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FIELD MAINTENANCE PRINT SET

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DESCRIPTION

MS11-P MEMORY (MS743)
PARTS LIST DATA BASE
MS11-P MEMORY
ETCH CUT DRAWING
MS11-P MEMORY
MS11-P MEMORY
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DRAWING DIRECTORY (MS11-P)
BLOCK DIAGRAM (MS11-P)
TIMING DIAGRAM (MS11-P)
FLOW DIAGRAM (MS11-P)

UNIT VARIATIONS COVERED BY THIS PRINT SET

MS11-PB

MS11-P
**Field Maintenance
Print Set**

**Digital Equipment
Corporation**
MP01477

REVISIONS	REV	A		
	CHG. NO.	ORIGINATED		
	DATE	9/28/82		
	SHEET 1 OF 1			
USED ON OPTION/MODEL		ORN.	DATE	TITLE: MS11-P MEMORY
11/44		P. BOSSMAN	13 AUG 82	
11/24		CHK'D	DATE	
		P. BOSSMAN	13 AUG 82	
		PROJ. ENG.	DATE	SIZE B COR TC NUMBER MS11-P-1 REV. A
		James H. Harte	24 Sept 82	
		FIELD SERV.	DATE	DIST.
		Serge Harte	24 Sept 82	
		digital		

DRS 124

ML2

REV. A
NUMBER MS11-P-1
SIZE CODE B TC

AUTOMATED BY PRTLST.3P(44)

P A R T S L I S T

SHEET A2 OF A4

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION			REFERENCE DESIGNATOR
					BC	BF	BH	
31	31		1317494-00	22.10 K .25 W 1.0 % RN55D-F10	2	2	2	R20,R21
32	32		1505321-00	DEC4258 PNP 200MW SI 12 30 M	2	2	2	Q1,Q2
33	33		1610033-00	DELAY= 10-100NS,10TAPS	1	1	1	E10
34	34		1909705-00	DEC 8881 NAND GATE-QUAD 2IN 0	1	1	1	E27
35	35		1910534-00	74S04 INVERTER GATE-HEX 1I	1	1	1	E12
36	36		1910536-00	74S10 NAND GATE-TRIPLE 3IN	1	1	1	E5
37	37		1910540-00	74S22 NAND GATE-DUAL 4INPU	1	1	1	E3
38	38		1910542-00	74S64 A-O-I GATE 4-2-3-2	2	2	2	E9,E17
39	39		1910544-00	74S74 FF-D DUAL,EDGE TRIGG	1	1	1	E6
40	40		1910546-00	74S140 NAND GATE-DUAL 4INPU	1	1	1	E4
41	41		1910547-00	74S153 MUX 1 OF 4 (DUAL)	4	4	4	E49,E50,E55,E56
42	42		1910549-00	74S158 MUX 1 OF 2 (QUAD)	1	1	1	E45
43	43		1910550-00	74S174 FF-D HEX	1	1	1	E40
44	44		1911469-00	DEC 8640 RECEIVER,BUS,QUAD,U	2	2	2	E1,E54
45	45		1911579-00	8641 TRANSCEIVER,BUS,QUA	4	4	4	E7,E13,E18,E22
46	46		1911944-00	555CN TIMER,FUNCT.BLOCK	1	1	1	E47
47	47		1911983-00	74S133 NAND GATE-POSITIVE 1	1	1	1	E37
48	48		1912388-00	74S02 NOR GATE-QUAD 2IN,PO	2	2	2	E2,E23
49	49		1912799-00	LS00 NAND-GATE-QUAD 2IN,P	1	1	1	E35
50	50		1912803-00	LS04 INVERTER GATE,HEX	1	1	1	E11
51	51		1912820-00	LS51 A-O-I GATE 2-WIDE 2I	1	1	1	E32
52	52		1912824-00	LS74 FF-D DUAL,EDGE TRIGG	1	1	1	E30
53	53		1912828-00	LS85 COMPARATOR,4BIT MAGN	1	1	1	E31
54	54		1912834-00	LS112 FF-JK,DUAL,EDGE TRIG	1	1	1	E8
55	55		1913340-00	74S32 OR GATE-QUAD 2IN	1	1	1	E26
56	56		1913670-00	74S373 LATCH 8BIT TRASP TR	3	3	3	E14,E16,E19
57	57		1913777-00	LS240 DRIVER,LINE,OCTAL,T	1	1	1	E43
58	58		1913887-00	74S258 MUX 1 OF 2(QUAD)TRI	1	1	1	E21
59	59		1914451-00	74LS393 COUNTER,BINARY,4BIT	2	2	2	E51,E57
60	60		1915219-00	LS373 FF-D OCTAL-TRANSPARE	2	2	2	E44,E46
61	61		1918822-00	2960 ERROR DETECTOR/CORRE	1	1	1	E15
62	62		1919004-00	DC 750 REGISTER,ADDRESS	1	1	1	E24
63	63		1919015-00	DC 021 BUS TRANSCEIVER,20PI	3	3	3	E36,E42,E48
64	64		1919095-00	2966PC DYNAMIC MEMORY DRIV	2	2	2	E61,E64
65	65		2118467-01	8264-20 RAM 64K X1,200NS 1	176	-	-	E100-E107,E110-E117,E120-E127, CONT E130-E137,E140-E147,E150-E157, CONT E160-E167,E170-E177,E180-E187, CONT E190-E197,E200-E207,E210-E217, CONT E220-E227,E230-E237,E240-E247, CONT E250-E257,E260-E267,E270-E277, CONT E280-E287,E290-E297,E300-E307, CONT E310-E317 E59,E60,E6 ,E63,E65
66	66		1919635-01	2965 DRIVER,DYNAMIC RAM	5	5	5	W1-W4
67	67		9000024-01	EYELET,ROLLED 0.1210DX0.192	12	12	12	R10
68	68		9009185-00	JUMPER, WIRE, INSULATED, BLACK B	4	4	4	E41
69	69		1302388-00	2.0 K .25 W 5.0 % CF	1	1	1	XE24,XE15
70	70		1910544-01	74S74-60GG-D DUAL,EDGE TRIG	1	1	1	
71	71	2 EACH IC	1215006-06	SKT,IC 24PIN DIP TIN SOLD	4	4	4	

