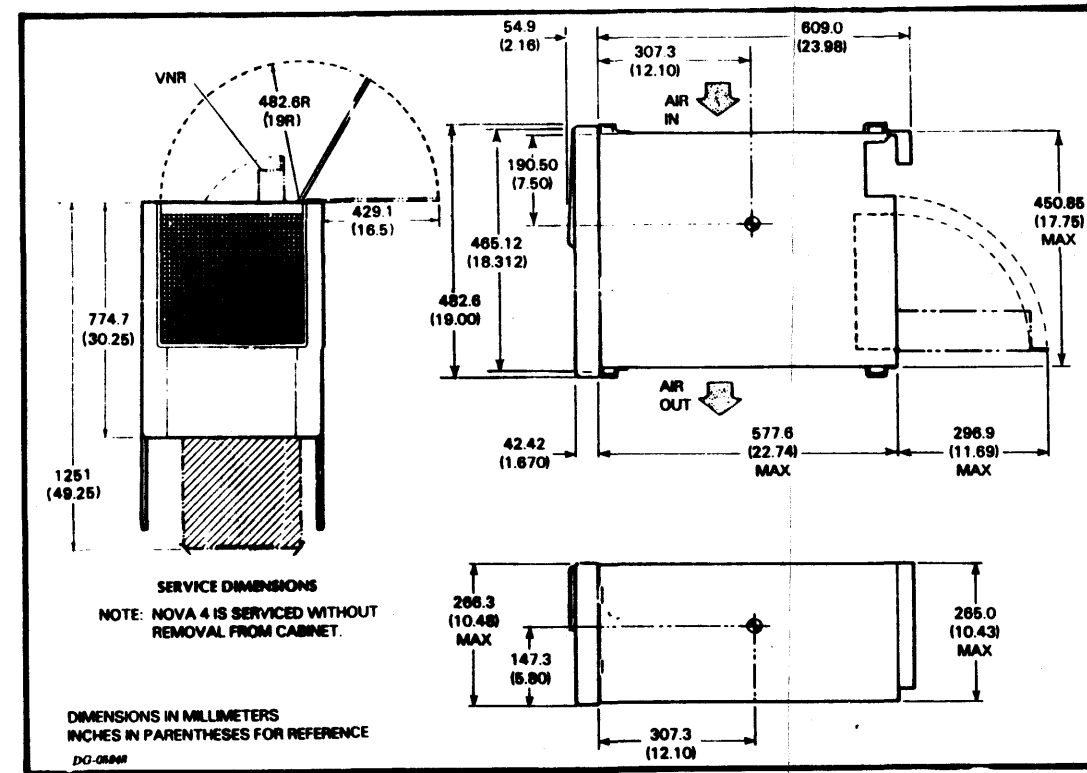
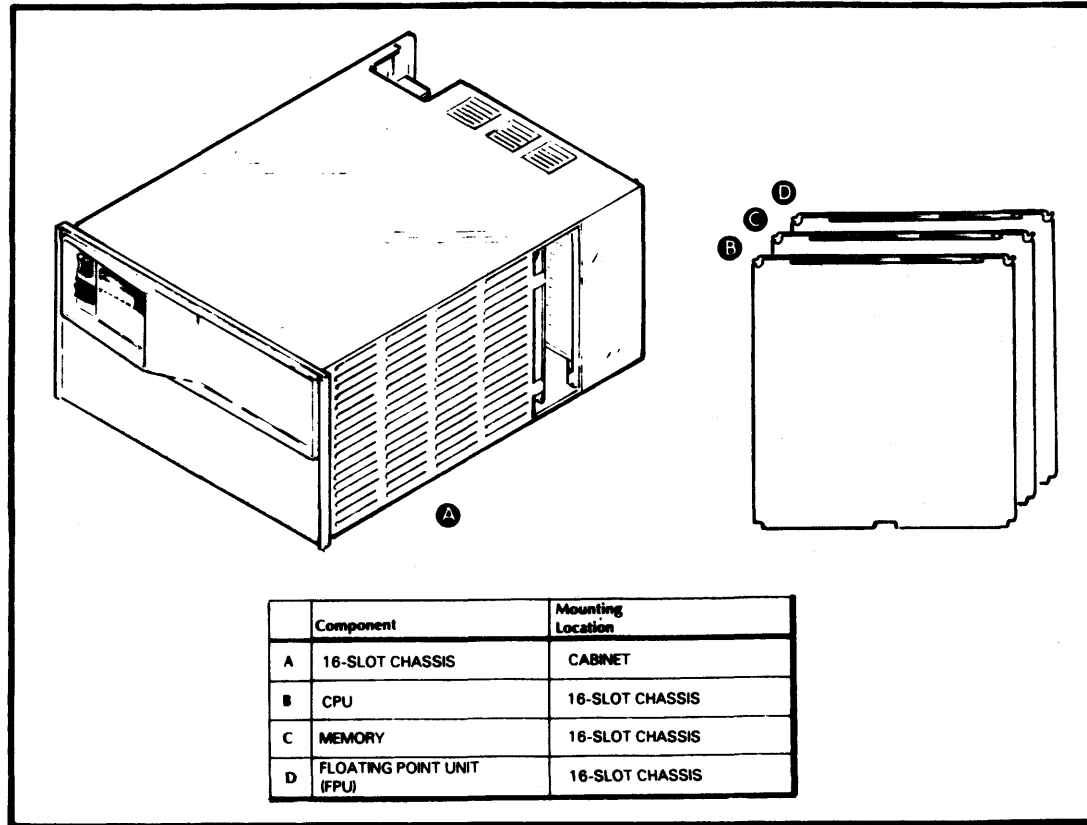


