

CUSTOMER PRINT SET INDEX

THIS IS PRINT SET

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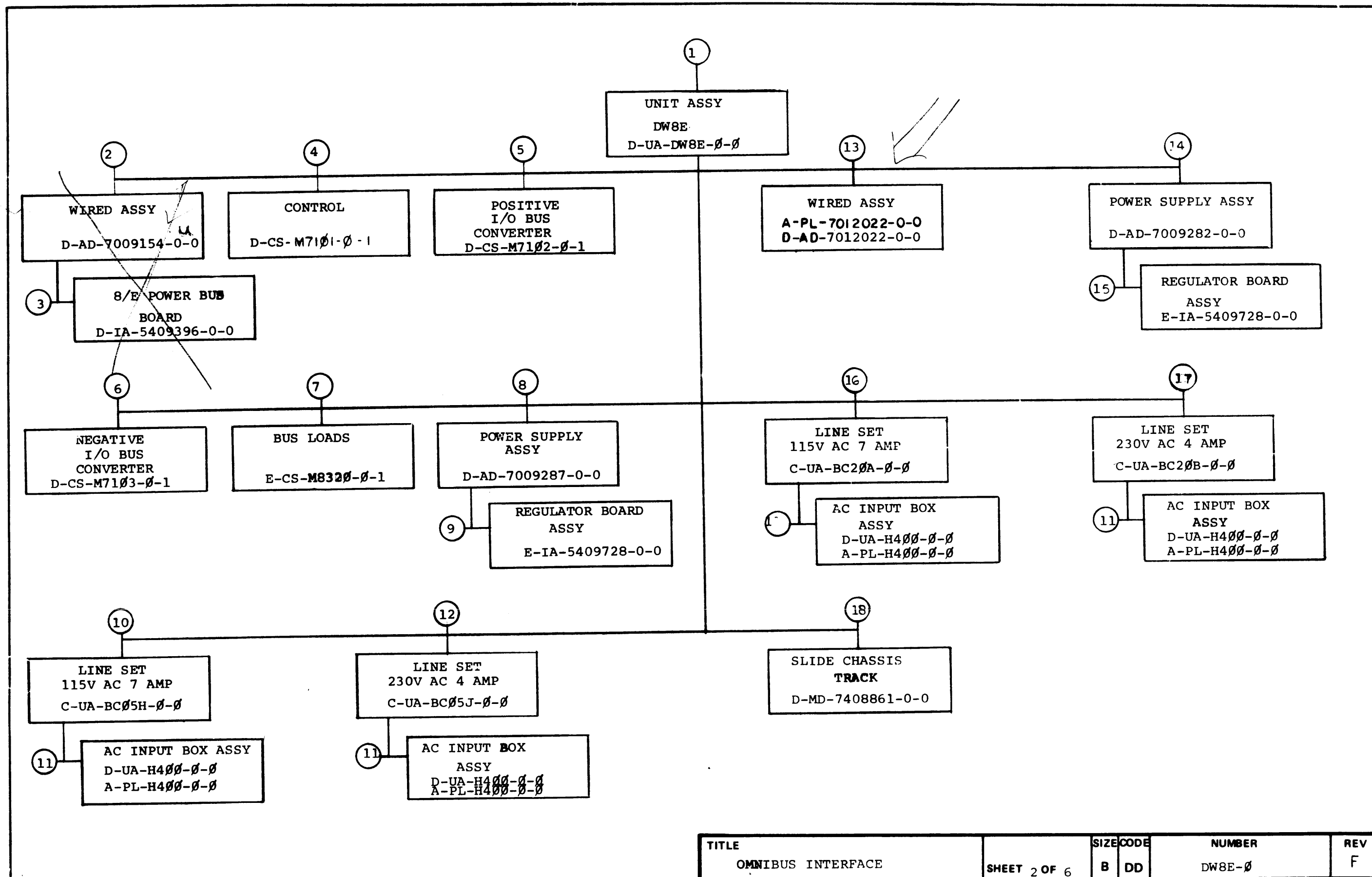
FOR FIELD MAINTENANCE PRINT SET
SEE B-TC-DW8E-0-14

UNIT VARIATIONS		PRINT SET				
VAR	TITLE					
DW8E-NA	PHASE OUT					
DW8E-NB	PHASE OUT					
DW8E-NC	8 NEG BUS TO OMNIBUS INTER 115V					
DW8E-ND	8 NEG BUS TO OMNIBUS INTR 230V					
DW8E-NX	5 SLOT EXPANDER MODULE SET					
DW8E-PA	PHASE OUT					
DW8E-PB	PHASE OUT					
DW8E-PC	8 POS BUS TO OMNIBUS INTER 115V					
DW8E-PD	8 POS BUS TO OMNIBUS INTER 230V					
DW8E-PX	5 SLOT EXPANDER MODULE SET					

REVISIONS	DATE	12-75	2-76
	CHG. NO.	DW8E-8	DW8E-9
	REV	E	F

USED ON OPTION/MODEL	DRN.	DATE	TITLE				
DW8E	F 41	10/16/75	OMNIBUS INTERFACE				
	CHK'D.	DATE					
	PROJ ENG.	DATE					
	PROD.	DATE	SIZE	CODE	NUMBER		REV
	F LASKY	1/13/75	B	DD	DW8E-0		F
	FIELD SERV.	DATE	DIST				
SHEET 1 OF 6	R 10/175						

EN-01062-1A-16-R972-(325)



TITLE	SHEET	SIZE	CODE	NUMBER	REV
OMNIBUS INTERFACE	2 OF 6	B	DD	DW8E-Ø	F

ELECTRICAL					ELECTRICAL								
NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE		
1	D-UA-DW8E-0-0		6	UNIT ASSY DW8E		5	D-CS-M7102-0-1		2	POSITIVE I/O BUS CONVERTER			
	C-PL-DW8E-0-0		2	UNIT ASSY DW8E (PL)			K-CO-M7102-0-4		1	X-Y COORDINATE HOLE LOCATION			
	D-MU-DW8E-0-1		1	MODULE UTILIZATION			D-AH-M7102-0-5		1	ASSY DRILLING HOLE LOCATION			
	A-PL-DW8E-0-1		1	MODULE UTILIZATION (PL)			B-MH-M7102-0-6		1	MODULE ECO HISTORY			
	D-BS-DW8E-0-3		1	DW8E CONTROL		6	D-CS-M7103-0-1		1	NEGATIVE I/O BUS CONVERTER			
	D-BS-DW8E-0-4		2	I/O BUS CONVERTER			K-CO-M7103-0-4		1	X-Y COORDINATE HOLE LOCATION			
	D-IC-DW8E-0-5		1	I/O BUS CONVERTER SIGNALS			D-AH-M7103-0-5		1	ASSY DRILLING HOLE LOCATION			
	D-BS-DW8E-0-6		1	DW8E EXPANDER CONTROL			B-MH-M7103-0-6		1	MODULE ECO HISTORY			
	D-BS-DW8E-0-7		2	I/O BUS EXPANDER		7	B-CS-M8320-0-1		2	BUS LOADS			
	D-IC-DW8E-0-8		1	I/O BUS EXPANDER SIGNALS			K-CO-M8320-0-4		1	X-Y COORDINATE HOLE LOCATION			
	D-IA-7009155-0-0		2	HARNESS AC			D-AH-M8320-0-5		1	ASSY DRILLING HOLE LOCATION			
	D-IA-7009288-0-0		1	HARNESS DC			B-MH-M8320-0-6		1	MODULE ECO HISTORY			
	A-SP-DW8E-0-12		19	DW8E ENG. SPEC.		8	D-AD-7009287-0-0		1	POWER SUPPLY			
	A-SP-DW8E-0-13		1	DW8E ACCEPTANCE PROCEDURE			D-IA-7409376-0-0		2	CHASSIS (P.S.)			
	A-AL-DW8E-0-10		1	DW8E ACCESSORY LIST			9	E-IA-5409728-0-0		1	REGULATOR BD ASSY		
D-IC-DW8E-0-2		2	I/O CONNECTORS		D-CS-5409728-0-1				1	REGULATOR BD			
A-SP-DW8E-0-9		4	FIELD INSTALLATION & ACCEPTANCE		K-CO-5409728-0-4			1	X-Y COORDINATE HOLE LOCATION				
C-IA-7005820-0-0		1	CABLE CONN TYPE W011 TO W021		D-AH-5409728-0-5			1	ASSY DRILLING HOLE LOCATION				
B-AD-7010108-0-0		1	CONNECTOR J1		B-MH-5409728-0-6		1	MODULE ECO HISTORY					
K-WL-DW8E-0-11		1	WIRE LIST		10	C-UA-BC05H-0-0		1	LINE SET 115V AC 7 AMP				
A-PL-DW8E-0-15		1	SHIPPING LIST			11	D-UA-H400-0-0		1	AC INPUT BOX ASSY (H400-A)			
2	D-AD-7009154-0-0		1	WIRED ASSY				A-PL-H400-0-0		1	AC INPUT BOX ASSY (H400-A) (PL)		
	A-PL-7009154-0-0		2	WIRED ASSY (PL)				C-IA-5409824-0-0		1	POWER CTRL BOARD 115V		
	K-WL-DW8E-0-11		1	WIRE LIST			D-AH-5409824-0-5		1	ASSY DRILLING HOLE LOCATION			
	C-MD-7409056-0-0		1	OMNICASTING (RMS-L)		B-MH-5409824-0-6		1	MODULE ECO HISTORY				
	E-SC-1205348-0-0		1	288 PIN CONNECTOR BLOCK (H803)		3	D-IA-5409396-0-0		1	8/E POWER BUS BOARD			
3	D-IA-5409396-0-0		1	8/E POWER BUS BOARD			B-CS-5409396-0-1		1	CIRCUIT SCHEMATIC			
	B-CS-5409396-0-1		1	CIRCUIT SCHEMATIC			K-CO-5409396-0-4		1	X-Y COORDINATE HOLE LOCATION			
	K-CO-5409396-0-4		1	X-Y COORDINATE HOLE LOCATION			D-AH-5409396-0-5		1	ASSY DRILLING HOLE LOCATION			
	D-AH-5409396-0-5		1	ASSY DRILLING HOLE LOCATION			B-MH-5409396-0-6		1	MODULE ECO HISTORY			
	B-MH-5409396-0-6		1	MODULE ECO HISTORY		D-IA-5009395-0-0		1	FRCH BOARD 8/E				
D-IA-5009395-0-0		1	FRCH BOARD 8/E		4	D-CS-M7101-0-1		2	CONTROL				
4	D-CS-M7101-0-1		2	CONTROL			K-CO-M7101-0-4		1	X-Y COORDINATE HOLE LOCATION			
	K-CO-M7101-0-4		1	X-Y COORDINATE HOLE LOCATION			D-AH-M7101-0-5		1	ASSY DRILLING HOLE LOCATION			
	D-AH-M7101-0-5		1	ASSY DRILLING HOLE LOCATION			B-MH-M7101-0-6		1	MODULE ECO HISTORY			
	B-MH-M7101-0-6		1	MODULE ECO HISTORY		CUSTOMER PRINT SET		TITLE		OMNIBUS INTERFACE	SIZE CODE	NUMBER	REV
CUSTOMER PRINT SET		X = PRINT OF DOCUMENT INCLUDED IN PRINT SET		C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT		S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED		SHEET 3 OF 6		B	DD	DW8E-0	F

CUSTOMER PRINT SET		ELECTRICAL					CUSTOMER PRINT SET										
	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE		MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE		
		12	C-UA-BC05J-0-0		1	LINE SET 230V AC 4 AMP											
		13	D/AD-7012022-0-0		1	DW8E WIRED ASSY											
			A-PL-7012022-0-0		1	DW8E WIRED ASSY (PL)											
			A-WT-7012022-0-0		1	DW8E AWT REV STATUS											
			C-MD-7409056-0-0		1	OMNIGASTING (DNR-L)											
			E-SC-1210258-0-0		1	288 PIN CONNECTOR BLOCK(H863)											
			D-IA-7011926-0-0		1	HARNESS DC											
		14	D-IA-7009282-0-0		1	POWER SUPPLY ASSY											
			E-IA-7007279-0-0		1	TRANSFORMER ASSY											
			D-IA-7009280-0-0		1	HARNESS, D.C.											
			C-IA-7009452-0-0		1	THERMOSTAT ASSY											
		15	E-IA-5409728-0-0		1	REGULATOR BOARD											
			D-CS-5409728-0-1		1	REGULATOR BOARD FOR H740											
			K-CO-5409728-0-4		1	X-Y COORDINATE HOLE LOCATION											
			D-AH-5409728-0-5		1	ASSY/DRILLING HOLE LAYOUT											
			B-MH-5409728-0-6		1	MODULE ECO HISTORY											
			5009727		1	ETCHED CIRCUIT BOARD											
			A-SP-5409728-0-3		13	MANUFACTURING TEST PROCEDURE											
			A-SP-5409728-0-8		25	MANUFACTURING SPECIFICATION											
			A-SP-5409728-0-9		4	ASSEMBLY PROCEDURE											
			B-IP-5409728-0-10		3	INSPECTION PROCEDURE											
			A-PI-3700065-0-0		2	5409728 INTERPLANT/CUST. PKG.											
		16	D-UA-BC20A-0-0		1	LINE SET 115V											
		17	D-UA-BC20B-0-0		1	LINE SET 230V											
CUSTOMER PRINT SET CODES		X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED					TITLE		OMNIBUS INTERFACE		SHEET 4 OF 6		SIZE CODE		NUMBER		REV
											B DD		DW8E-0		F		

CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET		MECHANICAL				
	MFG. SET	FIG. NO.		NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE		MFG. SET	FIG. NO.		NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
1		D-UA-DW8E-Ø-Ø		6	UNIT ASSY DW8E			8	D-AD-7009287-0-0		1	POWER SUPPLY	
		C-PL-DW8E-Ø-Ø		2	UNIT ASSY DW8E (PL)				D-IA-7409376-0-0		2	CHASSIS (P.S.)	
		D-IA-7009155-0-0		1	HARNESS AC								
		D-IA-7009288-0-0		1	HARNESS DC								
		E-IA-7410650-0-0		2	CHASSIS			9	E-IA-5409728-0-0		1	REGULATOR BD ASSY	
		E-IA-7410740-0-0		3	CHASSIS				C-IA-7409375-0-0		1	BRKT SUPPORT ETCH BD	
		D-IA-7410751-0-0		1	COVER TOP								
		D-IA-7410748-0-0		1	COVER, REAR								
		C-MD-7407449-0-0		1	COVER, STRIP			10	C-UA-BCØ5H-Ø-Ø		1	LINE SET 115V AC 7 AMP PHASE	
		C-IA-7410749-0-0		1	STRAIN RELIEF CABLE								
		C-IA-7410768-Ø-Ø		1	FILTER SIDE			11	D-UA-H4ØØ-Ø-Ø		1	AC INPUT BOX ASSY	
		E-SC-1210065-0-0		1	BEZEL				A-PL-H4ØØ-Ø-Ø		1	AC INPUT BOX ASSY (PL)	
		C-SC-1209278-0-0		1	PANEL, FRONT				D-IA-5309845-0-0		1	BOX AC INPUT	
		C-IA-7410752-0-0		1	STRAIN RELIEF, EXPANDER				C-MD-5309849-0-0		1	COVER	
		A-DC-5309414-0-0		1	DECAL, UL APPROVAL				A-DC-5309899-0-0		1	PWR CTRL DECAL 115V	
		A-DC-7410910-0-0		1	CHASSIS, DECAL				C-IA-5409824-0-0		1	POWER CTRL BOARD 115V	
		A-DC-5309413-0-0		1	DECAL, NFPA, TYPE II								
		C-IA-7409424-0-0		1	FILTER, SIDE								
		D-IA-7409380-0-0		1	COVER			12	C-UA-BCØ5J-Ø-Ø		1	LINE SET 230V AC 4 AMP	
		D-IA-7409414-0-0		1	BRKT, CABLE TROUGH								
		C-IA-7409387-0-0		1	STRAIN RELIEF, CABLE								
		B-MD-7409025-0-0		1	PROTECTION PLATE								
		C-IA-7005820-0-0		1	CABE CONN TYPE WØ11 TO WØ21								
		B-AD-7010108-0-0		1	CONNECTOR J1								
								13	D-AD-7012022 0 0		1	DW8E WIRED ASSY	
									A-PL-7012022-0-0		1	DW8E WIRED ASSY (PL)	
									D-IA-7011926-0-0		1	HARNESS DC	
									C-MD-7409056-0-0		1	OMNICASTING (BMS-L)	
									E-SC-1210258-0-0		1	288 PIN CONNECTOR BLOCK (H803)	
2		D-AD-7009154-0-0		1	WIRED ASSY			14	D-AD-7009282-0-0		1	POWER SUPPLY ASSY	
		A-PL-7009154-0-0		2	WIRED ASSY (PL)				E-IA-7410746-0-0		1	CHASSIS POWER SUPPLY	
		C-MD-7409056-Ø-Ø		1	OMNICASTING (BMS-L)				A-DC-7410790-0-0		1	DECAL PDP8/M	
		E-SC-1210258-0-0		1	288 PIN CONNECTOR BLOCK (H803)								
3		D-IA-5409396-0-0		1	8/E POWER BOARD			15	E-IA-5409728-0-0		1	REGULATOR BD ASSY	
		D-IA-5009395-0-0		1	ETCH BOARD 8/E				C-IA-7409375-0-0		1	BRKT SUPPORT ETCH BD	

CUSTOMER PRINT SET CODES
X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

TITLE

OMNIBUS INTERFACE

SIZE CODE

B DD

NUMBER

DW8E-Ø

REV

F

CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET									
		MFG. SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE			MFG. SET	FIND NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	
			16		1	D-UA-BC20A-0-0	LINE SET, 115V									
					1	A-DC-5310438-0-0	PWR CONTROL DECAL (115V)									
					1	D-IA-5309845-0-0	BOX AC INPUT									
					1	C-MD-5310373-0-0	COVER, AC INPUT									
			17		1	D-UA-BC20B-0-0	LINE SET, 230V									
					1	A-DC-5310439-0-0	PWR CONTROL DECAL (230V)									
					1	D-IA-5309845-0-0	BOX AC INPUT									
					1	C-MD-5310373-0-0	COVER, AC INPUT									
			18		1	D-MD-7408861-0-0	SLIDE, CHASSIS-TRACK									
					1	D-SC-1209154-0-0	SLIDE, CHASSIS 22" TRACK									
CUSTOMER PRINT SET CODES		X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED					TITLE		SHEET 6 OF 6		SIZE CODE		NUMBER		REV	
							OMNIBUS INTERFACE		B DD		DW8E-0		F			

**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 4-26-73

TITLE DW8E FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ECO CHANGE	00008	LEARSON	DEC-75	<i>[Signature]</i>	12/5/75

ENG <i>[Signature]</i>	APPD <i>[Signature]</i>	SIZE A	CODE SP	NUMBER DW8E-0-9	REV A
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DEC FORM NO. DRA 108

SHEET 1 OF 4

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE DW8E FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

1. HARDWARE

1.1 Basic Configurations

DW8E-NC Neg. I/O Bus, 115 VAC, 50/60Hz
 DW8E-ND Neg. I/O Bus, 230 VAC, 50/60Hz
 DW8E-PC Pos. I/O Bus, 115 VAC, 50/60 Hz
 DW8E-FD Pos. I/O Bus, 230 VAC, 50/60 Hz

1.2 DW8E Expanders

DW8E-NX Neg. I/O Bus Expander Modules
 Used on DW8E-NC or ND
 DW8E-PX Pos. I/O Bus Expander Modules
 Used on DW8E-PC or PD

1.3 Required Cables

- 1.3.1 BC08B-7's are to be used on a positive bus; DM04, PDP-8L, or PDP-12.
- 1.3.2 BC08D-7's are to be used on a negative bus; DM01, PDP-8, PDP-8I, or Linc-8.
- 1.3.3 The PDP-8I can be positive or negative bus but requires BC08D cables. When a DM04 is installed on a positive bus PDP-8I, BC08B cables are required.

1.4 System Requirements

- 1.4.1 The processor must have at least 4K of Read/Write memory.
- 1.4.2 An ASR33 teletype, or equivalent.

1.5 Tools Required

- 1.5.1 Special tools are not required to install a DW8E, all tools necessary are included in the Field Service Tool Kit.
- 1.5.2 If the DW8E is mounted in a cabinet, pallet handling equipment may be necessary to position the cabinet in the final installation position.

ENG	APPD	SIZE A	CODE SP	NUMBER DW8E-0-9	REV A
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DEC FORM NO. DRA 108

SHEET 2 OF 4

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE DW8E FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

2. UNPACKING AND INSTALLING THE DW8E

- 2.1 Inventory all items on the DW8E Accessory List (A-AL-DW8E-10)
- 2.2 If the DW8E is packed in a separate container, remove it from the shipping container and install it in the appropriate cabinet using the rotating slide included.
- 2.3 Remove the top cover of the DW8E and ensure that all modules are installed in the proper locations according to the module utilization drawing (D-MU-DW8E-1).
- 2.4 Install the I/O, and Data Break cables using the following table:

BC08B Cables

	BAC	BMB	AC IN	DATA ADDR	DATA BITS
DW8-E	C20	C19	C18	C17 (D17)	C16 (D16)
DM04	B01	B02	B03	B06 B07	B08 B09
PDP-8L	D36	D35	D34	C36	C35
PDP-12	N14	N15	N16	N17	N18

(D17 & D16 are expander section Data Break Slots)

BC08D Cables

	BAC	BMB	AC IN	DATA ADDR	DATA BITS
DW8E	C20	C19	C18	C17 (D17)	C16 (D16)
DM01	D01 D02, D03 D04, D05, D06, D07 D08, D12, D13, D09 D10, D14 D15				
PDP-8	ME34 MF34, ME35 MF35, PE02 PF02, PE03 PF03, PE04 PF04,				
PDP-8I	J01 J02 J03 J04 J05 J06 J07 J08, J09 J10				
*Linc8	ME34 MF34, ME35 MF35, PE02 PF02, PE03 PF03, PE04 PF04				

*Data Terminal Panel data bit and data addr cables should be unplugged from PH04, PJ04, PH08, PJ08. If any data break device uses these cables via the panel they should be inserted into a DM01.

SIZE A	CODE SP	NUMBER DW8E-0-9	REV A
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DEC FORM NO. DRA 108

SHEET 3 OF 4

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE DW8E FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

2.5 Install the option(s) in the DW8E using;

- A. Module Utilization (D-MU-DW8E-1)
- B. The options installation and acceptance procedure.
- C. The interface section of the DW8E Engineering Specifications

2.6 With the power source OFF, plug the DW8E power cord into a switched AC power source which is controlled by the C.P.U.'s On-Off switch.

3. ACCEPTANCE

- 3.1 After all other system acceptance tests are completed, perform the acceptance tests for the option(s) plugged into the DW8E.
- 3.2 Record any discrepancies on the Acceptance Form.

NOTE: For cable routing see Engineering Specification A-SP-DW8E-12 pages 4 and 5 and also page 6 for ECO's to LINC-8 and PDP-8. The cable length is critical and the DW8-E should ideally be the first device on the I/O Bus (BAC, BMB & AC Input Mixer cables). When a Data Multiplexer (DM01 or DM04) is used, the Data Break cables (Data Address and Data Bits) should be in device level 0.

SIZE A	CODE SP	NUMBER DW8E-0-9	REV A
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DEC FORM NO. DRA 108

SHEET 4 OF 4

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DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ACCESSORY LIST

LEGEND

D DOCUMENT
DN DOCUMENT CHANGE NOTICE
PA PAPER TAPE ASCII
PB PAPER TAPE BINARY
PM PAPER TAPE READ-IN-MODE

QUANTITY / VARIATION

MADE BY *Ed Reed* CHECKED K.Quinn SECTION
DATE 3-27-73 DATE 3-27-73
ENG Ed Reed PROD R.Pooler ISSUED SECT.
DATE 3-27-73 DATE 3-27-73

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	DW8E-NA	DW8E-NB	DW8E-NX	DW8E-PA	DW8E-PB	DW8E-PX	KIT CHECK	INSTALLATION CHECK	
										BY	DATE
1	D-UA-DW8-E-0	DW8-E Assembly	1	1		1	1				
2	C-UA-BC05H-0-0	H400A lineset, 115VAC, 7 amp	1			1					
3	C-UA-BC05J-0-0	H400B lineset, 230VAC, 4 amp		1			1				
4	B-DD-DW8-E	DW8-E print set	1	1		1	1				
5	D-CS-M7101-0-1	M7101 control card	1	1	1	1	1	1			
6	D-CS-M7102-0-1	M7102 pos. I/O bus converter				4	4	4			
7	D-CS-M7103-0-1	M7103 neg. I/O bus converter	4	4	4						
8	D-CS-M8320-0-1	M8320 bus loads card	1	1	1	1	1	1			
9	D-MD-7409100-1-0	slides, chassis, rotating set	1	1		1	1				
10	BC08B-7	cable, flat black coax				*	*				
11	BC08D-7	Y-cable, flat black coax	*	*							
12	ECO#8M-00007	ECO to PDP-8. send only FOR PDP-8 INSTALLATION	1	1							
13	ECO#LINC8M-00008	ECO TO LINC-8 SEND ONLY FOR LINC-8 INSTALLATION	1	1							
NOTE: BC08B-7 cables are used with positive bus systems - DM04, PDP8, PDP12.											
BC08D-7 cables are used with negative bus systems - DM01, PDP8, PDP8I, LINC8.											
(CAUTION: A PDP8I can be positive or negative bus but requires BC08D cables.											
When a DM04 is installed on a Positive bus PDP8, BC08B cables are required.)											

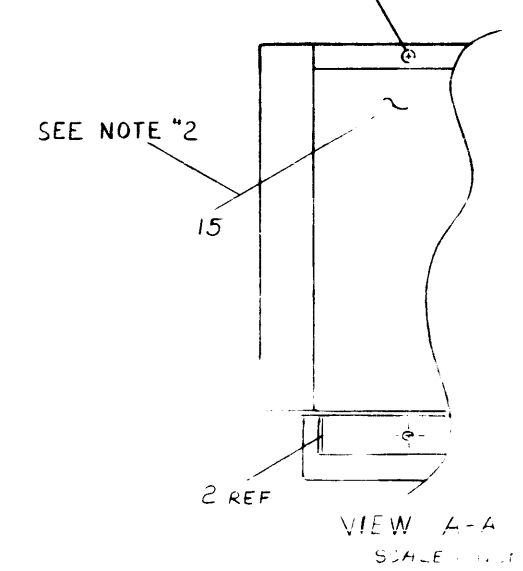
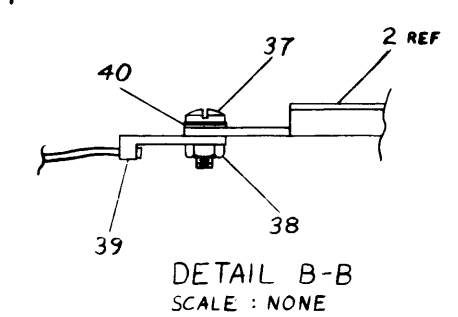
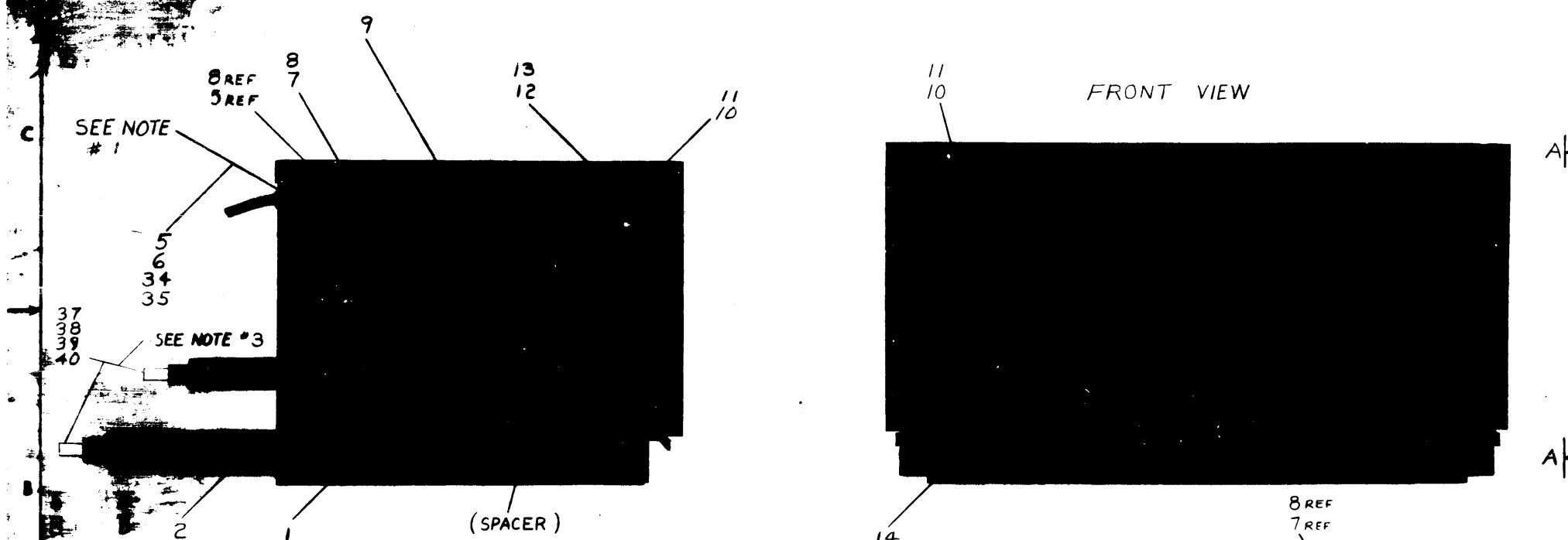
TITLE ACCESSORY LIST	ASSY. NO. D-UA-DW8-E-0	SIZE CODE A AL	NUMBER DW8E-0-10	REV =	ECO NO DW8E-00008
	SHEET 1 OF 1	DIST			

LEGEND	
NUMBER	VARIATION
DWB-E-NA	NEGATIVE BUS, 115 VAC
DWB-E-NB	NEGATIVE BUS, 230 VAC
DWB-E-NX	NEGATIVE BUS, EXPANDER; M7101, 1-M7103'S, M8320 ADDED TO NA OR NB
DWB-E-PA	POSITIVE BUS, 115 VAC
DWB-E-PB	POSITIVE BUS, 230 VAC
DWB-E-PX	POSITIVE BUS, EXPANDER; M7101, 4-M7102'S, M8320 ADDED TO PA OR PB

NOTES:
 1. MOUNTING HARDWARE VARIATION FOR ITEM 16 (FAN) ARE AS FOLLOWS

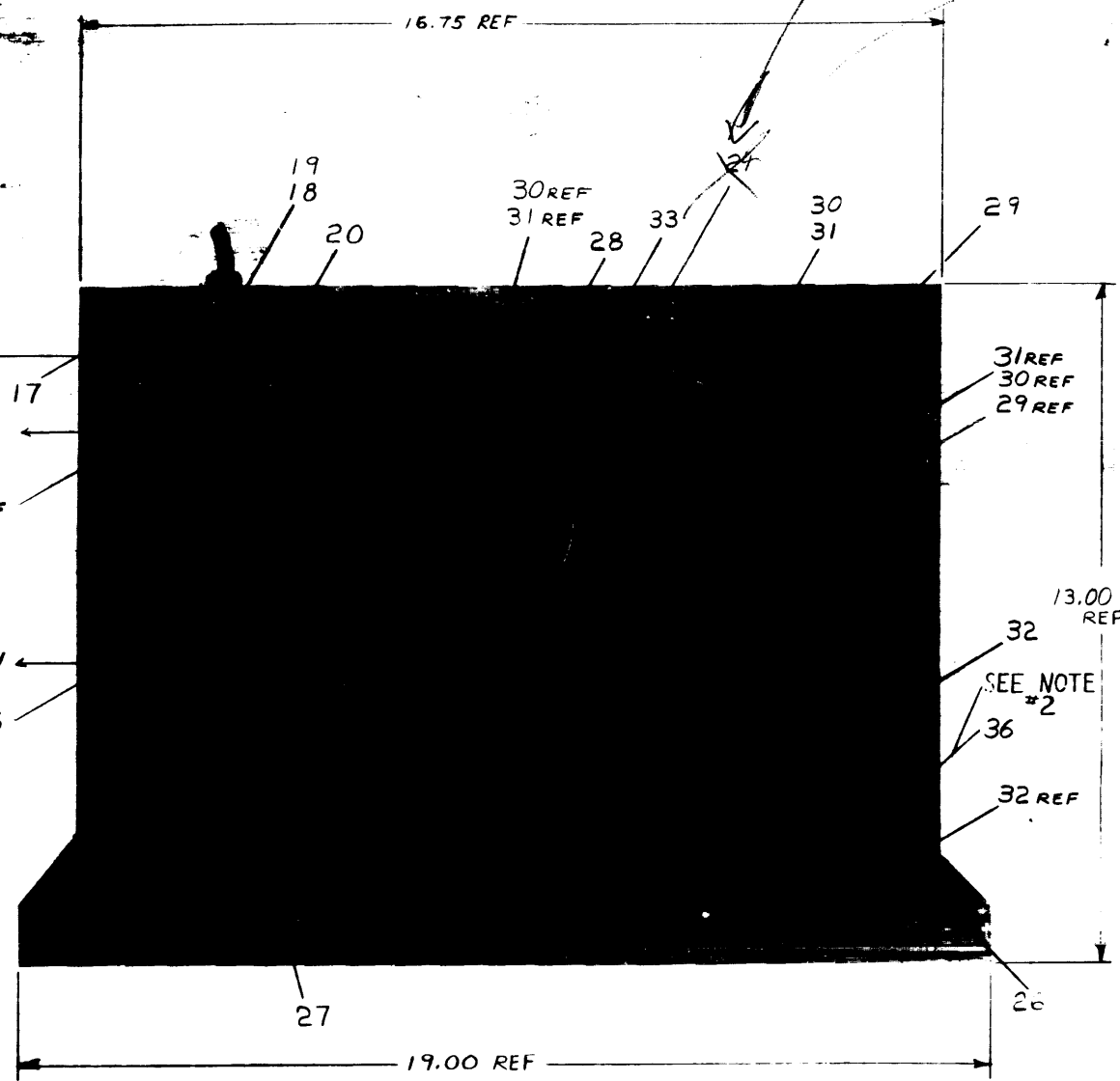
ITEM #16 (FAN)		MOUNTING HARDWARE	
ITEM NO	DESCRIPTION	ITEM NO	DESCRIPTION
1205033-1	ROTRON	34	MOUNTING CLIP
1205033-2	I M C	35	#8-32 X .38 SELF TAPPING SCR.

2. ITEM 15 f 36, SIDE FILTER, IS TO BE MOUNTED INSIDE BOX.
 3. ASSEMBLE AS SHOWN TO PROVIDE SHIPPING TIE-DOWN AND SLIDE-LOCK RELEASE.



