digital EQUIPMENT CORPORATION

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE | SEQUENCE

THIS IS PRINT SET: 7

UNIT VARIATIONS

VAR	TITLE	PRINT SET
VT50-AA	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP 115V 60 HZ	
VT50-AB	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP 230V 50/60 HZ	
VT50-AC	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP 100/127V 50/60 HZ	
VT50-BA	VIDEO DISPLAY TERMINAL	
	COPIER CURRENT LOOP 115V 60 HZ	
VT50-BB	VIDEO DISPLAY TERMINAL	
	COPIER, CURRENT LOOP 230V 50/60HZ	
VT50-BC	VIDEO DISPLAY TERMINAL	
	COPIER CURRENT LOOP 100/127V 50/60HZ	
VT52-HA	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL 115V 60 HZ	
VT52-HB	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL 230/240V 50/60 HZ	
VT52-HC	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL 100/127V 50/60 HZ	
VT52-JA	VIDEO DISPLAY TERMINAL CURRENT	
	LOOP, DIRECT CURSOR CONTROL	
	COPIER 115V 60 HZ	
VT52-JB	VIDEO DISPLAY TERMINAL CURRENT	
	LOOP, DIRECT CURSOR CONTROL	
	COPIER 220/240V 50/60 HZ	
VT52-JC	VIDEO DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL COPIER 100/127V 50/60 HZ	

REVISIONS			
DATE	CHG. NO.	REV
6/75	VTE0-6	A
9/75	VT50-10	B
6/76	VT50-11	C

DRB 106

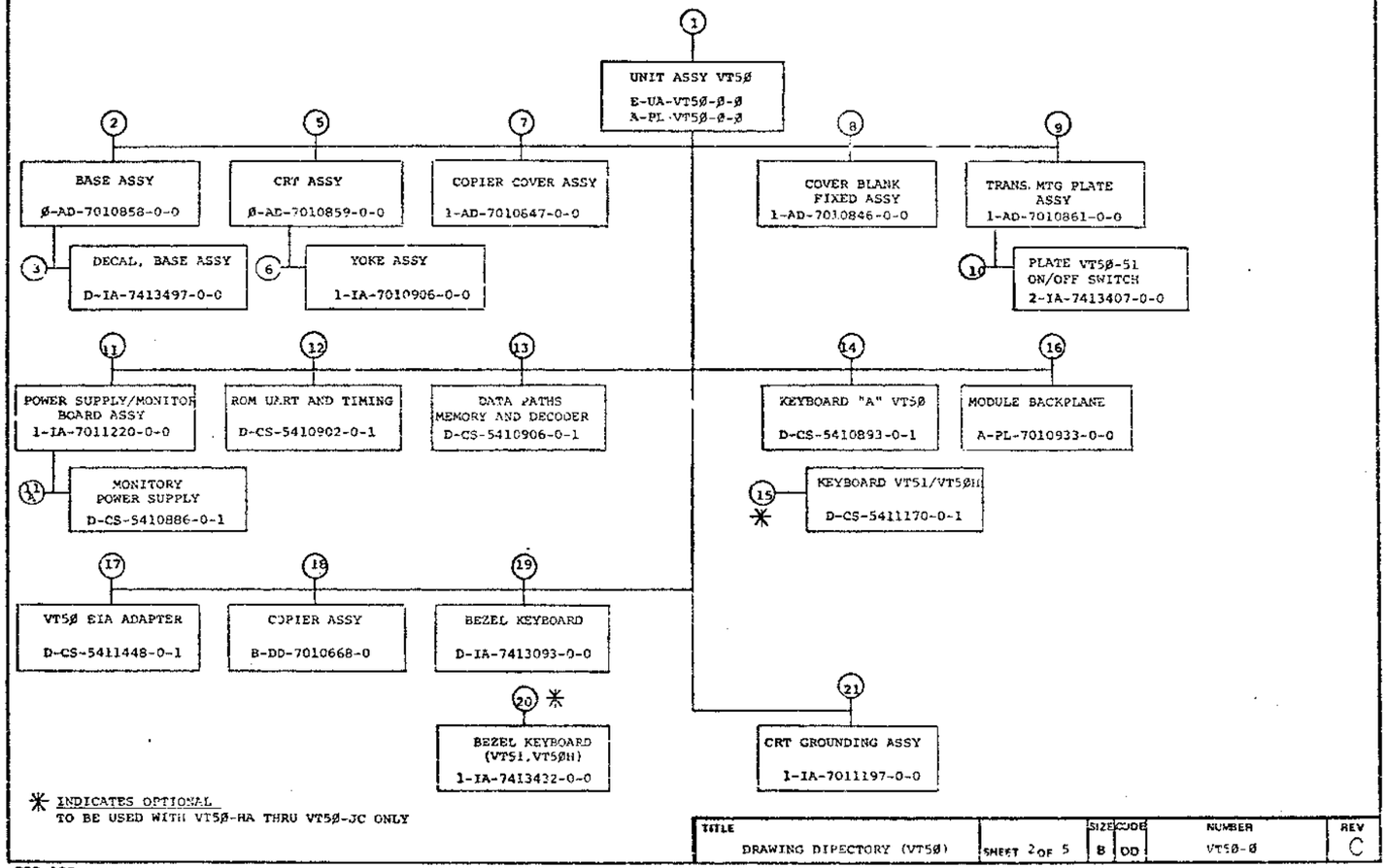
USED ON OPTION/MODEL		DRN.	DATE
VT50		[illegible]	9/15/75
		CHKD.	DATE
		[illegible]	9/16/75
		PROJ ENG.	DATE
		[signature]	12-5-75
		PROD.	DATE
		[signature]	[illegible]
		FIELD SERV.	DATE
		[signature]	[illegible]

SHEET 1 OF 5

TITLE: DRAWING DIRECTORY (VT50)

SIZE	CODE	NUMBER	REV
B	DD	VT52-0	C

DIST



DRB 107
DEC 36-(329)-1062-3-MAY1

CUSTOMER PRINT SET					ELECTRICAL					CUSTOMER PRINT SET					ELECTRICAL				
				MFG SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE					FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
					1	A-IA-7011220-0-0		2	UNIT ASSY VT5Ø											
						A-PL-VT5Ø-Ø		2	ENGINEERING SPEC.											
						A-SP-VT5Ø-Ø-2			ACCEPTANCE SPEC.											
						A-SP-VT5Ø-Ø-3			MFG. SPEC.											
						A-SP-VT5Ø-Ø-1			ENGINEERING SPEC.											
					11	1-IA-7011220-0-0			POWER SUPPLY ASSY						14	D-CS-5410893-0-1		4	KEYBOARD "A" VT5Ø	
						1-YA-7011186-0-0			HARNESS POWER SUPPLY							K-CO-5410893-0-4		1	X-Y COORDINATE HOLE LOCATION	
						1-YA-7011187-0-0			HARNESS YOKE							D-AH-5410893-0-5		1	ASSY/DRILLING HOLE LAYOUT	
						2-IA-7413948-0-0			HARNESS CRT							B-MH-5410893-0-6		1	MODULE ECO HISTORY	
																E-MD-9606359-0-0		1	PERIPHERY DIE	
																D-IA-7010912-0-0		1	CABLE ASSY	
					11A	D-CS-5410886-0-1		4	MONITOR POWER SUPPLY						15	D-CS-5411170-0-1		2	KEYBOARD VT51/VT50H	
						K-CO-5410886-0-4		1	X-Y COORDINATE HOLE LOCATION							K-CO-5411170-0-4		1	X-Y COORDINATE HOLE LOCATION	
						D-AH-5410886-0-5		1	ASSY/DRILLING HOLE LAYOUT							D-AH-5411170-0-5		1	ASSY/DRILLING HOLE LAYOUT	
						B-MH-5410886-0-6		1	MODULE HISTORY							B-MH-5411170-0-6		1	MODULE ECO HISTORY	
						E-IA-7413849-0-0		1	SPREADER HEAT							D-IA 7010912 0 0		1	CABLE ASSY	
						E-MD-9606362-0-0		1	PERIPHERY DIE											
															16	A-PL-7010933-0-0		1	MODULE PACKAGE (VT5Ø)	
																D CS 5410886-0-1		1	MONITOR POWER SUPPLY	
																D CS-5410906 0 1		1	DATA PATHS MEM. AND DECODER	
																D CS 5410902-0 1		1	ROMUART AND TIMMING	
					12	D-CS-5410902-0-1		4	ROM UART AND TIMING							A-SP 3700179 0 0		3	PACKAGING INST.	
						K-CO-5410902-0-4		1	X-Y COORDINATE HOLE LOCATION							A-SP 3700180-0 0		2	PACKAGING INST.	
						D-AH-5410902-0-5		1	ASSY/DRILLING HOLE LAYOUT							A-SP 3700181 0 0		2	PACKAGING INST.	
						B-MH-5410902-0-6		1	MODULE ECO HISTORY							A SP 3700182 0 0		2	PACKAGING INST.	
						E-MD-9606361-0-0		1	PERIPHERY DIE											
															17	D-CS-5411448 0 1		4	VT5Ø EIA ADAPTER	
																K-CO-5411448 0-4		1	X-Y COORDINATE HOLE LOCATION	
																D AH-5411448-0 5		1	ASSY/DRILLING HOLE LAYOUT	
																B-MH-5411448-0-6		1	MODULE ECO HISTORY	
					13	D-CS-5410906-0-1		4	DATA PATHS MEMORY AND DECODER											
						K-CO-5410906-0-4		1	X-Y COORDINATE HOLE LOCATION						18	B-DD 7010668-0			COPIER ASSY	
						D-AH-5410906-0-5		1	ASSY/DRILLING HOLE LAYOUT											
						B-MH-5410906-0-6		1	MODULE ECO HISTORY						19	A-PL-POPIO-0-SHIP		1	DEC SYSTEM IO SHIPPING LIST	
						E-MD-9606360-0-0		1	PERIPHERY DIE											
						C-AD-7011144-0-0		1	CABLE ASSY						20	D-IA-7011089-0-0		1	DEC SYSTEM IO 283 TO VT50 CABLE	

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		SIZE	CODE	NUMBER	REV
DRAWING DIRECTORY (VT5Ø)	SHEET 3 OF 5	B	DD	VT5Ø Ø	C

DPB 108

DEC 16-(325)-1063-28-8872

CUSTOMER PRINT SET	MFG. SET	FIND NO.	MECHANICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO / FILE DATE
		1	A-UA-7010858-0-0		2	UNIT ASSY VT50	
			A-PL-VT50-0-0			UNIT ASSY VT50 (PL)	
			C-MA-7010799-0-0		1	CASSETTE COVER	
			D-MA-7412868-0-0		1	COVER PLATE	
			C-MA-7413324-0-0		1	BRK'T PC BD TO CRT, (LEFT)	
			C-MA-7413325-0-0		1	BRK'T PC BD TO CRT, (RIGHT)	
			C-MA-7413326-0-0		1	BRK'T PC BD TO SHELL	
			2-MD-7413327-0-0		1	KEYBOARD MTG BRK'T (RIGHT)	
			2-MD-7413328-0-0		1	KEYBOARD MTG BRK'T (LEFT)	
			C-MD-7413400-0-0		1	BRK'T COPIER WELL	
			D-MA-7412866-0-0		1	HEAT SINK	
			E-MD-7411540-0-0		45	SHELL VT50	
		2	B-AD-7010858-0-0		1	BASE ASSY	
			B-MD-7411539-0-0		2	BASE VT50	
			1-MD-7413322-0-0		1	SCREEN, BASE, FRONT	
			1-MD-7413323-0-0		1	SCREEN, BASE, REAR	
		3	D-IA-7413497-0-0		1	DECAL BASE VT50	
			D-DC-7413497-0-1		1	ART WORK (DECAL BASE)	

CUSTOMER PRINT SET	MFG. SET	FIND NO.	MECHANICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO / FILE DATE
		5	1-AD-7010859-0-0		1	CRT ASSY	
			1-IA-7413320-0-0		1	BRK'T RIGHT CRT,	
			1-IA-7413321-0-0		1	BRK'T LEFT CRT,	
		6	1-IA-7010906-0-0		1	YOKE ASSY	
			1611900			YOKE	
		7	1-AD-7010847-0-0		1	COPIER COVER ASSY	
			E-MD-7412574-0-0		1	COPIER COVER	
			1-MD-7413330-0-0		1	BRK'T COPIER COVER	
			2-MD-7413329-0-0		1	BRK'T COPIER COVER	
		8	1-AD-7010846-0-0		1	COVER BLANK FIXED ASSY	
			E-MD-7412573-0-0		1	FIXED COVER	
			D-MD-7413333-0-0		1	HOLDOWN, BLANK COVER	
			D-MD-7413331-0-0		1	STIFFNER, BLANK COVER	
		9	1-AD-7010861-0-0		1	TRANS. MTG. PLATE ASSY	
			D-IA-7412850-0-0		1	TRANS. MTG. PLATE	
			C-IA-7011019-0-0		1	POWER CORD (VT50)	
			1-IA-7011130-0-0		1	HARNESS TRANS. 50 HZ	
			0-IA-7011131-0-0		1	HARNESS TRANS. 50 HZ	
		10	2-IA-7413407-0-0		1	PLATE VT50-51 ON/OFF SW.	
			A-SS-7413407-0-1		1	SILK SCREEN	
			A-SS-7413407-0-2		1	SILK SCREEN	
			A-SS-7413407-0-3		1	SILK SCREEN	
		16	B-DD-7010068-0			COPIER ASSY	

CUSTOMER PRINT SET CODES		TITLE		SIZE	CODE	NUMBER	REV
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED	DRAWING DIRECTORY (VT50)	SHEET 4 OF 5	B	00	VT50-0	C

DRB 108

CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			MECHANICAL				
			1-IA-7413093-0-0		1	BEZEL, KEYBOARD	
			A-SS-7413093-1-0		1	SILK SCREEN	
		20	1-IA-7413432-0-0		1	BEZEL, KEYBOARD	
			A-SS-7413432-1-0		1	SILK SCREEN	
		21	1-IA-701119.-0-0		1	CRT GROUNDING ASSY	
			2-MD-7413757-0-0		1	SUPPORT CRT GROUNDING	
			2-MD-7413956-0-0		1	STRAP, BRAIDED	

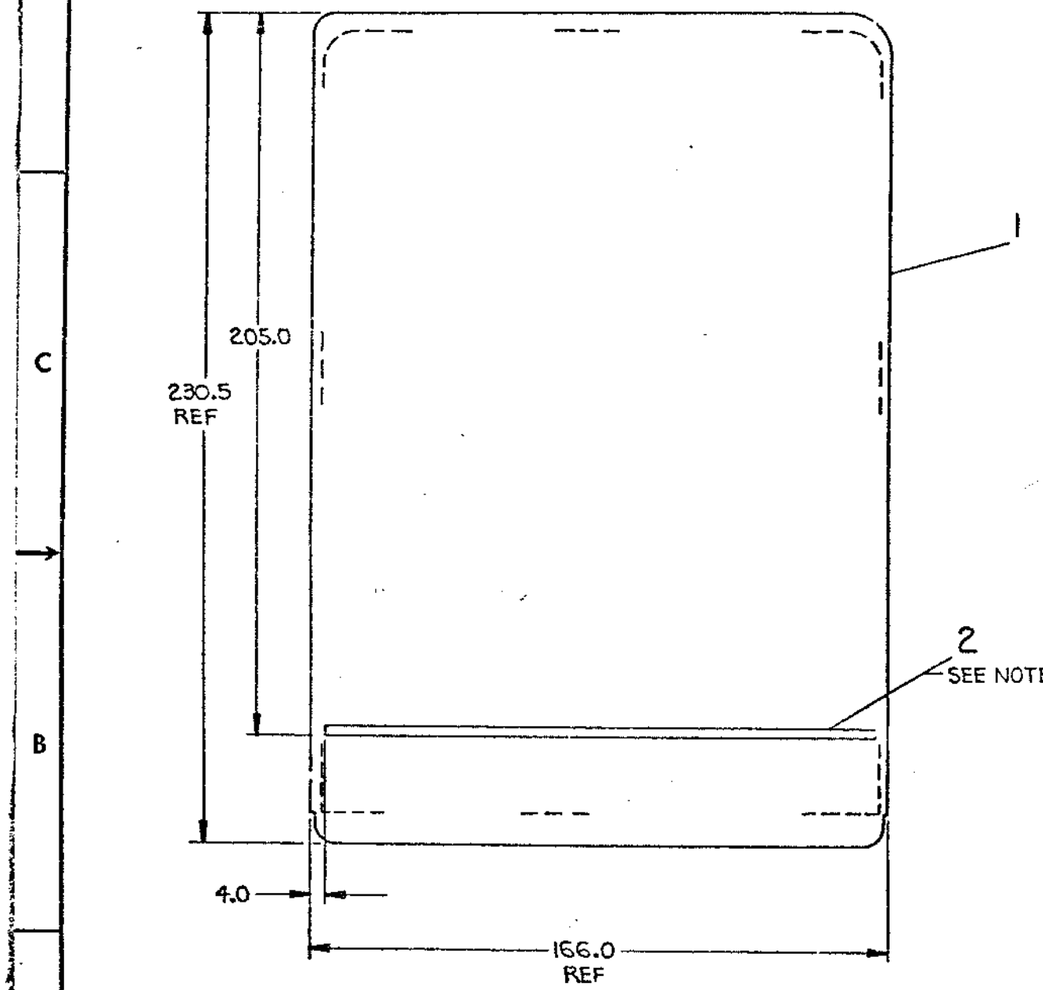
CUSTOMER PRINT SET CODES	
	X = PRINT OF DOCUMENT INCLUDED IN PRINT SET
	C = INCLUDES ALL PRINTS INDICATED ON DOCUMENT
	S = CONFIDENTIAL AUTHORIZED SIGNATURE REQUIRED

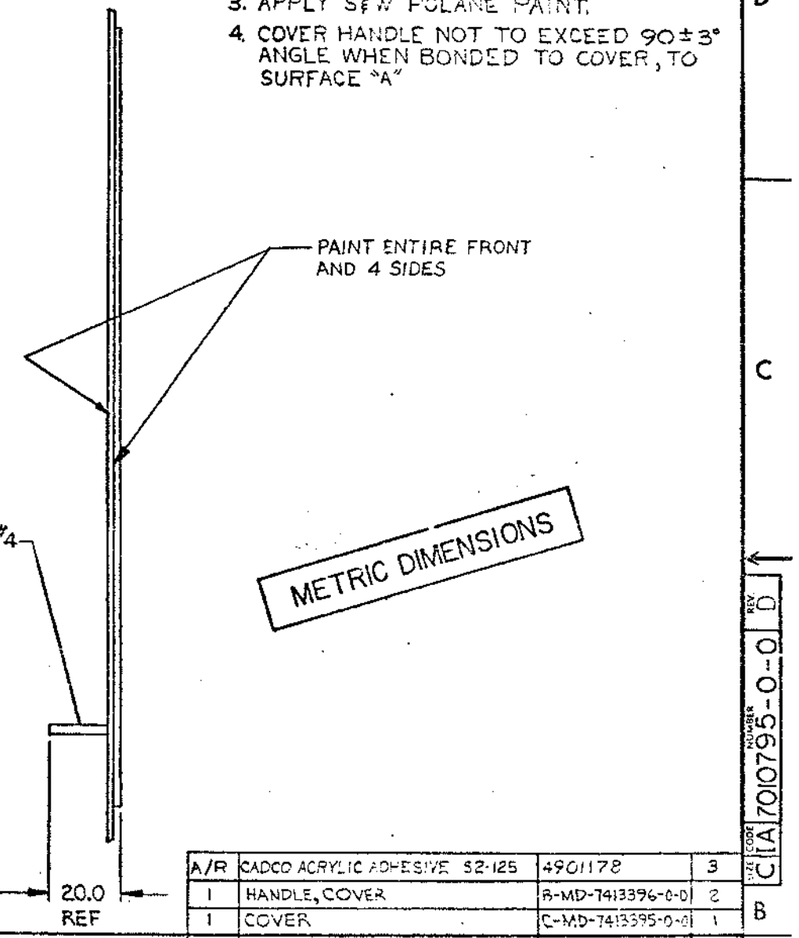
TITLE		SIZE	CODE	NUMBER	REV
DRAWING DIRECTORY	SHEET 5 OF 5	B	DD	VT50 @	C

DPB 108

DO NOT SCALE DRAWING

NOTES:
1. BOND ITEM #2 (HANDLE, COVER) TO ITEM #1 (COVER) USE ADHESIVE PURCHASE SPEC. 4901178.
2. FINISH PER DEC SPEC 9200151-47
3. APPLY S&W POLANE PAINT.
4. COVER HANDLE NOT TO EXCEED 90±3° ANGLE WHEN BONDED TO COVER, TO SURFACE "A"





REVISIONS	CHANGE NO.	REV
CHK		
EJE	7010795-00001	A
EJE	7010795-00002	B
EJE	7010795-00003	C
EJE	7010795-000C4	D

ITEM NO.	PART NO.	DESCRIPTION	QTY.
3	4901178	CADCO ACRYLIC ADHESIVE S2-125	A/R
2	B-MD-7413396-0-0	HANDLE, COVER	1
1	C-MD-7413395-0-0	COVER	1

PARTS LIST

FIRST USED ON OPTION/MODEL: VT5Ø

UNLESS OTHERWISE SPECIFIED DIMENSION IN MILLIMETERS
TOLERANCES
MILLIMETERS: X.XX=±0.10, X.X=±0.5, X=±2
DECIMALS: ANGLES ±0 30'
THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽
MATERIAL: SEE PARTS LIST
FINISH: SEE NOTE #2

DRN. S Colvin 1-8-75
CHK'D. L Balogh 1-13-75
ENG. [illegible] DATE
PROJ. ENG. [illegible] 1-13-75
PROD. [illegible] 1-13-75
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: COVER, CASSETTE (INTERIM)

SIZE C | CODE IA | NUMBER 7010795-0-0 | REV. D

DEC FORM NO. DRC 100-B

NOTES:
1. MASK BOTTOM OF FLANGE BEFORE PAINTING.
2. PAINT THIS SIDE ONLY.
3. ALLOY 1100 PREFERED FOR MAXIMUM THERMAL CONDUCTIVITY. ALLOY 3003 ACCEPTABLE, ANY HARDNESS CONDITION ACCEPTABLE

SEE NOTE "2"

SECTION A-A
SCALE: 1/1

DETAIL-A
SCALE: 2/1
10 "B" PLACES

REVISIONS			
ENG	CHANGE NO.	REV	

5	INSERT #8-32	9008872	2
1	PANEL REAR		1

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VTE2		PARTS LIST		

DIMENSIONAL TOLERANCE
DIMENSIONS ARE IN MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
XXX ±0.10	XXX ±.005	30' 30"
XX ±0.5	XX ±.02	
X ±2.5	X ±.1	

THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP CORNERS
SURFACE QUALITY

MATERIAL 2.5 MM (.097") THK ALUMINUM
FINISH 92-00151-47

		DATE
DRAWN		
CHK'D		
ENG.		
PROJ. ENG.		
PROG.		

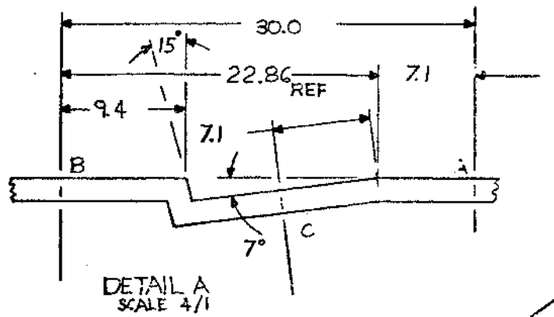
NEXT HIGHER ASSY.

digital

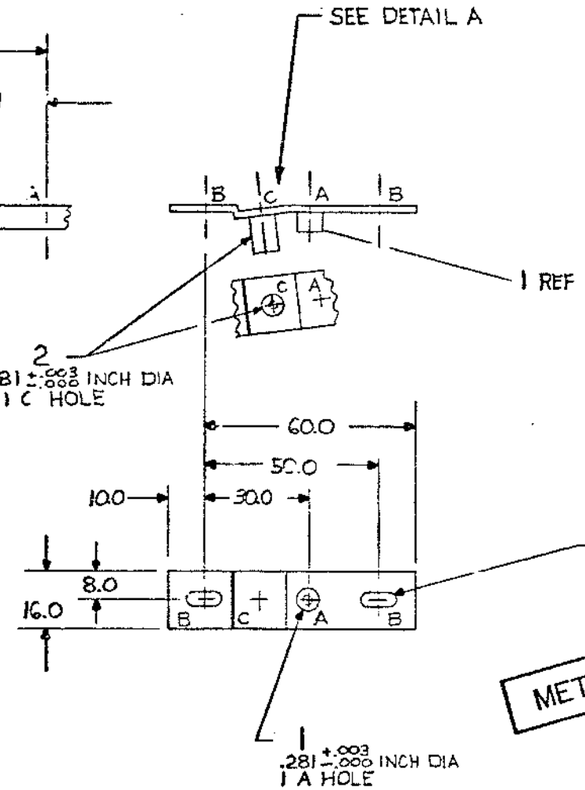
TITLE: HEAT SINK

SIZE	CODE	NUMBER	REV.
D	IA	7412856-0-0	A

SCALE 1/1
SHEET 1 OF 1



DETAIL A
SCALE 4/1



METRIC DIMENSIONS

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	STANDOFF #8-32-16	9009108-2	2
1	STANDOFF #8-32-10	9009108-0	1

PARTS LIST

FIRST USED ON OPTION/MODEL	VT5Ø
DIMENSIONAL TOLERANCE	DIMENSIONS ARE MILLIMETERS / INCHES UNLESS OTHERWISE SPECIFIED
MILLIMETERS	XXX = ±0,10; XX = ±0,5; X = ±2,
INCHES	.XXX = ±.005; .XX = ±.02; .X = ±.1
ANGLES	±0° 30'
THIRD ANGLE PROJECTION	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	
MATERIAL	1/16 INCH THK ALUM
FINISH	9200200-CC
DRN.	DATE 4/1/74
CHK'D.	DATE 2/13/75
ENG.	DATE 2/13/75
PROJ. ENG.	DATE 2/13/75
PROD.	DATE 2/14/75
NEXT HIGHER ASSY.	Ø-UA-VT5Ø-Ø-Ø
SCALE	1/1
SHEET	1 OF 1

digital

TITLE: BRKT, PC BD TO CRT BRKT (LEFT)

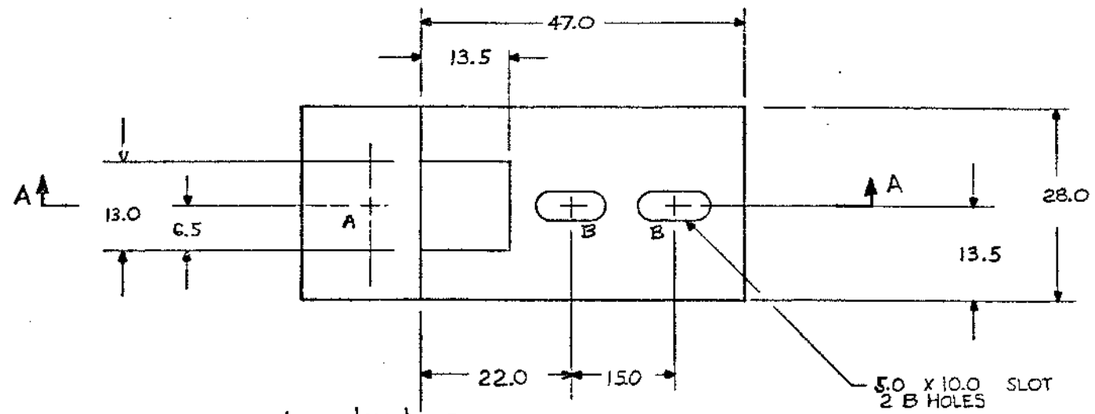
SIZE	CODE	NUMBER	REV.
C	IA	7413324-0-0	

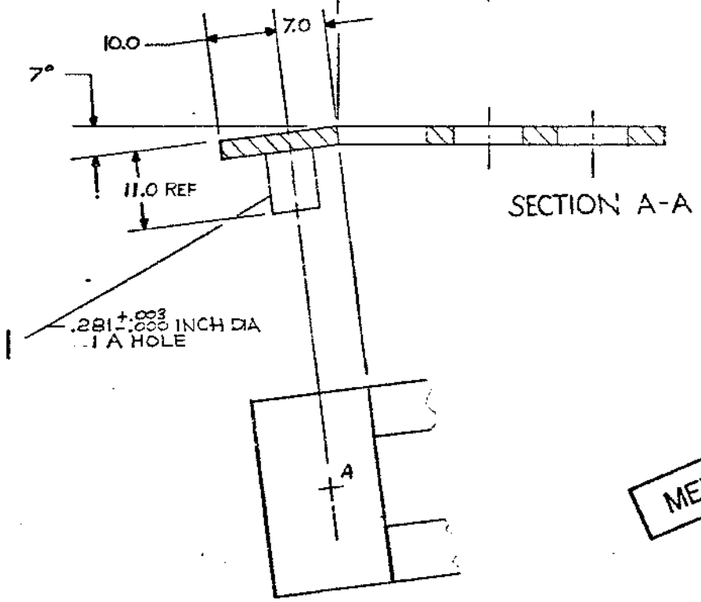
DIST.

REVISIONS

REV.	CHANGE NO.	CHK

DEC FORM NO. 9MC 100-B





METRIC DIMENSIONS

1	STANDOFF #8-32-14	9009108-1	1
QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION/MODEL: VT50

DIMENSIONAL TOLERANCE

DIMENSIONS ARE MILLIMETERS / INCHES UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
XXX = ±0,10	.XXX = ±.005	±0° 30'
XX = ±0,5	.XX = ±.02	
X = ±2,	.X = ±.1	

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL: 1/16 INCH THK ALUM

FINISH: 9200200-00

DRN.		DATE 5-1-74
CHK'D		DATE 2/3/75
ENG.		DATE 2/3/75
PROJ. ENG.		DATE 2/3/75
PROD.		DATE

NEXT HIGHER ASSY.: Ø-UA-VT5Ø-Ø-Ø

SCALE 2/1

SHEET 1 OF 1

digital

TITLE: BRKT PC BD TO SHELL

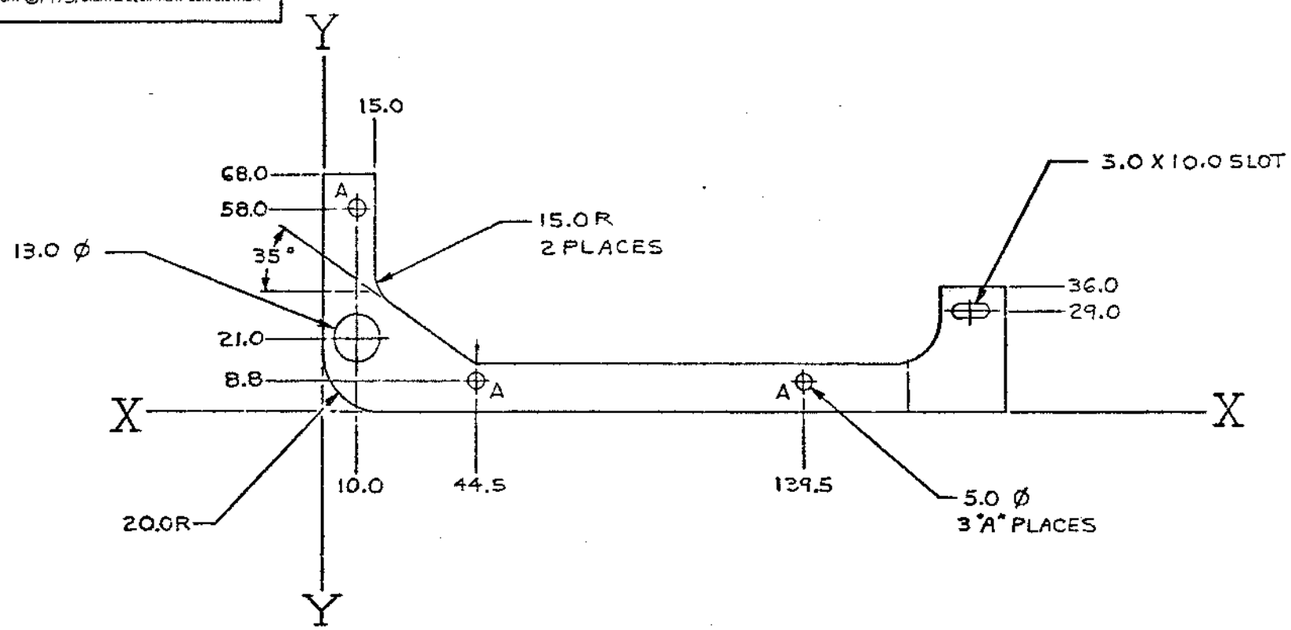
SIZE	CODE	NUMBER	REV.
C	IA	7413326-0-0	

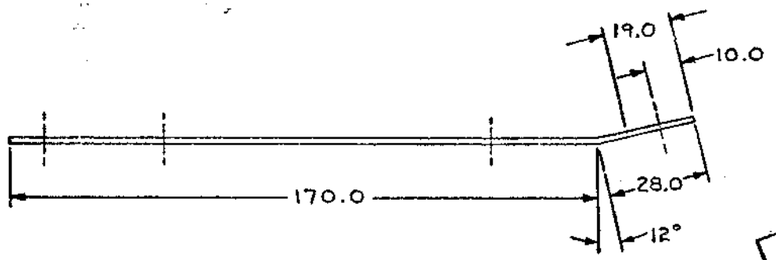
DIST.

REVISIONS		
REV.	CHANGE NO.	CHK

SIZE C | CODE IA | NUMBER 7413326-0-0 | REV.

DEC FORM NO. DEC 200-B





METRIC DIMENSIONS

DESCRIPTION							DWG./PART NO.	ITEM NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS									
ANGLES ±0° 30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE MILLIMETER							
		OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000		
SURFACE QUALITY IN MICROINCHES	(CHECK ONE) MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0		
	PREFERRED ☑	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5		

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN. L. E. Olson	1/10/75	FIRST USED ON VT5Ø
CHK'D R. Nicoll	2/3/75	digital
ENG. C. Lind	2/3/75	TITLE MTG. BRACKET KYBD RIGHT
PROJ. ENG. [illegible]	2/3/75	
PROD. [illegible]	[illegible]	
NEXT HIGHER ASSY.		

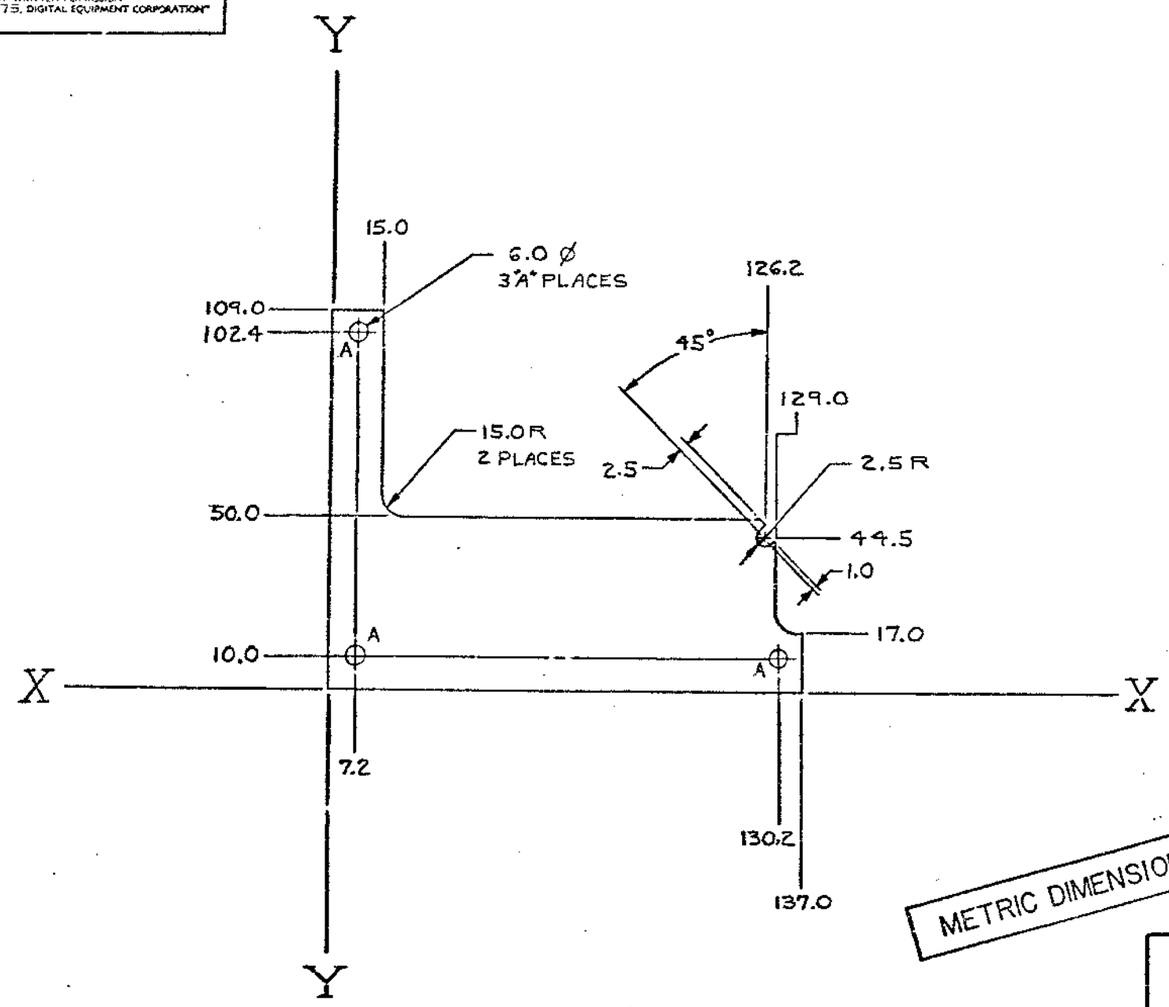
MATERIAL		SIZE	CODE	NUMBER	REV.
1.5 THK. (.062) CRS	2-UA-VT5D-0-0	2	MD	7413327-0-0	
FINISH 9200120-94	SCALE 1/1	DIST.			
	SHEET 1 OF 1				

REVISIONS

REV.	CHANGE NO.	CHK

DEC FORM NO. BA2-120

7413327-0-0 2 MD



METRIC DIMENSIONS

DESCRIPTION	DWG PART NO	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN ✓ MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☒	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN. D.C. Dixon 11/7/75
CHK'D 2/1/75
ENG. 2/1/75
PROJ. ENG. [illegible] 2/1/75
PROD. [illegible]

FIRST USED ON VT50

digital

TITLE
MTG. BRACKET
KYBD LEFT

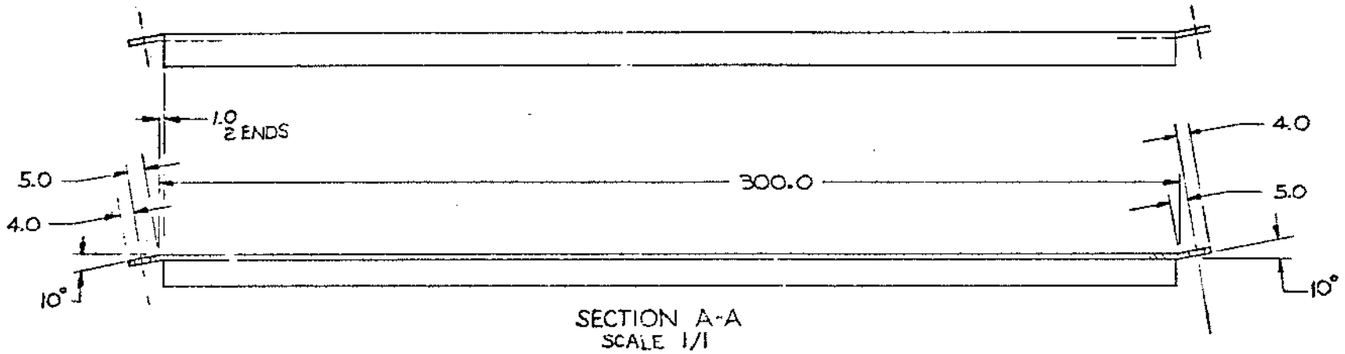
NEXT HIGHER ASSY. 2 UA-VT50-0-0

MATERIAL	SIZE	CODE	NUMBER	REV.
1.5 THK. (.062) CRS	2	MD	7413328-0-0	
FINISH S200120-54	SCALE 1/1			
	SHEET 1 OF 1	DIST.		

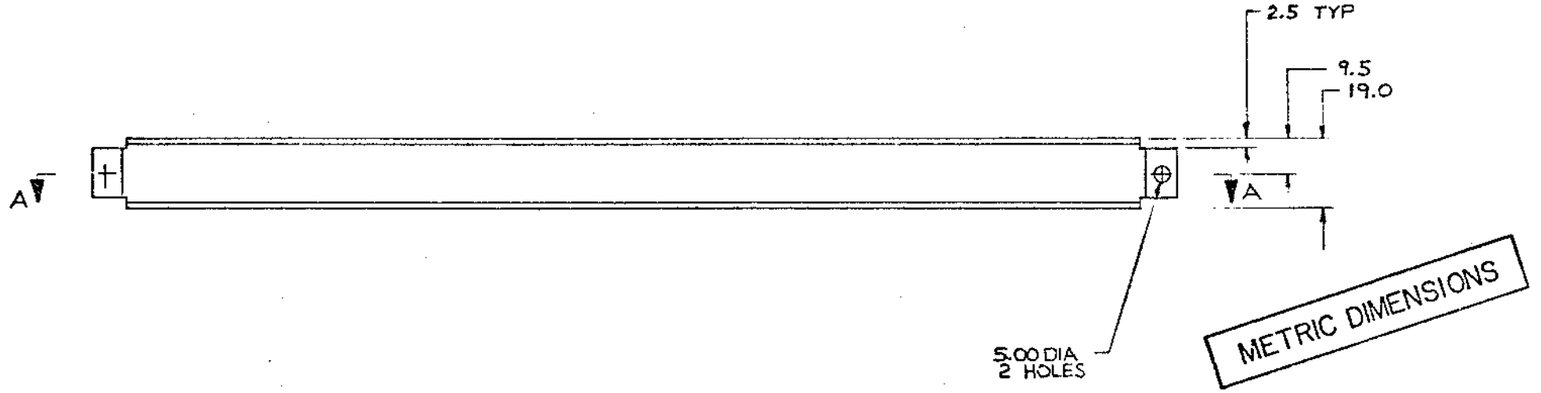
REVISIONS	REV.
CHANGE NO.	
CHK	

DEC FORM NO. DA2-120

7413328-0-0 MD 2



SECTION A-A
SCALE 1/1



FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
XXX = ± 0,10 XX = ± 0,5 X = ± 2,	XXX = ± .005 XX = ± .02 X = ± .1	±0° 30'

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL 1/16 INCH THK ALUMINUM

FINISH 9200200-00

		DATE
DRN.	M. Hartash	3 Jan 75
CHK'D	R. Lias	2/3/75
ENG.	R. Lias	2/3/75
PROJ. ENG.	Nippa Austin	2/3/75
PROD.	Lin Fearon	2-3-75

NEXT HIGHER ASSY.
D-UA-VT50-0-0
SCALE 1/1
SHEET 1 OF 1

digital

TITLE
BRACKET,
OCPIER WELL

SIZE	CODE	NUMBER	REV.
C	MD	7413400-0-0	

DIST.

REVISIONS	REV.
CHANGE NO.	
CHK	

DEC FORM NO. DEC 100-B

LEGEND "A"

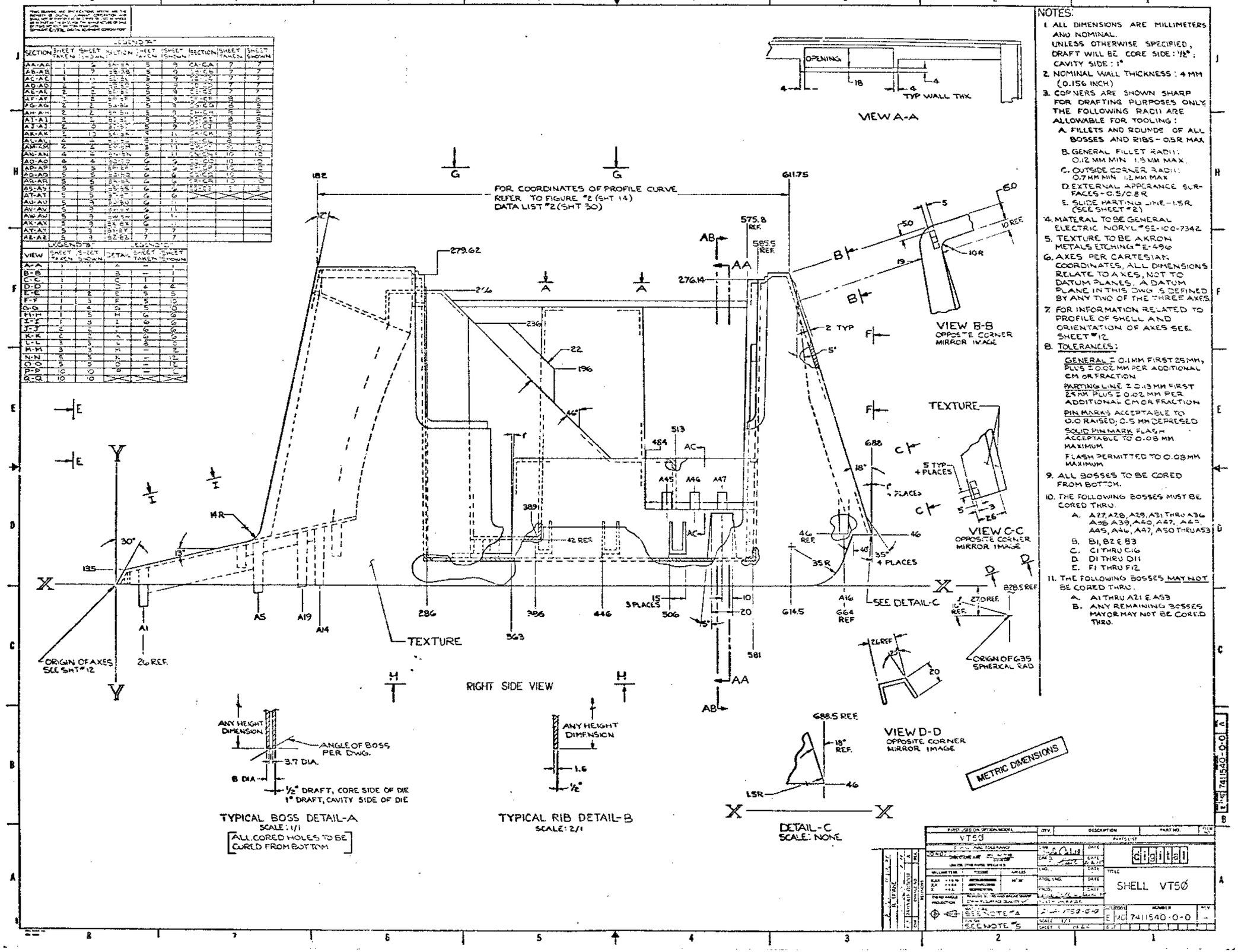
SECTION	SHEET TAKEN	SHEET SHOWN	SECTION	SHEET TAKEN	SHEET SHOWN	SECTION	SHEET TAKEN	SHEET SHOWN
AA-AA	1	1	BA-BA	5	5	CA-CA	7	7
AB-AB	1	1	BB-BB	5	5	CB-CB	7	7
AC-AC	1	1	BC-BC	5	5	CC-CC	7	7
AD-AD	2	2	BD-BD	5	5	CD-CD	7	7
AE-AE	2	2	BE-BE	5	5	CE-CE	7	7
AF-AF	2	2	BF-BF	5	5	CF-CF	7	7
AG-AG	2	2	BG-BG	5	5	CG-CG	7	7
AH-AH	2	2	BH-BH	5	5	CH-CH	7	7
AI-AI	2	2	BI-BI	5	5	CI-CI	7	7
AJ-AJ	2	2	BJ-BJ	5	5	CJ-CJ	7	7
AK-AK	2	2	BK-BK	5	5	CK-CK	7	7
AL-AL	2	2	BL-BL	5	5	CL-CL	7	7
AM-AM	2	2	BM-BM	5	5	CM-CM	7	7
AN-AN	4	4	BN-BN	5	5	CN-CN	10	10
AO-AO	4	4	BO-BO	5	5	CO-CO	10	10
AP-AP	5	5	BP-BP	5	5	CP-CP	10	10
AQ-AQ	5	5	BQ-BQ	5	5	CQ-CQ	10	10
AR-AR	5	5	BR-BR	5	5	CR-CR	10	10
AS-AS	5	5	BS-BS	5	5	CS-CS	10	10
AT-AT	5	5	BT-BT	5	5	CT-CT	10	10
AU-AU	5	5	BU-BU	5	5	CU-CU	10	10
AV-AV	5	5	BV-BV	5	5	CV-CV	10	10
AW-AW	5	5	BW-BW	5	5	CW-CW	10	10
AX-AX	5	5	BX-BX	5	5	CX-CX	10	10
AY-AY	5	5	BY-BY	5	5	CY-CY	10	10
AZ-AZ	5	5	BZ-BZ	7	7	CZ-CZ	10	10

LEGEND "B"

VIEW	SHEET TAKEN	SHEET SHOWN
A-A	1	1
B-B	1	1
C-C	1	1
D-D	1	1
E-E	1	2
F-F	1	3
G-G	1	4
H-H	1	5
I-I	1	6
J-J	1	6
K-K	1	6
L-L	1	6
M-M	3	3
N-N	5	5
O-O	5	5
P-P	10	10
Q-Q	10	10

LEGEND "C"

DETAIL	SHEET TAKEN	SHEET SHOWN
A	1	1
B	1	1
C	1	1
D	1	1
E	1	1
F	1	1
G	1	1
H	1	1
I	1	1
J	1	1
K	1	1
L	1	1
M	1	1
N	1	1
O	1	1
P	1	1
Q	1	1
R	1	1
S	1	1
T	1	1
U	1	1
V	1	1
W	1	1
X	1	1
Y	1	1
Z	1	1
AA	1	1
AB	1	1
AC	1	1
AD	1	1
AE	1	1
AF	1	1
AG	1	1
AH	1	1
AI	1	1
AJ	1	1
AK	1	1
AL	1	1
AM	1	1
AN	1	1
AO	1	1
AP	1	1
AQ	1	1
AR	1	1
AS	1	1
AT	1	1
AU	1	1
AV	1	1
AW	1	1
AX	1	1
AY	1	1
AZ	1	1
BA	1	1
BB	1	1
BC	1	1
BD	1	1
BE	1	1
BF	1	1
BG	1	1
BH	1	1
BI	1	1
BJ	1	1
BK	1	1
BL	1	1
BM	1	1
BN	1	1
BO	1	1
BP	1	1
BQ	1	1
BR	1	1
BS	1	1
BT	1	1
BU	1	1
BV	1	1
BW	1	1
BX	1	1
BY	1	1
BZ	1	1
CA	1	1
CB	1	1
CC	1	1
CD	1	1
CE	1	1
CF	1	1
CG	1	1
CH	1	1
CI	1	1
CJ	1	1
CK	1	1
CL	1	1
CM	1	1
CN	1	1
CO	1	1
CP	1	1
CQ	1	1
CR	1	1
CS	1	1
CT	1	1
CU	1	1
CV	1	1
CW	1	1
CX	1	1
CY	1	1
CZ	1	1



NOTES:

1. ALL DIMENSIONS ARE MILLIMETERS AND NOMINAL. UNLESS OTHERWISE SPECIFIED, DRAFT WILL BE CORE SIDE: ½°; CAVITY SIDE: 1°
2. NOMINAL WALL THICKNESS: 4 MM (0.156 INCH)
3. CORNERS ARE SHOWN SHARP FOR DRAFTING PURPOSES ONLY. THE FOLLOWING RADII ARE ALLOWABLE FOR TOOLING:
   - A. FILLETS AND ROUNDS OF ALL BOSSES AND RIBS - 0.5R MAX
   - B. GENERAL FILLET RADII: 0.12 MM MIN 1.5 MM MAX.
   - C. OUTSIDE CORNER RADII: 0.7 MM MIN 1.2 MM MAX
   - D. EXTERNAL APPEARANCE SURFACES - 0.5/0.8R
   - E. SLIDE PARTING LINE - 1.5R (SEE SHEET #2)
4. MATERAL TO BE GENERAL ELECTRIC NORYL "SE-100-7342
5. TEXTURE TO BE AKRON METALS ETCHING "E-496
6. AXES PER CARTESIAN COORDINATES, ALL DIMENSIONS RELATE TO AXES, NOT TO DATUM PLANES. A DATUM PLANE IN THIS DWG IS DEFINED BY ANY TWO OF THE THREE AXES.
7. FOR INFORMATION RELATED TO PROFILE OF SHELL AND ORIENTATION OF AXES SEE SHEET #12.
8. TOLERANCES:
   - GENERAL ± 0.1 MM FIRST 25 MM, PLUS ± 0.02 MM PER ADDITIONAL CM OR FRACTION
   - PARTING LINE ± 0.13 MM FIRST 25 MM PLUS ± 0.02 MM PER ADDITIONAL CM OR FRACTION
   - PIN MARKS ACCEPTABLE TO 0.0 RAISED; 0.5 MM DEPRESED
   - SOLID PIN MARK FLASH ACCEPTABLE TO 0.08 MM MAXIMUM
   - FLASH PERMITTED TO 0.08 MM MAXIMUM
9. ALL BOSSES TO BE CORED FROM BOTTOM.
10. THE FOLLOWING BOSSES MUST BE CORED THRU.
    - A. A27, A28, A29, A31 THRU A36, A38, A39, A40, A47, A48, A45, A46, A47, A50 THRU A53
    - B. B1, B2 E B3
    - C. C1 THRU C16
    - D. D1 THRU D11
    - E. F1 THRU F12.
11. THE FOLLOWING BOSSES MAY NOT BE CORED THRU.
    - A. A1 THRU A21 E A59
    - B. ANY REMAINING BOSSES MAY OR MAY NOT BE CORED THRU.

FIRST USED ON OPTION MODEL		QTY	DESCRIPTION	PART NO.	ITEM
VT50			PARTS LIST		
DRAWN	DATE				
DESIGNED	DATE				
CHECKED	DATE				
ENG	DATE				
TOOLING	DATE				
MFG	DATE				
QUALITY ASSURANCE					
MATERIAL: SEE NOTE "4"					
FINISH: SEE NOTE "5"					

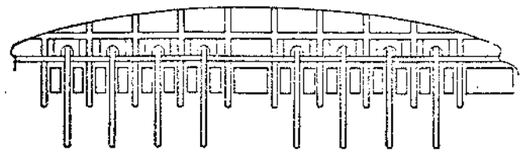
digital

TITLE: SHELL VT50

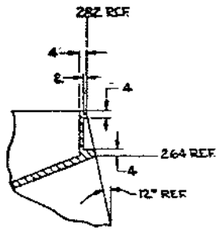
SIZE E | NO. 74-11540-0-0 | REV -

SCALE 1/1 | SHEET 1 OF 12

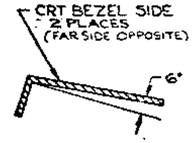
E NO. 74-11540-0-0 A



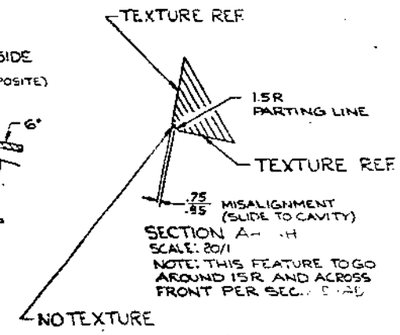
VIEW JJ



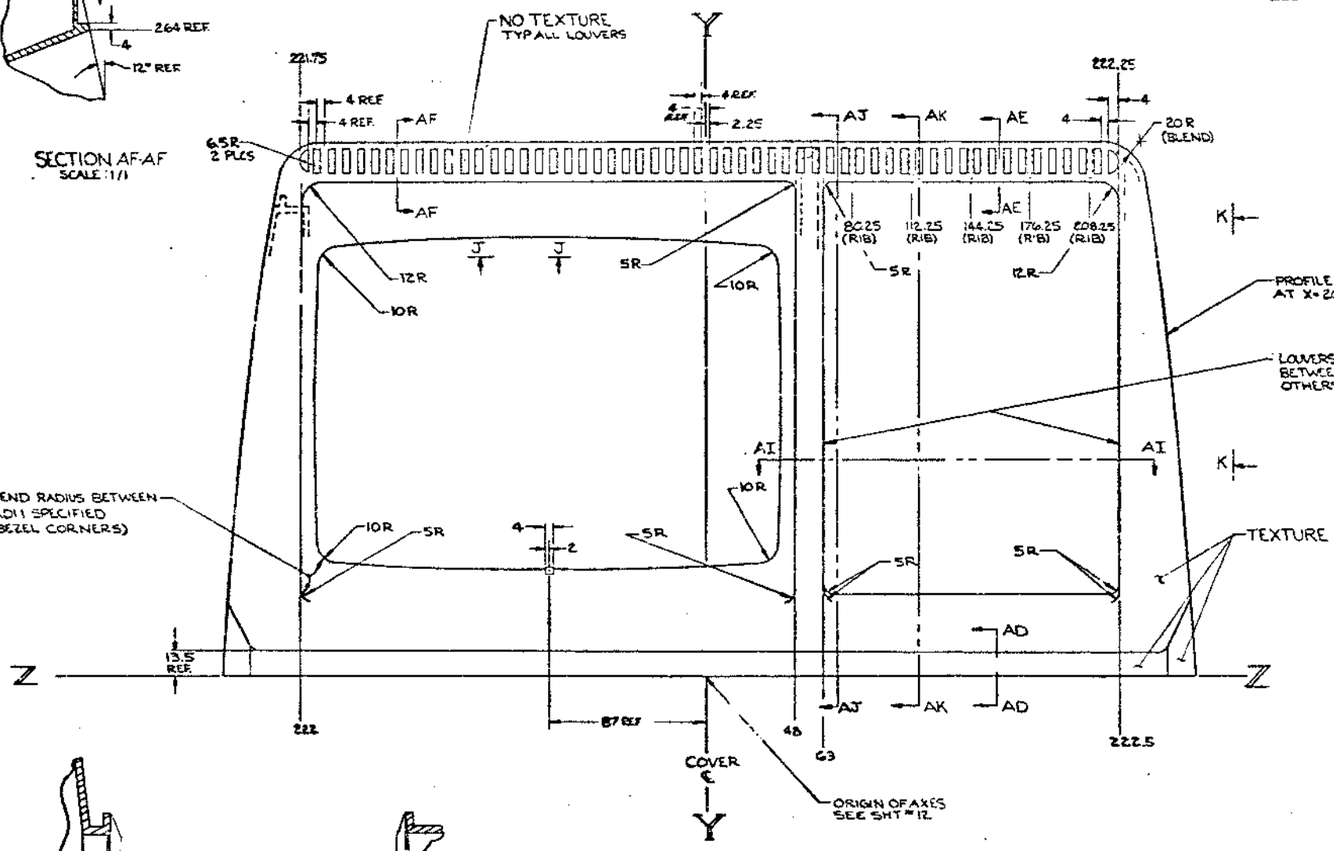
SECTION AF-AF
SCALE: 1/1

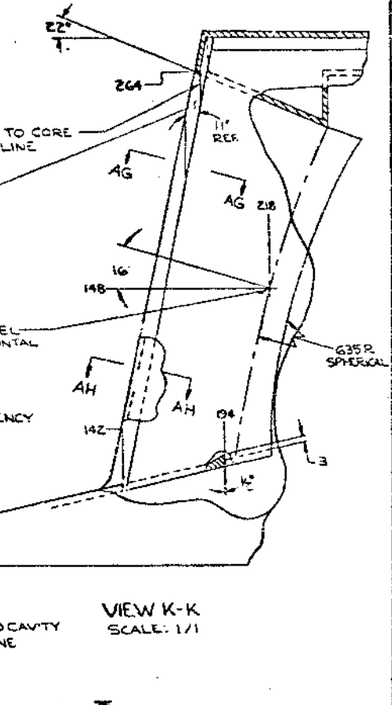


SECTION AG-AG

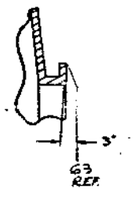


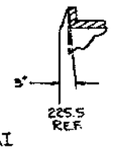
SECTION A-A
SCALE: 20/1
NOTE: THIS FEATURE TO GO AROUND 1.5R AND ACROSS FRONT PER SEC. B-B





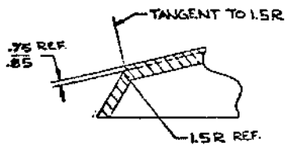
VIEW K-K
SCALE: 1/1



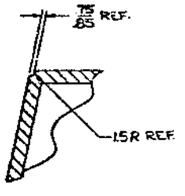


SECTION AI-AI
SCALE: 1/1

"FRONT" VIEW E-E



SECTION AD-AD
SCALE: 2/1

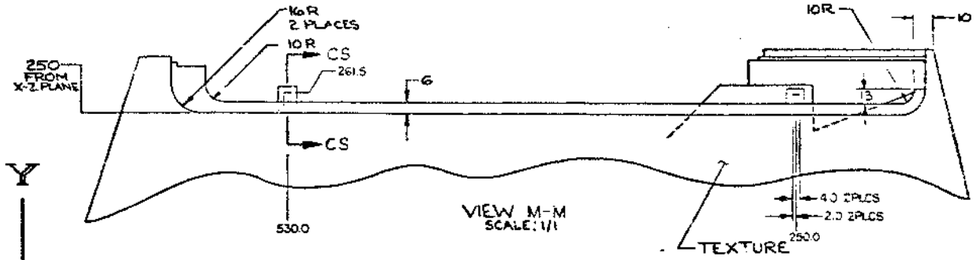


SECTION AE-AE
SCALE: 2/1

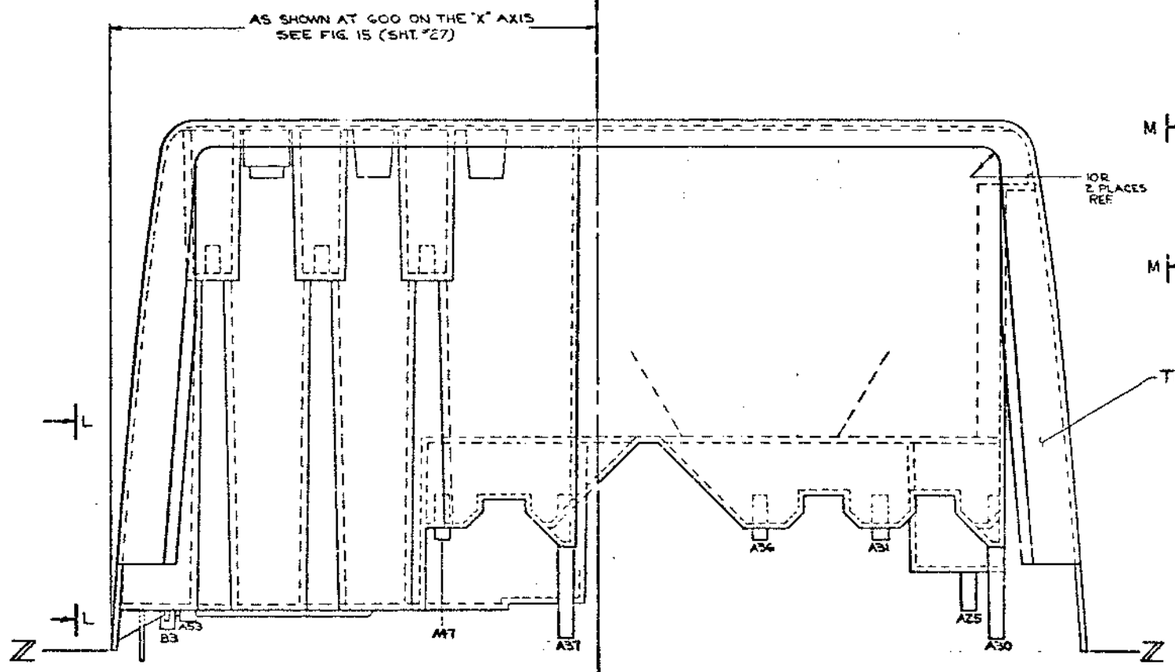
NOTE:
FOR SECTION VIEWS
AK-AK, AJ-AJ
SEE SHT.# 10

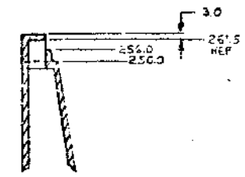
METRIC DIMENSIONS

SHELL VT5Ø					
SCALE 1/1	SHEET 2 OF 4.5	E	VO	7411540-0-0	A

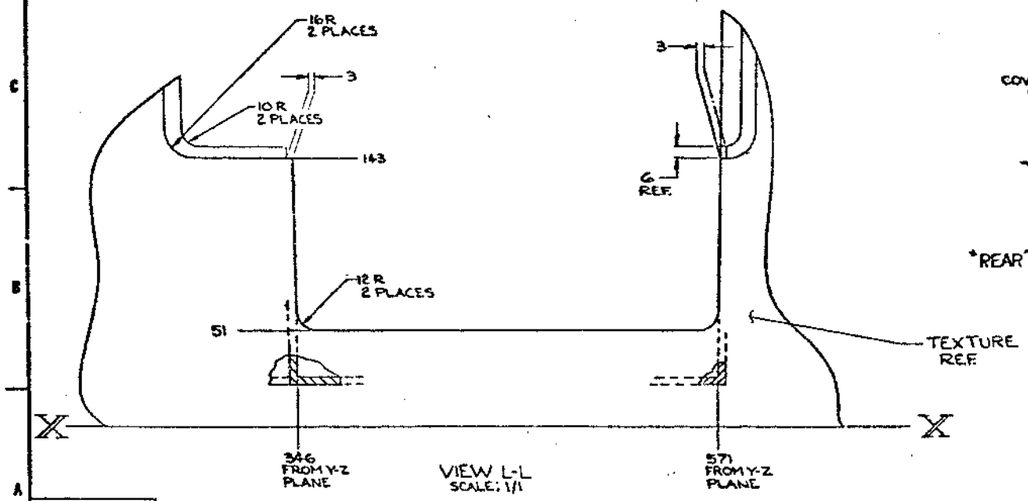


VIEW M-M
SCALE: 1/1





SECTION CS-CS
SCALE: 1/1



VIEW L-L
SCALE: 1/1

"REAR" VIEW F-F

METRIC DIMENSIONS

TITLE	SIZE	DRAWING
SHELL VT50	E	7411540-0-0
SCALE 1/1	SHEET 3 OF 4	DIST.

TEXTURE
4 PLACES

TEXTURE
REF.

SECTION AO-AO
SCALE: 1/1

DETAIL - D
SCALE: 1/1

SAW CUT
RADIUS ACCEPTED
R=2.6 MAX

SECTION AM-AM
SCALE: 1/1

SEE DETAIL-D

TEXTURE
REF.

CRT ℄ — 87 REF

CUTOUT — 206 REF.

