Addres B 16. 4.63 217 237 413 433 1-1,99 VinH= 417 432 605 625 14.82 6 610 630 1014/-1 1034 837 012/3415 6 11 063077-AC3 71 AC3 20,00 = AC3 222 AC3 23.00 403 230 231 AC3 25.00 40. DALE 2.34 36,00 AC3= 37 AC3 - 71

	1 XXX0 YOX XX0 1 OX	DRIVE LINE	120%K	16K
Ī	123456789101112131415	X00,02 =	046 =	049
ADDR. 1760	0011111110000	X01,03 =	047 =	050
DRIVE LINE	7 16 0	X04,06 =	U51 =	U54
IC#		X05,07 =	052 :	055
2760	110111110000		1. 11 2	
	1 3 16 0	X000,010 =	043 =	046
1 27/0	111011111110000	X 0 do , 0 30 =	042 =	045
5140	2. 7 1. 1.	X 040,030 -		047
	1 1 6	× 100,010 =	134 =	1137
6760	1110111100000	X 120, 130 =	033 =	136
	33160	X 140,150 =	U32 =	V35
		X160,170 =	U29 =	032
0540	000/0/110000	A N	and and the second s	
	0 2 16 0	1 100,04 =	070 =	U73
1.7/ 2		y01,05 =	U69 =	072
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		4040 060 E	1263 =	1166
		V 050 ,070 =	062 =	U65
		v100,120 =	060 =	U63
		¥110,130 =	U59 =	062
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1. TELETYPE OUTPUT

0 1 2 3 4	060477 061111 063611 000777 000000	READS DOAS, O SKPDN JMP1 JMP O	Start @ location Ø Set the lower 8 data switches to the bits you desire to output. Allows scoping output circuit.
2.	TELETYP	E IN/PUT	
0 1 2 3 4 5 0 3.	060110 063610 000777 074510 063610 000777 0000777 0000777 0000777	NIO,S SKPDN JMP1 DIAS,3 SKPDN JMP1 JMP1 JMP.2 YBOARD	Start @ location Ø reads any paper tape, continually, into AC ³ - Allows scoping input circuits.
0 1 2 3 4 5 6	063610 000777 060610 063710 000777 061111 000000	SKPDN JMP1 DIAC,Ø SKPDZ JMP1 DOAS,Ø JMP Ø	Starts @ location Ø Character typed on keyboard should be printed on printer keyboard⇒ CPU→ Printer
4.	ЕСНО ТА	PE #1	
0 1 2 3 4 5 6 7 10 11	060110 063610 000777 060610 063510 000777 061111 063611 000777 000000	NIO,S SKPDN JMP-1 DIAC,Ø SKPBZ JMP-1 DOAS,Ø SKPDN JMP-1 JMPØ	Start @ location Ø The tape read is printed on the printer.
5.	ECHO TA	PE #2	
0 1 2 3 4 5 6 7	060110 063610 000777 060510 063511 000777 061111 000001		Ditto #4

RON TINER EX-HOUSTON

Zel

Jerry

Subject:

#94

DEPOT INFORMATION BULLETIN

TROUBLESHOOTING AID FOR NOVA LINE MEMORIES:

Field Service

This DIB will check for any drivers which would hold down the read and write source voltages on all Nova line Memories.

The 3 watt current resistors on the memories should not have any noticeable voltage drop across them. If there is a voltage drop, then you have a bad driver or drivers which are holding the voltage down. The solution to this problem is to cut Pin 11 on the drivers, until the voltage drop across the current resistor is approximately \emptyset volts. Usually the first and fourth drivers of the group which pertain to that particular current resistor should be cut first. These measurements should be made with a DVM under static conditions.

Submitted by:	Russell Carreiro	RPC.	Date: 10/5/77
Reviewed by:	Jack Nadon	ANI	Date: 10/5/77



On the 1200 16K Memory and all Nova II Memories (4K, 8K, and 16K), a de-coupling capacitor for -5 volts has inadvertantly never been installed. It is strongly recommended that this capacitor be installed when encountering any of these memories.

Symptoms:

When running a Memory Test, turning the Teletype off/on causes a Memory failure. Secondary method is a visual inspection. Holding board by connector, look for a 6.8 MF 35V cap between -5 volt etch and ground. To the right of the sense amp for bit 14 and 15 is a crosshatch of etches. This is the ground connection for the cap. One of the etches between this crosshatch and the sense amp is -5 volts. This varies with each memory and also with Rev. level so more precise instructions cannot be given. (See ECO 2507 for precise location.)

