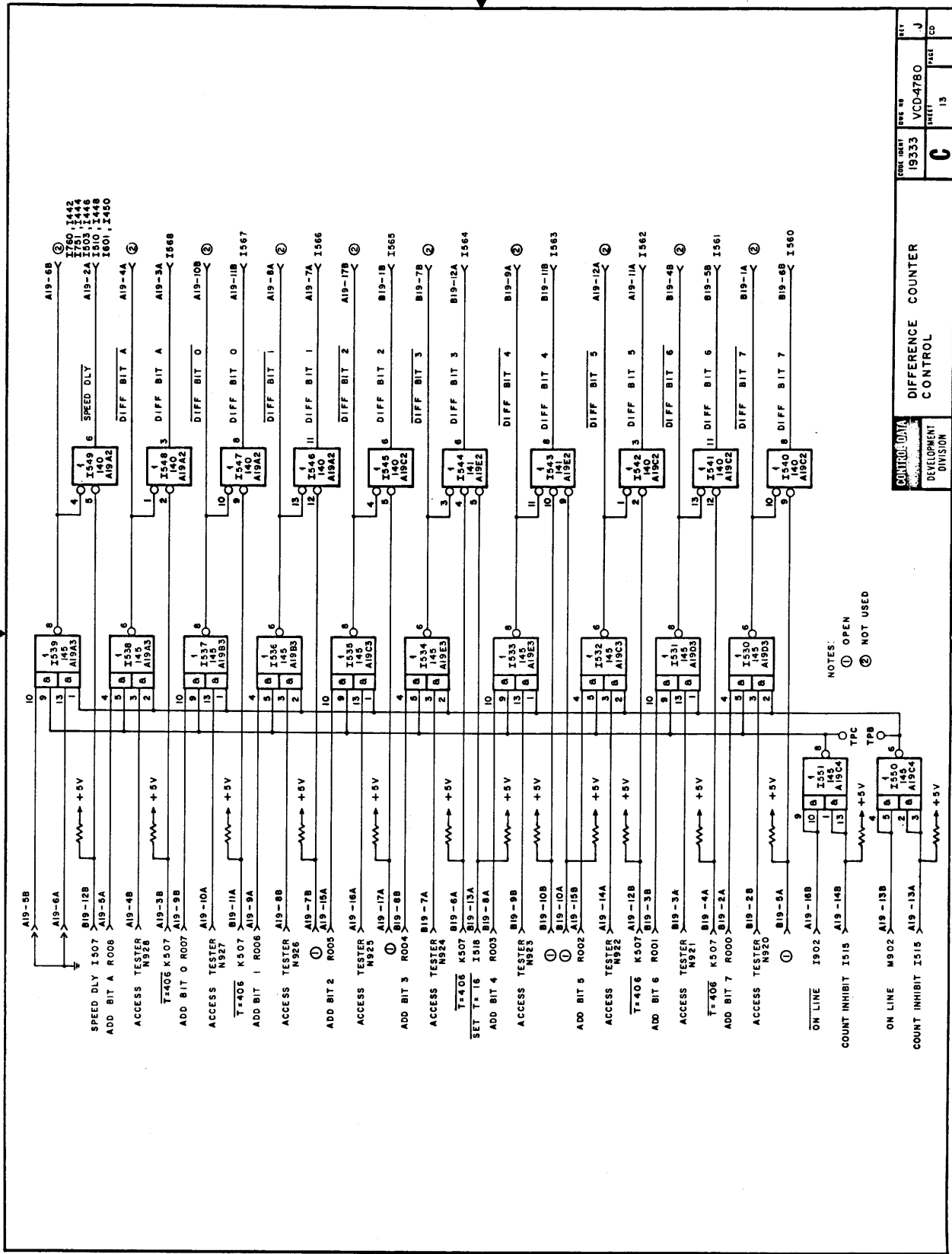
REV. NO.	13
DATE	1933
BY	VCD-4780
CHKD.	J
FIG. NO.	13
FIG. CD	



NOTES:  
 ○ OPEN

CONTROL DATA	DEVELOPMENT DIVISION
DCB NO. 19333	REV. 14
FILE NO. VCD-4780	J
	CD

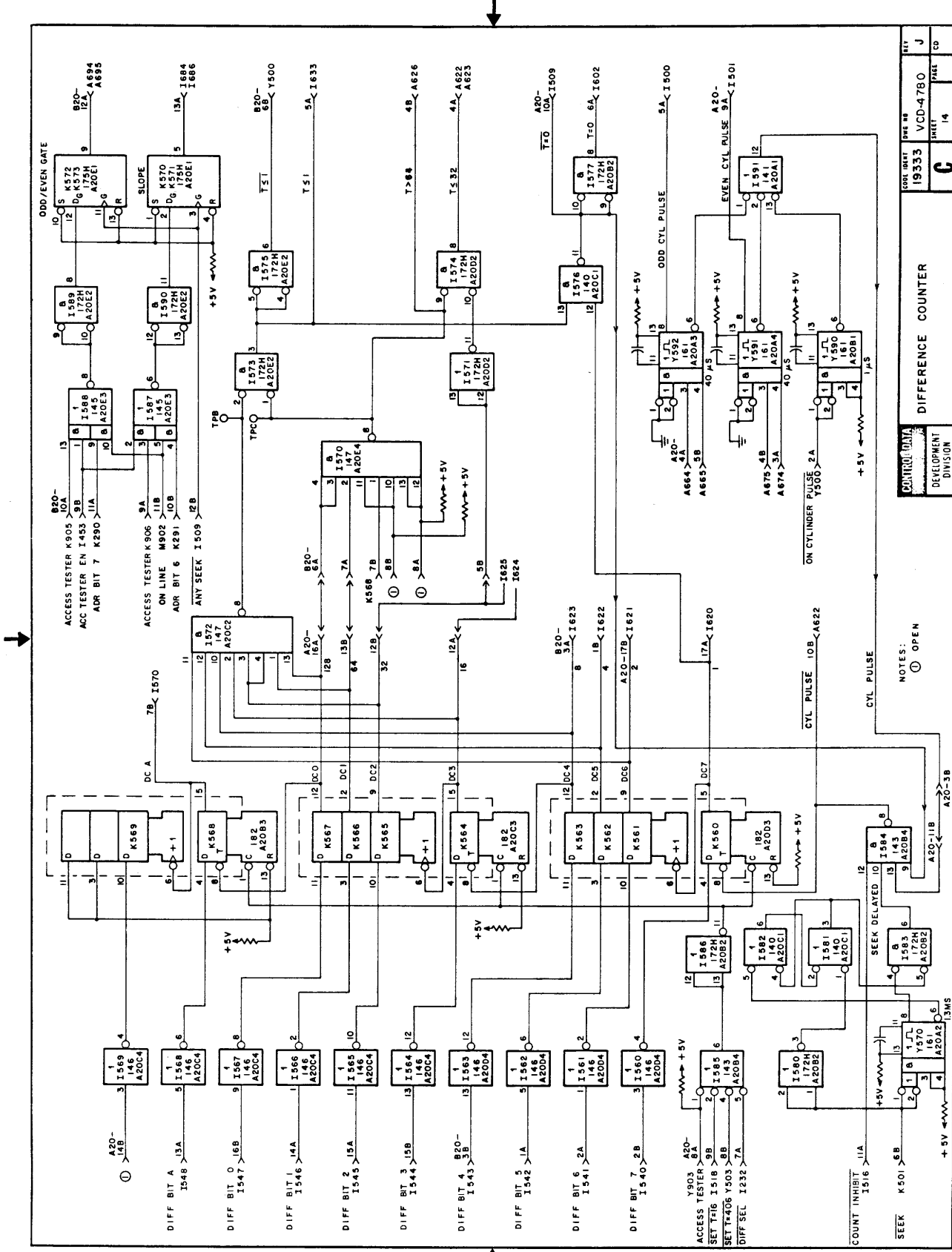




CONTROL ROOM	DEVELOPMENT DIVISION
19333	VCD-4780
13	J

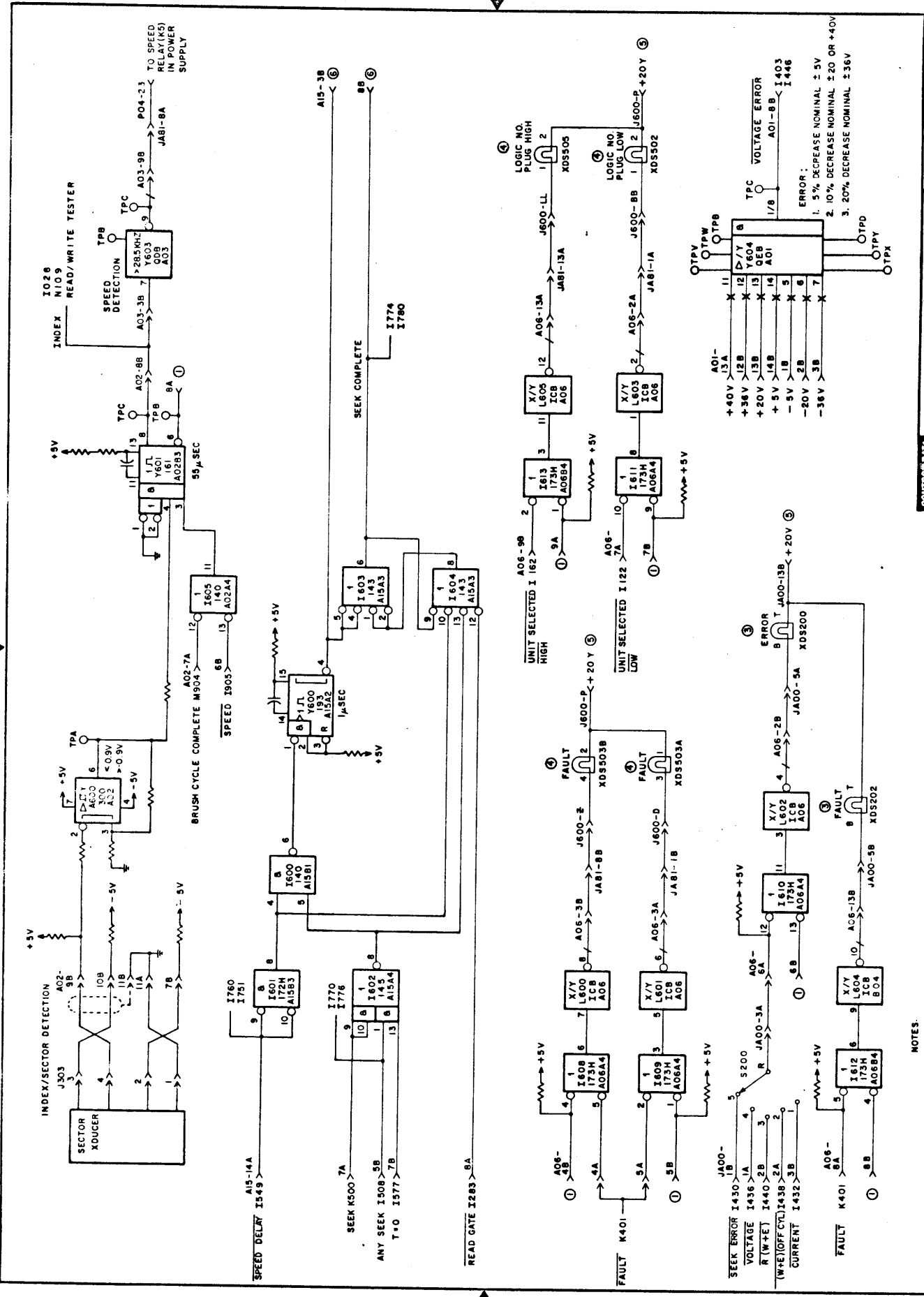
DIFFERENCE COUNTER CONTROL

NOTES:  
 ⓪ OPEN  
 Ⓛ NOT USED



CONTROL DATA		FORM NO.	REV. NO.	REV. DATE
DEVELOPMENT		19333	VCD-4780	J
DIFFERENCE COUNTER		SHEET	14	10
		C		

NOTES:  
 (1) OPEN



IND. NO.	1029
INDEX/SECTOR DETECTION	TPA
SPEED DETECTION	A03-3B
TO SPEED RELAY (KS) IN POWER SUPPLY	P04-23
	JAB1-8A
	A03-9B
	TPC
	A03-3B
	Y603
	O08
	A03

LOGIC NO. PLUS HIGH	J600-LL	1	2	XDS505
LOGIC NO. PLUS LOW	J600-BB	1	2	XDS502
	JAB1-13A	12	11	A06-9B
	A06-13A	12	11	X/Y L605 ICB A06
	A06-2A	2	1	X/Y L603 ICB A06
	JAB1-1A	1	2	XDS503
	JAB1-1B	1	2	XDS503
	JAB1-1C	1	2	XDS503
	JAB1-1D	1	2	XDS503
	JAB1-1E	1	2	XDS503
	JAB1-1F	1	2	XDS503
	JAB1-1G	1	2	XDS503
	JAB1-1H	1	2	XDS503
	JAB1-1I	1	2	XDS503
	JAB1-1J	1	2	XDS503
	JAB1-1K	1	2	XDS503
	JAB1-1L	1	2	XDS503
	JAB1-1M	1	2	XDS503
	JAB1-1N	1	2	XDS503
	JAB1-1O	1	2	XDS503
	JAB1-1P	1	2	XDS503
	JAB1-1Q	1	2	XDS503
	JAB1-1R	1	2	XDS503
	JAB1-1S	1	2	XDS503
	JAB1-1T	1	2	XDS503
	JAB1-1U	1	2	XDS503
	JAB1-1V	1	2	XDS503
	JAB1-1W	1	2	XDS503
	JAB1-1X	1	2	XDS503
	JAB1-1Y	1	2	XDS503
	JAB1-1Z	1	2	XDS503

INDEX SPEED DETECTION AND INDICATORS (SERIES CODE 12 AND BELOW)

19333 VCD-4780

15 PAGE

C

NOTES:

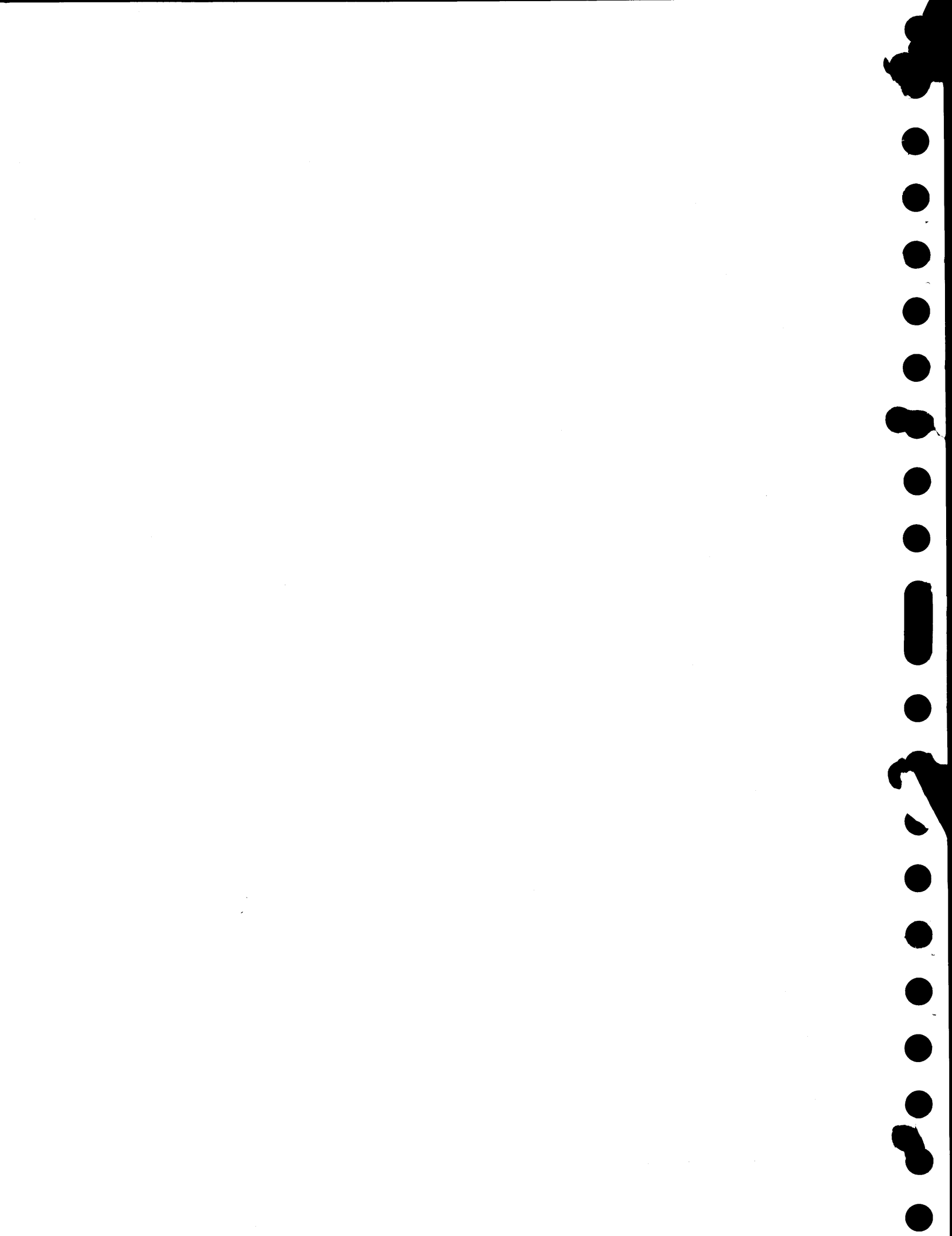
① OPEN

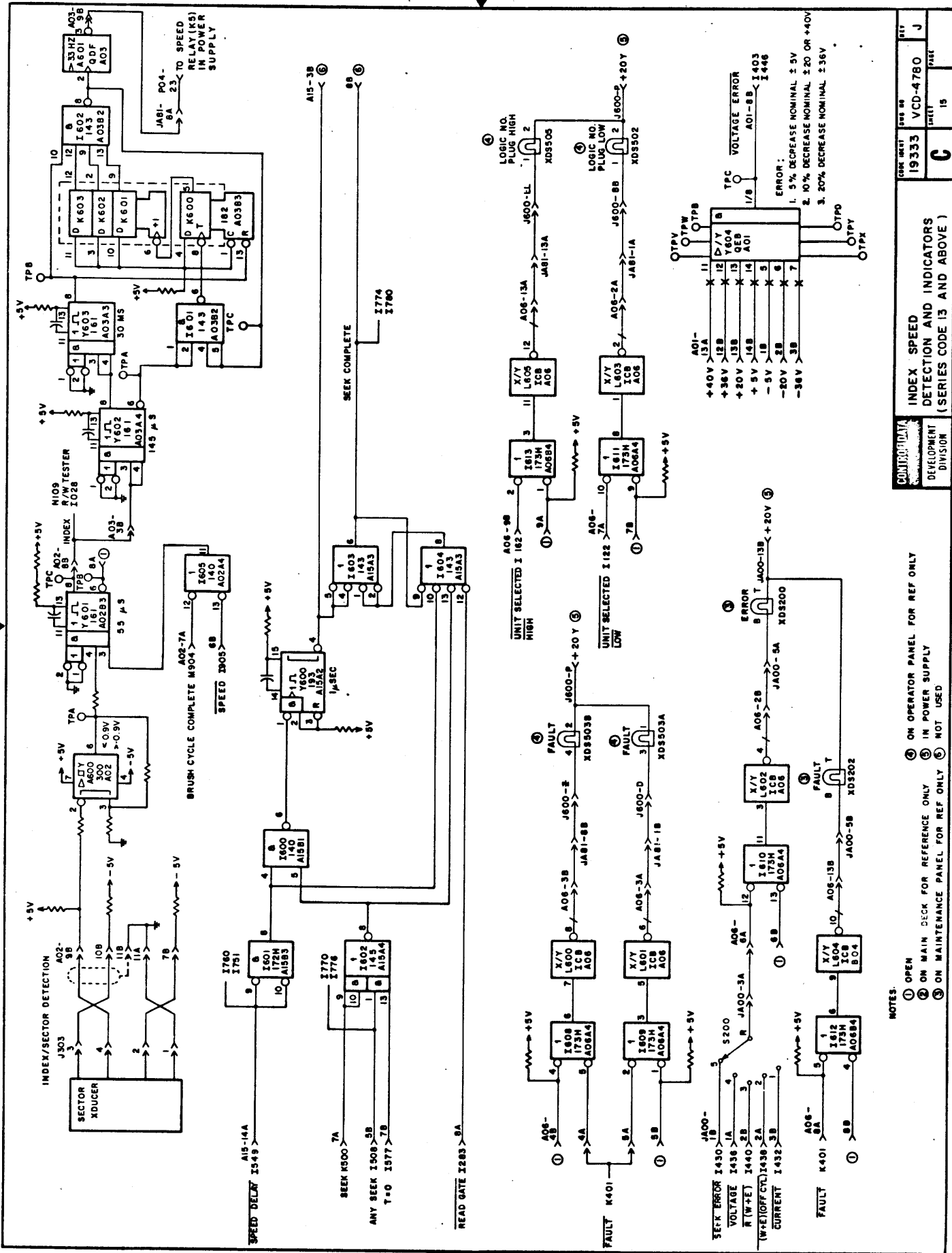
② ON MAIN DECK FOR REFERENCE ONLY

③ ON MAINTENANCE PANEL FOR REF ONLY

④ ON OPERATOR PANEL FOR REF ONLY

⑤ IN POWER SUPPLY

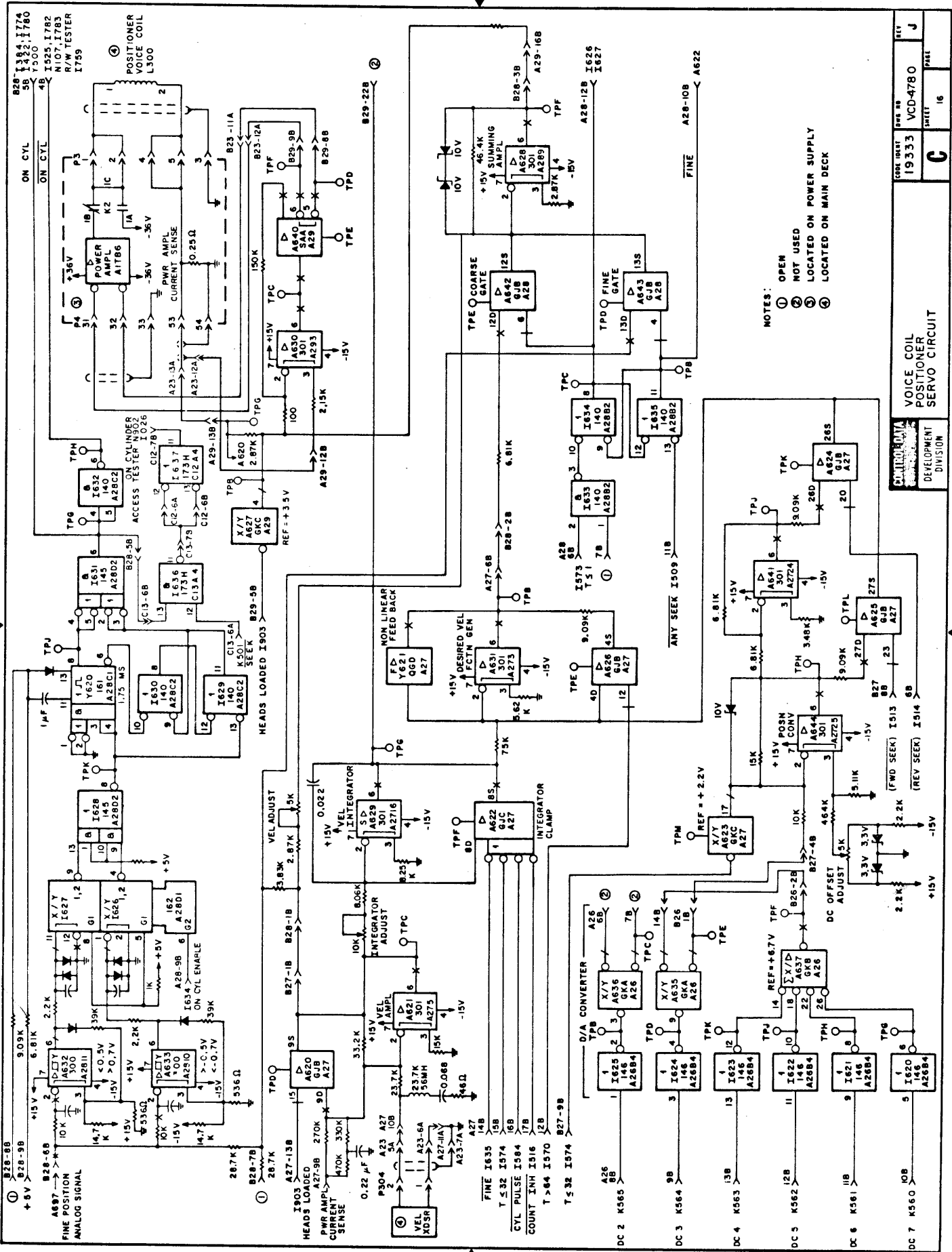




DATE	1933	REV	J
ISSUE	1	DATE	15
NO.	C	REV	15
INDEX SPEED DETECTION AND INDICATORS (SERIES CODE 13 AND ABOVE)			

