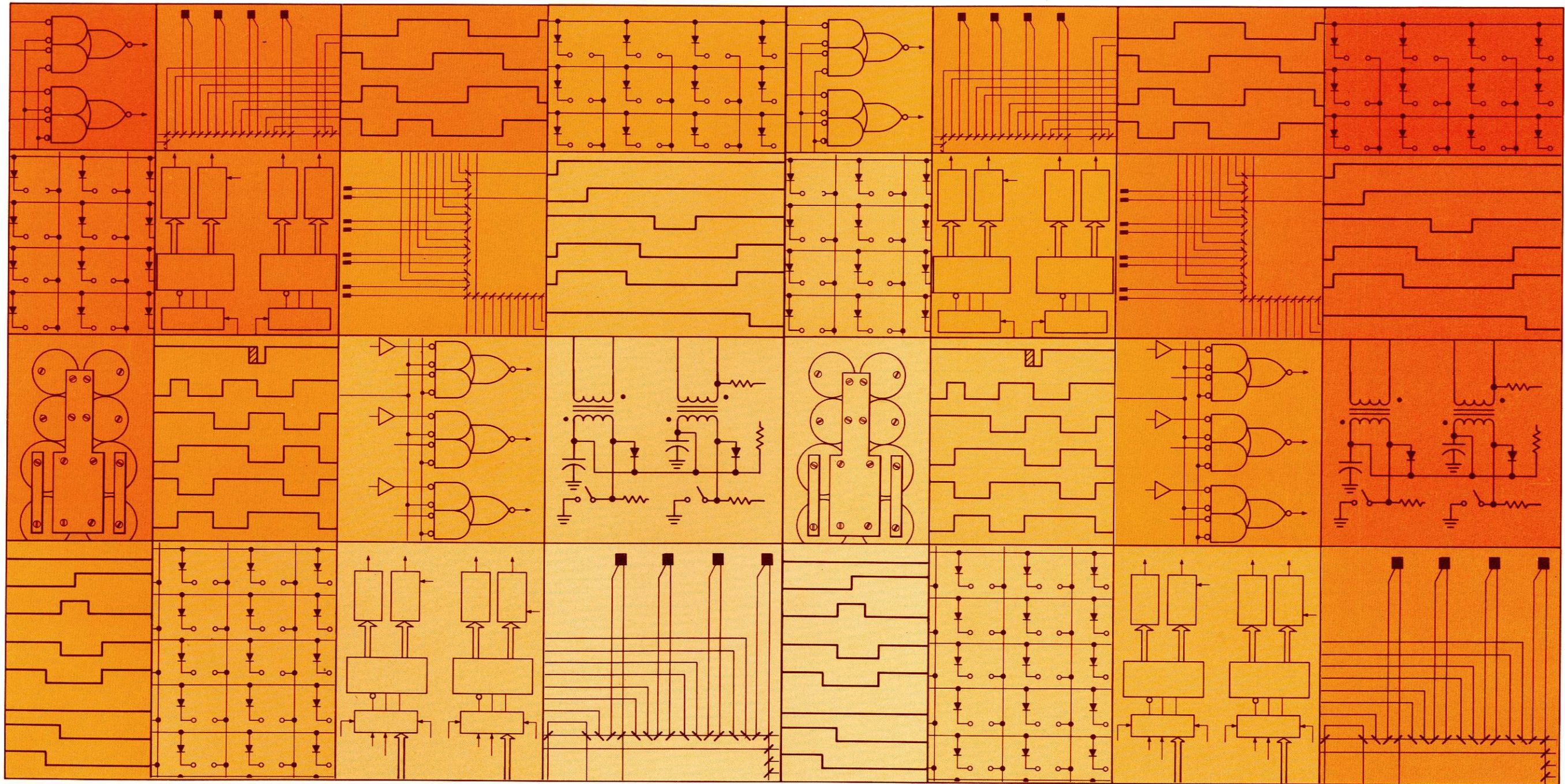


pdp8/e

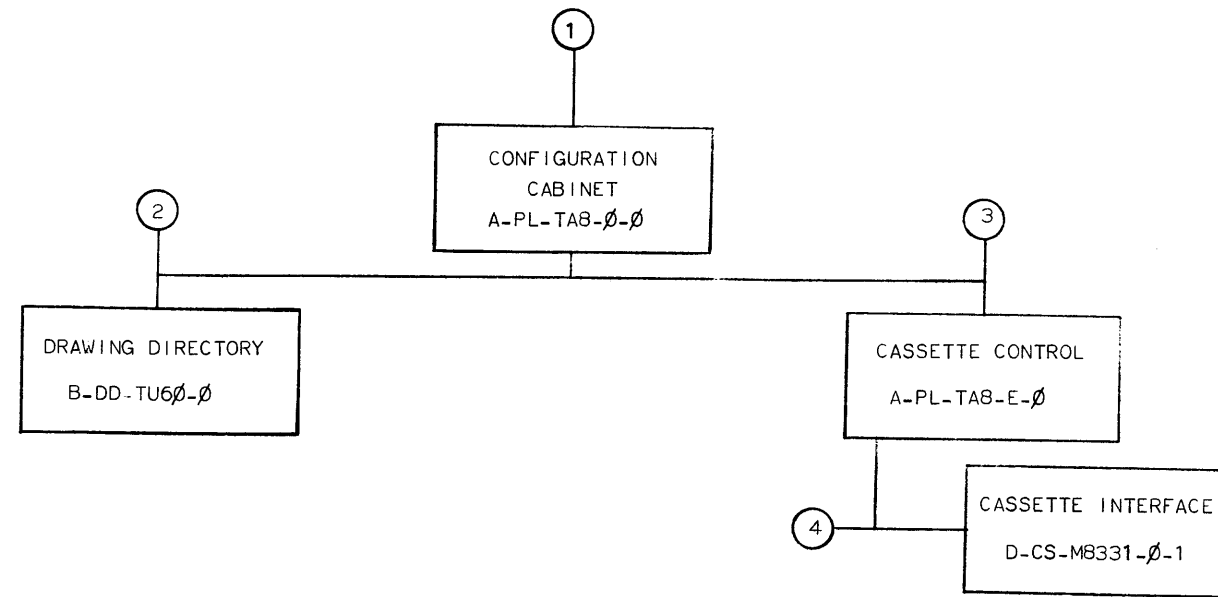
pdp8/f & pdp8/m

TA8-~~ø~~
cassette interface
engineering drawings



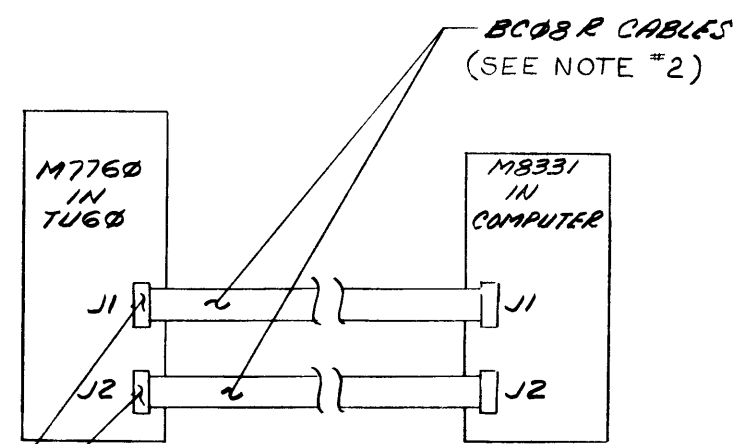
digital

TA8-~~Ø~~
cassette interface
engineering drawings

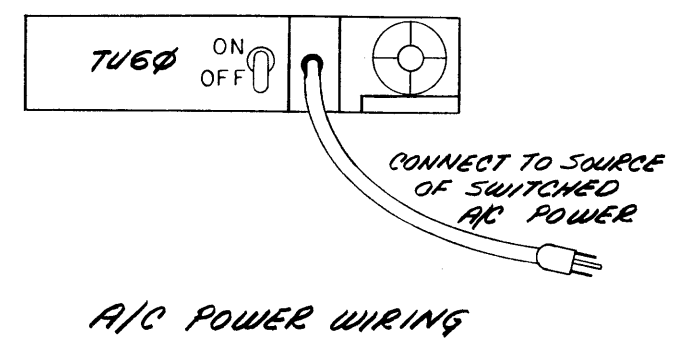


TITLE	SIZE	CODE	NUMBER	REV
CASSETTE SYSTEM (TAB-E)	B	DD	TAB-Ø	B

...are the prep... shall not be... used in whole or in part as... without... 1973



- NOTES:**
1. INSTALL CONNECTOR SO THE LETTERING ON THE CONNECTOR FACES DOWN.
 2. ON EACH END OF CABLE, LABEL J1 OR J2 AND "THIS SIDE UP" AS REQUIRED.



REV	A
DATE	1-15-73
BY	L. NARHI
REV	B
DATE	5-24-73
BY	L. NARHI

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TAB-E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	CHK'D.	DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS .XXX = .005 .XX = .02 .X = .1	ANGLES ±0° 30'	DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	ENG	DATE	TITLE POWER WIRING AND CABLE CONFIGURATION (TA8-E)	
MATERIAL	PROJ. ENG	DATE		
FINISH	PROD.	DATE	SIZE CODE NUMBER REV C IC TA8-0-1 B	
	NEXT HIGHER ASSY.			
		SCALE NONE	SHEET 1 OF 1	

REV B
 NUMBER TA8-0-1
 SIZE CODE C IC

...are the prop
...and shall not be
...part as
...of items without
1973

NOTES:

1. ONE (1) M8331 (TAB-E) MODULE REQ'D FOR EACH TUGØ. FOR TWO (2) OR MORE TUGØ'S, CHANGE IOT CODES PER DRAWING D-C5-M8331-Ø-1 FOR EACH TUGØ BEYOND #1
2. TWO (2) BCØBR-1Ø CABLES REQ'D PER TUGØ.
3. ~~FOR TABLE-TOP TUGØ'S ONE (1) 7ØØ862Ø IS REQ'D PER TUGØ.~~

	TUGØ #6
	TUGØ #5
	TUGØ #4
	TUGØ #3
TUGØ #8	TUGØ #2
TUGØ #7	TUGØ #1
	COMPUTER PDP 8/E, FORM
	EXPANDER BOX

FRONT VIEW

REV.	A
TAB-00001	1-12-73
L. NARHI	
TAB-00002	2-29-73
L. NARHI	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TAB-E				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DN. CHK'D.	DATE DATE	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	ANGLES	ENG. PROJ. ENG.	DATE DATE	TITLE
.XXX = .005 .XX = .02 .X = .1	±0° 30'	PROD. N. D. Gray	DATE 9-5-72	CONFIGURATION, CABINET (TAB-E)
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	NEXT HIGHER ASSY.	SIZE	CODE	NUMBER
MATERIAL	9-01-TAB-Ø	C	AR	TAB-Ø-Ø
FINISH	SCALE NONE	SHEET	1	OF 1
		DIST.		

REV. B
NUMBER TAB-Ø-Ø
SIZE CODE C AR

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY	L. NARHI	CHECKED	SECTION
DATE	7/6/72	DATE	1
ENG	L. NARHI	PROD <i>M.D. (6/10/72)</i>	ISSUED SECT.
DATE	7/6/72	DATE <i>9/7/72</i>	1

QUANTITY / VARIATION

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION															
			TAB-AA	TAB-AB	TAB-BA	TAB-BB												
1	C-UA-BC08R-10-0	I/O CABLE (BC08R)	2	2	-	-												
2	D-IA-7008624-0-0	CABLE, CASSETTE DATA			1	1												
3	D-UA-TU60-AA-0	CASSETTE, DUAL DRIVE RACK MOUNTABLE, 115V	1	-	-	-												
4	D-UA-TU60-AB-0	CASSETTE, DUAL DRIVE RACK MOUNTABLE, 230V	-	1	-	-												
5	D-UA-TU60-BA-0	CASSETTE, DUAL DRIVE TABLE TOP, 115V				1												
6	D-UA-TU60-BB-0	CASSETTE, DUAL DRIVE TABLE TOP, 230V				1												
7	A-PL-TA8-E-0	CASSETTE CONTROL (M8331 FOR TU60)	1	1	1	1												

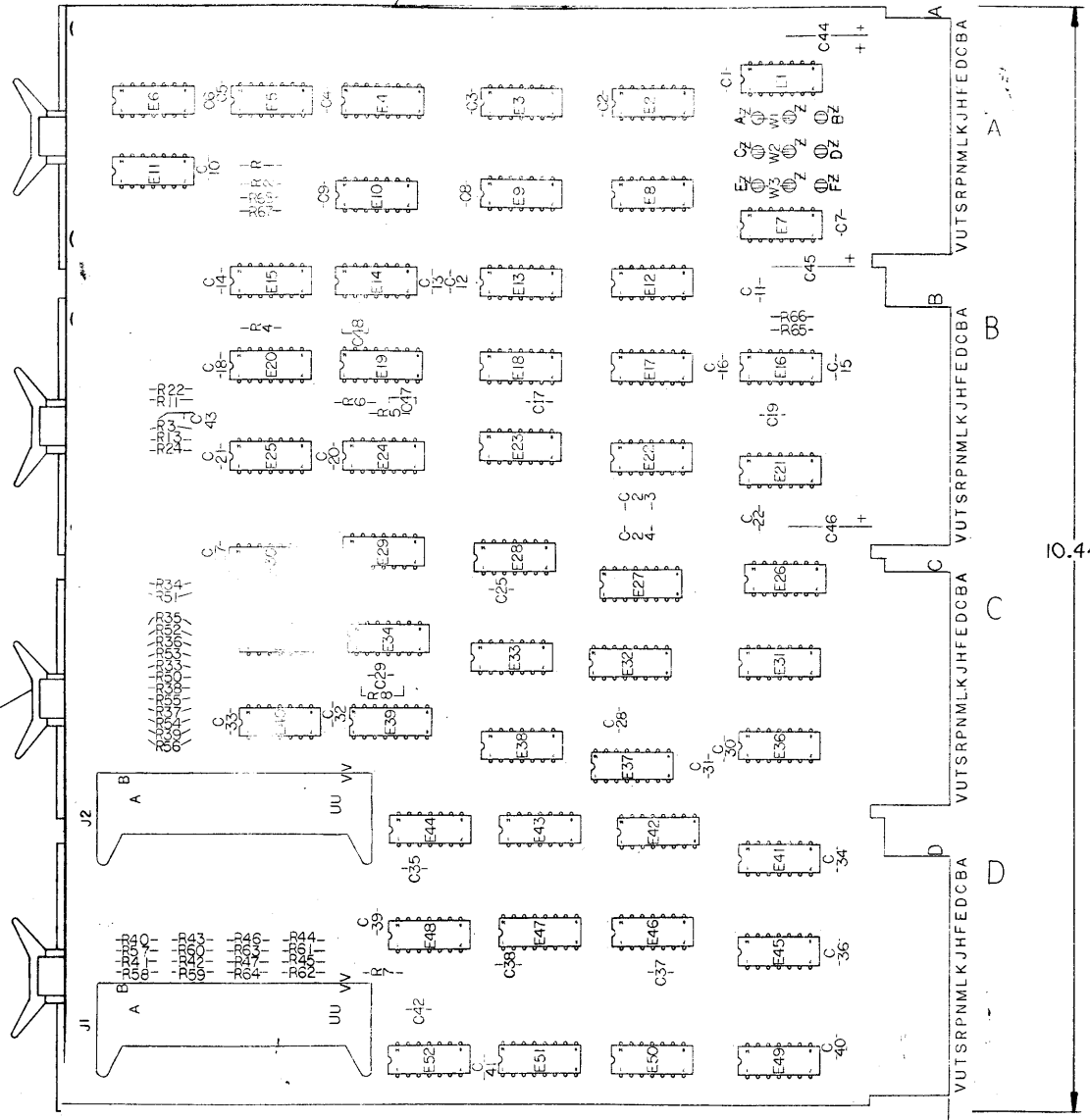
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO.
CONFIGURATION CABINET (TA8-E)	C-AR-TA8-0-0	A	PL	TA8-0-0	B	TAB-00002
SHEET 1 OF 1		DIST.				

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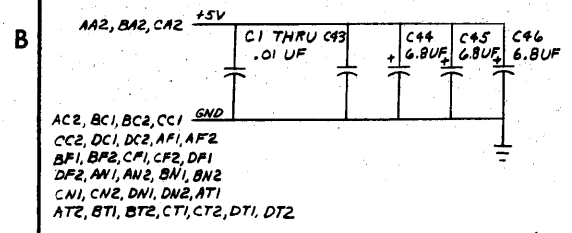
NOTES:
 1. TO CHANGE IOT CODES
 ARRANGE JUMPERS PER
 TABLE BELOW:

IOT CODE	JUMPERS					
	A	B	C	D	E	F
70	X		X		X	
71	X		X		X	
72	X			X	X	
73	X			X		X
74		X	X		X	
75		X	X		X	
76		X		X	X	
77	X			X		X

AN X INDICATES A JUMPER
 INSTALLED AT THAT LOCATION



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
4		HANDLE, FLIP CHIP (MAGENTA)	9008337-06	34
8		EYELET	9006750	33
9		SPLIT LUG	9006735	32
4		SPACER	1202704	31
1	E19	DEC IC 74123	1910436	30
2	E4, E27	DEC IC 7442	1910046	29
10	E17, E21, E22, E23, E26, E29, E30, E44, E48, E49	DEC IC 97401	1909973	28
1	E1	DEC IC 6314	1909972	27
6	E6, E7, E24, E33, E36, E41	DEC IC 6380	1909971	26
2	E37, E42	DEC IC 8235	1909935	25
2	E10, E25	DEC IC 7417	1909929	24
1	E20	DEC IC 8881	1909705	23
5	E12, E15, E28, E31, E50	DEC IC 7404	1909686	22
4	E32, E39, E47, E51	DEC IC 8271	1909615	21
8	E11, E16, E35, E38, E40, E43, E45, E52	DEC IC 384	1909486	20
1	E5	DEC IC 7440	1905579	19
1	E18	DEC IC 7420	1905577	18
1	E2	DEC IC 7410	1905576	17
5	E3, E8, E9, E34, E46	DEC IC 7400	1905575	16
2	E13, E14	DEC IC 7474	1905547	15
18	R11, R13, R33 THRU R47, R66	RES., 180, 1/4W, 5%	1301322	14
2	R5, R6,	RES., 10K, 1/4W, 5%	1300479	13
7	R1, R2, R4, R7, R8, R67, R68	RES., 3K, 1/4W, 5%	1300432	12
18	R22, R24, R50 THRU R 65	RES., 390, 1/4W, 5%	1300309	11
1	R3	RES., 47, 1/4W, 5%	1300202	10
2	J1, J2	CONN, RIGHT ANGLE HEADER	1209941	9
43	C1 THRU C43	CAP., .01UF, 100V, 20%	1001610	8
3	C44, C45, C46	CAP., 6.8UF, 35V, 20%	1000067	7
1	C47	CAP., 100PF, 100V, 5%	1000016	6
1	C48	CAP., 100PF, 100V, 5%	1000006	5
1		ETCHED CIRCUIT BOARD	50/0015	4
REF		ECO MODULE HISTORY	B-MH-M8331-0-6	3
REF		ASSY/DRILL HOLE LAYOUT	D-AH-M8331-0-5	2
REF		X-Y COORDINATE HOLE LOCATION	K-CO-M8331-0-4	1



IC TYPE	GND	+5V
384	1	8
6380	1	8
6314	1	8
74123	8	16
7442	8	16
8235	8	16
8271	8	16

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

FIRST USED ON OPTION MODEL
 TAB-E

PARTS LIST

ETCH BOARD REV B

DRN: S. Roberts DATE: 9/1/72
 CHK'D: DATE: 9/1/72
 ENGR: Gary Nabe DATE: 9-1-72
 PROJ. ENG: Gary Nabe DATE: 9-1-72
 PROD: M.D. Carney DATE: 9-7-72

digital EQUIPMENT CORPORATION
 WAYNARD, MASSACHUSETTS

TITLE: CASSETTE INTERFACE

SIZE CODE: DICS NUMBER: M8331-0-1 REV: E

SCALE NONE

SHEET 1 OF 3

REVISIONS

CHK	CHANGE NO.	REV
L. NARHI	1-12-73	C
L. NARHI	1-12-73	C
L. NARHI	9/21/72	B
L. NARHI	9/21/72	A

SEMICONDUCTOR CONVERSION CHART

DEC NO.	EIA NO.	DEC NO.	EIA NO.