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							MS11-P MEMORY				M8743-BA-DBP	A

LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION	BC	BF	BH	REFERENCE DESIGNATOR
72	1219911-01	SKT,IC	24PIN DIP	4	4			XE20,XE25,XE29,XE34
73	2306102-00	D2-02		1	1	1		E20
74	2306202-00	D2-02		1	1	1		E25
75	2306302-00	D2-02		1	1	1		E29
76	2306402-00	D2-02		1	1	1		E34
77	2308681-00	B1-03		1	1	1		E33
78	2308781-00	B1-03		1	1	1		E39
79	2334401-00	A1-05		1	1	1		E58
80	2118470-01	4864-1	MOS RAM 64K X1,200	-	176	-		E100-E107,E110-E117,E120-E127, E130-E137,E140-E147,E150-E157, E160-E167,E170-E177,E180-E187, E190-E197,E200-E207,E210-E217, E220-E227,E230-E237,E240-E247, E250-E257,E260-E267,E270-E277, E280-E287,E290-E297,E300-E307, E310-E317
81	2118472-01	164-2	MOS RAM 64K X1,200	-	176	-		E100-E107,E110-E117,E120-E127, E130-E137,E140-E147,E150-E157, E160-E167,E170-E177,E180-E187, E190-E197,E200-E207,E210-E217, E220-E227,E230-E237,E240-E247, E250-E257,E260-E267,E270-E277, E280-E287,E290-E297,E300-E307, E310-E317
82	D-C	7A-MS02	CIRCUIT SCHEMATIC	REF	REF	REF		
83	D-C	7A-MS03	CIRCUIT SCHEMATIC	REF	REF	REF		
84	D-C	743-B4-MS04	CIRCUIT SCHEMATIC	REF	REF	REF		
85	D-CS-M8743-B4-MS05	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
86	D-CS-M8743-B4-MS06	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
87	D-CS-M8743-B4-MS07	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
88	D-CS-M8743-B4-MS08	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
89	D-CS-M8743-B4-MS09	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
90	D-CS-M8743-B4-MS10	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
91	D-CS-M8743-B4-MS11	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
92	D-CS-M8743-B4-MS12	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
93	D-CS-M8743-B4-MS13	CIRCUIT SCHEMATIC	CIRCUIT SCHEMATIC	REF	REF	REF		
94	9105740-55	WIRE(WRAP)	30AWG KYNAR UL14	A/R	A/R	A/R		

95 NOTE: M8742 IS THE PRIMARY VARIATION OF THE 512KX16 BITS SYSTEM (NOT A MODULE TYPE).
96 NOTE: M8743-BF IS A MODULE TYPE USING FUJITSU 64K MOS DEVICES.
97 NOTE: M8743-BF IS A MODULE TYPE USING HITACHI 64K MOS DEVICES.
98 NOTE: M8743-BH IS A MODULE TYPE USING NEC 64K MOS DEVICES.
99 NOTE: ON ITEM 1 USE 2 PER EACH IC
100 NOTE: THIS ASSEMBLY CONTAINS ITEMS SENSITIVE TO ELECTRO-STATIC DISCHARGE.

