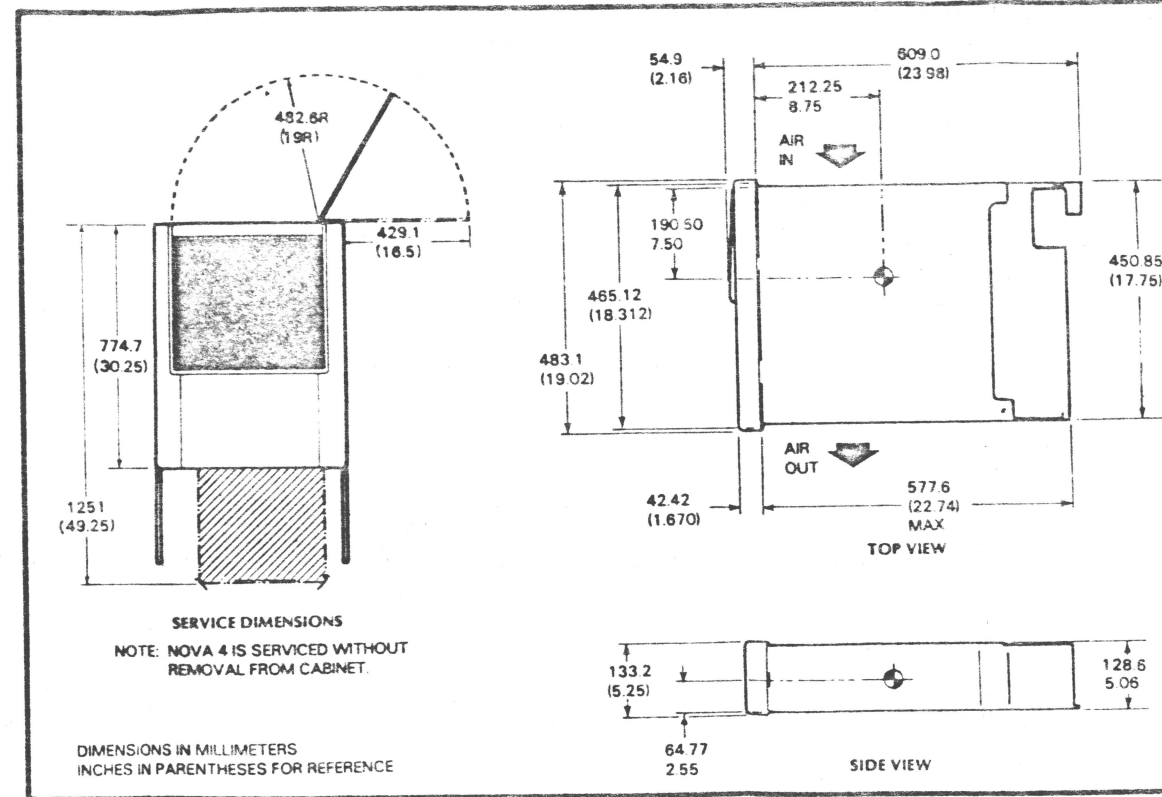
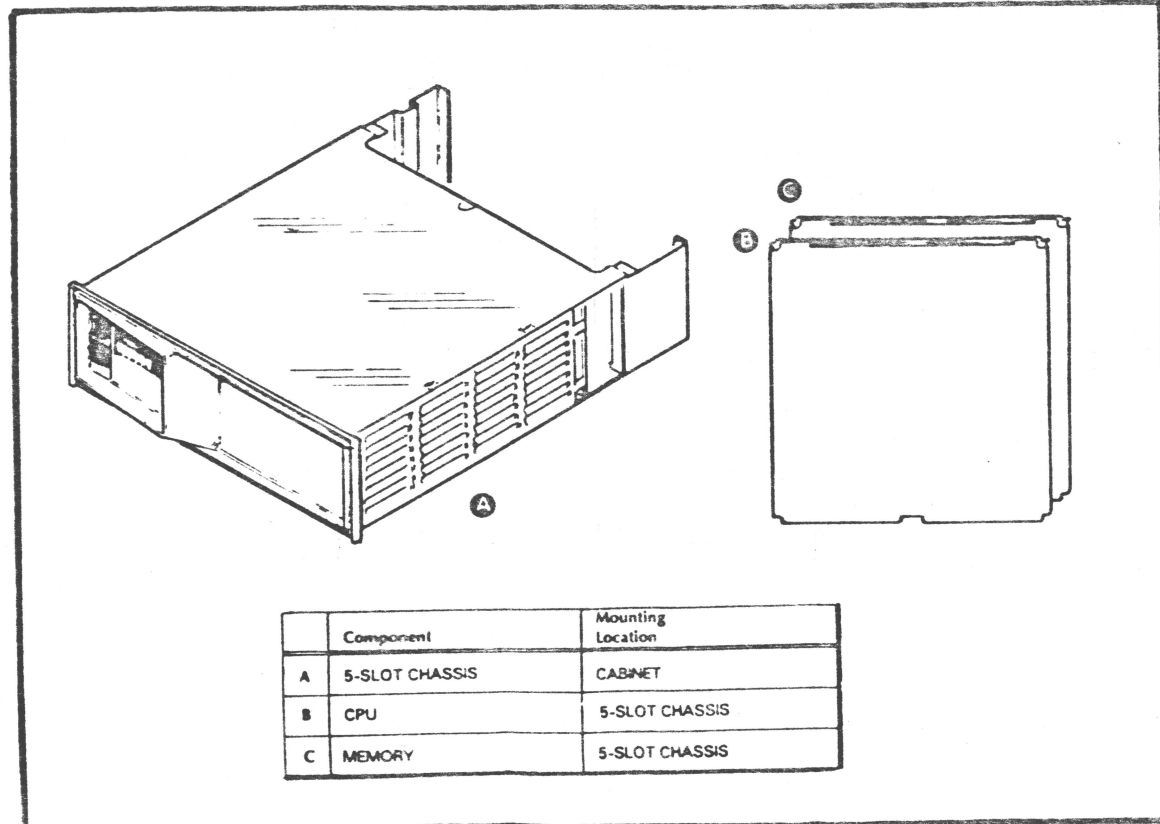