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WIRE TABLE			
FROM	TO	FROM	TO
P1-A	P2-VV	P1-Y	P2-X
P1-B	P2-UI	P1-Z	P2-W
P1-C	P2-TT	P1-AA	P2-V
P1-D	P2-SS	P1-PP	P2-U
P1-E	P2-RR	P1-CC	P2-T
P1-F	P2-QQ	P1-LL	P2-S
P1-G	P2-NN	P1-EE	P2-R
P1-H	P2-MM	P1-FF	P2-Q
P1-I	P2-KK	P1-PP	P2-N
P1-J	P2-JJ	P1-SS	P2-M
P1-K	P2-LL	P1-NN	P2-L
P1-L	P2-KK	P1-PP	P2-K
P1-M	P2-JJ	P1-NN	P2-J
P1-N	P2-PP	P1-RR	P2-I
P1-O	P2-SS	P1-CC	P2-H
P1-P	P2-RR	P1-LL	P2-G
P1-Q	P2-QQ	P1-EE	P2-F
P1-R	P2-NN	P1-FF	P2-E
P1-S	P2-MM	P1-PP	P2-D
P1-T	P2-KK	P1-SS	P2-C
P1-U	P2-JJ	P1-NN	P2-B
P1-V	P2-PP	P1-CC	P2-A
P1-W	P2-SS	P1-LL	
P1-X	P2-RR	P1-EE	
P1-Y	P2-QQ	P1-FF	
P1-Z	P2-NN	P1-PP	
P1-AA	P2-MM	P1-SS	
P1-AB	P2-KK	P1-NN	
P1-AC	P2-JJ	P1-CC	
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P1-AI	P2-JJ	P1-NN	
P1-AJ	P2-PP	P1-CC	
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P1-AM	P2-NN	P1-FF	
P1-AN	P2-MM	P1-PP	
P1-AO	P2-KK	P1-SS	
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P1-AQ	P2-PP	P1-CC	
P1-AR	P2-SS	P1-LL	
P1-AS	P2-QQ	P1-EE	
P1-AT	P2-NN	P1-FF	
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P1-AV	P2-KK	P1-SS	
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P1-BF	P2-SS	P1-LL	
P1-BG	P2-QQ	P1-EE	
P1-BH	P2-NN	P1-FF	
P1-BI	P2-MM	P1-PP	
P1-BJ	P2-KK	P1-SS	
P1-BK	P2-JJ	P1-NN	
P1-BL	P2-PP	P1-CC	
P1-BM	P2-SS	P1-LL	
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P1-BP	P2-MM	P1-PP	
P1-BQ	P2-KK	P1-SS	
P1-BR	P2-JJ	P1-NN	
P1-BS	P2-PP	P1-CC	
P1-BT	P2-SS	P1-LL	
P1-BU	P2-QQ	P1-EE	
P1-BV	P2-NN	P1-FF	
P1-BW	P2-MM	P1-PP	
P1-BX	P2-KK	P1-SS	
P1-BY	P2-JJ	P1-NN	
P1-BZ	P2-PP	P1-CC	
P1-CA	P2-SS	P1-LL	
P1-CB	P2-QQ	P1-EE	
P1-CC	P2-NN	P1-FF	
P1-CD	P2-MM	P1-PP	
P1-CE	P2-KK	P1-SS	
P1-CF	P2-JJ	P1-NN	
P1-CG	P2-PP	P1-CC	
P1-CH	P2-SS	P1-LL	
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P1-CK	P2-MM	P1-PP	
P1-CL	P2-KK	P1-SS	
P1-CM	P2-JJ	P1-NN	
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P1-CZ	P2-KK	P1-SS	
P1-DA	P2-JJ	P1-NN	
P1-DB	P2-PP	P1-CC	
P1-DC	P2-SS	P1-LL	
P1-DD	P2-QQ	P1-EE	
P1-DE	P2-NN	P1-FF	
P1-DF	P2-MM	P1-PP	
P1-DG	P2-KK	P1-SS	
P1-DH	P2-JJ	P1-NN	
P1-DI	P2-PP	P1-CC	
P1-DJ	P2-SS	P1-LL	
P1-DK	P2-QQ	P1-EE	
P1-DL	P2-NN	P1-FF	
P1-DM	P2-MM	P1-PP	
P1-DN	P2-KK	P1-SS	
P1-DO	P2-JJ	P1-NN	
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P1-DQ	P2-SS	P1-LL	
P1-DR	P2-QQ	P1-EE	
P1-DS	P2-NN	P1-FF	
P1-DT	P2-MM	P1-PP	
P1-DU	P2-KK	P1-SS	
P1-DV	P2-JJ	P1-NN	
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P1-DX	P2-SS	P1-LL	
P1-DY	P2-QQ	P1-EE	
P1-DZ	P2-NN	P1-FF	
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P1-EC	P2-JJ	P1-NN	
P1-ED	P2-PP	P1-CC	
P1-EE	P2-SS	P1-LL	
P1-EF	P2-QQ	P1-EE	
P1-EG	P2-NN	P1-FF	
P1-EH	P2-MM	P1-PP	
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P1-EJ	P2-JJ	P1-NN	
P1-EK	P2-PP	P1-CC	
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P1-EU	P2-NN	P1-FF	
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P1-FJ	P2-MM	P1-PP	
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P1-HB	P2-MM	P1-PP	
P1-HC	P2-KK	P1-SS	
P1-HD	P2-JJ	P1-NN	
P1-HE	P2-PP	P1-CC	
P1-HF	P2-SS	P1-LL	
P1-HG	P2-QQ	P1-EE	
P1-HH	P2-NN	P1-FF	
P1-HI	P2-MM	P1-PP	
P1-HJ	P2-KK	P1-SS	
P1-HK	P2-JJ	P1-NN	
P1-HL	P2-PP	P1-CC	
P1-HM	P2-SS	P1-LL	
P1-HN	P2-QQ	P1-EE	
P1-HO	P2-NN	P1-FF	
P1-HP	P2-MM	P1-PP	
P1-HQ	P2-KK	P1-SS	
P1-HR	P2-JJ	P1-NN	
P1-HS	P2-PP	P1-CC	
P1-HT	P2-SS	P1-LL	
P1-HU	P2-QQ	P1-EE	
P1-HV	P2-NN	P1-FF	
P1-HW	P2-MM	P1-PP	
P1-HX	P2-KK	P1-SS	
P1-HY	P2-JJ	P1-NN	
P1-HZ	P2-PP	P1-CC	
P1-IA	P2-SS	P1-LL	
P1-IB	P2-QQ	P1-EE	
P1-IC	P2-NN	P1-FF	
P1-ID	P2-MM	P1-PP	
P1-IE	P2-KK	P1-SS	
P1-IF	P2-JJ	P1-NN	
P1-IG	P2-PP	P1-CC	
P1-IH	P2-SS	P1-LL	
P1-II	P2-QQ	P1-EE	
P1-IO	P2-NN	P1-FF	
P1-IP	P2-MM	P1-PP	
P1-IQ	P2-KK	P1-SS	
P1-IR	P2-JJ	P1-NN	
P1-IS	P2-PP	P1-CC	
P1-IT	P2-SS	P1-LL	
P1-IU	P2-QQ	P1-EE	
P1-IV	P2-NN	P1-FF	
P1-IW	P2-MM	P1-PP	
P1-IX	P2-KK	P1-SS	
P1-IY	P2-JJ	P1-NN	
P1-IZ	P2-PP	P1-CC	
P1-JA	P2-SS	P1-LL	
P1-JB	P2-QQ	P1-EE	
P1-JC	P2-NN	P1-FF	
P1-JD	P2-MM	P1-PP	
P1-JE	P2-KK	P1-SS	
P1-JF	P2-JJ	P1-NN	
P1-JG	P2-PP	P1-CC	
P1-JH	P2-SS	P1-LL	
P1-JI	P2-QQ	P1-EE	
P1-JJ	P2-NN	P1-FF	
P1-JK	P2-MM	P1-PP	
P1-JL	P2-KK	P1-SS	
P1-JM	P2-JJ	P1-NN	
P1-JN	P2-PP	P1-CC	
P1-JO	P2-SS	P1-LL	
P1-JP	P2-QQ	P1-EE	
P1-JQ	P2-NN	P1-FF	
P1-JR	P2-MM	P1-PP	
P1-JS	P2-KK	P1-SS	
P1-JT	P2-JJ	P1-NN	
P1-JU	P2-PP	P1-CC	
P1-JV	P2-SS	P1-LL	
P1-JW	P2-QQ	P1-EE	
P1-JX	P2-NN	P1-FF	
P1-JY	P2-MM	P1-PP	
P1-JZ	P2-KK	P1-SS	
P1-KA	P2-JJ	P1-NN	
P1-KB	P2-PP	P1-CC	
P1-KC	P2-SS	P1-LL	
P1-KD	P2-QQ	P1-EE	
P1-KE	P2-NN	P1-FF	
P1-KF	P2-MM	P1-PP	
P1-KG	P2-KK	P1-SS	
P1-KH	P2-JJ	P1-NN	
P1-KI	P2-PP	P1-CC	
P1-KJ	P2-SS	P1-LL	
P1-KK	P2-QQ	P1-EE	
P1-KL	P2-NN	P1-FF	
P1-KM	P2-MM	P1-PP	
P1-KN	P2-KK	P1-SS	
P1-KO	P2-JJ	P1-NN	
P1-KP	P2-PP	P1-CC	
P1-KQ	P2-SS	P1-LL	
P1-KR	P2-QQ	P1-EE	
P1-KS	P2-NN	P1-FF	
P1-KT	P2-MM	P1-PP	
P1-KU	P2-KK	P1-SS	
P1-KV	P2-JJ	P1-NN	
P1-KW	P2-PP	P1-CC	
P1-KX	P2-SS	P1-LL	
P1-KY	P2-QQ	P1-EE	
P1-KZ	P2-NN	P1-FF	
P1-LA	P2-MM	P1-PP	
P1-LB	P2-KK	P1-SS	
P1-LC	P2-JJ	P1-NN	
P1-LD	P2-PP	P1-CC	
P1-LE	P2-SS	P1-LL	
P1-LF	P2-QQ	P1-EE	
P1-LG	P2-NN	P1-FF	
P1-LH	P2-MM	P1-PP	
P1-LI	P2-KK	P1-SS	
P1-LJ	P2-JJ	P1-NN	
P1-LK	P2-PP	P1-CC	
P1-LL	P2-SS	P1-LL	
P1-LM	P2-QQ	P1-EE	
P1-LN	P2-NN	P1-FF	
P1-LO	P2-MM	P1-PP	
P1-LP	P2-KK	P1-SS	
P1-LQ	P2-JJ	P1-NN	
P1-LR	P2-PP	P1-CC	
P1-LS	P2-SS	P1-LL	
P1-LT	P2-QQ	P1-EE	
P1-LU	P2-NN	P1-FF	
P1-LV	P2-MM	P1-PP	
P1-LW	P2-KK	P1-SS	
P1-LX	P2-JJ	P1-NN	
P1-LY	P2-PP	P1-CC	
P1-LZ	P2-SS	P1-LL	
P1-MA	P2-QQ	P1-EE	
P1-MB	P2-NN	P1-FF	
P1-MC	P2-MM	P1-PP	
P1-MD	P2-KK	P1-SS	
P1-ME	P2-JJ	P1-NN	
P1-MF	P2-PP	P1-CC	
P1-MG	P2-SS	P1-LL	
P1-MH	P2-QQ	P1-EE	
P1-MI	P2-NN	P1-FF	
P1-MJ	P2-MM	P1-PP	
P1-MK	P2-KK	P1-SS	
P1-ML	P2-JJ	P1-NN	
P1-MN	P2-PP	P1-CC	
P1-MO	P2-SS	P1-LL	
P1-MP	P2-QQ	P1-EE	
P1-MQ	P2-NN	P1-FF	
P1-MR	P2-MM	P1-PP	
P1-MS	P2-KK	P1-SS	
P1-MT	P2-JJ	P1-NN	
P1-MU	P2-PP	P1-CC	
P1-MV	P2-SS	P1-LL	
P1-MW	P2-QQ	P1-EE	
P1-MX	P2-NN	P1-FF	
P1-MY	P2-MM	P1-PP	
P1-MZ	P2-KK	P1-SS	
P1-NA	P2-JJ	P1-NN	
P1-NB	P2-PP	P1-CC	
P1-NC	P2-SS	P1-LL	
P1-ND	P2-QQ	P1-EE	
P1-NE	P2-NN	P1-FF	
P1-NF	P2-MM	P1-PP	
P1-NG	P2-KK	P1-SS	
P1-NH	P2-JJ	P1-NN	
P1-NI	P2-PP	P1-CC	
P1-NJ	P2-SS	P1-LL	
P1-NK	P2-QQ	P1-EE	
P1-NL	P2-NN	P1-FF	
P1-NM	P2-MM	P1-PP	
P1-NO	P2-KK	P1-SS	

**DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS**

ENGINEERING SPECIFICATION

DATE 8/21/72

TA8-E CASSETTE SYSTEM INTERFACE

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	CHANGE PER ECO	TA8-00001	NARHI	12/72	<i>L. Narhi</i>	1/1/73
B	CHANGE PER ECO	TA8-00002	NARHI	8/73	<i>L. Narhi</i>	8/31/73

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ENG Larry Narhi	APPD <i>L. Narhi</i>	SIZE A	CODE SP	NUMBER TA8-Ø-3	REV B
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ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE TA8-E CASSETTE SYSTEM INTERFACE

1. Overall Description

The TA8-E is an interface between a PDP8/E, M or F computer and the TU6Ø cassette drives. The tape format is: 8-bit serial word, programmable block length, and up to 92K, (see graph at end of spec.) 8-bit words per cassette cartridge of the Phillips type.

2. General Description

- 2.1 The basic system consists of one TU6Ø (Dual Drive) and one interface module, the M8331, and interface cables 2-BCØ8R-10.
- 2.2 Two cassette drives are contained in one chassis.

The cassette system, TA8-E, has the following variations:

- TA8-AA - M8331 module & TU6Ø-AA, Rack Mount, 115VAC
- TA8-AB - M8331 module & TU6Ø-AB, Rack Mount, 23ØVAC

Jumpers on the interface card can be arranged to select IOT codes 7Ø through 77. Code 7Ø for the first TU6Ø, and code 77 for the eighth, or last TU6Ø.

- 2.3 The entire interface is contained on one 8½" quad module.
- 2.4 Operating temperature is Ø° to 55°C and 15% to 90% relative humidity, non-condensing. Power required is +5.Ø volts at 2.4 amps for the M8331, and 1.5 amp at 12ØVAC for the TU6Ø drive.

3. Specifications of Vendor Supplied Equipment

See purchase spec for applicable board components.

4. Programming



TITLE TA8-E CASSETTE SYSTEM INTERFACE

4.1 The IOT codes for the TA8-E are as follows:

Mnemonic	Octal	Function
KCLR	67X0	Clear all. Clears Status A and B registers. See note below.
KSDR	67X1	Skip on Data flag, for either a read or a write.
KSEN	67X2	Skip on, EOT/BOT or EOF or Drive Empty or Timing Error, Block Error or Write Lock and "Write" True.
KSBF	67X3	Skip on Ready Flag.
KLSA	67X4	Load Status A from AC 4-11, clear AC, load complement Status A back into AC.
KSAF	67X5	Skip on any flag or error condition.
KGOA	67X6	Assert the contents of Status A, transfer data into the AC for a read, out of the AC into the Read/Write buffer for a write. This command has three functions: <ul style="list-style-type: none"> a) Causes the command in Status A register to be executed by the TU60; b) For a Read command the first KGOA causes the tape to start moving, then upon receipt of the data flag, the second KGOA loads the first byte into the AC; c) For a write command, Status A is set up for a Write, the AC is loaded with the first byte to be written and then KGOA is issued which causes the tape to move and to write the first byte on tape.
KRSB	67X7	Read Status B into AC 4-11.

SIZE A	CODE SP	NUMBER TA8-0-3	REV B
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TITLE TA8-E CASSETTE SYSTEM INTERFACE

Status A register definition:

AC Bit	Function
11	Enable Interrupts
10	Not used
09	Not used
08 } 07 } 06 }	Function Register
05	Drive B 0=A, 1=B
04	Select Enable

NOTE: Upon selection of a drive, "Ready" and "EOT/BOT" flags will appear in Status B. EOT/BOT will only appear obviously, if the tape is at EOT or BOT.

Function Register

- 000 - Read
- 001 - Rewind
- 010 - Write
- 011 - Backspace to File Gap
- 100 - Write Gap
- 101 - Backspace Block Gap
- 110 - Read/Write CRC Character
- 111 - Space Forward File Gap

Status "B" Register Definition:

AC Bit	Function
11	Ready flag
10	Write lock out
09	Rewind
08	Drive empty
07	End of file flag
06	EOT/BOT
05	Timing Error
04	CRC/Block error

4.2 There are no maintenance instructions.

SIZE A	CODE SP	NUMBER TA8-0-3	REV B
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TITLE TA8-E CASSETTE SYSTEM INTERFACE

- Error Flags: These will appear at the end of the block if true, but timing error flag will be raised when it occurs. Error flags are cleared by KGOA.
- Drive Empty: The bit in Status B will be a one if there is no cassette in the drive. The skip and interrupt tests will occur if the drive is empty.
- EOT/BOT: This flag will be true whenever the optical sensors have detected clear leader/trailer. Bit is held false for 125 ms after a motion command to allow tape to move off clear leader/trailer.
- Rewind: Will remain true as long as drive is rewinding and is selected.
- Write Lock Out: Bit is true in Status B if tab is missing on cassette or the Drive is empty or Drive is rewinding. Bit will not interrupt or skip unless attempting a Write command.
- Ready Flag: This bit is asserted in Status B when a drive is selected and is able to accept commands from the interface. This bit is false when commands are being executed.
- Data Flag: This flag appears for every byte including the two CRC bytes. Flag is cleared by KGOA. Flag timing averages 1.78 ms per flag.