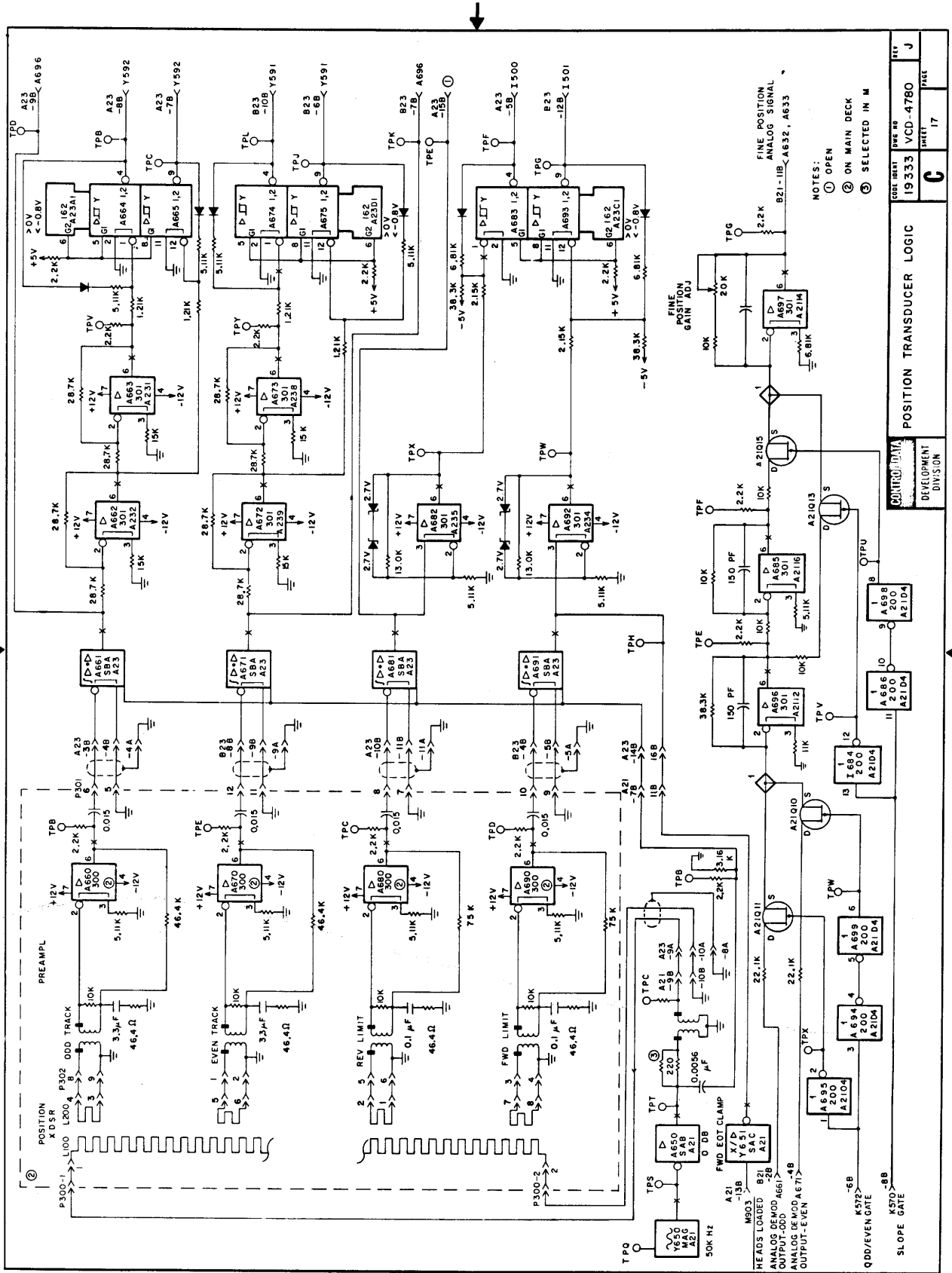
CONTRACT NO. 1933  
DEVELOPMENT DIVISION

- NOTES:
- ① OPEN
  - ② ON MAIN DECK FOR REFERENCE ONLY
  - ③ ON MAINTENANCE PANEL FOR REF ONLY
  - ④ ON OPERATOR PANEL FOR REF ONLY
  - ⑤ IN POWER SUPPLY
  - ⑥ NOT USED



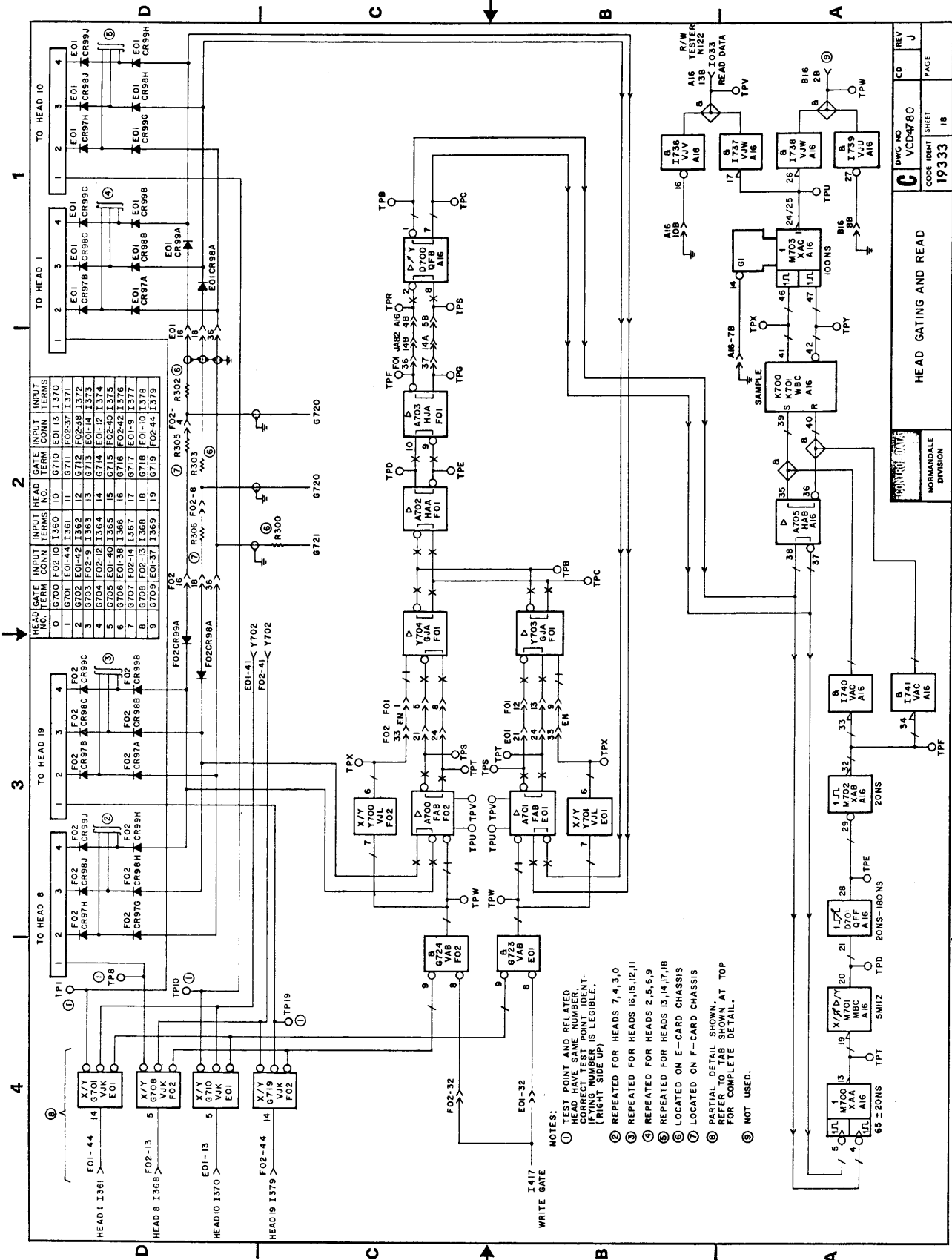
- NOTES:
- ① OPEN
  - ② NOT USED
  - ③ LOCATED ON POWER SUPPLY
  - ④ LOCATED ON MAIN DECK

DATE	REV	REV NO	REV
19333	C	VCD-4780	J
VOICE COIL POSITIONER SERVO CIRCUIT		SHEET 15	
DEVELOPMENT DIVISION		PART	



NOTES:  
 ① OPEN  
 ② ON MAIN DECK  
 ③ SELECTED IN M

CONTROL DATA DEVELOPMENT DIVISION		CODE INLET	SWR NO	REV
POSITION TRANSDUCER LOGIC		19333	VCD-4780	J
		SHEET	17	
		REV		



REV J  
VCD4780  
19333

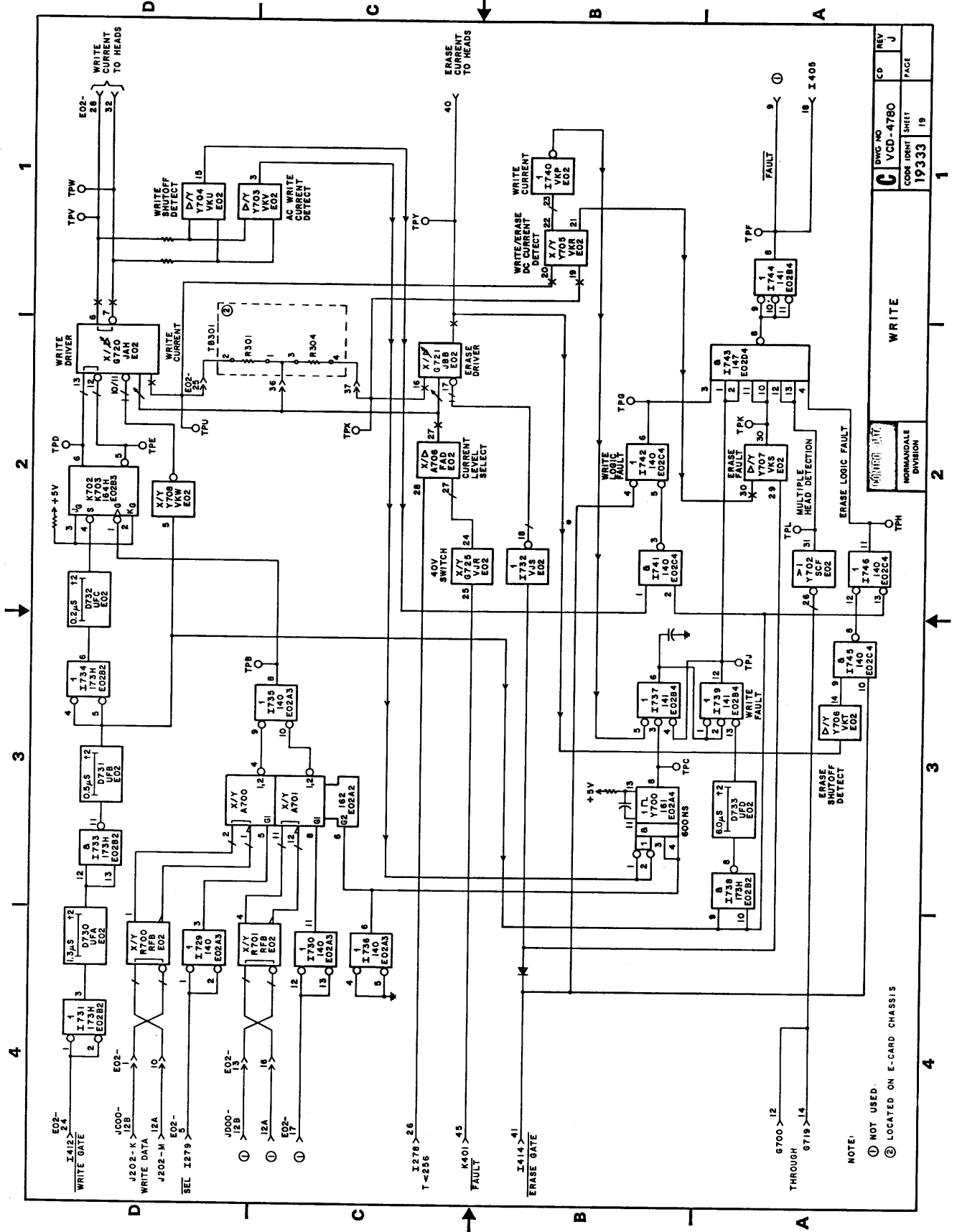
HEAD GATING AND READ

FORMER  
NORMANDEALE  
DIVISION

DWG NO VCD4780  
CODE IDENT SHEET 18

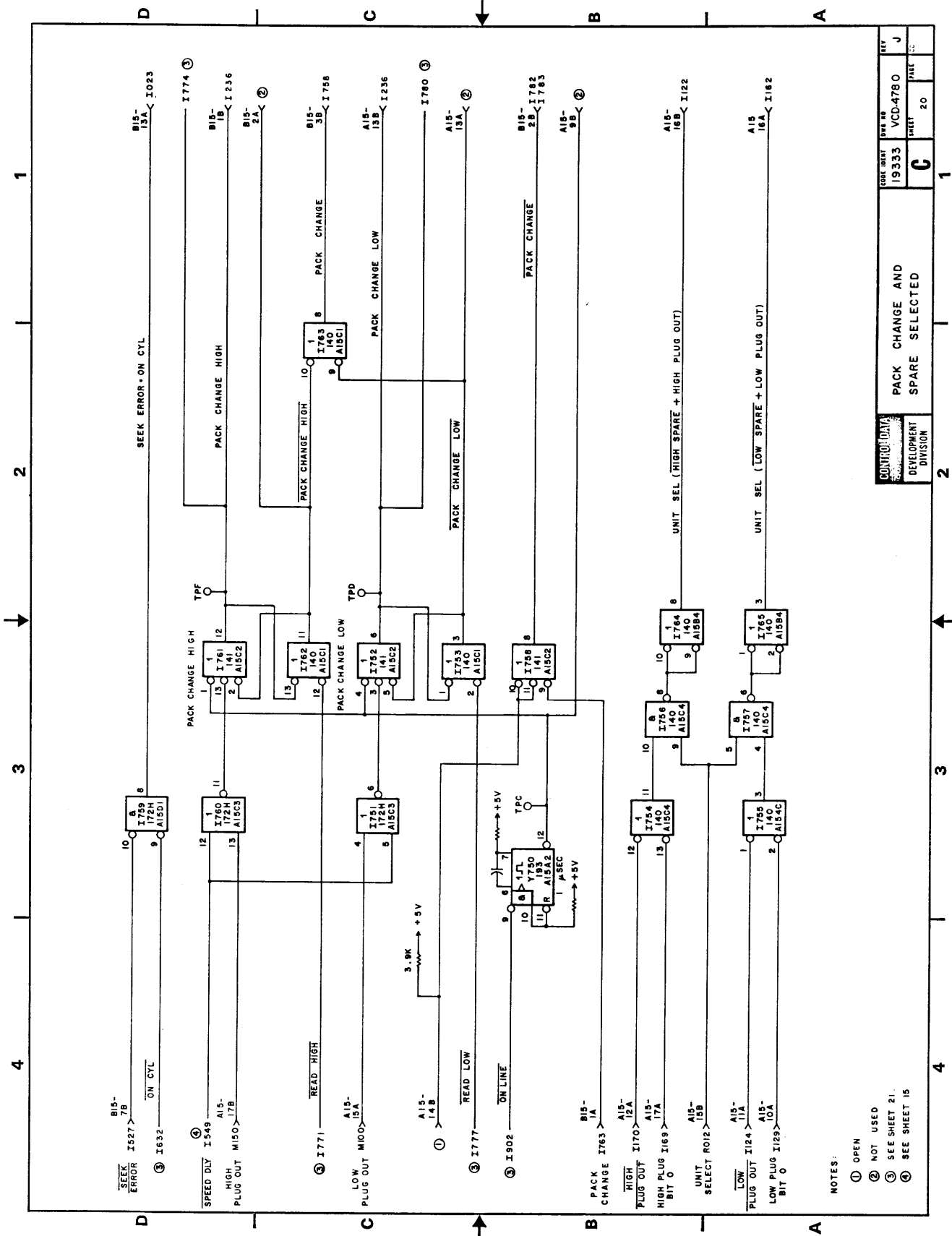
- NOTES:
- ① TEST POINT AND RELATED HEAD HAVE SAME NUMBER (RIGHT SIDE UP)
  - ② REPEATED FOR HEADS 7, 4, 3, 0
  - ③ REPEATED FOR HEADS 16, 15, 12, 11
  - ④ REPEATED FOR HEADS 2, 5, 6, 9
  - ⑤ REPEATED FOR HEADS 13, 14, 17, 18
  - ⑥ LOCATED ON E-CARD CHASSIS
  - ⑦ LOCATED ON F-CARD CHASSIS
  - ⑧ PARTIAL DETAIL SHOWN. REFER TO TAB SHOWN AT TOP FOR COMPLETE DETAIL.
  - ⑨ NOT USED.



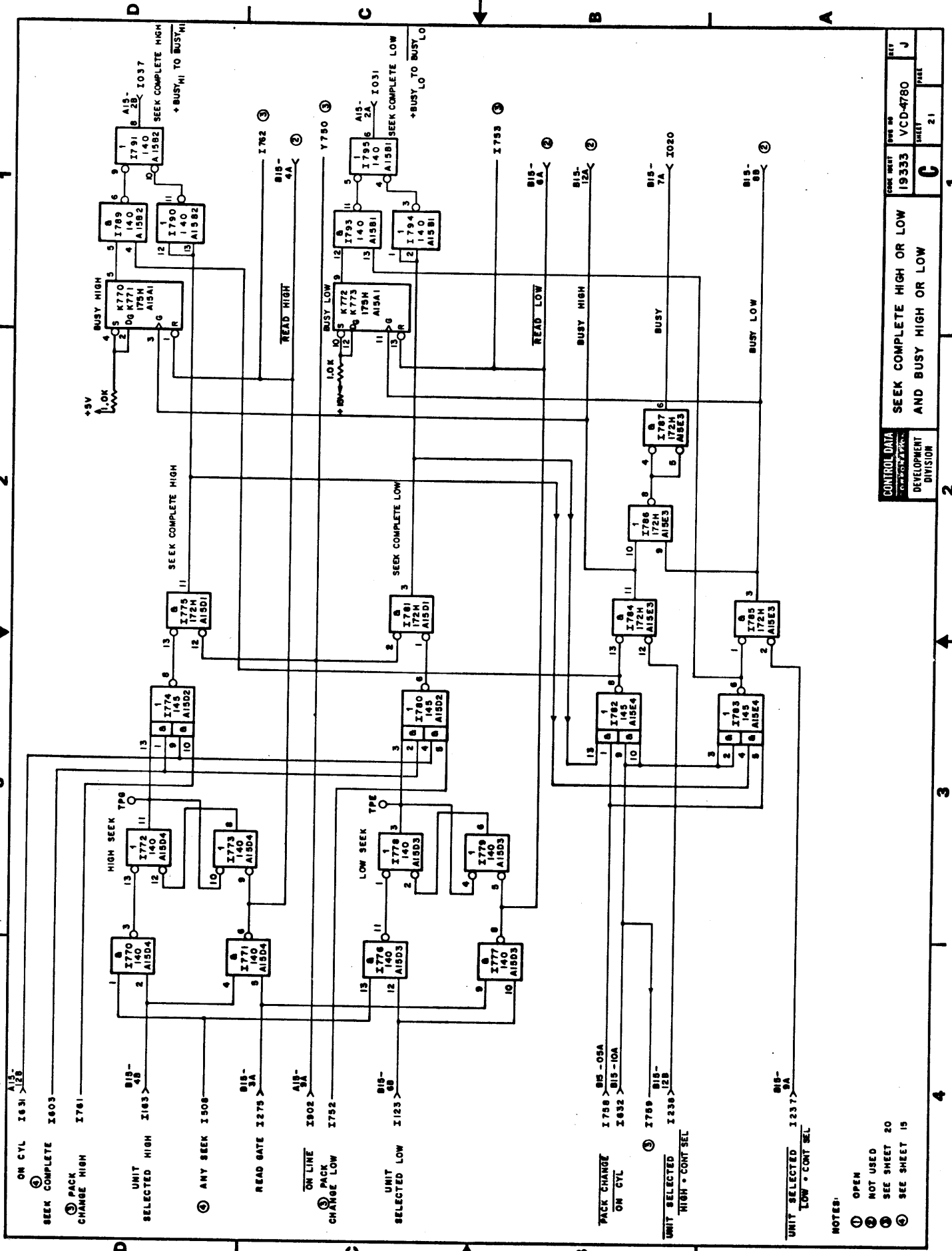


NOTE:  
 Ⓞ NOT USED.  
 Ⓜ LOCATED ON E-CARD CHASSIS

DWG. NO.	REV.
VCD-4780	C0
CODE IDENT. SHEET	PAGE
19333	19
WRITE	
NORMALDALE DIVISION	



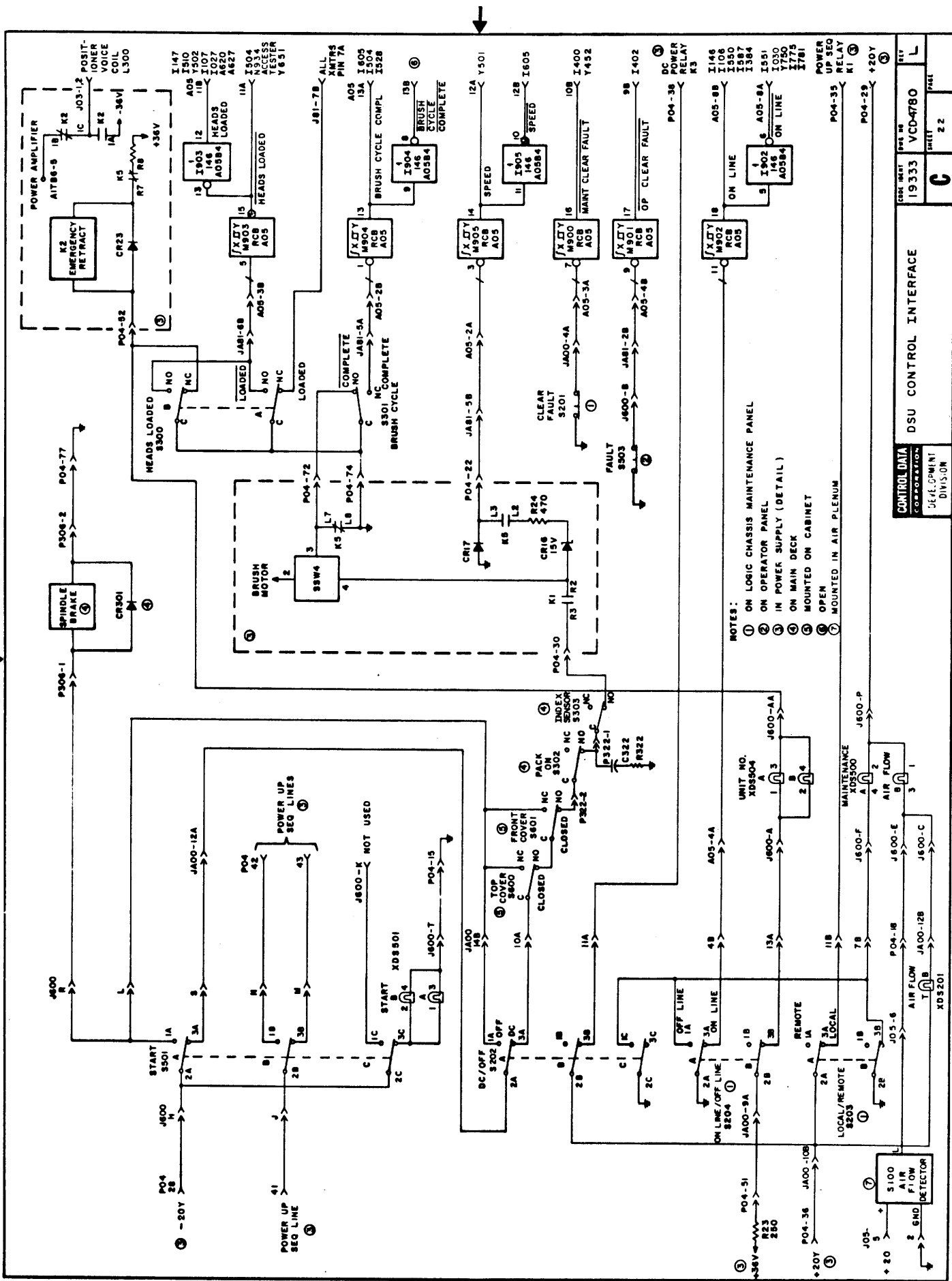
CONTROL DATA DEVELOPMENT DIVISION		PACK CHANGE AND SPARE SELECTED	
CODE IDENT	FORM NO	SHEET	REV
19333	VCD-4780	20	J



