

PDP8L


DOL

FCO's

TECH.
TIPS

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Engineering Change Order Log

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ECO SYNOPSIS FOR LOGIC OR OPTION
PDP-8L PROCESSOR LOGIC **PDP-8L**

PRODUCT LINE PDP-8L	PUBLICATION DATE OF THIS SYNOPSIS PAGE JUNE 1970	PAGE REVISION 0
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R643

ECO NO	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
8L 00001	>8L	M	AUG 68 - CHANGES THE SILK SCREEN FOR THE CONTROL PANEL TO POSITION WORDING CORRECTLY.
8L 00002	>8L	M	AUG 68 - CHANGES THE SILK SCREEN FOR THE CONTROL PANEL TO POSITION WORDING CORRECTLY.
8L 00003	>8L	M	AUG 68 - CHANGES THE SILK SCREEN FOR THE CONTROL PANEL TO POSITION WORDING CORRECTLY.
8L 00004	>8L	M	AUG 68 - CHANGES THE SILK SCREEN ANTIWURK FOR THE REAR SCREEN TO IMPROVE MECHANICAL ALIGNMENT.
8L 00005	>8L	M	SEP 68 - SPECIFIES THE USE OF A SMALLER INSERT FOR THE LIGHT BOARD SUPPORT.
8L 00006	N.A.	M	SEP 68 - ADDS A DIMENSION TO THE PRINT FOR THE PLEXIGLAS [®] SUPPORT.

BL 00007	>BL	M	SEP 68 - ADDS AN INSTRUCTION FOR PREPARATION OF THE SWITCH MOUNTING HOLE IN THE INDICATOR PANEL.
BL 00008	>BL	M	OCT 68 - ADDS RIVNUT CLEARANCE IN THE WIRING BLOCK.
BL 00009	BL 100-169>	D	OCT 68 - MAKES PPRL AND PRBL LOGIC COMPATIBLE WITH THE LATEST REVISION M705 AND M715. CHANGES TUP'S FROM 600 NSEC TO 500 NSEC.
BL 00010	>BL	M	OCT 68 - SPECIFIES TRIMMING OF THE INDICATOR PANEL SWITCH OPENING TO FACILITATE INSTALLATION.
BL 00011	BL 100-199>	P	OCT 68 - PROVIDES A DESIGN UPDATING OF THE BL PRINT SET.

<p align="center">LEGEND</p> <p>FIELD CODE</p> <p>F - Field action may be required D - Design ECO P - Print or Wire List change M - Mechanical ECO</p> <p>SYMBOL</p> <p>> - ECO applicable to future production</p> <p>ECO CHARGES</p> <p>Charges are coded within the synopsis. (*BX **BY ***BZ) BX - Charge for Space and updated prints <u>only</u> BY - Charge for necessary parts <u>only</u> BZ - Charge for on site labor <u>only</u> installation by DEC</p> <p>NOTE: Charges are additive BX+BY+BZ = <u>Total</u> on site charge for ECO installation by DEC!</p>	MASTER DRAWING LIST REVISIONS		WIRE LIST REVISIONS																								
	<table border="1"> <thead> <tr> <th>REV</th> <th>ECO NUMBER</th> <th>REV</th> <th>ECO NUMBER</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>BL-00009</td> <td></td> <td></td> </tr> <tr> <td>B</td> <td>BL-00011</td> <td></td> <td></td> </tr> </tbody> </table>	REV	ECO NUMBER	REV	ECO NUMBER	A	BL-00009			B	BL-00011				<table border="1"> <thead> <tr> <th>REV</th> <th>ECO NUMBER</th> <th>REV</th> <th>ECO NUMBER</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>BL-00009</td> <td></td> <td></td> </tr> <tr> <td>B</td> <td>BL-00011</td> <td></td> <td></td> </tr> </tbody> </table>	REV	ECO NUMBER	REV	ECO NUMBER	A	BL-00009			B	BL-00011		
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B	BL-00011																										

BL PAGE 1

ONLY FCO'S WRITTEN TO THE "PDP8L" OPTION ARE DOCUMENTED ON THIS FICHE.

FCO'S FOR BA08 ARE DOCUMENTED IN ITS APPROPRIATE PLACE IN THIS SECTION OF THE LIBRARY.

FCO'S FOR "G020", G021, G221, G624, & G793" ARE DOCUMENTED IN THE MODULE ASSEMBLY (BLUE) SECTION OF THE LIBRARY.



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ECO NO.	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00012	>BL	M	OCT 68 - CHANGES THE SUPER CHASSIS COVER MATERIAL FROM EMBOSSED STEEL TO PLAIN STEEL.
BL 00013	BL 100-199>	F	OCT 68 - CORRECTS AN IOP 4 RACE CONDITION CAUSED BY "I/O ON (1)" AND "IOP C (0)" BEING GENERATED SIMULTANEOUSLY BY I/O ROTATE.
G221 00001	ALL BL	F	OCT 68 - SPECIFIES THAT ALL DEC 6534B TRANSISTORS ARE TO BE CHANGED TO DEC 2904 TO PROVIDE MORE DEPENDABLE OPERATION UNDER HIGH VOLTAGE CONDITIONS. G221 CIRCUIT SCHEMATIC REVISION C
BL 00014	N.A.	P	OCT 68 - CORRECTS MODULE BLOCK DESIGNATIONS ON THE WIRED ASSEMBLY DRAWING.
BL 00015	>BL	M	OCT 68 - INCREASES INSERT HOLE SIZE TO ELIMINATE SPLITTING OF THE CORNERS OF THE BENELEX®.
BL 00016	>BL	M	OCT 68 - CHANGES THE LIGHT PANEL EXTRUSION TO HOLD THE SWITCHES MORE FIRMLY.
BL 00017	BL 100-199>	P	OCT 68 - CORRECTS WIRE LIST ERRORS.
BL 00018	>BL	M	OCT 68 - CHANGES THE POSITION OF A HOLE IN THE CHASSIS TO PROVIDE CORRECT ALIGNMENT WITH AN INSERT IN THE POWER SUPPLY.


G624 00001	ALL 8L FIELD RETROFIT AS REQUIRED	F	NOV 68 - CHANGES THE VALUE OF THE INHIBIT CURRENT LIMITING RESISTORS FROM 72 OHMS TO 56 OHMS. THIS INCREASES THE INHIBIT CURRENT AND IMPROVES THE OPERATION OF FERROX CUBE STACKS. G624 CIRCUIT SCHEMATIC REVISION D
8L 00019	>8L	M	NOV 68 - INCREASES CLEARANCE FOR THE SWITCHES ON THE INDICATOR PANEL.
8L 00020	8L 100-227>	P	NOV 68 - CORRECTS WIRE LIST ERRORS.
8L 00021	>8L	M	NOV 68 - CHANGES THE COLOR SCHEME FOR THE INDICATOR PANEL.
8L 00022	8L 101-325>	F	NOV 68 - CHANGES TIMING ON "KEY CL" AND "KEY LOAD" TO ALLOW SETTING OF THE EA LIGHT WITH LOAD ADDRESS WHEN THE SYSTEM INCLUDES EXTENDED MEMORY. ADDS A GATE TO ELIMINATE THE SR BEING LOADED INTO BOTH THE MA AND THE MB. PROVIDES "BEMA" TO THE MCBL INSTEAD OF "ERA"; THIS EXTENDS MEMORY PROTECTION TO INCLUDE THE LAST PAGE OF EXTENDED MEMORY. GATES "WORD COUNT 0" TO PROVIDE MEMORY PROTECT DURING A THREE-CYCLE BREAK.

LEGEND	
FIELD CODE	
F - Field action may be required	
D - Design ECO	
P - Print or Wire List change	
M - Mechanical ECO	
SYMBOL	
> - ECO applicable to future production	
ECO CHARGES	
Charges are coded within the synopsis. (8X,8Y,8Z)	
8X - Charge for Space and updated prints <u>only</u>	
8Y - Charge for necessary parts <u>only</u>	
8Z - Charge for on site labor <u>only</u> installation by DEC	
NOTE Charges are additive (8X+8Y+8Z = Total on site charge for ECO installation by DEC)	

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
C	8L-00013		
D	8L-00017		
E	8L-00020		
F	8L-00022		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
C	8L-00013		
D	8L-00017		
E	8L-00020		
F	8L-00022		

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ECO SYNOPSIS FOR LOGIC OR OPTION
PDP-8L PROCESSOR LOGIC **PDP-8/L**

PRODUCT LINE PDP-8L	PUBLICATION DATE OF THIS SYNOPSIS PAGE JUNE 1970	PAGE REVISION 0
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R643

ECO NO	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00023	N.A.	P	NOV 68 - MAKES AN INCIDENTAL CORRECTION TO AN 8L BLOCK SCHEMATIC PRINT.
BL 00024	>8L	M	DEC 68 - CHANGES INSERTS IN THE CHASSIS FRAME TO PROVIDE GREATER THREAD DEPTH.
BL 00025	N.A.	P	JAN 69 - CORRECTS PRINTS.
BL 00026	N.A.	P	JAN 69 - CORRECTS MODULE QUANTITIES ON THE PARTS LIST. ADDS SPECIFICATIONS AND ACCEPTANCE PROCEDURES TO THE 8L PRINT SET.
BL 00027	BL 100-200>	F	JAN 69 - SPECIFIES THE USE OF TWISTED PAIR SENSE AMP LINES TO ELIMINATE NOISE PICKUP. *\$5.00
BL 00028	AS ORDERED	M	JAN 69 - ADDS ART WORK TO PROVIDE A SPECIAL CONTROL PANEL VARIATION AT CUSTOMER REQUEST.
BL 00029	N.A.	M	FEB 69 - CHANGES THE DIMENSIONS OF AN ALUMINUM STRIP ON THE SHIPPING CRATE.

BL 00030	BL 1-692> ALL WITH BA08	F	FEB 69 - ADDS A SIGNAL TO ELIMINATE FLOATING GATES IN THE BA08 DURING BL POWER SHUTDOWN. NOTE: THE NET EFFECT OF ECO'S BL-00030, 00031 AND 00038 IS TWO "ADDS", A2BE1 TO B3612 AND B27F2 TO B3652. REFERENCE ECO BA08-00005. *\$5.00 (ERROR CORRECTED BY ECO 81-00031)
BL 00031	BL 1-692> ALL WITH BA08	F	FEB 69 - CORRECTS ECO BL-00030; DELETES A3652 TO B3652. NOTE: THE NET EFFECT OF ECO'S BL-00030, 00031 AND 00038 IS TWO ADUS, A2BE1 TO B3612 AND B27F2 TO B3652. REFERENCE ECO BA08-00005. INCLUDED IN THE BL-00030 KIT
BL 00032	>BL	M	FEB 69 - ADDS HOLE PUNCHING AND INSERT INSTALLATION INSTRUCTIONS TO THE SUPER COVER DRAWING.

LEGEND

FIELD CODE
 F - Field action may be required
 D - Design ECO
 P - Print or Wire List change
 M - Mechanical ECO

SYMBOL
 > - ECO applicable to future production

ECO CHARGES
 Charges are coded within the synopsis. (*SX,**SY ***SZ)
 SX - Charge for Space and updated prints only
 SY - Charge for necessary parts only
 SZ - Charge for on site labor only installation by DEC

NOTE Charges are additive (SX+SY+SZ = Total on site charge for ECO installation by DEC)

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
M	BL-00023		
J	BL-00025		
K	BL-00026		
L	BL-00027		
M	BL-00028		
N	BL-00030		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
M	BL-00027		
J	BL-00030		

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ECO NO.	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00033	>BL	M	FEB 69 - ADDS HOLE PUNCHING AND INSERT INSTALLATION INSTRUCTIONS TO THE CABLE RETAINER DRAWING.
BL 00034	>BL	M	FEB 69 - ADDS DIMENSIONS, HOLE PUNCHING AND INSERT INSTALLATION INSTRUCTIONS TO THE CHASSIS FRAME DRAWINGS.
BL 0035	>BL	M	FEB 69 - CHANGES DIMENSIONS ON THE CHASSIS SUPER COVER DRAWING.
BL 00036	>BL	M	FEB 69 - CORRECTS THE PARTS LIST TO INCLUDE A CORRECT PART NUMBER FOR FOAM BACKING.
BL 00037	>BL	M	FEB 69 - ADDS A WELDED CORNER BRACE TO PREVENT CHASSIS MOVEMENT.
BL 00038	BL 693> ALL WITH BA08	F	FEB 69 - CHANGES LOGIC, POWER SUPPLY AND G826 REGULATOR CONTROL TO ELIMINATE POWER ON-OFF PROBLEMS. NOTE: THE CHANGE NUMBER ON THE SPEC FACE SHEET IS 00036 IN ERROR. NOTE: THE NET EFFECT OF ECO'S BL-00030, 00031 AND 00038 IS TWO "ADDS" A28E1 TO B36T2 AND B27F2 TO B3652. *85.00
BL 00039	>BL	P	MAR 69 - CHANGES THE DRAWING FOR BRACKET #2 TO INCLUDE A PEM STUD RATHER THAN A WELDED STUD.
BL 00040	>BL	P	MAR 69 - CHANGES THE DRAWING FOR BRACKET #1 TO INDICATE PUNCHING AND INSERT INSTALLATION DIRECTIONS.

BL 00041	>BL	M	MAR 69 ADDS INSTRUCTIONS FOR THE BONDING OF THE DECORATIVE CASING TO THE CHASSIS.
BL 00042	>BL	P	MAR 69 - REVISES BEZEL DRAWING DIMENSIONS TO AGREE WITH THE MANUFACTURED BEZEL.
BL 00043	>BL	M	MAR 69 - ADDS A METAL BORDER TO THE HEX SCREEN FOR A STRONGER WELD.
BL 00044	BL 100-720 > ALL WITH MPBL	F	MAR 69 - CHANGES "MP SKIP" GATE INPUT FROM THE "1" SIDE OF THE PARITY ERROR FLIP-FLOP TO THE "0" SIDE. *\$5.00
BL 00045	BL 1000 >	F	APR 69 - CHANGES LOGIC TO ALLOW FAST FLAG TESTING IN PERIPHERALS. THIS IS A PRODUCT IMPROVEMENT MODIFICATION. (ERRORS CORRECTED BY ECO'S BL-00056, 00059 AND 00062) *\$5.00


LEGEND	
FIELD CODE	
F	Field action may be required
D	Design ECO
P	Print or Wire List change
M	Mechanical ECO
SYMBOL	
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ECO CHARGES	
Charges are coded within the synopsis. (*\$X, **\$Y, ***\$Z)	
\$X	Charge for Space and updated prints <u>only</u>
\$Y	Charge for necessary parts <u>only</u>
\$Z	Charge for on site labor <u>only</u> , installation by DEC
NOTE: Charges are additive (\$X+\$Y+\$Z = Total on site charge for ECO installation by DEC)	

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
P	BL-00036		
R	BL-00038		
S	BL-00044		
T	BL-00045		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
K	BL-00038		
L	BL-00044		
M	BL-00045		

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ECO SYNOPSES FOR LOGIC OR OPTION
PDP-BL PROCESSOR LOGIC **PDP-8/L**

PRODUCT LINE PDP-BL	PUBLICATION DATE OF THIS SYNOPSIS PAGE JUNE 1978	PAGE REVISION 0
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0170 R628

ECO NO	LOGIC OR OPTION SERIAL NO 'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00046	AS ORDERED	M	APR 69 - PROVIDES THE SPECIAL ARTWORK REQUIRED FOR A CUSTOMER REQUESTED VARIATION TO THE CONTROL PANEL.
BL 00047	>BL	M	APR 69 - STANDARDIZES CHASSIS SLIDE SPECIFICATIONS.
BL 00048	N.A.	P	MAY 69 - ADDS AN IN-PLANT TEST PROCEDURE TO THE BL PRINT SET.
BL 00049	>BL	M	MAY 69 - ADDS A SHIPPING LOCK FEATURE TO THE CHASSIS SLIDES.
BL 00050	>BL	M	MAY 69 - REDUCES THE HEIGHT OF THE 1-3/4" FILLER PANEL.
BL 00051	N.A.	P	MAY 69 - CORRECTS A DRAFTING ERROR ON A PPBL PRINT.
BL 00052	>BL	M	MAY 69 - REPLACES AN ALUMINUM ANGLE ON THE SUPER BOX WITH A PLASTIC STRIP TO PREVENT THE MARKING OF TABLE SURFACES.

BL 00053	N.A.	P	JUN 69 - ADDS DRAWINGS, ENGINEERING SPECIFICATIONS AND ACCEPTABLE PROCEDURE TO THE PCBL PRINT SET.
BL 00054	N.A.	P	JUN 69 - ADDS SEVERAL DRAWINGS TO THE PPBL PRINT SET.
HL 00055	N.A.	P	JUN 69 - ADDS PRINTS, ENGINEERING SPECIFICATIONS, AND ACCEPTANCE PROCEDURE TO THE PRBL PRINT SET.
BL 00056	BL 1000-1421 > ALL WITH ECO BL-00045	F	JUN 69 - CORRECTS ERRORS IN ECO BL-00045; ADDS AN M115 AND CORRECTS LOGIC TO ALLOW PROPER INTERRUPT OPERATION. (INCLUDED IN THE BL-00045 KIT) (ERROR CORRECTED BY ECO BL-00092)
BL 00057	BL 0761 ONLY	D	J IN 69 - ADDS CUSTOMER-REQUESTED JMS/0000 SWITCH LOGIC AND "PAUSE" TIMING MODIFICATION.

LEGEND	
FIELD CODE	
F	Field action may be required
D	Design ECO
P	Print or Wire List change
M	Mechanical ECO
SYMBOL	
>	ECO applicable to future production
ECO CHARGES	
Charges are coded within the synopsis *SX**SY***SZ	
SX	Charge for Spaco and updated prints only
SY	Charge for necessary parts only
SZ	Charge for on site labor only installation by DEC
NOTE Charges are additive (SX+SY+SZ = Total) or site charge for ECO installation by DEC	

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
U	BL-00046		
V	BL-00047		
W	BL-00048		
Y	BL-00056		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
N	BL-00056		

PDP-RL PAG- 5

ECO NO.	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00058	>BL	M	JUN 69 - CHANGES PLEXIGLAS® SUPPORT HOLE SPECIFICATION.
BL 00059	BL 1000-1471 > ALL WITH ECO BL-00045	F	JUN 69 - CORRECTS AN ERROR IN ECO BL-00045; ADDS "POWER CLEAR" TO THE PAUSE FLIP-FLOP TO ELIMINATE THE REQUIRED DOUBLE TOGGLING OF THE LOAD ADDRESS SWITCH WHEN PAUSE COMES ON IN THE "1" STATE AT POWER UP AND DISABLES THE PC. ERROR CORRECTED BY ECO BL-00062
BL 00060	>BL	M	JUN 69 - INCREASES A WELD AREA FOR BETTER SUPPORT OF THE CHASSIS FRAME.
BL 00061	>BL	M	JUN 69 - MODIFIES THE CHASSIS SLIDES.
BL 00062	BL 1000-1511 > AND ALL WITH ECO BL-00059	F	JUL 69 - CORRECTS ECO BL-00059; ADDS A MISSING WIRE AND REVERSES THE B13P1 AND B13R1 INPUTS TO THE M113.
BL 00063	N.A.	P	JUL 69 - CORRECTS PIN NUMBER DESIGNATIONS FOR A LOGIC GATE.
BL 00064	>BL	M	JUL 69 - CHANGES THE DIRECTION OF INSERT INSTALLATION ON A 718 POWER SUPPLY BRACKET.

BL 00065	>BL	M	JUL 69 - DELETES 90-DEGREE CORNERS ON THE PLEXIGLAS [®] SUPPORT.
RL 00066	N.A.	P	AUG 69 - ADDS ACCESSORY AND SOFTWARE LISTS TO THE BL PRINT SET.
BL 00067	N.A.	P	AUG 69 - ADDS ENGINEERING SPECIFICATION TEST PROCEDURE TO THE MPBL PRINT SET.
BL 00068	BL 1-1429>	F	AUG 69 - CHANGES THE POLARITY OF "INITIALIZE" ON THE BL BUS TO BE BI COMPATIBLE.
BL 00069	N.A.	M	AUG 69 - CHANGES DRILLING INSTRUCTIONS.
BL 00070	N.A.	M	SEP 69 - ADDS CHAD BOX GLUEING INSTRUCTIONS.

LEGEND

FIELD CODE
 F - Field action may be required
 D - Design ECO
 P - Print or Wire List change
 M - Mechanical ECO

SYMBOL
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ECO CHARGES
 Changes are coded within the synopsis. (SX **SY **SZ)
 SX - Charge for Space and updated prints only
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MASTER DRAWING LIST REVISIONS	
REV	ECO NUMBER
Z	BL-00059
AA	BL-00062
AB	M960B-00001
AC	BL-00063
AD	BL-00066
AE	BL-00068

WIRE LIST REVISIONS	
REV	ECO NUMBER
P	BL-00059
R	BL-00062
S	BL-00068

B2



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ECO SYNOPSIS FOR LOGIC OR OPTION

PDP-8L PROFESSOR LOGIC

PDP-8L

PRODUCT LINE	PUBLICATION DATE OF THIS SYNOPSIS PAGE	PAGE REVISION
PDP-8L	JULY 1970	0

1199 R5349

ECO NO	LOGIC OR OPTION SERIAL NO 'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00071	BL 1-1911> G826 REV P>	F	SEP 69 - SPECIFIES THE REMOVAL OF THE BUS BETWEEN H2TH2 AND H2PH2 TO ELIMINATE BOTH -15V SUPPLIES BEING SHORTED TOGETHER BY A JUMPER ON THE G826 MODULE. 055.00
BL 00072	N.A.	M	SEP 69 - CHANGES THE FAN PART NUMBER AND ITS MOUNTING.
BL 00073	BL WITH 741 LOGIC ONLY	D	SEP 69 - MAKES CUSTOMER-REQUESTED CHANGES TO BL SYSTEM #754 ONLY. ALLOWS A SWITCH TO FORCE A JMS TO 0000 AND HOLDS THE PAUSE FLIP-FLOP ON FOR 1.5 USEC DURING AN I/O CYCLE.
BL 00074	BL 100-1912>	F	SEP 69 - SPECIFIES THE INSTALLATION OF ADDITIONAL GROUND WIRES TO ELIMINATE RANDOM MACHINE PROBLEMS. 055.00
BL 00075	>BL	M	OCT 69 - ELONGATES A HOLE IN THE FRAME TO FACILITATE MOUNTING OF THE 718 POWER SUPPLY WITHIN THE CHASSIS.

RL 00076	>BL	M	OCT 69 - CORRECTS THE MOUNTING BAR ASSEMBLY DRAWING TO INDICATE THE REQUIRED QUANTITIES OF MECHANICAL HARDWARE.
BL 00077	N.A.	M	OCT 69 - CHANGES A HOLE DIMENSION IN THE SHIPPING CRATE.
BL 00078	BL 1800-2054 FIELD RETURN II AS REQUIRED	F	OCT 69 - ADDS KEY LOGIC TO CLEAR THE INTERRUPT SYNC FLIP-FLOP TO RESOLVE AN INABILITY TO DEPOSIT OR EXAMINE IN UPPER MEMORY WHEN AN EXTERNAL DEVICE HAS GENERATED AN INTERRUPT FOLLOWING A CP HALT WITH THE INTERRUPT ON. AN M115 MODULE WAS ADDED IN SLOT C28 BY ECO BL-000561 THE INSTALLATION OF THAT MODULE IS NECESSARY FOR PROPER MACHINE OPERATION FOLLOWING IMPLEMENTATION OF THIS ECO. *\$5.00 (ERROR CORRECTED BY ECO BL-00083)

LEGEND	
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MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
AF	BL-00071		
AH	MISC-00031		
AJ	BL-00072		
AK	BL-00074		
AL	BL-00076		
AM	BL-00078		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
T	BL-00078		


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ECO NO.	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
8L 00079	>8L	M	OCT 69 - ADDS A MECHANICAL PERPENDICULARITY SPECIFICATION FOR THE BEZEL.
G020 00003	ALL G020 AFTER 11-1-69	F	SEP 69 - CHANGES THE VOLTAGE DIVIDER RESISTORS ON REVISION "E" ETCHED BOARDS TO INCREASE THE SLICE VOLTAGE FROM -3 VDC TO -4 VDC. THIS PROVIDES INCREASED STROBE MARGINS AND NOISE IMMUNITY. ERROR CORRECTED BY ECO G020-00006. *\$5.00 G020 CIRCUIT SCHEMATIC REVISION E
G021 00003	ALL G021	F	SEP 69 - CHANGES THE VOLTAGE DIVIDER RESISTORS ON ETCHED BOARDS EARLIER THAN "E" REVISION TO INCREASE THE SLICE VOLTAGE FROM -3 VDC TO -4 VDC. THIS PROVIDES INCREASED STROBE MARGINS AND NOISE IMMUNITY. ERROR CORRECTED BY ECO G021-00007. *\$5.00 G021 CIRCUIT SCHEMATIC REVISION E
8L 00080	>8L	M	NOV 69 - ENLARGES HOLES TO ALLOW SWITCHES TO OPERATE MORE FREELY.
8L 00081	>8L	M	NOV 69 - REMOVES CAPTIVE SCREWS FROM THE CHASSIS FRAME AND ADDS LOCK WASHERS INSTEAD.
HA08 00027	BA08 1-589 ALL 8L	F	NOV 69 - RE-ROUTES THE "PWR ON" RUN AND SPECIFIES REVISED G785 AND G826 MODULES TO RESOLVE A POWER FAIL PROBLEM WITH EXTRA MEMORY. BOTH BA08 AND 8L MUST HAVE G785 REVISION "E" OR LATER AND G826 REVISION "M" OR LATER.
8L 00082	8L SYSTEM 0754 8L LOGIC 0761	D	NOV 69 - MODIFIES IOP LOGIC AT CUSTOMER REQUEST.

BL 00083	BL 1800-2054> ALL BL WITH ECO BL-00078	F	NOV 69 - CORRECTS AN ERROR IN ECO BL-00078; GATES "RUN (0)" WITH KEY FUNCTIONS SO THAT "KEY LA+EX+DP" IS DISABLED WHEN THE BL IS RUNNING.
HL 00084	N.A.	P	NOV 69 - CORRECTS THE WIRE LIST TO SHOW CURRENT LOOPS AND TWISTED PAIRS AS HAND WRAPS.
BL 00085	BL 100-2346>	F	DEC 69 - CORRECTS LOGIC AND SPECIFIES REVISIONS OF G826 AND G785 MODULES WHICH MUST BE USED TO PERMIT THE KP8L POWER FAIL OPTION TO OPERATE PROPERLY WITH MC8L. G785 REVISION E OR LATER AND G826 REVISION H ARE REQUIRED IN THE BL. G785 REVISION E OR LATER IS REQUIRED IN THE BA08 IF IT IS PRESENT.