INSTALLATION SPECIFICATIONS



SLOT ASSIGNMENTS

Slot	Allowed (Slot Chart)	Standard High Speed	Assigned	+5V Current Draw
5	I/O			17A
4	I/O			8A
3	I/O			5.6A
2	MEMORY or I/O			NOTE 2
1	CPU			NOTE 1
0	POWER SUPPLY			5.0A

NOTES:

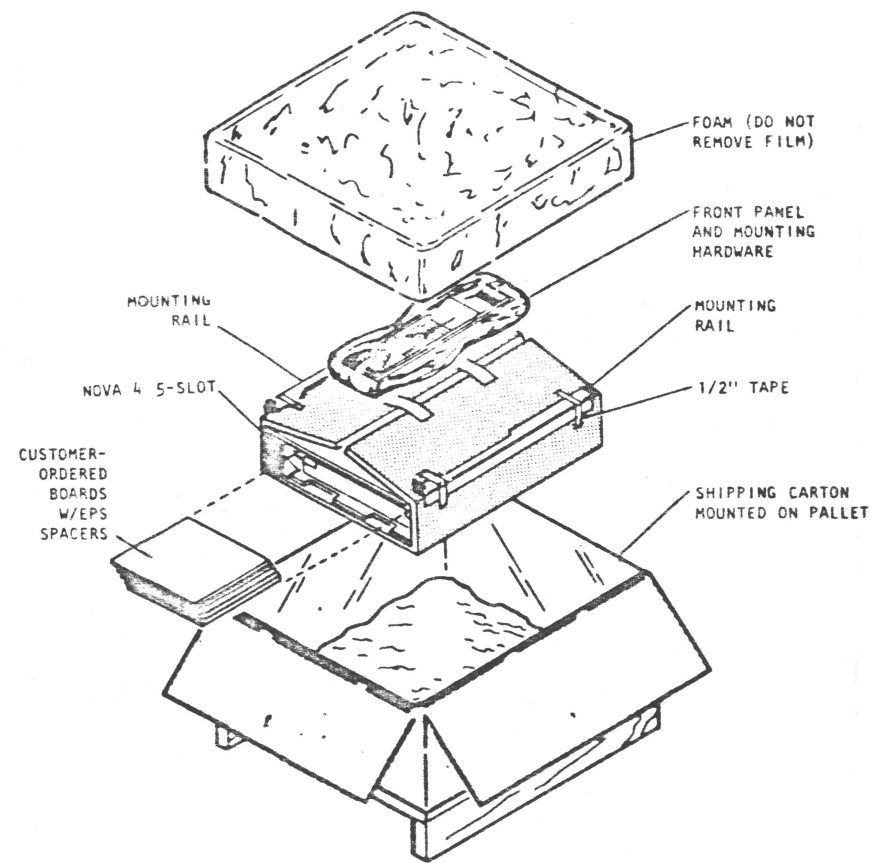
- NOVA 4/S and NOVA 4/X NOVA 4/C 17A 8A
- MEMORY (NOVA 4/S & 4/X only) 5.6A
- PUSH ON TERMINATORS ON MEMORY SLOT (NOVA 4/S & 4/X ONLY)
- MAX DRAW +15V, +12V, +12V MEM 5.0A
- MAX DRAW -5V, -5V MEM 1.5A