70617900 A

CONTROL DATA		DEV NO	SHEET	PAR
DEVELOPMENT DIVISION		19333	21	J
SEEK COMPLETE HIGH OR LOW AND BUSY HIGH OR LOW		VCD-4780		

- NOTES:
- ① OPEN
  - ② NOT USED
  - ③ SEE SHEET 20
  - ④ SEE SHEET 15



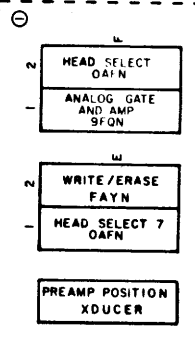
<b>CONTROL DATA</b>		DATE REVISED	REV
COMPARISON		19333	VCD-4780
DSU CONTROL INTERFACE		REVISED	REVISED
JFKL CP/MINT		REVISED	REVISED
DIVISION		REVISED	REVISED
		REVISED	REVISED

CHASSIS MAP

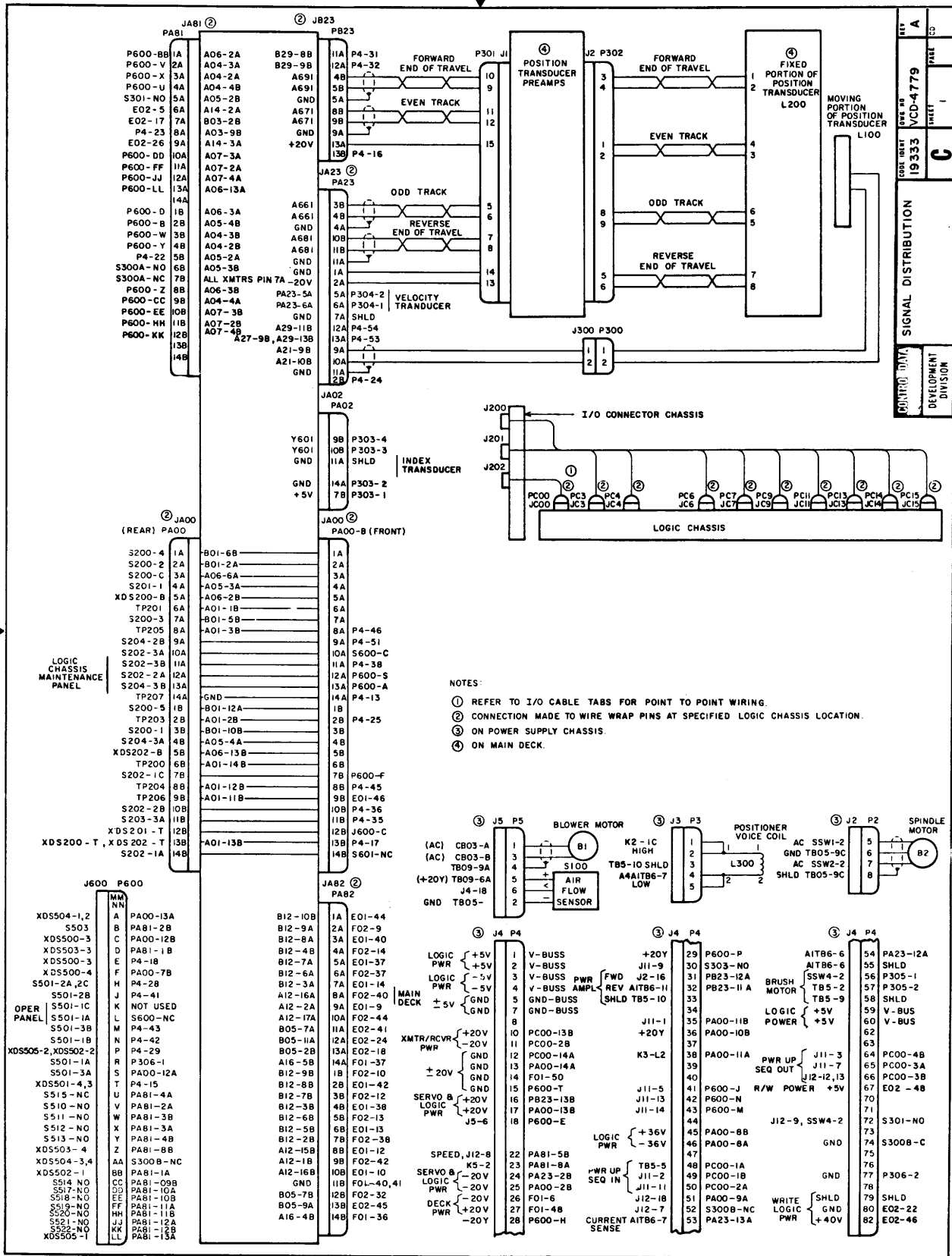
JAB0 JAB1 JAB2 JAB3 JAB4 JAB5

31	JAB3	JAB3	JC31	JC31	31
	A	B	C	D	
29	SERVO 3		ACCESS TESTER	OCRV	J095
28	SERVO 2				
27	SERVO 1				
26	D/A CONVERTER				
25					
24	XDUCER DEMODULATOR & SWITCH				J094
23					
22	XDUCER OSCILLATOR		READ/WRITE TESTER	OCKV	
21	DIFFERENCE COUNTER				
20	DIFFERENCE COUNTER CONTROL				
19	ACCESS CONTROL				J093
18					
17	READ RECOVERY				
16	SEEK COMPLETE, PACK CHANGE, BUSY		XMTR	ITDV ITDV	
15	CONTROL SELECT STEERING		XMTR	ITDV ITDV	J092
14	FUNCTION STEERING		XMTR	ITDV ITDV	
13	HEAD DECODE		XMTR	ITDV ITDV	
12			RCVR		
11	HEAD REGISTER	CYLINDER REGISTER	XMTR	ITDV ITDV	
10			RCVR		
9	UNIT SELECTED HIGH		XMTR	ITDV ITDV	J091
8	SWITCH RCVR		RCVR	ORDV ORDV	
7	INDICATOR DRIVER		XMTR	ITDV ITDV	
6	SWITCH RCVR	WRITE / READ / ERASE FAULT DETECTOR			
5	SWITCH RCVR		RCVR	ORDV ORDV	
4	SPEED DETECTOR		RCVR	ORDV ORDV	J090
3	OSC & SECTOR DEMODULATOR	UNIT SELECTED LOW	TERMINATOR	OREV OREV	
2	VOLTAGE ERROR DETECTOR	FAULT REGISTER	XMTR	ITDV ITDV	
1					
0	J000	J000	J000	J000	0

- NOTES:
- ① ON MAIN DECK
  - ② OPTIONAL CARD SHOWN FOR REFERENCE ONLY. INSTALL CARD AT THIS POSITION IF IT IS USED DURING MAINTENANCE.
  - ③ IUAV SERIES CODE 12 AND BELOW.
  - ④ IVVY SERIES CODE 12 AND BELOW.

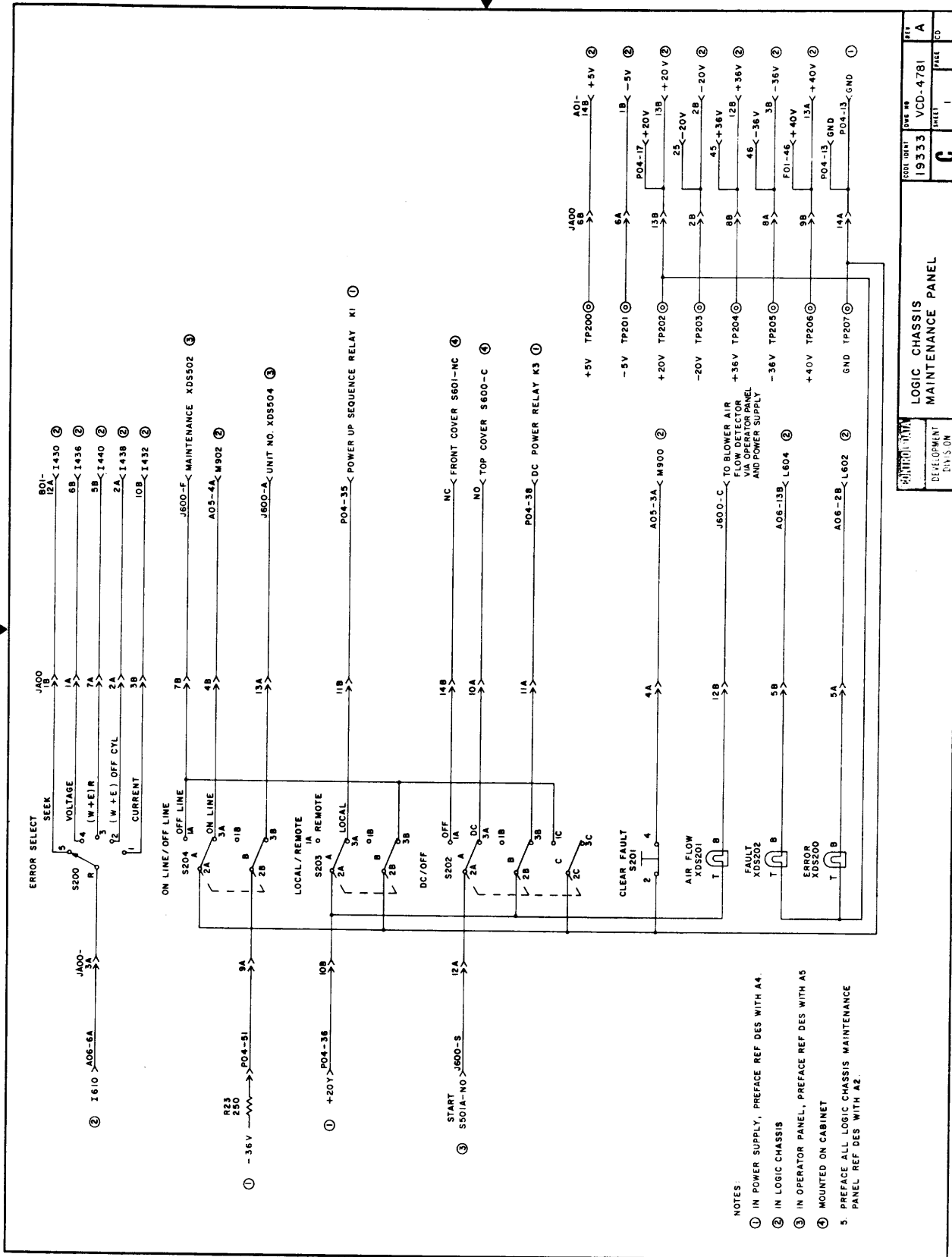






REV. 1  
 SHEET 1  
 CONTROL DATA  
 DEVELOPMENT DIVISION  
 CORE UNIT  
 VCD-4779  
 19333

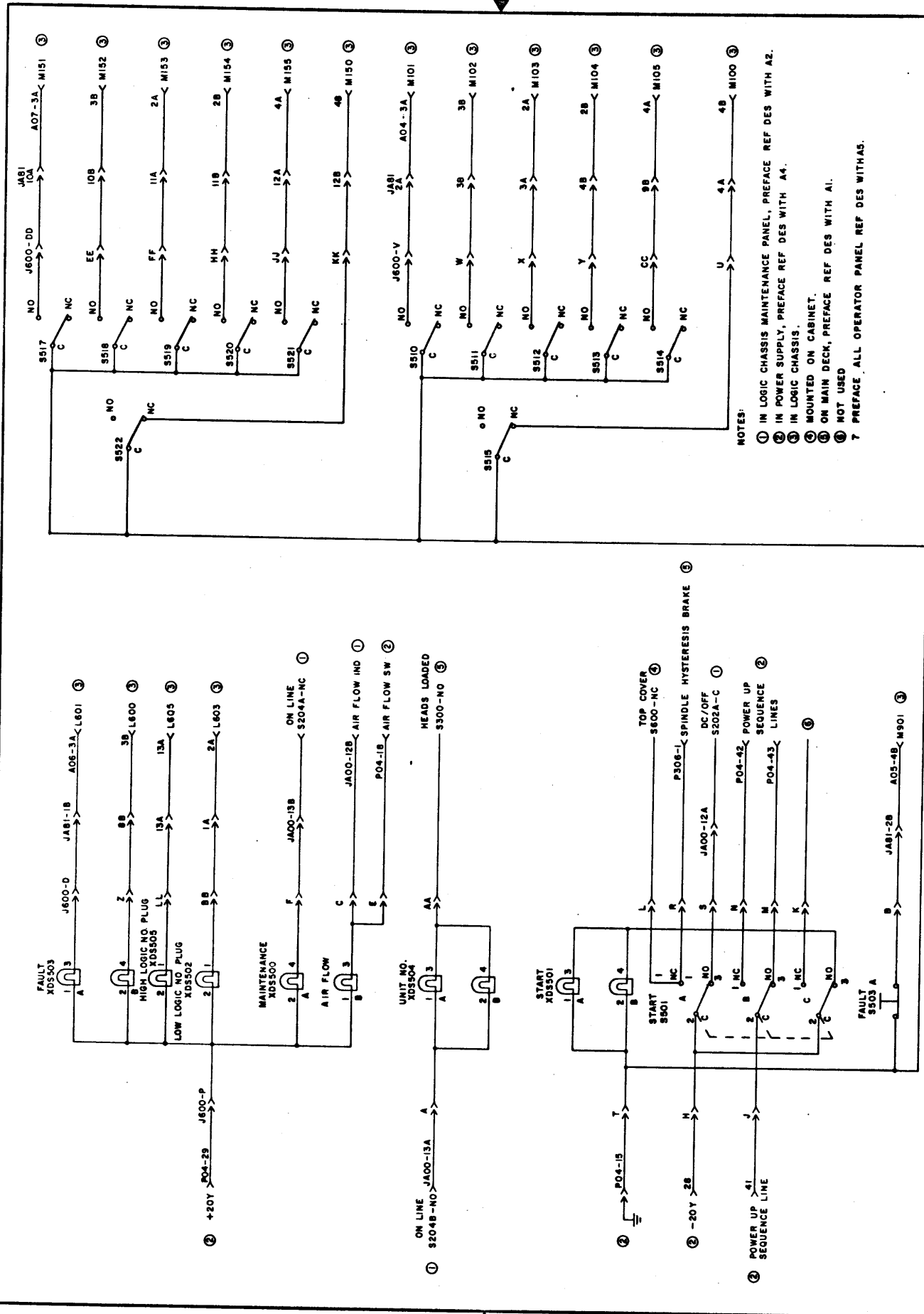
- NOTES:
- ① REFER TO I/O CABLE TABS FOR POINT TO POINT WIRING.
  - ② CONNECTION MADE TO WIRE WRAP PINS AT SPECIFIED LOGIC CHASSIS LOCATION.
  - ③ ON POWER SUPPLY CHASSIS.
  - ④ ON MAIN DECK.



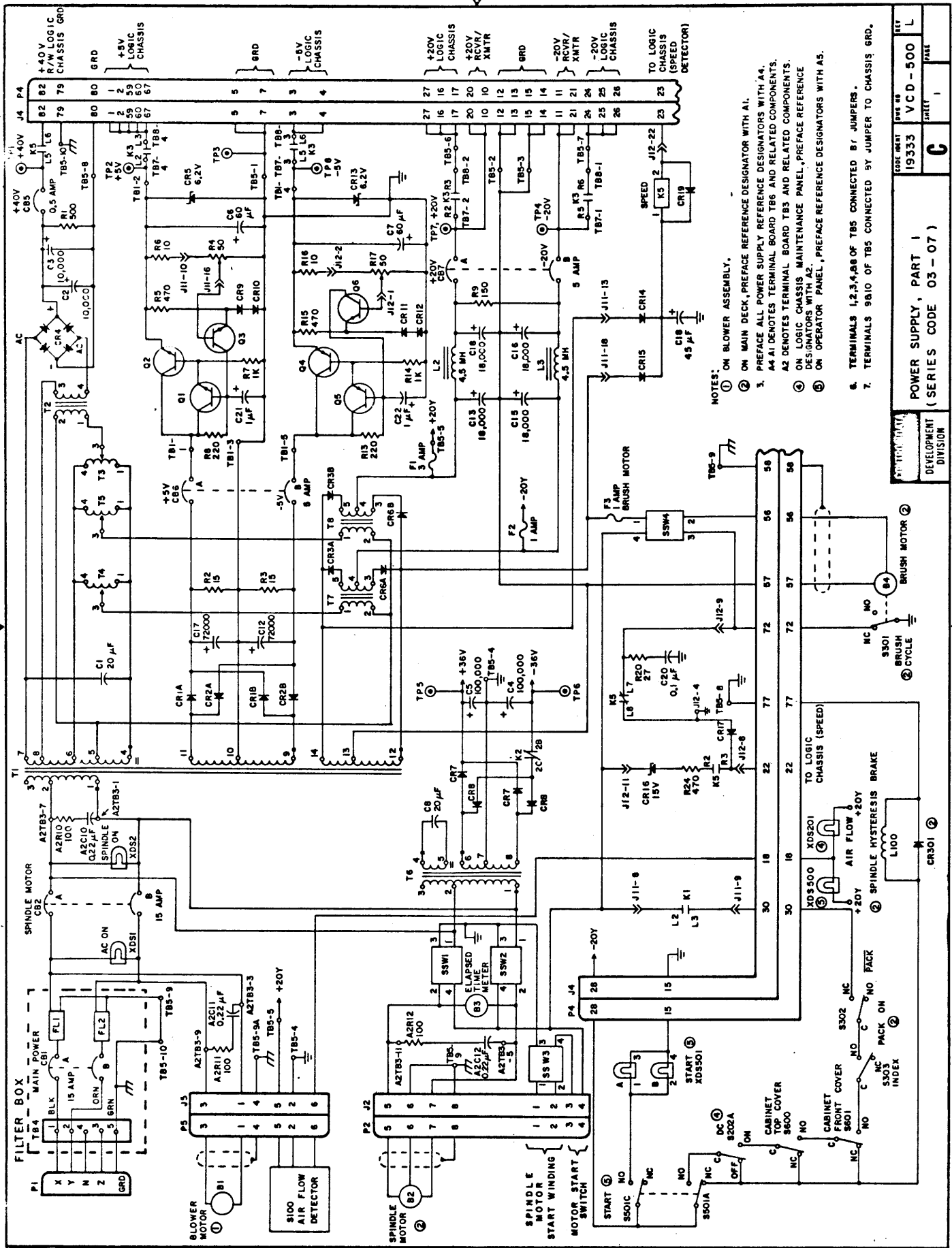
NOTES  
 ① IN POWER SUPPLY, PREFACE REF DES WITH A4.  
 ② IN LOGIC CHASSIS  
 ③ IN OPERATOR PANEL, PREFACE REF DES WITH A5  
 ④ MOUNTED ON CABINET  
 5. PREFACE ALL LOGIC CHASSIS MAINTENANCE PANEL REF DES WITH A2.

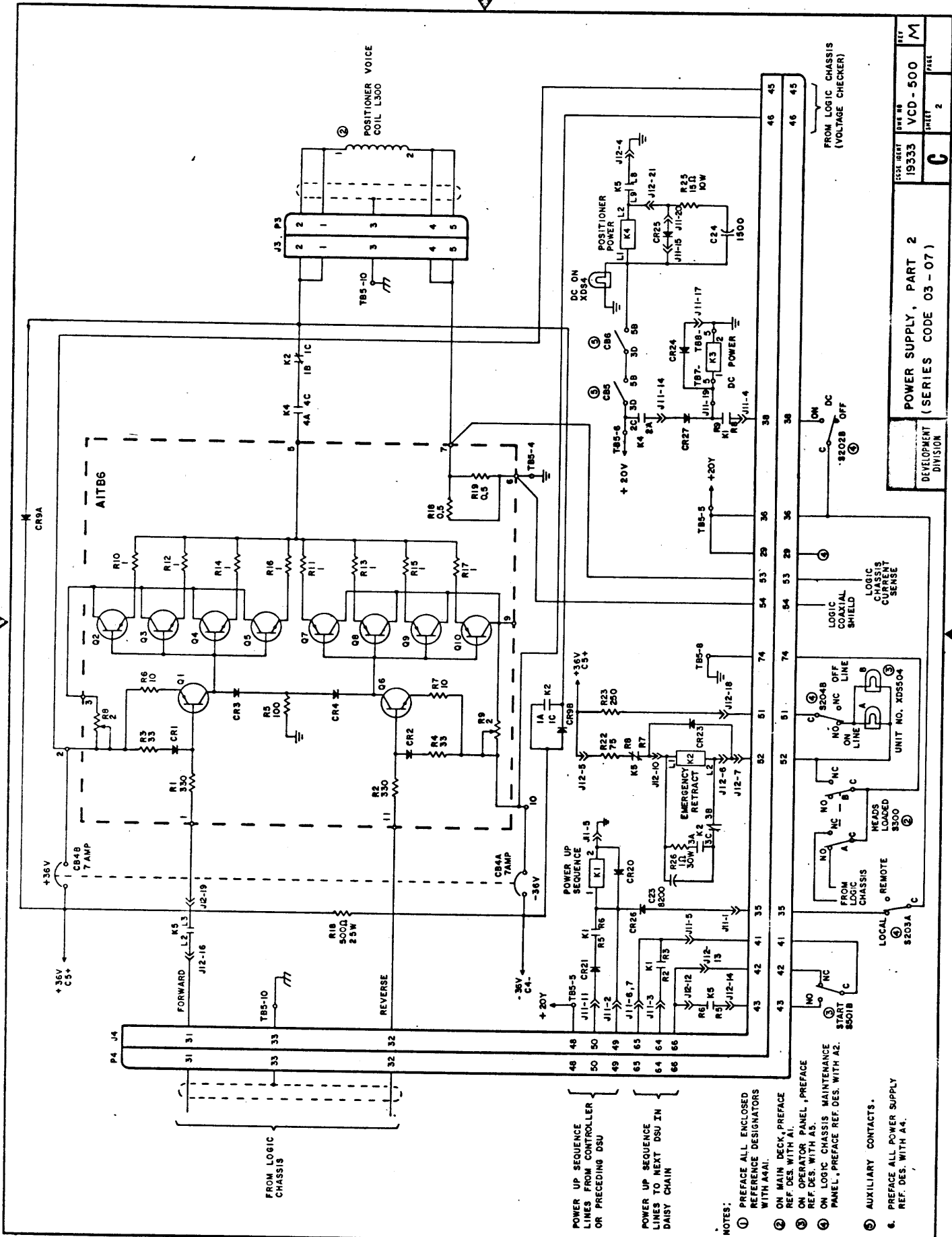
CONTROL DATA		FORM 100	REV 100	DATE
DEVELOPMENT DIVISION		19333	VCD-4781	A
LOGIC CHASSIS MAINTENANCE PANEL		SHEET	1	PAGE 00
		C		





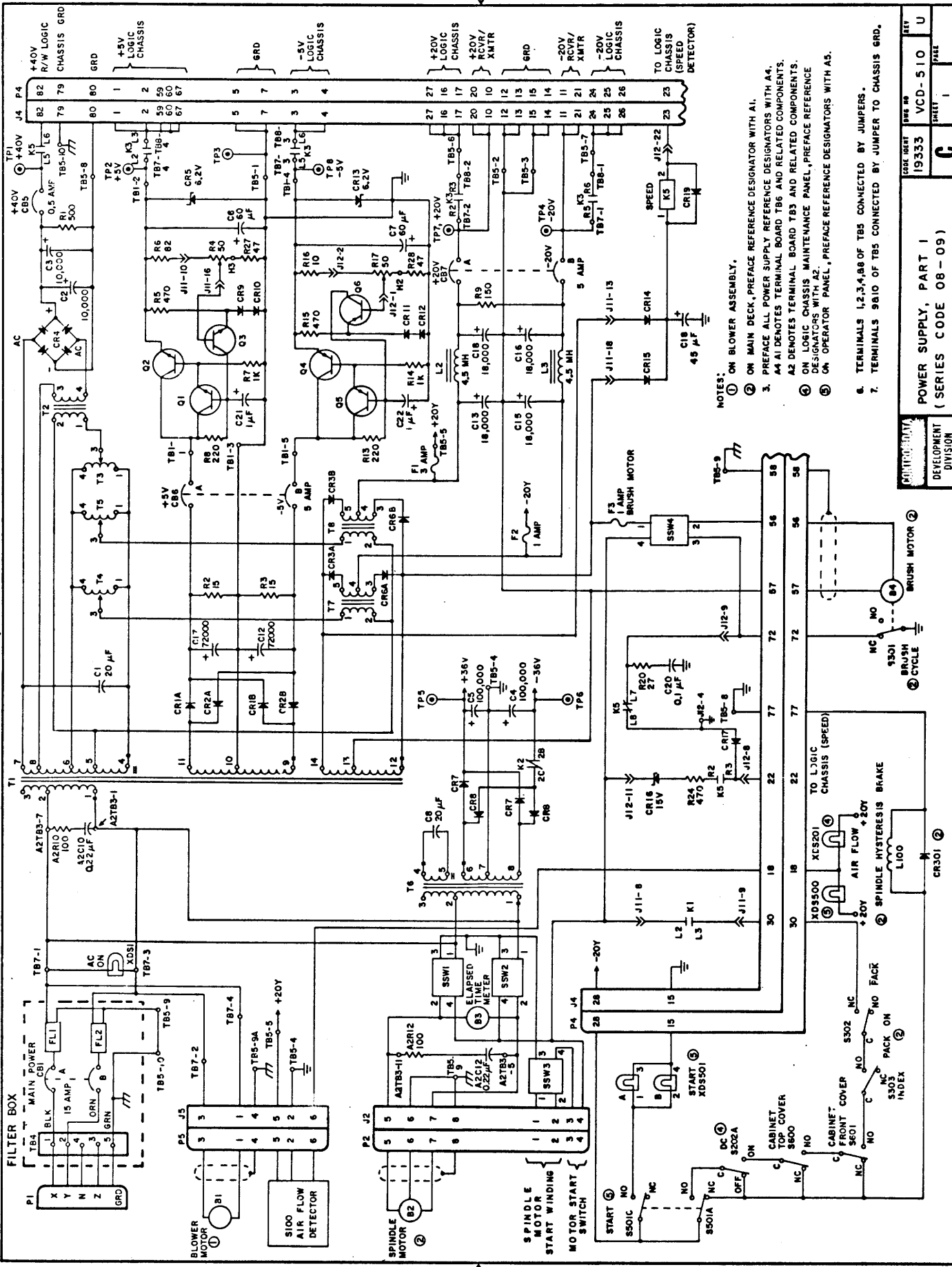
CONTROL DATA CORPORATION		REV	4
DEVELOPMENT DIVISION		REV NO	VCD-4781
OPERATOR PANEL		INIT	2
		REV	A





