



**NOTES:**

1. FOR FIELD INSTALLATION:  
 A. PLUG BOARD INTO OMNIBUS.  
 B. IF THERE ARE NO CONNECTIONS TO J5 ON THE 724 POWER SUPPLY, OR IF (OPTION CONNECTOR) ON THE BIF C/BIN POWER SUPPLY, INSTALL THE RED LEAD INTO THE CENTER POSITION ON THE 3 CONTACT MATE-N-LOCK CONNECTOR. THEN INSTALL THE 2 WHITE LEADS IN THE 2 REMAINING POSITIONS.  
 C. IF THE PROCESSOR HAS MORE THAN ONE OPTION THAT USES THE "OPTION CONNECTOR" (J1 B1M E B1J OR J5 (E1E)) THE MODULES WILL BE CONNECTED IN PARALLEL TO THE POWER SUPPLY IN THE FOLLOWING MANNER: INSERT THE PINS FROM THE "POWER SUPPLY END" OF THE MATE-N-LOCK INTO THE VACANT SOCKETS OF THE "OTHER OPTIONS" EIGHT PIN MATE-N-LOCK USING THE TABLE BELOW.

WIRE COLOR	PIN #
RED	4E5
WHITE	1E2
WHITE	7E8

2. REMOVE JUMPER W2 FOR PDP/EIM & RIF

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2	R28, R50	RES. 249 1/8W 1%	1309767	71
1	R49	RES. 75 1/8W 1%	1303064	70
1	R24	RES. 511 1/8W 1%	1302411	69
1	R16	RES. 3.65K 1/8W. 1%	1304835	68
1	R48	RES. 3.83K 1/8W 1%	1309413	67
1	C32	CAP. 68UF 15V 10%	1030382	66
AM		WIRE #22 GA SOLID BUS	9107560-01	65
1		POWER CABLE 20VAC	63A-WH25-4	64
1	R25	RES. 464 1/4W 1%	1303047	63
2		WASHER FLAT #4 NYLON	9006706	62
2		NUT, KEPS #4-40 SST	9006557	61
2E		SCREW PHL #0 PARN #4-40X1/2	9006010-1	60
2E		SPLIT LUG	9006735	59
1	E11	IC DEC 6314	1909972	58
2	E8, E18	IC DEC 6380	1909977	57
2	E13, E17	IC DEC 8881	1909705	56
2	E12, E15	IC DEC 384	1909836	55
4	E1, E3, E4, E7	IC DEC 7401	1909373	54
1	E5	IC DEC 7402	1909373	53
1	E6	IC DEC 7402	1909373	52
1	E16	IC DEC 7410	1909004	51
1	E2	IC DEC 7400	1905576	50
2	E9, E10	IC DEC 7474	1905547	49
2	Q6, Q7	TRANSISTOR DEC 6534B	1503409-01	48
6	Q1, Q5, Q8	TRANSISTOR DEC 3009B	1503100	47
1	R23	RES. 470 1/4W 5%	1300554	46