Total +5V Current draw
Max +5 Current Available **35A**
+5 Current Surplus

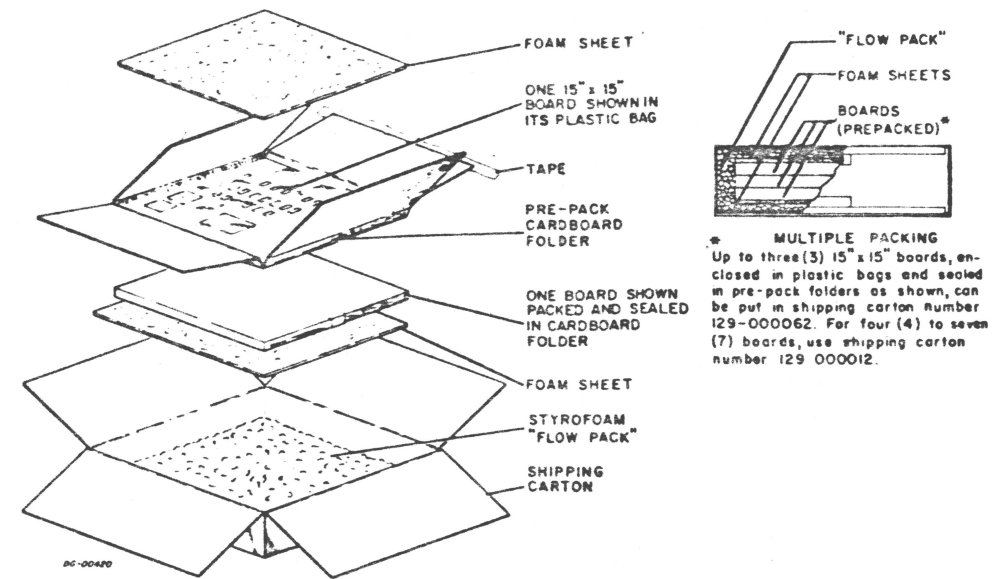
SPECIFICATIONS

NOVA 4 5-slot	
DIMENSIONS:	Width Depth Height
Millimeters	483.1 663.9 133.2
Inches	19.02 26.14 5.25
SERVICE CLEARANCES:	Front
Millimeters	508.0
Inches	20.0
WEIGHT:	Empty Fully Loaded
Kilograms	18.14 22.68
Pounds	40 50
OPERATING ENVIRONMENT:	
Temperature (max)	55°C (131°F) 60Hz, 45°C (113°F) 50Hz
Relative Humidity (max)	90%
Altitude (max)	3084m (10,000')
CABLES:	
Primary Power	Length Conn Mating Conn
Domestic	1.8m(6') 5-15P 5-15R
Export	1.8m(6') 6-15P 6-15R
External I/O Bus Cable	15.3m (50') max
HEAT OUTPUT:	500 watts (1705 BTU/hr)
POWER REQUIREMENTS:	
(Domestic)	
Voltage	85-132
Hz	47-63
Max Amp per Phase	8.0
Phase	1
(Export)	
Voltage	187-264
Hz	47-63
Max Amp per Phase	4.0
Phase	1
LINE CORDS:	
Supply	Part No
100V	109 000239
120V	109 000238
220V	109 000237
240V	109 000240

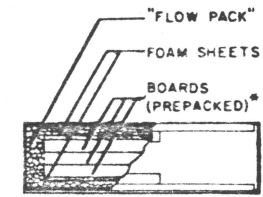
SHIPPING



DG-05726



DG-00480



*** MULTIPLE PACKING**
Up to three (3) 15" x 15" boards, enclosed in plastic bags and sealed in pre-pack folders as shown, can be put in shipping carton number 129-000062. For four (4) to seven (7) boards, use shipping carton number 129 000012.

SHIPPING AND PACKAGE DATA					
Outside Dimensions			Weight (Gross)	Volume	Density
Length	Width	Depth			
in.	in.	in.	lbs.	cu ft	lbs/cu ft
cm	cm	cm	kg	cu m	kg/cu m
36	28	24.5	75	14.29	
91.4	71.12	62.2	34.01	.4287	
SHIPPING SPECIFICATIONS			STORAGE SPECIFICATIONS		
Temperature Range	Relative Humidity (Non-condensing)	Maximum Altitude	Temperature Range	Relative Humidity (Non-condensing)	Maximum Period
$^{\circ}\text{F}$	$^{\circ}\text{C}$		$^{\circ}\text{F}$	$^{\circ}\text{C}$	
-40to+160	0%/90%	50,000ft. 15,200m	-40to+160	0%/90%	90 days
-40to+71			-40to+71		

DG-03224

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 27g:

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.

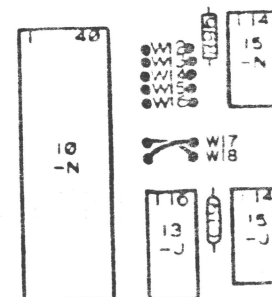
TYPE OF TRANSMISSION JUMPERS

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

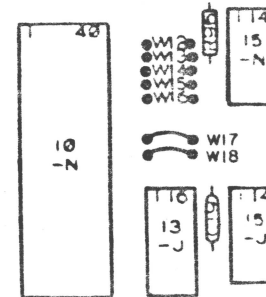
* JUMPER 25 IS INSERTED IF THE SYSTEM TERMINAL IS A TELETYPE, OTHERWISE IT IS NOT INSERTED.

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

20MA CURRENT LOOP

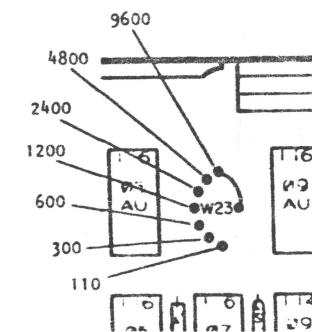


EIA RS232-C



JUMPERS W17 AND W18 MUST NOT TOUCH!