D	I	G	I	T	A	L	TITLE	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
							MS11-P MEMORY		K	PL	M8743-B4-DBP	A

AUTOMATED BY PRTLST.JP(11)

PARTS LIST

SHEET A4 OF A4

LINE ITEM DOCUMENT NUMBER

PART NUMBER

DESCRIPTION

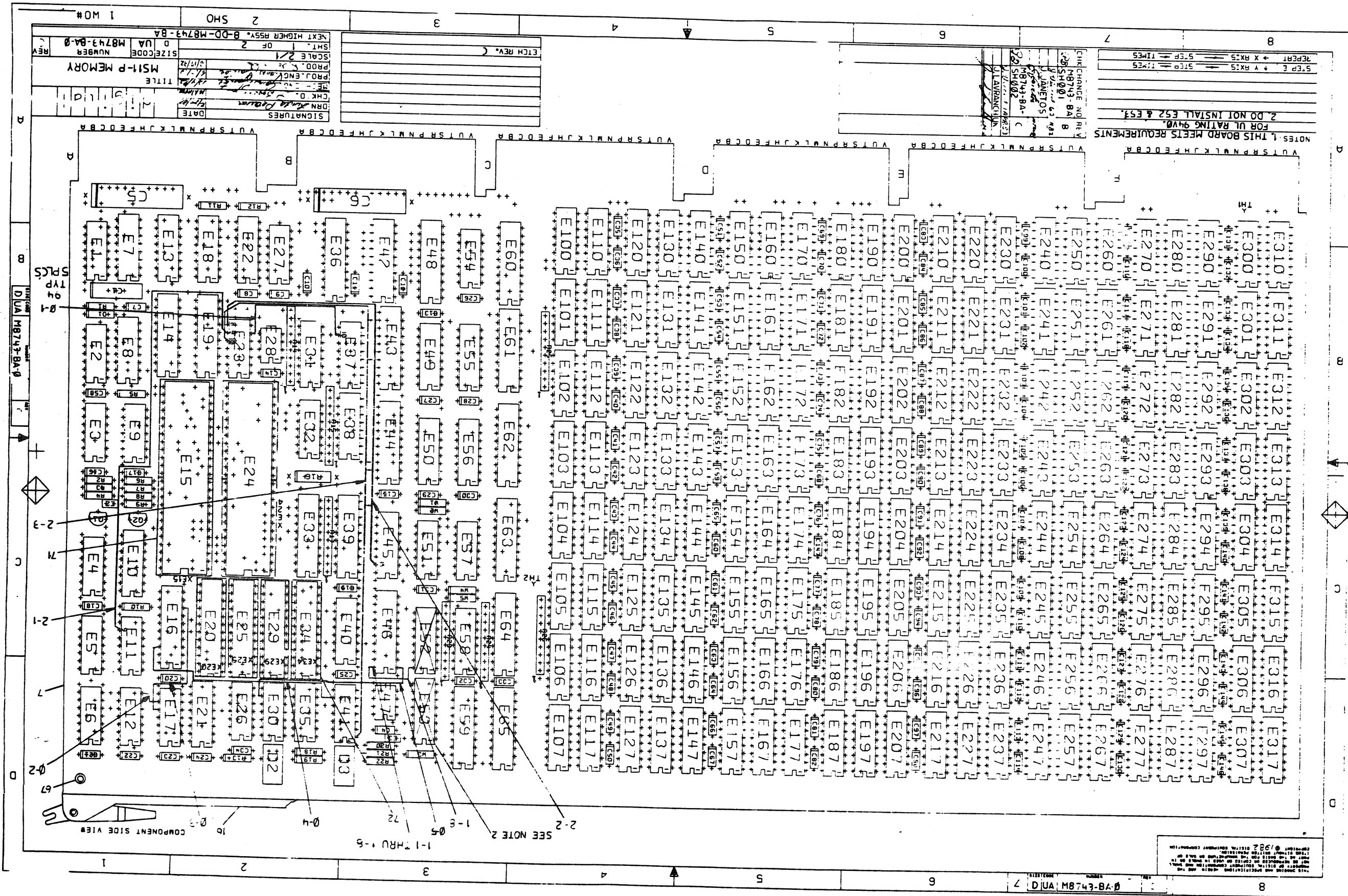
QTY PER VARIATION

BC BF BH

REFERENCE DESIGNATOR

101 NOTE: MAINTAIN ANTI-STATIC PROTECTION PROCEDURES PER DEC STD 067.

D	I	G	I	T	A	L	TITLE	MS11-P MEMORY	SECTION A OF A	SIZE	CODE	DOCUMENT NUMBER	REV
										K	PL	M8743-BA-DBP	A



1 MO# 2 SHO 3 4 5 6 7 8

REV 1
DUA M8743-BA-0
MS11-P MEMORY

DATE 1/1/72
BY J. J. J.
CHK D. J. J.
DRN J. J. J.

SIGNATURES

PROJ. ENCL. 1/1/72
SCALE 2/1
SMT. 1 OF 2
NEXT HIGHER ASSY. B-DD-M8743-BA

NOTES: 1. THIS BOARD MEETS REQUIREMENTS FOR UL RATING 94V0.
2. DO NOT INSTALL E52 & E53.

STEP 1: X AXIS
STEP 2: Y AXIS
STEP 3: TIMES

CHANGE NO. REV. B
M8743-BA-0
J. J. J.
J. J. J.
J. J. J.

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0-48-84284M 2

FIRST RELEASE

WIRE ADDS:

SIDE 1:

0-1: ADD WIRE FROM E37-10 TO E23-6.

