

MASTER DRAWING LIST

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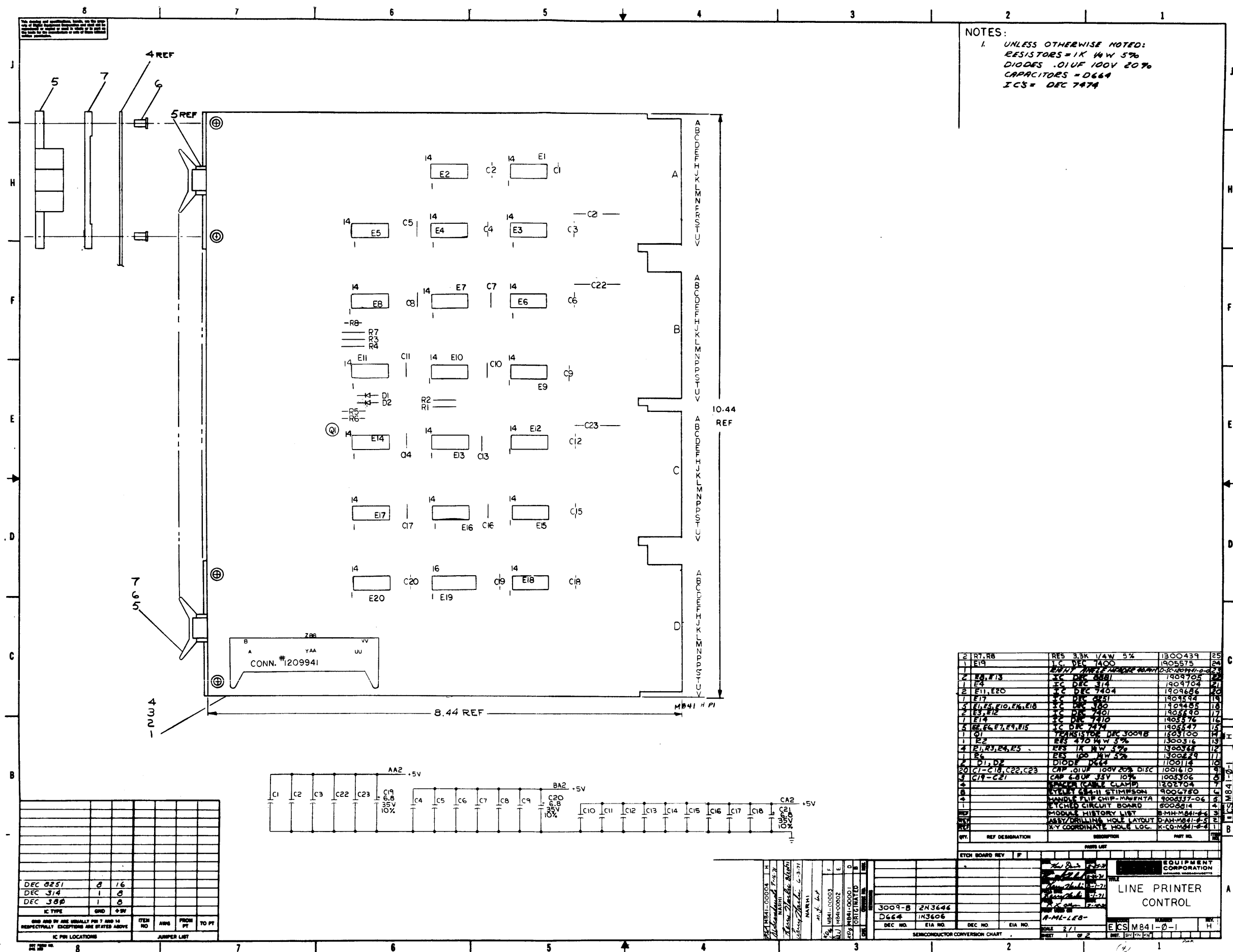
DRA 131

Dec 16 --(325)--1048--N471

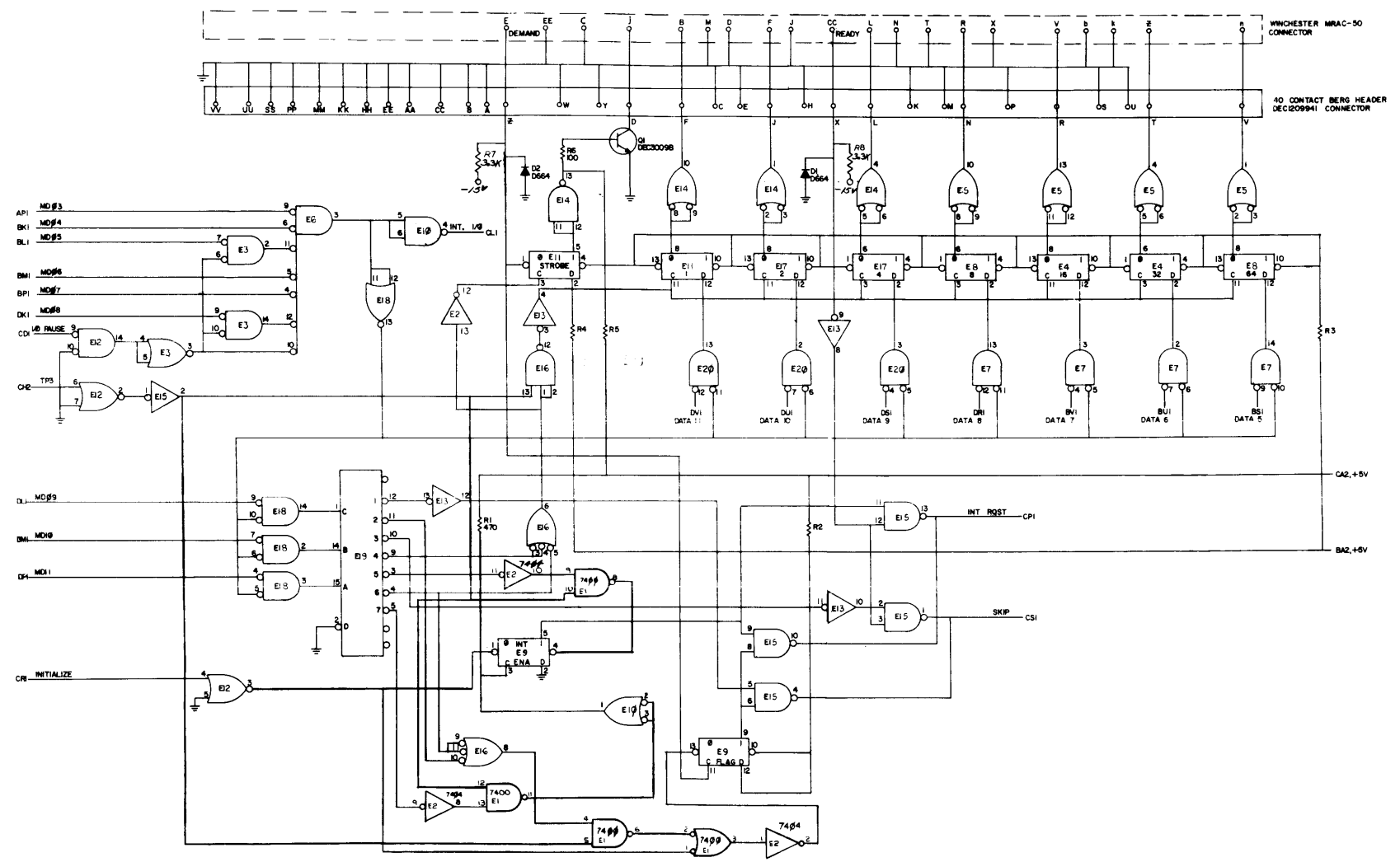
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DRA 132