1	R36	RES. 68.1K 1/4W 1%	1305252	45
1	R37	RES. 5.62K 1/4W 1%	1305128	44
1	R27	RES. 215 1/4W 1%	1305123	43
1	R40	RES. 3.48K 1/4W 1%	1305114	42
2	E13, E14	RES. 4.7K 1/4 5%	1300447	41
2	R4, R36	RES. 3.3K 1/4W 5%	1300439	40
2	R39, R32	RES. 348 1/4W 1%	1304858	39
1	E23	RES. 1.96K 1/4W 1%	1304533	38
1	E26	RES. 10K 1/4W 1%	1303312	37
1	E31	RES. 27.5K 1/4W 1%	1303155	36
4	E5, E20, E21, E39	RES. 10K 1/4W 1%	1303114	35
1	E22	RES. 287 1/4W 1%	1305124	34
1	E28	RES. 82K 1/4W 1%	1305128	33
1	E1	RES. 47K 1/4W 5%	1302177	32
4	E9, E11, R45, R46	RES. 27 1/4W 10%	1301420	31
4	R5, R12, R17, R18	RES. 1K 1/4W 5%	1300365	30
4	R6, E7, E8, R44	RES. 10K 1/4W 5%	1300479	29
1	E3, E19, E34, E20, E21	RES. 1.5K 1/4W 5%	1300391	28
3	E2, E10, R47	RES. 470 1/4W 5%	1300316	27
3	R35, E41, E43	RES. 100 1/4W 5%	1300229	26
4E		GRIPLET, SMALL	1210244-0	25
1	S1	SWITCH, TOGGLE	1210209	24
1	J1	PIN SOCKET (MATE-N-LOCK)	1209456	23
1	J1	PIN HOUSING (MATE-N-LOCK)	1209340-00	22
3	D4-D11	DIODE 3672	1105275	21
1	D16	DIODE AZ1 1/4M&VZ1M	1109941	20
1	D2, D12-D15	DIODE 664	1100114	19
1	C31	CAP. 15UF 20V 10%	1004812	18
1	C25, C26, C29	CAP. 200PF 100V 5%	1000039	17
1	C28	CAP. 10UF 35V 10%	1001776	16
1	C20	CAP. 27PF 100V 5%	1001739	15
20	C1-C20	CAP. .01UF 100V 20%	1001610	14
1	C36	CAP. 180UF 10V 20%	1000086	13
1	C37	CAP. 39UF 10V 20%	1000076	12
3	C33, C34, C35	CAP. 68UF 35V 20%	1000057	11
1	C29	CAP. 3.9UF 15V 10%	0000044	10
1	C30	CAP. 220PF 100V 5%	1000021	9
1	C27	CAP. 68PF 100V 5%	1000014	8
4		SPACER (CABLE CLAMP)	1202704	7
4		EYELET 654-11 STIMPSON	9006750	6
1		HANDLE FLIP CHIP-MAGENTA	900337-26	5
1		ETCHED CIRCUIT BOARD	8009392	4
REF		MODULE HISTORY LIST	BMM-11344-2-4	3
REF		ASSY/DRILLING HOLE LAYOUT	04M-11344-2-5	2
REF		X,Y COORDINATE HOLE LOC	K-CO-11344-2-4	1