# INSTALLATION SPECIFICATIONS



### SLOT ASSIGNMENTS

Slot	Data Channel Speeds Available		+5V Current Draw
	Allowed (Slot Chart)	Standard or High Speed <input checked="" type="checkbox"/>	
16	I/O		
15	I/O		
14	I/O		
13	I/O		
12	I/O		
11	MEMORY or I/O		
10	MEMORY or I/O		
9	MEMORY or I/O		
8	MEMORY or I/O		
7	MEMORY or I/O		
6	MEMORY or I/O		
5	MEMORY or I/O		
4	MEMORY or I/O		
3	MEMORY or I/O		
2	MEMORY or FPU	NOTE 2,3	
1	CPU	NOTE 1	
0	POWER SUPPLY		

Total +5V Current draw  
Max +5V Current Available  
+5V Current Surplus 100A

**NOTES:**

- NOVA 4 S and NOVA 4 X NOVA 4 C 17A 8A
- MEMORY (NOVA 4 S & 4 X only) w/BATTERY BACKUP OPTION PRESENT 4.4A w/o BATTERY BACKUP OPTION PRESENT 5.6A
- FLOATING POINT UNIT 15A
- MAXIMUM 4 MEMORY BOARDS PER SYSTEM.
- MAXIMUM 10 I/O BOARDS CONNECTED TO I/O BUS W/O A BUS REPEATER.
- PUSH-ON TERMINATORS ON TOP MEMORY SLOT FOR NOVA 4 S & 4 X.
- PUSH ON TERMINATORS ON SLOT 2 FOR NOVA 4 C
- SEE PAGE 10 FOR +12V LOAD RESTRICTIONS.

SPECIFICATIONS	NOVA 4 16 slot		
<b>DIMENSIONS:</b>	Width	Depth	Height
Millimeters	483.1	663.9	266.3
Inches	19.02	26.14	10.48
<b>SERVICE CLEARANCES:</b>	Front	Rear	
Millimeters	508.0	289.9	
Inches	20.0	11.69	
<b>WEIGHT:</b>	Empty	Fully Loaded	
Kilograms	35.38	49.9	
Pounds	78.0	110.0	
<b>OPERATING ENVIRONMENT:</b>	Temperature (max)	55°C (131°F) 60Hz, 45°C (113°F) 50Hz	
	Relative Humidity (max)	90%	
	Altitude (max)	3084m (10,000')	
<b>CABLES:</b>	Primary Power	Length	Conn
	Domestic	1.8m (6')	5-15P
	Export	1.8m (6')	6-15P
	External I/O Bus Cable	15.3m (50')	max
	Mating Conn	5-15R	6-15R
<b>LINE CORDS:</b>	Supply	Part No.	
	120V	109 000455	
	220/240	109 000456	
<b>HEAT OUTPUT:</b>	1100 watts (3750 BTU/hr)		
<b>POWER REQUIREMENTS:</b>	(Domestic)		
	Voltage	102-132	
	Hz	47-63	
	Max Amp per Phase	12.0	
	Phase	1	
	Startup Surge per Phase	20A (max) for 0.25 seconds	
	(Export)		
	Voltage	187-264	
	Hz	47-63	
	Max Amp per Phase	7.0	
	Phase	1	
	Startup Surge per Phase	40A (max) for 0.12 seconds	