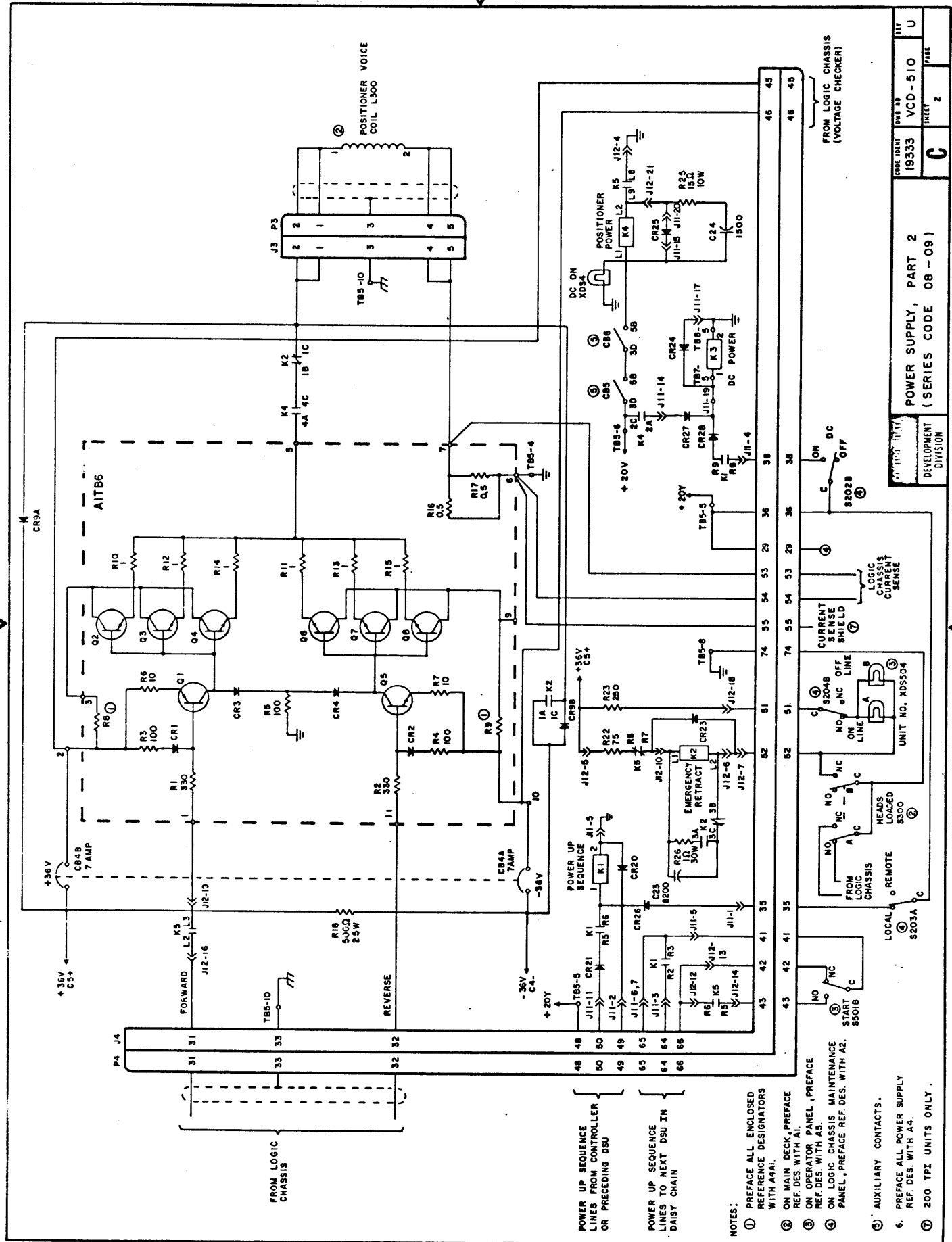
DEVELOPMENT DIVISION	POWER SUPPLY, PART 2 (SERIES CODE 03-07)	DATE REV 19333	REV M
		ISSUE C	PAGE 2

- NOTES:
1. PREFACE ALL ENCLOSED REFERENCE DESIGNATORS WITH A441.
  2. ON MAIN DECK, PREFACE REF. DES. WITH A1.
  3. ON OPERATOR PANEL, PREFACE REF. DES. WITH A5.
  4. ON LOGIC CHASSIS MAINTENANCE PANEL, PREFACE REF. DES. WITH A2.
  5. AUXILIARY CONTACTS.
  6. PREFACE ALL POWER SUPPLY REF. DES. WITH A4.

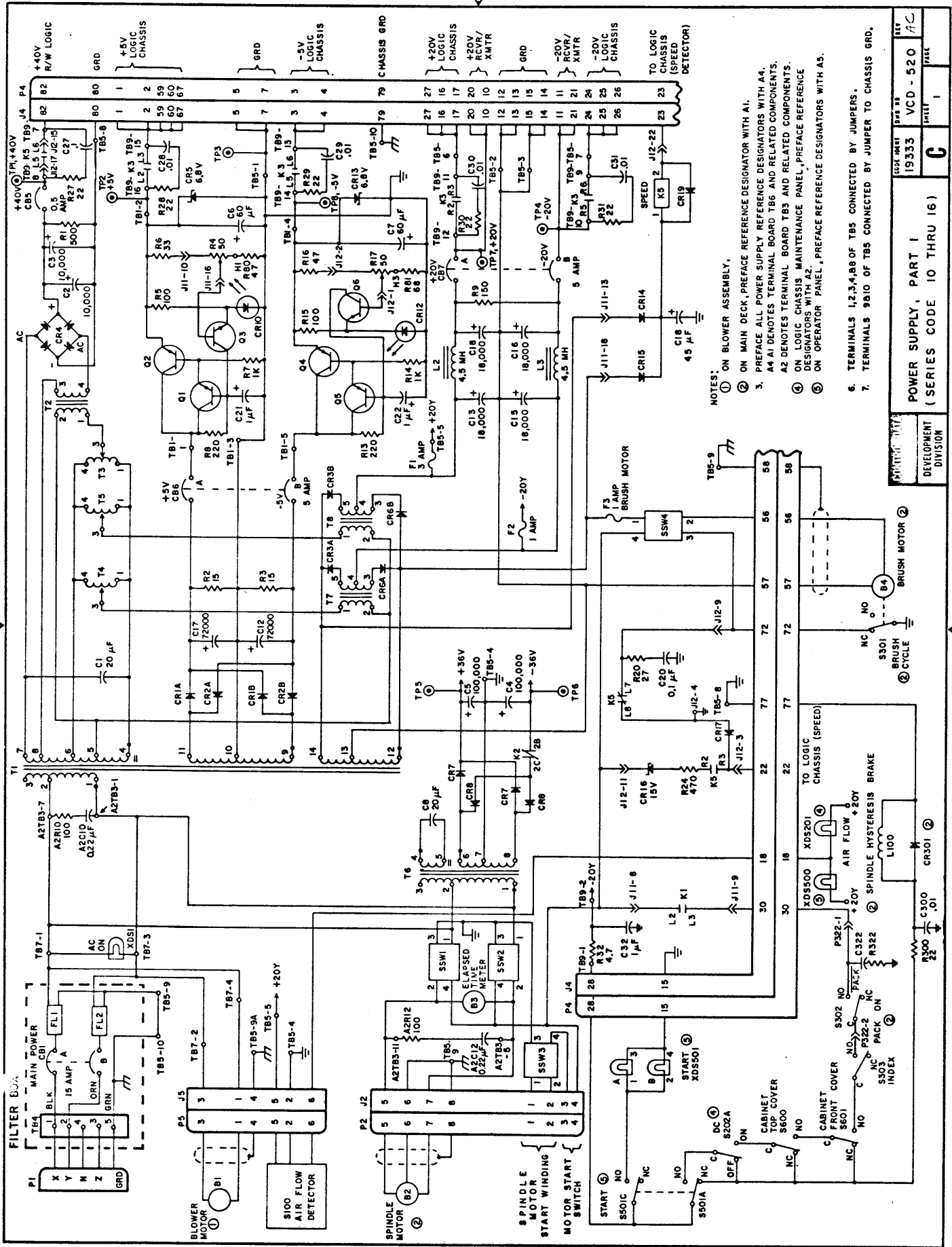


- NOTES:
- ON BLOWER ASSEMBLY.
  - ON MAIN DECK, PREFACE REFERENCE DESIGNATOR WITH A1.
  - PREFACE ALL POWER SUPPLY REFERENCE DESIGNATORS WITH A4. A4 A1 DENOTES TERMINAL BOARD T86 AND RELATED COMPONENTS. A2 DENOTES TERMINAL BOARD T83 AND RELATED COMPONENTS. DESIGNATORS WITH A2 OPERATOR PANEL, PREFACE REFERENCE DESIGNATORS WITH A5.
  - ON LOGIC CHASSIS MAINTENANCE PANEL, PREFACE REFERENCE DESIGNATORS WITH A5.
  - ON OPERATOR PANEL, PREFACE REFERENCE DESIGNATORS WITH A5.
  - TERMINALS 1,2,3,4,8,9 OF T85 CONNECTED BY JUMPER.
  - TERMINALS 9,10 OF T85 CONNECTED BY JUMPER TO CHASSIS GRD.

CONTROL BOARD		CODE SHEET	SHEET NO.	REV.
POWER SUPPLY, PART 1		19333	VCD-510	U
(SERIES CODE 08-09)				
DEVELOPMENT DIVISION		C		

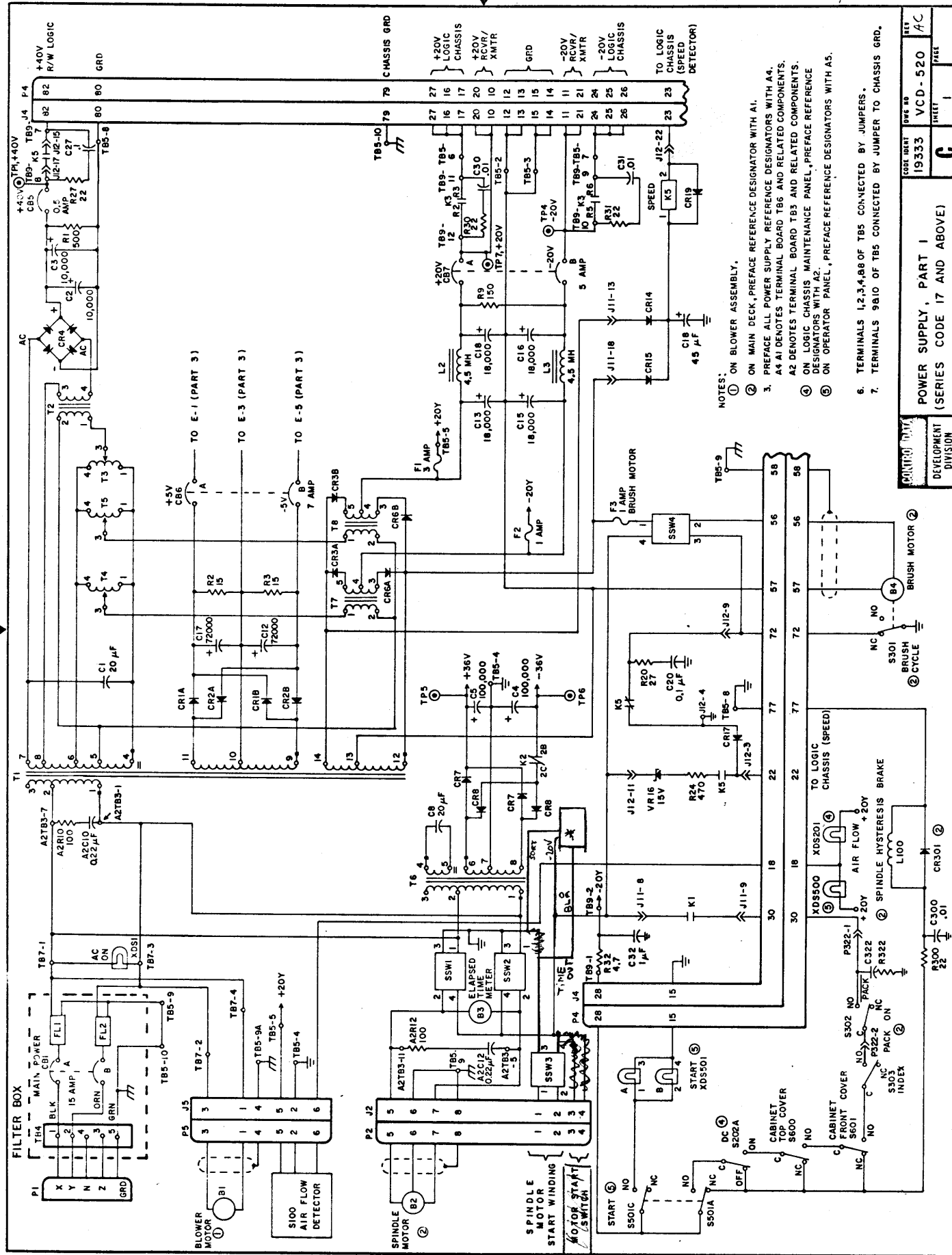


- NOTES:
- ① PREFACE ALL ENCLOSED LINES FROM CONTROLLER OR PRECEDING DSU
  - ② PREFACE ALL ENCLOSED LINES TO NEXT DSU IN DAISY CHAIN
  - ③ PREFACE ALL ENCLOSED REFERENCE DESIGNATORS WITH 44A1.
  - ④ ON MAIN DECK, PREFACE ON OPERATOR PANEL, PREFACE REF. DES. WITH A2.
  - ⑤ ON LOGIC CHASSIS MAINTENANCE PANEL, PREFACE REF. DES. WITH A2.
  - ⑥ AUXILIARY CONTACTS.
  - ⑦ PREFACE ALL POWER SUPPLY REF. DES. WITH A4.
  - ⑧ 200 TPI UNITS ONLY.



- NOTES:
- ① ON BLOWER ASSEMBLY.
  - ② ON MAIN DECK, PREFACE REFERENCE DESIGNATOR WITH A1.
  - ③ PREFACE ALL POWER SUPPLY REFERENCE DESIGNATORS WITH A4.
  - ④ A4 DENOTES TERMINAL BOARD TB6 AND RELATED COMPONENTS.
  - ⑤ A2 DENOTES TERMINAL BOARD TB3 AND RELATED COMPONENTS.
  - ⑥ ON LOGIC CHASSIS, MAINTENANCE PANEL, PREFACE REFERENCE DESIGNATORS WITH A2.
  - ⑦ ON OPERATOR PANEL, PREFACE REFERENCE DESIGNATORS WITH A5.
  - ⑧ TERMINALS 1,2,3,4,8,9 OF TB5 CONNECTED BY JUMPER.
  - ⑨ TERMINALS 9,10 OF TB5 CONNECTED BY JUMPER TO CHASSIS GRD.

DEVELOPMENT DIVISION	19333	DATE 33	REV
POWER SUPPLY, PART 1	19333	VCD - 520	REV
(SERIES CODE 10 THRU 16)			



- NOTES:
- ON BLOWER ASSEMBLY.
  - ON MAIN DECK, PREFACE REFERENCE DESIGNATOR WITH A1.
  - PREFACE ALL POWER SUPPLY REFERENCE DESIGNATORS WITH A4.
  - A4A1 DENOTES TERMINAL BOARD TB6 AND RELATED COMPONENTS.
  - A2 DENOTES TERMINAL BOARD TB3 AND RELATED COMPONENTS.
  - ON LOGIC CHASSIS MAINTENANCE PANEL, PREFACE REFERENCE DESIGNATORS WITH A2.
  - ON OPERATOR PANEL, PREFACE REFERENCE DESIGNATORS WITH A5.
  - TERMINALS 1,2,3,4,8,9 OF TB5 CONNECTED BY JUMPER.
  - TERMINALS 9,10 OF TB5 CONNECTED BY JUMPER TO CHASSIS GRD.

CONTROL UNIT	POWER SUPPLY, PART I	CODE IDENT	19333	REV	AC
DEVELOPMENT DIVISION	(SERIES CODE 17 AND ABOVE)	DATE	VCD-520	INLET	1

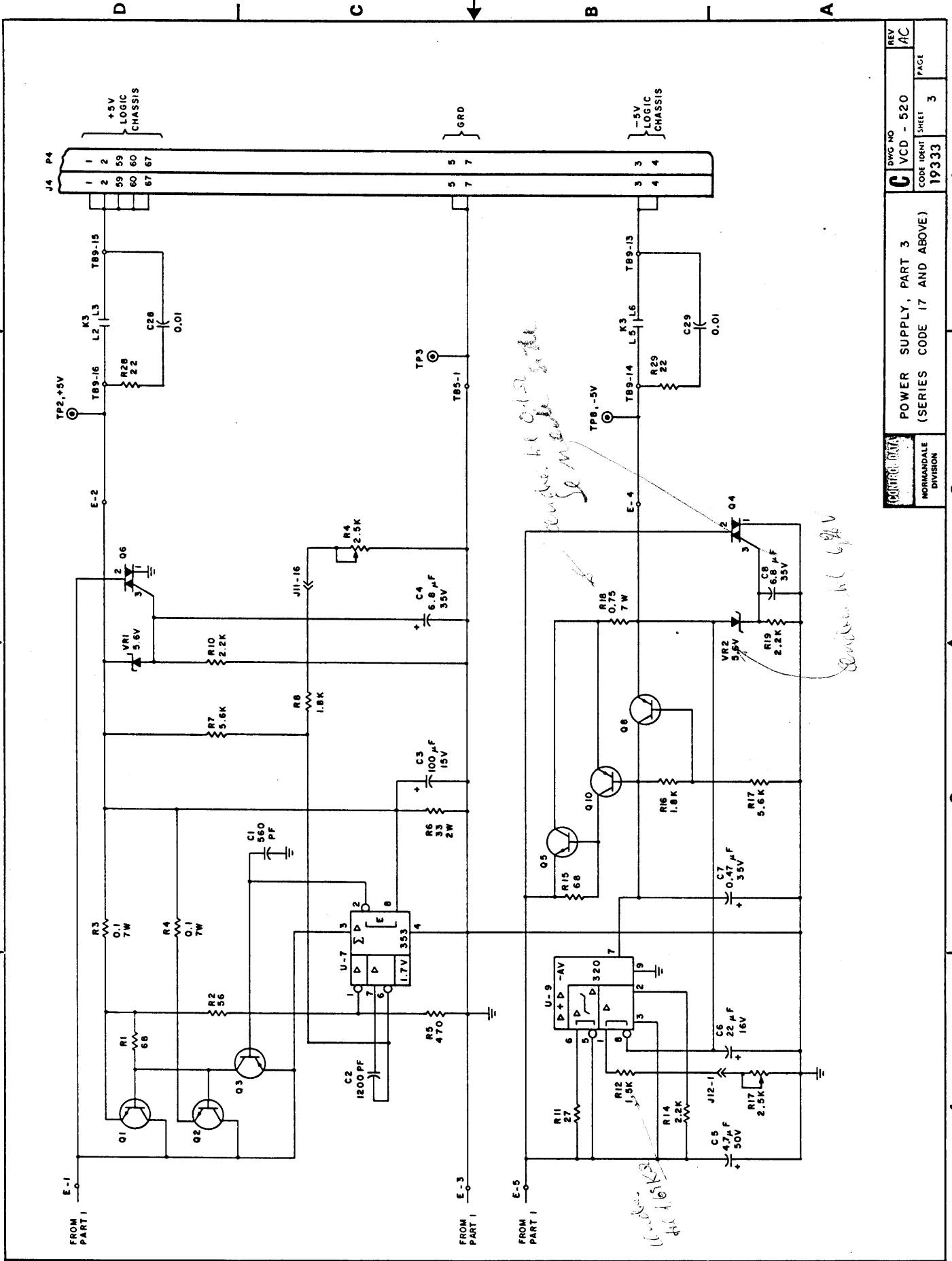
70617900 F

STEDET MAIN, STREET TIME/C  
 12/11-74 JPO

5-47





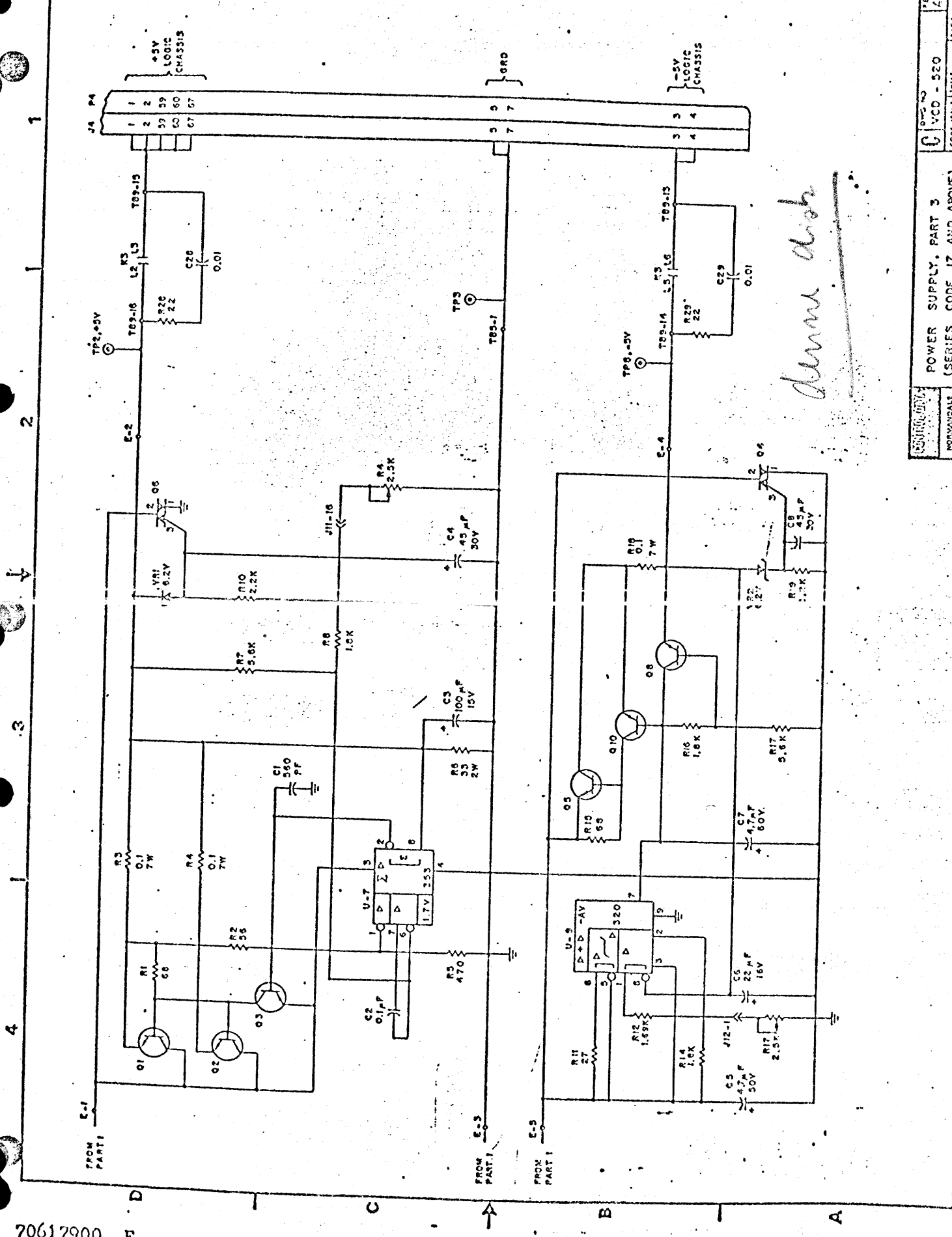


REV	AC
DWG. NO.	VCD - 520
CODE IDENT SHEET	19333
PAGE	3

POWER SUPPLY, PART 3  
(SERIES CODE 17 AND ABOVE)

NORMANDALE  
DIVISION





*dummy dash*

19333 19333	REV	AE
	Q	VCD - 520
19333	19333	3
POWER SUPPLY, PART 3 (SERIES CODE 17 AND ABOVE)		
NORMANDALE DIVISION		

70617900 F  
 (with PE31497/PE31499A)



**SECTION 6**

**MAINTENANCE**

Information for this section is included in BR5A1  
Disk Storage Unit, Publication No. 70617800.