ETCH BOARD REV	C	D
6534B	MPS 6284	
3009B	2N3009	
A21	+	
D672	1N3653	
D664	1N3608	
DEC NO	EIA NO	DEC NO

CONDUCTOR CONVERSION CHART

EQUIPMENT CORPORATION

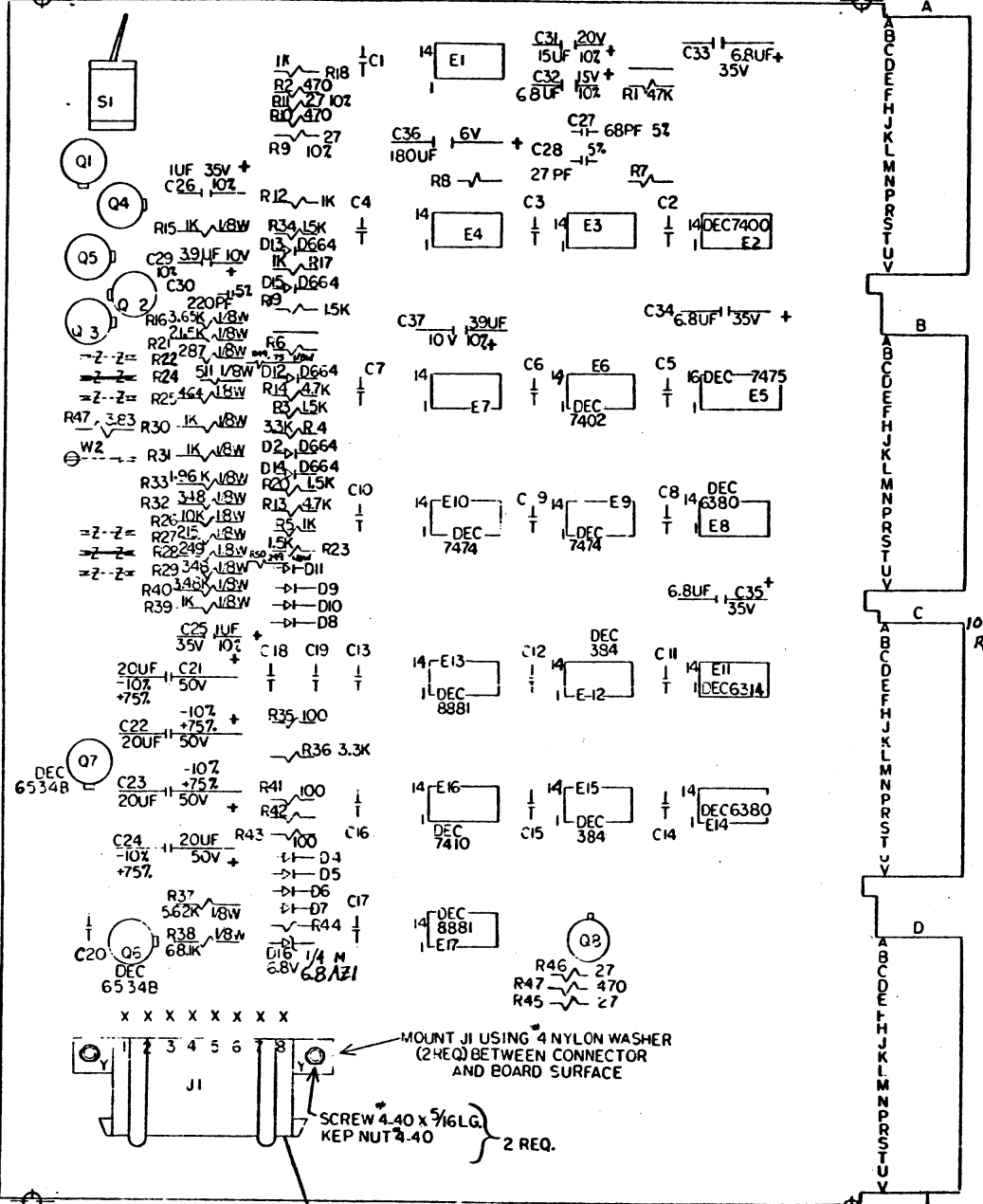
**POWER FAIL & AUTO RESTART**

MODEL: ECSM848-0-1

DATE: 12/11/72

REV: 1 OF 2

\*X HOLES .496(C73 DIA) DRILL NO GRIPLET  
 \*Y HOLES .30(.285 DIA) DRILL NO GRIPLET  
 FOR GRIPLETS DRILL ALL UNMARKED HOLES .54(.055 DIA) DRILL AND FOR 2 HOLES .51(.067 DIA) DRILL NO GRIPLET



MOUNT J1 USING 4 NYLON WASHER (2 REQ) BETWEEN CONNECTOR AND BOARD SURFACE  
 SCREW 4.40 X 5/16 LG. KEP NUT 7.40 } 2 REQ.