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REV	BY	DATE	DESCRIPTION
01	02	03	
ECO	20	10/97	
APP			
DATE	2-6		

DRAWN	APPROVED
CHECKED	FIRST USED ON
ENGINEER	CODE IDENT 34984

TITLE  
**INSTALLATION DATA SHEET**  
NOVA 4 16-SLOT

**DATA GENERAL CORPORATION**  
WESTBORO, MASSACHUSETTS 01581

SIZE	CODE	DRAWING NUMBER	REV
C	010	000213	03



# TAILORING CPU JUMPERING NOVA 4/C

DEVICE CODE JUMPERS FOR FRONT PANEL AUTOMATIC PROGRAM LOAD  
SELECT THE PROGRAM LOAD DEVICE CODE BY INSTALLING JUMPERS  
W11, W8, W6, W7, W9, W10, AS FOLLOWS:

JUMPER OUT = 1    JUMPER IN = 0

EXAMPLE JUMPERING FOR DEVICE CODE 278:

W11	W8	W6	W7	W9	W10
IN	OUT	IN	OUT	OUT	OUT

W4 IS NOT INSERTED IF THE PROGRAM LOAD DEVICE IS A HIGH SPEED DEVICE, OTHERWISE IT IS INSERTED.

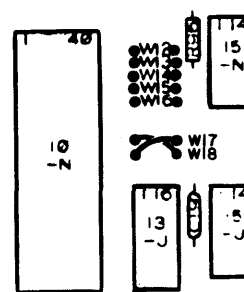
### TYPE OF TRANSMISSION JUMPERS

TYPE OF TRANSMISSION	JUMPERS INSERTED*
20MA CURRENT LOOP EIA RS232-C	W1, W3 W2

\* JUMPER 25 IS INSERTED IF THE SYSTEM TERMINAL IS A TELETYPE, OTHERWISE IT IS NOT INSERTED.

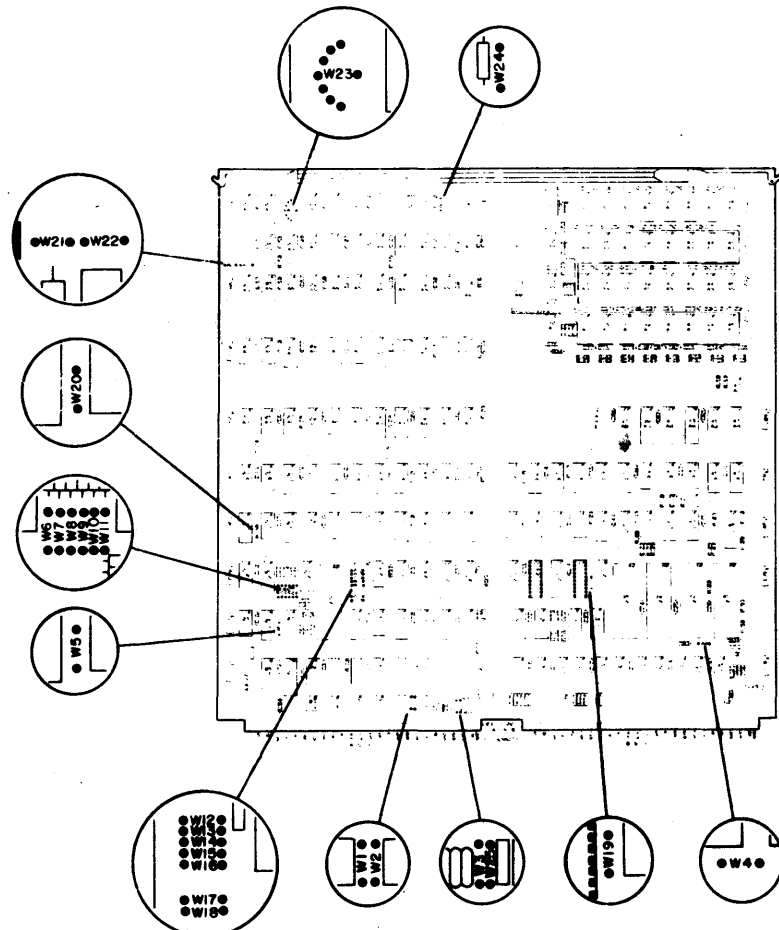
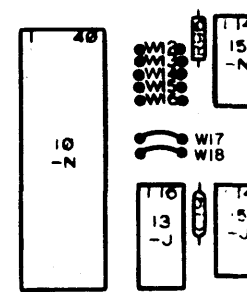
\* JUMPERS W17 AND W18 MUST ALSO BE INSERTED AS SHOWN BELOW.