RIBS AT X=234 & Y=273
PER SECTION AK-AK SHT=10

"TOP" VIEW G-G

SECTION AN-AN
SCALE: 1/1
(ROTATED 90° C.C.W)

SECTION AL-AL
SCALE: 1/1
(ROTATED 90° C.C.W)

METRIC DIMENSIONS

TITLE	SHELL VT50	
SCALE 1/1	SHEET 4 OF 45	DRAWING NUMBER 741-1540-0-0

DETAIL-E
SCALE: 2/1

SECTION AS-AS

SECTION AR-AR

SECTION AT-AT

VIEW N-N
SCALE: NONE

BOTTOM VIEW H-H

VIEW O-O
SCALE: NONE

SECTION AQ-AQ

SECTION AP-AP

SEE DETAIL-F SHT. NO 10 OPPOSITE CORNER MIRROR IMAGE

SEE DETAIL-E

SEE DETAIL-G SHT NO 10

PER DETAIL-J (SHT. 6)

CUTOUT

OPENING

BEZEL OPENING

OPEN

CRT ℄

COVER ℄

RIB TANGENT TO RADIUS

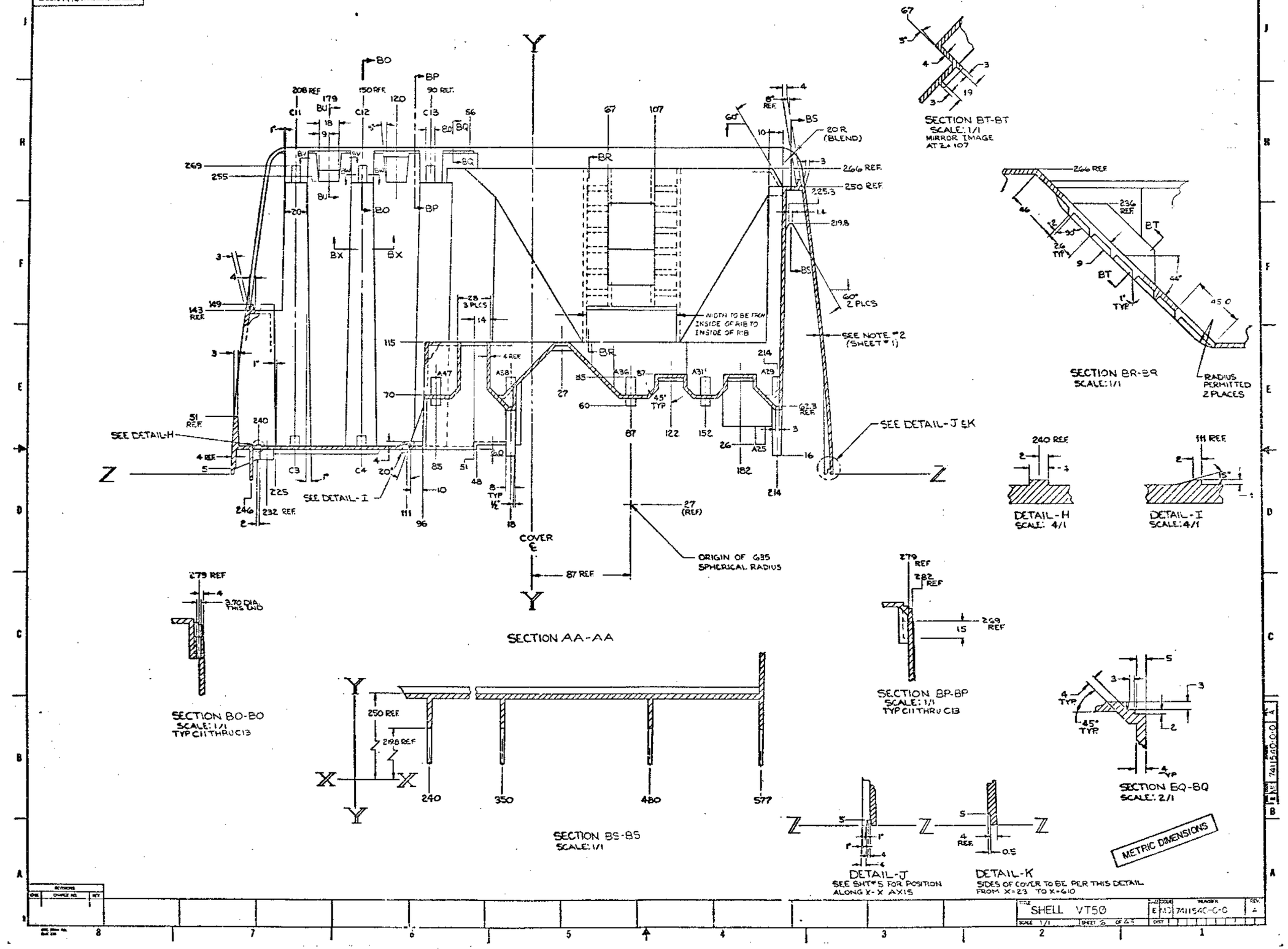
RIBS AT X = 284, 406 AND 559 PER DETAIL-J (SHT. 6)

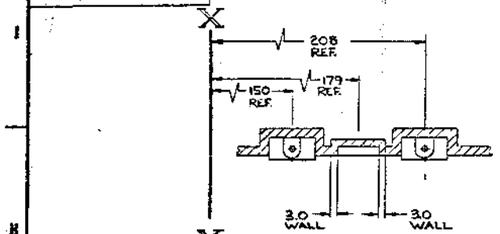
THIS PART OF RIB PER DETAIL-J (SHT. 6)

RIBS ON ℄ X = 284

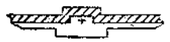
METRIC DIMENSIONS

TITLE	SHELL VT50	SIZE/CODE	NUMBER	REV
SCALE 1/1	SHEET 5 OF 45	E	741540-0-0	A

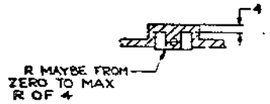

SECTION BT-BT
SCALE: 1/1
MIRROR IMAGE AT Z= 107
SECTION BR-BR
SCALE: 1/1
RADIUS PERMITTED 2 PLACES
SEE DETAIL-H
SEE DETAIL-I
SEE DETAIL-J & K
SEE NOTE #2 (SHEET #1)
WIDTH TO BE FROM INSIDE OF RIB TO INSIDE OF RIB
ORIGIN OF G35 SPHERICAL RADIUS
87 REF
COVER
SECTION AA-AA
SECTION BO-BO
SCALE: 1/1
TYP C11 THRU C13
SECTION BP-BP
SCALE: 1/1
TYP C11 THRU C13
SECTION BQ-BQ
SCALE: 2/1
SECTION BS-BS
SCALE: 1/1
DETAIL-H
SCALE: 4/1
DETAIL-I
SCALE: 4/1
DETAIL-J
SEE SHT #5 FOR POSITION ALONG X-X AXIS
DETAIL-K
SIDES OF COVER TO BE PER THIS DETAIL FROM X=23 TO X=610
METRIC DIMENSIONS
SHELL VT50
741154C-C-C



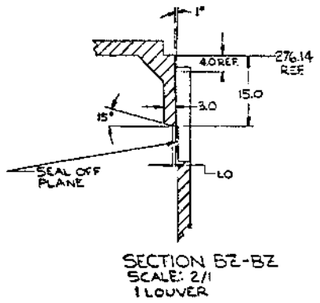
SECTION CA-CA
SCALE: 1/1
1 LOUVER



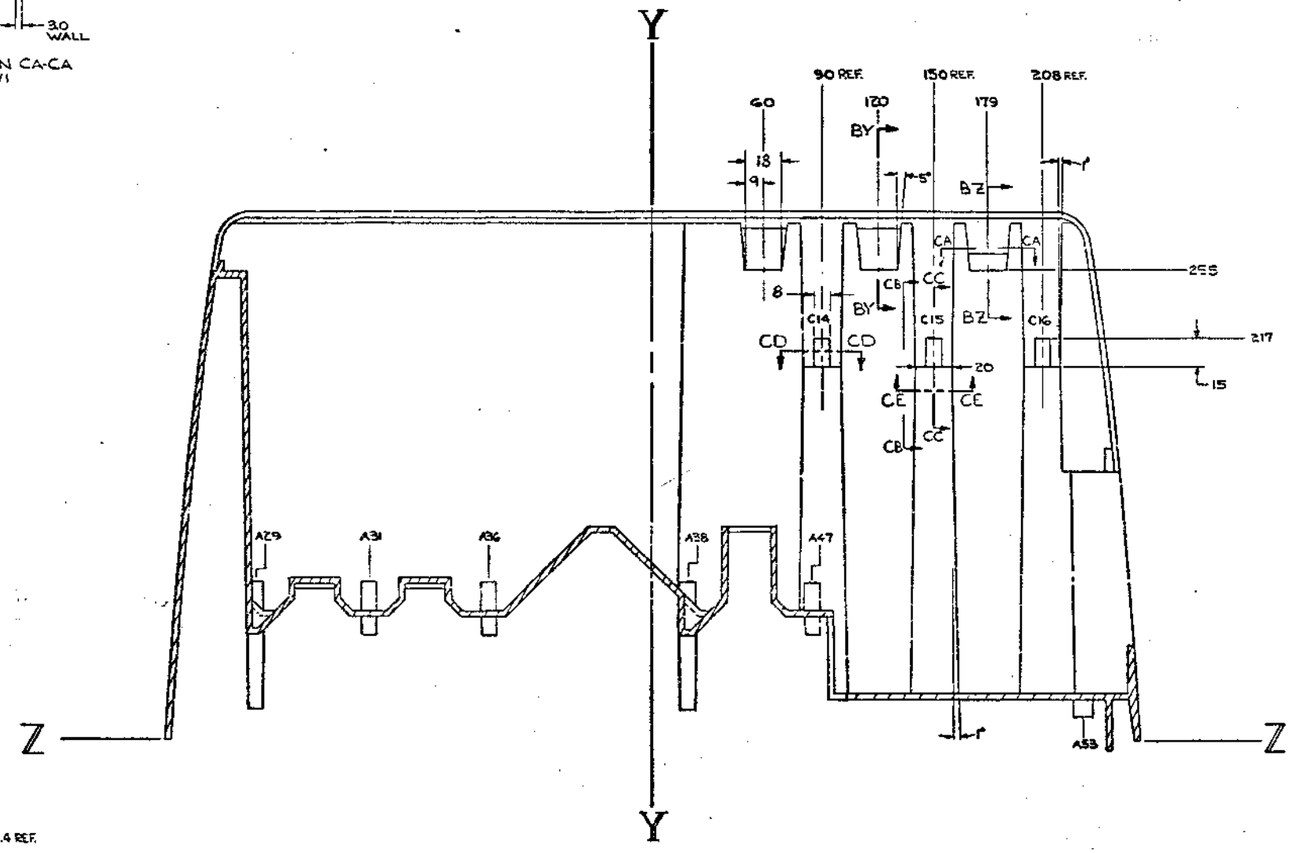
SECTION CE-CE
SCALE: 1/1
TYP C14 THRU C16



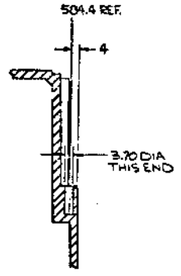
SECTION CD-CD
SCALE: 1/1
TYP C14 THRU C16



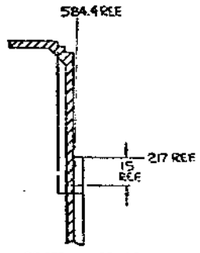
SECTION BZ-BZ
SCALE: 2/1
1 LOUVER



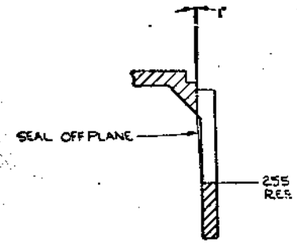
SECTION AB-AB



SECTION CC-CC
SCALE: 1/1
TYP C14 THRU C16



SECTION CB-CB
SCALE: 1/1
TYP C14 THRU C16



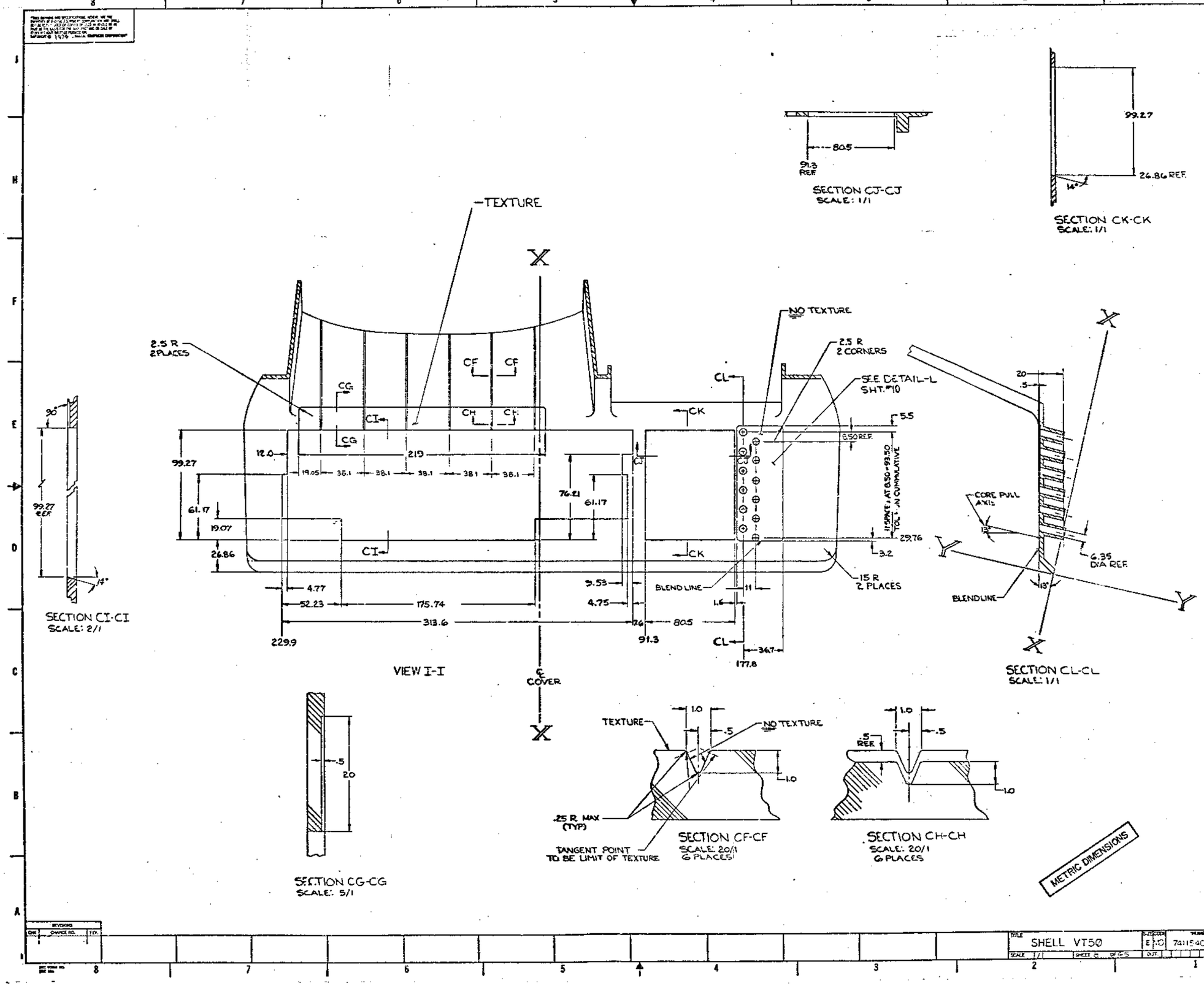
SECTION
SCALE: 2/1
TYP 3 LOUVERS

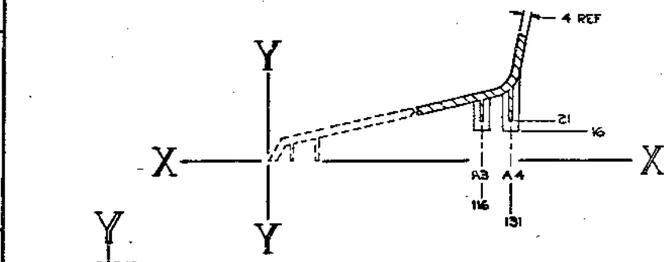
METRIC DIMENSIONS

REVISIONS		
CHK	CHANGE NO.	REV.

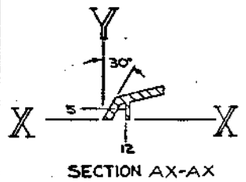
TITLE	SHELL VT50	SIZE/CODE	NUMBER
		E MD	7011540-0-0
SCALE	1/1	SHEET 77 OF 45	DIST.

7011540-0-0 A

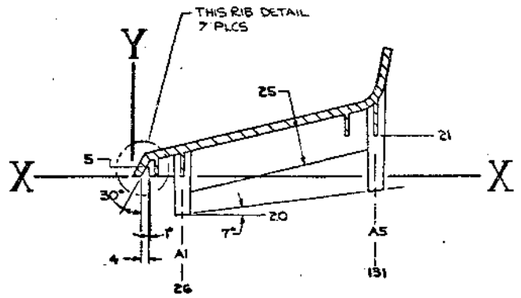

TEXTURE
X
2.5 R
2 PLACES
CF
CF
CG
CI
CH
CH
CG
CK
CL
NO TEXTURE
2.5 R
2 CORNERS
SEE DETAIL-L
SHT. #10
CJ
CJ
12.0
219
19.05
38.1
38.1
38.1
38.1
38.1
99.27
61.17
19.07
26.86
76.21
61.17
CI
CK
4.77
52.23
175.74
313.6
229.9
9.53
4.75
BLEND LINE
11
1.6
76
80.5
91.3
CL
36.7
177.8
6.50 REF.
5.5
29.76
3.2
15 R
2 PLACES
11 SPACES AT 6.50 = 93.50
TOTAL IN CUMMULATIVE
20
5
CORE PULL
AXIS
13°
6.35
DIA REF.
BLENDLINE
18°
Y
30°
99.27
REF.
14°
SECTION CI-CI
SCALE: 2/1
VIEW I-I
℄
COVER
SECTION CJ-CJ
SCALE: 1/1
80.5
91.3
REF
99.27
24.86 REF.
14°
SECTION CK-CK
SCALE: 1/1
SECTION CL-CL
SCALE: 1/1
.5
20
SECTION CG-CG
SCALE: 5/1
TEXTURE
NO TEXTURE
1.0
.5
.25 R MAX
(TYP)
TANGENT POINT
TO BE LIMIT OF TEXTURE
SECTION CF-CF
SCALE: 20/1
6 PLACES
.5
REF.
SECTION CH-CH
SCALE: 20/1
6 PLACES
METRIC DIMENSIONS
REVISIONS
ZONE
CHANGE NO.
TITLE
SHELL VT50
SIZE
CODE
NUMBER
7411540C-0-0
REV.
A
SCALE 1/1
SHEET 6 OF 6 S
OUT
UNLESS OTHERWISE SPECIFIED



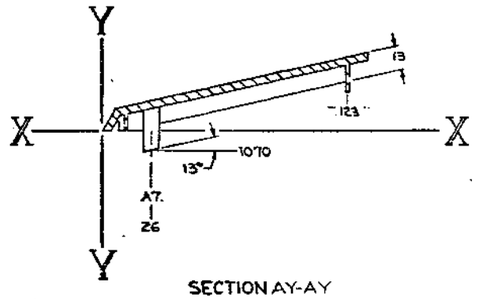
SECTION AU-AU



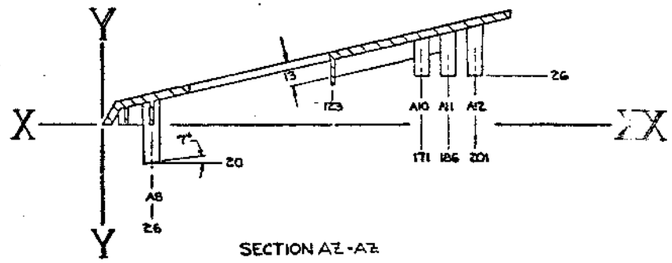
SECTION AX-AX



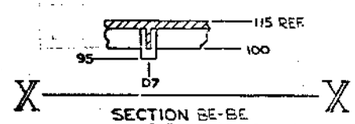
SECTION AV-AV



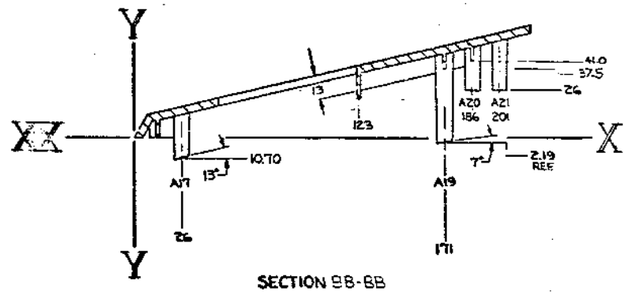
SECTION AY-AY



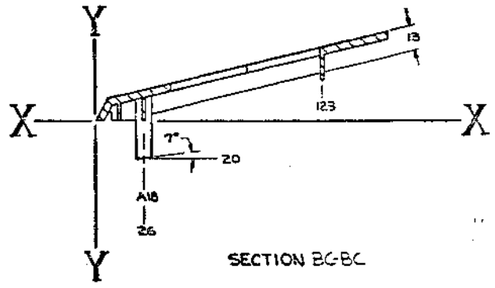
SECTION AZ-AZ



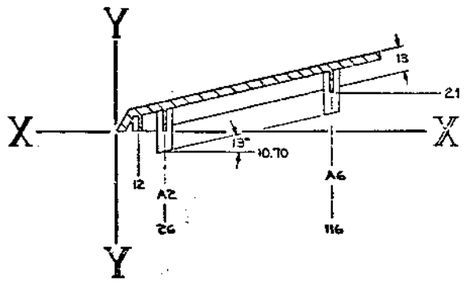
SECTION BE-BE
("TYP "D" BOSS & RIB DETAIL)



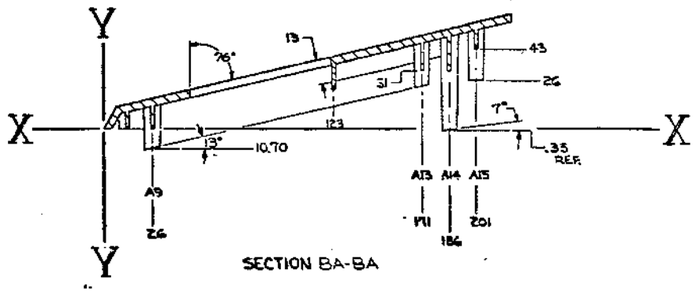
SECTION BB-BB



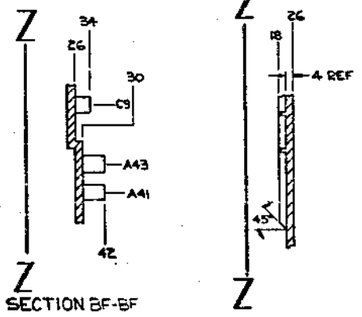
SECTION BC-BC



SECTION AW-AW

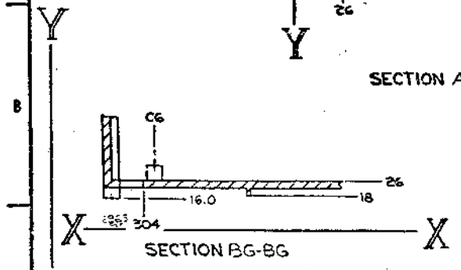


SECTION BA-BA

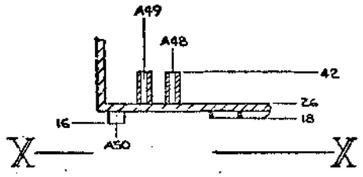


SECTION BF-BF

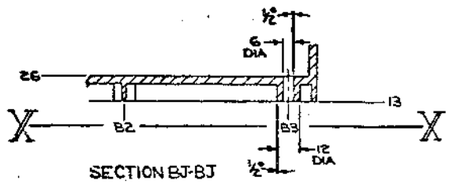
SECTION BH-BH



SECTION BG-BG

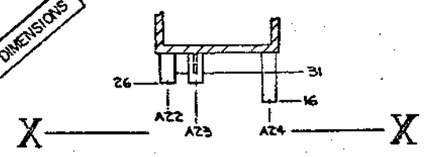


SECTION BI-BI



SECTION BJ-BJ

METRIC DIMENSIONS



SECTION BD-BD

REVISIONS		
ZONE	CHANGE NO.	REV.

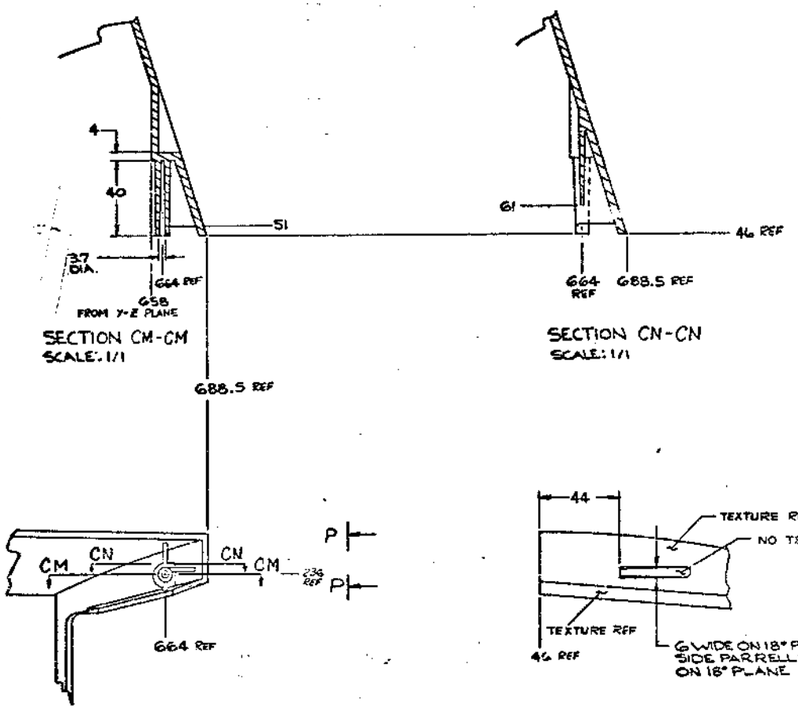
TITLE: SHELL VTSØ

SCALE: 1/1 SHEET 9 OF 45

DRAWING NUMBER: E MS 74115 40-0-0

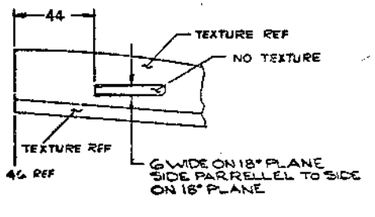
SIZE: A

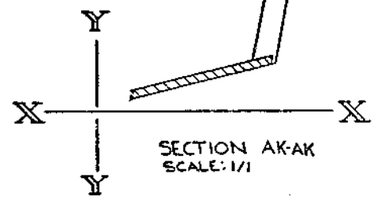
DIST.



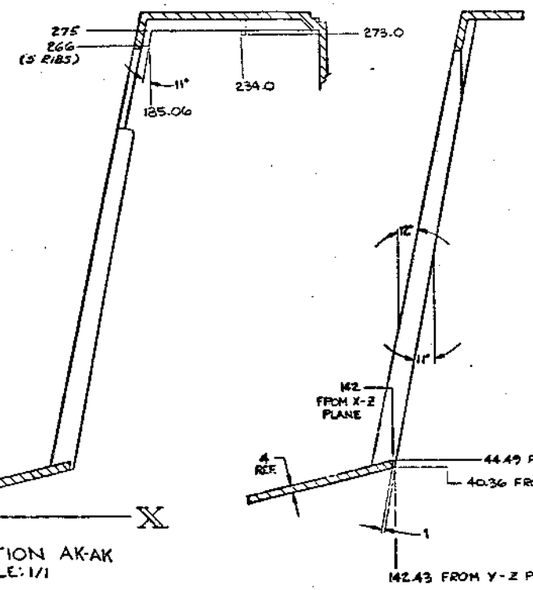
SECTION CM-CM
SCALE: 1/1

SECTION CN-CN
SCALE: 1/1





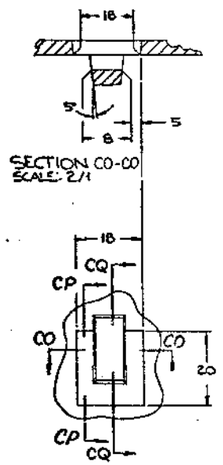
SECTION AK-AK
SCALE: 1/1



SECTION AJ-AJ
SCALE: 1/1

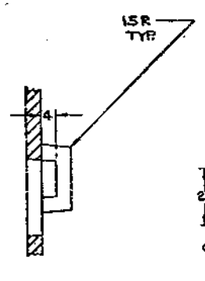
DETAIL-F
SCALE: 1/1
OPPOSITE CORNER
MIRROR IMAGE

VIEW P-P
SCALE: 1/1

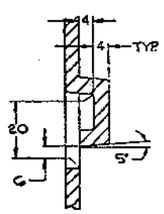


DETAIL-G
SCALE: 2/1
2 PLCS
ROTATE AS REQUIRED

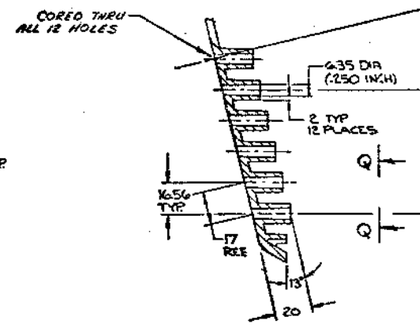
SECTION CO-CO
SCALE: 2/1



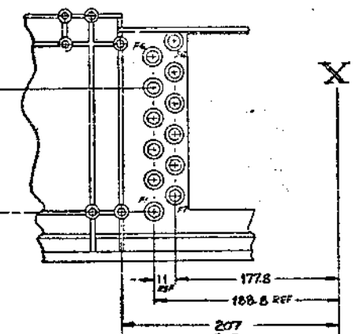
SECTION CP-CP
SCALE: 2/1



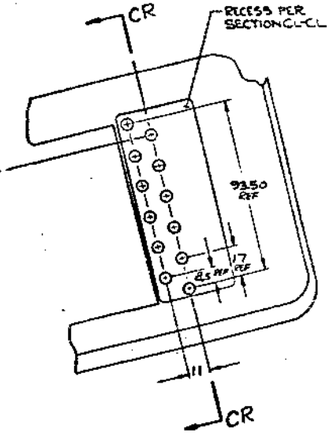
SECTION CQ-CQ
SCALE: 2/1



SECTION CR-CR
SCALE: 1/1



VIEW Q-Q
SCALE: 1/1

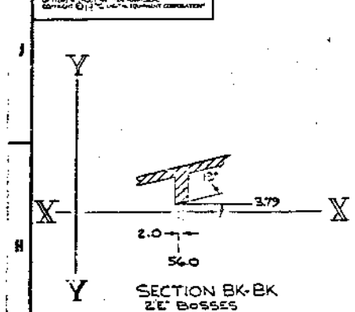


DETAIL-L
SCALE: 1/1

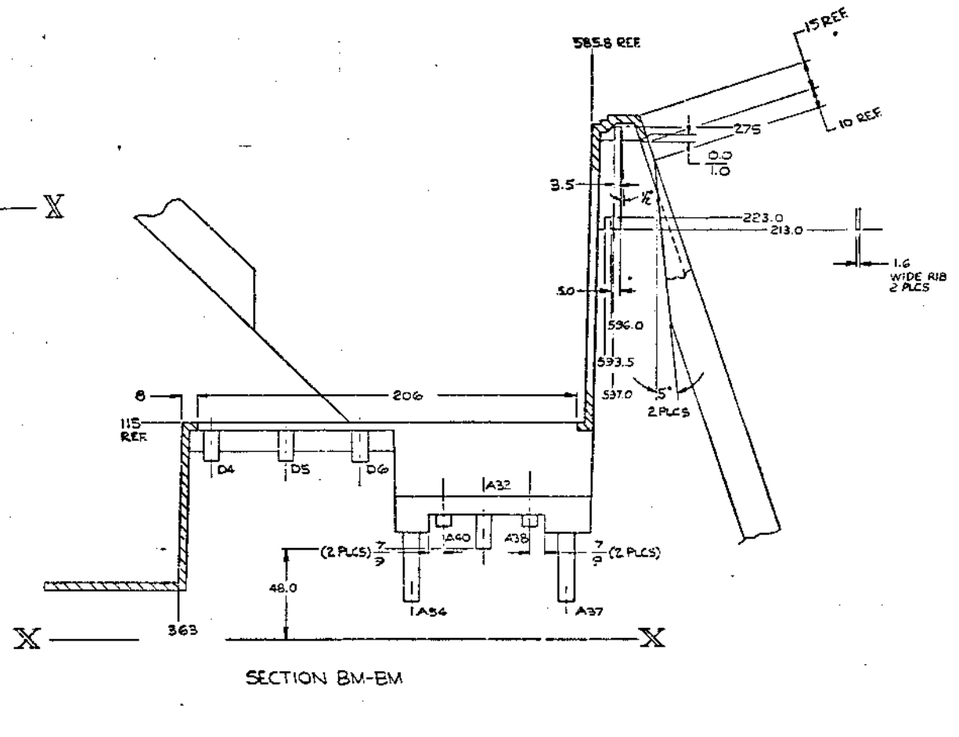
METRIC DIMENSIONS

REVISIONS		
ZONE	CHANGE NO.	REV.

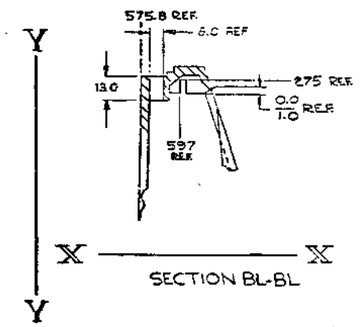
TITLE	SHELL VT5Ø	SIZE	NUMBER 7411540-0-0
SCALE 1/1	SHEET 10 OF 45		REV A



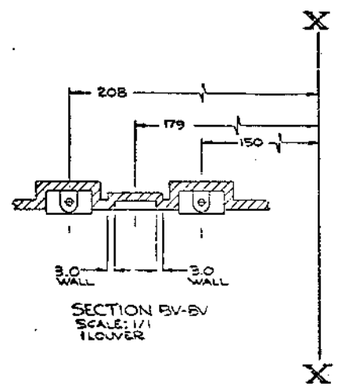
SECTION BK-BK
2 Ø BOSSES
NO CORED HOLE



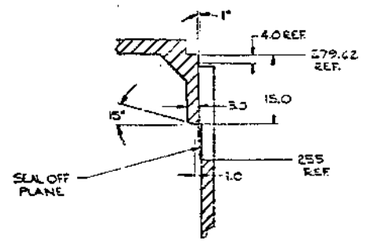
SECTION BM-BM



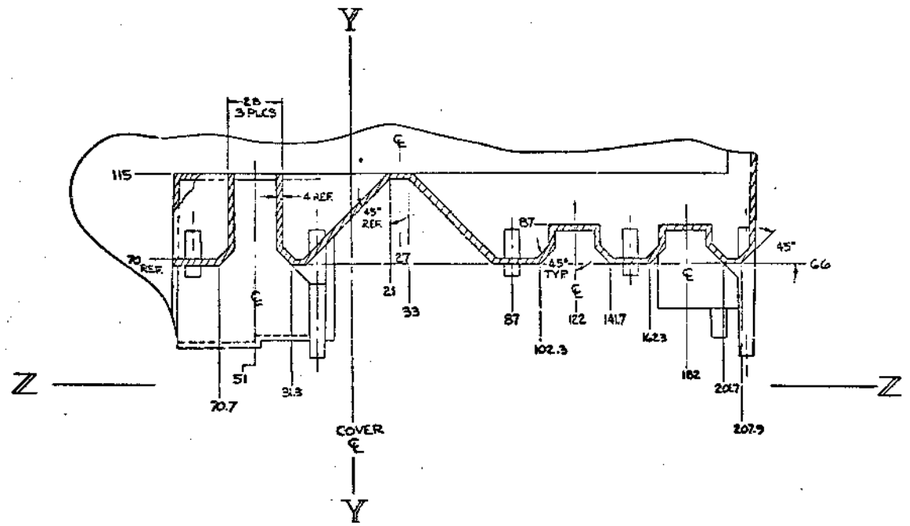
SECTION BL-BL



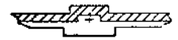
SECTION BV-BV
SCALE: 1/1
1 LOUVER



SECTION AZ-AZ
SCALE: 2/1
1 LOUVER

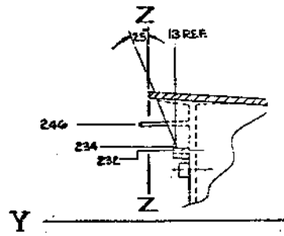


SECTION AC-AC
SCALE: 1/1



SECTION BX-BX
SCALE: 1/1
TYP C11 THRU C13

SECTION BW-BW
SCALE: 1/1
TYP C11 THRU C13

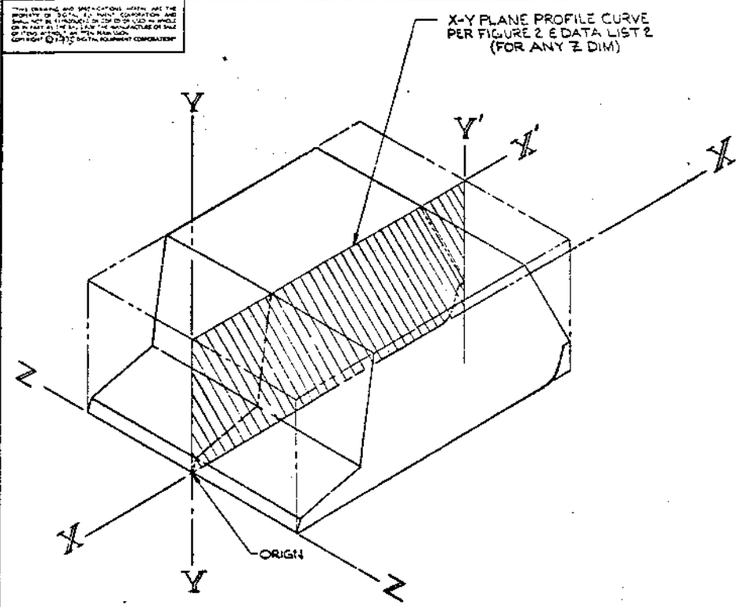


SECTION BN-BN

METRIC DIMENSIONS

REVISIONS		
DR	CHANGE NO	REV

TITLE	SIZE/CODE	NUMBER	REV.
SHELL VTEØ	E NO	7411540-0-0	A
SCALE 1/1 SHEET 1 OF 4 R	DIST		

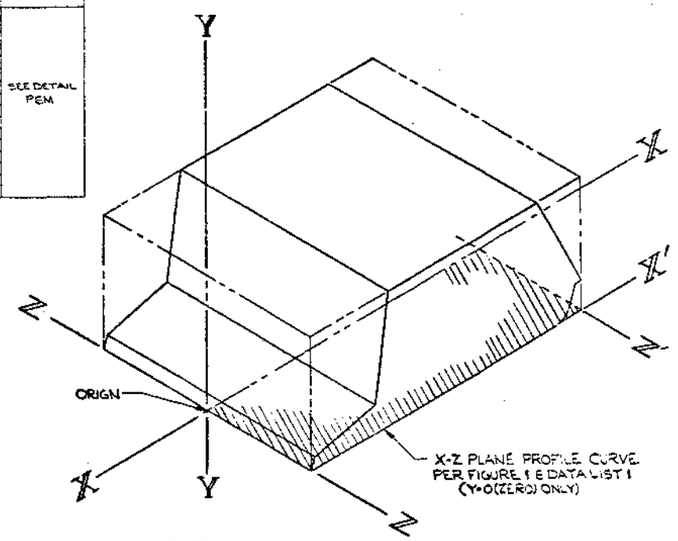


DETAIL-O
SCALE: 1/4

LEGEND D

SHELL PROFILE DIMENSIONAL INFORMATION

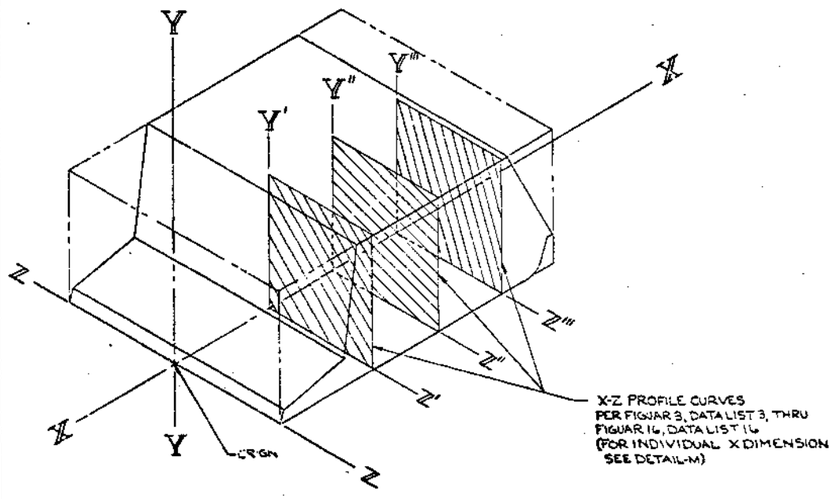
SECTION PLANE	FIGURE NO	FIGURE SHEET	DATA LIST NO	DATA LIST SHEET	REMARKS
X-Z PLANE AT Y=0	1	13	1	29	SEE DETAIL-N
X-Y PLANE ANY Z DIM	2	14	2	30	SEE DETAIL-O
Y-Z PLANE AT X=					
0	3	15	3	31	SEE DETAIL PEM
50	4	16	4	32	
100	5	17	5	33	
150	6	18	6	34	
200	7	19	7	35	
250	8	20	8	36	
300	9	21	9	37	
350	10	22	10	38	
400	11	23	11	39	
450	12	24	12	40	
500	13	25	13	41	
550	14	26	14	42	
600	15	27	15	43	
650	16	28	16	44	



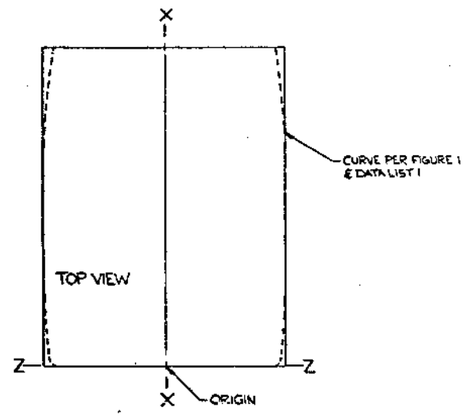
DETAIL-N
SCALE: 1/4

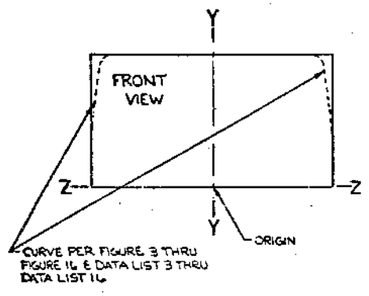
NOTES:

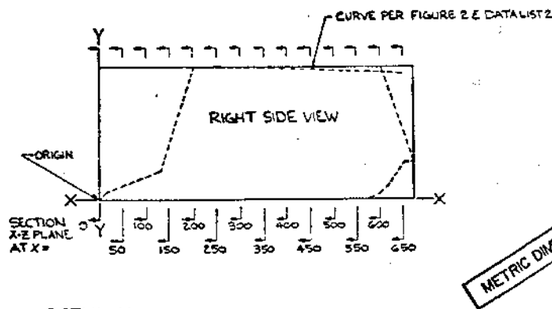
1. SHELL PROFILE IS SYMETRICAL ABOUT THE X-Y PLANE.
2. PROFILE PER FIGURE 2 & DATA LIST 2 IS CONSTANT ENTIRE WIDTH OF SHELL (-Z TO +Z)
3. INFORMATION CONTAINED IN FIGURE 1-16 & DATA LIST 1-16 DEFINE A SHAPE NOT ENTIRELY USED BY THE SHELL. DISREGARD ALL INFORMATION NOT WITHIN THE LIMITS OF THE SHELL AS GIVEN IN SHEET 1-11
4. COORDINATES IN DATA LIST 1 THRU 16 ARE FINISH PART SIZE MAT'L SHRINKAGE IS NOT INCLUDED
5. CURVES IN FIGURES 1 THRU 16 ARE FOR TEMPLATE PURPOSES & REF ONLY, SCALE OF 1.006 TO 1 INCLUDES .6% MAT'L SHRINKAGE & 100% PHOTO REPRODUCTION OF CURVE ORIGINAL IS REQD
6. AXES PER CARTESIAN COORDINATES, ALL DIMENSION RELATE TO AXES, NOT TO DATUM PLANES. A DATUM PLANE IN THIS DWG IS DEFINED BY ANY TWO OF THREE AXES.



DETAIL-P
SCALE: 1/4







DETAIL-M
ORIENTATION OF AXIS-VT50 SHELL
SCALE: 1/4

METRIC DIMENSIONS

REVISIONS		
DWN	CHANGE NO	REV

TITLE	SIZE CODE	NUMBER	REV
SHELL VT50	E MC	7411540-0-0	A
SCALE 1/1 SHEET 12 OF 43	DIST		

7411540-0-0

NOTES:
1. THE SHELL PROFILE IS SYMETRICAL ABOUT THE X-Y PLANE
2. FOR COORDINATES OF THE PROFILE CURVE REFER TO DATA LIST 1 (SHEET 29)
3. TO BE USED FOR CURVE TEMPLATE PUPOSES ONLY. SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR.

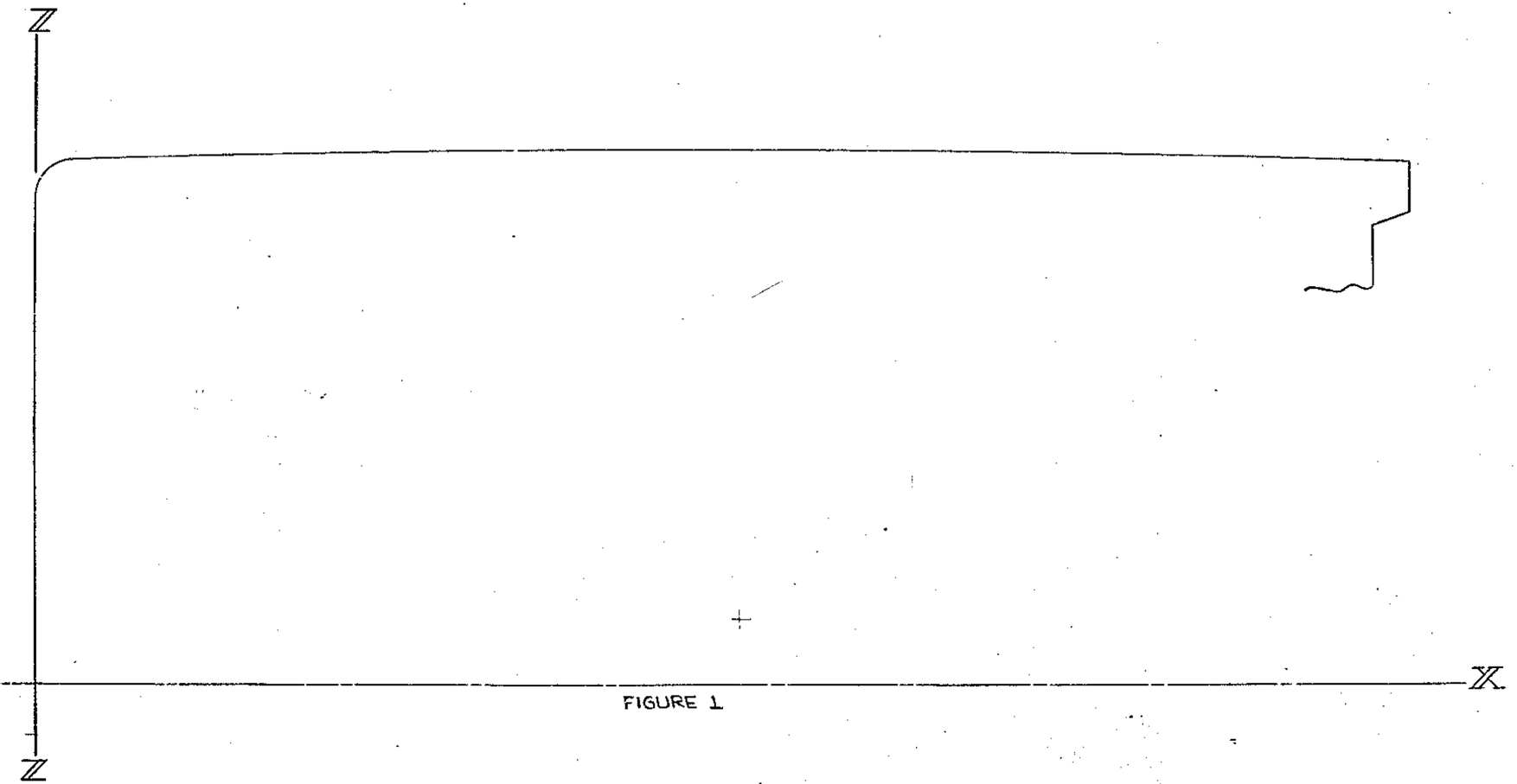


FIGURE 1

REVISIONS		
ENG	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006:1 SHEET 17 OF 45	DIST			

NOTES:
1. THE UPPER PROFILE CURVE IS USED BETWEEN THE POINTS X = 182 & X = 612. THE REMAINING PORTION OF THE CURVE IS FOR PLOTTING PURPOSES ONLY. THE X&Y COORDINATES ARE THE SAME FOR THE ENTIRE WIDTH OF THE SHELL.
2. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST 2. (SHEET 30)
3. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR

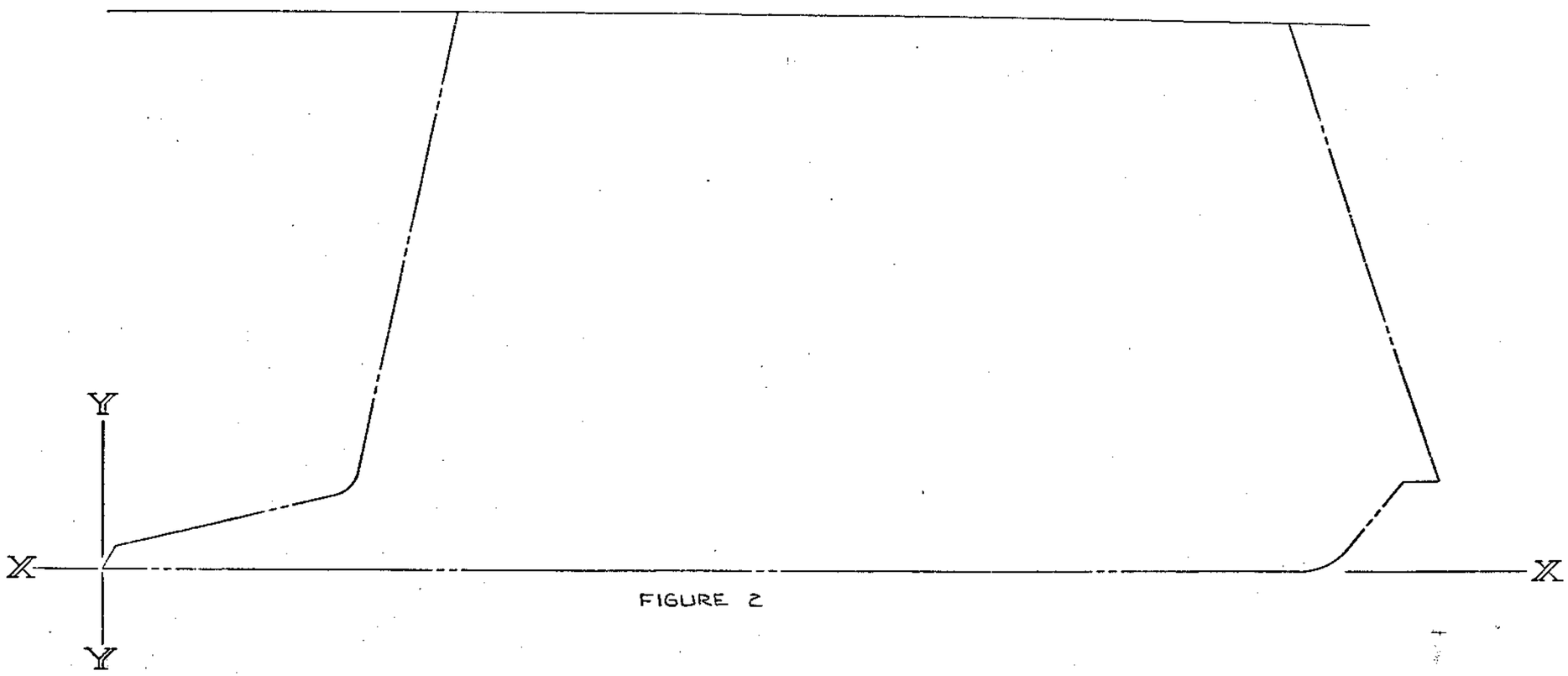
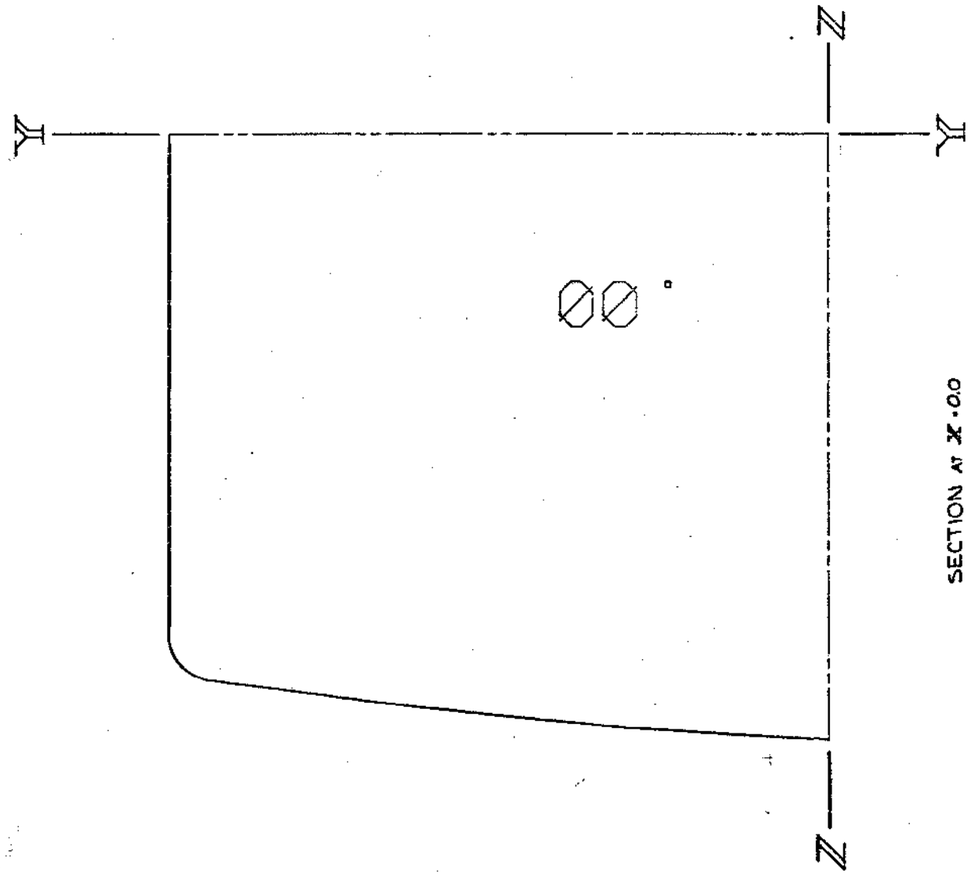


FIGURE 2

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006:1	SHEET 4 OF 45			

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #3 (SHEET 31)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR.



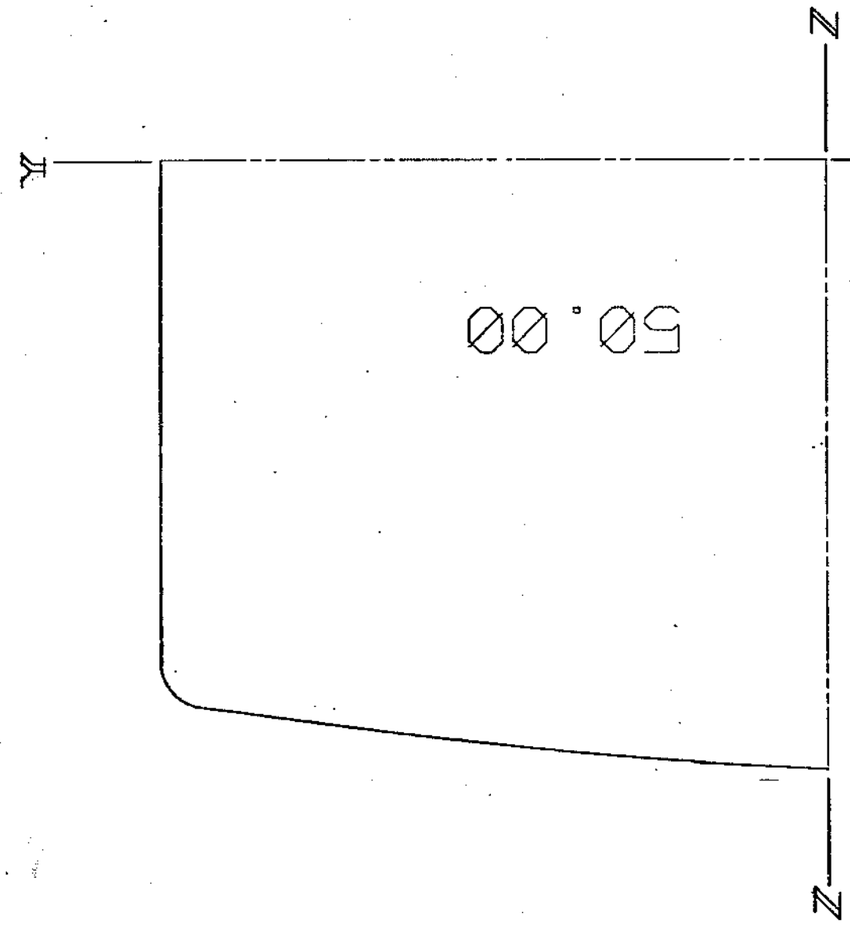
SECTION AT X-0.0

FIGURE 3

REVISIONS		
ECR	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006 : 1 SHEET 15 OF 65	DIST			

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #4 (SHEET 32)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF-1.006:1 INCLUDES .6% SHRINKAGE FACTOR



SECTION AT X-50.0

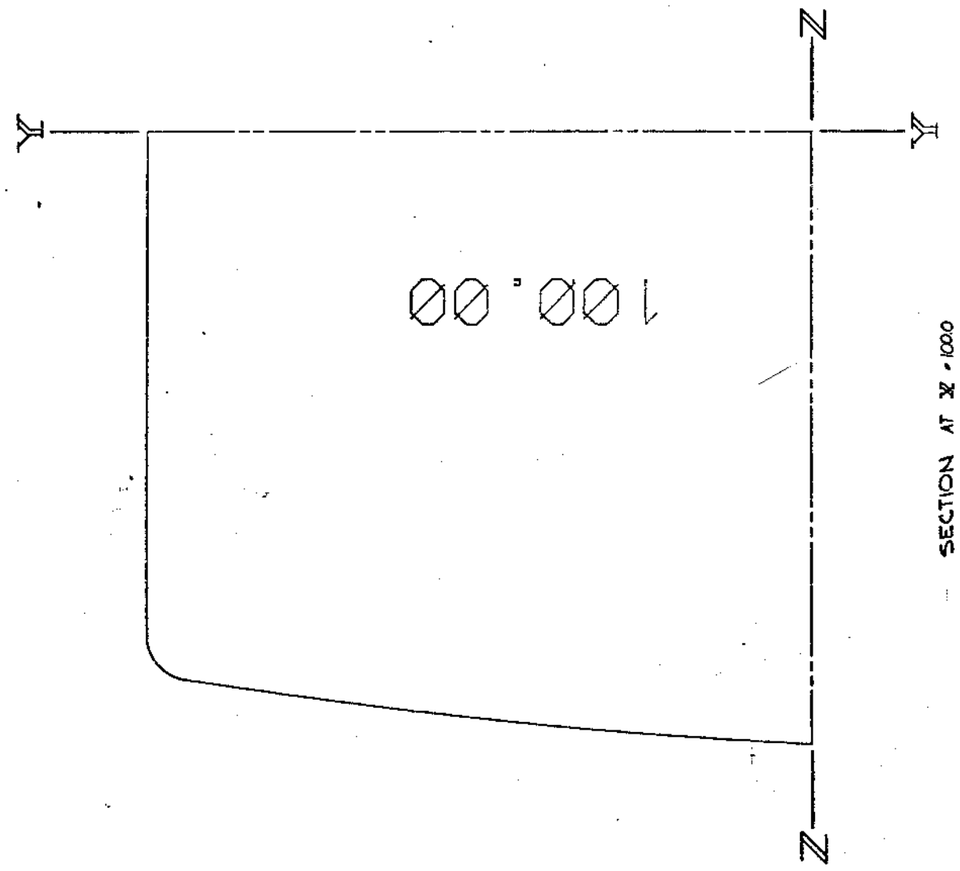
FIGURE 4

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE 1.006:1 SHEET 16 OF 45	DIST			

ARTICLE	NUMBER	REV
D-10	7411540-0-0	A

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #5 (SHEET 33)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR



SECTION AT X = 1000

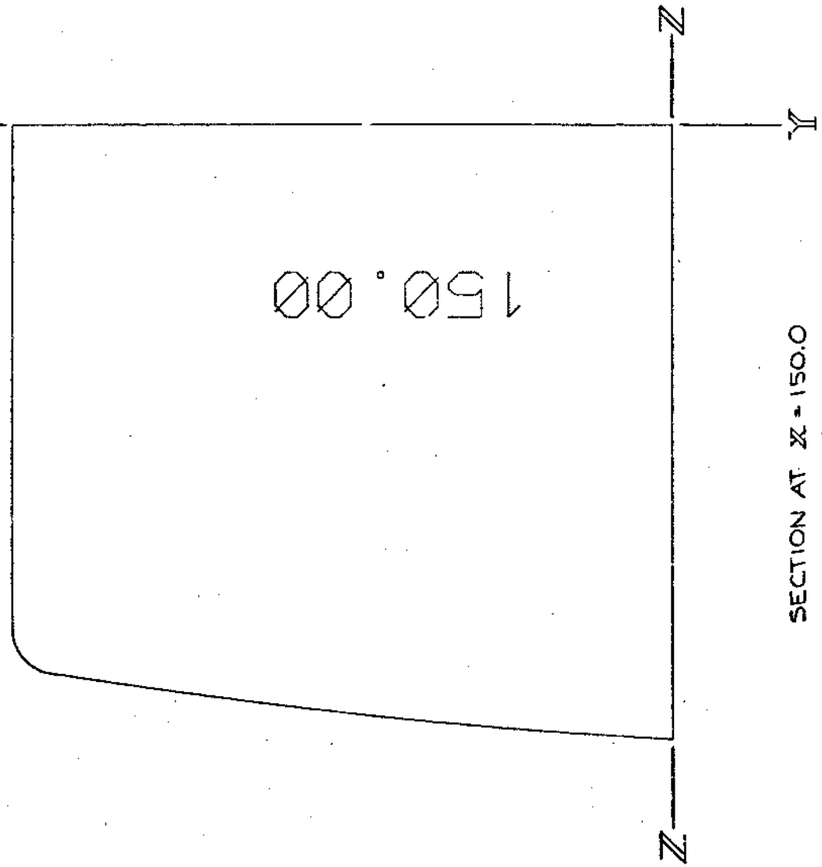
FIGURE 5

REVISIONS		
CHK	CHANGE NO.	REV

TITLE: SHELL VT50										PJ CODE: D-MD	NUMBER: 7411540-0-0	REV: A
SCALE 1.006:1	SHEET 7 OF 45									DIST		

8	7	6	5	4	3	2	1

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #6 (SHEET 34)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006 : 1 INCLUDES .6% SHRINKAGE FACTOR



SECTION AT Z = 150.0

FIGURE 6

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	NUMBER	REV
SHELL VT50	D	MD 7411540-0-0	A
SCALE: 1.006 : 1	SHEET 18 OF 45		

MD 7411540-0-0 A

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #7 (SHEET 35)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006 : 1 INCLUDES .6% SHRINKAGE FACTOR

SECTION AT X = 200.0

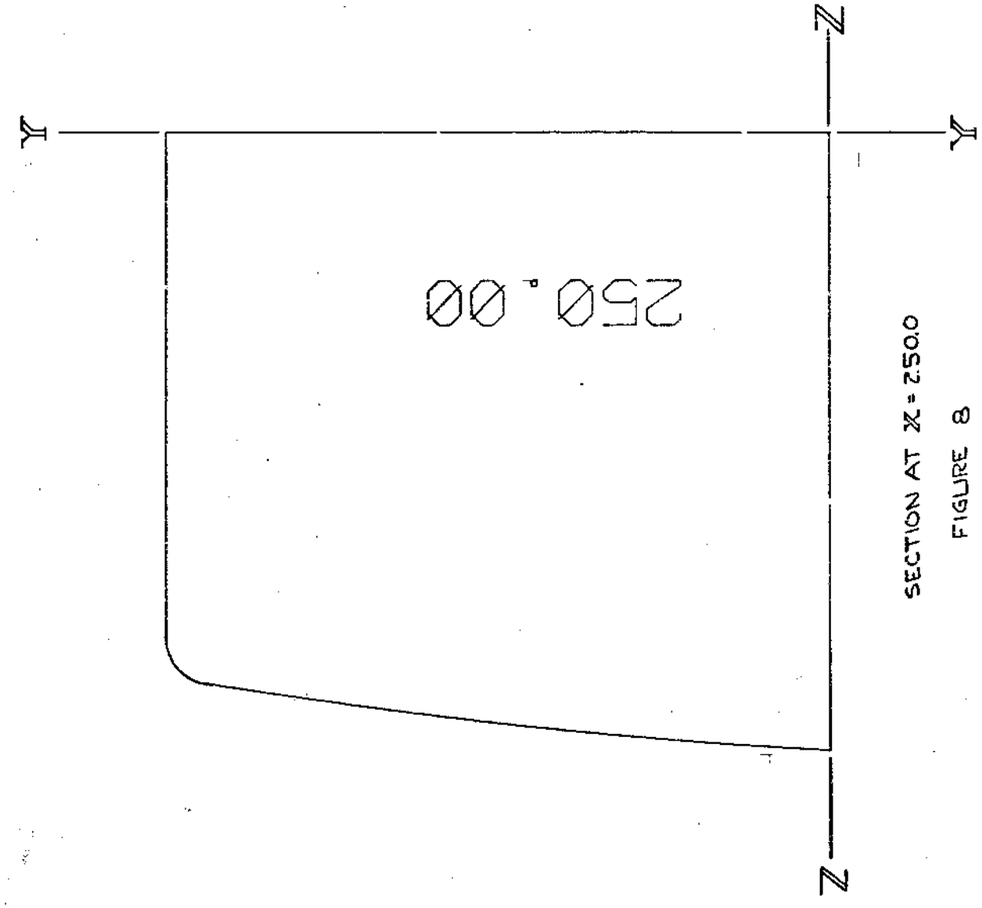
FIGURE 7

REVISIONS		
LTR	CHANGE NO	REV

TITLE	CHECK CODE	NUMBER	REV
SHELL VT50	D MD	7411540-0-0	A
SCALE 1.006 : 1 SHEET 19 OF 45	DIST		

DRAWING NUMBER D MD 7411540-0-0 REV A

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #8 (SHEET 36)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006 : 1 INCLUDES .6% SHRINKAGE FACTOR.