<p align="center">LEGEND</p> <p>FIELD CODE</p> <p>F - Field action may be required D - Design ECO P - Print or Wire List change M - Mechanical ECO</p> <p>SYMBOL</p> <p>> - ECO applicable to future production</p> <p>ECO CHARGES</p> <p>Charges are coded within the synopsis (*SX **SY ***SZ)</p> <p>SX - Charge for Space and updated prints <u>only</u></p> <p>SY - Charge for necessary parts <u>only</u></p> <p>SZ - Charge for on site labor <u>only</u> installation by DEC</p> <p>NOTE: Charges are additive (SX+SY+SZ = Total on site charge for ECO installation by DEC)</p>	MASTER DRAWING LIST REVISIONS		WIRE LIST REVISIONS						
	REV	ECO NUMBER	REV	ECO NUMBER	REV	ECO NUMBER	REV	ECO NUMBER	
	AN BL-00083				U BL-00083				
	AP BL-00084				V BL-00084				
	AR BL-00081				W BL-00085				
	AS BL-00085								

PDP-8L PAGE 8



Engineering Change Order Log

ECO SYNOPSIS pages are updated and published continuously in conjunction with the issuance of ENGINEERING CHANGE ORDERS for all DEC products and are available upon subscription from:

DIGITAL EQUIPMENT CORPORATION
FIELD SERVICE INFORMATION CENTER
MAYNARD, MASSACHUSETTS 01754

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ECO SYNOPSIS FOR LOGIC OR OPTION
PDP-8L PROCESSOR LOGIC **PDP-8/L**

PRODUCT LINE	PUBLICATION DATE OF THIS SYNOPSIS PAGE	PAGE REVISION
PDP-8L	JULY 1970	0

R6082

ECO NO	LOGIC OR OPTION SERIAL NO 'S AFFECTED	FIELD CODE	SYNOPSIS
8L 00086	>8L	M	DEC 69 - CHANGES A DIMENSION AND WELDING INSTRUCTIONS FOR THE CHASSIS FRAME.
G793 00001	ALL G793	F	JAN 70 - SPECIFIES A REDESIGN OF THE G793 WHICH WILL SEPARATE THE RESISTORS FOR BETTER HEAT DISSIPATION. HOT SPOTS OCCUR ON G793'S IN PDP-8I AND PDP-8L BECAUSE OF THEIR POSITION ABOVE THE INHIBIT RESISTORS. G793 CIRCUIT SCHEMATIC REVISION A
8L 00087	AS ORDERED	D	JAN 70 - ADDS A CUSTOMER-REQUESTED VARIATION TO THE INDICATOR PANEL.
8L 00088	8L 1-2479> WITH MC8L	F	JAN 70 - CORRECTS FAILURE OF "RMF" TO RESTORE MEMORY FIELD IF AN INTERRUPT OCCURS DURING AN IOT CYCLE WHILE THE PROGRAM IS RUNNING IN UPPER MEMORY. (*\$5.00 **\$5.00 ***\$20.00)
8L 00089	8L 2636>	F	JAN 70 - ADDS GROUNDS TO THE I/O CONNECTOR SLOTS TO REDUCE I/O LINE NOISE. THIS IS A DESIGN ECO WHICH HAS NOT BEEN IDENTIFIED AS THE SOLUTION TO ANY SPECIFIC FAILURE. (*\$5.00, **\$5.00, ***\$15.00)

BL 00090	BL 100-2516>	F	JAN 70 - TIES A FLOATING LEG OF THE M706 AT CD32 TO +3 VDC AND REMOVES -3 VDC FROM THE W076 CONNECTOR TO ELIMINATE RANDOM FAILURES WHICH OCCUR WHEN AN EXTRA CHARACTER IS ADVANCED. THE PROBLEM IS ESPECIALLY NOTICEABLE WITH TELETYPE TEST, P RT 2, TEST 3.
BL 00091	BL 2597> RETROFIT IF POSITIVE BUS OPTIONS ARE INSTALLED	F	FEB 70 - ADDS A G717 PULSE TERMINATOR MODULE TO THE BL PARTS LIST SO THAT IT WILL BE AVAILABLE WHEN OPTIONS ARE ADDED TO THE BL I/O BUS. (*\$5.00, **\$4.00, ***10.00)

LEGEND

FIELD CODE
 F - Field action may be required
 D - Design ECO
 P - Print or Wire List change
 M - Mechanical ECO

SYMBOL
 > - ECO applicable to future production

ECO CHARGES
 Charges are coded within the synopsis: (*\$X **\$Y ***\$Z
 \$X - Charge for Space and updated prints only
 \$Y - Charge for necessary parts only
 \$Z - Charge for on site labor only installation by DEC

NOTE Charges are additive (\$X+\$Y+\$Z = Total on site charge for ECO installation by DEC)

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
AT	BL-00088		
AU	BL-00089		
AV	BL-00090		
AW	BL-00091		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
Y	BL-00088		
Z	BL-00089		
AA	BL-00090		

1
9)

ECO NO.	LOGIC OR OPTION SERIAL NO.'S AFFECTED	FIELD CODE	SYNOPSIS
BL 00092	BL 1000-2756> ALL WITH ECO BL-00056	F	MAR 70 - CORRECTS AN ERROR IN ECO BL-00056; TIES "TS4 (0)" TO THE I/O PC ENABLE GATE. (ECO ONLY; INCLUDED IN THE BL-00056 KIT)
BL 00093	>BL	M	MAR 70 - CHANGES CASTING MATERIAL FROM ALUMINUM TO PLASTIC.
BL 00094	>BL	M	MAR 70 - CHANGES MOUNTING DEPTH OF THE SCREEN IN THE SUPER CHASSIS COVER.
BL 00095	>BL	M	MAR 70 - CORRECTS MECHANICAL DIMENSIONS FOR A MOUNTING BAR.
BL 00096	N.A.	M	MAR 70 - ADDS A CABINET CONFIGURATION DRAWING TO THE BL PRINT SET.
BL 00097	BL 100-2896>	P	APR 70 - ADDS MISSING RUNS TO THE WIRE LIST.
G020 00006	ALL BL	F	APR 70 - CORRECTS AN ERROR IN ECO G020-00003; CHANGES "SERIAL NUMBERS AFFECTED" TO "RETROFIT ALL IN-PLANT AND IN THE FIELD AND ALL FUTURE". SOME REVISIONS OF THE G020 HAVE +3 VDC SLICE AND OTHERS HAVE +4 VDC SLICE. BOTH ARE ACCEPTABLE; HOWEVER, THEY MUST NOT BE INTERMIXED. INCLUDED IN THE G020-00003 KIT
G021 00007	ALL BL	F	APR 70 - CORRECTS AN ERROR IN ECO G021-00003; CHANGES "SERIAL NUMBERS AFFECTED" TO "RETROFIT ALL IN-PLANT AND IN THE FIELD AND ALL FUTURE". SOME REVISIONS OF THE G021 HAVE +3 VDC SLICE AND OTHERS HAVE +4 VDC SLICE. BOTH ARE ACCEPTABLE; HOWEVER, THEY MUST NOT BE INTERMIXED. INCLUDED IN THE G021-00003 KIT

BL 00098	BL 100-3120>	P	MAY 70 - CORRECTS A STATEMENT IN THE ENGINEERING SPECIFICATIONS TO READ "POWER CONSUMPTION IS LESS THAN 300 WATTS".
G020 00007	ALL BL	F	MAY 70 - SPECIFIES A REMORKING OF THE BOARD TO ELIMINATE EXCESSIVE NOISE WHICH IS ASSOCIATED WITH THE REVISION M EYELET BOARDS. PROVIDES INSTRUCTIONS FOR FIELD REMORKING OF THE BOARDS. G020 CIRCUIT SCHEMATIC REVISION J
BL 00099	>BL	M	MAY 70 - CORRECTS MECHANICAL DIMENSION ERRORS ON THE SUPER COVER.
BL 00100	>CMBL	P	JUN 70 - CHANGES THE CMBL CARD READER SPECIFICATION FROM 80 COLUMN TO 40 COLUMN CARDS.

LEGEND

FIELD CODE

- F - Field action may be required
- D - Design ECO
- P - Print or Wire List change
- M - Mechanical ECO

SYMBOL

- > - ECO applicable to future production

ECO CHARGES

Changes are coded within the synopsis: 1*SX*SY*SZ


- SX - Charge for Specs and updated prints only
- SY - Charge for necessary parts only
- SZ - Charge for on site labor only installation by DEC

NOTE Charges are additive (SX+SY+SZ = Total on site charge for ECO installation by DEC)

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
AY	BL-00092		
AZ	BL-00093		
BA	BL-00096		
BB	BL-00097		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
AB	BL-00092		
AC	BL-00097		

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Engineering Change Order Log

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EQUIPMENT CORPORATION

MAYNARD MASSACHUSETTS

ECO SYNOPSIS FOR LOGIC OR OPTION

PDP-8/L PROCESSOR LOGIC **PDP-8/L**

PRODUCT LINE	PUBLICATION DATE OF THIS SYNOPSIS PAGE	PAGE REVISION
PDP-8/L	OCTOBER 1971	B

ECO NO	LOGIC OR OPTION SERIAL NO 'S AFFECTED	FIELD CODE	SYNOPSIS
8L 00101	V.A.	P	AIG 70 - CORRECTS THE DRAWINGS FOR THE BEZEL AND THE BEZEL INDICATOR PANEL.
9L 00102	>9L	M	AIG 70 - SPECIFIES THE USE OF AN ALUMINUM CASTING BECAUSE OF THE EXCESSIVE FLEXIBILITY OF THE PLASTIC BEZEL.
9L 00103	>9L	M	SEP 70 - SPECIFIES THE USE OF VARIATIONS OF THE STANDARD BLANK PANEL FOR THE 8L.
9L 00104	>8L	M	OCT 70 - SPECIFIES THE USE OF SCOTCHWELD 02216 TO REPLACE MARBON ADHESIVE WHICH IS NO LONGER AVAILABLE.
9L 00105	V.A.	P	OCT 70 - ADDS IN-PLANT TEST AND ACCEPTANCE PROCEDURES TO THE CML PRINT SFT.
9L 00106	9L 100-3124 500-5051 RETROFIT 8L WITH DF32-D OR TC99	F	OCT 70 - ADDS TERMINATION FOR THE 1/2 HITS AN 4902YA FOR THE 48 BITS AND AN 4902YB FOR THE AC HITS. (005.00, 00825.00, 00085.00)

9L 02127	N.A.	F	DEC 70 - PROVIDES A NEWER ADDITIONAL PRINT CORRECTION TO ECO 9L-00062. (05.00, 0040VE, 0006.00 INCLUDED IN THE 9L-00059 KIT)
9L 02128	>4	M	DEC 70 - SPECIFIES A CHANGE FROM SAND CASTING TO DIE CASTING OF THE 9L HE7EL.
9L 02129	>4L	J	JAN 71 - CHANGES THE WIRING OF 91 LOGIC PANELS TO ACCOMMODATE THE FEED 47LF STORED PCB4 WHEN IT BECOMES AVAILABLE. THIS ECO WILL NOT BE FIELD IMPLEMENTED. IDENTICAL FIELD MODIFICATION INSTRUCTIONS ARE INCLUDED IN THE KIT FOR ECO PCB4-C0044.
9L 02119	N.A.	P	FEB 71 - ORDERS CHANGES IN THE 91 PRINT SET TO REFLECT THE WIRING CHANGES MADE TO ACCOMMODATE THE FEED 47LF STORED PCB4 (PC41, PR91). THIS ECO WILL NOT BE FIELD IMPLEMENTED. IDENTICAL INFORMATION IS INCLUDED IN THE KIT FOR ECO PCB4-C0044.

LEGEND

FIELD CODE
 F - Field action may be required
 D - Design ECO
 P - Print or Wire List change
 M - Mechanical ECO

SYMBOL
 > - ECO applicable to future production

ECO CHARGES
 Charges are coded within the synopsis: (SX SY SZ)
 SX - Charge for Source and updated prints only
 SY - Charge for necessary parts only
 SZ - Charge for on site labor only installation by DEC

NOTE Charges are additive (SX+SY+SZ = Total) on site charge for ECO installation by DEC

MASTER DRAWING LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
HC	4150- 064		
R7	4L-02127		
RF	4L-02128		
RF	4L-02129		
R4	4L-02133		
R1	4L-02137		
9K	91-02119		

WIRE LIST REVISIONS			
REV	ECO NUMBER	REV	ECO NUMBER
A0	4L-02129		

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digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

Engineering Change
Order Log
DEC-O-LOG

8/L
PDP-8/L Processor
Logic

1343 R638

PROCESSOR TYPE PDP-8/L

8L-00111 CODE: P
APR 71 CORRECTION 1 General operation specifications of the CMI optical mark reader are being changed
PROBLEM 2 Optical mark data card specifications must be added
CORRECTION 2 Add card specification ASP-CM8 L 7
CORRECTION 3 Add Incoming Inspection Procedure to prints
In plant effectivity -06 documentation change only

8L-E0112 CODE: F ML: BL
JUN 71 PROBLEM When clearing TTY KEYBOARD flag READER RUN is set causing tape to advance This is undesirable in some programming situations
CORRECTION Clear the flag with IOP4 read buffer and set READER RUN with IOP2
In plant effectivity -01 phase in
Field effectivity Retrofit only at request and expense of customer
Time To Install And Test 5 Hour Documentation \$ 5 00 Parts None
Kit Contents FCO Prints

8L-C0113 CODE: F ML: BM WL: AE
JUN 71 PROBLEM Extended address bits 0 and 1 are open collector and have no pull-up resistors when a BM8 L is installed
CORRECTION Wire in clamp loads which are available in the PDP 8 L

NOTE Kit will be included with BM8 L add-on
In plant effectivity -03 rework immediately
Field effectivity -04 only when a BM8 L memory expansion is installed
Time To Install And Test Varies With System Configuration
Kit Contents FCO Only

FECO'S

**EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER**

REC'D. BY INFO SER **10 11 68**
 SPEC RELEASE **10 16 68**

TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 8L-00013

DOCUMENTATION PROJECT NUMBER
 A.T. PRGB LINE TYPE OR DISCRETE NO
2 6 0 7 1 7 5

MANUFACTURING PROJECT NUMBER
 A.T. PRGB LINE TYPE OR DISCRETE NO

UNIT NAME **8L** MODEL NO. **8L**

PREWIRED OPTIONS AFFECTED	
MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. BY

ESTIMATED TIME TO INSTALL 1/2 Hour

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)

	YES	NO
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)
ALL MACHINES
SERIAL NO. 100-199
AND FUTURE

PROBLEM:
 1. RACE CONDITION AT IOP4 CAUSED BY I/O Gn (1) AND IOP C (O) BEING GENERATED AT SAME TIME BY I/O ROTATE

CORRECTION:
 CORRECTED I/O TIMING.

DRAWINGS AFFECTED

NUMBER	OLD REV.	NEW REV.
D-ES-8L-0-2	B	C
K-WL-8L-0-19	B	C

ORIGINATOR M. E. Arsenault DATE 10-12-68

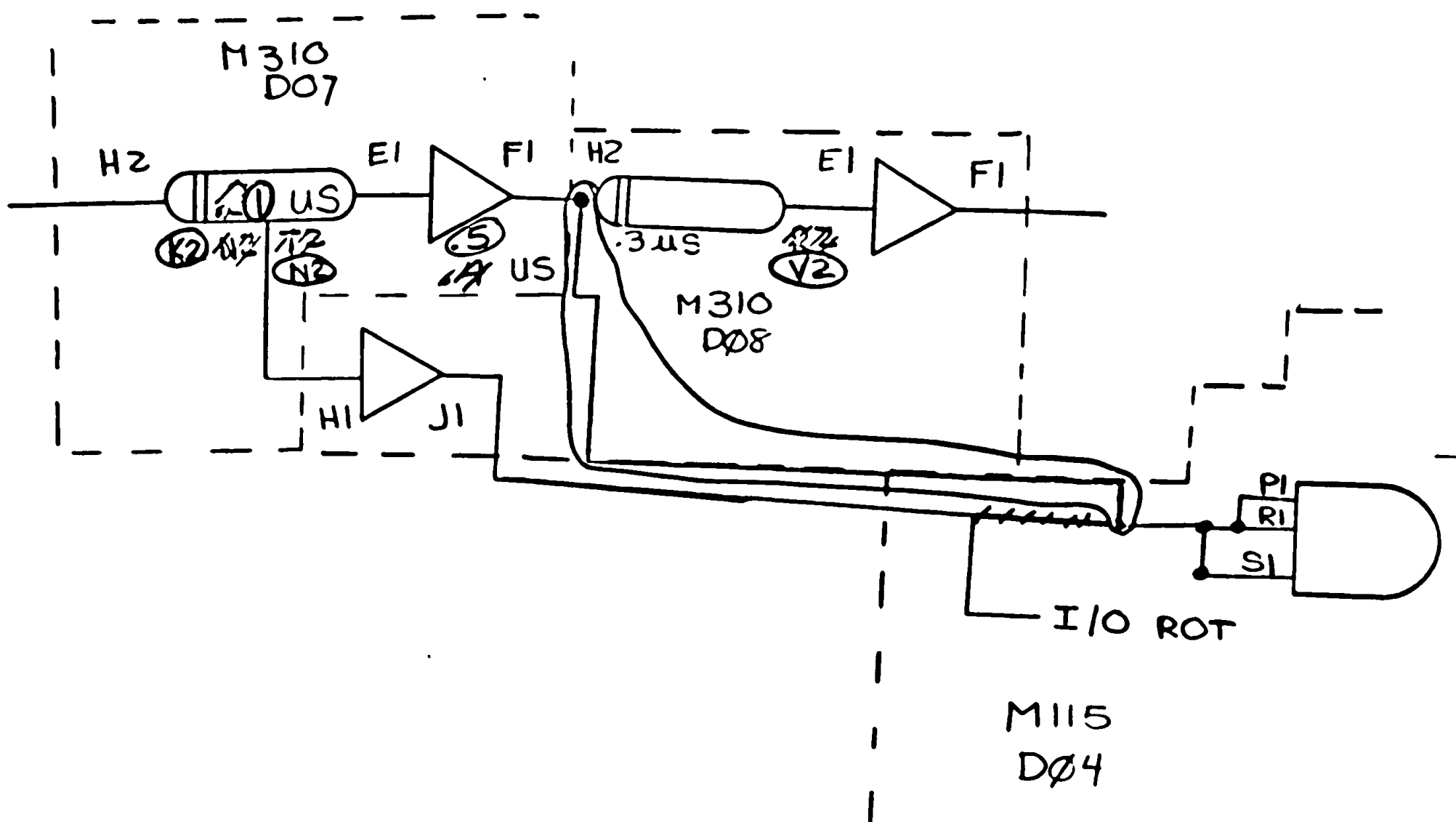
PRODUCTION ENG. H. Godfrey DATE 10-12-68

DESIGN ENG. D. A. White 1 DATE 10-12-68

OTHER DATE

PRODUCT LINES AFFECTED

SMALL COMPUTERS (8L)



2000-0000

2000-0000

> BS-84-0-2 ECO# 84-00013

New
Rev
C

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

CO. OR	SIGNAL NAME	FROM PIN	TO PIN	COMPO. NTS	ADD	DEL
	D07E1	D07E1	D07T2			✓
	↓	D07E1	D07N2		✓	
	D07F1	D04P1	D04R1		✓	
	↓	D04R1	D04S1		✓	
	↓	D04S1	D07F1		✓	
	D07N2	D07N2	D08H1			✓
	D07K2	D07K2	D08H1		✓	
	D08R2	D08E1	D08R2			✓
	D08V2	D08E1	D08V2		✓	
	I/O ROT	D08J1	D04P1			✓
	↓	D04P1	D04R1			✓
	↓	D04R1	D04S1			✓

ECO NUMBER 8L-00013

MADE BY Betty Vidita

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	8L-0-19	C

E3

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REC'D BY INFO SER	MO DAY YR 11 15 68	CHANGE NO. 8L-00022
SPECO RELEASE	11 26 68	DOCUMENTATION PROJECT NUMBER
TYPE OF CHANGE		A * PROB LINE TYPE OR DISCRETE NO 2 6 0 7 1 7 5
ELECTRICAL <input checked="" type="checkbox"/>		MANUFACTURING PROJECT NUMBER
MECHANICAL <input type="checkbox"/>		A * PROB LINE TYPE OR DISCRETE NO
MODULES <input type="checkbox"/>		

UNIT NAME	PDP 8L	MODEL NO.	PDP 8L
PREWIRED OPTIONS AFFECTED	CHANGE TESTED IN SERIAL NO. _____ BY _____		BREAK-IN POINT (DATE/SERIAL NOS)
	ESTIMATED TIME TO INSTALL	1.5 HOURS	ALL PDP 8L SN 101 THRU 325 AND FUTURE.
MODEL NO. VARIATION	PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	YES NO	
	SHOP MODEL AFFECTED	<input type="checkbox"/> <input checked="" type="checkbox"/>	
	SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/> <input checked="" type="checkbox"/>	
	DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/> <input checked="" type="checkbox"/>	
	TECHNICAL PUBLICATIONS AFFECTED	<input checked="" type="checkbox"/> <input type="checkbox"/>	

PROBLEM:

1. COULD NOT SET EA LIGHT WITH L.A. SWITCH WHEN EX. MEM. OPTION ADDED.
2. L.A. SWITCH WAS LOADING S.R.INTO M.B. & M.A.
3. COULD NOT PROTECT MEM. EX. LAST PAGE OF MEMORY WITH PROTECT SWITCH.
4. MEMORY WAS NOT PROTECTED DURING 3 CYCLE BREAK
5. WIRE LIST ERRORS.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
F-WL-PDP8-1-19	F	F
A-M-PDP8-1	F	F
D-MU-PDP8-1-18	0	A
D-ES-PIPB-1-2	C	D
D-PS-PDP8-1-3	A	B
D-ES-PDP8-1-4	A	B
D-RN-PIPB-1-17	A	B
A-PL-PIPB-L-18	0	A

CORRECTION:

1. CHANGED TIMING ON KEY CL. & KEY LOAD
2. ADDED GATE AT C15.
3. CHANGED EMA TO BEMA. ADDED LOGIC TO MC8L LOGIC
4. ADDED WORD COUNT 9 TO PROTECT GATE.
5. CORRECT WIRE LIST.

ORIGINATOR	M. ARSENAULT	DATE	11/15/68	PRODUCT LINES AFFECTED PDP 8L
PRODUCTION ENG.	H. GODFREY	DATE	11/15/68	
DESIGN ENG.	DON WHITE	DATE	11/15/68	
OTHER	FRANK PURCELL	DATE	11/15/68	

FJ

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 3

COLOR	SIGNAL NAME	FROM P.N	TO PIN	COMPONENTS	ADD	DEL
	BEMA	B35T2	C10T2		✓	
		C10T2	C26P2		✓	
	C05N2	C05N2	D04V2			✓
		C05N2	C06K1		✓	
	C15F1	C15F1	B13E2		✓	
	D04U1	D04U1	D04V2		✓	
		D04U1	C06K1			✓
	D07F1	D04P1	D04R1			✓
		D04R1	D04S1			✓
		D04S1	D07F1			✓
		C05L2	C05M2		✓	
		C05M2	D07F1		✓	
	EMA	B35V2	C26P2			✓
		C26P2	C10T2			✓
	+3V (1)	C02V1	C02U1			✓
		C02V1	C02M1		✓	
		C02M1	C02U1		✓	
	KEY EX + DP	D02D1	D09H1			✓

ECO NUMBER <u>BL-00022</u> MADE BY <u>ELAINE FROIAS</u>	DRAWING NUMBER AFFECTED																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CODE</th> <th style="width: 10%;">SIZE</th> <th style="width: 50%;">NUMBER</th> <th style="width: 30%;">NEW REV LTR.</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">WL</td> <td style="text-align: center;">K</td> <td style="text-align: center;">PDP8-L-19</td> <td style="text-align: center;">F</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	CODE	SIZE	NUMBER	NEW REV LTR.	WL	K	PDP8-L-19	F								
CODE	SIZE	NUMBER	NEW REV LTR.														
WL	K	PDP8-L-19	F														

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ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 2 OF 9

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	KEY EX + DP	DØ9H1	B10M2			✓
		DØ2D1	B10M2		✓	
	KEY LA1EX+DP	CØ2K2	DØ9H1		✓	
	KEY LA	CØ2J2	CØ2M1			✓
		CØ2M1	DØ2A1			✓
		CØ2J2	DØ2A1		✓	
	MEM ALT 1	CØ5L2	A1ØT2			✓
		A1ØT2	DØ4P1		✓	
	MEM ALT 2	CØ5M2	A12T2			✓
		A12T2	DØ4R1		✓	
	MFTP Ø	CØ2T2	C15U2		✓	
	MFTP 1	CØ5R2	C15U2			✓
		CØ5R2	D17L2		✓	
		D17L2	D17K2		✓	
	MFTP 2	D17L2	D17K2			✓
		D17K2	D12A1			✓

ECO NUMBER <u>BL-00022</u> MADE BY <u>ELAINE FROIAS</u>	DRAWING NUMBER AFFECTED																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CODE</th> <th style="width: 10%;">SIZE</th> <th style="width: 50%;">NUMBER</th> <th style="width: 30%;">NEW REV LTD</th> </tr> </thead> <tbody> <tr> <td>WL</td> <td>K</td> <td>POP8-L-19</td> <td>F</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	CODE	SIZE	NUMBER	NEW REV LTD	WL	K	POP8-L-19	F								
CODE	SIZE	NUMBER	NEW REV LTD														
WL	K	POP8-L-19	F														

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ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 3 OF 3

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	MFTS Ø	DØ9J1	B13E2			✓
	MFTS 1 (Ø)	CØ3K2	DØ4F1			✓
	↓	CØ3K2	C15D1		✓	
	↓	C15D1	DØ4F1		✓	
	MFTS 2 (Ø)	CØ3H2	DØ4H1			✓
	MFTS 2 (Ø)	C15E1	CØ3H2		✓	
	↓	C15E1	DØ4H1		✓	
	WORD COUNT (Ø)	DØ2S2	D1ØR2			✓
	↓	DØ2S2	DØ4S1		✓	
	↓	DØ4S1	D1ØR2		✓	

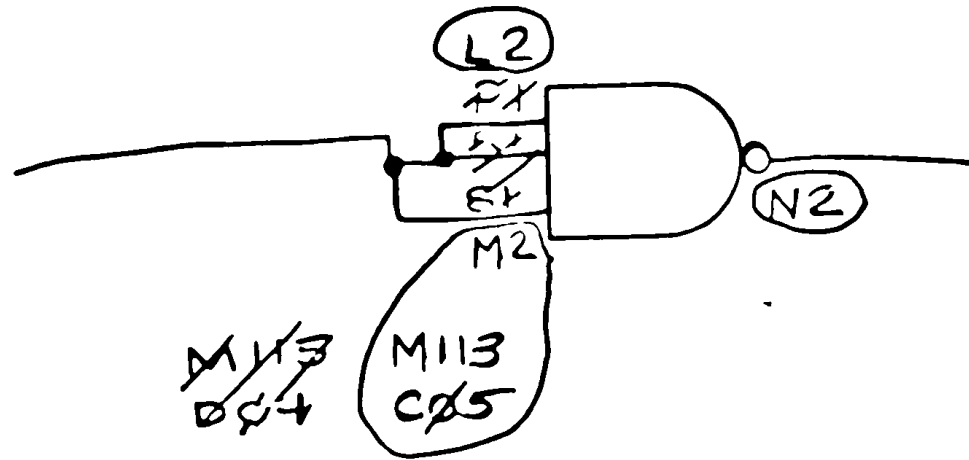
ECO NUMBER BL-00022

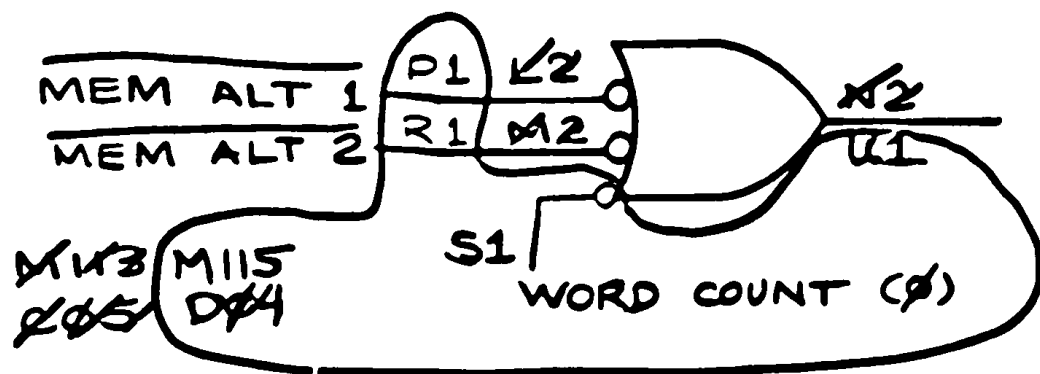
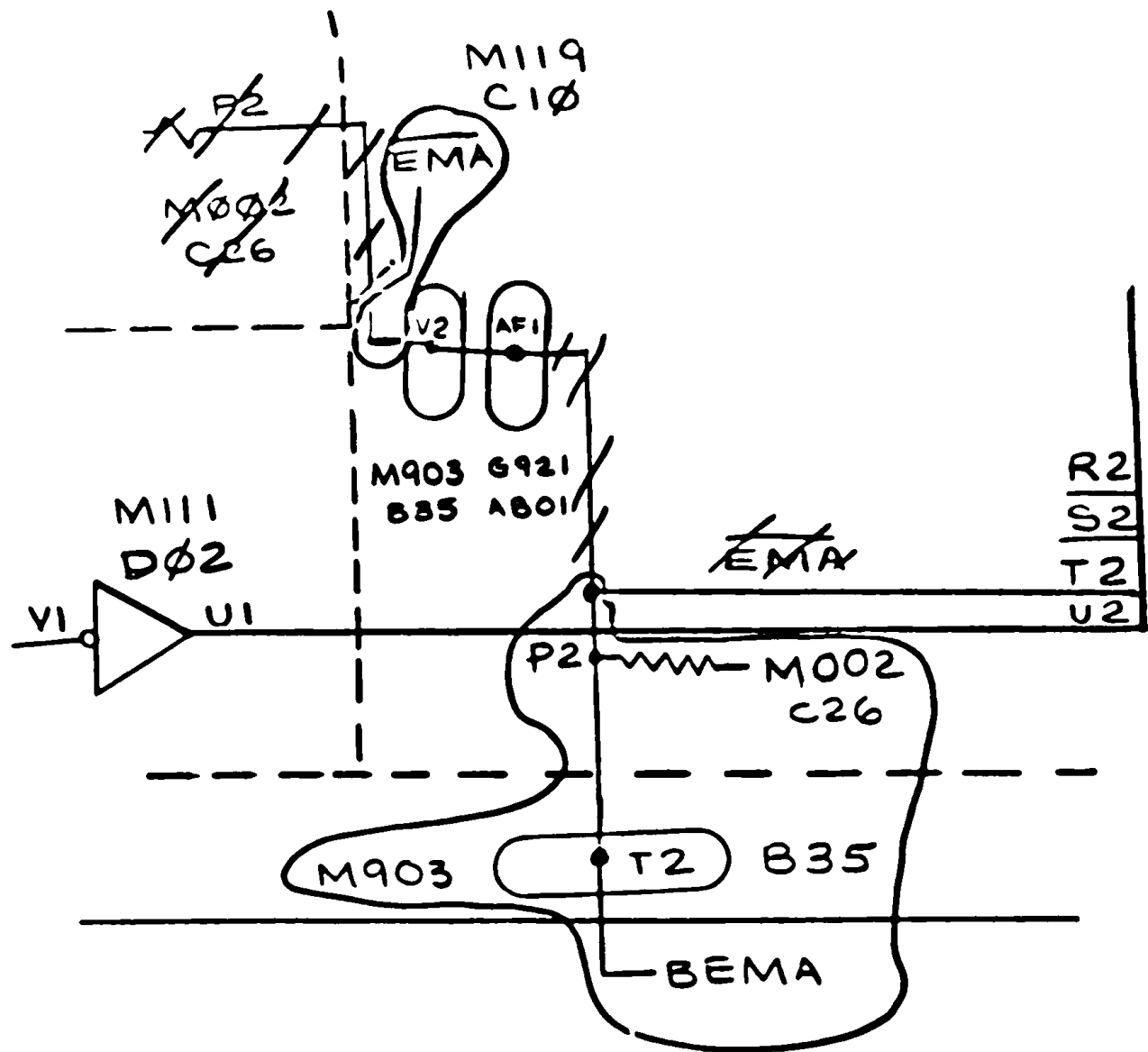
MADE BY ELAINE FROIAS