4.5 There are no operator controls on the interface.

SIZE A	CODE SP	NUMBER TA8-0-3	REV B
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TITLE TA8-E CASSETTE SYSTEM INTERFACE

5. Interface Specifications

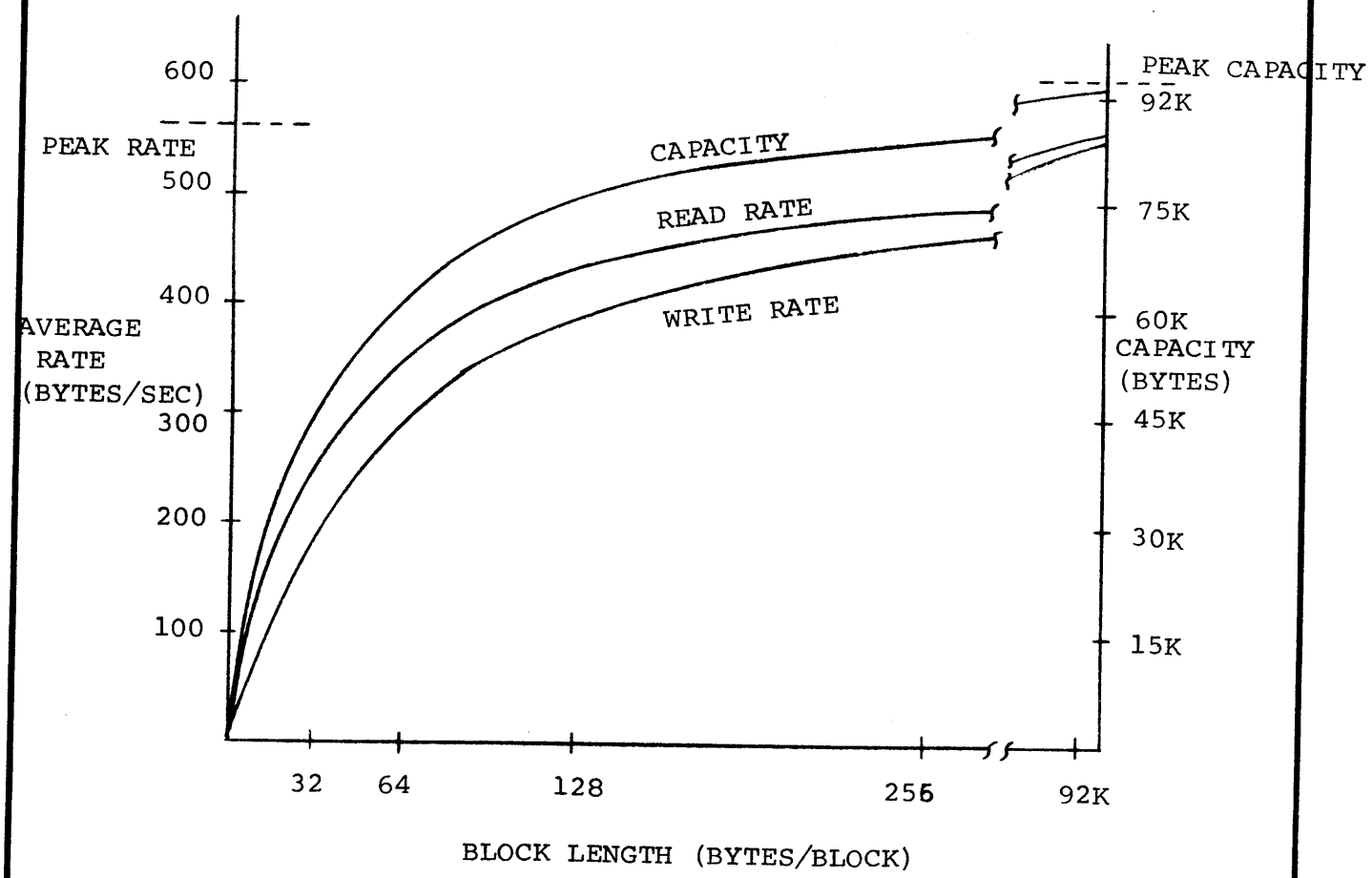
All signals leaving the interface going to the cassette drives are open collector Nand gates type 97401. All signals from the cassette drives are received with Untilogic gates type SP380 or equivalent. Both drivers and receivers are terminated with a 390 ohm resistor to ground and a 180 ohm resistor to +5.0 volts, at the interface end only.

The one exception is "START". This line has a 390 ohm resistor to ground at the interface and a 180 ohm resistor at the TU60, to +5 volts.

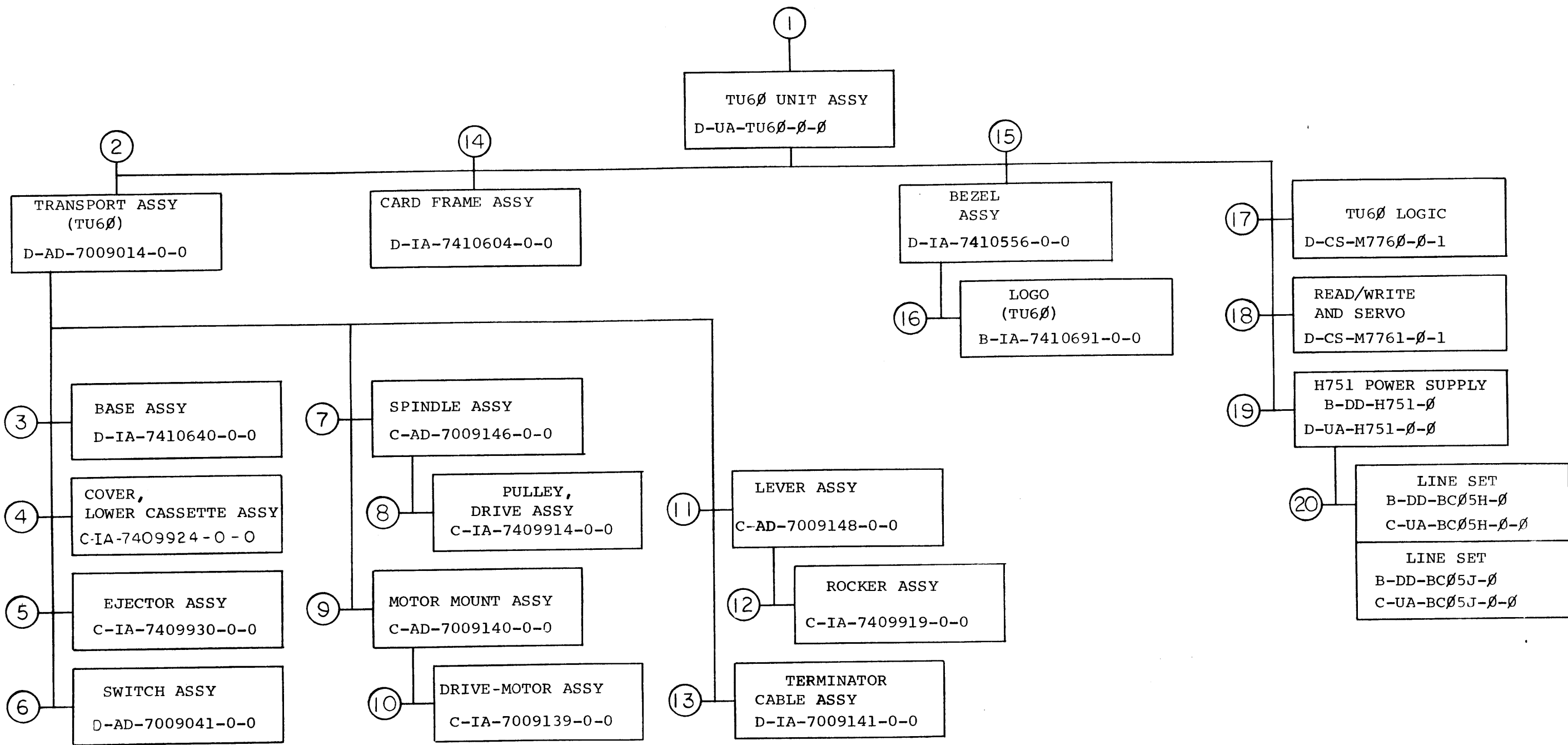
All signals to and from the cassette drive are low true levels including Status B bits. The only exception is the Read/Write level. Read is true when the level is at +3 volts. Write is true when the level is at 0 volts.

SIZE A	CODE SP	NUMBER TA8-0-3	REV B
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TITLE



SIZE	CODE	NUMBER	REV
A	SP	TA8-Ø-3	B



TITLE	SHEET	OF	SIZE	CODE	NUMBER	REV
TU60 DECASSETTE	2	4	B	DD	TU60-0	B

CUSTOMER PRINT SET		MECHANICAL					CUSTOMER PRINT SET		MECHANICAL						
TU6Ø-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	TU6Ø-Ø	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		4	C-IA-7409924-0-0		1	COVER, LOWER CASSETTE ASSY		X		10	C-IA-7009139-0-0		1	DRIVE-MOTOR ASSY	
			C-MD-7409905-0-0		1	COVER, LOWER CASSETTE					C-MD-7409913-0-0		1	SLEEVE, MOTOR	
			C-MD-7410541-0-0		1	PIN, SPRING, COVER, CASSETTE									
			B-MD-7410552-0-0		1	LENS									
		5	C-IA-7409930-0-0		1	EJECTOR ASSY		X		11	C-AD-7009148-0-0		1	LEVER ASSY	
			C-MD-7409907-0-0		1	EJECTOR					C-MD-7409931-0-0		1	LEVER, ROCKER	
			B-MD-7410543-0-0		1	ROLLER, EJECTOR					B-MD-7409932-0-0		1	ROLLER, IDLER	
X		6	D-AD-7009141-0-0		1	SWITCH ASSY				12	C-IA-7409919-0-0		1	ROCKER ASSY	
			C-MD-7409926-0-0		1	BLOCK, SWITCH					C-MD-7409916-0-0		1	PLATE, ROCKER	
			C-MD-7409935-0-0		1	SPACER, MICRO SWITCH					B-MD-7409921-0-0		1	SLEEVE, ROCKER	
											B-MD-7409922-0-0		1	SHAFT, IDLER	
X		7	C-AD-7009146-0-0		1	SPINDLE ASSY				14	D-IA-7410604-0-0		1	CARD FRAME ASSY	
			D-MD-7410509-0-0		1	COUPLING, CASSETTE DRIVE (2MM)					E-MD-7409942-0-0		1	FRAME, CARD	
			C-MD-7410692-0-0		1	BEARING, SPINDLE					C-MD-7410587-0-0		1	STAND-OFF, THREADED	
		8	C-IA-7409914-0-0		1	PULLEY, DRIVE ASSY				15	D-IA-7410556-0-0		1	BEZEL ASSY	
			C-MD-7410535-0-0		1	PULLEY, DRIVE					C-MD-7409882-0-0		1	ADAPTER, BEZEL	
			C-MD-7410527-0-0		1	SPINDLE					D-MD-7410579-0-0		1	INLAY, BEZEL	
											D-CS-1209226-0-0		1	BEZEL 5 1/4"	
X		9	C-AD-7009140-0-0		1	MOTOR MOUNT ASSY				16	B-IA-7410691-0-0		1	LOGO (TU6Ø)	
			C-MD-7409915-0-0		1	PIVOT, MOTOR					A-SS-7410691-0-1		1	SILK SCREEN	
			C-MD-7409910-0-0		1	MOUNT, MOTOR									
										19	B-DD-H751-Ø		3	H751 POWER SUPPLY	
											D-UA-H751-Ø-Ø		2	H751 POWER SUPPLY	
											E-IA-5310191-0-0		1	CHASSIS, POWER SUPPLY	

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

TITLE
TU6Ø DECASSETTE

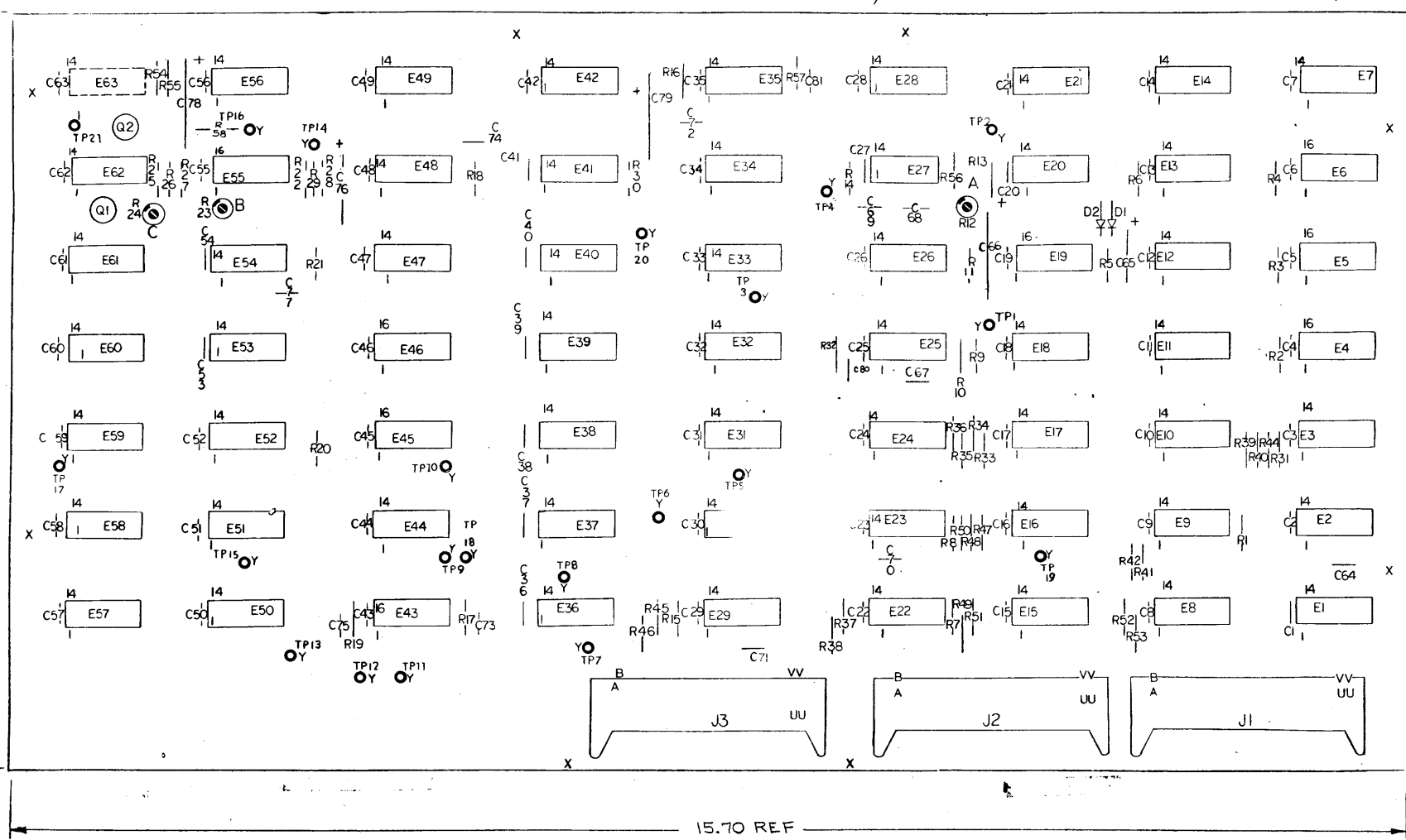
SIZE CODE
B DD

NUMBER
TU6Ø-Ø

REV
B

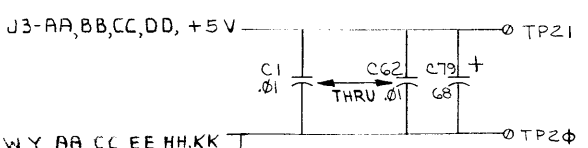
SHEET 4 OF 4

NOTES:
 1. UNLESS OTHERWISE SPECIFIED:
 RESISTANCE IS IN OHMS
 CAPACITANCE IS IN MICROFARADS



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
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ACCEPTANCE SIG		DATE		
1	R26	RES 620 1/4W 5%	1303178	52
1	R25	RES 680 1/4W 5%	1301424	51
1	R11	RES 5.6 K 1/4W 5%	1301874	50
1	C66	CAP 180 MFD 6V 20% S.TANT	1000086	49
1	R56	RES 30K 1/4W 5%	1302394	48
11	R34, R36, R38, R40, R42, R44, R46, R48, R49, R51, R53	RES 390 1/4W 5%	1300309	47
1	R16, R58	RES 150 1/4W 5%	1300250	46
1	R5	RES 24K 1/4W 5%	1304837	45
2	R12, R24	RES 20K 1/2W 10% G2P POT	1309150-13	44
1	R55	RES 2K 1/4W 5%	1302388	43
1	R23	RES 200 1/2W 10% G2P POT	1309150-10	42
1	R22	RES 47K 1/4W 5%	1302177	41
1	R27	RES 12K 1/4W 5%	1300488	40
1	R28	RES 14.7K 1/8W 1%	1302941	39
11	R8, R33, R35, R37, R39, R41, R45, R47, R31, R50, R52	RES 180 1/4W 5%	1301322	38
1	R17	RES 10K 1/4W 5%	1300479	37
7	R2, R3, R4, R20, R30, R54	RES 1K 1/4W 5%	1300365	36
2	R6, R29	RES 470 1/4W 5%	1300316	35
10	R1, R7, R10, R13, R14, R15, R18, R21, R32, R57	RES 220 1/4W 5%	1300271	34
1	R19	RES 20K 1/4W 5%	1302391	33
1	E53	IC DEC 7427	1910878	32
3	E19, E43, E55	IC DEC 74123	1910436	31
2	E45, E46	IC DEC 74193	1910018	30
1	E21	IC DEC 7486	1910011	29
5	E18, E22, E23, E24	IC DEC 380	1909485	28
3	E11, E12, E13	IC DEC 7416	1909928	27
5	E3, E10, E15, E16, E25	IC DEC 8881	1909705	26
6	E18, E20, E22, E47, E49, E60	IC DEC 7404	1909686	25
3	E4, E5, E6	IC DEC 8271	1909615	24
2	E2, E9	IC DEC 7495	1909055	23
8	E17, E20, E23, E25, E38, E50, E58, E59	IC DEC 7402	1909004	22
2	E41, E52	IC DEC 7401	1905570	21
2	E42, E56	IC DEC 7450	1905580	20
2	E40, E54	IC DEC 7410	1905576	19
9	E27, E28, E29, E31, E33, F48, E51, E57, E61	IC DEC 7400	1905575	18
8	E7, E14, E26, E34, E35, E37, E44, E62	IC DEC 7474	1905547	17
2	D1, D2	DIODE D664	1100114	16
1	C76	CAP 6.8 MFD 35V 10% S.TANT	1005306	15
1	C65	CAP 3.9 MFD 10V 10% S.TANT	1000064	14
64	C1 THRU C62, C73, C75	CAP .01 MFD 100V 20% DISC	1001610	13
2	C78, C79	CAP 68 MFD 15V 10% S.TANT	1000082	12
4	C67, C77, C72, C81	CAP 1000PF 100V 5% MICA	1000042	11
4	C68, C69, C71, C74	CAP 680 PF 100V 5% DM	1000076	10
2	C64, C70	CAP 470 PF 100V 5% DM	1000024	9
3	J1, J2, J3	CONNECTOR, 40PIN	1209941	8
21	TP1 THRU TP21	LUG, SWAGE #1026-2	9007791	7
2	Q1, Q2	TRANS, G534 D PND 31ΦMW	1503409	6
1	C80	CAP 100 PF 100V 5% DM	1000016	5
REF		MODULE ECO HISTORY	B-M-M760-0-1	4
REF		ASSY/DRILLING HOLE LAYOUT	E-AH-M760-0-3	3
REF		X-Y COORDINATE FRAME LOCATION	K-CO-M760-0-2	2
1		ETCHED CIRCUIT BOARD	5010025	1



- J1 A, B, C, E, H, K, M, P, S, U, W, Y, AA, CC, EE, HH, KK, MM, PP, SS, UU, VV.
- J2 A, B, C, E, H, K, M, P, S, U, W, Y, AA, CC, EE, HH, KK, MM, PP, SS, UU, VV.
- J3 M, N, P, R.