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
DWBE			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		EQUIPMENT CORPORATION	
DECIMALS	ANGLES	TITLE	
XXX - .005	10° 30'	UNIT ASSY	
XX - .02		DWBE	
X - .1			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	REV.
	B-DD-DWBE-0	DUA	DWBE-0-0
FINISH	SCALE	SHEET	OF
		1	3

J. D. LEARSON
 15 Dec 75



SEE NOTE BELOW

AIRFLOW

16 REF

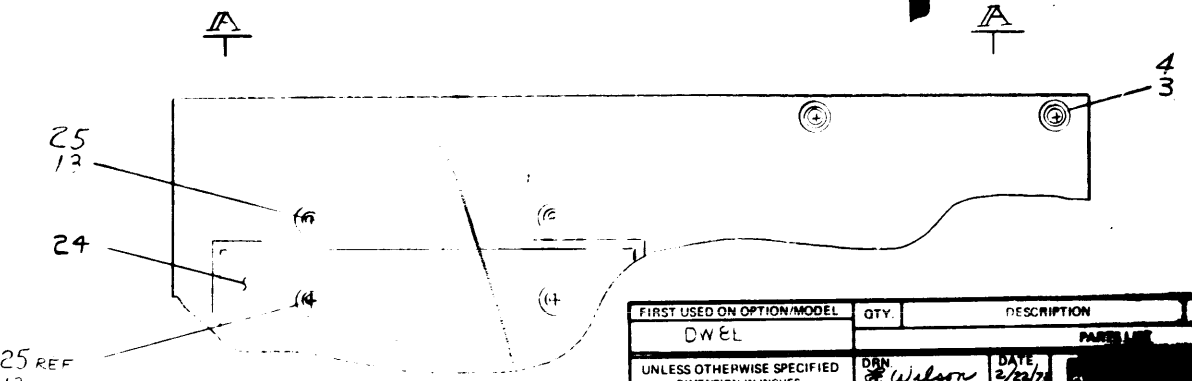
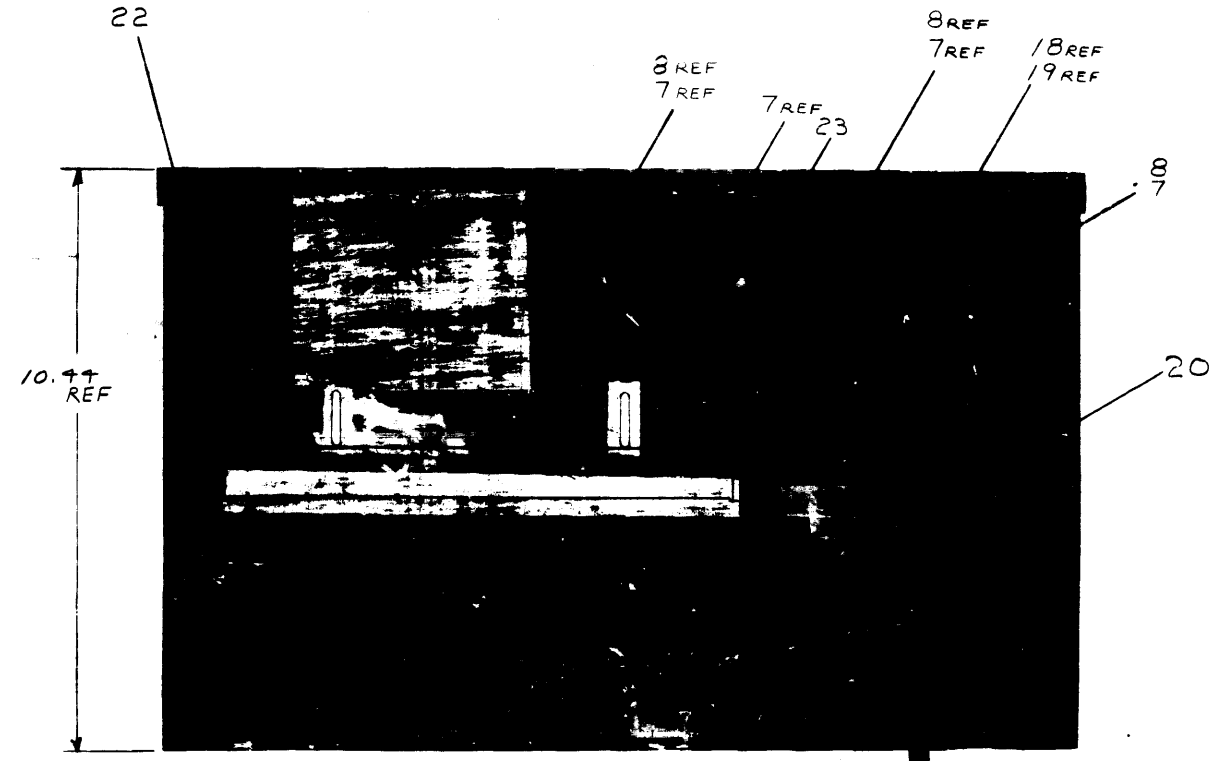
AIRFLOW

16

TOP VIEW WITH COVER (ITEM#9) & CABLE TROUGH (ITEM#17) REMOVED.

dim = 46 on New Box

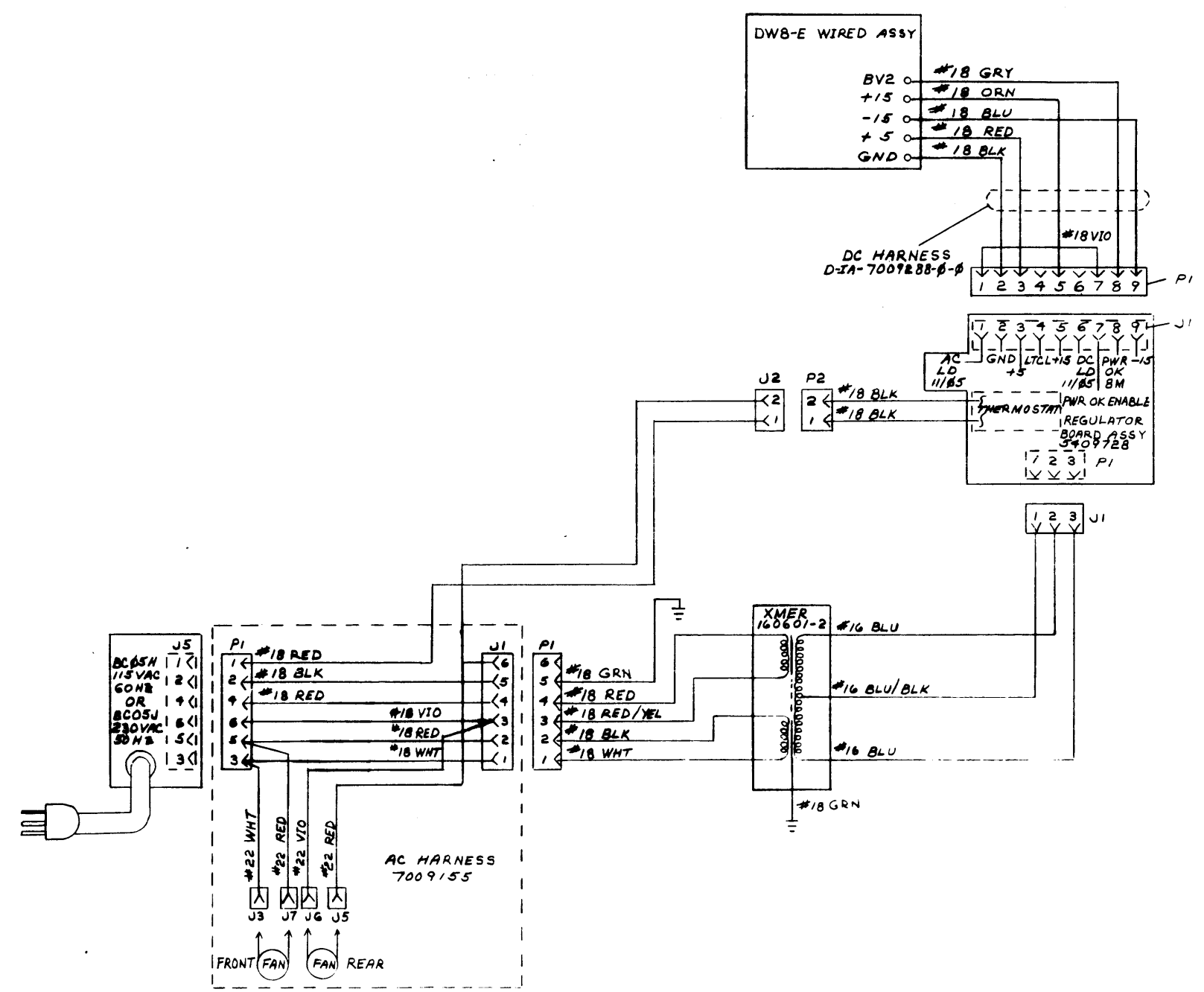
REAR VIEW



VIEW A-A (BOTTOM)
SCALE: NONE

old box

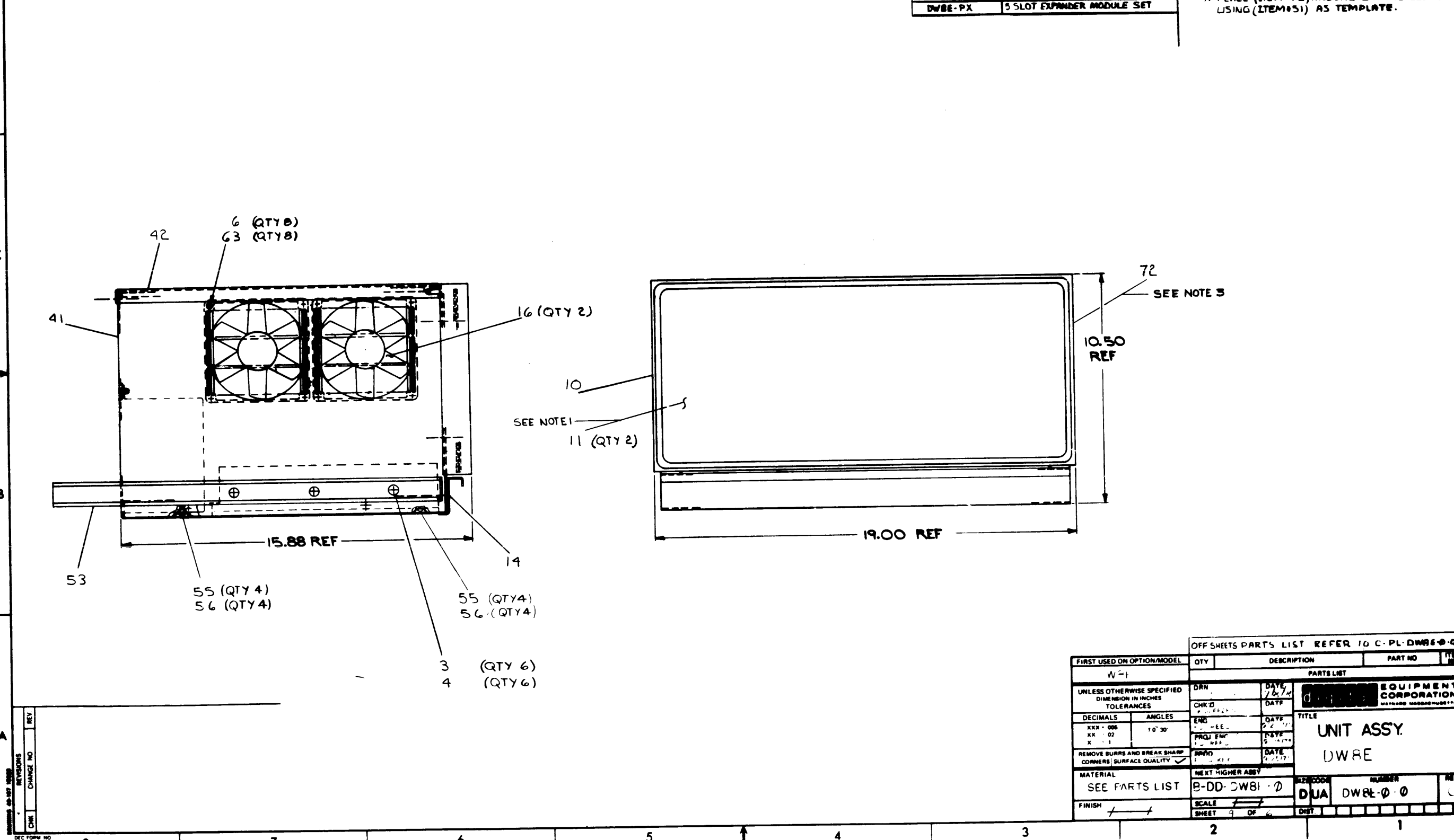
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
DWEL			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>Wilson</i> DATE <i>2/22/72</i> CHD <i>Wilson</i> DATE <i>3/1/72</i> ENG. <i>Wilson</i> DATE <i>3-2-72</i> PROU. ENG. <i>Wilson</i> DATE <i>3-2-72</i> PROU. <i>Wilson</i> DATE <i>4/1/72</i>	
DECIMALS	ANGLES	EQUIPMENT CORPORATION TITLE UNIT ASSY DWSE	
XXX - 006 .XX - 02 X - .1	± 0° 30'	SIZE CODE B-DD-DWSE-0	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		NUMBER DUA DWSE-0-0	
MATERIAL	NEXT HIGHER ASSY.	SHEET 2 OF 6	
FINISH	SCALE	DIST.	



REVISIONS		
CHK	DATE	BY

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LEGEND	
NUMBER	VARIATION
DWBE-NC	8 NEG. BUS TO OMNIBUS INTER. 115V
DWBE-ND	8 NEG. BUS TO OMNIBUS INTER. 220V
DWBE-NX	5 SLOT EXPANDER MODULE SET
DWBE-PC	8 POS. BUS TO OMNIBUS INTER. 115V
DWBE-PD	8 POS. BUS TO OMNIBUS INTER. 220V
DWBE-PX	5 SLOT EXPANDER MODULE SET

- NOTES:**
- ADHERE TWO PANELS (ITEM #1) TOGETHER USING ADHESIVE (ITEM #0).
 - FOR LOCATION OF MODULES (ITEM #0'S 29, 30, 31, 32) AND CABLE CONNECTOR (ITEM #70) SEE DRAWING D-MU-DWBE-0-1 (ITEM #68).
 - PLACE (ITEM #72) AROUND INTAKE SLOTS USING (ITEM #51) AS TEMPLATE.

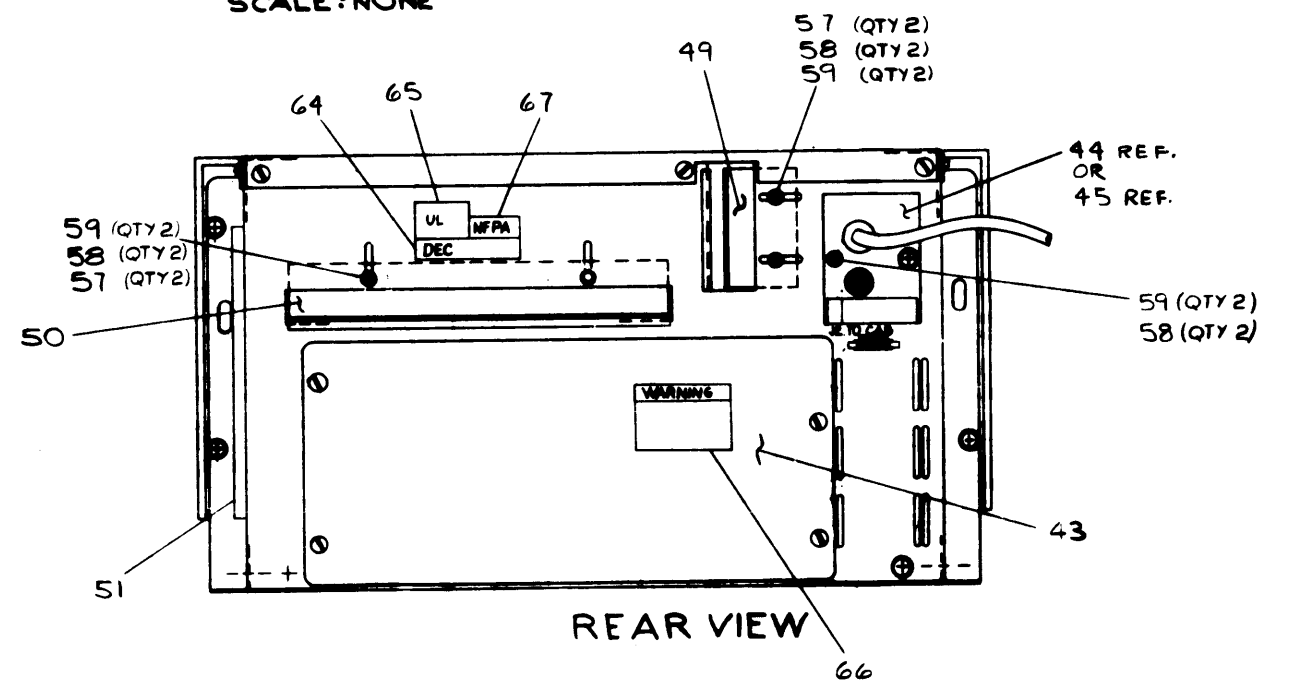
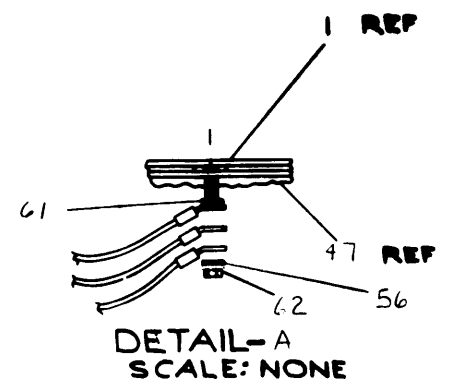
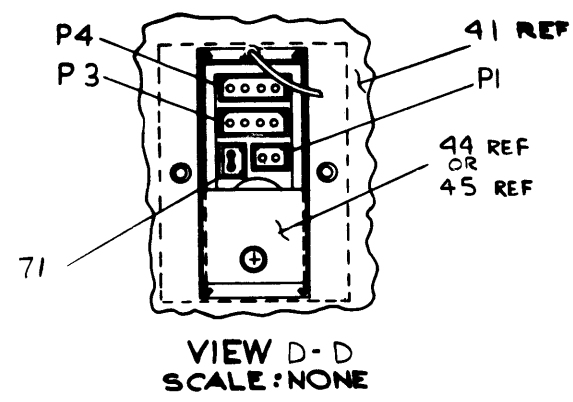
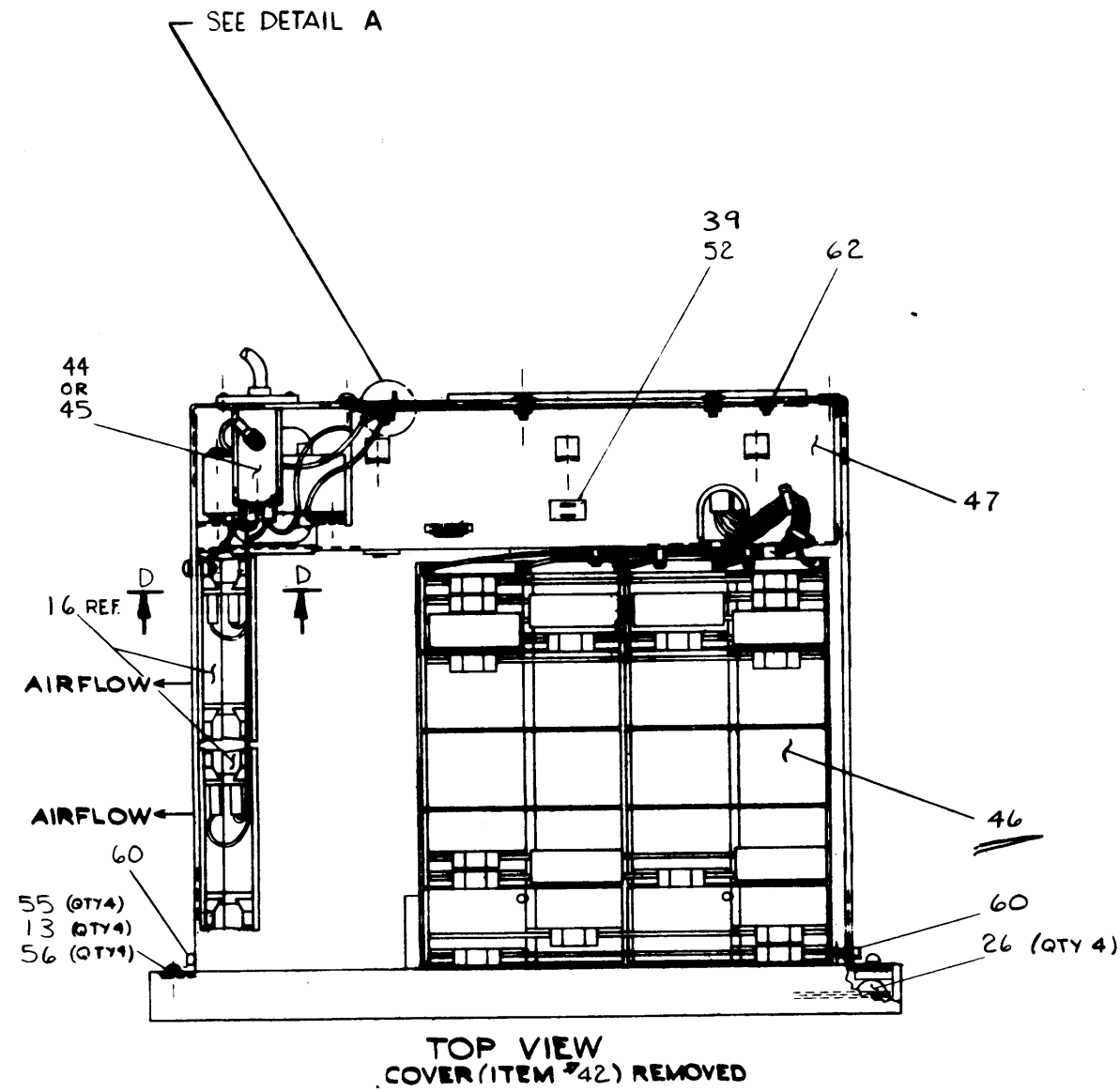
OFF SHEETS PARTS LIST REFER TO C-PL-DWBE-0-0			
FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO
W-1			
PARTS LIST			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN	DATE	EQUIPMENT CORPORATION MILWAUKEE, WISCONSIN 53211
DECIMALS	CHK'D	DATE	
ANGLES	ENG	DATE	TITLE
XXX - 006			UNIT ASSY.
XX - 02			DWBE
X - 1			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ ENG	DATE	
	DRN	DATE	
MATERIAL	NEXT HIGHER ASSY		
SEE PARTS LIST	B-DD-DWBE-0	REV	
FINISH	SCALE	DIST	
	SHEET 9 OF 6		

REV
CHANGE NO
CHK

DEC FORM NO 500 10-64

Check and verify all parts and quantities are correct before assembly. If any discrepancy is found, stop work immediately and report to the supervisor. Do not proceed until the discrepancy is corrected. Do not use parts from other assemblies. Do not use parts from other assemblies.

D
C
B
A



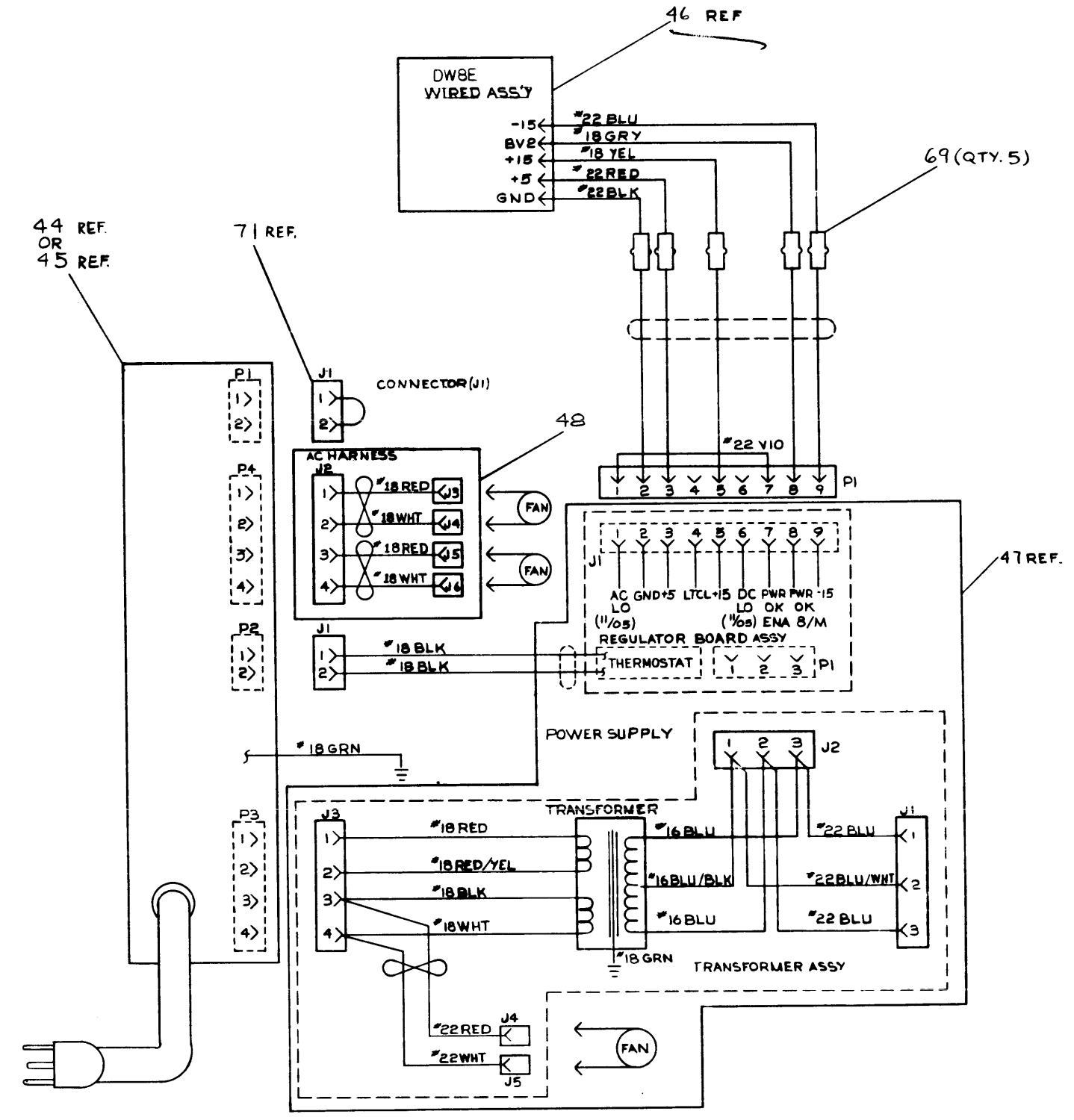
D
C
B
A

DW8E-0-0

REVISIONS		
CHK	CHANGE NO	REV

TITLE UNIT ASSY DW8E		SIZE CODE D UJA	NUMBER DW8E-0-0	REV C
SCALE	SHEET 5 OF 6	DIST		

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REVISIONS		
CHK	CHANGE NO	REV

TITLE	UNIT ASSY DW8E	SIZE CODE	DJA	NUMBER	DW8E-C-2	REV	C
SCALE	1:1	SHEET	6	OF	6	DIST.	

4

3

2

1

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ITEM NO.	PART NO.	DESCRIPTION	DWBE-NA	DWBE-NB	DWBE-NX	DWBE-PA	DWBE-PB	DWBE-PX	DWBE-NC	DWBE-ND	DWBE-PC	DWBE-PD
1	E-IA-7410650-0-0	CHASSIS, IWBE	1	1	-	1	1	-	-	-	-	-
2	D-MD-7409100-1-0	SLIDE, CHASSIS	1	1	-	1	1	-	-	-	-	-
3	9006071-03	SCR, PHL TRUSS HD #10-32 X .38 LG	4	4	-	4	4	-	6	6	6	6
4	9006636-00	WASHER, INT. TOOTH LOCK #10	4	4	-	4	4	-	6	6	6	6
5	9007793-04	SCR, SLTD BIND. HD #6-32 X .56 LG	11	11	-	11	11	-	-	-	-	-
6	9006560-00	NUT, KEPS #6-32 X .156	8	8	-	8	8	-	8	8	8	8
7	9006020-01	SCR, PHL PAN HD #6-32 X .25 LG	11	11	-	11	11	-	-	-	-	-
8	9007649-00	WASHER, EXT. TOOTH LOCK #6	10	10	-	10	10	-	-	-	-	-
9	D-IA-7409380-0-0	COVER	1	1	-	1	1	-	-	-	-	-
10	1210065-00	BEZEL	1	1	-	1	1	-	1	1	1	1
11	1209278-02	PANEL, FRONT	2	2	-	2	2	-	2	2	2	2
12	9006035-01	SCR, PHL PAN HD #8-32 X .25 LG	4	4	-	4	4	-	-	-	-	-
13	9006634-00	WASHER, INT. TOOTH LOCK #8	12	12	-	12	12	-	12	12	12	12
14	C-MD-7407449-0-0	COVER, STRIP	1	1	-	1	1	-	1	1	1	1
15	C-IA-7409424-0-0	FILTER, SIDE	1	1	-	1	1	-	-	-	-	-
16	1209403-01	FAN	2	2	-	2	2	-	2	2	2	2
17	D-IA-7409414-0-0	BRKT, CABLE TROUGH	1	1	-	1	1	-	-	-	-	-
18	C-UA-BC05H-0-0	LINE SET 115V, 7 AMP	1	-	-	1	-	-	-	-	-	-
19	C-UA-BC05J-0-0	LINE SET 230V, 5 AMP	-	1	-	-	1	-	-	-	-	-
20	D-AD-7009287-0-0	POWER SUPPLY ASSY	1	1	-	1	1	-	-	-	-	-
21	D-AB-7009154-0-0	DWBE WIRED ASSY	1	1	-	1	1	-	-	-	-	-
22	9008291-00	GROMMET, NYLON	A/R	A/R	-	A/R	A/R	-	-	-	-	-
23	C-IA-7409387-0-0	STRAIN RELIEF, CABLE	1	1	-	1	1	-	-	-	-	-
24	B-MD-7409025-0-0	PROTECTION PLATE	1	1	-	1	1	-	-	-	-	-
25	9006039-01	SCR, PHL PAN HD #8-32 X .50 LG	8	8	-	8	8	-	-	-	-	-
26	9008525-00	BUMPER, RUBBER	4	4	-	4	4	-	4	4	4	4
27	D-IA-7009155-0-0	HARNESS, AC	1	1	-	1	1	-	-	-	-	-
28	D-IA-7009288-0-0	HARNESS, DC	1	1	-	1	1	-	-	-	-	-
29	D-CS-M7101-0-1	CONTROL	1	1	1	1	1	1	1	1	1	1
30	D-CS-M7102-0-1	POS I/O BUS CONV.	4	4	4	-	-	4	4	-	-	-
31	D-CS-M7103-0-1	NEG I/O BUS CONV.	-	-	-	4	4	4	-	4	4	-
32	D-CS-M8320-0-1	BUS LOADS	1	1	1	1	1	1	1	1	1	1
33	9008442-00	STRAIN RELIEF	1	1	-	1	1	-	-	-	-	-
34	9008202-00	MTG CLIP	8	8	-	8	8	-	-	-	-	-
35	9006121-06	SCR, POZIDRIVE FIL. HD #8-32 X .38 LG	8	8	-	8	8	-	-	-	-	-
36	9008875-02	FASTENER, TAPE (LOOP)	A/R	A/R	-	A/R	A/R	-	-	-	-	-
37	9006072-03	SCR, PHL TRUSS HD #10-32 X .44 LG	2	2	-	2	2	-	-	-	-	-
38	9006565-00	NUT, KEPS #10-32	2	2	-	2	2	-	-	-	-	-
39	9007033-00	TIE, CABLE	2	2	-	2	2	-	4	4	4	4
40	9006664-00	WASHER, FLAT .437 ODX.218 IDX.062 THK	4	4	-	4	4	-	-	-	-	-
41	E-IA-7410740-0-0	CHASSIS	-	-	-	-	-	-	1	1	1	1
42	D-IA-7410751-0-0	COVER, TOP	-	-	-	-	-	-	1	1	1	1
43	D-IA-7410748-0-0	COVER, REAR	-	-	-	-	-	-	1	1	1	1

D

D

C

C

B

B

A

A

REVISIONS

REV.	CHG	NO.	DATE
C		0008	

CHK: J. D. LEARSON
DATE: 12/15/75

DRN - MILES V	10/17/75	FIRST USED ON	DWBE
CHK'D - SLEEZE I	10/17/75		
ENG. F. REF.	10/17/75	TITLE	UNIT ASSY DWBE
PROJ. ENG. FILE	1/11/75		
PROD. - A Y-C	1/11/75		
NEXT HIGHER ASSY.			
D-UA-DWBE-0-0		SIZE CODE	NUMBER
SCALE		C PL	DWBE-0-0
SHEET 1 OF 2		DIST.	

4

3

2

1

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ITEM NO.	PART NO.	DESCRIPTION	DWBE-NA	DWBE-NB	DWBE-NX	DWBE-PA	DWBE-PB	DWBE-PX	DWBE-NC	DWBE-ND	DWBE-PC	DWBE-PD
44	D-UA-BC2#A-#6-#	LINE SET 115V	-	-	-	-	-	-	1	-	1	-
45	D-UA-BC2#B-#6-#	LINE SET 230V	-	-	-	-	-	-	-	1	-	1
46	D-AD-7012022-0-0	WIRED ASSY (DWBE)	1	1	1	1	1	1	1	1	1	1
47	D-AD-7009282-0-0	POWER SUPPLY ASSY	-	-	-	-	-	-	1	1	1	1
48	D-IA-7010107-0-0	HARNES, AC	-	-	-	-	-	-	1	1	1	1
49	C-IA-7410749-0-0	STRAIN RELIEF, CABLE	-	-	-	-	-	-	1	1	1	1
50	C-IA-7410752-0-0	STRAIN RELIEF, EXPANDER	-	-	-	-	-	-	1	1	1	1
51	C-IA-7410768-0-0	FILTER, SIDE	-	-	-	-	-	-	1	1	1	1
52	9008264-00	CABLE TIE, MOUNT	-	-	-	-	-	-	4	4	4	4
53	D-MD-7408861-0-0	SLIDE, CHASSIS	-	-	-	-	-	-	1	1	1	1
54	9007594-00	ADHESIVE	-	-	-	-	-	-	R	A	RA	RA
55	9006037-01	SCR, PHL PAN HD #8-32 X .38 LG	-	-	-	-	-	-	12	12	12	12
56	9006666-00	WASHER, FLAT .500 OD X .187 ID X .032THK	-	-	-	-	-	-	13	13	13	13
57	9006653-00	WASHER, FLAT .375 OD X .156 ID X .032THK	-	-	-	-	-	-	4	4	4	4
58	9006633-00	WASHER, INT. TOOTH LOCK #6	-	-	-	-	-	-	6	6	6	6
59	9006022-01	SCR, PHL PAN HD #6-32 X .38 LG	-	-	-	-	-	-	6	6	6	6
60	9007882-08	SCR, SOC HD CAP. #6-32 X .38 LG	-	-	-	-	-	-	2	2	2	2
61	9008072-00	WASHER, EXT TOOTH LOCK #8	-	-	-	-	-	-	1	1	1	1
62	9006563-00	NUT, KEPS #8-32	-	-	-	-	-	-	2	2	2	2
63	9007794-01	SCR, PHL PAN HD #6-32 X .69 LG	-	-	-	-	-	-	8	8	8	8
64	9008141-01	SERIAL TAG	-	-	-	-	-	-	1	1	1	1
65	A-DC-5309414-0-0	DECAL, UL APPROVAL	-	-	-	-	-	-	1	1	1	1
66	A-DC-7410910-0-0	CHASSIS DECAL	-	-	-	-	-	-	1	1	1	1
67	A-DC-5309413-0-0	DECAL, NFPA, TYPE II	-	-	-	-	-	-	1	1	1	1
68	D-MU-DWBE-#-1	MODULE UTILIZATION	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
69	9009110-00	MALE CONNECTOR	-	-	-	-	-	-	5	5	5	5
70	C-IA-7005820-3-0	CABLE CONN TYPE W#11 TO W#21	-	-	-	-	-	-	5	5	5	5
71	B-AD-7010108-0-0	CONNECTOR J1	-	-	-	-	-	-	1	1	1	1
72	9009547-01	FASTENER, TAPE (LOOP)	-	-	-	-	-	-	A	RA	RA	RA
73	A-PL-DWBE-#-15	SHIPPING LIST	1	1	1	1	1	1	1	1	1	1

REV.	
CHANGE NO.	
CHK	

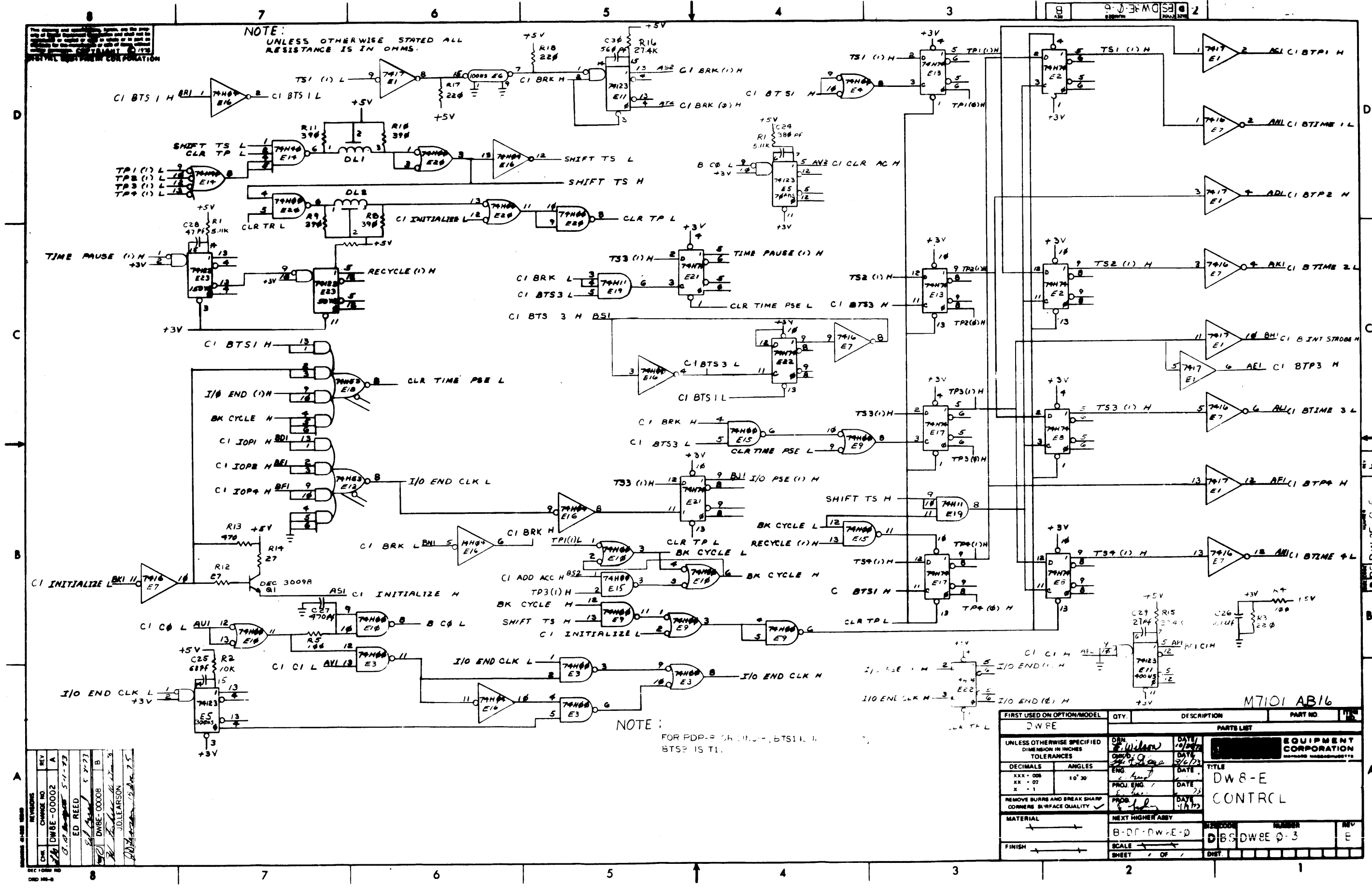
DRN: JILSON	10/17/75	FIRST USED ON	DWBE	
CHK'D: GLEEZEN	10/17/75	TITLE	UNIT ASSY DWBE	
ENG. ED: REED	10/17/75	SIZE	C	CODE
PROJ. ENG. ED: REED	10/17/75	NUMBER	DWBE-#-#	
PROD. F: LASKEY	10/17/75	REV.	C	
NEXT HIGHER ASSY.		SHEET	2	OF 2
D-UA-DWBE-#-#		DIST.		