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



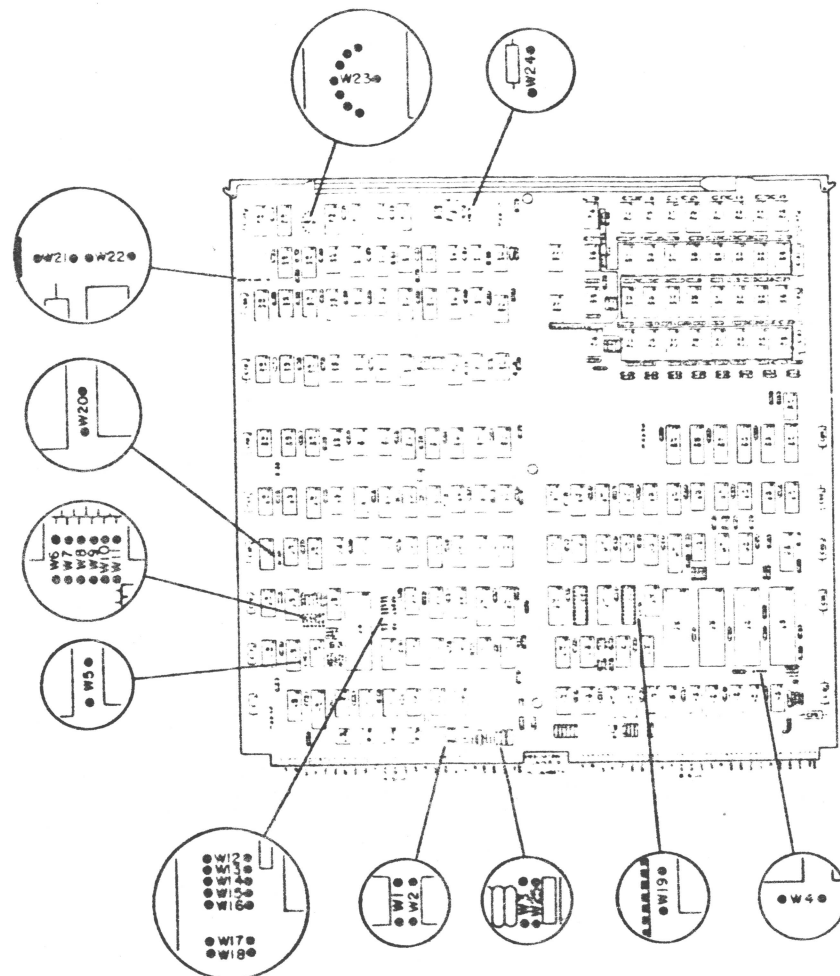
W22 IS NEVER INSERTED.

THE FOLLOWING JUMPERS ARE ALWAYS INSERTED:

- W5
- W19
- W20
- W21
- W24

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



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

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

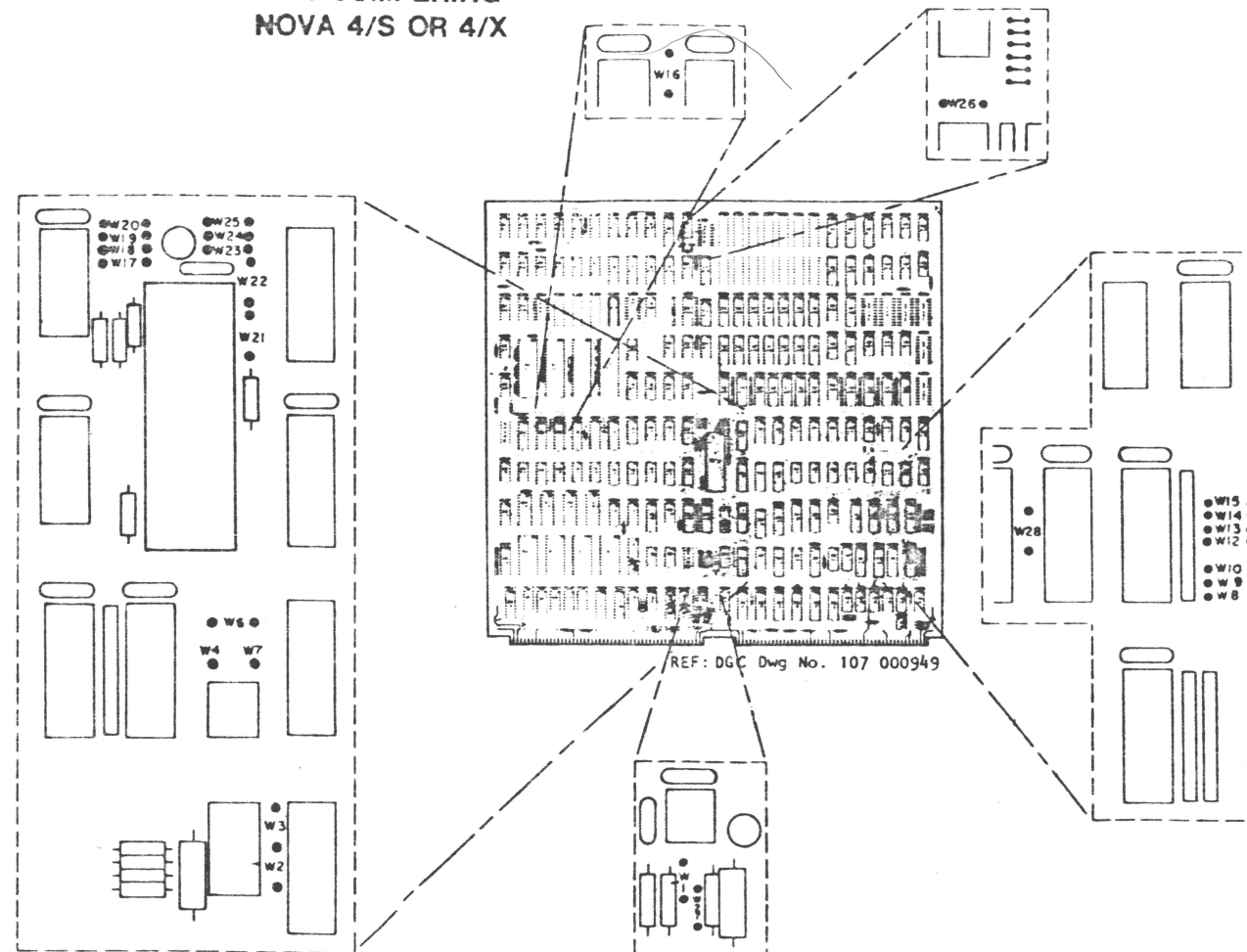
TYPE OF TRANSMISSION	JUMPERS INSERTED
ZOMA CURRENT LOOP	W4, W7, W2, W1
EIA RS232-C	W6, W3