Solution:

Install 6.8 ufd 35 tant capacitor (DG Part No. 103-000-002) to right of sense amp for bits 14 and 15 between -5 volts etch and ground etch. Use existing feedthru holes. ECO 2507 is generated to correct this problem.

Thanks to Parker Sutherland of the New England Depot for finding this problem and bringing this to attention.

A, B, F, G, I

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DATA GENERAL

Technic	al Information Bulle	tin	IB-
DATE: FROM: SUBJECT:	FEBRUARY 19, 1975 D. REED VOLTAGE REGULATOR & THRESHHOLD POTENTIOMETER ADJUSTMENTS FOR 8117 MEMORIES WITH ECO 2565 INSTALLED	NUMBER: CATEGORY: MODEL:	Sl008 MEMORIES 8117

All 8117 16K Memories, Artwork 107-000-185-03 and above, with ECO 2565 installed should have R5 & R198 adjusted as follows:

> Voltage Regulator Pot (R5) fully clockwise Threshhold Pot (R198) fully counterclockwise

Rev 02 and below, or REV 03 and higher without ECO 2565, should not be field adjusted due to the fact that an adjustable voltage supply is required for +VINH.

The best means of ascertaining if ECO 2565 has been implemented is as follows:

- (1) R73 510 OHM ½ resistor deleted.
- (2) C19, C36, C42, C52, C57, C68, C71, C84 100pf capacitors changed to 220pf.
- (3) R43, R80, R111, R114, R151, R155, R190, R199 3300 OHM resistors deleted.

See TIB S1007 - Category: MEMORIES

VBUTION

A, B, D, F, G, I



ECO 2565 balances the Read/Write currents of the 8117 16 K memories to allow them to pass Multiprogramming test. This ECO is implemented by changing the values of ten components for Rev. 3 & 4 and eighteen components for Rev. 5 and above. Eight of these components are capacitors and resistors which are varied at test level to achieve optimum memory margins. Since the selection of these components requires special test equipment, <u>it is not rec-</u> <u>ommended that this change be attempted in the field</u>. 8117 memories which require this change may be returned to a repair depot for updating per Data General Corporation standard repair procedures.



AND 8117

On the 1200 16K Memory and all Nova II Memories (4K, 8K, and 16K), a de-coupling capacitor for -5 volts has inadvertantly never been installed. It is strongly recommended that this capacitor be installed when encountering any of these memories.

Symptoms:

When running a Memory Test, turning the Teletype off/on causes a Memory failure. Secondary method is a visual inspection. Holding board by connector, look for a 6.8 MF 35V cap between -5 volt etch and ground. To the right of the sense amp for bit 14 and 15 is a crosshatch of etches. This is the ground connection for the cap. One of the etches between this crosshatch and the sense amp is -5 volts. This varies with each memory and also with Rev. level so more precise instructions cannot be given. (See ECO 2507 for precise location.)

Solution:

Install 6.8 ufd 35 tant capacitor (DG Part No. 103-000-002) to right of sense amp for bits 14 and 15 between -5 volts etch and ground etch. Use existing feedthru holes. ECO 2507 is generated to correct this problem.

Thanks to Parker Sutherland of the New England Depot for finding this problem and bringing this to attention.

A, B, F, G, I

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DRIVER IC # 100-307

16K CORE MEMORY

DRIVER #	12	1200		N2		N3
XØX		IC		IC		IC
X00-02	-	46	-	49		52
X01-03	*****	47	-	50		53
104-06	-	51	-	54	-	57
05-07	-	52	-	55	-	58
XXXØ		IC		IC		IC
X000-010	-	43	-	46	-	49
x020-030	- (42	-	45	-	48
X040-050)-	41		44		47
X060-070) -	40		43	-	46
X100-110)	34		37	-	40
X120-130)	33		36		39
X140-150) -	32	-	35		38
X160-170) —	29	_	32	-	35
YØX		IC		IC		IC
Y00-04	-	70	-	73	6	76
Y01-05	Berard	69	*****	72	Reported	75
Y02-06	-	67	-	70	-	73
Y03-07	-	66	-	69	-	72
YXXØ		IC		IC		IC
7000-020	-	65	_	68	-	71
Y010-030	-	64	-	67		70
Y040-060		63	-	66	4,000 M	69
Y050-070	-	62	-	65	-	68
Y100-120	-	60	-	63	-	66
Y110-130	-	59	-	62		65
Y140-160	-	58		61		64
Y150-170	-	57		60		63

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