DEC 16--(325)-1048-i'-N471



Device Code=66



UNLESS OTHERWISE SPECIFIED		DATE		PARTS LIST		PART NO.		ITEM NO.	
MOORE		9-16-70		DIGITAL EQUIPMENT CORPORATION		RECEIVED		REV.	
CHKD BY		SHE TRAWSKY		TITLE		LINE PRINTER CONTROL		REV.	
ENGR.		J. J. TRAWSKY		DATE		9-17-70		REV.	
PROJ. ENGR.		J. J. TRAWSKY		DATE		9-17-70		REV.	
MATERIAL		FIRST USED ON		SCALE		NONE		REV.	
FINISH		SHEET 2 OF 2		SHEET 2 OF 2		SHEET 2 OF 2		REV.	

DIGITAL EQUIPMENT CORPORATION

MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	L. NARHI	CHECKED	K. GULICK	SECTION
DATE	3-5-71	DATE	3-5-71	1
ENG	Larry Starkie	PROD	Larry Taylor	ISSUED SECT.
DATE	3-5-71	DATE	3/5/71	1

QUANTITY / VARIATION

[illegible]

DEC FORM NO.16-1031
DRA 110

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ENGINEERING SPECIFICATION

digital

CONTINUATION SHEET

TITLE LE8-XX Line Printer Interface to the PDP-8/E

1. OVERALL DESCRIPTION

The LE8 is an interface to several models of the Data Products Line Printer to the PDP-8/E computer. The logic is designed entirely of TTL integrated circuits for low cost and high speed.

2. GENERAL SPECIFICATIONS

2.1 The basic option consists of:

One M841 control card and
One 80 column, 64 character line printer.

Its designation is LE8-FA.

2.2 Options to the basic control and line printer are:

LE8-FB	80	column,	64	characters	50	Hz.
LE8-HA	80	column,	96	characters	60	Hz.
LE8-HB	80	column,	96	characters	50	Hz.
LE8-JA	132	column,	64	characters	60	Hz.
LE8-JB	132	column,	64	characters	50	Hz.
LE8-KA	132	column,	96	characters	60	Hz.
LE8-KB	132	column,	96	characters	50	Hz.

2.3 The interface is contained on one 8½" Quad Board whose pins are defined by the 8E bus.

2.4 Temperature limits:

32 F to 155° F
Relative Humidity: 0 to 95% non-condensing
Power Required: 650 MA at +5 volts.

	SIZE A	CODE SP	NUMBER LE8-0-1	REV
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ENGINEERING SPECIFICATION		CONTINUATION SHEET			
TITLE LE8-XX Line Printer Interface to the PDP-8/E					
3. PROGRAMMING					
3.1 IOT coding is as follows:					
Mnemonic	IOT	Function			
PSKF	6661	Skip if Flag = 1			
PCLF	6662	Clear Flag			
PSKE	6663	Skip on Error or Not Ready			
PSTB	6664	Strobe, Load Buffer			
PSIE	6665	Set Interrupt Enable			
PCLF, PSTB	6666	Clear Flag, Load Character			
PCIE	6667	Clear Interrupt Enable			
Note: Initialize Resets Interrupt Enable, to disable interrupts.					
3.2 There are no maintenance instructions.					
3.3 The line printer uses the standard ASCII character set. The lease significant bit appears in AC bit 11.					
3.4 There are no operator controls on the control board. Operator controls on the printer are:					
Top of Form - Advances paper to top of form					
Paper Step - Advances paper one line at a time, disabled on line.					
On line/Off line - Selects mode of operation					
Master Clear - Initializes printer to insure proper state of electronic elements.					
Print Inhibit - Check out switch for hammers.					
		SIZE	CODE	NUMBER	REV
		A	SP	LE8-Ø.1	

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ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE	LE8 TEST PROCEDURE
--------------	--------------------

1.0 EQUIPMENT

- ```

1.1 PDP8/E standard
1.2 Heat box
1.3 453 scope and voltage probes
1.4 Teletype
1.5 M841 module and 7006964 cable
1.6 Line printer types: LE8-FA/FB 64 Char/80 Col.
 LE8-HA/FB 96 Char/80 Col.
 LE8-JA/JB 64 Char/132 Col.
 LE8-KA/KB 96 Char/132 Col.

```

NOTE: XA/XB means 60/50 HZ respectively.

- 1.7 Box of line printer paper: 80 Col - 9 7/8 x 11 inches  
1.8 High speed reader PR8/e. 132 Col - 14 7/8 x 11 inches

## 2.0 TEST STATION SET UP

- 2.1 Check paperwork in the envelope making sure it is complete as required by DEC Standard # 101.
  - 2.1.1 Test and inspection record.
  - 2.1.2 Key sheet and ECO status sheet will contain both CS and etch revision.
  - 2.1.3 Quality Control inspection report.
  - 2.1.4 PDP8/E progress report (inserted at this time).
- 2.2 Insert the M841 module in the Omnibus per "Recommended Module Assignment List" (ASP-PDP8-E-0-4).
- 2.3 Connect the 7006964 cable between the J1 connector on the M841 module and the line printer.
- 2.4 After observing line printer model designation letters (50 or 60 HZ) plug in power cord accordingly.
- 2.5 Turn on PDP8E power.

### 3.0 LOADING PROCEDURE

- 3.1 Deposit rim loader (high speed) in PDP8E per PDP8E instruction card.
- 3.2 Load binary loader using starting address of 7756 .
- 3.3 Load diagnostic MAINDEC-8E-D2BB using starting address of 7777.

#### 4.0 LE8 CHECKOUT

- 4.1 Load paper in line printer.
- 4.2 Power down the line printer, if on.
- 4.3 Consult diagnostic write-up for correct program and/or operator action, starting addresses, and register switch settings.
- 4.4 Operating times for the following tests:

| <u>TEST NO.</u>         | <u>RUN TIME</u> |
|-------------------------|-----------------|
| 1 Preliminary Test      | 2 Pass          |
| 2 Single Char. all col. | 2 Passes        |
| 3 Rotating Pattern      | 2 Passes        |
| 4 Wedge Pattern         | 2 Passes        |

- 4.5 Tests 5 thru 7 are used for line printer alignment and adjustment only.