STOP BIT JUMPERS

NUMBER OF STOP BITS	W23 JUMPER POSITION
1	IN
2	OUT

REAL TIME CLOCK JUMPER

	W28
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 :
 8

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

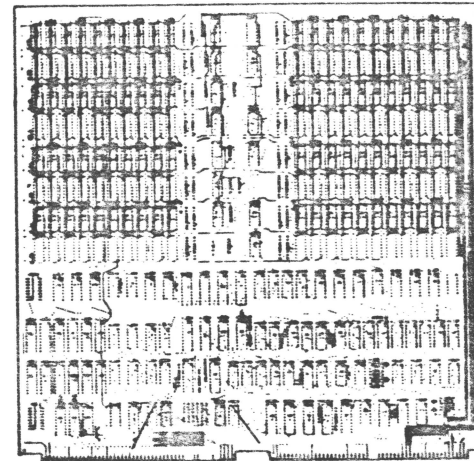
W9 IS INSERTED IF THE PROGRAM LOAD DEVICE IS A HIGH SPEED DEVICE, OTHERWISE, IT IS REMOVED.

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

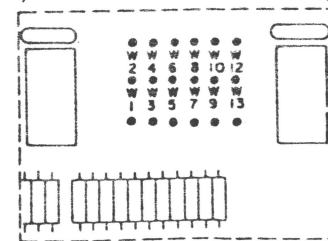
+5V CURRENT DRAW = 17A

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
0377777-	NONE	
0300000-		
0277777-		
0200000-		
0177777-		
0100000-	W7	
0077777-		
0000000-		

*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	
0040000-		
0037777-		W7 W9 W11
0000000-		

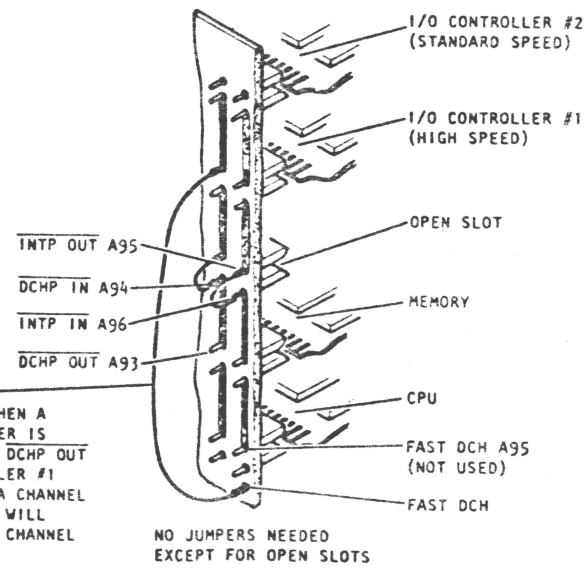
NOTE: JUMPERS W1, W3, AND W5 ARE ALWAYS INSERTED;
JUMPERS W2, W4, AND W6 ARE NEVER INSERTED.