**SECTION 7**

**MAINTENANCE AIDS**

Information for this section is included in Disk  
Storage Unit, Publication No. 70616800.

**SECTION 8**

**PARTS DATA**

Information for this section is included in BR5A1  
Disk Storage Unit, Publication No. 70618000.



SECTION 9

WIRE LISTS





## WIRE LISTS

### DESCRIPTION OF WIRE LISTS

The two types of wire lists are:

1. The line printer format which shows logic wiring.
2. The corporate (typed) form which shows non-logic wiring.

### LOGIC WIRE LISTS

The following is an example of the logic wire lists with an identification and an explanation of the columns.

Wire Identification	Comment	Origin	Destination	Z Level
A693		B1809A	B2312B	1
A697		B2509B	B2806B	1
A697		B2806B	B2807B	2
I001		D0710B	D1710B	1
I1000		D1608A	D1703B	1
I1001		D1704A	D1803B	1
I1002		D1513B	D1609A	1
I1003		D1510A	D1804B	1
10051	GND	A1413B	A1414A	1
10056	GND	A2305A	A2710B	1
10057		A2306A	A2711A	1
10059		A2301A	A2307A	1
10060	TP200	A0114B	JA0006B	1
10061	TP201	A0101B	JA0006A	1
10062	TP204	A0112B	JA0008B	1
10063	TP205	A0103B	JA0008A	1
10064	TP206	A0113A	JA0009B	1
10065	S204	A0404A	JA0004B	1
10066	S200	A0606A	JA0003A	1
10067	S201	A0503A	JA0004A	1
10114		C1406A	C1508A	1
10115		C1406B	C1508B	1
10200	BUS	A2602B	A2604B	1
10201	BUS	B2611B	B2613B	1

General

Back panels are machine wired according to the following paragraphs. The wiring operation prepares the unit for a number of operational options. A wire is installed for each entry in the list even if the unit does not contain the logic card types or complement to make full use of these options.

Wire Identification

If the identifier begins with a letter, the signal on the wire originates at the listed logic term. A multiple output is indicated when a term is repeated on successive line entries.

If the identifier begins with two letters, the signal on the wire originates at a transmitter or a receiver logic term. The first letter identifies the channel in which the term is located (A for channel I or B for channel II). The next four digits identify the logic term from which the signal originates (terms preceded by a B will exist physically only if the unit has a dual channel capability). An additional digit at the end of the identifier denotes a second and different (generally a differential of the first) signal being originated by the term.

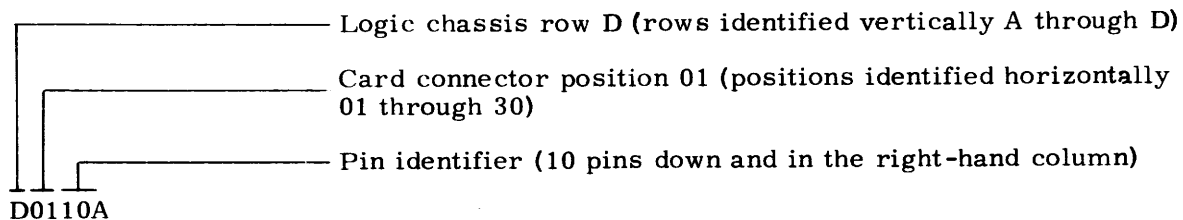
BT023 - signal source is term T023 in channel II (B).

BT0231 - last digit identifies a second and different signal being originated

If the identifier begins with a numeral, the signal on the wire generally originates at some point other than a logic term (switch, bus, test point, etc.). In this case, the adjacent CMMT (comment) column provides a clarifying entry. A multiple output is indicated when the identifier is repeated on successive line entries.

Origin

This column locates the logic chassis wire wrap pin from which the identified wire originates.



If this column is preceded by the letter J, the origin is from one of the connectors above, below, or to either side of the area where the cards are installed. The locator (same as first four digits in this column) is etched alongside each connector.

Destination

This column locates the logic chassis wire wrap pin to which the identified wire is terminated. The location information provided for the Origin column is also applicable for this column.

Z (Level)

The Z level denotes the vertical separation which an installed wire has relative to the surface of the wire wrap pin board. This vertical separation is maintained at both ends of the installed wire when it is wrapped on the pins. Three vertical separation distances are possible. A numeral 1 in this column indicates the smallest separation. At 3 in the column indicates the largest separation. A level of 2 is the intermediate separation level.

## NON-LOGIC WIRE LISTS

The following is an example of a non-logic wire list with an explanation of the columns.

TITLE								WL	SHEET NO.	DOCUMENT NO.	REV
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
1	18	2		P5	1	TB100	1				
2	20	0		PD5	2	TB100	2				
3	18	3		PD5	3	TB100	3				
4	20	4		PD5	6	TB100	4				
5	20	2		PD5	5	TB100	5				
6	18	5		PD5	4	SHIELD					

- |                  |                                  |
|------------------|----------------------------------|
| Conductor Ident. | - Not applicable to field usage  |
| Wire Size        | - Size of conductor (AWG)        |
| Color Code       | - Color information              |
| Wire Length      | - Length of conductor in inches  |
| Origin           | - Origin point of conductor      |
| Destination      | - Destination point of conductor |
| Remarks          | - Useful comments                |

### Color Code

Solid colored wires are identified by a one digit number in this column. Multicolored wires are identified by a number having two or three digits. Each digit of the number identifies one of the colors. The code numbers are identified as follows:

0 - Black	2 - Red	4 - Yellow	6 - Blue	8 - Gray	S - Shield
1 - Brown	3 - Orange	5 - Green	7 - Violet	9 - White	

In multi-digit color codes, the first digit denotes base color and the remaining digits denote tracer colors.

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV.
LOGIC WIRE LIST						1	VCD-7063	B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
	GND	C3001A	C3011A	1				
A621		B2701B	B2801B	1				
A626		A2706B	B2802B	2				
A628		A2916B	B2803B	1				
A635		B2601B	B2704B	1				
A637		A2614B	B2602B	1				
A651		A2107B	A2314B	1				
A661		A2309B	B2102B	1				
A664		A2004A	A2308B	1				
A665		A2005B	A2307B	2				
A671		B2104B	B2307B	1				
A674		A2003A	B2310B	2				
A675		A2004B	B2306B	1				
A683		A2305B	B1803A	2				
A693		B1809A	B2312B	1				
A697		B2111B	B2806B	1				
GND		A2301A	A2308A	1				
GND		B1403A	B1414A	1				
GND		B1402B	B1403A	2				
GND		A1410A	A1413B	1				
GND		A1413B	A1414A	2				
GND		A1414A	B1402B	1				
GND		A1408B	A1410A	2				
I000		C1006A	C1006B	1				
I000		C0807B	C1006A	2				
I001		C1203B	C1204B	1				
I001		C0803B	C0804B	1				
I001		C1204B	C1205B	2				
I001		C1003B	C1004B	2				
I001		C0805B	C1003B	1				
I001		C1004B	C1005B	1				
I001		C0804B	C0805B	2				
I001		C0803B	C1007B	2				
I001		C1005B	C1203B	2				
I122		A0607A	A1313B	1				
I122		A0607A	B0202B	2				
I123		C0103A	C0103B	1				
I123		B0202A	C0103A	2				
I123		B0202A	B1506B	1				
I124		A0409A	A1511B	2				

TITLE LOGIC WIRE LIST				WL	SHEET NO. 2	DOCUMENT NO. VCD-7063	REV. B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS		
I124		A0409A	C0104A	1			
I125		A0410A	B0209A	1			
I126		A0411B	B0205B	1			
I127		A0412B	B0205A	1			
I128		A0413B	B0203B	1			
I129		A0408A	B0207A	1			
I129		A0408A	A1510B	2			
I162		A0609B	A1314B	2			
I162		A0609B	A0802B	1			
I163		A0802A	B1504B	2			
I163		C1504A	C1504B	2			
I163		A0802A	C1504B	1			
I165		A0710A	A0809A	1			
I166		A0711B	A0805B	1			
I167		A0712B	A0805A	1			
I168		A0713B	A0803B	1			
I169		A0708A	A0807A	1			
I169		A0708A	A1517A	2			
I170		A0709A	A1512A	2			
I170		A0709A	C1505A	1			
I212		B1004B	B1402A	1			
I230		A1205A	B1301A	1			
I232		A1312A	A2007A	2			
I233		A1416B	B1309A	1			
I237		A1310B	B1509A	1			
I238		A1304A	B1512B	1			
I239		A1306B	C0106A	1			
I240		A1003A	B1306B	1			
I241		B1003A	B1305B	2			
I243		B1311B	C0606A	1			
I245		B1301B	C0806A	1			
I246		A1307A	C1503B	1			
I249		C0105B	C1503A	1			
I249		C1403A	C1404A	1			
I249		C0105B	C1403A	2			
I249		A1302A	C0603B	1			
I249		C1404A	C1405A	2			
I249		C0603B	C0806B	2			
I249		C0806B	C1305A	1			
I249		C1304A	C1405A	1			

TITLE LOGIC WIRE LIST					WL	SHEET NO. 3	DOCUMENT NO. VCD-7063	REV. B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
I249		C1304A	C1305A	2				
I260		A1807B	B1401A	2				
I261		A1808B	B1404B	1				
I262		A1206B	A1412A	1				
I266		A1205B	A1408A	2				
I267		A1204B	A1410B	1				
I272		A1411A	B1806B	1				
I273		B0510B	B1411B	1				
I274		B0506B	B1412A	2				
I275		B1401B	B1503A	2				
I275		B0506A	B1401B	1				
I276		A1002A	A1407A	2				
I277		A1002B	A1411B	1				
I278		A1403A	JA8109A	2				
I279		A1402A	JA8106A	1				
I282		B1412B	C0107B	2				
I283		A1417A	C0607B	1				
I283		A1417A	A1508A	2				
I360		B1209B	JA8201B	2				
I361		B1210B	JA8201A	1				
I362		B1208B	JA8202B	2				
I363		B1209A	JA8202A	1				
I364		B1207B	JA8203B	2				
I365		B1208A	JA8203A	1				
I366		B1203B	JA8204B	2				
I367		B1204B	JA8204A	1				
I368		B1206B	JA8205B	2				
I369		B1207A	JA8205A	1				
I370		B1205B	JA8206B	2				
I371		B1206A	JA8206A	1				
I372		B1202B	JA8207B	2				
I373		B1203A	JA8207A	1				
I374		A1215B	JA8208B	2				
I375		A1216A	JA8208A	1				
I376		B1201B	JA8209B	2				
I377		B1202A	JA8209A	1				
I378		A1216B	JA8210B	2				
I379		A1217A	JA8210A	1				
I383		A1214B	C0603A	1				
I412		B0511A	JA8212A	1				

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV.
LOGIC WIRE LIST						4	VCD-7063	B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
I414		B0507A	JA8211A	2				
I417		B0508B	JA8212B	1				
I420		B0104A	B0513A	2				
I423		B0103B	B0505A	1				
I430		B0112A	JA0001B	2				
I432		B0110B	JA0003B	1				
I435		B0109B	B2009B	2				
I436		B0106B	JA0001A	1				
I438		B0102A	JA0002A	1				
I440		B0105B	JA0007A	2				
I501		B1808A	C3012B	1				
I507		A1802A	B1807B	2				
I507		A1802A	B1803B	1				
I507		B1803B	B1912B	2				
I507		B0503A	B1807B	1				
I508		A1505B	A1809A	1				
I509		A2811B	B2012B	1				
I509		A1804A	A2811B	2				
I513		A1813A	B2708B	1				
I514		A1805A	B2706B	2				
I515		A1815B	A1913A	2				
I515		A1815B	B1002A	1				
I515		A1913A	A1914B	1				
I516		A1815A	A2011A	1				
I516		A1407B	A1815A	2				
I516		A2011A	A2717B	2				
I518		B1811B	B1913A	2				
I518		A2009B	B1913A	1				
I526		A1812A	B0113B	1				
I527		B1507B	B1805A	1				
I528		A1811B	B1808B	1				
I540		B1906B	B2002B	2				
I541		B1905B	B2002A	1				
I542		A1911A	B2001A	2				
I543		B1911B	B2003B	1				
I544		A2015B	B1912A	2				
I545		A2015A	B1901B	1				
I546		A1907A	A2014A	2				
I547		A1911B	B2016B	1				
I548		A1903A	A2013A	2				



TITLE LOGIC WIRE LIST					WL	SHEET NO. 5	DOCUMENT NO. VCD-7063	REV B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
I549		A1514A	A1902A	2				
I549		A1902A	B1811A	1				
I549		B0104B	B1811A	2				
I570		A2712B	B2004B	2				
I573		A2806B	B2005A	1				
I574		B2004A	B2709B	1				
I574		A2715B	B2709B	2				
I575		A1810B	B2006B	2				
I576		A1804B	A2010A	1				
I577		A1507B	A2006A	1				
I584		A2010B	A2716B	1				
I591		A2003B	A2011B	2				
I631		A1207B	A1810A	2				
I631		A1512B	B0513B	2				
I631		A1810A	B2805B	1				
I631		B2805B	C1306B	2				
I631		A1207B	B0513B	1				
I632		B1801A	C2113B	1				
I632		B1801A	B2804B	2				
I632		B1510A	B2804B	1				
I634		A2809B	A2812B	1				
I635		A2714B	A2810B	2				
I636		C1206A	C1206B	2				
I636		C1206A	C1307B	1				
I637		C1403B	C3012A	2				
I637		C1207B	C1403B	1				
I737		A1613B	C0105A	1				
I737		A1613B	D2106B	2				
I752		A1308B	A1513B	1				
I758		B1502B	B1505A	1				
I759		B1513A	C1305B	1				
I761		A1309A	B1501B	1				
I763		B1501A	B1503B	2				
I764		A1516B	B0203A	1				
I765		A0803A	A1516A	1				
I787		C0604A	C0604B	2				
I787		B1507A	C0604B	1				
I791		A1502B	C1505B	1				
I795		A1502A	C0104B	1				
I902		A1916B	C0605B	2				

TITLE LOGIC WIRE LIST					WL	SHEET NO. 6	DOCUMENT NO. VCD-7063	REV B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
I902		A1509A	A1916B	1				
I902		A0508A	C0605B	1				
I903		B0210A	C1404B	1				
I903		A0511B	C1404B	2				
I903		A0810A	B0210A	2				
I903		A2713B	B1802A	2				
I903		A0511B	B1802A	1				
I903		A2713B	B2905B	1				
I905		A0206B	A0512B	1				
K290		B1003B	B2011A	2				
K290		B1003B	C0803A	1				
K291		B1005B	B2010B	2				
K291		B1005B	C0804A	1				
K292		B1005A	C0805A	1				
K293		B1007B	C1003A	1				
K294		B1008B	C1004A	1				
K295		B1010B	C1005A	1				
K296		B1009A	C1203A	1				
K297		B1011A	C1204A	1				
K298		A1403B	B1013A	1				
K298		B1013A	C1205A	2				
K300		A1003B	B1211B	2				
K300		B1211B	C2108A	1				
K301		B1212A	C2106B	1				
K301		A1005B	B1212A	2				
K302		A1005A	B1213A	2				
K302		A1208A	B1213A	1				
K302		A1208A	C2105B	2				
K303		B1211A	C2104B	1				
K303		A1007B	A1213B	1				
K303		A1213B	B1211A	2				
K304		B1212B	C2103B	2				
K304		A1008B	A1208B	2				
K304		A1208B	B1212B	1				
K400		A1414B	B0502A	1				
K400		B0502A	C1304B	2				
K401		B0509A	JA8213B	1				
K401		A0605A	A0608A	2				
K401		A0604A	B0509A	2				
K401		A0604A	A0605A	1				

TITLE LOGIC WIRE LIST					WL	SHEET NO. 7	DOCUMENT NO. VCD-7063	REV. B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
K403		B0110A	B0511B	1				
K500		A1507A	A1803B	1				
K501		A2006B	C1306A	2				
K501		A1803A	A2006B	1				
K507		B1906A	B1911A	1				
K507		A1903B	A1912B	2				
K507		A1912B	B1904A	1				
K507		A1903B	B1801B	1				
K507		B1904A	B1906A	2				
K560		A2017A	A2610B	2				
K561		A2017B	A2611B	1				
K562		A2612B	B2001B	1				
K563		A2613B	B2003A	1				
K564		A2012A	A2609B	1				
K565		A2012B	A2608B	1				
K565		A2012B	B2005B	2				
K566		A2013B	B2007A	2				
K567		A2016A	B2006A	1				
K568		A2007B	B2007B	1				
K570		B2013A	B2108B	1				
K572		B2012A	B2106B	1				
K905		B2010A	C3009B	2				
K906		B2010A	C3009A	1				
L600		A0603B	JA8108B	1				
L601		A0603A	JA8101B	2				
L602		A0602B	JA0005A	1				
L603		A0602A	JA8101A	2				
L604		A0613B	JA0005B	1				
L605		A0613A	JA8113A	1				
M100		A0409B	B0207B	2				
M100		A1515A	B0207B	1				
M150		A0709B	A0807B	1				
M150		A0807B	A1517B	2				
M900		A0510B	B0503B	2				
M900		B0112B	B0503B	1				
M901		A0509B	B0504A	1				
M902		A0508B	B0209B	2				
M902		A0508B	A1207A	1				
M902		A1913B	B2011B	1				
M902		A0809B	B0209B	1				

TITLE LOGIC WIRE LIST				WL	SHEET NO. 8	DOCUMENT NO. VCD-7063	REV. B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS		
M902		A1207A	A1913B	2			
M903		A1813B	C3015A	1			
M903		A0511A	A1813B	2			
M903		A0511A	A2113B	1			
M904		A0207A	A0513A	2			
M904		A1814A	B1806A	2			
M904		A0513A	A1814A	1			
M905		A0513A	A1814B	1			
N104		C0605A	C2114B	2			
N108		A1413A	D2112B	2			
N108		A1416A	D2111B	1			
N108		B1407A	D2110B	2			
N108		B1409B	D2109B	1			
N136		B1411A	C2110B	1			
N908		A1805B	D3002B	1			
N909		A1807A	D3002A	2			
N920		B1902B	C3016A	1			
N921		B1903A	C3016B	2			
N922		A1914A	C3017A	1			
N923		B1909B	D3005A	2			
N924		B1907A	D3005B	1			
N925		A1916A	D3006A	2			
N926		A1908B	D3006B	1			
N927		A1910A	D3007A	2			
N928		A1904B	D3007B	1			
R000		B1004A	B1408A	2			
R000		B1004A	C0704B	1			
R000		A1004A	C0704B	2			
R000		B1408A	B1902A	1			
R001		B1006A	B1903B	1			
R001		A1006A	C0606B	2			
R001		A1006A	C0711A	1			
R001		B1006A	C0711A	2			
R002		A1004B	C0711B	2			
R002		A1915B	B1004B	2			
R002		A1004B	A1915B	1			
R003		A1409A	B1006B	1			
R003		A1006B	B1908A	1			
R003		A1006B	A1409A	2			
R003		B1006B	C0904A	2			

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV.
LOGIC WIRE LIST						9	VCD-7063	B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
R004		A1008A	C0904B	1				
R004		B1008A	B1408B	1				
R004		A1008A	B1008A	2				
R004		B1408B	B1908B	2				
R005		B1010A	C0911A	1				
R005		A1915A	C0911A	2				
R005		B1010A	B1403B	2				
R006		A1415B	B1009B	2				
R006		B1009B	C1104B	1				
R006		A1415B	A1909A	1				
R007		B1011B	C1111A	2				
R007		A1409B	C1111A	1				
R007		A1409B	A1909B	2				
R008		B1013B	C1111B	1				
R008		A1905A	C1111B	2				
R009		B1303A	B1313B	2				
R009		B1303A	C1104A	1				
R010		B1302B	C0404A	2				
R010		B1302A	B1302B	1				
R011		A1305A	C0411A	2				
R011		E1308A	B1309B	2				
R011		A1305A	A1310A	1				
R011		B1309B	C0411A	1				
R012		A1515B	C0911B	1				
R013		A1316A	C0411B	1				
R013		A1315A	A1316A	2				
R015		A1314A	A1315B	2				
R015		A1314A	C0404B	1				
R016		B0208B	C0304A	1				
R016		A0808B	B0208B	2				
R017		B0206A	C0304B	1				
R017		A0806A	B0206A	2				
R018		A0804B	B0204B	2				
R018		B0204B	C0311A	1				
R019		A0804A	B0204A	2				
R019		B0204A	C0311B	1				
R020		A0806B	B0206B	2				
R020		B0206B	C0704A	1				
T000		C0707B	C0808B	2				
T0001		C0707A	C0808A	1				

TITLE LOGIC WIRE LIST					WL	SHEET NO. 10	DOCUMENT NO. VCD-7063	REV. B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
T001		C0708B	C0809B	2				
T0011		C0708A	C0809A	1				
T002		C0709B	C0810B	2				
T0021		C0709A	C0810A	1				
T003		C0906B	C1008B	2				
T0031		C0906A	C1008A	1				
T004		C0907B	C1009B	2				
T0041		C0907A	C1009A	1				
T005		C0908B	C1010B	2				
T0051		C0908A	C1010A	1				
T006		C1107B	C1208B	2				
T0061		C1107A	C1208A	1				
T007		C1108B	C1209B	2				
T0071		C1108A	C1209A	1				
T008		C1109B	C1210B	2				
T0081		C1109A	C1210A	1				
T019		C0108B	C0207B	1				
T019		C0108B	JC0007B	2				
T0191		C0108A	C0207A	1				
T0191		C0108A	JC0007A	2				
T020		C0610B	JC0012B	2				
T0201		C0610A	JC0012A	1				
T021		C0109B	C0208B	1				
T021		C0109B	JC0008B	2				
T0211		C0109A	JC0008A	2				
T0211		C0109A	C0208A	1				
T023		C0110B	JC0006B	2				
T023		C0110B	C0209B	1				
T0231		C0110A	C0209A	1				
T0231		C0110A	JC0006A	2				
T026		C1509B	JC0009B	2				
T026		C0205B	C1509B	1				
T0261		C0205A	C1509A	1				
T0261		C1509A	JC0009A	2				
T027		C1510B	JC0010B	2				
T027		C0206B	C1510B	1				
T0271		C0206A	C1510A	1				
T0271		C1510A	JC0010A	2				
Y500		A1809B	A2002A	2				
Y503		A2008B	B1802B	1				

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV.
LOGIC WIRE LIST						11	VCD-7063	B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
Y591		A2009A	B1809B	1				
Y592		A2005A	B1804B	2				
Y601		A0208B	A0303B	1				
Y601		C1405B	D2103B	1				
Y601		A0303B	C1405B	2				
Y603		A0309B	JA8108A	1				
Y604		B0107A	B0512A	1				
Y604		A0108B	B0107A	2				
Y651		A2111B	A2316B	1				
Y900		A1412B	C3003A	1				
Y903		A2008A	D3009B	1				
Y904		A1808A	D3009A	2				
10000	S200	A0606A	JA0003A	2				
10001	S201	A0503A	JA0004A	1				
10002	S204	A0504A	JA0004B	2				
10003	TP201	A0101B	JA0006A	1				
10004	TP205	A0103B	JA0008A	2				
10005	TP200	A0114B	JA0006B	1				
10006	TP204	A0112B	JA0008B	2				
10007	TP206	A0113A	JA0009B	2				
10008	S510	A0403A	JA8102A	2				
10009	S512	A0402A	JA8103A	1				
10010	S515	A0404B	JA8104A	2				
10011	S301	A0502B	JA8105A	1				
10012	S503	A0504B	JA8102B	2				
10013	S511	A0403B	JA8103B	1				
10014	S513	A0402B	JA8104B	2				
10015	INTP	A0502A	JA8105B	1				
10016	S300	A0503B	JA8106B	2				
10017	Y702	B0502B	JA8213A	1				
10019	GND	A1301A	A1304B	1				
10019	GND	A1313A	A1316B	1				
10019	GND	A1301A	A1309B	2				
10019	GND	A1304B	A1313A	2				
10020	GND	A1404B	A1405B	2				
10020	GND	A1401A	A1405A	2				
10020	GND	A1405A	A1406A	1				
10020	GND	A1401A	A1404B	1				
10021	GND	B1001A	B1007A	1				
10022	GND	A1001A	A1007A	2				