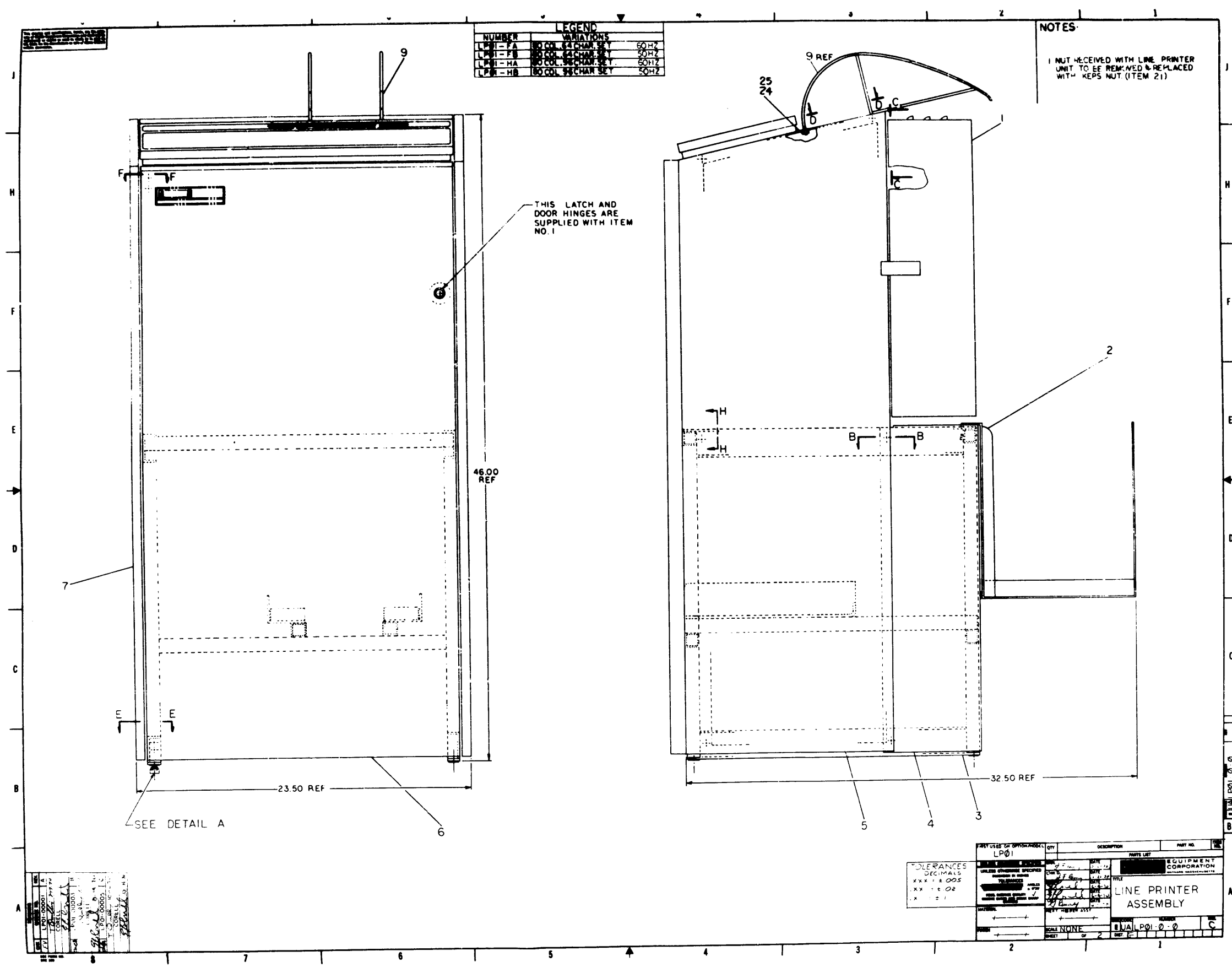
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|--|-------------------------|-------------------|--------------------------|------------|
|  | <b>SIZE</b><br><b>A</b> | <b>CODE</b><br>SP | <b>NUMBER</b><br>LE8-0-2 | <b>REV</b> |
|--|-------------------------|-------------------|--------------------------|------------|

|                                                                                                                                                                                 |  |        |  |                    |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------|--|--------------------|------------|
| ENGINEERING SPECIFICATION                                                                                                                                                       |  | 000000 |  | CONTINUATION SHEET |            |
| TITLE    LE8 TEST PROCEDURE                                                                                                                                                     |  |        |  |                    |            |
| 4.6    Printouts should be viewed for clarity and character alignment using sample LP01/LP02 printouts for reference. Include a sample from the LE8 test in the option envelop. |  |        |  |                    |            |
| 5.0    HEAT TEST                                                                                                                                                                |  |        |  |                    |            |
| 5.1    Heat test is to be run after successful completion of all previously indicated tests.                                                                                    |  |        |  |                    |            |
| 5.2    Run Tests 2, 3, and 4 with register switch 4 in the "UP" position for 5 minutes with the heat box down, ports closed and heat off. Load per loading procedure step 3.0   |  |        |  |                    |            |
| 5.3    Raise the heat switch on the test station panel and once the indicator light goes off run the tests indicated, refer to 5.2 for 10 minutes.                              |  |        |  |                    |            |
| 5.4    Turn the heat switch off and open the two ports on the left side of the heat box.                                                                                        |  |        |  |                    |            |
| 5.5    Allow 15 minutes for the machine to cool before removing the heat box.                                                                                                   |  |        |  |                    |            |
| 5.6    Terminate the test once the machine has run for 5 minutes at room temperature.                                                                                           |  |        |  |                    |            |
| 5.7    Power down line printer and PDP8E.                                                                                                                                       |  |        |  |                    |            |
| 6.0    FINAL OPERATION AND INSPECTION                                                                                                                                           |  |        |  |                    |            |
| 6.1    Disconnect the M841 module from the PDP8E and the cable between the M841 module and the line printer.                                                                    |  |        |  |                    |            |
| 6.2    Check that the following paperwork has been completed:<br>Envelope<br>ECO Status Sheet<br>QC Sheet<br>8/E Progress Report                                                |  |        |  |                    |            |
|                                                                                                                                                                                 |  |        |  | SIZE<br>A          | CODE<br>SP |
|                                                                                                                                                                                 |  |        |  | NUMBER<br>LE8-0-2  | REV        |