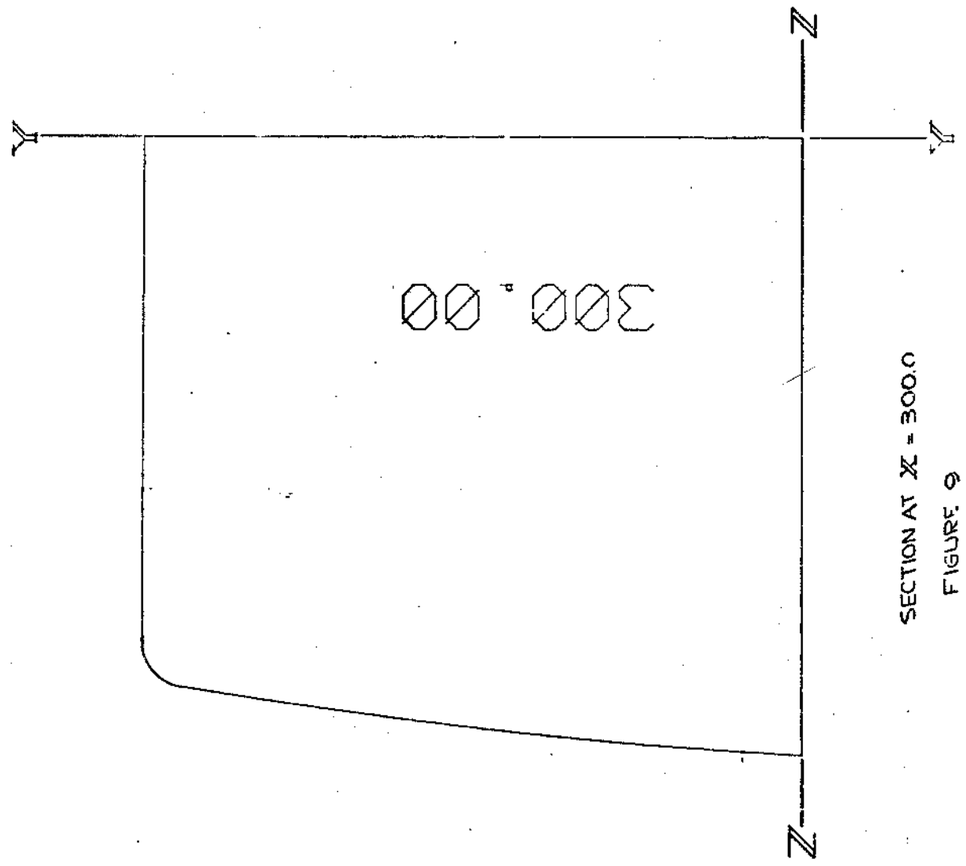
SECTION AT Z = 250.0
FIGURE 8

REVISIONS
CHG | CHANGE NO | REV

TITLE	DIA CODE	NUMBER	REV
SHELL VT50	D	MD7411540-0-0	A
SCALE 1.006 : 1	SHEET 20 OF 45	DIST	

DRAWING NUMBER D MD7411540-0-0 REV A

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST # 9 (SHEET 37)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006 : 1 INCLUDES [illegible] SHRINKAGE FACTOR



SECTION AT X = 300.0
FIGURE 9

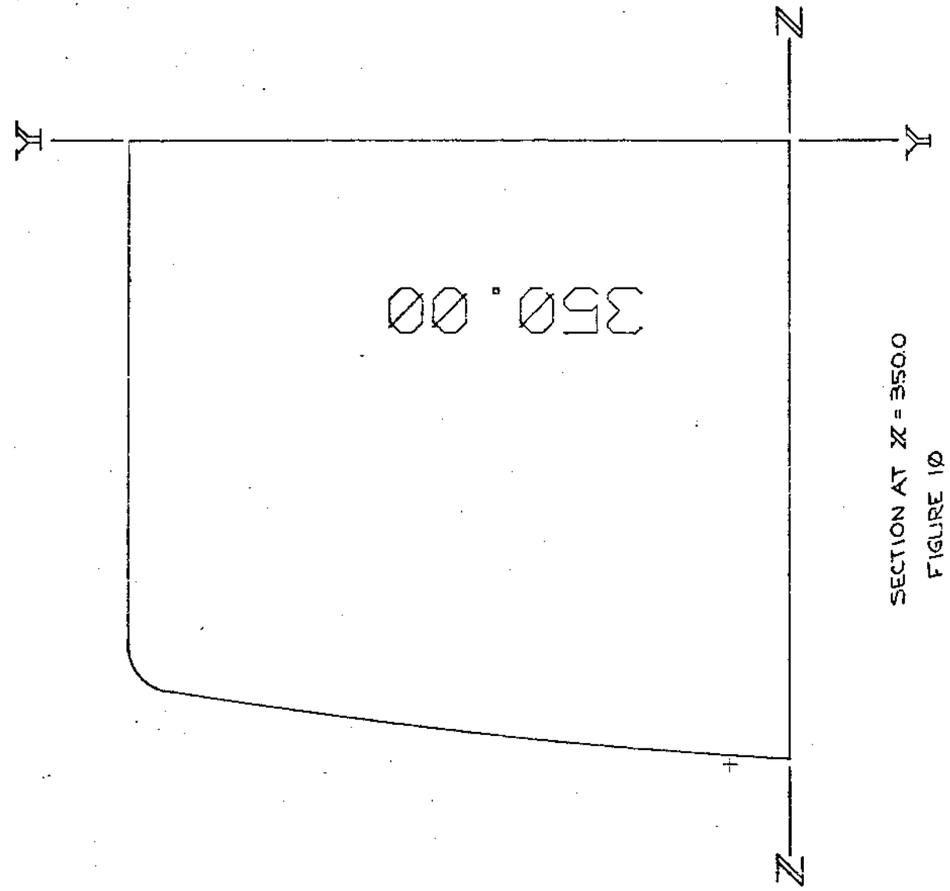
REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE 1.006 : 1 SHEET 21 OF 45	DIST			

DWG NUMBER 7411540-0-0 REV A

NOTES:

1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #10 (SHEET 38)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006:1 INCLUDES 6% SHRINKAGE FACTOR

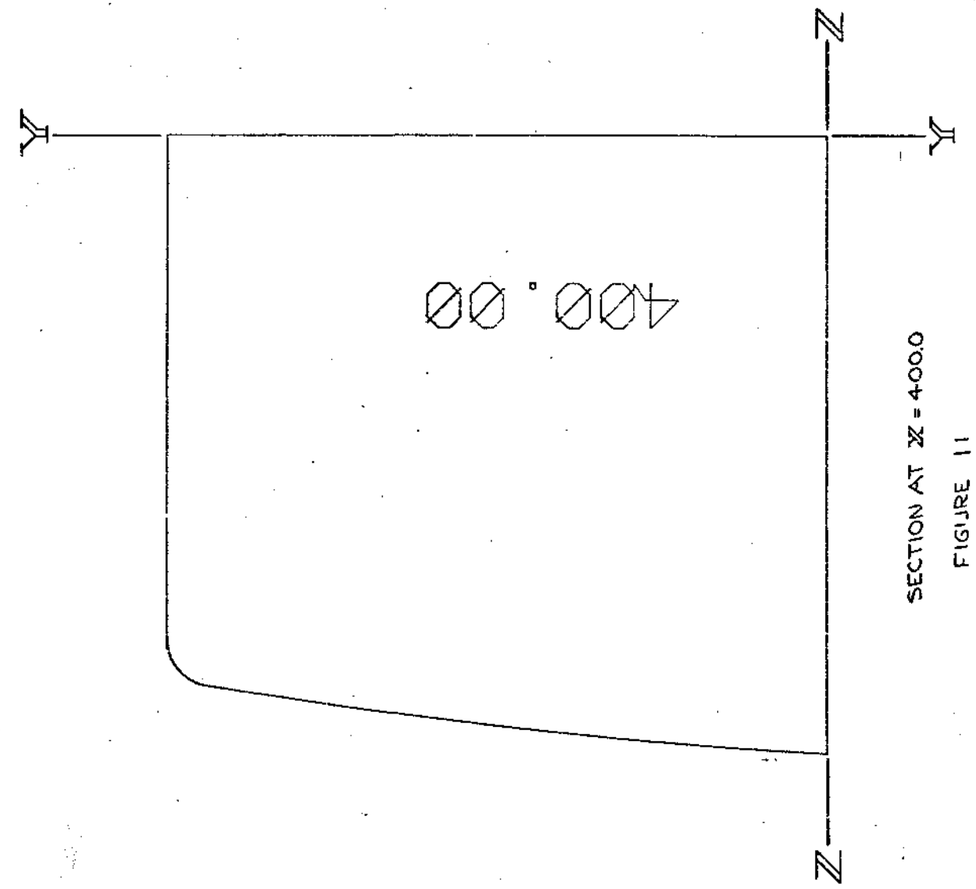


SECTION AT X = 350.0
FIGURE 10

REVISIONS		
CHK	CHANGE NO	REV

TITLE SHELL VT50
SIZE D CODE MD NUMBER 7411540-0-0 REV A
SCALE: 1.006:1 SHEET 22 OF 45
DIST.

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #11 (SHEET 39)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR.



SECTION AT X = 400.0

FIGURE 11

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SHELL VT50	SIZE/CODE	NUMBER / REV
		D MD	7411540-0-0 A
SCALE: 1.006:1	SHEET 23 OF 45	DIST	

NOTES
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST 12 (SHEET 45)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006:1 INCLUDES 6% SHRINKAGE FACTOR.

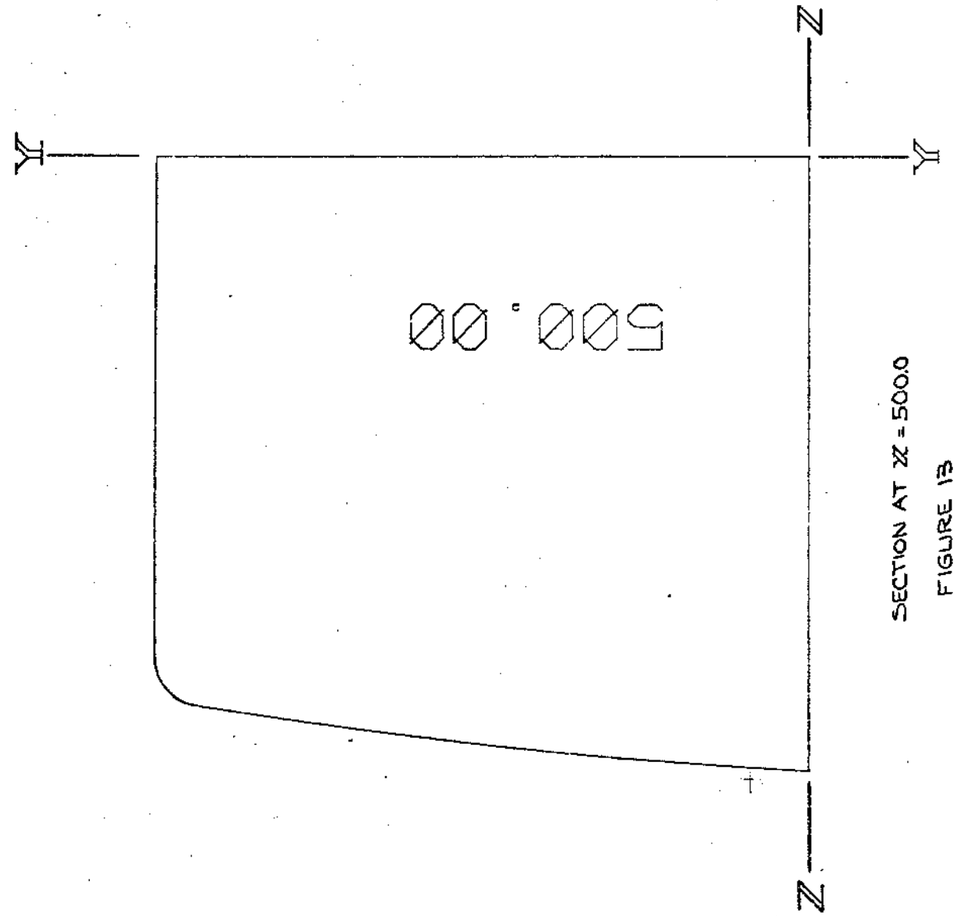
SECTION AT X = 4500

FIGURE 12

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE 1.006:1	SHEET 4 OF 45	DIST		

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST # 13 (SHEET 41)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY; SCALE OF 1.006:1 INCLUDE .6% SHRINKAGE FACTOR.



SECTION AT X = 500.0

FIGURE 13

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE 1.006:1 SHEET 25 OF 45	DIST			

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #14 (SHEET 42)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE

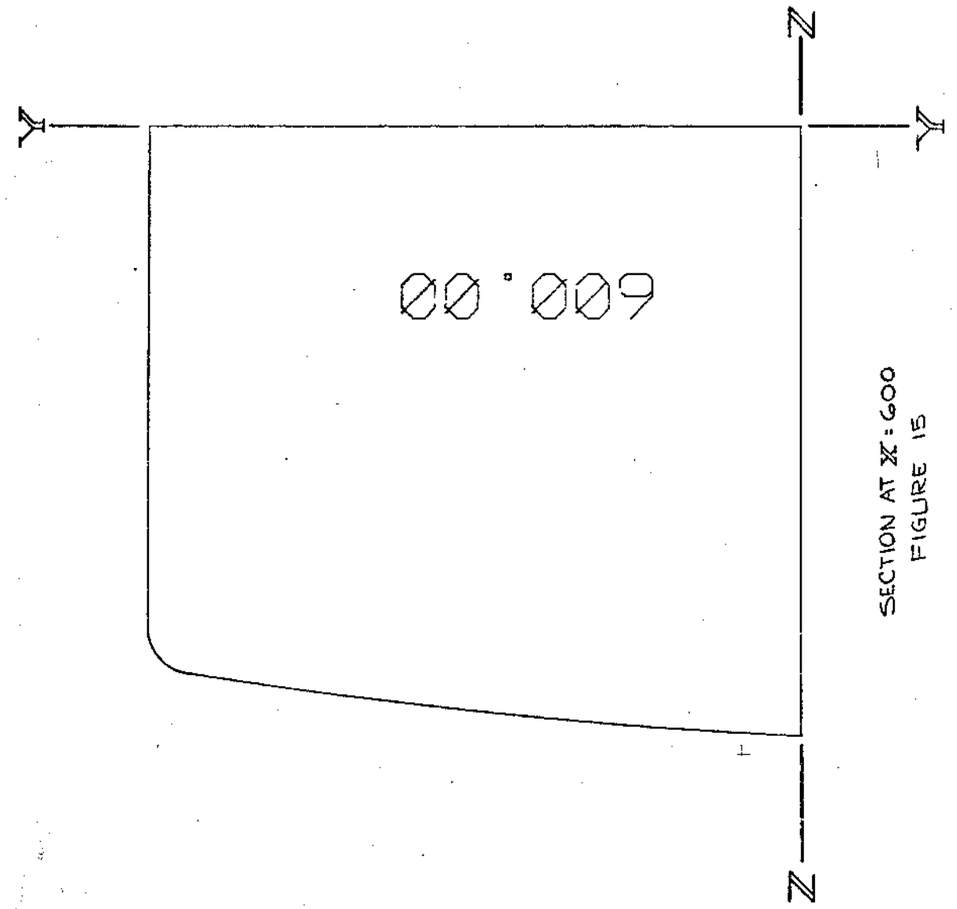
SECTION AT X = 5500
FIGURE 14

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006:1	SHEET 2 OF 45	DAST		

DWG NUMBER D MD 7411540-0-0 REV A

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST = 15 (SHEET 43)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY. SCALE OF 1.006:1 INCLUDES .6% SHRINKAGE FACTOR.

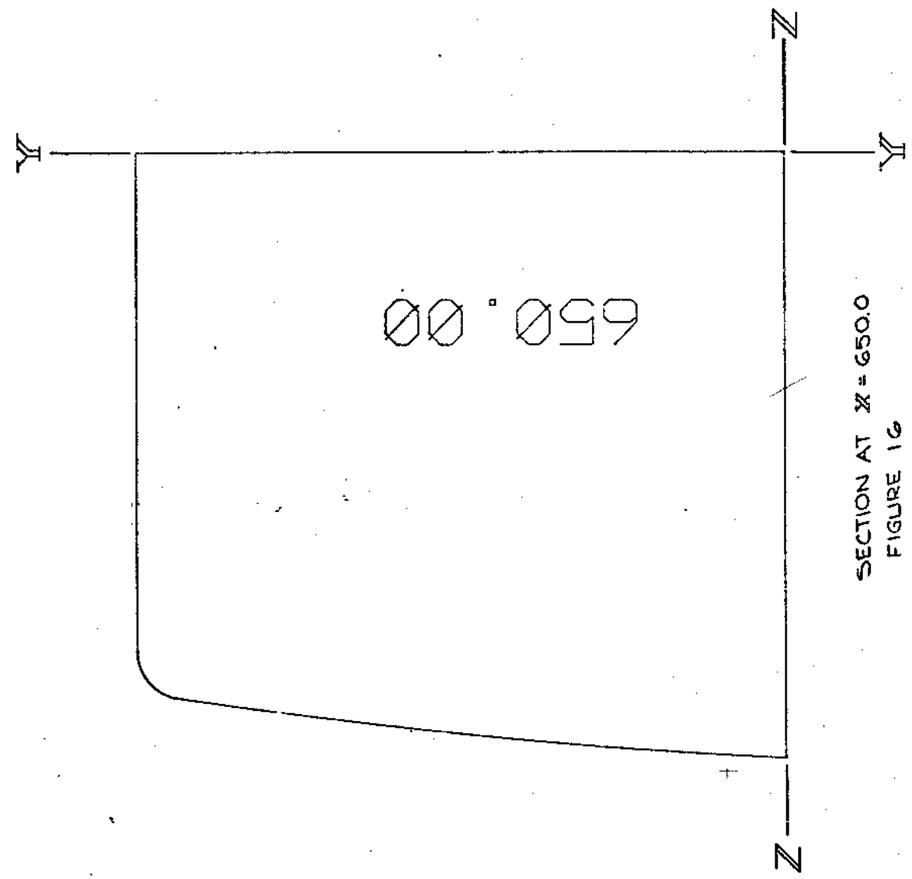


SECTION AT X = 600
FIGURE 15

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE 1.006:1 SHEET 1 OF 45	DIST			

NOTES:
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST #16 (SHEET 44)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006 : 1 INCLUDES .6% SHRINKAGE FACTOR.



SECTION AT X = 650.0
FIGURE 16

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	NUMBER	REV
SHELL VT50	D	7411540-0-0	A
SCALE: 1.006/1 SHEET 2 OF 45			

X	Z
0.0000000	258.5220030
5.0000000	259.6535700
10.0000000	258.8047600
15.0000000	259.9535700
20.0000000	259.1030000
25.0000000	259.2440500
30.0000000	259.3857100
35.0000000	259.5250000
40.0000000	259.6619000
45.0000000	259.7964300
50.0000000	259.9285700
55.0000000	260.0583300
60.0000000	260.1857100
65.0000000	260.3107100
70.0000000	260.4333300
75.0000000	260.5535700
80.0000000	260.6714200
85.0000000	260.7869000
90.0000000	260.9000000
95.0000000	261.0107100
100.0000000	261.1190500
105.0000000	261.2250000
110.0000000	261.3285700
115.0000000	261.4297600
120.0000000	261.5285700
125.0000000	261.6250000
130.0000000	261.7190500
135.0000000	261.8107100
140.0000000	261.9000000
145.0000000	261.9869000
150.0000000	262.0714300
155.0000000	262.1535700
160.0000000	262.2333300
165.0000000	262.3107100
170.0000000	262.3857200
175.0000000	262.4583400
180.0000000	262.5285700
185.0000000	262.5964300
190.0000000	262.6619000
195.0000000	262.7250000
200.0000000	262.7857100
205.0000000	262.8440500
210.0000000	262.9000000
215.0000000	262.9535700
220.0000000	263.0047600
225.0000000	263.0535700
230.0000000	263.1000000
235.0000000	263.1440500
240.0000000	263.1857100
245.0000000	263.2250000
250.0000000	263.2619100
255.0000000	263.2964300
260.0000000	263.3285700
265.0000000	263.3583300
270.0000000	263.3857200
275.0000000	263.4107200
280.0000000	263.4333300
285.0000000	263.4535700
290.0000000	263.4714300

X	Z
295.0000000	263.4869000
300.0000000	263.5000000
305.0000000	263.5107200
310.0000000	263.5190500
315.0000000	263.5250000
320.0000000	263.5285700
325.0000000	263.5297600
330.0000000	263.5285700
335.0000000	263.5250000
340.0000000	263.5190500
345.0000000	263.5107100
350.0000000	263.5000000
355.0000000	263.4869000
360.0000000	263.4714300
365.0000000	263.4535700
370.0000000	263.4333300
375.0000000	263.4107100
380.0000000	263.3857200
385.0000000	263.3583300
390.0000000	263.3285700
395.0000000	263.2964200
400.0000000	263.2619000
405.0000000	263.2250000
410.0000000	263.1857100
415.0000000	263.1440500
420.0000000	263.1000000
425.0000000	263.0535700
430.0000000	263.0047500
435.0000000	262.9535700
440.0000000	262.9000000
445.0000000	262.8440500
450.0000000	262.7857100
455.0000000	262.7250000
460.0000000	262.6619000
465.0000000	262.5964300
470.0000000	262.5285700
475.0000000	262.4583300
480.0000000	262.3857200
485.0000000	262.3107100
490.0000000	262.2333300
495.0000000	262.1535700
500.0000000	262.0714300
505.0000000	261.9869000
510.0000000	261.9000000
515.0000000	261.8107100
520.0000000	261.7190500
525.0000000	261.6250000
530.0000000	261.5285700
535.0000000	261.4297600
540.0000000	261.3285700
545.0000000	261.2250000
550.0000000	261.1190500
555.0000000	261.0107100
560.0000000	260.9000000
565.0000000	260.7869000
570.0000000	260.6714300
575.0000000	260.5535700
580.0000000	260.4333300
585.0000000	260.3107100
590.0000000	260.1857100

X	Z
595.0000000	260.0583300
600.0000000	259.9285700
605.0000000	259.7964300
610.0000000	259.6619000
615.0000000	259.5250000
620.0000000	259.3857200
625.0000000	259.2440500
630.0000000	259.1000000
635.0000000	258.9535700
640.0000000	258.8047600
645.0000000	258.6535700
650.00	258.500

NOTES:
1. ALL DIMENSIONS ARE NOMINAL. FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

DATA LIST #1
SEE FIGURE 1 SHEET13

METRIC DIMENSIONS

REVISIONS	REV.	CHK
CHANGE NO.		

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS | ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √
MATERIAL
FINISH

DRN. [illegible] DATE 1-21-74
CHK'D [illegible] DATE [illegible]
ENG. [illegible] DATE [illegible]
PROJ. ENG. [illegible] DATE [illegible]
PROD. [illegible] DATE [illegible]
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 23 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

SIZE	CODE	NUMBER	REV.
C	MD	7411540-0-0	A

DIST.

DEC FORM NO. DNC 100-B

X	Y
0.0000000	285.0260000
5.0000000	285.0170000
10.0000000	285.0332000
15.0000000	285.0486000
20.0000000	285.0630000
25.0000000	285.0766000
30.0000000	285.0894000
35.0000000	285.1013000
40.0000000	285.1123000
45.0000000	285.1225000
50.0000000	285.1318000
55.0000000	285.1403000
60.0000000	285.1479000
65.0000000	285.1546000
70.0000000	285.1605000
75.0000000	285.1655000
80.0000000	285.1696000
85.0000000	285.1729000
90.0000000	285.1753000
95.0000000	285.1769000
100.0000000	285.1776000
105.0000000	285.1775000
110.0000000	285.1764000
115.0000000	285.1746000
120.0000000	285.1718000
125.0000000	285.1682000
130.0000000	285.1638000
135.0000000	285.1584000
140.0000000	285.1523000
145.0000000	285.1452000
150.0000000	285.1373000
155.0000000	285.1286000
160.0000000	285.1189000
165.0000000	285.1084000
170.0000000	285.0971000
175.0000000	285.0849000
180.0000000	285.0718000
185.0000000	285.0579000
190.0000000	285.0431000
195.0000000	285.0275000
200.0000000	285.0109000
205.0000000	284.9936000
210.0000000	284.9753000
215.0000000	284.9562000
220.0000000	284.9363000
225.0000000	284.9155000
230.0000000	284.8938000
235.0000000	284.8713000
240.0000000	284.8479000
245.0000000	284.8236000
250.0000000	284.7965000
255.0000000	284.7725000
260.0000000	284.7457000
265.0000000	284.7180000
270.0000000	284.6894000
275.0000000	284.6600000
280.0000000	284.6297000
285.0000000	284.5986000
290.0000000	284.5665000

X	Y
295.0000000	284.5337000
300.0000000	284.5000000
305.0000000	284.4654000
310.0000000	284.4299000
315.0000000	284.3936000
320.0000000	284.3564000
325.0000000	284.3184000
330.0000000	284.2795000
335.0000000	284.2398000
340.0000000	284.1993000
345.0000000	284.1577000
350.0000000	284.1153000
355.0000000	284.0721000
360.0000000	284.0281000
365.0000000	283.9832000
370.0000000	283.9374000
375.0000000	283.8908000
380.0000000	283.8433000
385.0000000	283.7949000
390.0000000	283.7457000
395.0000000	283.6956000
400.0000000	283.6446000
405.0000000	283.5928000
410.0000000	283.5402000
415.0000000	283.4866000
420.0000000	283.4323000
425.0000000	283.3770000
430.0000000	283.3209000
435.0000000	283.2639000
440.0000000	283.2061000
445.0000000	283.1474000
450.0000000	283.0879000
455.0000000	283.0275000
460.0000000	282.9662000
465.0000000	282.9040000
470.0000000	282.8411000
475.0000000	282.7772000
480.0000000	282.7125000
485.0000000	282.6469000
490.0000000	282.5805000
495.0000000	282.5132000
500.0000000	282.4450000
505.0000000	282.3760000
510.0000000	282.3061000
515.0000000	282.2354000
520.0000000	282.1638000
525.0000000	282.0913000
530.0000000	282.0180000
535.0000000	281.9438000
540.0000000	281.8687000
545.0000000	281.7928000
550.0000000	281.7161000
555.0000000	281.6384000
560.0000000	281.5600000
565.0000000	281.4806000
570.0000000	281.4004000
575.0000000	281.3193000
580.0000000	281.2374000
585.0000000	281.1546000
590.0000000	281.0709000

X	Y
595.0000000	280.9864000
600.0000000	280.9011000
605.0000000	280.8148000
610.0000000	280.7277000
615.0000000	280.6398000
620.0000000	280.5509000
625.0000000	280.4613000
630.0000000	280.3707000
635.0000000	280.2793000
640.0000000	280.1871000
645.0000000	280.0939000
650.00	280.000

DATA LIST #2
SEE FIGURE 2 SHEET 14

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR
2. X&Y COORDINATES ARE THE SAME FOR THE ENTIRE WIDTH OF THE SHELL

METRIC DIMENSIONS

REVISIONS			
REV.	CHANGE NO.		CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS .005 | ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL
FINISH

DRN.	DATE	1-21-76
CHK'D	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE,	
NEXT HIGHER ASSY.		
SCALE 1/1		
SHEET 30 OF 45		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

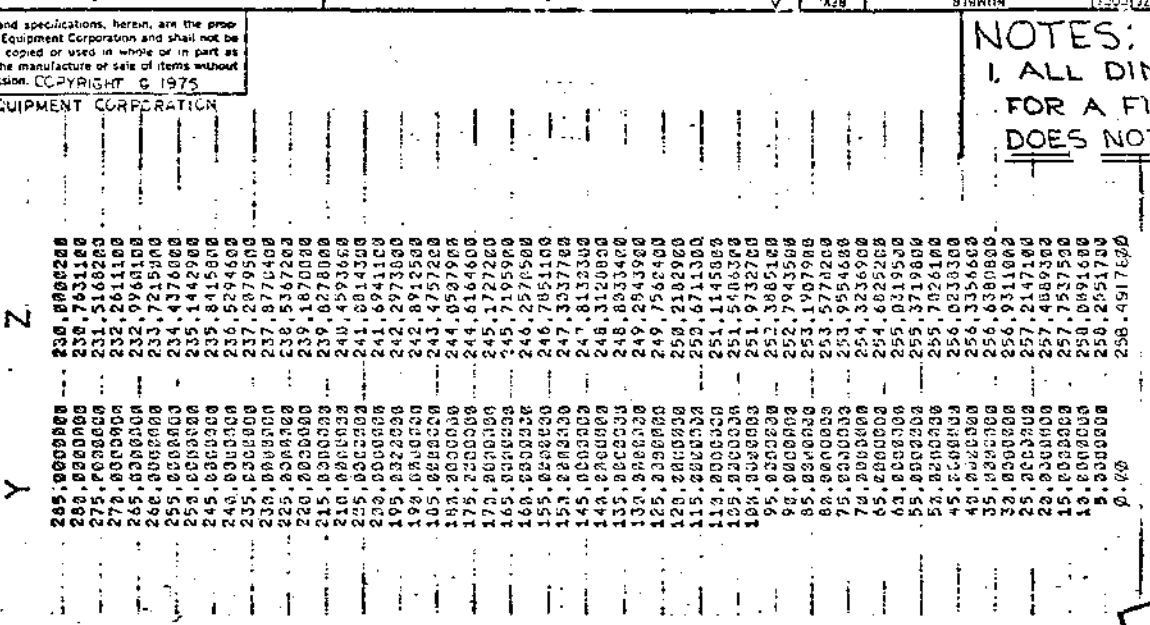
SIZE	CODE	NUMBER	REV.
C	MD	7411540-0-0	A

DIST.

SIZE C CODE MD NUMBER 7411540-0-0 REV. A

DEC FORM NO. DEC 100-B

NOTES:
1. ALL DIMENSIONS ARE NOMINAL.
FOR A FINISHED PART, 1:1 SCALE
DOES NOT INCLUDE SHRINKAGE FACTOR



METRIC DIMENSIONS

DATA LIST #3
SEE FIGURE 3 SHEET 15

REV.	NUMBER	SIZE	CODE
A	7411540-0-0	B	MD

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT5Ø		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES

DECIMALS	ANGLES
.xxx = .005 .xx = .02 .x = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

DRN. MC Stack	DATE 18 JAN 74	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D.	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSY.		
SCALE 1:1		
SHEET 31 OF 45		

TITLE
SHELL VT5Ø

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

OCC 16-(2222)-1086-1A-N373
DRB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE
DOES NOT INCLUDE SHRINKAGE FACTOR

REV.	NUMBER	NO. SIZE
A	74-11540-0-0	

X	Y	Z
5.1318700	285.1318760	230.5714300
5.1318700	280.1318760	231.3496000
5.1318700	275.1318760	232.1185200
5.1318700	270.1318760	232.8779500
5.1318700	265.1318760	233.6279000
5.1318700	260.1318760	234.3685000
5.1318700	255.1318760	235.0997000
5.1318700	250.1318760	235.8215000
5.1318700	245.1318760	236.5339000
5.1318700	240.1318760	237.2369000
5.1318700	235.1318760	237.9304000
5.1318700	230.1318760	238.6146000
5.1318700	225.1318760	239.2893000
5.1318700	220.1318760	239.9547000
5.1318700	215.1318760	240.6108000
5.1318700	210.1318760	241.2571000
5.1318700	205.1318760	241.8942000
5.1318700	200.1318760	242.5219000
5.1318700	195.1318760	243.1402000
5.1318700	190.1318760	243.7491000
5.1318700	185.1318760	244.3485000
5.1318700	180.1318760	244.9385000
5.1318700	175.1318760	245.5192000
5.1318700	170.1318760	246.0904000
5.1318700	165.1318760	246.6522000
5.1318700	160.1318760	247.2046000
5.1318700	155.1318760	247.7476000
5.1318700	150.1318760	248.2812000
5.1318700	145.1318760	248.8054000
5.1318700	140.1318760	249.3201000
5.1318700	135.1318760	249.8255000
5.1318700	130.1318760	250.3214000
5.1318700	125.1318760	250.8080000
5.1318700	120.1318760	251.2851000
5.1318700	115.1318760	251.7528000
5.1318700	110.1318760	252.2111000
5.1318700	105.1318760	252.6600000
5.1318700	100.1318760	253.0995000
5.1318700	95.1318760	253.5296000
5.1318700	90.1318760	253.9502000
5.1318700	85.1318760	254.3615000
5.1318700	80.1318760	254.7633000
5.1318700	75.1318760	255.1558000
5.1318700	70.1318760	255.5390000
5.1318700	65.1318760	255.9124000
5.1318700	60.1318760	256.2764000
5.1318700	55.1318760	256.6314000
5.1318700	50.1318760	256.9770000
5.1318700	45.1318760	257.3127000
5.1318700	40.1318760	257.6393000
5.1318700	35.1318760	257.9564000
5.1318700	30.1318760	258.2642000
5.1318700	25.1318760	258.5625000
5.1318700	20.1318760	258.8514000
5.1318700	15.1318760	259.1309000
5.1318700	10.1318760	259.4010000
5.1318700	5.1318760	259.6617000
5.1318700	0.1318760	259.9130600

METRIC DIMENSIONS

DATA LIST #4
SEE FIGURE 4 SHEET 16

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

		DATE
DRN.		1-13-74
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

MATERIAL
NEXT HIGHER ASSY.
FINISH
SCALE 1/1
SHEET 12 OF 45

SIZE	CODE	NUMBER	REV.
B	MD	74-11540-0-0	A

DIST.

DEC 19-(329)-1040-1A-R372
DAB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, SCALE 1:1
DOES NOT INCLUDE SHRINKAGE FACTOR

Z	Y
231.8476188	285.1776588
231.8386188	280.1776588
232.6202888	275.1776588
233.3923788	270.1776588
234.1551388	265.1776588
234.9084688	260.1776588
235.6523688	255.1776588
236.3868888	250.1776588
237.1119788	245.1776588
237.8276388	240.1776588
238.5338888	235.1776588
239.2307188	230.1776588
239.9181288	225.1776588
240.5961288	220.1776588
241.2647088	215.1776588
241.9238588	210.1776588
242.5736088	205.1776588
243.2139288	200.1776588
243.8448388	195.1776588
244.4663288	190.1776588
245.0783988	185.1776588
245.6810488	180.1776588
246.2742888	175.1776588
246.8581088	170.1776588
247.4325088	165.1776588
247.9974888	160.1776588
248.5530588	155.1776588
249.0991988	150.1776588
249.6358988	145.1776588
250.1632488	140.1776588
250.6811788	135.1776588
251.1896788	130.1776588
251.6886788	125.1776588
252.1781388	120.1776588
252.6581488	115.1776588
253.1293488	110.1776588
253.5927388	105.1776588
254.0482088	100.1776588
254.4956488	95.1776540
254.9349988	90.1776540
255.3662388	85.1776540
255.7894188	80.1776540
256.2045188	75.1776540
256.6115188	70.1776540
256.9104088	65.1776540
257.3194488	60.1776540
257.7006588	55.1776540
258.0744488	50.1776540
258.4407888	45.1776540
258.7997888	40.1776540
259.1513888	35.1776540
259.4956488	30.1776540
259.8325888	25.1776540
260.1621888	20.1776540
260.4844888	15.1776540
260.8000888	10.1776540
261.1044208	5.1776543
	.1776543

METRIC DIMENSIONS

DATA LIST #5
SEE FIGURE 5 SHEET 17

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES

DECIMALS	ANGLES
.xxx = .005 .xx = .02 .x = .1	±0° 30'

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

		DATE
DRN.	D. Sullivan	1-12-74
CHK'D.	[illegible]	DATE
ENG.	[illegible]	DATE
PROJ. ENG.	[illegible]	DATE
PROD.	[illegible]	DATE

NEXT HIGHER ASSY.

SCALE 1/1

SHEET 33 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

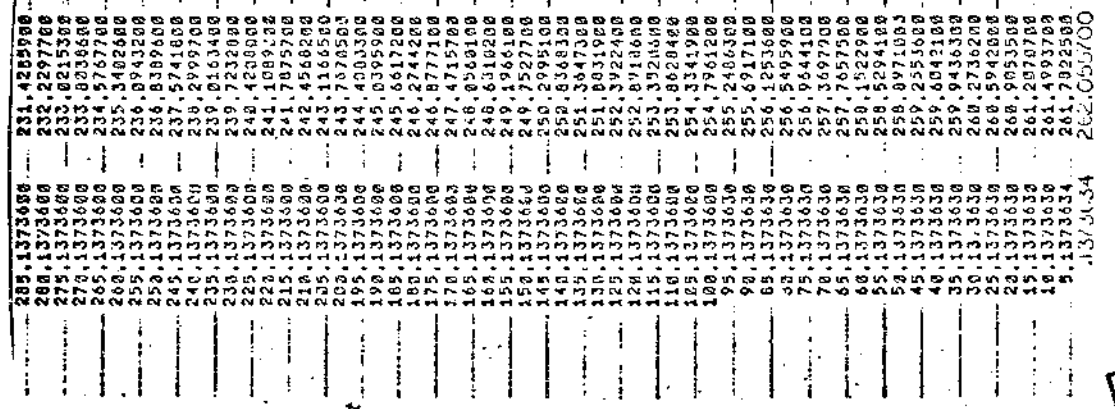
TITLE
SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

DEC 16-(325)-2040-1A-R373
DRB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE
DOES NOT INCLUDE SHRINKAGE FACTOR.



METRIC DIMENSIONS

DATA SHEET #6
SEE FIGURE 6 SHEET 18

REVISIONS	REV.	CHANGE NO.	CHK
	A	7411540-0-0	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL —
FINISH —

		DATE
DRN.		1-13-74
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE

NEXT HIGHER ASSY. —

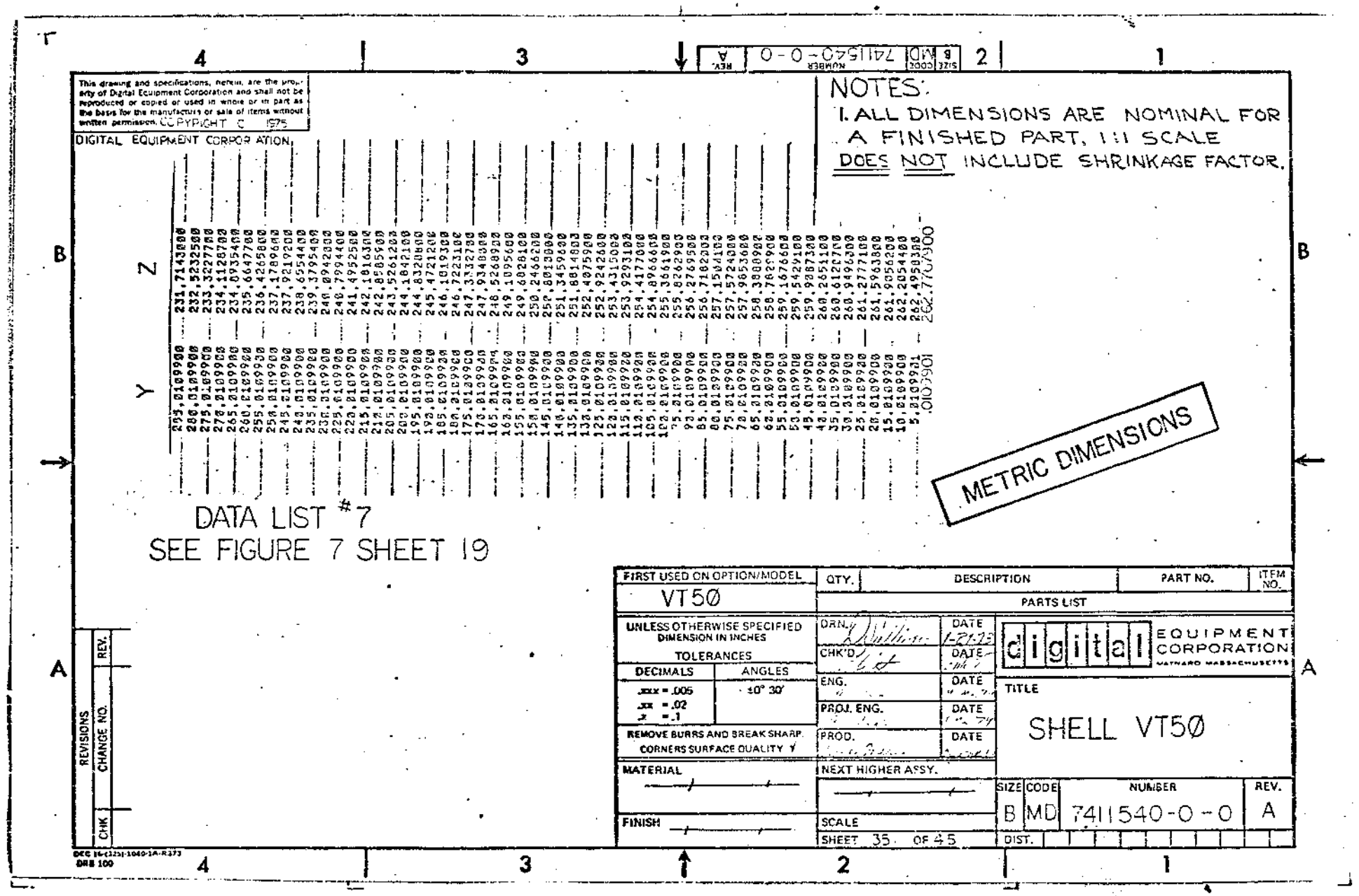
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

SCALE 1/1
SHEET 34 OF 45
DIST.

DCG 80-(325)-1080-1A-w373
DRS 100


This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission. COPYRIGHT © 1975
DIGITAL EQUIPMENT CORPORATION
NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE
DOES NOT INCLUDE SHRINKAGE FACTOR.
METRIC DIMENSIONS
DATA LIST #7
SEE FIGURE 7 SHEET 19
REV. A
SIZE B MD 7411540-0-0
FIRST USED ON OPTION/MODEL
VT50
QTY.
DESCRIPTION
PART NO.
ITEM NO.
PARTS LIST
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS
.xxx = .005
.xx = .02
.x = .1
ANGLES
±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √
MATERIAL
FINISH
DRN.
CHK'D
ENG.
PROJ. ENG.
PROD.
DATE
NEXT HIGHER ASSY.
SCALE
SHEET 35 OF 45
digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
TITLE
SHELL VT50
SIZE CODE NUMBER REV.
B MD 7411540-0-0 A
DIST.
REVISIONS
REV.
CHANGE NO.
CHK
DEC 16-(12S)-1040-1A-R373
DIB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR

Z	Y
231.7847700	284.7985300
232.7198800	279.7985300
233.5237600	274.7985300
234.3194100	269.7985300
235.1054300	264.7985300
235.8820100	259.7985300
236.6491600	254.7985300
237.4068900	249.7985300
238.1551800	244.7985300
238.8941400	239.7985300
239.6236600	234.7985300
240.3436600	229.7985300
241.0540200	224.7985300
241.7551400	219.7985300
242.4466000	214.7985300
243.1291300	209.7985300
243.8017600	204.7985300
244.4653700	199.7985300
245.1193400	194.7985300
245.7638800	189.7985300
246.3989900	184.7985300
247.0246700	179.7985300
247.6409200	174.7985300
248.2477400	169.7985300
248.8451200	164.7985300
249.4330700	159.7985300
250.0115900	154.7985300
250.5806800	149.7985300
251.1403400	144.7985300
251.6905600	139.7985300
252.2313500	134.7985300
252.7627200	129.7985300
253.2846500	124.7985300
253.7971400	119.7985300
254.3002100	114.7985300
254.7938500	109.7985300
255.2780500	104.7985300
255.7528200	99.7985300
256.2181600	94.7985300
256.6740600	89.7985300
257.1205400	84.7985300
257.5575900	79.7985300
257.9852000	74.7985300
258.4033000	69.7985300
258.8121300	64.7985300
259.2114500	59.7985300
259.6013400	54.7985300
259.9817900	49.7985300
260.3527100	44.7985300
260.7141100	39.7985300
261.0660000	34.7985300
261.4083800	29.7985300
261.7412500	24.7985300
262.0645900	19.7985300
262.3784200	14.7985300
262.6827300	9.7985300
262.9814500	4.7985300

METRIC DIMENSIONS

DATA LIST #8
SEE FIGURE 8 SHEET 20

REVISIONS	REV.	CHANGE NO.	CHK
	A	7411540-0-0	MD

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

DRN.	[illegible]	DATE 1-21-75
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE
MATERIAL		
NEXT HIGHER ASSY.		
FINISH		
SCALE	1 / 1	
SHEET	36 OF 45	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

DEC 50-(225)-1040-1A-R373
DAB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE
DOES NOT INCLUDE SHRINKAGE FACTOR.

Z	Y
232.5000000	264.5000000
232.8271680	279.5000000
233.6249280	274.5000000
234.4232320	269.5000000
235.2221000	264.5000000
235.9715392	259.5000000
236.7815488	254.5000000
237.5221120	249.5000000
238.2732960	244.5000000
239.0449600	239.5000000
239.7472320	234.5000000
240.4700800	229.5000000
241.1834784	224.5000000
241.8874496	219.5000000
242.5819904	214.5000000
243.2671680	209.5000000
243.9429504	204.5000000
244.6089984	199.5000000
245.2657984	194.5000000
245.9131648	189.5000000
246.5511808	184.5000000
247.1796864	179.5000000
247.7986752	174.5000000
248.4083648	169.5000000
249.0085824	164.5000000
249.5992896	159.5000000
250.1806144	154.5000000
252.7525184	149.5000000
251.3149824	144.5000000
251.8680256	139.5000000
252.4116224	134.5000000
252.9457984	129.5000000
253.4705280	124.5000000
253.9858304	119.5000000
254.4916992	114.5000000
254.9881344	109.5000000
255.4751232	104.5000000
255.9526848	99.5000000
256.4208384	94.5000000
256.8795520	89.5000000
257.3288384	84.5000000
257.7686912	79.5000000
258.1990912	74.5000000
258.6200064	69.5000000
259.0315392	64.5000000
259.4336384	59.5000000
259.8263040	54.5000000
260.2095360	49.5000000
260.5833344	44.5000000
260.9477888	39.5000000
261.3028992	34.5000000
261.6481344	29.5000000
261.9842048	24.5000000
262.3106304	19.5000000
262.6280192	14.5000000
262.9357952	9.5000000
263.2341248	4.5000000

METRIC DIMENSIONS

DATA LIST #9
SEE FIGURE 9 SHEET 21

REVISIONS	REV.	CHANGE NO.	CHK
	A	7411540-0-0	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx ± .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

		DATE
DRN.		
CHK'D.		
ENG.		
PROJ. ENG.		
PROD.		

MATERIAL
FINISH
NEXT HIGHER ASSY.
SCALE 1 : 1
SHEET 37 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

GEC 16-(325)-1040-LA-R373
DAB 100

REV.	NUMBER	SIZE	CODE
A	7411540-0-0	B	MD

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

Z	Y
231.	284.1153600
232.	279.1153600
233.	274.1153600
234.	269.1153600
235.	264.1153600
236.	259.1153600
237.	254.1153600
238.	249.1153600
239.	244.1153600
240.	239.1153600
241.	234.1153600
242.	229.1153600
243.	224.1153600
244.	219.1153600
245.	214.1153600
246.	209.1153600
247.	204.1153600
248.	199.1153600
249.	194.1153600
250.	189.1153600
251.	184.1153600
252.	179.1153600
253.	174.1153600
254.	169.1153600
255.	164.1153600
256.	159.1153600
257.	154.1153600
258.	149.1153600
259.	144.1153600
260.	139.1153600
261.	134.1153600
262.	129.1153600
263.	124.1153600
264.	119.1153600
265.	114.1153600
266.	109.1153600
267.	104.1153600
268.	99.1153600
269.	94.1153600
270.	89.1153600
271.	84.1153600
272.	79.1153600
273.	74.1153600
274.	69.1153600
275.	64.1153600
276.	59.1153600
277.	54.1153600
278.	49.1153600
279.	44.1153600
280.	39.1153600
281.	34.1153600
282.	29.1153600
283.	24.1153600
284.	19.1153600
285.	14.1153600
286.	9.1153600
287.	4.1153600
288.	0.0000000
289.	0.0000000
290.	0.0000000
291.	0.0000000
292.	0.0000000
293.	0.0000000
294.	0.0000000
295.	0.0000000
296.	0.0000000
297.	0.0000000
298.	0.0000000
299.	0.0000000
300.	0.0000000
301.	0.0000000
302.	0.0000000
303.	0.0000000
304.	0.0000000
305.	0.0000000
306.	0.0000000
307.	0.0000000
308.	0.0000000
309.	0.0000000
310.	0.0000000
311.	0.0000000
312.	0.0000000
313.	0.0000000
314.	0.0000000
315.	0.0000000
316.	0.0000000
317.	0.0000000
318.	0.0000000
319.	0.0000000
320.	0.0000000
321.	0.0000000
322.	0.0000000
323.	0.0000000
324.	0.0000000
325.	0.0000000
326.	0.0000000
327.	0.0000000
328.	0.0000000
329.	0.0000000
330.	0.0000000
331.	0.0000000
332.	0.0000000
333.	0.0000000
334.	0.0000000
335.	0.0000000
336.	0.0000000
337.	0.0000000
338.	0.0000000
339.	0.0000000
340.	0.0000000
341.	0.0000000
342.	0.0000000
343.	0.0000000
344.	0.0000000
345.	0.0000000
346.	0.0000000
347.	0.0000000
348.	0.0000000
349.	0.0000000
350.	0.0000000
351.	0.0000000
352.	0.0000000
353.	0.0000000
354.	0.0000000
355.	0.0000000
356.	0.0000000
357.	0.0000000
358.	0.0000000
359.	0.0000000
360.	0.0000000
361.	0.0000000
362.	0.0000000
363.	0.0000000
364.	0.0000000
365.	0.0000000
366.	0.0000000
367.	0.0000000
368.	0.0000000
369.	0.0000000
370.	0.0000000
371.	0.0000000
372.	0.0000000
373.	0.0000000
374.	0.0000000
375.	0.0000000
376.	0.0000000
377.	0.0000000
378.	0.0000000
379.	0.0000000
380.	0.0000000
381.	0.0000000
382.	0.0000000
383.	0.0000000
384.	0.0000000
385.	0.0000000
386.	0.0000000
387.	0.0000000
388.	0.0000000
389.	0.0000000
390.	0.0000000
391.	0.0000000
392.	0.0000000
393.	0.0000000
394.	0.0000000
395.	0.0000000
396.	0.0000000
397.	0.0000000
398.	0.0000000
399.	0.0000000
400.	0.0000000
401.	0.0000000
402.	0.0000000
403.	0.0000000
404.	0.0000000
405.	0.0000000
406.	0.0000000
407.	0.0000000
408.	0.0000000
409.	0.0000000
410.	0.0000000
411.	0.0000000
412.	0.0000000
413.	0.0000000
414.	0.0000000
415.	0.0000000
416.	0.0000000
417.	0.0000000
418.	0.0000000
419.	0.0000000
420.	0.0000000
421.	0.0000000
422.	0.0000000
423.	0.0000000
424.	0.0000000
425.	0.0000000
426.	0.0000000
427.	0.0000000
428.	0.0000000
429.	0.0000000
430.	0.0000000
431.	0.0000000
432.	0.0000000
433.	0.0000000
434.	0.0000000
435.	0.0000000
436.	0.0000000
437.	0.0000000
438.	0.0000000
439.	0.0000000
440.	0.0000000
441.	0.0000000
442.	0.0000000
443.	0.0000000
444.	0.0000000
445.	0.0000000
446.	0.0000000
447.	0.0000000
448.	0.0000000
449.	0.0000000
450.	0.0000000
451.	0.0000000
452.	0.0000000
453.	0.0000000
454.	0.0000000
455.	0.0000000
456.	0.0000000
457.	0.0000000
458.	0.0000000
459.	0.0000000
460.	0.0000000
461.	0.0000000
462.	0.0000000
463.	0.0000000
464.	0.0000000
465.	0.0000000
466.	0.0000000
467.	0.0000000
468.	0.0000000
469.	0.0000000
470.	0.0000000
471.	0.0000000
472.	0.0000000
473.	0.0000000
474.	0.0000000
475.	0.0000000
476.	0.0000000
477.	0.0000000
478.	0.0000000
479.	0.0000000
480.	0.0000000
481.	0.0000000
482.	0.0000000
483.	0.0000000
484.	0.0000000
485.	0.0000000
486.	0.0000000
487.	0.0000000
488.	0.0000000
489.	0.0000000
490.	0.0000000
491.	0.0000000
492.	0.0000000
493.	0.0000000
494.	0.0000000
495.	0.0000000
496.	0.0000000
497.	0.0000000
498.	0.0000000
499.	0.0000000
500.	0.0000000
501.	0.0000000
502.	0.0000000
503.	0.0000000
504.	0.0000000
505.	0.0000000
506.	0.0000000
507.	0.0000000
508.	0.0000000
509.	0.0000000
510.	0.0000000
511.	0.0000000
512.	0.0000000
513.	0.0000000
514.	0.0000000
515.	0.0000000
516.	0.0000000
517.	0.0000000
518.	0.0000000
519.	0.0000000
520.	0.0000000
521.	0.0000000
522.	0.0000000
523.	0.0000000
524.	0.0000000
525.	0.0000000
526.	0.0000000
527.	0.0000000
528.	0.0000000
529.	0.0000000
530.	0.0000000
531.	0.0000000
532.	0.0000000
533.	0.0000000
534.	0.0000000
535.	0.0000000
536.	0.0000000
537.	0.0000000
538.	0.0000000
539.	0.0000000
540.	0.0000000
541.	0.0000000
542.	0.0000000
543.	0.0000000
544.	0.0000000
545.	0.0000000
546.	0.0000000
547.	0.0000000
548.	0.0000000
549.	0.0000000
550.	0.0000000
551.	0.0000000
552.	0.0000000
553.	0.0000000
554.	0.0000000
555.	0.0000000
556.	0.0000000
557.	0.0000000
558.	0.0000000
559.	0.0000000
560.	0.0000000
561.	0.0000000
562.	0.0000000
563.	0.0000000
564.	0.0000000
565.	0.0000000
566.	0.0000000
567.	0.0000000
568.	0.0000000
569.	0.0000000
570.	0.0000000
571.	0.0000000
572.	0.0000000
573.	0.0000000
574.	0.0000000
575.	0.0000000
576.	0.0000000
577.	0.0000000
578.	0.0000000
579.	0.0000000
580.	0.0000000
581.	0.0000000
582.	0.0000000
583.	0.0000000
584.	0.0000000
585.	0.0000000
586.	0.0000000
587.	0.0000000
588.	0.0000000
589.	0.0000000
590.	0.0000000
591.	0.0000000
592.	0.0000000
593.	0.0000000
594.	0.0000000
595.	0.0000000
596.	0.0000000
597.	0.0000000
598.	0.0000000
599.	0.0000000
600.	0.0000000
601.	0.0000000
602.	0.0000000
603.	0.0000000
604.	0.0000000
605.	0.0000000
606.	0.0000000
607.	0.0000000
608.	0.0000000
609.	0.0000000
610.	0.0000000
611.	0.0000000
612.	0.0000000
613.	0.0000000
614.	0.0000000
615.	0.0000000
616.	0.0000000
617.	0.0000000
618.	0.0000000
619.	0.0000000
620.	0.0000000
621.	0.0000000
622.	0.0000000
623.	0.0000000
624.	0.0000000
625.	0.0000000
626.	0.0000000
627.	0.0000000
628.	0.0000000
629.	0.0000000
630.	0.0000000
631.	0.0000000
632.	0.0000000
633.	0.0000000
634.	0.0000000
635.	0.0000000
636.	0.0000000
637.	0.0000000
638.	0.0000000
639.	0.0000000
640.	0.0000000
641.	0.0000000
642.	0.0000000
643.	0.0000000
644.	0.0000000
645.	0.0000000
646.	0.0000000
647.	0.0000000
648.	0.0000000
649.	0.0000000
650.	0.0000000
651.	0.0000000
652.	0.0000000
653.	0.0000000
654.	0.0000000
655.	0.0000000
656.	0.0000000
657.	0.0000000
658.	0.0000000
659.	0.0000000
660.	0.0000000
661.	0.0000000
662.	0.0000000
663.	0.0000000
664.	0.0000000
665.	0.0000000
666.	0.0000000
667.	0.0000000
668.	0.0000000
669.	0.0000000
670.	0.0000000
671.	0.0000000
672.	0.0000000
673.	0.0000000
674.	0.0000000
675.	0.0000000
676.	0.0000000
677.	0.0000000
678.	0.0000000
679.	0.0000000
680.	0.0000000
681.	0.0000000
682.	0.0000000
683.	0.0000000
684.	0.0000000
685.	0.0000000
686.	0.0000000
687.	0.0000000
688.	0.0000000
689.	0.0000000
690.	0.0000000
691.	0.0000000
692.	0.0000000
693.	0.0000000
694.	0.0000000
695.	0.0000000
696.	0.0000000
697.	0.0000000
698.	0.0000000
699.	0.0000000
700.	0.0000000
701.	0.0000000
702.	0.0000000
703.	0.0000000
704.	0.0000000
705.	0.0000000
706.	0.0000000
707.	0.0000000
708.	0.0000000
709.	0.0000000
710.	0.0000000
711.	0.0000000
712.	0.0000000
713.	0.0000000
714.	0.0000000
715.	0.0000000
716.	0.0000000
717.	0.0000000
718.	0.0000000
719.	0.0000000
720.	0.0000000
721.	0.0000000
722.	0.0000000
723.	0.0000000
724.	0.0000000
725.	0.0000000
726.	0.0000000
727.	0.0000000
728.	0.0000000
729.	0.0000000
730.	0.0000000
731.	0.0000000
732.	0.0000000
733.	0.0000000
734.	0.0000000
735.	0.0000000
736.	0.0000000
737.	0.0000000
738.	0.0000000
739.	0.0000000
740.	0.0000000
741.	0.0000000
742.	0.0000000
743.	0.0000000
744.	0.0000000
745.	0.0000000
746.	0.0000000
747.	0.0000000
748.	0.0000000
749.	0.0000000
750.	0.0000000
751.	0.0000000
752.	0.0000000
753.	0.0000000
754.	0.0000000
755.	0.0000000
756.	0.0000000
757.	0.0000000
758.	0.0000000
759.	0.0000000
760.	0.0000000
761.	0.0000000
762.	0.0000000
763.	0.0000000
764.	0.0000000
765.	0.0000000
766.	0.0000000
767.	0.0000000
768.	0.0000000
769.	0.0000000
770.	0.0000000
771.	0.0000000
772.	0.0000000
773.	0.0000000
774.	0.0000000
775.	0.0000000
776.	0.0000000
777.	0.0000000
778.	0.0000000
779.	0.0000000
780.	0.0000000
781.	0.0000000
782.	0.0000000
783.	0.0000000
784.	0.0000000
785.	0.0000000
786.	0.0000000
787.	0.0000000
788.	0.0000000
789.	0.0000000
790.	0.0000000
791.	0.0000000
792.	0.0000000
793.	0.0000000
794.	0.0000000
795.	0.0000000
796.	0.0000000
797.	0.0000000
798.	0.0000000
799.	0.0000000
800.	0.0000000
801.	0.0000000
802.	0.0000000
803.	0.0000000
804.	0.0000000
805.	0.0000000
806.	0.0000000
807.	0.0000000
808.	0.0000000
809.	0.0000000
810.	0.0000000
811.	0.0000000
812.	0.0000000
813.	0.0000000
814.	0.0000000
815.	0.0000000
816.	0.0000000
817.	0.0000000
818.	0.0000000
819.	0.0000000
820.	0.0000000
821.	0.0000000
822.	0.0000000
823.	0.0000000
824.	0.0000000
825.	0.0000000
826.	0.0000000
827.	0.0000000
828.	0.0000000
829.	0.0000000
830.	0.0000000
831.	0.0000000
832.	0.0000000
833.	0.0000000
834.	0.0000000
835.	0.0000000
836.	0.0000000
837.	0.0000000
838.	0.0000000
839.	0.0000000
840.	0.0000000
841.	0.0000000
842.	0.0000000
843.	0.0000000
844.	0.0000000
845.	0.0000000
846.	0.0000000
847.	0.0000000
848.	0.0000000
849.	0.0000000
850.	0.0000000
851.	0.0000000
852.	0.0000000
853.	0.0000000
854.	0.0000000
855.	0.0000000
856.	0.0000000
857.	0.0000000
858.	0.0000000
859.	0.0000000
860.	0.0000000
861.	0.0000000
862.	0.0000000
863.	0.0000000
864.	0.0000000
865.	0.0000000
866.	0.0000000
867.	0.0000000
868.	0.0000000
869.	0.0000000
870.	0.0000000
871.	0.0000000
872.	0.0000000
873.	0.0000000
874.	0.0000000
875.	0.0000000
876.	0.0000000
877.	0.0000000
878.	0.0000000
879.	0.0000000
880.	0.0000000
881.	0.0000000
882.	0.0000000
883.	0.0000000
884.	0.0000000
885.	0.0000000
886.	0.0000000
887.	0.0000000
888.	0.0000000
889.	0.0000000
890.	0.0000000
891.	0.0000000
892.	0.0000000
893.	0.0000000
894.	0.0000000
895.	0.0000000
896.	0.0000000
897.	0.0000000
898.	0.0000000
899.	0.0000000
900.	0.0000000
901.	0.0000000
902.	0.0000000
903.	0.0000000
904.	0.0000000
905.	0.0000000
906.	0.0000000
907.	0.0000000
908.	0.0000000
909.	0.0000000
910.	0.0000000
911.	0.0000000
912.	0.0000000
913.	0.0000000
914.	0.0000000
915.	0.0000000
916.	0.0000000
917.	0.0000000
918.	0.0000000
919.	0.0000000
920.	0.0000000
921.	0.0000000
922.	0.0000000
923.	0.0000000
924.	0.0000000
925.	0.0000000
926.	0.0000000
927.	0.0000000
928.	0.0000000
929.	0.0000000
930.	0.0000000
931.	0.0000000
932.	0.0000000
933.	0.0000000
934.	0.0000000
935.	0.0000000
936.	0.0000000
937.	0.0000000
938.	0.0000000
939.	0.0000000
940.	0.0000000
941.	0.0000000
942.	0.0000000
943.	0.0000000
944.	0.0000000
945.	0.0000000
946.	0.0000000
947.	0.0000000
948.	0.0000000
949.	0.0000000
950.	0.0000000
951.	0.0000000
952.	0.0000000
953.	0.0000000
954.	0.0000000
955.	0.0000000
956.	0.0000000
957.	0.0000000
958.	0.0000000
959.	0.0000000
960.	0.0000000
961.	0.0000000
962.	0.0000000
963.	0.0000000
964.	0.0000000
965.	0.0000000
966.	0.0000000
967.	0.0000000
968.	0.0000000
969.	0.0000000
970.	0.0000000
971.	0.0000000
972.	0.0000000
973.	0.0000000
974.	0.0000000
975.	0.0000000
976.	0.0000000
977.	0.0000000
978.	0.0000000
979.	0.0000000
980.	0.0000000
981.	0.0000000
982.	0.0000000
983.	0.0000000
984.	0.0000000
985.	0.0000000
986.	0.0000000
987.	0.0000000
988.	0.0000000
989.	0.0000000
990.	0.0000000
991.	0.0000000
992.	0.0000000
993.	0.0000000
994.	0.0000000
995.	0.0000000
996.	0.0000000
997.	0.0000000
998.	0.0000000
999.	0.0000000
1000.	0.0000000

METRIC DIMENSIONS

DATA LIST #10
SEE FIGURE 10 SHEET 22

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL
FINISH

DRN. DATE 1-21-76
CHK'D DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 35 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

DEC 16-(325)-1040-1A-R373
DRB 100

REV.	NUMBER	SIZE	CODE
A	7411540-0-0	B	MD

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

Y	Z
285.6446900	231.9847688
278.6446920	232.7282480
273.6446900	233.5282980
268.6446900	234.3228960
263.6446900	235.1186780
258.6446920	235.8878230
253.6446920	236.6561300
248.6446930	237.4150190
243.6446900	238.1644500
238.6446900	238.9044730
233.6446920	239.6350500
228.6446900	240.3562000
223.6446900	241.0679200
218.6446900	241.7702070
213.6446900	242.4630610
208.6446928	243.1464080
203.6446900	243.8204770
198.6446900	244.4850280
193.6446900	245.1401480
188.6446900	245.7858380
183.6446900	246.4220900
178.6446928	247.0489220
173.6446930	247.6663183
168.6446908	248.2742783
163.6446930	248.8720080
158.6446908	249.4619000
153.6446920	250.0415600
148.6446900	250.6117983
143.6446900	251.1726900
138.6446900	251.7239600
133.6446930	252.2658980
128.6446900	252.7984080
123.6446900	253.3214700
118.6446900	253.8351000
113.6446900	254.3393180
108.6446928	254.8346800
103.6446928	255.3194200
98.6446910	255.7953300
93.6446910	256.2618030
88.6446910	256.7188480
83.6446910	257.1664580
78.6446910	257.6046300
73.6446910	258.0333800
68.6446910	258.4526960
63.6446910	258.8625760
58.6446910	259.2632200
53.6446910	259.6548300
48.6446910	260.0358100
43.6446910	260.4077700
38.6446910	260.7714060
33.6446910	261.1237800
28.6446910	261.4676260
23.6446910	261.8020460
18.6446910	262.1278400
13.6446910	262.4425980
8.6446915	262.7487180
3.6446915	263.0454100

METRIC DIMENSIONS

DATA LIST *11
SEE FIGURE 11 SHEET 23

REVISIONS	REV.	CHANGE NO.	CHK

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

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 √

MATERIAL

FINISH

		DATE
DRN.	[illegible]	1-21-74
CHK'D.	[illegible]	DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE

NEXT HIGHER ASSY.

SCALE 1/1
SHEET 39 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

DEC 36-12253-3080-3A-R273
DRB 100

REV.	NUMBER	SIZE	CODE
A	7411540-0-0	B	MD

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISH PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

Y	Z
255.	255.7143688
254.	254.5252188
253.	253.3267888
252.	252.1187688
251.	250.9013988
250.	249.6745988
249.	248.4383588
248.	247.1926988
247.	245.9376088
246.	244.6731088
245.	243.3991388
244.	242.1157588
243.	240.8229588
242.	239.5207188
241.	238.2090488
240.	236.8879488
239.	235.5573988
238.	234.2174088
237.	232.8679888
236.	231.5091288
235.	230.1408388
234.	228.7631088
233.	227.3759488
232.	225.9793488
231.	224.5733188
230.	223.1578588
229.	221.7329588
228.	220.2986288
227.	218.8548688
226.	217.4016788
225.	215.9390588
224.	214.4670088
223.	212.9855288
222.	211.4946188
221.	209.9942788
220.	208.4844988
219.	206.9652888
218.	205.4366488
217.	203.8985688
216.	202.3510588
215.	200.7941188
214.	199.2277388
213.	197.6519288
212.	196.0666888
211.	194.4720088
210.	192.8679088
209.	191.2543788
208.	189.6314188
207.	187.9990288
206.	186.3571988
205.	184.7059388
204.	183.0452488
203.	181.3751188
202.	179.6955588
201.	178.0065588
200.	176.3081288
199.	174.6002688
198.	172.8829688
197.	171.1562388
196.	169.4200788
195.	167.6744888
194.	165.9194588
193.	164.1550088
192.	162.3811188
191.	160.5977988
190.	158.8050488
189.	157.0028588
188.	155.1912388
187.	153.3701888
186.	151.5396988
185.	149.6997788
184.	147.8504188
183.	145.9916288
182.	144.1234088
181.	142.2457488
180.	140.3586588
179.	138.4621388
178.	136.5561888
177.	134.6407988
176.	132.7159788
175.	130.7817288
174.	128.8380388
173.	126.8849188
172.	124.9223688
171.	122.9503788
170.	120.9689588
169.	118.9780988
168.	116.9777988
167.	114.9680688
166.	112.9488988
165.	110.9202988
164.	108.8822688
163.	106.8347988
162.	104.7778988
161.	102.7115688
160.	100.6357988
159.	98.5505988
158.	96.4559588
157.	94.3518888
156.	92.2383888
155.	90.1154488
154.	87.9830788
153.	85.8412688
152.	83.6900288
151.	81.5293488
150.	79.3592388
149.	77.1796888
148.	74.9907088
147.	72.7922888
146.	70.5844388
145.	68.3671488
144.	66.1404288
143.	63.9042688
142.	61.6586788
141.	59.4036488
140.	57.1391888
139.	54.8652888
138.	52.5819588
137.	50.2891988
136.	47.9869988
135.	45.6753688
134.	43.3542988
133.	41.0237988
132.	38.6838588
131.	36.3344888
130.	33.9756888
129.	31.6074488
128.	29.2297788
127.	26.8426688
126.	24.4461188
125.	22.0401388
124.	19.6247188
123.	17.1998688
122.	14.7655788
121.	12.3218588
120.	9.8687088
119.	7.4061188
118.	4.9340988
117.	2.4526388
116.	0.0617488

X	Z
0.	255.8079100
2.	255.8079100
4.	255.8079100
6.	255.8079100
8.	255.8079100
10.	255.8079100
12.	255.8079100
14.	255.8079100
16.	255.8079100
18.	255.8079100
20.	255.8079100
22.	255.8079100
24.	255.8079100
26.	255.8079100
28.	255.8079100
30.	255.8079100
32.	255.8079100
34.	255.8079100
36.	255.8079100
38.	255.8079100
40.	255.8079100
42.	255.8079100
44.	255.8079100
46.	255.8079100
48.	255.8079100
50.	255.8079100
52.	255.8079100
54.	255.8079100
56.	255.8079100
58.	255.8079100
60.	255.8079100
62.	255.8079100
64.	255.8079100
66.	255.8079100
68.	255.8079100
70.	255.8079100
72.	255.8079100
74.	255.8079100
76.	255.8079100
78.	255.8079100
80.	255.8079100
82.	255.8079100
84.	255.8079100
86.	255.8079100
88.	255.8079100
90.	255.8079100
92.	255.8079100
94.	255.8079100
96.	255.8079100
98.	255.8079100
100.	255.8079100
102.	255.8079100
104.	255.8079100
106.	255.8079100
108.	255.8079100
110.	255.8079100
112.	255.8079100
114.	255.8079100
116.	255.8079100
118.	255.8079100
120.	255.8079100
122.	255.8079100
124.	255.8079100
126.	255.8079100
128.	255.8079100
130.	255.8079100
132.	255.8079100
134.	255.8079100
136.	255.8079100
138.	255.8079100
140.	255.8079100
142.	255.8079100
144.	255.8079100
146.	255.8079100
148.	255.8079100
150.	255.8079100
152.	255.8079100
154.	255.8079100
156.	255.8079100
158.	255.8079100
160.	255.8079100
162.	255.8079100
164.	255.8079100
166.	255.8079100
168.	255.8079100
170.	255.8079100
172.	255.8079100
174.	255.8079100
176.	255.8079100
178.	255.8079100
180.	255.8079100
182.	255.8079100
184.	255.8079100
186.	255.8079100
188.	255.8079100
190.	255.8079100
192.	255.8079100
194.	255.8079100
196.	255.8079100
198.	255.8079100
200.	255.8079100
202.	255.8079100
204.	255.8079100
206.	255.8079100
208.	255.8079100
210.	255.8079100
212.	255.8079100
214.	255.8079100
216.	255.8079100
218.	255.8079100
220.	255.8079100
222.	255.8079100
224.	255.8079100
226.	255.8079100
228.	255.8079100
230.	255.8079100
232.	255.8079100
234.	255.8079100
236.	255.8079100
238.	255.8079100
240.	255.8079100
242.	255.8079100
244.	255.8079100
246.	255.8079100
248.	255.8079100
250.	255.8079100
252.	255.8079100
254.	255.8079100
256.	255.8079100
258.	255.8079100
260.	255.8079100
262.	255.8079100
264.	255.8079100
266.	255.8079100
268.	255.8079100
270.	255.8079100
272.	255.8079100
274.	255.8079100
276.	255.8079100
278.	255.8079100
280.	255.8079100
282.	255.8079100
284.	255.8079100
286.	255.8079100
288.	255.8079100
290.	255.8079100
292.	255.8079100
294.	255.8079100
296.	255.8079100
298.	255.8079100
300.	255.8079100
302.	255.8079100
304.	255.8079100
306.	255.8079100
308.	255.8079100
310.	255.8079100
312.	255.8079100
314.	255.8079100
316.	255.8079100
318.	255.8079100
320.	255.8079100
322.	255.8079100
324.	255.8079100
326.	255.8079100
328.	255.8079100
330.	255.8079100
332.	255.8079100
334.	255.8079100
336.	255.8079100
338.	255.8079100
340.	255.8079100
342.	255.8079100
344.	255.8079100
346.	255.8079100
348.	255.8079100
350.	255.8079100
352.	255.8079100
354.	255.8079100
356.	255.8079100
358.	255.8079100
360.	255.8079100

METRIC DIMENSIONS

DATA LIST #12
SEE FIGURE 12 SHEET 24

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50	PARTS LIST			

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

		DATE
DRN.	D. Miller	1-20-75
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE

NEXT HIGHER ASSY.