### 20MA CURRENT LOOP

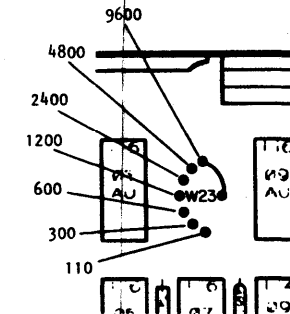


JUMPERS W17 AND W18 MUST NOT TOUCH!

### EIA RS232-C



W23 IS INSERTED TO DETERMINE THE BAUD RATE AS SHOWN BELOW: (9600 SHOWN)



W22 IS NEVER INSERTED.

THE FOLLOWING JUMPERS ARE ALWAYS INSERTED:

- W5
- W19
- W20
- W21
- W24

### STOP BIT JUMPERS

NUMBER OF STOP BITS	W15 JUMPER POSITION
1	IN
2	OUT

### PARITY JUMPERS

TYPE OF PARITY	JUMPER POSITION	
	W12	W16
EVEN	OUT	IN
ODD	IN	IN
NONE	OUT	OUT

### CHARACTER LENGTH JUMPERS

CHARACTER LENGTH	JUMPER POSITION	
	W13	W14
5 BITS	IN	IN
6 BITS	OUT	IN
7 BITS	IN	OUT
8 BITS	OUT	OUT

### CPU/MEMORY LOADS

VOLTAGE	DESCRIPTION	CURRENT DRAW
+5V	SYSTEM WITHOUT BATTERY BACKUP	8.0A
+5V	SYSTEM WITH BATTERY BACKUP	7.5A
+5V MEM		0.5A
+12V MEM		0.7A
+15V		0.04A

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ECO		CHECKED		FIRST USED ON	
APP		ENGINEER		CODE IDENT 34984	
DATE					

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SIZE C CODE 010 DRAWING NUMBER 000213 REV 03

# TAILORING (CONT)

## CPU JUMPERING

### NOVA 4/S OR 4/X

BAUD RATE JUMPERS

BAUD RATE	JUMPER POSITION:				
	W17	W18	W19	W20	W27
50	IN	IN	OUT	IN	OUT
75	IN	IN	OUT	OUT	OUT
110	OUT	OUT	OUT	OUT	IN
134.5	IN	OUT	IN	IN	OUT
150	OUT	OUT	OUT	IN	OUT
200	IN	OUT	IN	OUT	OUT
300	OUT	OUT	IN	OUT	OUT
600	IN	OUT	OUT	IN	OUT
1200	OUT	IN	OUT	OUT	OUT
1600	OUT	IN	OUT	IN	OUT
2400	OUT	OUT	IN	IN	OUT
4800	OUT	IN	IN	OUT	OUT
9600	OUT	IN	IN	IN	OUT
19200	IN	IN	IN	OUT	OUT