**POWER FAIL THRESHOLDS**

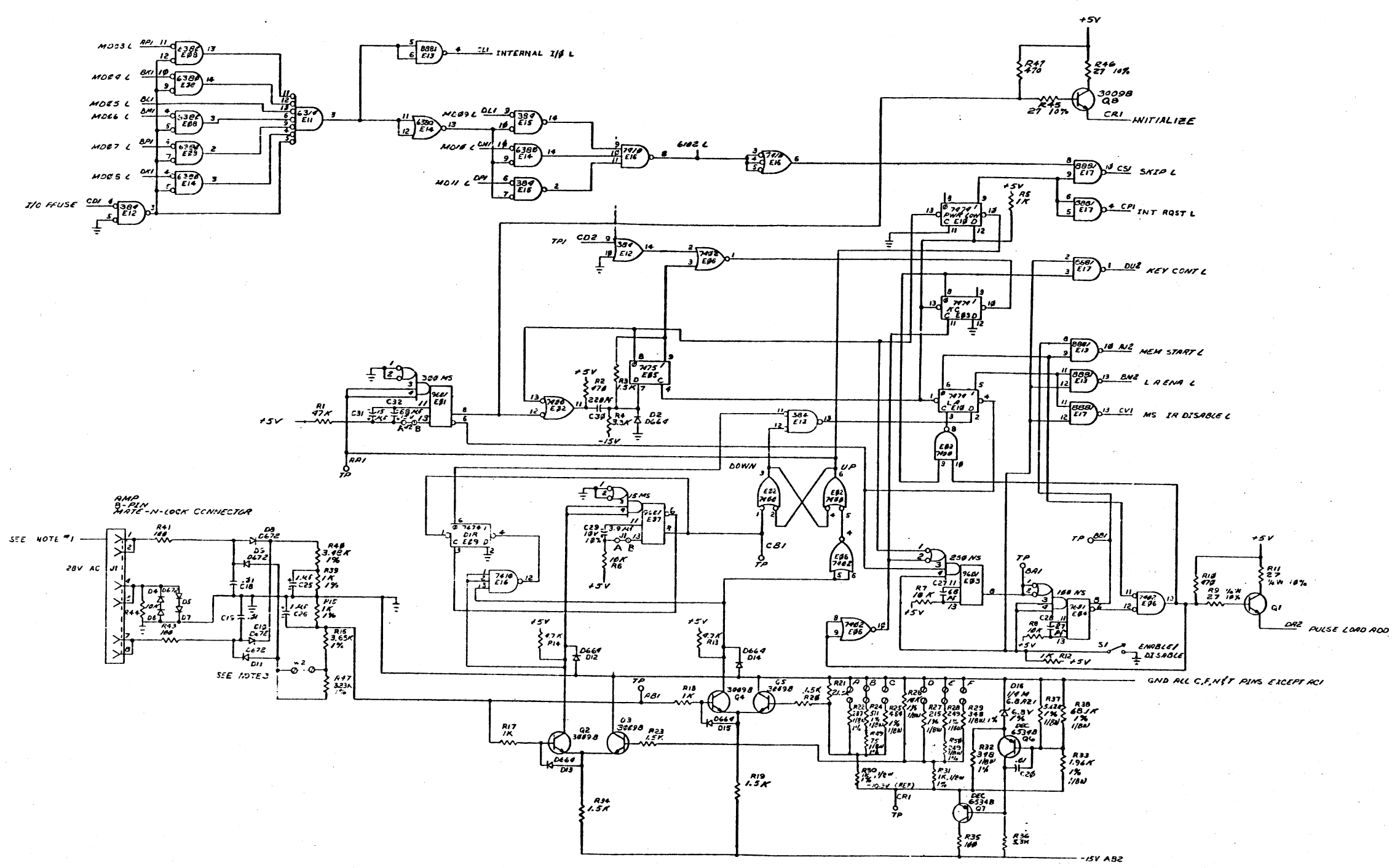
LINE	12V AC UPPER/LOWER TOLERANCE	230V AC UPPER/LOWER TOLERANCE	INSTALL JUMPER
HIGH	105/95	190/170	C8F
NORMAL	90/80	175/155	B8E
LOW	80/70	160/140	A8D

NOTE:  
 UPPER THRESHOLD RESTARTS COMPUTER  
 LOWER THRESHOLD SETS POWER LOW FLAG.