IC TYPE	GND	+5V
7435	(8)	14
8271	(8)	16
380	(1)	8
74193	(8)	16
74123	(8)	16

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

CHK	CHANGE NO.	REV
M. LEIS	1	D
M. LEIS	2	D
M. LEIS	3	D
M. LEIS	4	D
M. LEIS	5	D
M. LEIS	6	D
M. LEIS	7	D
M. LEIS	8	D
M. LEIS	9	D
M. LEIS	10	D
M. LEIS	11	D
M. LEIS	12	D
M. LEIS	13	D
M. LEIS	14	D
M. LEIS	15	D
M. LEIS	16	D
M. LEIS	17	D
M. LEIS	18	D
M. LEIS	19	D
M. LEIS	20	D
M. LEIS	21	D
M. LEIS	22	D
M. LEIS	23	D
M. LEIS	24	D
M. LEIS	25	D
M. LEIS	26	D
M. LEIS	27	D
M. LEIS	28	D
M. LEIS	29	D
M. LEIS	30	D

DEC NO.	EIA NO.	DEC NO.	EIA NO.
6664	1N3620		

FIRST USED ON OPTION MODEL
TU60

ETCH BOARD REV E

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
TU60 LOGIC

SCALE
1:1

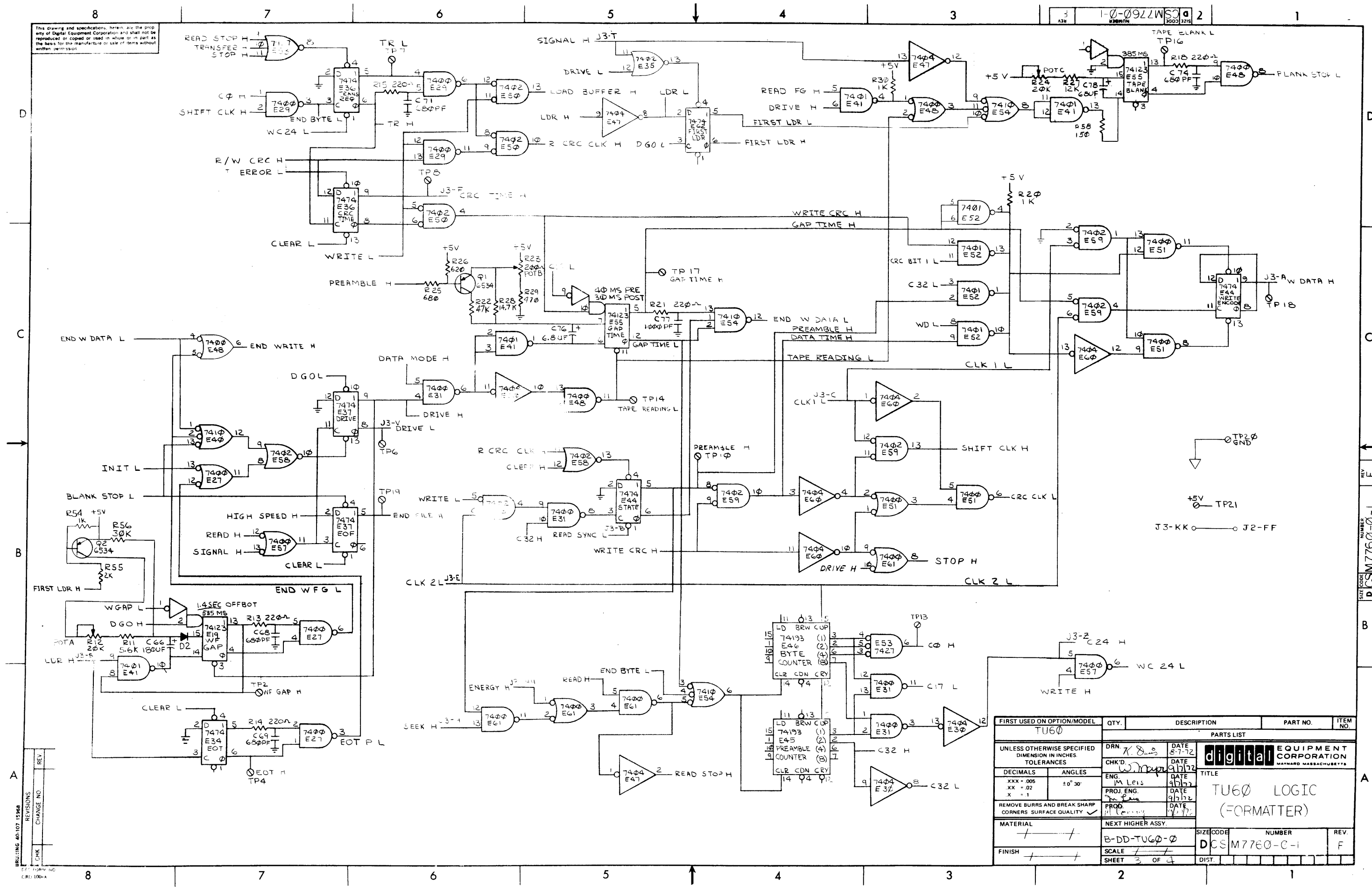
REV. NO. F

SEMICONDUCTOR CONVERSION CHART

BRUNING 40-522 15689

DEC FORM NO DRD 135A

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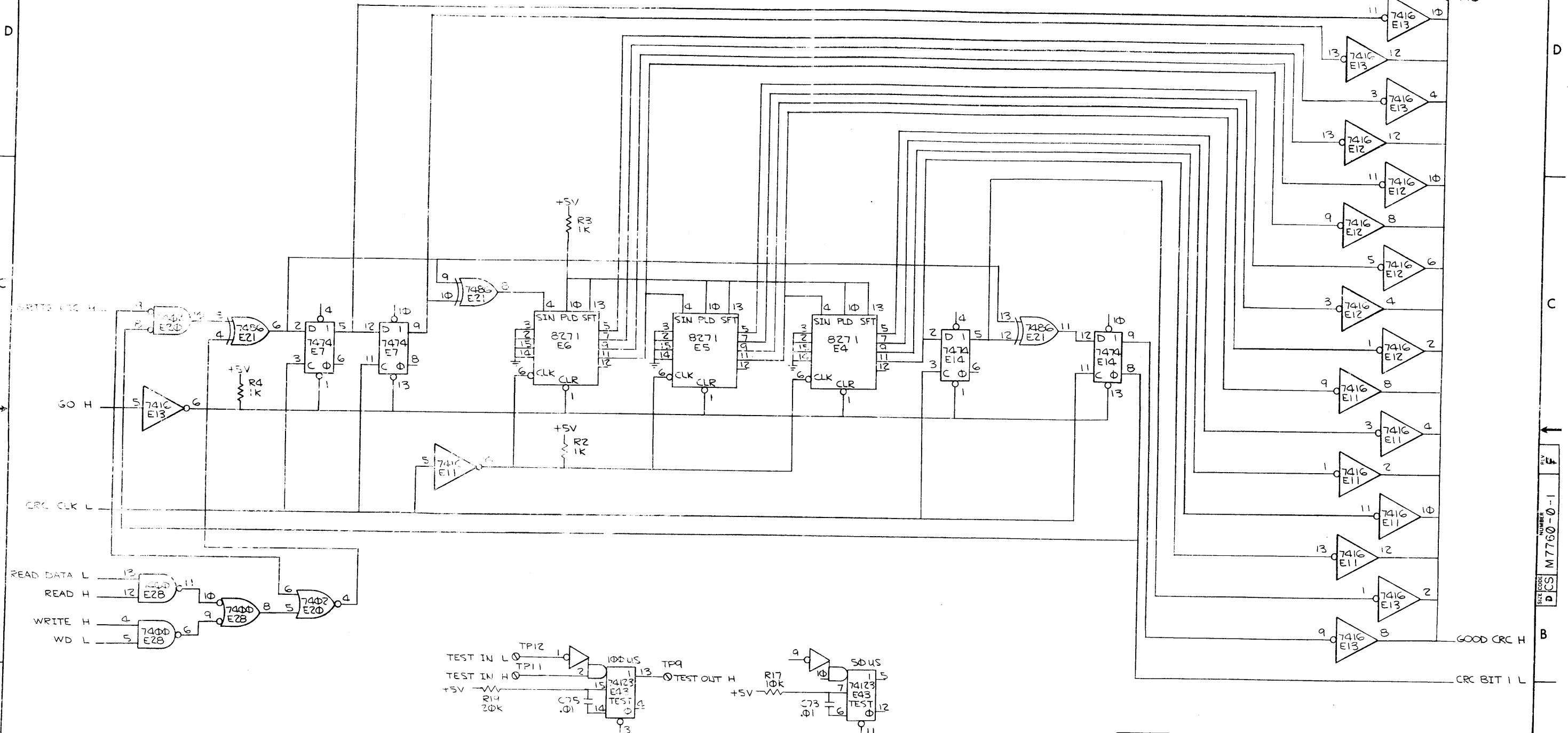
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS				
TITLE TU60 LOGIC (FORMATTER)				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES				
DECIMALS	ANGLES	DATE 8-7-72		
XXX = .005	±0°30'	CHK'D. W. M. 9/17/72	DATE 9/17/72	
XX = .02		ENG. M. L. 9/17/72	DATE 9/17/72	
X = .1		PROJ. ENG. J. P. 9/17/72	DATE 9/17/72	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH				
B-DD-TU60-0		SIZE CODE	NUMBER	REV.
SCALE 1/16"		DCS M7760-C-1		F
SHEET 3 OF 4		DIST.		

BRU:JING 40-107 15268
REVISIONS
CHANGE NO.
CHK

SIZE CODE NUMBER
DCS M7760-0-1

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1 0 7422W S02 2



BRUNING 40-222 15840

REV	CHANGE NO

DEC FORM NO DRP 101-B

FIRST USED ON OPTION/MODEL TU60	QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN. <i>Ch. Stande</i>	DATE 5-14-77	 digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHK'D. <i>W. D. D.</i>	DATE 10/7/77		
ANGLES	ENG. <i>M. Lewis</i>	DATE 11/72		
.XXX = .005	PROJ. ENG. <i>R. J. J.</i>	DATE 11/72		
.XX = .02	PROP. <i>M. Lewis</i>	DATE 11/72		
.X = .1	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		TITLE TU60 LOGIC (CRC LOGIC)	
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH	B-DD-TU60-0		DCS	M7760-0-1
SCALE		SHEET 4 OF 4		REV F

SIZE CODE NUMBER
DCS M7760-0-1

8 7 6 5 4 3 2 1

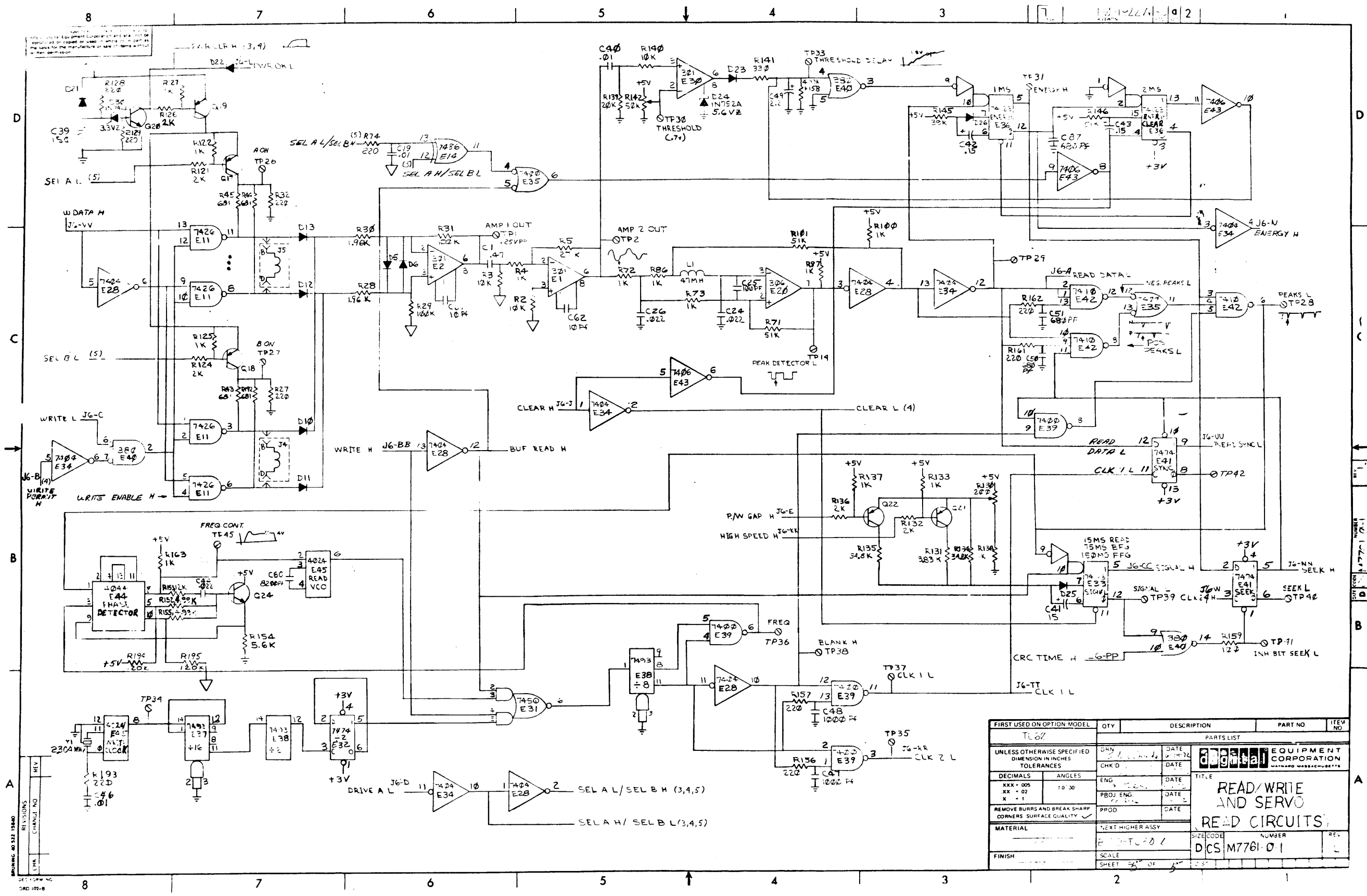
D

C

B

A

8 7 6 5 4 3 2 1

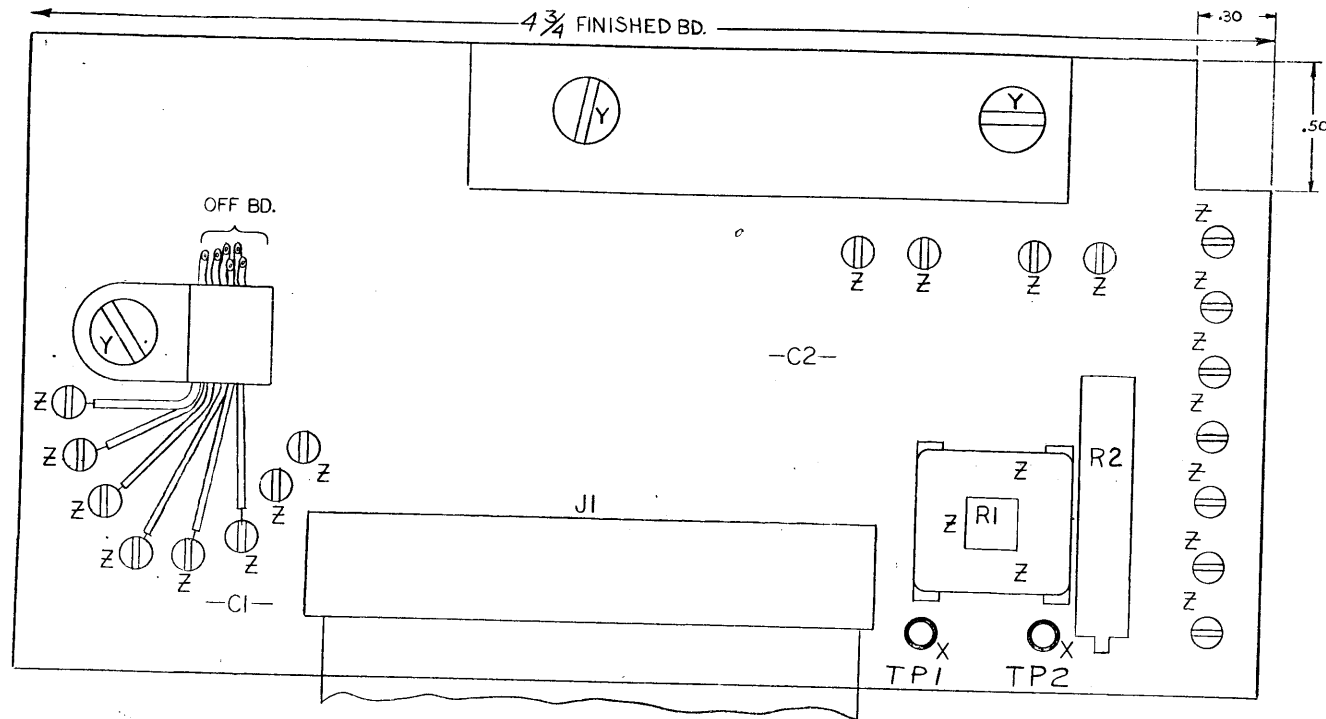
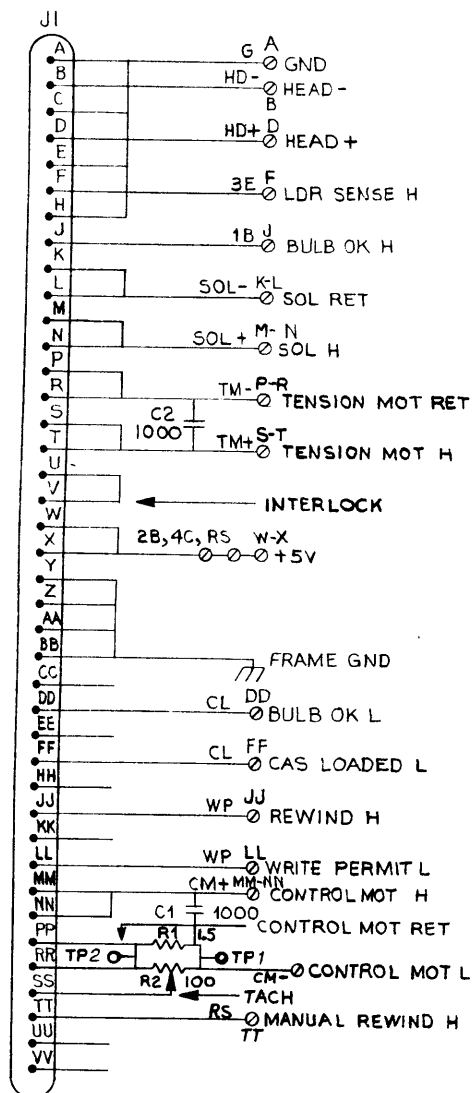


FIRST USED ON OPTION MODEL	QTY	DESCRIPTION	PART NO	ITEM NO
TE62		PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRY	DATE	GENTRAL EQUIPMENT CORPORATION	
DECIMALS	CHK'D	DATE	MILITARY MANUFACTURE	
XXX - 005	ENG	DATE	TITLE	
XX - 02	PBJ/ENG	DATE	READ/WRITE AND SERVO	
X - 1	PROD	DATE	READ CIRCUITS	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY		SIZE CODE	NUMBER
			DCS	M7761-01
FINISH	SCALE			REL
	SHEET 25 OF 35			

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NOTES:

- UNLESS OTHERWISE SPECIFIED:
RESISTANCE IS IN OHMS.
CAPACITANCE IS IN PICOFARADS.



IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.		
IC PIN LOCATIONS		

REF	QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
2		TP1, TP2	TERMINATOR CASSETTE DRIVE ASSY	D-1A-500134-0-0	11
2		C1, C2	TURRET LUG #1026-2	9007791	10
1		R1	CAP 1000	DM 1000042	9
1		R2	RES 1.5 10W WIRE WOUND	1311112	8
1		J1	RES 100 347.0% POT 76PR	1309143-04	7
1		J1	CONNECTOR 40 TERMINAL	1210073	6
1			SPLIT LUGS	9006735	5
REF			MODULE ECO HISTORY	B-MH-5410135-0-6	4
REF			7-V COORDINATE HOLE LOCATION	K-CO-5410135-0-4	3
1			ETCHED CIRCUIT BOARD	5010134	1

FIRST USED ON OPTION MODEL: TU50

ETCH BOARD REV: D

DRN. DATE	2-18-73
CHK'D DATE	2-18-73
ENG DATE	2-18-73
PROJ. ENG. DATE	11/27/72
PROD. DATE	12/15/72
NEXT HIGHER ASSY	D-1A-7007041-0-0

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

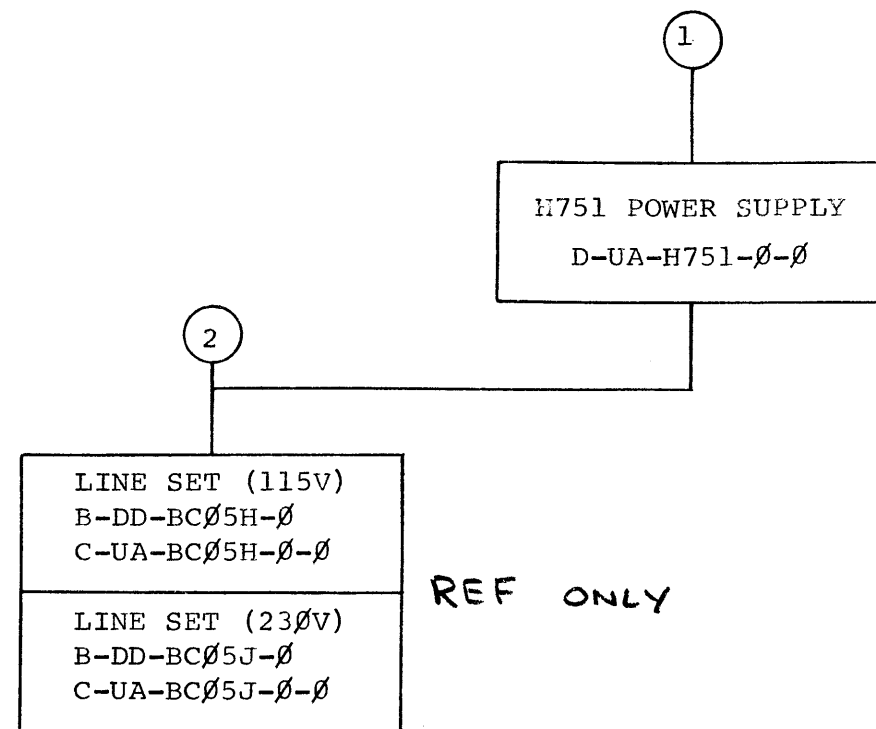
TITLE: TERMINATOR, CASSETTE DRIVE

SIZE CODE: 1000042-0-1
NUMBER: 01
REV: D

SCALE: 1:1
SHEET: 1 OF 1
DIST.