D
C
B
A

REV. C
DWBE-#-#

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NOTE:
UNLESS OTHERWISE STATED ALL
RESISTANCE IS IN OHMS.



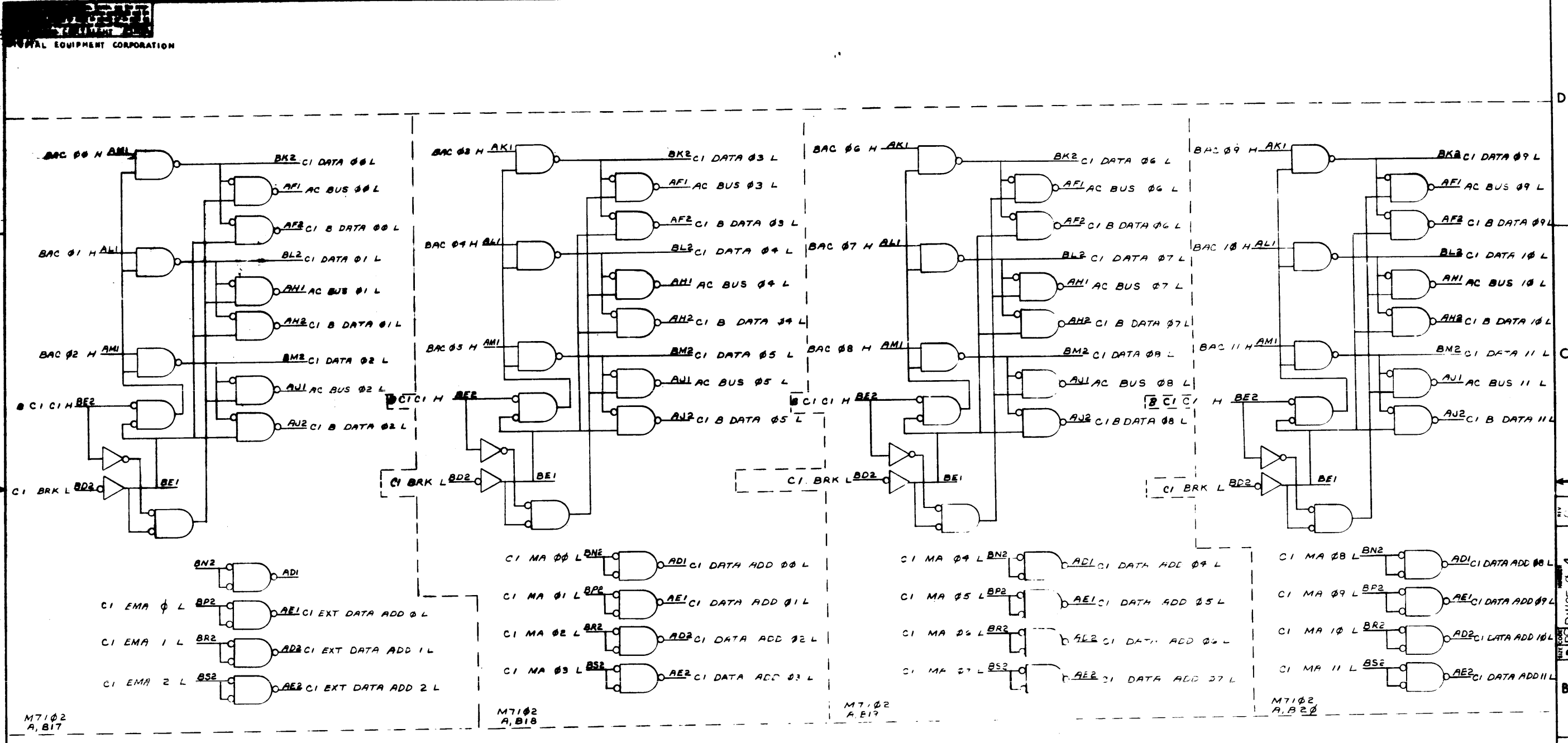
NOTE:
FOR PDP-9 (S1101, S111, S112, S113, S114, S115, S116, S117, S118, S119, S120) IS T1.

REV	NO	DATE	BY
1	A	10/24/72	W. J. Wilson
2	B	11/2/72	W. J. Wilson
3	C	11/2/72	W. J. Wilson
4	D	11/2/72	W. J. Wilson

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.
DWRE			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES			
DECIMALS	ANGLES	DATE	
XXX - 008	10° 30'	DATE	
XX - 02		DATE	
X - 1		DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL		NEXT HIGHER ASSY	REV
		B-DP-DWRE-0	E
FINISH		SCALE	SHEET
		OF	OF

M7101 AB16

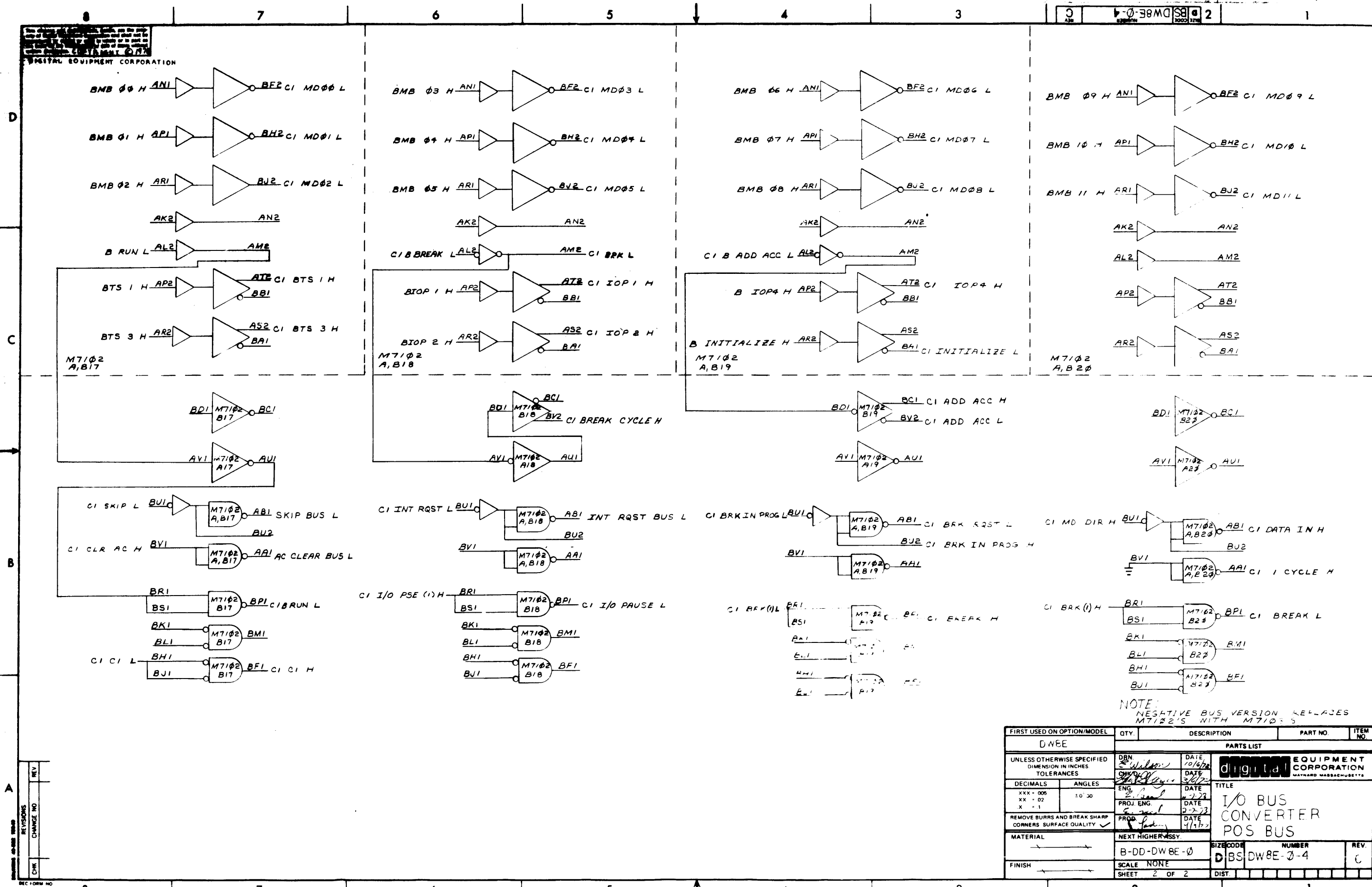
EQUIPMENT CORPORATION
DWRE-C-6



NOTE:
NEGATIVE BUS VERSION REPLACES
M7102'S WITH M7103'S

REV	DATE	BY	CHKD
1	5-1-73	J. D. LEARSON	
2	5-1-73	J. D. LEARSON	
3	5-1-73	J. D. LEARSON	
4	5-1-73	J. D. LEARSON	
5	5-1-73	J. D. LEARSON	
6	5-1-73	J. D. LEARSON	
7	5-1-73	J. D. LEARSON	
8	5-1-73	J. D. LEARSON	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DW8E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN S. Wilson	DATE 10/1/72	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
DECIMALS ANGLES		CHKD S. Wilson	DATE 3/7/73	
XXX - 005 ±0°30'		ENG S. Wilson	DATE 8-7-73	
XX - 02		PROJ. ENG. S. Wilson	DATE 2-2-73	
X - 1		PROD. S. Wilson	DATE 4/6/73	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER BUSY.		SIZE CODE	NUMBER
FINISH	SCALE NONE		DBSDW8E-0-4	REV. C
SHEET OF 2		DIST.		



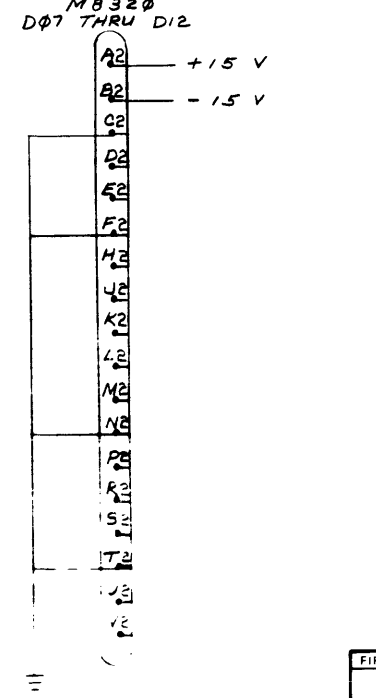
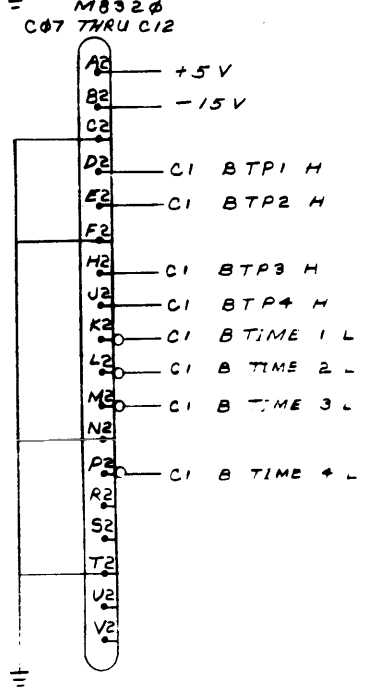
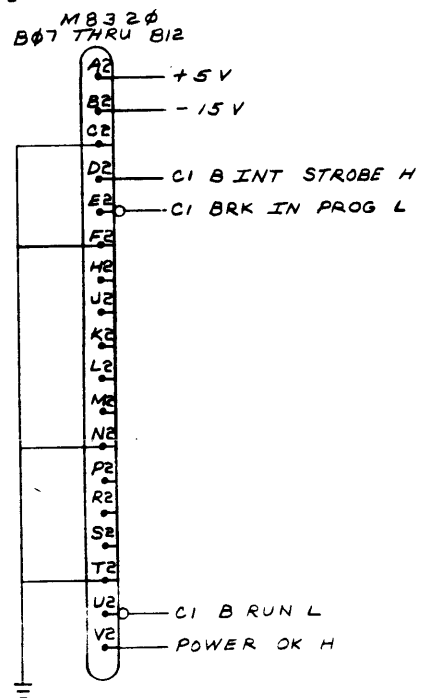
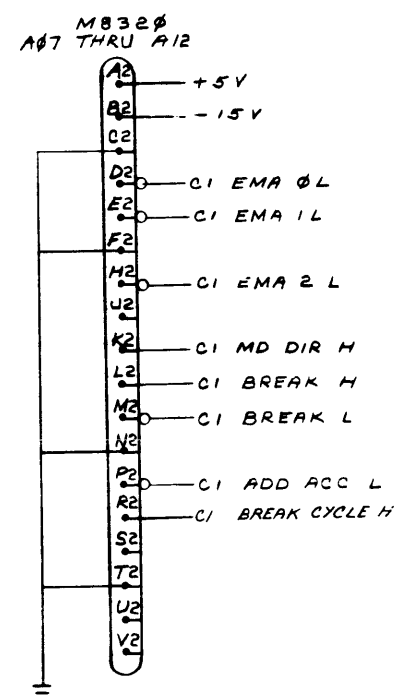
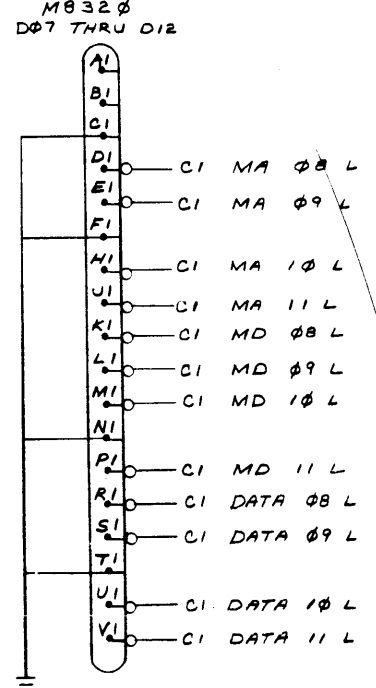
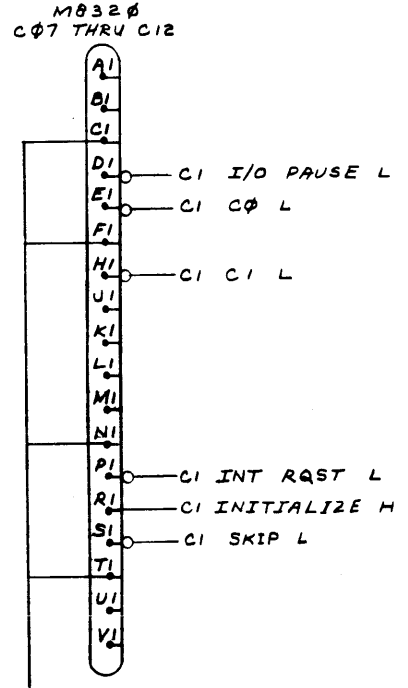
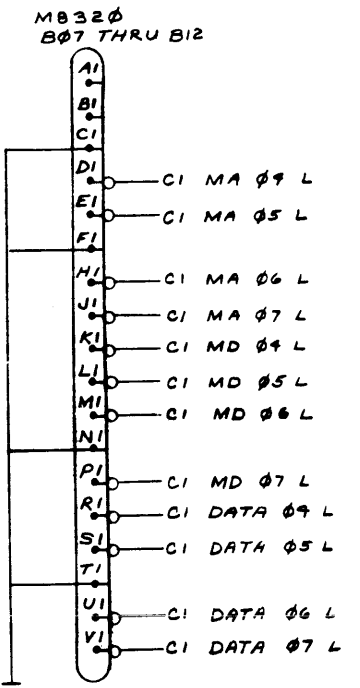
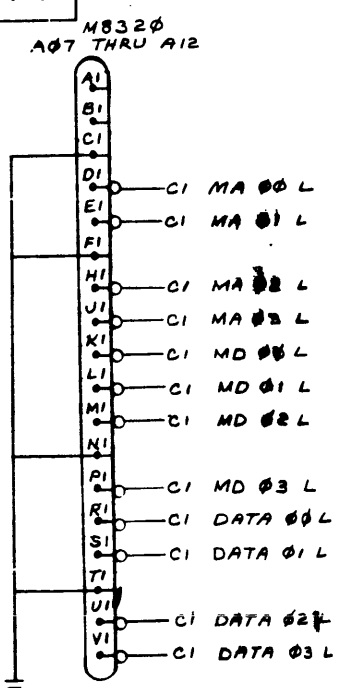
REV	NO
CHG	NO
CHK	NO
REV	NO
CHG	NO
CHK	NO

NOTE:
NEGATIVE BUS VERSION REFLECTS
M7102'S WITH M7103'S

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DW8E				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX - 005	10' 30	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS		
XX - 02		TITLE		
X - 1		I/O BUS CONVERTER POS BUS		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
NEXT HIGHER ASSY.				
B-DD-DW8E-0				
SCALE NONE				
SHEET 2 OF 2				
SIZE CODE NUMBER B-BS-DW8E-0-4				
REV. C				

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NOTES:
1. THE SIGNAL NAMES OF AN OPTION WHICH ARE PLUGGED INTO THE CONVERTER SECTION WILL ASSUME THE PREFIX "CI"



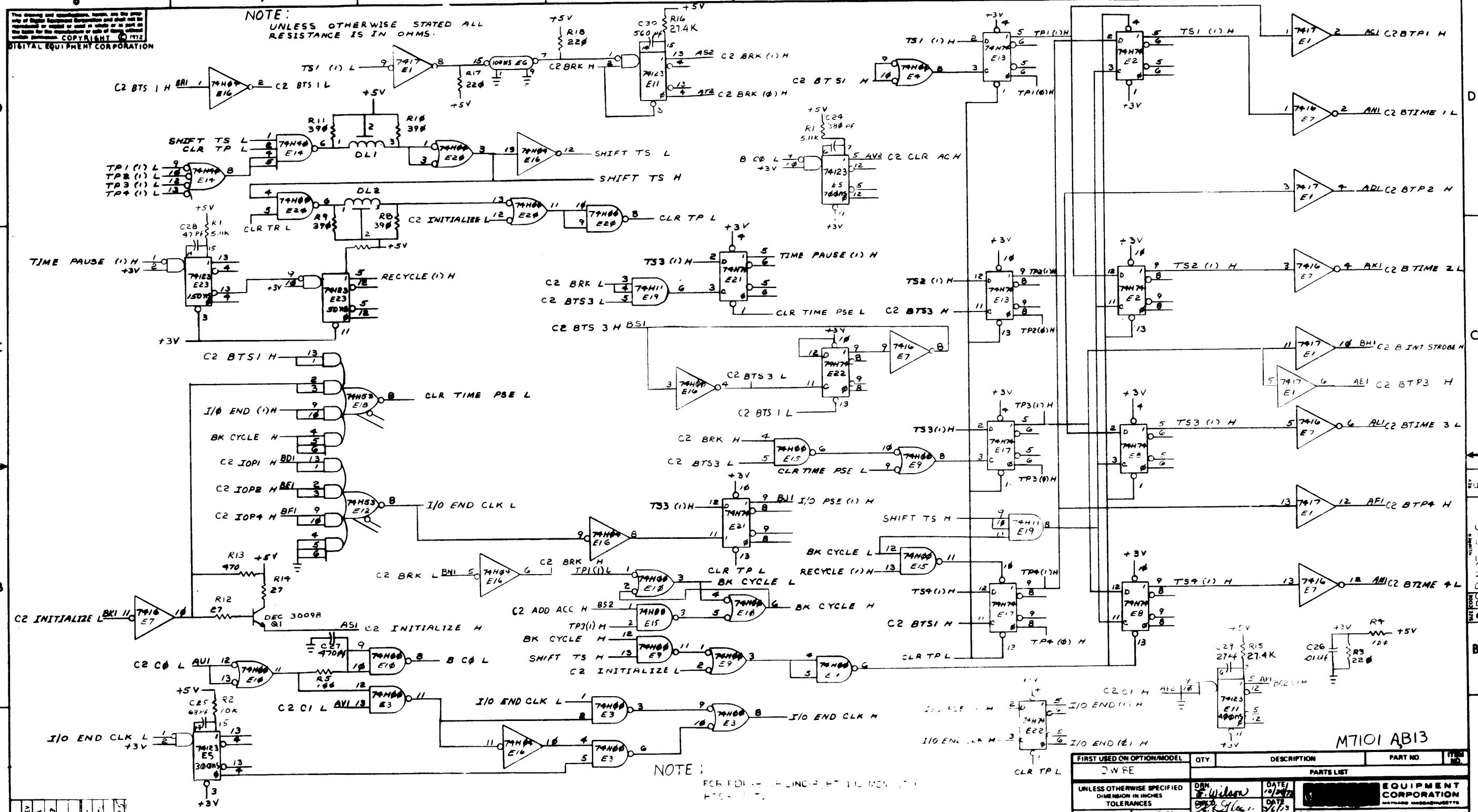
REV	DATE	BY	CHK'D	DATE
1	5-1-73	J. D. LEARSON		
2	5-1-73	J. D. LEARSON		
3	5-1-73	J. D. LEARSON		
4	5-1-73	J. D. LEARSON		
5	5-1-73	J. D. LEARSON		
6	5-1-73	J. D. LEARSON		
7	5-1-73	J. D. LEARSON		
8	5-1-73	J. D. LEARSON		

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.								
DW8E												
PARTS LIST												
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES:												
DECIMALS	ANGLES	TITLE										
.xxx ± .005	° 0' 30"	I/O BUS CONVERTER SIGNALS										
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY 1		<table border="1"> <tr> <td>DA</td> <td>2/1/73</td> </tr> <tr> <td>DATE</td> <td>3/16/73</td> </tr> <tr> <td>DATE</td> <td>2/2/73</td> </tr> <tr> <td>DATE</td> <td>4/19/73</td> </tr> </table>			DA	2/1/73	DATE	3/16/73	DATE	2/2/73	DATE	4/19/73
DA	2/1/73											
DATE	3/16/73											
DATE	2/2/73											
DATE	4/19/73											
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV								
	B-CI-DW8E-0	DIC	DW8E-0-5	C								
FINISH	SCALE	SHEET	OF	DIST.								
		1	1									

D I C DW8E-0-5

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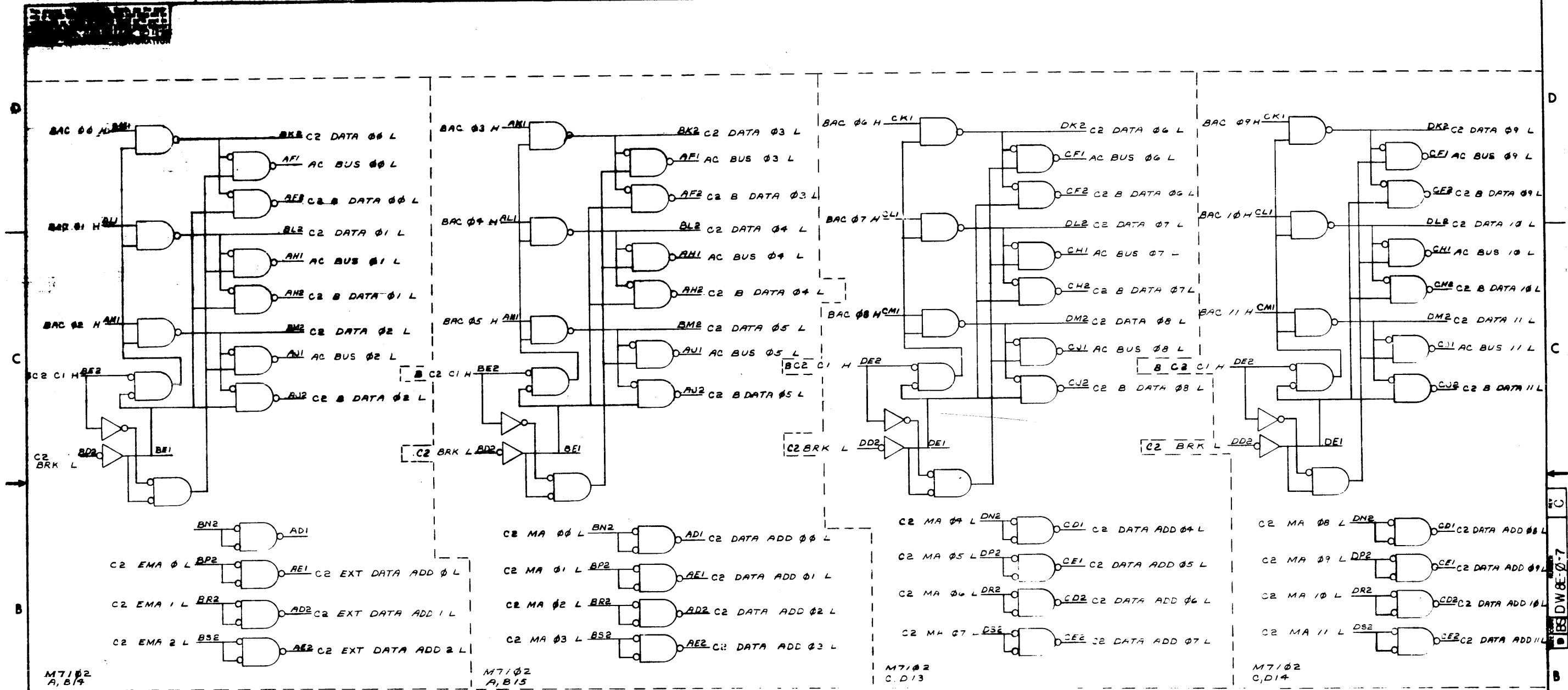
NOTE:
UNLESS OTHERWISE STATED ALL RESISTANCE IS IN OHMS.



NOTE:
FOR EDGE TRIGGERING SET TO MODE 1
FIG. 1-1

REV	CHG	DATE	BY	APP
1				
2				
3				
4				
5				
6				
7				
8				

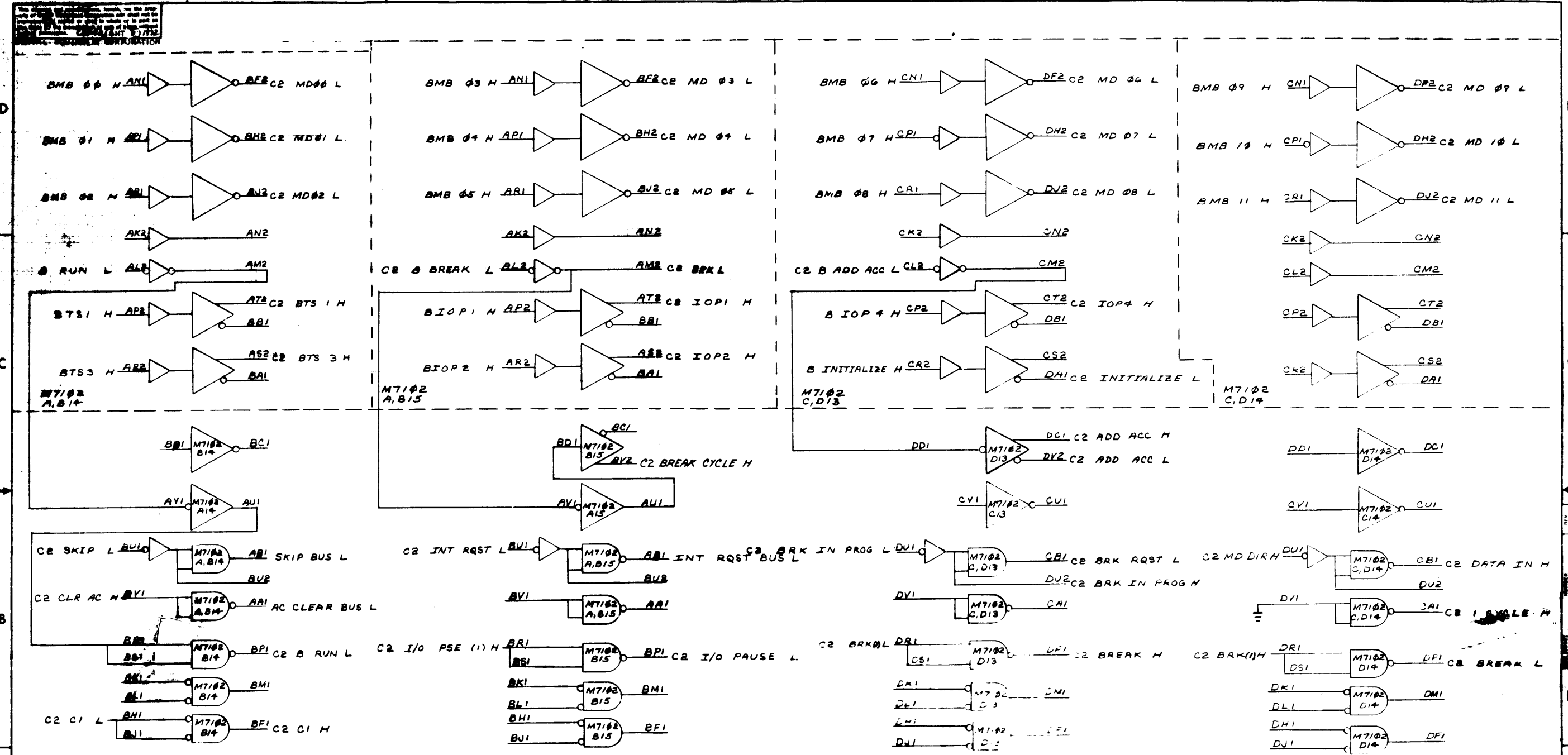
FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
DWRE				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	ENG	DATE	
XXX - 000	10° 30'	PROJ	DATE	
XX - 00		PROD	DATE	
X - 0		PROD	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY	SIZE CODE	NUMBER	REV
	B 00-DWRE-0	D	BSDWRE-0-6	R
FINISH	SCALE	SHEET	OF	
		1	OF 1	



NOTE:
NEGATIVE BUS VERSION REPLACES
M7102'S WITH M7103'S

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DWRE				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>S. Wilcox</i>	DATE 10/11/73	EQUIPMENT CORPORATION MATTING HOLLOWAY DRIVE
DECIMALS	ANGLES	ENG <i>S. Wilcox</i>	DATE 10/11/73	
.XX - .02	±0° 30'	PROJ. ENG. <i>S. Wilcox</i>	DATE 10/11/73	
X - 1		PROB. <i>S. Wilcox</i>	DATE 10/11/73	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓				
MATERIAL		NEXT HIGHER ASSY.		
FINISH		B-UD-DWRE-0		
SCALE NONE		DDBS DW8E-0-7		
SHEET 1 OF 2		DST.		