IC PIN LOCATIONS	JUMPER LIST
DEC 6314	1 8
DEC 6380	1 8
DEC 3009	1 8
K TYPE	GND #9W
	G5 22 J2A J2B
	G5 22 J1A J1B

IC PIN LOCATIONS

JUMPER LIST



AMP 9-PIN MATE-N-LOCK CONNECTOR  
 SEE NOTE #1

GND ALL C.F. NET PINS EXCEPT AC1

QTY	DESCRIPTION	PART NO.	REV. NO.
	PARTS LIST		
	EQUIPMENT CORPORATION		
	TITLE		
	POWER FAIL & AUTO-RESTART		
	SCALE		
	SHEET 2 OF 2		
	DRAWN		
	ECS M848-0-1		
	BY		
	P		

ECS M848-0-1 P

# MASTER DRAWING LIST

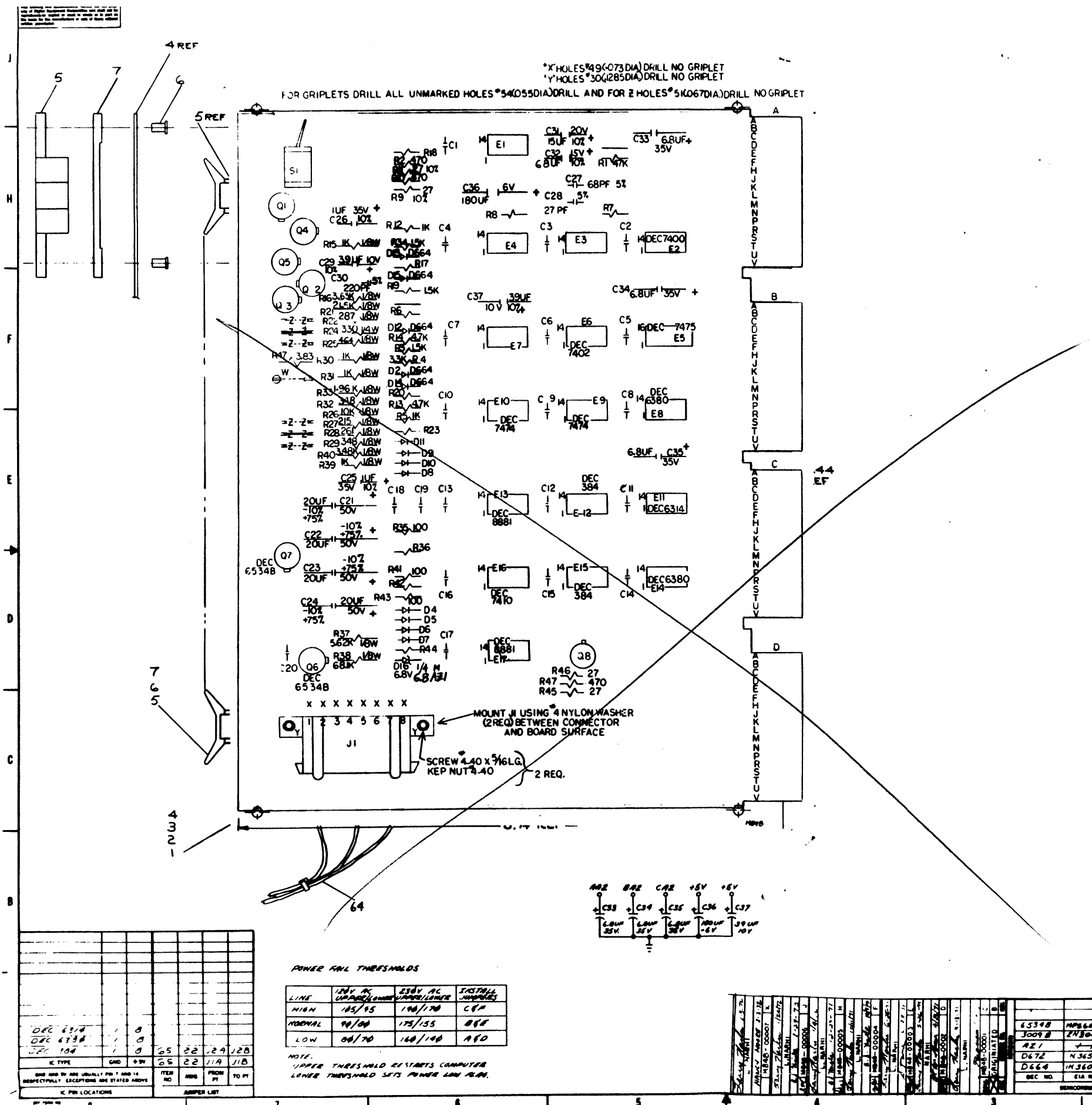
UNIT VARIATIONS									
MAINTENANCE MANUALS	TITLE	NO.							
	POWER FAIL AND AUTO-RESTART	KP8-E	X						