MEMORY LOADS

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

**TAILORING (CONT)
BACKPANEL JUMPERING**

TYPICAL CONFIGURATION



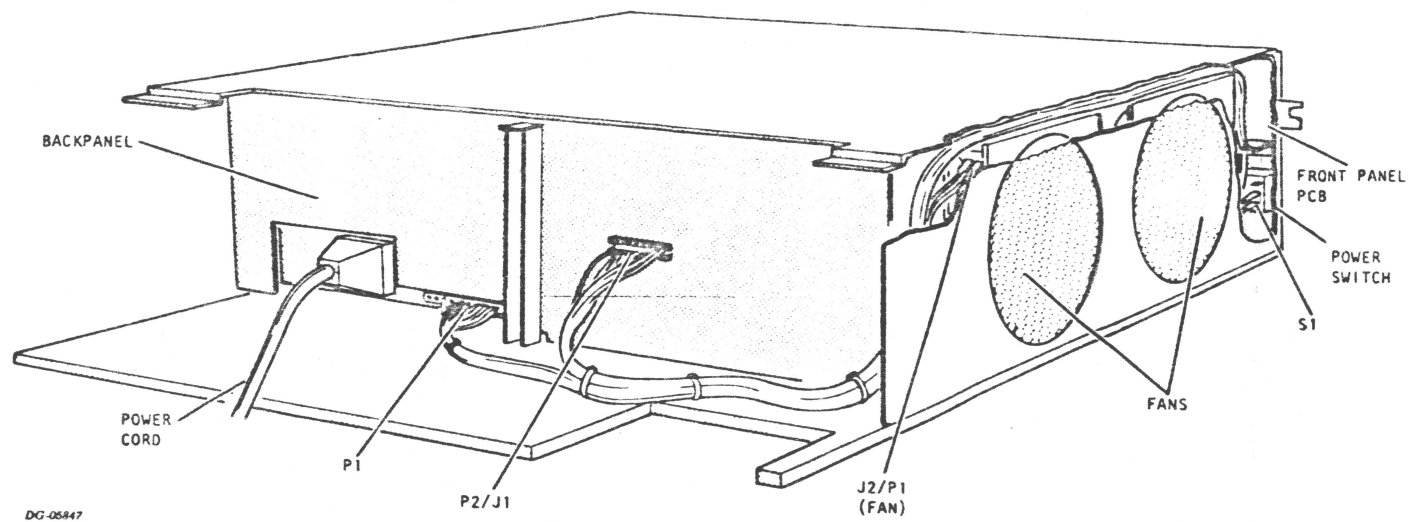
FAST DCH JUMPER
(THIS JUMPER IS ONLY USED WHEN A STANDARD SPEED I/O CONTROLLER IS CONFIGURED. IT RETURNS THE DCHP OUT SIGNAL TO THE CPU. CONTROLLER #1 WILL RECEIVE HIGH SPEED DATA CHANNEL SERVICE WHILE CONTROLLER #2 WILL RECEIVE STANDARD SPEED DATA CHANNEL SERVICE.)

NOTE: WHEN AN I/O CONTROLLER RESIDES OUTSIDE THE CHASSIS, IT MUST BE CONFIGURED AS A STANDARD DATA CHANNEL CONTROLLER.

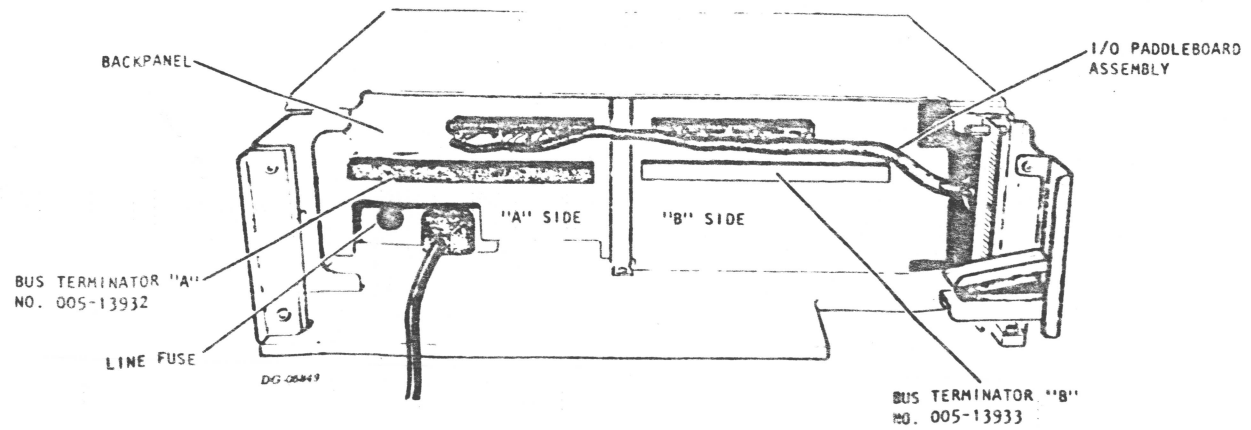
FOR MORE INFORMATION CONCERNING INTERRUPT AND DATA CHANNEL PRIORITY SCHEMES, REFER TO THE INTERFACE DESIGNER'S REFERENCE, NOVA AND ECLIPSE LINE COMPUTERS, DG NO. 015-000031.

EX: 05/62/2

**INTERNAL CABLING
BACKPANEL CONNECTORS**



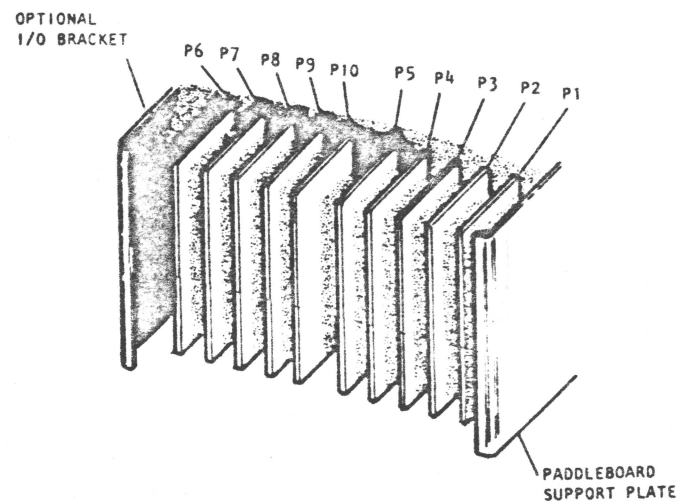
DG-05847



DG-05849

INTERNAL CABLING (CONT)