PARITY JUMPERS

TYPE OF PARITY	JUMPER POSITION	
	W22	W21
EVEN	OUT	IN
ODD	IN	IN
NONE	OUT	OUT

CHARACTER LENGTH JUMPERS

CHARACTER LENGTH	JUMPER POSITION	
	W25	W24
5 BITS	IN	IN
6 BITS	OUT	IN
7 BITS	IN	OUT
8 BITS	OUT	OUT

TYPE OF TRANSMISSION JUMPERS

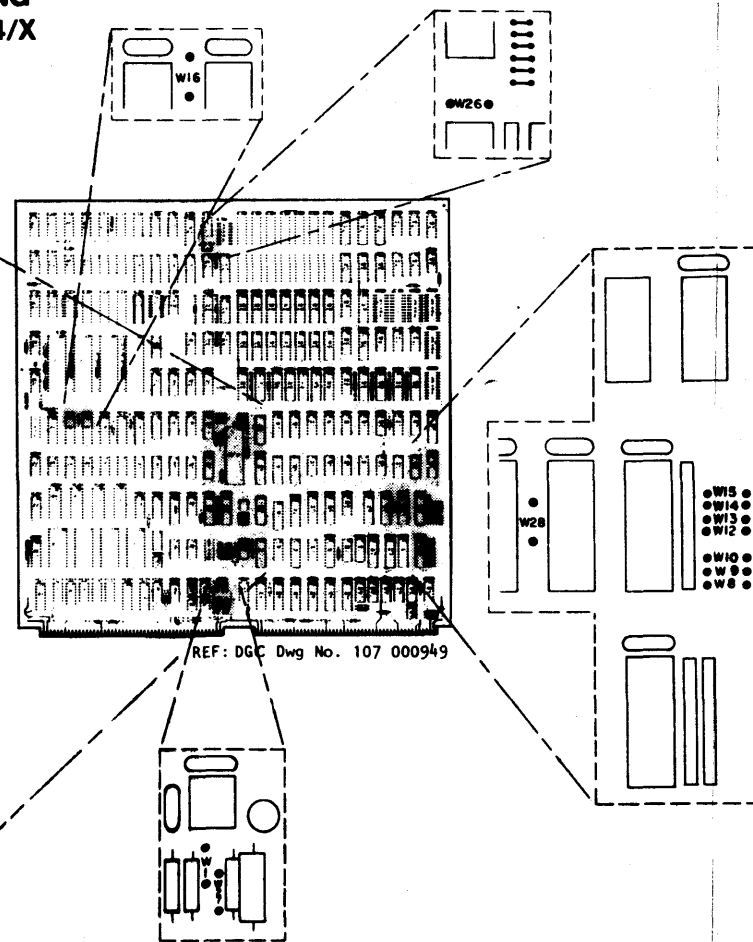
TYPE OF TRANSMISSION	JUMPERS INSERTED
20MA CURRENT LOOP	W4, W7, W2, W1
EIA RS232-C	W6, W3

STOP BIT JUMPERS

NUMBER OF STOP BITS	W23 JUMPER POSITION
1	IN
2	OUT

REAL TIME CLOCK JUMPER

	W29
RTC ENABLED	IN
RTC DISABLED	OUT



DEVICE CODE JUMPERS FOR FRONT PANEL AUTOMATIC PROGRAM LOAD

SELECT THE PROGRAM LOAD DEVICE CODE BY INSTALLING JUMPERS W13, W15, W14, W12, W10, W8 AS FOLLOWS:

JUMPER IN = 1      JUMPER OUT = 0

EXAMPLE JUMPERING FOR DEVICE CODE 27 :

W13	W15	W14	W12	W10	W8
OUT	IN	OUT	IN	IN	IN

W9 IS INSERTED IF THE PROGRAM LOAD DEVICE IS A HIGH SPEED DEVICE, OTHERWISE, IT IS REMOVED.

NOTE: JUMPERS W16 AND W26 ARE ALWAYS INSERTED. JUMPERS W5 AND W11 DO NOT EXIST.