USED ON OPTIONS	
PDP8/E	
PDP8/M	

REVISIONS	
APP'D.	DATE 7-71
CHG. NO. 0001	00055
 digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DRN. L. NARHI	DATE 27-71
CHK'D K. GULICK	DATE 3-4-71
ENG. L. NARHI	DATE 3-5-71
PROJ. ENG. L. NARHI	DATE 3-5-71
PROD. L. SAYLOR	DATE 3-5-71
TITLE POWER FAIL AND AUTO-RESTART	
FIRST USED ON PDP8/E	SIZE CODE A ML
SCALE	NUMBER KP8-E
SHEET 1	OF 2
DIST.	REV. B

PRINT SET							
KP8-E	DWG. NO.	REV. NO. OF SHEETS	LET.	TITLE	OPTION NO.		
X	A-PL-KP8-E-0	1		POWER FAIL PARTS LIST			
X	E-CS-M848-0-1	2	#	POWER FAIL AND AUTO-RESTART			
X	A-SP-KP8-E-1	3	A	ENGINEERING SPECS			
-	A-SP-KP8-E-2	4		CHECKOUT PROCEDURE			
-	A-SP-7665125-0-0	2		ACCEPTANCE PROCEDURE			
-	LIBKIT-8E--KP8E	REF		PROGRAM LIBRARY KIT			

TITLE POWER FAIL AND AUTO RESTART							
	SIZE CODE	SHEET 2	OF 2	NUMBER	REV.		
	A ML			KP8-E	B		



- NOTES:
- UNLESS NOTED:  
RESISTORS = 10K 1/4W 5%  
DIODES = D672  
CAPACITORS = .01UF, 100V, 20%  
IC'S = DEC 9401
  - FOR FIELD INSTALLATION:  
A PLUG BOARD INTO OMNIBUS.  
B IF THERE ARE NO CONNECTIONS TO JS ON THE 7/4 FOWH SUPPLY INSTALL THE RED LEAD INTO THE CENTER POSITION ON THE 3 CONTACT MATE-N-LOK CONNECTOR, THEN INSTALL THE 2 WHITE LEADS IN THE 2 REMAINING POSITIONS.  
C IF THERE ARE LEADS ALREADY IN JS, THE LEADS FROM THE M848 MUST BE "DAISY CHAINED" ONTO BOARD THAT'S USING JS. PLUG THE M848 LEADS INTO B PINS MATE-N-LOK ONTO BOARD THAT'S USING JS. PLUG THE RED LEAD NEXT TO THE RED LEAD THAT'S ALREADY THERE AND DO THE SAME FOR THE 2 WHITE LEADS.  
D REMOVE JUMPER W2 FOR PDP8/M