BRUNING 40-522 16899
DEC FORM NO. DRD-135A

REV. D
NUMBER
D-1A-5410135-0-1



TITLE	SHEET 2 OF 3	SIZE CODE	NUMBER	REV
H751 POWER SUPPLY		B DD	H751-Ø	D

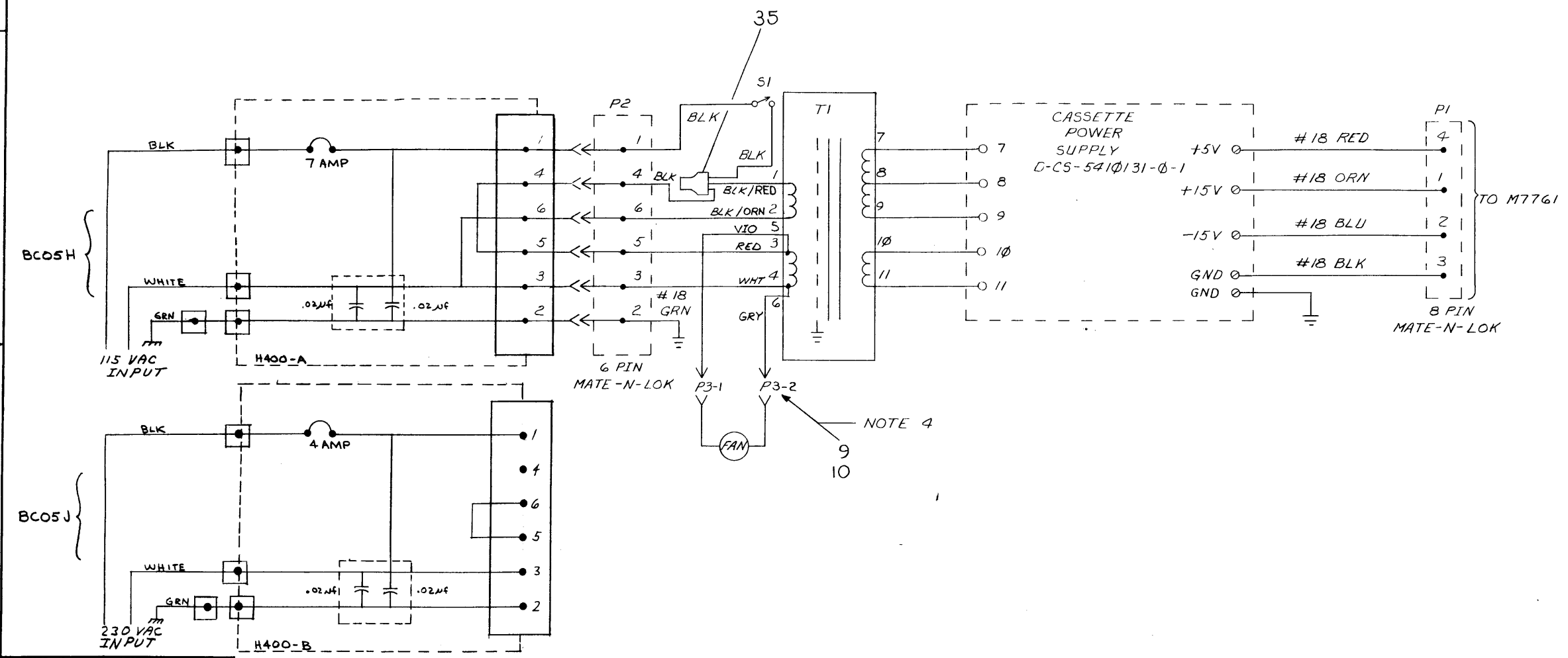
ELECTRICAL					CUSTOMER PRINT SET		MECHANICAL					
DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE	H751-Ø	MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
A-H751-Ø-Ø	D	2	H751 POWER SUPPLY				1	D-UA-H751-Ø-Ø	C	2	H751 POWER SUPPLY	
A-PL-H751-Ø-Ø	D	2	H751 POWER SUPPLY (PL)					A-PL-H751-Ø-Ø	C	2	H751 POWER SUPPLY (PL)	
E-IA-5310191-0-0		1	CHASSIS, POWER SUPPLY					E-IA-5310191-0-0		1	CHASSIS, POWER SUPPLY	
D-CS-H751-Ø-1	B	1	CIRCUIT SCHEMATIC H751									
D-CS-5410131-0-1	#	2	CIRCUIT SCHEMATIC									
2 B-DD-BCØ5H-Ø	#	3	LINE SET									
C-UA-BCØ5H-Ø-Ø		1	LINE SET BCØ5H (115V)									
C-UA-BCØ5J-Ø-Ø		1	LINE SET BCØ5J (230V)									

CUSTOMER PRINT SET CODES	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED	TITLE	H751 POWER SUPPLY	SHEET 3 OF 3	SIZE CODE	B DD	NUMBER	H751-Ø	REV	D
--------------------------	--	-------	-------------------	--------------	-----------	------	--------	--------	-----	---

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NOTES:

1. WIRES NUMBERED 1-11 ARE TRANSFORMER LEADS.
2. FOR DIAGRAM OF CASSETTE POWER SUPPLY SEE U CS-541031-0-1.
3. 0 INDICATES SPLIT LUGS.
4. P3-1 AND P3-2 ARE FASTENERS.



IC TYPE	GND	+ 5V
GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY. EXCEPTIONS ARE STATED ABOVE.		
IC PIN LOCATIONS		

DEC FORM NO. DRD 135A

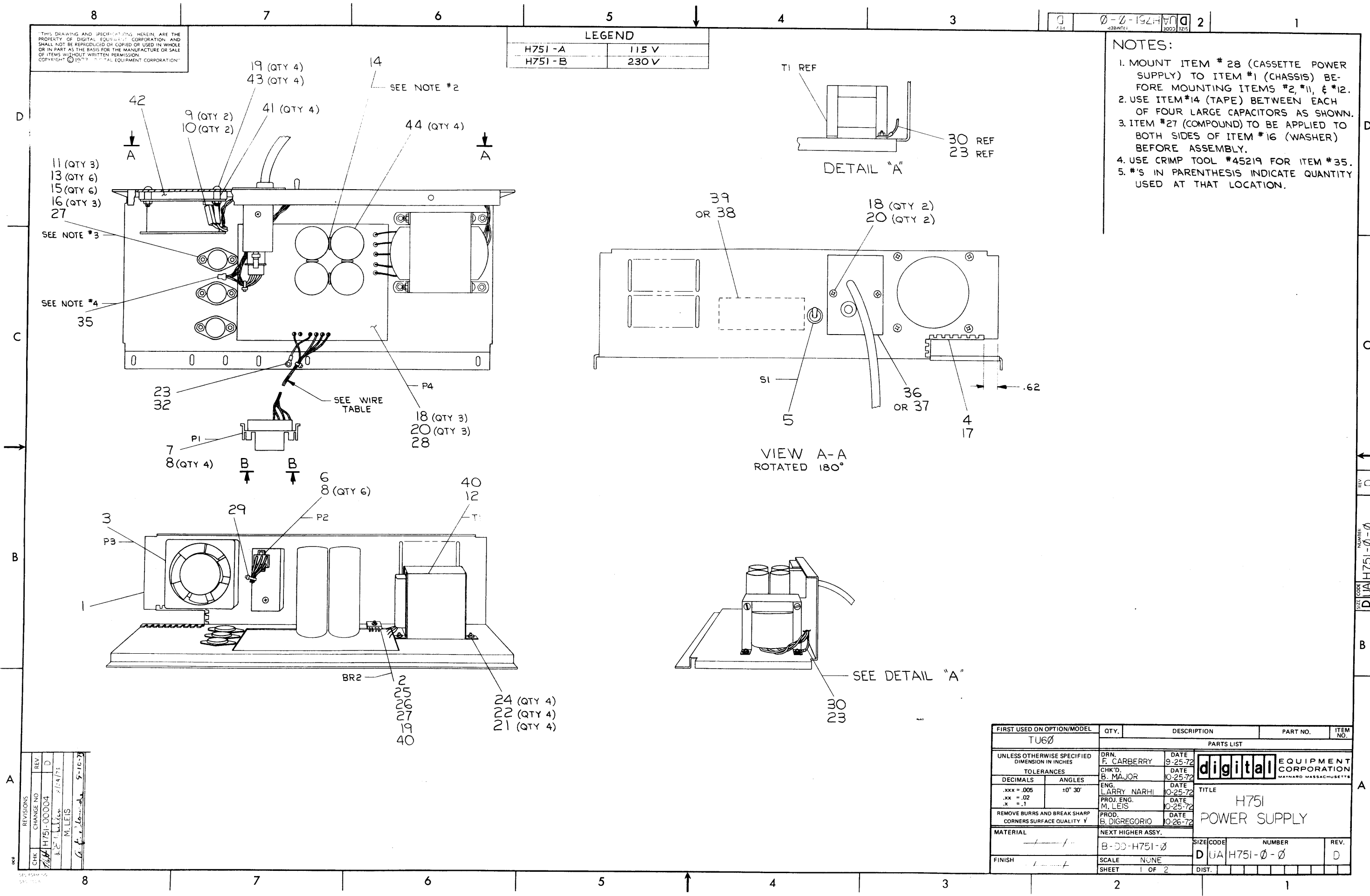
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
ETCH BOARD REV				
FIRST USED ON OPTION MODEL H751				
DRN. <i>P. Cassonville</i>		DATE <i>6-19-72</i>	 CIRCUIT SCHEMATIC H751	
CHKD. <i>S. Major</i>		DATE <i>10-25-72</i>		
ENG. <i>Kenny Zebala</i>		DATE <i>10-25-72</i>		
PROJ. ENG. <i>M. S. ...</i>		DATE <i>11/16/72</i>		
PROD. <i>Ed. ...</i>		DATE <i>12/1/72</i>		
NEXT HIGHER ASSY				
B-DD-H751-0		SCALE <i>1/1</i>	SHEET <i>1</i> OF <i>1</i>	REV. <i>B</i>
SEMICONDUCTOR CONVERSION CHART				
DEC. NO.	EIA NO.	DEC. NO.	EIA NO.	DIST. <i>1</i>

SIZE CODE NUMBER
 DCS H751-0-1
 REV. B

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LEGEND	
H751-A	115 V
H751-B	230 V

- NOTES:
1. MOUNT ITEM # 28 (CASSETTE POWER SUPPLY) TO ITEM #1 (CHASSIS) BEFORE MOUNTING ITEMS #2, #11, & #12.
 2. USE ITEM #14 (TAPE) BETWEEN EACH OF FOUR LARGE CAPACITORS AS SHOWN.
 3. ITEM #27 (COMPOUND) TO BE APPLIED TO BOTH SIDES OF ITEM #16 (WASHER) BEFORE ASSEMBLY.
 4. USE CRIMP TOOL #45219 FOR ITEM #35.
 5. #'S IN PARENTHESIS INDICATE QUANTITY USED AT THAT LOCATION.



REV.	CHANGE NO.	DATE	BY	APP.
D	00004	5-10-72	M. LEIS	
C	00003	2/19/73	M. LEIS	
B	00002			
A	00001			

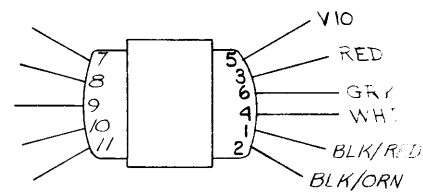
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES				
TOLERANCES				
DECIMALS	ANGLES			
.xxx = .005	±0° 30'			
.xx = .02				
.x = .1				
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY Y				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH				
SHEET 1 OF 2				

DATE	BY	APP.	TITLE
9-25-72	E. CARBERRY		H751 POWER SUPPLY
10-25-72	B. MAJOR		
10-25-72	LARRY NARHI		
10-25-72	M. LEIS		
10-26-72	B. DIGREGORIO		

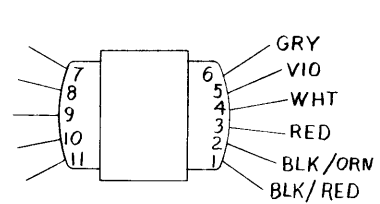
SIZE CODE	NUMBER	REV.
DUA	H751-0-0	D

REV. D
 NUMBER DUAH751-0-0
 SIZE CODE DUA

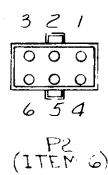
NO	AWG	COLOR	FROM	TO	WITH	REMARKS	LENGTH (IN)
11	18	BLK	S1-1	P1-1	8		DO NOT CUT
5	18	BLK	S1-2	P1-1	35	SEE NOTE 4	DO NOT CUT
12	18	BLK/RED	T1-1				15
32	18	BLK	P2-4				3
12	18	VIO	T1-5	P3-1	2.10		18
12	18	RED	T1-3	P3-2	8		18
12	18	WHT	T1-4	P3-3	8		18
30	18	GRN	P2-2	P3-4	23	SEE DETAIL A	16
12	18	GRY	T1-6	P3-2	8		18
12	18		T1-7	P4-7		SOLDER	1 1/4
12	18		T1-8	P4-8		SOLDER	1 1/4
12	18		T1-9	P4-9		SOLDER	1 1/4
12	18		T1-10	P4-10		SOLDER	1 1/4
12	18		T1-11	P4-11		SOLDER	1 1/4
31	18	RED	P4-+EV	P1-4	8		16
33	18	GRN	P4-+EV	P1-1	8		16
34	18	GRY	P4--EV	P1-2	8		16
32	18	BLK	P4-GND	P1-3	8		16
12	18	BLK/ORN	T1-2	P2-6	8		18
2			BR2-(+)	P4-(+)		SOLDER	1
2			BR2-(-)	P4-(-)		SOLDER	1
2			BR2-A	P4-A		SOLDER	1
2			BR2-B	P4-B		SOLDER	1



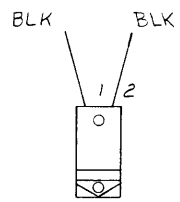
T1 TOP VIEW (ITEM 12)



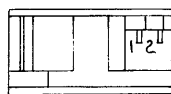
T1 (ALTERNATE VENDOR)



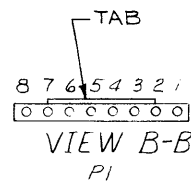
P2 (ITEM 6)



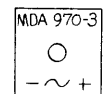
S1 REAR VIEW (ITEM 5)



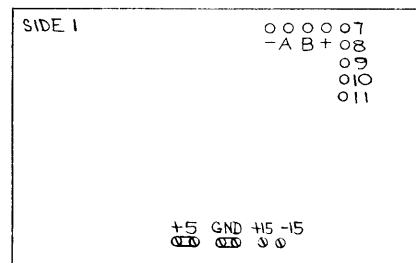
P3 (ITEM 3) TOP VIEW



VIEW B-B P1



MDA 970-3
-AB+
BR 2
TOP VIEW (ITEM 2)



P4 (ITEM 28)

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN: [Signature]	DATE: 9/20/78	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS: .XXX = .005, .XX = .02, .X = .1	CHK'D: [Signature]	DATE: 10/7/78	TITLE: H751 POWER SUPPLY	
ANGLES: ±0° 30'	ENG: [Signature]	DATE: 10-20-78	SIZE CODE: DUAH751-2-2	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ. ENG. [Signature]	DATE: 11/1/78	NUMBER: D	
MATERIAL	PROD. [Signature]	DATE: 11/2/78	REV. D	
FINISH	NEXT HIGHER ASSY.	SCALE: 1:1	SHEET 2 OF 2	

BRUNING 40-107 15968
REV. 100-A

SIZE CODE: DUAH751-0-0

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
PARTS LIST

MADE BY F. CARBERRY
DATE 9/19/72
ENG Larry Nadeau
DATE 10/26/72

CHECKED W. MAJOR
DATE 10/6/72
PROD Cab De Bona
DATE 10/26/72

SECTION 1
ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY	VARIATION
1	E-IA-5310191-0-0	CHASSIS, POWER SUPPLY	1	
2	1110208	DIODE ARRAY MDA970-3 (BR2)	1	
3	1210719	FAN, BOXER 115V, 25-35 CUFT	1	
4	9007036	GROMMET, CATERPILLAR	A/R	A/R
5	1203376	SWITCH, TOGGLE SPST	1	
6	1209351-06	CONNECTOR, MATE-N-LOCK 6 PIN	1	
7	1209340-01	CONNECTOR, MATE-N-LOCK 8 PIN	1	
8	1209378-01	PIN, MATE-N-LOCK	10	10
9	1210820-01	MINI-FASTAB, HOUSING #1-480417-0	2	2
10	1210820-02	MINI-FASTAB, PIN #60291-1	2	2
11	1505819	TRANSISTOR, 2N3055 (Q2, Q3, Q4)	3	3
12	1611096	TRANSFORMER, MMC 4565-1/T72105 (T1)	1	1
13	9006012-1	SCR, #4-40 x 7/16, PHL PAN HD	6	6
14	9007834	TAPE, DOUBLE SIDED, 1/2 INCH	A/R	A/R
15	9006557	KEP NUT #4	6	6
16	9006721	WASHER, INSULATING	3	3
17		LOCTITE, IS-150	A/R	A/R
18	9006633	LOCK WASHER #6, INT TOOTH	5	5
19	9008185	KEP NUT #6	5	5
20	9006020-1	SCR, 6-32 x 1/2, PHL PAN HD	5	5
21	9006039-1	SCR, 8-32 x 1/2, PHL PAN HD	4	4
22	9006666	WASHER, FLAT, #8	4	4