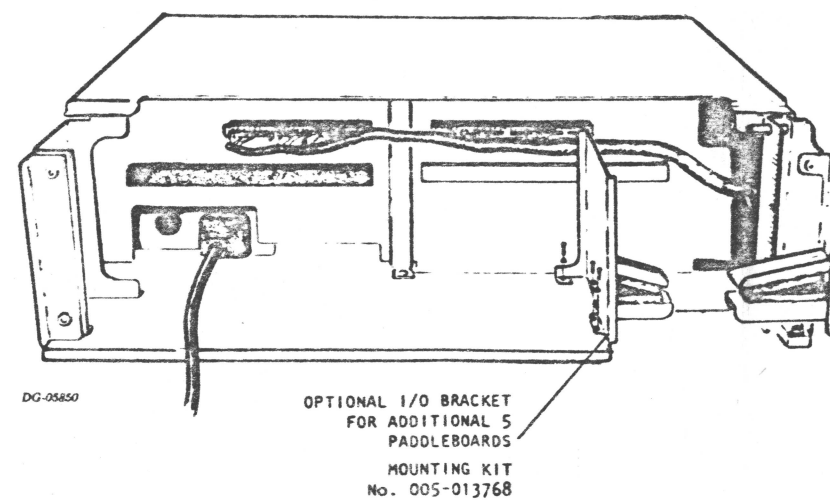
PADDLEBOARD MOUNTING



NOVA 4 I/O PADDLEBOARDS

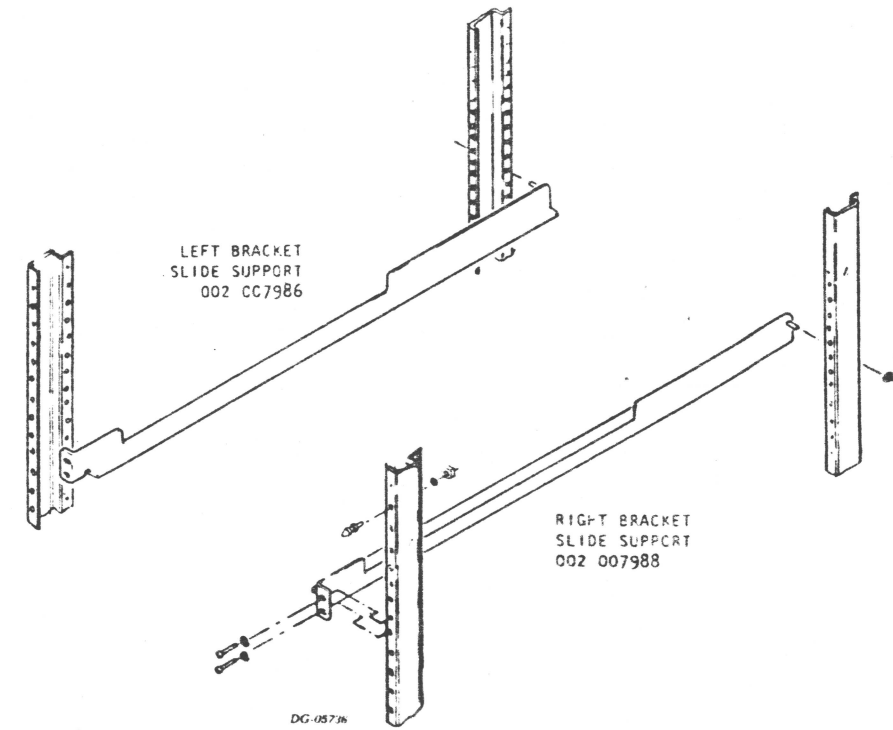
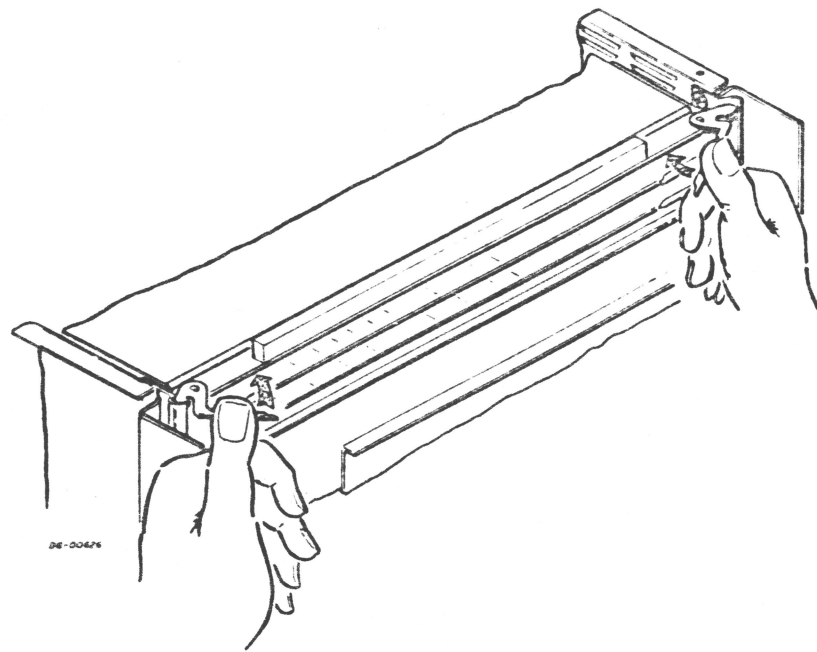
ASSEMBLY No.	TYPE
005 012472	GENERAL PURPOSE I/O
005 012751	EXTERNAL I/O BUS
005 012765	UNIVERSAL LINE MUX (SYNC) MODEL 4241, 4241A, 4242, 4243
005 012476	I/O BUS REPEATER MODEL 8315
005 012590	DCU-50 MODELS 4250, 4254
005 012473*	ASYNCHRONOUS INTERFACE MODELS 4007, 4010, 4023, 4075, 4077, 4078
005 012585	MCA MODEL 4206

* THIS PADDLEBOARD MUST BE PLACED IN THE OUTSIDE POSITION: i.e. THE FURTHEST AWAY FROM THE PADDLEBOARD SUPPORT PLATE.