0-2: ADD WIRE FROM E12-7 TO E17-9.

0-3: ADD WIRE FROM E17-10 TO E16-8.

0-4: ADD WIRE FROM E41-9 TO E16-18.

0-5: ADD WIRE FROM E30-9 TO E46-1.

0-6: ADD WIRE FROM E46-20 TO LOCATION E52-16.

ECO *M8743-BA-SH001

REWORK INSTRUCTIONS:

PROCEDURE:

1-1. CUT PIN 20 ON E46 CLOSE TO BOARD.

1-2. BEND PIN 20 UP TO 45° ANGLE FROM VERTICAL.

1-3. REMOVE CUT PIN FROM HOLE.

1-4. FILL HOLE WITH SOLDER.

1-5. MAKE SECOND CUT, REMOVE ANOTHER 1/16".

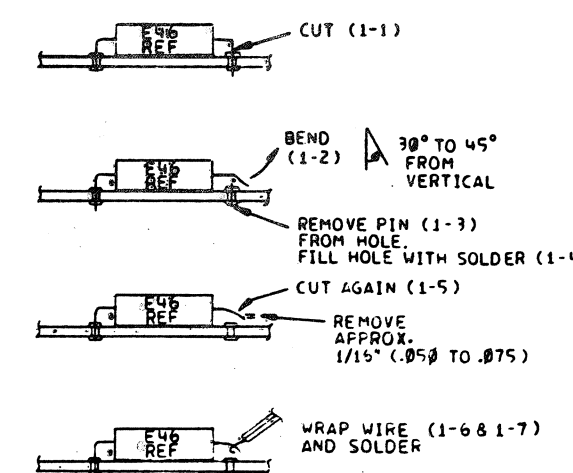
1-6. PREPARE ECO WIRE.

1-7. WRAP ECO WIRE ON STUB OF PIN 20 & SOLDER TO PIN 20.

1-8. PLACE OTHER END OF WIRE IN HOLE (PIN POSITION 16 OF E52 - THIS IS AN EMPTY HOLE), SOLDER WIRE, DRESS AND GLUE WIRE.

1-9. TEST: 2224 DC TEST, 25°.

M8743-BA REWORK INSTRUCTIONS:



ECO *2 REWORK:

WIRE ADDS:

2-1. ADD WIRE FROM E11-9 TO E23-9.

2-2. ADD WIRE FROM E45-15 TO E23-8.

2-3. ADD WIRE FROM E23-10 TO E-1-1.

REVISIONS		
CHK	CHANGE NO.	REV.

MS11-P MEMORY

SHEET 2 OF 2

SHO 1

SIZE CODE

D UA M8743-BA-0

NUMBER

REV. C