TITLE H751 POWER SUPPLY

ASSY NO. D-UA-H751-0-0

SIZE CODE A PL

NUMBER H751-0-0

REV. D

ECO NO. H751-00004

SHEET 1 OF 2

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
PARTS LIST

MADE BY F. CARBERRY
DATE 9/19/72
ENG Larry Nadeau
DATE 10/26/72

CHECKED W. MAJOR
DATE 10/6/72
PROD Cab De Bona
DATE 10/26/72

SECTION 1
ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY	VARIATION
23	9006776	CONN, SOLDERLESS, AMP #31889	2	2
24	9006563	KEP NUT, #8	4	4
25	9007793-1	SCR, #6-32 x 9/16, PHL PAN HD	1	1
26	9006656	WASHER, FLAT, #6	1	1
27	9008268	COMPOUND, THERMAL JOINT	A/RA/R	A/RA/R
28	D-CS-5410131-0-1	CASSETTE POWER SUPPLY	1	1
29	9007031	CABLE TIE, PANDUIT, SST 1 M	A/RA/R	A/RA/R
30	9107360-55	WIRE, #18 AWG STRD, IPVC, GRN	A/RA/R	A/RA/R
31	9107360-22	WIRE, #18 AWG, STRD, IPVC, RED	A/RA/R	A/RA/R
32	9107360-00	WIRE, #18 AWG, STRD, IPVC, BLK	A/RA/R	A/RA/R
33	9107360-33	WIRE, #18 AWG, STRD, IPVC, ORN	A/RA/R	A/RA/R
34	9107360-66	WIRE, #18 AWG, STRD, IPVC, BLU	A/RA/R	A/RA/R
35	9009541	SPLICE, CLOSED END AMP #36965	1	1
36	C-UA-BC05H-0-0	LINE CORD SET, 115VAC	1	1
37	C-UA-BC05J-0-0	LINE CORD SET, 230VAC	1	1
38	A-DC-5310297-0-0	H751-A DECAL (115V)	1	1
39	A-DC-5310298-0-0	H751-B DECAL (230V)	1	1
40	9107278-00	TUBING, BLACK, TFE #18 AWG	A/RA/R	A/RA/R
41	9007615	1/4 X 1/4 X 6 ROUND FIBER SPACER	4	4
42	A-PS-1211343-0-0	FILTER	1	1
43	9006025-1	SCR, 6-32 X 5/8 PHL. PAN HD.	4	4
44	1011023	CAP, 14000 UF, 20V, (C7, C8, C9, C10)	4	4

TITLE H751 POWER SUPPLY

ASSY NO. D-UA-H751-0-0

SIZE CODE A PL

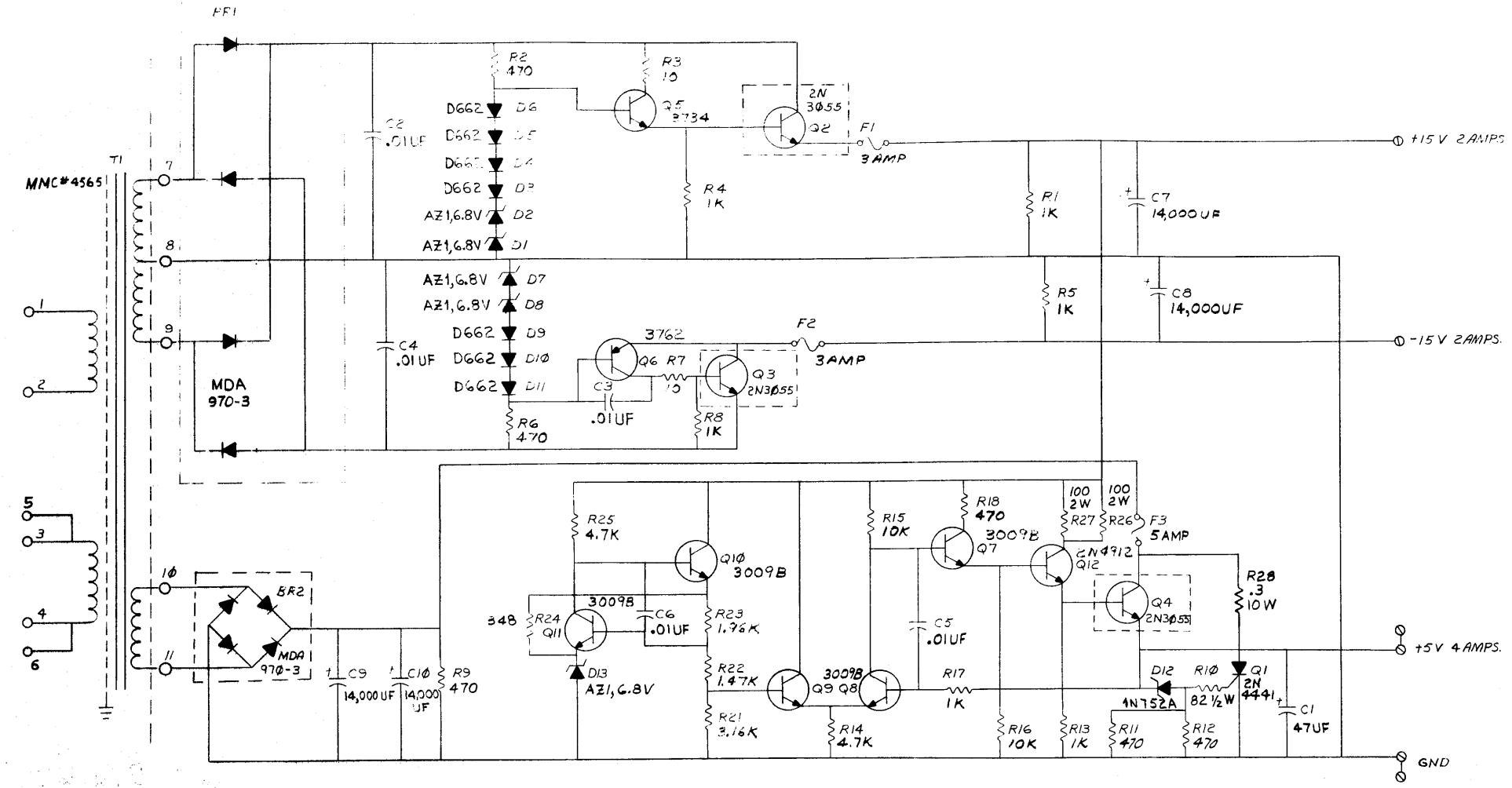
NUMBER H751-0-0

REV. D

ECO NO. H751-00004

SHEET 2 OF 2

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O INDICATES HOLES FOR DIODE BRIDGE
Q2, Q3, Q4, BR2 & T1 ARE MOUNTED ON
CHASSIS HEAT SINK

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST				
ETCH BOARD REV C				
DRN	<i>[Signature]</i>	DATE	7-25-72	
CHK'D	<i>[Signature]</i>	DATE	7-26-72	
ENG	<i>[Signature]</i>	DATE	7/27/72	
PROG. ENG.	<i>[Signature]</i>	DATE	7/27/72	
PROD.	<i>[Signature]</i>	DATE	7/27/72	
NEXT HIGHER ASSY				
DEC NO.	EIA NO.	DEC NO.	EIA NO.	
SEMICONDUCTOR CONVERSION CHART				SCALE
SHEET 2 OF 2				DIST.

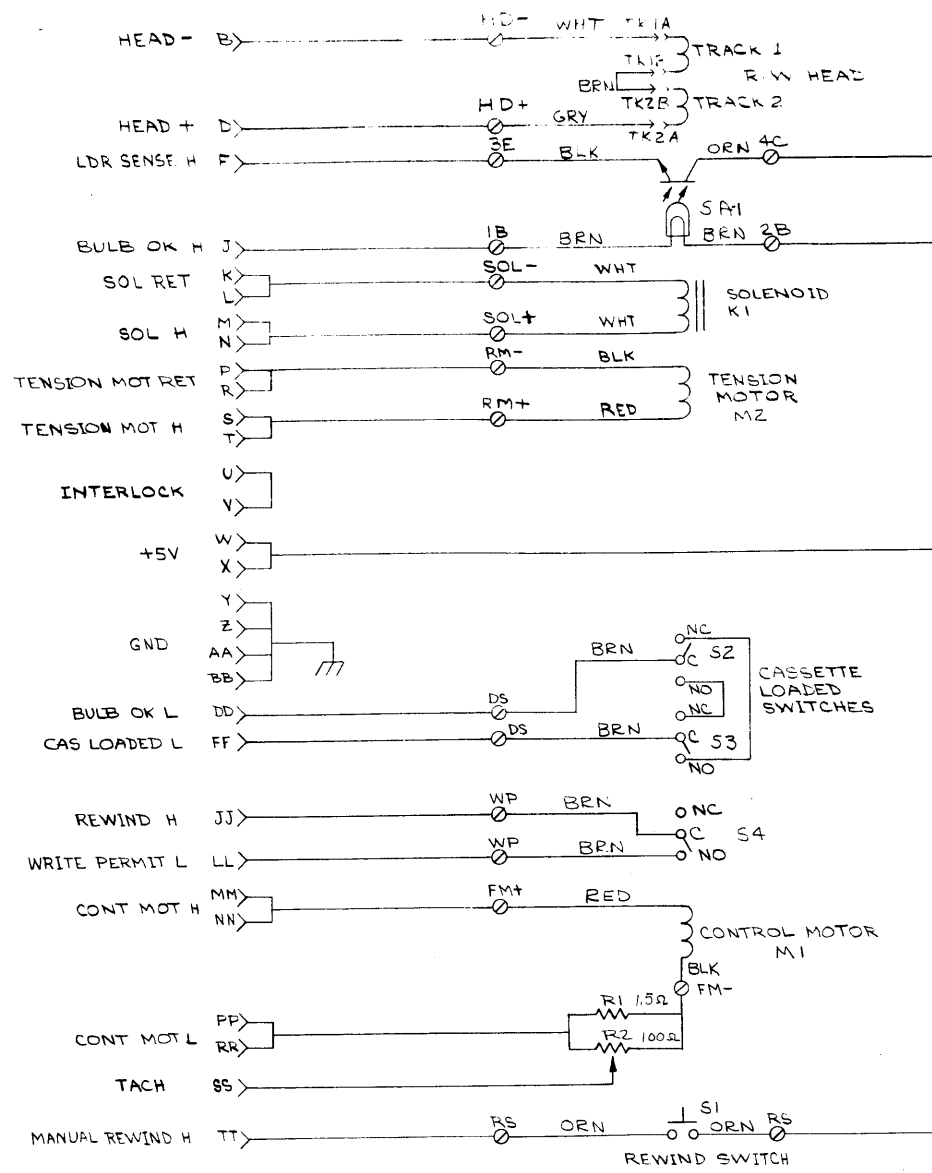
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS
TITLE
CASSETTE
POWER SUPPLY

SIZE CODE D NUMBER 5410131-0-1 REV. E

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NOTES:
 1. SWITCHES ARE SHOWN WITH "CAS LOADED" AND "WRITE PERMIT" ACTIVATED.
 2. CONNECT WIRE (ITEMS #44 & #45) TO HEAD (ITEM #20) USING CONNECTOR PINS SUPPLIED WITH HEAD (ITEM #20). SEE DETAIL "A".



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DRN <i>[Signature]</i>	DATE 10/13/72	 digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
DECIMALS ANGLES		CHK'D <i>[Signature]</i>	DATE 12/21/72	
.XXX - .005	± 0° 30'	ENG. <i>[Signature]</i>	DATE 11/17/72	
.XX - .02		PROJ. ENG. <i>[Signature]</i>	DATE 11/27/72	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		PRD. <i>[Signature]</i>	DATE 11/17/72	
MATERIAL		NEXT HIGHER ASSY.		
FINISH		SCALE		
SHEET 1 OF 1		DIST		
		SIZE CODE		
		NUMBER		
		REV.		
		DWD TU60-0-WD		

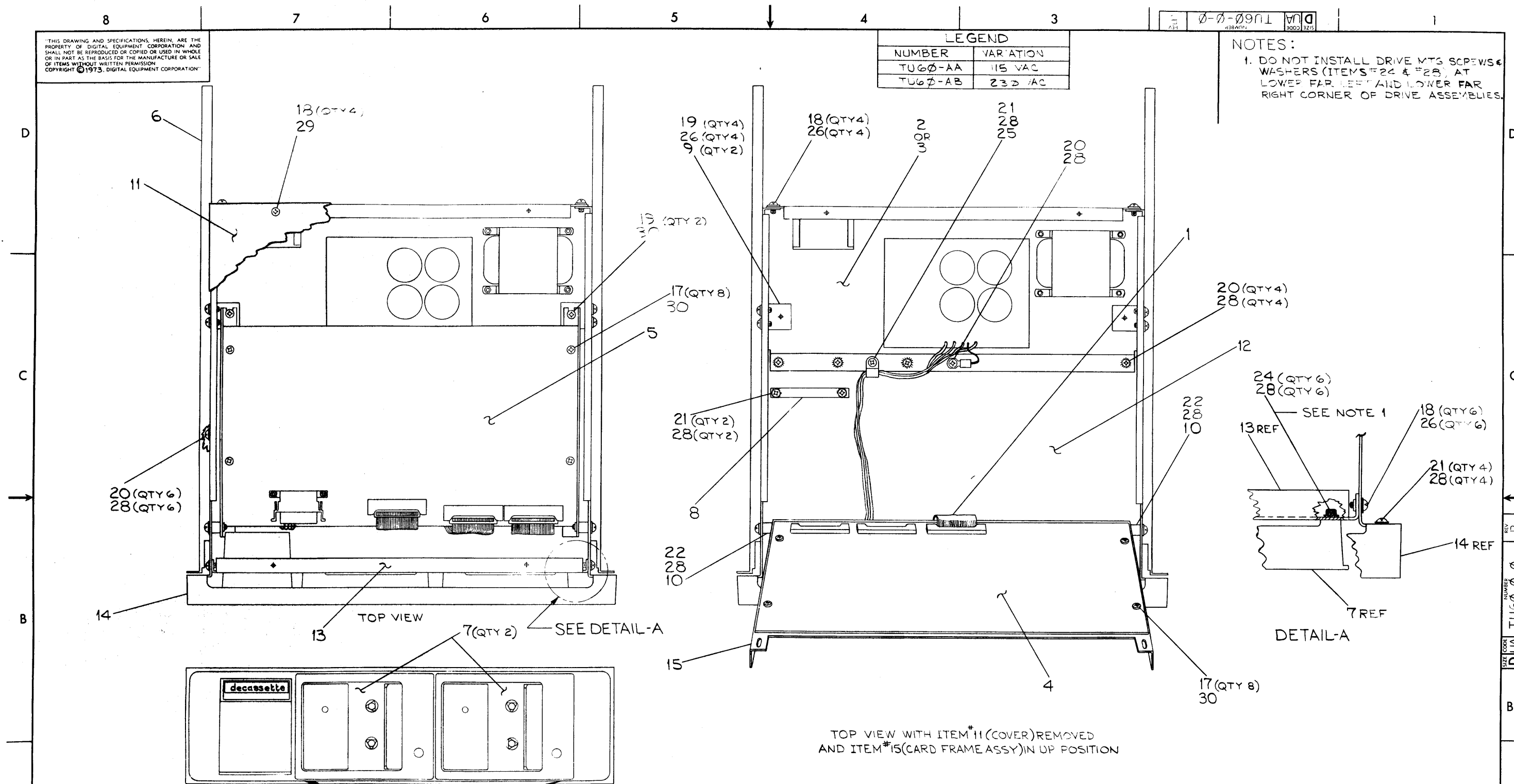
BRUNING 40-522 15840
 DEC FORM NO DRD 102-B
 REVISIONS
 CHANGE NO
 REV

SIZE CODE
 DWD TU60-0-WD

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LEGEND	
NUMBER	VARIATION
TU60-AA	115 VAC
TU60-AB	230 VAC

NOTES:
1. DO NOT INSTALL DRIVE MTS SCREWS & WASHERS (ITEMS #24 & #28) AT LOWER FAR LEFT AND LOWER FAR RIGHT CORNER OF DRIVE ASSEMBLIES.



TOP VIEW WITH ITEM #11 (COVER) REMOVED AND ITEM #15 (CARD FRAME ASSY) IN UP POSITION

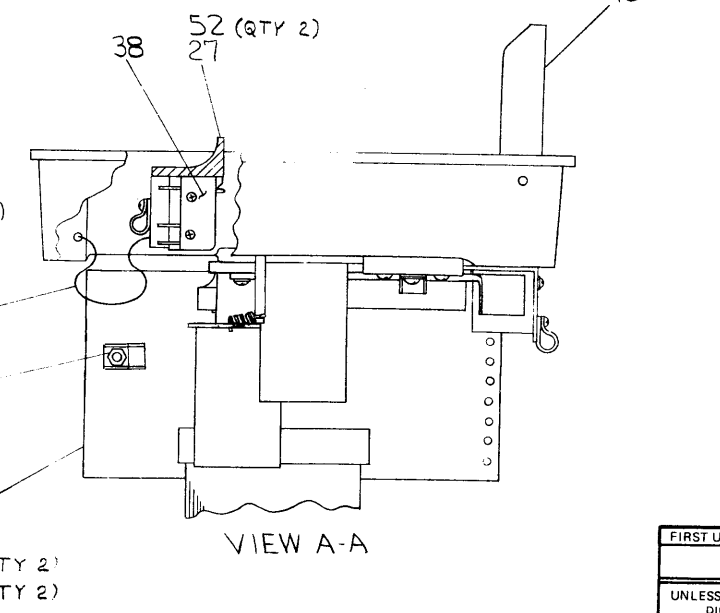
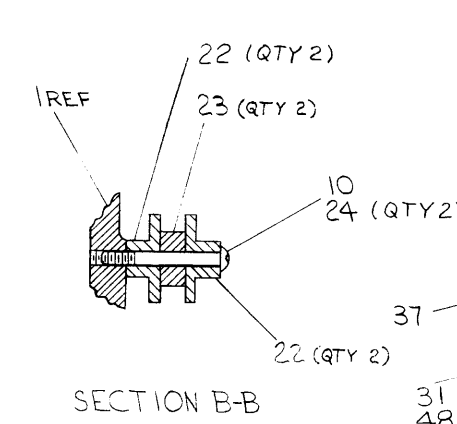
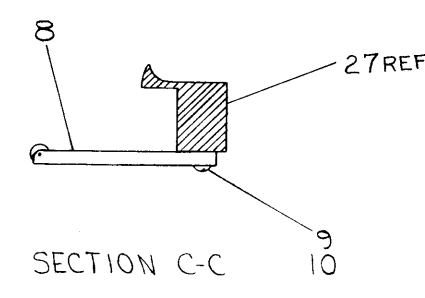
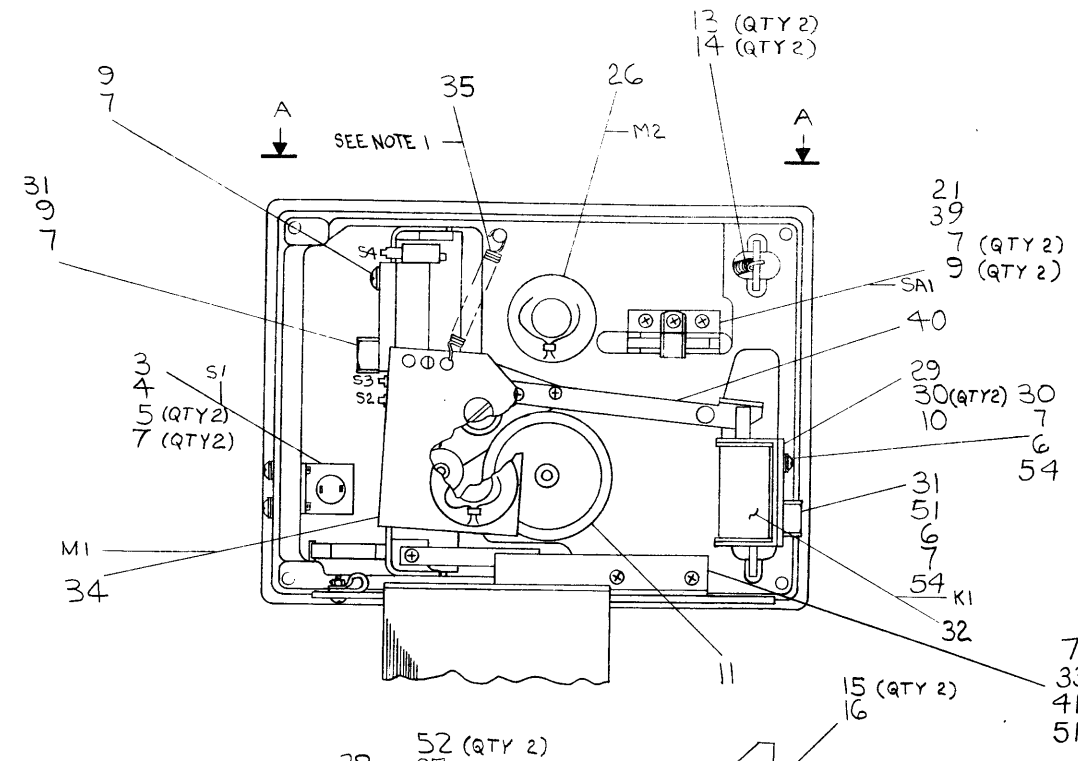
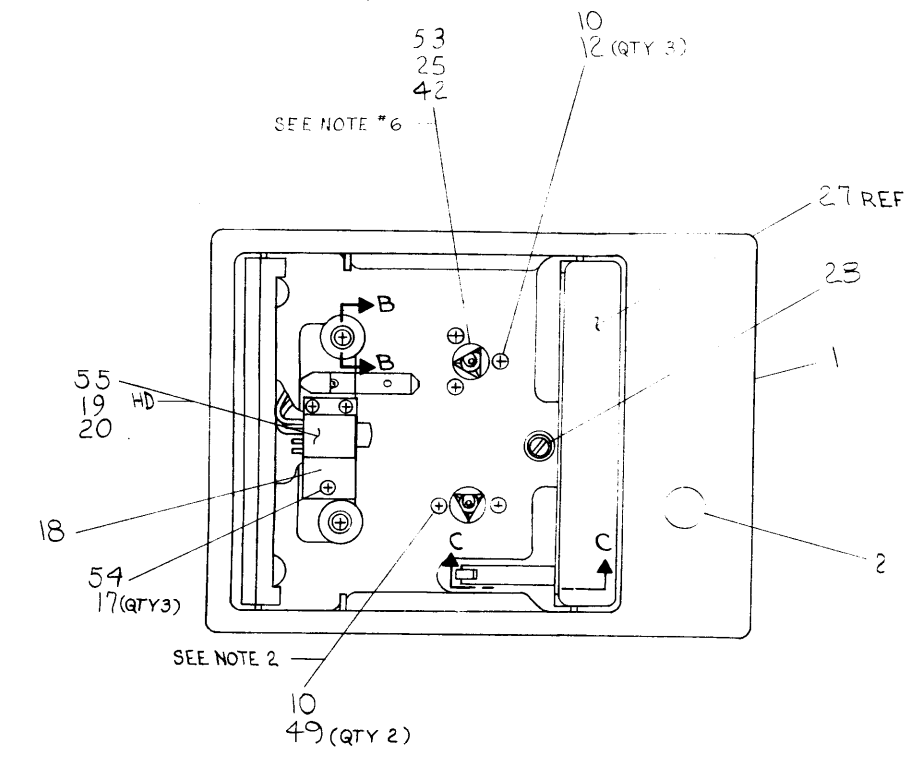
REV	CHANGE NO.	DATE	BY	CHK'D.
B	1	12/20/72	T. O'NEILL	A. PLOURDE
A	1	8/4/72	T. O'NEILL	A. PLOURDE