TITLE LOGIC WIRE LIST					WL	SHEET NO. 12	DOCUMENT NO. VCD-7063	REV B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS			
10023	GND	A1201A	A1212B	1				
10024	BUS	B0509B	B0510A	1				
10026	GND	A2312A	A2912B	1				
10038	GND	B0208A	B0214A	1				
10040	BUS	B2809B	B2814B	1				
10041	A703	A1604B	JA8214B	2				
10042	A703	A1605B	JA8214A	1				
10043	PA	A2305A	A2710B	2				
10044	PA	A2306A	A2711A	2				
10045	A21	A2109B	A2309A	2				
10046	A21	A2110B	A2310A	1				
10048		A2709B	A2913B	1				
10048	A29	A2313A	A2913B	2				
10049	B29	B2311A	B2908B	2				
10050	B29	B2312A	B2909B	1				
10051	C01	C0106B	D2111A	2				
10052	A12	A1203A	D2112A	1				
10055	C02	C0202A	C0213A	2				
10055	C02	C0213A	C0214A	1				
10055	C02	C0201A	C0202A	1				
10057	B23	B2313A	B2313B	1				
10058	A23	A2302A	A2302B	1				
10060	B16	A1610B	B1608B	1				
10060	B16	B1608B	B1614A	2				
10061	B01	B0109A	C3004A	1				
10062	B01	B0101A	B0108A	2				
10063	BUS	B2811B	B2813B	1				
10063	BUS	A2802B	A2804B	1				
10064	BUS	A2702B	A2704B	1				
10065	BUS	B2711B	B2713B	1				
10066	BUS	A2902B	A2904B	1				
10067	BUS	B2911B	B2913B	1				
10068	S300	C0107A	JA8107B	1				
10069	S300	C0107A	C0607A	2				
10070	S300	C0607A	C0807A	1				
10071S	S300	C0807A	C1007A	2				
10072S	S300	C1007A	C1207A	1				
10073	S300	C1207A	C1307A	2				
10074	S300	C1307A	C1407A	1				
10082	S300	C1407A	C1507A	2				



TITLE					WL	SHEET NO.		DOCUMENT NO.		REV.
LOGIC WIRE LIST						13		VCD-7063		B
WIRE IDENTIFICATION	COMMENT	ORIGIN	DESTINATION	Z LEVEL	REMARKS					
10083	GND	A1901A	A1906A	2						
10083	GND	A1905B	A1906A	1						
10084	I249	A1305B	A1306A	2						
10084	I249	A1306A	B1312B	1						
10085	S514	A0404A	JA8109B	1						
10086	S517	A0703A	JA8110A	1						
10087	S518	A0703B	JA8110B	1						
10088	S519	A0702A	JA8111A	1						
10089	S520	A0702B	JA8111B	1						
10090	S521	A0704A	JA8112A	1						
10091	S522	A0704B	JA8112B	1						
10092	GND	A1601A	A1607B	1						
10093	GND	A0808A	A1814A	1						
10094	GND	B0212B	B0214A	2						
10095	GND	A0812B	A0814A	2						
10095	GND	A1415A	B1414A	2						
10096	GND	C1301A	C1303A	1						
10096	GND	C1303A	C1303B	2						

TITLE OPERATOR CONTROL PANEL							WL	SHEET NO. 1	DOCUMENT NO. VCD-4771	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
1	24	6		J600	A	XDS504	1			
2	24	6		XDS504	1	XDS504	2			
3	24	0		J600	B	S503A	NC			
4	24	4		J600	D	XDS503	3			
5	24	0		J600	F	XDS500	4			
6	20	2		J600	E	XDS500	3			
7	20	6		J600	H	S501A	C			
8	20	6		S501A	C	S501C	C			
9	20	2		J600	J	S501B	C			
10	20	4		J600	K	S501C	NC			
11	20	6		J600	L	S501A	NC			
12	20	2		J600	M	S501B	NO			
13	20	2		J600	N	S501B	NC			
14	24	2		J600	P	XDS503	1			
15	24	2		XDS503	1	XDS503	2			
16	24	2		XDS503	2	XDS500	1			
17	24	2		XDS500	1	XDS500	2			
18	24	2		XDS500	2	XDS502	2			
19	20	6		J600	R	S501A	NC			
20	20	6		J600	S	S501A	NO			
21	20	0		J600	T	S503A	C			
22	24	0		S503A	C	XDS501	1			
23	▲	0		XDS501	1	XDS501	2			
24		0		XDS501	2	S515	C			
25		0		J600	U	S515	NC			
26		0		J600	V	S510	NO			
27		0		J600	W	S511	NO			
28		0		J600	X	S512	NO			
29		0		J600	Y	S513	NO			
30		4		J600	Z	XDS503	4			
31		0		J600	AA	XDS504	3			
32		0		XDS504	3	XDS504	4			
33		4		J600	BB	XDS502	1			
34		6		XDS501	3	XDS501	4			
35		6		XDS501	4	S501C	NO			
36		0		S515	C	S510	C			
37		0		S510	C	S511	C			
38	▼	0		S511	C	S512	C			
39	24	0		S512	C	S513	C			
40	20	2		J600	C	XDS500	3			
41	24	2		XDS502	2	XDS505	2			

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV
OPERATOR CONTROL PANEL						2	VCD-4771	A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
42	24	4		J600	LL	XDS505	1	
43	▲	0		S513	C	S514	C	
44		▲		S514	C	S522	C	
45				S522	C	S517	C	
46				S517	C	S518	C	
47				S518	C	S519	C	
48				S519	C	S520	C	
49				S520	C	S521	C	
50				J600	KK	S522	NC	
51				J600	DD	S517	NO	
52				J600	EE	S518	NO	
53				J600	FF	S519	NO	
54				J600	HH	S520	NO	
55	▼	▼		J600	JJ	S521	NO	
56	24	0		J600	CC	S514	NO	

TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
MAINTENANCE PANEL							1	VCD-7366	A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
1	24	4	9	PA00	1A	S200	4		
2	24	4	8	↑	2A	S200	2		
3	24	4	8		3A	S200	C		
4	24	0	12		4A	S201	4		
5	24	4	12		5A	XDS200	B		
6	24	6	9		6A	TP201			
7	24	4	8		7A	S200	3		
8	24	6	12		8A	TP205			
9	20	6	14		9A	S204	2B		
10	20	6	14		10A	S202	3A		
11	20	2	15		11A	S202	3B		
12	20	6	14		12A	S202	2A		
13	20	6	14	↓	13A	S204	3B		
14	20	0	13	PA00	14A	TP207			
15	20	0	3	TP207		S204	2A		
16	20	0	2	S204	2A	S203	2B		
17	20	0	3	S203	2B	S202	2C		
18	24	0	3	S202	2C	S201	2		
19	24	4	8	PA00	1B	S200	5		
20	24	6	10	↑	2B	TP203			
21	24	4	9		3B	S200	1		
22	20	0	14		4B	S204	3A		
23	24	4	10		5B	XDS202	B		
24	24	2	8	↓	6B	TP200			
25	20	6	13	PA00	7B	S202	1C		
26	20	6	3	S202	1C	S204	1A		
27	20	6	3	S204	1A	S203	3B		
28	24	2	11	PA00	8B	TP204			
29	24	2	12	PA00	9B	TP206			
30	20	2	12	PA00	10B	S202	2B		
31	20	2	4	S202	2B	S203	2A		
32	20	2	4	S203	2A	XDS201	T		
33	20	2	16	PA00	11B	S203	3A		
34	24	4	11	PA00	12B	XDS201	B		
35	24	2	11	PA00	13B	XDS200	T		
36	24	2	3	XDS200	T	XDS202	T		
37	24	2	3	XDS202	T	TP202			
38	20	6	14	PA00	14B	S202	1A		

IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
1				B1	Red	J5B	1	
2				B1	Org	J5B	3	
3	20	2	8	S100	+	J5B	5	⚠
4	20	0	8	S100	-	J5B	2	⚠
5	20	4	8	S100	L	J5B	6	⚠

NOTES: ⚠ CRIMP LABELED WIRES 1 AND 8 TOGETHER TO MAKE S100 - (J5B-2), LABELED WIRE 6 IS S100 + (J5B-2), AND LABELED WIRE 3 IS S100 L (J5B-6).



TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
W4 HARNESS ASSEMBLY							1	VCD-7565	C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
1	20	2		P4	1	+5 BUSS			
2	▲	2		▲	2	+5 BUSS			
3		6			3	-5 BUSS			
4		6			4	-5 BUSS			
5		0			5	GND BUSS			
6		0			7	GND BUSS			
7		2			10	PC00 B	13B	+20 T/R	
8		6			11	PC00 B	2B	-20 T/R	
9		0			12	PC00 B	14A		
10		0			13	PA00 B	14A		
11		0			14	F1	50		
12		0			15	P600	T		
13		2			16	PB23	13B		
14		2			17	PA00 B	13B		
15		2			18	P600	E		
16		2			59	+5 BUS			
17		2			60	+5 BUS			
18		4			22	PA81	5B		
19		4			23	PA81	8A		
20		6			24	PA23	2B		
21		6			25	PA00 B	2B		
22		6			26	F1	6		
23		2			27	F1	48		
24		6			28	P600	H		
25		2			29	P600	P		
26	▼	6			30	S303	NO		
27	20								
27A		2			31	PB23	12A		
27B		0			32	PB23	11A		
27C		SHIELD			33	FLOATING			
28	20	2			35	PA00 B	11B		
29	▲	2			36	PA00 B	10B		
30		2			38	PA00 B	11A		
31		2			41	P600	J		
32		2			42	P600	N		
33		2			43	P600	M		
34		2			45	PA00 B	8B		
35		6			46	PA00 B	8A		
36		2			48	PC00 B	1A		
37	▼	2		▼	49	PC00 B	1B		
38	20	2		P4	50	PC00 B	2A		

TITLE W4 HARNESS ASSEMBLY								WL	SHEET NO. 2	DOCUMENT NO. VCD-7585	REV C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
39	20	2		P4	51	PA00 B	9A				
40	20	0		▲	52	S300B	NC				
41	24										
41A		9			53	PA23	13A				
41B		0			54	PA23	12A				
41C		SHIELD			55	FLOATING					
42	20										
42A		2			56	J305	1				
42B		0			57	J305	2				
42C		SHIELD			58	FLOATING					
43	20	2			64	PC00 B	4B				
44	20	2			65	PC00 B	3A				
45	20	2			66	PC00 B	3B				
46	20	0			72	S301	NC				
47	20	0			74	S300B	C				
48	20	0			77	J306	2				
49	20										
49A		SHIELD			79	FLOATING					
49B		0		▼	80	E2	50				
49C				P4	82	E2	46				
50	24	6		P600	A	PA00B	13A				
51	24	0		▲	B	PA81	2B				
52	20	2			C	PA00B	12B				
53	24	4			D	PA81	1B				
54	24	0			F	PA00B	7B				
55	20	6			L	S600	NC				
56	20	6			R	J306	1				
57	20	6			S	PA00B	12A				
58	24	4			U	PA81	4A				
59	24	4			V	PA81	2A				
60	24	4			W	PA81	3B				
61	24	4			X	PA81	3A				
62	24	4			Y	PA81	4B				
63	24	4			Z	PA81	8B				
64	24	0		▼	AA	S300B	NC				
65	24	4		P600	BB	PA81	1A				
66	20										
66A		2		J300	1	PA23	9A				
66B		0		J300	2	PA23	10A				
66C		SHIELD		FLOATING		PA23	8A				



TITLE W4 HARNESS ASSEMBLY							WL	SHEET NO. 3	DOCUMENT NO. VCD-7565	REV C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
67	24									
67A		9		P301	5	PA23	4B			
67B		0		P301	6	PA23	3B			
67C		SHIELD		FLOATING		PA23	4A			
68	24									
68A		9		P301	7	PA23	11B			
68B		0		P301	8	PA23	10B			
68C		SHIELD		FLOATING		PA23	11A			
69	24									
69A		9		P301	9	PB23	5B			
69B		0		P301	10	PB23	4B			
69C		SHIELD		FLOATING		PB23	5A			
70	24									
70A		9		P301	11	PB23	9B			
70B		0		P301	12	PB23	8B			
70C		SHIELD		FLOATING		PB23	9A			
71	24	6		P301	13	PA23	2A	-20		
72	24	0		P301	14	PA23	1A	GND		
73	24	2		P301	15	PB23	13A	+20		
74										
75										
76	24									
76A		4		J303	1	PA02	7B			
76B		0		J303	2	PA02	14A			
77	24									
77A		9		J303	3	PA02	10B			
77B		0		J303	4	PA02	19B			
77C		SHIELD		FLOATING		PA02	11A			
78	24									
78A		9		J304	2	PA23	5A			
78B		0		J304	1	PA23	6A			
78C		SHIELD		FLOATING		PA23	7A			
79	20	6		PA00 B	10A	S600	C			
80	20	2		PA00 B	9B	E2	46			
81	20	6		PA00 B	14B	S601	NC			
82	20	0		PA81	5A	S301	NO			
83	24	4		PA81	6A	E2	5			
84	24	4		PA81	7A	E2	17			
85	24	4		PA81	9A	E2	26			
86	20	0		PA81	6B	S300A	NO			
87										

TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
W4 HARNESS ASSEMBLY							4	VCD-7565	C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
88	24	4		PA82	1A	E1	44		
89	↑	↑		↑	2A	F2	9		
90					3A	E1	40		
91					4A	F2	14		
92					5A	E1	37		
93					6A	F2	37		
94					7A	E1	14		
95					8A	F2	40		
96					9A	E1	9		
97					10A	F2	44		
98					11A	E2	41		
99					12A	E2	24		
100					13A	E2	18		
101					1B	F2	10		
102					2B	E1	42		
103					3B	F2	12		
104					4B	E1	38		
105					5B	F2	13		
106					6B	E1	13		
107					7B	F2	38		
108					8B	E1	12		
109					9B	F2	42		
110					10B	E1	10		
111	▼	▼		▼	12B	F2	32		
112	24	4		PA82	13B	E2	45		
113	24								
113A		COAX	F1	36	PA82	14B			
113B		SHIELD	F1	40	PA82	11B			
114	24								
114A		COAX	F1	37	PA82	14A			
114B		SHIELD	F1	41	PA82	11B			
115	24								
115A		COAX	F1	12	E1	21			
115B		SHIELD	F1	14	E1	22			
116	24								
116A		COAX	E1	24	F1	13			
116B		SHIELD	E1	26	F1	14			
117	24								
117A		COAX	F2	8	E2	32			
117B		SHIELD	F2	20	E2	22			

TITLE								WL	SHEET NO.	DOCUMENT NO.	REV
W4 HARNESS ASSEMBLY									5	VCD-7565	C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
118	24										
118A		COAX		E2	28	F2	4				
118B		SHIELD		E2	22	F2	17				
119	24										
119A		COAX		F2	36	E1	36				
119B		SHIELD		F2	34	E1	34				
120	24	4		E1	33	F1	9				
121	24	4		F2	41	E2	12				
122	24	4		F2	32	E1	32				
123	20	6		S600	NC	S601	NC				
124	20	6		S600	NO	S601	C				
125	20	6		S601	NO	S302	C	SERIES CODE 11 AND BELOW ONLY SERIES CODE 12 AND ABOVE ONLY			
125	20	6		S601	NO	J322	2				
126	24										
126A		0		E2	1	PC00 B	12B				
126B		4		E2	10	PC00 B	12A				
127											
128	20	6		F2	6	E1	6				
129	20	2		F2	48	E1	48				
130	20	0		S301	C	S300A	C				
131	20	0		S300A	C	S300B	C				
132	20	0		S300A	NO	S300B	NO				
133	20	0		PA81	7B	S300A	NC				
134	20	0		S302	NO	S303	C	SERIES CODE 11 AND BELOW ONLY SERIES CODE 12 AND ABOVE ONLY			
134	20	0		J322	1	S303	C				
135	24	4		P600	CC	PA81	9B				
136	24	4		P600	DD	PA81	10A				
137	24	4		P600	EE	PA81	10B				
138	24	4		P600	FF	PA81	11A				
139	24	4		P600	HH	PA81	11B				
140	24	4		P600	JJ	PA81	12A				
141	24	4		P600	KK	PA81	12B				
142	24	4		P600	LL	PA81	13A				
143	20	2		P4	67	E02	48				

TITLE W7 CABLE ASSEMBLY					WL	SHEET NO. 1	DOCUMENT NO. VCD-4773	REV C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
1	24							
1A		4		PC3	6B	J200	40	
1B		0		▲	6A	J200	43	
1C		4			6B	J201	40	
1D		0			6A	J201	43	
1E		4			7B	J200	41	
1F		0			7A	J200	44	
1G		4			7B	J201	41	
1H		0			7A	J201	44	
1J		4			8B	J200	42	
1K		0			8A	J200	45	
1L		4			8B	J201	42	
1M		0			8A	J201	45	
1N		4			9B	J200	46	
1P		0			9A	J200	49	
1R		4		▼	9B	J201	46	
1S		0		PC3	9A	J201	49	
1T		4		PC4	6B	J200	22	
1U		0		▲	6A	J200	25	
1V		4			6B	J201	22	
1W		0			6A	J201	25	
1X		4			7B	J200	23	
1Y		0			7A	J200	26	
1AA		4			7B	J201	23	
1AB		0			7A	J201	26	
2	24							
2A		4			8B	J200	24	
2B		0			8A	J200	27	
2C		4			8B	J201	24	
2D		0			8A	J201	27	
2E		4			9B	J200	28	
2F		0			9A	J200	31	
2G		4		▼	9B	J201	28	
2H		0		PC4	9A	J201	31	
2J		4		PC9	9B	J200	47	
2K		0		PC9	9A	J200	50	
2L		4		PC9	9B	J201	47	
2M		0		PC9	9A	J201	50	
2N		4		PC6	8B	J200	54	
2P		0		PC6	8A	J200	57	
2R		4		PC6	8B	J201	54	

TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
W7 CABLE ASSEMBLY							2	VCD-4773	C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
2S		0		PC6	8A	J201	57		
2T		4		PC6	9B	J200	66		
2U		0		PC6	9A	J200	71		
2V		4		PC6	9B	J201	66		
2W		0		PC6	9A	J201	71		
2X		4		PC7	7B	J200	1		
2Y		0		↑	7A	J200	4		
2AA		4			7B	J201	1		
2AB		0			7A	J201	4		
3	24								
3A		4			8B	J200	2		
3B		0			8A	J200	5		
3C		4			8B	J201	2		
3D		0			8A	J201	5		
3E		4			9B	J200	3		
3F		0			9A	J200	7		
3G		4			9B	J201	3		
3H		0		PC7	9A	J201	7		
3J		4		PC9	6B	J200	8		
3K		0		↑	6A	J200	12		
3L		4			6B	J201	8		
3M		0			6A	J201	12		
3N		4			7B	J200	10		
3P		0			7A	J200	13		
3R		4			7B	J201	10		
3S		0			7A	J201	13		
3T		4			8B	J200	11		
3U		0			8A	J200	14		
3V		4			8B	J201	11		
3W		0		PC9	8A	J201	14		
3X		4		PC11	6B	J200	17		
3Y		0		↑	6A	J200	21		
3AA		4			6B	J201	17		
3AB		0			6A	J201	21		
4	24								
4A		4			7B	J200	15		
4B		0			7A	J200	18		
4C		4			7B	J201	15		
4D		0			7A	J201	18		
4E		4			8B	J200	16		
4F		0		PC11	8A	J200	20		

TITLE W7 CABLE ASSEMBLY						WL	SHEET NO. 3	DOCUMENT NO. VCD-4773	REV C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
4G		4		PC11	8B	J201	16		
4H		0		↑	8A	J201	20		
4J		4			9B	J200	48		
4K		0			9A	J200	51		
4L		4		↓	9B	J201	48		
4M		0		PC11	9A	J201	51		
4N		4		PC13	8B	J200	30		
4P		0		↑	8A	J200	33		
4R		4			8B	J201	30		
4S		0			8A	J201	33		
4T		4			9B	J200	34		
4U		0			9A	J200	37		
4V		4			9B	J201	34		
4W		0			9A	J201	37		
4X		4			10B	J200	35		
4Y		0			10A	J200	38		
4AA		4		↓	10B	J201	35		
4AB		0		PC13	10A	J201	38		
5	24								
5A		4		PC14	8B	J200	58		
5B		0		↑	8A	J200	62		
5C		4			8B	J201	58		
5D		0			8A	J201	62		
5E		4			9B	J200	59		
5F		0			9A	J200	63		
5G		4			9B	J201	59		
5H		0			9A	J201	63		
5J		4			10B	J200	60		
5K		0			10A	J200	64		
5L		4		↓	10B	J201	60		
5M		0		PC14	10A	J201	64		
5N		4		PC15	8B	J200	73		
5P		0		PC15	8A	J200	76		
5R		4		PC15	8B	J201	73		
5S		0		PC15	8A	J201	76		
5T		4		PC3	12A	J200	80		
5U		0		PC3	12A	J200	80		
5V		4		PC3	13A	J201	80		
5W		0		PC3	13A	J201	80		
5X		4		PC7	6B	J200	36		
5Y		0		PC7	6A	J200	39		

TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
W7 CABLE ASSEMBLY							4	VCD-4773	C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
5AA		4		PC7	6B	J201	36		
5AB		0		PC7	6A	J201	39		
6									
7	20	0	1	PC03	1B				
8									
9	20	0	1	PC03	14B				
10	▲	▲	▲	PC04	1A				
11				PC04	1B				
12				PC04	14A				
13				PC04	14B				
14				PC15	1A				
15				PC15	1B				
16				PC15	14A				
17				PC15	14B				
18				PC06	1A				
19				PC06	1B				
20				PC06	14A				
21				PC06	14B				
22				PC07	1A				
23				PC07	1B				
24				PC07	14A				
25				PC07	14B				
26				PC09	1A				
27				PC09	1B				
28				PC09	14A				
29				PC09	14B				
30				PC11	1A				
31				PC11	1B				
32				PC11	14A				
33				PC11	14B				
34				PC13	1A				
35				PC13	1B				
36				PC13	14A				
37				PC13	14B				
38				PC14	1A				
39				PC14	1B				
40	▼	▼	▼	PC14	14A				
41	20	0	1	PC14	14B				

IDENTIFIER	WIRE SIZE	WIRE COLOR	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
1	24							
1A		4		J202	B	PC00	7B	
1B		0		J202	D	PC00	7A	
1C		4		J202	E	PC00	8B	
1D		0		J202	H	PC00	8A	
1E		4		J202	F	PC00	6B	
1F		0		J202	J	PC00	6A	
1G		4		J202	K	PC00	12B	
1H		0		J202	M	PC00	12A	
2	24							
2A		4		J202	P	PC00	9B	
2B		0		J202	S	PC00	9A	
2C		4		J202	EE	PC00	10B	
2D		0		J202	HH	PC00	10A	
3	20	0		J202	R	PC00	13A	
4	20	2		J202	U	PC00	1A	
5	20	2		J202	V	PC00	1B	
6	20	2		J202	W	PC00	2A	
7	20	2		J202	X	PC00	4B	
8	20	2		J202	Y	PC00	3A	
9	20	2		J202	Z	PC00	3B	



TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 1	DOCUMENT NO. VCD-7127	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
1	12	0		FL1	1	CB2A	LINE		
2									
3	20	0		CB24	LINE	DS1	L		
4	12	3		FL1	2	CB2B	LINE		
5	12	5		FILTER CHASSIS	GND	TB5	10		
6	20	3		CB2B	LINE	DS1	R		
7	20	5		SHIELD		FILTER CHASSIS	GND		
8	20	0		CB2A	LINE	TB3	3		
9									
10	20	3		CB2B	LINE	TB3	9		
11	14	3		CB2B	LOAD	SSW2	1		
12	14	0		CB2A	LOAD	SSW1	1		
13	20	0		SSW1	2	B3	B		
14	20	3		SSW2	2	B3	T		
15	20	3		B3	T	TB3	5		
16	20	0		B3	B	TB3	11		
17	18	0		CB2A	LOAD	T1	3		
18	20	0		TB3	7	CB2A	LOAD		
19	18	3		CB2B	LOAD	T1	1		
20	18	0		T6	3	CB2A	LOAD		
21	20	3		TB3	1	CB2B	LOAD		
22	20	3		DS2	L	TB3	1		
23	20	0		DS2	R	TB3	7		
24	18	4		T6	4	C8	1		
25	18	4		T6	5	C8	2		
26	16	4		T6	6	CR8	AC1		
27	16	4		T6	8	CR8	AC2		
28									
29	14	2		CB4B	LOAD	TB6	2		
30	14	2		CR7	DC	C5	POS		
31	20	6		C4	NEG	R18	R		
32	14	4		K2	1B	K4	4C		
33	14	6		CB4A	LOAD	TB6	10		
34	16	4		T6	6	CR7	AC1		
35	16	4		T6	8	CR7	AC2		
36	14	4		K4	4A	TB6	5		
37	20	0		J4	77	TB5	8C		
38	20	2		C5	POS	R18	L		
39	14	0		T6	7	C4	POS		
40	14	0		C4	POS	C5	NEG		
41	14	0		C5	NEG	TB5	4C		