REV	DATE	BY	DESCRIPTION
A	5-1-73	J.D. LEARSON	REVISED
B	5-1-73	J.D. LEARSON	REVISED
C	5-1-73	J.D. LEARSON	REVISED



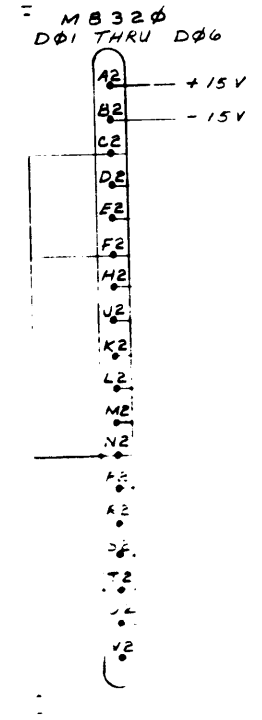
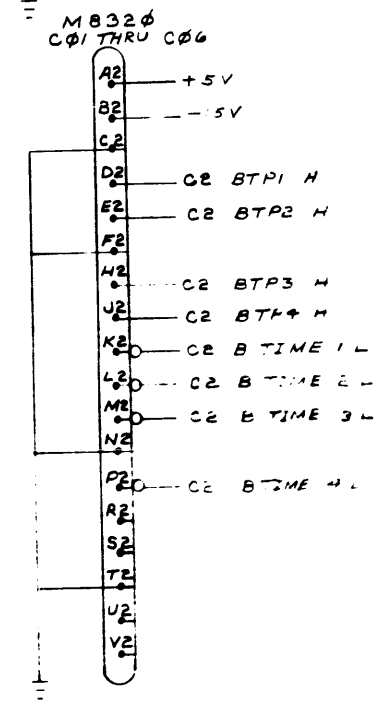
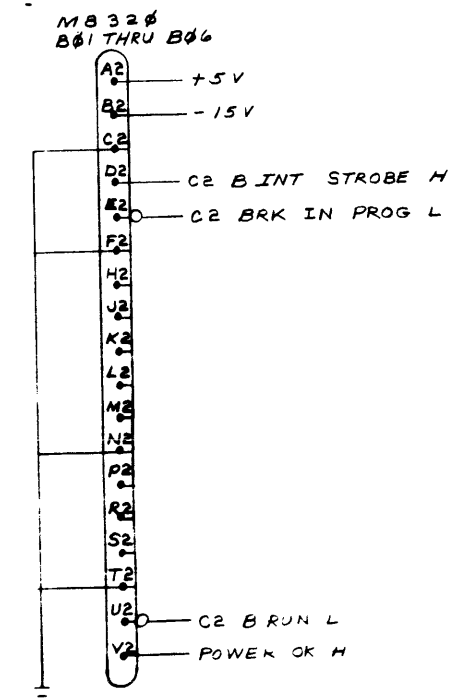
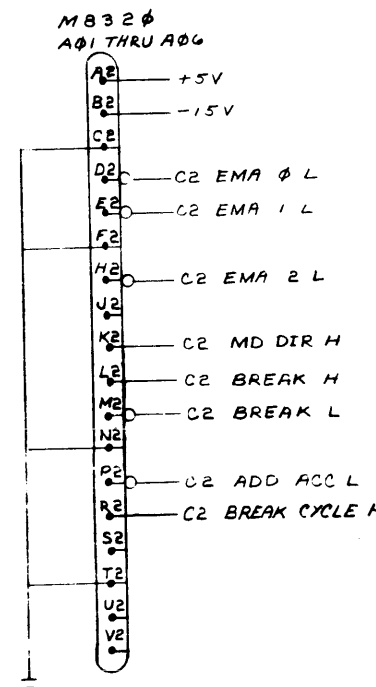
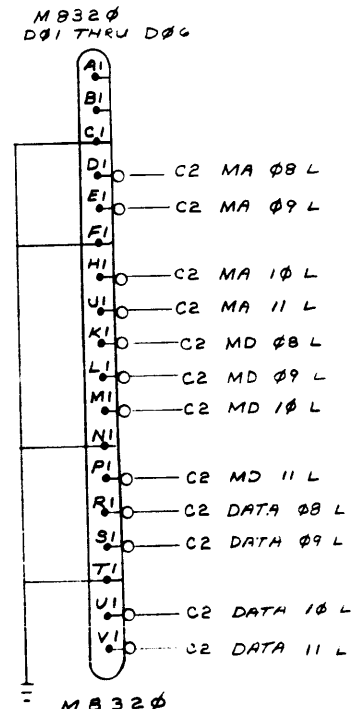
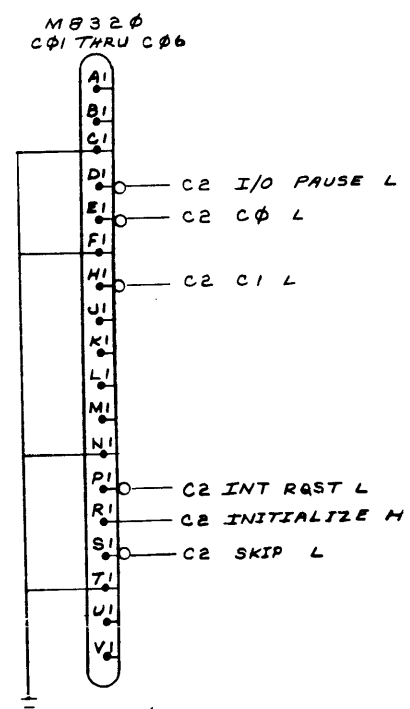
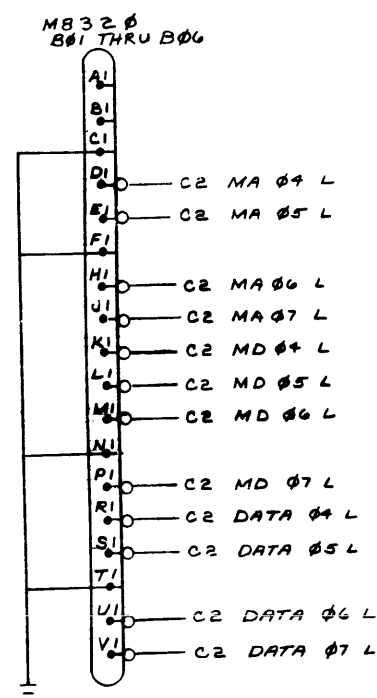
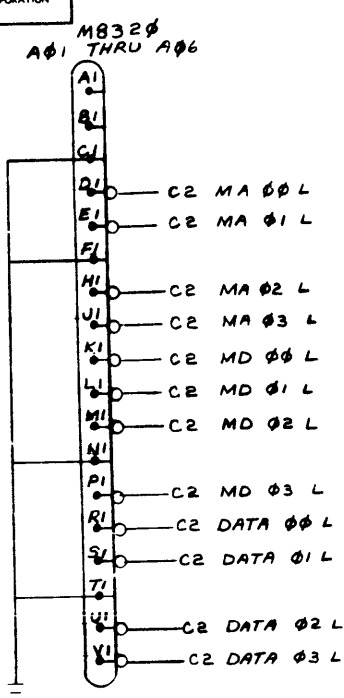
NOTE:
NEGATIVE BUS VERSION REPLACES
M7102'S WITH M7103'S.

REV	CHG	CHARCT NO	REVISIONS

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DW8E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DBN B. Wilson	DATE 10/3/72	 EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS ANGLES	ENG S. Reed	DATE 12/72		
XXX - 008 XX - 02 X - 1	PROJ ENG S. Reed	DATE 2/72	TITLE 1/0 BUS EXPANDER POS BUS	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD S. Reed	DATE 4/72		
MATERIAL	NEXT HIGHER LSTY	SIZE CODE	NUMBER	REV.
FINISH	B-DD-DW8E-0	D	DBS DW8E-0-7	C
SCALE NONE	SHEET 2 OF 2	DIST.		

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NOTES:
 1. THE SIGNAL NAMES OF AN OPTION WHICH IS PLUGGED INTO THE EXPANDER SECTION WILL ASSUME THE PREFIX "C2"



REV	DATE	BY	CHKD
1	5-1-73	J.D. LEARSON	
2	5-16-73	J.D. LEARSON	
3	7-12-73	J.D. LEARSON	
4	8-16-73	J.D. LEARSON	
5	8-16-73	J.D. LEARSON	
6	8-16-73	J.D. LEARSON	
7	8-16-73	J.D. LEARSON	
8	8-16-73	J.D. LEARSON	

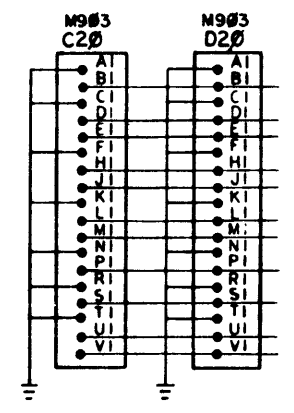
FIRST USED OR OPT. MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
[WFE]				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IS IN INCHES	DRN	DATE	digital EQUIPMENT CORPORATION	
TOLERANCES	CHKD	DATE	MAINE, MASSACHUSETTS	
DECIMALS ANGLES	ENG.	DATE	TITLE	
.xx .005 .030	PROJ. ENG.	DATE	I/O BUS EXPANDER SIGNALS	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY 1	PROD.	DATE	REV	
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH			DIC DW8E-φ-8	C
	SCALE		DIST.	
	SHEET	OF		

D I C DW8E-φ-8

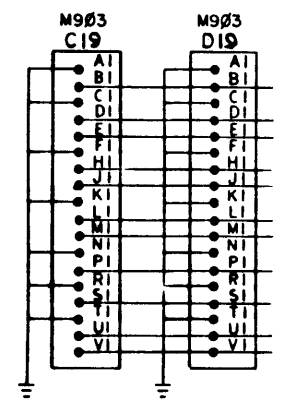
B

A

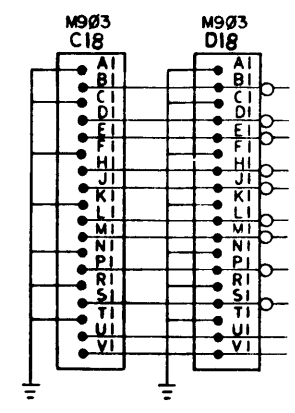
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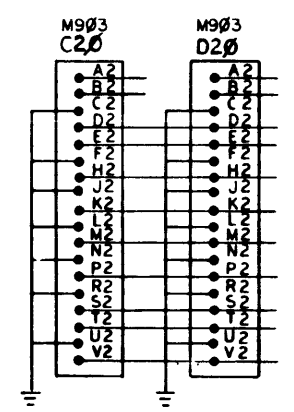
- BAC 00 (1) H
- BAC 01 (1) H
- BAC 02 (1) H
- BAC 03 (1) H
- BAC 04 (1) H
- BAC 05 (1) H
- BAC 06 (1) H
- BAC 07 (1) H
- BAC 08 (1) H



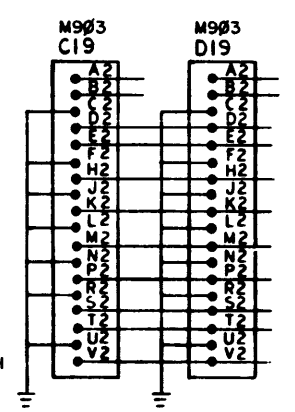
- BMB 00 (1) H
- BMB 01 (1) H
- BMB 02 (1) H
- BMB 03 (0) H
- BMB 03 (1) H
- BMB 04 (0) H
- BMB 04 (1) H
- BMB 05 (0) H
- BMB 05 (1) H



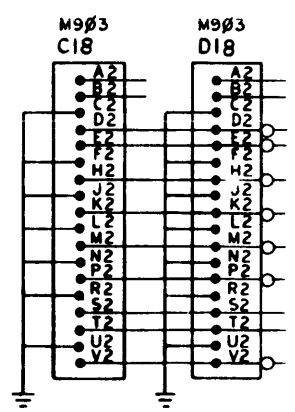
- AC 00 BUS L
- AC 01 BUS L
- AC 02 BUS L
- AC 03 BUS L
- AC 04 BUS L
- AC 05 BUS L
- AC 06 BUS L
- AC 07 BUS L
- AC 08 BUS L



- BAC 09 (1) H
- BAC 10 (1) H
- BAC 11 (1) H
- BIOP1 H
- BIOP2 H
- BIOP4 H
- BTS 3 (1) H
- BTS 1 (1) H
- B INITIALIZE H



- BMB 06 (0) H
- BMB 06 (1) H
- BMB 07 (0) H
- BMB 07 (1) H
- BMB 08 (0) H
- BMB 08 (1) H
- BMB 09 (1) H
- BMB 10 (1) H
- BMB 11 (1) H



- AC 09 BUS L
- AC 10 BUS L
- AC 11 BUS L
- SKIP BUS L
- INT RQST BUS L
- AC CLEAR BUS L
- B RUN L
- B TT INST H *
- LINE MUX L *

NOTES:
 1. SIGNALS MARKED WITH AN ANTERISK ARE NOT USED IN PDP 8/L BUT RESERVED FOR SPECIFIC USE IN PDP 8/I.
 2. ~~DC08A IN C15 USED ONLY ON A PDP 8 OR LINC 8 AND ADD IC02 FROM C15T2 TO GND.~~

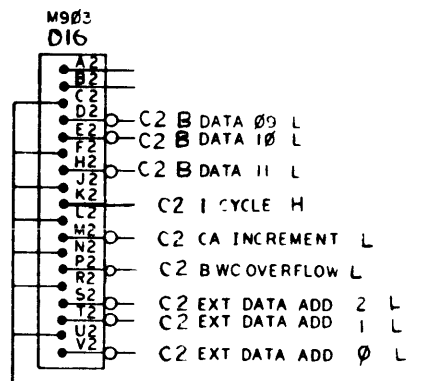
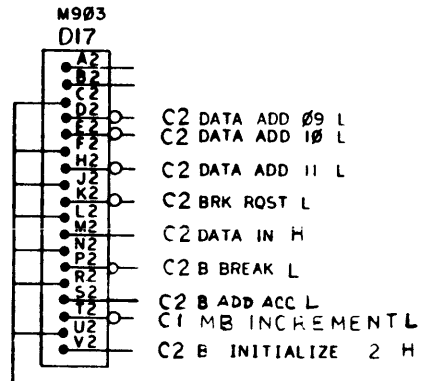
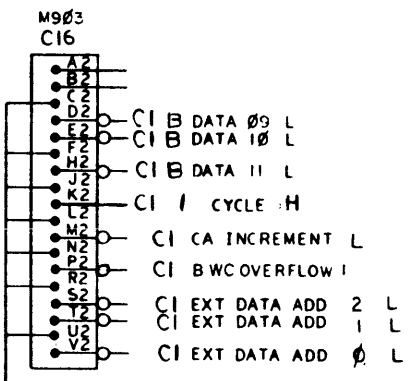
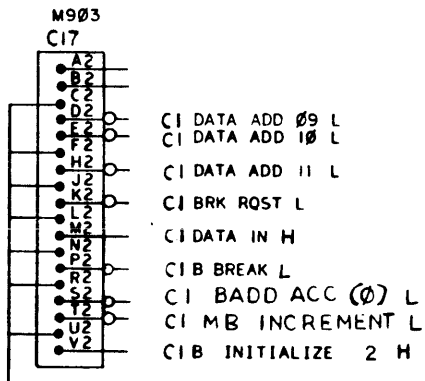
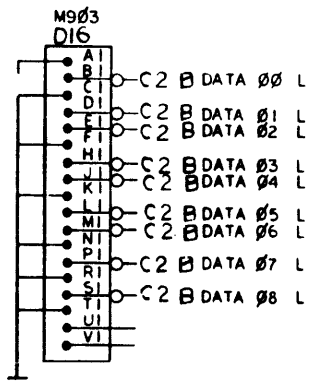
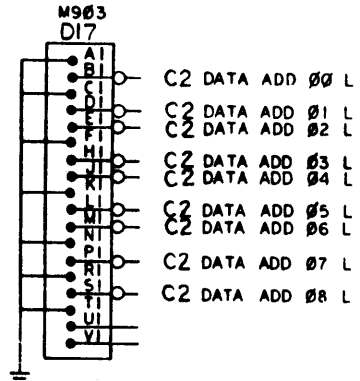
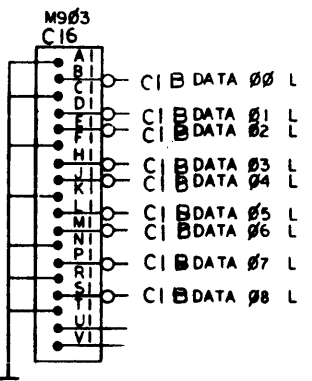
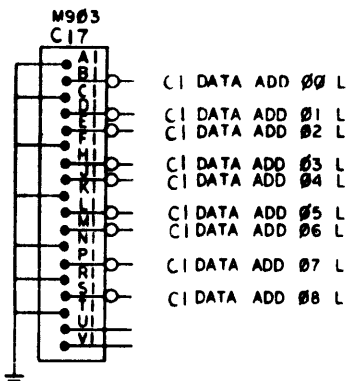
REV. NO.	REV.
1	A
2	B
ED REED	
J.D. LEARSON	

FIRST USED ON OPTION/MODEL
 DWBE

DO NOT SCALE DRAWING
 UNLESS OTHERWISE SPECIFIED
 DIMENSION IN INCHES
 TOLERANCES
 DECIMALS FRACTIONS ANGLES
 ± .005 ± .006 ± 0'30"
 FINAL SURFACE FINISH
 REMOVE BURRS AND BREAK SHARP CORNERS
 MATERIAL
 FINISH

QTY	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			
DIGITAL EQUIPMENT CORPORATION			
TITLE: 1/0 CONNECTORS			
NEXT-HIGHER ASSY: B-DD-DWBE-0			
SCALE: 1 OF 2			
SITE CODE: DWBE-0-2			
REV. B			

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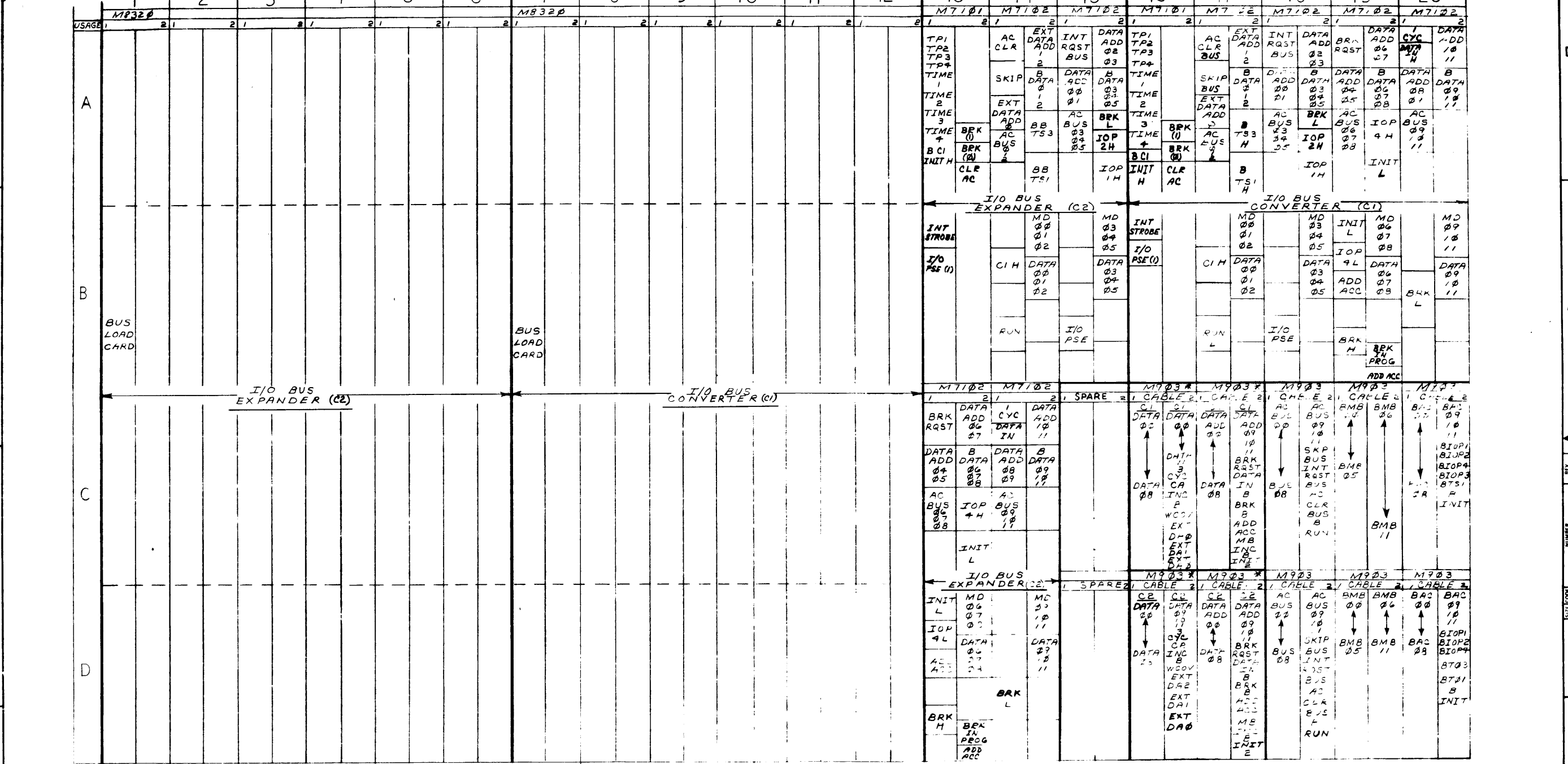
REV	
CHANGE NO	
CHK	

FIRST USED ON OPTION/MODEL
DW 8 E

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS FRACTIONS ANGLES
± .005 ± .004 ± .020
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP EDGES

QTY.	DESCRIPTION	PART NO	ITEM NO
PARTS LIST			
		DIGITAL EQUIPMENT CORPORATION	
		TITLE	
		I/O CONNECTORS	
		NEXT HIGHER ASSY	
		F-11-DW 8 E-0	
		SCALE	
		SHEET 2 OF 2	
		SITE CODE NUMBER REV	
		CIC DW 8 E J-2 B	

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- NOTE:
1. IN NEGATIVE BUS VERSION THE M7102'S ARE REPLACED BY M7103'S
 2. * DATA CABLES IN C16 AND C17 ARE FOR I/O BUS CONVERTER (C1) DATA CABLES IN D16 & D17 ARE FOR I/O BUS EXPANDER
 3. ~~SC08-A CABLE IN C15~~ FOR RDP-8 OR ~~SC08-B ONLY~~
 4. QUAD-SLOTS 07-12 AND SLOTS A,B16-A,B20 ARE THE BASIC CONVERTER SECTION. (SIGNAL NAMES PREFIXED BY "C")
 5. QUAD-SLOTS 01-06 AND SLOTS A,B13-A,B15 & C,D13-C,D14 ARE THE EXPANDER SECTION. (SIGNAL NAMES PREFIXED BY "E")

REV	CHANGE NO	DATE	BY
A	00002	5-2-72	J.D. LEARSON
B	00008	5-1-73	J.D. LEARSON
C	00008	5-1-73	J.D. LEARSON
D	00008	5-1-73	J.D. LEARSON

QTY	DESCRIPTION	PART NO.	ITEM NO.															
	PARTS LIST																	
	<table border="1"> <tr> <td>DRN</td> <td>DATE</td> <td>12/31/72</td> </tr> <tr> <td>CHKD</td> <td>DATE</td> <td>3/1/73</td> </tr> <tr> <td>ENG</td> <td>DATE</td> <td>2-2-73</td> </tr> <tr> <td>PROJ ENG</td> <td>DATE</td> <td>2-2-73</td> </tr> <tr> <td>PRD</td> <td>DATE</td> <td>4/4/73</td> </tr> </table>			DRN	DATE	12/31/72	CHKD	DATE	3/1/73	ENG	DATE	2-2-73	PROJ ENG	DATE	2-2-73	PRD	DATE	4/4/73
DRN	DATE	12/31/72																
CHKD	DATE	3/1/73																
ENG	DATE	2-2-73																
PROJ ENG	DATE	2-2-73																
PRD	DATE	4/4/73																
	<table border="1"> <tr> <td colspan="2">NEXT HIGHER ASSY</td> <td>NUMBER</td> <td>REV.</td> </tr> <tr> <td colspan="2">B-LD-DW8E-0</td> <td>D MU DW 8E-0-1</td> <td>B</td> </tr> </table>			NEXT HIGHER ASSY		NUMBER	REV.	B-LD-DW8E-0		D MU DW 8E-0-1	B							
NEXT HIGHER ASSY		NUMBER	REV.															
B-LD-DW8E-0		D MU DW 8E-0-1	B															
	<table border="1"> <tr> <td>SCALE</td> <td>NONE</td> </tr> <tr> <td>SHEET</td> <td>OF</td> </tr> </table>			SCALE	NONE	SHEET	OF											
SCALE	NONE																	
SHEET	OF																	

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
PARTS LIST

QUANTITY / VARIATION

MADE BY E. REED
DATE 3/6/73
ENG [Signature]
DATE 3-6-73

CHECKED KENT GLEEZEN
DATE
PROD [Signature]
DATE 3/14/73

SECTION
ISSUED SECT.

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION
1	M7101	CONTROL
2	M7102	I/O BUS CONVERTER POS.
3	M7103	I/O BUS CONVERTER NEG.
4	M8320	BUS LOADS


DW8E-N	DW8E-P	DW8E-NX	DW8E-PX									
1	1	1	1									
-	4	-	4									
4	-	4	-									
1	1	1	1									

TITLE: MODULE UTILIZATION ASSY NO: B-DD-DW8E-0 SIZE CODE: A PL NUMBER: DW8E-0-1 REV: B ECO NO: DW8E-00008
 SHEET 1 OF 1 DIST.

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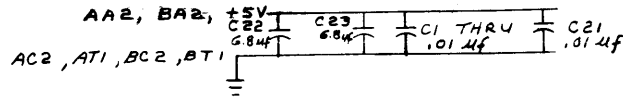
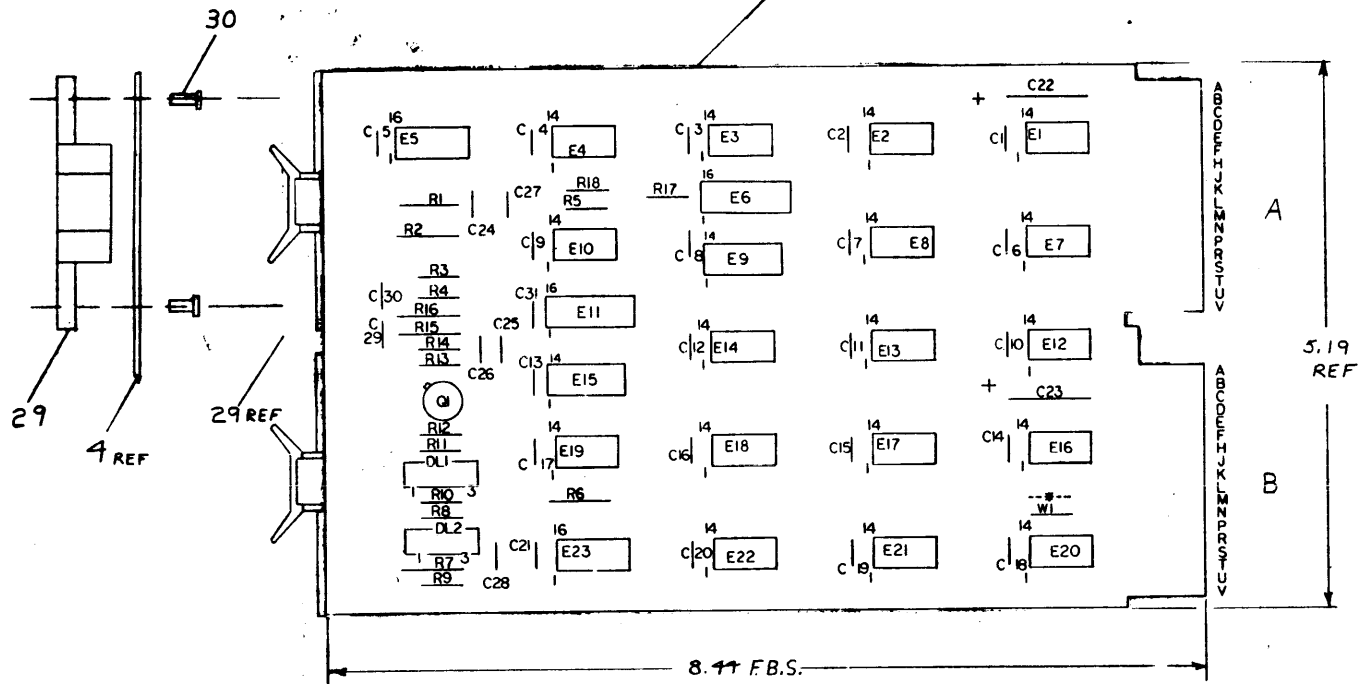
DIGITAL EQUIPMENT CORPORATION

REV. C NUMBER DW8E-0-11 SIZE CODE K WL 2 1

FIRST USED ON OPTION MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DW8E				
PARTS LIST				
DRN <i>[Signature]</i>	DATE 3/2/73	<div style="text-align: center;">  <p>digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS</p> </div>		
CHK'D. <i>[Signature]</i>	DATE 3/27/73			
ENG. <i>[Signature]</i>	DATE 4/1/73			
PROJ. ENG. <i>[Signature]</i>	DATE 4/1/73			
PROD. <i>[Signature]</i>	DATE 4/1/73			
NEXT HIGHER ASSEMBLY B-DD-DW8E-0		TITLE DW8 WIRE LIST		
SCALE + + +	SHEET 1 OF 1	SIZE CODE K WL	NUMBER DW8E-0-11	REV. C
		DIST.		

REVISIONS	CHANGE NO.	REV.
<i>[Signature]</i>	DW8E-00002	A
B. S. Lodge 5-1-73		
ED REED		
<i>[Signature]</i> 5-8-73		
<i>[Signature]</i>	DW8E-00007	B
J. Chardon 7-16-73		
EL REED		
<i>[Signature]</i> 8-6-73		
<i>[Signature]</i>	DW8E-00008	C
<i>[Signature]</i>		
J.D. LEARSON		
<i>[Signature]</i> Dec 15, 1975		

NOTES:
1. UNLESS OTHERWISE NOTED ALL RESISTORS IS IN OHMS.



REF	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF			X-Y COORDINATE HOLE LOCATION	K-CO-M7101-0-1	1
REF			ASSY/DRILLING HOLE LAYOUT	D-MH-M7101-0-2	2
REF			MODULE ECO HISTORY	B-MH-M7101-0-4	3
1			ETCHED CIRCUIT BOARD	3009865	4
1	1	C28	CAP. 47pF 100V 5% DM	10-00011	5
1	1	C25	CAP. 68pF 100V 5% DM	10-00014	6
1	1	C27	CAP. 470pF 100V 5% DM	10-00024	7
2	2	C22, C23	CAP. 6.8uF 35V 10% TANT	10-05306	8
23	1	C1 THRU C21, C31	CAP. .01uF 100V 20% DISC	10-01610	9
1	1	C24	CAP. 390pF 100V 5% DM	10-01631	10
2	2	R4, R5	RES. 100 1/4W 5%	13-00229	11
3	3	R3, R17, R18	RES. 220 1/4W 5%	13-00271	12
4	4	R8, R9, R10, R11	RES. 390 1/4W 5%	13-00309	13
1	1	R13	RES. 470 1/4W 5%	13-00316	14
2	2	R12, R14	RES. 27 1/4W 5%	13-01522	15
1	1	R2	RES. 10K 1/8W 1%	13-03312	16
3	3	R1, R6, R7	RES. 5.11K 1/8W 1%	13-04854	17
1	1	Q1	TRAN. DEC 30098	15-03190	18
2	2	DL1, DL2	DL 30NS	16-05528	19
1	1	E14	I.C. DEC 74H40	19-05526	20
6	6	E3, E4, E9, E10, E15, E20	I.C. DEC 74H00	19-09056	21
2	2	E12, E18	I.C. DEC 74H53	19-09062	22
1	1	E19	I.C. DEC 74H11	19-09267	23
6	6	E2, E8, E13, E17, E21, E22	I.C. DEC 74H74	19-09667	24
1	1	E7	I.C. DEC 7416	19-09928	25
1	1	E1	I.C. DEC 7417	19-09929	26
1	1	E16	I.C. DEC 74H04	19-09931	27
3	3	E5, E11, E23	I.C. DEC 74123	19-10436	28
2	2		HANDLE FLIPCHIP MAGENTA	9008337-6	29
4	4		EYELETS (GS-4-7)	9006732	30
1	1	E6	DL 100NS	1610033-0	31
2	2	R15, R16	RES. 27.4K 1/8W 1%	1309417	32
1	1	C29	CAP. 27pF 100V 5% DM	1001739	33
1	1	C30	CAP. 560pF 100V 5% DM	1000025	34

IC TYPE	GND	+5V
IC DEC 74123	8	16
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE		
IC PIN LOCATIONS		

FIRST USED ON OPTION MODEL DW6E

ETCH BOARD REV F

DATE 12/21/73
DATE 1/16/74
DATE 2/1/74
DATE 3/17/73
DATE 4/16/74

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

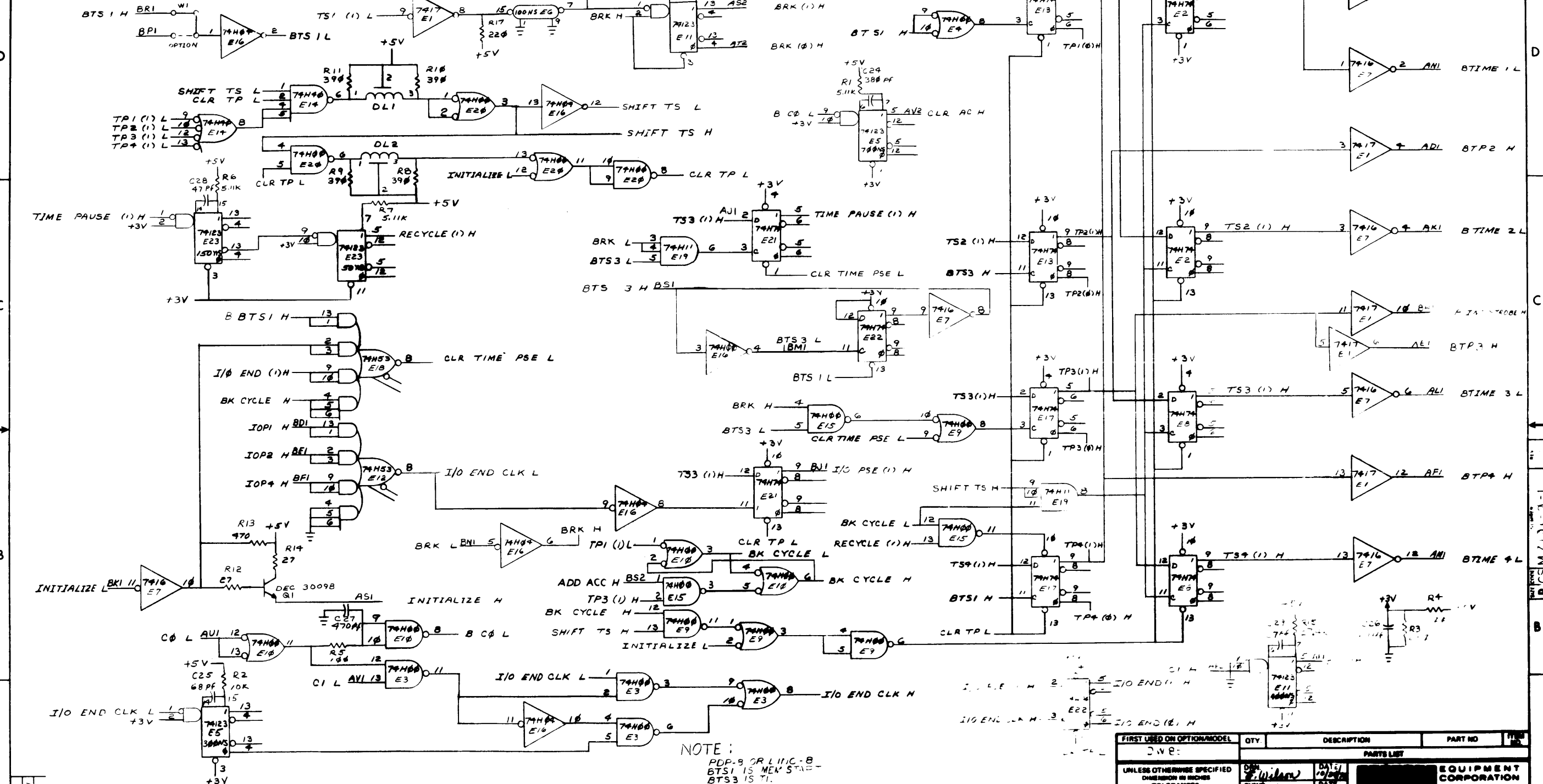
TITLE DW6E CONTROL

SEMICONDUCTOR CONVERSION CHART

SHEET 1 OF 2

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NOTE: UNLESS OTHERWISE STATED ALL RESISTANCE IS IN OHMS.



NOTE: PDP-9 OR L11C-B
BTS1 IS MEM ST10-
BTS3 IS T1.

Table with columns: REV, CHANGE NO, CHK, REVISIONS, DATE, BY, DATE, BY, DATE, BY, DATE, BY. The table is mostly empty with some handwritten entries.