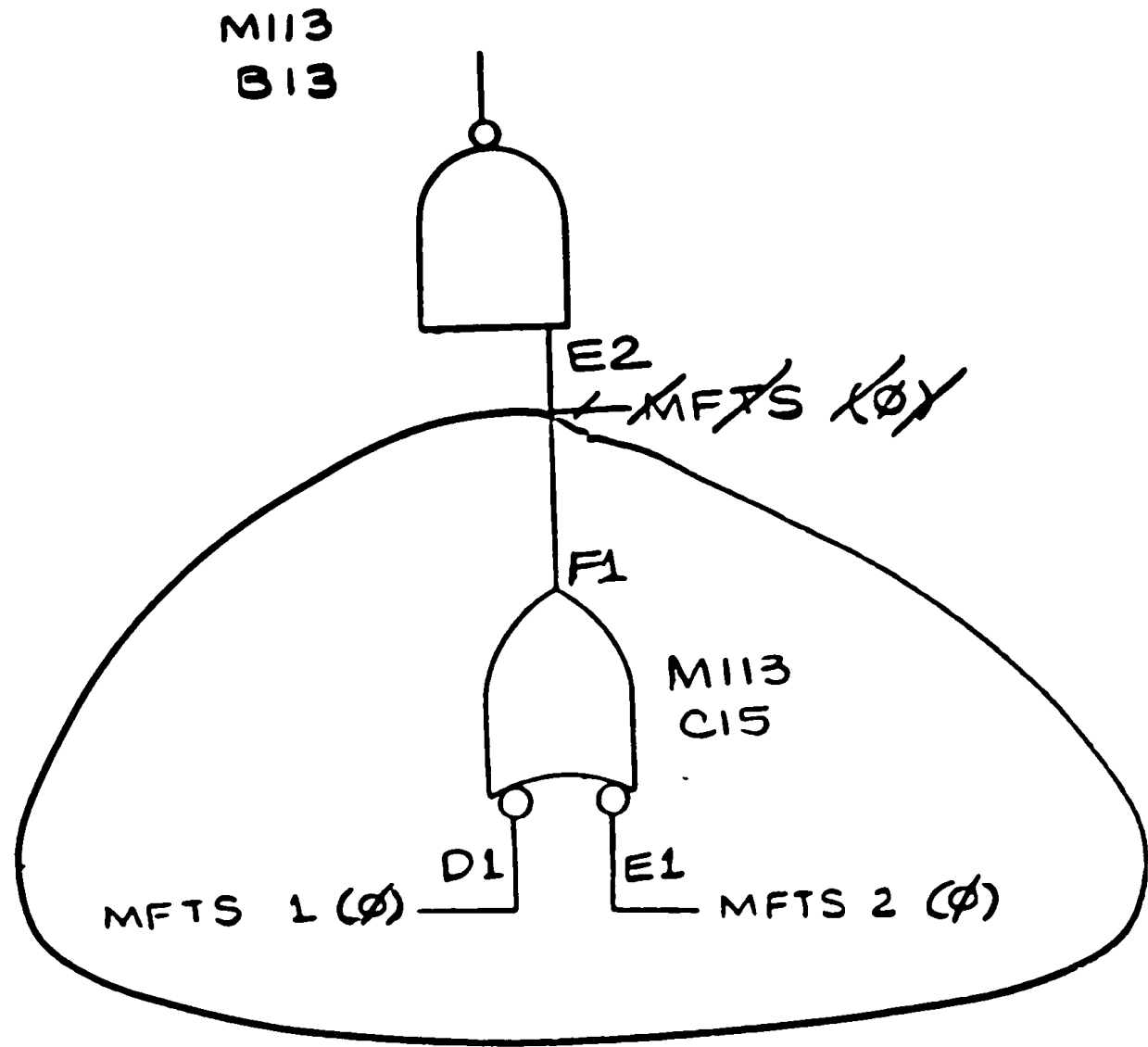
DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	PDP8-L-19	F

13

DWG. NO.	NEW REV.	OLD REV.
D-BS-PDP8-L-2	D	C
D-BS-PDP8-L-3	B	A
D-BS-PDP8-L-4	B	A
D-BS-PDP8-L-17	B	A
D-MU-PDP8-L-18	A	Ø
A-PL-PDP8-L-18	A	Ø
K-WL-PDP8-L-19	F	E





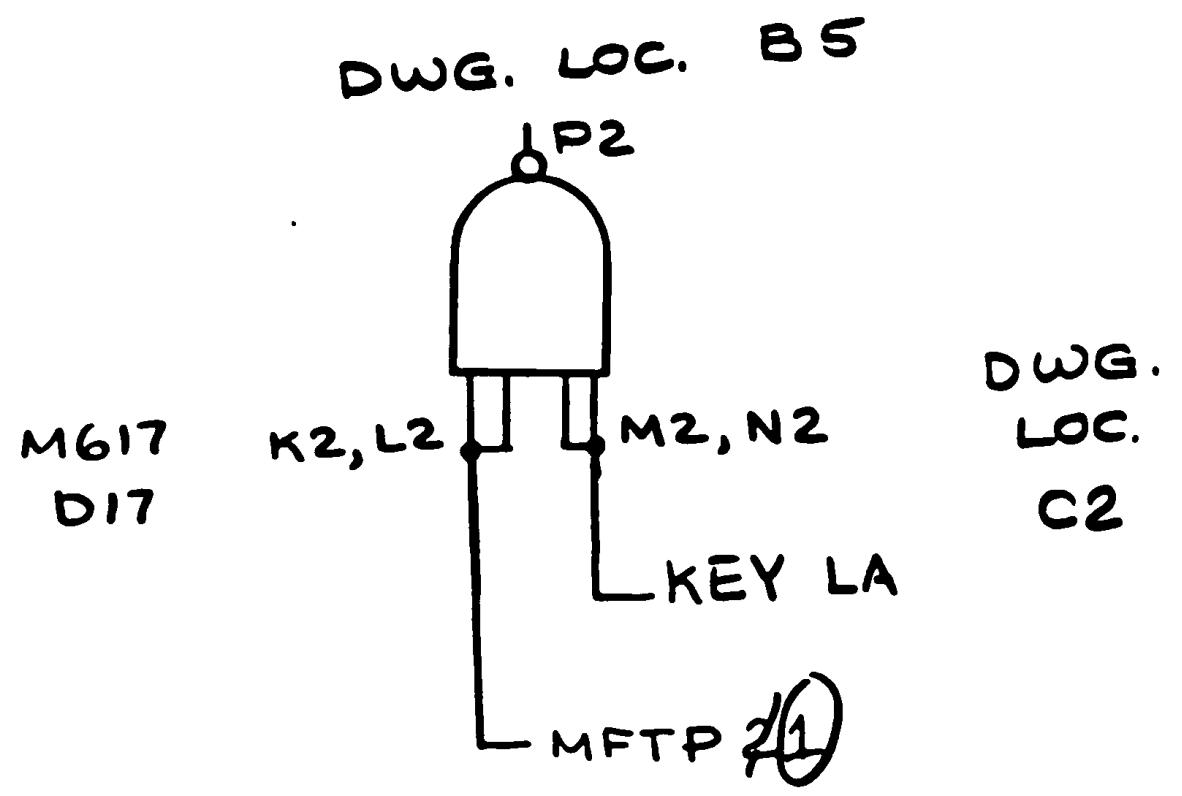
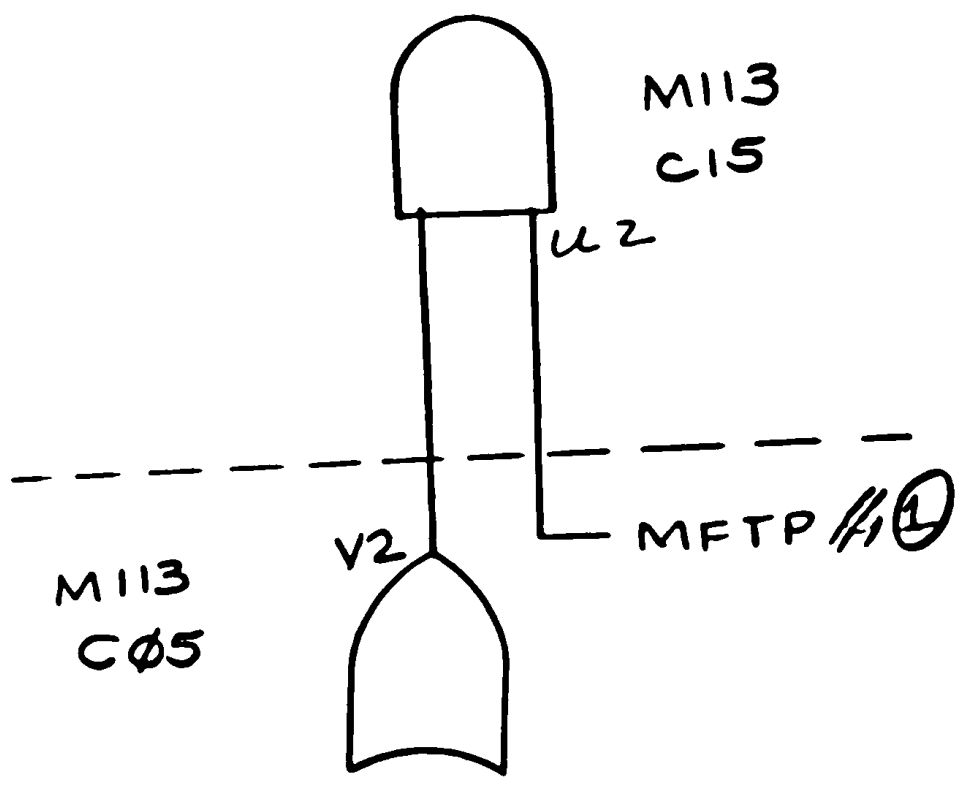


DWG LOC A-4

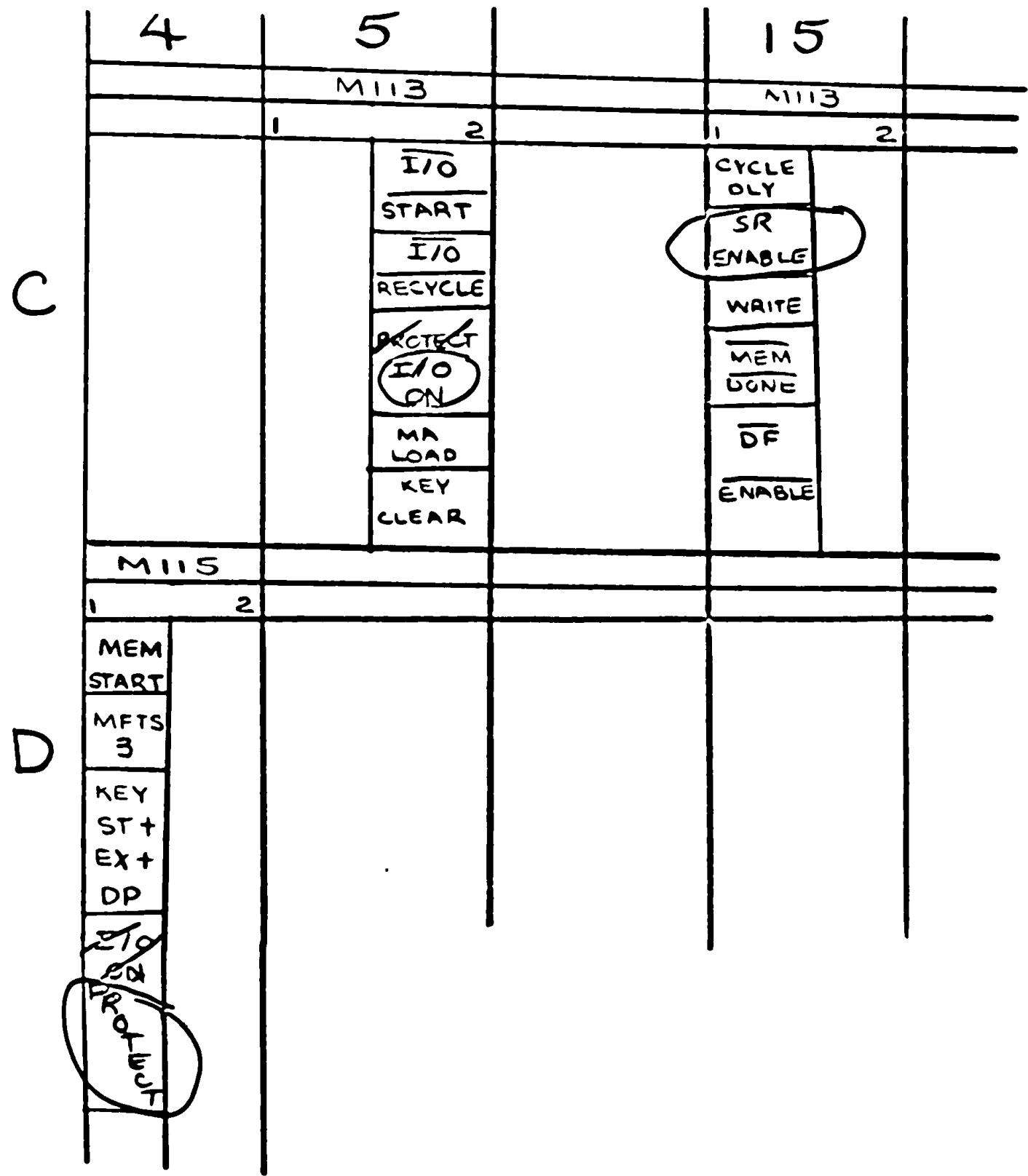
m3

2-11-68

2-11-68



BY



EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D BY INFO BER 1 17 69
 SPEC'D RELEASE 1 21 69

MO DAY YR
 TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 8L-00027
 DOCUMENTATION PROJECT NUMBER
 ACT PROB LINE TYPE OR D SCRTE NO
2 6 0 7 1 7 5
 MANUFACTURING PROJECT NUMBER
 ACT PROB LINE TYPE OR D SCRTE NO.

UNIT NAME PDP 8L MODEL NO. 8L

PREV REQ OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED VARIOUS
 IN SERIAL NO. MACHINES BY PRODUCTION

ESTIMATED TIME TO INSTALL 1.5 HOURS

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)

SHOP MODEL AFFECTED YES NO

SYSTEMS PROGRAMS AFFECTED YES NO

DIAGNOSTIC PROGRAMS AFFECTED YES NO

TECHNICAL PUBLICATIONS AFFECTED YES NO

BREAK-IN POINT (DATE/SERIAL NOS)

ALL 8/L

100-200 AND FUTURE

PROBLEM:

- MEMORY SENSE WINDINGS INCUR VARIOUS AMOUNTS OF NOISE DUE TO VARIATIONS IN WIRE ROUTING ON PANEL.

CORRECTION:

- ~~1. USE TWISTED PAIR~~
- USE TWISTED PAIR WIRING ON SENSE WINDINGS. THIS WOULD REMOVE AFFECTED RUNS FROM WIRE LIST ("DELETES") AND REPLACE THEM WITH TWISTED PAIR WIRING ON GENERAL WIRE SHEET ("ADDS")

DRAWINGS AFFECTED

NUMBER	REV	
	OLD	NEW
A-WL-8L-0	K	L
K-WL-8L-19	F	H
D-DI-8L-0-20	A	B
A-WL-8L-0-24		Q

ORIGINATOR J. CATALANO DATE 1/14/69
 PRODUCTION ENG. H. GODFREY DATE 1/14/69
 DESIGN ENG. M. E. ARSENAULT DATE 1/15/69
 OTHER R. J. PIRCELL DATE 1/15/69

PRODUCT LINES AFFECTED
PDP 8L

MASTER DWG LIST

DWG NO.	NEW REV.
D-DI-8L-0-20	B
M-WL-8L-0-19	H
A-WL-8L-0-24 (TWISTED PAIR)	Ø

ELC 8L-00027

A-ML-8L-0

NEW
REV
L

F4

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 2

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	A 21 C 2	A 21 C 2	A 18 D 2			✓
	A 21 D 2	A 21 D 2	A 18 E 2			✓
	A 21 E 2	A 21 E 2	A 18 L 1			✓
	A 21 F 2	A 21 F 2	A 18 M 1			✓
	A 21 H 2	A 21 H 2	A 19 D 2			✓
	A 21 J 2	A 21 J 2	A 19 E 2			✓
	A 21 K 2	A 21 K 2	A 19 L 1			✓
	A 21 L 2	A 21 L 2	A 19 M 1			✓
	A 21 M 2	A 21 M 2	A 20 D 2			✓
	A 21 N 2	A 21 N 2	A 20 E 2			✓
	A 21 P 2	A 21 P 2	A 20 L 1			✓
	A 21 R 2	A 21 R 2	A 20 M 1			✓
	A 21 S 2	A 21 S 2	A 17 D 2			✓
	A 21 T 2	A 21 T 2	A 17 E 2			✓
	B 21 C 2	B 21 C 2	B 18 D 2			✓
	B 21 D 1	B 21 D 2	B 18 E 2			✓
	B 21 E 2	B 21 E 2	B 18 L 1			✓
	B 21 F 2	B 21 F 2	B 18 M 1			✓
	B 21 H 2	B 21 H 2	B 19 D 2			✓
	B 21 J 2	B 21 J 2	B 19 E 2			✓
	B 21 K 2	B 21 K 2	B 19 L 1			✓
	B 21 L 2	B 21 L 2	B 19 M 1			✓
	B 21 M 2	B 21 M 2	B 20 D 2			✓

ECO NUMBER 8L-00027
 MADE BY J. Hopkins

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	8L-0-19	H

F4

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 2 OF 2

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	B21N2	B21N2	B20E2			✓
	B21P2	B21P2	B20L1			✓
	B21R2	B21R2	B20M1			✓

ECO NUMBER 8L-00027

MADE BY _____

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	8L-0-19	H

G4

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REC'D BY INFO SER 2 7 AG
SPECO RELEASE 2/7/69
MO DAY YR
TYPE OF CHANGE
ELECTRICAL
MECHANICAL
MODULES

CHANGE NO 8L-00030
DOCUMENTATION PROJECT NUMBER
ACT PROD LINE TYPE OR DISCRETE NO 2 6 0 7 1 6 0
MANUFACTURING PROJECT NUMBER
ACT PROD LINE TYPE OR DISCRETE NO

UNIT NAME PDP-8/L **MODEL NO.** 8L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION
P. 8	

CHANGE TESTED PROTO **BY** M. Arsenault
ESTIMATED TIME TO INSTALL _____
PARTS ADDED OR DELETED
(IF YES REFER TO SEPARATE SHEET)
SHOP MODEL AFFECTED
SYSTEMS PROGRAMS AFFECTED
DIAGNOSTIC PROGRAMS AFFECTED
TECHNICAL PUBLICATIONS AFFECTED

BREAK-IN POINT
(DATE/SERIAL NOS)
ALL 8L WITH BA08
SERIAL NO. 1 THRU 692
AND FUTURE

PROBLEM:

WHEN THE POWER IS TURNED OFF IN 8L, IT CAUSES GATES TO FLOAT IN BA08, WHICH IN TURN CAUSES THE BA08 TO DROP BITS IN MEMORY.

CORRECTION:

GENERATED A SIGNAL IN THE 8/L TO HOLD GATES ON UNTIL POWER IN BA08 HAS DECAYED

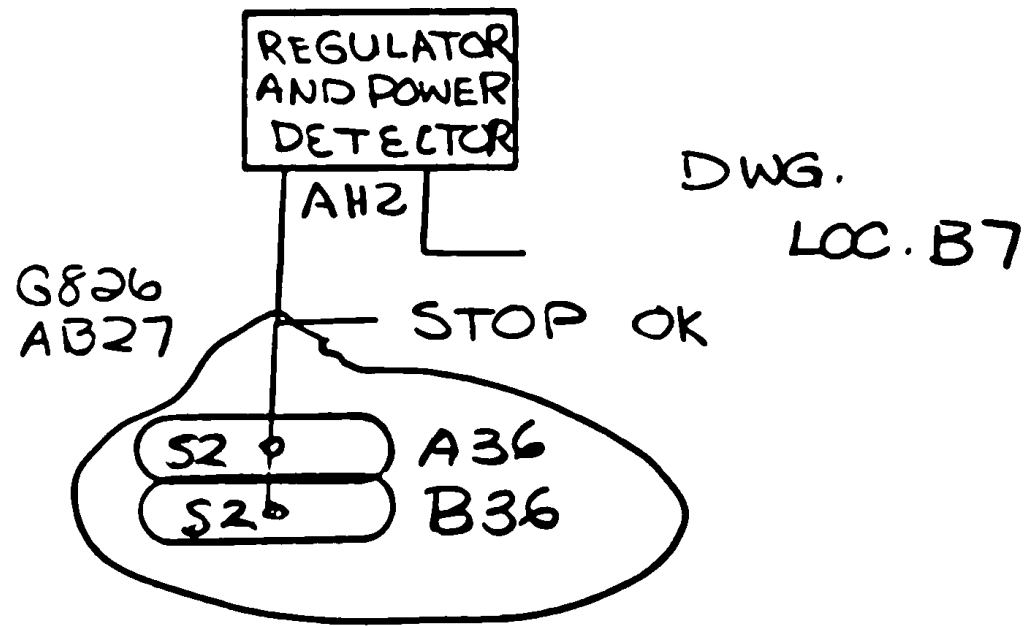
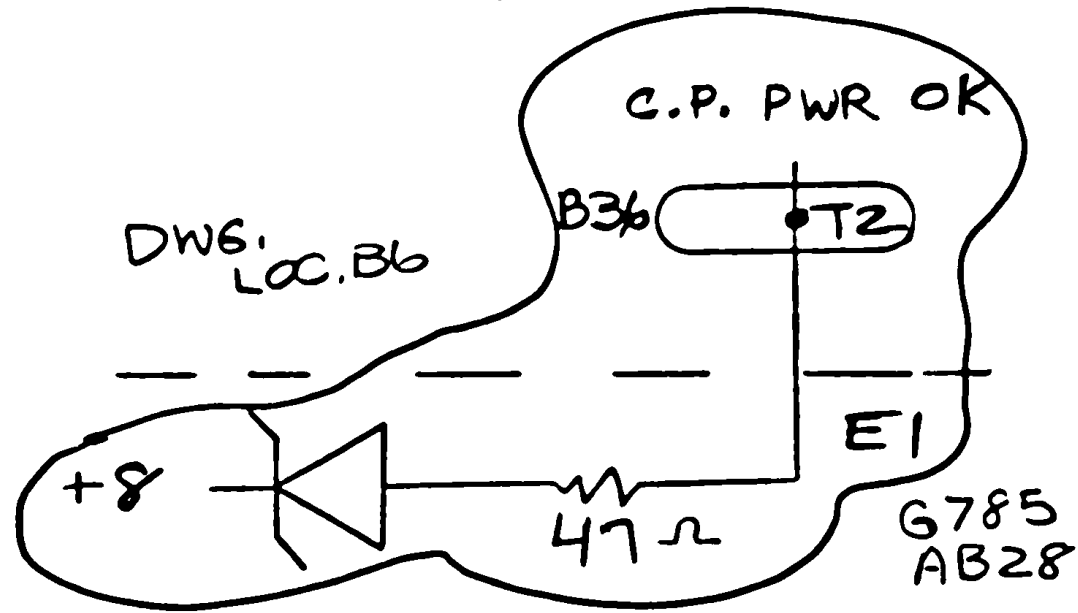
DRAWINGS AFFECTED

NUMBER	REV	
	OLD	NEW
D-BS-81-0-13	C	D
K-WL-81-0-19	H	J
A-ML-8L-0	M	N

ORIG NATOR M. Arsenault **DATE** 2-7-69
PRODUCTION ENG. H. Godfrey **DATE** 2-7-69
DESIGN ENG. M. Arsenault **DATE** 2-7-69
OTHER F. Purcell **DATE** 2-7-69

PRODUCT LINES AFFECTED
8L

HY



ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	CP PWR OK	A28E1	B36T2		X	
	STOP OK	A36P2	D09K1			X
	↓	A36P2	A36S2		X	
		A36S2	B36S2		X	
		B36S2	D09K1		X	

ECO NUMBER <u>8L-00030</u>		DRAWING NUMBER AFFECTED		
MADE BY <u>BV/AV</u>	CODE	SIZE	NUMBER	NEW REV LTR
	WL		R-8L-0-19	J

DR-24 © D T T O F 86 ●

MASTER DRAWING

D-BS-8L-0-13	D
K-WL-8L-0-19	J

New
Rev
N

ECO # 8L-00030

1-ML-8L-0

24

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D BY INFO SER MO DAY YR
SPECO RELEASE 2 13 69

TYPE OF CHANGE
ELECTRICAL
MECHANICAL
MODULES

CHANGE NO 8L-00031
DOCUMENTATION PROJECT NUMBER
ACT PRDD LINE TYPE OR D SCRETE NO
2 6 0 7 1 6 0
MANUFACTURING PROJECT NUMBER
ACT PRDD LINE TYPE OR D SCRETE NO

UNIT NAME PDP-8/L MODEL NO. 8L

PREVIOUS OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED PROTO BY M. Arseneault
IN SERIAL NO. _____

ESTIMATED TIME TO INSTALL _____

PARTS ADDED OR DELETED
(IF YES REFER TO SEPARATE SHEET) YES NO

 SHOP MODEL AFFECTED
 SYSTEMS PROGRAMS AFFECTED
 DIAGNOSTIC PROGRAMS AFFECTED
 TECHNICAL PUBLICATIONS AFFECTED

BREAK-IN POINT
(DATE/SERIAL NO.)
PDP-8L WITH BA08
SERIAL NO. 1 THRU 692
AND FUTURE

PROBLEM:

CORRECTION TO ECO 8L-00030
A36S2 SHOULD NOT BE WIRED TO B36S2

CORRECTION:

REMOVE A36S2 FROM RUN

DRAWINGS AFFECTED

NUMBER	OLD REV.	NEW REV.
NONE		

ORIG NATOR M. Arseneault DATE 2-13-69
 PRODUCTION ENG. H. Godfrey DATE 2-13-69
 DESIGN ENG. M. Arseneault DATE 2-13-69
 OTHER FRANK PIRCELL DATE 2-13-69

PRODUCT LINES AFFECTED
8L

44

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

CO. OR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	STOP OK	A36P2	A36S2			✓
	↓	A36S2	B36S2			✓
	↓	A36P2	B36S2		✓	

ECO NUMBER 8L-00031

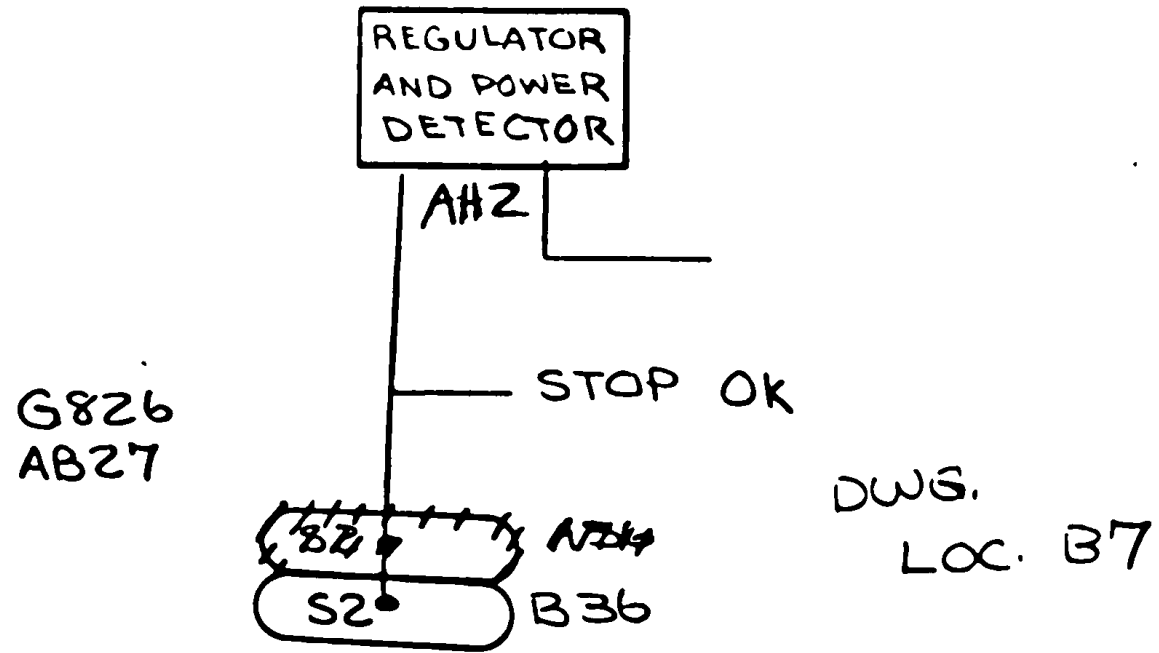
MADE BY Betty Vidito

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WLK		8L-079	J

MY

Line 500 78

Line 1078



New
REV
D

FCO # 8L-00031

D-BS-8L-0-13

B3

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REC'D. BY INFO SER

MO	DAY	YR
2	28	69

SPECO RELEASE

MO	DAY	YR
2	28	69

TYPE OF CHANGE
ELECTRICAL
MECHANICAL
MODULES

CHANGE NO. 81-00018
DOCUMENTATION PROJECT NUMBER
ACT PROB LINE TYPE OR DISCRETE NO.
MANUFACTURING PROJECT NUMBER
ACT PROB LINE TYPE OR DISCRETE NO.