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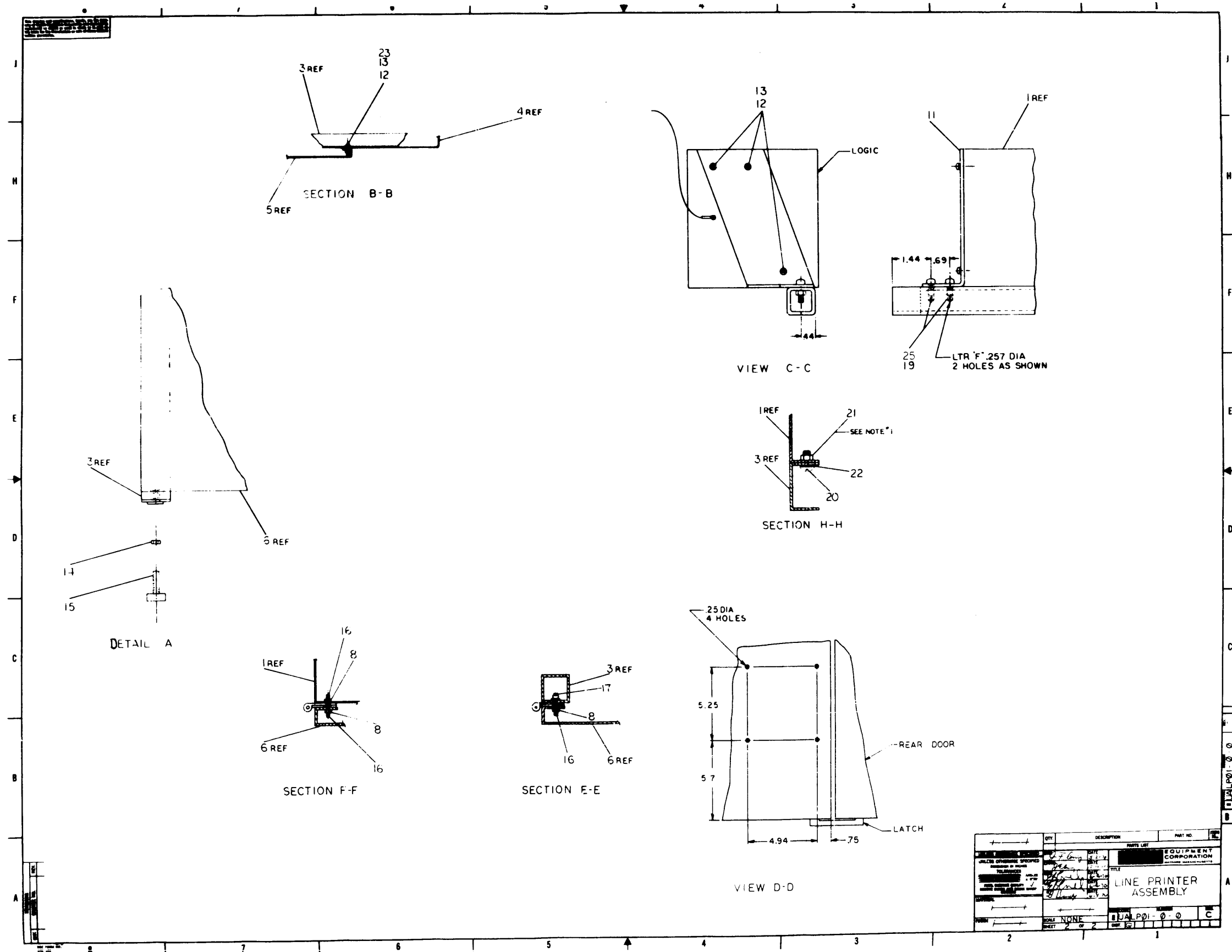
DEC FORM NO.16-1033  
DRA 103



REVISIONS  
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TOLERANCES  
DECIMALS  
XX ± .005  
XX ± .02  
X ± .1

| PART USED ON EQUIPMENT |  | QTY | DESCRIPTION | PART NO. |
|------------------------|--|-----|-------------|----------|
| LP01                   |  |     |             |          |
| EQUIPMENT CORPORATION  |  |     |             |          |
| LINE PRINTER ASSEMBLY  |  |     |             |          |
| B UALP01-0-0           |  |     |             |          |
| 1                      |  |     |             |          |



**DIGITAL EQUIPMENT CORPORATION**  
MAYNARD, MASSACHUSETTS

## PARTS LIST

| MADE BY |          | CHECKED |            | SECTION      |
|---------|----------|---------|------------|--------------|
| DATE    |          | DATE    |            |              |
| 5-19-70 | P. MILAN | 5-21-70 | J. FLEMING |              |
|         |          |         |            |              |
| ENG     |          | PROD    | G. BUNDY   | ISSUED SECT. |
| DATE    | 6-4-70   | DATE    | 6-4-70     |              |

| ITEM<br>NO. | DWG NO. / PART NO. | DESCRIPTION |
|-------------|--------------------|-------------|
|-------------|--------------------|-------------|

[illegible]

**TITLE**

LINE PRINTER ASSY

|      |      |
|------|------|
| SIZE | CODE |
| A    | PL   |

|       |   |
|-------|---|
| DIST. | G |
|-------|---|

NUMBER  
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| REV.<br>C | ECO NO.<br>LPOL-<br>0115 |
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**DIGITAL EQUIPMENT CORPORATION**  
MAYNARD, MASSACHUSETTS

## PARTS LIST

| MADE BY |  | P. MILAN      |  | CHECKED |  | J. FLEMING |  | SECTION      |  |
|---------|--|---------------|--|---------|--|------------|--|--------------|--|
| DATE    |  | 5-19-70       |  | DATE    |  | 5-21-70    |  |              |  |
| ENG     |  | E. B. CORRELL |  | PROD    |  | G. BUNDY   |  | ISSUED SECT. |  |
| DATE    |  | 6-4-70        |  | DATE    |  | 6-4-70     |  |              |  |

| ITEM NO. | DWG NO. / PART NO. | DESCRIPTION |
|----------|--------------------|-------------|
|----------|--------------------|-------------|

|    |           |                                             |
|----|-----------|---------------------------------------------|
| 20 | 9006057-3 | SCR TRUSS HD $\frac{1}{4}$ -20 X .62 LG SST |
|----|-----------|---------------------------------------------|

|    |         |                             |
|----|---------|-----------------------------|
| 22 | 900€724 | WASH EXT TOOTH <sup>3</sup> |
| 21 | 900/880 | NUT KEFS <sup>3-20</sup>    |

|    |         |                                |
|----|---------|--------------------------------|
| 23 | 9006653 | WASH FLAT #6                   |
| 24 | 9006829 | SPACED 1/4" X 3/8" IC #10 HOLE |

|    |         |                                 |
|----|---------|---------------------------------|
| 24 | 9000625 | SIRCHIN 2 HT A 3/8 LG TWO RCHES |
| 25 | 9006565 | NUT, KEPS #10-32                |

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| TITLE             | ASSY NO.       | SIZE |
|-------------------|----------------|------|
| LINE PRINTER ASSY | E-UA-LP011-0-0 | A    |

|              |  |              |  |      |  |
|--------------|--|--------------|--|------|--|
| DEC FORM NO. |  | SHEET 2 OF 2 |  | DIST |  |
| 254 110      |  |              |  |      |  |

DEC FORM NO.  
DRA 110

|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|----------------------------------------------------------|-------------------|------------------------------------------|--------------|----------------------------|----------|----------------|-----------------|------|--------|--|--------------------|--|--|--|--|--|-----------|----|------|--------------------|----|------|
| DIGITAL EQUIPMENT CORPORATION<br>MAYNARD , MASSACHUSETTS |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
| SOFTWARE LIST                                            |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
| MADE BY DATE                                             |                   | CHECKED DATE                             | SECTION      | D DOCUMENT                 |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              | DN DOCUMENT CHANGE NOTICE  |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
| ENG DATE                                                 |                   | PROD DATE                                | ISSUED SECT. | PA PAPER TAPE ASCII        |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              | PB PAPER TAPE BINARY       |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              | PM PAPER TAPE READ-IN-MODE |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
| ITEM NO.                                                 | DWG NO./PART NO.  | DESCRIPTION                              |              |                            |          |                |                 |      |        |  | QUANTITY/VARIATION |  |  |  |  |  |           |    |      |                    |    |      |
| 1                                                        | 3609829           | 1 Part Paper Moore Business # 201P       |              |                            |          |                |                 |      |        |  | 2                  |  |  |  |  |  | KIT CHECK | BY | DATE | INSTALLATION CHECK | BY | DATE |
| 2                                                        | 3609828           | Ribbon, Line Printer 9" x 28 yards Nylon |              |                            |          |                |                 |      |        |  | 2                  |  |  |  |  |  |           |    |      |                    |    |      |
| 3                                                        | None              | Cleaning Kit                             |              |                            |          |                |                 |      |        |  | 1                  |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
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|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
|                                                          |                   |                                          |              |                            |          |                |                 |      |        |  |                    |  |  |  |  |  |           |    |      |                    |    |      |
| TITLE                                                    | LP01 SOFTWARE KIT |                                          |              | ASSY. NO.                  | SHEET OF | SIZE CODE A SL | NUMBER LP01-0-1 | REV. | ECC NO |  |                    |  |  |  |  |  |           |    |      |                    |    |      |