SCALE 1/1
SHEET 40 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT5Ø

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

REV.	CHANGE NO.	CHK
IN NUMBERS		

DEC 38-(325)-8040-1A-R373
DRB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISH PART, 1/1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

Z	Y
231.4285700	262.4456600
232.2324400	277.4456600
233.0220700	272.4456600
233.8118800	267.4456600
234.5974700	262.4456600
235.3536200	257.4456600
236.1103600	252.4456600
236.8576700	247.4456600
237.5955500	242.4456600
238.3241100	237.4456600
239.0430400	232.4456600
239.7526500	227.4456600
240.4528300	222.4456600
241.1435900	217.4456600
241.8249200	212.4456600
242.4968300	207.4456600
243.1593100	202.4456600
243.8123600	197.4456600
244.4559900	192.4456600
245.0902000	187.4456600
245.7149800	182.4456600
246.3303300	177.4456600
246.9362600	172.4456600
247.5327600	167.4456600
248.1198400	162.4456600
248.6975000	157.4456600
249.2657200	152.4456600
249.8245200	147.4456600
250.3739000	142.4456600
250.9138500	137.4456600
251.4443800	132.4456600
251.9654800	127.4456600
252.4771600	122.4456600
252.9794100	117.4456600
253.4722300	112.4456600
253.9556300	107.4456600
254.4296100	102.4456600
254.8941600	97.4456578
255.3492800	92.4456578
255.7949800	87.4456578
256.2312500	82.4456578
256.6581000	77.4456578
257.0755200	72.4456578
257.4835200	67.4456578
257.8820900	62.4456578
258.2712400	57.4456578
258.6509600	52.4456578
259.0212600	47.4456578
259.3821300	42.4456578
259.7335700	37.4456578
260.0755900	32.4456578
260.4081800	27.4456578
260.7313500	22.4456578
261.0451000	17.4456578
261.3494200	12.4456578
261.6443100	7.4456569
261.9297800	2.4456569

METRIC DIMENSIONS

DATA LIST #13
SEE FIGURE 13 SHEET 25

FIRST USED ON OPTION/MODEL: VT50	QTY.	DESCRIPTION: PARTS LIST	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DRN.	DATE 12/7	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
TOLERANCES: DECIMALS .xxx = .005, .xx = .02, .x = .1; ANGLES ±0° 30'	CHK'D	DATE	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √	ENG.	DATE	TITLE: SHELL VT50
MATERIAL	PROJ. ENG.	DATE	
FINISH	PROD.	DATE	SIZE B, CODE MD, NUMBER 7411540-0-0, REV. A
	NEXT HIGHER ASSY.		
	SCALE 1/1		
	SHEET 41 OF 45		DIST.

REV. | CHANGE NO. | DATE

DEC-11-[illegible]-1040-1A-R273
DRB 100

DIGITAL EQUIPMENT CORPORATION

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISH PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

Z	Y
231.8476468	201.7161285
232.0266068	206.7161285
232.2055668	211.7161285
232.3845268	216.7161285
232.5634868	221.7161285
232.7424468	226.7161285
232.9214068	231.7161285
233.1003668	236.7161285
233.2793268	241.7161285
233.4582868	246.7161285
233.6372468	251.7161285
233.8162068	256.7161285
233.9951668	261.7161285
234.1741268	266.7161285
234.3530868	271.7161285
234.5320468	276.7161285
234.7110068	281.7161285
234.8899668	286.7161285
235.0689268	291.7161285
235.2478868	296.7161285
235.4268468	301.7161285
235.6058068	306.7161285
235.7847668	311.7161285
235.9637268	316.7161285
236.1426868	321.7161285
236.3216468	326.7161285
236.5006068	331.7161285
236.6795668	336.7161285
236.8585268	341.7161285
237.0374868	346.7161285
237.2164468	351.7161285
237.3954068	356.7161285
237.5743668	361.7161285
237.7533268	366.7161285
237.9322868	371.7161285
238.1112468	376.7161285
238.2902068	381.7161285
238.4691668	386.7161285
238.6481268	391.7161285
238.8270868	396.7161285
239.0060468	401.7161285
239.1850068	406.7161285
239.3639668	411.7161285
239.5429268	416.7161285
239.7218868	421.7161285
239.9008468	426.7161285
240.0798068	431.7161285
240.2587668	436.7161285
240.4377268	441.7161285
240.6166868	446.7161285
240.7956468	451.7161285
240.9746068	456.7161285
241.1535668	461.7161285
241.3325268	466.7161285
241.5114868	471.7161285
241.6904468	476.7161285
241.8694068	481.7161285
242.0483668	486.7161285
242.2273268	491.7161285
242.4062868	496.7161285
242.5852468	501.7161285
242.7642068	506.7161285
242.9431668	511.7161285
243.1221268	516.7161285
243.3010868	521.7161285
243.4800468	526.7161285
243.6590068	531.7161285
243.8379668	536.7161285
244.0169268	541.7161285
244.1958868	546.7161285
244.3748468	551.7161285
244.5538068	556.7161285
244.7327668	561.7161285
244.9117268	566.7161285
245.0906868	571.7161285
245.2696468	576.7161285
245.4486068	581.7161285
245.6275668	586.7161285
245.8065268	591.7161285
245.9854868	596.7161285
246.1644468	601.7161285
246.3434068	606.7161285
246.5223668	611.7161285
246.7013268	616.7161285
246.8802868	621.7161285
247.0592468	626.7161285
247.2382068	631.7161285
247.4171668	636.7161285
247.5961268	641.7161285
247.7750868	646.7161285
247.9540468	651.7161285
248.1330068	656.7161285
248.3119668	661.7161285
248.4909268	666.7161285
248.6698868	671.7161285
248.8488468	676.7161285
249.0278068	681.7161285
249.2067668	686.7161285
249.3857268	691.7161285
249.5646868	696.7161285
249.7436468	701.7161285
249.9226068	706.7161285
250.1015668	711.7161285
250.2805268	716.7161285
250.4594868	721.7161285
250.6384468	726.7161285
250.8174068	731.7161285
250.9963668	736.7161285
251.1753268	741.7161285
251.3542868	746.7161285
251.5332468	751.7161285
251.7122068	756.7161285
251.8911668	761.7161285
252.0701268	766.7161285
252.2490868	771.7161285
252.4280468	776.7161285
252.6070068	781.7161285
252.7859668	786.7161285
252.9649268	791.7161285
253.1438868	796.7161285
253.3228468	801.7161285
253.5018068	806.7161285
253.6807668	811.7161285
253.8597268	816.7161285
254.0386868	821.7161285
254.2176468	826.7161285
254.3966068	831.7161285
254.5755668	836.7161285
254.7545268	841.7161285
254.9334868	846.7161285
255.1124468	851.7161285
255.2914068	856.7161285
255.4703668	861.7161285
255.6493268	866.7161285
255.8282868	871.7161285
256.0072468	876.7161285
256.1862068	881.7161285
256.3651668	886.7161285
256.5441268	891.7161285
256.7230868	896.7161285
256.9020468	901.7161285
257.0810068	906.7161285
257.2599668	911.7161285
257.4389268	916.7161285
257.6178868	921.7161285
257.7968468	926.7161285
257.9758068	931.7161285
258.1547668	936.7161285
258.3337268	941.7161285
258.5126868	946.7161285
258.6916468	951.7161285
258.8706068	956.7161285
259.0495668	961.7161285
259.2285268	966.7161285
259.4074868	971.7161285
259.5864468	976.7161285
259.7654068	981.7161285
259.9443668	986.7161285
260.1233268	991.7161285
260.3022868	996.7161285
260.4812468	1001.716128
260.6602068	1006.716128
260.7416468	1008.716128

METRIC DIMENSIONS

DATA LIST #14
SEE FIGURE 14 SHEET 26

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005; .xx = .02; .x = .1
ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

DR: DATE 1-21-76
CHK'D DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE

NEXT HIGHER ASSY.

SCALE
SHEET 42 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT50

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

REVISIONS	REV.	CHANGE NO.	CHK
	A		

DEC 10-[2325]-2040-1A-R373
DRB 100

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISH PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

METRIC DIMENSIONS

DATA LIST #15
SEE FIGURE 15 SHEET 27

REVISIONS	REV.	CHANGE NO.	CHK
	A	7411540-0-0	

FIRST USED ON OPTION/MODEL: VT50	QTY.	DESCRIPTION: PARTS LIST	PART NO. / ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES: DECIMALS .XXX = .005, .XX = .02, .X = .1; ANGLES ±0° 30'. REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √	DRN.	DATE 1-22-75	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK'D.	DATE	
	ENG.	DATE	TITLE: SHELL VT50
	PROJ. ENG.	DATE	
	PROD.	DATE	
MATERIAL	NEXT HIGHER ASSY.		SIZE B; CODE MD; NUMBER 7411540-0-0; REV. A
FINISH	SCALE		
	SHEET 43 OF 45		DIST.

DEC 36-(375)-1060-1A-R373
DRB 100

Z	Y
239.8000000	260.8000000
238.7673828	275.8000000
237.7355957	270.8000000
236.7039795	265.8000000
235.6730347	260.8000000
234.6432495	255.8000000
233.6141968	250.8000000
232.5859375	245.8000000
231.5585938	240.8000000
230.5322876	235.8000000
229.5070190	230.8000000
228.4829102	225.8000000
227.4599609	220.8000000
226.4382324	215.8000000
225.4177856	210.8000000
224.3986206	205.8000000
223.3808594	200.8000000
222.3645020	195.8000000
221.3496094	190.8000000
220.3361816	185.8000000
219.3244019	180.8000000
218.3142090	175.8000000
217.3056641	170.8000000
216.2988281	165.8000000
215.2937012	160.8000000
214.2903442	155.8000000
213.2888184	150.8000000
212.2891235	145.8000000
211.2913208	140.8000000
210.2954102	135.8000000
209.3015137	130.8000000
208.3096924	125.8000000
207.3200073	120.8000000
206.3325195	115.8000000
205.3474121	110.8000000
204.3647461	105.8000000
203.3847656	100.8000000
202.4074707	95.80000000
201.4331055	90.80000000
200.4619141	85.80000000
199.4941406	80.80000000
198.5300293	75.80000000
197.5698242	70.80000000
196.6137695	65.80000000
195.6623535	60.80000000
194.7158203	55.80000000
193.7746582	50.80000000
192.8393555	45.80000000
191.9104004	40.80000000
190.9884033	35.80000000
190.0739746	30.80000000
189.1677246	25.80000000
188.2704468	20.80000000
187.3830566	15.80000000
186.5066528	10.80000000
185.6425781	5.800000000
184.7924805	0.8000000000
183.9580078	
183.1411133	
182.3439941	
181.5691528	
180.8197021	
180.1000977	
179.4159546	
178.7750244	
178.1875000	
177.6687012	
177.2421875	
176.9375000	
176.7890625	
176.8437500	
177.1562500	
177.8125000	
178.9062500	
180.5312500	
182.8125000	
185.9375000	
190.0000000	
195.1875000	
201.6875000	
209.8125000	
220.0000000	
232.5000000	
248.6875000	
268.8125000	
294.0000000	
325.5000000	
365.6875000	
417.8125000	
485.0000000	
572.5000000	
687.8125000	
841.0000000	
1045.687500	
1317.812500	
1680.000000	
2162.500000	
2805.687500	
3661.812500	
4785.000000	
6242.500000	
8165.687500	
10717.81250	
14080.00000	
18502.50000	
24325.68750	
31981.81250	
42045.00000	
55262.50000	
72645.68750	
95477.81250	
125480.0000	
164942.5000	
216805.6875	
284981.8125	
374525.0000	
492325.6875	
647021.8125	
850480.0000	
1117943.000	
1469405.000	
1931181.000	
2537981.000	
3335405.000	
4383981.000	
5761805.000	
7571981.000	
9950405.000	
13076980.00	
17186180.00	
22585400.00	
29681980.00	
39000405.00	
51258180.00	
67356980.00	
88518405.00	
116317980.0	
152866180.0	
200885400.0	
264005980.0	
346999405.0	
456060180.0	
599365980.0	
787604405.0	
1035000180.	
1360605980.	
1787885405.	
2349660180.	
3087995980.	
4057965405.	
5332230180.	
7007975980.	
9208140405.	
12100260180.	
15901575980.	
20897420405.	
27457266180.	
36076695980.	
47406540405.	
62292810180.	
81850575980.	
107539020405.	
141306690180.	
185676405980.	
243989310405.	
320544135180.	
421171635980.	
553402860405.	
727215585180.	
955501335980.	
1255441770405.	
1649214360180.	
2167191435980.	
2847596520405.	
3741309360180.	
4916772435980.	
6461081640405.	
8491132860180.	
11156681235980.	
14657934210405.	
19262154535180.	
25311870810000.	

NOTES:
1. ALL DIMENSIONS ARE NOMINAL FOR A FINISHED PART, 1:1 SCALE DOES NOT INCLUDE SHRINKAGE FACTOR.

METRIC DIMENSIONS

DATA LIST #16
SEE FIGURE 16 SHEET 28

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50		PARTS LIST		

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .xxx = .005, .xx = .02, .x = .1 — ANGLES: ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √
MATERIAL
FINISH

DRN.	DATE	1-21-76
CHK'D.	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSY.		
SCALE		
SHEET 44 OF 45		

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

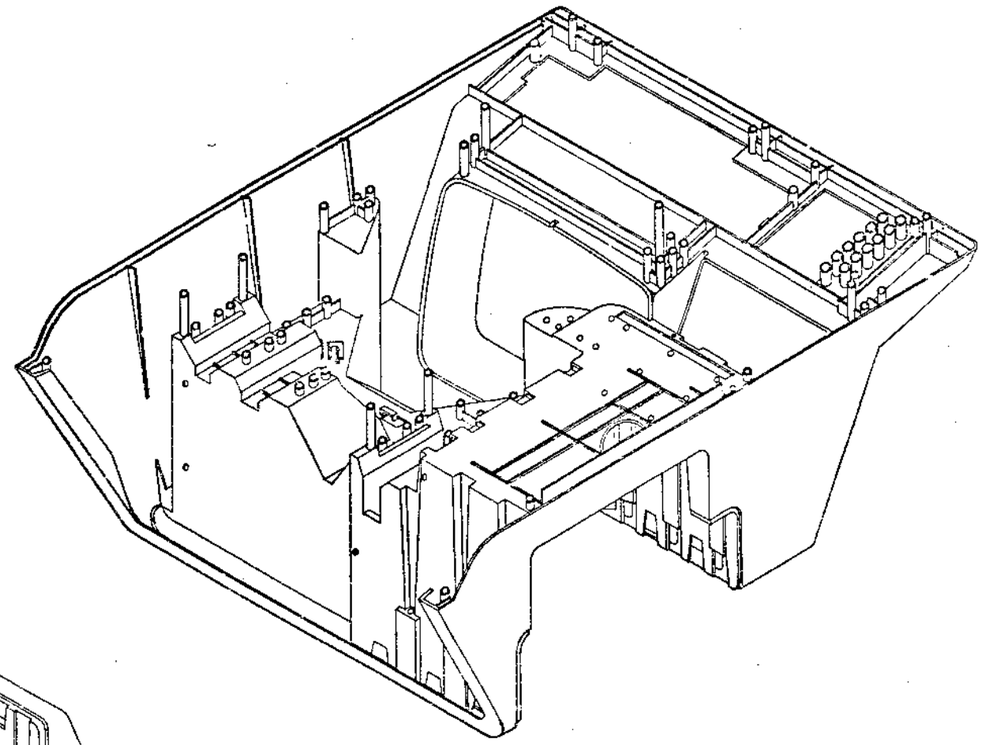
SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

DIST.

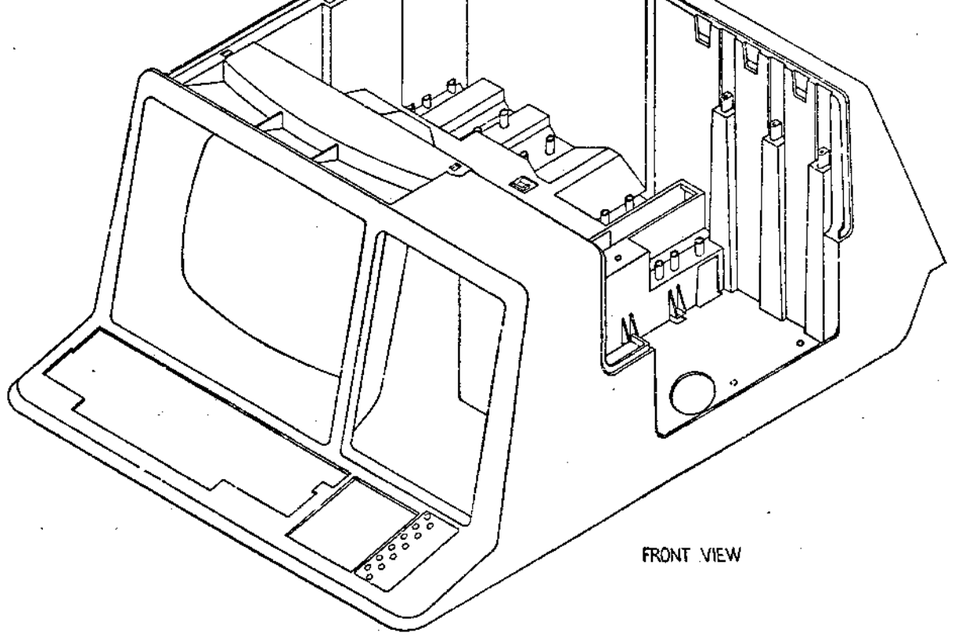
REV.	CHANGE NO.	CHK

SIZE	CODE	NUMBER	REV.
B	MD	7411540-0-0	A

13 12 11 10 9 8 7 6 5 4 3 2 1



BOTTOM REAR VIEW



FRONT VIEW

REVISIONS		
ZONE	CHANGE NO.	REV

TITLE	SIZE	CODE	NUMBER	REV.
SHELL VT50	E	70/D	7411540-0-0	A
SCALE NONE	SHEET 45 OF 45		DIST.	

MD 7411540-0-01 A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

INCOMING INSPECTION PROCEDURE

DATE 30 JUN 75

TITLE VT50 Shell

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
•	Original Release		C.Hillard C. Hillard	6/30/75 6/30/75	[illegible]	7-7-75

ENG	APPD	SIZE	CODE	NUMBER	REV
[illegible]	[illegible]	A	II	74-11540-0-0	

DEC 3-(493)-1283-M670

SHEET 1 OF 2

INSPECTION PROCEDURE CONTINUATION SHEET

TITLE VT50 Shell

1.0 Inspection by attributes.

1.1 All other dimensions and/or characteristics pertaining to 7411540 that are not listed must be inspected on 20% of the sample size from each lot. All defects must be listed and inspected on the entire A.Q.L. sample. Parts must conform completely to print.

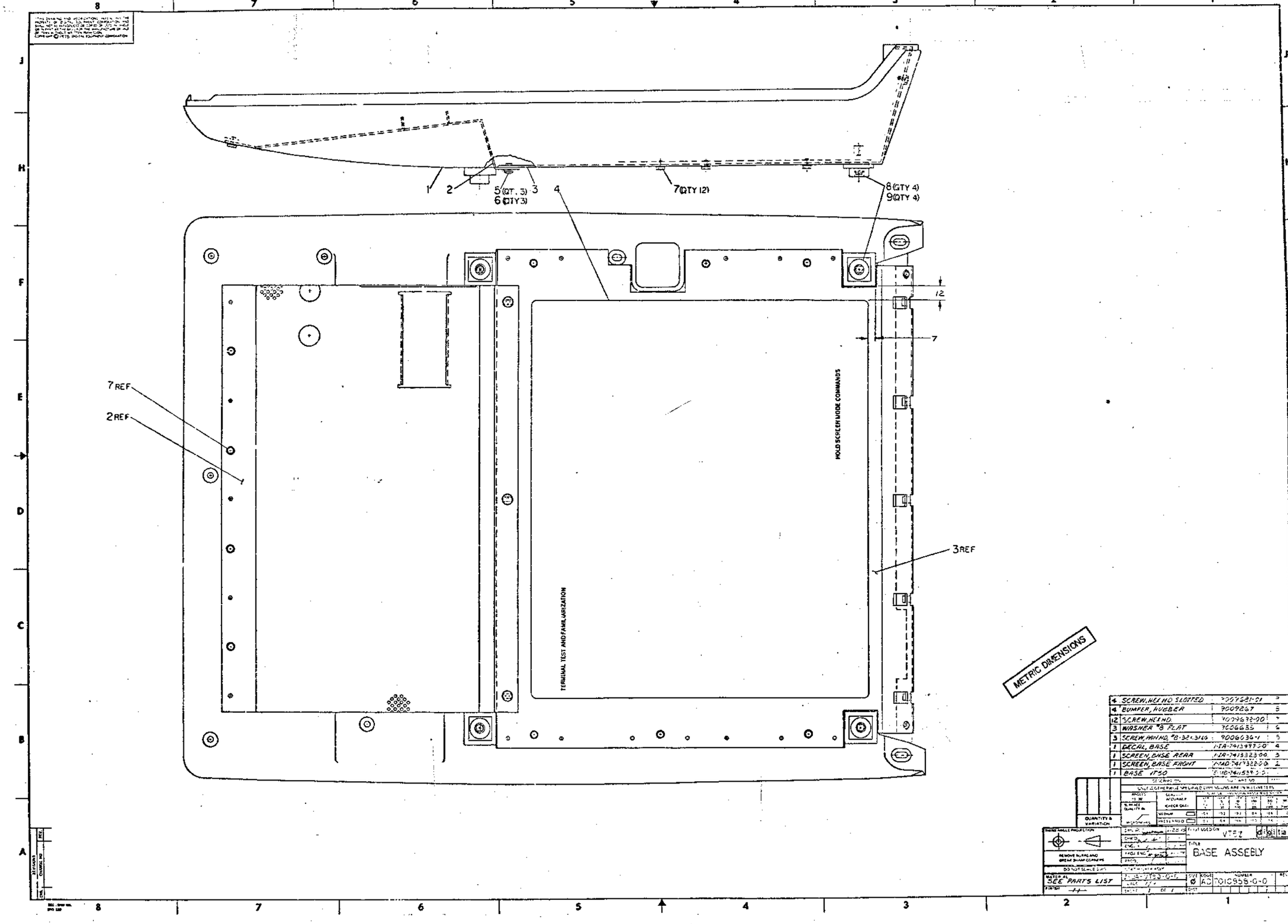
1.2 Applicable document DEC metals quality manual.

2.0	CHARACTERISTICS	PROCEDURE
2.1	Check location of the front bosses (keyboard)	Use fixture #94-2155-3
2.2	Check location of the front processor board bosses	Use fixture #94-2152-3
2.3	Check location of the rear processor board bosses	Use fixture #94-2156-3
2.4	Size of holes in bosses	Plug gage/vernier cal.
2.5	Mat. thickness	Vernier calipers
2.6	Keyboard opening and location	vernier calipers
2.7	Workmanship	Visually inspect for: 2.7.1 sink in material 2.7.2 flashing/scratches 2.7.3 color and texture 2.7.4 filled holes

	SIZE	CODE	NUMBER	REV
	A	II	7411540-0-0	

DEC 3-(332)-1283-1A-R175

SHEET 2 OF 2



4	SCREW, HEX HD SLOTTED	7057621-01	9
4	BUMPER, RUBBER	7009267	8
12	SCREW, HEX HD	7009632-00	7
3	WASHER #8 FLAT	7006655	6
3	SCREW, MACHINE #8-32 X 3/16	9006636-4	5
1	DECAL, BASE	MA-7413497-0-0	4
1	SCREEN, BASE REAR	MA-7413323-00	3
1	SCREEN, BASE FRONT	MAD-7413322-0-0	2
1	BASE VT50	E-110-76/1539-0-0	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES						
LINEAR ACCURACY						
SURFACE QUALITY	CHECK ONLY					
	MEDIUM					
	PRESS FITS					

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE PRINT

MATERIAL: SEE PARTS LIST

FINISH:

DRAWN

CHK'D

ENG'G

MFG ENG'G

APPD

DIGITAL EQUIPMENT CORPORATION

VT52

TITLE: BASE ASSEBLY

SIZE: D | CODE | NUMBER: AC7010958-0-0 | REV

SCALE: 1/1 | WEIGHT: | SHEET 1 OF 1

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

INCOMING INSPECTION PROCEDURE

DATE 6/30/75

TITLE VT50 Base

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
*	Original Release		C.Hillard C.Hillard	6/30		7-7-

ENG	APPD	SIZE	CODE	NUMBER	REV
		A	II	7411539-0-0	

DEC 3-(493)-1283-M670

SHEET 1 OF 2

INSPECTION PROCEDURE CONTINUATION SHEET

TITLE VT50 Base

1.0 Inspection by attributes.

1.1 All other dimensions and/or characteristics pertaining to 7411539 that are not listed must be inspected on 20% of the sample size from each lot. All defects must be listed and inspected on the entire A.Q.L. sample. Parts must conform completely to print.

1.2 Applicable document DEC metals quality manual.

	CHARACTERISTIC	PROCEDURE
2.1	Check location of holes	Use fixture #94-02146-3
2.2	Check holes sizes	Vernier calipers/plug gages
2.3	Material thickness	Vernier calipers
2.4	Workmanship	Visually inspect for:

2.4-1 sink in material
2.4.2 flashing / scratches
2.4.3 color and texture
2.4.4 filled bosses

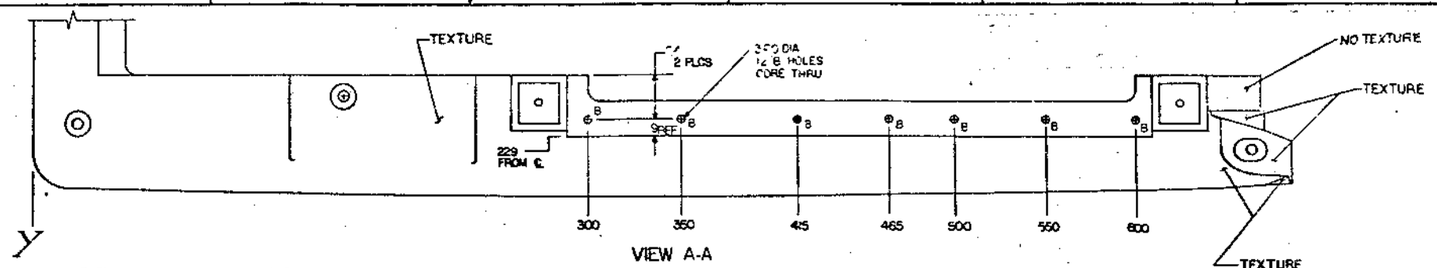
SIZE	CODE	NUMBER	REV
A	II	74 11539-0-0	

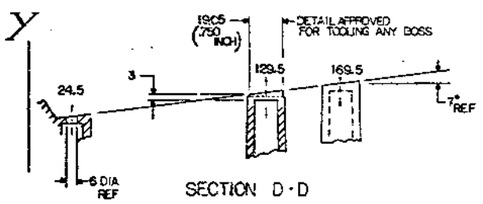
DEC 3-(332)-1283-1A-R175

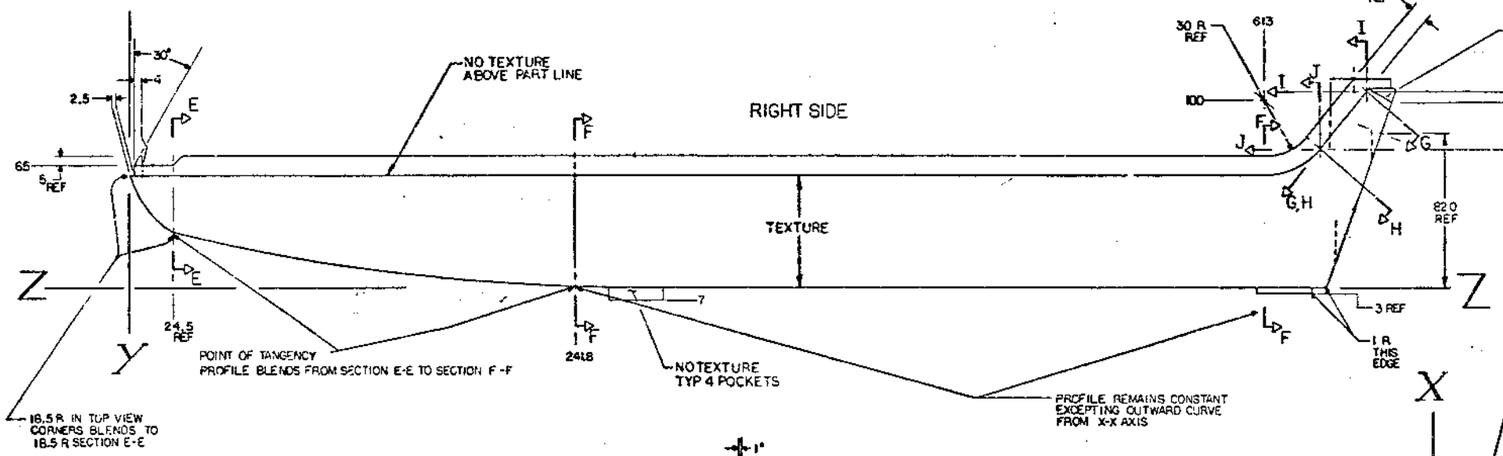
SHEET 2 OF 2

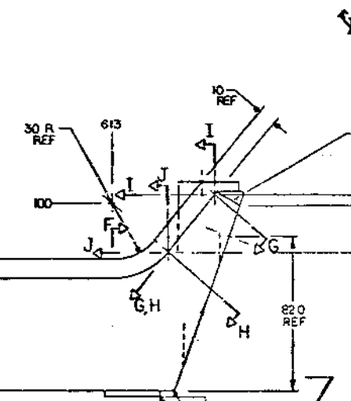
NOTES:

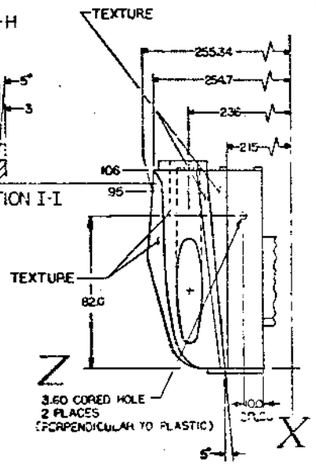
1. BASE IS SYMETRIC ABOUT THE X-X AXIS EXCEPT FOR THE FOLLOWING: A. NOTCH AT 418.5
   B. BOSS AT 129.5, 222
   C. BOSS AT 400, 222
   D. BOSS AT 169.5, 217
2. DRAFT TO BE 1°
3. ALL DIMENSIONS ARE MILLIMETERS
4. TOLERANCE TO BE:
   ± .1mm FIRST 25 mm
   ± .02mm PER ADDITIONAL 10mm (1cm)
5. NOMINAL WALL THICKNESS TO BE 4mm (0.156 inch)
6. CORNERS ARE SHOWN SHARP FOR DRAFTING ONLY. THE FOLLOWING RADII ARE ALLOWABLE FOR TOOLING:
   A. FILLETS & ROUNDS OF BOSSES & RIBS - 0.5 R
   B. EXTERNAL APPEARANCE SURFACES 0.5/0.8 R UNLESS SPECIFIED OTHERWISE.
7. TEXTURE TO BE APPLIED WHERE SPECIFIED ON EXTERIOR OF PART ONLY.
8. NO TEXTURE ANY INTERIOR SURFACES
9. TEXTURE TO BE AKRON METALS #E.496
10. MATL TO BE GENERAL ELECTRIC NORYL #SE-100-7385.

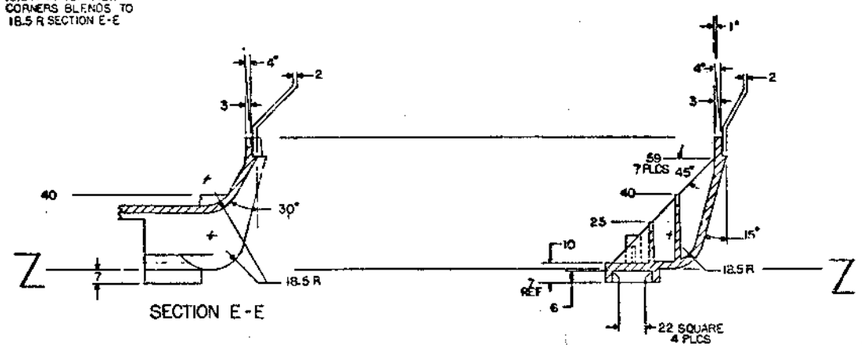


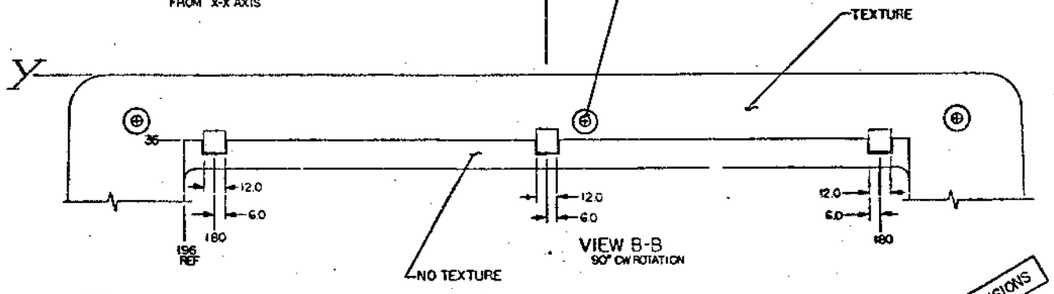


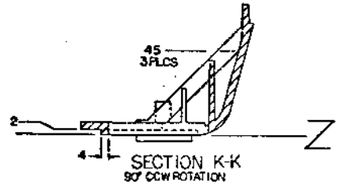


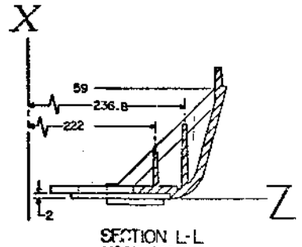


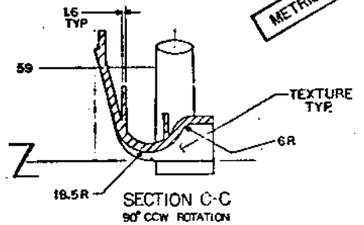












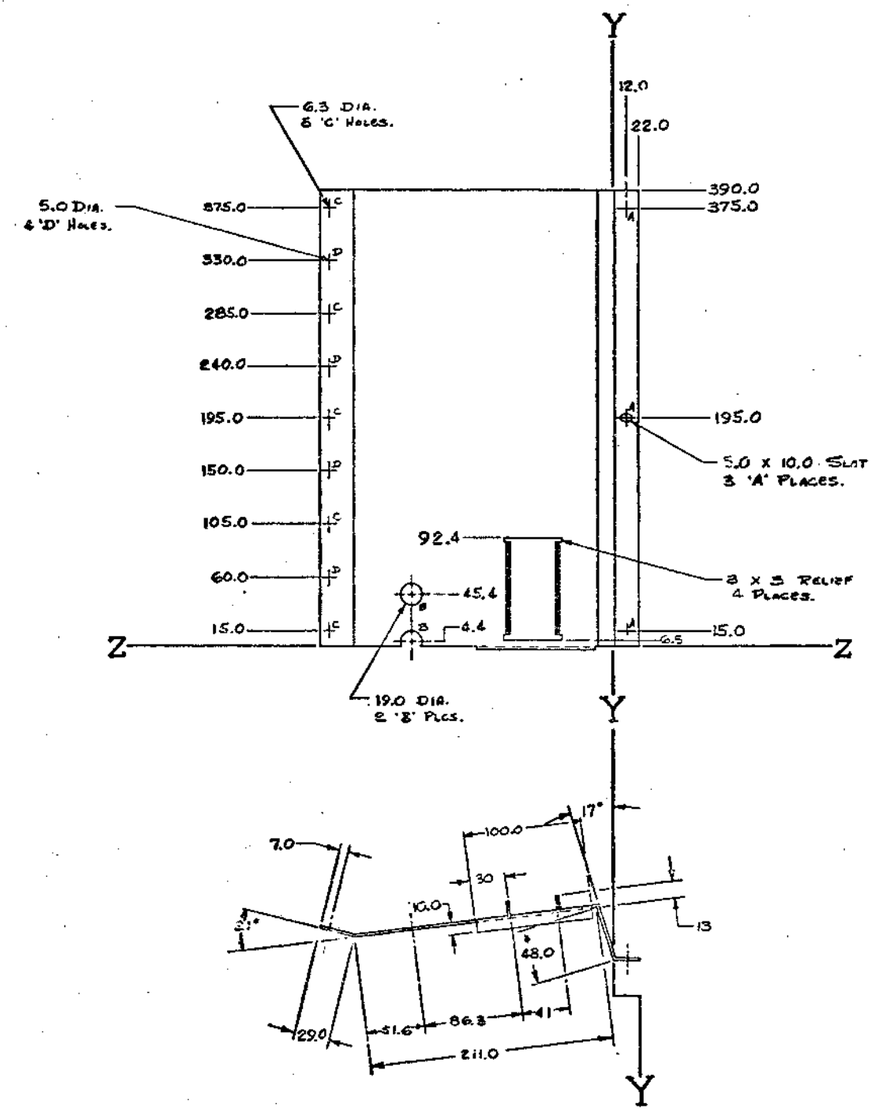
METRIC DIMENSIONS

SYMBOL	CHANGE NO.	REV.

TITLE	NUMBER	REV.
BASE VT50	7411539-0-0	A
SCALE 1/1	SHEET 2 OF 2	

7411539-0-0 A

NOTES:
1. MAT'L: .050 THK PERFORATED ALUM. 2.00 DIA. HOLES STAGGERED ON 3.15 CENTERS.
2. BEND ALLOWANCES ARE RELATED TO ℄ LOCATIONS OF HOLE PATTERN.



METRIC DIMENSIONS

DESCRIPTION	DWG PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☒	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTES

FINISH 0200020-47

DRN. R. A. G. 12/20/74
CHK'D R. J. 1/9/75
ENG. R. J. 1/9/75
PROJ. ENG. 1/9/75
PROD. 1/9/75
NEXT HIGHER ASSY. 7010958-0-0
SCALE
SHEET 1 OF 1

FIRST USED ON VT52

digital

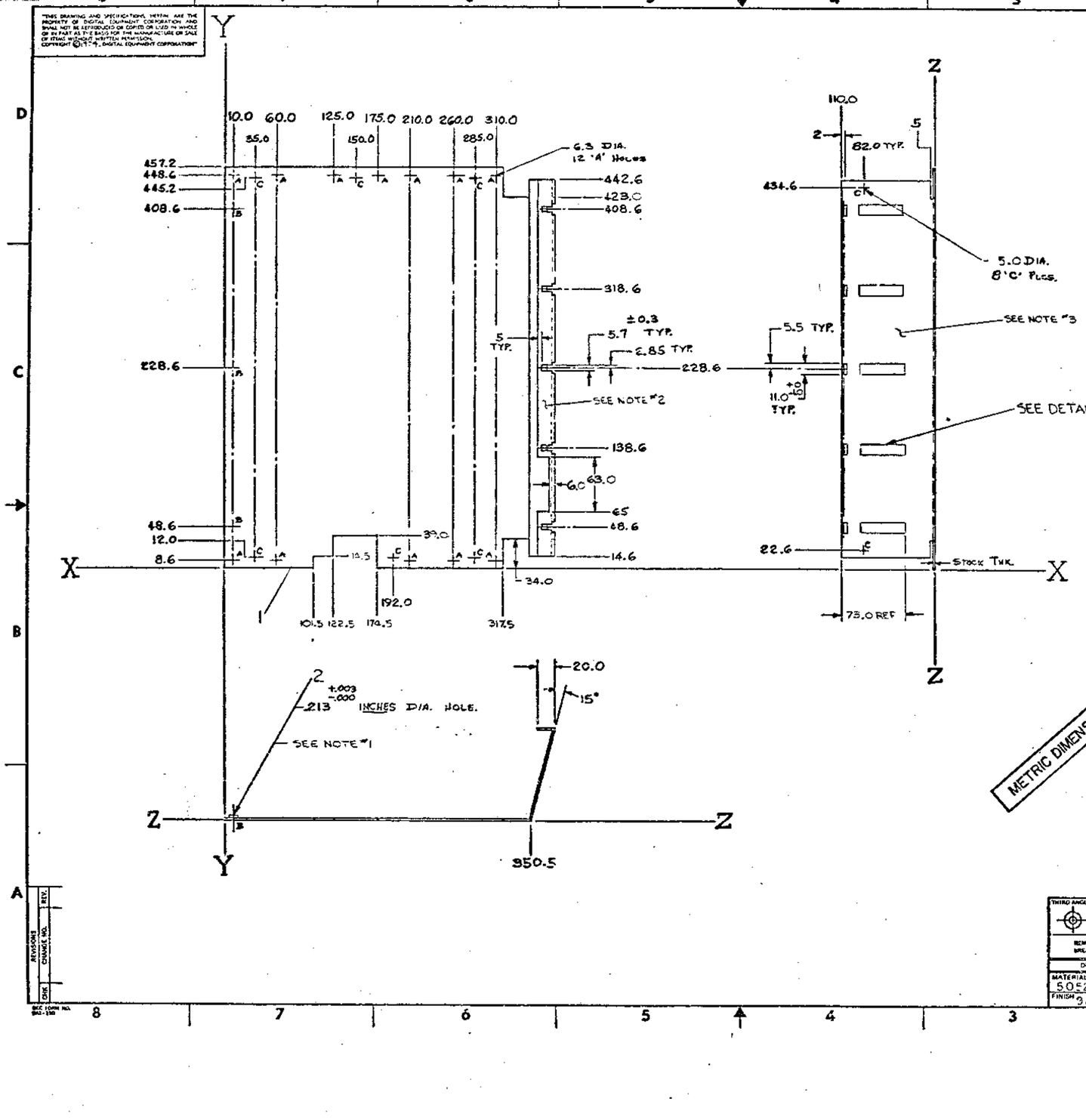
TITLE SCREEN, BASE, FRONT

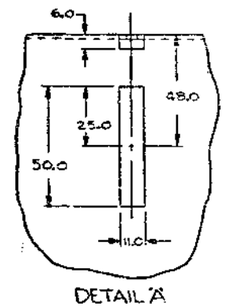
SIZE 1 CODE MD NUMBER 7413322-0-C REV.

DIST.

REVISIONS CHANGE NO. REV. CHK

NOTES:
1. INSTALL ITEM "(2) INSERT 3 'B' PLACES.
2. MASK 20 WIDE BEFORE PAINTING.
3. TEXTURE THIS SURFACE ONLY; PAINT OTHER SURFACES FLAT.





DETAIL 'A'
SCALE: 1/1
5 PLACES

METRIC DIMENSIONS

3	INSERT "F-32	9009158-3	2
1	SCREEN BASE, REAR		1
	DESCRIPTION	DEC PART NO	11 ETA NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES IN ° '	CLASS OF ACCURACY (CHECK ONE)	0 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000	OVER 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM	±0.1	±0.2	±0.3	±0.4	±0.8	±1.2	
	PREFERRED	±0.3	±0.4	±0.6	±1.0	±1.6	±2.4	

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN. H.A.P.	4/1/75	FIRST USED ON: VT50
CHK'D		
ENG.		
PROJ. ENG.	4/1/75	
PROD.		
NEXT HIGHER ASSY.		

TITLE: SCREEN, BASE, REAR

MATERIAL	SIZE	CODE	NUMBER	REV.
1.5(.062) THK 5052-H32	1	14	7413323-0-0	
FINISH 92-00150-147	SCALE			
	SHEET 1 OF 1		DIST.	

1 14 7413323-0-0

REVISIONS: REV. | CHANGE NO. | DWN

NOTES:
1-MATERIAL: FASSON CRACK-N-PEEL (VARIETY UNPERFORATED BACKING)
COLOR: PRINT, DIAGRAMS, BORDERS: DEC GRAY 9200001-97
BACKGROUND: DEC GRAY 9200000-68.
VENDOR: COMMONWEALTH PUBLISHING

369 REF

307 REF

TERMINAL TEST AND FAMILIARIZATION

Notes

DESCRIPTION OF S1 AND S2

VT50FEATURES

CONTROL CODES

ESCAPE SEQUENCES

HOLD SCREEN MODE COMMANDS

METRIC DIMENSIONS

REVISIONS	REV.
CHANGE NO.	
CHK.	

1	DECAL (ARTWORK)	C-DC-7413497-0-1	2
1	DECAL, BASE		1
QUANTITY	DESCRIPTION	ENG/PART NO.	SHEET NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0°30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 0 TO 10	OVER 10 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM	±.01	±.02	±.03	±.04	±.06	±.10
	PREFERRED	±.03	±.04	±.05	±.10	±.16	±.25

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL: SEE NOTE #1

FINISH: ---

DRN. P. [illegible] 1-27-75
CHK'D. [illegible] 1-27-75
ENG. [illegible] 1-27-75
PROJ. ENG. [illegible]
MOD. [illegible]

FIRST USED ON: VT50 digital

TITLE: DECAL, BASE

HEAT EXCHANGER ASSY.

Z-UA-VT50-0-0

SIZE: 1 | CODE: IA | NUMBER: 7413497-0-0 | REV.

SCALE: 1/1

SHEET 1 OF 1

DIST.

1 IA 7413497-0-0

IA 7413497-0-0

BEC FORM NO. BM3-150

SIZE	CODE	NUMBER	REV.
C	DC	7413497-0-1	

SHEET 1 OF 1 — DIST.

SCALE 1/1

DRN. — CHK'D — ENG. — PROJ. ENG. — PROD. — NEXT HIGHER ASSY.

TITLE: BASE DECAL

FIRST USED ON

d i g i t a l

REV.	CHANGE NO.	REVISIONS	CHK

TERMINAL TEST AND FAMILIARIZATION

1. Check the Connections

Set the EIA/20 mA switch to the 20 mA position. Set switch S1 to position 1 and switch S2 to position C, as shown in the drawing at right.

2. Turn the Power On

The On/Off Switch is on the right side of the unit.

3. Wait for the Blinking Cursor

After approximately one minute, the cursor should appear at its home position – the upper left corner of the screen.

4. Adjust the Intensity Control

If the cursor fails to apear after one minute, the intensity control may be set too low. Similar to the brightness control on a television set, the intensity control is the sliding lever at the back of the unit.

5. Test the VT50 features described below, and make sure the control codes and Escape Sequences function properly.

6. Connect the VT50 to the Host

Use the connector which is attached to the terminal strip to plug the VT50 into an input-output socket of the host computer. Switches S1 and S2 must now be changed so that data entered through the keyboard goes to the computer rather than the screen. Whether the features of the VT50, such as control codes and Escape Sequences, work properly now depends on whether the computer sends back to the screen the information you have typed to it. Switches S1 and S2 must be set so that the transmitting and receiving speed of the VT50 matches that of the host.

VT50 FEATURES

Input and the Cursor

The cursor underlines the position where the next character displayed on the screen will appear. After a character (or space) is displayed, the cursor moves one character position to the right. Type several displayable characters and observe this cursor movement.

Slowly type additional characters to form a longer line; when the 73rd character is displayed, a buzzer sounds. This buzzer serves the same function as a typewriter bell by alerting the operator to the right margin. The maximum line length (left to right margin) is 80 characters.

Displaying More Lines

When the cursor reaches the extreme right margin, it is locked in position until moved by a cursor control command. To move the cursor to the extreme left margin of the next line, press the RETURN key (moves the cursor to the left margin of the current line) and the LF key (moves the cursor down one line). Either may be typed first.

If the cursor is not moved from the right margin, each new character received at the screen will replace the character currently displayed above the cursor. Type another full line. With the cursor at the extreme right margin, continue typing displayable characters to observe the character replacement.

Move the cursor to the next line and continue typing variable length lines until 12 lines are displayed. When the cursor is below line number 12, an LF (Line Feed) key will create space for a new line by moving all displayed lines up one line position. Creating space for new lines in this manner is called scrolling. Note that scrolling causes the top line to be lost as it moves off the screen. Type additional lines and watch the screen as each new Line Feed moves existing lines up.

Changing Text on the Screen

Use cursor control commands to move the cursor to a position on the screen where a character is currently displayed. Type a displayable character and verify that this replaces the old character.

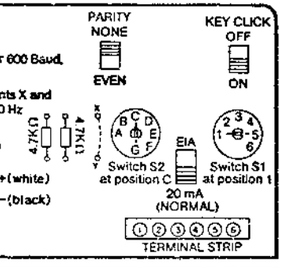
Notes:

Switches S1 and S2 are shown set for 600 Baud, off-line use.

There must be a jumper between points X and Y if and only if the line frequency is 50 Hz (European) or the display will waver.

The contacts on the terminal strip are connected as follows:

1. 20 mA
2. Transmitter +(green)
3. Transmitter –(red)
4. Receiver +(white)
5. Receiver –(black)
6. Ground



DESCRIPTION OF S1 AND S2

Switch S2 (speed)	Switch S1 (mode)
A – Bell 103**	1 – Off-Line
B – 110 Baud	2 – Full Duplex with Local Copy
C – 600 Baud	3 – Full Duplex
D – 1200 Baud	4 – Full Duplex, 300 Baud*
E – 2400 Baud	5 – Full Duplex, 150 Baud*
F – 4800 Baud	6 – Full Duplex, 75 Baud*
G – 9600 Baud	

*Transmit at this speed rather than the speed selected by Switch S2.
**Transmit and receive at the same speed:

300 Baud if Switch S1 is in position 4
150 Baud if Switch S1 is in position 5
75 Baud if Switch S1 is in position 6

For Teletype (Model 33) compatibility, set S1 to 3 and S2 to B. (Full Duplex 110 Baud)

CONTROL CODES

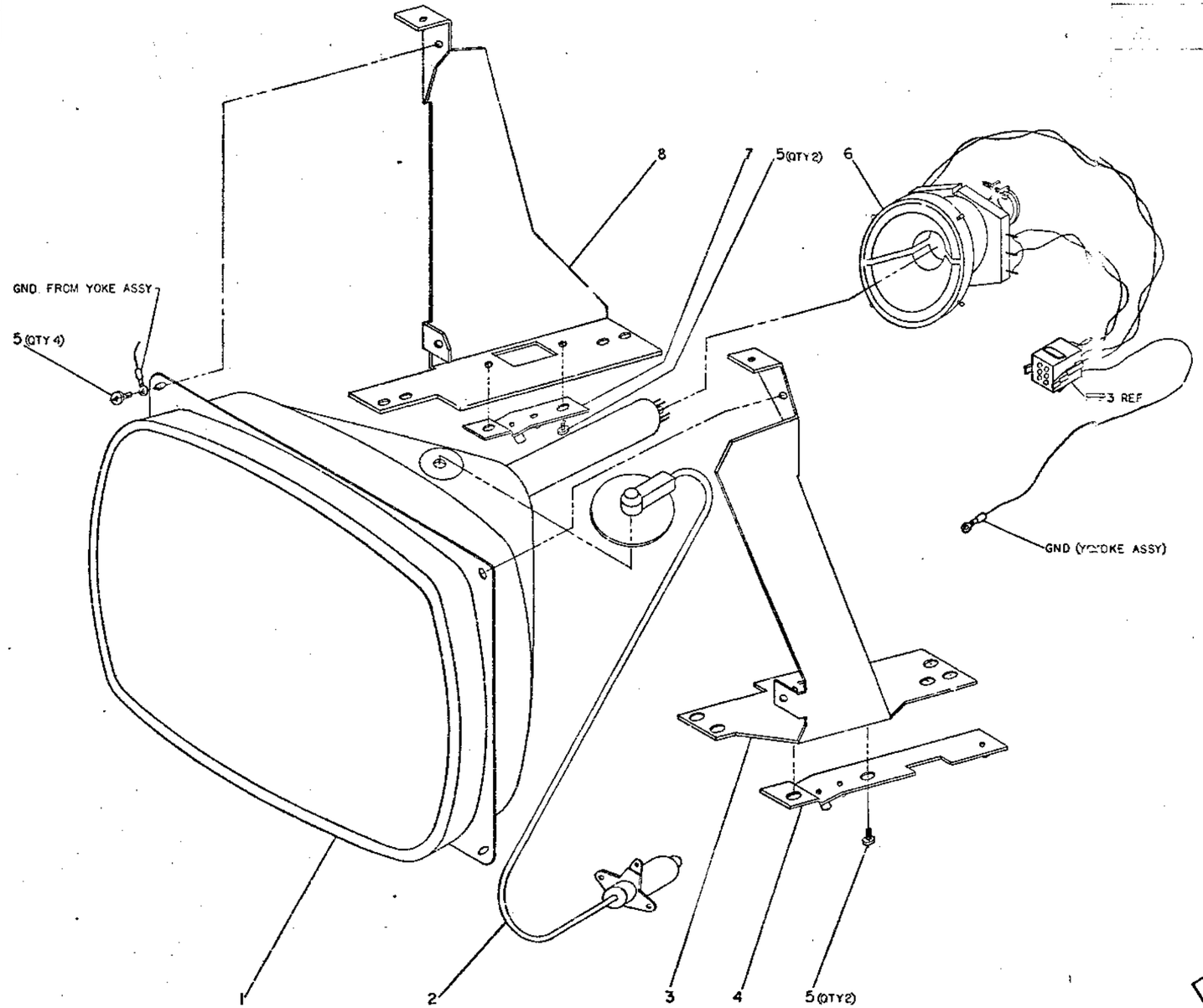
ctrl G	Ring buzzer
ctrl H (or BACKSPACE)	Move cursor left one position
ctrl I (or TAB)	Move cursor to next TAB stop
ctrl J (or LF)	Move cursor down one line
ctrl M (or RETURN)	Move cursor to leftmost position in line
ESC	1. Enter Escape Mode (Prepare to process an Escape Sequence) 2. Exit Escape Mode (if terminal was in Escape Mode before ESC was typed)

ESCAPE SEQUENCES

ESC A	Move cursor up one line
ESC C	Move cursor right one position
ESC H	Move cursor to the Home position (top left of screen)
ESC J	Erase from cursor to end of screen
ESC K	Erase from cursor to end of line
ESC Z	Identify terminal type (Terminal will transmit ESC / A)
ESC {	Enter Hold Screen Mode
ESC \	Exit Hold Screen Mode

HOLD SCREEN MODE COMMANDS

SCROLL	Display a new line
shift SCROLL	Display 12 new lines (Display a new page)



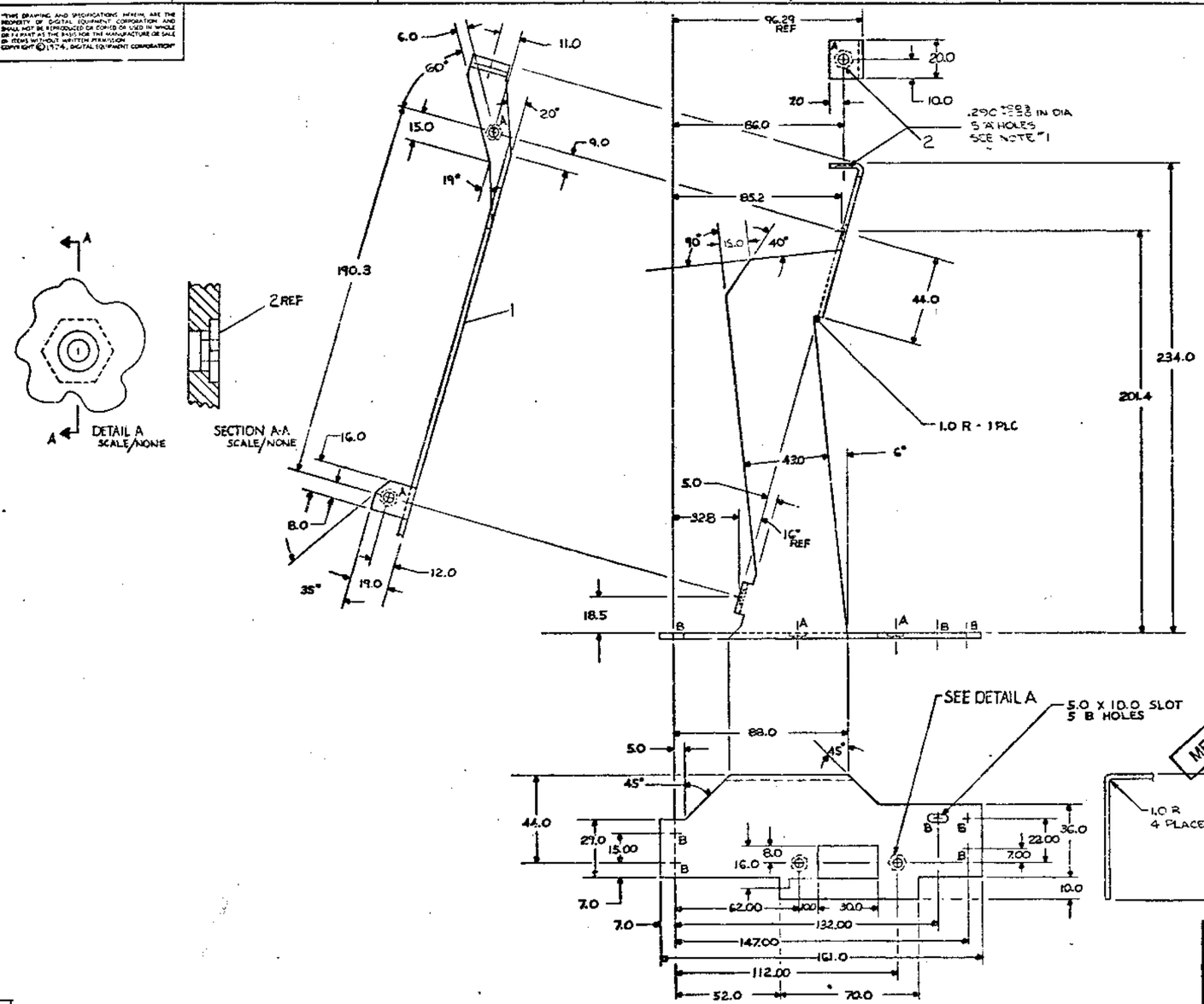
METRIC DIMENSIONS

1	BRACKET, CRT LEFT	1-EA-7413821-00	5
1	BRKT PC BD TO CRT BRKT LEFT	2-EA-7413824-00	7
1	YOKE ASSEMBLY	2-EA-7010905-00	6
8	SCREW, MACH, PAN HD 8-32 X .31	9006834-1	5
1	BRKT PC BD TO CRT BRKT RT	2-EA-7413825-00	4
1	BRACKET, CRT RIGHT	1-EA-7413822-00	3
1	TOWN, HIGH VOLTAGE		2
1	CATHODE RAY TUBE	12-11901	1

DRAWN		FIRST USED ON	VT50
CHK			
ENGR		TITLE	CRT ASSEMBLY
APPV			
DO NOT SCALE DWG			
MATERIAL	SEE PARTS LIST	SIZE	D
CODE	AD	NUMBER	7010859-0-0
REV			
SCALE		SHEET	1 OF 1

7 010859-00

NOTES:
1. INSTALL ITEM "(2) INSERT 5 "A" PLACES.



5	INSERT "E-32	90C8645	2
1	BRACKET CTR RIGHT		1

DESCRIPTION	DWG/PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0°30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE IN MILLIMETERS					
		OVER 0 TO 6	OVER 6 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY ▽▽ MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☒	±0.3	±0.4	±0.4	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN R.A. HUTNAN 11/19/74 — FIRST USED ON: VT50

CHK'D

ENG.

PROJ. ENG. 12/3/74

PROD.

NEXT HIGHER ASSY.

TITLE: BRACKET,CRT RIGHT

MATERIAL: 2.3(093)THK. C.R.S. — SIZE: 1 — CODE: IA — NUMBER: 7413320-00 — REV:

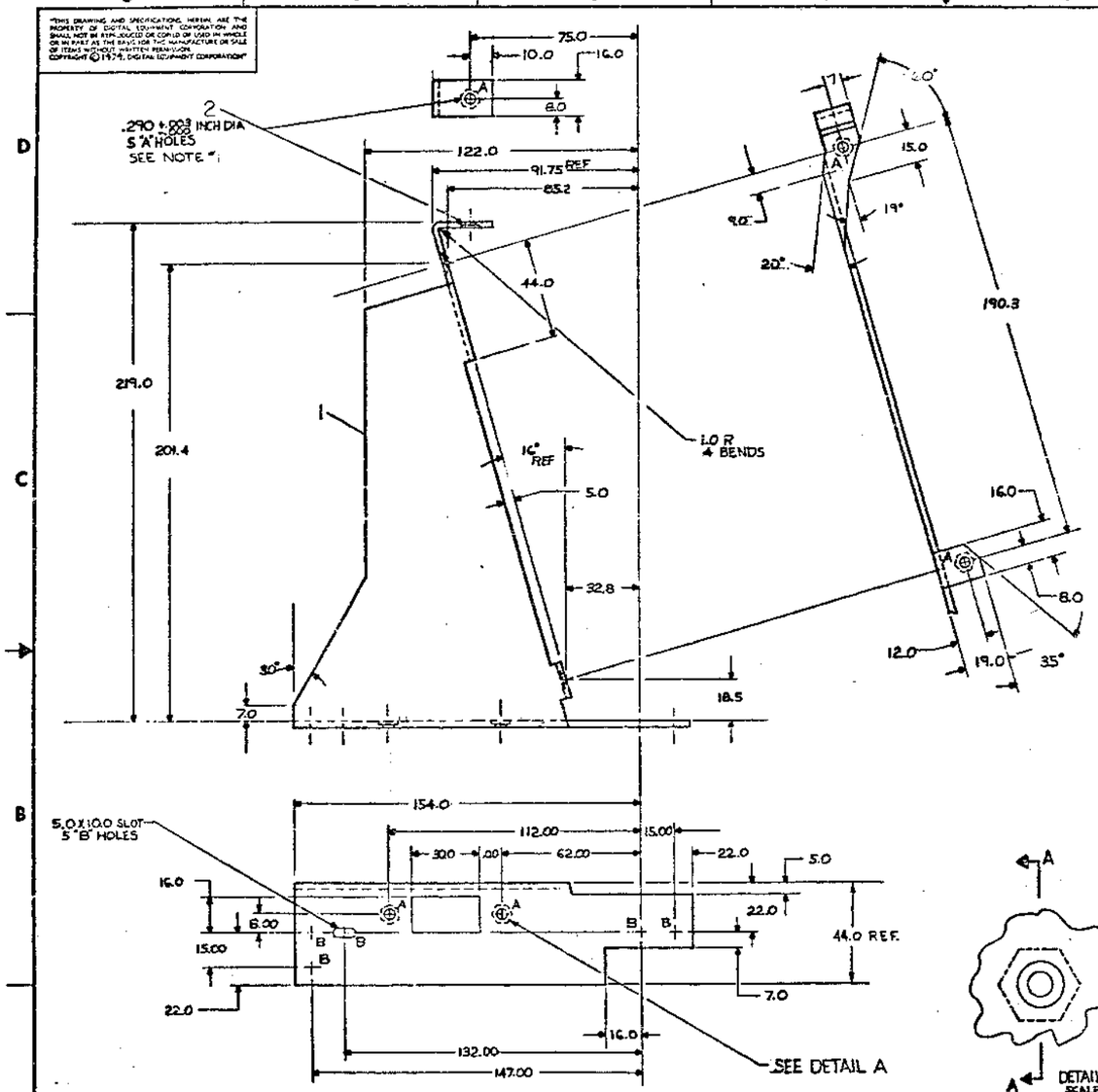
FINISH: 92-00120-94 — SCALE: 1/1 — SHEET: 1 OF 1 — DIST:

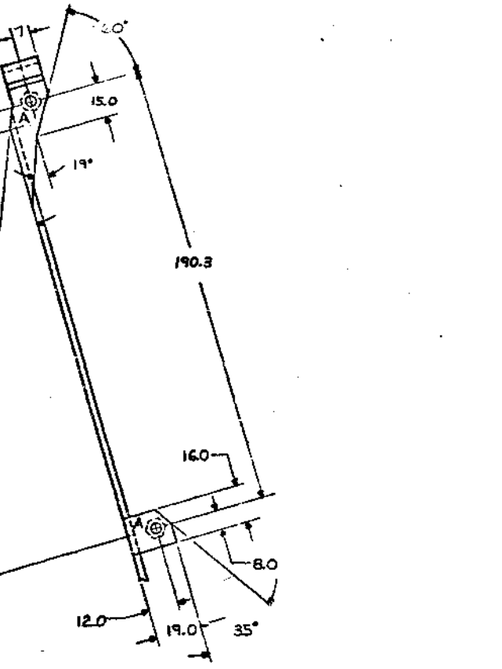
digital

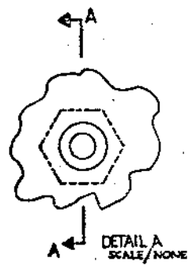
7413320-00 | IA | 1

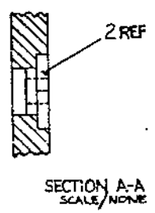
REVISIONS: ZONE | CHANGE NO. | REV.

NOTE:
1. INSTALL ITEM "(2) INSERT 5 "A" PLACES









METRIC DIMENSIONS

REVISIONS		
ORN	CHANGE NO.	REV

ITEM NO	DWG PART NO	DESCRIPTION	QTY
5	7006865	INSERT 8-32	2
1		BRACKET, CTR LEFT	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 20'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER OVER / TO					
SURFACE QUALITY IN MICROINCHES		OVER 1 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000
	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED (USE) ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY A VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG.

DRN R.A. HUTNAK 11/14/74 FIRST USED ON VT50
CHK D.C. 11/15/74
ENG. C. [illegible] 11/15/74
PROJ. ENG. [illegible] 11/15/74
PROD. [illegible]
NEXT HIGHER ASSY.

TITLE: BRACKET, CRT LEFT

MATERIAL	SIZE	CODE	NUMBER	REV
23(093) THK CRS	1	1A	7413321-0-0	
FINISH 9200120-94	SCALE 1/1			
	SHEET 1 OF 1	DIGT.		

digital

1 1A 7413321-00

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

PURCHASE SPECIFICATIONS

TITLE: YOKE DEFLECTION

1. GENERAL DESCRIPTION:
   Deflection Yoke with an inductance of 107 μH ± 5% horizontal coils connected in parallel, an inductance of 29.9 mH ± 10% vertical coils connected in series.

2. APPLICABLE DOCUMENTS: (Latest revision on date of order).
   U.L. FR-1 Fire Retardant

3. REQUIREMENTS:

3.1 Mechanical:

3.1.1 Dimensions: Reference Per Figure 1A and 1B

3.1.2 Yoke Lock: A screw tightened clamping ring shall be provided which allows the yoke to be locked both axially and radially in the desired position.

3.1.3 Workmanship: All units shall be manufactured in a careful and workmanship like manner in accordance with good design and sound practice. All units will be processed in such a manner that they are uniform in quality and free from cracks and voids in the case and other defects that will affect the life and proper functioning or appearance.

3.2 Electrical:

3.2.1 Schematic: Reference Per Figure 2

3.2.2 Test Procedures: Reference Per Figure 3

3.2.3 Deflection Angle: 110 degrees nominal.

3.2.4 Horizontal Coils:

A) Connection: Shall be in parallel

B) Inductance: 107 μH ± 5%

C) Resistance: 0.2 Ω ± 10%

D) Sensitivity: 8.4 A/230mm (with 11K anode potential).