UNIT NAME PDP-12 MODEL NO. 8/L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____
ESTIMATED TIME TO INSTALL 15 MINUTES
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)
SHOP MODEL AFFECTED
SYSTEMS PROGRAMS AFFECTED
DIAGNOSTIC PROGRAMS AFFECTED
TECHNICAL PUBLICATIONS AFFECTED

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)

ALL 8/L WITH BA08 AND ALL FUTURE 8/L STARTING WITH SERIAL NUMBER 693

PROBLEM:

POWER (ON-OFF) TEST IN TROUBLE

CORRECTION:

CHANGES IN LOGIC, POWER SUPPLY AND REGULATOR CONTROL G826

DRAWINGS AFFECTED

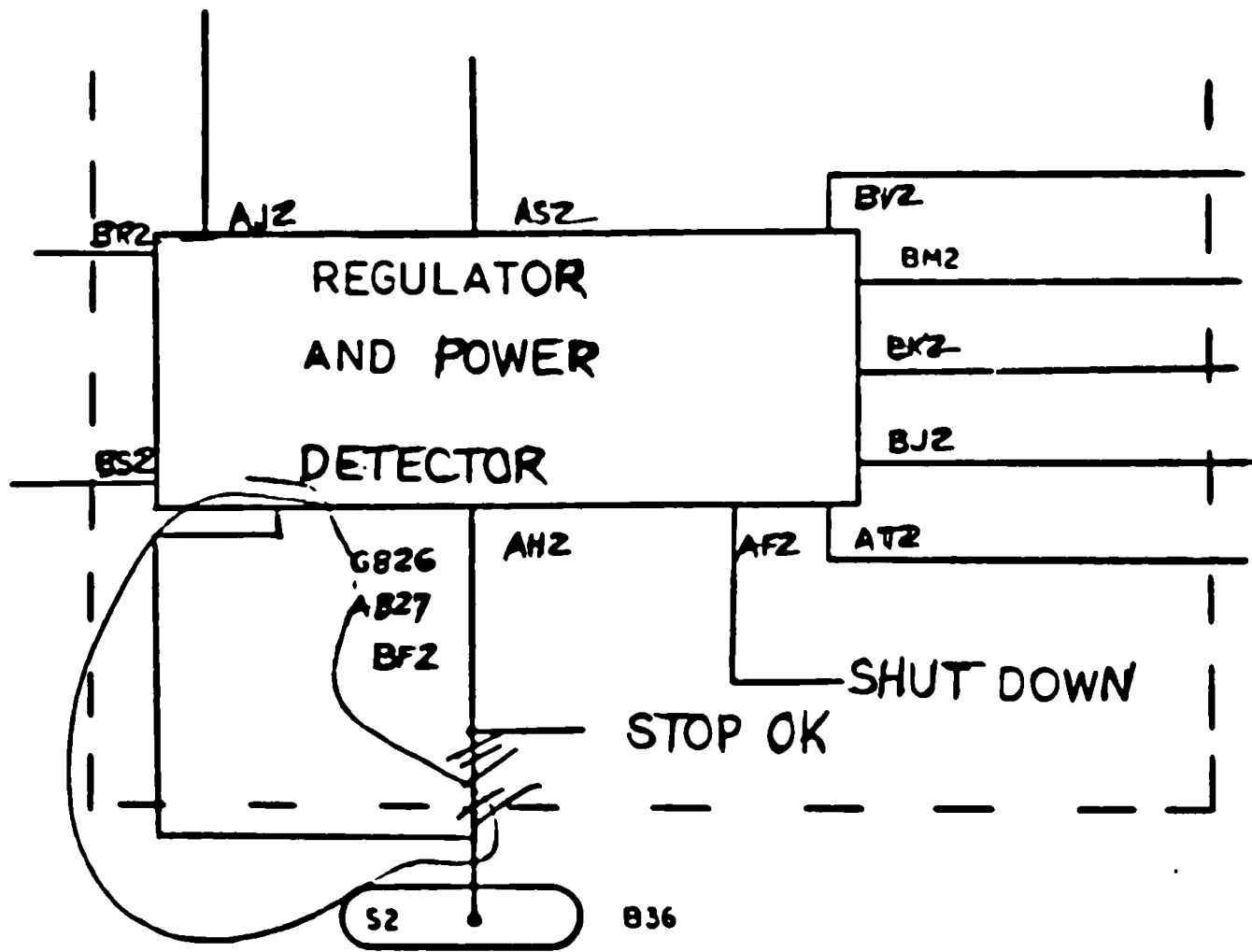
NUMBER	OLD REV	NEW REV
D-ES-8L-0-13	D	E
A-WL-8L-0	P	R
K-WL-8L-0-19	J	K

ORIGINATOR M. ARSENEAULT DATE 2/27/69
PRODUCTION ENG. H. GODFREY DATE 2/27/69
DESIGN ENG. M. ARSENEAULT DATE 2/27/69
OTHER E. PURCELL DATE 2/27/69

PRODUCT LINES AFFECTED
8/L

J.P.

CS



MASTER DRAWING LIST

DWG NO.	REV- LET.	TITAL
D-BS-8L-Ø-13	B (E)	MEMORY CONTROL
K-VL-8L-Ø-19	S (K)	WIRB LIST (PDP 8-L)

ECO 8L-00038

A-ML-8L-Ø

NEW
REV
F

E

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D BY INFO SER. 3 17 69
 SPEC'D RELEASE 3 19 69
 TYPE OF CHANGE:
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 81-00066
 DOCUMENTATION PROJECT NUMBER
 ACT. PROC. LINE TYPE OR DISCRETE NO. 2 6 0 7 1 1 3
 MANUFACTURING PROJECT NUMBER
 A TYPE LINE TYPE OR DISCRETE NO.

UNIT NAME PARITY OPTION MODEL NO. 8L

PREWIRED OPTIONS AFFECTED	
MODEL NO.	VARIATION
<u>MP8L</u>	

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL 15 MINUTES

	YES	NO
PARTS ADDED OR DELETED IF YES REFER TO SEPARATE SHEET	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS.)
 ALL, 100 THRU 720 AND FUTURE.
 FOR THE PRESENT TIME, INSTALL ONLY IN 8/L'S GETTING MP8/L.

PROBLEM:

1. WIRE LIST ERRORS
2. MP SLIP GATE INPUT COMING FROM "1" SIDE OF PARITY ERROR F.F.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
D-1-5-1-0-1	A	K
A-11-11-8L-0	0	A
A-11-6L-0	K	S
I-6L-6L-0-19	K	L

CORRECTION:

1. CORRECT WIRE LIST AND PRINTS.
2. CHANGE TO "0" SIDE OF F.F.

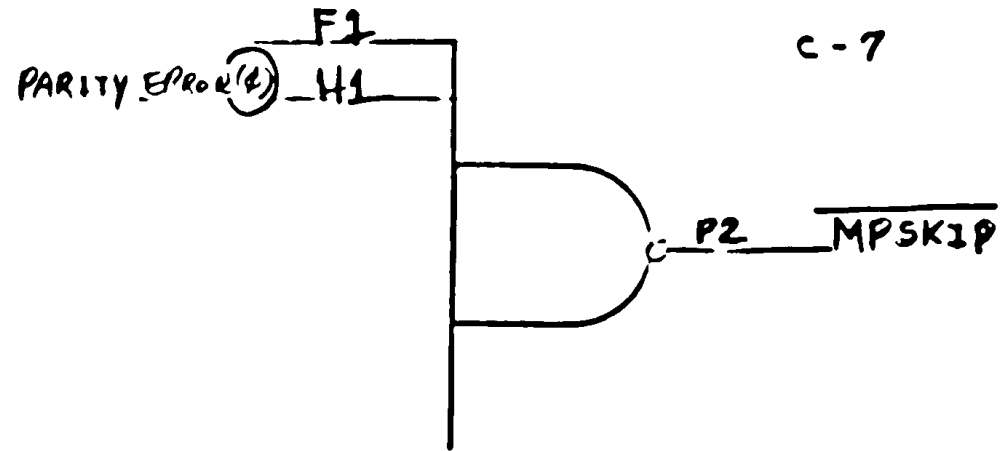
ORIGINATOR <u>MEL ARSENAULT</u>	DATE <u>3-14-69</u>
PRODUCTION ENG. <u>H. GODFREY</u>	DATE <u>3-17-69</u>
DESIGN ENG. <u>MEL ARSENAULT</u>	DATE <u>3-14-69</u>
OTHER <u>F. PURCELL</u>	DATE <u>3-17-69</u>

PRODUCT LINES AFFECTED

8L

FS

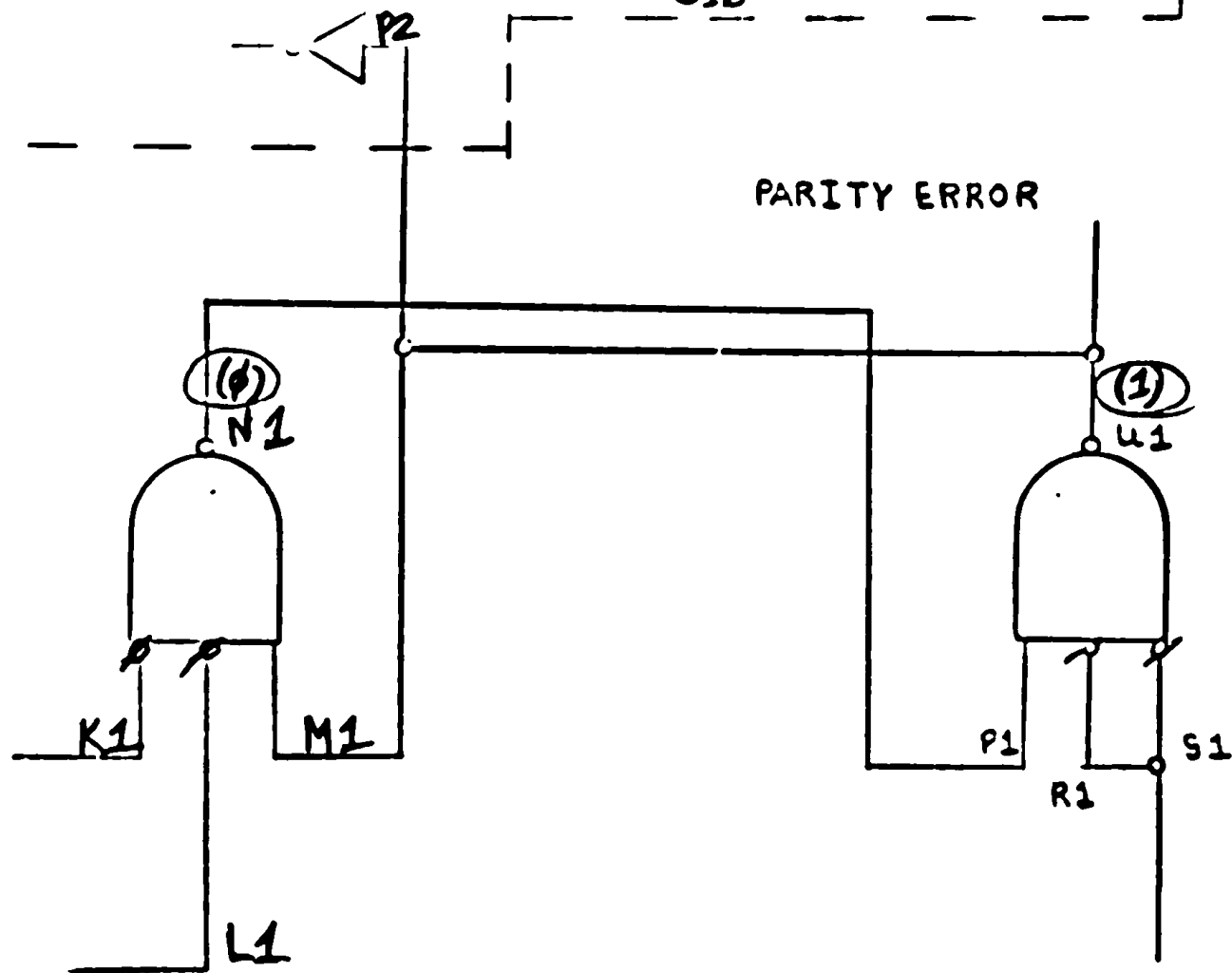
M119
B15



M112
C16

M115
A14

PARITY ERROR



DWG. LOC. D-2

Sheet 1 of 2

ECO 2L-00014

SPIPTT 1 C-2

DCS-MPCL-0-2

NEW
REV B

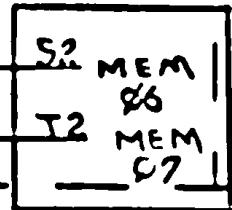
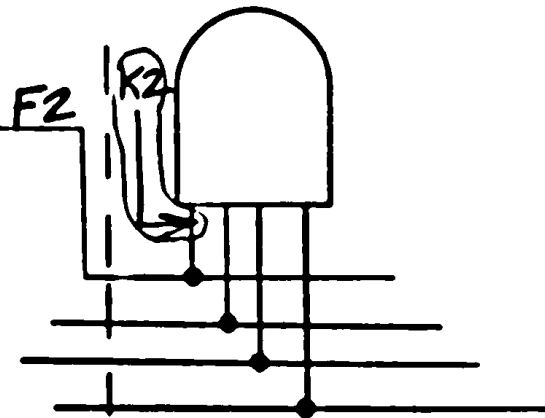
G5

M162
A15

M162
A16

M111
C16

MEM E2
P8



MISSING ON
WIRE LIST

Sheet 2 of 2

MDL

DWG NO.	NEW REV
D-BS-MP8L-0-1	B

ECO # 8L-00044

A ML-MP8L-0

NEW
REV
A

IS

M.D.L.

DWG NO	NEW REV
A-WL-8L-0-19	L

EO 8L00044

A-ML-8L-0

NEW
REV
S

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	PARITY ERROR	A14K2	B15H2			X
	PARITY ERROR (1)	A14P2	B15H2		X	
	A16K2	A16K2	C16P2			X
	↓	A16K2	C16F2		X	
	MEM #6	A15S2	B#4R2		X	
	MEM #7	A15T2	B#4V2		X	
	PARITY ERROR (1)	A14K2	C16P2		X	

ECO NUMBER Q-00044
 MADE BY J.W. PATE

DRAWING NUMBER AFFECTED			NEW REV LTR
CODE	SIZE	NUMBER	
K	WL-86-8-19		L

RS

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REC'D. BY INFO SER.	MO	DAY	YR
4	1	69	
SPECO RELEASE	4	2	69

TYPE OF CHANGE

ELECTRICAL

MECHAN CAL

MODULES

CHANGE NO. **8L-00045**

DOCUMENTATION PROJECT NUMBER

ACT	PRJB LINE	TYPE OR DISCRETE NO
2	6	0 7 1 7 5

MANUFACTURING PROJECT NUMBER

ACT	PRJB LINE	TYPE OR DISCRETE NO

UNIT NAME **PDP-8L** MODEL NO. **8L**

PREWIRED OPTIONS AFFECTED	
MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY **M. ARSENAULT**

ESTIMATED TIME TO INSTALL **2 HOURS**

	YES	NO
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)

SERIAL 1000 AND FUTURE

PROBLEM:

THE PDP 8 (SALE NOTE BOOK) MEMO 0.2.10 FAST FLAG TESTING MA 7.65 ALL STATES THAT THE COMPUTER CAN DO MULTIPLE I/O SHIPS WITH SOME LOGIC DESIGN IN THE PERIPHERAL EQUIPMENT.

THE 8L WOULD NOT ALLOW THIS.
 THIS IN NO WAY EFFECTS PROGRAMMING OR TIMING OF SOP'S

CORRECTION:

CHANGE AS PER LOGIC PRINTS TO ALLOW FAST FLAG TESTING IN PERIPHERALS.

DRAWINGS AFFECTED

NUMBER	OLD	NEW
	REV	REV
D-ES-8L-0-2	D	E
D-ES-8L-0-4	B	C
D-BS-8L-0-5	A	B
D-BS-8L-0-6	A	B
D-WL-8L-0-18	B	C
A-PL-8L-0-18	B	C
D-WL-8L-0-19	L	M
A-WL-8L-0	S	T

ORIGINATOR **M. ARSENAULT** DATE **3/24/69**

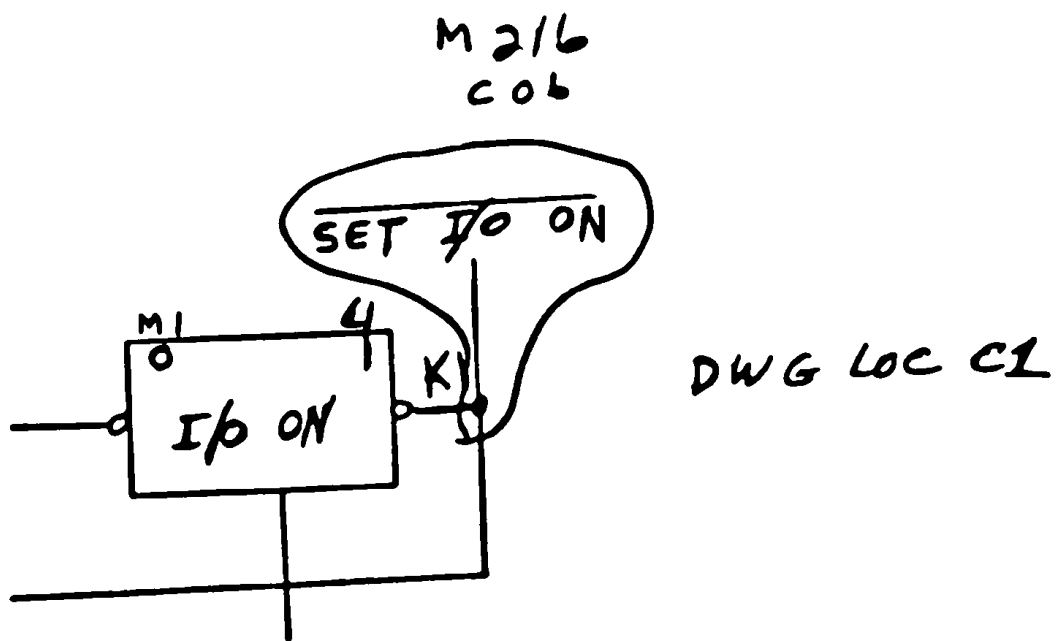
PRODUCTION ENG. **H. GODFREY** DATE _____

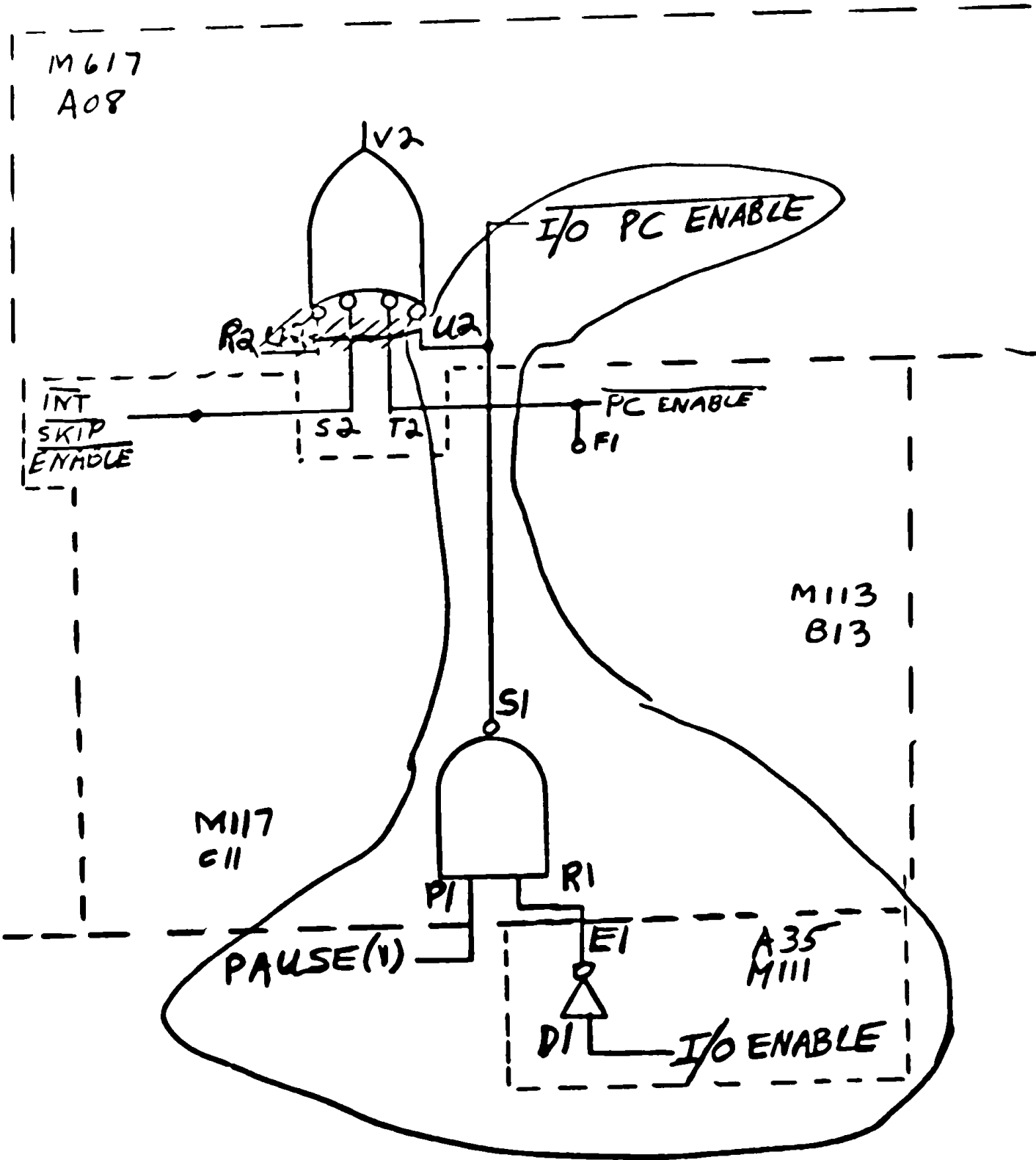
DESIGN ENG. **M. ARSENAULT** DATE **3.24.69**

OTHER **F. J. PURCELL** DATE **3/24/69**

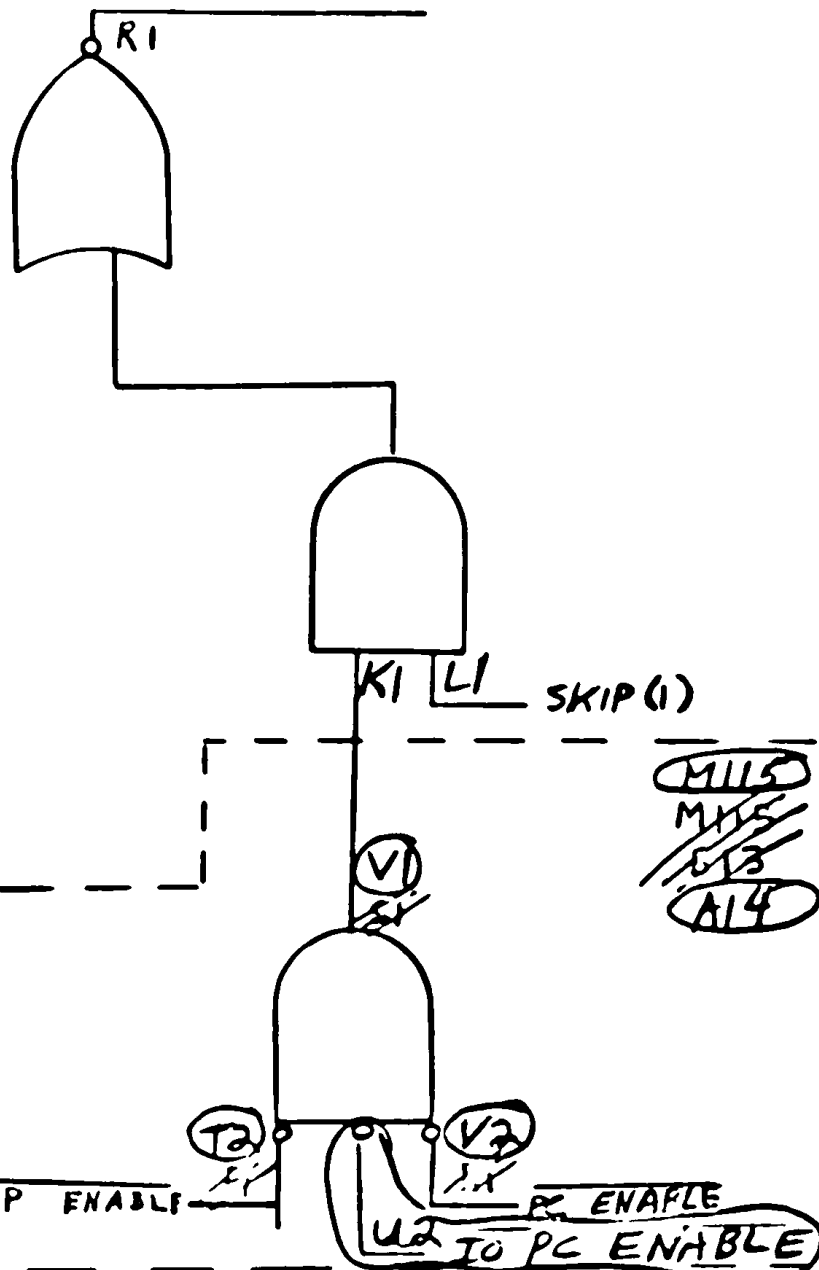
PRODUCT LINES AFFECTED

8L



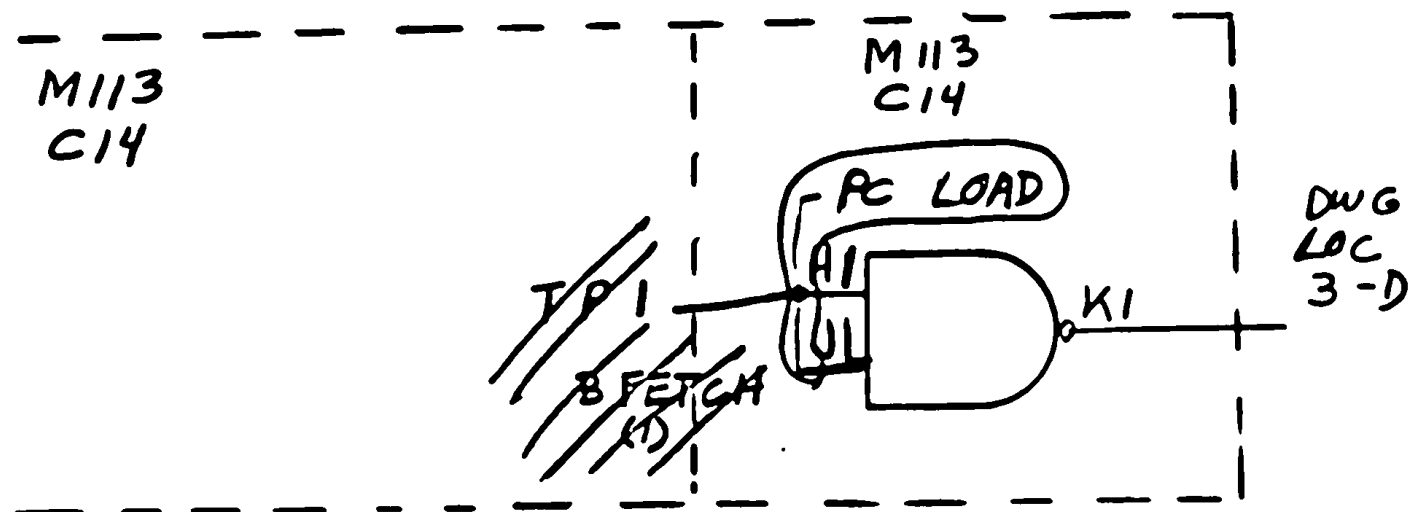
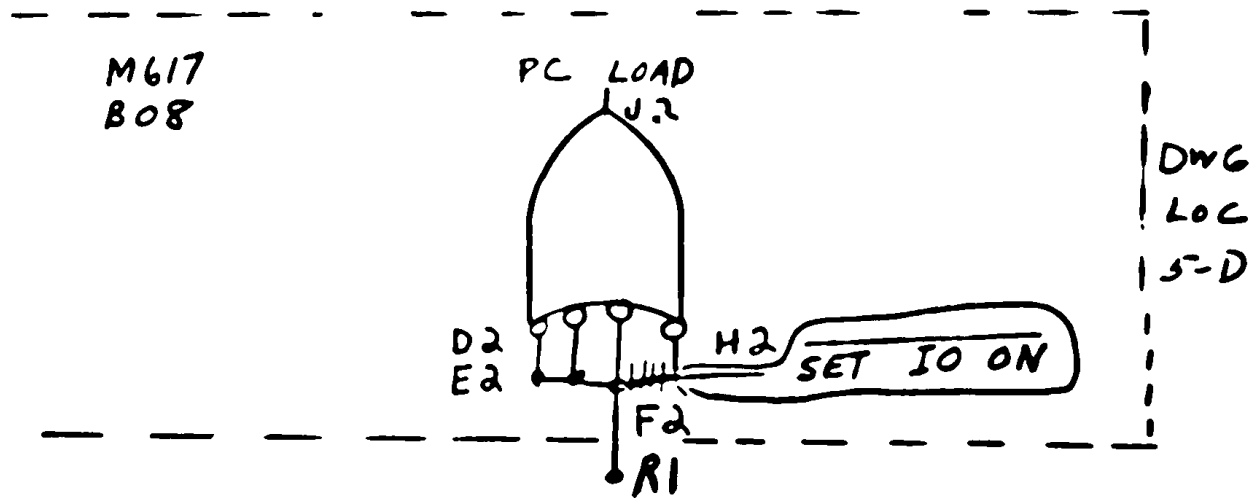