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	REV.
DVE:				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES				
DECIMALS	ANGLES	PARTS LIST		
XXX - .005	10' 30"	EQUIPMENT CORPORATION		
.XX - .002		TITLE		
.X - .001		I-WBF CONTROL		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT WORKS/LABY			
FINISH	SCALE			
	SHEET			

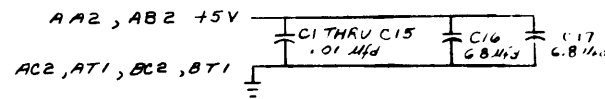
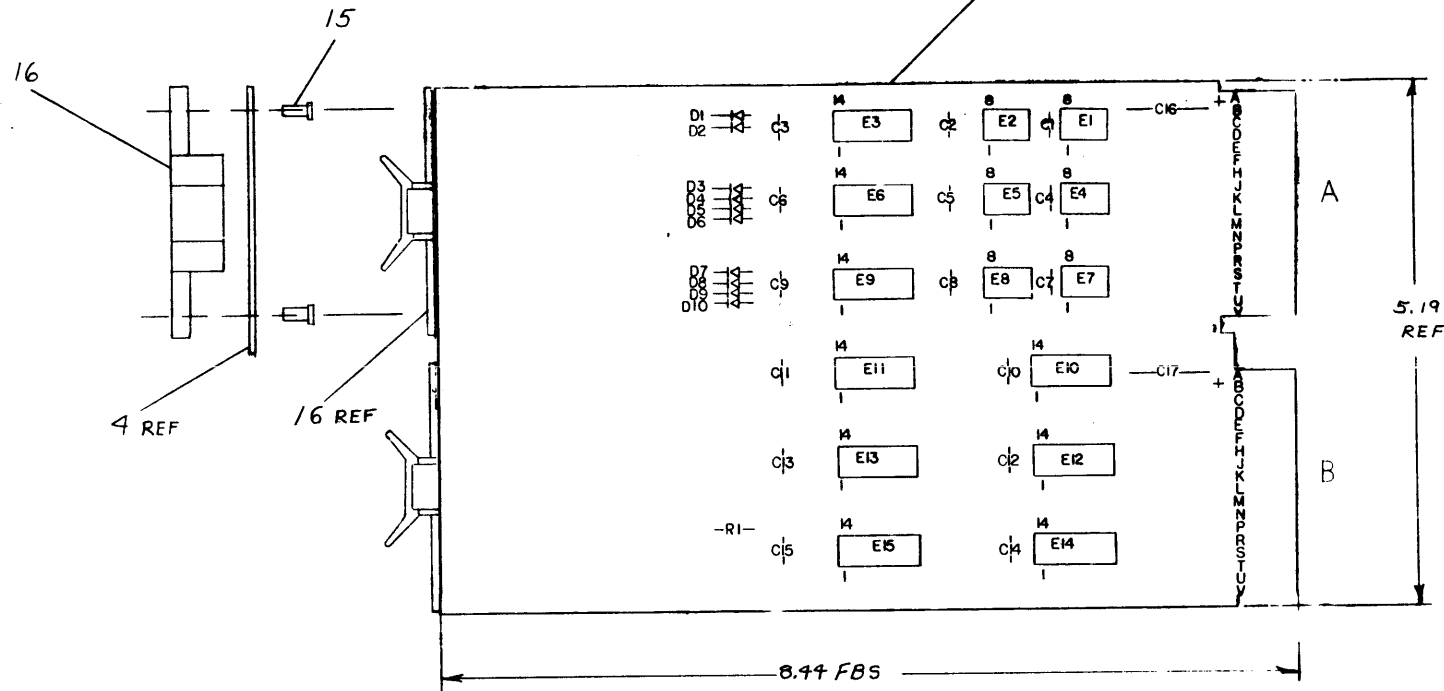
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NOTES:

1. UNLESS OTHERWISE STATED ALL RESISTANCE IS IN OHMS.

1-0-2012W502

REF	X-Y COORDINATE HOLE LOCATION	R-CD-M7102-0-1	ITEM NO.
REF	ASSY/DRILLING HOLE LAYOUT	E-AH-M7102-0-5	2
REF	MODULE ECO HISTORY	B-MH-17102-0-4	3
1	ETCHED CIRCUIT BOARD	8009866	4
2	C16, C17	CAP 6.8UF 35/10% S.TANT	5
15	C1 THRU C15	CAP .01UF 100V 20% DISC	6
10	D1 THRU D10	DIODE D664	7
1	R1	RES. 3.3K 1/4, 5%	8
3	E3, E6, E9	I.C. DEC 384	9
1	E11	I.C. DEC 74H04	10
1	E15	I.C. DEC 8881	11
1	E13	I.C. DEC 7416	12
3	E10, E12, E14	I.C. DEC 380A	13
6	E1, E2, E4, E5, E7, E8	I.C. DEC 75452	14
4	EYELET	9006732	15
2	HANDLE, FLIP CHIP MAGENTA	9008337-06	16



IC TYPE	QTY	REF	DESCRIPTION
I.C. DEC 75452	1	8	
I.C. DEC 384	1	8	
I.C. DEC 380	1	8	
I.C. TYPE	GND	+5V	

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.

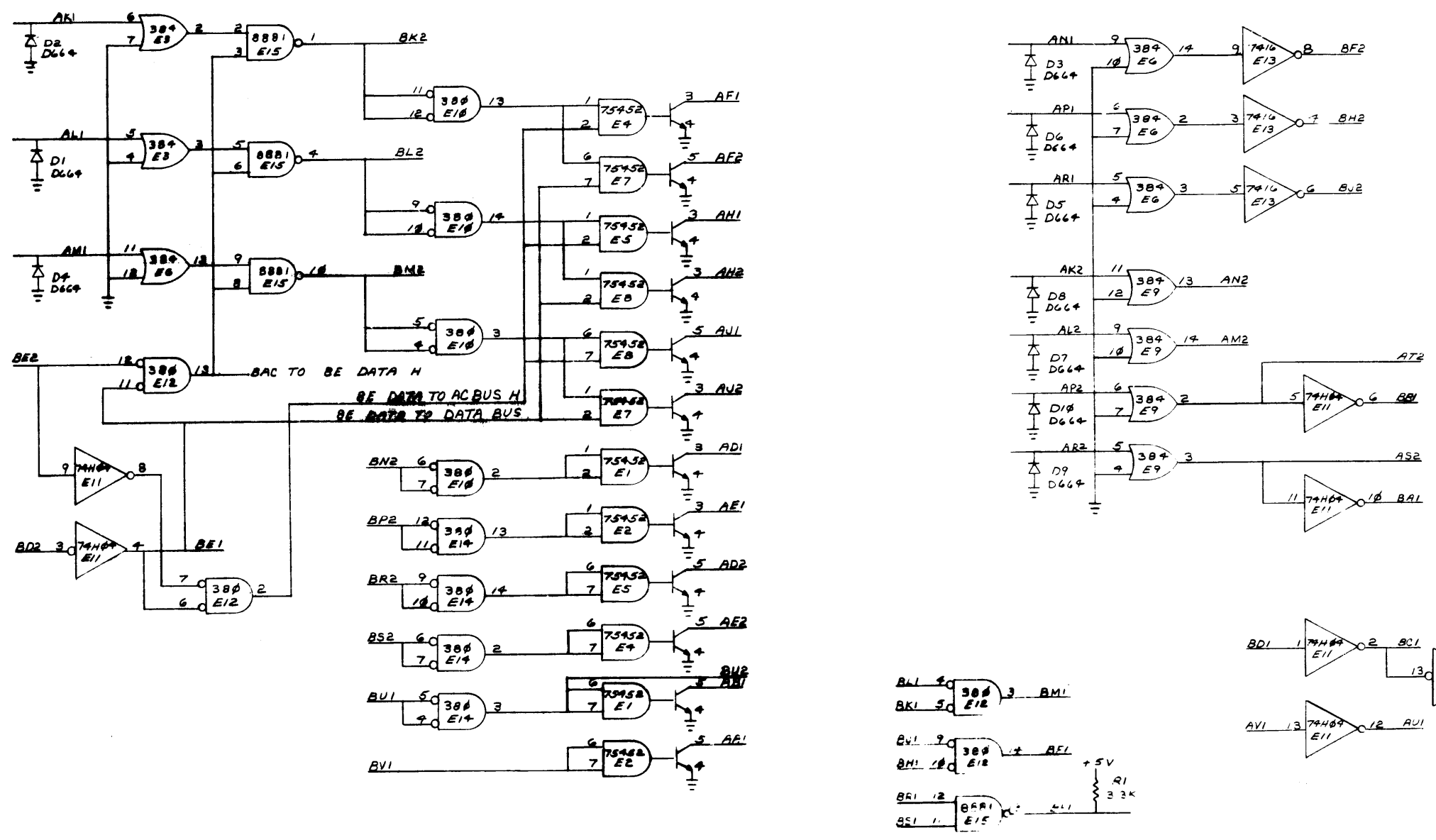
IC PIN LOCATIONS

UNINITIATED		REVISIONS		SEMICONDUCTOR CONVERSION CHART	
CHK	CHG	NO.	REV	DEC NO.	EIA NO.

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

DATE: 7/14/72	DRG: [Signature]
DATE: 7/16/72	CHK: [Signature]
DATE: 7/17/72	APP: [Signature]
DATE: 7/17/72	PRG: [Signature]
DATE: 7/17/72	PRG: [Signature]
DATE: 7/17/72	PRG: [Signature]
DATE: 7/17/72	PRG: [Signature]
DATE: 7/17/72	PRG: [Signature]

TITLE: POSITIVE I/O BUS CONVERTER	PROJECT: DCSM7102-0-1
SCALE: NONE	SHEET: 1 OF 2
DIST:	

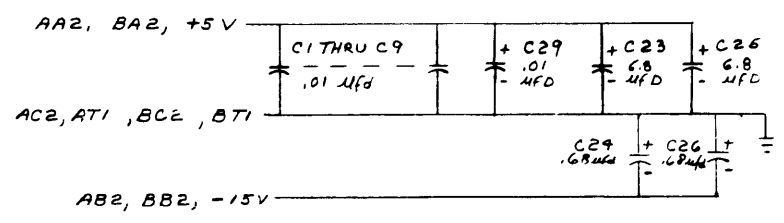
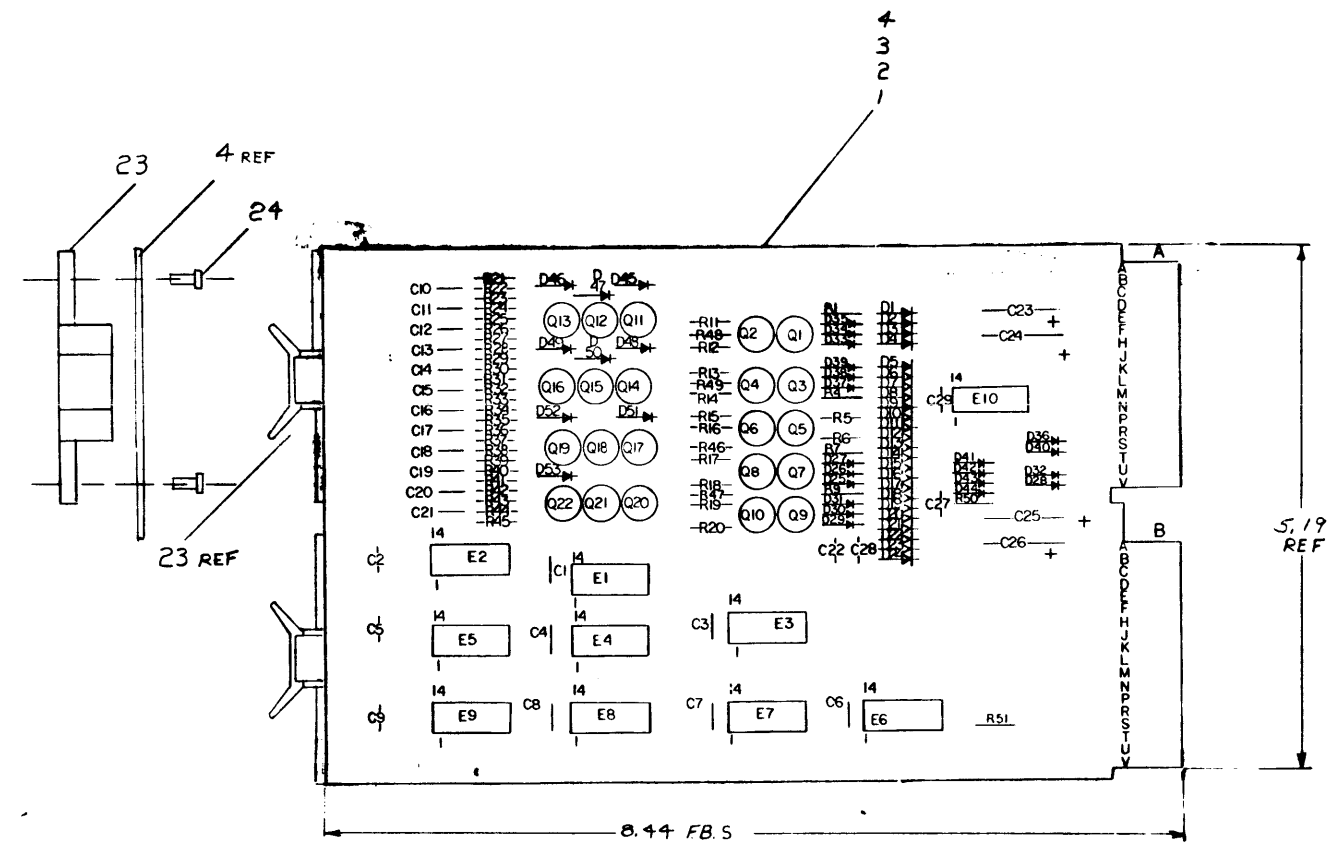


FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DW8-E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN <i>Wilson</i>	DATE 10/1/72	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS ANGLES	CHK'D <i>Wilson</i>	DATE 3/16/72		
XXX - 005 ±0.30	ENG <i>Wilson</i>	DATE 5-2-72	TITLE POSITIVE I/O BUS CONVERTER	
PROJ. ENG <i>Wilson</i>	DATE 4-1-72			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PRD <i>Wilson</i>	DATE 4/19/72	MATERIAL NEXT HIGHER ASSY. B-DC-DW8-E	
FINISH	SCALE NONE	SIZE CODE NUMBER DICS M7102-0-1		
	SHEET 2 OF 2	REV. C		

REV.	CHANGE NO.	DATE

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NOTES:
 1. UNLESS OTHERWISE STATED RESISTANCE IS IN OHMS.



IC PART NO.	QTY	IC TYPE	IC PIN LOCATIONS
I.C. DEC 380	1	B	GND +5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.			

REF	DESCRIPTION	PART NO.	ITEM NO.
REF	X-Y COORDINATE HOLE LOCATION	K-CO-M7183-1	1
REF	ASSY/DRILLING HOLE LAYOUT	D-AM-M7183-1	2
REF	MODULE ECG HISTORY	B-MH-M7183-1	3
1	ETCHED CIRCUIT BOARD	5009867	4
12	C10 THRU C21	CAP 15M 100V 5% DM	1000007
4	C23 THRU C26	CAP 6.8M 35V 10% STANT	1003306
13	C1 THRU C9, C22, C27, C28, C29	CAP .01M 100V 20% DISC	1001610
8	D21 THRU D24, D41 THRU D44	DIODE D662	1100113
9	D1 THRU D20, D25 THRU D40, D45, D46	DIODE D664	1100114
10	R1, R4 THRU R7, R9, R11, R14, R17, R19	RES. 470 1/4W 5%	1300316
13	R21, R23, R25, R27, R29, R31, R33, R35, R37, R39, R41, R43, R45	RES. 1K 1/4W 5%	1300365
10	R12, R13, R15, R16, R18, R20, R42 THRU R49	RES. 4.7K 1/4W 5%	1300447
12	R22, R24, R26, R28, R30, R32, R34, R36, R38, R40, R42, R44	RES. 5.6K 1/4 5%	1301874
1	R50	RES. 220 1/4 5%	130027
1	R51	RES. 3.3K 1/4 5%	1300439
10	Q1 THRU Q10	TRANS. DEC 3001B	1503100
12	Q11 THRU Q22	TRANS. DEC 50245	1502762-00
3	E4, E6, E7	I.C. DEC 380	1909485
1	E1	I.C. DEC 8881	1909705
1	E7	I.C. DEC 7416	1909928
2	E3, E10	I.C. DEC 74H09	1909931
3	E2, E5, E9	I.C. DEC 7400	1905575
2		HANDLE, FLIP CHIP - MAGENTA	9008337-01
4		EYELET (GS-4-7)	9006732

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

REV	DATE	BY	CHK
ED REED	11/15/73		
ORIGINATED	11/15/73		

FIRST USED ON OPTION MODEL
 1245-2

REVISIONS

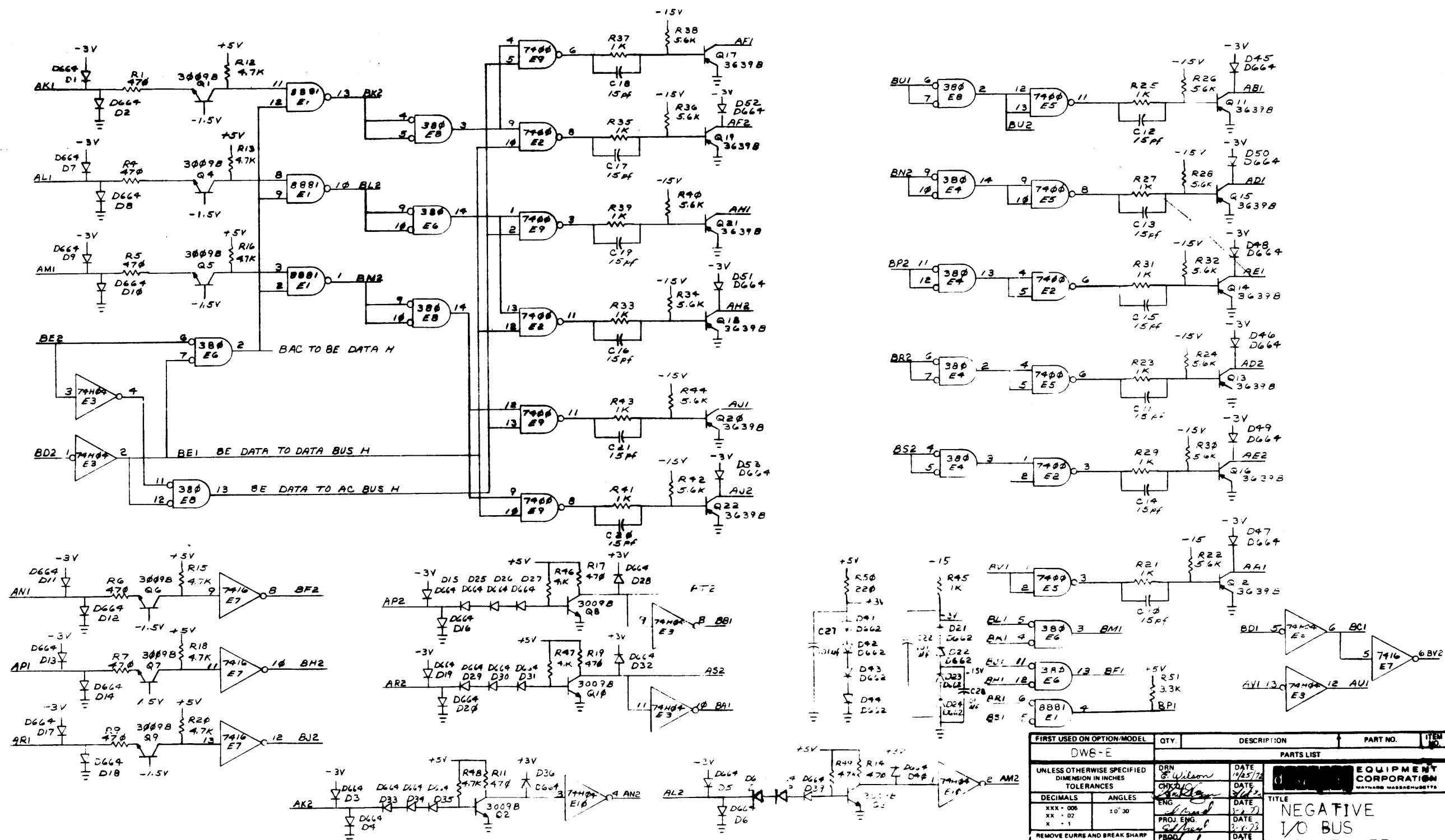
REV	DATE	BY	CHK
1	11/15/73		
2	11/15/73		
3	11/15/73		

SEMICONDUCTOR CONVERSION CHART

DEC NO.	EIA NO.	DEC NO.	EIA NO.
3001B	2N3646	3007E	2N1515
D1.4	1N3606	2002	1N645

EQUIPMENT CORPORATION
 TITLE: NEGATIVE I/O BUS CONVERTER
 DCS: 17103-0-1

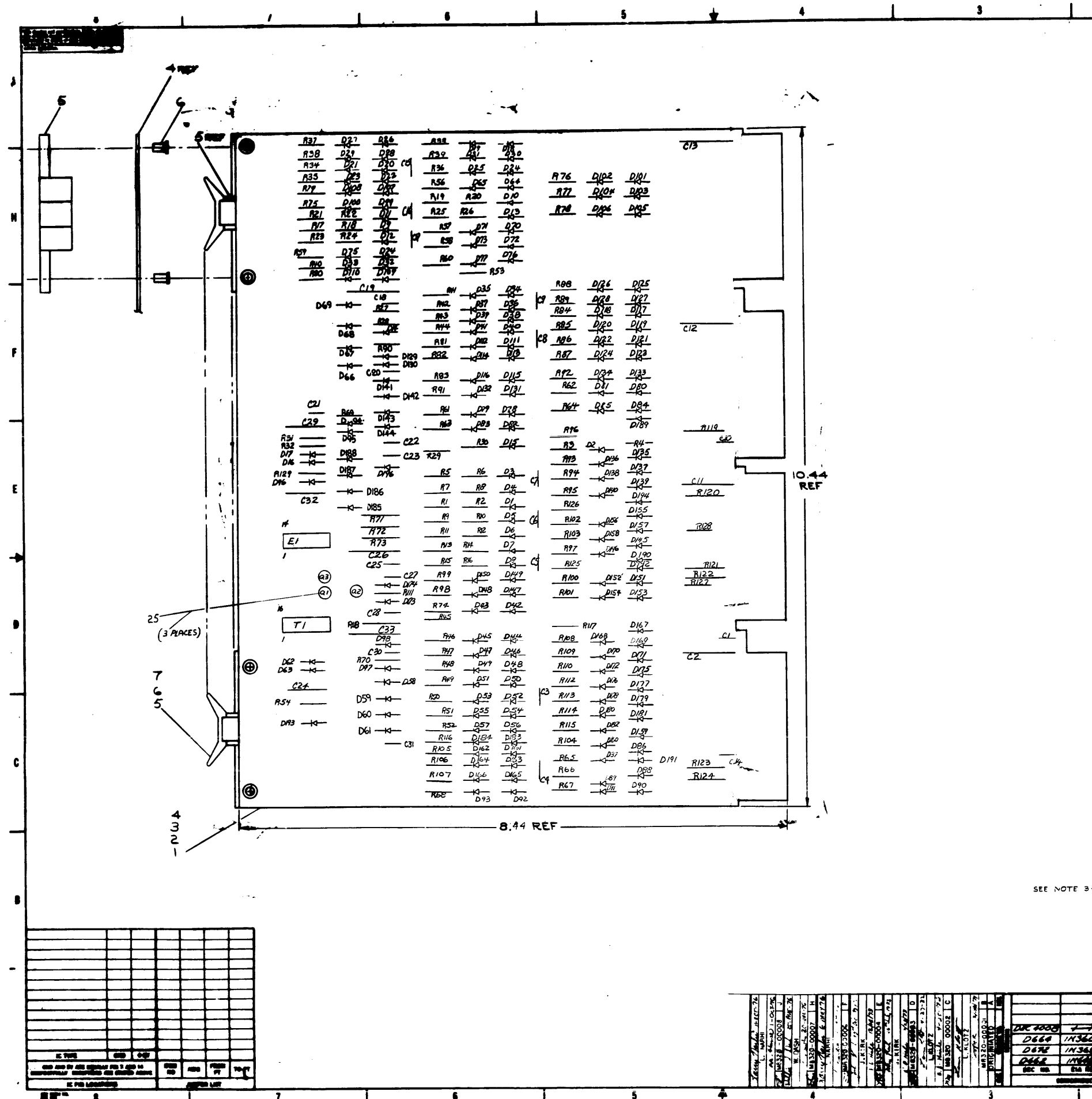
DIGITAL EQUIPMENT CORPORATION



REVISIONS

REV	CHANGE NO

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
DWB-E		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DRN	DATE	EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
XX - .006	10' 30"	CHKD	DATE	
XX - .02		ENG	DATE	
X - .1		PROJ. ENG.	DATE	
		PROD. ENG.	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY	TITLE		
FINISH	B-DD-DWB-E	NEGATIVE I/O BUS CONVERTER		
		SIZE CODE	NUMBER	REV.
		D	CSM7103-0-1	F
		SHEET 2 OF 2	DIST.	



- NOTES:
- UNLESS OTHERWISE SPECIFIED:
 CAPACITORS = .047UF 16V 15-20%
 RESISTORS = 1500 MW 5%
 DIODES = D664
 - CONNECT ALL PWS C, F, N, T (EXCEPT AC1)
 TOGETHER TO GROUND.
 - ITEM NO. B (D664) MAY BE REPLACED WITH D600
 P.N. 1105366 (REV C ONLY).
 - INSTALL ITEM 25 (TUBING) ON BASE LEAD OF
 EACH 2N3725.
 - ANY COLOR TUBING MAY BE USED FOR ITEM 25.

QTY	REF DESIGNATOR	DESCRIPTION	QTY
25	A1/R	TUBING, 22 AWG	9107256-11
24	3	TRANS 2N3725	1510939
23	12 R57-R60	RES 1K 1/4 W 5%	1300366
22	46	GRIPLET	1202694-0
21	3 C28, C29, C32	CAP 330PF 100V 5%	1000083
20	7 C8, C11, C12, C13, C19, C26, C33	CAP 6.8UF 35V 20%	1000067
19	23 C13-C10, C14-C10, C20-C23, C25, C29, C30, C30, C31	CAP .047UF 16V 15-20%	1009678
18	40 R7, R24, R26, R28, R29, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124	RES 470 1/4 W 10%	1300314
17	20 R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R53, R54, R55, R56, R57, R58, R59, R60, R61, R62, R63, R64, R65, R66, R67, R68, R69, R70, R71, R72, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90, R91, R92, R93, R94, R95, R96, R97, R98, R99, R100, R101, R102, R103, R104, R105, R106, R107, R108, R109, R110, R111, R112, R113, R114, R115, R116, R117, R118, R119, R120, R121, R122, R123, R124	RES 150 1/4 W 5%	1300260
16	2 D17, D19	DIODE D672	1105278
15	16 D58-D1, D14-D18, D41-D44, D55-D59	DIODE D668	1100113
14	177 D1-D16, D19-D23, D25-D28, D30-D34, D36-D39, D41-D44, D46-D49, D51-D54, D56-D59, D61-D64, D66-D69, D71-D74, D76-D79, D81-D84, D86-D89, D91-D94, D96-D99, D101-D104, D106-D109	DIODE D664	1100114

SEE NOTE 3

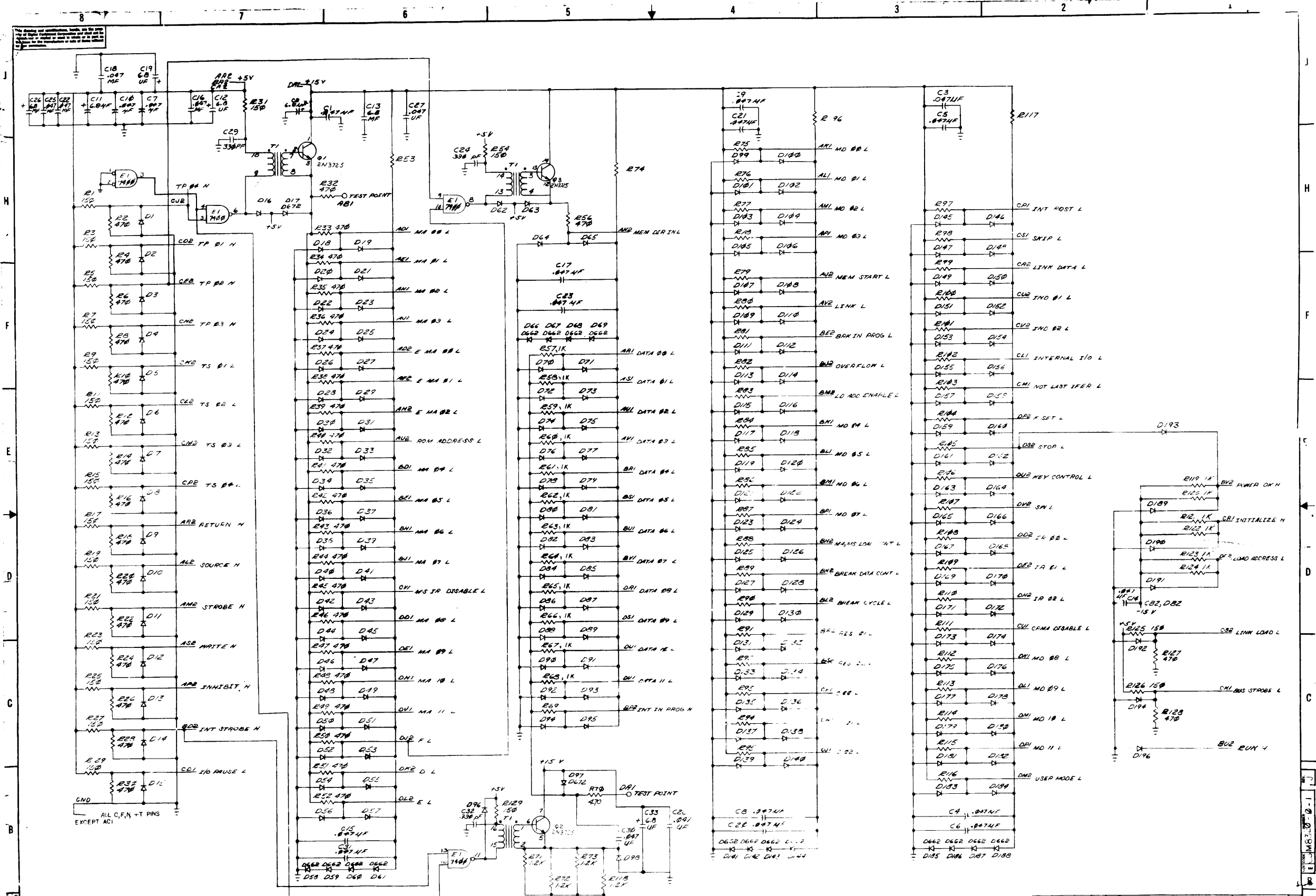
IC TYPE	QTY	QTY	QTY	QTY

REF	DESCRIPTION	QTY	VALUE	REF	DESCRIPTION	QTY	VALUE	REF	DESCRIPTION	QTY	VALUE
D664	1N3606	1	1N3606	D672	1N3606	1	1N3606	D668	1N3606	1	1N3606
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D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D672	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606
D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D664	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606
D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D664	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606
D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D664	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606
D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D664	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606
D664	1N3606	1	1N3606	D668	1N3606	1	1N3606	D664	1N3606	1	1N3606
D668	1N3606	1	1N3606	D664	1N3606	1	1N3606	D668	1N3606	1	1N3606

BUS LOADS

D-LA-KRB-E-0

IC PARTS LIST



REV.	DESCRIPTION	DATE	BY
1	ISSUED FOR FABRICATION	11-29-59	W.J. BENTLEY
2	REVISION	12-21-59	W.J. BENTLEY
3	REVISION	1-10-60	W.J. BENTLEY
4	REVISION	1-23-60	W.J. BENTLEY
5	REVISION	1-23-60	W.J. BENTLEY
6	REVISION	1-23-60	W.J. BENTLEY
7	REVISION	1-23-60	W.J. BENTLEY
8	REVISION	1-23-60	W.J. BENTLEY
9	REVISION	1-23-60	W.J. BENTLEY
10	REVISION	1-23-60	W.J. BENTLEY

BUS LOADS	
FIRST USED ON OPTION/MODEL	QTY.
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS IN INCHES	
TOLERANCES	
MATERIAL	
FINISH	
SCALE	1:1
SHEET	2 OF 2

EQUIPMENT CORPORATION	
DATE	11-29-59
BY	W.J. BENTLEY
REV. NO.	1
ITEM NO.	44320-1
DESCRIPTION	BUS LOADS
PARTS LIST	
REVISIONS	
DATE	
BY	
REV. NO.	
ITEM NO.	
SCALE	1:1
SHEET	2 OF 2

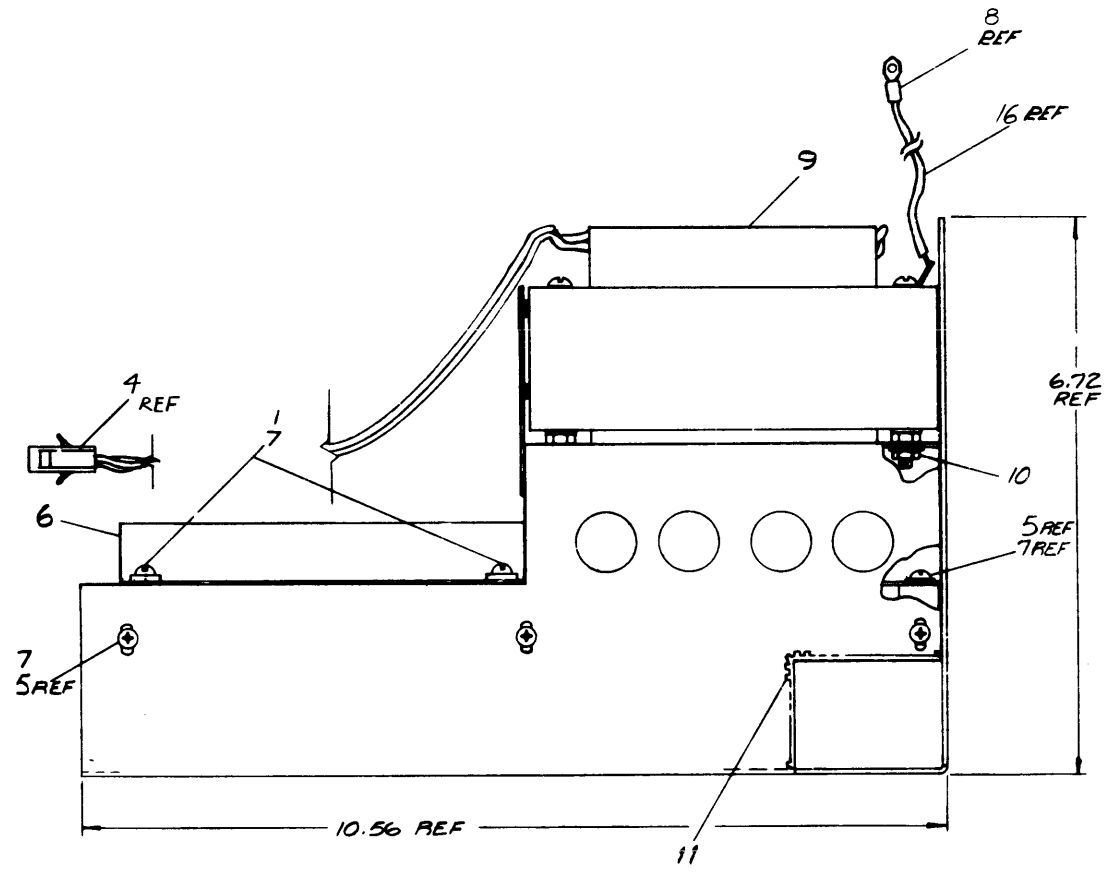
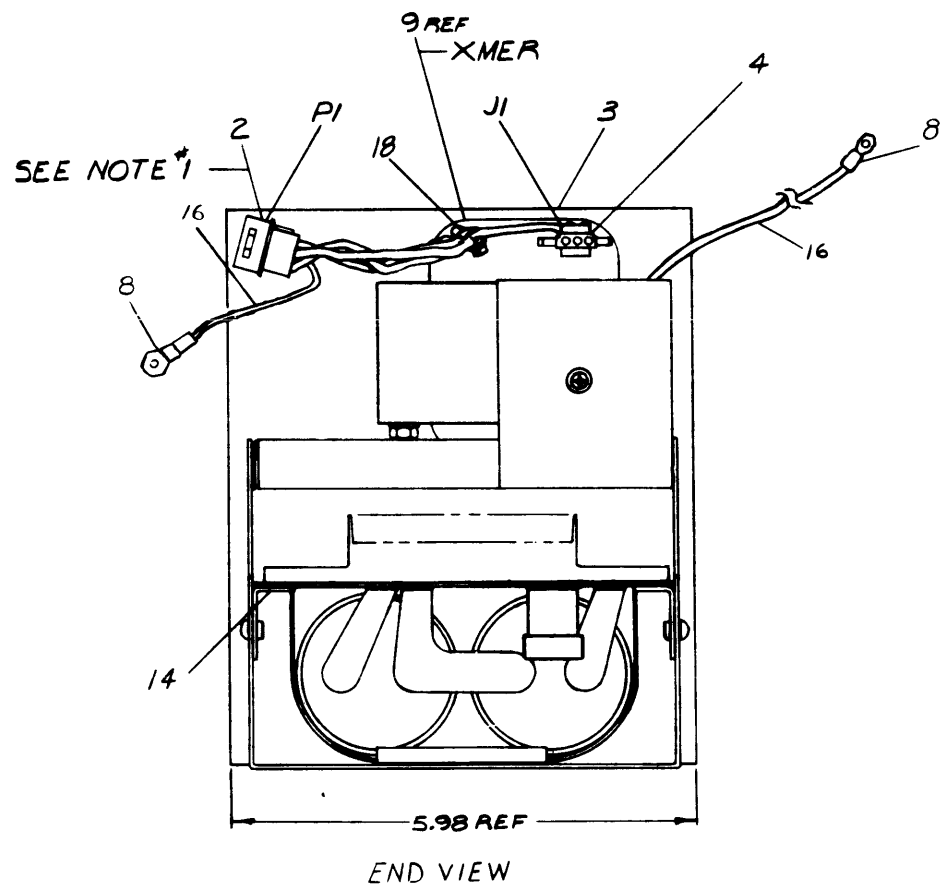
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WIRE TABLE						
ITEM NO.	AWG	COLOR	FROM:		TO:	
			CONNECTION	WITH	CONNECTION	WITH
9		BLU	XMER	-	J1-3	12
		BLU		-	J1-2	12
		BLU		-	J1-1	12
		BLK		-	P1-3	13
		RED		-	P1-4	13
		WHT		-	P1-1	13
9		BLK	XMER	-	P1-2	13
22	18	GRN	XMER	SOLDER	-	21
22	18	GRN	P1-5	13	-	21

LENGTH OF WIRE TO BE 1 1/2 IN. ± 1/2 IN. (REF. ONLY)

LENGTH OF WIRES TO BE 6 IN. ± 1/2 IN. (REF. ONLY)

NOTES:
 1. LENGTH OF WIRES TERMINATING TO P1 (ITEM 2) ARE TO BE 3 INCHES ± 1/2 INCH.
 2. COMPONENTS J1 & P1, TO BE LABELED WITH COMPONENT IDENTIFIERS, USING BRADY MARKERS.