E) Terminal Connections: 4, 6, and 5 ct or Flying Leads

APPROVED VENDOR — First Used On:

Per Qualified Vendor Listing — VT50

Unless Otherwise Specified.
Dimensions are in inches, tolerances are three decimals ± .005, two place decimals ± .02, one place decimal ± .1; Angles ± 0° 30'.

REVISION AUTHORIZATION			APPROVAL AND DATE		SIZE	CODE	NUMBER	REV
SIGNATURE	REV	DATE	Design Eng R. Puccl	Chief Engr	A	PS	1611900-0-0	
			Project Engr Ted DuLorenzo	Comp Engr M. Cherry	PAGE 1		OF 9	

DEC 8 (491)-1049-N173

3.2 Electrical: (continued)

3.2.4 Vertical Coils:

A) Connection: Shall be in series

B) Inductance: 29.9mH ± 10%

C) Resistance: 16.4 Ω ± 10%

D) Sensitivity: 504mA/175mm (with 11K anode potential)

E) Terminal Connections: 1 and 3 center tap 2 or Flying Leads

3.2.5 Beam Centering Magnets (shall be provided which will have the following characteristics:

A) Null Effective Field: With the beam centering magnets adjusted to null their effective field, there will be no deflection of the beam greater than 3mm measured at the center of a 90 degree 12 inch CRT faceplate, when the entire magnet assembly is rotated.

NOTE: There will be no yoke current flowing during this test.

B) Maximum Effective Field: With the beam centering magnets adjusted for maximum effective field, there will be at least 20mm deflection of the beam as measured at the center of a 90 degree 12 inch C.R.T. faceplate when the entire magnet assembly is rotated.

NOTE: There will be no yoke current flowing during this test.

3.2.6 Cross Talk: Maximum allowable cross talk 1/15 of the applied voltage @500 HZ or 1/200th @ 15,750 HZ

3.2.7 Deflection Centers: Horizontal deflection center shall be well within the conical part of the C.P.T. and Vertical & Horizontal deflection centers shall coincide.

3.2.8 Distortion: Reference Per Figure 4

3.2.9 High Voltage Breakdown: 500 Volts peak-peak min. Winding to Winding & Winding to Core.
NOTE: All beam centering and distortion measurements shall be made with, an 11K anode potential.

3.3 Solderability: All contacts will be tinned and ready for soldering as received with no further preparation required. They will be capable of providing well wetted solder joints when mated with an #18 AWG stranded, tinned copper wire lead. Standard Hand Soldering techniques will be employed using a Weller W-TCP Iron equipped with a PTE7 solder tip, at a soldering temperature of 700°F an Alpha DX4815F rosin core solder with a QQ-S-571 Flux shall be the materials used to solder the leads to the component.

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	
PAGE 2		OF 9	

DEC 8 (491)-1049-N173

3.4 Environmental:

3.4.1 Temperature:

A) Operating: +10°C to +70°C

B) Storage: −10°C to +80°C

3.4.2 Humidity: 20% to 80% over a temperature −10°C to +80°C without condensation.

3.4.3 Shock (non-operating): 50G shock pulse duration 30 ± 10m seconds in 6 orientation with 1/2 sine pulse.

3.4.4 Vibration:

A) Operating: .002" Double Amplitude from 8 to 50HZ, 0.256 Double Amplitude from 40 to 500HZ with one octave per minute duration.

B) Non-Operating: Vertical; 1.899 RMS overall from 10-300HZ. Acceleration Spectral Density; $0.029G^2$ HZ from 10 to 50 HZ, with approximately db/octave roll off from 50-200HZ.

3.5 Marking: Vendor name or symbol, DEC identifying number 1611900-00 and leads marked.

NOTE: Markings shall be impervious to a Trichlorethylene bath for 5 seconds of contact when applied with a cleaning brush.

3.6 Shelf Life: There shall be no degradation from initial measurements, when stored for 1 year at RH of 20% to 80% over a temperature range of −10°C to +80°C.

3.7 Packaging: Shall be enclosed in a non-corrosive container to the component and meet I.C.C. requirements for shipment by rail, airplane and truck.

NOTE:
All Flying leads shall be 18 inches long, #22 stranded hookup wire with U.L. approved (FR-1) PVC Insulation. Leads shall be stripped and tinned 5/8" from the end. Vertical Leads shall be Yellow and Green, Horizontal Leads shall be Red and Blue.

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	
PAGE 3		OF 9	

DEC 8 (491)-1049-N173

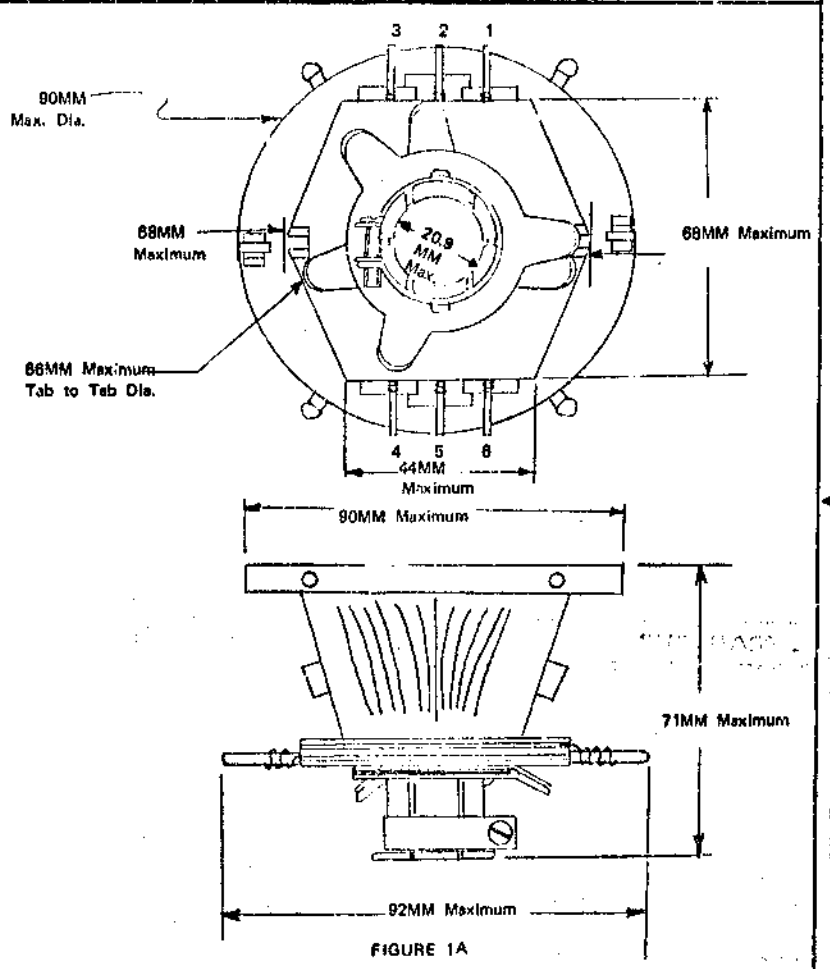
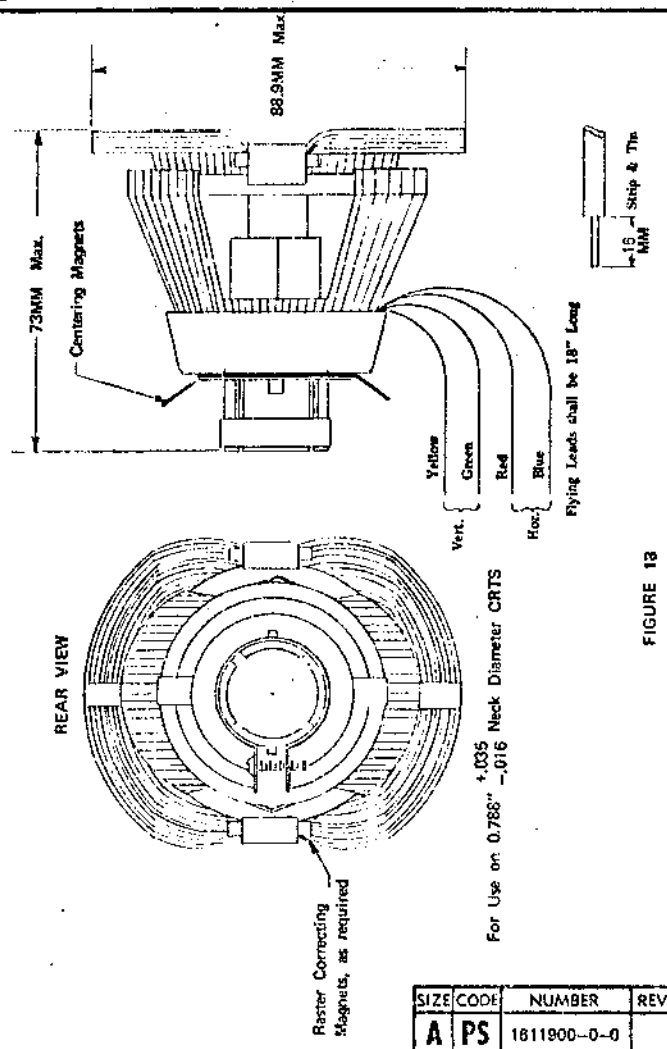


FIGURE 1A
MECHANICAL CONFIGURATION

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	
PAGE 4		OF 9	

DEC 8 (491)-1049-N173



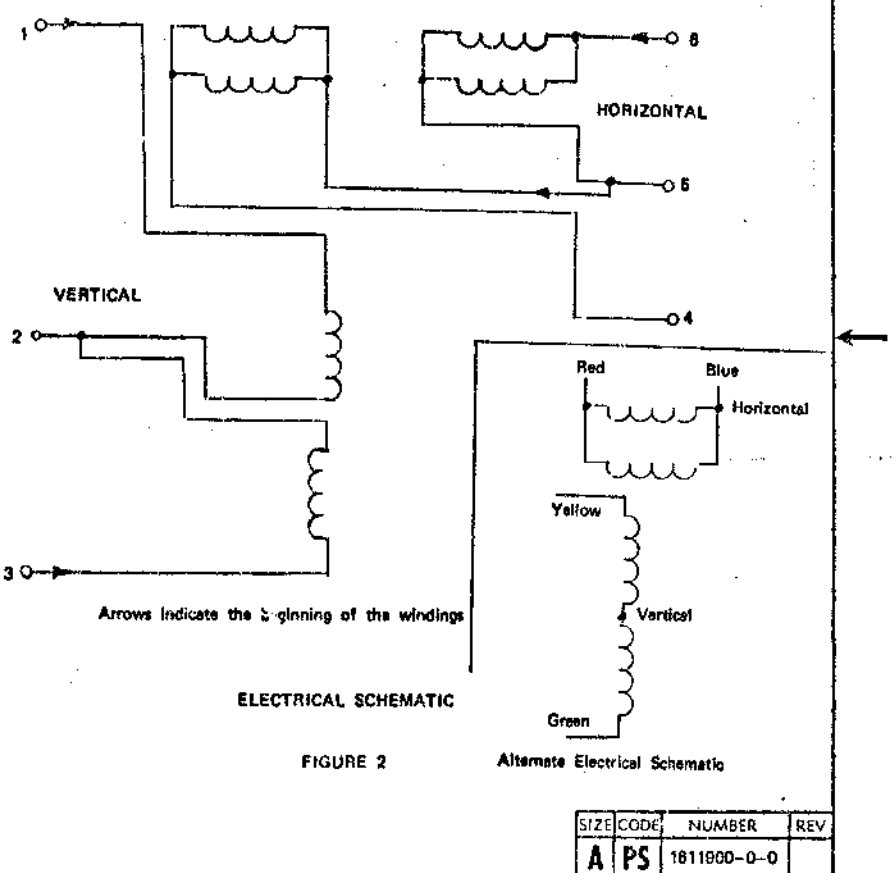
ALTERNATE MECHANICAL CONFIGURATION

FIGURE 1B

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	

PAGE 5 OF 9

DEC 8-(491)-1049-N173



ELECTRICAL SCHEMATIC

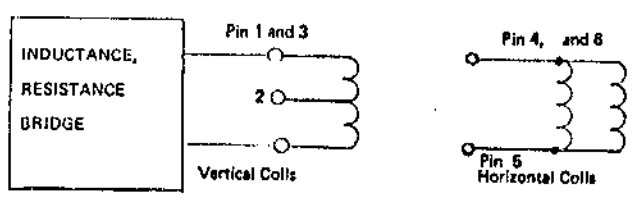
FIGURE 2

Alternate Electrical Schematic

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	

PAGE 6 OF 9

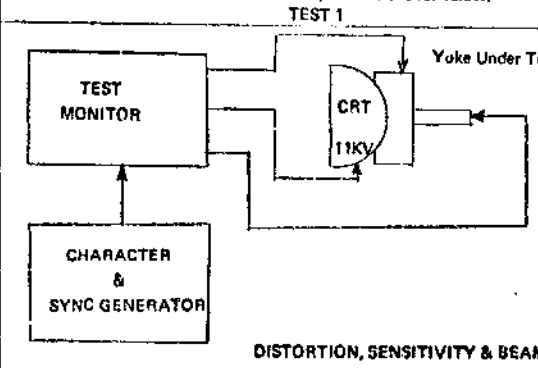
DEC 8-(491)-1049-N173



INDUCTANCE/RESISTANCE MEASUREMENTS

(measure L & Rdc. See specifications for values)

TEST 1

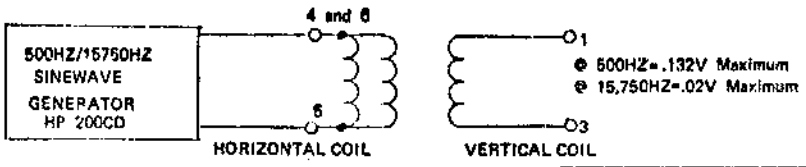


Observe that with standard signals applied to yoke, raster falls within limits of frame described in figure 4.

DISTORTION, SENSITIVITY & BEAM CENTERING

TEST 2

Measure Voltage applied (2 V-P-P) at pins 4, 5, and 6. Measure Voltage appearing at pins 1 and 3.



TEST 3 CROSS TALK

FIGURE 3

TEST PROCEDURES

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	

PAGE 7 OF 9

DEC 8-(491)-1049-N173

TEST 4: Deflection Range of Centering Magnets:

A) Two Yokes are required to perform this test. The Yoke under test is placed on the neck of the test monitor C.R.T. The second Yoke is not mounted on the C.R.T. but is wired into the monitor circuitry in the usual manner.

B) Adjust the centering magnets on the C.R.T. mounted Yoke for minimum deflection of the spot.

C) Rotate the entire magnet assembly and note the deflection limits of the spot.

D) Adjust the centering magnets for maximum deflection of the spot.

E) Rotate the assembly and note the deflection limits of the spot.

NOTE! (caution) all the above adjustments will be made with the brightness control set so that the spot is just barely visible to prevent burning the C.R.T. Phosphors.

TEST 5: Distortion:

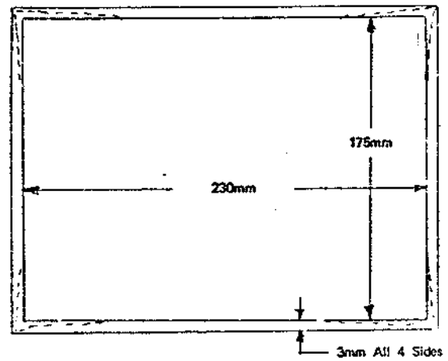
A. Place the yoke in an operable VT50 Monitor.

B. With height and width controls set ot produce a rastor 230mm wide by 175mm high, all distortion shall fall within the 3mm wide frame as shown in Figure 4.

SIZE	CODE	NUMBER	REV
A	PS	1611900-0-0	

PAGE 8 OF 9

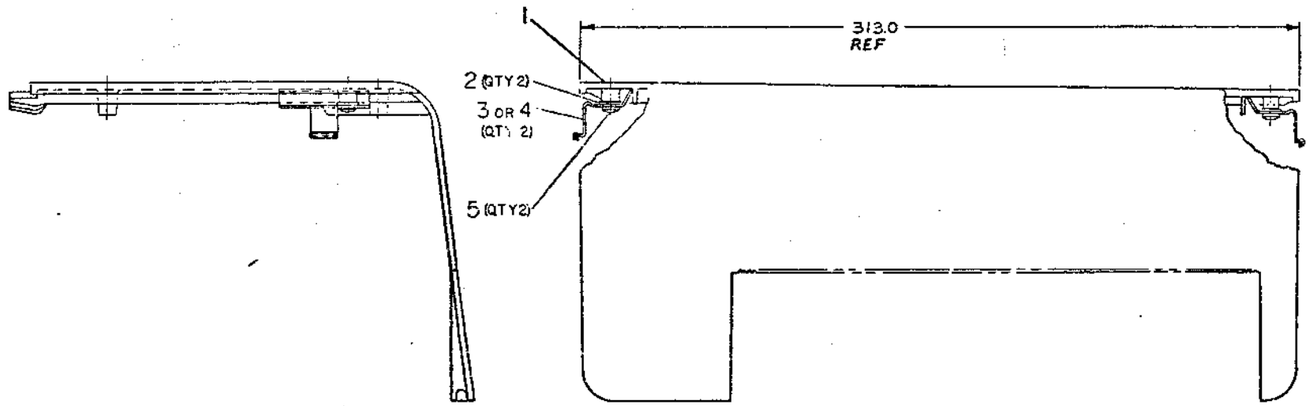
DEC 8-(491)-1049-N173



With a raster dimension of 230 x 175mm all distortion will fall within a 3mm wide band on each edge of the raster.

FIGURE 4
DISTORTION

LEGEND	
NUMBER	VARIATION
7010847-1-0	USE WITH COPIER
7010847-2-0	USE WITH-OUT COPIER



METRIC DIMENSIONS

2	2	SCREW, PAN HD. *8-32x.25	9007324-1	5
2	-	BRACKET, COPIER COVER	1-MD-74133290-0	4
-	2	BRACKET, COPIER COVER	1-MD-74133300-0	3
2	2	WASHER, FLAT	9006662	2
1	1	COPIER COVER	2-MD-7412574-00	1
		DESCRIPTION	VMS PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±1° 30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 3	OVER 3 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000
SURFACE QUALITY IN MICROINCHES	KNURL OR BEAD	90	90	125	125	250	500
	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

7010847-2-0
7010847-1-0

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL: SEE PARTS LIST

FINISH

DRN. P. Fogelsanger 1/24/75
CHK'D
ENG.
PROJ. ENG.
PROD.
NEXT HIGHER ASSY.
2-UA-VT50-0-0
SCALE 1/1
SHEET 1 OF 1

FIRST USED ON: VT50

TITLE: COPIER COVER ASSEMBLY

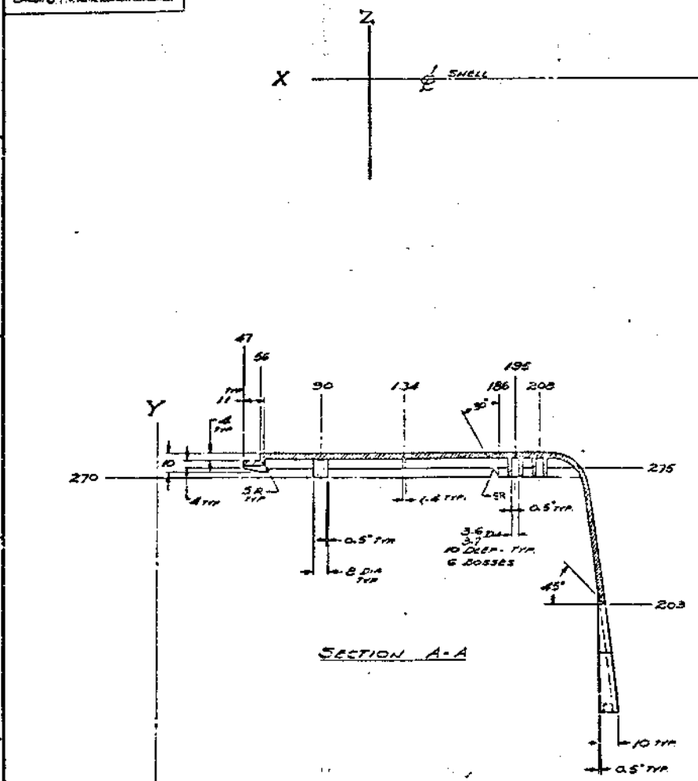
SIZE: A | CODE: AD | NUMBER: 7010847-0-0 | REV:

DIST:

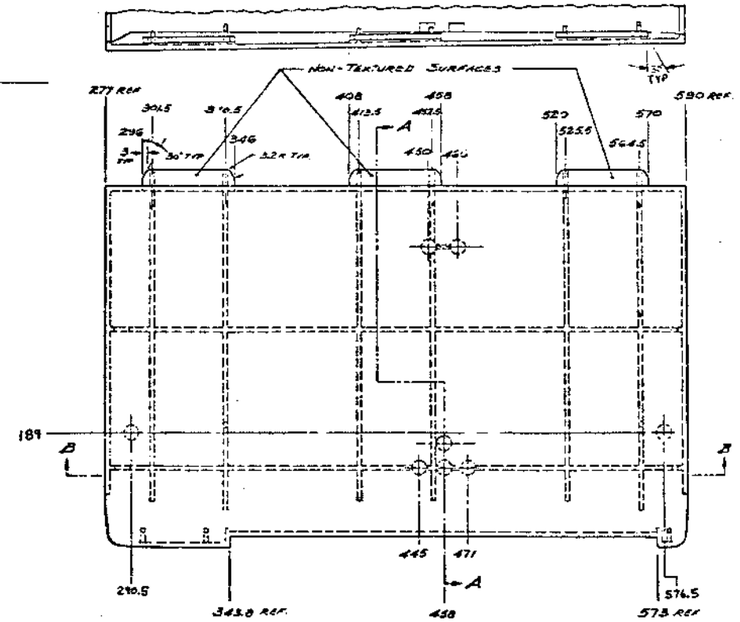
1 AD 7010847-0-0 2

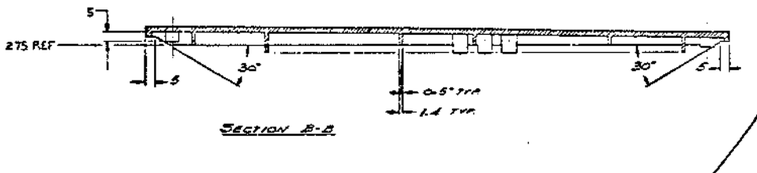
REVISIONS: REV. | CHANGE NO. | ISH

BEE FORM NO. 212-550

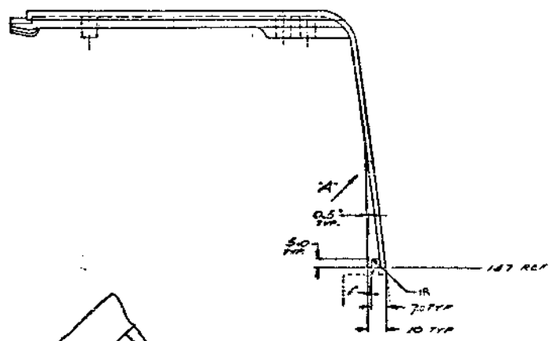


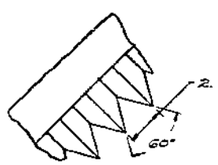
SECTION A-A



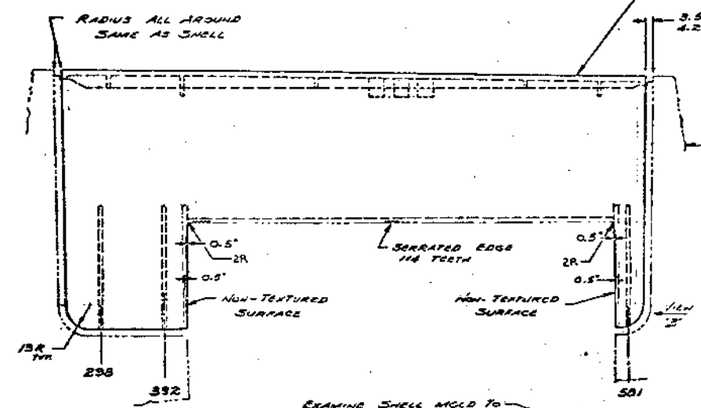


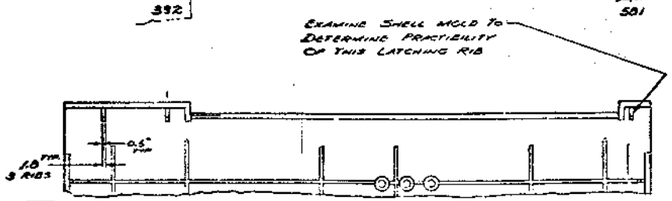
SECTION B-B

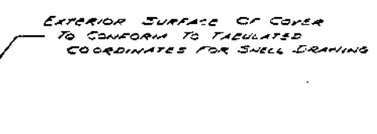


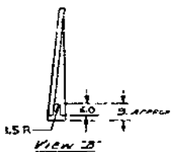


DETAIL OF SERRATION AT A
SCALE 10X









Notes

1. MAT'L: GENERAL ELECTRIC NORYL SE-100-7942
2. TEXTURE: ARMOR METALS E436
3. ALL DIMENSIONS ARE IN MILLIMETERS AND NOMINAL.
4. NOMINAL WALL THICKNESS = 3mm
5. UNLESS OTHERWISE SPECIFIED, DRAFT TO BE
   - 0.5° CORE SIDE
   - 1° CAVITY SIDE
6. THE FOLLOWING RADII ARE ALLOWABLE FOR TOOLING:
   - a. FILLET & ROUND OF ALL BOSSES AND RIBS 0.5R MAX.
   - b. EXTERNAL APPEARANCE SURFACE 0.5 0.8R
7. XYZ DATUM LINES ARE SAME AS USED ON SHELL DRAWING.

QTY.	DESCRIPTION	PART NO.
	PARTS LIST	

DIMENSIONAL TOLERANCE
DIMENSIONS ARE WILL MATCH SE SHELL UNLESS OTHERWISE SPECIFIED
TOLERANCES AS: ANGLES ±0.5° AREAS ±0.5 ±0.5 ±0.5 X.XX ±0.10 X.X ±0.5 X ±1.0 .XX ±0.05 .X ±0.1 X ±0.5
THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP
COSMETIC SURFACE QUALITY ✓
MATERIAL: SEE NOTE 1
FINISH: SEE NOTE 2

DRN. [illegible] DATE
CHK'D. [illegible] DATE
ENG. [illegible] DATE
PROJ. LDR. [illegible] DATE
PROD. [illegible] DATE
NEXT HIGHER ASSY.

digital

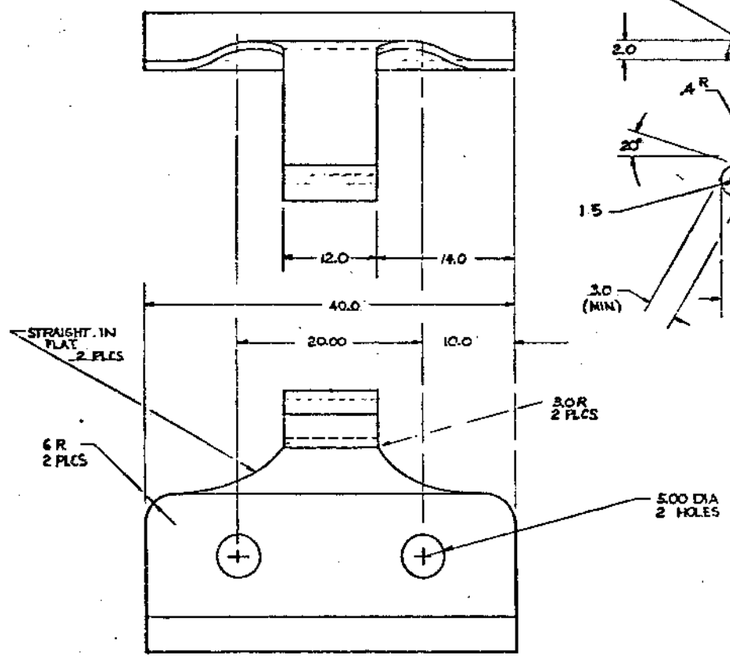
TITLE
COPIER COVER
VT 50

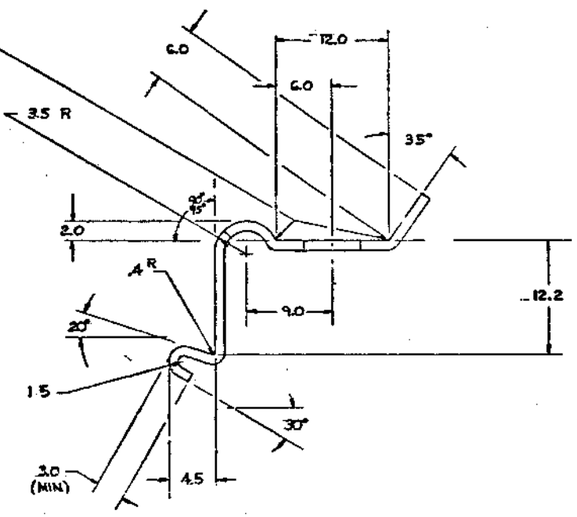
SIZE/CODE E MD
NUMBER 74125740
SCALE 1/2
SHEET 1 OF 1
DIST.

CHANGE NO. REVISIONS DATE

NOTES:

1. MATERIAL TO BE: .020 THK BERYLIUM COPPER, ½ HARD.





METRIC DIMENSIONS

DESCRIPTION	DWG. PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS		

ANGLES ±10' ±20'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 3	OVER 3 TO 10	OVER 10 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	101	102	103	104	106	110	
	PREFERRED ☒	103	104	106	110	114	125	

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTE #1

FINISH NONE

DRN R.A. HUTNAK 12/18/74
CHK'D [illegible]
ENG. K. [illegible]
PROJ. ENG. [illegible]
PROD [illegible]
NEXT HIGHER ASSY.
MD 7413347-0-0
SCALE 4/1
SHEET 1 OF 1

FIRST USED ON VT50

digital

TITLE
BRACKET, COPIER COVER

SIZE 1 | CODE MD | NUMBER 7413330-0-0 | REV.

DIST.

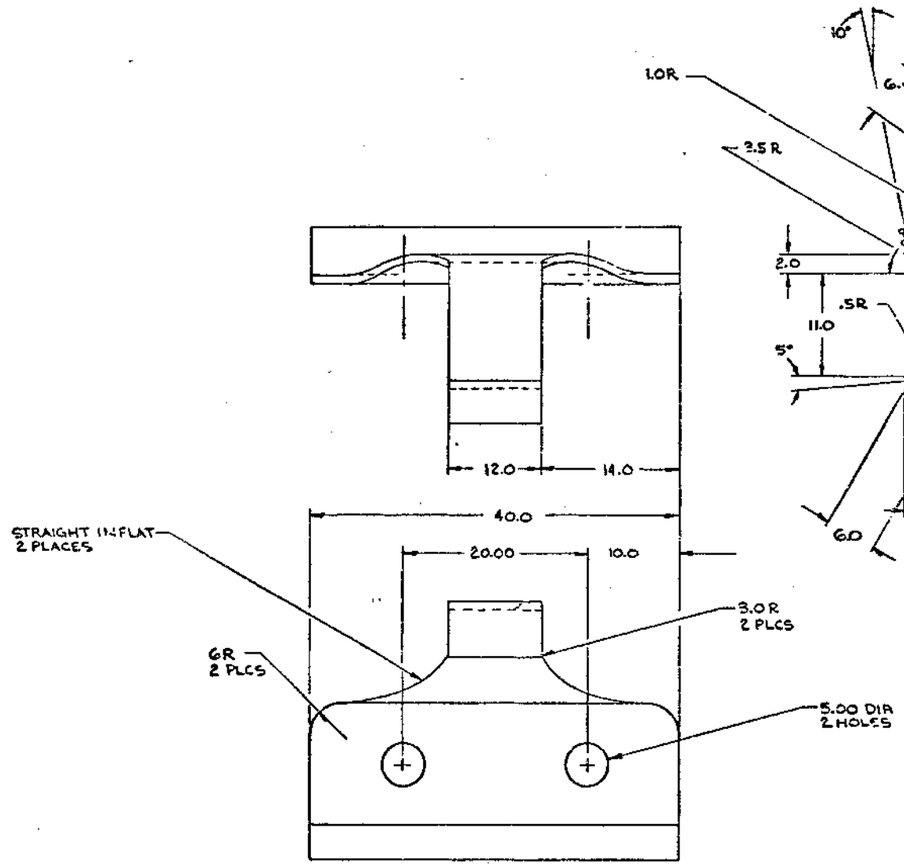
REVISIONS		
CHANGE NO.	CHK	REV.

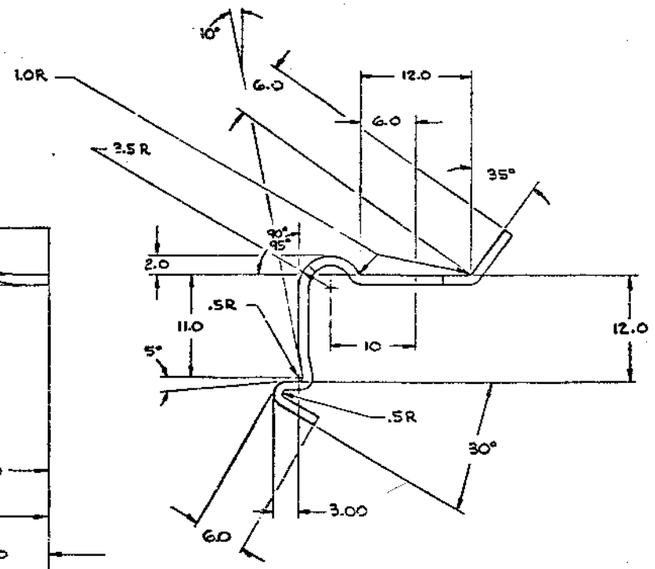
BIC FORM 144 841-330

1 MD 7413330-0-0

NOTES

1. MAT'L TO BE: .020 THK BERELIUM COPPER, 1/2 HARD





METRIC DIMENSIONS

DESCRIPTION		DWG/PART NO	ITEM NO
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS			
ANGLES ±0°30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE MILLIMETERS	
SURFACE QUALITY IN MICROINCHES	ICHECK ONE		
	MEDIUM	±0.1	±0.2
	PREFERRED	±0.3	±0.4

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN	5-3-72	FIRST USED ON VTE4
CHK		
ENG		
PROJ. ENG		
PROD		
NEXT HIGH ASSY.		

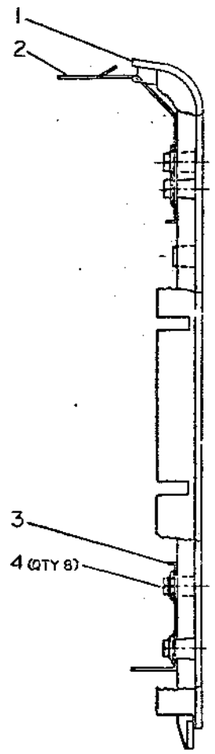
TITLE: BRACKET, COPIER COVER(REMOVABLE)

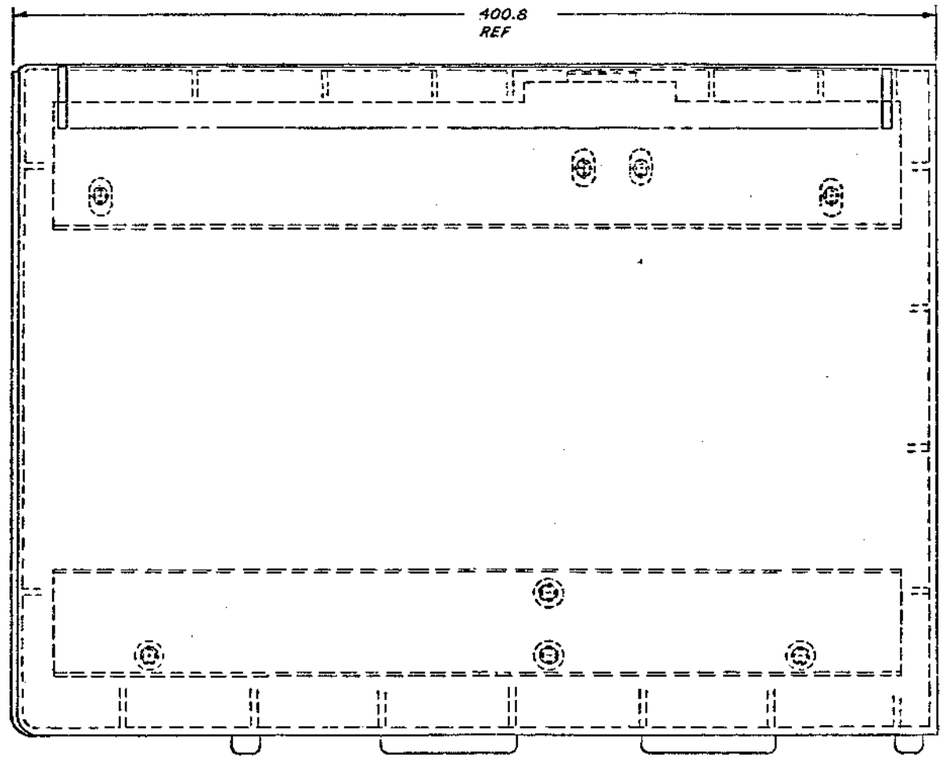
MATERIAL	SEE NOTE 1	SIZE	CODE / NUMBER / REV.
FINISH	NONE	A	MD 74133290-0
ASSY 108847-0-0	SCALE 1/1	SHEET 1 OF 1	DIST.

REVISIONS		
CHANGE NO.	CHK.	REV.

DEC FORM NO. 1043-1150

MD 74133290-0





METRIC DIMENSIONS

8	SCREW, HEX HD. #8 x 3/4	9009681-5	4
1	STIFFENER, BLANK COVER	D-1AD-7413831-0-0	3
1	HOLD DOWN, BLANK COVER	D-1AD-7413833-0-0	2
1	FIXED COVER	D-1AD-7412573-0-0	1
QTY	DESCRIPTION	DEC PART NO.	ITEM NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0°30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGES MILLIMETER					
		OVER 0 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	ROUGH ONES	1 TO 10	5 TO 25	25 TO 100	100 TO 300	300 TO 1000	1000 TO 2000
	MEDIUM	±0.1	±0.2	±0.3	±0.4	±0.6	±1.2
	PREFERRED	±0.3	±0.4	±0.6	±1.0	±1.6	±2.4

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

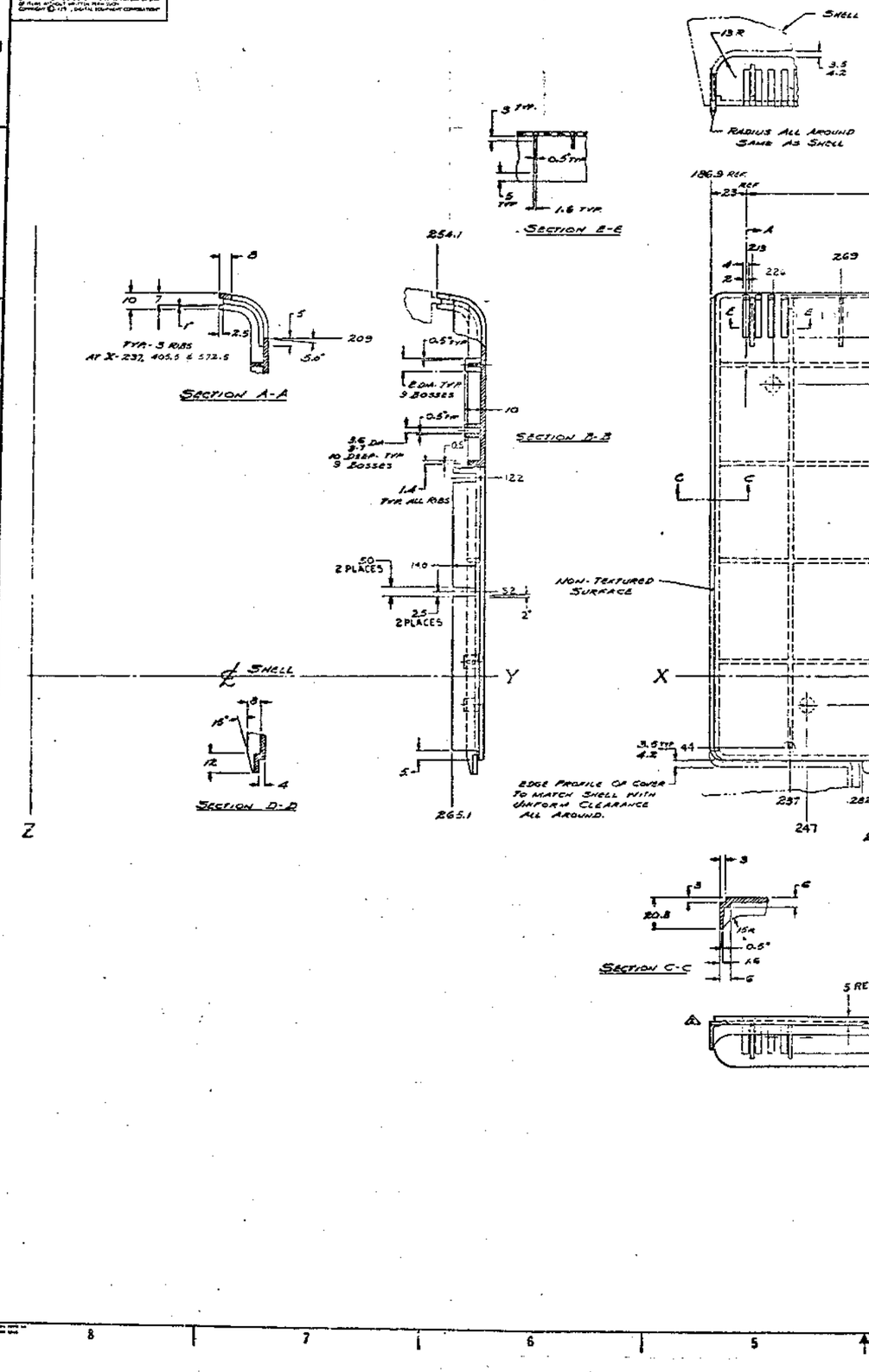
DO NOT SCALE DWG

DRN	1-23-75	FIRST USED ON VT50
CHK'D		digital
ENG		TITLE COVER BLANK FIXED ASSEMBLY
PROJ. ENG		
PROD.		
NEXT HIGHER ASSY.		
MATERIAL SEE PARTS LIST	-UA-VT50-0-0	SIZE 1 / CODE AD / NUMBER 7010846-0-0 / REV.
SCALE	1/1	
FINISH		SHEET 1 OF 1 / DIST.

REVISIONS		
CHANGE NO.	BY	DATE

DEC FORM NO. SAS-250

1AD 7010846-0-0



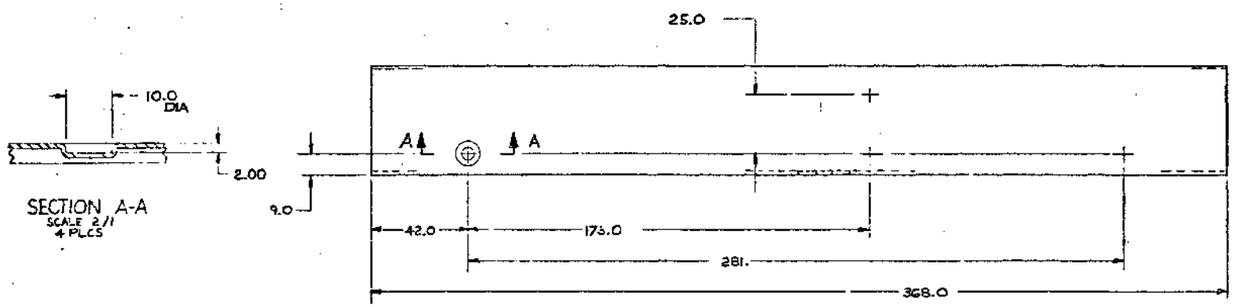
NOTES

1. MAT'L: GENERAL ELECTRIC NORYL SE-100-7942
2. TEXTURE: AKRON METALS E495
3. ALL DIMENSIONS ARE IN MILLIMETERS AND NOMINAL.
4. NOMINAL WALL THICKNESS = 3 mm
5. UNLESS OTHERWISE SPECIFIED, DRAFT TO BE
   0.5° CORE SIDE
   1° CAVITY SIDE
6. THE FOLLOWING RADII ARE ALLOWABLE FOR TOOLING:
   a. FILLET & ROUND OF ALL BOSSES AND RIBS 0.5 R MIN
   b. EXTERNAL APPEARANCE SURFACES 0.5 / 0.8 R
7. XYZ DATUM LINES ARE SAME AS USED ON SHELL DRAWING.

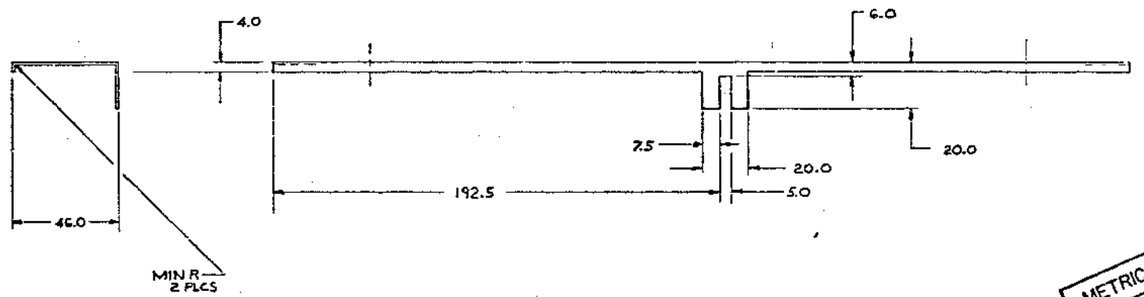
FIRST USED ON OPT-ION MODEL	QTY.	DESCRIPTION	PART NO
DIMENSIONAL TOLERANCE	DRN	DATE	digital
	CHK'D	DATE	
	ENGR	DATE	TITLE: FIXED COVER VT50
	MFG ENG	DATE	
	MFGR	DATE	
FIRST ANGLE PROJECTION	REMOVE BURRS AND EDGES SHARP		
	MATERIAL		SIZE: E
	FINISH AKRON METALS E495	SCALE: 1/1	SHEET 1 OF 1

NUMBER 74125730 REV

DRAWING NO. 74125730 REV A



SECTION A-A
SCALE 2/1
4 PLCS



METRIC DIMENSIONS

REV.	DESCRIPTION	DWG./PART NO.	ITEM NO.

REV.	REVISIONS	CHANGE NO.	CHK.

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE INCHES						
		OVER 0 TO 0.3	OVER 0.3 TO 1.2	OVER 1.2 TO 4.0	OVER 4.0 TO 12.0	OVER 12.0 TO 40.0	OVER 40.0 TO 80.0
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±.004	±.005	±.012	±.016	±.024	±.04
	PREFERRED ☐	±.012	±.016	±.025	±.04	±.063	±.01

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG.

DRN.		
CHK'D		
ENG.		
PROJ. ENG.		
PROD.		
N.S.A.T. HIGHER ASSY.		

FIRST USED ON: VT50

digital

TITLE: STIFFNER, BLANK COVER

MATERIAL	FINISH	SIZE	CODE	NUMBER	REV.
.048 ALUM THK C.R.S.	9930120-69	D		74-13331-0-0	

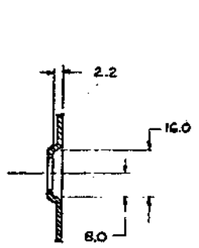
SCALE 1/1

SHEET 1 OF 1

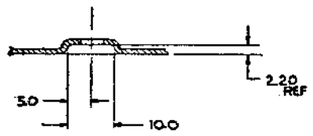
DIST.

NEXT CODE: D

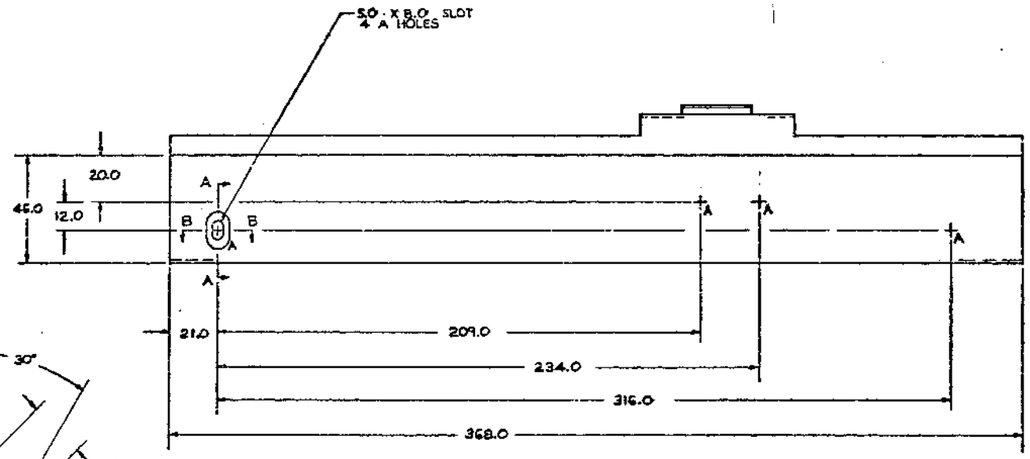
NEXT NUMBER: 74-13331-0-0

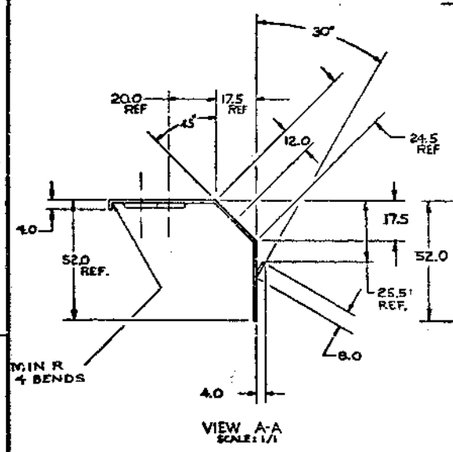


SECTION A-A
SCALE: NONE
TYP 4 PLCS

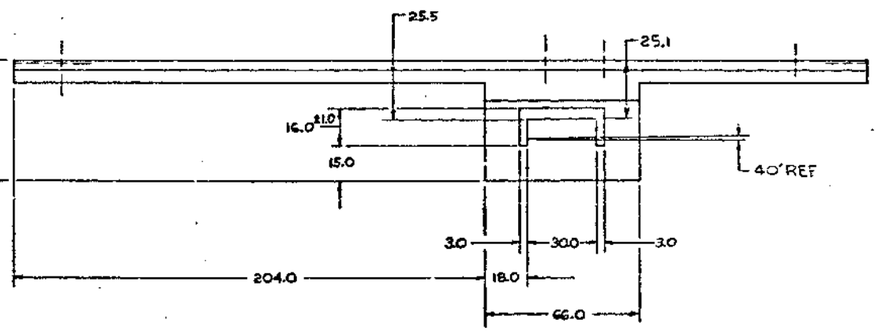


SECTION B-B
SCALE: NONE
TYP 4 PLCS





VIEW A-A
SCALE: 1/1



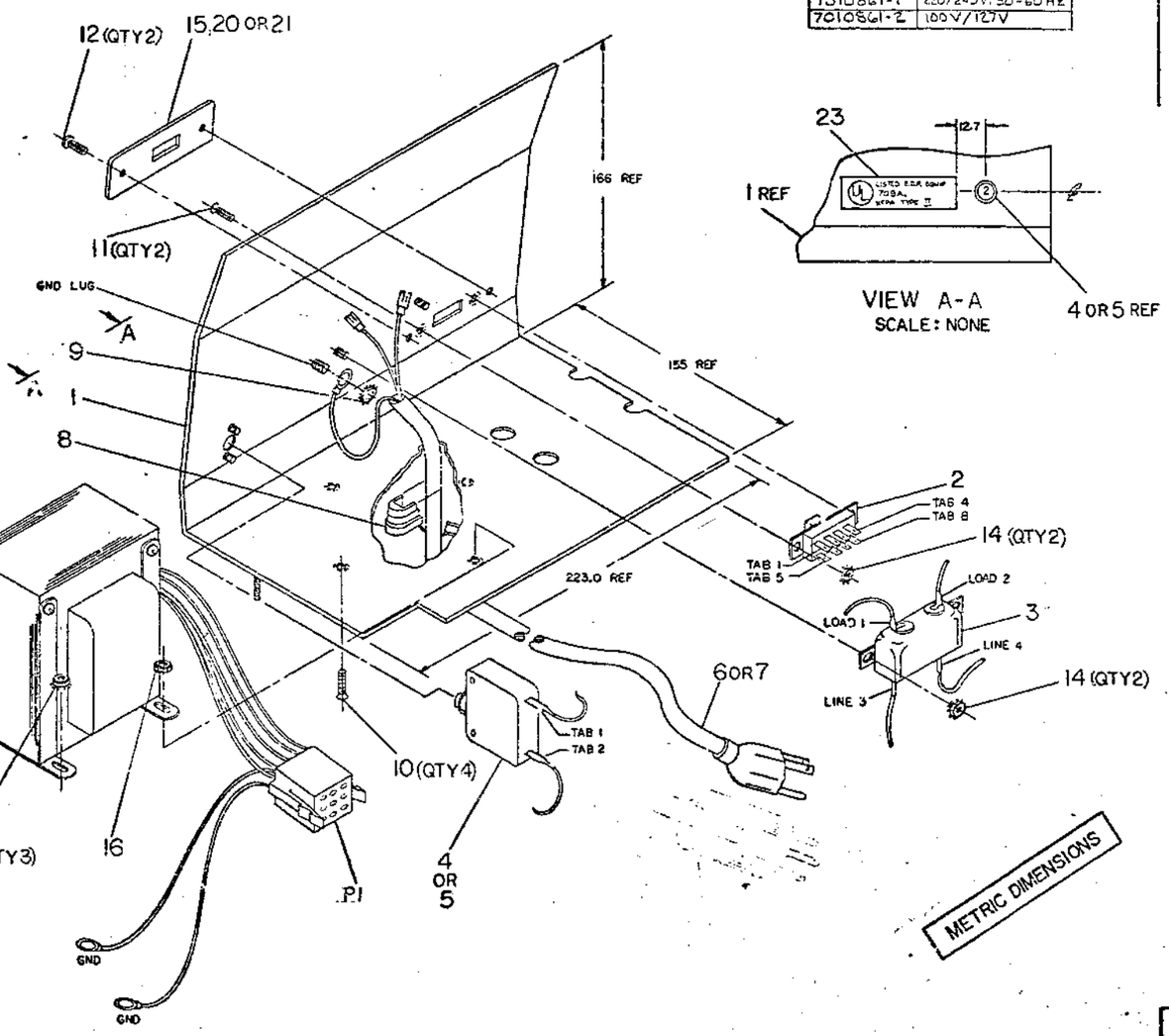
METRIC DIMENSIONS

REVISIONS	ZONE	CHANGE NO.	REV.

DESCRIPTION		DWG PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS			
ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	SUGGESTED DIMENSION RANGE MILLIMETER	
SURFACE QUALITY IN MICROINCHES	MEDIUM		
	PREFERRED		
QUANTITY & VARIATION			
THIRD ANGLE PROJECTION	DRN. P.C. HUTNAK 12/17/74	FIRST USED ON VT50	digital
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D R. Quan 12/17/74	TITLE COVER, BLANK HOLD DOWN	
	ENG. R. Quan 12/17/74		
	PROJ. ENGR. [illegible] 12/17/74		
DO NOT SCALE DWG	PROD. [illegible] 12/17/74		
	NEXT HIGHER ASSY		
MATERIAL 1.2 (.048) THK. CRS.	12-7010 [illegible] 0-0	SIZE 1 CODE MD NUMBER 7413333-0-0	REV
FINISH 92-00120-66	SCALE 1/1		
	SHEET 1 OF 1	DIST.	

1 MD 7413333-0-0

LEGEND	
NUMBER	VARIATION
7010861-0	115V, 60 HZ
7010861-1	220/240V, 50-60 HZ
7010861-2	100V/127V



VIEW A-A
SCALE: NONE

METRIC DIMENSIONS

1	1	1	STICKER, VT50 U.L.	9X-7493218-0-0	23
1	-	-	HARNESS, TRANSFORMER (50HZ)	3-IA-7011131-1-0	22
1	-	-	PLATE, VT50-51	3-IA-7413407-3-0	21
-	1	-	PLATE, VT50-51	3-IA-7413407-2-0	20
-	1	-	HARNESS, TRANSFORMER (60HZ)	3-IA-7011131-0-0	19
-	-	1	HARNESS, TRANSFORMER (50HZ)	1-IA-7011130-0-0	18
AR	AR	AR	TUBING, SHRINKABLE WHT	9107253-09	17
1	1	1	NUT, 8-32, HEX	9006561	16
-	-	1	PLATE, VT50-51	2-IA-7413407-1-0	15
4	4	4	NUT, 4-40, KEP	9006557	14
3	3	3	NUT, 8-32, KEP	9006563	13
2	2	2	SCREW, 8-32X.250 BUTTON HD	9009744	12
2	2	2	SCREW, 4-40X.312 FLATHEAD	9006010-02	11
4	4	4	SCREW, 8-32X.312 FLATHEAD	9006036-02	10
1	1	1	NUT, 10-32, KEP	9006565	9
1	1	1	RELIEF, CABLE STRAIN	900-492-02	8
1	1	-	CORD POWER, 220/240	9-IA-7011013-1	7
-	-	1	CORD POWER, 115V	9-IA-7011013-0	6
-	1	-	BREAKER CIRCUIT	1210292-01	5
1	-	1	BREAKER CIRCUIT	1210292-00	4
1	1	1	FILTER	1212503	3
1	1	1	SWITCH	1211997	2
1	1	1	PLATE MTG TRANSFORMER	9-IA-7412840-0-0	1
			DESCRIPTION	DIG. PART NO.	ITEM NO.

7010861-2
7010861-1
7010861-0

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ± 30'	CLASS OF ACCURACY	DECIMALS				
		.X ± 1	.XX ± .1	.XXX ± .05	FRACTIONS ± 1/64	
SURFACE QUALITY IN	INCH SERIES	1/2	32	100	500	1000
	METRIC	12.5	1.27	2.54	12.7	25.4
MACHINED SURFACES	MEDIUM	101	102	103	104	105
	PREFERRED	103	104	106	110	125

QUANTITY & VARIATION

THIRD ANGLE PROJECTION	DRWG	9-5-75	FIRST USED ON VT50
REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D		TITLE TRANSFORMER ASSY
	ENG		
	PROJ. ENGR		
	PRODN. MGR.		
DO NOT SCALE DWG	NEXT HIGHER ASSY.		
MATERIAL SEE PARTS LIST	9-IA-VT50-0-0	SIZE 1	CODE AD
FINISH	SCALE NONE	NUMBER 7010861-0-0	REV.
	SHEET 1 OF 2	DIST.	

digital

REVISIONS			
	DWG. OR ECO NO.	CHK.	REV.
1-2	5-15-75		

DEC FORM NO. BM1-1320

115 VOLTS
60 HZ

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM WITH	TO POINT	TO CONNECTION	TO WITH	SIGNAL
18	—	—	—	P1	—	—	—	—	
4	—	—	1	——	—	—	S1-5	—	
	—	—	2	——	—	—	S1-1	—	
	—	—	3	——	—	—	——	—	NOT USED
	—	—	4	——	—	—	——	—	NOT USED
	10	BLK	13	FL LOAD 1	17	18	CB-1	17	
	14	BLK	14	S1-2	—	17	CB-2	17	
	14	WHT	15	S1-6	—	16	FL LOAD 2	17	
↓	18	GRN	19	——	—	—	GND	—	
18	18	GRN	20	——	—	—	GND	—	
6	18	WHT	—	——	—	—	FL LINE 3	17	
6	18	BLK	—	——	—	—	FL LINE 4	17	
6	18	GRN	—	——	—	—	GND	—	

100/127 VOLTS
220/240 VOLTS
50-60 HZ

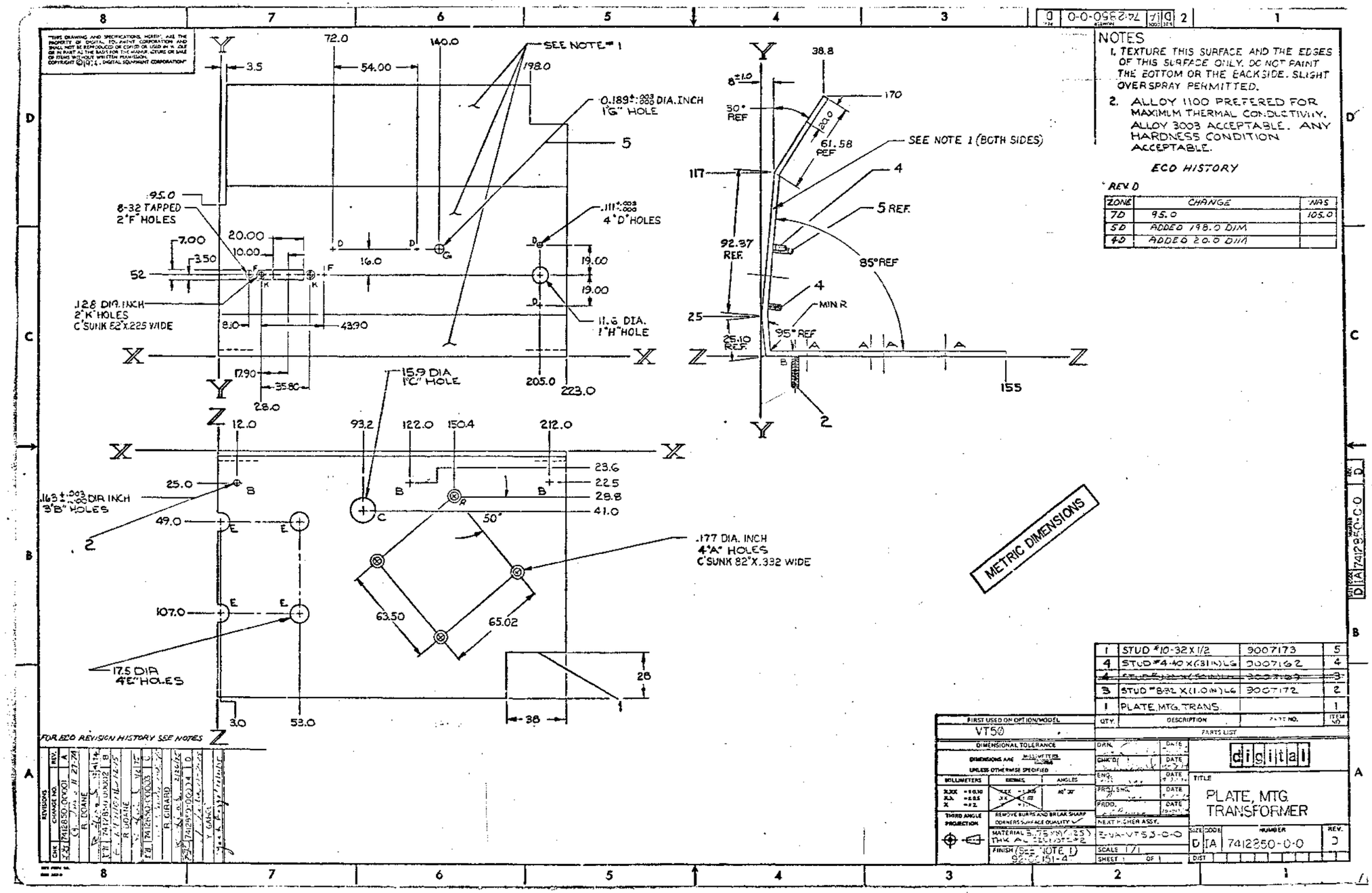
WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM WITH	TO POINT	TO CONNECTION	TO WITH	SIGNAL
19or22	—	—	—	P1	—	—	——	—	
4	16	BLK	1	——	—	—	S1-1	—	
	18	GRN	2	——	—	—	GND	—	
	18	GRN	3	——	—	—	GND	—	
	14	BLK	12	——	—	—	CB-2	17	
	18	BLK	17	CB-1	15	18	FL LOAD 1	17	
	14	WHT	15	——	—	—	FL LOAD 2	17	
	18	BLK	13	——	—	—	S1-2	—	
	18	BLK	14	——	—	—	S1-3	—	
	18	WHT	15	——	—	—	S1-5	—	
	18	WHT	16	——	—	—	S1-6	—	
	18	BLK/WHT	22	——	—	—	S1-4	—	
	18	WHT	24	——	—	—	S1-7	—	
	18	WHT	25	——	—	—	S1-8	—	
↓	16	RED/YEL	26	——	—	—	——	—	NOT USED
19or22	16	RED/YEL	27	——	—	—	——	—	NOT USED
7	18	GRN	—	——	—	—	FL LINE 4	17	
7	18	BLU	—	——	—	—	FL LINE 3	17	
7	18	GRN/YEL	—	——	—	—	GND	9	

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	*NUMBER	REV.
TRANSFORMER ASSY	1	AD	7010861-0-0	
SCALE None SHEET 2 OF 2	DIST.			

7010861-0-0
1 AD



NOTES

1. TEXTURE THIS SURFACE AND THE EDGES OF THIS SURFACE ONLY. DO NOT PAINT THE BOTTOM OR THE BACKSIDE. SLIGHT OVERSPRAY PERMITTED.
2. ALLOY 1100 PREFERED FOR MAXIMUM THERMAL CONDUCTIVITY. ALLOY 3003 ACCEPTABLE. ANY HARDNESS CONDITION ACCEPTABLE.

ECO HISTORY

REV D

ZONE	CHANGE	WAS
7D	95.0	105.0
5D	ADDED 198.0 DIM.	
4D	ADDED 20.0 DIA	

ITEM NO	QTY	DESCRIPTION	PART NO.
5	1	STUD #10-32 X 1/2	9007173
4	1	STUD #4-40 X (.81 IN) LG	9007162
3	1	STUD #832 X (1.0 IN) LG	9007172
2	1	PLATE, MTG, TRANS.	
1			

PARTS LIST

FIRST USED ON OPTION/MODEL: VT50

DIMENSIONAL TOLERANCE

DIMENSIONS ARE MILLIMETERS UNLESS OTHERWISE SPECIFIED

MILLIMETERS	DECIMAL	ANGLES
X.XXX ±0.10	XXX ±.005	±0° 30'
X.X ±0.5	XX ±.02	
X ±2.		

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY

MATERIAL 5.75 MM (.25) THK AL 1100 H12

FINISH (SEE NOTE 1) 92-151-4

DRN. R. DOANE 3-14-74

CHK'D Y. GANZ 3-14-74

ENG. 3-17-74

PROJ. SPEC.

PROD.

NEXT HIGHER ASSY.