M160
A12



L. 50

1. 1. 1



NEW
REV

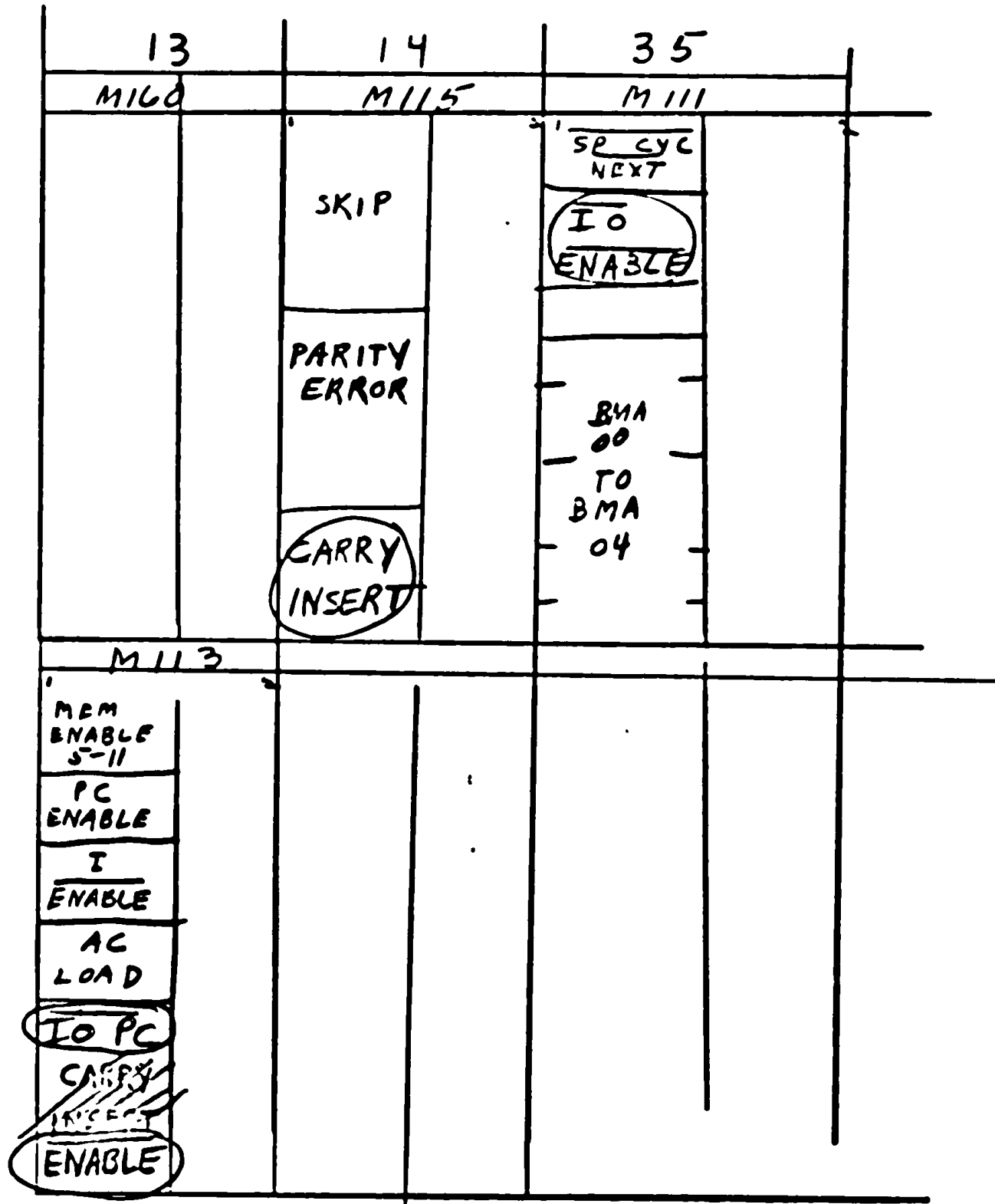
ECO - 86 - 00045

D - BS - 86 - 0 - 6

B

D6

A



B

D.MU-82-0-18

NEW
REV
C

EF

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 2

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	A12K1	A12K1	B13S			✓
		A12K1	A14V1		✓	
	A13R1	A13R1	B08H2			✓
		B08H2	B08F2			✓
		B08F2	A13R1		✓	
	A35E1	A35E1	B13R1		✓	
	B FETCH (1)	D12J1	C14R2			✓
		C14R2	C14J1			✓
		C14J1	C13C1			✓
		C13C1	C14R2		✓	
		C14R2	D12J1		✓	
	INT SKIP ENABLE	A08S2	B13P1			✓
		B13P1	C11V2			✓
		A08S2	A14T2		✓	
		A14T2	C11V2		✓	
	I/O ENABLE	D09J2	A35D1		✓	
	I/O PC ENABLE	A08U2	A14U2		✓	
		A14U2	B13S1		✓	

ECO NUMBER <u>8L-00045</u> MADE BY <u>J. Tompkins</u>	DRAWING NUMBER AFFECTED																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CODE</th> <th style="width: 10%;">SIZE</th> <th style="width: 40%;">NUMBER</th> <th style="width: 10%;">NEW REV</th> </tr> </thead> <tbody> <tr> <td>WL</td> <td>K</td> <td>8L-0-19</td> <td>M</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	CODE	SIZE	NUMBER	NEW REV	WL	K	8L-0-19	M								
CODE	SIZE	NUMBER	NEW REV														
WL	K	8L-0-19	M														

FG

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 2 OF 2

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	C12N1	C12N1	A08U2			✓
		A08U2	A08R2			✓
		C12N1	A08R2		✓	
	PAUSE (1)	B13P1	C04L1		✓	
	PC ENABLE	C13K1	B13R1			✓
		B13R1	B13F1			✓
		C13K1	A14V2		✓	
		A14V2	B13F1		✓	
	PC LOAD	B08J2	C14H1		✓	
		C14H1	C14J1		✓	
	SET IO ON	B08H2	C06K1		✓	
	TP1	D02M1	D06H2			✓
		D06H2	C14H1			✓
		C14H1	B13T2			✓
		B13T2	D06H2		✓	
		D06H2	D02M1		✓	

ECO NUMBER <u>86-00045</u> MADE BY <u>E.T.</u>	DRAWING NUMBER AFFECTED <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CODE</th> <th style="width: 10%;">SIZE</th> <th style="width: 40%;">NUMBER</th> <th style="width: 10%;">NEW REV</th> <th style="width: 10%;">LIT.</th> </tr> </thead> <tbody> <tr> <td>WL</td> <td>K</td> <td>86-0-19</td> <td>M</td> <td></td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	CODE	SIZE	NUMBER	NEW REV	LIT.	WL	K	86-0-19	M											
CODE	SIZE	NUMBER	NEW REV	LIT.																	
WL	K	86-0-19	M																		

G6

MASTER DRAWING LIST

DWG. No	NEW REV
D-BS-PL-0-2	E
D-BS-PL-0-4	C
D-BS-PL-0-5	B
D-BS-PL-0-6	B
D-MU-PL-0-18	C
A-PL-PL-0-18	C
K-WL-PL-0-19	M

EQUIPMENT CORPORATION
ENGINEERING CHANGE ORDER

REC'D BY INFO SER MO DAY YR
SPECO RELEASE 6 10 69
6 11 E 69

CHANGE NO. 81-00056
DOCUMENTATION PROJECT NUMBER
A * PROD LINE TYPE OR DISCRETE NO
2 7 0 7 1 7 5
MANUFACTURING PROJECT NUMBER
/ * PROD LINE TYPE OR DISCRETE NO
/ / / / / / / /

TYPE OF CHANGE
ELECTRICAL
MECHANICAL
MODULES

UNIT NAME SMALL COMPUTER MODEL NO. ** 8L

PREPARED OPTIONS AFFECTED	
MODEL NO	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____
ESTIMATED TIME TO INSTALL _____
PARTS ADDED OR DELETED IF YES REFER TO SEPARATE SHEET
SHOP MODEL AFFECTED

	YES	NO
<input checked="" type="checkbox"/>	X	
		X
		X
		X
		X

SYSTEMS PROGRAMS AFFECTED
DIAGNOSTIC PROGRAMS AFFECTED
TECHNICAL PUBLICATIONS AFFECTED

BREAK-IN POINT (DATE/SERIAL NOS)
SERIAL #1000 TO #1421 AND FUTURE.

ALL MACHINES WITH ECO#45.

PROBLEM:

MULTIPLE SKIP (ECO 8L-00045) WOULD NOT WORK WITH INTERRUPTS. (CORRECTION TO ECO#45)

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
I-LS-8L-0-6	C	D
I-RT-8L-0-18	C	D
A-PL-8L-0-18	C	D
I-WI-8L-0-19	M	N
A-WL-8L-0	W	Y
D-ES-8L-0-5	R	C

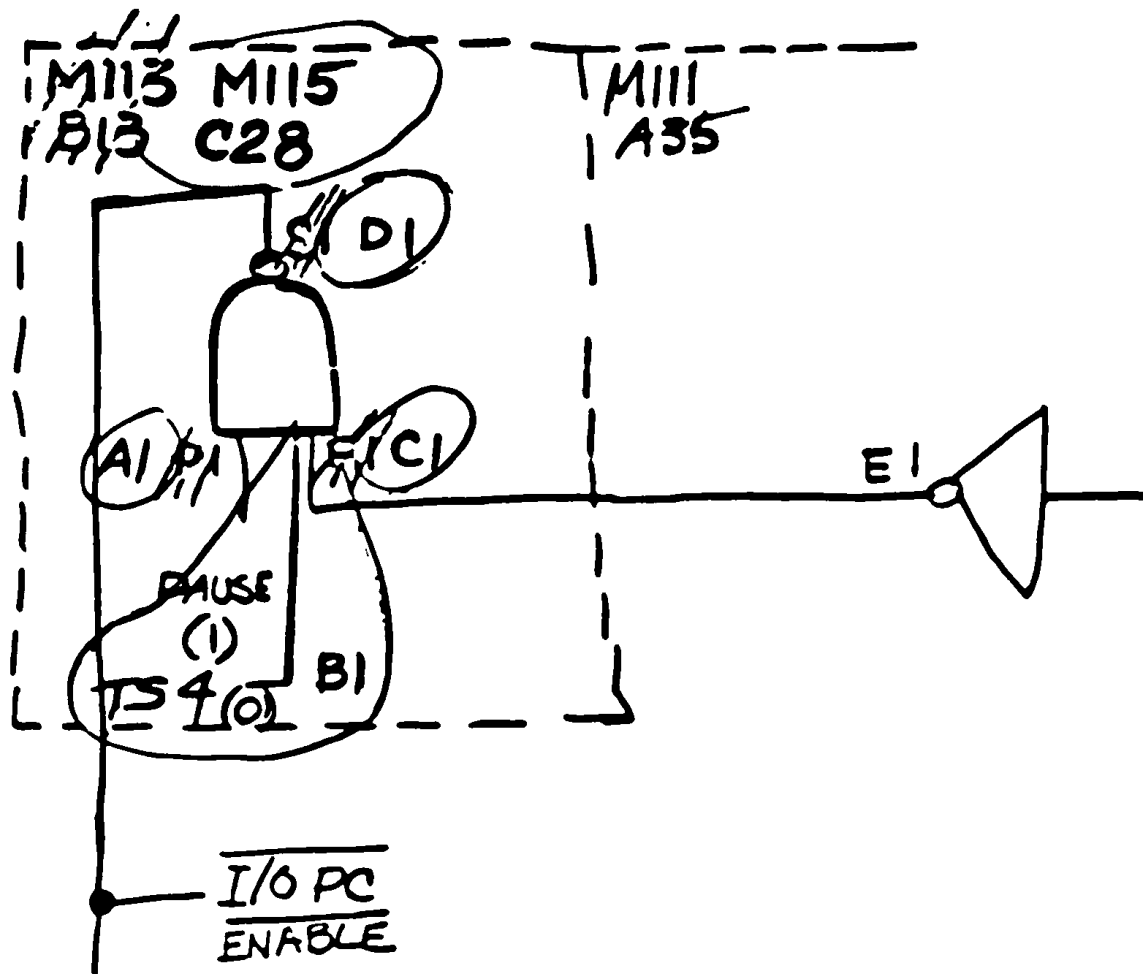
CORRECTION:

CORRECTIONS AS PER MARKED UP PRINTS.

ORIGINATOR M. ARSENAULT DATE 6-9-69
PRODUCTION ENG. H. GODFREY DATE 6-10-69
DESIGN ENG. M. ARSENAULT DATE 6-9-69
OTHER R.J. PURCELL DATE 6-8-69

PRODUCT LINES AFFECTED
3L

16



M115 | 1.6

EDD 8L-PA057

A-PL-PL-0-18
NEW REV. 1.
D

LG

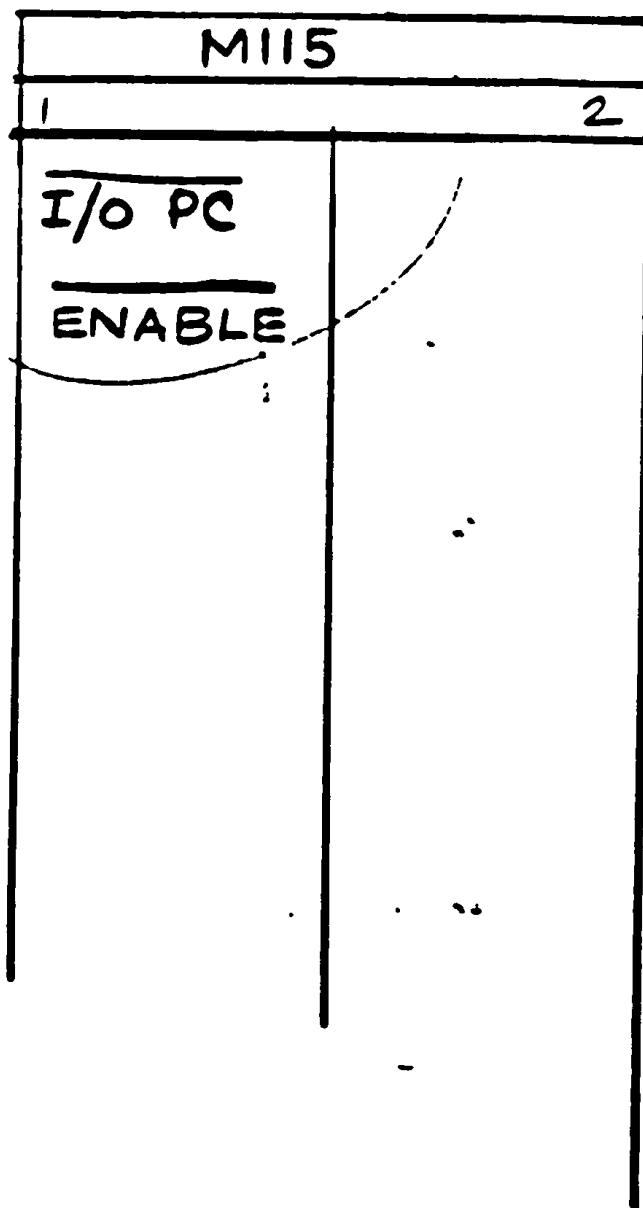
M113	
1	2
$\overline{\text{IOPC}}$ $\overline{\text{ENABLE}}$	

ERR-000576

A-M11-82-0-18 ^{NEW} _{REV} D

m6

28



B

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

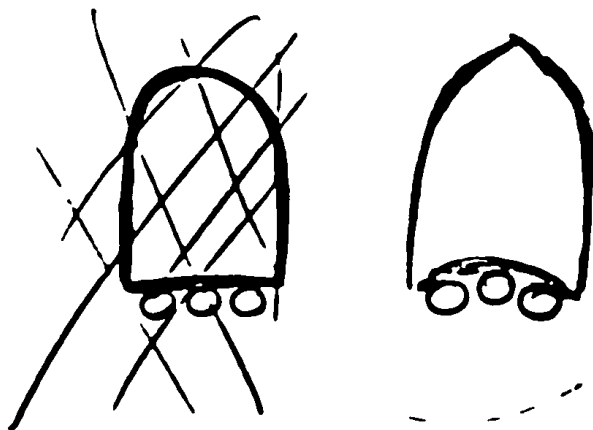
PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	A35E1	A35E1	B13R1			✓
	↓	A35E1	C28C1		✓	
	I/O PC ENABLE	A14U2	B13S1			✓
	↓	A14U2	C28D1		✓	
	PAUSE (1)	B13P1	C04L1			✓
	↓	C04L1	C28A1		✓	

ECO NUMBER BL-00056
MADE BY DAVE CHAMBERS

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	BL-0-19	N

M115
A14



END 8L-00056

D-BE8L-0-5

NEW
REX C

D7

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D BY INFO SER	MO	DAY	YR
	6	18	69

SPEC'D RELEASE	MO	DAY	YR
	6	23	69

TYPE OF CHANGE

ELECTRICAL

MECHANICAL

MODULES

CHANGE NO. EL-00059

DOCUMENTATION PROJECT NUMBER

ACT	PROB LINE	TYPE OR DISCRETE NO			
	26	0	7	1	75

MANUFACTURING PROJECT NUMBER

A T	PROB LINE	TYPE OR DISCRETE NO			

UNIT NAME PDP8L MODEL NO. 8L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED 1000 IN SERIAL NO. _____ BY M. ARSENAULT

ESTIMATED TIME TO INSTALL 15 Min.

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	YES	NO
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
DIAGNOSTIC PROGRAM AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="checked" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)

ALL 8L WITH EDO#45
1000 THRU 1471 AND FUTURE

PROBLEM: THE PAUSE P.F. CAN COME ON IN EITHER STATE WHEN THE COMPUTER IS FIRST TURNED ON. IF IT COMES UP IN THE "I" STATE, LOAD ADD HAS TO BE HIT TWICE BECAUSE THE PAUSE INHIBITS PC ENABLE.

CORRECTION: ADD POWER CLEAR TO PAUSE P.F.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
D-ES-EL-0-2	E	F
E-EL-EL-0-18	D	E
F-PL-EL-0-18	D	E
G-EL-EL-0-19	N	O
H-EL-EL-0	Y	Z

ORIGINATOR R.M. ARSENAULT DATE 6-18-69

PRODUCTION ENG. AK DATE _____

DESIGN ENG. R.M. ARSENAULT DATE 6-18-69

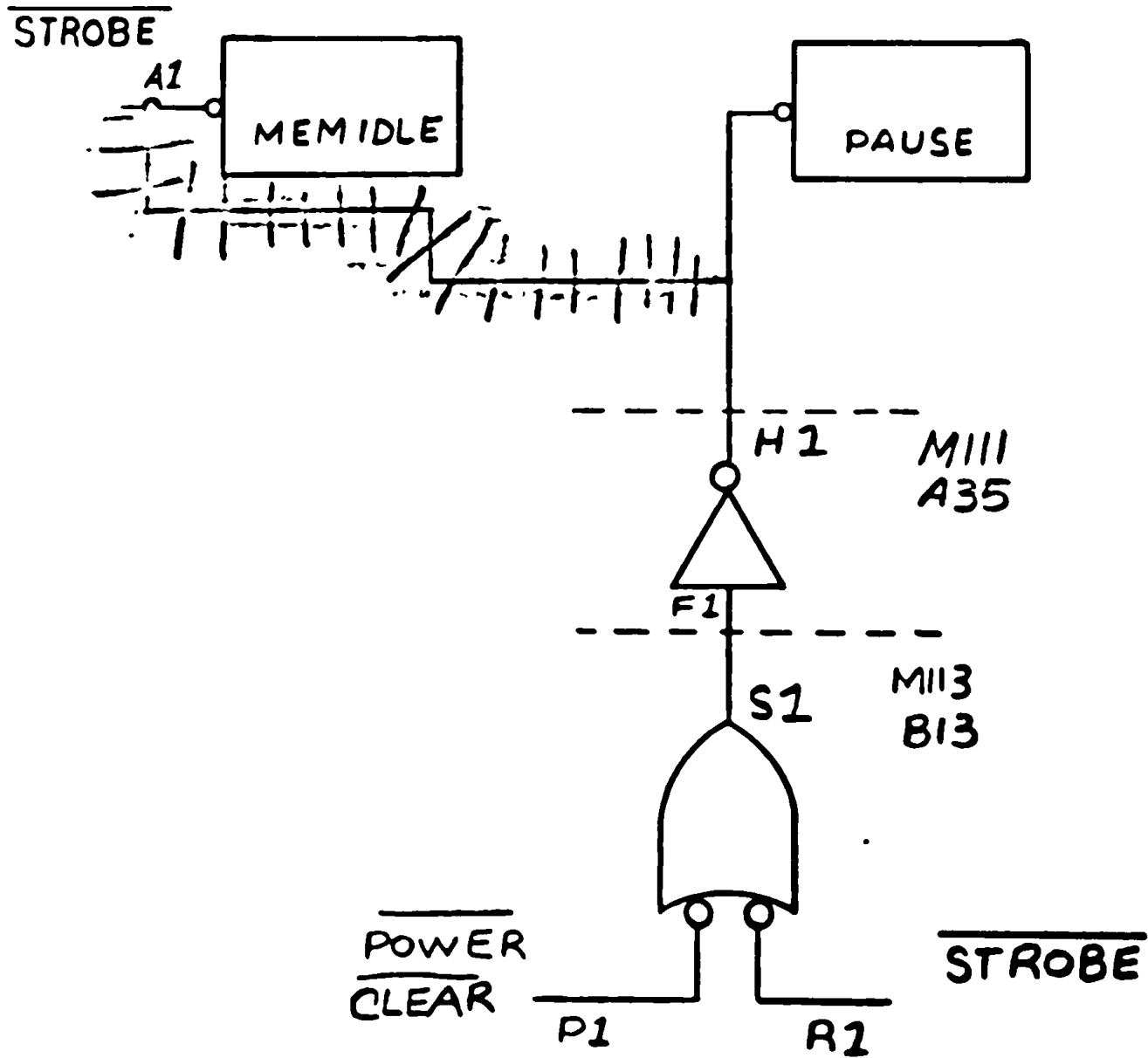
OTHER F.J. PURCELL DATE _____

PRODUCT LINES AFFECTED

SM COMP

E7

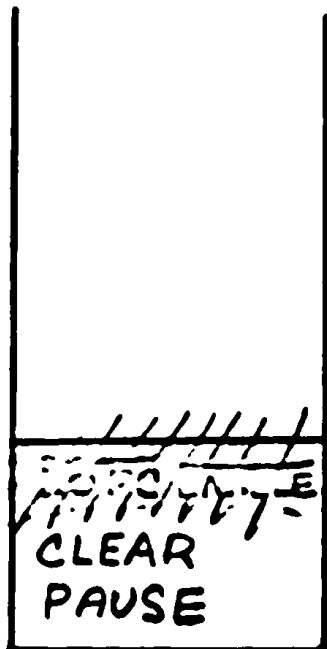
M216
CØ4



NEWREV

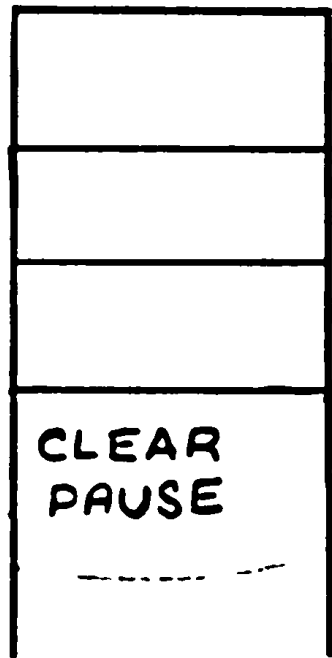
F7

M113
1



C

M111 1



A

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	B13S1	A35F1	B13S1		✓	
	POWER CLEAR (w)	A27S2	D16A1			✓
	↓	A27S2	B13P1		✓	
		B13P1	D16A1		✓	
	STROBE (w)	B13R1	B34S2		✓	

ECO NUMBER <u>8L-00059</u> MADE BY <u>DAVE CHAMBERS</u>	DRAWING NUMBER AFFECTED		
	CODE WL	SIZE K-8L- 0 -19	NUMBER NEW REV LTR P

X)

MASTER DRAWING LIST

REV

D-BS-8L-0-2	F
D-MU-8L-0-18	E
APL-8L-0-18	E
K-WL-8L-0-19	D

FAD 9L00059

A-ML-8L-0

NEWREV
Z

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D BY INFO SER	MO	DAY	YR
	6	25	69
SPECO RELEASE	7	1	69
TYPE OF CHANGE			
ELECTRICAL	<input checked="" type="checkbox"/>		
MECHANICAL	<input type="checkbox"/>		
MODULES	<input type="checkbox"/>		

CHANGE NO. 8L-00062

DOCUMENTATION PROJECT NUMBER

A	1	PROJ LINE	TYPE OR DISCRETE NO
		2	07175

MANUFACTUR NO PROJECT NUMBER

A	1	PROJ LINE	TYPE OR DISCRETE NO
---	---	-----------	---------------------

UNIT NAME 8L MODEL NO. 81

PREV REV OPTIONS AFFECTED

MODEL NO	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL _____

	YES	NO
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT
(DATE/SERIAL NOS)

ALL 8L WITH ECO# 00059
SN. 1000-1511
and future

PROBLEM: 1. PINS REVERSED ON M113
2. MISSING WIRE

DRAWINGS AFFECTED

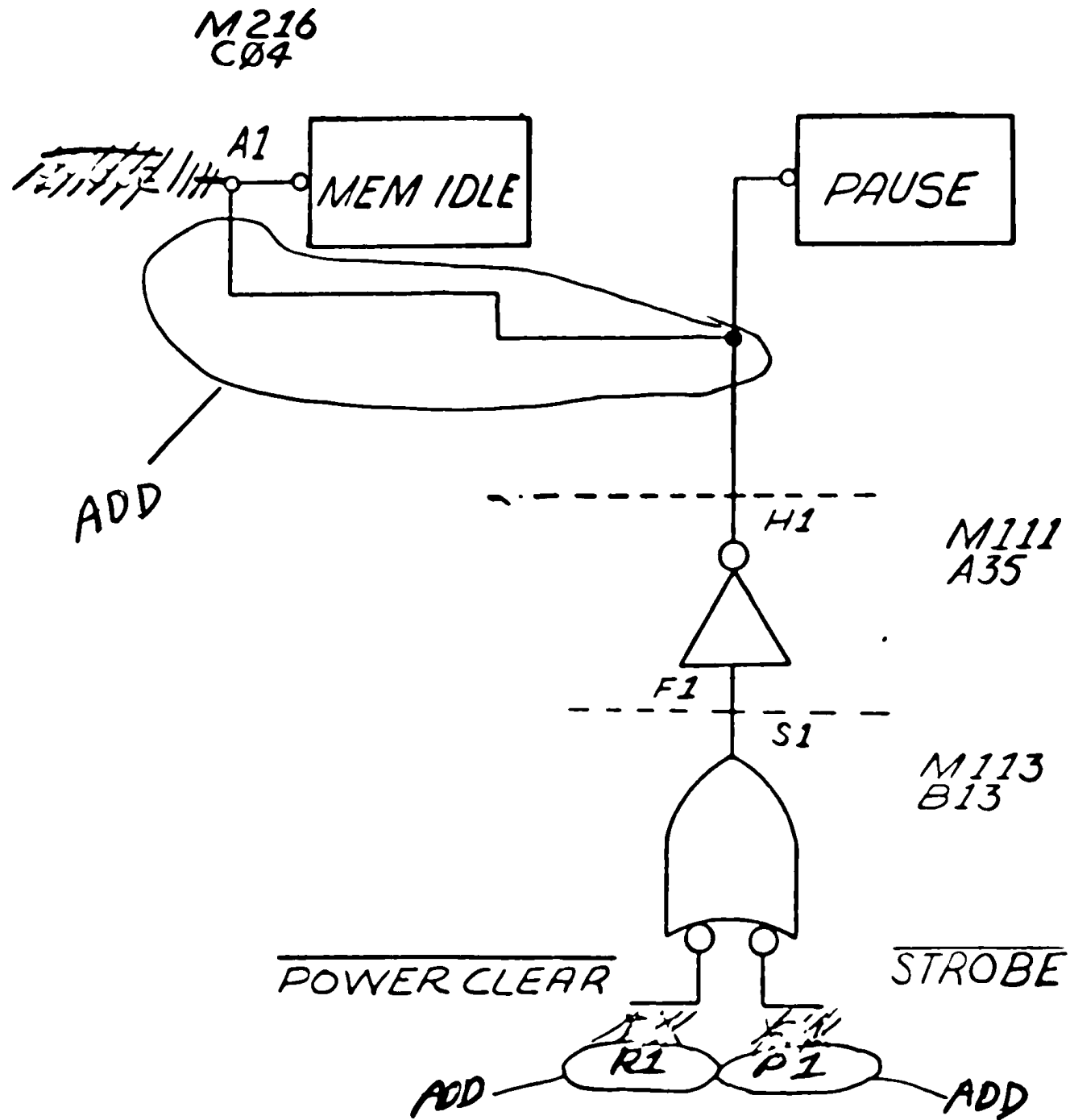
NUMBER	OLD	NEW
	REV	REV
D-B-S-8L-0-2	F	II
F-WL-8L-0-19	P	R
A-M-L-8L-0	Z	AA

CORRECTION: ~~XXXXXXXX~~
1. REVERSE PINS
2. ADD MISSING WIRE

ORIG NATOR <u>M. ARSENAULT</u>	DATE <u>6-24-69</u>
PRODUCTION ENG. <u>H. GODFREY</u>	DATE <u>6-25-69</u>
DESIGN ENG. <u>M. ARSENAULT</u>	DATE <u>6-24-69</u>
OTHER <u>F. PURCELL</u>	DATE <u>6-24-69</u>

PRODUCT LINES AFFECTED
SMALL COMP

27



ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

CO. OR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	A35H1	C04A1	A35H1		✓	
	STROBEW	C04N2	C04A1			✓
	↓	B34S2	B13R1			✓
	↓	C04N2	B13P1		✓	
	POWER CLEAR	A27S2	B13P1			✓
	↓	B13P1	D16A1			✓
	↓	A27S2	B13R1		✓	
	↓	B13R1	D16A1		✓	
	B13S1	B13S1	A35F1		✓	

ECO NUMBER 8L-00062
 MADE BY DAVE CHAMBERS

DRAWING NUMBER AFFECTED			NEW REV
CODE	SIZE	NUMBER	LTR
WL		K-2-0-19	R

67

MASTER DRAWING LIST
NEW REV

D-BS-8L-0-2	(H)
K-WL-8L-0-19	(R)

ECO 8L-00062

A-ML-8L-0 NEW REV
AA

m7

EQUIPMENT CORPORATION
ENGINEERING CHANGE ORDER

REC'D BY INFO. SER.