DEC FORM NO.  
DRA 120

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|                                                                                |                                                                                                                              |        |      |              |         |      |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------|------|--------------|---------|------|
| DIGITAL EQUIPMENT CORPORATION<br>MAYNARD, MASSACHUSETTS                        |                                                                                                                              |        |      |              |         |      |
| ENGINEERING SPECIFICATION                                                      |                                                                                                                              |        |      | DATE 8/27/70 |         |      |
| TITLE PRODUCTION TEST PROCEDURE FOR THE LP01 (DATA PRODUCTS 2310 LINE PRINTER) |                                                                                                                              |        |      |              |         |      |
| REVISIONS                                                                      |                                                                                                                              |        |      |              |         |      |
| REV                                                                            | DESCRIPTION                                                                                                                  | CHG NO | ORIG | DATE         | APPD BY | DATE |
|                                                                                |                                                                                                                              |        |      |              |         |      |
| 1.0                                                                            | SCOPE                                                                                                                        |        |      |              |         |      |
| 1.1                                                                            | This specification outlines the procedure to be used for acceptance of the LP01 which has the following option designations: |        |      |              |         |      |
| 1.1.1                                                                          | LP01 FA                                                                                                                      |        |      |              |         |      |
| 1.1.2                                                                          | LP01 FB                                                                                                                      |        |      |              |         |      |
| 1.1.3                                                                          | LP01 HA                                                                                                                      |        |      |              |         |      |
| 1.1.4                                                                          | LP01 HB                                                                                                                      |        |      |              |         |      |
| 2.0                                                                            | APPLICABLE DOCUMENTS                                                                                                         |        |      |              |         |      |
| 2.1                                                                            | LP01 print set                                                                                                               |        |      |              |         |      |
| 2.2                                                                            | LP08 print set                                                                                                               |        |      |              |         |      |
| 2.3                                                                            | Digital Equipment Corporation "Standard Vibration Test on Flip Chip Systems" (Q.C. # 1022).                                  |        |      |              |         |      |
| 2.4                                                                            | LP08 Line Printer Test, MAINDEC-8/I-D2AA                                                                                     |        |      |              |         |      |
| 2.5                                                                            | DEC Manual (LP08 Interface)                                                                                                  |        |      |              |         |      |
| 2.6                                                                            | Data Products Line Printer Manual                                                                                            |        |      |              |         |      |
| 3.0                                                                            | TEST EQUIPMENT                                                                                                               |        |      |              |         |      |
| 3.1                                                                            | Any family of 8 computer                                                                                                     |        |      |              |         |      |
| 3.2                                                                            | Teletype model 33 ASR                                                                                                        |        |      |              |         |      |
| 3.3                                                                            | Moore Business Form # 911612 (6 part paper - 9 7/8" X 11")                                                                   |        |      |              |         |      |
| 3.4                                                                            | Moore Business Form # 201B (1 part paper - 9 7/8" X 11")                                                                     |        |      |              |         |      |
| 3.5                                                                            | Line Printer Control (7006716)                                                                                               |        |      |              |         |      |
| 3.6                                                                            | 3 BC08 I/O Cables                                                                                                            |        |      |              |         |      |
| 3.7                                                                            | Data Products Interface Cable (7006606)                                                                                      |        |      |              |         |      |
| 4.0                                                                            | PROCEDURE (Using 1 part paper)                                                                                               |        |      |              |         |      |
| 4.1                                                                            | Turn main breaker off.                                                                                                       |        |      |              |         |      |
| 4.2                                                                            | Attach interface cable and install ribbon.                                                                                   |        |      |              |         |      |
| 4.2.1                                                                          | Turn static eliminator on. (Newer model turns on automatically)                                                              |        |      |              |         |      |
| 4.3                                                                            | Place paper in printer so that it covers the hammers and the bottom paper out switch but not the top paper out switch.       |        |      |              |         |      |
| ENG                                                                            | APPD                                                                                                                         | SIZE   | CODE | NUMBER       | REV     |      |
|                                                                                |                                                                                                                              | A      | SP   | LP01-0-2     |         |      |

DEC FORM NO.  
DRA 107

SHEET 1 OF 2

|                                                                                                                                                                                                                                                                                        |      |      |          |                    |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|----------|--------------------|--|
| ENGINEERING SPECIFICATION                                                                                                                                                                                                                                                              |      |      |          | CONTINUATION SHEET |  |
| TITLE PRODUCTION TEST PROCEDURE FOR THE LP01 (DATA PRODUCTS 2310 LINE PRINTER)                                                                                                                                                                                                         |      |      |          |                    |  |
| 4.3.1 Turn breaker on, "READY" light should not turn on, and "PAPER FAULT" light should be lit.                                                                                                                                                                                        |      |      |          |                    |  |
| 4.4 Turn breaker off, and place paper in printer so that it covers the hammers and the top paper out switch, but not the bottom paper out switch.                                                                                                                                      |      |      |          |                    |  |
| 4.4.1 Turn breaker on, "READY" light should not turn on, and "PAPER FAULT" light should be lit.                                                                                                                                                                                        |      |      |          |                    |  |
| 4.5 Open drum gate, remove paper; press "TOP OF FORM" switch and place in a continuous form (line up perforation with arrow).                                                                                                                                                          |      |      |          |                    |  |
| 4.5.1 If necessary, adjust right tractor for proper paper width and tension.                                                                                                                                                                                                           |      |      |          |                    |  |
| 4.6 Close drum gate, "READY" should light within 15 seconds. Check "TOP OF FORM" and "PAPER STEP" switches for correct operation.                                                                                                                                                      |      |      |          |                    |  |
| 4.6.1 Press "ON LINE" switch. Check "TOP OF FORM" and "PAPER STEP" switch. Both switches should not operate.                                                                                                                                                                           |      |      |          |                    |  |
| 4.6.2 Press "ON LINE" switch and "MASTER CLEAR" switch. Check "TOP OF FORM" and "PAPER STEP" switch. Both switches should operate.                                                                                                                                                     |      |      |          |                    |  |
| 4.7 Press "ON LINE" switch and start MAINDEC-8/I-D2AA, beginning with part 1 of test 1, while accomplishing 4.7.1.                                                                                                                                                                     |      |      |          |                    |  |
| 4.7.1 Adjust vertical paper adjustment vernier with test running.                                                                                                                                                                                                                      |      |      |          |                    |  |
| 4.8 Stop diagnostic from running; press "PRINT INHIBIT" switch, press "ON LINE" switch, restart diagnostic from part 1 of test 1.                                                                                                                                                      |      |      |          |                    |  |
| 4.8.1 "PRINT INHIBIT" light should turn on and the diagnostic run as before. Continue for 1 minute.                                                                                                                                                                                    |      |      |          |                    |  |
| 4.8.2 Turn "PRINT INHIBIT" switch off, press "ON LINE" switch.                                                                                                                                                                                                                         |      |      |          |                    |  |
| 4.9 Run test 3 and vibrate modules to Digital Equipment Corporation specifications (Q.C. # 1022)                                                                                                                                                                                       |      |      |          |                    |  |
| 4.9.1 Check printout for errors.                                                                                                                                                                                                                                                       |      |      |          |                    |  |
| 5.0 DURABILITY TEST                                                                                                                                                                                                                                                                    |      |      |          |                    |  |
| 5.1 Excluding part 1 of test 1, run all parts of MAINDEC-8/I-D2AA for eight hours using single part paper at nominal line voltage of 115 volts for the 60 cycle printers, and 220 volts for the 50 cycle printers. Obtain a printout sample using both single part and six part paper. |      |      |          |                    |  |
| 5.2 Make sure right tractor is adjusted and set "NUMBER OF COPIES" lever to the correct position for the two types of paper being used.                                                                                                                                                |      |      |          |                    |  |
| 5.3 Inspect all printout for errors.                                                                                                                                                                                                                                                   |      |      |          |                    |  |
|                                                                                                                                                                                                                                                                                        | SIZE | CODE | NUMBER   | REV                |  |
|                                                                                                                                                                                                                                                                                        | A    | SP   | LP01-0-2 |                    |  |