SCALE 1/1

SHEET 1 OF 1

digital

TITLE: PLATE, MTG TRANSFORMER

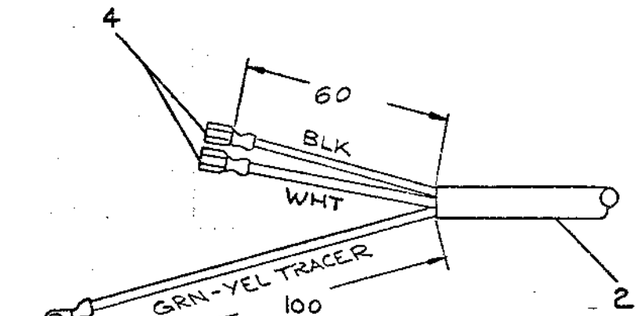
SIZE D | CODE IA | NUMBER 7412350-0-0 | REV. D

DIST

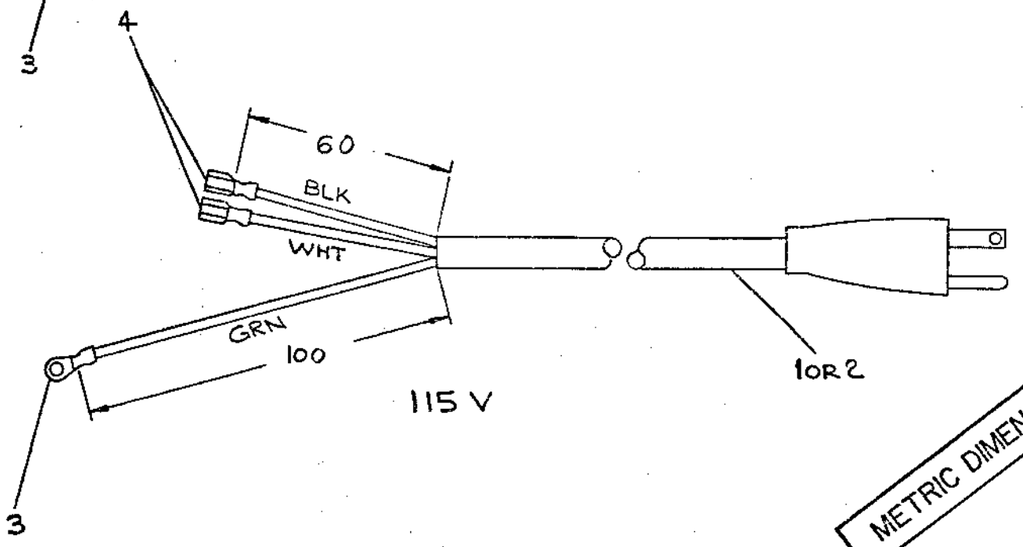
REVISIONS				
DIM	CHANGE NO.	REV.		
4D	7416850-00X01	A	R. DOANE	3-14-74
5D	7412850-00X02	B	R. DOANE	3-14-74
7D	7412850-00X03	C	R. GIRARD	3-14-74
3D	7412850-00X04	D	Y. GANZ	3-14-74

LEGEND	
PART NO.	VARIATION
7011019-0	115 V
7011019-1	220/240/127 V

NOTES:



220/240/127V



115 V

METRIC DIMENSIONS

7011019-1	7011019-0			
2	2	CONN, FASTON (RED)	9007928-01	4
1	1	LUG, BARREL RING (BLU)	9007917	3
1	–	POWER CORD 220/240/127	1700043	2
–	1	POWER CORD 115 V	1700015-9	1

PARTS LIST

FIRST USED ON: OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50				

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS: .XXX = .005, .XX = .02, .X = .1
ANGLES: ±0 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY 1
MATERIAL: SEE PARTS LIST
FINISH

DRN.		DATE 3/11/75
CHK'D		DATE 4-11-75
ENG.		DATE 4-25-75
PROJ. ENG.		DATE 4-25-75
PROD.		DATE 5/7/75

NEXT HIGHER ASSY. 1-AD-7010861-0-0
SCALE NONE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: POWER CORD (VT50)

SIZE	CODE	NUMBER	REV.
C	IA	7011019-0-0	

DIST.

REVISIONS			
REV.	CHANGE NO.	CHK	DATE

DEL FORM NO. DRC 100-B

NUMBER 7011019-0-0 REV C

WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM	REMARKS
1	18	—	—	T1-5	—	1	—	4&5	
	18	—	—	T1-4	—	2	—	4&5	
	16	—	—	T1-3	—	3	—	7	SEE NOTE #1
	16	—	—	T1-2	—	4	—	7	SEE NOTE #1
8	18	GRN	5	P1-1	3	20	—	6	
8	18	GRN	6	P1-2	3	19	—	6	
1	16	—	—	T1-1	—	7	P1-6	3	
	"	—	—	T1-6	—	8	P1-9	3	
		—	—	T1-7	—	9	P1-7	3	
		—	—	T1-8	—	10	P1-8	3	
		—	—	T1-9	—	11	P1-5	3	
	16	—	—	T1-10	—	12	P1-4	3	
9	18	BLK	13	—	12	18	—	12	
10	14	BLK	14	—	4&5	17	—	12	
11	14	WHT	15	—	4&5	16	—	12	

NOTE:
1. POINTS 3 & 4 ARE NOT USED AT PRESENT TIME. COIL WIRES AND HOLD IN PLACE WITH CABLE TIE.
ITEM #7, SHRINK TUBING TO BE USED ON END OF WIRE.

2 REF P1
3 (QTY 2)
VIEW A-A (REAR VIEW)

5 — B — B

2 P1 — A — A

5 REF 4
VIEW B-B (REAR VIEW) 4 PLACES

5 — B — B

DO NOT SCALE — 594.6

0MM 76.2MM 152.4MM 228.6MM 304.8MM

SCALE
DO NOT REDUCE
(FOR MFG PURPOSES ONLY)

METRIC DIMENSIONS

	ITEM NO	QTY	DESCRIPTION	DEC PART NO	ITEM NO
X	3	3	CABLE TIES	3007031	13
②	4	1	QUICK CONN. FEMALE	3007228	12
		AR	WIRE, #14 AWG, WHT	9107370-99	11
		AR	WIRE, #14 AWG, BLK	9107370-00	10
		AR	WIRE, #18 AWG, BLK	9107360-00	9
		AR	WIRE #18 AWG GRN	9107360-55	8
⊖		AR	TUBING, SHRINK WHT	9107253-09	7
△	2	1	TERM., QUICKCONNECT	9007930-00	6
	+		HOUSING (FASTAB)	12.10820-21	5
①	4	1	MINI FASTAB	12.10820-04	4
▯	8	1	SOCKET, TERM	1209379-00	3
	1	1	CONN. 9 SKT	1209350-09	2
	1	1	TRANSFORMER	1611533	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0°30'	CLASS OF ACCURACY (CHECK ONE ☑)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 0 TO 3	OVER 3 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2500
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.8	±1.0
	PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL —

FINISH —

DRN — CHK'D — ENG — PROJ. ENG — PROD. —

NEXT HIGHER ASSY. —

FIRST USED ON VT50

digital

TITLE HARNESS, TRANSFORMER (50HZ)

SIZE 1 | CODE TA | NUMBER 7011130-0-0 | REV.

SCALE 1/1 | SHEET 1 OF 1 | DIST

REVISIONS — REV. — CHANGE NO. — PWR

BCD FORM NO. BM1-130

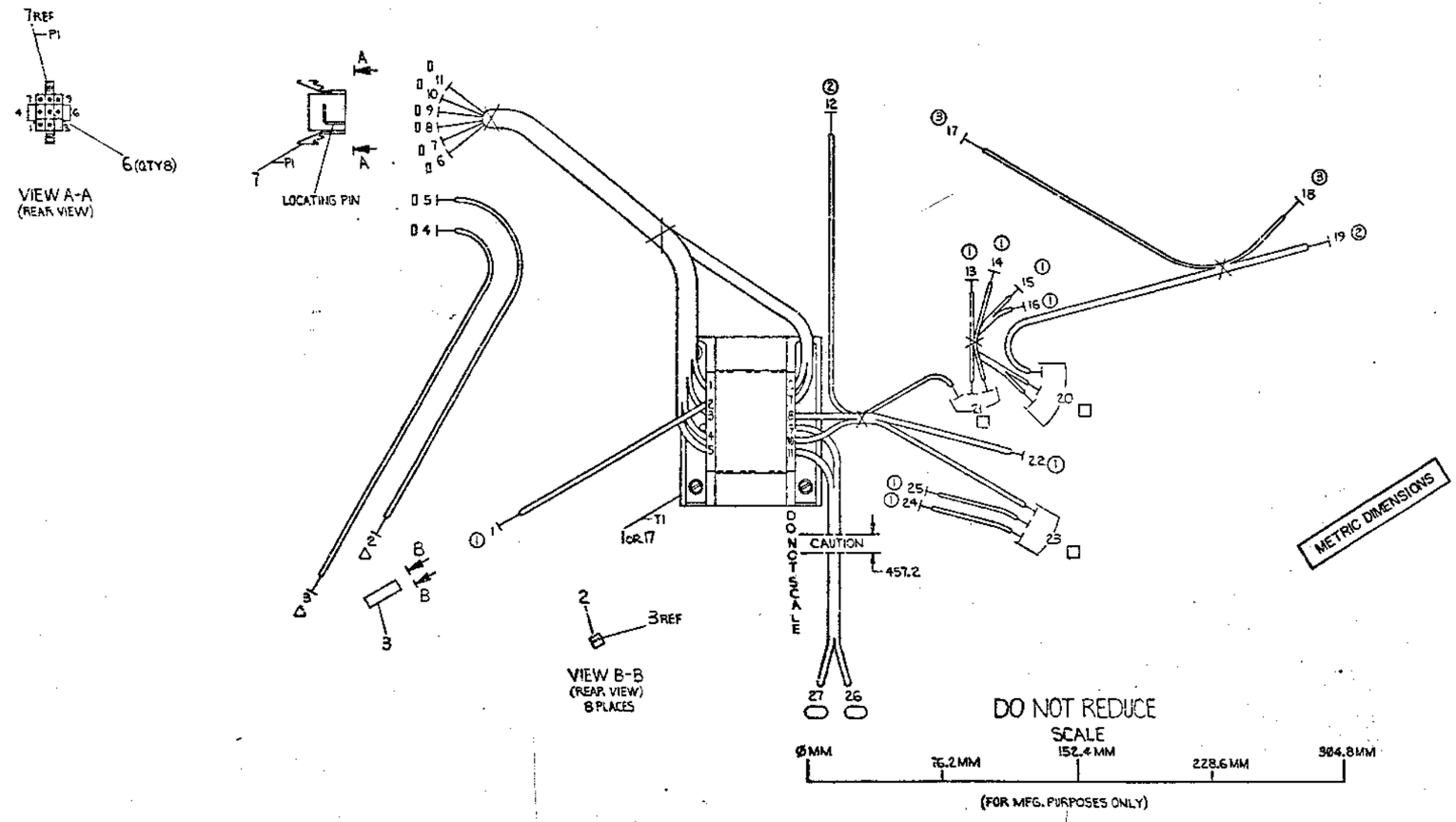
7011130-0-0

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO ITERM	REMARKS
1	16	BLK		T1-2		1		2&3	
4	18	GRN			5	5	P1-2	2&7	
4	18	GRN			5	4	P1-1	1	
for17	16	VIO		T1-7		6	P1-4	1	
	1	VIO		T1-6		7	P1-5		
		VIO/BLK		T1-1		8	P1-6		
		BLU		T1-5		9	P1-7		
	1	BLU		T1-3		10	P1-8		
	16	BLU/BLK		T1-4		11	P1-9	5&7	
8	14	BLK	12		3				
11	18	BLK	13		2&3	21		10	
11	18	BLK	4		2&3				
14	18	WHT	15		2&3				
14	18	WHT	16		2&3	20		10	
13	14	WHT	19		3				
11	18	BLK	17		12	16		12	
for17	16	BLK/WHT		T1-8		22		2&3	
	16	WHT		T1-10					
14	18	WHT	24		2&3	23		10	
14	18	WHT	25		2&3				
for17	16	RED/YEL		T1-9		26		15	SEE NOTE #1
	16	RED/YEL		T1-11		27		15	

LEGEND	
NUMBER	VARIATION
7011151-0	220/240 VOLTS
7011151-1	100/127 VOLTS

NOTES:
1. POINTS 26 & 27 ARE NOT USED AT PRESENT TIME. COIL WIRES TO BE HELD IN PLACE WITH CABLE TIE (ITEM #8). SHRINK TUBING (ITEM #5) TO BE USED AT END OF WIRES.



ITEM	QTY		DESCRIPTION	PART NO.	
	1	—	XFMR, 100/127V	1A3139	17
X	6	S	TIE,CABLE	3227791	6
	AR	A/R	SHRINK TUBING (WHT)	9077959-29	5
	AR	A/R	WIRE, #18 AWG STRD (VIO)	9077959-19	4
	AR	A/R	WIRE, #18 AWG STRD (WHT)	9077959-19	18
③	2	2	TERM, QUICK CONNECT	9007917	17
	AR	A/R	WIRE, #18 AWG STRD (BLK)	9077959-29	1
□	3	3	SPLICE, WIRE 3-10 AWG	9007575	2
②	2	2	TERM, QUICK CONNECT	9007919	9
	AR	A/R	WIRE, #18 AWG STRD (BLK)	9077959-29	9
	1	1	PCHN, 3 SKT HOUSING	1209560-29	1
①	8	8	CONN, SKT	2209579-30	8
△	2	2	TERM, RING	9007931-29	3
	AR	A/R	WIRE, #18 AWG STRD (GRN)	9077959-19	4
	8	8	HOUSING, 1 STAB SKT	9 09531**	3
④	8	8	TERM, MINI TASTAB	9 14851-**	2
	1	1	CONN, RECEPTACLE, 12 POS	9 10159-30	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ± 30'	CLASS OF ACCURACY								
SURFACE QUALITY									
SENSITIVITY & VARIATION	MEDIUM								
	PRECISION								

DRN — DATE —
CHKD — DATE —
ENGR APPR — DATE —
PROJ ENGR APPR — DATE —
PROD — DATE —
NEXT HIGHER ASSY —
DO NOT SCALE DWG

MATERIAL SEE PARTS LIST
FINISH

NEXT ASSY USED ON VT52

TITLE HARNESS, TRANSFORMER 50-3

1-13-70 DOB 81-0-0

SIZE A3 CODE IDENT NO. Ø TA

NUMBER 70151-0-0

SCALE 1/1

SHEET 1 OF 1

DIST

REVISIONS: DIST | CHANGE NO | REV

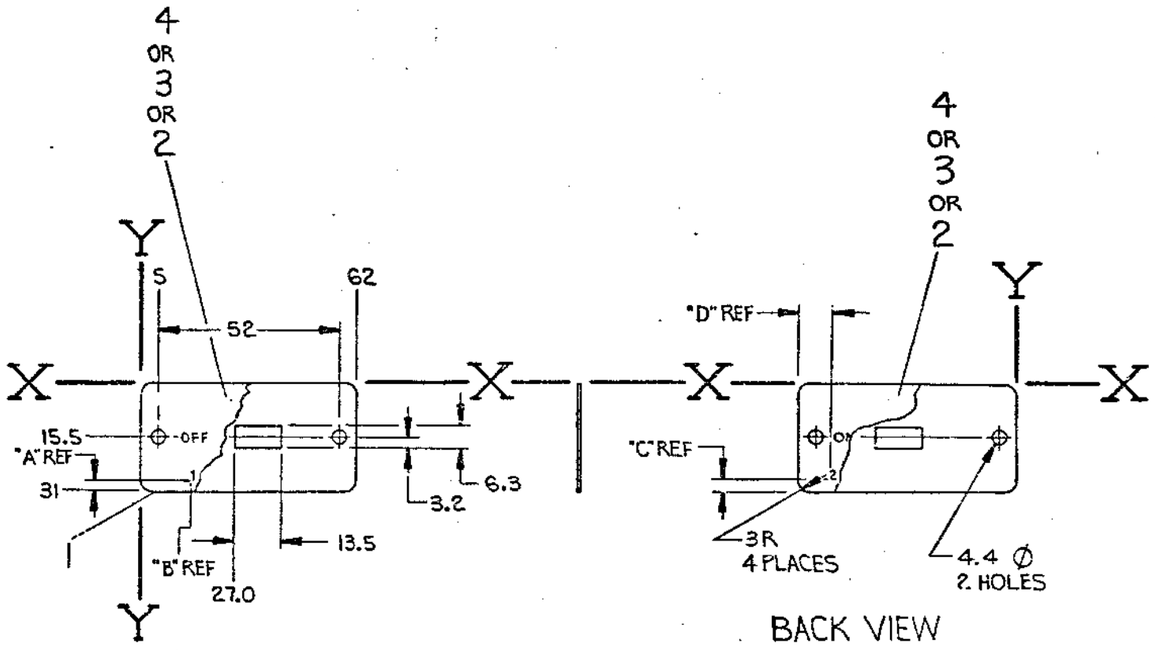
THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP EDGES

DIGITAL

LEGEND

PART NO.	VARIATION	"A" REF	"B" REF	"C" REF	"D" REF
7413407-1-0	115 VAC	3.0	14.0	—	—
7413407-2-0	220VAC-240VAC	3.3	8.6	3.3	8.1
7413407-3-0	100VAC-127 VAC	3.3	8.4	3.3	10.4



METRIC DIMENSIONS

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7413407-00001	A	Originator 2-28-75 M. MORGANSTEIN

—	—	—	SILK SCREEN	(LT GRY)	A-SS-7413407-0-3	4
—	—	—	SILK SCREEN	(LT GRY)	A-SS-7413407-0-2	3
—	—	—	SILK SCREEN	(LT GRY)	A-SS-7413407-0-1	2
—	—	—	PLATE			1

7413407-3-0	7413407-2-0	7413407-1-0	DESCRIPTION	DWG./PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

QUANTITY & VARIATION	ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER: OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
	SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.5	±1.0
		PREFERRED ☑	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL .75 THK 5052-H32 ALUM.

FINISH 92C0101-47

DRN. S. RAEVE	1-9-75	
CHK'D R. MOTT	1-27-5	
ENG'L [illegible]	1-27-5	
PROJ. ENG. [illegible]	1-27-5	
PROD. [illegible]	1-27-5	
NEXT HIGHER ASSY.		
SCALE 1/1		
SHEET 1 OF 1		

FIRST USED ON VT50

digital

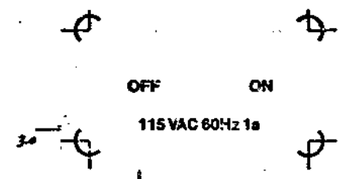
TITLE
PLATE, VT50-51
OFF/ON SWITCH

SIZE	CODE	NUMBER	REV.
2	IA	7413407-0-0	A

DIST.

2 IA 7413407-0-0 A

DEC FORM NO. DA3-120

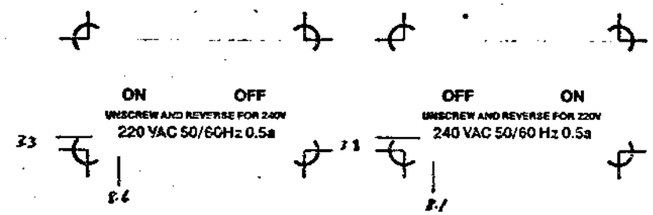


SPEC # 9200101-68 GRAY

REVISIONS		
CHK	CHANGE NO.	REV.
J.H	7413407-00001	A

O.K. INSPECTED BY PT MH DATE 1-15-75

DRN. J Dennis	1-14-75	FIRST USED ON: VT50
CHK'D	1-27-75	digital
ENG.	1-27-75	TITLE: Switch Plate VT50 - AA
PROJ. ENG.		
PROD 2	1-27-75	
NEXT HIGHER ASSY.		
SCALE		SIZE A, CODE 55, NUMBER 7413407-0-1, REV. A
SHEET OF		DIST.

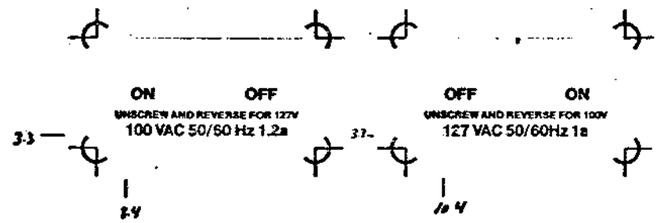


REVISIONS		
CHK	CHANGE NO.	REV.
JJ	74/3407-0000	A

O.K.
AMT. TO STOCK
INSPECTED BY
DATE 1-31-75

SPEC # 9200101-68 GRAY

DRN. J Demers	1-14-75	FIRST USED ON VT50			
CHK'D	1-27-75				
ENG.	1-27-75	TITLE switch PLATE VT50-BA			
PROJ. ENG.					
PROD Balao	1-27-75				
NEXT HIGHER ASSY.					
		SIZE	CODE	NUMBER	REV.
SCALE		A	55	74/3407-0-2	A
SHEET OF		DIST.			



REVISIONS		
REV.	CHANGE NO.	CHK
A	7413407-0001	

O.K.
AMT. TO STOCK .....
INSPECTED BY .....
DATE 1/21/75

SPEC # 9200101-68 GRAY

DRN. L Demers	1-14-75	FIRST USED ON: VT50 — digital
CHK'D	1-27-75	TITLE: SWITCH PLATE VT50-CA
ENG.	1-27-75	
PROJ. ENG.		
PROD. L Babcock	1-27-75	
NEXT HIGHER ASSY.		
SCALE		SIZE A · CODE 55 · NUMBER 7413407-0-3 · REV. A
SHEET OF		DIST.

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 12/16/74

TITLE VT50 ENGINEERING SPECIFICATION

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ECO CHANGE	VT50-00002	MORGANSTERN	3-75	[signature]	3-25-75
B	ECO CHANGE	VT50-00007	BUZYNSKI	4-75	[signature]	4-25-75

1.0 General

This document specifies the level of performance the end-user can expect from the VT50.

For the purposes of this specification, the VT50 Programmer's and Operator's Manuals are included as part of this specification.

VT50 Programmer's Manual DEC-00-0VT5A-A-D

VT50 Operator's Manual DEC-00-0VT0A-A-D

ENG	APPD	SIZE	CODE	NUMBER	REV
[signature]	[signature]	A	SP	VT50-0-1	B

DEC 16-[illegible]-1079-N971
DRA 107

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 ENGINEERING SPECIFICATION

2.0 OVERALL SPECIFICATIONS

CHARACTERISTIC	DESCRIPTION
DIMENSIONS	
Height	360mm (14.1 in.)
Width	53 mm (20.9 in.)
Depth	690mm (27.2 in.)
Minimum Table Depth	450mm (17.7 in.)
WEIGHT	20kg (44 lbs.)
OPERATING ENVIRONMENT	DEC STD 102 Class B environment
Temperature	10°C to 40°C (50°F to 104°F)
Humidity	20% to 80% with: Maximum wet bulb 25°C (77°F) Minimum dew point 2°C (36°F)
LINE VOLTAGE	U.S. model: 100-126V (115V nominal) European model: 191-238V or 209-260V (220/240V nominal switch selectable)
LINE FREQUENCY	U.S. model: 60±1 Hz European model: 60±1 Hz or 50±1 Hz
POWER LINE HASH FILTER	Low leakage - BALUN type
DISPLAY FORMAT	12 lines of 80 characters
Character Type	5X7 dot matrix (foreign character fonts; 5X8 when available)
Character Size	2.0mm X 4.0mm (.08" X .16")
Screen Size	12" diagonal (305mm) rectangular
Active Screen Size	210mm X 105mm (8.3" X 4.1")
CHARACTER SET	64 character upper case ASCII 32 control codes
KEY LAYOUT	Typewriter rather than keypunch format
KEYCLICK	Audible sound simulates typewriter feel. Switch Disable for quiet environments.

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-1	B

DEC FORM NO DEC 16-[illegible]-1022-N370
DRA 108

SHEET 2 OF 14

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 ENGINEERING SPECIFICATION

CHARACTERISTIC	DESCRIPTION
BELL	Audible alarm sounds when Control G is received and on the 73rd character of a line when keyboard data is being entered.
TERMINAL MODES	Local Mode Remote Mode: Full Duplex or Full Duplex with Local Copy
PAGE OVERFLOW	Upward scroll
PARITY	Even or mark (no parity) switch selectable Odd or space possible with rewiring
CURSOR	
Type	Blinking underline
Control	Up or down one line; right or left one character; home; tab; erase display from cursor position to end of line; erase to end of screen
HOLD SCREEN MODE	Allows operator to halt transmission from host, preserving data on display. Enabled; disabled by Escape sequences sent by system software or keyboard
COMMUNICATIONS	20ma current loop standard; EIA interface optional
Code	U.S. ASCII extended through Escape Sequences
Speed	Switch Selectable - Full Duplex: 75, 110, 150, 300, 600, 1200, 2400, 4800 and 9600 baud Full Duplex With Local Copy: 110, 600, 1200, 2400, 4800, 9600 baud (75, 150, 300 are not available in this mode without machine modification) Full Duplex Split Speeds: Transmission at 75, 150, 300 baud with reception at 600, 1200, 2400, 4800, 9600 baud

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-1	B

DEC FORM NO DEC 16-[illegible]-1022-N370
DRA 108

SHEET 3 OF 14

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 ENGINEERING SPECIFICATION

CHARACTERISTIC	DESCRIPTION
OPERATOR CONTROLS	Power ON/OFF, Intensity Control, Baud Rate Switch, Terminal Mode Switch, Key-Click ON/OFF, Even/No Parity
OVERLOAD PROTECTION	Thermal switch
POWER CONSUMPTION	110 watts
PLASTIC CASE MATERIAL	Expansion cast ABS or Injection Molded NORYL
PHOSPHOR	P4
BAUD RATE SELECTION	Switches on underside of unit
TRANSMISSION CODE	8 bit ASCII(U.S.)
TRANSMISSION CODE LENGTH	
10 bit	75,150,300,600,1200,2400,4800,9600
11 bit	110 baud only
PARITY	Generated on transmission as ever parity or a mark (switch selectable) Parity is not checked on reception.
INTERNAL DATA HANDLING	TTL Microprocessor and UART
DISPLAY MEMORY	MOS STATIC RAM
VIDEO	Raster scan. Roll free. No need for horizontal hold and vertical hold adjustments.
CHARACTER GENERATION	MOS ROM (Signetics 2513 or equivalent)
ERASE FUNCTIONS	Erase from cursor to End-of-Line (ESC K-033,113) Erase from cursor to End-of-Screen (ESC J-033,112)
STRAPPING OPTIONS	Odd parity, parity bit = space, 60Hz 220/240V
CURSOR CONTROLS	Cursor Up...ESC A(033,101) Backspace...(010)

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-1	B

DEC FORM NO DEC 16-[illegible]-1022-N370
DRA 108

SHEET 4 OF 14

CHARACTERISTIC	DESCRIPTION
	Cursor Right...ESC C(033,103) Home.....ESC H Line Feed.....(012) Tab.....(011)
OPERATOR CONTROLS Right Side Rear Bottom	Power ON/OFF voltage select Brightness control(slide control) Baud rates, full duplex, local, full duplex with local copy. Keyclick switch, EIA switch (EIA card optional). Parity/No Parity switch
BREAK KEY	When pressed, a 250 millesecond (approx) one shot signal is transmitted
INTERNAL POWER SUPPLY (these include reserve power specified below)	Overcurrent protected +5 @ 4.5 amps +15 @ 1.65 amp peak, 1.45 amps avg. -12 @ 500ma avg., 650ma peak -5 @ 15ma
Reserve power for interface options such as EIA card, special DF11 options, etc.	+5 @ 250ma -12 @ 125ma +15 @ 250ma
INTERNAL TIMING SOURCE	Crystal oscillator 13.824MHz ± .1%
CHARACTER SPACING	5 dots, 4 spaces to generate well separated easy-to-read characters
MONITOR ELECTRONICS	100% solid state
GEOMETRIC DISTORTION	The perimeter of a full field of characters shall approach an ideal rectangle to within ±4% of the rectangle height
INTERNAL SET-UP CONTROLS (access limited)	Vertical height, Vertical Linearity, Horizontal Size, Focus, Test Pattern Switch

CHARACTERISTIC	DESCRIPTION
UL APPROVAL	Units with serial numbers in excess of _____, shall have Underwriter's approval. Units lacking UL stickers shall be assumed not to have UL approval.
TAB	When TAB (011) is received by the terminal, the cursor is moved to the next tab stop. Tab stops are set every 8 spaces to the 73rd character position, TAB moves the cursor one position to the right.

VT50 H - (VT50 with direct cursor addressing and 10-key numeric pad).

The VT50 H has all of the above VT50 specifications plus the following additional features.

BLANK (A)	BLANK (B)	BLANK (C)	↑
7	8	9	↓
4	5	6	→
1	2	3	←
0		.	ENTER

Key Legend	Code Transmitted	Function
.	056_8	Period
0 thru 9	060_8 thru 071_8	Numerics 0 thru 9
ENTER	015_8	CR - used to delimit data fields.
↑	ESC A	Moves the cursor position up one line.
↓	ESC B	Moves the cursor position down one line.
→	ESC C	Moves the cursor position to the right one character.
←	ESC D	Moves the cursor position to the left one character position.
BLANK (A)	ESC P	Blank keys may be used to implement user functions
BLANK (B)	ESC Q	
BLANK (C)	ESC R	

DIRECT CURSOR ADDRESSING	Direct Cursor Addressing can be invoked in the VT50H and VT50J by two separate commands. The two commands are: 1) CNTL N (CAD 16 (8)) "Line" "Column" Through the use of CAD 016 (8), the cursor can be directed to any of the 960 character locations in the CRT screen using three instructions. When the CAD-code is received by the VT50H, it causes the firmware to escape from its normal mode of operation. 2) ESC "Y" "Line" "Column" (2) Through the use of ESC "Y", the cursor can be directed to any of the 960 character locations on the CRT screen using three instructions. When the ESC-code is received by the VT50H, it causes the firmware to escape from its normal mode of operation. The next two data words are interpreted as the Y- and X- address in that order. The Y-data word presents the Y-address counter to the selected character line, and the X-data word presents the X-address counter to the selected character position in the selected line. Once the cursor is moved to the new location (or address), the cycle is complete and the next data word received, will perform its normal function.

The Y- and X- addresses are determined by subtracting 40 (8), from the received data, and using the result as the new cursor-position. If the Y-address is greater than 13 (8), the cursor will be postioned on the last line. If the X-address is greater than 117 (8), the cursor will be positioned in the last column.

Control codes and escape-sequences do not interfere with the execution of a direct cursor addressing sequence.

All of the following specifications also apply to the VT50H

3.0 20ma CURRENT LOOP SPECIFICATION:

CHARACTERISTIC	DESCRIPTION	
TRANSMITTER	Passive, isolated, goes to the mark state when power is turned off	
	MIN	MAX
Open Circuit Voltage (of the current being driven)	5.)	25V
Voltage Drop Marking	.5V	4.0V
Spacing Current	.4ma	2.0ma
Marking Current	20ma	----
RECEIVER	Passive, isolated	
Voltage Drop Marking	.8V	2.5V
Spacing Current	0.0ma	3.0ma
Marking Current	15ma	30ma

3.1 20ma LOOP TERMINAL STRIP
Six 8/32 Screw Terminals
Numerals appear on the terminal strip phenolic.

CHARACTERISTIC	DESCRIPTION	
SCREW 1	15 volts open circuit, output impedance 500 ohms (used for self-test only)	
SCREW 2	Transmit Positive	Tx+
SCREW 3	Transmit Negative	Tx-
SCREW 4	Receive Positive	Rx+
SCREW 5	Receive Negative	Rx-
SCREW 6	Ground (used for self-test only)	

Self-test is achieved by jumpering 1-2, 3-4, 5-6, and putting the terminal in full duplex.

3.2 CABLE FOR 20ma LOOP

A cable is supplied with an 8 pin Mate-N-Lok connector for connection to DEC computers. The plug may be cut off and changed as desired. The cable installs under the screw terminals of the terminal strip.

CHARACTERISTIC	DESCRIPTION
CABLE LENGTH	4 meters
CABLE TYPE	4 wires #22 AWG stranded
CONNECTOR HOUSING TYPE	DEC P/N 12-09340-01 AMP 1-480460
CONNECTOR PIN TYPE (4 req'd)	DEC P/N 12-09378-03 AMP 350079-4
CONNECTOR MATES WITH:	DEC P/N 12-09340-00 AMP 1-480459
FEMALE PINS (4 req'd)	DEC P/N 12-09379-03 AMP 350078-4
SIGNAL = TRANSMIT POSITIVE	Terminal screw = #2 Wire color = green Mate-N-Lok pin = #7
SIGNAL = TRANSMIT NEGATIVE	Terminal screw = #3 Wire color = red Mate-N-Lok pin = #3
SIGNAL = RECEIVE POSITIVE	Terminal screw = #4 Wire color = white Mate-N-Lok pin = #5
SIGNAL = RECEIVE NEGATIVE	Terminal screw = #5 Wire color = black Mate-N-Lok pin = #2

Jumpering terminal 3 to terminal 4 allows 2 wire half-duplex operation.

3.3 BAUD RATES VS. DISTANCE FOR INTEGRAL 20ma LOOP
Greater than 100 feet at any baud rate when connected to an M596

Greater than 1000 feet at any baud rate when connected to an M5960

4.0 EIA CARD SPECIFICATIONS

The EIA card is an extra cost option consisting of a customer installable cable assembly. The cable has 2 chips which convert to EIA levels.

CHARACTERISTIC	DESCRIPTION
LENGTH OF CABLE	4 meters
CONNECTOR	Cannon DB 19604-432 or equivalent Male 25 position connector
EIA PIN #1	Signal: protective ground Comment: Logic 1 = off = -10V
EIA PIN #2	Signal: transmitted data Comment: Logic 0 = on +10V
EIA PIN #3	Signal: received data Comment: Logic 1 = off - -5 to 25V Logic 0 = on +5 to 25V
EIA PIN #4	Signal: request to send Comment: wired true (+10V)
EIA PIN #7	Signal ground
EIA PIN #20	Signal: data terminal ready Comment: wired true (+10V)
ALL OTHERS	No connection

The VT50 meets RS-232C by using the Motorola MC 1488 RS-232C line driver and MC 1489 RS0232C line receiver.

The EIA card is a customer installed option.

5.0 EIA CARD INTERNAL CONNECTIONS

The EIA card is supported by two rows of straight pins which accept AMP CIS Top Entry connectors (AMP P/N 6-380950-0) or AMP cable housing (AMP P/N 1-350092-0 with contacts 350093-1) for cable connection to custom interfaces. One row of pins is only for card support. Signals available on the other row are:

CHARACTERISTIC	DESCRIPTION
PIN #1	Signal name: +5V @ 250ma
PIN #2	Signal name: -12V @ 125ma
PIN #3	Signal name: +15V @ 250ma
PIN #4	Ground
PIN #5	TTL received data
PIN #6	TTL transmitted data

6.0 INITIALIZING

Powering up the unit causes the VT50 to initialize. The power ON/OFF switch on the right side of the VT50 is recommended for initialization.

Initialization causes the entire screen to be cleared and cursor moved to the home position (upper left hand corner).

Initialization on some VT50's may be achieved by holding the control key down then pressing and releasing the break key. It is anticipated that this feature will be deleted at some later date as the initialize function is achieved by the power switch.

7.0 BREAK KEY

Depressing the break key forces the serial line to a space condition (zero current) for .15 to .40 seconds (.25 sec. nominal). This feature is provided for users with software written to operate in Half-Duplex.

CAUTION: THE BREAK KEY FUNCTIONS EVEN IN LOCAL MODE!

8.0 TV PICTURE QUALITY

The character resolution shall not vary markedly across the screen nor shall there be excessive pin-cushion nor excessive barrel distortion. What is acceptable shall be that which is acceptable to the untrained observer such as a clerk typist. The picture must be clear, easy to read and free of visual defects that impair readability.

The horizontal centering shall be such that the distance of the left hand character on the sixth line from the left screen boundary is within 13mm (½") of the distance from the right most character on the sixth line to the right screen boundary.

The vertical centering shall be such that the distance of the top screen edge to the 40th character on line 1 shall be within 13mm (½") of the distance of the bottom screen edge to the 40th character on the twelfth line.

The screen image shall appear parallel to the table surface.

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION DATE 12/23/74

TITLE VT5Ø ACCEPTANCE TEST

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	ECO CHANGE	VT50-00003	MORGANSTERN	3-75		3-25-75
B	REPLACED SHT'S 2 & 3	VT50-00008	BUZYNSKI	4-75		4-28-75

Upon removal from shipping container, inspect for physical damage, then make the following checks before connecting your VT5Ø terminal to system:

1) LOCAL MODE CHECK:
Set terminal, using a screwdriver or small coin, to "Local Mode" and "9600" baud as shown on label mounted to underside of terminal. Plug terminal into line, move the ON/OFF slide switch located on the right side of terminal to the ON position.

After a one minute warm-up period, a flashing cursor should appear on the screen. If nothing is seen or display is too bright, reach over and adjust the intensity control on the rear of the terminal at the top right hand corner. Control moves to the right for increased brightness.

Check for terminal to display characters as keys are depressed.

2) REMOTE MODE CHECK - FULL DUPLEX:
Set terminal for full-duplex operation, locate terminal strip, with screws numbered 1 through 6 on underside, jumper 1 and 2 together, then 3 and 4, and finally 5 and 6. Use any wire for jumpers.

The terminal should now display characters as keys are depressed.

ENG	APPD	SIZE	CODE	NUMBER	REV
M. Morganstern	M. Morganstern	A	SP	VT50-0-2	B

DEC 16-(392)-0079-N971
DRA 107

SHEET 1 OF 3

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE VT50 ACCEPTANCE TEST

3) HALF-DUPLEX, ESCAPE AND CONTROL COMMAND CHECKS:
Remove jumpers 1 and 2, and 3 and 4, then add a jumper from 1 to 4 on the terminal strip. Set terminal for half-duplex operation, then depress keys and check for corresponding characters on screen.

Erase Functions:
a. Type some characters on all 12 lines
b. With cursor on the bottom line, press "CTRL M;" check for cursor to move to the left-most position on that line.
c. Press "ESC K"; check for all characters on the bottom line to be erased.
d. Press "ESC H"; check for cursor to go to the top left of screen.
e. Press "ESC J"; check for all characters on the screen to be erased.

Move Cursor Functions:

A. All VT50 Models
a. Press "ESC C"; cursor should move to right, repeat until cursor is in the center of screen.
b. Press "CTRL J"; cursor should move down one line.
c. Press "ESC A"; cursor should move up one line.
d. Press "CTRL H"; cursor should move left one position.
e. Press "CTRL I"; cursor should move to the next TAB stop.

B. VT50H, VT50J only (direct cursor addressing and numeric pad)
a. Press "ESC H" on numeric pad; cursor should move to the home position on the screen (1st character on 1st line).
b. Fill the screen with miscellaneous characters.
c. Press "CTRL N" "+" "SPACE"; the cursor should move to the 1st character position on the last (12th) line on the screen.
d. Press "CTRL N" "/"; the cursor should move to the 64th character position of the 2nd line on the screen.
e. Press "CTRL N" "SPACE" "SPACE"; The cursor should move to the home position on the screen.
f. Repeat steps a thru e replacing the "CNTL N" with "ESC Y".

Hold Screen Mode Functions:
a. Place cursor on bottom line
b. Press "ESC ["; Hold Screen Mode
c. Press "LF" key
d. Type "VT5Ø" - check characters do not appear on the screen
e. Press "SCROLL" key - the message "VT5Ø" should now appear on the screen
f. Press "ESC \ "; exit Hold Screen Mode
g. Press "LF" key - check for message to scroll up

Miscellaneous Functions:
a. Press "CTRL G"; check for buzzer to ring
b. Press "ESC Z"; check for the character to appear on the screen.

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-2	B

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

SHEET 2 OF 3

ENGINEERING SPECIFICATION CONTINUATION SHEET

TITLE VT50 ACCEPTANCE TEST

as follows:

Terminal	Character displayed on screen
VT50A	A
VT50B	B
VT50H	H
VT50J	H

C.) Press the "REPEAT" key and the "A" key: the letter A should repeat as long ar both keys are down.

4) ON-LINE ACCEPTANCE TEST
Connect VT5Ø to a PDP-11 computer via a DL11-A/B interface. Load and run the VT5Ø acceptance test program for at leaas one pass.

MAINDEC-11-DZVTC- (Latest Revision)

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-2	B

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

SHEET 3 OF 3

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 12-19-74

TITLE VT50 Manufacturing Acceptance Specification

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
*	Original Release	N/A		12-19-74		
A	ADD CRT BLEMISH SPEC.	00009	MORGANSTERN	5-22-75	morganstern	30 May 75

ENG	APPD	SIZE	CODE	NUMBER	REV
		A	SP	VT50-0-3	A

DEC 16-(393)-1070-N971
DRA 107

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 Manufacturing Acceptance Specification

1.0 SCOPE:

The purpose of this specification is to set a manufacturing standard to which all VT50's are produced. The specifications set forth in this document are more stringent then the VT50 Engineering specification. This insures DEC, as a manufacturer, that when a customer receive his VT50 it will meet the Engineering Specification.

2.0 TESTING

All VT50's will undergo two stages of testing module test and VT50 system test. Refer to Test Plan/Flow.

2.1 Module Test

All VT50 modules and VT50 option modules (Copier, EIA) will be tested initially by and not be assembled into a VT50 until successfully passing their respective module test.

This will insure that when a VT50 is assembled that each module is at least 90% good.

2.2 VT50 System Testing

All VT50 will under go at least 48 hours of hot/cold cycle testing while being exercised by the VT50 Acceptance Test Program MAINDEC-11-DZVTC-A. The parameters of this testing are stated in Figure 1.

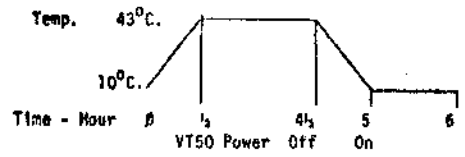


FIGURE 1

2.2.1 Vibration Testing

All VT50's will be vibration tested with a full screen of characters.

2.2.2 Keyboard Diagnostic Test

The Keyboard Diagnostic Test will be performed twice

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-3	A

DEC FORM NO DEC 16-(383)-1022-N370
DRA 108

SHEET 2 OF 4

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 Manufacturing Acceptance Specification

during system testing---before skeleton burn-in and after Vibration Test.

2.2.3. Final Acceptance Test

Final Acceptance Testing is a communication test which tests the ability of a VT50 to communicate over a 20ma serial loop 1000 feet long to another VT50 device at all baud rates.

2.2.4 48 Hour Ambient

All VT50's under go 48 hours of final testing at ambient temperatures while being exercised by the VT50 Acceptance Test Program.

2.2.5 Failures

All failures detected during Module Testing and VT50 System Testing will be repaired in accordance with VT50 Module Repair and Rework Procedure. Failures will not constitute the resetting to zero the time of any of the VT50 system tests except in the case when a module or modules are replaced, and only then if the modules used for replacement have not previously passed the test which the unit failed in.

3.0 VT50 Picture Quality

The VT50 picture quality shall be in conformance with this specification before being shipped.

Active Screen Size:	Vertical	105mm ± 2mm
	Horizontal	210mm ± 2mm
** Character Size:	Vertical	4mm ± .4mm
	Horizontal	2mm ± .4mm
Centering:	Vertical	A difference of no greater than 7mm between the top and bottom margins* at the vertical center of the screen (40th character.).
	Horizontal	A difference of no greater than 7mm between the right and left margins* at the horizontal center of the screen's sixth line.

* The vertical and horizontal margins are the non-displayed area on the CRT between the shell and Active Screen Size.
** Character size dependant on the active screen size.

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-3	A

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

SHEET 3 OF 4

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 MANUFACTURING ACCEPTANCE SPECIFICATION

Rotation:		The active screen shall be square within ±5mm of the shell surface above the keyboard as measured between the first character on the 12th line and the shell surface and the 80th character on the 12th line and shell surface.
Pin Cushion Distortion:	Vertical	±2mm at each corner char.
	Horizontal	±1mm at each corner char.
Barrel Distortion:	Vertical	±2mm at each corner char.
	Horizontal	±1mm at each corner char.

3.1 SCREEN BLEMISH CRITERIA

Opaque spots, blisters and defects in the screen and glass.
Size - .025" maximum
Number - 2 maximum, between .010" to .025" with 3" minimum separation. Disregard all under .010".

4.0 PRE-SHIPMENT SETTINGS AND CONNECTIONS

To have consistency on all VT50's shipped the following settings/connections should be made:

Baud Rate	S2-G 9600 baud	Key click	on
Local Remote	S1-1 Local	Parity, no Parity	No Parity
Power ON/OFF	Off	20ma, EIA	20ma

Serial Line Cable connected to the 20ma loop terminal strip.

Terminal 1	NC Tignten Screw
Termianl 2	Green Wire
Terminal 3	Red Wire
Terminal 4	White Wire
Terminal 5	Black Wire
Terminal 6	NC Tighten Screw

SIZE	CODE	NUMBER	REV
A	SP	VT50-0-3	A

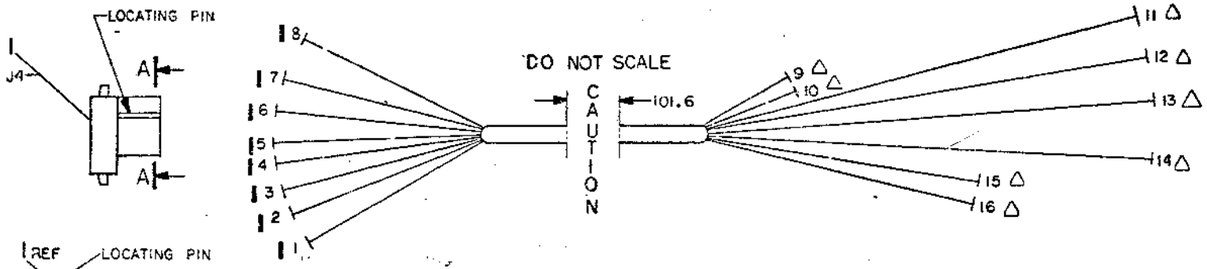
DEC FORM NO DEC 16-(381)-1022-N370
DRA 108

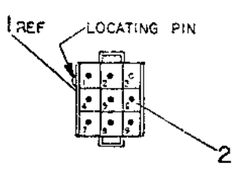
SHEET 4 OF 4

WIRE TABLE

ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM WITH	TO POINT	TO CONNECTION	TO WITH	WIRE LENGTH
3	18	BLU	1	J4-7	ITEM #2	15	——	TIN	390 MM
3	"	BLU	2	J4-8	"	16	——	"	390 MM
4	"	BLU/BLK	3	J4-9	"	11	——	"	460 MM
5	"	VIO	4	J4-4	"	9	——	"	300 MM
5	"	VIO	5	J4-5	"	10	——	"	300 MM
6	"	VIO/BLK	6	J4-6	"	12	——	"	460 MM
7	"	GRN	7	J4-1	"	13	——	TIN	480 MM
7	18	GRN	8	J4-2	ITEM #2	14	——	ITEM #9	500 MM

NOTES:





VIEW A A
REAR VIEW
SCALE-:NONE

0MM — DO NOT REDUCE 152.4MM — 304.8MM

FOR MANUFACTURING PURPOSES ONLY

METRIC DIMENSIONS

△	ITEM	DESCRIPTION	DEC PART NO.	QTY
	1	TERMINAL RING (BLUE)	9007927	8
360 MM	A/R	WIRE #18 AWG (GRN)	9107360-55	7
480 MM	A/R	WIRE #18 AWG TRACER (VIO/BLK)	9107410-70	6
300 MM	A/R	WIRE #18 AWG (VIO)	9107360-77	5
460 MM	A/R	WIRE #18 AWG TRACER BLU/BLK	9107410-60	4
780 MM	A/R	WIRE #18 AWG (BLUE)	9107360-66	3
	9	PIN, (MALE)	1209378-06	2
	1	CONN 9 PIN (MALE)	1209351-09	1

DESCRIPTION | DEC PART NO. | ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0°30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER OVER 0 TO 3	OVER 3 TO 10	OVER 10 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM	±0.3	±0.2	±0.3	±0.4	±0.5	±1.0	
	PREFERRED	±0.3	±0.4	±0.8	±1.0	±1.5	±3	

SYM | QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN
CHK
ENG
PROJ. ENG
PROD.
NEXT HIGHER ASSY.

MATERIAL: SEE PARTS LIST
FINISH

FIRST USED ON: VT50

TITLE: HARNESS, POWER SUPPLY

SIZE: 1 | CODE: IA | NUMBER: 70-11186-0-0 | REV.

SCALE 1/1
SHEET 1 OF 1 | DIST.

REVISIONS | REV. | CHANGE NO. | CHK

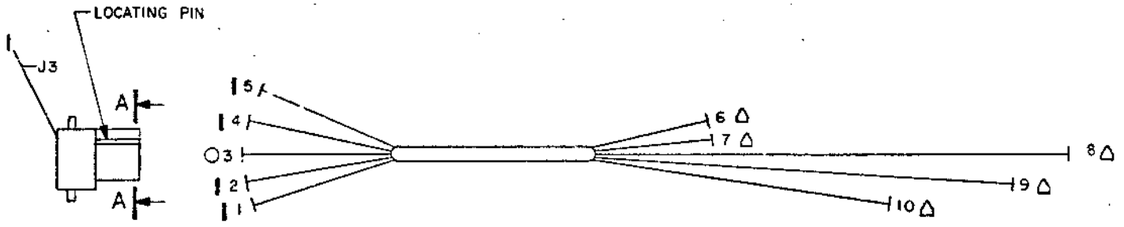
DEC 83MM NO. BM1-350

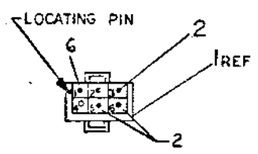
L IA 70-11186-0-0

WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM WITH	TO POINT	TO CONNECTION	TO WITH	WIRE LENGTH
5	22 TWP	BLUE	1	J1-2	ITEM #2	6	——	TIN	200 MM
		WHITE	2	J1-5		7	——		200 MM
3	18	GREEN	3	J1-4		10	——		250 MM
4	22 TWP	RED	4	J1-6		8	——		360 MM
		BLACK	5	J1-3	ITEM #2	9	——	TIN	330 MM

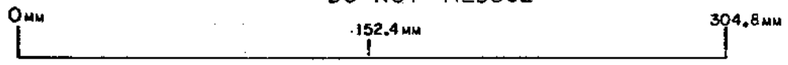
NOTES:





VIEW A-A
REAR VIEW
SCALE : NONE

DO NOT REDUCE



FOR MANUFACTURING PURPOSES ONLY

METRIC DIMENSIONS

	1	PIN (MALE)	1209378-00	6
200 MM	A/R	WIRE #22 AWG TWP (BLUE/WHT)	9107420 -69	5
330 MM	A/R	WIRE #22 AWG TWP (BLK/RED)	9107420 -02	4
280 MM	A/R	WIRE #18 AWG (GRN)	9107360-55	3
	4	PIN (MALE)	1209378-03	2
	1	CONN 6 PIN (MALE)	1209351-06	1
		DESCRIPTION	SPEC. PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2500
SURFACE QUALITY IN MICROINCHES	MEDIUM	±.01	±.02	±.03	±.04	±.08	±.12
	PREFERRED	±.03	±.04	±.06	±.10	±.16	±.25

SYM

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

NEXT HIGHER ASSY.

MATERIAL SEE PARTS LIST

FINISH

DRAWN [illegible] 1/15/75
CHK [illegible]
ENGR [illegible]
PROJ. ENG [illegible]
PROD [illegible]

NEXT USED ON VT50

digital

TITLE HARNESS, YOKE

1-IA-7011187-0-0

SIZE 1 | CODE IA | NUMBER 7011187-0-0 | REV. A

SCALE 1/1

SHEET 1 OF

DIST.

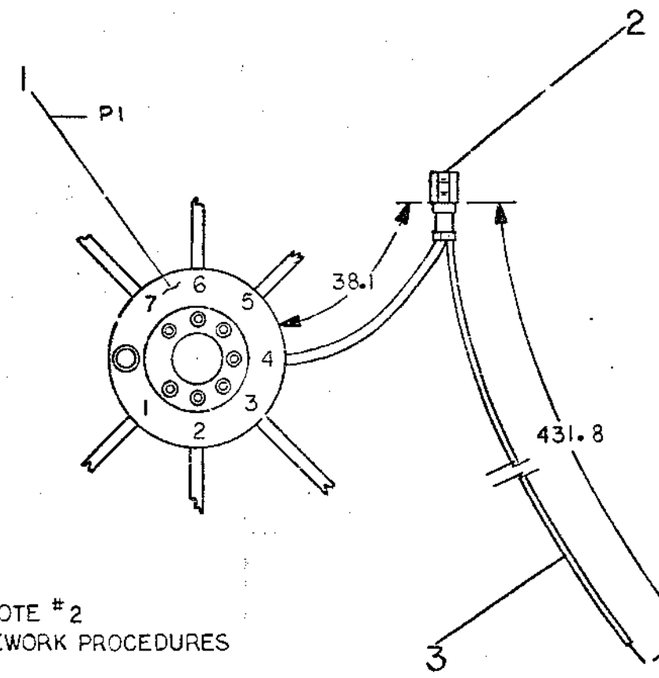
REVISIONS				
DIR	CHANGE NO.	REV.		
CK	70INSP-00001	A		

ALL MORGANSTERN

ECO FORM NO. BEL-130

NOTES :

1. REWORK FROM PURCHASE SPEC. DWG. C-PS-1212127-0-0
2. CUT BLACK WIRE 38.1 MM FROM PIN 4 CONNECTION AND STRIP INSULATION BACK 6.3MM USE WIRE (ITEM #3) CUT INSULATION BACK 6.3MM ON BOTH ENDS AND CONNECT ONE END OF EACH WIRE TO TERMINAL (ITEM #2) AS SHOWN.



SEE NOTE #2
FOR REWORK PROCEDURES

METRIC DIMENSIONS

431 MM	WIRE #22 AWG STRD (BLK)	9107350-00	3
1	TERMINAL QUICK CONNECT	9007970	2
1	HARNESS CRT	C-PS-1212127-0-0	1
	DESCRIPTION	DWG./PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE PARTS LIST

FINISH

DR George Brown 4/15/75
CHK'D
ENG. 5/21/75
PROJ. ENG
PROD.
NEXT HIGHER ASSY. 1-1A-7011220-0-0
SCALE NONE
SHEET 1 OF 1

FIRST USED ON VT50

digital

TITLE
HARNESS, CRT
REWORK

SIZE	CODE	NUMBER	REV.
2	1A	7413948-0-0	

DIST.

7413948-0-0 1A 2 B

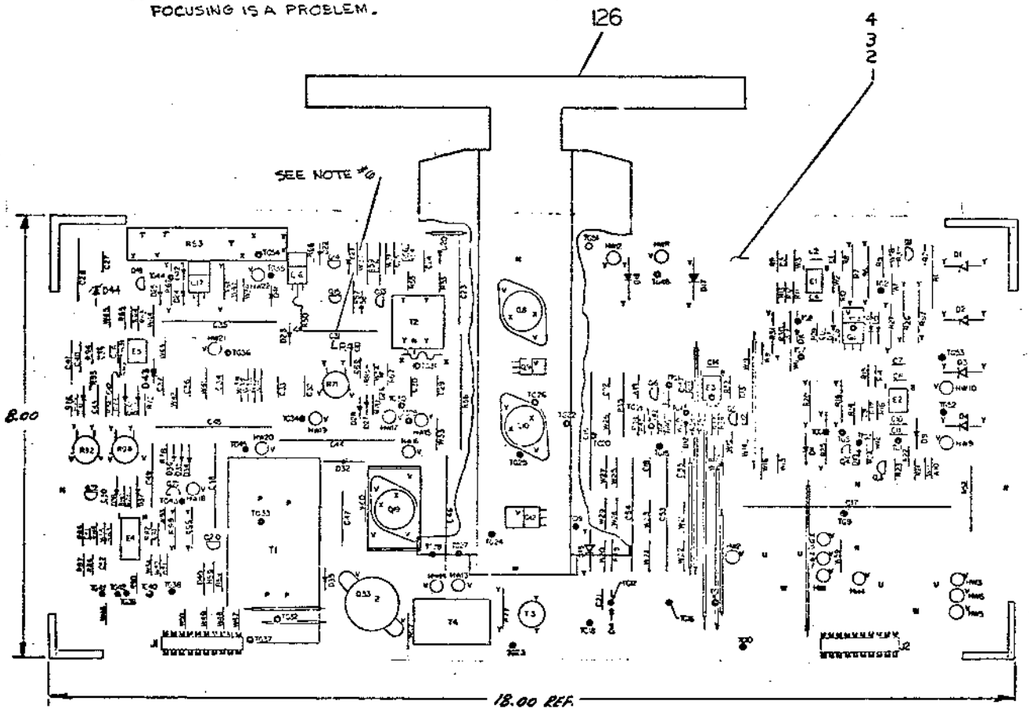
REVISIONS | REV. | CHANGE NO. | CHK

DEC FORM NO. BA2-12C

NOTES:

1. THERE IS NO ETCH BETWEEN T1 AND D33
2. ETCH & PUNCH/DRILL FOR T05 AND 7922Φ
3. CURRENT LOOP 4 INCH LENGTH 22 AWG WIRE
4. ~~ETCH A-2 DO NOT INSERT~~
5. ▽ MUST BE CONNECTED TO A POINT GROUND
6. ECO #5 IS IMPLEMENTED ONLY ON BOARDS WHERE FOCUSING IS A PROBLEM.

LEGEND	
VARIATION	DESCRIPTION
5410886-0-0	BASIC VT50
5410886-1-0	HEAT CYCLED, SYSTEM TESTED 5410886-0



REF			
		X-Y COORDINATE HOLE LOCATION	A-CO-5410886-0-4
		ASSY/DRILLING HOLE LAYOUT	D-AH-5410886-0-5
		MODULE ECO HISTORY	B-WH-5410886-0-6
1		ETCH CIRCUIT BOARD	5010885
2	C50,52	CAP 100 PF 100V 5% DM	1000018
2	C9,38	CAP 470 PF 100V 5% DM	1000024
2	C25,40	CAP .33 UF 20V 10% S.TANT	1005328
1	C41	CAP 6.8 UF 35V 10% S.TANT	1005305
1	C26	CAP 15 UF 20V 10% S.TANT	1004812
1	C42	CAP 1 UF 35V 10% S.TANT	1001776
1	C43	CAP .47 UF 35V 10% S.TANT	1005965
1	C31	CAP .47 UF 100V 10% MYLAR	1000040
1	C39	CAP 270 PF 100V 5% DM	1000022
2	C29,49	CAP 25 UF 25V 6% AL EL	1000075
1	C17	CAP 1900 UF 40V	1011607
6	C4,6,7,11,12,13	CAP .01 UF 100V 20% DISC	1001610-1
4	C55,21,18,22	CAP .1 UF 100V 20% DISC	1000039
9	C29,32,33,36,38,34,24,37, C27	CAP .022 UF 600V	1011846
4	C16,44,35,45	CAP 1000UF 16V	1011849-02
2	C23,48	CAP 25 UF 150V	1011849-03
1	C47	CAP .068 UF 600V	1011847
1	C46	CAP 7.0 UF 200V	1011848
2	C53,54	CAP 500 UF 25V	1011849-01
2	C2, C51	CAP 150 PF 100V 5% DM	1000020
1	D44	DIODE IN567A	1110028
1	D6	DIODE 1N4732A 4.7V	1105138
4	D21,38,37,43	DIODE G672	1105275
8	D22,27,28,25,24,23,941,D42	DIODE IN4004	1105796
2	D40,7	DIODE 1N752 A 5.6V 5% ZENER	1102408
3	D34,35,36	DIODE IN3648 13V 5% ZENER	1103988
5	D1,2,3,4,15	DIODE IN5624	1110420
2	D17,18	DIODE MR752	1110615
3	D8,9,14	DIODE 4W5.1Z1 5.1V 1% ZENER	1105873
1	D12	DIODE IN754A 6.8V 5% ZENER	1103991
4	D24, 10,29,30,	DIODE D684	1100114
1	D11	DIODE IN4733A 5.4V 5% ZENER	1101938
1	D32	DIODE MR852	1109834-04
2	D39,20	DIODE MR812	1111054-00
1	D26	DIODE MR817	1111054-01
1	D33	DIODE H-V DIODE ASSY (20KV)	11-12553
1		ROBSON P82 CAP	1213126
2		TIE WRAP	9007031
1	R28	RES. 5.6K, 1/2 W, 5%	1301874
1	R61	RES. .47, 2W, 5%	1305258
1	R79	RES. 5.1 1/4W 5%	1309422
2	R63, R50	RES. 27 1/4W 5%	1301522
1	R55	RES. 220 1/4W 5%	1300271
3	R58, 74, 88	RES. 330 1/4W 5%	1300295
1	R59	RES. 390 1/2W 5%	1300308
1	R57	RES. 47 1W 5%	1302199
QTY	REF DESIGNATION	DESCRIPTION	PART NO

ITEM NO

PARTS LIST

DEC 741			4	7		
DEC LM301					4	7
IC TYPE	GND	+5V	-12	+15	-V	+V

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

IC PIN LOCATIONS

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

SEMICONDUCTOR CONVERSION CHART

FIRST USED ON OPTION MODEL: VT50

ETCH BOARD REV: D

REVISIONS			
REV	CHANGE NO.	CHK	
B	ECO #5		
C			
D			
E			
F			
J	5410826-00006		9-19-79
K	5410826-00003		

M. MORGANSTERN

DRN	L. Wilson		DATE
CHK'D	Roy Love		DATE
ENG	[illegible]		DATE
PROD	[illegible]		DATE
NEXT HIGHER ASSY			
SCALE	NONE		
SHEET	OF -		

digital EQUIPMENT CORPORATION

TITLE: MONITOR POWER SUPPLY

SIZE	CODE	NUMBER	REV.
D	CS	5410886-0-1	K

DIST

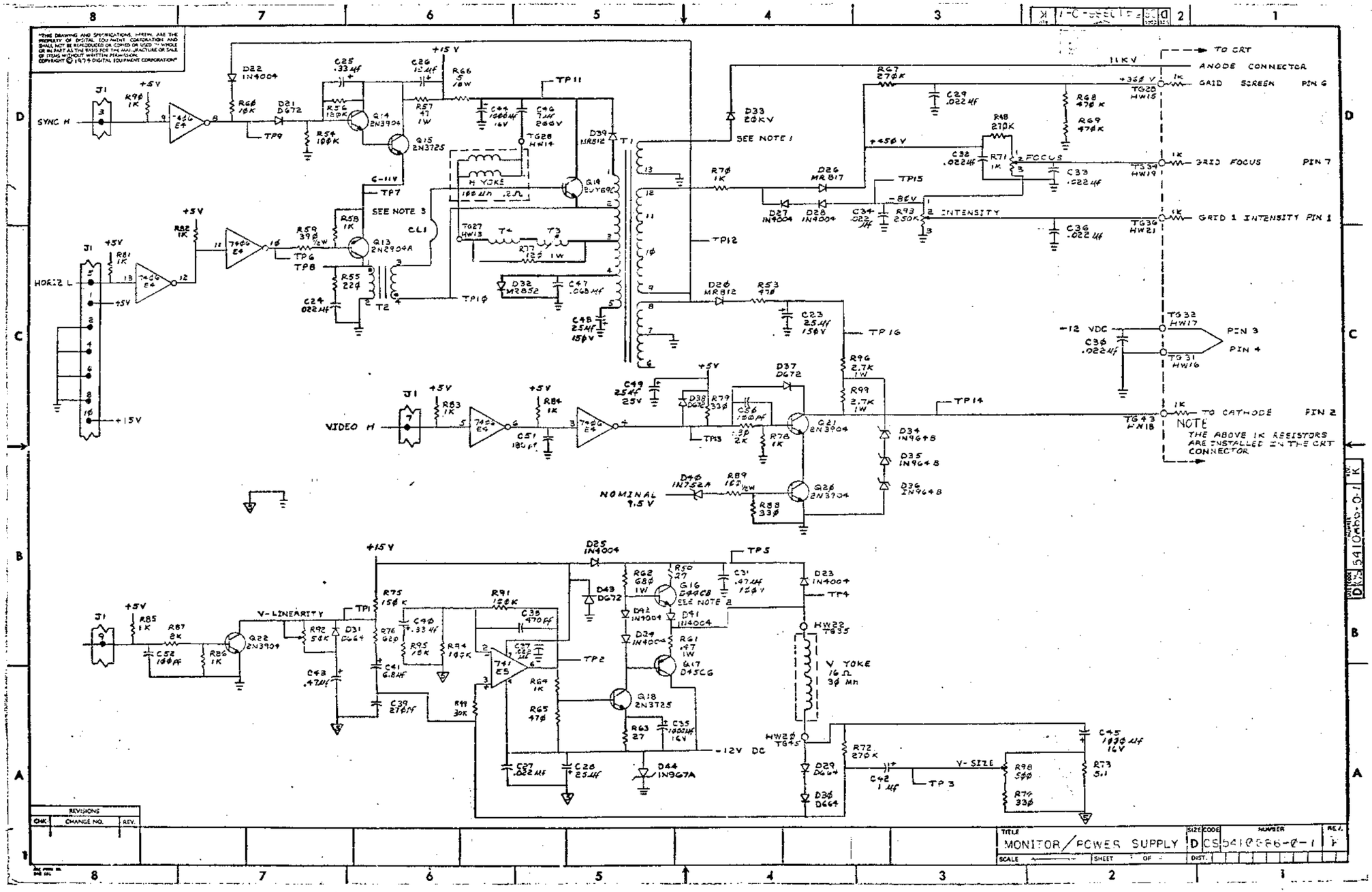
DEC/CSD 1316

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	R28	RES 5.2K 4W 5%	13-01874	116
1	T1	TRAN AT 2072/FLY BACK XFMR(L)	16-11896	117
1	T2	TRAN DRIVER XFMR U9737 (7,5,2)	16-11897	118
1	T4	TRAN AT 4072 (LINEARITY COIL)	16-11859	119
1	T3	TRAN U9934 (SIZE COIL)	16-11891	120
1		CRT CONN. (WITH (4) 1K 1/2W RES.	121212?	121
1	E4	IC DEC 7406	1910241	122
1	E5	IC DEC 741 OP-AMP	1910298	123
3	E1,E2,E3	IC DEC LM301C	1910282	124
20		'F PINS	900-3607	125
1		HEAT SPREADER	7412849	126
22	H#1-H#22	EYELET GS4-3	5007836	127
52	#1,2,3,4,#5,#8,#15,#19, #20,#26,#34 #33,#40,#42, #43,#45-#50-#53,#58 #7,#16,#17,#18 #21-#25, #27-#33,#35-#39,#41,#44, #56,#57,#59 ALSO #6 #WIRE2	JUMPERS .6 #22 WIRE	9107560-1	128

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	R76	RES. 620 1/4W 5%	1303178	55
13	R#23 80 58 81 84 64, 70 82 78 53 65 86	RES. 1K 1/4W 5%	1300365	56
2	R80,87	RES. 2K 1/4W 5%	1302388	57
5	R28,33,36,60,85	RES. 10K 1/4W 5%	1300479	58
3	R34,91,54	RES. 100K 1/4W 5%	1302402	59
1	R56	RES. 120K 1/4W 5%	1300539	60
1	R75	RES. 150K 1/4W 5%	1302396	61
2	R68,R69	RES. 470K 1/4W 5%	1302398	62
1	R62	RES. 680 1W 5%	1300346	63
2	R72,87 R48	RES. 270K 1/4W 10%	1301310	64
2	R53,65	RES. 470 1/4W 5%	1300318	65
1	R77	RES. 120 1/2W 5%	1301838	66
2	R34,69	RES. 100 1/2W 5%	1300228	67
2	R58,98	RES. 2.7K 1W 10%	1309023	68
1	R1	RES. .2 3W 3% WW	1311604	69
1	R35	RES. .08 5W 3% WW	1311603	70
4	R2,21,38,10	RES. 100 1/4W 5%	1300228	71
2	R#27	RES. 130,2W5%	1309832	72
1	R32	RES. 1 MEG 1/4W 5%	1309595	73
1	R9	RES. 6.8K 1/4W 5%	1301423	74
1	R19	RES. 330K 1/4W 5%	1302031	75
1	R13	RES. 10K 1.8W 1%	1303312	76
2	R12,15	RES. 4.99K 1.88 1%	1305324	77
1	R31	RES. 511 3/4W 1%	1300324	78
1	R52	RES. 0.5 3W 3%	1311611	79
1	R16	RES. 47K 1/4W 5%	1302137	80
1	R14	RES. 4.7K 1/4W 5%	1300447	81
1	R17	RES. 12.1K 1.8W 1%	1303313	82
1	R45	RES. 200 1/2W 5%	1302381	83
1	R5	RES. 3.9K 1/2W 5%	1300443	84
1	R22	RES. 4.3K 1.4W 5%	1302389	85
2	R37,24	RES. 1.5K 1.4W 5%	1300391	86
1	R40	RES. 12K 1.4W 5%	1300488	87
2	R6,7	RES. 15 2W 5%	1303039	88
1	R8	RES 2.7M 1/4W 5%	1309680	89
3	R30,42,44,	RES. 10 1/4W 5%	1301317	90
1	R3	RES. 82 1/4W 5%	1301477	91
1	R43,	RES. 150 1/4W 5%	1300250	92
1	R44	RES. 39 1/4W 5%	1302377	93
1	R18	RES. 190K 1/4W 5%	1302397	94
1	R29	RES. 300 1W 5%	1300292	95
1	R25	RES. 1.5K 1/2W 5%	1300394	96
1	R20	RES. 330 1W 5%	1300297	97
1	R98	RES. 500 POT BLUE	13-11853-00	98
1	R71	RES. 1 MEG POT CLEAR	13-11853-02	99
1	R92	RES. 50K POT RED	13-11853-01	100
1	R93	Res. 250K	13-11844	101
1	R66	RES. 5A, 10%, 10W	13-11842	102
1	R47	RES 3#K 1/4W 5%	13-02394	103
1	Q17	TRANS. 04508	1510414	104
2	Q15,18	TRANS. 2N3725	1510953	105
1	Q13	TRANS. 2N2904A	1501913	106
4	Q14,20,21,22	TRANS. 2N3904	1509524	107
1	Q1C	TRANS. 2N3791	1509581	108
2	Q1,4	TRANS. MXA455	1510706	109
2	Q2,12	TRANS. 2N5284	1510377	110
3	Q5,6,3	TRANS. MXAA0C	1510705	111
1	Q8	TRANS. 2N3055	1505819	112
1	Q9	TRANS. 2N4923	1509804	113
1	Q16	TRANS 04408	1510421	114
1	Q19	TRANS. 80T69C BD198	15-11852	115

REVISIONS		
ORIG	CHANGE NO.	REV.