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES				
TOLERANCES				
DECIMALS	ANGLES	DATE		
.xxx = .005	±0° 30'	DRN. G. FLANDERS	12/20/72	
.xx = .02		CHK'D. W. MAJOR	1/11/73	
.x = .1		ENG. M. LEIS	1/15/72	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY V				
MATERIAL				
NEXT HIGHER ASSY.				
FINISH				
TITLE				
TU60 UNIT ASSY				
MATERIAL		SIZE CODE	NUMBER	REV.
B-DD-TU60-0		D UA	TU60-0-0	E
SCALE		DIST.		
SHEET 1 OF 2				

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- NOTES:
1. SET SPRING TENSION 45/55 GRAMS MEASURED ON ROCKER ASSY LEVER AT POSITION WHERE SOLENOID STRIKES LEVER. TRANSPORT MUST BE IN OPERATING POSITION.
 2. TIGHTEN SCR (ITEM #49) TO 6 INCH-POUNDS OF TORQUE.
 3. TRIM LEADS OF ITEM #50 (CAP) TO 38 LONG BEFORE SOLDERING TO ITEM #36.
 4. SEE DETAILS B, C, D TO LOCATE ITEM #47 (CABLE TIES).
 5. CABLE WILL BE LACED SO AS NOT TO INHIBIT FREE MOTION OF LOCK-BAR #27.
 6. ITEM #53 TO BE USED BETWEEN MOTOR SHAFT AND I.D. OF COUPLING. APPLY LOCTITE TO I.D. OF COUPLING AND SLIP ON MOTOR SHAFT. BE SURE LOCTITE DOES NOT RUN DOWN MOTOR SHAFT TO MOTOR BEARING.



REV	DATE	BY	CHKD	DESCRIPTION
1	12-17-72	V. DEMPSEY		TU60-00008
2	1-17-73	V. DEMPSEY		TU60-00001
3	4-17-73	V. DEMPSEY		TU60-00012
4	9-7-73	M. LEIS		TU60-00012

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DRN. <i>Cartney</i> DATE <i>10/29/72</i>	CHK'D. <i>Cartney</i> DATE <i>12/21/72</i>	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS .xxx + .005 .xx - .02 .x - .1	ANGLES ± 0° 30'	ENG. <i>W. J. Brown</i> DATE <i>12-14-72</i>	TITLE TRANSPORT ASSY (TU60)	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROD. <i>W. J. Brown</i> DATE <i>11/1/73</i>	PROJ. ENG.	SIZE CODE D AI 70C9014-0-0	
MATERIAL	NEXT HIGHER ASSY.	SCALE NONE	NUMBER	REV.
	D-JA-TU60-2-0	SHEET OF 2	70C9014-0-0	C

REV C
NUMBER
D AI 70C9014-0-0

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY W. MAJOR
 DATE 11/27/72
 ENG WY BENSON
 DATE 1-16-73
 CHECKED W. MAJOR
 DATE 1/16/73
 PROD *W. Benson*
 DATE 1/18/73
 SECTION 1
 ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY	VARIATION
1	D-IA-7410640-0-0	BASE ASSY	1	
2	B-MD-7410518-0-0	BUTTON, REWIND SWITCH	1	
3	1211040	SWITCH, PUSHBUTTON SPST	1	
4	B-MD-7410519-0-0	BRACKET, REWIND SWITCH	1	
5	9006011-1	SCR, PHL HD PAN #4-40 X 3/8	2	
6	9008172	WASHER, FLAT #4 S.S.	2	
7	9006632	WASHER, INT TOOTH #4	1/2	
8	C-IA-7409930-0-0	EJECTOR ASSY	1	
9	9006013-1	SCR, PHL HD PAN #4-40 X 1/2	5	
10		LOCTITE 242	A/R	
11	D-AD-7009146-0-0	SPINDLE ASSEMBLY	1	
12	9009275-2	SCR, PHL HD PAN #4-40 X 3/8	3	
13	9009308	SPRING	2	
14	9006527	ROLL PIN 3/32 X 11/16 LG	2	
15	9006531	ROLL PIN 1/8 X 3/8 LG	2	
16	C-IA-7409924-0-0	COVER, LOWER CASSETTE ASSY	1	
17	9006001-1	SCR, PHL HD PAN #2-56 X 1/4	3	
18	C-MD-7409908-0-0	PLATE, HEAD MOUNT	1	
19	9009276	SCR, PHL HD PAN #2-56 X 1/8	1	
20	1211174	HEAD	1	
21	D-PS-1211289-0-0	SENSOR ASSEMBLY	1	
22	C-MD-7409912-0-0	GUIDE, TAPE	4	

TITLE
 TRANSPORT ASSY (TU6Ø)
 ASSY NO. D-AD-7009014-0-0
 SIZE CODE A PL
 NUMBER 7009014-0-0
 REV. ECO NO. C TU6Ø-00012
 SHEET 1 OF 3

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY W. MAJOR
 DATE 11/27/72
 ENG WY BENSON
 DATE 1-16-73
 CHECKED W. MAJOR
 DATE 1/16/73
 PROD *W. Benson*
 DATE 1/18/73
 SECTION 1
 ISSUED SECT. 1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY	VARIATION
23	C-MD-7409911-0-0	SPACER, TAPE GUIDE	2	
24	9006015-1	SCR, PHL HD PAN #4-40 X 3/4	2	
25	D-PS-1211279-0-0	COUPLING, CASSETTE DRIVE	1	
26	1211111	MOTOR, CASSETTE	1	
27	D-MD-7409917-0-0	LOCK-BAR, CASSETTE	1	
28	9009277-1	SCR, SLOTTED HD PAN #8-32 X 1/4	1	
29	C-MD-7409928-0-0	BRACKET, SOLENOID	1	
30	9008301-1	SCR, PHL HD PAN #4-40 X 1/4	5	
31	9007079	CLAMP, CABLE 5/16	3	
32	1211189	SOLENOID	1	
33	B-MD-7409929-0-0	BRACKET, TERMINAL BOARD	1	
34	C-AD-7009140-0-0	MOTOR MOUNT ASSY	1	
35	9009279	SPRING	1	
36	D-IA-7009041-0-0	TERMINATOR CABLE ASSY	1	
37	C-MD-7410537-0-0	SPRING, LOCK BAR	1	
38	C-AD-7009141-0-0	SWITCH ASSY	1	
39	B-MD-7410544-0-0	SPACER, E.O.T. BLOCK	1	
40	C-AD-7009148-0-0	LEVER ASSY	1	
41	9006791	SPACER, AL HEX #4 1/8 LG	2	
42	9009274	SCREW, SET #2-56 X 1/8 LG	1	
43	9107636-33	WIRE, #26 AWG IPVC STRD ORN	A/R	
44	9107636-11	WIRE, #26 AWG IPVC STRD BRN	A/R	

TITLE
 TRANSPORT ASSY (TU6Ø)
 ASSY NO. D-AD-7009014-0-0
 SIZE CODE A PL
 NUMBER 7009014-0-0
 REV. ECO NO. C TU6Ø-00012
 SHEET 2 OF 3

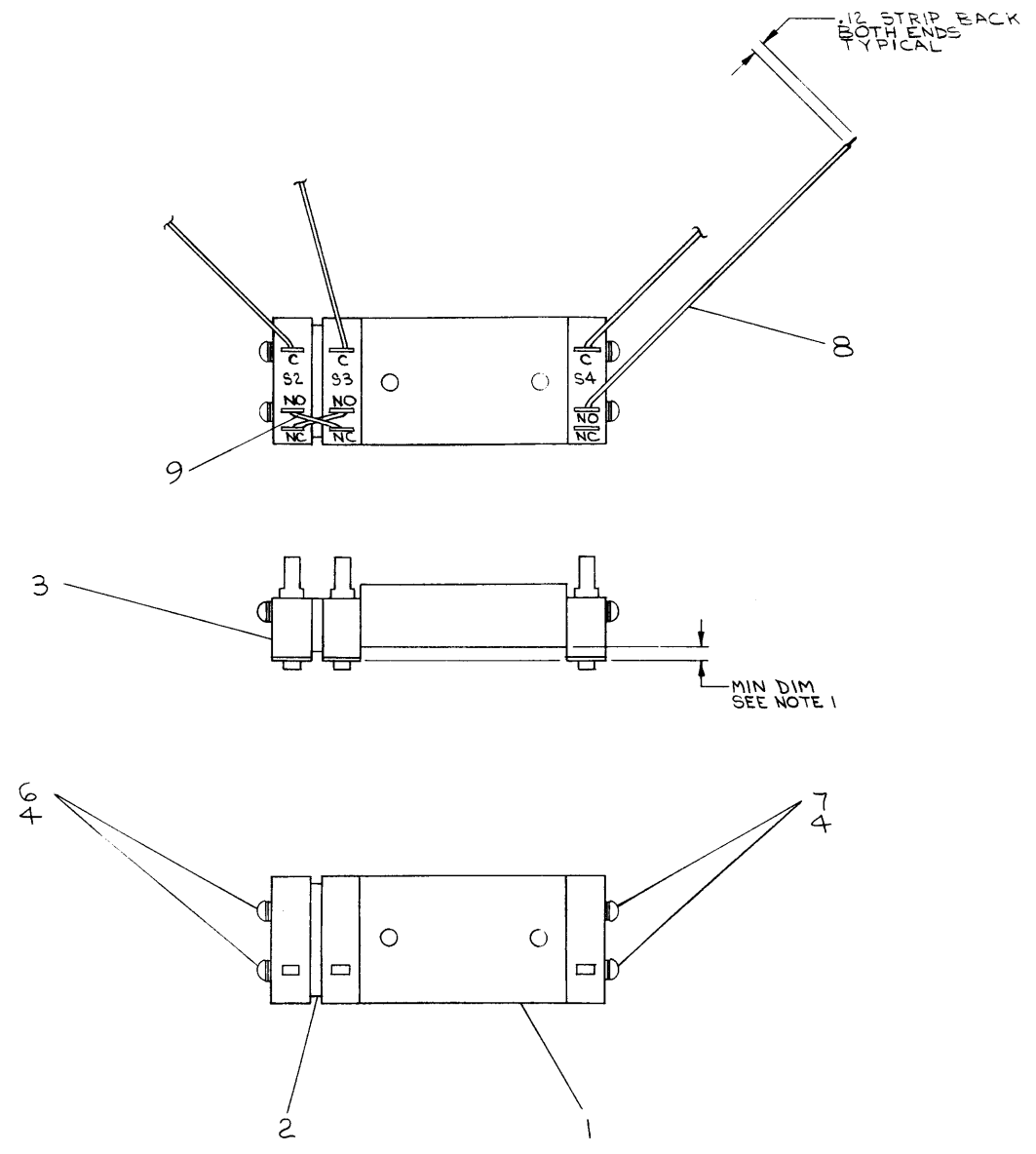
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WIRE TABLE

ITEM NO.	DESCRIPTION	AWG	FROM		TO		LENGTH
			CONN	WITH	CONN	WITH	
8	BRN	26	S2-C	SOLDER	→	→	5"
9	BUSS	22	S2-NO	SOLDER	S3-NC	SOLDER	.75"
9	BUSS	22	S2-NC	SOLDER	S3-NO	SOLDER	.75"
8	BRN	26	S3-C	SOLDER	→	→	5"
8	BRN	26	S4-C	SOLDER	→	→	6"
8	BRN	26	S4-NO	SOLDER	→	→	4.5"

NOTES:
1. SWITCHES MUST BE ADJUSTED AT ASSY TO OBTAIN MINIMUM DIMENSION FROM BOTTOM SURFACE OF SWITCHES TO BOTTOM SURFACE OF SWITCH BLOCK.



QTY.	DESCRIPTION	PART NO.	ITEM NO.
A/R	WIRE, BUSS, #22 AWG	9107560-01	9
A/R	WIRE #26 AWG, IPVC, STRD	9107636-11	8
2	SCR, PHL HD PAN 2-56X 1/2 SST	9006005-1	7
2	SCR, PHL HD PAN 2-56X 3/4 SST	9006006-1	6
4	WASHER, 250X 094X 020 THK	9008877	5
4	WASHER, INT TOOTH #2 SST	9006631	4
3	SWITCH, MICRO	1209782	3
1	SPACER, MICRO SWITCH	C-MD-7409935-00	2
1	BLOCK, SWITCH	C-MD-7409926-0-0	1

FIRST USED ON OPTION/MODEL		TUG0	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN: <i>[Signature]</i> DATE: 11/2/72 CHK'D: <i>[Signature]</i> DATE: 12/9/72 ENG: <i>[Signature]</i> DATE: 11/7/72 PROJ. ENG: <i>[Signature]</i> DATE: 12/1/72 PROD: <i>[Signature]</i> DATE: 11/10/72	
DECIMALS: XXX = .005, XX = .02, X = .1	ANGLES: ± 0° 30'	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE: SWITCH ASSY	
REMOVE BURRS AND BREAK SHARP CORNERS. SURFACE QUALITY		NEXT HIGHER ASSY: U-AD-7009C14-0-0	
MATERIAL: <i>[Symbol]</i>	FINISH: <i>[Symbol]</i>	SIZE CODE: D AD	NUMBER: 7009141-0-0
SCALE: 2/1		REV. A	
SHEET 1 OF 1		DIST. <i>[Blank]</i>	

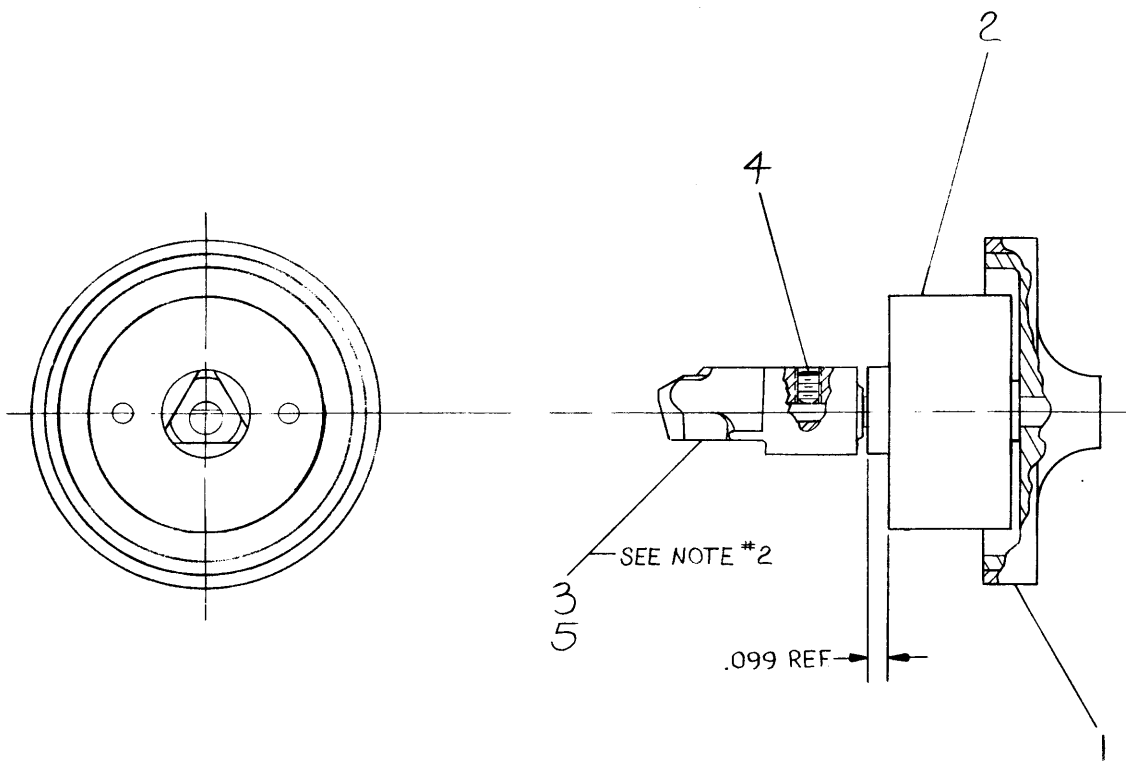
REVISIONS

CHK	CHANGE NO	REV
	TUG0-00012	A
		1

DATE: 11/2/72
M. LEIS

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1972

NOTES:
1. ITEM #2 TO BE FITTED AGAINST SHOULDER OF SPINDLE.
2. LOCTITE TO BE USED BETWEEN SPINDLE SHAFT AND I.D. OF COUPLING. APPLY LOCTITE TO I.D. OF COUPLING AND SLIP ON SPINDLE SHAFT. BE SURE LOCTITE DOES NOT RUN DOWN TO BEARING.