DEC FORM NO.  
DRA 108

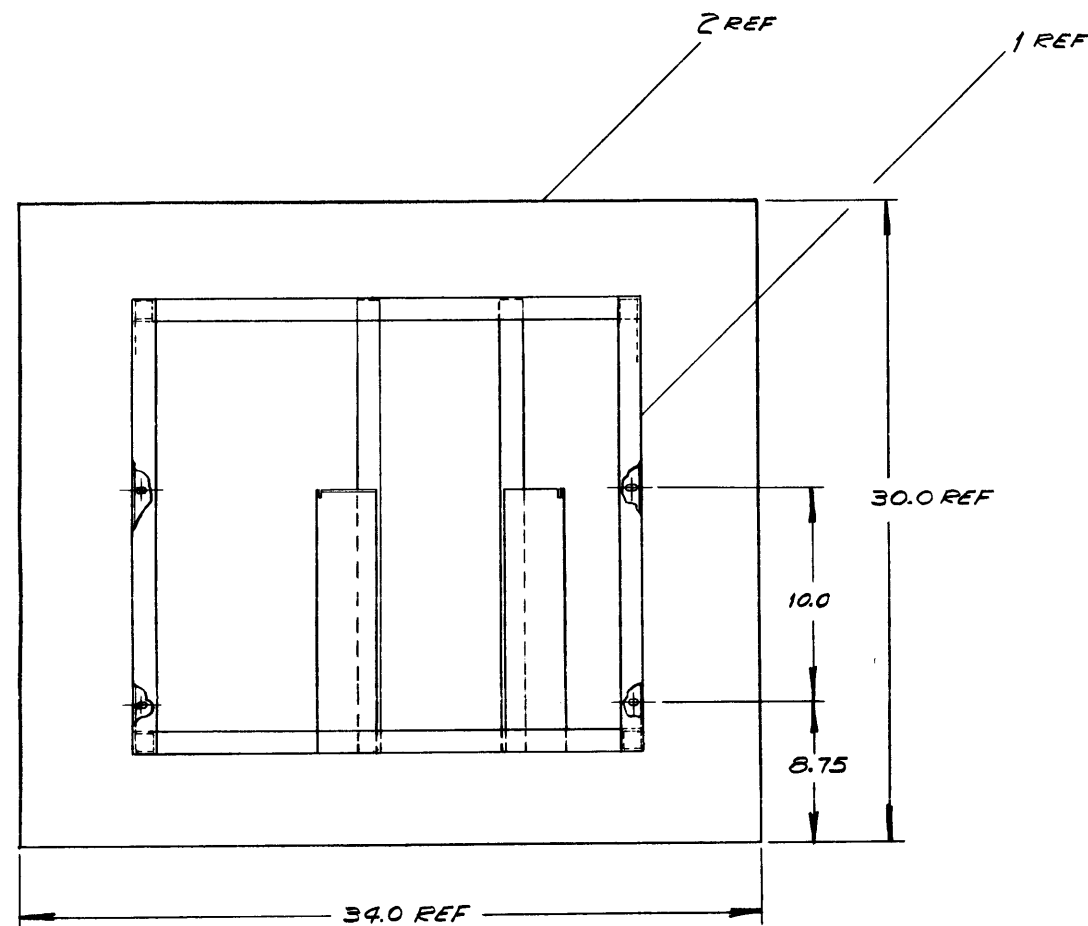
SHEET 2 OF 2



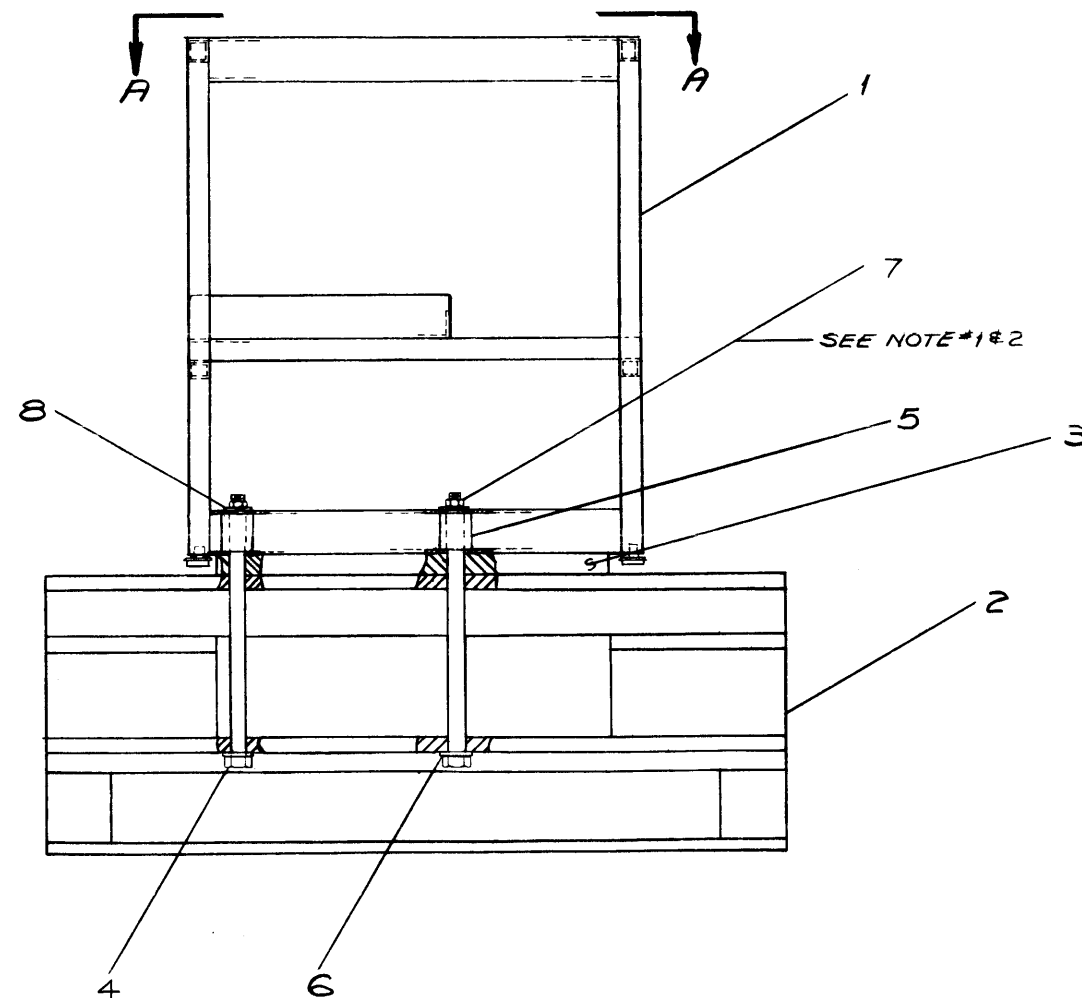
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# NOTES:

1. TIGHTEN BOLTS UNTIL ETHAFOAM BLOCKS ARE COMPRESSED BY 1/16 OR 1/8 INCH
2. BOLT TO COME UP FROM BOTTOM WITH THREADS ON TOP SIDE OF FRAME.



VIEW A-A



FIRST USED ON OPTION/MODEL  
LP08

DO NOT SCALE DRAWING  
UNLESS OTHERWISE SPECIFIED  
DIMENSION IN INCHES  
TOLERANCES  
DECIMALS FRACTIONS ANGLES  
± .005 ± 1/64 ± 0°30'  
FINAL SURFACE QUALITY  
REMOVE BURRS AND BREAK SHARP CORNERS  
MATERIAL  
FINISH

| QTY.             | DESCRIPTION | PART NO.           | ITEM NO. |
|------------------|-------------|--------------------|----------|
| PARTS LIST       |             |                    |          |
| DRAWN            | DATE        | 2-18-70            |          |
| CHECKED          | DATE        | 2-17-70            |          |
| ENG.             | DATE        | 2-11-70            |          |
| PROJ. ENG.       | DATE        | 2-18-70            |          |
| PROD.            | DATE        | 2-11-70            |          |
| NEXT HIGHER ASSY |             | D-DI-LP08-0-1      |          |
| SCALE            | 1/4         |                    |          |
| SHEET            | 1 OF 1      |                    |          |
| TITLE            |             | LP01 FRAME TO SKID |          |
| SIZE CODE        |             | DAD                |          |
| NUMBER           |             | 7505037-0-0        |          |
| REV              |             | D                  |          |

| REV. | CHANGE NO. | REV. |
|------|------------|------|
| A    | LP08-00010 |      |
| B    | LP08-00013 |      |
| C    | LP01-00002 |      |
| D    | LP01-00005 |      |
| E    | LP01-00006 |      |
| F    | LP01-00007 |      |
| G    | LP01-00008 |      |
| H    | LP01-00009 |      |
| I    | LP01-00010 |      |
| J    | LP01-00011 |      |
| K    | LP01-00012 |      |
| L    | LP01-00013 |      |
| M    | LP01-00014 |      |
| N    | LP01-00015 |      |
| O    | LP01-00016 |      |
| P    | LP01-00017 |      |
| Q    | LP01-00018 |      |
| R    | LP01-00019 |      |
| S    | LP01-00020 |      |
| T    | LP01-00021 |      |
| U    | LP01-00022 |      |
| V    | LP01-00023 |      |
| W    | LP01-00024 |      |
| X    | LP01-00025 |      |
| Y    | LP01-00026 |      |
| Z    | LP01-00027 |      |





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DIGITAL EQUIPMENT CORPORATION  
MAYNARD MASSACHUSETTS

PACKAGING INSTRUCTION

TITLE Line Printer LP01

REV: \_\_\_\_\_ DATE: \_\_\_\_\_

Material Requirements

| Quantity | Identification No. | Purchase Specification | Description           |
|----------|--------------------|------------------------|-----------------------|
| 1        | 17-340230025800-0  | 99-05021               | Outer shipping carton |
| 4        |                    |                        | Steel corner supports |
| A/R      |                    |                        | Tri-wall clips        |
| 2        |                    |                        | Straps                |

Packaging Instructions

| Step | Procedure                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.   | If desired, temporarily nail two cleats to the shipping skid as shown in Figure 1.                                                              |
| 2.   | Place the outer shipping carton over the Line Printer and let it rest on the cleats.                                                            |
| 3.   | Fasten the shipping carton to the skid using Tri-wall clips, spaced approximately six inches apart.                                             |
| 4.   | Install four steel corner supports on top of the shipping carton and secure the carton to the skid by strapping the outer carton in two places. |
| 5.   | Remove the two cleats.                                                                                                                          |