+5V CURRENT DRAW = 17A

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REV	ECO	APP	DATE	DRAWN	CHECKED	ENGINEER	APPROVED	FIRST USED ON	CODE IDENT
									34984

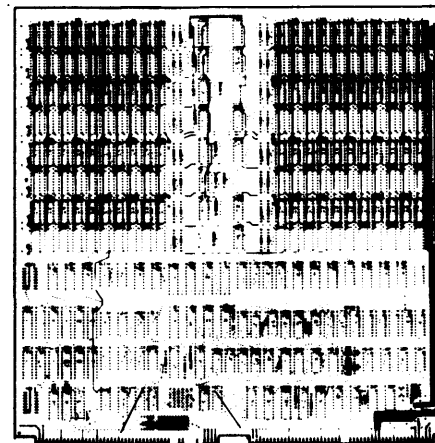
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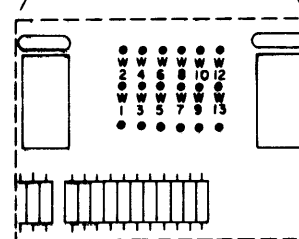
SIZE	CODE	DRAWING NUMBER	REV
C	010	000213	03

# TAILORING (CONT)

## MEMORY JUMPERING NOVA 4/S AND 4/X



REF: DGC Dwg No. 107 000813



NOVA 4/X MEMORY BOARD SELECT JUMPERS

ADDRESS RANGE	JUMPERS INSERTED*		
	BOARD SIZE		
	256KBYTES	128KBYTES	64KBYTES
0377777-	W8	W8	W8 W10
0300000-			W8 W9
0277777-			W8 W9
0200000-	W7	W7	W7 W10
0177777-			W7 W9
0100000-			W7 W9
0077777-	NONE	NONE	W7 W9
0000000-			W7 W9

\*NOTE: JUMPERS W1, W3, AND W5 ARE ALWAYS INSERTED.  
JUMPERS W2, W4, AND W6 ARE NEVER INSERTED.

NOVA 4/S MEMORY BOARD SELECT JUMPERS

ADDRESS RANGE	JUMPERS INSERTED*	
	BOARD SIZE	
	64 KBYTES	32KBYTES
0077777-	W7 W9	W7 W9 W12
0040000-		W7 W9 W11
0037777-		W7 W9 W11
0000000-	W7 W9	W7 W9 W11

NOTE: JUMPERS W1, W3, AND W5 ARE ALWAYS INSERTED;  
JUMPERS W2, W4, AND W6 ARE NEVER INSERTED.

SYSTEMS SHOULD BE CONFIGURED WITH THE LARGER BOARDS OCCUPYING THE LOWER MEMORY ADDRESS RANGES.

MEMORY LOADS

VOLTAGE	DESCRIPTION	CURRENT DRAW
+5V	SYSTEM WITH BATTERY BACKUP	4.4 A
+5V	SYSTEM WITHOUT BATTERY BACKUP	5.6 A
+5V MEM	FIRST BOARD IN CHASSIS	1.2 A
+12V MEM	FIRST BOARD IN CHASSIS	2.3 A
+12V MEM	EACH ADDITIONAL BOARD	0.3 A