MO	DAY	YR
8	5	69

 SPEC O. PLEASE

8	8	69
---	---	----

 TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 8L-00068
 DOCUMENTATION PROJECT NUMBER
 ACT | PROD LINE | TYPE OR DISCRETE NO.
 | 2 | 6 | 0 | 7 | 1 | 7 | 5
 MANUFACTURING PROJECT NUMBER
 ACT | PROD LINE | TYPE OR DISCRETE NO.

UNIT NAME PDP-8L MODEL NO. 8L

PREV. REQ. OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED PROTO BY M. ARSENAULT
 ESTIMATED TIME TO INSTALL 10 MIN.
 PARTS ADDED OR DELETED IF YES REFER TO SEPARATE SHEET
 SHOP MODEL AFFECTED
 SYSTEMS PROGRAMS AFFECTED
 DIAGNOSTIC PROGRAMS AFFECTED
 TECHNICAL PUBLICATIONS AFFECTED

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)
 ALL MACHINES
 S.N. 1 THRU 1429 AND FUTURE

PROBLEM:

- INITIALIZE ON THE BUS IS OF DIFFERENT POLARITY FROM 8L.
- OMISSION OF GATE ON MUL.

CORRECTION:

- CHANGE POLARITY OF BUS ON 8L TO KEEP BUS THE SAME.
- CORRECT MUL.

DRAWINGS AFFECTED

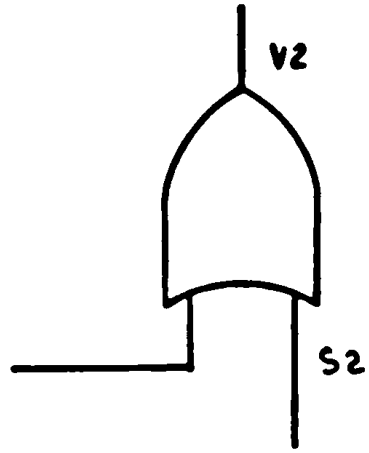
NUMBER	OLD REV	NEW REV
A-PL-8L-0	AD	AE
D-FS-8L-0-10	B	C
D-T-8L-0-18	E	F
A-PL-8L-0-18	E	F
I-WL-8L-0-19	R	S

ORIGINATOR M. ARSENAULT DATE 8-4-69
 PRODUCTION ENG. B. VAILLANCOURT DATE 8-4-69
 DESIGN ENG. M. ARSENAULT DATE 8-4-69
 OTHER F.J. PURCELL DATE 8-4-69

PRODUCT LINES AFFECTED
SMALL COMPUTER
8L

38

M623
C27



~~INITIALIZE~~

DWG LOC B-1

ENGINEERING CHANGE ORDER

REC'D BY INFO SER _____
 SPEC'D RELEASE _____
 MO DAY YR
 9 2 69
 TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL _____
 MODULES _____

CHANGE NO. 8L-00071
 DOCUMENTATION PROJECT NUMBER
 A T PROD LNS TYPE OR DISC RITE NO
 2 6 0 7 1 6 0
 MANUFACTURING PROJECT NUMBER
 A T PROD LNS TYPE OR DISC RITE NO

UNIT NAME PDP 8L MODEL NO. _____

MODEL NO	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL 5 MIN.

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)

SHOP MODEL AFFECTED YES NO

SYSTEMS PROGRAMS AFFECTED YES NO

DIAGNOSTIC PROGRAMS AFFECTED YES NO

TECHNICAL PUBLICATIONS AFFECTED YES NO

BREAK-IN POINT (DATE/SERIAL NO.)
 ALL 8L's
 SERIAL # 1 --- 1911 & FUTURE
 FIELD INSTALL ONLY IF G826 REV (F) OR ABOVE IS INSTALLED

PROBLEM:

THE BUSSING PRINT SHOWS PIN B27B2 TO B28B2. UP TO REV F ON THE G826 (B28B2) HAD NO ETCH ON IT, ABOVE REV D IT IS -15. B27B2 IS READER CLOCK POWER.

WITH THE NEW REV G826 THIS PARALLELS 2 (-15's) AND CAUSES THE ETCH TO BURN ON THE G826 AND A DIODE TO BLOW IN THE POWER SUPPLY.

CORRECTION:

REMOVE THE BUSSING FROM B27B2 TO B28B2

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
A-NI-91-0	AF	AF
D-AD-7005906-0-0	0	A
A-PL-7005906-0-0	0	A

ORIGINATOR H. ARSENAULT DATE 9/2/69

PRODUCTION ENG. B. VAILLANCOURT DATE 9/2/69

DESIGN ENG. H. ARSENAULT DATE 9/2/69

OTHER F. J. PURCELL DATE 9/2/69

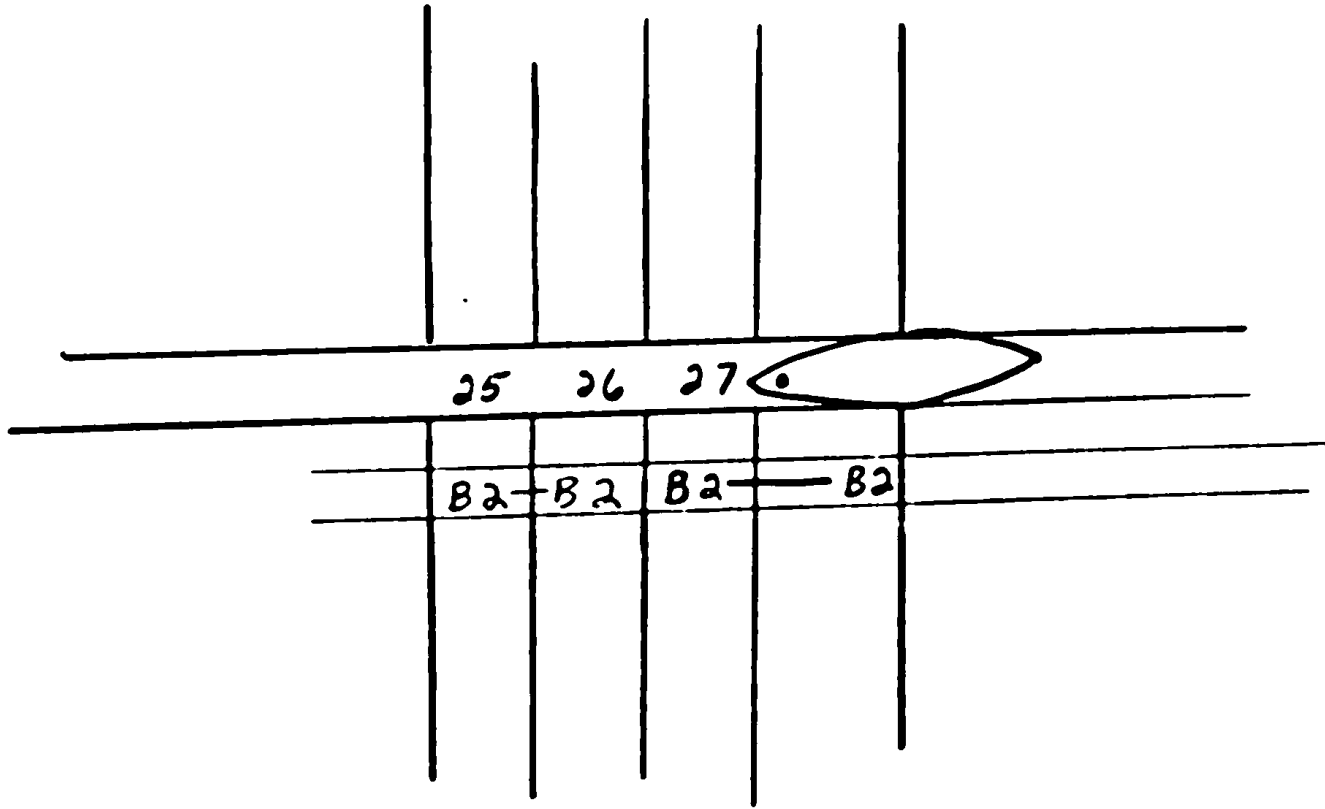
PRODUCT LINES AFFECTED
 S4 COMP.

FS

MASTER DRAWING LIST

DWG No	NEW REV
D-AD-7005906-0-0	A
A-PL-7005906-0-0	A

A



B

ECO 8L-00071

NEW
KEY

D-AD-7005906-0-0 B

128

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

MO DAY YR
 RE'D BY INFO SER 9 17 69
 SPELO RELEASE 4 25 69
 TYPE OF CHANGE
 ELECTRICAL X
 MECHANICAL
 MODULES

CHANGE NO. 8L-00074
 DOCUMENTATION PROJECT NUMBER
 ACT PROB LINE TYPE OR DISCRETE NO
 2 7 0 7 5 4 4
 MANUFACTURING PROJECT NUMBER
 ACT PROB LINE TYPE OR DISCRETE NO

UNIT NAME PDP-8L MODEL NO. 8L

PREWIRED OPTIONS AFFECTED

MODEL NO	VARIATION

CHANGE TESTED PROTO BY M. ARSENAULT
 IN SERIAL NO. _____
 ESTIMATED TIME TO INSTALL 10 MIN.
 PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)
 SHOP MODEL AFFECTED
 SYSTEMS PROGRAMS AFFECTED
 DIAGNOSTIC PROGRAMS AFFECTED
 TECHNICAL PUBLICATIONS AFFECTED

	YES	NO
		<input checked="" type="checkbox"/> X
		<input checked="" type="checkbox"/> X
		<input checked="" type="checkbox"/> X
		<input checked="" type="checkbox"/> X
		<input checked="" type="checkbox"/> X

BREAK-IN POINT (DATE/SERIAL NOS)
 ALL 8L
 s.n. 100 THRU 1912 AND FUTURE.
 (FIELD INSTALL WHERE NEEDED)

PROBLEM:

POSSIBLE MACHINE PROBLEMS BECAUSE OF POOR GROUNDING.

CORRECTION:

ADD GROUND WIRES WHERE NEEDED.

DRAWINGS AFFECTED

NUMBER	OLD REV.	NEW REV.
A-ML-8L-0	AJ	AK
A-PI-7005906-0-0	A	B
D-AD-7005906-0-0	A	B

ORIG NATOR M.E. ARSENAULT DATE 9-17-69
 PRODUCTION ENG. W.R. MILLER DATE 9-18-69
 DESIGN ENG. M.E. ARSENAULT DATE 9-17-69
 OTHER D. DUBAY DATE _____

PRODUCT LINES AFFECTED
PDP-8L SMALL COMPUTER

MASTER DRAWING LIST

<u>DWG NO</u>	<u>NEW REV</u>
D-AD-7005906-0-0	B
A-PL-7005906-0-0	B

ECO 8L-00074

A ML-8L-0

NEW
REV AK

18

NOTES:

ADD

6 SOLDER 22 GAUGE SOLID WIRE TO THE FOLLOWING, AS CLOSE TO BASE OF PIN AS POSSIBLE, AFTER PANEL IS BUSSED, USE BROWN OR BLACK SLEEVING.

- A20C2 TO A23C2
- B20C2 TO B23C2
- C19C2 TO C23C2
- D19C2 TO D23C2

DWG LOC
C-142

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REQ'D. BY INFO SCR 10-13-69
 DATE RELEASE 10-22-69
 TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 8L-00078
 DOCUMENTATION PROJECT NUMBER
 A T PROD LINE TYPE OR DISCRETE NO
 2 7 0 7 5 4 4
 MANUFACTURING PROJECT NUMBER
 A T PROD LINE TYPE OR DISCRETE NO

UNIT NAME		PDP-8L	MODEL NO.	8L
PREV RFD OPTIONS AFFECTED		CHANGE TESTED PROTO BY M. ARSENAULT		BREAK-IN POINT (DATE/SERIAL NO)
MODEL NO	VARIATION	ESTIMATED TIME TO INSTALL	30 MIN.	
		PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	YES	NO
		SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FIELD MODIFY IF PROBLEMS EXISTS WITH EXTENDED MEMORY AND MANUAL FUNCTIONS			S.N. 1800 THRU 2054 AND FUTURE.	

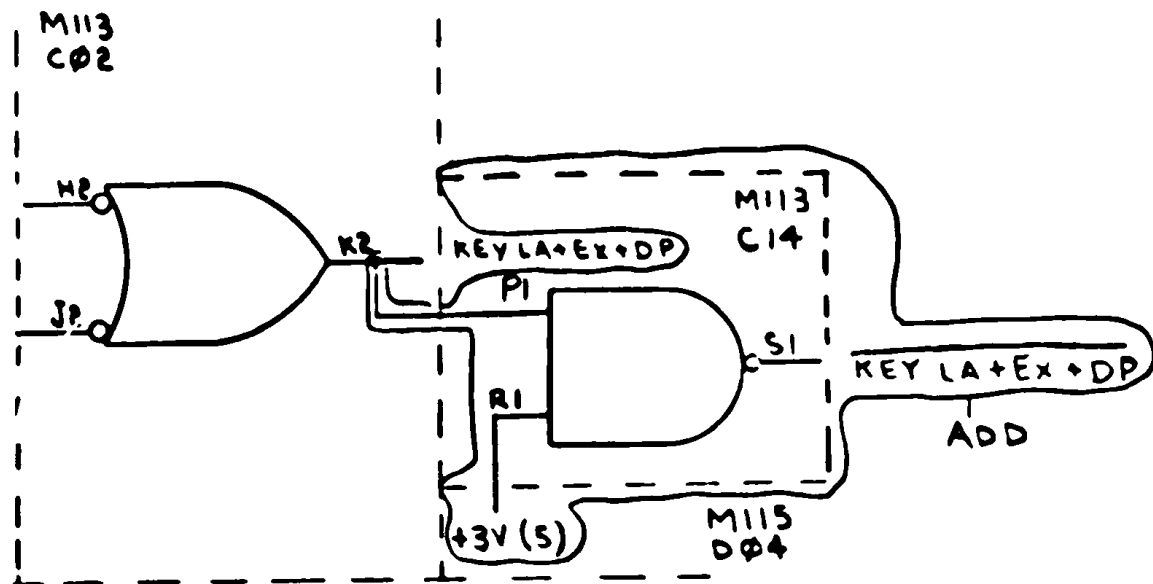
PROBLEM: 1. IF THE MACHINE HALTS WITH THE INTERRUPT ON, AND AN INTERRUPT COMES IN FROM AN EXTERNAL DEVICE ONE CAN NO LONGER DEPOSIT OR EXAMINE IN THE UPPER FIELD.	DRAWINGS AFFECTED	
	NUMBER	OLD REV / NEW REV
	A-ML-8L-0	AL / AN
	D-B5-8L-0-2	J / K
	D-B5-8L-0-7	A / B
	D-W-8L-0-18	F / H
	A-PL-8L-0-18	F / H
	F-WL-8L-0-19	S / T

ORIGINATOR	M. ARSENAULT	DATE	10-13-69	PRODUCT LINES AFFECTED SMALL COMPUTER 8L
PRODUCTION ENG.	W.R. MILLER	DATE	10-13-69	
DESIGN ENG.	M.E. ARSENAULT	DATE	10-13-69	
OTHER	F.J. PURCELL	DATE	10-13-69	

28

MASTER DRAWING LIST

DWG NO	NEW REV
D-BS-8L-Ø-2	K
D-BS-8L-Ø-7	B
D-MU-8L-Ø-18	H
A-PL-8L-Ø-18	H
K-WL-8L-Ø-19	T

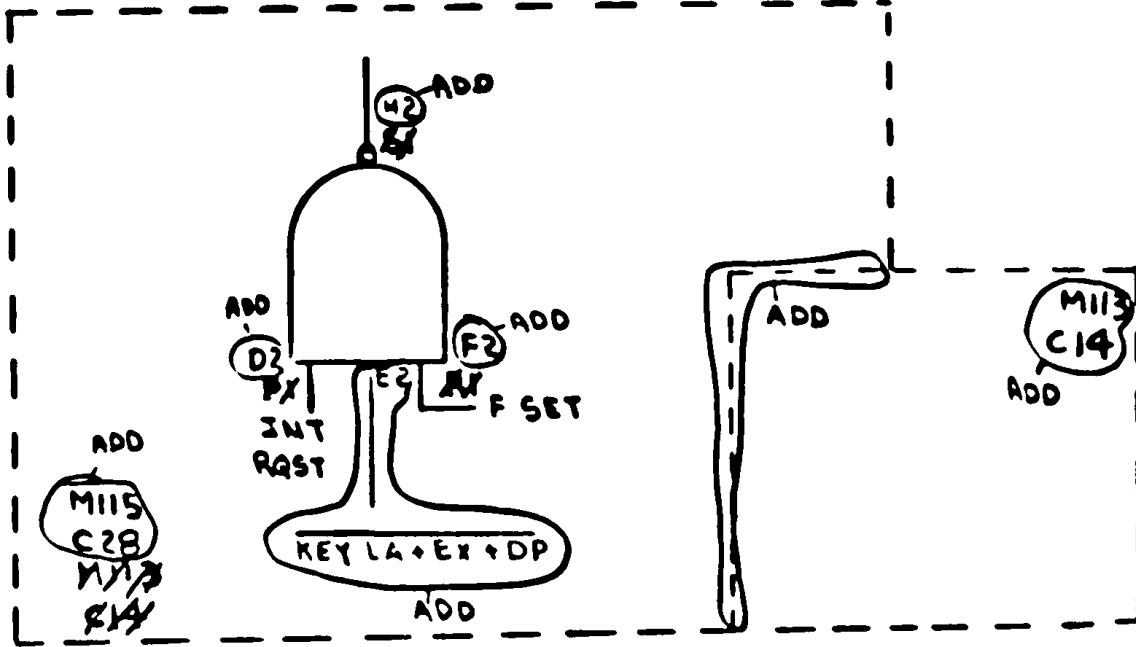


DWG LOC
B-4

ECO-78L-00078

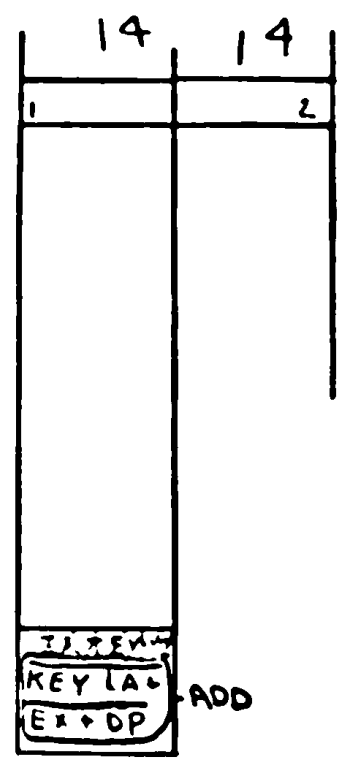
D-BS-8L-0-2 NEW REV K

B9

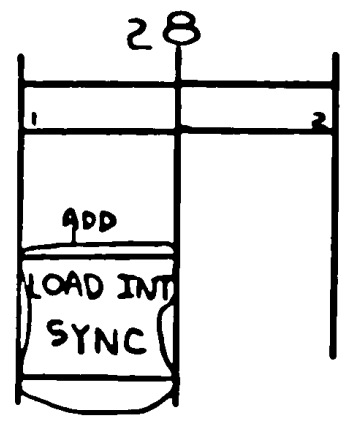


DWG LOC
C-E-4-5

C



C



ECO 82-00078

D-MU-82-Ø-18

NEW
REV. H

D9

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	C1451	B11J1	C1451			x
	C28H2	B11J1	C28H2		x	
	FSET	B13E1	C14R1			x
	↓	C14R1	CØ8M2			x
	↓	B13E1	C28F2		x	
	↓	C28F2	CØ8M2		x	
	INT RQST	A33P2	C14P1			x
	↓	A33P2	C28D2		x	
	+3V(S)	C1ØV1	C14R1		x	
	KEY LA+EX+DP	CØ2K2	DØ9H1			x
	↓	CØ2K2	C14P1		x	
	↓	C14P1	DØ9H1		x	
	KEY LA+EX+DP	C1451	C28E2		x	

DRAWING NUMBER AFFECTED

ECO NUMBER 8L-00078

MADE BY J.W. Pate

CODE	SIZE	NUMBER	NEW REV LTR
WL		K-8L-Ø-19	T

E9

ECO NO: 8L-00078

DATE: 10-17-69

DRAWING NO.	NEW DEV	SERIAL NUMBERS	OLD REV ADD C.I.P	SEPIA?
D-BS-8L-Ø-2	J	1000 - 1799	-	
↓	K	1800 →	J	YES
D-BS-8L-Ø-7	A	1-760, 762-1799	-	
↓	B	1800 →	A	YES
D-MU-8L-Ø-18	F	1000 - 1799	-	
↓	H	1800 →	F	YES
A-PL-8L-Ø-18	F	1000 - 1799	-	
↓	H	1800 →	F	YES
K-WL-8L-Ø-19	S	1000 - 1799	-	
↓	T	1800 →	S	YES

A-SPECIAL REVS

SHEET 1 OF 1

F9

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REC'D. BY INFO. SER.	MO	DAY	YR
	11	5	69
SPECO RELEASE	11	20	69
TYPE OF CHANGE			
ELECTRICAL	<input checked="" type="checkbox"/>		
MECHANICAL	<input type="checkbox"/>		
MODULES	<input type="checkbox"/>		

CHANGE NO. **8L-00083**

DOCUMENTATION PROJECT NUMBER			
ACT	PROD LINE	TYPE OR DISCRETE NO.	
2	7	07	544
MANUFACTURING PROJECT NUMBER			
ACT	PROD LINE	TYPE OR DISCRETE NO.	