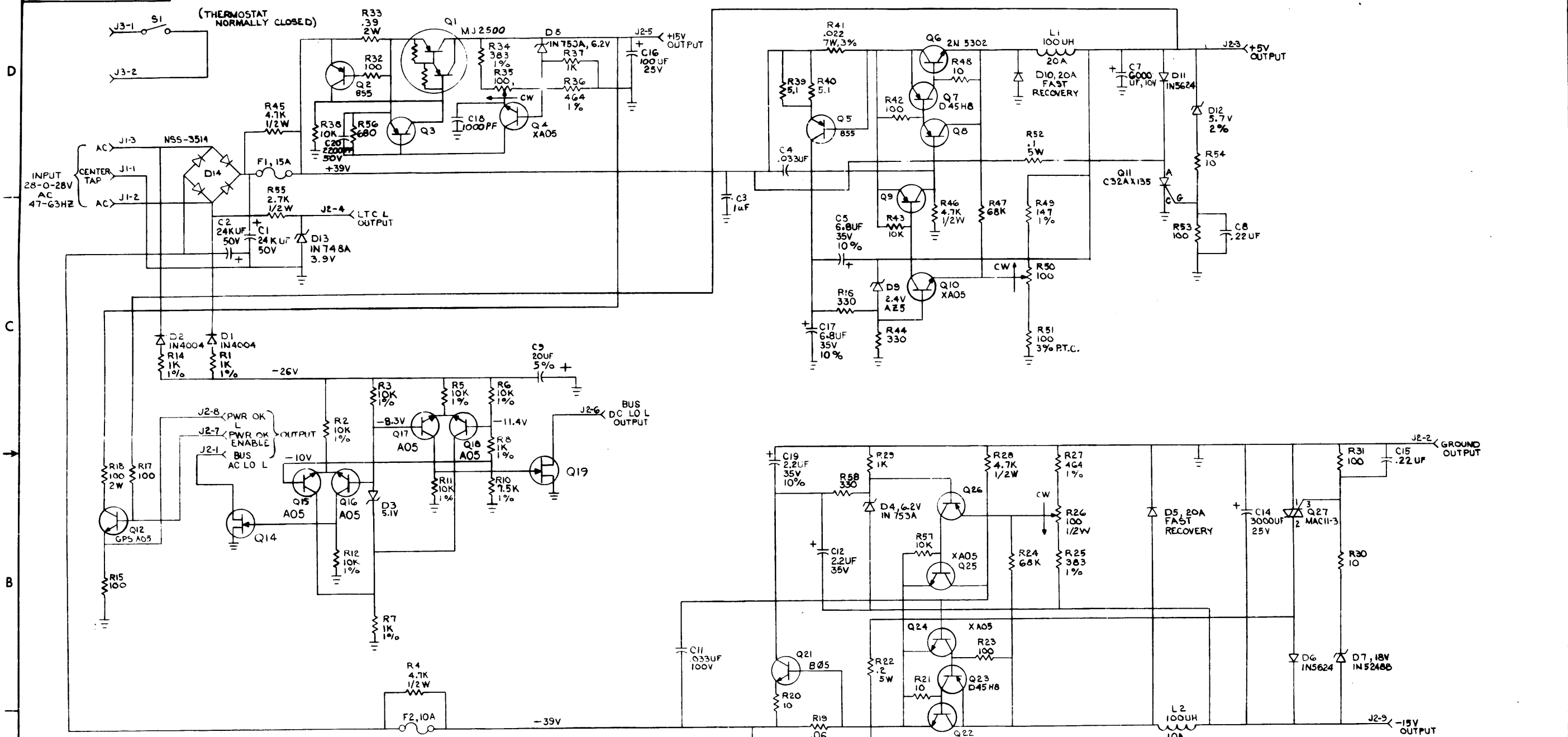
QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	TIE WRAP RADUIT SST-18	9007031	18
A/R	WIRE 18 AWG BLK	9107360-00	17
7/R	WIRE 18 AWG GREEN	9107360-55	16
1	STRAIN, RELIEF	9008442	15
6	BRKT, SUPPORT ECH BD	900832000	14
5	CONTACT, MATE-N-LOK (M/L)	1209370-01	13
3	CONTACT, MATE-N-LOK (M/L)	1209370-01	12
A/R	GROMMET	9007621	11
4	NUT, KEP # 8-32	9006563	10
1	XMER (TRANSFORMER)	1610601-02	9
2	TERMINAL SOLDERLESS	9007929	8
12	WASHER, INT TOOTH LOCK	9006693	7
1	REGULATOR BD ASSY	912-34072000	6
8	SCR, PHIL PAN HD # 6-32 X .25	9006020-1	5
1	CONN, MATE-N-LOK 3 CKT	1209350-08	4
1	CHASSIS, P.S.	1209350-08	3
1	CONN, MATE-N-LOK 6 CKT	1209351-06	2
4	SCR, PHIL PAN HD # 6-32 X .50	9006024-1	1

CAUTION
CHANGE COULD AFFECT U.L. LISTING

FIRST USED ON OPTION/MODEL DWR-E		QTY.	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES					
DECIMALS	ANGLES	DATE 2/15/73			
.XXX - .005	± 0° 30'	DATE 2/16/73			
.XX - .00		DATE 2-2-73			
.X - .1		DATE 2/19/73			
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY					
MATERIAL		NEXT HIGHER ASSY.			
FINISH		D-UM-DWR-E-0			
SCALE		DAD 7009287-0-0			
SHEET		REV.			

REVISIONS
 CHK CHANGE NO. REV.

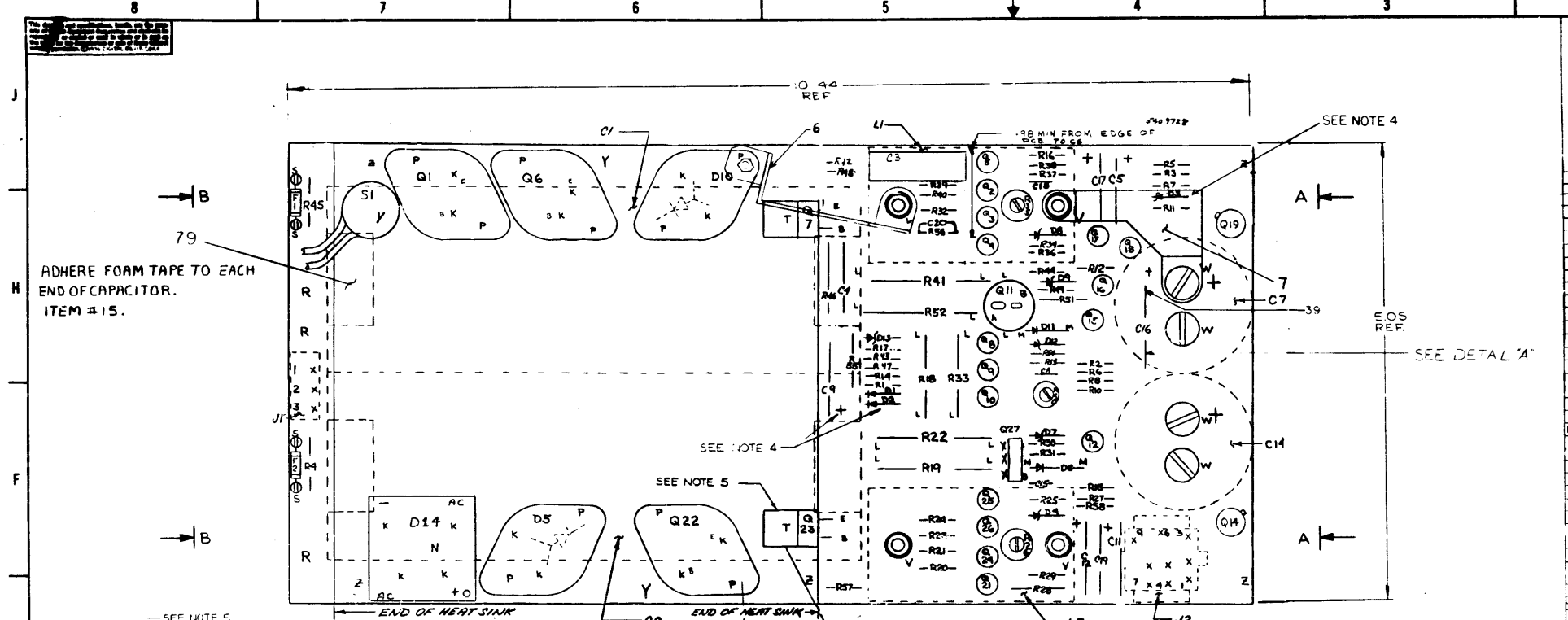
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UNLESS OTHERWISE INDICATED:
 1% RESISTORS ARE 1/8W
 VOLTAGES ARE TAKEN AT NO LOAD WITH 115 VAC LINE
 VOLTAGES ARE ± 10% TAKEN BY A ≥ 10MΩ METER
 TRANSISTORS = XA55

REV	DATE	BY	CHKD	DESCRIPTION
1	12-20-71	R. WOLFF	R. WOLFF	REVISED
2	1-1-72	R. WOLFF	R. WOLFF	REVISED
3	1-1-72	R. WOLFF	R. WOLFF	REVISED
4	1-1-72	R. WOLFF	R. WOLFF	REVISED
5	1-1-72	R. WOLFF	R. WOLFF	REVISED
6	1-1-72	R. WOLFF	R. WOLFF	REVISED
7	1-1-72	R. WOLFF	R. WOLFF	REVISED
8	1-1-72	R. WOLFF	R. WOLFF	REVISED

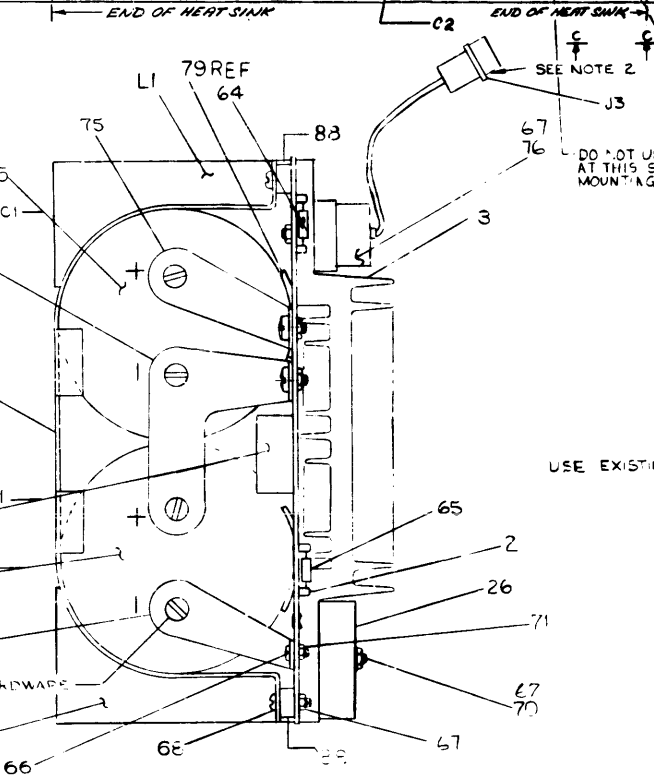
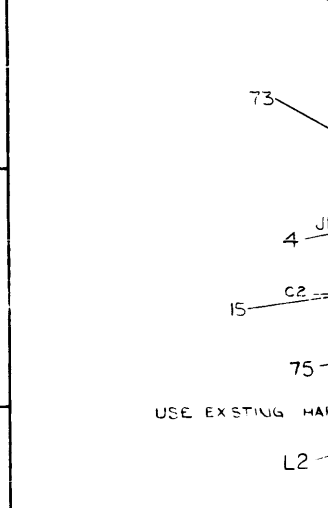
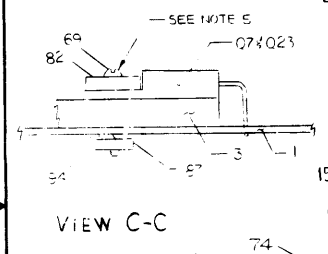
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.												
PARTS LIST																
ETCH BOARD REV E																
<table border="1"> <tr> <td>DRN. FIGURA</td> <td>DATE 12-20-71</td> </tr> <tr> <td>CHK'D. MURPHY</td> <td>DATE 1-21-72</td> </tr> <tr> <td>ENG. R. WOLFF</td> <td>DATE 1-25-71</td> </tr> <tr> <td>PROJ. ENG. R. WOLFF</td> <td>DATE 1-25-71</td> </tr> <tr> <td>PROD. R. WOLFF</td> <td>DATE 1-25-71</td> </tr> <tr> <td colspan="2">NEXT HIGHER ASSY</td> </tr> </table>					DRN. FIGURA	DATE 12-20-71	CHK'D. MURPHY	DATE 1-21-72	ENG. R. WOLFF	DATE 1-25-71	PROJ. ENG. R. WOLFF	DATE 1-25-71	PROD. R. WOLFF	DATE 1-25-71	NEXT HIGHER ASSY	
DRN. FIGURA	DATE 12-20-71															
CHK'D. MURPHY	DATE 1-21-72															
ENG. R. WOLFF	DATE 1-25-71															
PROJ. ENG. R. WOLFF	DATE 1-25-71															
PROD. R. WOLFF	DATE 1-25-71															
NEXT HIGHER ASSY																
TITLE REGULATOR BOARD FOR H740				EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS												
SEMICONDUCTOR CONVERSION CHART				SCALE SHEET 1 OF 2												
DCS 5409728-0-1 Y				REV. NO.												



NOTES:
 1. APPLY ITEM #8 (THERMAL COMPOUND) BETWEEN TRANSISTOR AND HEAT SINK FOR Q1, Q6, Q7, Q22, Q23. DO NOT USE D14 & S1.
 2. TRIM LEADS ON ITEM #76 (THERMOSTAT) TO (.5) INCHES AND ATTACH ITEM #84 (FINS) AND ITEM #83 (HOUSING) AS SHOWN.
 3. APPLY FLAT WASHER ITEM #72 BETWEEN SCR. HD. AND ETCHED BOARD WHEN MOUNTING COMPONENTS Q1, Q6, Q22, D5 + D10.

REF.	ITEM NO.	DESCRIPTION	PART NO.	QTY.	REF. DESIGNATION	DESCRIPTION	PART NO.
2		SPACER ALUM. #6, 1.44X1/8 LG.	9009283	40			
		NUT 6-32	9008557	1			
1	Q11	XSTR C32X132	72727	1			
		XSTR B55	151075-01	35			
		BINS MALE CRIMP	1209716-01	25			
		MATE-N-LOCK CONNECTOR	1212728-08	25			
		WASHER REL.	9009749	50			
		DIODE ZENER 5.7V, 2W	1111235	31			
		CAP 2.2UF 35V 10% STANT	1002451	80			
		1" LG FOAM TAPE	900287-1	75			
		RES 5.1 1/4W 5%	1307422	78			
		PIN FEMALE	1209436	77			
		THERMOS T SEST	1210824	76			
		CONTACT CAPACITOR	C-MC-5309781-0-0	75			
		CONTACT COMMON CAPACITOR	C-MC-5309779-0-0	74			
		HOLDER CAPACITOR	C-1A-5510124-0-0	73			
		WASHER #6 FLAT	9006688	72			
		NUT KEPS #4-40	9006257	71			
		SCR PH. PAN HD #32 X 3/4 LG	9004261	70			
		SCR PH. PAN HD #32 X 1/2 LG	9004241-01	69			
		SCR PH. HD #32 X 5/8 LG	9004225	68			
		NUT KEPS #6-32 X 1/4	9008185	67			
		SCR PH. PAN HD #4-40 X 5/16 LG	9004204	66			
		FUSE 10AMP PICO	1210929-01	65			
		FUSE 15AMP PICO	1210979	64			
		CHOKE 100MH 10A MM 0.445	1611331	63			
		CHOKE 600MH 20A MM 0.289	1610717	62			
		XSTR MAC 11-3	1510765	61			
		XSTR M32900	1511232	60			
		XSTR DRS #B 5	1510708-2	59			
		XSTR XA55	1510706	58			
		XSTR XA05	1510705	57			
		XSTR ZN5302	1510196	56			
		XSTR ZN5333	1511685	55			
		XSTR B55	1510706-01	54			
		RES .02, 1/4W, 5%	1310709-03	53			
		RES .680, 1/4W, 5%	1307424	52			
		RES .2, 3W, 5%	309864	51			
		POT 100, 1/2W, 20% CLIP	309150-05	50			
		RES 1.5W, 5%, WH	1305972	49			
		RES .39, 2W, 5%, WW	310765	48			
		RES .15K, 1/2W, 5%, MF	1305372	47			
		RES .39K, 1/2W, 5%, MF	1305125	46			
		RES 10K, 1/2W, 5%, MF	303312	45			
		RES 1K, 1/8W, 5%, MF	1303114	44			
		RES .4M, 1/8W, 5%, MF	1303047	43			
		RES 100, 3% PTC	1310927-1	42			
		RES .47, 1/8W, 1% MF	1302874	41			
		SPACER #32 X 1/4 AF X 3/8 LG	9006857	40			
		TPE TUBING 1/8" DIA	3107656	39			
		RES .68K 1/4W 5%	1301327	38			
		RES 10 1/4W 5%	13013	37			
		RES .10K 1/4W 5%	1300479	36			
		RES .47K 1/2W 5%	1300455	35			
		RES .27K 1/2W 5%	1300453	34			
		RES .05 3W 5% WW	1310876-32	33			
		RES 1K 1/4W 5%	1300365	32			
		RES 330 1/4W 5%	1300295	31			
		RES 100, 2W 5%	1302380	30			
		RES 100 1/4W 5%	1300224	29			
		DIODE 1N4248B 16V ZENER	1110766	28			
		DIODE 20AMP FAST RECOVERY RECT	110715	27			
		DIODE BRIDGE RECTIFIER	110716	26			
		DIODE 5.1V ZENER	1110925	25			
		DIODE 1N5624	1110420	24			
		DIODE 1N4004	1105796	23			
		DIODE 1N753A 6.2V ZENER	1102421	22			
		DIODE AZ5 2.4V ZENER	1101938	21			
		DIODE 1N748A 3.9V ZENER	1100122	20			
		CAP 100PF 100V DM	1000042	19			
		CAP 20UF 50V 5% STANT	1000002-01	18			
		CAP 6000UF 10V 10% AL EL	1010704	17			
		CAP 4500UF 25V 10% AL EL	1010703	16			
		CAP 2400UF 50V 10% AL EL	1010702	15			
		CAP 100UF 10V 10%	1011022	14			
		CAP 22UF 50V	1010274	13			
		CAP 8.8UF 35V 10% STANT	002306	12			
		CAPACITOR .035UF 100V HYLAM	1000080	11			
		CAP 2200PF 50V CER	1000055	10			
		THERMAL COMPOUND CER.	9008885	9			
		#2 THERMAL TAP	C-MC-5310971-1	7			
		#1 THERMAL STRAP	C-MC-531108-1	6			
		MATE-N-LOCK CONNECTOR	1209750-09	5			
		MATE-N-LOCK CONNECTOR	1212728-03	4			
		HEAT SINK	1210496	3			
		SPLIT LUG	9006756	2			
		ETCHED BOARD	9006757	1			
		MODULE ECO HISTORY	C-1A-5309779-0-0				
		X-Y COORDINATE HOLE LOC.	C-1A-5409728-0-0				
		CIRCUIT SCHEMATIC	C-1A-5409728-0-0				

ADHERE FOAM TAPE TO EACH END OF CAPACITOR. ITEM #15.



NOTE:
 4. PLUS (+) SIGN ON PC BOARD TO BE REMOVED DURING MODULE MANUFACTURE OR WHEN PERFORMING ECO #22. (C9 IS INSTALLED WITH + END TOWARDS L2 SIDE OF BOARD). D1, Q2, D3 ARE INSTALLED WITH CATHODES TOWARDS HEAT SINK.
 5. USE 6 INCH-POUNDS OF TORQUE WHEN MOUNTING Q7, Q23.

IC TYPE	QTY	REV	DATE	BY
7805	1	1	11/05	JM
7805	1	1	11/05	JM
7805	1	1	11/05	JM

IC PIN LOCATIONS	JUMPER LIST
IC1: 1-8	J1: 1-2
IC2: 1-8	J2: 1-2
IC3: 1-8	J3: 1-2

ITEM NO.	DESCRIPTION	QTY.
1	7805	1
2	7805	1
3	7805	1

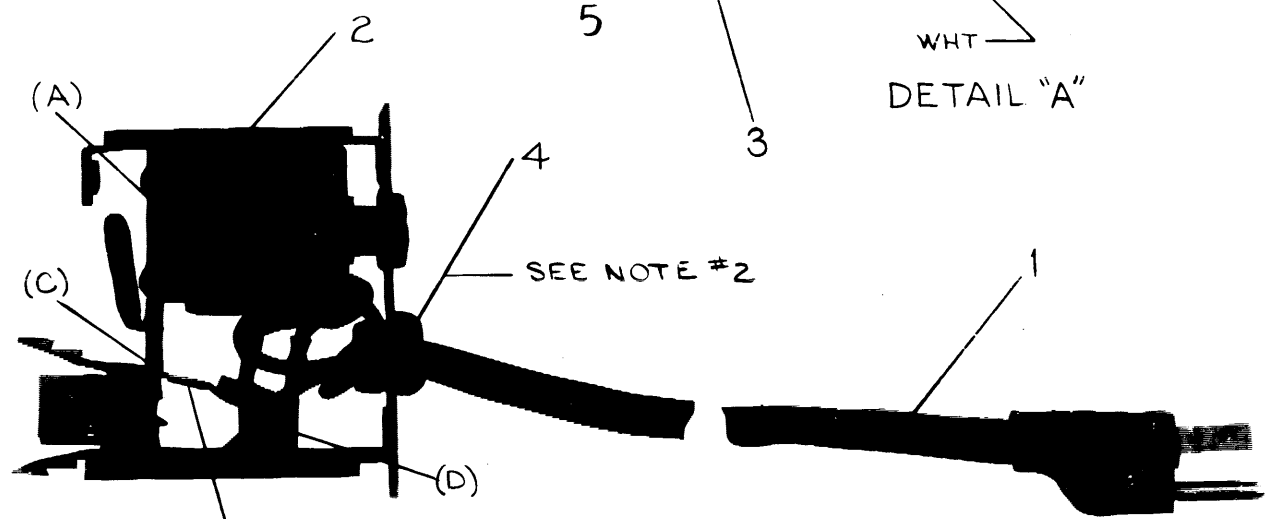
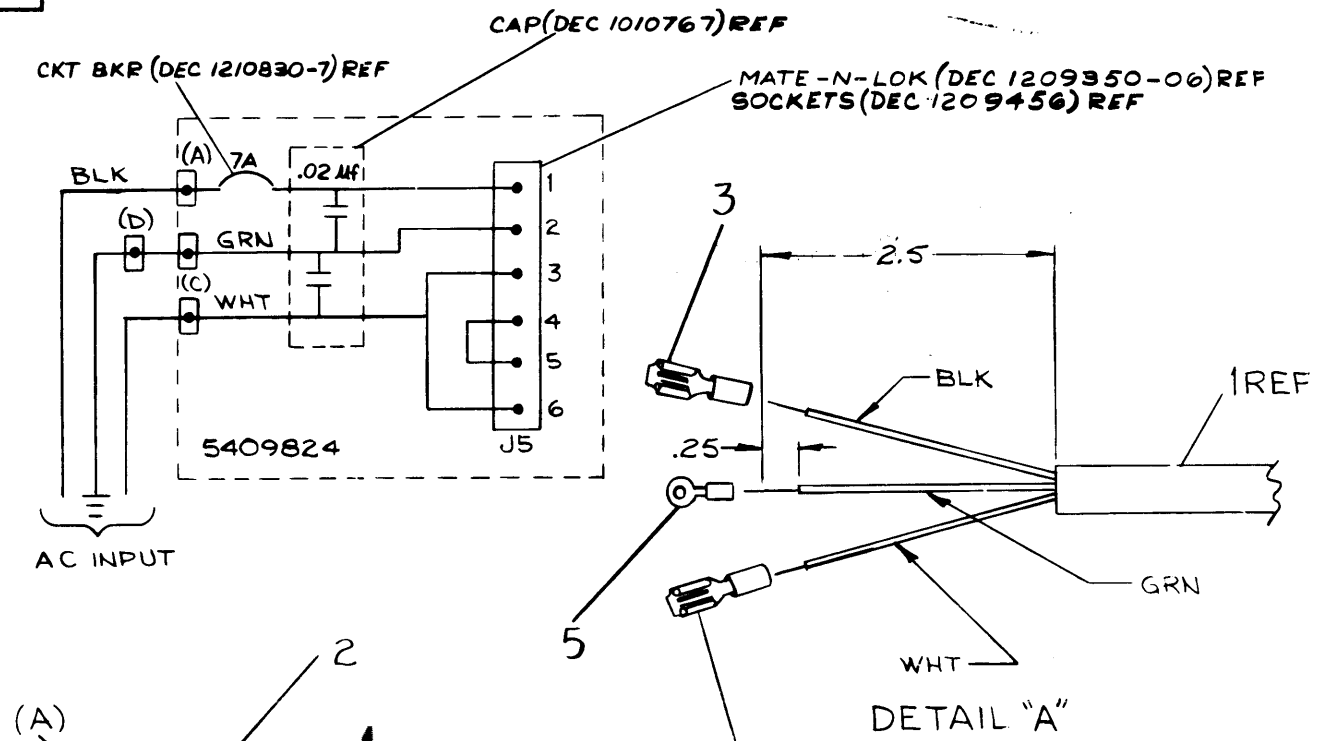
REF. DESIGNATION	DESCRIPTION	PART NO.	QTY.
2	WASHER #6 SPLIT	9007801	94
1	5409728 INTERPLANT/CUSTOMER PKG	A-PI-3700245-0-0	93
1	MANUFACTURING SPECIFICATION	A-SP-5405728-0-0	92
1	ASSEMBLY PROCEDURE	A-SP-5409728-0-0	91
1	INSPECTION PROCEDURE	A-SP-5409718-0-0	90
1	MANUFACTURING TEST PROCEDURE	A-SP-5409728-0-3	89

REGULATOR BOARD
 EQUIPMENT CORPORATION
 DATE 5409728-C-0
 11/05
 5409728-C-0

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NOTES:

- CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT BOX) PER CIRCUIT SCHEMATIC.
- FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS



SEE NOTE #2
SEE DETAIL 'A'
3 REF
SHOWN WITHOUT COVER

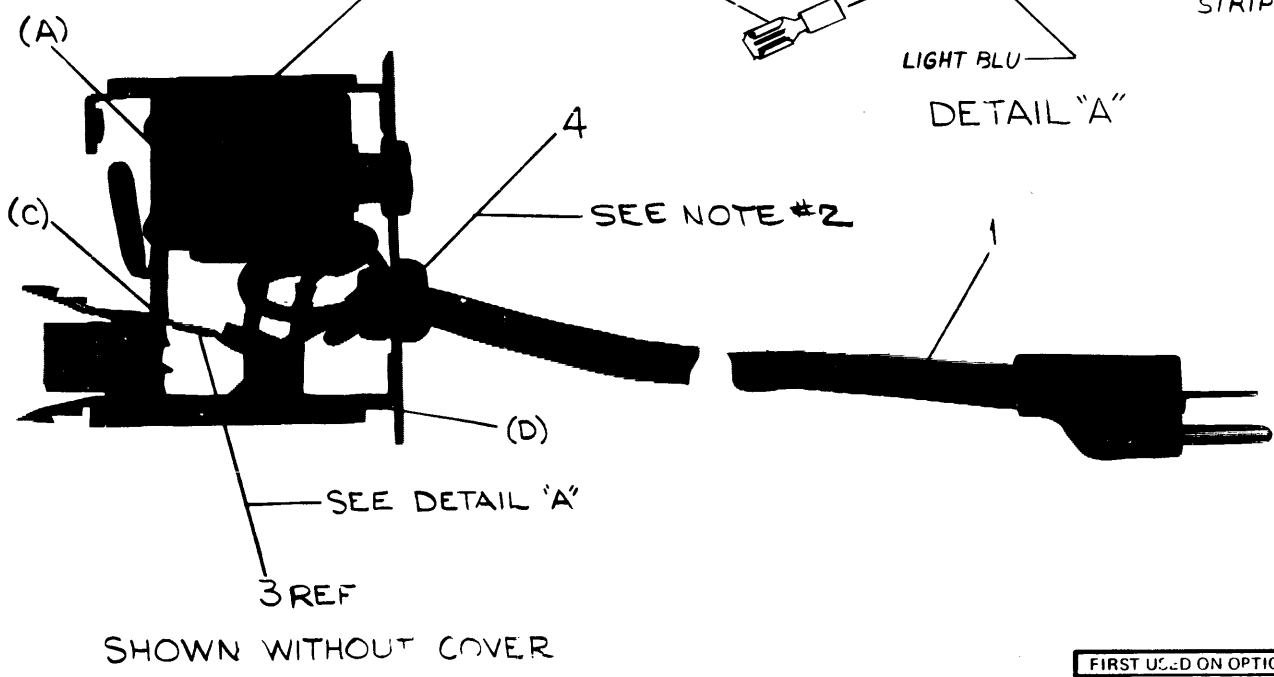
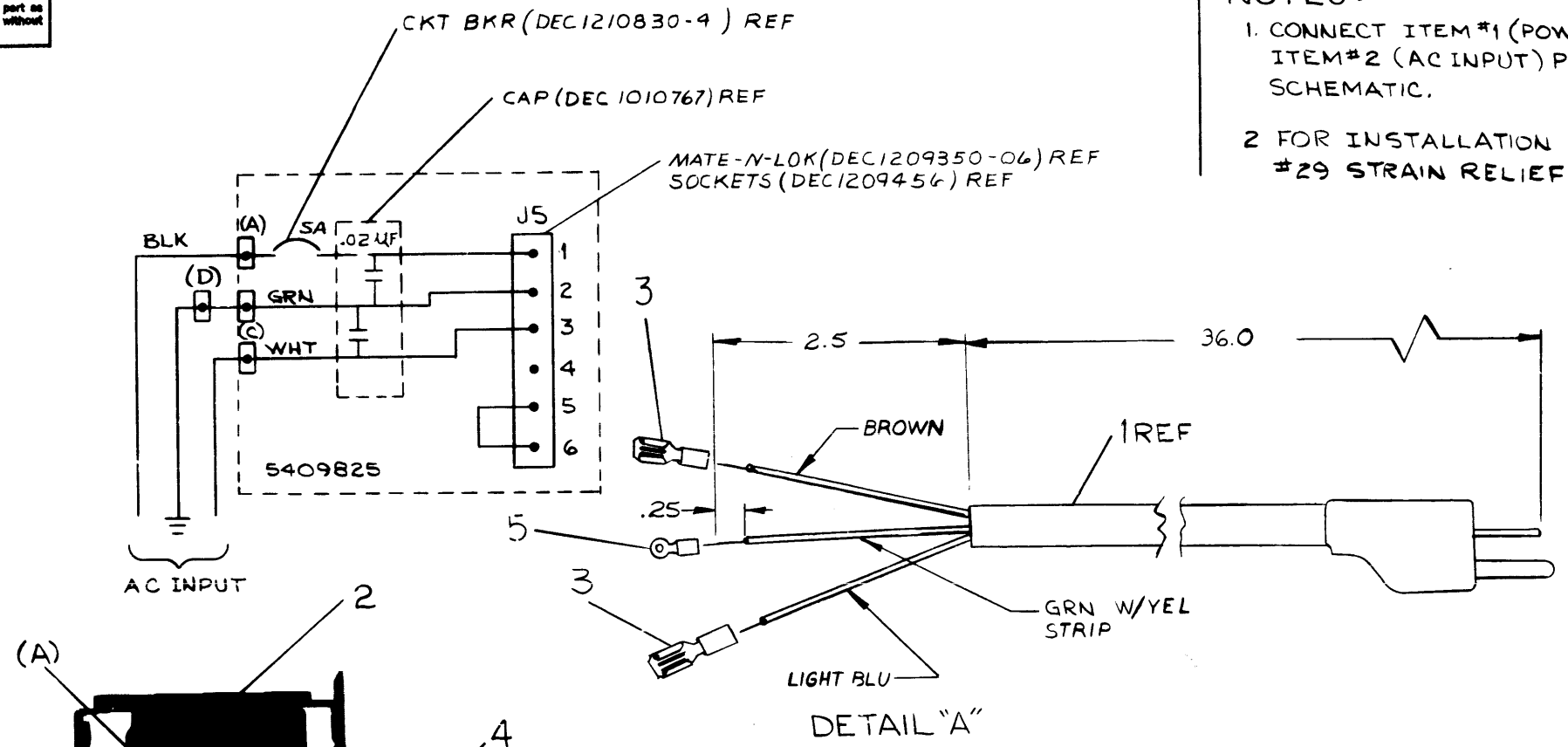
1	TERMINAL, RING, RED	9007929-0	5
1	STRAIN RELIEF SR-6N3-4	9008492-2	4
2	CONNECTOR, FASTON, RED	9007970	3
1	AC INPUT BOX H400A	D-UA-H400-0-0	2
1	POWER CORD 120V	1700015-6	1

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
11/05			PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>T. Guillin</i>	DATE 12-27-71	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS TITLE LINE SET 115V AC 7 AMP	
DECIMALS	ANGLES	CHK'D <i>H. Hartman</i>	DATE 1-8-72		
XXX - .005	± 0' 30	ENG <i>David DeMionello</i>	DATE 1-7-72		
XX - .02		PROJ. ENG. <i>Ross H. Hays</i>	DATE 1-7-72		
X - .1		PROD. <i>R.K. Peters</i>	DATE 1/7/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓		NEXT HIGHER ASSY.		SIZE CODE	NUMBER
MATERIAL				C UA	BC05H-0-0
FINISH				SCALE	REV.
				SHEET OF	E

REV.	CHANGE NO.	REV.
A	00001	A
B	00002	B
C	00003	C
D	00004	D
E	00005	E

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NOTES:
 1. CONNECT ITEM #1 (POWER CORD) AND ITEM #2 (AC INPUT) PER CIRCUIT SCHEMATIC.
 2. FOR INSTALLATION USE HAYCO #29 STRAIN RELIEF PLIERS.



QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	TERMINAL, RING, RED	9007929-0	5
1	GROMMET HEYCO SR-6N3-4	9008492-2	4
2	CONNECTOR, FASTON, RED	9007970	3
1	AC INPUT BOX H4ØØ B	D-UA-H4ØØ-Ø-Ø	2
1	POWER CORD 240V	1700043	1

FIRST USED ON OPTION/MODEL 11/Ø5		PARTS LIST	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN: <i>T. Guilin</i> DATE: 12-27-71 CHK'D: <i>[Signature]</i> DATE: 1-8-72 ENG.: <i>[Signature]</i> DATE: 1-7-72 PROJ. ENG.: <i>[Signature]</i> DATE: 1-7-72 PROD.: <i>[Signature]</i> DATE: 1/7/72	
DECIMALS: .XXX = .005 .XX = .02 .X = .1	ANGLES: ±0°30'	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE: LINE SET 230V AC 4 AMP	
MATERIAL: + + +	NEXT HIGHER ASSY: + + +	SIZE CODE: C UA	NUMBER: BCØ5J-Ø-Ø
FINISH: + + +	SCALE: + + +	DIST.:	REV. E

REV.	CHANGE NO.	REV.
A	BCØ5J-00001	
B	H400-00002	
C	BCØ5J-00002	
D	BCØ5J-00003	
E	BCØ5J-00005	

4 3 2 1

D

C

B

A

REV. E

NUMBER BCØ5J-Ø-Ø

SIZE CODE C UA

DEC 1972

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DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS						
ENGINEERING SPECIFICATION				DATE 3/9/73		
TITLE DW8E ENGINEERING SPECIFICATION						
REVISIONS						
REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	CHANGE PER ECO	DW8E-00003	REED	4/73	<i>Ed Reed</i>	5/73
B	CHANGE PER ECO	00008	LEARSON	DEC-73	<i>John Learson</i>	12/73

ENG	ED REED	APPD	STEVE GROSS	SIZE	CODE	NUMBER	REV
				A	SP	DW8E-0-12	B

DEC FORM NO 16-(381)-1079-N971
DRA 107

ENGINEERING SPECIFICATION				CONTINUATION SHEET			
TITLE DW8E ENGINEERING SPECIFICATION							
1. General Description							
1.1 The DW8E I/O Bus Converter accepts the I/O bus and Data Break Bus of both negative and positive PDP-8 family machines (LINC8, PDP8, PDP8/L, PDP8I and PDP12) and SIMULATES THE PDP-8E OMNIBUS FORMAT. The unit mounts on CHASSIS slides in a standard nineteen-inch relay rack or DEC option cabinet.							
1.2 The DW8E primarily provides an interface between a Family-of-8 Bus and an RK8F Disk System (see section 7) enabling the bi-directional transfer of: Programmed IOT's via the PDP8 accumulator; and Data Break information via the single cycle data break facility.							
2. Physical Specification							
2.1 The DW8E Bus Converter is provided with chassis slides for mounting in DEC standard 19-inch cabinetry.							
Operating Temperature: 32°- 130°F (0°- 55°C) @ 0% to 90% humidity, non-condensing							
Power Requirements: DW8E-PC and NC 95 to 130 volts self-contained 47 to 63 Hz 4 Amps maximum DW8E-PD and ND 185 to 250 volts self-contained 47 to 63Hz 2 1/2 Amps maximum							
Power Dissipation: 500WATTS							
Power Supply: H740 +15V @ 1 Amp +5V @ 17 Amps -15V @ 5 Amps							
				SIZE	CODE	NUMBER	REV
				A	SP	DW8E-0-12	B

DEC FORM NO 16-(381)-1022-N370
DRA 108

SHEET 2 OF 19

ENGINEERING SPECIFICATION				CONTINUATION SHEET			
TITLE DW8E ENGINEERING SPECIFICATION							
Module Types: M7101, M7102, M7103, M8320							
Capacity: Five quad bus slots expandable to ten quad bus slots with DW8E-PX or DW8E-NX expander unit.							
Altitude: See operating specification of the peripherals installed on the DW8E.							
Variations: DW8E-PC 115VAC, positive bus DW8E-PD 230VAC, positive bus DW8E-NC 115VAC, negative bus DW8E-ND 230VAC, negative bus DW8E-PX expander unit for either DW8E-PA or PB DW8E-NX expander unit for either DW8E-NA or NB							
Type of cables: BC08B for DM04, PDP-8/L, and PDP12 BC08D for DM01, PDP-8, Linc-8 and PDP-8/I							
NOTE: Seven foot cables are supplied. A positive bus PDP-8I equipped with a DM04 will require BC08B cables.							
3. Interface							
3.1 The DW8E provides space for five quad modules. Programmed I/O (accumulator transfers) as well as data break transfers are handled by the basic unit. As many options and/or peripherals may be controlled via the DW8E as module slots permit. However, only one high-speed (data break) device can be used in the basic unit. The basic unit consists of: 1-M7101, 1-M8320 and 4-M7102's (or 4-M7103's).							
3.2 The unit can be expanded as follows: If only one high-speed (data break) device is to be mounted inside the DW8E there are 5 quad bus slots available in the basic unit (DW8E-NC/PC or ND/PD).							
If two high-speed (data break) devices are to be mounted, or if additional slots are required, the expander section (DW8E-NX/PX) is required to be added to the unit. This puts, additionally, 1-M7101, 1-M8320 and 4-M7102's (or 4-M7103's) into the basic unit.							
				SIZE	CODE	NUMBER	REV
				A	SP	DW8E-0-12	B

DEC FORM NO 16-(381)-1022-N370
DRA 104

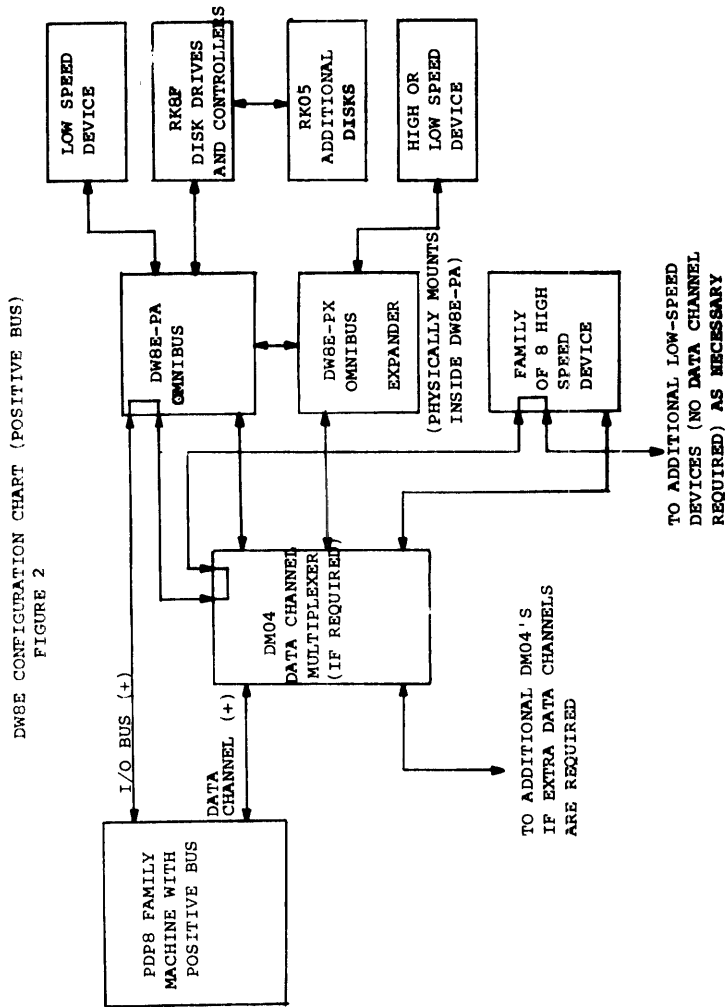
SHEET 3 OF 19

ENGINEERING SPECIFICATION				CONTINUATION SHEET			
TITLE DW8E ENGINEERING SPECIFICATION							
				SIZE	CODE	NUMBER	REV
				A	SP	DW8E-0-12	B

DEC FORM NO 16-(381)-1022-N370
DRA 108

SHEET 4 OF 19

TITLE DW8E ENGINEERING SPECIFICATION



TITLE DW8E ENGINEERING SPECIFICATION

3.3 Figures 1 + 2 show how the unit configures. Note that the DW8E does not perform the data channel multiplexing. Should two or more high-speed devices (data break) be used on a PDP system (either inside the DW8E or via the normal positive or negative I/O bus), a DM01 or DM04 data channel multiplexer is still necessary.

3.4 The DW8E must be the first device on the I/O bus and must have the highest priority slot when used with either a DM01 or DM04.

3.5 A DW08-A or DW08-B I/O bus converter must not be used to drive a DW8E.

3.6 PDP-8 Installation & LINC-8

3.6.1 PDP-8 ECO #8M-00007 must be installed in the PDP-8. This replaces timing signal B72A with B MEM START on the I/O Bus cable. (ECO #LINC8M-00008 IN THE LINC-8)

3.6.2 All system diagnostics should be run prior to, and after, installation of the ECO to assure no latency problems.

3.6.3 Margins should be run on the PDP-8 while running the RK8E Drive and Control Test, "MAINDEC-08-DHRKB-B-PB".

3.6.4 M7101 revision F, or modified version D or E boards, should be used in the DW8E, or later.

4. Programming

No specific IOT's are associated with the DW8E bus converter. The function of the converter is to translate the PDP-8 family external bus format into the OMNIBUS format.

4.1 The execution of a 6XX0 on the DW8E bus converter would be considered a NOP by the processor since no input or output would be executed.

4.2 I/O cycles will occur in 4.25 micro sec.

4.3 The skip bus may only be used to increment the PC by one location.

TITLE DW8E ENGINEERING SPECIFICATION

4.4 The time to complete non I/O cycles will be: 1.5 micro sec. for 8, 81. 1.6 micro sec. for 8L.

4.5 Only single cycle data break is allowed. A data break cycle will precede a fetch cycle only, and will be followed by at least one machine cycle.

4.6 The peripheral will halt with time state 3 asserted.

TITLE DW8E ENGINEERING SPECIFICATION

5. Omnibus Signals

The following signals are available.

Signal Function

Data Bus	Data 0-11
Memory Add	MA 0-11, EMA0-2
Memory Data	MD 0-11
Time States	TS1, TS2, TS3, TS4
Time Pulses	TP1, TP2, TP3, TP4, Int Strobe
I/O Cables	C0, C1, SKIP, Int RQST, I/O PAUSE
Memory	MD DIR
DATA BREAK	BRK IN PROG
MISC	Run, Power OK, Initialize, +5, +15, -15, GND

5.1 Timing Diagrams

- 5.1.1 OPR Cycle see fig. 3
- 5.1.2 I/O Cycle see figs. 4, 5, 6
- 5.1.3 Data Break Cycle see fig. 7

6. Limitations

The following signals are NOT available.

Signal Function

Memory Control	ALL SIGNALS
Processor States	ALL SIGNALS
Programmer console	ALL SIGNALS
Programmed I/O	C2, Buss strobe NOT LAST XFER
Data Break	INT IN PROG CPMA Disable Over Flow Break Data Control MS IR Disable MA MS Load Control

TITLE DW8E ENGINEERING SPECIFICATION

7. Equipment Requirements

7.1 The following peripherals may be used with the DW8E

- 7.1.1 RK8F ✓
- 7.1.2 DB8E ✓
- 7.1.3 KL8E ✓
- 7.1.4 KL8J ✓
- 7.1.5 RK8E ✓

7.2 RK8F Requirements

7.2.1 All Family of 8 machines must have a data break facility.

7.2.2 The M7105 Major Registers module of the RK8E must be modified to M7105-YB, and M7104 to M7104-YA.

7.3 DB8E Requirements

7.3.1 NONE

7.4 KL8E Requirements

7.4.1 IOT code 0 must not be used.

7.5 KL8F Requirements

7.5.1 IOT code 0 must not be used.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

TITLE DW8E ENGINEERING SPECIFICATION

8. DW8-E Theory of Operation

The configuration of the DW8-E I/O bus converter is to use PDP-8 I/O bus timing to generate Time States 1, 2, 3, & 4 (TS1, TS2, TS3, TS4); Time Pulses TP1, TP2, TP3, TP4; and signals necessary to transfer information in or out of approved 8/E omnibus options via AC transfers (IOT's) or Data Break Transfers (single-cycle).

Figures 3, 4, 5, 6 & 7 illustrate the OPR, IOT, & BREAK cycle timing which is generated by the control card M7101.

OPR CYCLE - Figure 3 shows the timing sequence of a basic Operate or memory reference instruction. Referring to a control module print (C-CS-M7101-0-1, D-BS-DW8-E-3 or D-BS-DW8-E-5) the control is initially set to Time State 1 by **INITIALIZE L**.

Timing is sequenced by the level changes of **BTS 1** and **BTS 3** from the PDP8 computer. These level changes generate the TP pulses, which in turn generate **SHIFT TS H**. This shifts the control to the next time state. **CLR TP L** then clears the TP pulse floos after the shift.

When the control is in Time State 1, **BTS 1** going away sets **TP1**. **SHIFT TS H** shifts the control to Time State 2 and **CLR TP L** clears **TP1**. In Time State 2, **BTS 3** going high causes the shift to Time State 3. If the machine is halted the control will stop in Time State 3. **TP3**, Time State 4 and **TP4** occur during **BTS 1** Time of the following cycle.

In Time State 3, **BTS 3** going away sets **TIME PAUSE**. **BTS 1** of the next cycle generates **CLR TIME PSE L** which clears **TIME PAUSE** and issues **TP3**, shifting to Time State 4. 150 NS after **TIME PAUSE** is cleared, **RECYCLE** issues **TP4** which shifts it again to Time State 1.

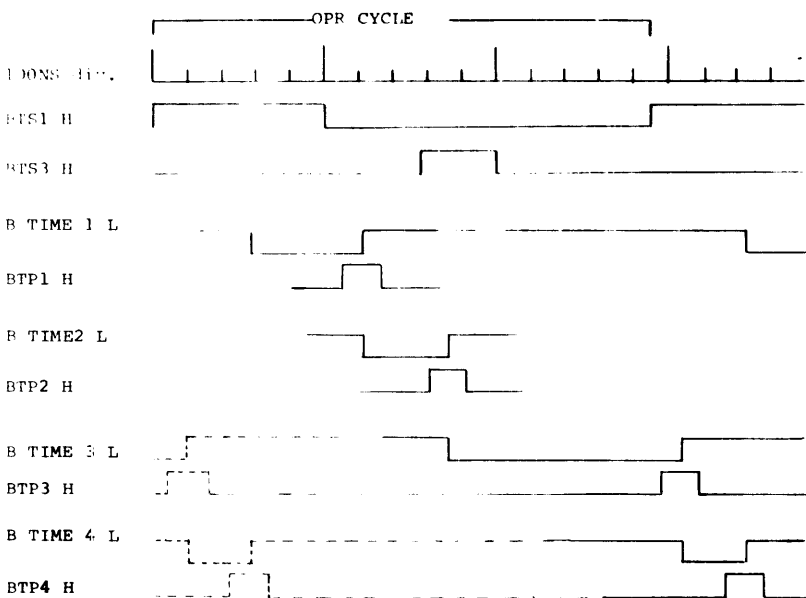
Note in the delay circuitry for **SHIFT TS L** and **CLR TP L** that these signals are fed back to their own inputs, to limit their pulse widths to 50NS. **CLR TP L** also disables the input to the delay for **SHIFT TS H**. This prevents recirculating pulses before the TP input goes away.

IOT CYCLE - Figures 4 & 5 show the elongated IOT cycle.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

TITLE DW8E ENGINEERING SPECIFICATION

FIGURE 3.



NOTE: TP3, TIME STATE 4 and TP4 are issued during **BTS1** of the following cycle.

The Times shown here for **BTS1** and **BTS3** are typical for a PDP-8I. For a PDP-8L they are 650 NS and 250 NS. For a PDP-8 they are both 400 NS.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

TITLE DW8E ENGINEERING SPECIFICATION

The function is to issue **I/O PAUSE L** and **TP3 H** to the option and also to receive and interpret **COL** and **CLL** from the option. The timing of these events to each other remain the same although they occur on the first of the IOP pulses which are issued.

COL causes the accumulator to be cleared by **CLR AC H** which enables the AC CLEAR BUS for 700 NS. **CLL** causes the AC to be loaded with the contents of a buffer register in the option via the AC INPUT BUS which is enabled for 400 NS by **B Cl H**.

The **C0** and **C1** combinations are:

- $\overline{C0} . \overline{C1}$ = Load buffer register with contents of AC, don't clear AC.
- $\overline{C0} . C1$ = Don't clear AC, "OR" contents of buffer register to AC.
- $C0 . C1$ = Clear AC, then load contents of buffer register to AC.
- $C0 . \overline{C1}$ = Load buffer register with contents of AC, then clear AC.

When any combination of **IOP1**, **IOP2**, **IOP4** is issued, **I/O END CLK L** follows the IOP levels inversely. For any combination of **C0** and **C1** (except $C0 . C1$) **I/O END CLK H** will follow **I/O END CLK L**.

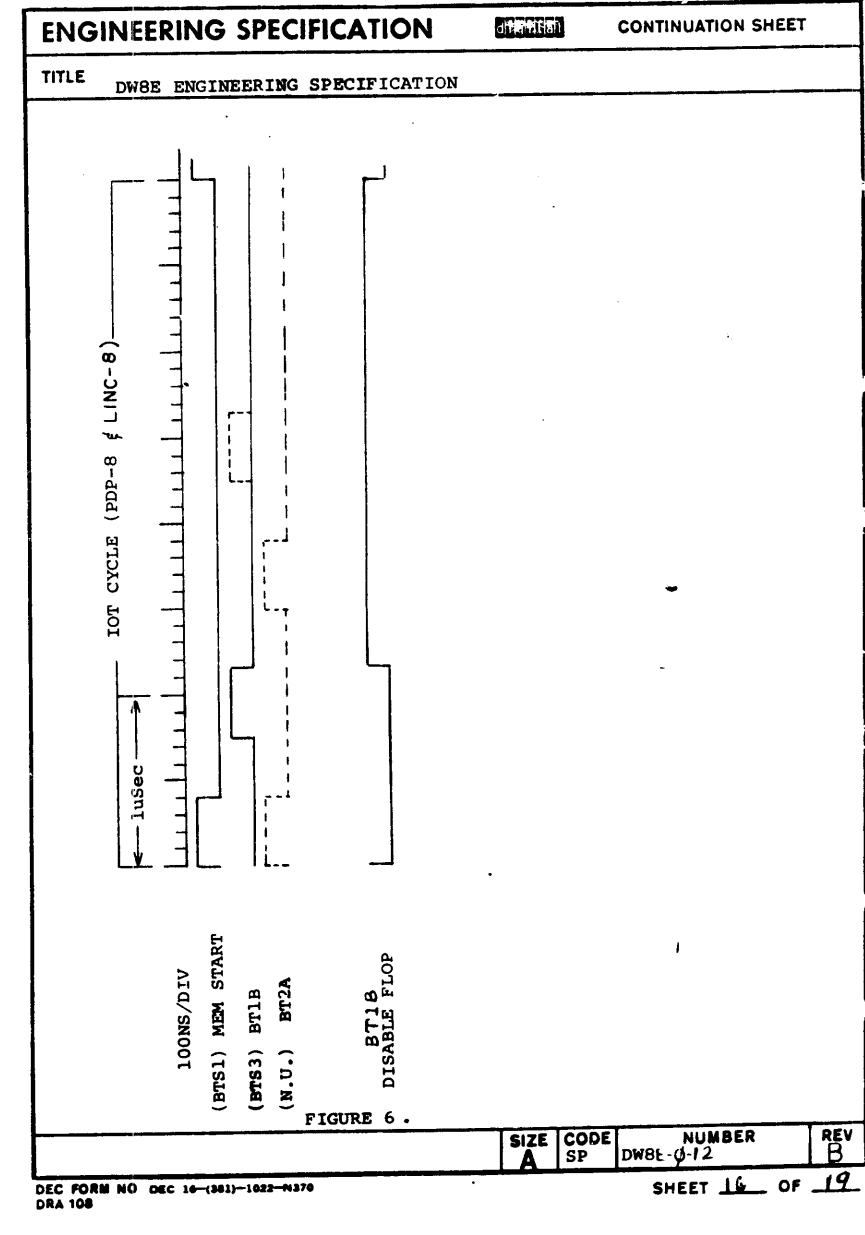
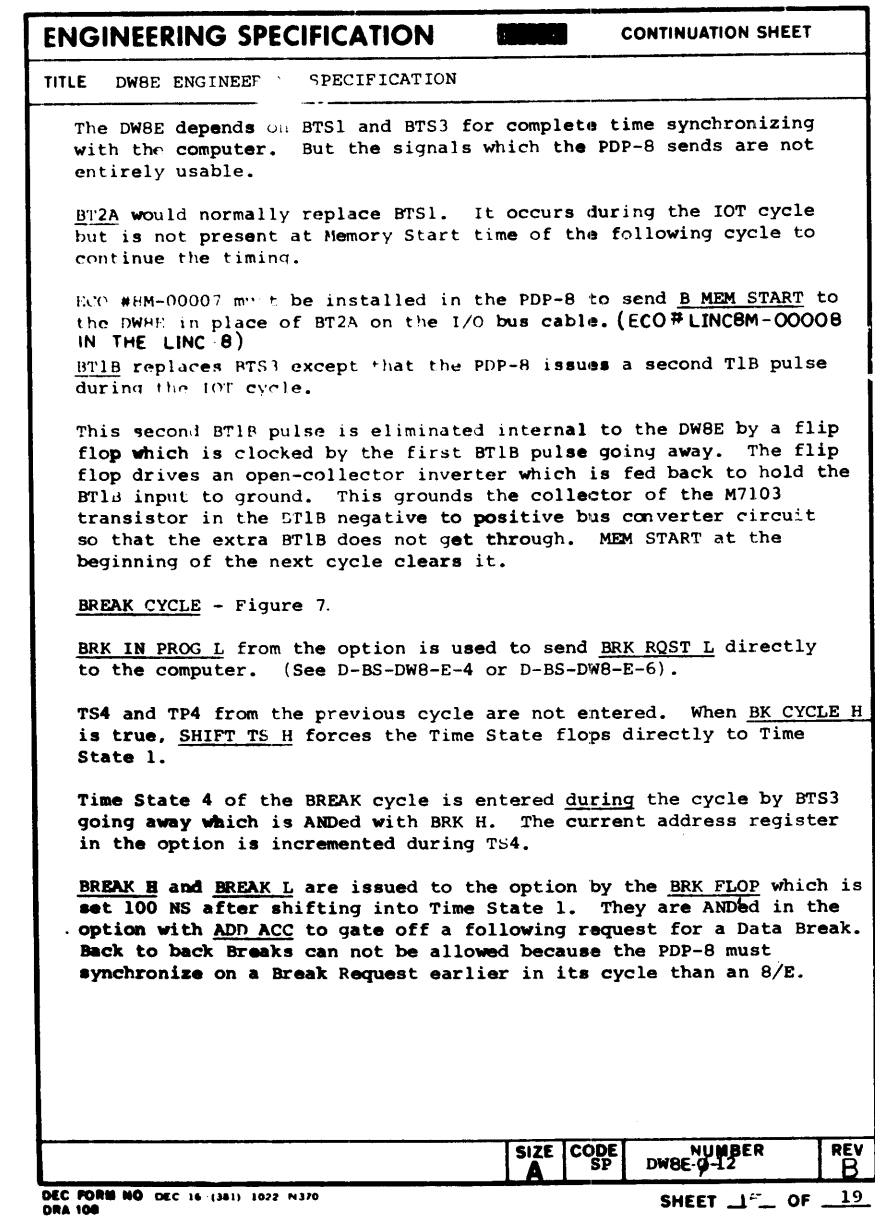
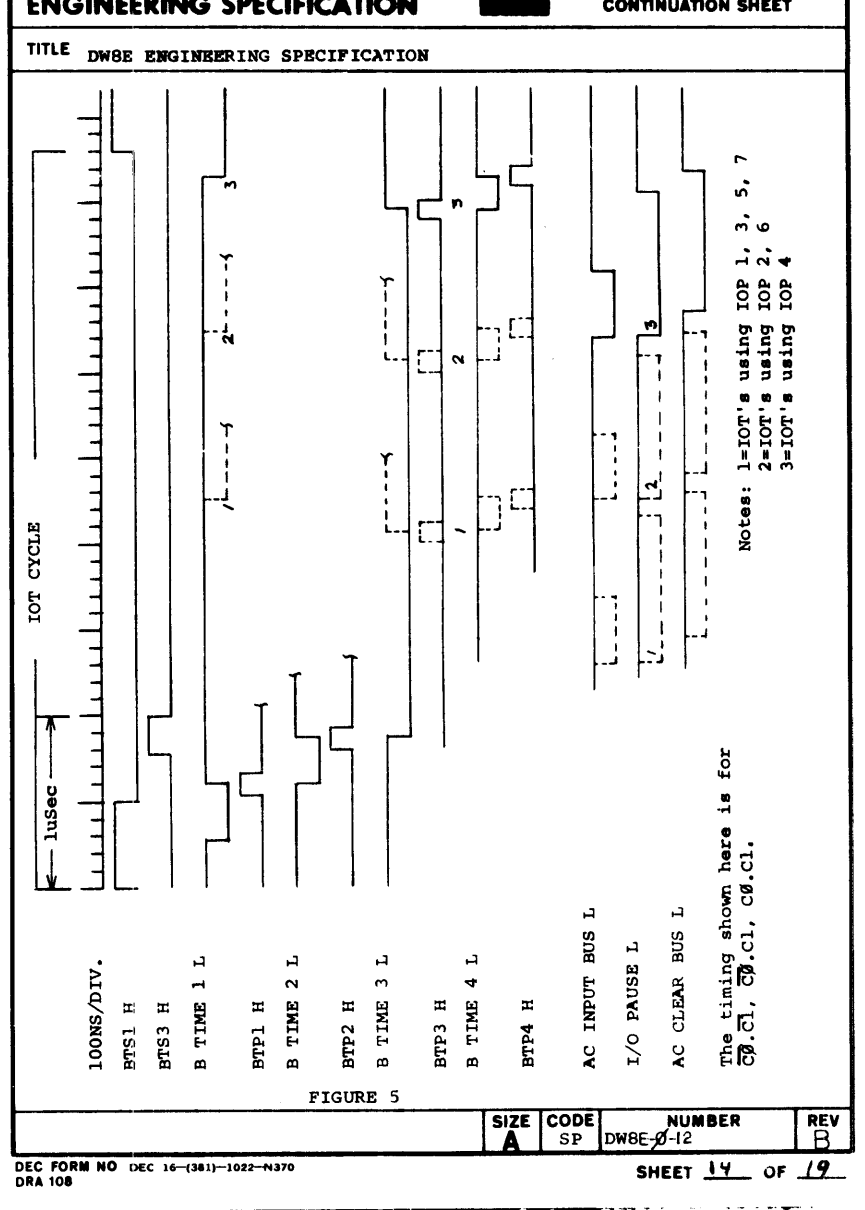
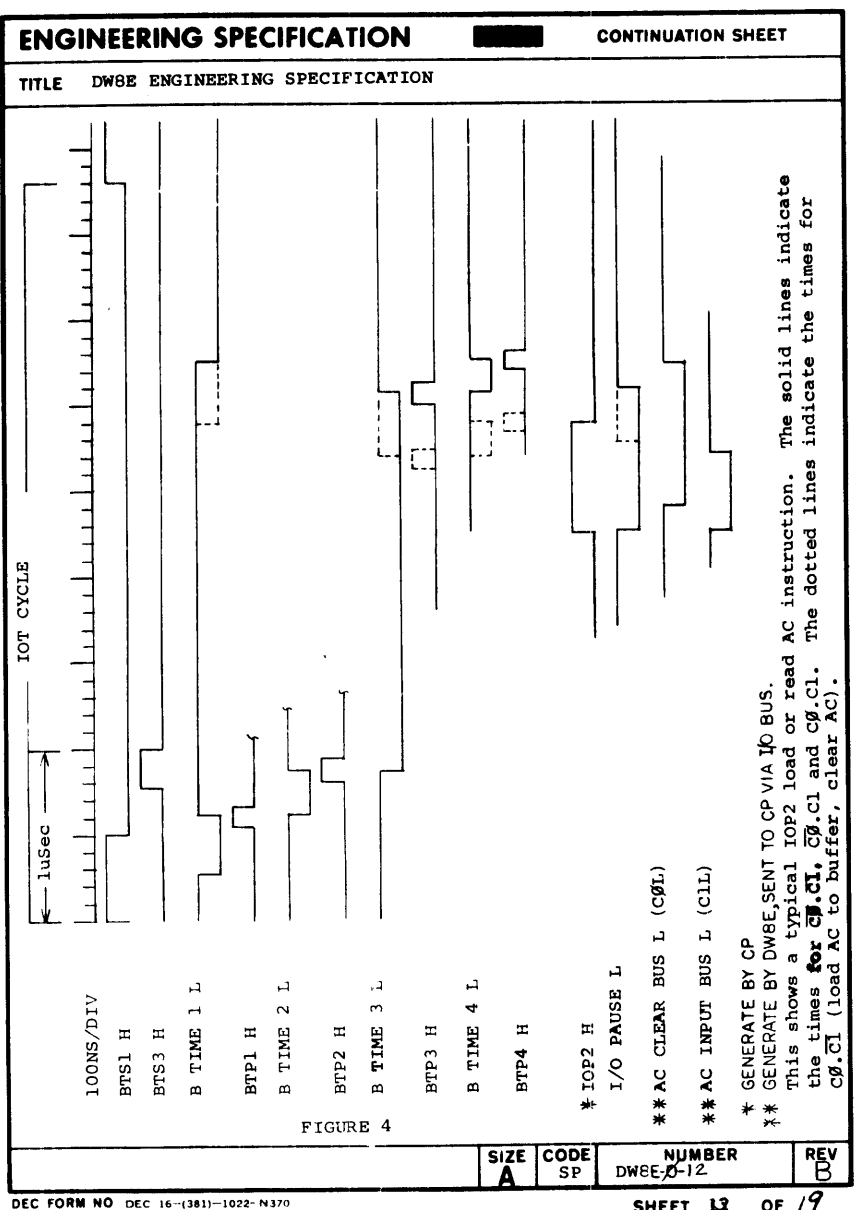
I/O PSE (1) H is set by the leading edge of the first IOP pulse and **I/O END CLK H** goes low. When the IOP pulse goes away **I/O END CLK H** goes high setting **I/O END**. This issues **CLR TIME PSE L** which clears **TIME PAUSE**, issues **TP3**, and shifts to Time State 4. **CLR TP L** then clears **TP 3**, **I/O END**, and **I/O PAUSE**.

The following IOP pulses do not set **I/O PAUSE** again because the control is out of Time State 3. 150 NS after **TIME PAUSE** is cleared, recycle issues **TP4** and shifts into Time State 1 for the rest of the I/O cycle.

* $C0 . \overline{C1}$ is the case where the contents of the AC must be loaded to the buffer register before the AC is cleared. The gate of the delay which was strobed by **I/O END CLK L** is enabled so that **I/O END CLK H** is only 300 NS long. **I/O PAUSE** is shortened and **TP3** and the other events occur as before except that they are now earlier in the cycle.

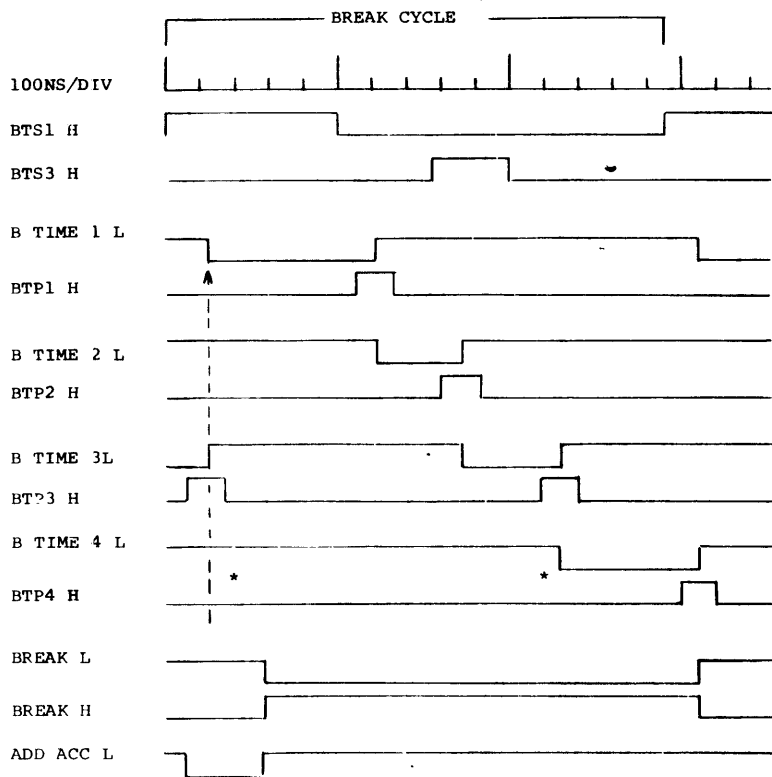
PDP-8 IOT CYCLE - Figure 6.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B



TITLE DW8E ENGINEERING SPECIFICATION

FIGURE 7



*NOTE: 1) Time State 4 and TP4 from the previous cycle are not allowed when entering the Break Cycle. The control goes directly to Time State 1.
 2) Time State 4 for the Break Cycle is entered during the Break Cycle.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

TITLE DW8E ENGINEERING SPECIFICATION

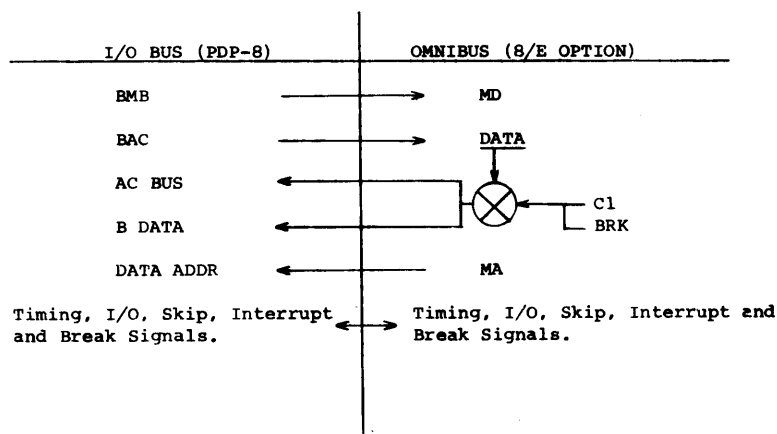
There are two further constraints to the option. The Break Address must be on the Bus before the Break Cycle. Also, the Data to be transferred into the computer must be on the Bus before Time State 2. Data to be read from the computer is loaded by the peripheral with the leading edge of TP3.

Information Multiplexing - (DWG. D-BS-DW8-E-4 or D-BS-DW8-E-6). Four M7102's are used to interface to a PDP-8 positive I/O bus. Operation of the M7103's are identical except that the M7103 has negative to positive receivers, and positive to negative drivers, to interface to a PDP-8 negative I/O bus. The M7102 and M7103 are pin-compatible.

Each M7102 or M7103 handles 3 information lines and 4 address lines and has sufficient circuitry to utilize the control and timing signals. The circuitry from input pins AP2 and AR2 allows for the fact that on the positive I/O Bus these signals are positive pulses but are negative pulses on the negative I/O bus. These signals are: BTS1, BTS3, BIOP1, BIOP2, BIOP4 and B INITIALIZE.

Figure 8 is a representative of the interfacing of the signals between the PDP-8 I/O bus and the derived OMNIBUS I/O signals.

FIGURE 8.



SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

TITLE DW8E ENGINEERING SPECIFICATION

The BMB bits are used to drive the MD (Memory Data) lines directly without any gating. The BAC bits are normally gated onto the bi-directional DATA lines. If an IOT instruction is given to read an option buffer to the AC, the C1 line comes true. This turns off the BAC and gates the contents of the DATA lines onto the AC input Bus lines so that they can be strobed into the AC by the computer.

BRK comes true at the beginning of a Break Cycle. This also gates off the BAC but gates the DATA lines onto the B DATA lines which are strobed into the Memory Buffer of the computer.

The Memory Address (MA) and Extended Memory Address (EMA) bits are used to drive the DATA Address and Extended Data Address lines directly to the computer. Other signals which are used to drive lines directly to the computer are: SKIP, INT RQST, BRK IN PROG (BRK RQST), ADD ACC, and MD DIR (DATA IN). The cycle selection input is grounded to request only Single-cycle Data Breaks (1 cycle).

BREAK H and BREAK L inputs are driven by the (1) H and (1) L sides of the BRK flop from the M7101 control card.

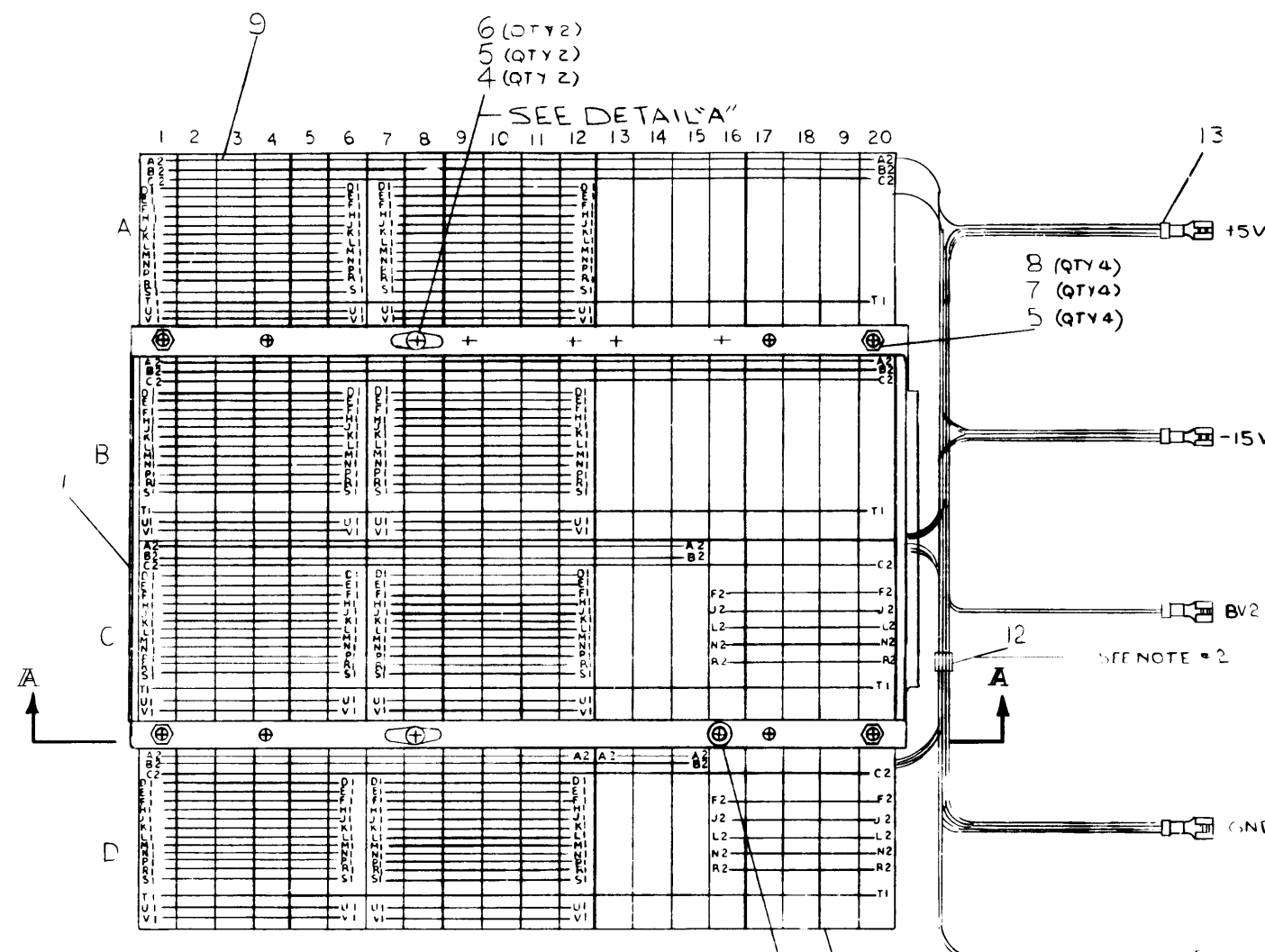
The AC CLEAR BUS is driven by the 700 NS delay CLR AC from the M7101 and I/O PAUSE to the OMNIBUS is driven from the M7101 by the flop I/O PSE.

SIZE	CODE	NUMBER	REV
A	SP	DW8E-0-12	B

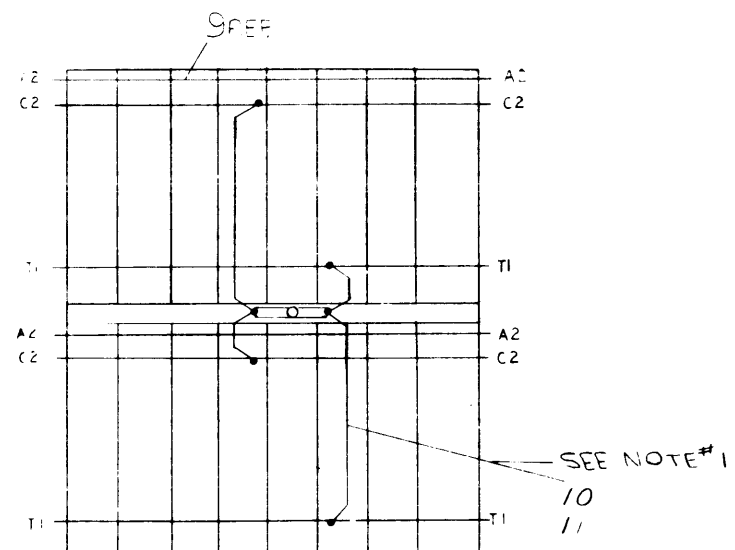
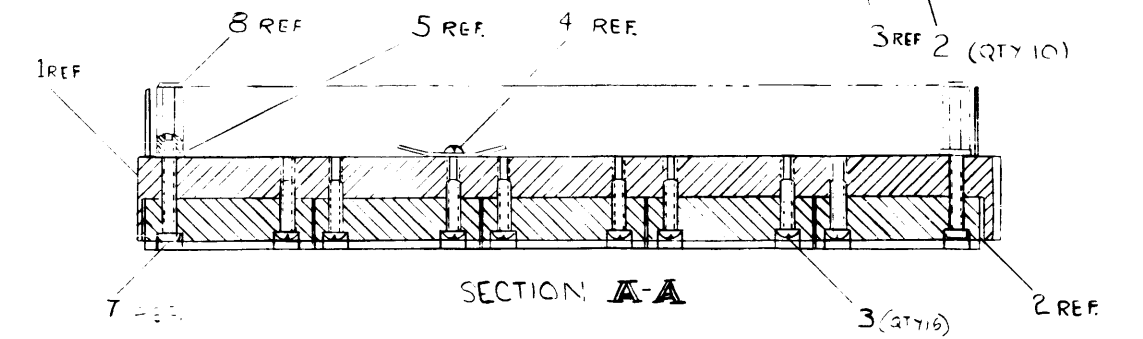
DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				QUANTITY / VARIATION																			
PARTS LIST																							
MADE BY K. GLEZEN		CHECKED <i>S. Reilly</i>		SECTION 1																			
DATE 10/7/75		DATE 11-7-75																					
ENG <i>J. Leo, zom</i>		PROD <i>Ron R. R.</i>		ISSUED SECT. 1																			
DATE 11-26-75		DATE 11-26-75																					
ITEM NO.	DWG NO. / PART NO.	DESCRIPTION																					
1	C-MD-7409056-0-0	OMNICASTING		1																			
2	E-BC-1210258-0-0	288 PIN CONN BLOCK		10																			
3	9006120-06	SCR PHL HD. POSTDRIVE #8-32 x .62		16																			
4	9006035-01	SCR PHL HD PAN #8-32 X .25		2																			
5	9006634-00	WASH INT TOOTH #8		6																			
6	9007597-00	TERM SOLDER		2																			
7	9007988-08	SCR SOCKET HD. CAP #8-32 X 1.00		4																			
8	9008334-00	SPACER .25 AF X .69 LG #8-32 HOLE		4																			
9	1205541-0-0	BUSS STRIP		A/R																			
10	9107256-1	TUBING THIN WALL		A/R																			
11	9107560-1	#22 AWG BUSS WIRE		A/R																			
12	9008845-00	TAPE INSULATING.		A/R																			
13	D-1A-7011926-0-0	HARNES DW8E		1																			
14	9105740-44	WIRE #30 AWG SOLID		A/R																			
15	9105740-66	WIRE 30 AWG SOLID		A/R																			
16	K-WL-DW8E-0-11	WIRE LIST		1																			
17	A-DC-7411881-0-0	DECAL LOGIC ASSY REVISION		1																			
18	A-WT-7012022-0	DW8E AWT REV STATUS		REF																			
TITLE		ASSY NO.		SIZE	CODE	NUMBER				REV	ECO NO.												
WIRED ASSY (DW8E)		D-AD-7012022-0-0		A	PL	7012022-0-0					DW8E-00000												
		SHEET 1 OF 1		DIST																			

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NOTES:
 1. CONNECTIONS ON ITEM 9 & 1 TO BE LOCATED & SOLDERED AT MINIMUM PRACTICAL HEIGHT ABOVE BLOCKS.
 2. ADHERE TAPE TO SURFACE DOWN (ITEM #14)
 3. WIRE (ITEM #14) FOR MACHINE WRAPPED WIRING AND BLUE WIRE (ITEM #15) FOR HAND WRAPPED WIRING



ITEM NO	DESCRIPTION	WIRE TABLE	
		FROM	TO
22	RED	+5V	A2 Ø A2
	RED	+5V	B2 Ø A2
	RED	+5V	C15 A2
	RED	+5V	D15 A2
	BLK	GND	A2 Ø C2
	BLK	GND	B2 Ø C2
	BLK	GND	C2 Ø C2
22	BLK	GND	D2 Ø C2
15	GRY	BV2	B12 V2
22	BLU	-15V	A2 Ø B2
	BLU	-15V	B2 Ø B2
	BLU	-15V	C15 B2
22	BLU	-15V	D15 B2
15	VEL	+7.5V	D12 A2



DETAIL "A"
2 PLACES

REV	CHANGE NO	DATE	BY

FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
N/E				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN DATE 11/30/75	PARTS LIST	
DECIMALS	ANGLES	CHK'D DATE 11/25/75	digital EQUIPMENT CORPORATION	
XXX .005		ENG DATE 11/25/75	MAYNARD MASSACHUSETTS	
XX .02	+0 .30	PROJ ENG DATE 11/25/75	TITLE	
X .1		PROD DATE 11/26/75	DW8E WIRED ASSY	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY		SIZE CODE	NUMBER
			DAD	7012022-0-0
FINISH	SCALE NONE		SHEET	OF 1
			DIST	

WORKING AT 107 15848

REV NUMBER 0-0

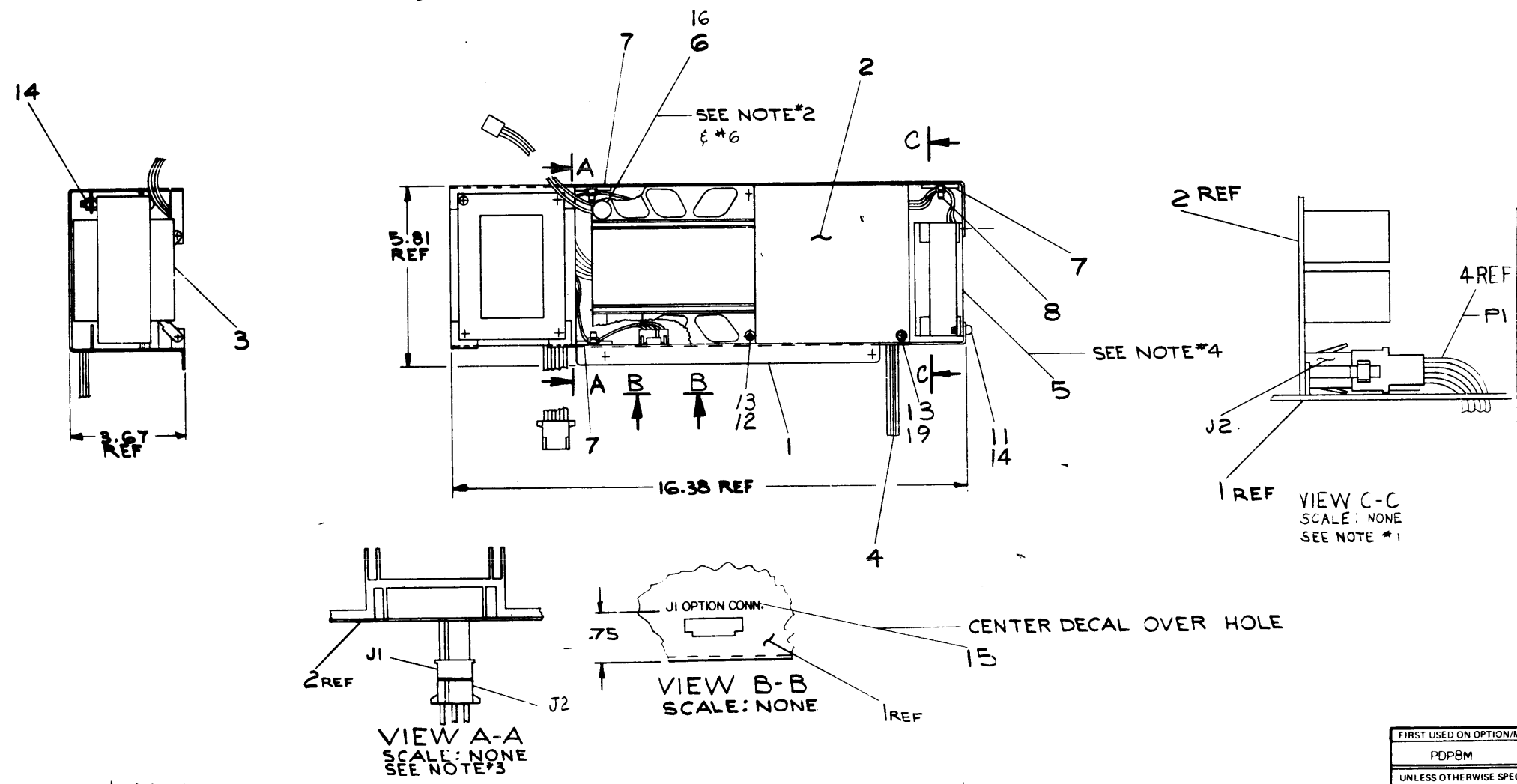
A

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LEGEND	
7009282-0	DC HARNESS
7009282-1	NO DC HARNESS

- NOTES:**
- CONNECT J2 OF ITEM #2 (REGULATOR BOARD ASSY.) TO P1 OF ITEM #4 (D.C. HARNESS).
 - REPLACE THERMOSTAT ON ITEM #2, (ITEM #76 ON DWG. NO E-IA-5409728-0-0) WITH ITEM #6 (THERMOSTAT).
~~LEAVE LEADS AT FULL LENGTH AND ADD ITEM #10 (PIN) AND ITEM #11 (CONN.) TO END OF LEADS RETURN OLD THERMOSTAT WITH 5 INCH LEADS TO STOCKROOM.~~
 - CONNECT J1 OF ITEM #2 (REGULATOR BOARD ASSY.) TO J2 OF ITEM #3 (TRANSFORMER ASSY.)
 - CONNECT J4 AND J5 OF ITEM #3 (TRANSFORMER ASSY.) TO ITEM #5 (FAN).
 - FOR POWER SUPPLY ASSEMBLY PROCEDURE SEE DWG. A-SP-PDP8M-0-8
 - REMOVE THERMOSTAT (ITEM #6) FROM THE BOARD AND LEAVE WITH THE MACHINE WHEN RETURNING THE REGULATOR BD ASSY. (ITEM #2) FOR REPAIR.



QTY	DESCRIPTION	PART NO.	ITEM NO.
2	SCR, PHL PAN HD #6-32X.25	9006020-1	19
N/A	PACKAGING INSTRUCTIONS	A-SP-370007-0-0	18
REF	PS ASSY PROCEDURE	A-SP-PDP8M-0-8	17
A/R	COMPOUND THERMAL JOINT	9008268	16
1	DECAL (PDP8/M)	A-DE-7410790-0-0	15
8	NUT, KEPS # 8-32	9006663	14
6	WASHER, INT TOOTH LOCK	9006663	13
4	SCR, PHL HD PAN #6-32X.44	9006023-0	12
4	SCR, PHL HD PAN #8-32X.44	9006038-0	11
1	PIN, MATE-N-LOK (MALE)	180828-01-10	10
1	CONN, MATE-N-LOK	180828-02	9
3	CABLE, TIE	9007031	8
3	CABLE, TIE MOUNT	9008264	7
1	THERMOSTAT ASSY	C-IA-7009452-4-6	6
1	FAN,	1210719	5
0	HARNESS, D.C.	D-IA-7009280-0-0	4
1	TRANSFORMER ASSY.	E-IA-7009277-0-0	3
1	REGULATOR BD ASSY	E-IA-5409728-0-0	2
1	CHASSIS, POWER SUPPLY	E-IA-7410746-0-0	1

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
PDP8M		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN	DATE	digital EQUIPMENT CORPORATION <small>MAYFARDE MASSACHUSETTS</small> TITLE POWER SUPPLY ASSY.
DECIMALS	ANGLES	CHK'D	DATE	
xxx .06	10' 30'	ENG	DATE	
xx .02		PROJ ENG	DATE	
x .01		PROD	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		NEXT HIGHER ASSY		
MATERIAL		D-IA-PDP8M-0-0	SIZE CODE	NUMBER
FINISH		SCALE NONE	D AD	7009282-0-0
		SHEET 1 OF 1	DIST	REV C

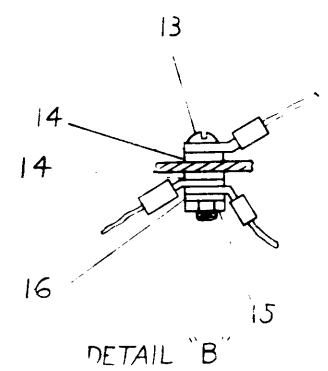
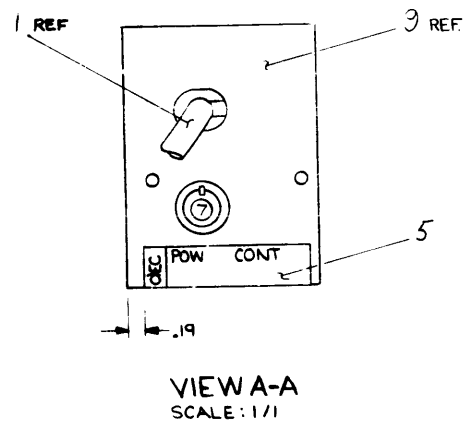
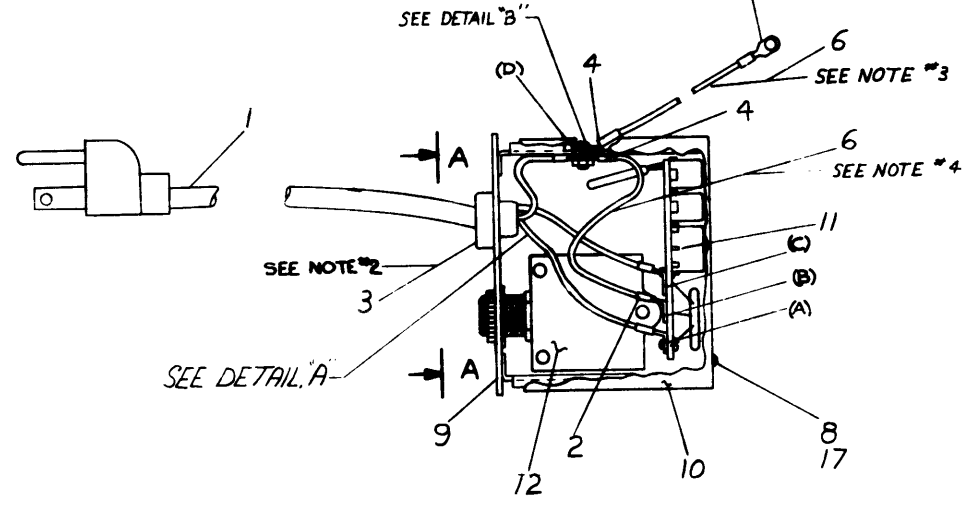
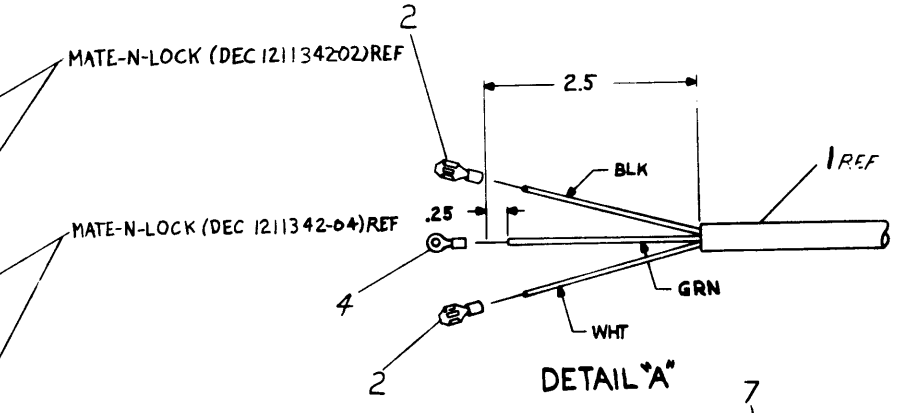
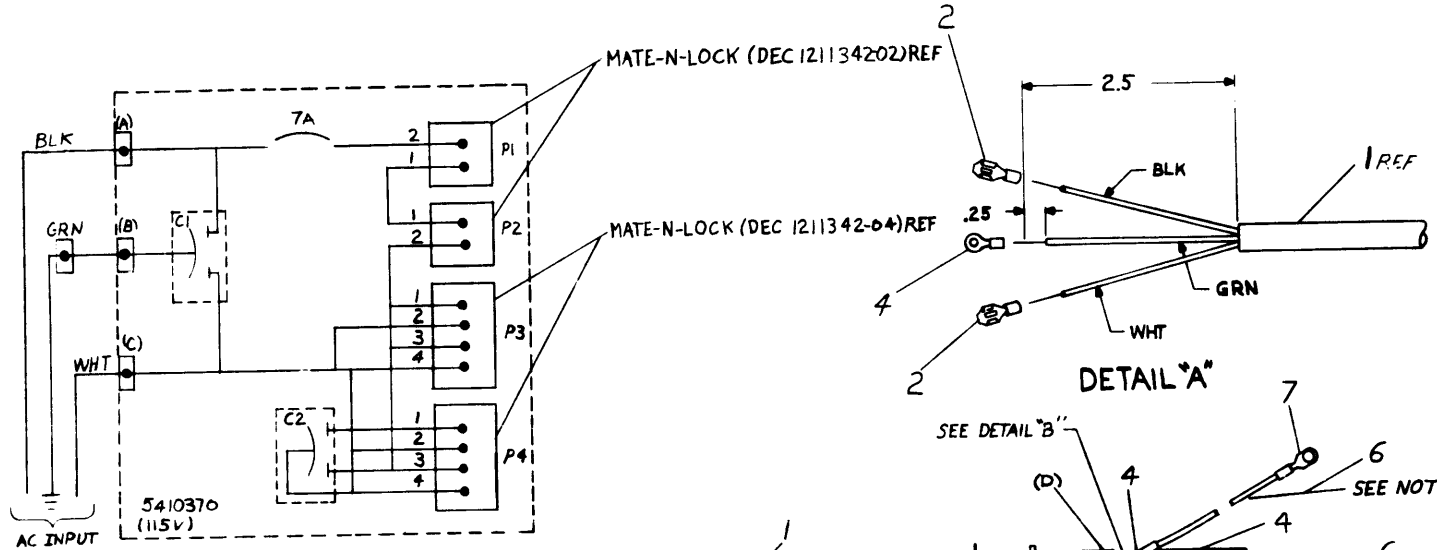
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1	5-17-73	P. GARDNER	
2	5-18-73	J. GARDNER	
3	5-18-73	J. GARDNER	
4	5-18-73	B. PATTON	
5	12-21-73	P. GARDNER	

DEC FORM NO DED 100-A

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LEGEND		
PART NO.	ITEM #1	VARIATION
BC20A-06	V700015-06	6 FT
BC20A-09	V700015-09	9 FT

- NOTES:
- CONNECT ITEM #1 (POWER CORD) PER CIRCUIT SCHEMATIC.
 - FOR INSTALLATION USE HEYCO #29 STRAIN RELIEF PLIERS.
 - LENGTH OF THIS WIRE (ITEM#6) IS 9.75" ±.5
 - LENGTH OF THIS WIRE (ITEM#6) IS 3.0" ±.5



QTY	DESCRIPTION	PART NO.	ITEM NO.
1	WASHER #6 INTERNAL TOOTH	7006633	
1	WASHER, FLAT 3/2x1/25x027	7006655	16
1	KEPNUT #4-40	9006557	15
2	WASHER #4 INTERNAL TOOTH	9006632	14
1	SCR. PHL. PAN HD #4x.38	9006011-1	13
1	CIRCUIT BREAKER (7AMP)	1210830-7	12
1	POWER CONTROL BQ (115 V)	CTA-5410370-0-0	11
1	COVER, AC. INPUT	C-MD-570773-0-0	10
1	BOX, AC. INPUT	03ALE-0015-0-0	9
1	SCR. PHL. HD. PAN #6-32x.25	7006620-1	8
1	SOLDERLESS, CONN #50360	7007930	7
AIR	#18 AWG. STRD GRN	9107360-55	6
1	PWR CONTROL DECAL (115V)	A-DC-5310438-0-0	5
3	SOLDERLESS, CONN.	9077929-0	4
1	STRAIN RELIEF S.R.6N3-4	9008492-2	3
3	SOLDERLESS CONN	9007917	2
1	POWER CORD 120 V	SEE LEGEND	1

FIRST USED ON OPTION/MODEL	QTY	DESCRIPTION	PART NO.	ITEM NO.
PDP8M				

DRN	DATE	CHK'D	DATE	ENG	DATE	PROD	DATE
D. Sullivan	2-21-73	X. Sullivan	2-21-73	J. Sullivan	2-27-73		2-27-73

MATERIAL	FINISH	NEXT HIGHER ASSY.	SCALE	SHEET	OF	SIZE CODE	NUMBER	REV
						DUA	BC20A-0-0	C

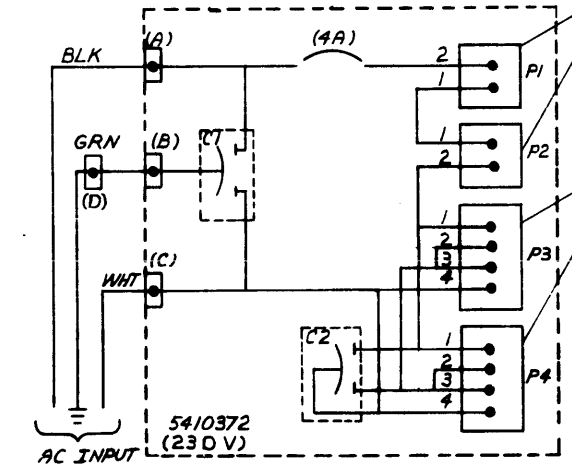
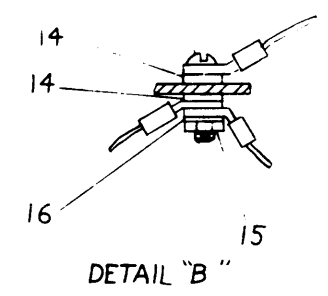
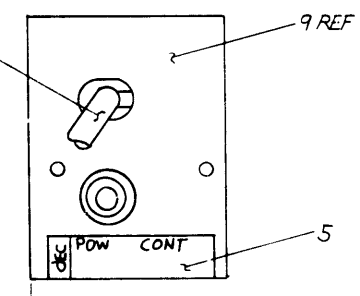
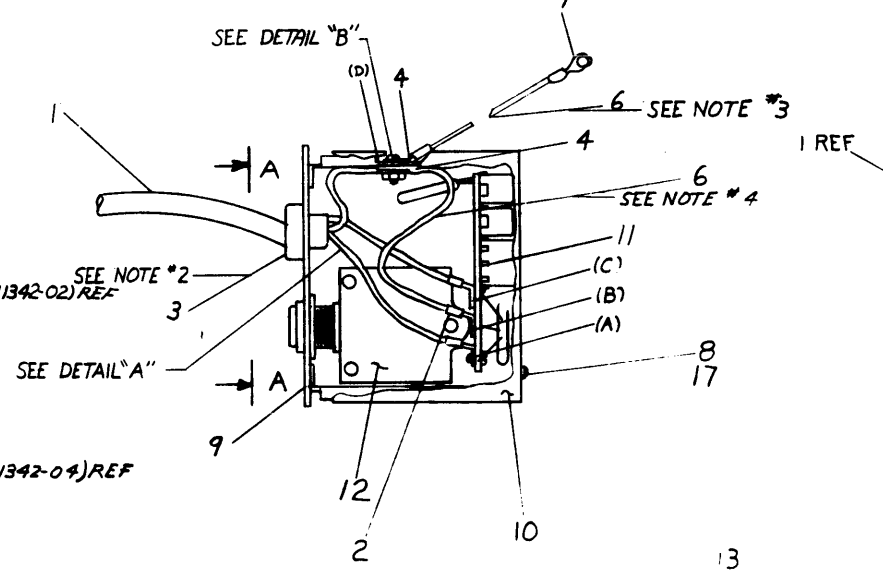
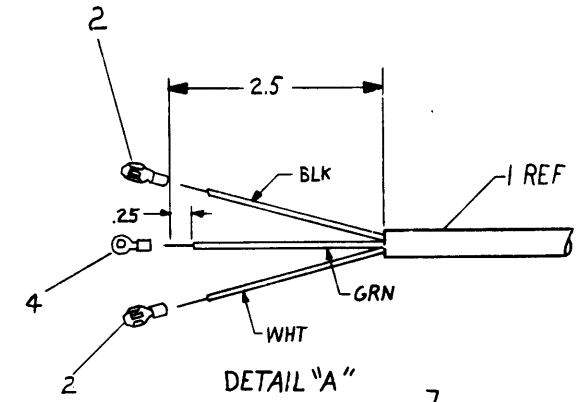
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1	0001	4-25-73	P. GARDNER	
2	0002	5-15-73	P. GARDNER	
3	0003	5-15-73	P. GARDNER	

ORIGINATED BY: P. GARDNER
DRAWING NO: WAS
D-UA-BC20-0-0
P. GARDNER

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LEGEND		
PART NO.	ITEM #1	VARIATION
BC20B-06	1700016-06	6 FT
BC20B-09	1700016-09	9 FT

- NOTES:
- CONNECT ITEM #1 (POWER CORD) PER CIRCUIT SCHEMATIC.
 - FOR INSTALLATION USE HEXCO #29 STRAIN RELIEF PLIERS.
 - LENGTH OF THIS WIRE (ITEM #6) IS 9.75" ± .5
 - LENGTH OF THIS WIRE (ITEM #6) IS 3.0" ± .5



QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	WASHER, #6 INTERNAL TOOTH	9006633	17
1	WASHER, FLAT, .312x.125 .027	9006655	16
1	KEP NUT #4-40	9006557	15
2	WASHER, #4 INTERNAL TOOTH	9006632	14
1	SCR. PHL. PAN HD #4-40 x .38	9006011-1	13
1	CIRCUIT BREAKER (4 AMP)	1210830-4	12
1	POWER CONTROL BD (230V)	C-2A-5410372-0	11
1	COVER, AC INPUT	C-MD-5310372-0	10
1	BOX, AC INPUT	D-3A-5309045-0	9
1	SCR. PHL. PAN HD #6-32 x .25	9006020-1	8
1	SOLDERLESS CONN #50360	9007930	7
NR	#18 AWG STRD, GRN	9107360-55	6
1	PWR CONTROL DECAL (230V)	A-DG5310439-0-0	5
3	SOLDERLESS CONN	9007929-0	4
1	STRAIN RELIEF SR-6N3-4	9008492-2	3
3	SOLDERLESS CONN	9007917	2
1	POWER CORD 240V	SEE LEGEND	1

FIRST USED ON OPTION MODEL		DATE		DATE		DATE		DATE	
PDP 8M		9-5-78		9-5-78		9-18-78		9-18-78	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES		DRN: <i>Chatter</i>		DATE: <i>9-5-78</i>		DATE: <i>9-5-78</i>		DATE: <i>9-18-78</i>	
TOLERANCES		CHK'D: <i>Phillips</i>		DATE: <i>9-5-78</i>		DATE: <i>9-5-78</i>		DATE: <i>9-18-78</i>	
DECIMALS	ANGLES	END: <i>Phillips</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>	
.xxx = .005	0 30'	PROJ. ENG. <i>Phillips</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>	
.xx = .02		PROJ. <i>Phillips</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>	
.x = .1		PROJ. <i>Phillips</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>		DATE: <i>9-18-78</i>	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY 1		MATERIAL		NEXT HIGHER ASSY.		SIZE CODE		NUMBER	
		FINISH		SCALE		D UA		BC20B-0-0	
				SHEET 1 OF 1		DIST.			

REVISIONS	CHANGE NO.	REV.
1	BC20-00003	HIV
2	BC20-00001	A
3	BC20-00001	A
4	BC20-00001	A
5	BC20-00001	A
6	BC20-00001	A
7	BC20-00001	A
8	BC20-00001	A

DEC FORM 16
10-68

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DRAWING NUMBER	INIT REL		AUTOMATIC WIRE TESTER (AWT) REVISION STATUS																REV			
	T5	C																				
K-WL-DWBE-Ø-11	-	C																				
A-PL-7012022-0-0	-	*																				
D-AD-7012022-0-0	-	*																				

SIZE CODE: A
 AWT
 NUMBER: 7012022-0
 REV: 0

REVISIONS	REV.	C
	CHANGE NO.	DWBE-00008
ORIGINATED		
CHK		

DRAWN <i>[Signature]</i>	DATE 11/6/75	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE DWBE AWT REVISION STATUS SIZE CODE: A NUMBER: 7012022-0 REV: 0
CHK'D <i>[Signature]</i>	DATE 11-7-75	
ENG. <i>[Signature]</i>	DATE 1-26-75	
PROJ. ENG. <i>[Signature]</i>	DATE -	
PROD. <i>[Signature]</i>	DATE 11-26-75	
FIRST USED ON LWBE		
SCALE ---		
SHEET 1 OF 1	DIST	

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

QUANTITY / VARIATION

MADE BY K. GLEEZEN	CHECKED <i>S. Roberts</i>	SECTION 1
DATE 11-13-75	DATE 11-26-75	
ENG <i>J. Simonson</i>	PROD <i>Ronda Ruch</i>	ISSUED SECT. 1
DATE 11-26-75	DATE 11-26-75	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION
1	MP00012	DW8E FIELD MAINTENANCE PRINT SET

DW8E-NA	DW8E-NB	DW8E-NC	DW8E-ND	DW8E-NX	DW8E-PA	DW8E-PB	DW8E-PC	DW8E-PD	DW8E-PX
1	1	1	1	1	1	1	1	1	1

TITLE SHIPPING LIST	ASSY NO. <i>H</i>	SIZE A	CODE PL	NUMBER DW8E-0-15	REV	ECO NO DWFE- 00008
SHEET 1 OF 1		DIST				