TITLE: MONITOR POWER SUPPLY
SIZE: D | CODE: CS | NUMBER: 5410886-0-1 | REV.: K
SCALE: | SHEET 2 OF 4 | DIST:


SYNC H
HORIZ L
VIDEO H
V-LINEARITY
+15V
+5V
-12V DC
-11V
-88V
+450V
+365V
11KV
TO CRT
ANODE CONNECTOR
GRID SCREEN PIN 6
GRID FOCUS PIN 7
GRID 1 INTENSITY PIN 1
-12 VDC PIN 3
PIN 4
TO CATHODE PIN 2
FOCUS
INTENSITY
H YOKE
V YOKE
16Ω
3φ Mh
V-SIZE
SEE NOTE 1
SEE NOTE 2
SEE NOTE 3
NOMINAL 9.5V
NOTE
THE ABOVE 1K RESISTORS ARE INSTALLED IN THE CRT CONNECTOR
REVISIONS
CHK
CHANGE NO.
REV.
TITLE
MONITOR/POWER SUPPLY
SIZE
D
CODE
CS5410886-0-1
REV.
SCALE
SHEET
OF
DIST.

IN5624 D4 D2 D3 D1 HW10 HW8 HW12 HW11 HW1

R1 10 2W R2 10Ω R3 82 R5 3.9K ½W R6 75 2W R7 75 2W R97 130 2W R26 130 2W R28 5.6K R10 100 R11 350K R12 4.99K 1% R13 10K 1% R31 511 ½W 1%

Q1 A85 Q10 2N3771 Q2 2N5294 D6 IN4732A 4.7V

HW2 6800μF 40V HW7 NOT ON BOARD

C1 150pf C3 2400 pf RA 2.7M R9 6.8K R29 10K C2 100 pf ** 3 of IC E1

C4 .01 C55 .1 C53 6800μF 25V

J1-12 +15 V @ 1.45A

D7 IN752A 5.6V C8 4MS.121 5.1V C6 .01 R34 10 J2-7 GND REMOTE SENSE

J2-8 J2-9 J2-16 GND

T1 TO PRINTER

C17 1900 μF 40V R23 1K Q3 A85 R21 100 R52 .5 2W R22 9.3K D9 4MS.1A21 5.1V

D13 G64 Q4 A85 R24 1500 R19 300 1W R20 33Ø 1W Q12 2N5294

C7 .02 ** C8 470pf R14 4.7K 3 of IC E2 C11 .01 R16 47K * C10 3300 pf

* C9 150 pf R17 12.1K 1% R18 100K D15 MS624 R25 1.5K 1/2W

R15 4.99K 1% C18 .1 μF C54 6800μF 25V C21 .1μF D14 .4MS.121

J2-3 -5V @ 15 MA R45 200 1/2 W J2-2 -12V @ .5Ø

D17 MR752 D18 MR752 9.38V NOMINAL HW4 HW3 18,000μF 25V NOT ON BOARD

D12 IN754A 6.8V Q8 2N3055 +15V R37 1.5K R35 .08 5W D11 ¼ MZ-4 A25 2.4V R44 39 R38 100 Q9 2N4923 R43 150 R42 10 R41 10 R40 10 2W Q6 A85 R43 12K Q5 A25

J1-1 +5V @ 4.5A J2-5 J2-6

C22 .1 C16 1500 μF 16V R39 1K C13 * 4750 pF C12 .01 μF R32 1MEG C14 .01μF ** C15 * 470 pF 3 of IC E3 R33 10K R36 10K

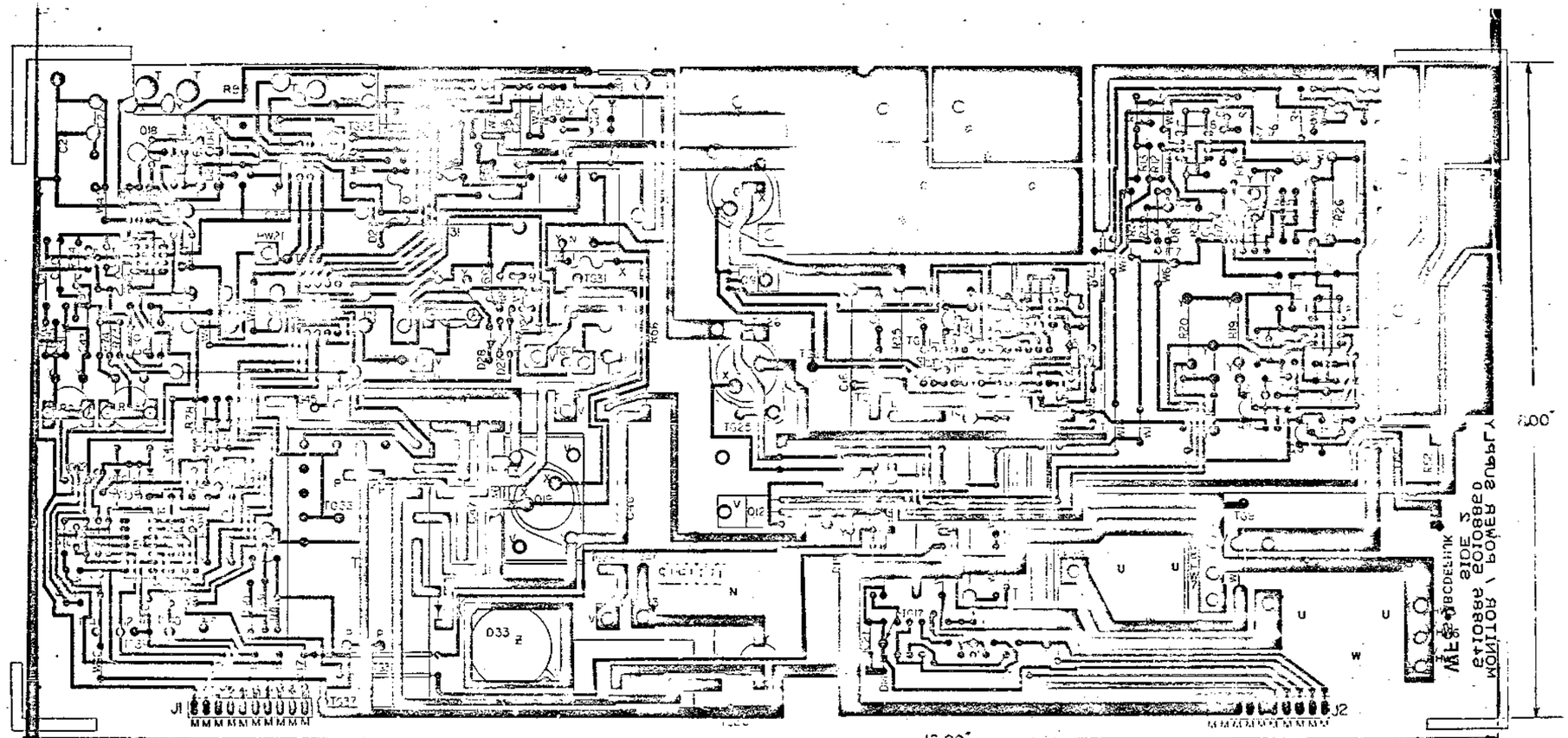
J2-4 +5V REMOTE SENSE

▽ =

* = INSTALL WHEN USING 741 OP AMPS
** = INSTALL WHEN USING 301 OP AMPS

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
MONITOR/POWER SUPPLY	D	09	54108886-2-1	K
SCALE — SHEET - OF -	DIST.			



NOTES:
1. Z,W,U HOLES TO BE PUNCHED WITH PERIPHERY DIE, REF DWG. E-TA-501CS65-0-0.
2. NO REFERENCE HOLES ON JUMPER CLUSTER.
3. USE NEW EXCELLON SHEET 142

DRILLING DATA

HOLE LETTER	FOR PTH BOARDS: DRILL SIZES BEFORE PLATE	AFTER PLATE	FOR NON-PTH BOARDS	CENTERS TRIPLETS YES	CENTERS TRIPLETS NO	QTY OF HOLES
NONE			E (.1285)			
T			F (.1405)			30
X			G (.1520)			24
V			H (.1562)			36
M			I (.1610)			40
W			J (.175)			6
U			K (.250)			6
N			L (.1660)			7
Z			M (.1800)			1
P			N (.63)			2
R			O (.1805)			3

BOARD FABRICATION INFORMATION

BOARD SIZE 5X18

BOARD MATERIAL .062 STOCK
1 SIDE COPPER

EYELET ☐ PLATED THRU ☐
1 SIDED ☒ MULTI-LAYER ☐
NOTCH BEFORE GOLD PLATING ☐
NOTCH AFTER GOLD PLATING ☐

DIGITAL EQUIPMENT CORPORATION

TITLE: MONITOR POWER SUPPLY

SIZE E | CODE AH | NUMBER 8410884-0-5 | REV

MS 40311

PRODUCT LINE 98

DATE RELEASED 7-28-75

RELEASED BY M. MORGANSTERN

MODULE ECO HISTORY

PAGE 1 OF 1

RELEASED CS REV. P

RELEASED ETCH BD REV. 2

ECO. NO.	ORIGINATOR	DATE WRITTEN	NEW CS REV.	NEW ETCH BOARD REV.	IS IT MANDATORY TO REWORK ALL EARLIER VERSIONS (NOW AVAILABLE OR RETURNED FOR REPAIR) TO THIS REVISION LEVEL? YES	NO	CONDITIONAL (EXPLAIN)	ARE ALL REVISIONS OF THIS MODULE COMPLETELY COMPATIBLE NOW (CAN BE MIXED INDISCRIMINATELY)? YES	NO	CONDITIONAL (EXPLAIN)	SIMPLIFIED CHANGE DESCRIPTION	NO. PARTS ADDED	NO. PARTS DELETED
00001	P.PUCCI	1-27-75	C	—		X		X			CHANGED COMP VALUES MADE SEVERAL ETCH CUTS	13	11
00002	R.PUCCI	3-6-75	D	C		X		X			CHANGED COMP VALUES, MADE SEVERAL ETCH CUTS CORRECTED ERRORS IN PARTS LIST		
00003	WHITTLESEY	3-24-75	E	—		X		X			ADD TWO DIODES TO PROTECT ES	2	0
00004	R.PUCCI	4-17-75	F	—		X		X			ADD TWO CAPS	2	0
00004A	R.PUCCI	5-5-75	F			X		X			CANCEL ECO 4	—	—
00005	M.HASTINGS	4-16-75	H	D		X		X			ADJUSTED ETCH UP TO LATEST ECO'S TO CS.	0	0
00006	DICKENSON	3-28-75	F			X		X			ADD 80V TO FOCUS POT	1	0
00007	R.DICKERSON	7-7-75				X		X			ADD ASSY PRINT TO PRINT SET	8	0
00008	R.DICKERSON	5-16-75	K	—		X		X			ADDED CAP C51 TO IMPROVE CHARACTERS	1	0
00009	R.DICKERSON	6-20-75	L			X		X			ADD ASSY PRINT TO PRINT SET	8	0
0007A	R.DICKERSON	7-28-75	L	—		X		X			ADD 15 HOLES TO BOARD. DISREGARD CHANGE DESCRIPTION ON MH-S410666-0-6 ECO #7	0	0

REVISIONS

CHK	ECO NO	REV
VA	00001	A
VA	00002	C
VA	00003	D
VA	00004	E
VA	00005	F
VA	00006	H
VA	00007	J
VA	00008	K
WF	00009	L
VA	0007A	M

DRN. E.WILSON DATE

CHK'D P.PUCCI DATE

ENG. M.Morganstern DATE

PROD. DATE

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE MODULE ECO HISTORY

SIZE B | CODE | NUMBER 54108E-0-0-0 | REV M

DAB 104

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

INCOMING INSPECTION PROCEDURE

DATE 6/30/75

TITLE VT50 Heat Spreader

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
*	Original Release		C.H.Hilliard	6/30/75	[illegible]	7-7-75

ENG	APPD	SIZE	CODE	NUMBER	REV
[signature]	[signature]	A	II	7412849-0-0	

DEC 3-(493)-1283-N670

INSPECTION PROCEDURE CONTINUATION SHEET

TITLE VT50 Heat Spreader

1.0 Inspecttion by attributes.

1.1 All other dimensions and/or characteristics pertaining to 7412849 that are not listed must be inspected on 20% of the sample size from each lot. All defects must be listed and inspected on the entire A.Q.L. sample. Parts must conform completely to print.

1.2 Applicable document DEC Metal Quality Manual..

2.0	CHARACTERISTICS	PROCEDURE
2.1	Check position of 10 #8-32 inserts	Use fixture #94-02147-3
2.2	Check position of holes; on surface "B"	Use fixture #94-02148-3
2.3	Check for finish	Visual
2.4	Check for "D" hole for masking	Visual
2.5	Material thickness	Vernier calipers
2.6	Workmanship	Visual

SIZE	CODE	NUMBER	REV
A	II	7412849-0-0	

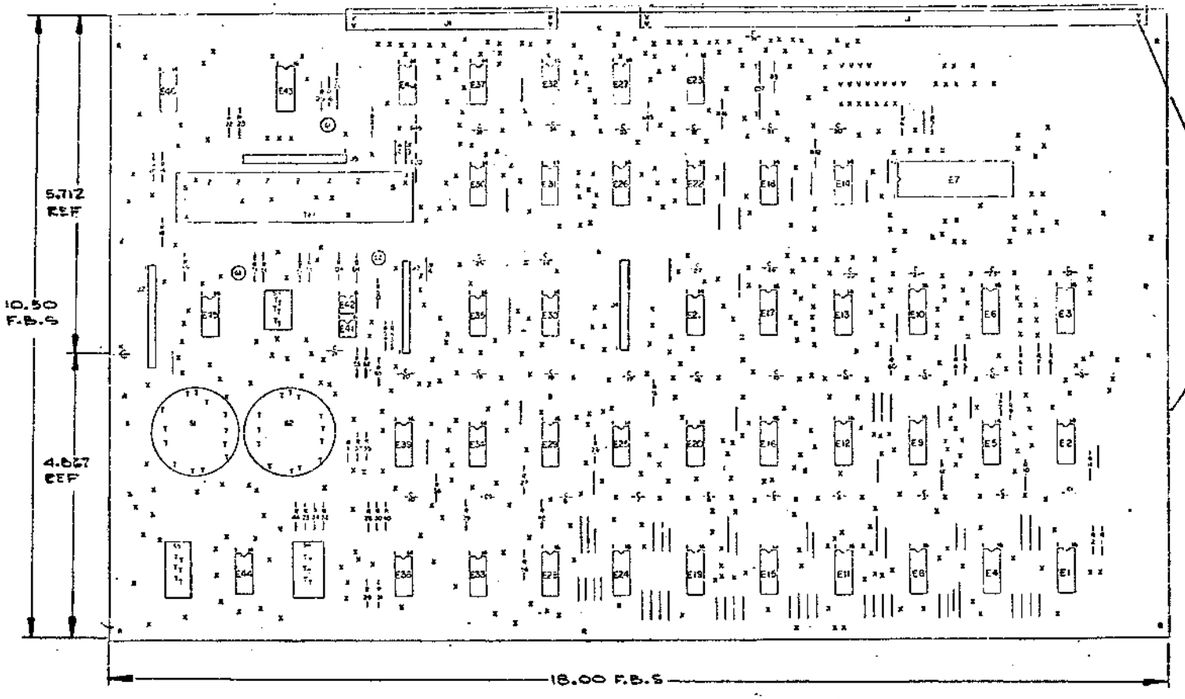
DEC 3-(332)-1283-1A-R175

NOTES:

1. JUMPER 'W4' ADDED FOR 5410902-2 VARIATION (VT5ØH, VT5ØJ)
2. FOR 5410902-2 VARIATION (VT5ØH, VT5ØJ) REMOVE W1, W2 AND INSERT W3.
3. BOM'S FOR 5410902-0, 5410902-2, 5410902-4 MUST BE UPDATED SIMULTANEOUSLY
4. REMOVE 'W7' FOR 5410902-4 (VT5Ø8)
5. OPTIONAL JUMPERS FOR ODD PARITY, INSERT W6. AND TO CAUSE THE 7TH DATA BIT TO BE TRANSMITTED AS A SPACE, INSERT JUMPER W5

VARIATION	COMMENTS
5410902-0	BASIC VT50
5410902-1	HEAT CYCLED SYSTEM TESTED 5410902-0
5410902-2	VT MODEL WITH DIRECT CURSOR CONTROL AND COPIER SUPPORT
5410902-3	HEAT CYCLED SYSTEM TESTED 5410902-2
5410902-4	BASIC VT50 WITH COPIER SUPPORT
5410902-5	HEAT CYCLED SYSTEM TESTED 5410902-4

QTY	VARIATION	ITEM# B3 LEGEND E1 E4 E8 E11 E15 E19 E24 E28
4	5410902-0	2308242 2308442 — — 2308342 2309542 — —
8	5410902-2	E20-2 E20-4 E20-4 E20-5 E20-5
6	5410902-4	B20-2 B20-4 B20-4 B20-5 B20-5



REF	QTY	DESCRIPTION	PART NO.	ITEM NO.
REF		ASSY-DISPONATE HOLE	70-14144-00	1
REF		ASSY-DRILLING HOLE LAYOUT	70-RM-5410923-00	2
REF		MODULE ECO HISTORY	EM-RM-5410923-00	3
	1	ETCHED CIRCUIT BOARD	5010021	5
	36	C1 THRU C36, C41, C 121	CAP. .01UF, 100V. ±20%	1021610-01	6
	1	C37	CAP. 20 I.F. 25V	1121796	7
	1	C38	CAP. 33 I.F. 10V. ±10%	1000076	8
	1	C1	CERAM. MCL13C1	1105±10	9
	2	D4, D6	DIODE, D472	1105275	10
	21	R1-R8, R26-R34, R55 R44, R63, R64	RES 1K 1/4W 5%	1300365	11
	22	R9-R15, R18, R20, R25 R35, R37, R39-R43, R45 R48, R58, R59, R60, R61	RES 4.7K 1/4W 5%	1300447	12
	2	R21, R22	RES 2.2K 1/4W 5%	1300419	13
	1	R56	RES 130E 1/4W 5%	1300339	14
	1	R51	RES 150 1/4 W 5%	1300360	15
	2	R16, R50	RES 39K 1/4 W 5%	1302314	16
	1	R36	RES 220 1/4W 5%	1300271	17
	1	R62	RES 750 1/4 W 5%	1301401	18
	1	R53	RES 7.5K 1/4W 5%	1301422	19
	2	E33, E35	I.C DEC 74197	1910035	20
	3	E2, E25 E40	I.C DEC 7474	1905647	21
	7	E5, E21, E27, E30, E32 E36, E43	I.C DEC 7400	1906576	22
	6	E9, E12, E16, E23, E29, E39	I.C DEC 74161	1910650	23
	1	E20	I.C DEC 7490	1909061	24
	2	E13, E34	I.C DEC 7404	1909686	25
	4	E26, E31, E37, E44	I.C DEC 7402	1904004	26
	4	E3, E6, E10, E17	I.C DEC 74193	1909937	27
	1	E38	I.C DEC 74H10	1909057	28
	1	E45	I.C DEC 7430	1905660	29
	1	E7	I.C DEC 1402 UART ASYNCH	9102469	30
	2	E14, E22	I.C DEC 7499	1909065	31
	1	E18	I.C DEC 7430	1909978	32
	1	E46	OSCILLATOR	1812181	33
	—	SEE LEGEND	I.C DEC 5600A	2300048	35
	2	E41, E42	OPTO-ISOLATOR	1610727	34
	3	Q1, Q2, Q8	TRANS 6431	1504338	36
	3	S3, S4, S6	SWITCH, SLIDE	1201.9	37
	2	S1, S2	SWITCH, ROTARY	1270002	38
	77	——	PINS 'F'	9009607	39
	42	——	PINS STRAIGHT	9009605	40
	1	TB	STRIP, TERMINAL	2111905	41
	56		JUMPERS	9107560-1	42
	549		EYELETS	9330756	43
	1	SOCKET	40 PIN	1200141	45
	19		JUMPER, INSULATED	9009155	44

PARTS LIST

FIRST USED ON OPTION MODEL: VT50

ETCH BOARD REV. J

IC TYPE	GND	+5V
74153	8	16
7490	10	5
7401	8	16

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

IC PIN LOCATIONS

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

SEMICONDUCTOR CONVERSION CHART

M. Morgenstern 7/6/79
M. MORGENSTERN
E. Mayo Charles 7/11/79
5410902-0-0 J
ORIGINATED
CHANGE NO. REVISIONS
CHK. REV.

DRAW. — DATE
CHECK — DATE
ENG. — DATE 7/24/79
PROD. M.G. — DATE
PROD. — DATE 7/31/79
NEXT HIGHER ASSY

SCALE
SHEET 1 OF 5

digital

TITLE: RCM UART AND TIMING

SIZE D | CODE CS | NUMBER 5410902-0-1 | REV. J
DIST.

1.3 µS CYCLE TIME

72 NS

OSC A = 13.824 MHZ

E. = DO "E" INSTRUCTIONS
F. = DO "F" INSTRUCTIONS
W. = WRITE ENABLE, IF SELECTED
G. = CLEAR WRITE FLOP
H. = TEST FLAGS; INC PC
J. = CONDITIONAL PC INC
LOAD PC FROM ROM OR DO NOTHING

RUT 1 H FL" H

RUT 1 T2 L

RUT 2 INIT L

RUT 2 B OSC A

RUT 2 INIT H

SYNC L

HORIZ L

VERT H

TSC L

BINIT L

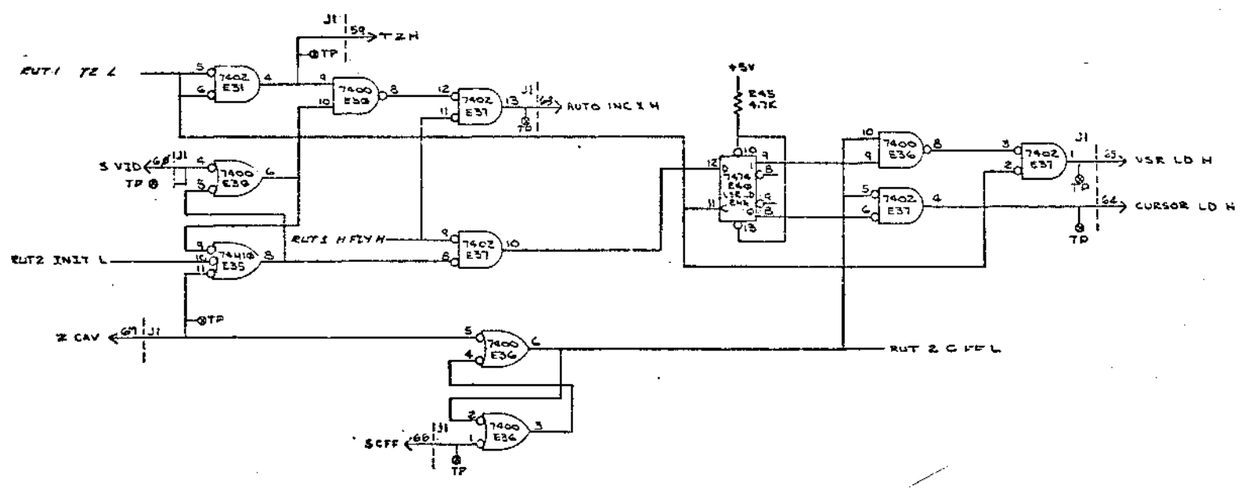
60 HZ

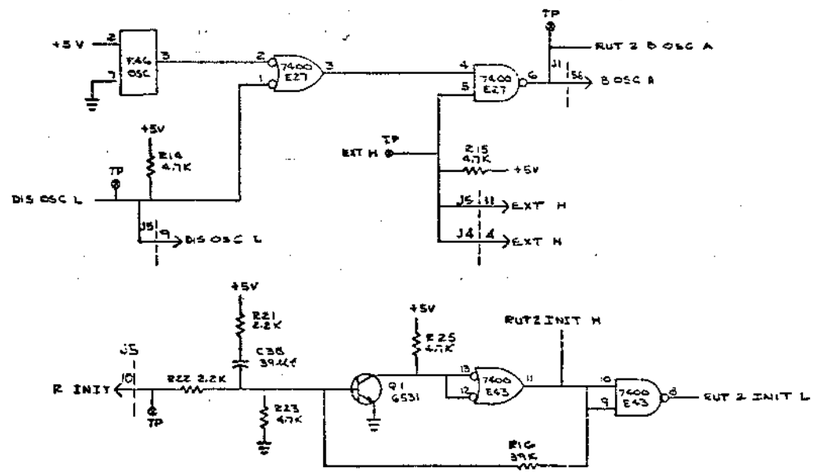
INSERT JUMPER FOR 50HZ VTOP

REVISIONS		
OK	CHANGE NO.	REV.

TITLE	ROM UART & TIMING (RUT 1)	SIZE	CODE	NUMBER	REV.
		D	CS	5410902-0-1	
SCALE	SHEET 2 OF 5	DIST.			

DCS 5410902-0-1

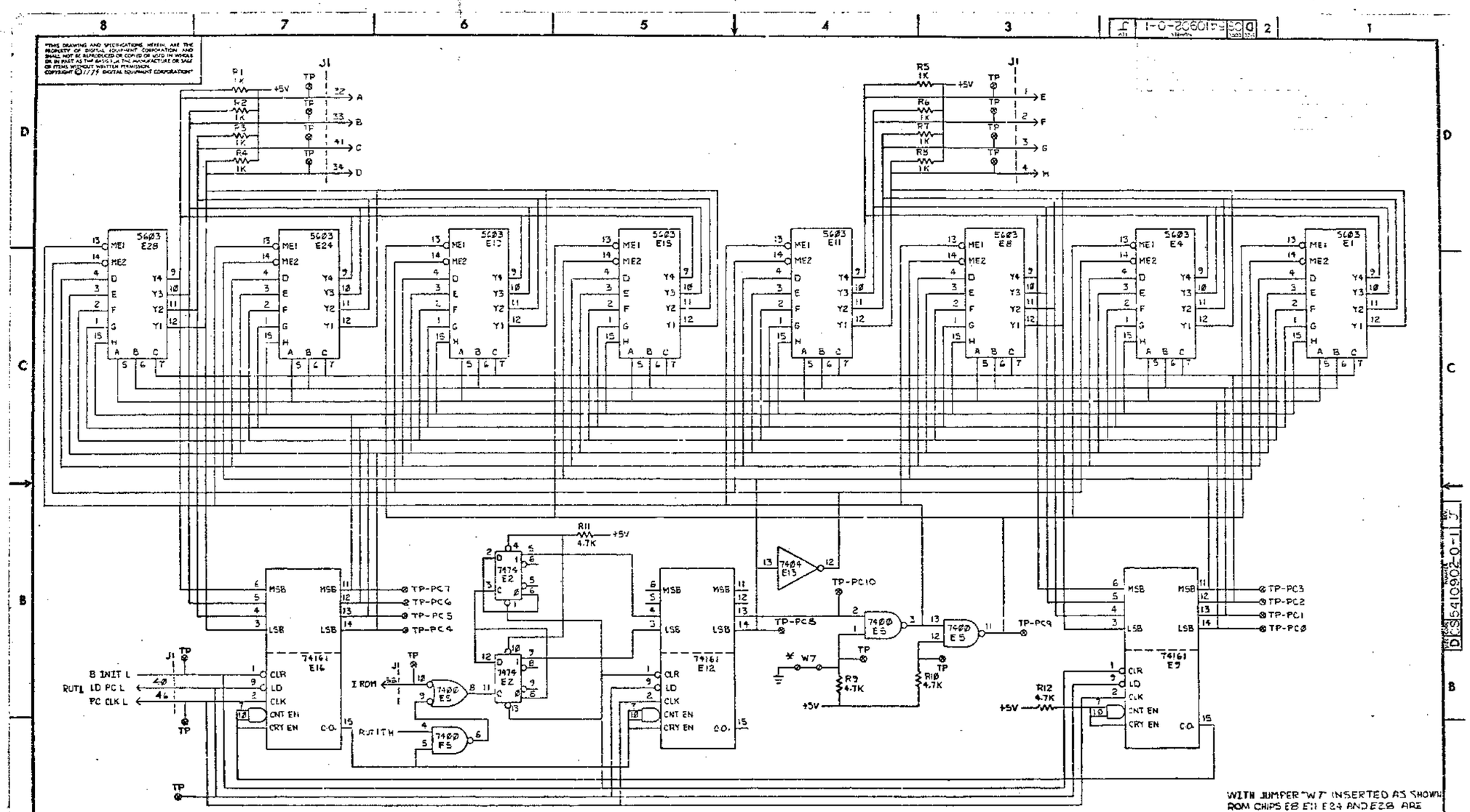




REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	ROM UART & TIMING (RUT 2)					SIZE	CODE	NUMBER	REV.
						D	CS	E410902-0-1	J
SCALE		SHEET 3 OF 5				DIST.			

J 54-10902-0-1 CS D



WITH JUMPER "W7" INSERTED AS SHOWN, ROM CHIPS E8 E11 E24 AND E28 ARE DISABLED.

* FOR VT50 WITH COPIER OR VT50H, VT50J MODELS, REMOVE JUMPER W7 ENABLING ALL 2 ROM CHIPS.

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
ROM UART & TIMING (RUT 3)	D	CS	5410902-0-1	T
SCALE — SHEET 2 OF 5	DIST.			

DIGITAL 5410902-0-1 T

★ NOTE: JUMPER W3 INSTALLED & JUMPER W2 CUT FOR 5410902-2 (VT5ØH, VT5ØJ) VARIATION ONLY

RECEIVE LOOP

RECEIVE LOOP (LOCAL L)

(HALF DUPLEX L)

BRK KEY L

TRANSMIT LOOP

CLK LDG NRZ NRI NP EP 2SB

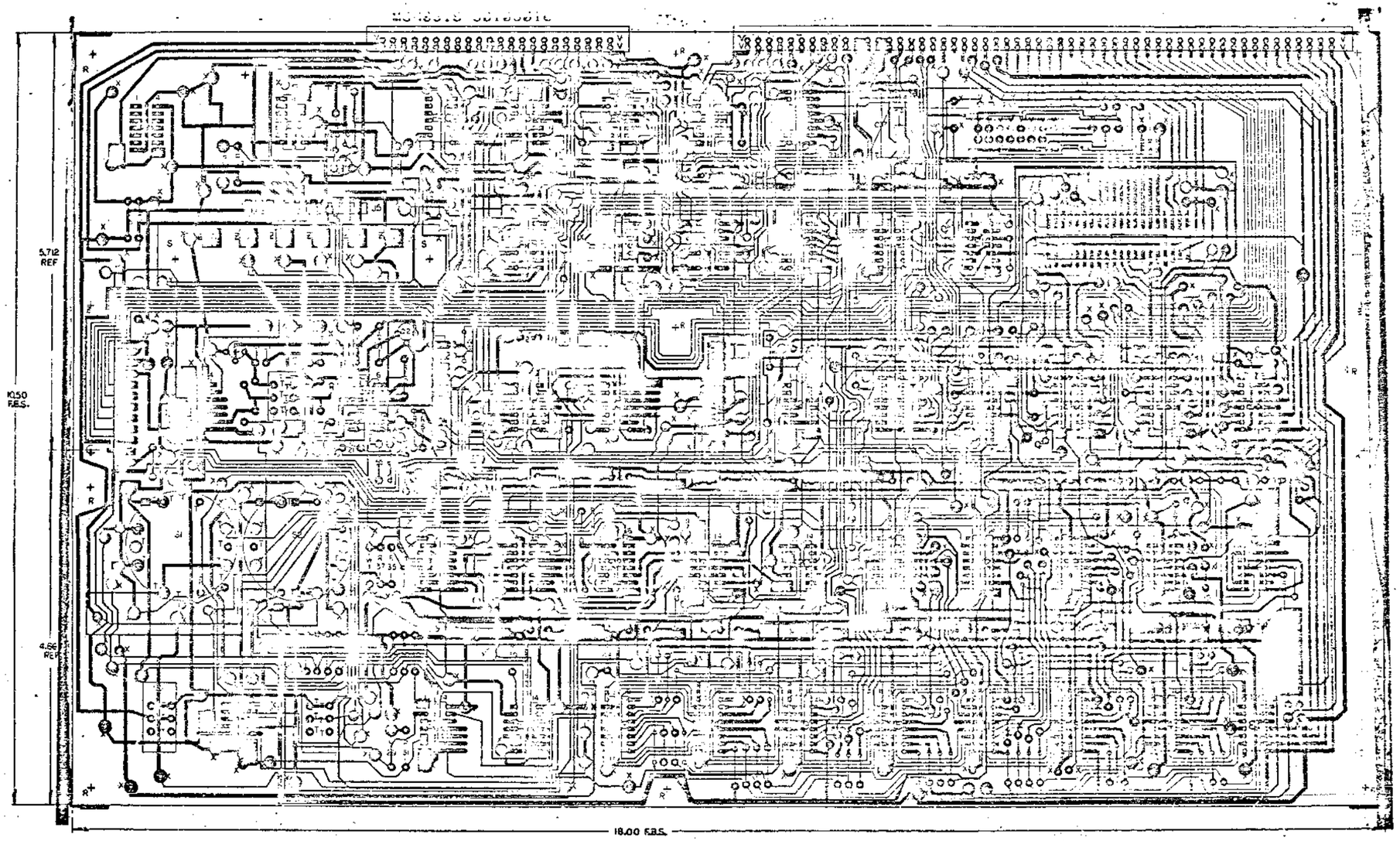
NOTE: JUMPER W4 INSTALLED ON 5410902-2 (VT5ØH, VT5ØJ) VARIATION ONLY

MUX A*	MUX B*	
Ø	Ø	RCM
Ø	1	ø2 =
1	Ø	A2
1	1	UART

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZ	CODE	NUMBER	REV.
RCM UART & TIMING	D	CS	5410902-0-1	J
SCALE	SHEET 5 OF 5	DIST.		

5410902-0-1 J



NOTES:

1. X HOLES ARE FOR EYELETS
2. R HOLES ARE PUNCHED SLOTS

DRILLING DATA

HOLE LETTER	FOR PTH BOARDS	FOR NON-PTH	QTY OF HOLES
		.040 DIA.	
		.052 DIA.	
		.100 DIA.	48
		.110 DIA.	8
		.125 DIA.	9
		.161 DIA.	166

BOARD FABRICATION INFORMATION

BOARD SIZE 10.5 X 18.0

BOARD MATERIAL .062 THK 1 OZ COPPER

EYELET ☒ PLATED THRU ☐

2 SIDED ☐ MULTI-LAYER ☐

NOTCH BEFORE GOLD PLATING ☐

NOTCH AFTER GOLD PLATING ☐

APPROVED	DATE	EQUIPMENT CORPORATION
DRAWN	DATE	TITLE: ROM UART & TIMING
CHECKED	DATE	
PROJ ENGR	DATE	
FIRST USED ON: 5410902		
SCALE: 2:1	REVISION LETTER: E	NUMBER: 5410902-0-5
SIZE: C		MS 40318

REV	NUMBER	SIZE	CODE
J	5410902-0-6	B	11491

PRODUCT LINE 98

DATE RELEASED 1-10-75

RELEASED BY M.MORGANSTERN

MODULE ECO HISTORY

PAGE 1 OF 1

RELEASED CS REV. A

RELEASED ETCH BD REV. B

ECO. NO	ORIGINATOR	DATE WRITTEN	NEW CS REV.	NEW ETCH BOARD REV.	IS IT MANDATORY TO REWORK ALL EARLIER VERSIONS (NOW AVAILABLE OR RETURNED FOR REPAIR) TO THIS REVISION LEVEL? YES	NO	CONDITIONAL (EXPLAIN)	ARE ALL REVISIONS OF THIS MODULE COMPLETELY COMPATIBLE NOW (CAN BE MIXED INDISCRIMINATELY)? YES	NO	CONDITIONAL (EXPLAIN)	SIMPLIFIED CHANGE DESCRIPTION	NO. PARTS ADDED	NO. PARTS DELETED
00001	MORGASTERN	1-27-75	B	B							1. CAPS ADDED TO 74123 R55 INCREASED TO 39K Ω. 2. DOCUMENT CHANGES REQUIRED TO PRODUCE 5410902-1 THRU 5410902-3	1. 2 2. 8	1. NONE 2. 4
00002	MISITANO	2-4-75	C	B		✓		✓			CHANGE R50 TO 39K Ω	0	0
00003	BUZYNSKI	2-27-75	D	B		✓				2 AND 3 NOT COMPATIBLE	1. DOCUMENT CHANGE REQUIRED TO PRODUCE 5410902-2 2. CHANGE ROM DESIGNATIONS FOR 5410902-4	0	0
00004	DICKENSON	3-4-75	E	B		✓		✓			DOCUMENTATION CORRECTION	0	0
00005	BUZYNSKI	4-29-75	F	B	✓		5410902-2 VARIATIONS ONLY (VT50 H)			ALL -2 AND -3 VARIATIONS ARE COMPATIBLE	JUMPER WIRES FOR +5, GND ADDED TO P2 VARIATION (VT50 H, VT50 J)	1	—
00006	DICKENSON	4-14-75	H	C		✓		✓			NEW ETCH REV C INITIALIZE CIRCUIT CHANGE TO ELEMINATE E43-74/2,3	4	9
00007	NEUMANN	4-30-75	J			✓		✓			1. DELETE UART SOCKET 2 CORRECT E7 ON CS SHEET 1 OF 4	0	1
00008	PUCCI	27-OCT-75	K			X		X			DOCUMENTATION CORRECTIONS	0	0

REVISIONS CHK	CHG NO.	REV.
	00001	A
	00002	B
	00003	C
	00004	D
V.L.	00005	E
M.L.	00006	F
M.L.	00007	H
V.L.	00008	J

DRN.	DATE
CHK'D	DATE
ENG.	DATE
PROD.	DATE

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

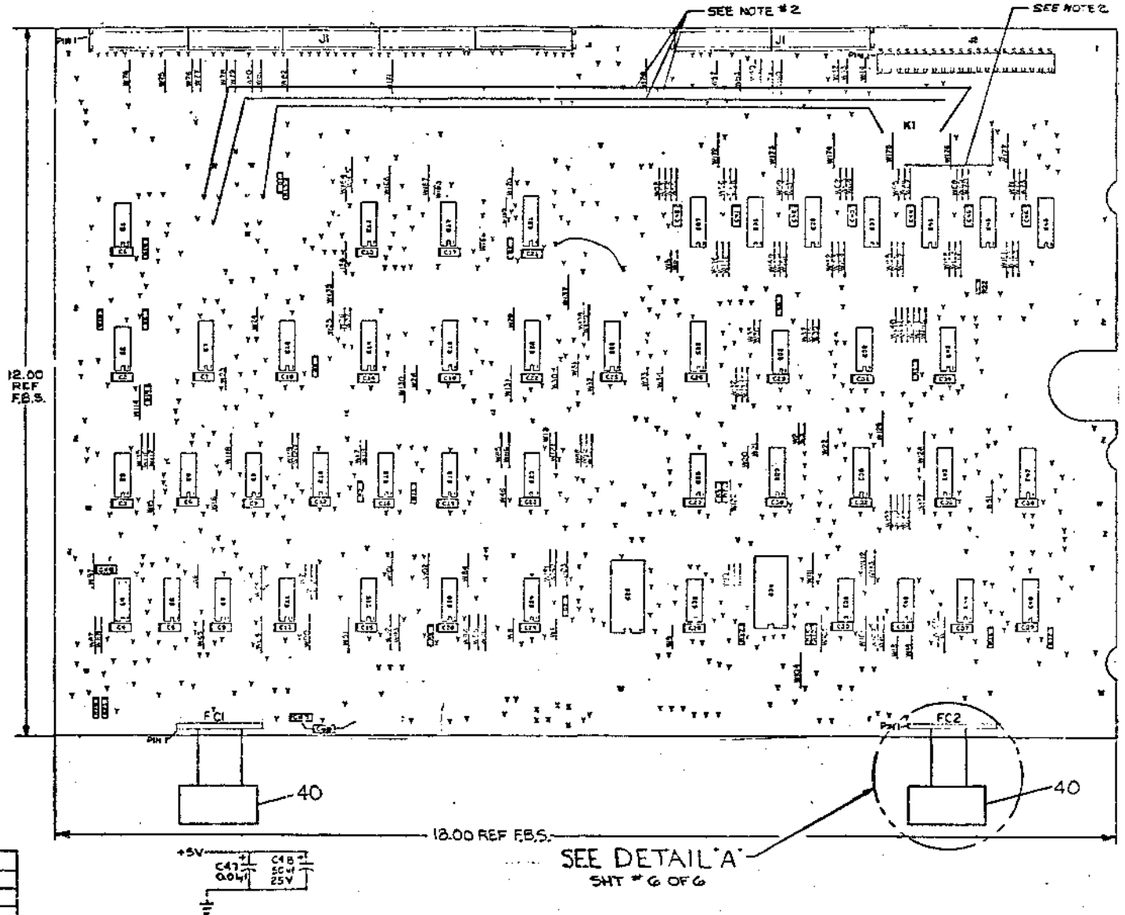
TITLE: MODULE ECO HISTORY

SIZE B | CODE 11491 | NUMBER 5410902-0-6 | REV. J

DEC 25-(329)-1026-N971
DRB 104

NOTES:

1. 5410906-1 IS THE HEAT AND SYSTEM TESTED 5410906-0.
2. WIRES ADDED FOR RELOCATION OF K1 (ITEM #9)
   SEE AH DWG FOR REWORK DETAILS.



REF				
REF		X-Y COORDINATE HOLE LOCATION	K-CD-5410906-4	1
REF		ASSY DRILLING HOLE LAYOUT	E-AH-5410906-5	2
REF		MODULE ECO HISTORY	B-MH-7410906-6	3
1		ETCHED CIRCUIT BOARD	5010905	4
1	C48	CAPACITOR 50uf 25V	1301798	5
47	C1 THRU C47	CAPACITOR .01 DISC	1001810-01	6
2	D1,D2	DIODE	2700124	7
1	S1	SLIDE SWITCH	1210919	8
1	K1	RELAY PHILIPS 12V DC 3PA111 AE	1212049-0-0	9
1	J1	50 PIN SIDE ENTRY AMP CONNECTOR	1211851	10
2	J2,	10 PIN BOTTOM ENTRY AMP CONNECTOR	1211850	11
1	R13	RESISTOR 100 OHM 1/4W 5%	1300229	12
11	R1,R3,R4,R7,R10,R15,R22,	RESISTOR 1K 1/4W 5%	1300385	13
11	R2,R5,R6,R8,R9,R11,R12, R16,R17,R18,	RESISTOR 4.7K 1/4W 5%	1300447	14
1	R21	RESISTOR 430 1/4W 5%	1300316	15
1	R20	RESISTOR 47 1/4W 5%	1300202	16
5	E15,E20,E32,E38,E42	IC DEC 7495	1909059	17
6	E5,E9,E9,E19,E46,E44	IC DEC 7400	1905576	18
2	E17,E24	IC DEC 74H30	1909060	19
1	E21	IC DEC 74157	1910855	20
5	E14,E18,E22,E25,E26	IC DEC 74193	1910019	21
2	E7,E10	IC DEC 7455	1910224	22
2	E23,E29	IC DEC 9242	1909712	23
2	E2,E16	IC DEC 7474	1905547	24
3	E11,E12,E36	IC DEC 74H10	1909057	25
3	E3,E6,E30	IC DEC 7404	1909686	26
1	E1	IC DEC 7408	1910741	27
1	E34	IC DEC 74150	1910153	28
3	E33,E39,E43	IC DEC 7442	1910048	29
1	E43	IC DEC 74155	1910856	30
2	E13,E48	IC DEC 74H11	1909267	31
1	E4	IC DEC 7402	1909004	32
7	E27,E31,E35,E37,E41,..45, E46	IC DEC 2102-1 1024 X 1 RAM	2111319-1	33
1	E26	IC DEC 2513 24 PIN CHAR GEN	23000A7-01	34
745		EYELET	9007831	35
180		JUMPERS	9007560-01	36
1		24 PIN IC SOCKET	1210835	37
A/R		WIRE 30 AWG. INSULATED	9105760	38
10		JUMPERS INS	9007166	39
2		CABLE ASSY.	5410906-0460	40
1		TERMINAL	9007990	41
A/R		WIRE, 18 AWG INSULATED	9107B-0-55	42
1	C49	CAP 82pF 100V 5%	1000015	43

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC 74150	12	24
IC 7495	8	14
IC 2102	9	10
IC 2513	12	24
IC TYPE	GND	+5V

GND AND 5V ARE USUALLY PIN 8 AND 16 RESPECTIVELY EXCEPTIONS ARE STATED ABOVE

IC PIN LOCATIONS

REV.	CHANGE NO.	CHK	DATE
A	5410906-00001		
B	5410906-00002		
C	5410906-00003		
D	5410906-00004		
E	5410906-00005		
F	5410906-00006		
G	5410906-00007		
H	5410906-00008		
J	5410906-00009		
K	5410906-00010		

FIRST USED ON OPTION MODEL: VT50

ETCH BOARD REV. C

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

SEMICONDUCTOR CONVERSION CHART

DRN. M. Cummings DATE
CHK'D M. Fitzgerald DATE
ENG. M. Bergeron DATE
PROJ. ENG. M. Bergeron DATE
PROD. M. Bergeron DATE

NEXT HIGHER ASSY: 8-DD-VT50-0

SCALE —
SHEET 1 OF 6

digital

TITLE: DATA PATHS MEMORY AND DECODER

SIZE D | CODE CS | NUMBER 5410906-0-1 | REV K

DIST.

PART OF 5410906-0-1

DP3-X0
DP3-X1
DP3-X2
DP3-X3
DP1-A2
DP1-A6
DP3-Y0
DP3-Y1
DP1-A1
DP1-A7

2102 E27 — DI6 ← J1-8
2102 E31 — DI5 ← J1-9
2102 E35 — DI4 ← J1-12
2102 E37 — DI3 ← J1-13
2102 E41 — DI2 ← J1-16
2102 E45 — DI1 ← J1-17
2102 E46 — DI0 ← J1-5

DP2-LD RAM L
R22 1K +5V

74157 E21
R2 4.7K +5V
DP3-X5
DP3-Y3
DP3-X4
DP3-Y2
DP1-A0
DP1-A1
DP1-A4
DP1-A5
74LS32 E17
DP3-X6

7495 E38 — DO3, DO5, DO4, DO6
7495 E42 — DO2, DO1, DO0, DP1-B CURSOR H
DP3-CURSOR H
J1-39 → T2 H
R1 1K +5V

REVISIONS		
DR	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
DATA PATHS (DP1) MEMORY AND DECODERS	D	CS	5410906-0-1	K
SCALE — SHEET 2 OF 6	DIST.			

J1
A 32
E 1
B 33
TE 56
C 41
D 34
TF 37
F 2
N 4
TN 54
G 3
TW 53
DP3-AC <RAM

7404 E6
74H18 E12
R10 1K +5V
74H11 E48
74H11 E48
74H11 E48
7406 E1
R14 1K +5V
74H10 E36
7406 E1
7400 E8
DONE FLIPFLOP
7400 E8
7400 E8
74H10 E36
74H10 E36
7404 E6
7400 E5
7406 E1
7405 E1
7400 E44
7402 E4
7404 E6
7402 E4

E 7442 E35
F 7442 E39
G 74155 E43
Q 7492 E47

MO
ZX
MI
XA
IX
IXDY
DP2-CX8
IXEY
DP2-DAC
DX
DY
DP2-IY
IA
IA
DXDY
M2U
DP2-M2B
DP2-M2X
DP2-M2A
L40M
U2M
A2M
HPR-EY
ENPR
J1-67 ECAV
KEY CLICK
DP2-BZY
J1-68 SVID
66 SCFF

7404 E6
7400 E9
DP2-ZYH
7400 E9
DP2-ZXH
7400 E9
7404 E6
DP2-ZACH
7400 E9
J1-47 MODE 1 L
7402 E4
DP2-IXH
74H18 E12
74H11 E13
DP2-IAH
C49 82PF
7400 E19
7400 E19
7400 E19
74H11 E13
DP2-DXH
74H11 E13
DP2-DYH
74H53 E24
7400 E40
M2U FF
7400 E40
7400 E40
7402 E4
7400 E5
7404 E6
7400 E44
7400 E44
7400 E44
R15 1K
J2 9 CEN L
+5V
9 C LD L

J1-22 U7
KEY UP H
SYNC L
SYNC L
UR
TSC L
6GHJ
KCLK
CSF L
R12 4.7K +5V
R17 4.7K +5V TRU J2
DP3-ADX H
DP3-AC *RAM
R16 4.7K +5V TRU J1
CCF L J2-1
DP3-TAB
J1-20 RUF L
63 AUTO INC X H
135 I ROM
J1-46 PC CLK L
52 TJ
J1-61 B INIT L
25 M2U L
37 MUX B
38 MUX A
52 TG
DP2-LD RAM L
R18 4.7K
R13 4.7K +5V
R19 4.7K +5V
R11 4.7K
R13 100 +5V
L1
D1 D664
K1
J1-40 LD PC L

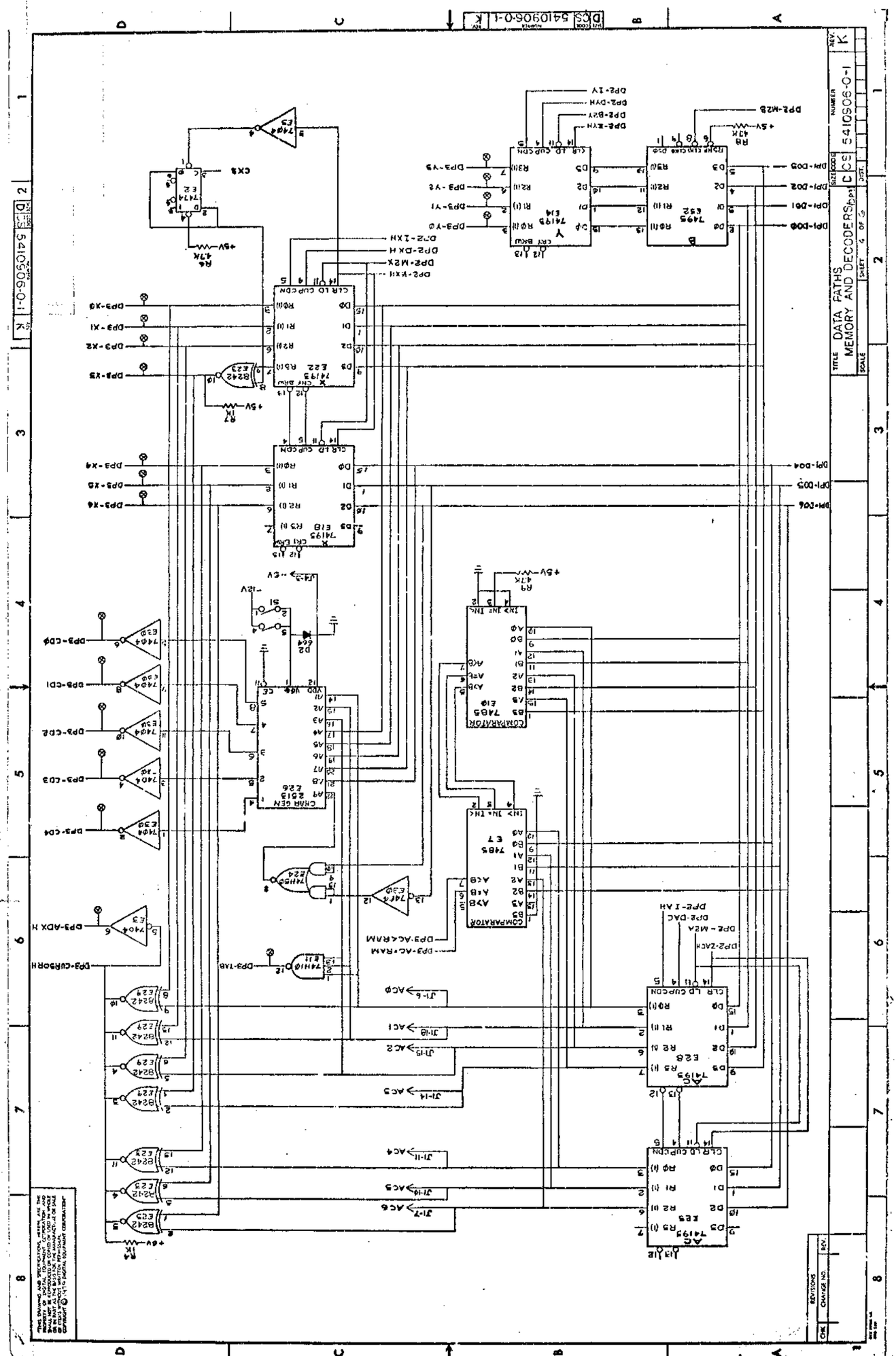
E74 MODE 1 74150 E34
MODE 0
D15 D14 D13 D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1 D0
S3 S2 S1 S0

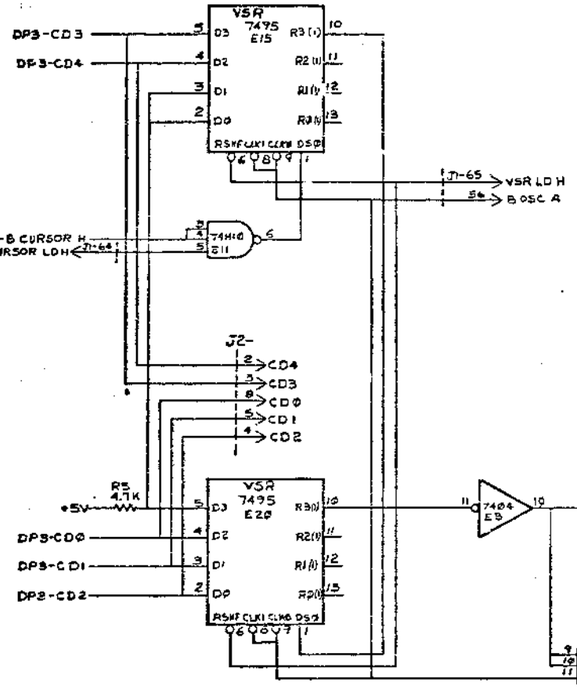
E16 7474 WRITE PF
E16 7474 BELL PF

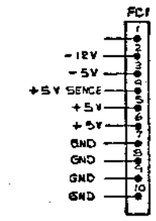
REVISIONS
CHK | CHANGE NO. | REV.

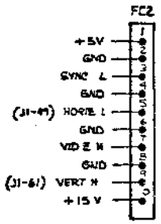
TITLE DATA PATHS
MEMORY AND DECODERS, DP21
SIZE D | CODE | NUMBER DCS 5410906-0-1 | REV. K
SCALE | SHEET 3 OF 5 | DIST

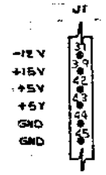
DCS 5410906-0-1

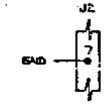

DCS 5410906-0-1
TITLE
DATA PATHS
MEMORY AND DECODERS
SIZE C
NUMBER 5410906-0-1
REV K
SHEET 4 OF 6
DPI-DO0
DPI-DO1
DPI-DO2
DPI-DO3
DPI-DO4
DPI-DO5
DPI-DO6
DPI-DO7
DPI-DO8
DPI-DO9
DPI-DO10
DPI-DO11
DPI-DO12
DPI-DO13
DPI-DO14
DPI-DO15
DPI-DO16
DPI-DO17
DPI-DO18
DPI-DO19
DPI-DO20
DPI-DO21
DPI-DO22
DPI-DO23
DPI-DO24
DPI-DO25
DPI-DO26
DPI-DO27
DPI-DO28
DPI-DO29
DPI-DO30
DPI-DO31
DPI-DO32
DPI-DO33
DPI-DO34
DPI-DO35
DPI-DO36
DPI-DO37
DPI-DO38
DPI-DO39

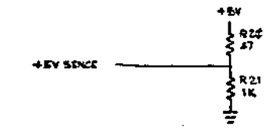












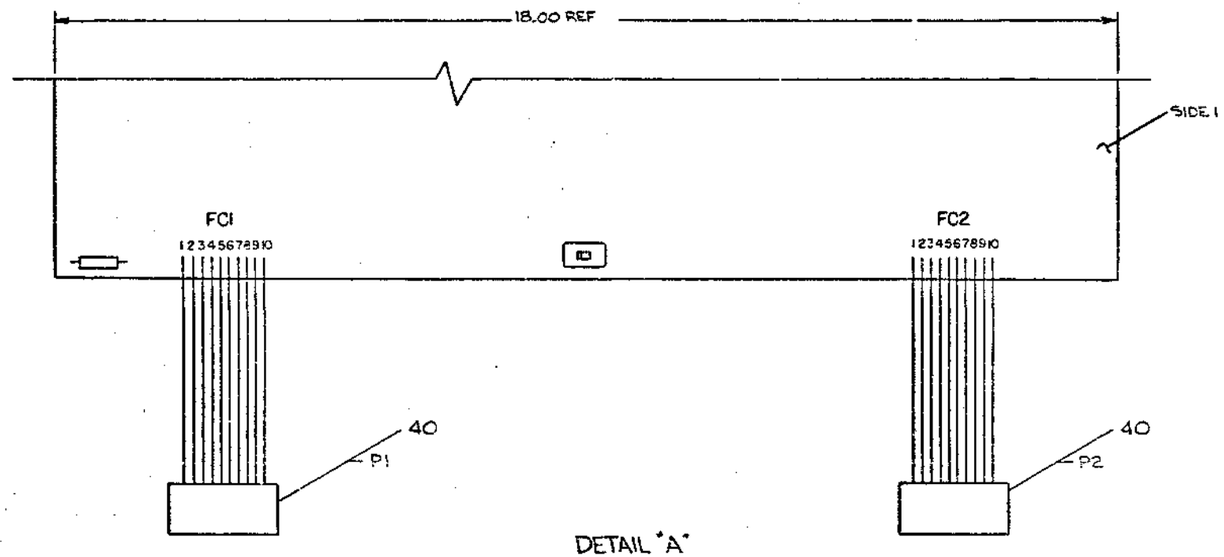
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE/CODE	NUMBER	REV.
DATA PATHS MEMORY AND DECODERS (CPU)	D	CS 5410906-0-1	K
SCALE	SHEET 5 OF 6	DIST.	

5410906-0-1 K

WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM CONNECTION	TO CONNECTION
40	22	BLK		FC1-1
		BRN		2
		RED		3
		ORN		4
		YEL		5
		GRN		6
		BLU		7
		VIO		8
		GRY		9
40		WHT		FC1-10
40		BLK		FC2-1
		BRN		2
		RED		3
		ORN		4
		YEL		5
		GRN		6
		BLU		7
		VIO		8
		GRY		9
40	22	WHT		FC2-10



DETAIL "A"
SCALE = NONE

REVISIONS		
CHG	CHANGE NO	REV

TITLE	DATA PATHS MEMORY AND DECODER		
SIZE	CODE	NUMBER	REV.
D	CS	5410906-0-1	K
SCALE	SHEET	DIST.	

H CUT
J2 SIDE 3 1 S
12.000 F.B.S.
ETCH CUT SIDE 1
55601

W A39 | 9-0-5410925-0-6 NUMBER | W/M CODE | B SIZE

PRODUCT LINE VT50

DATE RELEASED 1-10-75

RELEASED BY M MORGENSTERN

MODULE ECO HISTORY

PAGE 1 OF 1

RELEASED CS REV. A

RELEASED ETCH BD REV. B

ECO. NO.	ORIGINATOR	DATE WRITTEN	NEW CS REV.	NEW ETCH BOARD REV.	IS IT MANDATORY TO REWORK ALL EARLIER VERSIONS (NOW AVAILABLE OR RETURNED FOR REPAIR) TO THIS REVISION LEVEL? YES	NO	CONDITIONAL (EXPLAIN)	ARE ALL REVISIONS OF THIS MODULE COMPLETELY COMPATIBLE NOW (CAN BE MIXED INDISCRIMINATELY)? YES	NO	CONDITIONAL (EXPLAIN)	SIMPLIFIED CHANGE DESCRIPTION	NO. PARTS ADDED	NO. PARTS DELETED
00001	MORGANSTERN	JAN. 27, 75	B	B		X		X			1. CIRCUIT CHANGED SO KEY CLICK RELAY STILL WORKS IF CONTACTS FAIL. 2. DOCUMENT CHANGES REQUIRED TO PRODUCE 5410906-1 THRU 5410906-3 VARIATIONS.	NONE	1
00002	MISITANO	JAN. 24, 75	C	B				X			MOVED KEYCLICK RELAY TO OPPOSITE SIDE OF BOARD	NONE	NONE
00003	BUZYNSKI	2-26-75	C	B		X		X			DELETE VARIATIONS 5410906-2 5410906-3	NONE	NONE
00004	DICKENSON	3-5-75	D			X		X			DOCUMENT CHANGES	0	0
00005	WHITTLESEY	4-25-75	E			X		X			ADD GND JUMPER	1	0
0005A	WHITTLESEY	5-8-75	—	—		X		X			CHG WIRE SIZE FROM #22 TO #18 GREEN	0	0
00006	NEUMANN	4-30-75	H	B		X		X			1. DELETE PIN 2, 24 PIN SOCKETS. 2. CORRECT CS SHEET 1 OF #5	0	2
00007	DICKENSON	3-25-75	J	C		X		X			NEW ETCH REV C. RESISTORS ADDED TO INCREASE -5V AND 0 NOISE IMMUNITY	4	NONE
00008	WHITTLESEY	8-7-75	K	—		X		X			ADD CAP C48	1	0
00008A	WHITTLESEY	2-SEPT-75	L	—		X		X			CHG VALUE OF C49 TO 82 PF.	1	1
00009	PUCCI	27-OCT-75	M			X		X			DOCUMENTATION CORRECTION	0	0

REVISIONS CHK	CHG INC	REV
V1	00001	A
V2	00002	B
V3	00003	C
V4	00004	D
V5	00005	E
V1	0005A	F
V1	00006	H
V4	00007	J
V5	00008	K
V1	0008A	L
V1	00009	M

DRN. [illegible] DATE 1-10-75

CHK'D [illegible] DATE 1-10-75

ENG. [illegible] DATE 1-10-75

PROD. [illegible] DATE 1-10-75

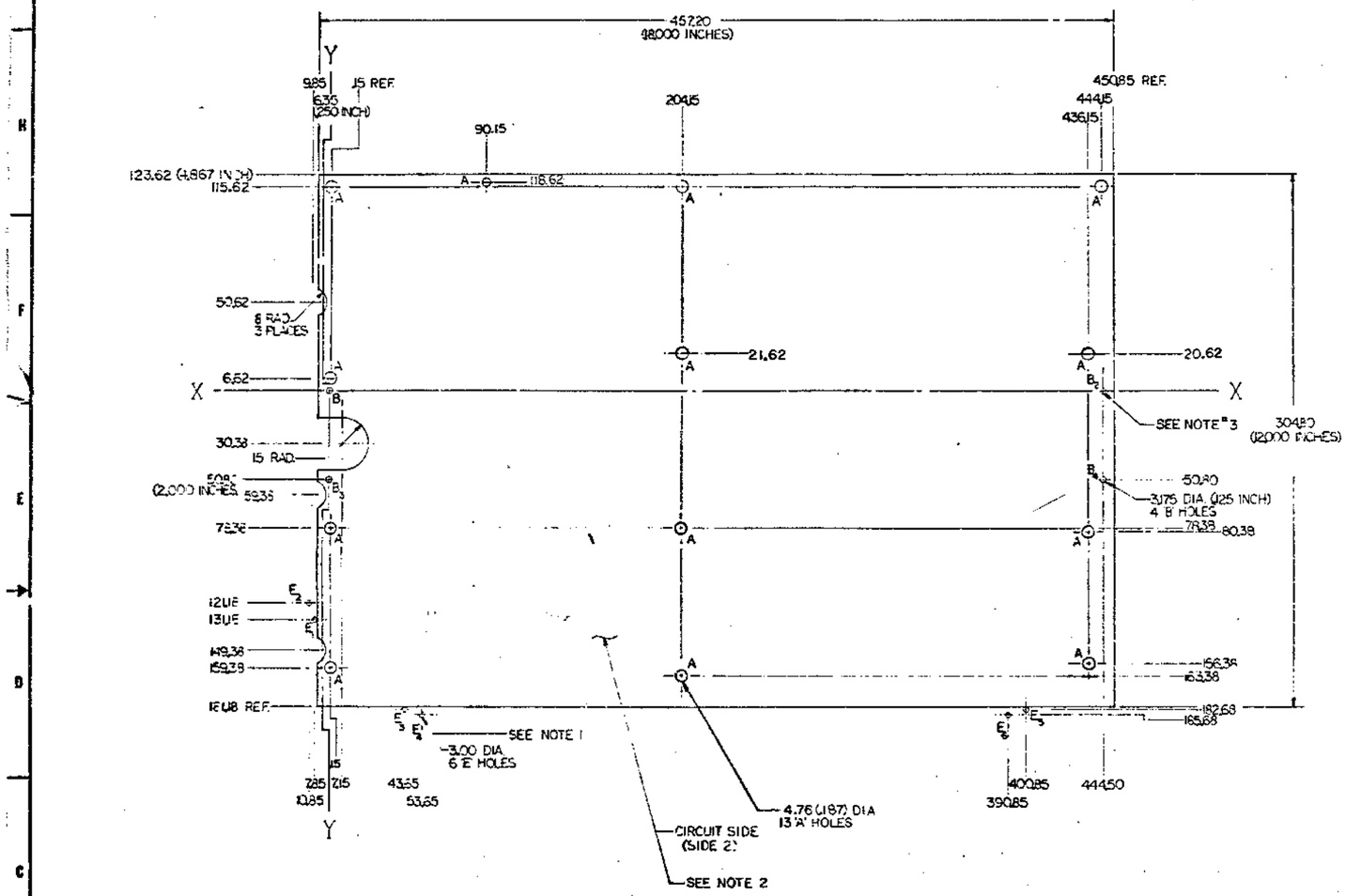
EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE MODULE ECO HISTORY

SIZE B | CODE MH | NUMBER 5410906-0-6 | REV. M

DCC 14-13261-1026-R971

DAB 104



NOTES.

1. $_A$ TOOL TO BE DESIGNED WITH ALL PINS E, THRU E_4 INSTALLED.

   $_B$ E_1, E_2 & E_3 TO BE SPRING LOADED RETRACTABLE.

   $_C$ E_2, E_3, E_4 PINS USED WHEN SHEARING EDGES AND MUST BE FIXED PINS.

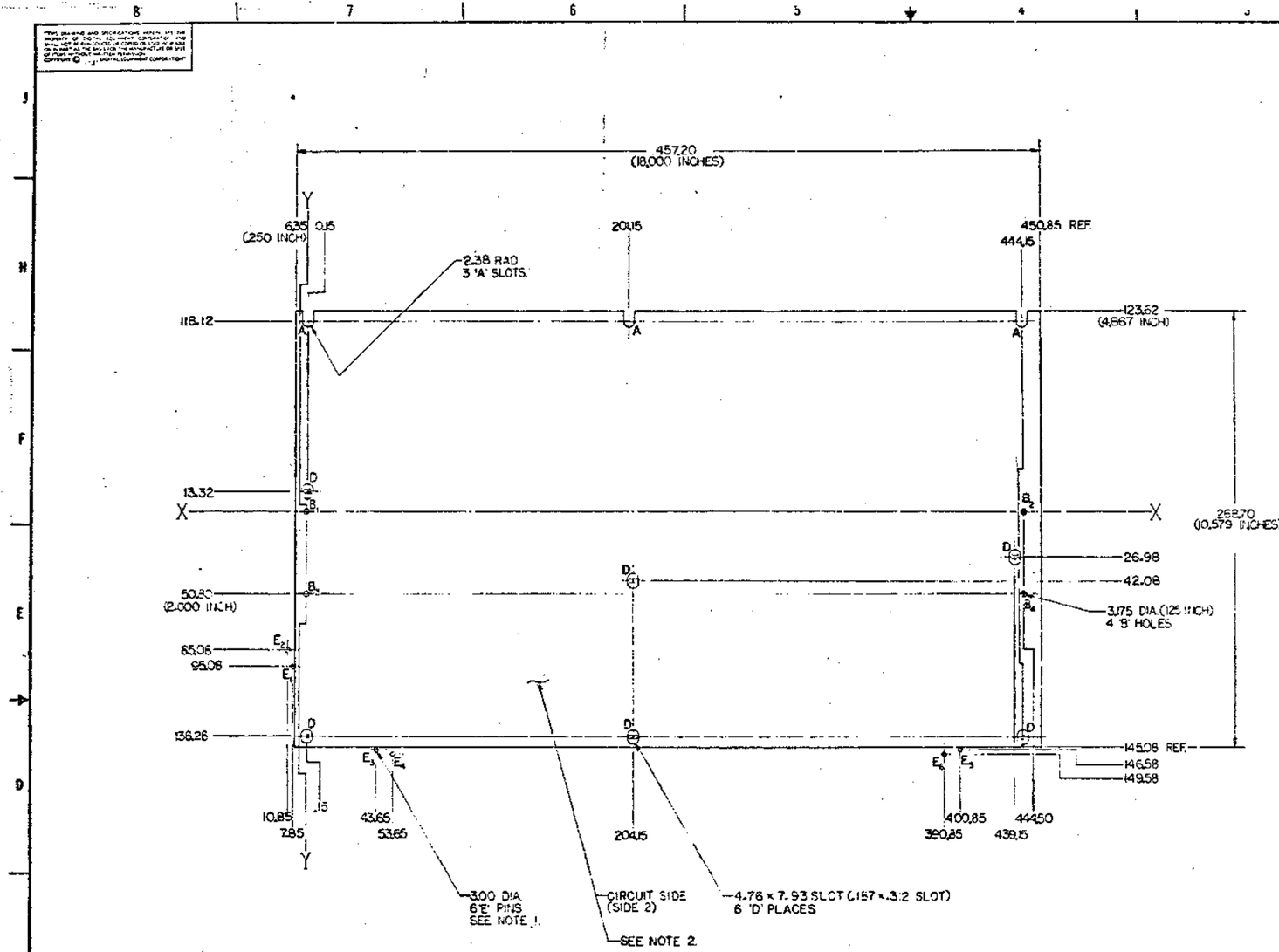
2. CIRCUIT SIDE IS COPPER CLAD SIDE. (ETCH SIDE) OF BOARD, PUNCHING OF HOLES WILL BE FROM THIS SIDE TOWARD OPPOSITE SIDE.