A
B
C
D

A
B
C
D

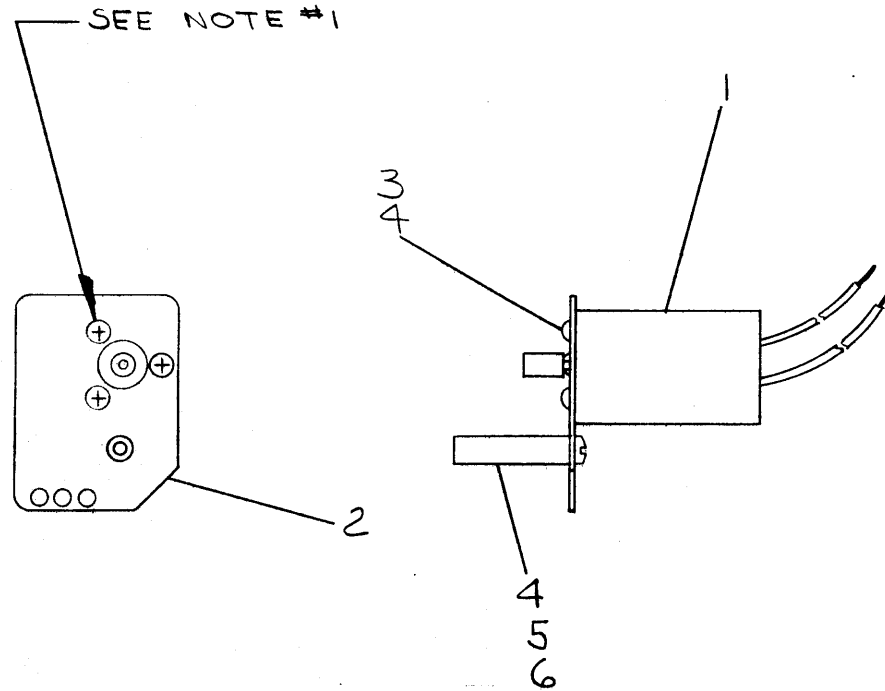
BRUNING 40-107 1596B	REV. A	12/12/72	W. BENSON
CHG	CHANGE NO.	REV.	
TU60-00004	A		
TU60-00007	B		
V LEMPSEY			
3-27-73			

A/R	LOCTITE IS 150		5
1	SCREW, SET, #2-56	9009274	4
1	COUPLING, CASSETTE DRIVE	D-PS-1211279-0-0	3
1	BEARING	C-MD-7410692-0-0	2
1	PULLEY, DRIVE ASSY	C-IA-7409914-0-0	1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN: <i>W. Benson</i>	DATE: 9/11/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS	
DECIMALS	CHK'D: <i>W. Benson</i>	DATE: 10/25/72	TITLE: SPINDLE ASSY	
ANGLES	ENG: <i>W. Benson</i>	DATE: 12/1/72		
.XXX = .005	PROJ. ENG: <i>W. Benson</i>	DATE: 12/1/72		
.XX = .02	PROJ. DATE: 6/27/72			
X = .1	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY			
MATERIAL	NEXT HIGHER ASSY.	SIZE CODE	NUMBER	REV.
		C AD	7009146-0-0	B
FINISH	SCALE 2/1	SHEET 1	OF 1	DIST.

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NOTES:
1. LOCTITE (#4) TO BE APPLIED TO THREADS OF ITEMS #3 & #5.



QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	PIVOT, MOTOR	GMD-7409915-0-0	6
1	SCR, SLOT HD PAN	9009277	5
A/R	LOCTITE 242		4
3	SCR, PHL PAN HD 4-40-1/4	9008301-1	3
1	MOUNT, MOTOR	GMD-7409910-0-0	2
1	DRIVE MOTOR ASSY	C-IA-7009139-0-0	1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU6Ø				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES	DRN. <i>K Davis</i>	DATE 9-12-72	digital EQUIPMENT CORPORATION <small>MAYNARD MASSACHUSETTS</small> TITLE MOTOR MOUNT ASSY	
DECIMALS ANGLES	CHK'D <i>W Major</i>	DATE 11/1/72		
.XXX - .005 .XX - .02 .X - .1	ENG. <i>WY BENSON</i>	DATE 11/1/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	PROJ. ENG. <i>WY BENSON</i>	DATE 11/6/72		
	DATE 11/1/72			
MATERIAL	NEXT HIGHER ASSY.		SIZE CODE	NUMBER
FINISH			C AD	7009140-0-0
	SCALE 1/1			REV. A
	SHEET 1 OF 1		DIST.	

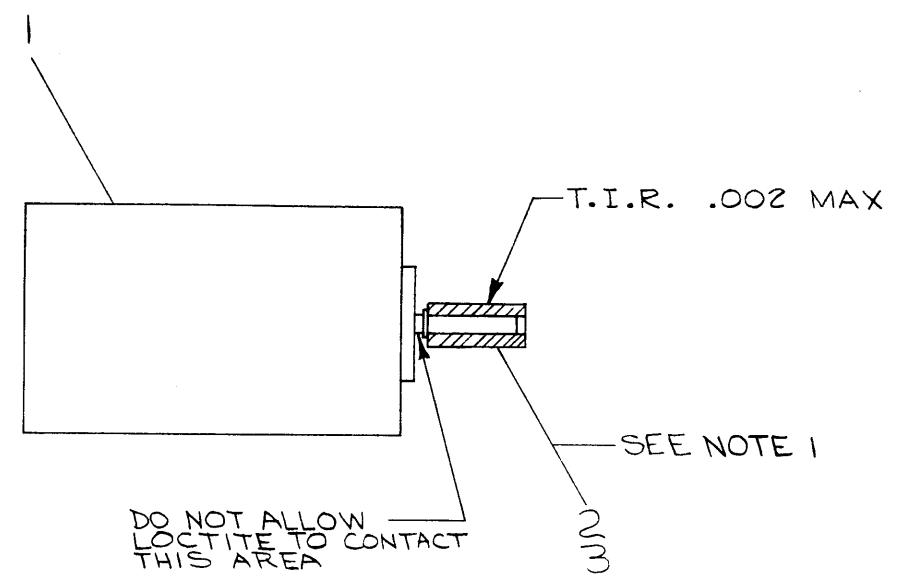
REV.	CHANGE NO.	DATE	BY
A	TU60-00012	9-7-73	MLEIS

BRUNING 40-107 15968

NUMBER 7009140-0-0
 REV. A
 SIZE CODE C AD
 B

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NOTES:
 1. SLEEVE (#2) TO BE PRESS FIT ON MOTOR SHAFT TO BEARING. LOCTITE TO BE APPLIED SPECIFICALLY TO INSIDE OF SLEEVE BEFORE ASSEMBLY.



D
C
B
A

D
C
B
A

BRUNING 40-107 1596B	REVISIONS	CHANGE NO.	REV.
	TU60-00012		A
	M LEIS		

DEC FORM NO. DRC 100-A

4

3

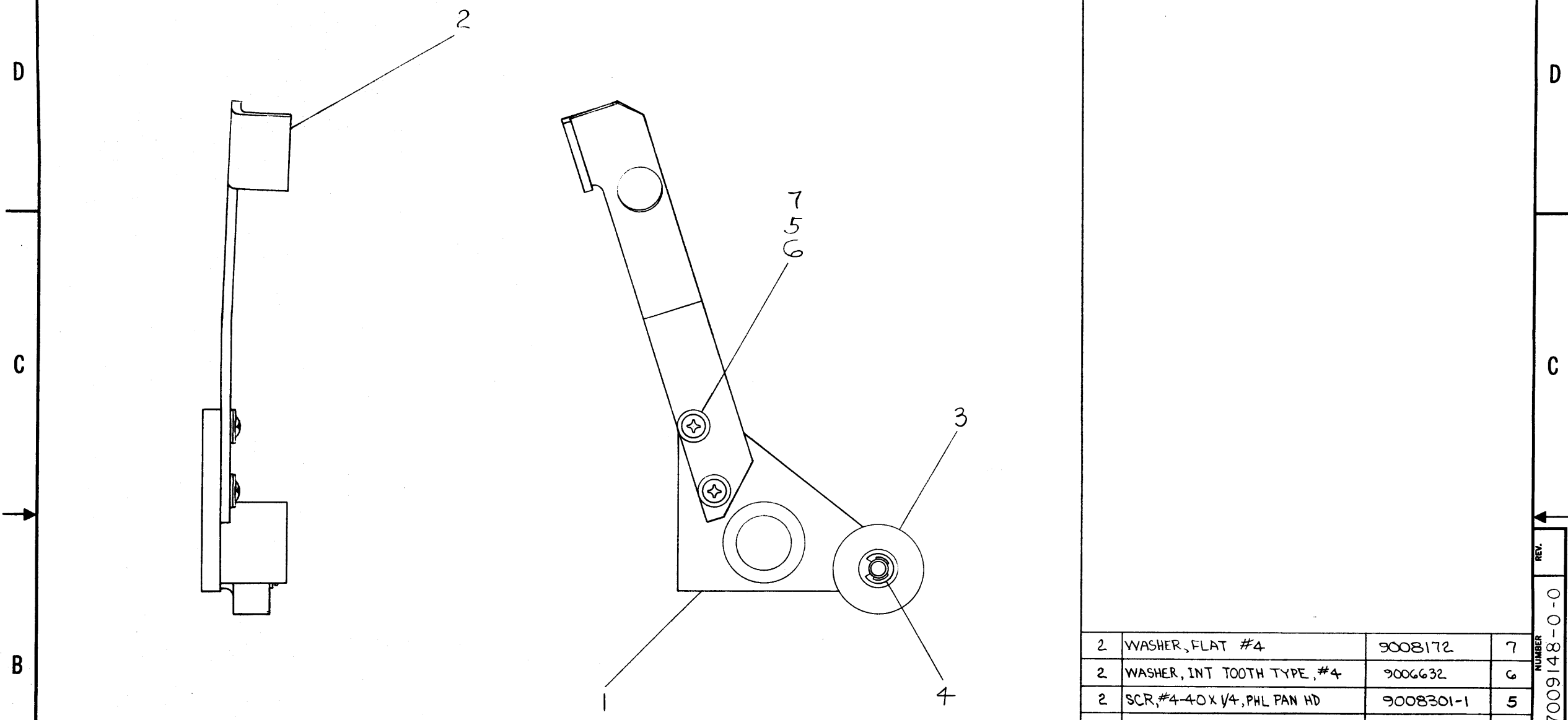
2

1

FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN. <i>Z. Gibson</i>	DATE 10-5-72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE DRIVE-MOTOR ASSY	
DECIMALS	ANGLES	CHK'D. <i>W. J. ...</i>	DATE 10/2/72		
.XXX = .005	± 0° 30'	ENG. <i>C. J. ...</i>	DATE 10/2/72		
.XX = .02		PROJ. ENG. <i>...</i>	DATE 10/2/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY		DATE 10/27/72			
MATERIAL		NEXT HIGHER ASSY.		SIZE CODE	NUMBER
---		C-AD-730-1A-0-0		C IA	7009139-0-0
FINISH		SCALE 2/1		DIST. G	REV. A
		SHEET 1 OF 1			

REV. A
NUMBER 7009139-0-0
SIZE CODE C IA

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QTY.	DESCRIPTION	PART NO.	ITEM NO.
2	WASHER, FLAT #4	9008172	7
2	WASHER, INT TOOTH TYPE, #4	9006632	6
2	SCR, #4-40 X 1/4, PHL PAN HD	9008301-1	5
1	RING, RETAINING	9009273	4
1	ROLLER, IDLER	B-MD-7409932-0-0	3
1	LEVER, ROCKER	C-MD-7409931-0-0	2
1	ROCKER ASSY	C-IA-7409919-0-0	1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TU60				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRM <i>Z. Carberry</i> DATE 9/12/72	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS TITLE LEVER ASSY	
DECIMALS	ANGLES	CHK'D <i>W. Major</i> DATE 11/1/72		
.XXX = .005	± 0° 30'	ENG. <i>W. Major</i> DATE 11/1/72		
.XX = .02		PROJ. ENG. <i>m. deo</i> DATE 11/6/72		
.X = .1		PROD <i>[Signature]</i> DATE 11/1/72		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSY.			
FINISH	D-AD-700914-0-0			
	SCALE	SIZE CODE NUMBER REV.		
	2/1	C AD 7009148-0-0		
	SHEET 1 OF 1	DIST. 1		

BRUNING 40-107 15968	REV.	
	CHANGE NO.	
CHK		

NUMBER 7009148-0-0
 SIZE CODE C AD
 REV.

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DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 12-13-72

TITLE TA8 FIELD INSTALLATION AND ACCEPTANCE PROCEDURE

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE

ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE TA8 Field Installation and Acceptance Procedure

1.0 HARDWARE

1.1 TA8E DECASSETTE Interface Module (M8331)

1.2 TU60 DECASSETTE, Dual Drive

1.2.1 TA8-AA, TU60-AA Cass., Dual Drive 115VAC
50-60 Hz, Rackmountable

1.2.2 TA8-AB, TU60-AB Cass., Dual Drive 230VAC,
50-60 HZ, Rack Mountable

1.2.3 TA8-BA, TU60-BA Cass., Dual Drive 115VAC
50-60 Hz, Table Top

1.2.4 TA8-BB, TU60-BB Cass., Dual Drive 230VAC
50-60 Hz, Table Top

1.3 Interface Cables

1.3.1 (2) BC08-R-10, Flat Cable (used with TA8-A)

1.3.2 (1) 70-08624, Round Cassette Cable, 20 feet,
(used with TA8-B)

1.4 System Hardware Requirements

1.4.1 ASR Teletype, or equivalent

1.4.2 Programmer Console

1.4.3 A PDP-8E, 8M, or 8F with at least 4K
of Read/Write Memory.

2.0 ACCESSORIES

2.1 Cassette, Maindecs - LIBKIT-8E-TA8E

2.1.1 TA8E Cassette Diagnostic
Maindec-08-DHTAA-A-PB
Maindec-08-DHTAA-A-D

2.1.2 TA8E Data Reliability
Maindec-08-DHTAB-A-PB
Maindec-08-DHTAB-A-D

ENG <i>L. Harli</i> 12/13/72	APPD <i>L. Harli</i> 12/13/72	SIZE A	CODE SP	NUMBER TA8-0-6	REV
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DEC FORM NO. DRA 107

SIZE A	CODE SP	NUMBER TA8-0-6	REV
---------------	---------	----------------	-----

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

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE TA8 Field Installation and Acceptance Procedure (continued)

2.0 continued

2.2 TA8E Maintenance Manual
DEC-8E-HR3B-TA8E-D

2.3 TU60 Maintenance Manual
DEC-00-TU60-DA

2.4 TA8 Print Set
B-DD-TA8-E-D
B-DD-T60-0-0

2.5 DECASSETTE Tapes (2)
36-11226

3.0 TOOLS

3.1 The following tools are the only ones necessary to install and perform the Acceptance Procedure.

3.1.1 If the TA8 is rack mounted, some sort of pallet handling equipment is needed to position the system.

3.1.2 A philips head screw driver.

3.1.3 A box cutter, if TU60 is in a separate container.

3.1.4 If TU60 is rack mounted, a 10in adjustable wrench to remove the pallet.

4.0 UNPACKING AND INSPECTION

4.1 Rack Mounted

4.1.1 Place the rack in the final installation location and remove the protective covering.

4.1.2 Remove the bolts securing the rack to the pallet and raise the leveling legs.

4.1.3 Carefully roll the rack off the pallet.

4.1.4 Open the rear door of the rack and remove the shipping brackets from the rear of each TU60. Retain the brackets for possible future shipments.

4.1.5 Slide the TU60 out from the rack and remove the top cover.

4.1.6 Inspect the TU60 and, if any, record all damage on the Acceptance Form.

SIZE	CODE	NUMBER	REV
A	SP	TA8-0-6	

ENGINEERING SPECIFICATION

CONTINUATION SHEET

TITLE TA8 Field Installation and Acceptance Procedure (continued)

4.0 continued

4.2 Shipped in a separate container.

4.2.1 Using a box cutter open the container and remove the foam and corrugated packing pieces.

4.2.2 Lift the transport out of the carton and remove the plastic shipping bag.

4.2.3 If the TU60 is to be rack mounted, unpack the chassis slides and install them onto the rack. (Refer to Drawing C-AR-TA8-5-0 for correct configuration). Then install the chassis slide receptacles in both slides in the rack to their stops and insert the transport.

4.2.4 Remove the top cover and inspect the transport, recording any damage on the Acceptance Form.

4.3 Both Rack Mounted and Separate Container

4.3.1 Using the parts list (A-PL-TA8-E-0) and accessory list (A-AL-TA8-E-0) verify that all items are present.

4.3.2 Inspect the interface (M8331) and control modules (M7760 and M7761) to insure circuit and etch revisions match those on the ECO status sheet.

4.3.3 Check the interface module (M8331) to insure that the device code is correct. (Normally 670X for the first TA8E-677X for the eight or last TA8E). Refer to drawing D-CS-M8331-0-1 for proper jumper configuration.

4.3.4 Check power supply line cord assembly to ensure that the transport is configured properly for the input power to be used. Line cord breaker assembly BC05-H is for 115VAC operation and BC05-J is for 230 VAC operation.

4.3.5 Record any discrepancies on the Acceptance Form.

SIZE	CODE	NUMBER	REV
A	SP	TA8-0-6	

ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE TA8 Field Installation and Acceptance Procedure (continued)

5.0 INSTALLATION

- 5.1 Insure that the power switch on the PDP-8E, 8M, or 8F is turned off and that the power source for the TU60 is denergized.
- 5.2 Connect the interface cable(s) to the M8331 module. Refer to the TA8E power wiring and cable configuration drawing (C-IC-TA8-E-1) for instructions.
- 5.3 Insert the M8331 module into the Omnibus, refer to recommended omnibus module assignments (A-SP-PDP-8E-0-4) and route the interface cable(s) through the strain relief.
- 5.4 Route the cable(s) through the opening below the fan in the rear of the TU60 and under the strain relief.
- 5.5 Connect the cable(s) to the M7760 module, again referring to the TA8E power wiring and cable configurations drawing (C-IC-TA8-E-1).
- 5.6 Connect the TU60's AC power cord to a source of switched AC power.

6.0 ACCEPTANCE

6.1 Test Procedure

NOTE

Any failures observed (refer to 7.0) while performing this procedure should be corrected before preceding to the next step.

- 6.1.1 Place the TU60's power switch (rear of chassis) in the Off position.
- 6.1.2 Energize the PDP-8E,8M or 8F.
- 6.1.3 Place the TU60's power switch in the ON position, and observe that the two (one on each drive) power ON indicators light.

SIZE	CODE	NUMBER	REV
A	SP	TA8-0-6	

ENGINEERING SPECIFICATION



CONTINUATION SHEET

TITLE TA8 Field Installation and Acceptance Procedure (continued)

6.0 continued

- 6.1.4 Insert a "scratch" cassette into each drive with the tape wound around the lower reel. (Refer to cassette insertion and removal procedure in the TU60 cassette tape transport Maintenance Manual, Chapter 2.) Check that the drive receives the tape without binding.
- 6.1.5 Check that tape does not "creep" from one reel to the other. (To correct refer TU60 Maintenance Manual Chapter 5.)
- 6.1.6 Momentarily depress the rewind pushbutton on each drive and insure that the tape completely rewinds to the BOT clear leader, (about 20 seconds).
- 6.1.7 Momentarily depress the rewind pushbutton on each drive again, and insure that the drive rewinds for cassette about one second, hitting the stops!
- 6.1.8 Perform the following tests, in order, using the loading and operating procedure in the programs document.
 - 6.1.8.1 TA8E Cassette Diagnostic
 - A. Static Test -3 Passes per TU60
 - B. Control Test -3 Passes per Drive
 - C. Write Protect -1 Pass per Drive
 - D. Data Test -4 Passes per Drive
 - 6.1.8.2 TA8E Data Reliability Test
 - A. Format Cassettes -1 Pass per drive
 - B. Read Only to EOT Forever - 1 pass per drive
 - C. Data Reliability Test - 6 passes per drive

SIZE	CODE	NUMBER	REV
A	SP	TA8-0-6	

TITLE TA8 Field Installation and Acceptance Procedure

7.0 DIAGNOSTIC FAILURE

7.1 Any TA8E/TU60 which while performing acceptance tests haults, generates error printouts, garbles or runs other than as specified in the diagnostic's document, will be classified as a failure and must be repaired. However, errors will be allowed per 7.2 and 7.3.

7.2 One READ error, per drive, while performing steps 6.1.8.1-D to 6.1.8.2-D is acceptable.

7.3 If, while performing step 6.1.8 more than one READ error per drive is observed the testing should be stopped. The head and tape guides should be cleaned using magnetic tape head cleaner. The cassette should be examined for any dirt on the tape surface, and replaced in the drive. Testing should be continued starting with step 6.1.8.1-D.

If any errors occur on the forementioned drive, after the cassette has been replaced the TA8E/TU60 should be repaired or adjusted. (Refer to the maintenance section of the TA8E or TU60 for troubleshooting aids.)

SIZE	CODE	NUMBER	REV
A	SP	TA8-0-6	