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 2	DOCUMENT NO. VCD-7127	REV C
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
42									
43	20	0		SSW1	3	SSW2	3		
44	20	0		SSW2	3	TB5	4A		
45									
46									
47	16	6		SSW3	2	J2	2		
48	20	0		J5	2	TB5	4E		
49	16	6		SSW3	1	J2	1		
50	20	0		SSW3	3	SSW1	3		
51	16	6		SSW4	4	J2	3		
52	16	6		SSW1	4	J2	4		
53	18	0		J5	1	CB2A	LINE		
54	18	3		J5	3	CB2B	LINE		
55	14	3		J2	7	SSW2	2		
56	14	5		J2	6	TB5	9C		
57	14	0		J2	5	SSW1	2		
58	20	5		J2	8	TB5	9D		
59	20	2		J5	5	TB5	5C		
60	20	2		J5	6	J4	18		
61	14	3		T6	1	CB2B	LOAD		
62	20	6		SSW1	4	SSW2	4		
63	16	5		J5	4	TB5	9A		
64	18	4		T1	7	C1	1		
65	20	4		C1	1	CR4	AC1		
66	20	4		T1	8	T2	3		
67	20	4		T2	4	CR4	AC2		
68	20	0		CR4	NEG	C2	NEG		
69	20	0		C2	NEG	C3	NEG		
70	20	0		C3	NEG	TB5	1C		
71	20	0		TB5	3E	R1	R		
72	20	2		CR4	POS	C2	POS		
73	20	2		C2	POS	C3	POS		
74	20	2		C3	POS	CB5	LINE		
75	20	2		CB5	LINE	R1	L		
76	20	4		T1	5	T2	2		
77	18	4		T1	4	C1	2		
78	20	4		C1	2	T5	1		
79	20	4		T5	1	T4	1		
80	20	4		T4	1	T3	1		
81	20	4		T1	6	T5	4		
82	20	4		T5	4	T4	4		

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)								WL	SHEET NO. 3	DOCUMENT NO. VCD-7127	REV B
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
83	20	4		T4	4	T3	4				
84	20	4		T2	1	T3	3				
85	14	2		CR1	POS	C17	POS				
86	20	0		C17	NEG	R2	L				
87	14	0		T1	10	C17	NEG				
88	20	4		T1	5	T7	2				
89	20	2		CB6A	LINE	R2	R				
90	20	4		T7	2	T8	2				
91	20	4		T4	3	T7	1				
92	14	4		T1	14	CR3	AC				
93	14	4		T7	5	CR3	NEG				
94	14	4		T8	5	CR3	POS				
95	14	4		T7	3	CR6	NEG				
96	14	4		T7	4	C15	NEG				
97	14			C15	NEG	L3	2				
98	14			L3	2	C16	NEG				
99	14	6		C16	NEG	CB7B	LINE				
100	20	6		CB7B	LINE	R9	T				
101	14	4		T5	3	T8	1				
102	14	4		CR6	POS	T8	3				
103	14	2		T8	4	C13	POS				
104	14	4		T1	12	CR6	AC				
105	14			C13	POS	L2	1				
106	14			L2	2	C14	POS				
107	14	2		C14	POS	CB7A	LINE				
108	20	2		CB7A	LINE	R9	B				
109	14	6		CB7B	LOAD	TB7	1				
110	14	6		TB8	1	TB5	7A				
111	14	2		CB7A	LOAD	TB7	2				
112	14	0		T1	13	C15	POS				
113	14	0		T1	13	C13	NEG				
114	14	0		C15	POS	C16	POS				
115	14	0		C16	POS	TB5	3A				
116	14	0		C13	NEG	C14	NEG				
117	14	0		C14	NEG	TB5	2A				
118	20	4		T1	12	F3	T				
119	20	2		TB5	50	F1	B				
120	20	2		F1	T	C13	POS				
121	20	2		K3	4A	J4	67				
122	20	0		DS4	L	TB5	2B				
123	14	2		TB8	2	TB5	6A				

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 4	DOCUMENT NO. VCD-7127	REV 8
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
124	20	4		SSW4	1	F3	B		
125	20	6		K2	1A	CB4A	LINE		
126	20	0		C17	NEG	TB5	1A		
127	20	2		J4	1	TB8	4		
128	20	2		J4	2	TB8	4		
129	20	6		J4	3	TB8	3		
130	20	6		J4	4	TB8	3		
131	20	0		J4	5	TB5	1B		
132	20	0		J4	7	TB5	1E		
133	20	2		J4	10	CB7A	LOAD		
134	20	6		J4	11	CB7B	LOAD		
135	20	0		J4	12	TB5	2D		
136	20	0		J4	13	TB5	3B		
137	20	0		J4	14	TB5	3C		
138	20	0		J4	15	TB5	3D		
139	20	2		J4	16	TB5	6C		
140	20	2		J4	17	TB5	6D		
141	20	6		J4	24	TB5	7B		
142	20	6		J4	25	TB5	7C		
143	20	2		J4	29	TB5	5E		
144	20	2		J4	31	J12	16		
145	20	6		J4	32	TB6	11		
146	20	5		J4	33	TB5	10E		
147	20	2		J4	36	TB5	5F		
148									
149	20	2		J4	45	TB6	2		
150	20	6		J4	46	TB6	10		
151	20	2		J4	48	TB5	5B		
152	20	0		J4	53	TB6	7		
153	20	5		J4	54	TB6	6		
154	20	2		J4	56	SSW4	2		
155	20	0		J4	57	C13	NEG		
156	20	5		J4	58	TB5	9F		
157	20	0		J4	74	TB5	3F		
158	20	5		J4	79	TB5	10D		
159	20	0		J4	80	C3	NEG		
160	20	0		J4	55	TB6	6		
161									
162									
163	16	4		J3	1	K2	1C		
164	16	4		J3	2	K2	1C		

TITLE								WL	SHEET NO.	DOCUMENT NO.	REV
POWER SUPPLY (SERIES CODE 03 THRU 07)								5	5	VCD-7127	8
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
165	16	5		J3	3	TB5	10B				
166	16	0		J3	4	TB6	7				
167	16	0		J3	5	TB6	7				
168											
169											
170											
171	20	2		TP1		CB5	LOAD				
172	20	2		TP2		TB1	2				
173	20	0		TP3		TB5	1D				
174	20	6		TP4		CB7B	LOAD				
175	20	2		TP5		C5	POS				
176	20	6		TP6		C4	NEG				
177	20	2		TP7		CB7A	LOAD				
178	14	4		T1	11	CR1A	AC				
179	14	4		T1	11	CR2A	AC				
180	14	4		T1	9	CR2B	AC				
181	14	4		T1	9	CR1B	AC				
182	14	6		CR2	NEG	C12	NEG				
183	14	6		C12	NEG	CB6B	LINE				
184	20	0		C12	POS	TB5	1F				
185	20	6		R3	R	CB6B	LINE				
186	20	0		R3	L	C12	POS				
187	14	0		T1	10	C12	POS				
188	14	2		C17	POS	CB6A	LINE				
189	20	2		CB6A	LOAD	TB1	1				
190	20	6		CB6B	LOAD	TB1	5				
191	20	2		TB1	2	TB8	4				
192	20	6		TB1	4	TB7	3				
193	20	0		TB1	3	TB5	2F				
194	20	6		SSW2	4	SSW4	4				
195	20	0		SSW4	3	J4	72				
196	20	0		R4	3	R17	3				
197	20	0		R17	3	TB5	8D				
198	20	2		DS4	R	CB6	5B				
199	20	2		CB6	5B	C24	POS				
200	20	6		F2	T	C15	NEG				
201											
202	20	0		TB8	5	TB5	8F				
203											
204	20	2		R4	2C	TB5	6F				
205	20	2		CB5	3D	TB5	6E				

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 6	DOCUMENT NO. VCD-7127	REV B
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
206									
207	20	6		F2	B	J4	28		
208	20	2		J11	1	J4	35		
209	20	0		J11	2	J4	49		
210	20	0		J11	3	J4	64		
211	20	0		J11	4	J4	3B		
212	20	0		J11	6	J4	41		
213	20	0		J11	7	J4	65		
214	20	0		J11	8	SSW4	4		
215	20	0		J11	5	TB5	8A		
216	20	6		J11	9	J4	30		
217	20	0		J11	10	R4	01		
218	20	0		J11	11	J4	50		
219									
220	20	4		J11	13	T1	14		
221	20	2		J11	14	K4	2A		
222	20	2		J11	15	K4	L1		
223	20	4		J11	16	R4	2		
224	20	0		J11	17	TB8	5		
225	20	4		J11	18	T1	12		
226	20	2		J11	19	TB7	5		
227	20	0		J11	20	K4	L2		
228	20	2		C24	POS	K4	L1		
229	20	0		K2	L2	K2	3B		
230	20	4		J12	1	R17	2		
231	20	0		J12	2	R17	1		
232	20	6		J12	3	J4	22		
233	20	0		J12	4	TB5	8B		
234	20	2		J12	5	C5	POS		
235	20	0		J12	6	K2	L2		
236	20	0		J12	7	J4	52		
237	20	2		K2	L1	C23	POS		
238	20	0		J12	9	SSW4	03		
239	20	2		J12	10	K2	L1		
240	20	6		J12	11	SSW1	4		
241	20	0		J12	12	J4	66		
242	20	0		J12	13	J4	42		
243	20	0		J12	14	J4	43		
244	20	2		J12	15	J4	82		
245	20	2		J12	19	TB6	1		
246	20	2		J12	17	CB5	LOAD		

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 7	DOCUMENT NO. VCD-7127	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
247	20	6		J12	18	J4	51		
248	20	0		J12	21	R25	BOT		
249	20	0		R25	BOT	K4	L2		
250	20	0		G24	NEG	R25	TOP		
251	20	0		J12	22	J4	23		
252	20	0		TB5	4F	TB5	9F		
253	20	2		K3	4A	J4	59		
254	20	6		TP8		TB1	04		
255	20	2		K3	4A	J4	60		
256	20	2		CB7A	LOAD	J4	20		
257	20	2		TB5	6B	J4	27		
258	20	6		CB7B	LOAD	J4	21		
259	20	6		TB5	7D	J4	26		
260	20	0		TB5	4B	TB5	8E		
261									
262	14	6		CB4A	LINE	C4	NEG		
263	14	0		TB6	6	TB5	4D		
264	14	2		CB4B	LINE	C5	POS		
265									
266	14	2		CR9A	POS	C5	POS		
267	14	6		CR9B	NEG	C4	NEG		
268	14	6		CR9	AC	K2	1C		
269									
270									
271	14	6		CR8	DC	K2	2C		
272	14	6		K2	2B	C4	NEG		
273	20	2		C23	POS	R26	TOP		
274	20	2		R26	BOT	K2	3A		
275	20	0		C23	NEG	K2	3C		
276	12	0		J01	Z	CB1A	LINE		
277	12	3		J01	Y	CB1B	LINE		
278	12	0		CB1A	LOAD	FL1	1		
279	12	3		CB1B	LOAD	FL1	2		
280									
281									
282									
283									
284									
285	8	0		P1	X	J01	Z		
286	8	9		P1	Y	J01	X		
287	8	2		P1	Z	J01	Y		

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)							WL	SHEET NO. 8	DOCUMENT NO. VCD-7127	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
288	8	5		P1	GND	J01	GND			
289										
290										
291										
292										
293										
294										
295	20	6		TB6	11	R2	E8			
296	14	2		TB6	10	R9	3			
297	16	4		TB6	6	R19	2			
298	16	4		R19	2	R13	2			
299	20	5		R18	2	R5	2			
300	16	4		TB6	7	R19	1			
301	16	4		R19	10	R18	1			
302	20	5		TB6	10	R7	2			
303	20	5		TB6	10	R4	E11			
304	20	5		TB6	2	R6	2			
305	20	5		TB6	2	R3	E7			
306	14	2		TB6	2	R8	3			
307	20	5		TB6	1	R1	E4			
308	16	4		TB6	5	R10	1			
309	20	5		R10	1	R11	1			
310	20	5		R11	1	R12	1			
311	20	5		R12	1	R13	1			
312	16	4		R13	1	R17	1			
313	20	5		R17	1	R16	1			
314	20	5		R16	1	R15	1			
315	20	5		R15	1	R14	1			
316	20	5		Q1	E14	Q2	E15			
317	20	5		Q2	E15	Q3	E18			
318	20	5		Q3	E18	Q4	E21			
319	20	5		Q4	E21	Q5	E24			
320	20	5		Q6	E29	Q7	E30			
321	20	5		Q7	E30	Q8	E33			
322	20	5		Q8	E33	Q9	E36			
323	20	5		Q9	E36	Q10	E39			
324	16	4		Q2	E17	Q3	E20			
325	16	4		Q3	E20	Q4	E23			
326	16	4		Q4	E23	Q5	E26			
327	16	4		Q7	E32	Q8	E35			
328	16	4		Q8	E35	Q9	E38			



TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)								WL	SHEET NO. 9	DOCUMENT NO. VCD-7127	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
329	16	4		Q9	E38	Q10	E41				
330	20	5		R2, CR2	E9	Q6	E27				
331	20	5		R1, CR1	E5	Q1	E12				
332	20	5		CR3, CR4	E2	R5	1				
333	20	5		Q6	E28	R7	1				
334	20	5		Q1	E13	R6	1				
335	20	5		Q1, Q2	E14	CR4	E3				
336	20	5		Q6, Q7	E29	CR3	E1				
337	20	5		Q2	E16	R10	2				
338	20	5		Q7	E31	R11	2				
339	20	5		Q3	E19	R12	2				
340	20	5		Q8	E34	R13	2				
341	20	5		Q4	E22	R14	2				
342	20	5		Q9	E37	R15	2				
343	20	5		Q5	E25	R16	2				
344	20	5		Q10	E40	R17	2				
345	14	2		Q5	E26	TB6	3				
346	14	2		Q10	E41	TB6	9				
347	14	2		R8	3	R8	2				
348	14	2		R9	3	R9	2				
349	14	2		R8	1	TB6	3				
350	14	2		R9	1	TB6	9				
351											
352											
353											
354											
355											
356	20	4		Q1	COL	Q2	COL				
357	20	4		Q2	COL	B					
358	20	4		Q4	COL	Q6	COL				
359	20	4		Q5	COL	K					
360	20	4		Q2	EM	C					
361	20	4		C		TB1	2				
362	20	4		CR5	TOP	TB1	2				
363	20	4		TB1	1	B					
364	20	4		TB1	5	K					
365	20	4		Q1	BASE	A					
366	20	4		Q1	EM	Q2	BASE				
367	20	4		Q2	BASE	D					
368	20	4		Q5	EM	Q4	BASE				
369	20	4		Q4	BASE	J					

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)								WL	SHEET NO. 10	DOCUMENT NO. VCD-7127	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
370	20	4		Q4	EM	H					
371	20	4		H		TB1	4				
372	20	4		G		Q5	BASE				
373	20	4		F		TB1	3				
374	20	4		E		TB1	3				
375	20	4		CR13	TOP	TB1	4				
376											
377											
378											
379											
380	20			Q1	B		E12				
381	20			Q1	E		E13				
382	20			Q1	C		E14				
383	20			Q2	B		E15				
384	20			Q2	E		E16				
385	20			Q2	C		E17				
386	20			Q3	B		E18				
387	20			Q3	E		E19				
388	20			Q3	C		E20				
389	20			Q4	B		E21				
390	20			Q4	E		E22				
391	20			Q4	C		E23				
392	20			Q5	B		E24				
393	20			Q5	E		E25				
394	20			Q5	C		E26				
395	20			Q6	B		E27				
396	20			Q6	E		E28				
397	20			Q6	C		E29				
398	20			Q7	B		E30				
399	20			Q7	E		E31				
400	20			Q7	C		E32				
401	20			Q8	B		E33				
402	20			Q8	E		E34				
403	20			Q8	C		E35				
404	20			Q9	B		E36				
405	20			Q9	E		E37				
406	20			Q9	C		E38				
407	20			Q10	B		E39				
408	20			Q10	E		E40				
409	20			Q10	C		E41				
410	20	2		CB5	5B	CB6	3D				

TITLE POWER SUPPLY (SERIES CODE 03 THRU 07)						WL	SHEET NO. 11	DOCUMENT NO. VCD-7127	REV 8
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
411									
412									
413									
414									
415									
416									
417									
418									
419									
420									
421	20	6		TB7	1	K3	R5		
422	18	2		TB7	2	K3	R2		
423	20	6		TB7	3	K3	L5		
424	18	2		TB7	4	K3	L2		
425	20	2		TB7	5	K3	1		
426	20	6		K3	R6	TB8	1		
427	18	2		K3	R3	TB8	2		
428	20	6		K3	L6	TB8	3		
429	18	2		K3	L3	TB8	4		
430	20	0		K3	2	TB8	5		

TITLE						WL	SHEET NO.	DOCUMENT NO.	REV
POWER SUPPLY (SERIES CODE 08 AND ABOVE)							1	VCD-7183	F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
1	12	0		FL1	1	TB7	1		
2									
3	20	0		TB7	1	DS1	L		
4	12	3		FL2	2	TB7	3		
5	12	5		FILTER CHASSIS	GND	TB5	10		
6	20	3		TB7	3	DS1	R		
7	20	5		SHIELD		FILTER CHASSIS	GND		
8									
9									
10									
11	14	3		TB7	4	SSW2	1		
12	14	0		TB7	2	SSW1	1		
13	20	0		SSW1	2	B3	B		
14	20	3		SSW2	2	B3	T		
15	20	3		B3	T	TB3	5		
16	20	0		B3	B	TB3	11		
17	18	0		TB7	2	T1	2		
18	20	0		TB3	7	TB7	1		
19	18	3		TB7	4	T1	1		
20	18	0		T6	2	TB7	2		
21	20	3		TB3	1	TB7	3		
22									
23									
24	18	4		T6	4	C8	1		
25	18	4		T6	5	C8	2		
26	16	4		T6	6	CR8	AC1		
27	16	4		T6	8	CR8	AC2		
28									
29	14	2		CB4B	LOAD	TB1B	2		
30	14	2		CR7	DC	C5	POS		
31	20	6		C4	NEG	R18	R		
32	14	4		K2	1B	K4	4C		
33	14	6		CB4A	LOAD	TB1B	10		
34	16	4		T6	6	CR7	AC1		
35	16	4		T6	8	CR7	AC2		
36	14	4		K4	4A	TB1B	5		
37	20	0		J4	77	TB5	8		
38	20	2		C5	POS	R18	L		
39	14	0		T6	7	C4	POS		
40	14	0		C4	POS	C5	NEG		
41	14	0		C5	NEG	TB5	4C		

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)								WL	SHEET NO. 2	DOCUMENT NO. VCD-7183	REV F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
42											
43	20	0		SSW1	3	SSW2	3				
44	20	0		SSW2	37	TB5	4A				
45											
46											
47											
48	20	0		J5	2	TB5	4E				
49											
50	20	4		TB3	2	TB3	8				
51											
52	20	4		TB3	6	TB3	12				
53	18	0		J5	1	TB7	1				
54	18	3		J5	3	TB7	3				
55	14	3		J2	7	SSW2	2				
56	14	5		J2	6	TB5	9				
57	14	0		J2	5	SSW1	2				
58	20	5		J2	8	TB5	9				
59	20	2		J5	5	TB5	5				
60	20	2		J5	6	J4	18				
61	18	3		T6	1	TB7	4				
62	20	6		SSW1	4	SSW2	4				
63	16	5		J5	4	TB5	9				
64	18	4		T1	7	C1	1				
65	20	4		C1	1	CR4	AC1				
66	20	4		T1	8	T2	3				
67	20	4		T2	4	CR4	AC2				
68	20	0		CR4	NEG	C2	NEG				
69	20	0		C2	NEG	C3	NEG				
70	20	0		C3	NEG	TB5	1				
71	20	0		TB5	3	R1	R				
72	20	2		CR4	POS	C2	POS				
73	20	2		C2	POS	C3	POS				
74	20	2		C3	POS	CB5	LINE				
75	20	2		CB5	LINE	R1	L				
76	20	4		T1	5	T2	2				
77	18	4		T1	4	C1	2				
78	20	4		C1	2	T5	1				
79	20	4		T5	1	T4	1				
80	20	4		T4	1	T3	1				
81	20	4		T1	6	T5	4				
82	20	4		T5	4	T4	4				

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV
POWER SUPPLY (SERIES CODE 08 AND ABOVE)						3	VCD-7183	F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
83	20	4		T4	4	T3	4	
84	20	4		T2	1	T3	3	
85	14	2		CR1	POS	C17	POS	
86	20	0		C17	NEG	R2	L	
87	14	0		T1	10	C17	NEG	
88	20	4		T1	5	T7	2	
89	20	2		CB6A	LINE	R2	R	
90	20	4		T7	2	T8	2	
91	20	4		T4	3	T7	1	
92	14	4		T1	14	CR3	AC	
93	14	4		T7	5	CR3	NEG	
94	14	4		T8	5	CR3	POS	
95	14	4		T7	3	CR6	NEG	
96	14	4		T7	4	C15	NEG	
97	14			C15	NEG	L3	2	
98	14			L3	2	C16	NEG	
99	14	6		C16	NEG	CB7B	LINE	
100	20	6		CB7B	LINE	R9	T	
101	14	4		T5	3	T8	1	
102	14	4		CR6	POS	T8	3	
103	14	2		T8	4	C13	POS	
104	14	4		T1	12	CR6	AC	
105	14			C13	POS	L2	1	
106	14			L2	2	C14	POS	
107	14	2		C14	POS	CB7A	LINE	
108	20	2		CB7A	LINE	R9	B	
109	14	6		CB7B	LOAD	TB7	1	SERIES CODE 09 AND BELOW ONLY
109	16	6		CB7B	LOAD	TB9	10	SERIES CODE 10 AND ABOVE ONLY
110	14	6		TB8	1	TB5	7	SERIES CODE 09 AND BELOW ONLY
110	16	6		TB9	9	TB5	7	SERIES CODE 10 AND ABOVE ONLY
111	14	2		CB7A	LOAD	TB7	2	SERIES CODE 09 AND BELOW ONLY
111	16	2		CB7A	LOAD	TB9	12	SERIES CODE 10 AND ABOVE ONLY
112	14	0		T1	13	C15	POS	
113	14	0		T1	13	C13	NEG	
114	14	0		C15	POS	C16	POS	
115	14	0		C16	POS	TB5	3	
116	14	0		C13	NEG	C14	NEG	
117	14	0		C14	NEG	TB5	2	
118	20	4		T1	12	F3	T	
119	20	2		TB5	5	F1	B	
120	20	2		F1	T	C13	POS	
121	20	2		TB8	2	J4	67	SERIES CODE 09 AND BELOW ONLY
121	20	2		TB9	17	J4	67	SERIES CODE 10 AND ABOVE ONLY
122	20	0		DS4	L	TB5	2	
123	14	2		TB8	2	TB5	6	SERIES CODE 09 AND BELOW ONLY
123	16	2		TB9	11	TB5	6	SERIES CODE 10 AND ABOVE ONLY

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)							WL	SHEET NO. 4	DOCUMENT NO. VCD-7183	REV F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
124	20	4		SSW4	1	F3	B			
125	20	6		K2	1A	CB4A	LINE			
126	16	0		C17	NEG	TB5	1			
127	20	2		J4	1	TB8	4	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
127	20	2		J4	1	TB9	17			
128	20	2		J4	2	TB8	4	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
128	20	2		J4	2	TB9	17			
129	20	6		J4	3	TB8	3	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
129	20	6		J4	3	TB9	13			
130	20	6		J4	4	TB8	3	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
130	20	6		J4	4	TB9	13			
131	20	0		J4	5	TB5	1			
132	20	0		J4	7	TB5	1			
133	20	2		J4	10	CB7A	LOAD			
134	20	6		J4	11	CB7B	LOAD			
135	20	0		J4	12	TB5	2			
136	20	0		J4	13	TB5	3			
137	20	0		J4	14	TB5	3			
138	20	0		J4	15	TB5	3			
139	20	2		J4	16	TB5	6			
140	20	2		J4	17	TB5	6			
141	20	6		J4	24	TB5	7			
142	20	6		J4	25	TB5	7			
143	20	2		J4	29	TB5	5			
144	20	2		J4	31	J12	16			
145	20	6		J4	32	TB1B	11			
146	20	5		J4	33	TB5	10			
147	20	2		J4	36	TB5	5			
148										
149	20	2		J4	45	TB1B	2			
150	20	6		J4	46	TB1B	10			
151	20	2		J4	48	TB5	5			
152	20	0		J4	53	TB1B	7			
153	20	5		J4	54	TB1B	6			
154	20	2		J4	56	SSW4	2			
155	20	0		J4	57	C13	NEG			
156	20	5		J4	58	TB5	9			
157	20	0		J4	74	TB5	3			
158	20	5		J4	79	TB5	10			
159	20	0		J4	80	C3	NEG			
160	20	0		J4	55	TB1B	6			
161										
162										
163	16	4		J3	1	K2	1C			
164	16	4		J3	2	K2	1C			