UNIT NAME PDP 8L MODEL NO. 8L

PREVIOUS OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. PROTO BY _____

ESTIMATED TIME TO INSTALL 5 MIN

	YES	NO
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)

ALL 8L WITH ECO# 78

1800 thru 2054 and FUTURE

PROBLEM:

WITH MACHINE RUNNING KEY LA + EX + DP IS NOT DISABLED WHEN ECO# 78 INSTALLED

CORRECTION:

CORRECTION TO ECO # 78 GATE KEY LA + EX + DP WITH RUN (0)

DRAWINGS AFFECTED

NUMBER	OLD	NEW
	REV	REV
D-ES-8L-0-2	K	L
F-PL-8L-0-19	T	U
A-PL-8L-0	KH	AN

ORIGINATOR M. ARSENAULT DATE 11/11/69

PRODUCTION ENG. B. VAILLANCOURT DATE 11/5/69

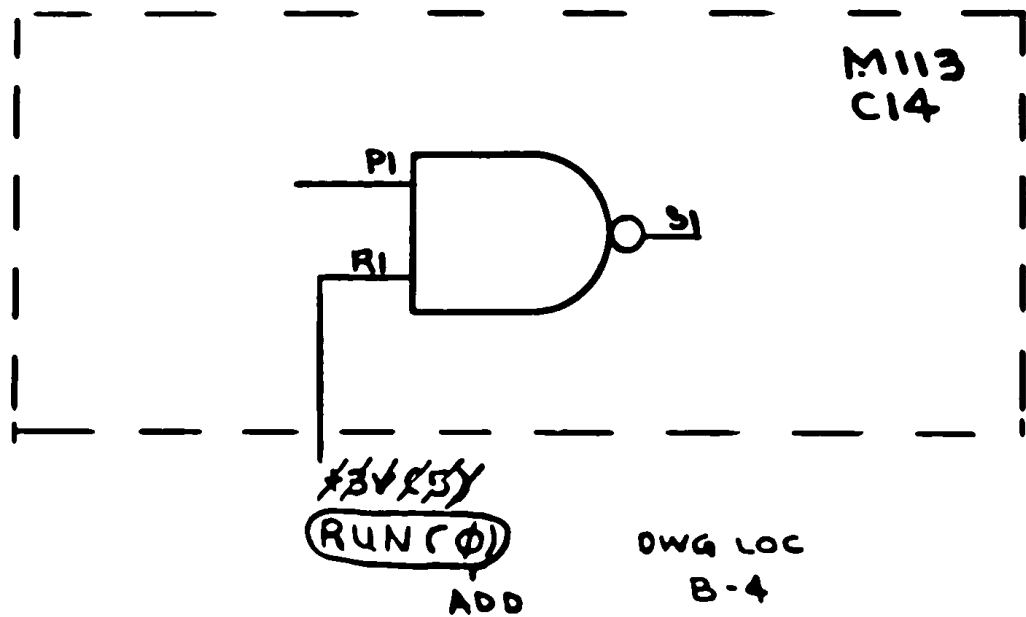
DESIGN ENG. M. ARSENAULT DATE 11/4/69

OTHER F. PUCELL DATE _____

PRODUCT LINES AFFECTED

8L

69



ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	+3V (5)	C10V1	C14R1			x
	RUN (Ø)	C27D2	C06S1			x
	↓	C27D2	C14R1		x	
	↓	C14R1	C06S1		x	

ECO NUMBER 8L-00083

MADE BY J.W PATE

DRAWING NUMBER AFFECTED

CODE	SIZE	NUMBER	NEW REV LTR
WL	K	8L-Ø-19	U

29

MASTER DRAWING LIST


<u>DWG NO</u>	<u>NEW REV</u>
<u>D-BS-8L-Ø-2</u>	<u>L</u>
<u>K-WL-8L-Ø-19</u>	<u>U</u>

ECO 8L-00083

A-ML-8L-Ø

NEW REV AN

19

 EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER	REC'D BY INFO SER	MO	DAY	YR	CHANGE NO. BL-00085 DOCUMENTATION PROJECT NUMBER ACT PROD LINE TYPE OR DISCRETE NO 2 7 0 7 5 4 4	
	SPEC'D RELEASE	11	13	69		MANUFACTURING PROJECT NUMBER ACT PROD LINE TYPE OR DISCRETE NO
	TYPE OF CHANGE					
	ELECTRICAL					X
MECHANICAL						
MODULES						

UNIT NAME	MFM CONTROL	MODEL NO.	BL																
PREV. REV. Q. TIONS AFFECTED	CHANGE TESTED PROTO IN SERIAL NO. BY <u>A.L. C.Z.</u>		BREAK-IN POINT (DATE/SERIAL NO.)																
<table border="1"> <thead> <tr> <th>MODEL NO.</th> <th>VARIATION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	MODEL NO.	VARIATION															ESTIMATED TIME TO INSTALL <u>18 MIN.</u>		ALL MACHINES
MODEL NO.	VARIATION																		
	PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET) SHOP MODEL AFFECTED SYSTEMS PROGRAMS AFFECTED DIAGNOSTIC PROGRAMS AFFECTED TECHNICAL PUBLICATIONS AFFECTED		S.N. 100 THRU 2346 AND FUTURE.																
	YES	NO	WITH G785 REV E AND G826 REV H OR ABOVE. (IF INSTALLED WITH THE PA08 IT ALSO MUST HAVE REV. C785)																
	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>																	

PROBLEM: <p>POWER FAIL WOULD NOT WORK PROPERLY WITH A MC8L.</p>	DRAWINGS AFFECTED <table border="1"> <thead> <tr> <th>NUMBER</th> <th>OLD REV.</th> <th>NEW REV.</th> </tr> </thead> <tbody> <tr> <td>A-MI-81-0</td> <td>AK</td> <td>AS</td> </tr> <tr> <td>D-RS-81-0-13</td> <td>F</td> <td>F</td> </tr> <tr> <td>F-WI-8L-0-19</td> <td>V</td> <td>W</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NUMBER	OLD REV.	NEW REV.	A-MI-81-0	AK	AS	D-RS-81-0-13	F	F	F-WI-8L-0-19	V	W																																																									
		NUMBER	OLD REV.	NEW REV.																																																																		
A-MI-81-0	AK	AS																																																																				
D-RS-81-0-13	F	F																																																																				
F-WI-8L-0-19	V	W																																																																				
CORRECTION: <p>CIRCUIT CHANGES ON THE G826 AND G785.</p>																																																																						

ORIGINATOR <u>M.E. ARSENAULT</u> DATE <u>6-7-69</u>	PRODUCT LINES AFFECTED <u>PDP8L SMALL COMP</u>
PRODUCTION ENG. <u>W.R. MILLER</u> DATE <u>7-18-69</u>	
DESIGN ENG. <u>M. ARSENAULT</u> DATE <u>6-7-69</u>	
OTHER <u>F. PURCELL</u> DATE <u>7-17-69</u>	

MASTER DRAWING LIST

<u>DWG NO</u>	<u>NEW REV</u>
<u>D-BS-8L-Ø-13</u>	<u>F</u>
<u>K-WL-8L-Ø-19</u>	<u>W</u>

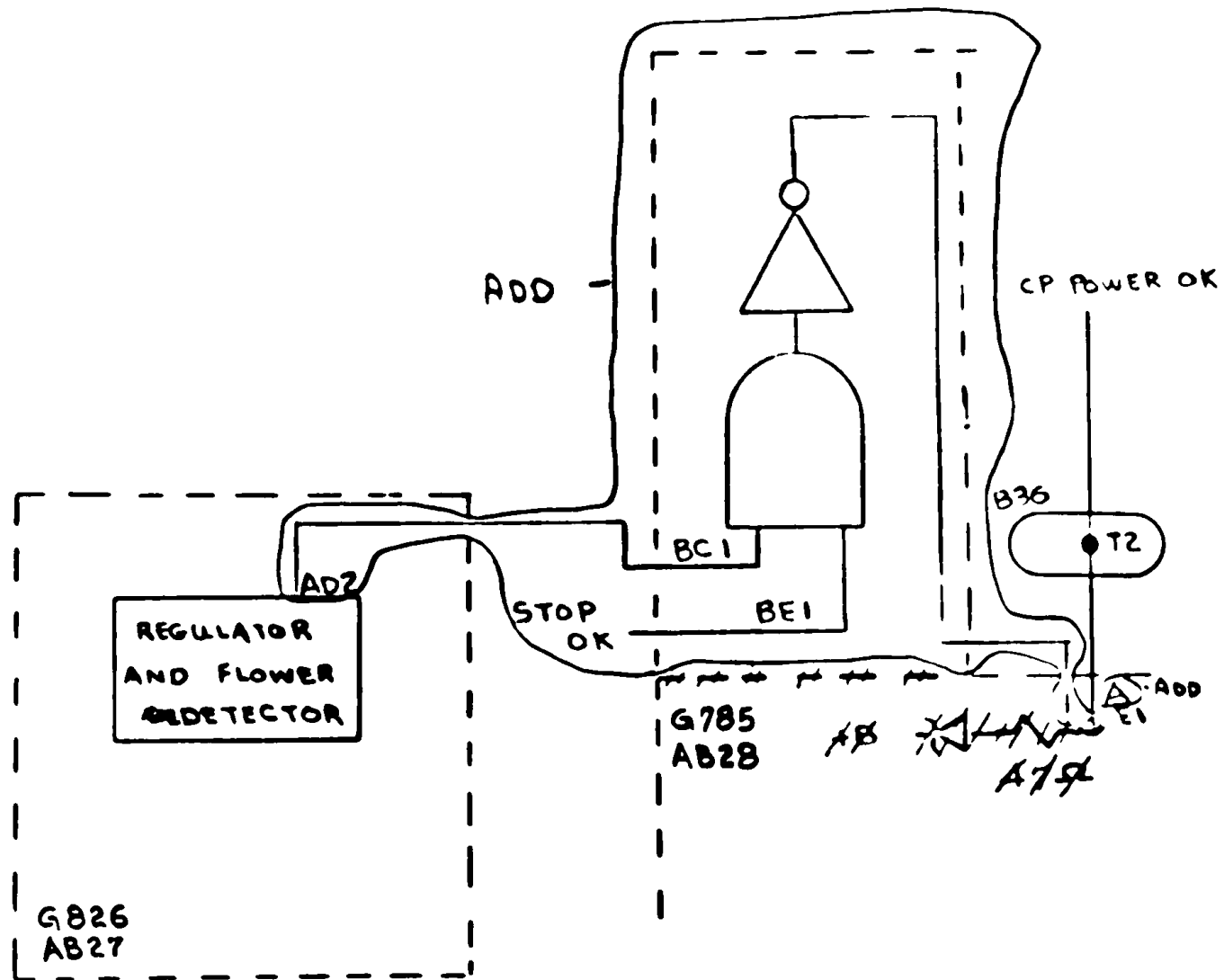
ECO 8L-00085

A-ML-AL-Ø NEW
REV AS

ECO NO: 84-00085

DATE: 12-3-59

DRAWING NO.	NEW DEV	SERIAL NUMBERS	OLD REV APP CLIP	SERIAL
0-85-84-0-13	F		E	
K-WL-84-0-19	L2	1-760, 768-999	L1	
	S1	1000 - 1799	S	
	2A	761	2	
	W	1800 →	V	



G826
AB27

DWG LOC
B-6+7

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	A2702	A2702	B28C1		x	
	STOP OK	D09K1	A36P2			x
		D09K1	B28E1		x	
		B28E1	A36P2		x	

DRAWING NUMBER AFFECTED		
CODE	SIZE	NUMBER
WL	K	8L-0-19

ECO NUMBER 8L-00085

MADE BY AWP

NEW REV	LTR
W	

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D. BY INFO SER	MO	DAY	YR
	12	22	69
SPECO RELEASE	1	8	70
TYPE OF CHANGE			
ELECTRICAL	<input checked="" type="checkbox"/>		
MECHANICAL	<input type="checkbox"/>		
MODULES	<input type="checkbox"/>		

CHANGE NO. 8L-00088			
DOCUMENTATION PROJECT NUMBER			
ACT	PLCD	LINE	TYPE OR DISCRETE NO
2	7	0	7 5 4 4
MANUFACTURING PROJECT NUMBER			
ALT	PL	LINE	TYPL OR D S RITE NO

UNIT NAME PDP-8L MODEL NO. 8L

PREVIOUS OPTIONS AFFECTED	
MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL _____

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	YES	NO
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT (DATE/SERIAL NOS)

All PDP-8L's
 1 thru 2479 & Future
 Field install only if
 MC8L is installed

PROBLEM:

- When program is running in upper memory with the interrupt on, and an interrupt occurs during an IOT the program never gets restored to upper memory with an RNF (load SF clears each FF during interrupt)
- Wire list errors - prints are correct

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
D-LS-8L-0-2	L	M
D-FS-8L-0-17	P	C
D-M-8L-0-18	H	J
I-WL-8L-0-15	W	Y
A-PL-8L-0-18	H	J
A-ML-8L-0	AS	AT

CORRECTION:

- Gate INT strobe to the load SF gate
- Change wire list to agree with prints - reference D-BS-8L-0-6

ORIGINATOR <u>R.C. Sutherland</u>	DATE <u>12-19-69</u>
PRODUCTION ENG. <u>W.R. Miller</u>	DATE <u>12-19-69</u>
DESIGN ENG. <u>M. Arsenault</u>	DATE <u>12-19-69</u>
OTHER <u>F. Purcell</u>	DATE <u>12-19-69</u>

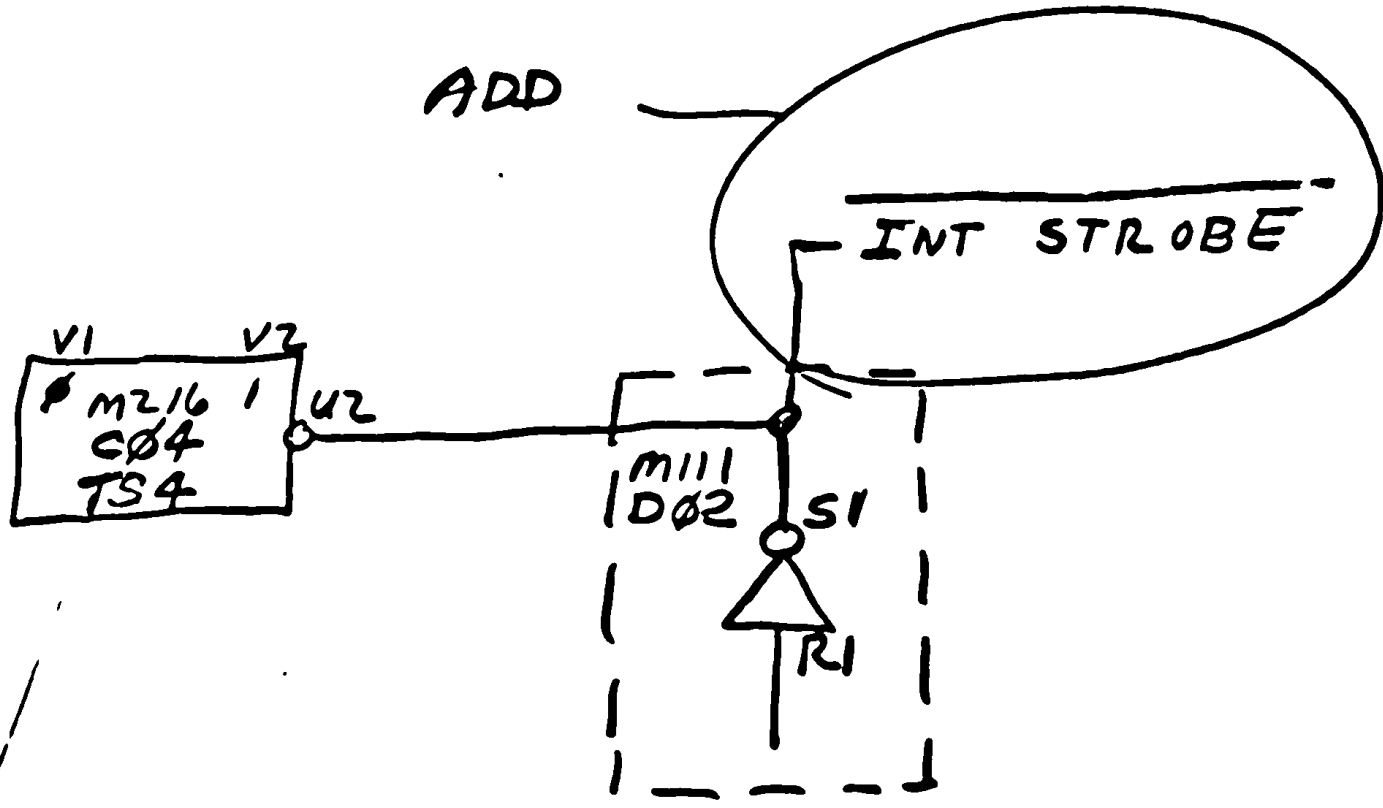
PRODUCT LINES AFFECTED

8L

D10

... 23

... 12

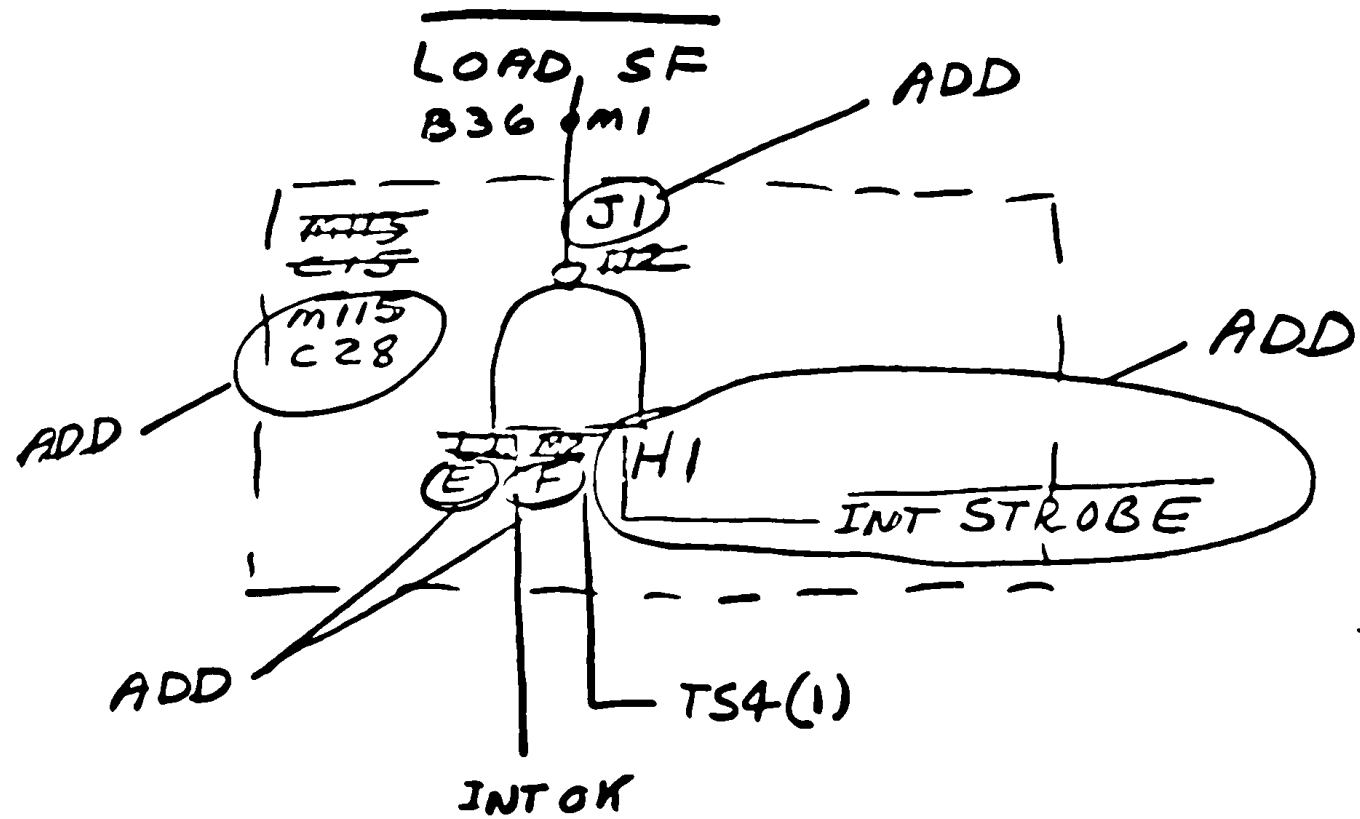


FCO# RL-00088

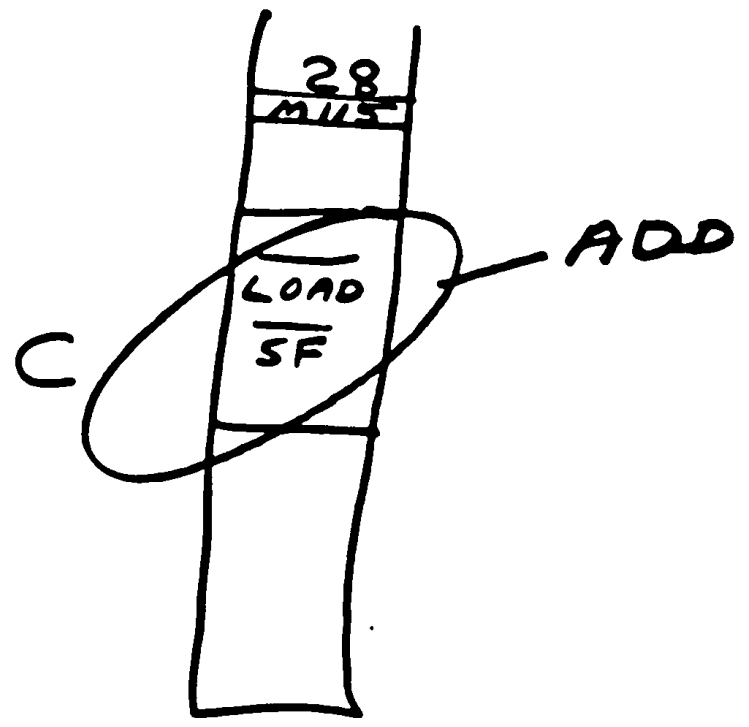
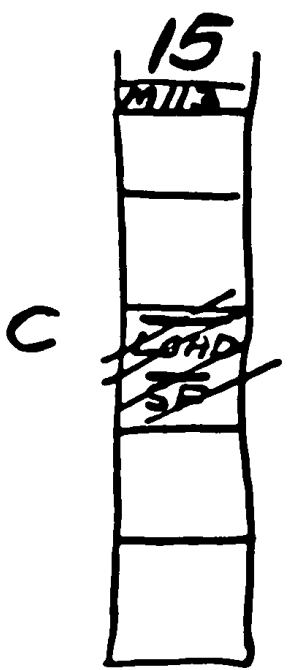
D-BS-8L-0-2

NEW
REV
M

E10



SE



ECO#
8L-00088

D-MU-8L-φ-18

NEW
REV
J

G10

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

COLOP	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	D02S1	C04U2	D02S1			✓
	INT OK	B13U2	C15L2			✓
		C15L2	D12J2			✓
		B13U2	C28E1		✓	
		C28E1	D12J2		✓	
	<u>INT STROBE</u>	C04U2	C28H1		✓	
		C28H1	D02S1		✓	
	<u>LOAD F</u>	B36M1	C15N2			✓
		B36M1	C28J1		✓	
	TS 4 (1)	C13F1	C15M2			✓
		C15M2	D11L1			✓
		C13F1	C28F1		✓	
		C28F1	D11L1		✓	
<u>WIRELIST CORRECTIONS ONLY</u>						
(PRINTS & MACHINES ARE CORRECT)						
	KEY COUNT	C02R2	C05P2			✓
		C05P2	D02H1			✓
		C02R2	D02H1		✓	
	<u>KEY CONT</u>	D01P2	C05P2		✓	

WIRING CHANGES

ECO NUMBER 86-00088

MADE BY CCB

DRAWING NUMBER AFFECTED

CODE	SIZE	NUMBER	NEW REV	LTR
WL	K	86-0-19	Y	

H10

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D. BY INFO SER MO DAY YR
 1 7 69

SPECO RELEASE 10 09

TYPE OF CHANGE

ELECTRICAL X

MECHANICAL

MODULES

CHANGE NO. 81-00089

DOCUMENTATION PROJECT NUMBER

ACT	PROJ LINE	TYPE OR DISCRETE NO.			
	2 7	0	7	5	4 4

MANUFACTURING PROJECT NUMBER

ACT	PROJ LINE	TYPE OR DISCRETE NO.			

UNIT NAME PDP-8L MODEL NO. PDP-8L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. 1911 BY F. PURCELL

ESTIMATED TIME TO INSTALL 1/2 HR

	YES	NO
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	<input type="checkbox"/>	<input checked="" type="checkbox"/> X
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/> X
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/> X
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/> X
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/> X

BREAK-IN POINT (DATE/SERIAL NOS)
 SERIAL NO. 2636 and future

PROBLEM:

IMPROPER GROUNDINGS ON I/O CONNECTOR SLOTS
 ALLOWS PICKING UP OF NOISE. NO SPECIFIC FAILURE
 IS KNOWN TO RESULT FROM THIS.

CORRECTION:

TIE BUS STRIPS TO GROUND TO REDUCE I/O LINE NOISE.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
I-WL-8L-0-19	Y	Z
A-WL-8L-0	AT	AU

FIELD CODE

F

ORIGINATOR R. NUNLEY DATE 1/6/80

PRODUCTION ENG. W. R. MILLER DATE 1/6/70

DESIGN ENG. M. ARSENAULT DATE 1/6/70

OTHER FRANK PURCELL DATE 1/6/70

PRODUCT LINES AFFECTED

8L

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

CC.OR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	GND 36	B36C2	B36T1			✓
	↓	B36R2	B36L2		✓	
		B36L2	B36J2		✓	
		B36J2	B36F2		✓	
		B36F2	B36C2		✓	
		B36R2	B36T1		✓	
		D36C2	D36C1			✓
		D36R2	D36L2		✓	
		D36L2	D36J2		✓	
		D36J2	D36F2		✓	
	↓	D36F2	D36C2		✓	
	GND 36	D36R2	D36C1		✓	
....						

ECO NUMBER 8L-00089

MADE BY AKS

DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	REV LTR
WL	K	8L-0-19	2

210

EQUIPMENT CORPORATION ENGINEERING CHANGE ORDER

REC'D. BY INFO. SER.	MO	DAY	YR
1 10 70	1	8	70
REC'D. RELEASE	1	10	U

TYPE OF CHANGE

ELECTRICAL	<input checked="" type="checkbox"/>
MECHANICAL	<input type="checkbox"/>
MODULES	<input type="checkbox"/>

CHANGE NO. 8L-00090

DOCUMENTATION ON PROJECT NUMBER									
ACT	PROB. LINE	TYPE OR DISCREP. NO.							
2	7	0	7	3	4	4			

MANUFACTURING PROJECT NUMBER

ACT	PROB. LINE	TYPE OR DISCREP. NO.			

UNIT NAME PDP-8L MODEL NO. PDP-8L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED 680 IN SERIAL NO. BY B. DUNGEY

ESTIMATED TIME TO INSTALL 1/2 HR

	YES	NO
PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOP MODEL AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SYSTEMS PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DIAGNOSTIC PROGRAMS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TECHNICAL PUBLICATIONS AFFECTED	<input type="checkbox"/>	<input checked="" type="checkbox"/>

BREAK-IN POINT
(DATE/SERIAL NOS)

ALL 8/L's

SERIAL NO. 100 THRU 2516 AND FUTURE

PROBLEM:

DURING TELETYPE TEST PART 2, TEST 3 RANDOM FAILURES OCCUR DUE TO INCORRECT ADVANCING EXTRA CHARACTER

CORRECTION:

TIE FLOATING LEG OF GATE TO +3V
REMOVE -30V TO W076 CONNECTOR

DRAWINGS AFFECTED

NUMBER	OLD	NEW
	REV	REV
A-PL-EL-0	M	N
I-IL-8L-0-19	Z	AA
D-LS-8L-0-11	A	B

FIELD CODE

ORIGINATOR	R. NUNLEY	DATE	1/6/70
PRODUCTION ENG.	W. R. MILLER	DATE	1/6/70
DESIGN ENG.	M. ARSENAULT	DATE	1/6/70
OTHER	F. PURCELL	DATE	1/6/70

PRODUCT LINES AFFECTED

8L

ADD/DELETE SHEET

MAKE ALL DELETIONS FIRST

PAGE 1 OF 1

CO OR	SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
	+3V (16)	D32R1	D32K2		✓	
	MEM SUPPLY-	B23V2	B24V2			✓
		B23V2	D33V2			✓
	↓	B23V2	B24V2		✓	

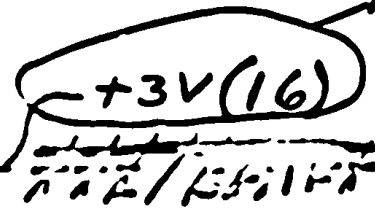
ECO NUMBER SL-00090

MADE BY CR28

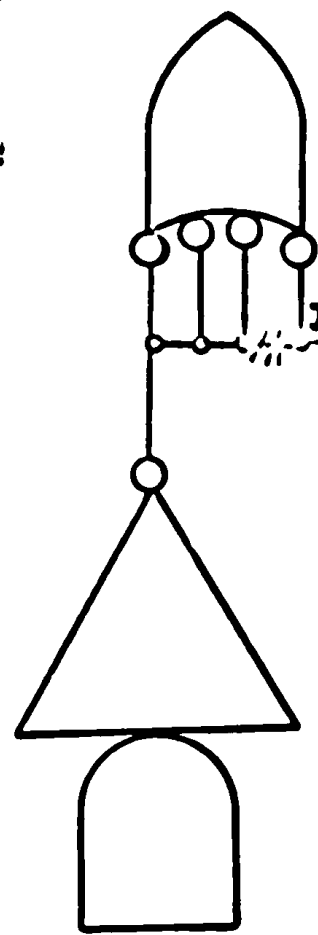
DRAWING NUMBER AFFECTED			
CODE	SIZE	NUMBER	NEW REV LTR
WL	K	SL-0-19	AA

M706
CD32

ADD



DWG LOC
C 8



W076
D33



DWG LOC.
B 7

ECO # 8L-00090

D-BS-8L-0-11

NEW
REV
B

M10

EQUIPMENT CORPORATION
ENGINEERING
CHANGE ORDER

REV'D BY INFO. SER 1 2597
 SPEC'D RELEASE 2 11 70

TYPE OF CHANGE
 ELECTRICAL
 MECHANICAL
 MODULES

CHANGE NO. 81-00091

DOCUMENTATION PROJECT NUMBER
 A 1 2 7 0 7 5 4 1

MANUFACTURING PROJECT NUMBER

UNIT NAME PDP-8L MODEL NO. 8L

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL _____

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET) YES NO

SHOP MODEL AFFECTED YES NO

SYSTEMS PROGRAMS AFFECTED YES NO

DIAGNOSTIC PROGRAMS AFFECTED YES NO

TECHNICAL PUBLICATIONS AFFECTED YES NO

BREAK-IN POINT (DATE/SERIAL NOS)
 SERIAL NO. 2597 and FUTURE.

IF POSITIVE BUS OPTIONS ARE FIELD INSTALLED

PROBLEM:

THE G717 (PULSE TERMINATOR MODULE,) IS USUALLY MISSING WHEN OPTIONS ARE INSTALLED ON THE 8L IO BUS.

CORRECTION:

INCLUDE THE G717 AS PART OF THE BASIC MACHINE. ADD IT TO THE 8L PARTS LIST AND MU.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
A-PL-8L-0-18	J	K
D-M-8L-0-18	J	K
A-ML-8L-0	AV	AW

FIELD SERVICE CODED

IF POSITIVE BUS OPTION FIELD INSTALLED

ORIGINATOR M. APSENALT DATE 1/24/70
 PRODUCTION ENG. W. R. MILLER DATE 1/22/70
 DESIGN ENG. M. APSENALT DATE 1/21/70
 OTHER E. J. PURCELL DATE 1/21/70

PRODUCT LINES AFFECTED

SM, COMP.