ENG J. W. Lawrence

APPD J. W. Lawrence

SIZE  
A

CODE  
PI

NUMBER  
3700016-0-0

DEC 8-1031

SHEET 1 OF 2

PACKAGING INSTRUCTION

CONTINUATION SHEET

TITLE Line Printer LP01

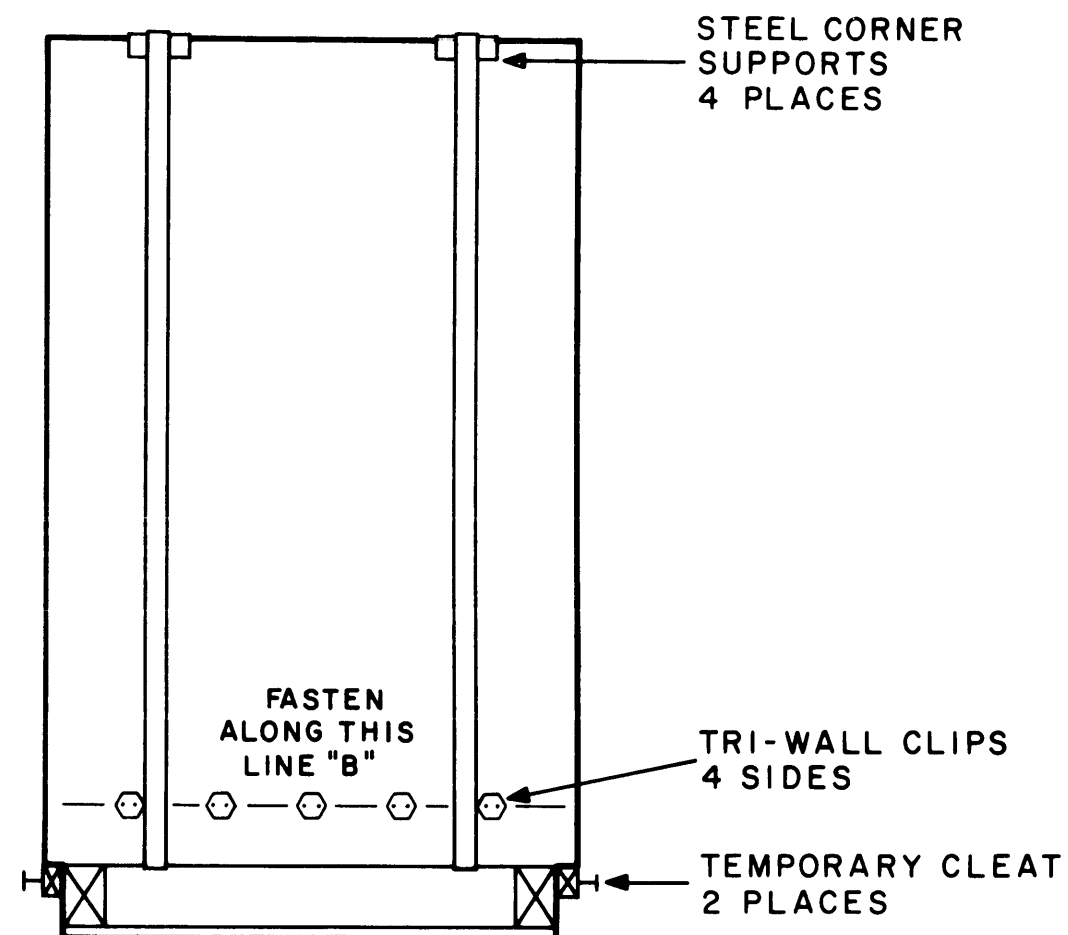


Figure 1

MI-0054

J. W. Lawrence

J. W. Lawrence

SIZE  
A

CODE  
PI

NUMBER  
3700016-0-0

DEC 8-1031

SHEET 2 OF 2

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**DIGITAL EQUIPMENT CORPORATION**  
**MAYNARD MASSACHUSETTS**

**PACKAGING INSTRUCTION**

**TITLE** Line Printers 30-09766, 30-09767,  
30-09768 and 30-09769

**REV:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

| Material Requirements |                    |                         |                                               |
|-----------------------|--------------------|-------------------------|-----------------------------------------------|
| Quantity              | Identification No. | Purchase Specifications | Description                                   |
| 1                     |                    | C-IA-7605824-0-0        | Shipping skid                                 |
| 1                     | 3-340230023400-0   | 9905022                 | Stitched sleeve and telescoping cap           |
| 4                     |                    |                         | 1/4-20x8 lg. hex head bolts                   |
| 4                     |                    | 9007897                 | 1/4-20 Nylok hex nuts                         |
| 4                     |                    | 9008858                 | 1-1/2 O.D. 3/8 I.D. x 1/16 thick flat washer. |
| 2                     |                    |                         | Steel corner support straps                   |
| A/R                   |                    |                         | Tri-wall clips                                |

**Packaging Instructions**

Step

Procedure

1. Secure the Line Printer to the skid using the four bolts, nuts, and washers as shown in Figure 1.
2. Place the Stitched Sleeve as shown in Figure 2 and fasten it to the skid with Tri-wall clips placed approximately 6 inches apart from each other.
3. Place the telescoping cap on the sleeve and strap it in two places using steel corner supports on the cap, as shown in Figure 2.

ENG

W. Lawrence

APPD

W. Lawrence

SIZE

A

CODE

P

NUMBER

3700015-0-0

DEC 8-1031

SHEET 1 OF 2

**PACKAGING INSTRUCTION**

**CONTINUATION SHEET**

**TITLE** Line Printers 30-09766, 30-09767, 90-09768 and 30-09769

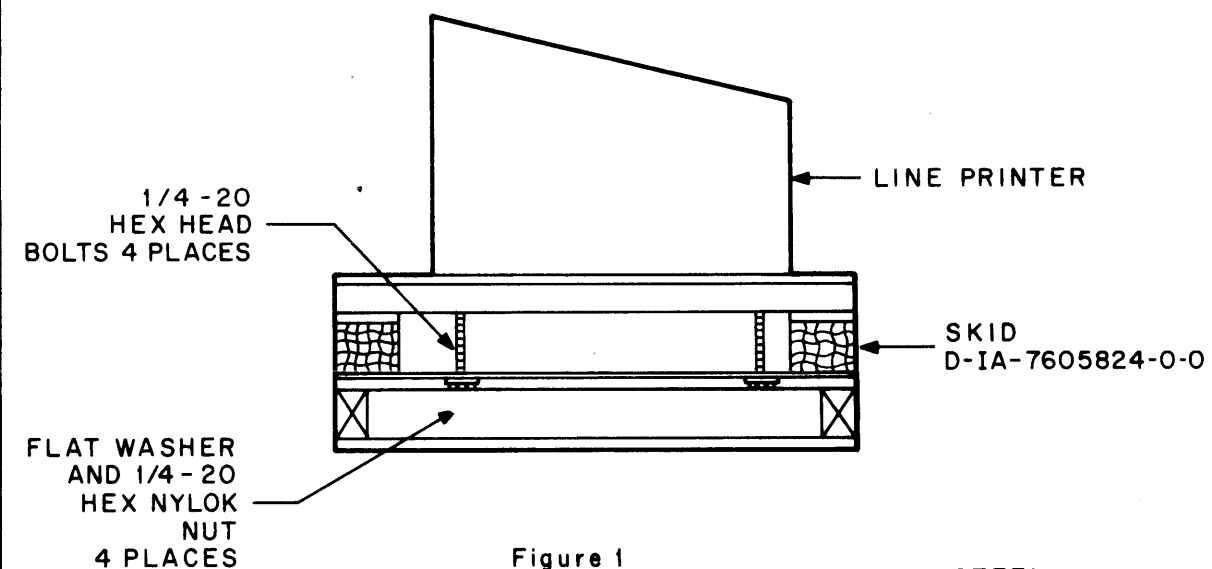


Figure 1

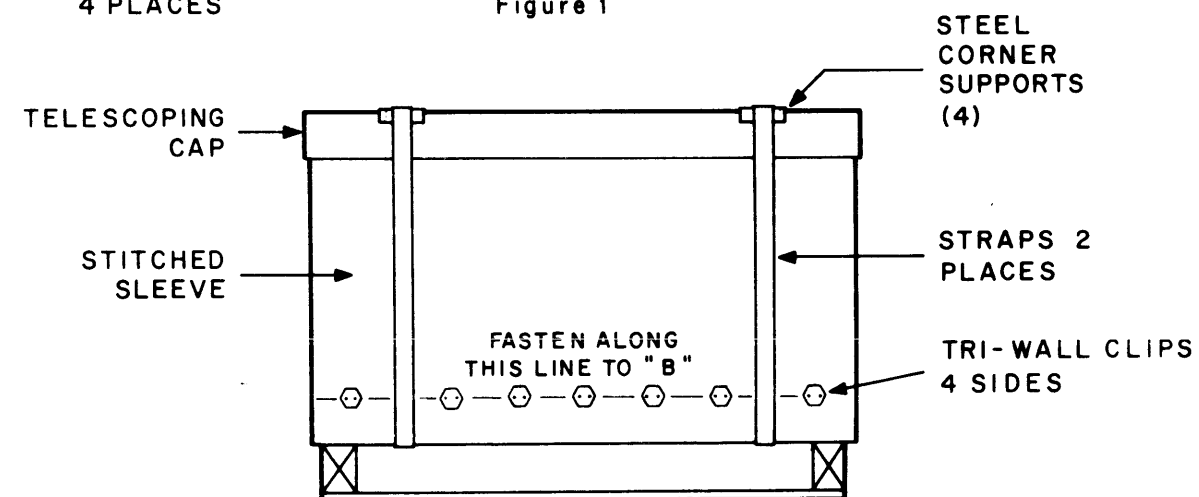


Figure 2

MI-0055

SIZE

A

CODE

P

NUMBER 37 00015-0-0

DEC 8-1031

SHEET 2 OF 2