QTY	REF DESIGNATION	DESCRIPTION	PART NO.
1	R16	RES. 3.65K 1/4W 1%	130945
1	R48	RES. 3.63K 1/4W 1%	130943
1	C32	CAP 10UF 15V 10%	130302
1	AM	WIRE 22 GA SOLID BUS	9107500-01
1		WIRE GAUGE 28 WIRE	9107500-01
1		WIRE GAUGE 14 W 1%	130309
1	R25	RES 1.5K 1/4W 5%	130670
1		WASHER FLAT 1/4" DIA	900670
1		NUT, NERS 4-40 3/8"	900672
1		SCR PIN W/ PAN # 401346	900610-1
1		SPLIT LOG	900675
1	E11	IC DEC 6314	100992
2	E11A	IC DEC 6380	100997
2	E11B	IC DEC 6001	100995
2	E11C	IC DEC 384	100998
2	E11D, E11E	IC DEC 9401	100999
1	E11F	IC DEC 7475	100980
1	E11G	IC DEC 7402	100900
1	E11H	IC DEC 7410	100556
1	E11I	IC DEC 7400	100559
2	E11J, E11K	IC DEC 7474	100554
2	Q6, Q7	TRANSISTOR DEC 6534B	130404
2	Q1-Q5, Q8	TRANSISTOR DEC 6009B	130310
1	R24	RES 330 1/4W 5%	130094
1	R26	RES 68K 1/4W 1%	130522
1	R27	RES 5.62K 1/4W 1%	130523
1	R27	RES 2.5 1/4W 1%	130523
1	R28	RES 3.48K 1/4W 1%	130314
2	R13, R14	RES 4.7K 1/4W 5%	130047
1	R4	RES 3.37 1/4W 5%	130049
2	R29, R32	RES 370 1/4W 1%	130483
1	R30	RES 300 1/4W 1%	130483
1	R31	RES 107 1/4W 1%	130312
1	R31	RES 21.5K 1/4W 1%	130314
4	R30, R31, R31, R39	RES 1K 1/4W 1%	130314
1	R32	RES 207 1/4W 1%	130324
1	R28	RES 261 1/4W 1%	130287
1	R1	RES 47K 1/4W 5%	102177
4	R1, R11, R45, R46	RES 17 1/4W 10%	130420
2	R2, R12	RES 1K 1/4W 5%	100365
1	R4, R13, R14, R18, R44	RES 1K 1/4W 5%	100479
3	R19, R20, R21	RES 1.5K 1/4W 5%	130091
3	R2, R10, R47	RES 470 1/4W 5%	130016
3	R35, R41, R43	RES CC 1/4W 5%	130229
4		WIRE 30 ALL	130242
1	J1	SWITCH TOGGLE	101225
1	J1	3/4 HOUS NG WATER LOCK	101225
1	J1	3/4 HOUS NG WATER LOCK	101225
1	D4-D11	DIODE 5.72	105715
1	D16	DIODE AZI W/ RIZING	104981
1	D1, D12-D15	DIODE 664	CC 4
1	C31	CAP 5UF 20V 10%	4812
1	C32, C36	CAP 10UF 35V 20%	10 776
1	C28	CAP 27PF 150V 5%	101739
20	C1-C20	CAP .01UF 100V 20%	021610
1	C36	CAP 100UF 6V 20%	100086
1	C37	CAP 10UF 10V 5%	100078
3	C31, C34, C35	CAP 6UF 35V 20%	100067
1	C21	CAP 30UF 15V 5%	100064
1	C30	CAP 220PF 100V 5%	101002
1	C27	CAP 68PF 100V 5%	101014
4		SPACER (CABLE CLAMP)	102704
1		EYELET G54-II STIMPSON	9006750
1		HANDLE FLIP CHIP 106574	9006750
1		ETCHED CIRCUIT BOARD	9006750
1		MODULE HISTORY LIST	BMM 1044-04
1		ASSY/DRILLING HOLE LAYOUT	DAM 1044-04
1		X,Y COORDINATE HOLE LOC	KCO 1044-04

ETCH BOARD REV	C	D	DATE	BY	DESCRIPTION
6534B					
3009B					
A21					
D672					
D664					