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)								WL	SHEET NO. 5	DOCUMENT NO. VCD-7183	REV F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
165	16	5		J3	3	TB5	10				
166	16	0		J3	4	TB1B	7				
167	16	0		J3	5	TB1B	7				
168	20	0		R4	3	H3		SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
168	20	0		R4	3	H1					
169	20	0		R17	3	H1		SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
169	20	0		R17	3	H3					
170	20	0		TB5	8	H2					
171	20	2		TP1		CB5	LOAD				
172	20	2		TP2		TB1	2				
173	20	0		TP3		TB5	1				
174	20	6		TP4		CB7B	LOAD				
175	20	2		TP5		C5	POS				
176	20	6		TP6		C4	NEG				
177	20	2		TP7		CB7A	LOAD				
178	14	4		T1	11	CR1A	AC				
179	14	4		T1	11	CR2A	AC				
180	14	4		T1	9	CR2B	AC				
181	14	4		T1	9	CR1B	AC				
182	14	6		CR2	NEG	C12	NEG				
183	14	6		C12	NEG	CB6B	LINE				
184	20	0		C12	POS	TB5	1F				
185	20	6		R3	R	CB6B	LINE				
186	20	0		R3	L	C12	POS				
187	14	0		T1	10	C12	POS				
188	14	2		C17	POS	CB6A	LINE				
189	16	2		CB6A	LOAD	TB1	1				
190	20	6		CB6B	LOAD	TB1	5				
191	20	2		TB1	2	TB7	4	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
191	20	2		TB1	2	TB9	16				
192	20	6		TB1	4	TB7	3	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
192	20	6		TB1	4	TB9	14				
193	20	0		TB1	3	TB5	2				
194	20	6		SSW2	4	SSW4	4				
195	20	0		SSW4	3	J4	72				
196	20	0		TB5	2	TB09	6	SERIES CODE 10 AND ABOVE ONLY			
197	20	2		TB9	5	C24	POS	SERIES CODE 10 AND ABOVE ONLY			
198	20	2		DS4	R	CB6	5B				
199	20	2		CB6	5B	C24	POS	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
199	20	2		CB6	5B	TB9	4				
200	20	6		F2	T	C15	NEG				
201											
202	20	0		TB8	5	TB5	8	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY			
202	20	0		K3	2	TB5	8				
203											
204	20	2		K4	2C	TB5	6				
205	20	2		CB5	3D	TB5	6				



TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)							WL	SHEET NO. 6	DOCUMENT NO. VCD-7183	REV F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
206	20	6		TB9	1	J4	28	SERIES CODE 10 AND ABOVE ONLY		
207	20	6		F2	B	J4	28	SERIES CODE 09 AND BELOW ONLY		
207	20	6		F2	B	TB9	2	SERIES CODE 10 AND ABOVE ONLY		
208	20	2		J11	1	J4	35			
209	20	0		J11	2	J4	49			
210	20	0		J11	3	J4	64			
211	20	0		J11	4	J4	38			
212	20	0		J11	6	J4	41			
213	20	0		J11	7	J4	65			
214	20	0		J11	8	SSW4	4			
215	20	0		J11	5	TB5	8			
216	20	6		J11	9	J4	30			
217	20	0		J11	10	R4	01			
218	20	0		J11	11	J4	50			
219										
220	20	4		J11	13	T1	14			
221	20	2		J11	14	K4	2A			
222	20	2		J11	15	K4	L1			
223	20	4		J11	16	R4	2			
224	20	0		J11	17	TB8	5	SERIES CODE 09 AND BELOW ONLY		
224	20	0		J11	17	K3	4	SERIES CODE 10-12 ONLY		
224	20	0		J11	17	TB5	2	SERIES CODE 13 AND ABOVE ONLY		
225	20	4		J11	18	T1	12			
226	20	2		J11	19	TB7	5	SERIES CODE 09 AND BELOW ONLY		
226	20	2		J11	19	K3	1	SERIES CODE 10 AND ABOVE ONLY		
227	20	0		J11	20	K4	L2			
228	20	2		G24	POS	K4	L1			
229										
230	20	4		J12	1	R17	2			
231	20	0		J12	2	R17	1			
232	20	6		J12	3	J4	22			
233	20	0		J12	4	TB5	8			
234	20	2		J12	5	C5	POS			
235	20	0		J12	6	K2	L2			
236	20	0		J12	7	K4	3B			
237										
238	20	0		J12	9	SSW4	03			
239	20	2		J12	10	K2	L1			
240	20	6		J12	11	SSW1	4			
241	20	0		J12	12	J4	66			
242	20	0		J12	13	J4	42			
243	20	0		J12	14	J4	43			
244	20	2		J12	15	J4	82	SERIES CODE 09 AND BELOW ONLY		
245	20	2		J12	19	TB1B	1			
246	20	2		J12	17	CB5	LOAD	SERIES CODE 09 AND BELOW ONLY		

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)							WL	SHEET NO. 7	DOCUMENT NO. VCD-7183	REV F
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
247	20	6		J12	18	J4	51			
248	20	0		J12	21	R25	BOT			
249	20	0		R25	BOT	K4	L2			
250	20	0		C24	NEG	R25	TOP			
251	20	0		J12	22	J4	23			
252	20	0		TB5	4	TB5	9			
253	20	2		TB8	4	J4	59	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
253	20	2		TB9	15	J4	59			
254	20	6		TP8		TB1	04			
255	20	2		TB8	4	J4	60	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY		
255	20	2		TB9	15	J4	60			
256	20	2		CB7A	LOAD	J4	20			
257	20	2		TB5	6	J4	27			
258	20	6		CB7B	LOAD	J4	21			
259	20	6		TB5	7	J4	26			
260	20	0		TB5	4	TB5	8			
261										
262	14	6		CB4A	LINE	C4	NEG			
263	14	0		TB1B	6	TB5	4			
264	14	2		CB4B	LINE	C5	POS			
265	20	0		K4	3C	J4	52			
266	14	2		CR9A	POS	C5	POS			
267	14	6		CR9B	NEG	C4	NEG			
268	14	6		CR9	AC	K2	1C			
269										
270										
271	14	6		CR8	DC	K2	2C			
272	14	6		K2	2B	C4	NEG			
273										
274										
275										
276	12	0		J01	Z	CB1A	LINE			
277	12	3		J01	Y	CB1B	LINE			
278	12	0		CB1A	LOAD	FL1	1			
279	12	3		CB1B	LOAD	FL2	2			
280										
281										
282										
283										
284										
285	8	0		P1	X	J01	Z			
286	8	9		P1	Y	J01	X			
287	8	2		P1	Z	J01	Y			

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)						WL	SHEET NO. 8	DOCUMENT NO. VCD-7183	REV E
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
288	8	5		P1	GND	J01	GND		
289									
290									
291									
292									
293									
294									
295	16	6		SSW3	2	J2	2		
296	16	6		SSW3	1	J2	1		
297	20	0		SSW3	3	SSW1	3		
298	16	6		SSW3	4	J2	3		
299	16	6		SSW1	4	J2	4		
300									
301	20	6		TB7	1	K3	R5	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
301	20	6		TB9	10	K3	R5		
302	18	2		TB7	2	K3	R2	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
302	18	2		TB9	12	K3	R2		
303	20	6		TB7	3	K3	L5	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
303	20	6		TB9	14	K3	L5		
304	18	2		TB7	4	K3	L2	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
304	18	2		TB9	16	K3	L2		
305	20	2		TB7	5	K3	1	SERIES CODE 09 AND BELOW ONLY	
306	20	6		K3	R6	TB8	1	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
306	20	6		K3	R6	TB9	9		
307	18	2		K3	R3	TB8	2	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
307	18	2		K3	R3	TB9	11		
308	20	6		K3	L6	TB8	3	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
308	20	6		K3	L6	TB9	13		
309	18	2		K3	L3	TB8	4	SERIES CODE 09 AND BELOW ONLY SERIES CODE 10 AND ABOVE ONLY	
309	18	2		K3	L3	TB9	15		
310	20	0		K3	2	TB8	5	SERIES CODE 09 AND BELOW ONLY	
311									
312									
313									
314									
315									
316									
317									
318									
319									
320									
321									
322									
323									
324									
325									
326									
327									
328									

TITLE					WL	SHEET NO.	DOCUMENT NO.	REV
POWER SUPPLY (SERIES CODE 08 AND ABOVE)						9	VCD-7183	A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS
				LOCATION	PIN NO.	LOCATION	PIN NO.	
329								
330								
331								
332								
333								
334								
335								
336								
337								
338								
339								
340								
341								
342								
343								
344								
345								
346								
347								
348								
349								
350								
351								
352								
353								
354								
355								
356	20	4		Q1	COL	Q2	COL	
357	▲	▲		Q2	COL	B		
358				Q4	COL	Q5	COL	
359				Q5	COL	K		
360				Q2	EM	C		
361				C		TB1	2	
362				CR5	TOP	TB1	2	
363				TB1	1	B		
364				TB1	5	K		
365				Q1	BASE	A		
366				Q1	EM	Q2	BASE	
367				Q2	BASE	D		
368	▼	▼		Q5	EM	Q4	BASE	
369	20	4		Q4	BASE	J		

TITLE POWER SUPPLY (SERIES CODE 08 AND ABOVE)							WL	SHEET NO. 10	DOCUMENT NO. VCD-7183	REV D
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
370	20	4		Q4	EM	H				
371	20	4		H		TB1	4			
372	20	4		G		Q5	BASE			
373	20	4		F		TB1	3			
374	20	4		E		TB1	3			
375	20	4		CR13	TOP	TB1	4			
376										
377										
378										
379										
380										
381										
382										
383										
384										
385										
386										
387										
388										
389										
390										
391										
392										
393										
394										
395										
396										
397										
398										
399										
400										
401										
402										
403										
404										
405										
406										
407										
408										
409										
410										



TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)						WL	SHEET NO. 1	DOCUMENT NO. VCD-7713	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
1	14	3		TB7	4	SSW2	1		
2	14	0		TB7	2	SSW1	1		
3	20	0		SSW1	2	TB3	11		
4	20	3		SSW2	2	TB3	5		
5	20	3		B3	T	SSW2	2		
6	20	0		B3	B	SSW1	2		
7	18	0		TB7	2	T1	2	NOT INSTALLED IN 230V, 60 Hz UNITS	
8	20	0		TB3	7	TB7	1		
9	18	3		TB7	4	T1	1		
10	18	0		T6	2	TB7	2	NOT INSTALLED IN 230V, 60 Hz UNITS	
11	20	3		TB3	1	TB7	3		
12	18	4		T6	4	C8	1		
13	18	4		T6	5	C8	2		
14	16	4		T6	6	CR8	AC1		
15	16	4		T6	8	CR8	AC2		
16	14	2		CB4B	LOAD	TB1B	2		
17	14	2		CR7	DC	C5	POS		
18	20	6		C4	NEG	R18	R		
19	14	4		K2	1B	K4	4C		
20	14	6		CB4A	LOAD	TB1B	10		
21	16	4		T6	6	CR7	AC1		
22	16	4		T6	8	CR7	AC2		
23	14	4		K4	4A	TB1B	5		
24	20	0		J4	77	TB5	8		
25	20	2		C5	POS	R18	L		
26	14	0		T6	7	C4	POS		
27	14	0		C4	POS	C5	NEG		
28	14	0		C5	NEG	TB5	4		
29	20	0		SSW1	3	SSW2	3		
30	20	0		SSW2	3	TB5	4		
31	20	0		J5	2	TB5	4		
32	18	0		J5	1	TB7	1		
33	18	3		J5	3	TB7	3		
34	16	3		J2	7	SSW2	2		
35	14	5		J2	6	TB5	9		
36	16	0		J2	5	SSW1	2		
37	20	5		J2	8	TB5	9		
38	20	2		J5	5	TB5	5		
39	20	2		J5	6	J4	18		
40	18	3		T6	1	TB7	4		

TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)								WL	SHEET NO. 2	DOCUMENT NO. VCD-7713	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
41	20	6		SSW1	4	SSW2	4				
42	16	5		J5	4	TB5	9				
43	18	4		T1	7	C1	1				
44	20	4		C1	1	CR4	AC1				
45	20	4		T1	8	T2	3				
46	20	4		T2	4	CR4	AC2				
47	20	0		CR4	NEG	C2	NEG				
48	20	0		C2	NEG	C3	NEG				
49	20	0		C3	NEG	TB5	1				
50	20	0		TB5	3	R1	R				
51	20	2		CR4	POS	C2	POS				
52	20	2		C2	POS	C3	POS				
53	20	2		C3	POS	CB5	LINE				
54	20	2		CB5	LINE	R1	L				
55	20	4		T1	5	T2	2				
56	18	4		T1	4	C1	2				
57	20	4		C1	2	T5	1				
58	20	4		T5	1	T4	1				
59	20	4		T4	1	T3	1				
60	20	4		T1	6	T5	4				
61	20	4		T5	4	T4	4				
62	20	4		T4	4	T3	4				
63	20	4		T2	1	T3	3				
64	14	2		CR1	POS	C17	POS				
65	20	0		C17	NEG	R2	L				
66	14	0		T1	10	C17	NEG				
67	20	4		T1	5	T7	2				
68	20	2		CB6A	LINE	R2	R				
69	20	4		T7	2	T8	2				
70	20	4		T4	3	T7	1				
71	14	4		T1	14	CR3	AC				
72	14	4		T7	5	CR3	NEG				
73	14	4		T8	5	CR3	POS				
74	14	4		T7	3	CR6	NEG				
75	14	4		T7	4	C15	NEG				
76	14			C15	NEG	L3	1				
77	14			L3	2	C16	NEG				
78	14	6		C16	NEG	CB7B	LINE				
79	20	6		CB7B	LINE	R9	T				
80	14	4		T5	3	T8	1				



TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)								WL	SHEET NO. 3	DOCUMENT NO. VCD-7713	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
81	14	4		CR6	POS	T8	3				
82	14	2		T8	4	C13	POS				
83	14	4		T1	12	CR6	AC				
84	14			C13	POS	L2	1				
85	14			L2	2	C14	POS				
86	14	2		C14	POS	CB7A	LINE				
87	20	2		CB7A	LINE	R9	B				
88	16	6		CB7B	LOAD	TB9	10				
89	16	6		TB9	9	TB5	7				
90	16	2		CB7A	LOAD	TB9	12				
91	14	0		T1	13	C15	POS				
92	14	0		T1	13	C13	NEG				
93	14	0		C15	POS	C16	POS				
94	14	0		C16	POS	TB5	3				
95	14	0		C13	NEG	C14	NEG				
96	14	0		C14	NEG	TB5	2				
97	20	4		T1	12	F3	T				
98	20	2		TB5	5	F1	B				
99	20	2		F1	T	C13	POS				
100	20	2		TB9	17	J4	67				
101	20	0		D64	L	TB5	2				
102	16	2		TB9	11	TB5	6				
103	20	4		SSW4	1	F3	B				
104	20	6		K2	1A	CB4A	LINE				
105	16	0		C17	NEG	TB5	1				
106	20	2		J4	1	TB9	17				
107	20	2		J4	2	TB9	17				
108	20	6		J4	3	TB9	13				
109	20	6		J4	4	TB9	13				
110	20	0		J4	5	TB5	1				
111	20	0		J4	7	TB5	1				
112	20	2		J4	10	CB7A	LOAD				
113	20	6		J4	11	CB7B	LOAD				
114	20	0		J4	12	TB5	2				
115	20	0		J4	13	TB5	3				
116	20	0		J4	14	TB5	3				
117	20	0		J4	15	TB5	3				
118	20	2		J4	16	TB5	6				
119	20	2		J4	17	TB5	6				
120	20	6		J4	24	TB5	7				

TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)						WL	SHEET NO. 4	DOCUMENT NO. VCD-7713	REV E
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
121	20	6		J4	25	TB5	7		
122	20	2		J4	29	TB5	5		
123	20	2		J4	31	J12	16		
124	20	6		J4	32	TB1B	11		
125	20	5		J4	33	TB5	10		
126	20	2		J4	36	TB5	11		
127	20	0		J4	70	TB5	4		
128	20	2		J4	45	TB1B	2		
129	20	6		J4	46	TB1B	10		
130	20	2		J4	48	TB5	5		
131	20	0		J4	53	TB1B	7		
132	20	5		J4	54	TB1B	6		
133	20	2		J4	56	SSW4	2		
134	20	0		J4	57	C13	NEG		
135	20	5		J4	58	TB5	9		
136	20	0		J4	74	TB5	3		
137	20	5		J4	79	TB5	10		
138	20	0		J4	80	C3	NEG		
139	20	0		J4	55	TB1B	6		
140	16	4		J3	1	K2	1C		
141	16	4		J3	2	K2	1C		
142	16	5		J3	3	TB5	10		
143	16	0		J3	4	TB1B	7		
144	16	0		J3	5	TB1B	7		
145	20	0		R4	3	H1		SERIES CODE 16 AND BELOW SERIES CODE 17 AND ABOVE	
145	20	0		R4	3	R17	1		
146	20	0		R17	3	H3		SERIES CODE 16 AND BELOW SERIES CODE 17 AND ABOVE	
146	20	0		R17	3	R17	2		
147	20	0		TB5	8	H2		SERIES CODE 16 AND BELOW SERIES CODE 17 AND ABOVE	
147	20	0		TB5	8	R4	3		
148	20	2		TP1		CB5	LOAD		
149	20	2		TP2		TB1	2		
150	20	0		TP3		TB5	1		
151	20	6		TP4		CB7B	LOAD		
152	20	2		TP5		C5	POS		
153	20	6		TP6		C4	NEG		
154	20	2		TP7		CB7A	LOAD		
155	14	4		T1	11	CR1A	AC		
156	14	4		T1	11	CR2A	AC		
157	14	4		T1	9	CR2B	AC		
158	14	4		T1	9	CR1B	AC		
159	14	6		CR2	NEG	C12	NEG		
160	14	6		C12	NEG	CB6B	LINE		

TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)								WL	SHEET NO. 5	DOCUMENT NO. VCD-7713	REV E
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
161	20	0		C12	POS	TB5	1				
162	20	6		R3	R	CB6B	LINE				
163	20	0		R3	L	C12	POS				
164	14	0		T1	10	C12	POS				
165	14	2		C17	POS	CB6A	LINE				
166	16	2		CB6A	LOAD	TB1	1				
167	20	6		CB6B	LOAD	TB1	5				
168	16	2		TB1	2	TB9	16				
169	20	6		TB1	4	TB9	14				
170	20	0		TB1	3	TB5	2				
171	20	6		SSW2	4	SSW4	4				
172	20	0		SSW4	3	J4	72				
173	20	0		TB5	2	TB9	6				
174	20	2		TB9	5	C24	POS				
175	20	2		DS4	R	CB6	5B				
176	20	2		CB6	5B	TB9	4				
177	20	6		F2	T	C15	NEG				
178	20	0		K3R	2	TB5	8				
179	20	2		K4	2C	TB5	6				
180	20	2		CB5	3D	TB5	6				
181	20	6		TB9	1	J4	28				
182	20	6		F2	B	TB9	2				
183	20	2		J11	1	J4	35				
184	20	0		J11	2	J4	49				
185	20	0		J11	3	J4	64				
186	20	0		J11	4	J4	38				
187	20	0		J11	6	J4	41				
188	20	0		J11	7	J4	65				
189	20	0		J11	8	SSW4	4				
190	20	0		J11	5	TB5	8				
191	20	6		J11	9	J4	30				
192	20	0		J11	10	J4	30	SERIES CODE 16 AND BELOW SERIES CODE 17 AND ABOVE			
192	20	0		R4	2	J4	30				
193	20	0		J11	11	J4	50				
194	20	4		J11	13	T1	14				
195	20	2		J11	14	K4	2A				
196	20	2		J11	15	K4	L1				
197	20	4		J11	16	R4	2				
198	20	0		J11	17	TB5	2				
199	20	4		J11	18	T1	12				
200	20	2		J11	19	K3L	1				

TITLE POWER SUPPLY (SERIES CODE 14 AND ABOVE)						WL	SHEET NO. 6	DOCUMENT NO. VCD-7713	REV E
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS	
				LOCATION	PIN NO.	LOCATION	PIN NO.		
201	20	0		J11	20	K4	L2		
202	20	2		C24	POS	K4	L1		
203	20	4		J12	1	R17	2		
204	20	0		J12	2	R17	1	SERIES CODE 16 AND BELOW	
205	20	6		J12	3	J4	22		
206	20	0		J12	4	TB5	8		
207	20	2		J12	5	C5	POS		
208	20	0		J12	6	K2	L2		
209	20	0		J12	7	K4	3B		
210	20	0		J12	9	SSW4	3		
211	20	2		J12	10	K2	L1		
212	20	6		J12	11	SSW1	4		
213	20	0		J12	12	J4	66		
214	20	0		J12	13	J4	42		
215	20	0		J12	14	J4	43		
216	20	2		J12	19	TB1B	1		
217	20	6		J12	18	J4	51		
218	20	0		J12	21	R25	BOT		
219	20	0		R25	BOT	K4	L2		
220	20	0		C24	NEG	R25	TOP		
221	20	0		J12	22	J4	23		
222	20	0		TB5	4	TB5	9		
223	20	2		TB9	15	J4	59		
224	20	6		TP8		TB1	4		
225	20	2		TB9	15	J4	60		
226	20	2		CB7A	LOAD	J4	20		
227	20	2		TB5	6	J4	27		
228	20	6		CB7B	LOAD	J4	21		
229	20	6		TB5	7	J4	26		
230	20	0		TB5	4	TB5	8		
231	14	6		CB4A	LINE	C4	NEG		
232	14	0		TB1B	6	TB5	4		
233	14	2		CD4B	LINE	C5	POS		
234	20	0		K4	3C	J4	52		
235	14	2		CR9A	POS	C5	POS		
236	14	6		CR9B	NEG	C4	NEG		
237	14	6		CR9	AC	K2	1C		
238	14	6		CR8	DC	K2	2C		
239	14	6		K2	2B	C4	NEG		
240	20	6		TB9	10	K3	R5		

TITLE								WL	SHEET NO.	DOCUMENT NO.	REV
POWER SUPPLY (SERIES CODE 14 AND ABOVE)									7	VCD-7713	E
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS			
				LOCATION	PIN NO.	LOCATION	PIN NO.				
241	18	2		TB9	12	K3	R2				
242	20	6		TB9	14	K3	L5				
243	18	2		TB9	16	K3	L2				
244	20	6		K3	R6	TB9	9				
245	18	2		K3	R3	TB9	11				
246	20	6		K3	L6	TB9	13				
247	18	2		K3	L3	TB9	15				
248	20	2		J12	17	TB9	8				
249	20	2		TB9	8	CB5	LOAD				
250	20	2		J12	15	TB9	7				
251	20	2		TB9	7	J4	82				
252											
253											
254											
255	16	6		SSW1	4	J2	4				
256	20	0		TB7	1	DS1	L				
257	20	3		TB7	3	DS1	R				
258	20	4	4*	TB3	2	TB3	8				
259	20	4	4*	TB3	6	TB3	12				
260	20	2		CB5	5B	CB6	3D				
261	20	4		Q1	COL	Q2	COL	SERIES CODE 16 AND BELOW			
262	20	4		Q2	COL	B					
263	20	4		Q4	COL	Q5	COL				
264	20	4		Q5	COL	K					
265	20	4		Q2	EM	C					
266	20	4		C		TB1	2				
267	20	4		CR5	TOP	TB1	2				
268	20	4		TB1	1	B					
269	20	4		TB1	5	K					
270	20	4		Q1	BASE	A					
271	20	4		Q1	EM	Q2	BASE				
272	20	4		Q2	BASE	D					
273	20	4		Q5	EM	Q4	BASE				
274	20	4		Q4	BASE	J					
275	20	4		Q4	EM	H					
276	20	4		H		TB1	4				
277	20	4		G		Q5	BASE				
278	20	4		F		TB1	3				
279	20	4		E		TB1	3				
280	20	4		CR13	TOP	TB1	4	SERIES CODE 16 AND BELOW			



TITLE POWER DISTRIBUTION (SERIES CODE 14 AND ABOVE)							WL	SHEET NO. 1	DOCUMENT NO. VCD-7771	REV A
IDENTIFIER	WIRE SIZE	COLOR CODE	WIRE LENGTH	ORIGIN		DESTINATION		REMARKS		
				LOCATION	PIN NO.	LOCATION	PIN NO.			
1	12	0		FL1	2	TB7	1			
2	12	3		FL2	2	TB7	3			
3	12	5		FILTER CHASSIS	QND	TB5	10			
4	SHLD			COND IDENT 5		FLOATING				
5	20	5		FILTER CHASSIS	QND	COND IDENT 4				
6	12	0		J1	Z	CB1A	LINE			
7	12	3		J1	X	CB1B	LINS			
8	12	0		CB1A	LOAD	FL1	1			
9	12	3		CB1B	LOAD	FL2	1			
10	12	5		J1	QND	FILTER CHASSIS	GND			
11	8	0		P1	X	J1	Z			
12	8	9		P1	Y	J1	X			
13	8	2		P1	Z	J1	Y			
14	8	5		P1	QND	J1	GND			





SECTION 10

EQUATION SUMMARY

(not applicable)



# COMMENT SHEET

MANUAL TITLE CONTROL DATA BR5A1 DISK STORAGE UNIT

Customer Engineering Manual

PUBLICATION NO. 70617900 REVISION \_\_\_\_\_

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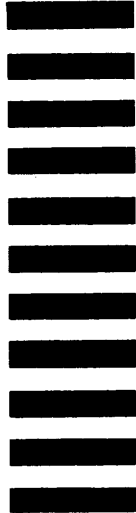
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