311

ECO NO: 8L-00091

DATE: 2-4-0

DRAWING NO.	NEW REV	SERIAL NUMBERS	OLD REV AND C.I.P.	SPECIAL?
D-MU-8L-0-18	K	2597 →	J	YES
A-PL-8L-0-18	K	2597 →	J	YES

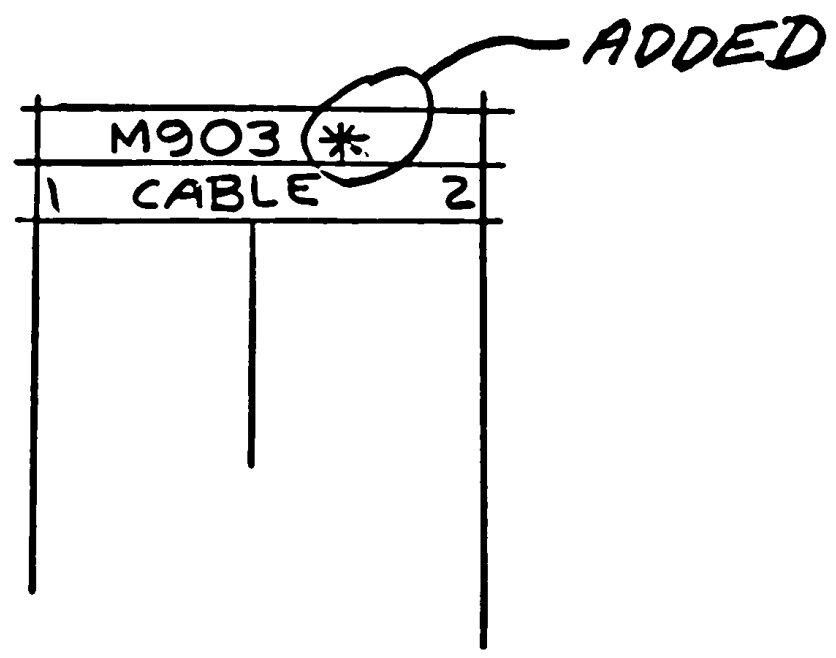
ADDED 1 6717 RESISTOR
TERMINATOR FOR PDP-8/L

BL-00091 A-PL-BL-0-18

NEW
REV K

EM

SLOT D-36



* NOTE ADDED

EQUIPMENT CORPORATION
**ENGINEERING
CHANGE ORDER**

REC'D. BY INFO SER	NO	DAY	YR
	2	25	70
SPECO RELEASE	3	2	70

CHANGE NO. **8L-00092**

DOCUMENTATION PROJECT NUMBER

ACT	PROD LINE	TYPE OR DISCRETE NO.
2	7	07542

MANUFACTURING PROJECT NUMBER

ACT	PROD LINE	TYPE OR DISCRETE NO.

TYPE OF CHANGE

ELECTRICAL	<input checked="" type="checkbox"/>
MECHANICAL	<input type="checkbox"/>
MODULES	<input type="checkbox"/>

UNIT NAME **PDP-8L** MODEL NO. **8L**

PREWIRED OPTIONS AFFECTED

MODEL NO.	VARIATION

CHANGE TESTED IN SERIAL NO. _____ BY _____

ESTIMATED TIME TO INSTALL **5 MIN.**

PARTS ADDED OR DELETED (IF YES REFER TO SEPARATE SHEET)

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

- SHOP MODEL AFFECTED
- SYSTEMS PROGRAMS AFFECTED
- DIAGNOSTIC PROGRAMS AFFECTED
- TECHNICAL PUBLICATIONS AFFECTED

BREAK-IN POINT (DATE/SERIAL NO.)

S.N. 1000 THRU 2756 AND ALL FUTURE.

(ALL MACHINES WITH ECO #56)

PROBLEM:

CORRECTIONS TO ECO 8L-00056

TS 4 (Ø) MISSING ON IO PC ENABLE GATE.
PRINTS ARE CORRECT. WIRE LIST ERROR ONLY.

DRAWINGS AFFECTED

NUMBER	OLD REV	NEW REV
A-11-8L-0	AA	AA
F-WL-8L-0-19	AA	AA

FIELD CONTROL

F

CORRECTION:

CORRECT THE WIRE LIST.

ORIGINATOR **M. ARSENAULT** DATE **2-25-70**

PRODUCTION ENG. **W.R. MILLER** DATE **2-25-70**

DESIGN ENG. **M. ARSENAULT** DATE **2-25-70**

OTHER **D. DUEY AGK** DATE _____

PRODUCT LINES AFFECTED

PDP-8L

MASTER DRAWING LIST

DRAWING NUMBER	NEW REV
K-WL-BL-Ø-19	AB

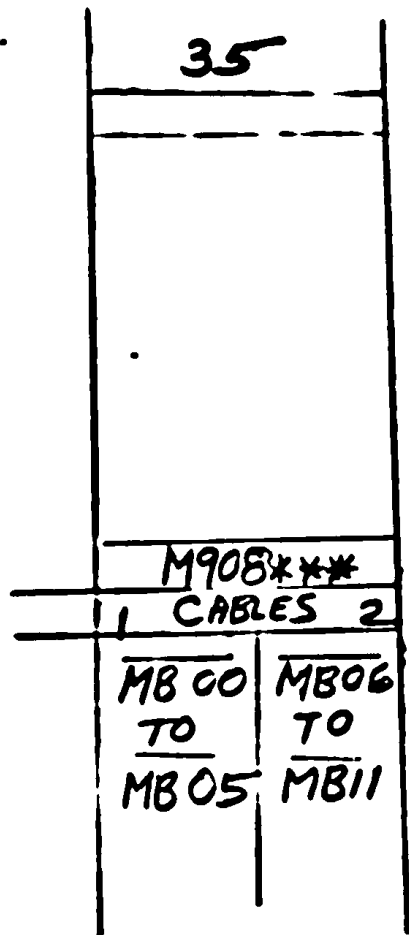
ECO BL-ØCA92

A-ML-BL-Ø NEW REV AV

HI

		QUANTITY	
DWG NO. / PART NO.	DESCRIPTION	PDR	BL
GT M902 YA	RESISTOR TERMINATOR	1	
M902 YB	RESISTOR TERMINATOR	1	

ADD sheet 2 of 2



sheet 2 of 2

**THE ~~THE~~ ^{ADD} M902YB (TERMINATOR) IS ALWAYS PLACED AT THE END OF THE IO BUS FOR IOFS, AC BITS AND ^{ADD} TIME STATES WHEN ~~20~~ ^{ADD} FT OR MORE OF CABLE IS USED. WHEN THERE ARE NO OPTIONS THE ~~THE~~ ^{ADD} M902YB IS PLACED IN LOCATION D36. ^{ADD}

*** THE M902YA IS ALWAYS PLACED AT THE END OF THE IO BUS FOR ALL MB BITS WHEN 20 FT OR MORE OF CABLE IS USED. WHEN THERE ARE NO OPTIONS THE M902YA IS PLACED IN LOCATION D35. ^{ADD}

m11

		ENGINEERING CHANGE ORDER		ECO NO BL 00107 Sheet 1 of 2																														
ORIGINATOR ROBERT NUNLEY DATE 12/7/70 FYT 2136	RECEIVED CHG DATE 12/14/70	ISSUED ECO DATE 12 28-70	FINAL RELEASE DATE 1-17-71	DISCRETE PROJECT NUMBER 80-05028																														
EQUIPMENT AFFECTED																																		
TYPE CHANGE ELECTRICAL <input checked="" type="checkbox"/> MECHANICAL <input type="checkbox"/> MODULE <input type="checkbox"/> SUBASSEMBLY <input type="checkbox"/> MFG FIELD PROCEDURE <input type="checkbox"/> TEST INFORMATION SERIAL # _____ BY _____		UNIT TO BE CHANGED PDP8L PRODUCT LINES PDP8-L	CHECKLIST <table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr><td>SWP MODEL</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>SYSTEMS PROGRAMS</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>DIAGNOSTICS</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>TECHNICAL PUB</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>TEST PROGRAMS</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>TESTER</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>MFG FIELD PROCEDURE</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>PACKAGING INSTRUCTIONS</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> <tr><td>TOOLING</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr> </tbody> </table>			YES	NO	SWP MODEL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SYSTEMS PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DIAGNOSTICS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TECHNICAL PUB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEST PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TESTER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MFG FIELD PROCEDURE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PACKAGING INSTRUCTIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TOOLING	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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BREAK IN POINT		SIGNIFICANCE																																
SYSTEM	MODULE/OPTION PDP8-L	FIELD	REWORK CODE DE	RETROFIT <input type="checkbox"/> REWORK <input type="checkbox"/> REQ TO MEET SPECIFICATION <input type="checkbox"/> PROD IMPROVEMENT <input type="checkbox"/> CUSTOMER/FIELD REQ <input type="checkbox"/> FACILITATE MFG <input type="checkbox"/> DRAWING CORRECTION <input type="checkbox"/> VENDOR <input type="checkbox"/>																														
PROBLEM																																		
ECO # BL-00062 DELETED PIN C04A1 FROM SIGNAL STROBE. THIS PIN IS SHOWN IN TWO PLACES ON DRAWING, AND SIGNAL NAME WAS ONLY CHANGE IN 1 PLACE.																																		
				FIELD SERVICE CODED																														
CORRECTION																																		
REMOVE PIN C04A1 FROM STROBE & ADD IT TO A35HI ONLY.				PRINT CORRECTED																														
700 9 1970																																		
APPROVAL																																		
DESIGN ENGINEER MEL ARCHAULT		ENG MGR RENO VOGELSANG																																
PRODUCTION ENGINEER ALAN HIRSCH		FIELD SERVICE (ADVISORY) ROBERT NUNLEY																																
CHIEF ENGINEER _____																																		

DRA 111A

36401

C.S.

SEE REVERSE SIDE FOR INSTRUCTIONS

B12

(10)



**ENGINEERING CHANGE ORDER
DOCUMENT & MATERIAL
CHANGE**

ECO NO
8L 000107
Sheet 2 of 2

ITEM	DOCUMENT/OR PART NUMBER	OLD REV	NEW REV	(PARTIAL) DESCRIPTION OF CHANGE	DISP CODE
1	A-PL-8L-0	BE	1 F	UPDATE REV FOR ITEM 2 OF THIS ECO	06
2	D-BS-8L-0-2	N	N	(TIMING, MANUAL FUNCTIONS & RUN) DELETE PIN C04A1 FROM SIGNAL STORE. ZONE D-7	06

DISPOSITION CODES

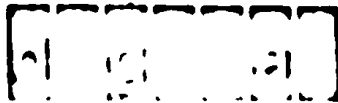
Use up Present Stock	01	Retrofit to Break in	05
Use Present Stock until New Stock Available	02	Documentation Change Only	06
Resort all Material	03	New Item Purchase	07
Resort until New Stock Available	04	New Item in Stock	08
		New Item on Order	09
		Return	00

DRA 112A

SEE REVERSE SIDE FOR INSTRUCTIONS

C12

07

		ENGINEERING CHANGE ORDER W.O. 4169E AT ORDER JB		ECO NO BL-00112 Sheet 1 of 4
ORIGINATOR LARRY NARHI DATE 5/27/71 EXT 3629	RECEIVED CHG. DATE 6/11/71	ISSUED ECO DATE 6-16-71	FINAL RELEASE DATE 6-29-71	DISCRETE PROJECT NUMBER 81 07160

EQUIPMENT AFFECTED

TYPE CHANGE ELECTRICAL <input checked="" type="checkbox"/> MECHANICAL <input type="checkbox"/> MODULE <input type="checkbox"/> SUBASSEMBLY <input type="checkbox"/> MFG/FIELD PROCEDURE <input type="checkbox"/>	UNIT TO BE CHANGED PDP8-L PRODUCT LINES PDP8-L	CHECKLIST <table style="width: 100%;"> <tr> <td>SHOP MODEL</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>SYSTEMS PROGRAMS</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>DIAGNOSTICS</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>TECHNICAL PUB</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>TEST PROGRAMS</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>TESTER</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>MFG/FIELD PROCEDURE</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>PACKAGING INSTRUCTIONS</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>TOOLING</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	SHOP MODEL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SYSTEMS PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DIAGNOSTICS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TECHNICAL PUB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEST PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TESTER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MFG/FIELD PROCEDURE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PACKAGING INSTRUCTIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TOOLING	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SHOP MODEL	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
SYSTEMS PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
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PACKAGING INSTRUCTIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
TOOLING	<input type="checkbox"/>	<input checked="" type="checkbox"/>																											
TEST INFORMATION SERIAL # _____ BY _____																													

BREAK IN POINT				SIGNIFICANCE	
SYSTEM	MODULE/OPTION	FIELD RETROFIT	REWORK CODE		
	PDP8-L	RETROFIT ONLY AT REQUEST AND EXPENSE OF CUSTOMER.	01	REQ TO MEET SPECIFICATION	<input type="checkbox"/>
				PROD IMPROVEMENT	<input type="checkbox"/>
				CUSTOMER/FIELD REQ	<input checked="" type="checkbox"/>
				FACILITATE MFG	<input type="checkbox"/>
				DRAWING CORRECTION	<input type="checkbox"/>
				VENDOR	<input type="checkbox"/>

PROBLEM

WHEN CLEARING TTY KEYBOARD FLAG, READER RUN IS SET, CAUSING TYPE TO ADVANCE. THIS IS UNDESIRABLE IN SOME PROGRAMMING SITUATIONS.

CORRECTION

CLEAR FLAG WITH IOP4 (READ BUFFER) AND SET READER RUN WITH IOP2.
 THIS ECO TO BE INSTALLED ONLY AT CUSTOMER REQUEST.

APPROVAL DESIGN ENGINEER <u>M. ARSENAULT 5/27/71</u> PRODUCTION ENGINEER <u>T. MAC DONALD</u> CHIEF ENGINEER _____	ENG MGR <u>R. VOGELSANG</u> FIELD SERVICE (ADVISORY) <u>R. NUNLEY</u>
--	--

(1) (9) 21

ENGINEERING CHANGE ORDER DOCUMENT & MATERIAL CHANGE

ECO NO
8L-00112
Sheet 2 of 4

ITEM	DOCUMENT/OR PART NUMBER	OLD REV	NEW REV	(PART NAME) DESCRIPTION OF CHANGE	DISP CODE
1	D-BS-8L-0-11	B	C	ADD FOLLOWING NOTE: TO ALLOW IOP4 TO CLEAR KEYBOARD FLAG: DELETE D32D1 TO GND DELETE C32E2 TO C32V2 ADD D32D1 TO C32V1 ADD C32V2 TO D32E2	06
2	A-ML-8L-0	BK	BL	UPDATE REVS PER THIS ECO.	06

DISPOSITION CODES

Use up Present Stock	01	Retrofit to Break in	05
Use Present Stock until New Stock Available	02	Documentat on Change Only	06
Rework all Material	03	New Item Purchase	07
Rework until New Stock Available	04	New Item in Stock	08
		New Item on Order	09
		Retain	00

DRA 112A

DEC 16-(327)-1093-N471

SEE REVERSE SIDE FOR INSTRUCTIONS

(E12)

FIELD SERVICE NOTES:

ECO 8L-000112
Page 3 of 4

E LEVEL OF URGENCY code

The ECO number will be posted to the EDP file with this LOU code replacing the lead # - "A" = Mandatory, High Priority
"B" = Mandatory "C" = Applicable if symptoms are present
"D" = Low Priority "E" = Product Improvement, Optional

This ECO is NO CHARGE TO CUSTOMER - All DEC installation labor and materials are to be reported under a "W" charge code.

This ECO is STANDARD APPLICABILITY - It is to be installed at no charge for warranty and maintenance contract customers in accordance with the technical effectivity, otherwise at customer expense.
Charges - Documentation \$ 5.00, Parts \$ None
DEC on-site labor \$ 13.00. (Minimum per call billing applies)
(* parts prices not available at the time of Speco release)

F FIELD DISTRIBUTION CODE

"F" = Immediate Speco distribution to all field offices
"DF" = No general Speco distribution, only to offices where equipment is located (less than 25 units in the field) and to Regional product support.

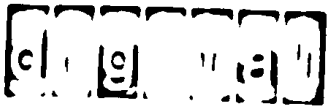
UNCONDITIONAL ECO - General distribution kits will include Field Installation Orders, Specos, Prints, and Parts.

CONDITIONAL ECO - General distribution will include Field Installation Orders only. Prints ~~and parts~~ must be ordered from FSIC as required.

N.A. Parts availability delay expected _____.

No The REQUIREMENT TO MEET SPECIFICATION is applicable retroactively to equipment in the field.

No Print changes are minimal and are to be done manually in red and green; updating prints will be supplied only upon request.



**ENGINEERING CHANGE ORDER
ADD/DELETE SHEET**

ECO NO
8L-00112
Sheet 4 of 4

WIRE LIST NO. **D-BS-8L-0-11**

TITLE

MAKE ALL DELETIONS FIRST WHEN INSTALLING

SIGNAL NAME	FROM PIN	TO PIN	COMPONENTS	ADD	DEL
KCC	C32V2	C32E2			X
GND	D32D1	D32C2			X
GND	D32D1	D32T1			X
TTAC CLEAR	D32E2	C32V2		X	
KRB	D32D1	C32V1		X	
GND	D32T1	D32C2		X	

G12

ORIGINATOR ED REED	RECEIVED CHG. DATE 6/18/71	ISSUED ECO DATE	FINAL RELEASE DATE 7-22-71	DISCRETE PROJECT NUMBER 99 06224
DATE 6/15/71	EXT 2174			

EQUIPMENT AFFECTED

TYPE CHANGE ELECTRICAL <input checked="" type="checkbox"/> MECHANICAL <input type="checkbox"/> MODULE <input type="checkbox"/> SUBASSEMBLY <input type="checkbox"/> MFG FIELD PROCEDURE <input type="checkbox"/>	UNIT TO BE CHANGED PDP-8L <hr/> PRODUCT LINES TPL	CHECKLIST <table style="width:100%; border: none;"> <tr> <td style="width:50%;"></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> </tr> <tr> <td>SHOP MODEL</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>SYSTEMS PROGRAMS</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>DIAGNOSTICS</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>TECHNICAL PUB</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>TEST PROGRAMS</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>TESTER</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>MFG/FIELD PROCEDURE</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>PACKAGING INSTRUCTIONS</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td>TOOLING</td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>		YES	NO	SHOP MODEL	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SYSTEMS PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DIAGNOSTICS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TECHNICAL PUB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TEST PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TESTER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MFG/FIELD PROCEDURE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PACKAGING INSTRUCTIONS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TOOLING	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	YES	NO																														
SHOP MODEL	<input type="checkbox"/>	<input checked="" type="checkbox"/>																														
SYSTEMS PROGRAMS	<input type="checkbox"/>	<input checked="" type="checkbox"/>																														
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TEST INFORMATION SERIAL # 2818 BY ED REED																																

BREAK IN POINT				SIGNIFICANCE	
SYSTEM	MODULE/OPTION	FIELD RETROFIT	REWORK	CODE	
	8L	ONLY WHEN A BM8-L MEMORY EXPANSION IS INSTALLED.	X		REQ TO MEET SPECIFICATION <input type="checkbox"/> PROD IMPROVEMENT <input type="checkbox"/> CUSTOMER/FIELD REQ. <input checked="" type="checkbox"/> FACILITATE MFG <input type="checkbox"/> DRAWING CORRECTION <input type="checkbox"/> VENDOR <input type="checkbox"/>

PROBLEM

EXTENDED ADDRESS BITS "0" AND "1" ARE OPEN COLLECTOR AND HAVE NO PULLUP RESISTORS WHEN A BM8-L IS INSTALLED.

CORRECTION

WIRE IN CLAMP LOADS WHICH ARE AVAILABLE IN THE PDP-8L.

APPROVAL

DESIGN ENGINEER <u>J. MILTON</u>	ENG MGR _____
PRODUCTION ENGINEER <u>R. REED</u>	FIELD SERVICE (ADVISORY) <u>R. NUNLEY</u>
CHIEF ENGINEER _____	

H2

ENGINEERING CHANGE ORDER
DOCUMENT & MATERIAL
CHANGE

ECO NO.
8L-00113
Sheet 2 of 4

ITEM	DOCUMENT/OR PART NUMBER	OLD REV	NEW REV	(PART NAME) DESCRIPTION OF CHANGE	DISP CODE
1	A-ML-8L-Ø	BL	BM	UPDATE PER ITEMS 2 THROUGH 5.	06
2	K-WL-8L-0-19	AD	AE	SEE MARKED PRINT.	06
3	D-BS-8L-0-10	C	D	MAKE FOLLOWING ADDITIONS TO LOCATION B-2 ON THE PRINT: CLAMP-LOAD- M9Ø6, B33T2 TO CABLE- M9Ø3, C35T2; AND CLAMP-LOAD- M9Ø6, B33V2 TO CABLE- M9Ø3, C35V2.	06
4	D-MU-8L-0-18	M	N	UPDATE PER ITEM 3.	06
5	A-PL-8L-0-18	M	N	UPDATE REV PER ITEM 4.	06

DISPOSITION CODES

Use up Present Stock	01	Retrofit to Break in	05
Use Present Stock until New Stock Available	02	Documentation Change Only	06
Rework all Material	03	New Item Purchase	07
Rework until New Stock Available	04	New Item in Stock	08
		New Item on Order	09
		Retain	00

FIELD SERVICE NOTES:

ECO 8L-00113

Page 3 of 4

C LEVEL OF URGENCY code

The ECO number will be posted to the EDP file with this LOU code replacing the lead # - "A" = Mandatory, High Priority
"B" = Mandatory "C" = Applicable if symptoms are present
"D" = Low Priority "E" = Product Improvement, Optional

* This ECO is NO CHARGE TO CUSTOMER - All DEC installation labor and materials are to be reported under a "W" charge code.

This ECO is STANDARD APPLICABILITY - It is to be installed at no charge for warranty and maintenance contract customers in accordance with the technical effectivity, otherwise at customer expense.
Charges - Documentation \$ _____, Parts \$ _____
DEC on-site labor \$ _____. (minimum per call billing applies)
(* parts prices not available at the time of Speco release)

F FIELD DISTRIBUTION CODE

"F" = Immediate Speco distribution to all field offices
"DF" = No general Speco distribution, only to offices where equipment is located (less than 25 units in the field) and to Regional product support.

UNCONDITIONAL ECO - General distribution kits will include Field Installation Orders, Specos, Prints, and Parts.

CONDITIONAL ECO - General distribution will include Field Installation Orders only. Prints and parts must be ordered from FSIC as required.

N.A. Parts availability delay expected _____.

* The REQUIREMENT TO MEET SPECIFICATION is applicable retroactively to equipment in the field.

Print changes are minimal and are to be done manually in red and green; updating prints will be supplied only upon request.

* This ECO will be installed, at no charge, with the addition of a BMB-L option.

TECH TIPS

digital	FIELD SERVICE TECHNICAL MANUAL				Option or Designator
	12 Bit <input checked="" type="checkbox"/>	16 Bit <input type="checkbox"/>	18 Bit <input type="checkbox"/>	36 Bit <input type="checkbox"/>	PDP-8L

Title <u>BUFFERING OF POWER CLEAR</u>				Tech Tip PDP-8L TT#1 Number	
AN	Processor Applicability	Author Robert Nunley	Rev g	Cross Reference	
		Approval <u>W. Cummins</u>	Date 7-31-72		

The Power Clear signal run, generated at A25S2 is **overloaded** beyond engineering specs. However, because we use the level rather than transition, this overload is acceptable in most machines. In the rest, due to component age and component individual characteristics, weird unexplainable things might happen with any or all of the following symptoms.

1. Intermittent halt when none was programmed (not to be confused with loss of timing where run is on but there is no control of the machine) where run is cleared as if the halt key was actuated.
2. Intermittent loss of data where one memory cell is changed to 0000.
3. Intermittent clearing of flags and/or buffers in I/O devices (not connected to a DM01).

If any of these symptoms occur it is possible that the cause is the power clear run.

If a glitch appears on power clear this is what can happen:

1. If the glitch appears before TP3 but after TP2 memory control flops will be cleared and as a result one memory location will be cleared, but the MB will have the correct data this time. TP3 will then set RUN and the program should resume normal flow (until the zero's are reached again).
2. If the glitch appears after TP3 the effect is as if the SS key is pressed.
3. Depending on where the glitch occurs between MFM start and strobe governs whether or not a read is done at all, or a strobe is generated.
4. If the glitch appears in the 8L of amplitude and duration enough to cause any of the above, it will be felt on the I/O bus and cause the same type intermittent problems.

To buffer Power Clear: break the Power Clear run at A27S2 but maintain the other end (could go to D16A1 or B13R1 depending on the vintage of the 8L).

Add A27S2 to C27F2
Add C27J2 to other end of wire deleted in the first step.
Add 220 ohm 1/4W pull up

C27J2 to +5V

This gives a drive of about 100 load units for the Power Clear run.

PAGE 1	PAGE REVISION 0	PUBLICATION DATE July 1972
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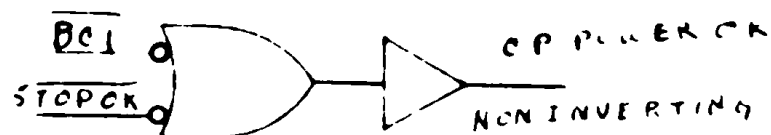
MD

Title PRINT CORRECTIONS IN 8L				Tech Tip Number PDP-8L TT #2		
All	Processor Applicability			Author Robert Nunley	Rev 0	Cross Reference
	8L			Approval W. Cummins	Date 7-31-72	

There are errors in the 8L print set not in Logic Gating but in signal names and generation. Two of these errors have been corrected by ECO's which will be coded "P" therefore will not be distributed to the field.

The corrections are:

1. Drawing No. D-BS-8L-~~8~~-2 coordinates D-7 direct clear of TS1 is not ~~stroke~~, but the "OR" function of ~~POWER CLEAR + STROBE~~. The signal comes from Inverter M11 at A35H1. (This gating was generated by ECO 8L-00045, ECO 8L-00059, ECO 8L-00062.) Direct Clear of TS1 should now be called "A35H1."
2. Drawing number D-BS-8L-~~8~~-13 coordinates B-6 generation of "CP Power OK." The logic works correctly but should be drawn like this.



Title 8L ECO 00045, 00056 FRROR				Tech Tip Number PDP8/L TT#3		
All	Processor Applicability			Author Art Newbury	Rev 0	Cross Reference
	8L			Approval W.E. Cummins	Date	

Another ECO will be generated to effect correction of an error which exists with respect to ECO's 8L #00045 and 00056. The schematic which is part of the Speco for 8L 00056, shows correctly that there are three inputs to the M15 which is added in slot C28. The Add/Delete sheet, however, fails to include the wiring of the TS4 (~~8~~) input to C28B1. The following Add will resolve the problem:

C28B1 to C~~2~~4V1

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digital	FIELD SERVICE TECHNICAL MANUAL				Option or Designator
	12 Bit <input checked="" type="checkbox"/>	16 Bit <input type="checkbox"/>	18 Bit <input type="checkbox"/>	36 Bit <input type="checkbox"/>	P P 81

Title 3 CYCLE BREAK INTERMITTENT				Tech Tip Number P P 81 TT 4	
All	Processor Applicability			Author S. Lamotte	Rev 0
	81			Approval W.I. Cummins	Date Aug 15
Cross Reference					

PROBLEM: 3 Cycle break devices, with cables over 15ft. in length, have displayed a problem of intermittently not setting "Break". This is caused by "Ext 3 cycle L" being noisy at the processor. This condition brings up WC Set, when it shouldn't be there.

FIX: Ground "ext 3 cycle L" signal at processor, A34V2 B34C2

This Tech Tip apply's only to systems with 3 cycle break options, and no 1 cycle break devices.

Title 81 FUSE RATINGS				Tech Tip Number PDP8L TT#5	
All	Processor Applicability			Author W. Freeman	Rev 0
	8L			Approval W. Cummins	Date 12/1/73
Cross Reference					

Because of the complaints about the 5 amp fuse in the +5 volt line (F-3) in the 718 power supply, an investigation was undertaken. The following facts have been revealed:

- 1) The PDP-8L draws six amps on the +5 volt line under full load conditions.
- 2) This load will occasionally blow the 5 amp fuse (F-3)
- 3) The other two fuse ratings were found to be correct.

It was found that the use of a 6 amp fuse for F-3 produced reliable operation. An ECO for changing this specification (#718-00007) is being prepared for distribution. This will be a permanent change for all 718 power supplies. The proper fuse ratings for the 718 power supply are:

F-1	15 amp slow blow
F-2	4 amp slow blow
F-3	6 amp common

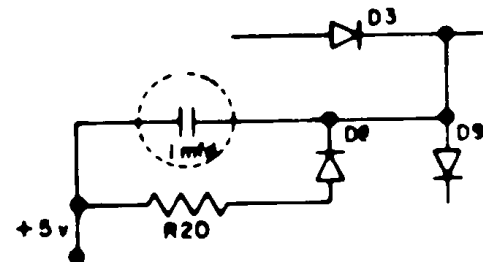
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1013

Title					Tech Tip				
8L AFFECTED BY EXTERNAL NOISE					Number				
Processor Applicability					PDP8L TT#7				
All					Cross Reference				
Author					Rev				
W. Freeman					g				
Approval					Date				
W. Cummins					11/11/73				

TECH TIP NUMBER PDP8L-TT-6
WAS NEVER PUBLISHED.

If external noise from surrounding equipment is affecting an 8L, the installation of a .1 mfd. capacitor on the G785 module as shown in the schematic below will resolve the problem.



Mel Arsenault

March 1969

Approximately 150 8/L's have been shipped to the field with the capacitor connected to the base of Q1 rather than the junction of D3, D8, and D9. A symptom indicative of this condition is random stopping in the run state, all switch functions inoperative and inability to restart except following a power-down, power-up operation.

Title					Tech Tip				
B RUN NOISE					Number				
Processor Applicability					PDP8L-TT-3				
All					Cross Reference				
Author					Rev				
W. Freeman					g				
Approval					Date				
W. Cummins					12/05/73				

B RUN NOISE

It has been found that ground noise caused by the 'B bits is causing B RUN to move. The noise can be eliminated by tying the emitters of all the transistors on the M623 together.

CO's M623 - 00001 and 00002 implement this solution.

Title					Tech Tip				
DOUBLE SELECTION OF G221					Number				
Processor Applicability					PDP8L-TT -9				
All					Cross Reference				
Author					Rev				
W. Freeman					g				
Approval					Date				
W. Cummins					12/05/73				
G221-TT-1									

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