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REV	DATE	APP	DATE

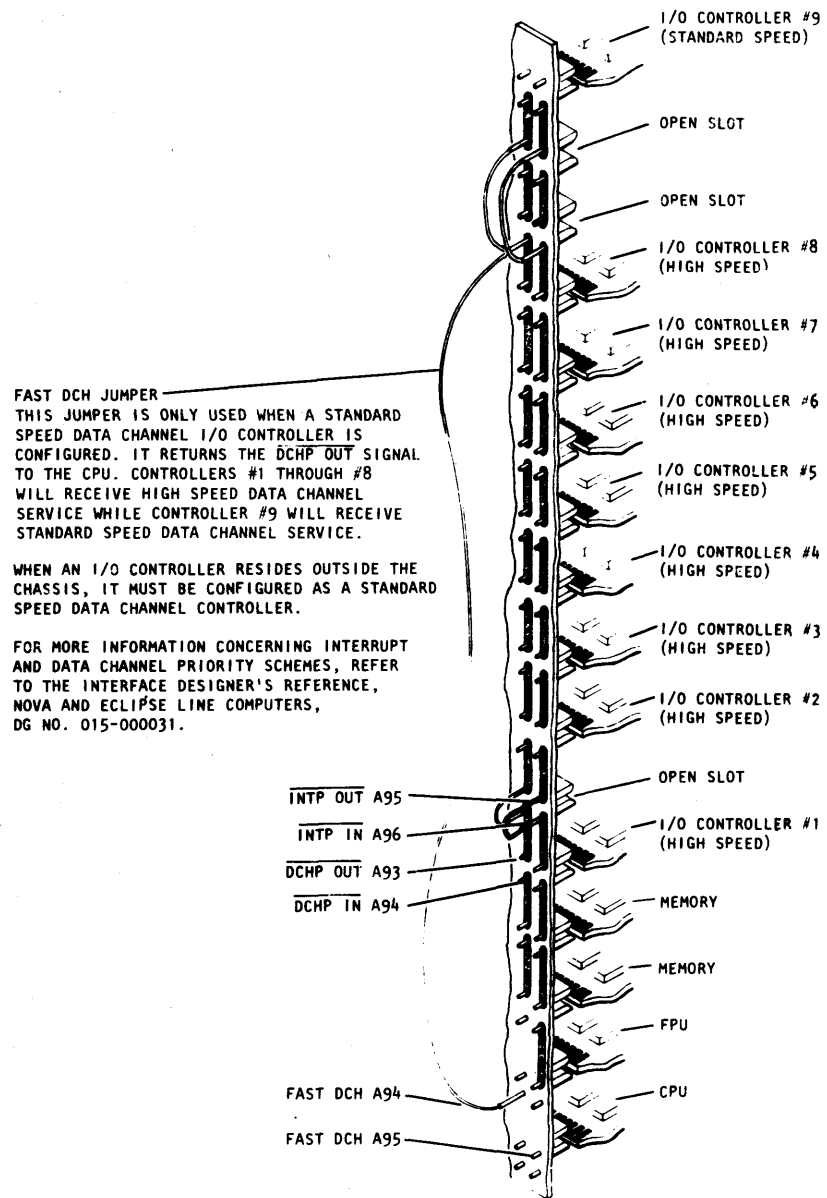
DRAWN	CHECKED	ENGINEER	APPROVED	FIRST USED ON	CODE IDENT
					34984

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SIZE	CODE	DRAWING NUMBER	REV
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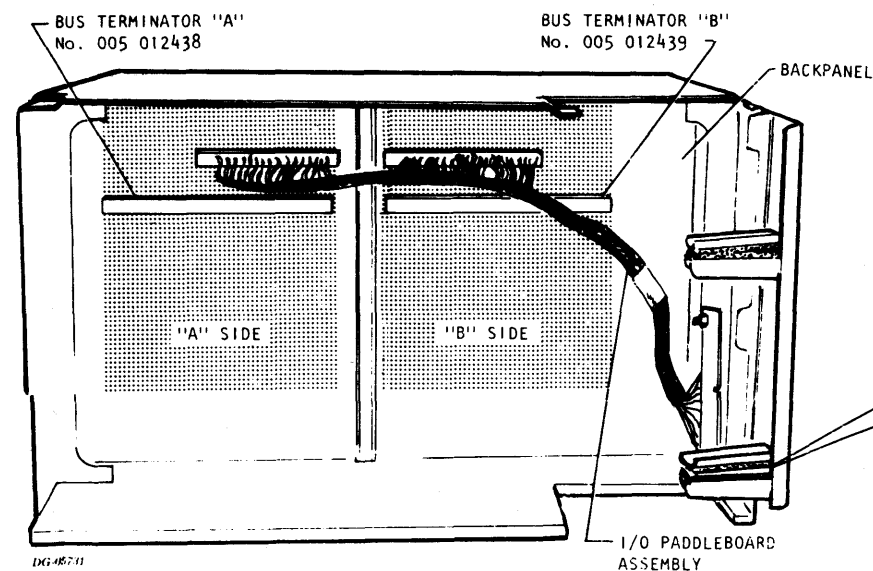
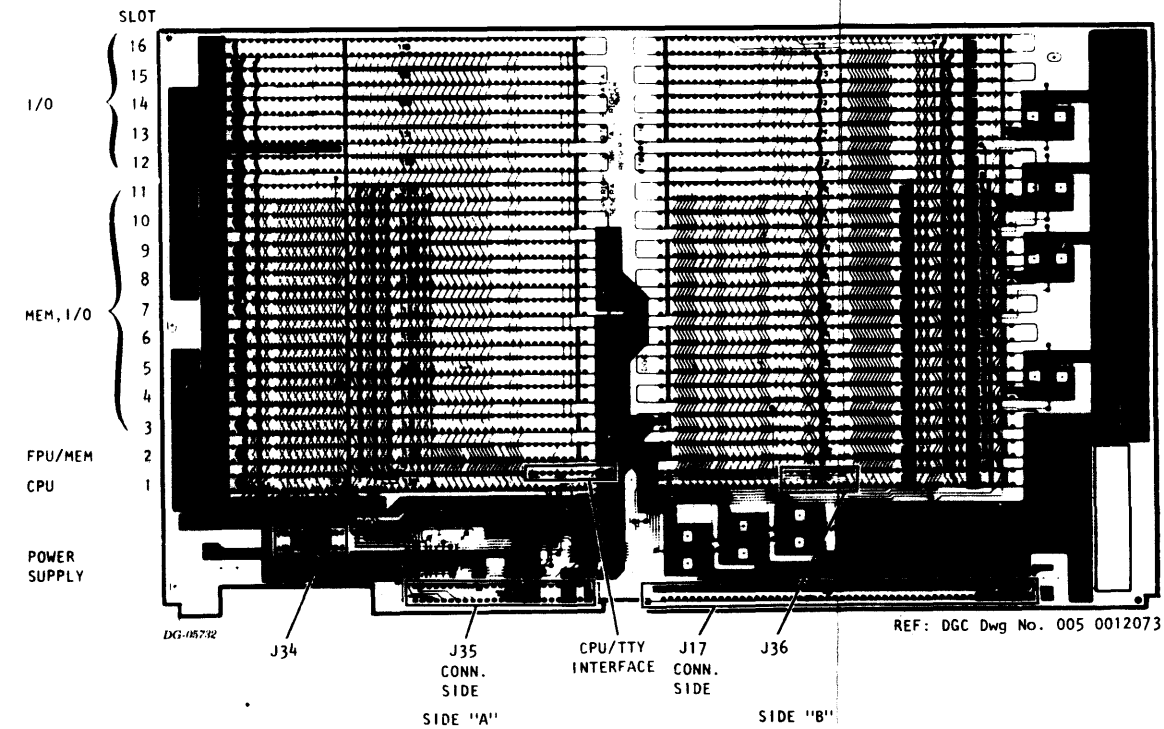
### TAILORING (CONT) BACKPANEL JUMPERING



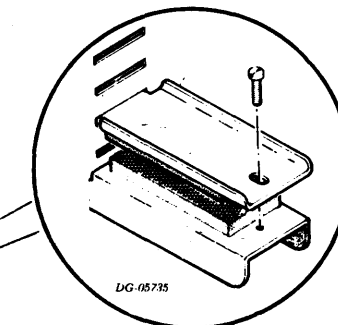
DG-08722  
NO JUMPERS NEEDED EXCEPT FOR OPEN SLOTS AND STANDARD SPEED DATA CHANNEL I/O CONTROLLERS.

WHEN A 4C PROCESSOR IS USED IN THIS CHASSIS, THE END OF THE INTp PRIORITY NETWORK CLOSEST TO THE PROCESSOR (HIGHEST PRIORITY) MUST BE CONNECTED TO THE NEAREST GROUND (PIN A99 OR A100).

### INTERNAL CABLING BACKPANEL CONNECTORS



#### STRAIN RELIEF



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C	010	000213	03