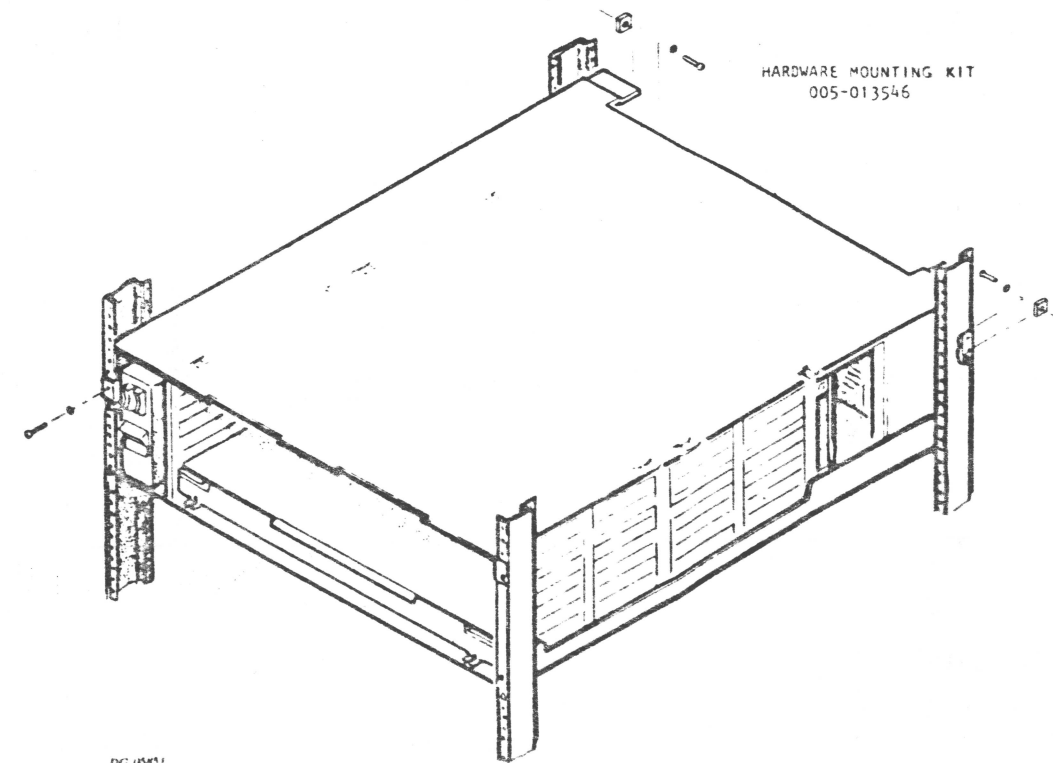
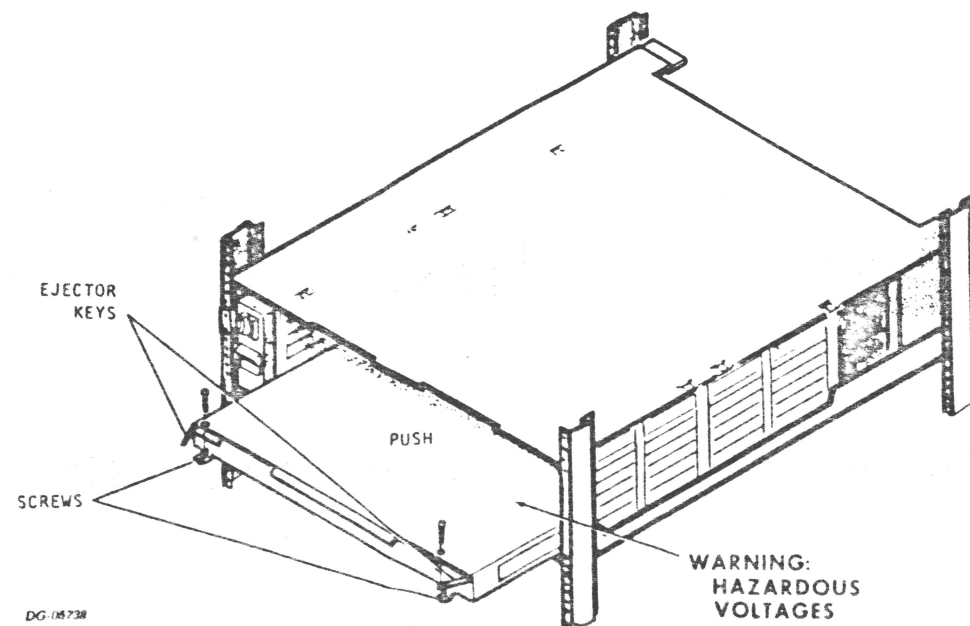


CABINET MOUNTING

INSERTING PC BOARD



INSERTING POWER SUPPLY PCB



HARDWARE MOUNTING KIT
005-013546