3. PUT 3.175 (.125) DIA HOLES IN TOP & BOTTOM PLATE. DO NOT INSTALL PUNCHES IN B_1-B_2 DATUM.

METRIC DIMENSIONS

FIRST USED ON (OPTION MODEL) VT 2?	QTY.	DESCRIPTION	PART NO.
DIMENSIONAL TOLERANCES	DRN.	DATE	digital
DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED	CHK'D.	DATE	
	STD.	DATE	TITLE PERIPHERAL PEAP PROCESSOR
THIRD ANGLE PROJECTION	MATERIAL B120-VT52-16-2		SIZE CODE IDENT NUMBER 9206360-0-0 REV.
	FINISH	SCALE	
		SHEET OF	DO NOT SCALE

ITEM NO. 9206360-0-0



NOTES:

1a. TOOL TO BE DESIGNED WITH ALL PINS E THRU E_6 INSTALLED.

1b. PINS E_1, E_2, E_3 TO BE SPRING LOADED RETRACTABLE.

1c. E_4, E_5 & E_6 PINS USED WHEN SHEARING EDGES AND MUST BE FIXED PINS.

2. CIRCUIT SIDE IS COPPER CLAD SIDE (ETCH SIDE) OF BOARD. PUNCHING OF HOLES WILL BE FROM THIS SIDE TOWARD OPPOSITE SIDE.

3. PUT 3.175 (.125) DIA HOLES IN TOP AND BOTTOM PLATES. DO NOT INSTALL PUNCHES IN B_1 & B_2 DATUM HOLES.

METRIC DIMENSIONS

FIRST USED ON OPTION NO.	QTY.	DESCRIPTION	PART NO.	ITEM NO.
V T E P		PARTS LIST		

DIMENSIONAL TOLERANCE UNLESS OTHERWISE SPECIFIED

DECIMALS	INCHES	ANGLES
X.X ± 0.8	XXX ± 0.005	± 0°30'
X.XX ± 0.25	.XX ± 0.25	
.X ± 0.2	.X ± 0.1	

THIRD ANGLE PROJECTION

REMOVE BURR AND BREAK SHARP CORNERS TO .5 MIL RADIUS

CONFORM TO DIGITAL QUALITY STD.

MATERIAL B-CO-V-50-0-0

FINISH

DRAWN [illegible] DATE 1-5-82

CHECKED [illegible] DATE 1-5-82

ENG [illegible] DATE 1-12-82

PROJ [illegible] DATE

MFG [illegible] DATE

digital

TITLE PERIPHERY DIE FRONT PROCESSOR

SIZE B CODE 80063

NUMBER 9006361-0-0

REV.

SCALE 1/1

SHEET 1 OF 1

DIST.

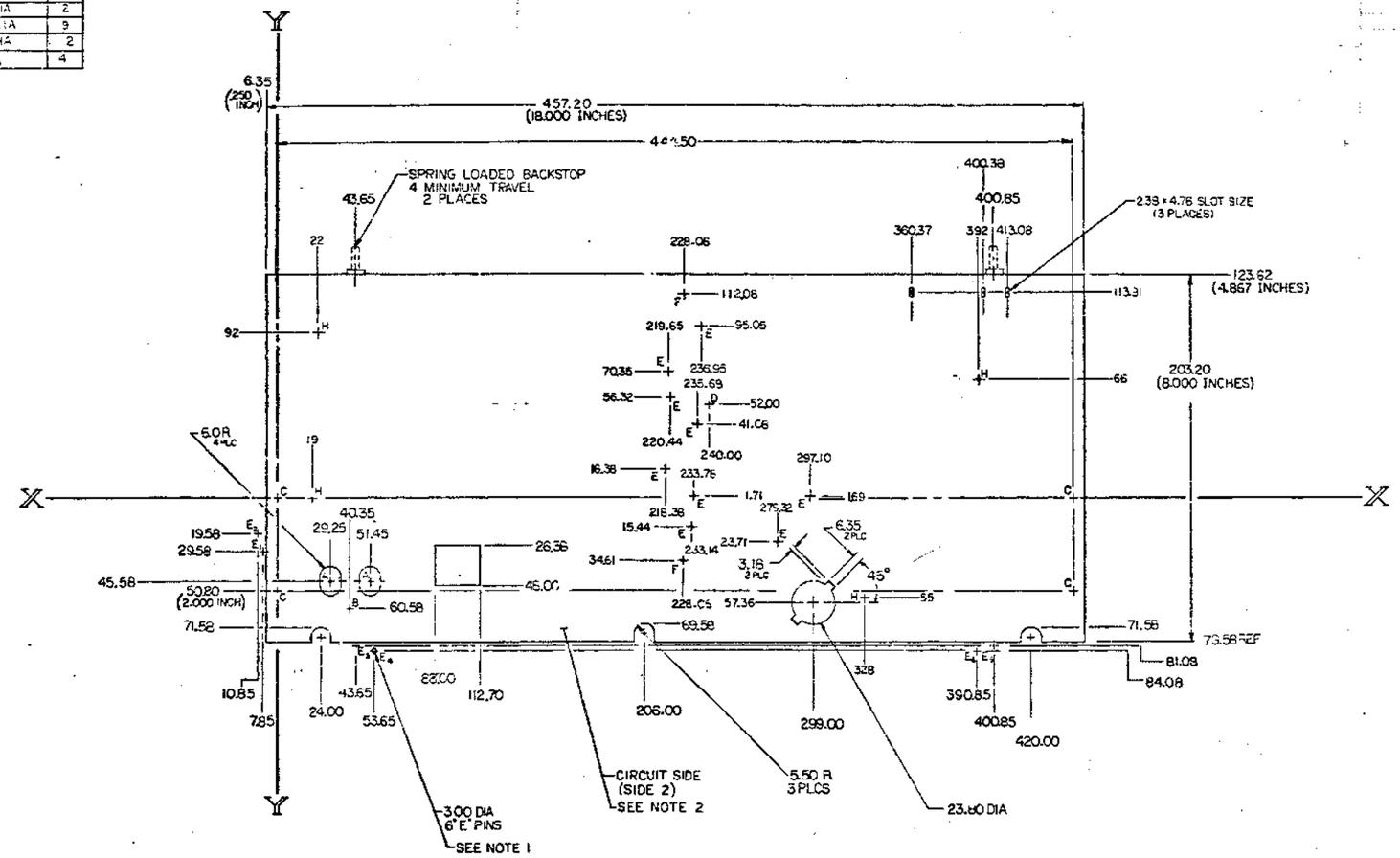
REVISIONS

REV	NO.	DESCRIPTION
B	9006361-0-0	

HOLE LEGEND

HOLE	SIZE	QTY
A	12 X 15 SLOT	2
B	12 DIA	1
C	3.175 DIA	4
D	4.8 DIA	2
E	8.00 DIA	9
F	3.26 DIA	2
H	4.0 DIA	4

NOTES:
1A TOOL TO BE DESIGNED WITH ALL PINS E1 THRU E8 INSTALLED.
1B PINS E1, E3, AND E5 TO BE SPRING LOADED RETRACTABLE, USED WHEN NOT SHEARING EDGES.
1C E2, E4, E6 PINS USED WHEN SHEARING EDGES, TO BE FIXED DOWEL PINS.
2 CIRCUIT SIDE IS COPPER CLAD SIDE (ETCH SIDE) OF BOARD. PUNCHING OF HOLES WILL BE FROM THIS SIDE TOWARD OPPOSITE SIDE.
3 FOR REV D PC BOARD.



METRIC DIMENSIONS

FIRST USED ON PART OR MODEL: VT50	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

DIMENSIONAL TOLERANCE
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE MILLIMETERS / INCHES
MILLIMETERS: XXX ±0.5, XX ±0.25, X ±0.1, ANGLES ±0°30'
INCHES: XXX ±.020, XX ±.010, X ±.005, ANGLES ±0°30'
THIRD ANGLE PROJECTION
MATERIAL
FINISH
DRN
CHK'D
ENG
PROJ MGR
PROD MGR
DATE
NEXT HIGHER ASSY
8-05-VT50-0-0
SCALE 1/1
SHEET 1 OF 1

digital

TITLE: PERIPHERY DIE, PWR SUP/MONITOR

CODE: VD | NUMBER: 9E06362-0-0 | REV: --

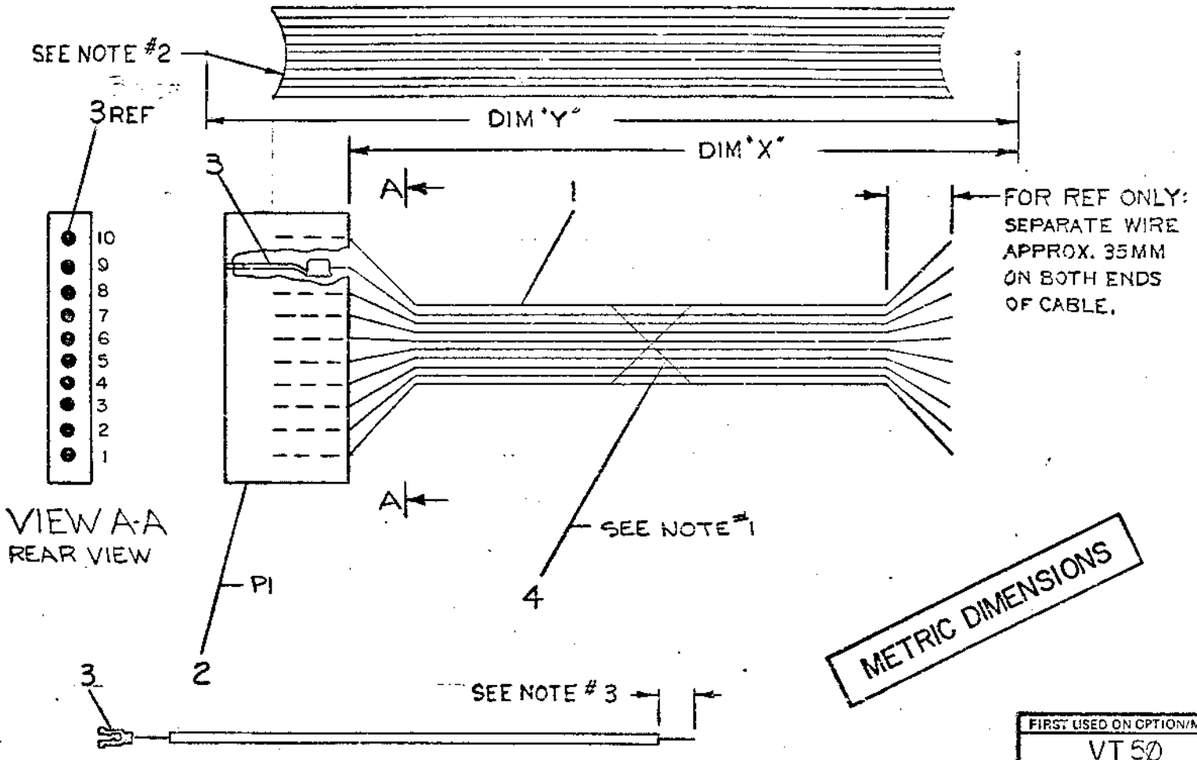
9E06362-0-0 A1

WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM CONN	TO CONN
1	22	WHT	P1-1	———
		GRY	P1-2	———
		VIO	P1-3	———
		BLU	P1-4	———
		GRN	P1-5	———
		YEL	P1-6	———
		ORN	P1-7	———
		RED	P1-8	———
		BRN	P1-9	———
1	22	BLK	P1-10	———

NOTES:

1. USE TIEWRAP (X) ITEM #4 AT APPROX. CENTER OF CABLE.
2. CUT BOTH ENDS OF CABLE TO 9.5 MM RADIUS AS SHOWN.
3. STRIP BACK INSULATION 4 MM ON BOTH ENDS.



NUMBER	DIM "X"	DIM "Y" (PRECUT)
7011144-0-D	134 MM ± 5 MM	150 MM ± 5 MM

METRIC DIMENSIONS

ITEM NO	QTY.	DESCRIPTION	PART NO.
1	1	TIEWRAP	9007031
10	10	CONTACT, CABLE	9009609-00
1	1	HOUSING, CONN 10 PIN	1211555-01
A/R	A/R	CABLE, RIBBON	9107575-00

PARTS LIST

REVISIONS			
CHK	CHANGE NO.	REV.	
RJJ	7011144-00001	A	M. WHITTLESEY

FIRST USED ON OPTION/MODEL: VT50

UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS .XX = .05, .XXX = .02, X = .1
ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

MATERIAL: SEE PARTS LIST
FINISH

		DATE
DRN.	G. Hung	4/7/75
CHK'D.		4/8/75
ENG.		4/9/75
PROJ. ENG.		4/23/75
PROD.		6/26/75

NEXT HIGHER ASSY.: D-CS-5410906-0-1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CABLE ASSY MEMORY & DECODER

SIZE	CODE	NUMBER	REV.
C	AD	7011144-0-0	A

SCALE
SHEET 1 OF 1
DIST.

NUMBER 7011144-0-0 REV. A
SIZE C CODE AD
B

DEC FORM NO. DEC 100-B

7442 E1

AC 2 (MSB)
AC1
AC0 (LSB)

FC1
CTR KEY L
BRK KEY L
AC 0
AC 1
AC 2
AC 3
AC 4
AC 5
GROUND
KEY UP H
+5V

SHIFT
PRINT
PAGE
LF
TAB
DEL
ESC
RET
BS

74S30 E9
74S30 E4
74S30 E3
74S30 E2
74S32 E9
74S33 E8
74S30 E7

74151 E5
STB
DP2
KEY UP

AC3
AC4
AC5

CTRL KEY
CTRL KEY L

BRK KEY
BRK KEY L

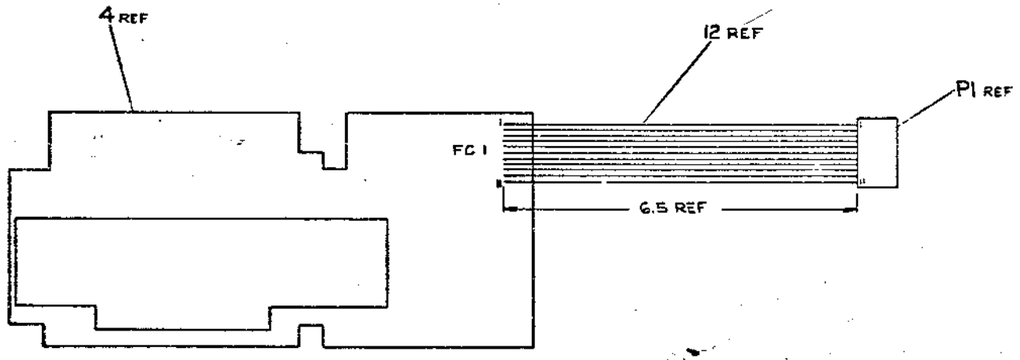
REVISIONS
ECO | CHANGE NO | REV

TITLE: KEYBOARD A VT5Ø
SIZE: D | CODE: CS | NUMBER: 5410893-0-1 | REV: F
SCALE | SHEET 2 OF 4 | DIST

DCS 5410893-0-1 F

WIRE TABLE

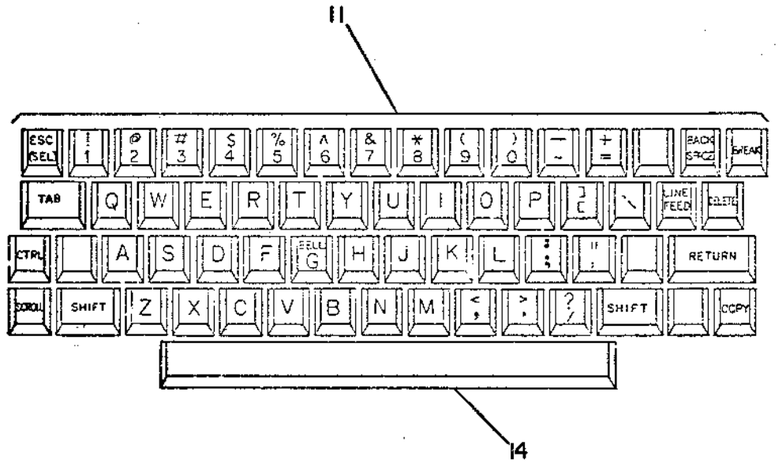
ITEM NO	DESCRIPTION AWG	COLOR	FROM CONN	FROM WITH	TO CONN	TO WITH	REMARKS
12	22	BLK	P1-1	——	FC1-1	SOLDER	+5V
		GRN	P1-2	——	FC1-2		KEY UP H
		RED	P1-3	——	FC1-3		GND
		ORN	P1-4	——	FC1-4		AC5
		YEL	P1-5	——	FC1-5		AC4
		GRN	P1-6	——	FC1-6		AC3
		BLU	P1-7	——	FC1-7		AC2
		VIO	P1-8	——	FC1-8		AC1
		GRY	P1-9	——	FC1-9		AC0
		WHT	P1-10	——	FC1-10		BRK KEY
12	22	BLK	P1-11	——	FC1-11	SOLDER	CTRL KEY



REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV.
KEYBOARD, VT50	D	DCS	5410893-0-1	F
SCALE ——	SHEET 3 OF 4	DIST.		

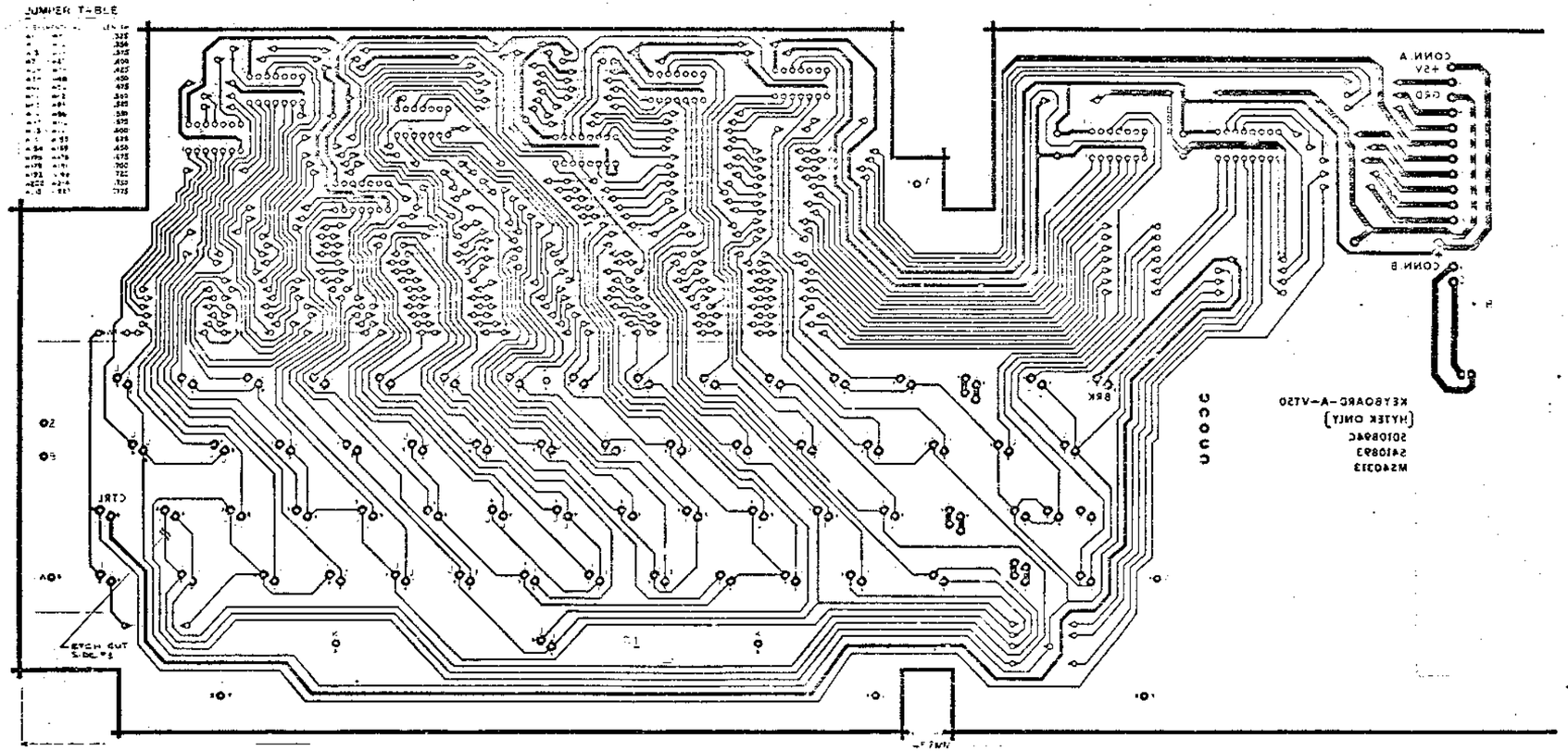
DCS 5410893-0-1 F



REVISIONS		
CHK	CHANGE NO	REV

TITLE: KEYBOARD, VT50	SIZE: D	CODE: CS	NUMBER: 5410893-0-1
SCALE: —	SHEET 4 OF 4	DIST:	REV: F

DCS 5410893-0-1 F



NOTES:

1. UNLESS OTHERWISE NOTED ALL DIMENSIONS ARE ±.005 (.13mm).
2. HOLE LOCATIONS ARE TO BE HELD WITHIN .002 (.05mm) TRUE POSITION RELATIVE TO DATUM A, B AND C AT MAXIMUM MATERIAL CONDITION.
3. ALL HOLES ARE TO BE PLATED THROUGH AND SOLDER COATED.
4. BOARD THICKNESS .062 (1.57mm).
5. MATERIAL TO BE GLASS REINFORCED EPOXY.
6. ALL HOLES ARE TO BE LOCATED WITH RESPECT TO EDGE #1 AND EDGE #2 AS DATUMS.
7. BOARD ASSEMBLY IS TO BE IN ACCORDANCE WITH MIL-P-28809 EXCEPT AS NOTED.
8. DO NOT ENLARGE "A" HOLES.

DRILLING DATA

HOLE LETTER FOR PTH BOARDS	DRILL SIZES BEFORE PLATE	DRILL SIZES AFTER PLATE	FOR NON-PTH BOARDS	CAN TAKE GRIP LETS YES	CAN TAKE GRIP LETS NO	QTY OF HOLES
NONE		X	.031 (.8mm)			
A		X	.1285			
H		X	.144 (3.7mm)			2
K		X	.196 (5mm)			2
L		X	.250 (6.4mm)			4
M		X	.375 (9.5mm)			4
N		X	.500 (12.7mm)			6
P		X	.125 (3.2mm)			6

BOARD FABRICATION INFORMATION

BOARD SIZE 6.5" X 12.5"

BOARD MATERIAL

EYELET PLATED THRU

/ SIDED / MULTI-LAYER

NOTCH BEFORE GOLD PLATING

NOTCH AFTER GOLD PLATING

DIGITAL EQUIPMENT CORPORATION

SIZE A | SIM 5410893-0-5 | REV F

ETCH REV C

MS

3 | 9-0-5580745-4W | B

PRODUCT LINE VT 50

DATE RELEASED 1-10-75

RELEASED BY M MORGANSTERN

MODULE ECO HISTORY

PAGE 1 OF 1

RELEASED CS REV. B

RELEASED ETCH BD REV. C

ECO. NO.	ORIGINATOR	DATE WRITTEN	NEW CS REV.	NEW ETCH BOARD REV.	IS IT MANDATORY TO REWORK ALL EARLIER VERSIONS (NOW AVAILABLE OR RETURNED FOR REPAIR) TO THIS REVISION LEVEL?			ARE ALL REVISIONS OF THIS MODULE COMPLETELY COMPATIBLE NOW (CAN BE MIXED INDISCRIMINATELY)?			SIMPLIFIED CHANGE DESCRIPTION	NO. PARTS ADDED	NO. PARTS DELETED
					YES	NO	CONDITIONAL (EXPLAIN)	YES	NO	CONDITIONAL (EXPLAIN)			
00001	MORGANSTERN	FEB. 3, 75	C	—		X			X		KEYCAPS CHANGE TO COLORED SET	—	—
00002	DICKENSON	FEB. 13, 75	D	—		X		X			ADD CABLE TO PRINT	1	1
00003	DICKENSON	MAR. 4, 75	E	—		X			X		VARIATION ADDED	0	0
00004	D. COLMAN	MAR. 24, 75	F	—		X			X		CUT ETCH	0	0
00005	DICKENSON	AUG. 5 75	H	D		X		X			NEW ETCH REV ADDED	0	0

REVISIONS		
CHK	CHG NO.	REV.
V.H.	00001	A
V.H.	00002	B
V.H.	00003	C
V.H.	00004	D
V.H.	00005	E

DEC Tc-1781-1026-N971

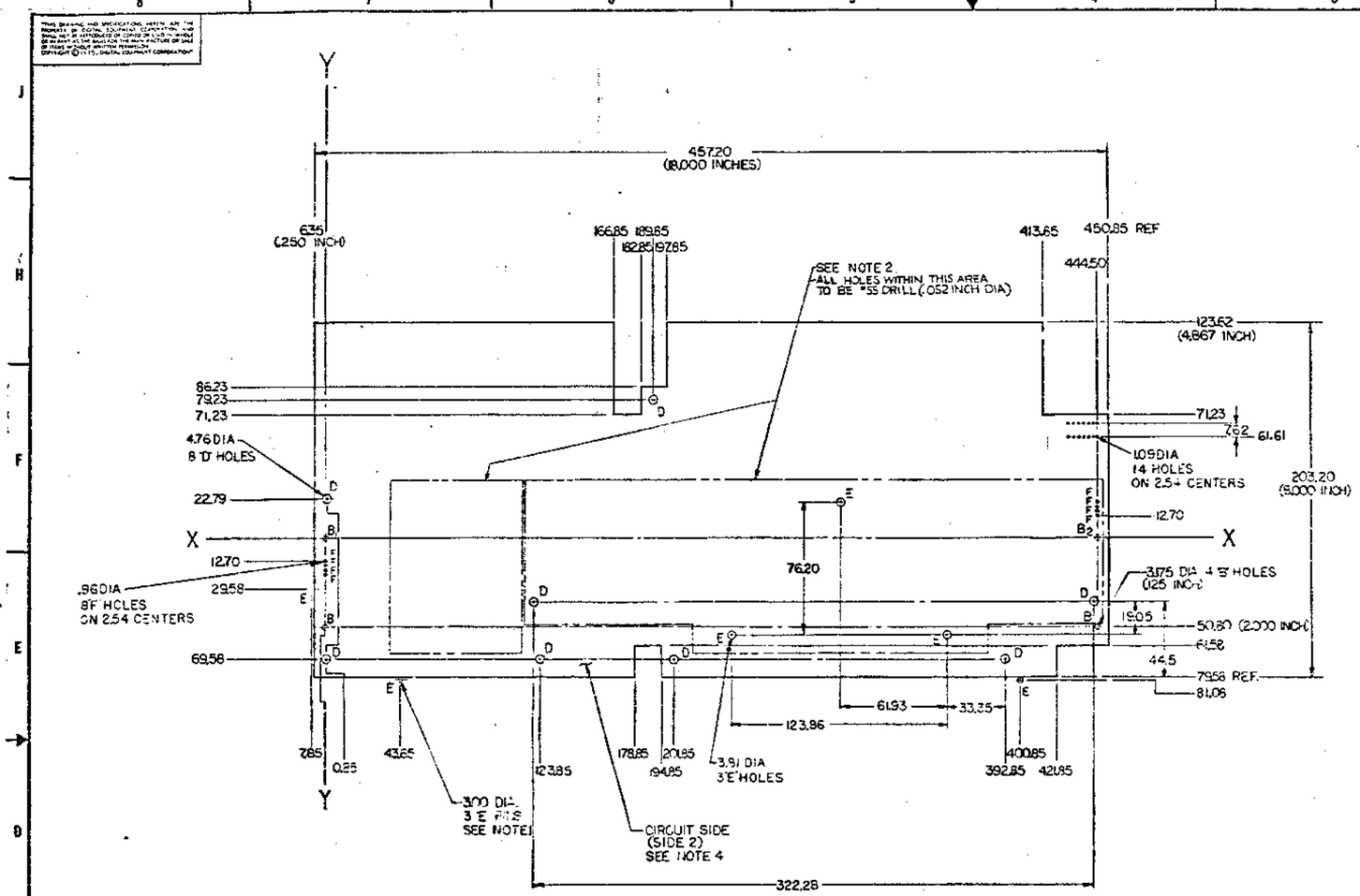
DRB 104

DRN.	Vad	DATE 1-9-75
CHK'D	Vad	DATE 1-10-75
ENG.	Morganstern	DATE 1-10-5
PROD'N	Morganstern	DATE 1-10-5

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: MODULE ECO HISTORY

SIZE: a | CODE: MM | NUMBER: 54-10893-0-6 | REV: F



NOTES:

1. PUT 3.175 DIA (.125 INCH) HOLES IN TOP AND BOTTOM PLATES DO NOT INSTALL ALL PUNCHES IN B, B1, B2 DATUM HOLES.
2. REFER TO ARTWORK FOR KEYTAB SWITCH HOLE LOCATION DATA.
3. 'E' PINS ARE USED WHEN SHEAR IS EDGES AND MUST BE FIXED PINS.
4. CIRCUIT SIDE IS COPPER CLAD SIDE (ETCH SIDE) OF BOARD. PUNCHING OF HOLES WILL BE FROM THIS SIDE TOWARD OPPOSITE SIDE.

METRIC DIMENSIONS

FIRST USED ON ASSEMBLY/MODEL: VT 52	QTY.	DESCRIPTION	PART NO.
PARTS LIST			
DIMENSIONS TO FRANCE	DRN.	DATE	digital
DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED	CHK'D.	DATE	
	ENG.	DATE	
	PROJ. ENG.	DATE	TITLE: PERIPHERY DIE HYTEK KEY ARRAY
	PROJ.	DATE	
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS TO .010 MAX RADIUS	NEXT HIGHER ASSY.	
	MATERIAL	B-DD-VT52-0-0	SIZE: C; CODE: 07707; SIZE NUMBER: 9606359-01; REV: L
	FINISH	SCALE	SHEET OF

9606359-01 B

WIRE TABLE

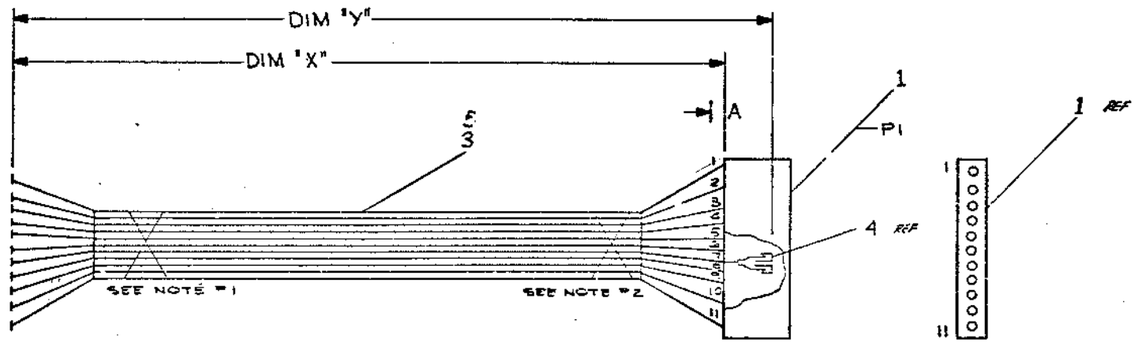
ITEM NO	DESCRIPTION AWG	COLOR	FROM CONNECT ON	FROM WITH	TO CONNECTION	TO WITH	REMARKS
3	22	BLACK			P1-1	4	
		BROWN			P1-2		
		RED			P1-3		
		ORANGE			P1-4		
		YELLOW			P1-5		
		GREEN			P1-6		
		BLUE			P1-7		
		VIOLET			P1-8		
		GRAY			P1-9		
3		WHITE			P1-10		
5	22	BLUE			P1-11	4	

LEGEND

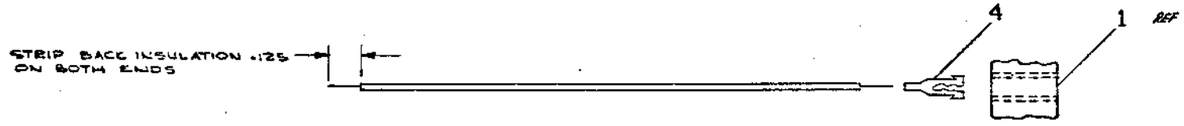
NUMBER	DIM "X" VARIATION	DIM "Y" PRECUT
70109 12-00H	6.75 INS	8.0 INS

NOTES:

1. USE TIE WRAP (X) ITEM #2 1.5 INS FROM KEYBOARD END OF CABLE.
2. USE TIE WRAP (X) ITEM #2 1.0 INS FROM P1 END OF CABLE



VIEW A-A



A/R	WIRE, STRND, #22 AWG	9175 50 - 66	5
11	CONTACT RECP.	90C 1609	4
A/R	CABLE R BRCN (SECOND SOURCE) AWG	9107575	3
2	TIE WRAP - 1.5M	9007880	2
1	CONN. RECP - OUTING II P.N.	21855	1
	DESCRIPTION	DEC PART NO.	ITEM NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE (INCHES) 0 TO .5	.5 TO 2	2 TO 4	4 TO 12	12 TO 40	40 TO 120
SURFACE QUALITY IN MICROINCHES	MEDIUM	±.004	±.008	±.012	±.016	±.024	±.06
	PREFERRED	±.002	±.005	±.008	±.01	±.015	±.03

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE PARTS LIST

FINISH

DRN Mike Lynch 3-21 | FIRST USED ON VT-2H | digital

CHK'D

ENG.

PROJ. ENGR.

PROD.

NEXT HIGHER ASSY.

SCALE

SHEET 1 OF 1

TITLE KEYBOARD CABLE VT51/VT50H (VT52H CABLE)

SIZE D | CODE | NUMBER 70-09912-00 | REV. A | DIST.

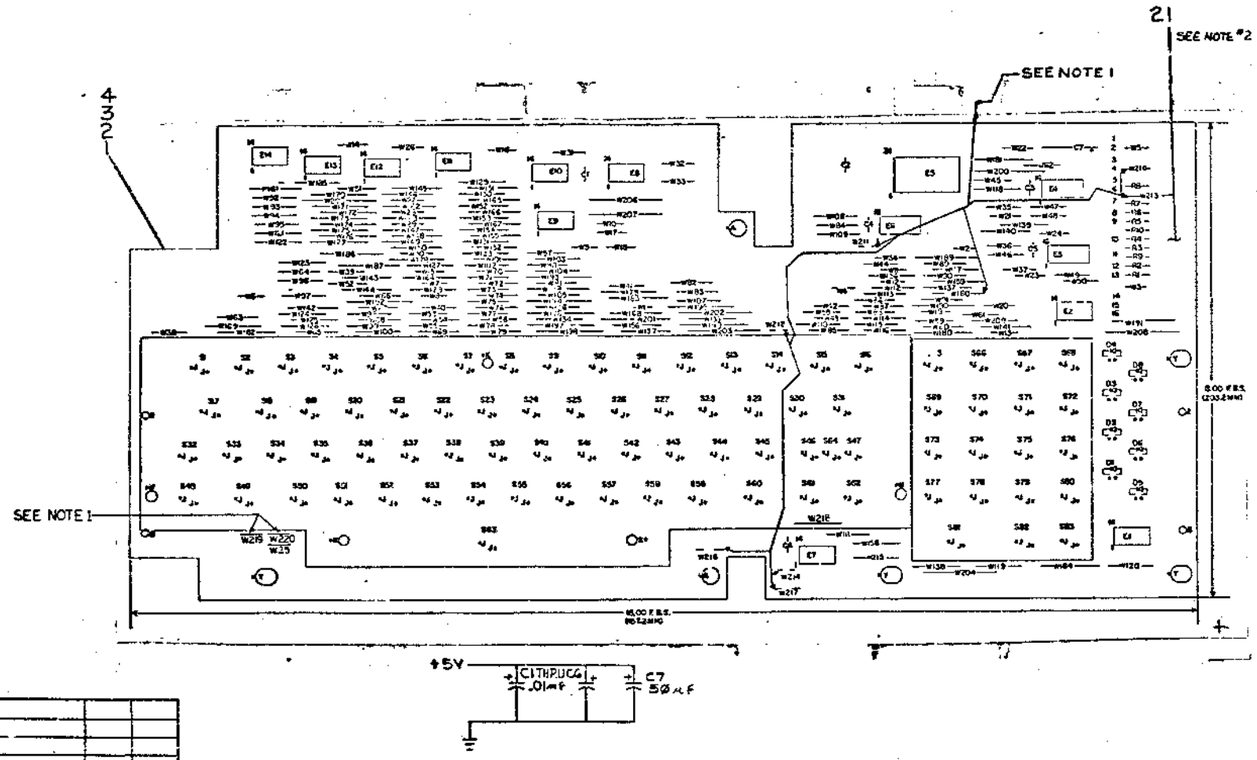
REV.	REVISIONS CHANGE NO.	CHK	DATE
A	70-09912-00	J BUTYNSKI	

SEE FORM NO. BD 100-C

NOTES:

1. OPTIONAL JUMPERS SEE SHEET 2 FOR CONFIGURATION TABLE.
2. SEE SHEET 3 OF 4 FOR WIRE TABLE.
3. SEE SHEET 4 OF 4 FOR VT50H/VT50J KEYCAP PLACEMENT.
4. NOTE THAT THE B.O.M. FOR BOTH VARIATIONS (-0 AND -2) OF THIS BOARD MAY REQUIRE UPDATING ON ANY ECO.

VARIATION EXPLANATION	
VARIATION	COMMENT
54111170-0	THIS VARIATION IS NOT PRESENTLY USED
54111170-1	HEAT CYCLED SYSTEM TESTED 54111170-0
54111170-2	BASIC VT50H
54111170-3	HEAT CYCLED SYSTEM TESTED 54111170-2



DEC IC 7442	8	16			
DEC IC 74175	8	16			
DEC IC 74150	12	24			
IC TYPE	GND	+5V			

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

* PIN LOCATIONS

54111170-2	54111170-0			
REF	REF		X-Y COORDINATE HOLE LOCATION	K-CO-54111170-0-4	1
REF	REF		ASSY/DRILLING HOLE LAYOUT	E-AH-54111170-05	2
REF	REF		MODULE ECO HISTORY	B-MH-54111170-06	3
1	1		STCH CIRCUIT BOARD	5011169	4
6	6	C1-C6	CAP, CER 100V, 20% DISC	1001610-01	5
1	1	C7	CAP 50 MF, 25V	1001796	6
1	-	63 KEY ARRAY	HITEK KEYCAPS (1 SET)	12122B7-05	7
1	-		KEYCAP (REPEAT)	12122B7-43	8
1	1		SPACE BAR, BLUE	12119S7-01	9
1	-	19 KEY ARRAY	HITEK KEYCAPS (1 SET)	12122B7-00	10
-	8	D1-D8	DIODE MV5054-1 LED	1110324	11
-	2	R9-R10	RES, 1K, 1/4W, 5%	1300365	12
-	8	R1-R8	RES 330, 1/4W, 5%	1300288	13
1	1	E6	IC DEC 7442	1910046	14
1	1	E5	IC DEC 74150	1910153	15
10	10	E1, E2, E7-E14	IC DEC 7430	1905578	16
-	2	E3, E4	IC DEC 74175	1910651	17
1	1	S1-S63	63 KEY SWITCH ASSY	7009892	18
1	1	S65-S83	19 KEYSWITCH ASSY	7009890	19
2	2	W1-W210, W212-W218, W220	REEL JUMPER	9107560-7	20
1	-		CABLE KEYBOARD VT50/VT50H	D-TA-7010412-0-0	21

ITEM NO.	PART NO.	DESCRIPTION	REF. DESIGNATION	QTY

PARTS LIST

FIRST USED ON OPTION MODEL: VT51/VT50
ETCH BOARD REV. C

SEMICONDUCTOR CONVERSION CHART

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

J. BUZYNSKI 10-13-75
M. Simonelli 5-9-75
54111170-0000 ORIGINATED
CHANGE NO. REVISIONS
A REV.

DRN. DATE 2/6/76
CHK. DATE
ENG. DATE
PROJ. ENGR. DATE
PROD. DATE
NEXT HIGHER ASSY: 0-UA-VT50-0-0
SCALE
SHEET 1 OF 4

digital
TITLE: KEYBOARD VT51/VT50H
SIZE D | CODE DS | NUMBER 54111170-0-1 | REV. B
DIST.

8 7 6 5 4 3 2 1

* JUMPER

JUMPER	VT50H,J 54111170-2	VT52 54111170-2	VT61 54111170-0
W160	IN	IN	OUT
W210	IN	IN	OUT
W211	IN	IN	OUT
W212	OUT	OUT	IN
W213	IN	IN	OUT
W214	OUT	IN	IN
W216	OUT	IN	OUT
W217	OUT	OUT	IN
W219	IN	OUT	IN
W220	OUT	IN	OUT

FCI CONN

1 UPPER CASE L
2 +5V
3 KEY UP H
4 GND
5 ACT
6 LD LED FLAGS
7 AC6
8 AC5
9 AC4
10 AC3
11 AC2
12 AC1
13 AC0
14 +5V
15 GND
16 GND

BRK KEY L * W213
UPPER CASE L * W220 * W219
* W160
* W210
* W211
* W212
* W214
* W215
* W216
* W217
* W218

7442 E6
74150 E5
74175 E4
74175 E3
7430 E8 E10 E9 E4 E13 E12 E11 E2 E7 E1
MV5054-1 D1 D2 D3 D4 D5 D6 D7 D8

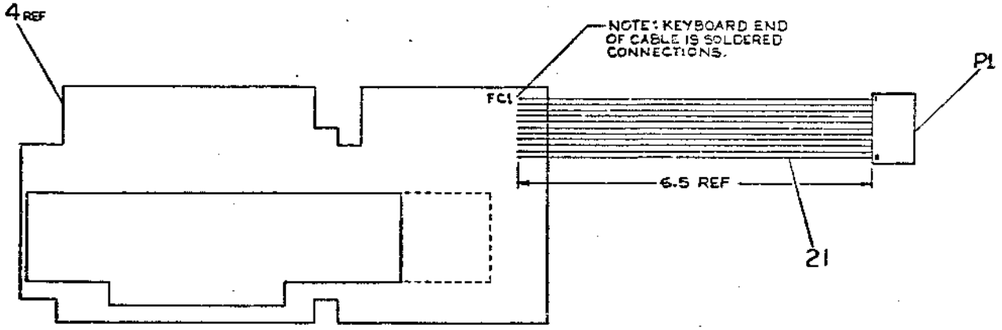
NOTES:
THIS CIRCUITRY INSTALLED ONLY ON 54111170-01 VERSION (VT61)

REVISIONS		
ECR	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
KEYBOARD VT51/VT50H	D	DCS	54111170-0-1	B.
SCALE	SHEET 2 OF 4	DIST.		

WIRE TABLE

ITEM NO	DESCRIPTION AWG	DESCRIPTION COLOR	FROM CONNECTION	TO CONNECTION	REMARKS
21	*22	BLK	P1-1	FC1-2	+5V
▲	▲	BRN	P1-2	FC1-3	KEY UP H
		RED	P1-3	FC1-4	GND
		ORN	P1-4	FC1-8	AC5
		YEL	P1-5	FC1-9	AC4
		GRN	P1-6	FC1-10	AC3
		BLU	P1-7	FC1-11	AC2
		VIO	P1-8	FC1-12	AC1
		GRY	P1-9	FC1-13	AC0
▼	▼	WHT	P1-10	FC1-6	BRK KEY
21	*22	BLK	P1-11	FC1-7	AC6



INCH

QUANTITY & VARIATION	DESCRIPTION	DWG PART NO.	ITEM NO.
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		
THIRD ANGLE PROJECTION	DRN.	FIRST USED ON: VT52H/VT51	digital
	CHK'D.		
	ENG.	TITLE: KEYBOARD VT51/VT50H	
REMOVE BURRS AND BREAK SHARP CORNERS	PROJ. ENG.		
DO NOT SCALE DWG.	PROD.	(CABLE CONN)	
MATERIAL	NEXT HIGHER ASSY.	SIZE D CODE LCS NUMBER 54-11170-0-1	REV. B
FINISH	SCALE		
	SHEET 3 OF 4	DIST:	

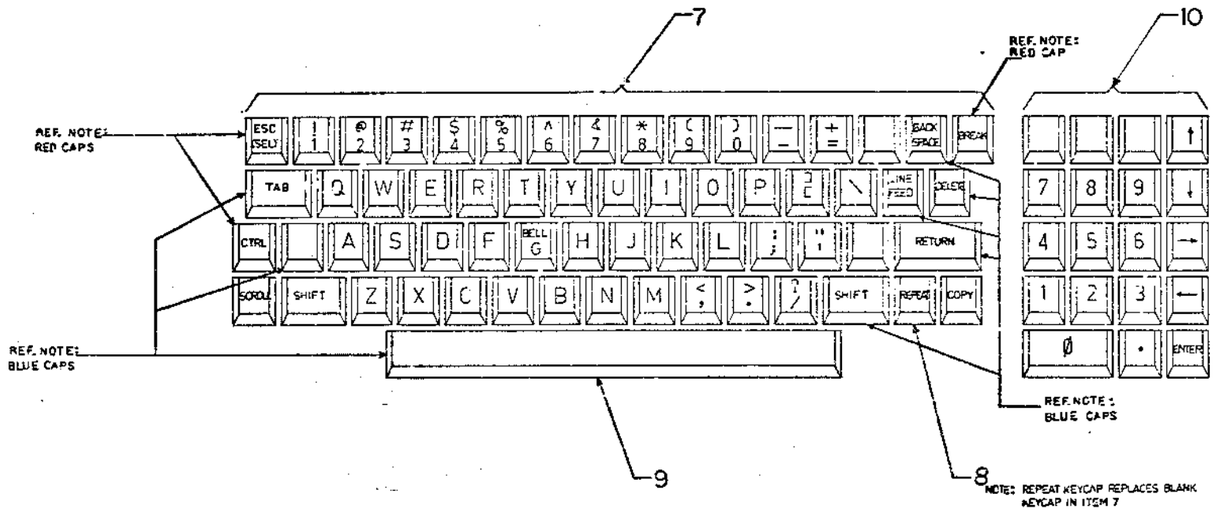
ANGLES ±30' | CLASS OF ACCURACY (CHECK ONE) | NOMINAL DIMENSION RANGE INCHES: OVER 0 TO 6, OVER 6 TO 12, OVER 12 TO 48, OVER 48 TO 120, OVER 120 TO 480, OVER 480 TO 1000

SURFACE QUALITY IN MICROINCHES | MEDIUM ± .006 ± .009 ± .012 ± .016 ± .024 ± .04 | PREFERRED ± .012 ± .016 ± .025 ± .04 ± .063 ± .1

SEE FORM NO. 99 SEC

REVISIONS			
ZONE	REVISION	CHANGE NO.	APP'D

REV. B
LCS 54-11170-0-1



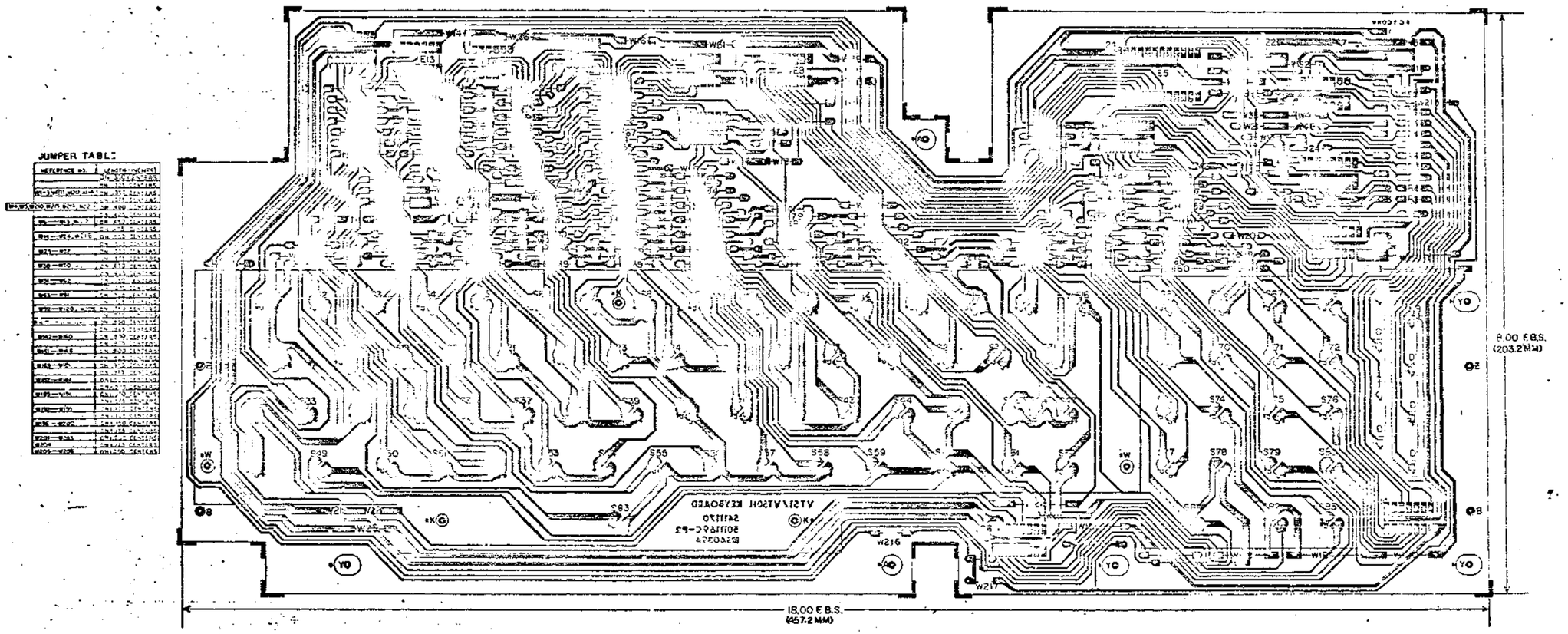
DRN.			FIRST USED ON		
CHK'D			V 50 H/ VT51		digital
ENG.			TITLE		
PROJ. ENG.			KEYBOARD VTEØH/VT51		
PROD.			(VTEØH KEYCAPS)		
NEXT HIGHER ASSY.			SIZE	CODE	NUMBER	REV.
			D	CS	54 11170-0-0	B
SCALE NONE			DIST.			
SHEET 4 OF 4						

REVISIONS: REV. | CHANGE NO. | DR#

SEC FORM NO. 3900 1025

JUMPER TABLE

REFERENCE (S)	LENGTH (INCHES)
W1	.25
W2	.25
W3	.25
W4	.25
W5	.25
W6	.25
W7	.25
W8	.25
W9	.25
W10	.25
W11	.25
W12	.25
W13	.25
W14	.25
W15	.25
W16	.25
W17	.25
W18	.25
W19	.25
W20	.25
W21	.25
W22	.25
W23	.25
W24	.25
W25	.25
W26	.25
W27	.25
W28	.25
W29	.25
W30	.25
W31	.25
W32	.25
W33	.25
W34	.25
W35	.25
W36	.25
W37	.25
W38	.25
W39	.25
W40	.25
W41	.25
W42	.25
W43	.25
W44	.25
W45	.25
W46	.25
W47	.25
W48	.25
W49	.25
W50	.25
W51	.25
W52	.25
W53	.25
W54	.25
W55	.25
W56	.25
W57	.25
W58	.25
W59	.25
W60	.25
W61	.25
W62	.25
W63	.25
W64	.25
W65	.25
W66	.25
W67	.25
W68	.25
W69	.25
W70	.25
W71	.25
W72	.25
W73	.25
W74	.25
W75	.25
W76	.25
W77	.25
W78	.25
W79	.25
W80	.25
W81	.25
W82	.25
W83	.25
W84	.25
W85	.25
W86	.25
W87	.25
W88	.25
W89	.25
W90	.25
W91	.25
W92	.25
W93	.25
W94	.25
W95	.25
W96	.25
W97	.25
W98	.25
W99	.25
W100	.25
W101	.25
W102	.25
W103	.25
W104	.25
W105	.25
W106	.25
W107	.25
W108	.25
W109	.25
W110	.25
W111	.25
W112	.25
W113	.25
W114	.25
W115	.25
W116	.25
W117	.25
W118	.25
W119	.25
W120	.25
W121	.25
W122	.25
W123	.25
W124	.25
W125	.25
W126	.25
W127	.25
W128	.25
W129	.25
W130	.25
W131	.25
W132	.25
W133	.25
W134	.25
W135	.25
W136	.25
W137	.25
W138	.25
W139	.25
W140	.25
W141	.25
W142	.25
W143	.25
W144	.25
W145	.25
W146	.25
W147	.25
W148	.25
W149	.25
W150	.25
W151	.25
W152	.25
W153	.25
W154	.25
W155	.25
W156	.25
W157	.25
W158	.25
W159	.25
W160	.25
W161	.25
W162	.25
W163	.25
W164	.25
W165	.25
W166	.25
W167	.25
W168	.25
W169	.25
W170	.25
W171	.25
W172	.25
W173	.25
W174	.25
W175	.25
W176	.25
W177	.25
W178	.25
W179	.25
W180	.25
W181	.25
W182	.25
W183	.25
W184	.25
W185	.25
W186	.25
W187	.25
W188	.25
W189	.25
W190	.25
W191	.25
W192	.25
W193	.25
W194	.25
W195	.25
W196	.25
W197	.25
W198	.25
W199	.25
W200	.25
W201	.25
W202	.25
W203	.25
W204	.25
W205	.25
W206	.25
W207	.25
W208	.25
W209	.25
W210	.25
W211	.25
W212	.25
W213	.25
W214	.25
W215	.25
W216	.25
W217	.25
W218	.25
W219	.25
W220	.25
W221	.25
W222	.25
W223	.25
W224	.25
W225	.25
W226	.25
W227	.25
W228	.25
W229	.25
W230	.25
W231	.25
W232	.25
W233	.25
W234	.25
W235	.25
W236	.25
W237	.25
W238	.25
W239	.25
W240	.25
W241	.25
W242	.25
W243	.25
W244	.25
W245	.25
W246	.25
W247	.25
W248	.25
W249	.25
W250	.25
W251	.25
W252	.25
W253	.25
W254	.25
W255	.25
W256	.25
W257	.25
W258	.25
W259	.25
W260	.25
W261	.25
W262	.25
W263	.25
W264	.25
W265	.25
W266	.25
W267	.25
W268	.25
W269	.25
W270	.25
W271	.25
W272	.25
W273	.25
W274	.25
W275	.25
W276	.25
W277	.25
W278	.25
W279	.25
W280	.25
W281	.25
W282	.25
W283	.25
W284	.25
W285	.25
W286	.25
W287	.25
W288	.25
W289	.25
W290	.25
W291	.25
W292	.25
W293	.25
W294	.25
W295	.25
W296	.25
W297	.25
W298	.25
W299	.25
W300	.25
W301	.25
W302	.25
W303	.25
W304	.25
W305	.25
W306	.25
W307	.25
W308	.25
W309	.25
W310	.25
W311	.25
W312	.25
W313	.25
W314	.25
W315	.25
W316	.25
W317	.25
W318	.25
W319	.25
W320	.25
W321	.25
W322	.25
W323	.25
W324	.25
W325	.25
W326	.25
W327	.25
W328	.25
W329	.25
W330	.25
W331	.25
W332	.25
W333	.25
W334	.25
W335	.25
W336	.25
W337	.25
W338	.25
W339	.25
W340	.25
W341	.25
W342	.25
W343	.25
W344	.25
W345	.25
W346	.25
W347	.25
W348	.25
W349	.25
W350	.25
W351	.25
W352	.25
W353	.25
W354	.25
W355	.25
W356	.25
W357	.25
W358	.25
W359	.25
W360	.25
W361	.25
W362	.25
W363	.25
W364	.25
W365	.25
W366	.25
W367	.25
W368	.25
W369	.25
W370	.25
W371	.25
W372	.25
W373	.25
W374	.25
W375	.25
W376	.25
W377	.25
W378	.25
W379	.25
W380	.25
W381	.25
W382	.25
W383	.25
W384	.25
W385	.25
W386	.25
W387	.25
W388	.25
W389	.25
W390	.25
W391	.25
W392	.25
W393	.25
W394	.25
W395	.25
W396	.25
W397	.25
W398	.25
W399	.25
W400	.25
W401	.25
W402	.25
W403	.25
W404	.25
W405	.25
W406	.25
W407	.25
W408	.25
W409	.25
W410	.25
W411	.25
W412	.25
W413	.25
W414	.25
W415	.25
W416	.25
W417	.25
W418	.25
W419	.25
W420	.25
W421	.25
W422	.25
W423	.25
W424	.25
W425	.25
W426	.25
W427	.25
W428	.25
W429	.25
W430	.25
W431	.25
W432	.25
W433	.25
W434	.25
W435	.25
W436	.25
W437	.25
W438	.25
W439	.25
W440	.25
W441	.25
W442	.25
W443	.25
W444	.25
W445	.25
W446	.25
W447	.25
W448	.25
W449	.25
W450	.25
W451	.25
W452	.25
W453	.25
W454	.25
W455	.25
W456	.25
W457	.25
W458	.25
W459	.25
W460	.25
W461	.25
W462	.25
W463	.25
W464	.25
W465	.25
W466	.25
W467	.25
W468	.25
W469	.25
W470	.25
W471	.25
W472	.25
W473	.25
W474	.25
W475	.25
W476	.25
W477	.25
W478	.25
W479	.25
W480	.25
W481	.25
W482	.25
W483	.25
W484	.25
W485	.25
W486	.25
W487	.25
W488	.25
W489	.25
W490	.25
W491	.25
W492	.25
W493	.25
W494	.25
W495	.25
W496	.25
W497	.25
W498	.25
W499	.25
W500	.25
W501	.25
W502	.25
W503	.25
W504	.25
W505	.25
W506	.25
W507	.25
W508	.25
W509	.25
W510	.25
W511	.25
W512	.25
W513	.25
W514	.25
W515	.25
W516	.25
W517	.25
W518	.25
W519	.25
W520	.25
W521	.25
W522	.25
W523	.25
W524	.25
W525	.25
W526	.25
W527	.25
W528	.25
W529	.25
W530	.25
W531	.25
W532	.25
W533	.25
W534	.25
W535	.25
W536	.25
W537	.25
W538	.25
W539	.25
W540	.25
W541	.25
W542	.25
W543	.25
W544	.25
W545	.25
W546	.25
W547	.25
W548	.25
W549	.25
W550	.25
W551	.25
W552	.25
W553	.25
W554	.25
W555	.25
W556	.25
W557	.25
W558	.25
W559	.25
W560	.25
W561	.25
W562	.25
W563	.25
W564	.25
W565	.25
W566	.25
W567	.25
W568	.25
W569	.25
W570	.25
W571	.25
W572	.25
W573	.25
W574	.25
W575	.25
W576	.25
W577	.25
W578	.25
W579	.25
W580	.25
W581	.25
W582	.25
W583	.25
W584	.25
W585	.25
W586	.25
W587	.25
W588	.25
W589	.25
W590	.25
W591	.25
W592	.25
W593	.25
W594	.25
W595	.25
W596	.25
W597	.25
W598	.25
W599	.25
W600	.25
W601	.25
W602	.25
W603	.25
W604	.25
W605	.25
W606	.25
W607	.25
W608	.25
W609	.25
W610	.25
W611	.25
W612	.25
W613	.25
W614	.25
W615	.25
W616	.25
W617	.25
W618	.25
W619	.25
W620	.25
W621	.25
W622	.25
W623	.25
W624	.25
W625	.25
W626	.25
W627	.25
W628	.25
W629	.25
W630	.25
W631	.25
W632	.25
W633	.25
W634	.25
W635	.25
W636	.25
W637	.25
W638	.25
W639	.25
W640	.25
W641	.25
W642	.25
W643	.25
W644	.25
W645	.25
W646	.25
W647	.25
W648	.25
W649	.25
W650	.25
W651	.25
W652	.25
W653	.25
W654	.25
W655	.25
W656	.25
W657	.25
W658	.25
W659	.25
W660	.25
W661	.25
W662	.25
W663	.25
W664	.25
W665	.25
W666	.25
W667	.25
W668	.25
W669	.25
W670	.25
W671	.25
W672	.25
W673	.25
W674	.25
W675	.25
W676	.25
W677	.25
W678	.25
W679	.25
W680	.25
W681	.25
W682	.25
W683	.25
W684	.25
W685	.25
W686	.25
W687	.25
W688	.25
W689	.25
W690	.25
W691	.25
W692	.25
W693	.25
W694	.25
W695	.25
W696	.25
W697	.25
W698	.25
W699	.25
W700	.25
W701	.25
W702	.25
W703	.25
W704	.25
W705	.25
W706	.25
W707	.25
W708	.25
W709	.25
W710	.25
W711	.25
W712	.25
W713	.25
W714	.25
W715	.25
W716	.25
W717	.25
W718	.25
W719	.25
W720	.25
W721	.25
W722	.25
W723	.25
W724	.25
W725	.25
W726	.25
W727	.25
W728	.25
W729	.25
W730	.25
W731	.25
W732	.25
W733	.25
W734	.25
W735	.25
W736	.25
W737	.25
W738	.25
W739	.25
W740	.25
W741	.25
W742	.25
W743	.25
W744	.25
W745	.25
W746	.25
W747	.25
W748	.25
W749	.25
W750	.25
W751	.25
W752	.25
W753	.25
W754	.25
W755	.25
W756	.25
W757	.25
W758	.25
W759	.25
W760	.25
W761	.25
W762	.25
W763	.25
W764	.25
W765	.25
W766	.25
W767	.25
W768	.25
W769	.25
W770	.25
W771	.25
W772	.25
W773	.25
W774	.25
W775	.25
W776	.25
W777	.25
W778	.25
W779	.25
W780	.25
W781	.25
W782	.25
W783	.25
W784	.25
W785	.25
W786	.25
W787	.25
W788	.25
W789	.25
W790	.25
W791	.25
W792	.25
W793	.25
W794	.25
W795	.25
W796	.25
W797	.25
W798	.25
W799	.25
W800	.25
W801	.25
W802	.25
W803	.25
W804	.25
W805	.25
W806	.25
W807	.25
W808	.25
W809	.25
W810	.25
W811	.25
W812	.25
W813	.25
W814	.25
W815	.25
W816	.25
W817	.25
W818	.25
W819	.25
W820	.25
W821	.25
W822	.25
W823	.25
W824	.25
W825	.25
W826	.25
W827	.25
W828	.25
W829	.25
W830	.25
W831	.25
W832	.25
W833	.25
W834	.25
W835	.25
W836	.25
W837	.25
W838	.25
W839	.25
W840	.25
W841	.25
W842	.25
W843	.25
W844	.25
W845	.25
W846	.25
W847	.25
W848	.25
W849	.25
W850	.25
W851	.25
W852	.25
W853	.25
W854	.25
W855	.25
W856	.25
W857	.25
W858	.25
W859	.25
W860	.25
W861	.25
W862	.25
W863	.25
W864	.25
W865	.25
W866	.25
W867	.25
W868	.25
W869	.25
W870	.25
W871	.25
W872	.25
W873	.25
W874	.25
W875	.25
W876	.25
W877	.25
W878	.25
W879	.25
W880	.25
W881	.25
W882	.25
W883	.25
W884	.25
W885	.25
W886	.25
W887	.25
W888	.25
W889	.25
W890	.25
W891	.25
W892	.25
W893	.25
W894	.25
W895	.25
W896	.25
W897	.25
W898	.25
W899	.25
W900	.25
W901	.25
W902	.25
W903	.25
W904	.25
W905	.25
W906	.25
W907	.25
W908	.25
W909	.25
W910	.25
W911	.25
W912	.25
W913	.25
W914	.25
W915	.25
W916	.25
W917	.25
W918	.25
W919	.25
W920	.25
W921	.25
W922	.25
W923	.25
W924	.25
W925	.25
W926	.25
W927	.25
W928	.25
W929	.25
W930	.25
W931	.25
W932	.25
W933	.25
W934	.25
W935	.25
W936	.25
W937	.25
W938	.25
W939	.25
W940	.25
W941	.25
W942	.25
W943	.25
W944	.25
W945	.25
W946	.25
W947	.25
W948	.25
W949	.25
W950	.25
W951	.25
W952	.25
W953	.25
W954	.25
W955	.25
W956	.25
W957	.25
W958	.25
W959	.25
W960	.25
W961	.25
W962	.25
W963	.25
W964	.25
W965	.25
W966	.25
W967	.25
W968	.25
W969	.25
W970	.25
W971	.25
W972	.25
W973	.25
W974	.25
W975	.25
W976	.25
W977	.25
W978	.25
W979	.25
W980	.25
W981	.25
W982	.25
W983	.25
W984	.25
W985	.25
W986	.25
W987	.25
W988	.25
W989	.25
W990	.25
W991	.25
W992	.25
W993	.25
W994	.25
W995	.25
W996	.25
W997	.25
W998	.25
W999	.25
W1000	.25



C | 54111?0-0-6 | SIZE B

PRODUCT LINE 98
DATE RELEASED 3/21/75
RELEASED BY BUZYNSKI

MODULE ECO HISTORY
PAGE 1 OF 1

RELEASED CS REV. A
RELEASED ETCH BD REV. B

ECO. NO.	ORIGINATOR	DATE WRITTEN	NEW CS REV.	NEW ETCH BOARD REV.	IS IT MANDATORY TO REWORK ALL EARLIER VERSIONS (NOW AVAILABLE OR RETURNED FOR REPAIR) TO THIS REVISION LEVEL? YES	NO	CONDITIONAL (EXPLAIN)	ARE ALL REVISIONS OF THIS MODULE COMPLETELY COMPATIBLE NOW (CAN BE MIXED INDISCRIMINATELY)? YES	NO	CONDITIONAL (EXPLAIN)	SIMPLIFIED CHANGE DESCRIPTION	NO. PARTS ADDED	NO. PARTS DELETED
00001	BUZYNSKI		B	C		✓		✓			RELAYOUT TO REMOVE ECO WIRES	—	—
00001A	BUZYNSKI	5-1-75	—	—		✓		✓			DOC. CHG.	—	—
00002	NEUMANN	29-OCT-75	C	C		X		X			DOC CHG	0	0

REVISIONS			
CHK	CHG NO.	REV.	
PRP	K1UU1	A	WIRING CHANGE
	1200002	C	

DRN. J BUZYNSKI DATE 3-21-75
CHK'D J BUZYNSKI DATE
ENG. DATE 3-21-75
PROD. DATE

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

MODULE ECO HISTORY

SIZE B | CODE MH | NUMBER 54111?0-0-6 | REV. C

DEC 14-13781-1026-0971
DRB 104

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY J. CAHILL	CHECKED J. CAHILL	SECTION
DATE 3/6/75	DATE 3/6/75	1
ENG	PROD	ISSUED SECT.
DATE	DATE	1

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY / VARIATION 7010933-0-0
1	D-CS-5410886-1	MONITOR POWER SUPPLY	1
2	D-CS-5410906-1	DATA PATHS MEMORY AND DECODER	1
3	D-CS-5410902-1	ROM UART AND TIMING	1
4	A-SP-3700179-0-0	PACKAGING INSTRUCTION: (DATA PATH BOARD,	1
		ROM/UART BOARD, POWER SUPPLY BOARD)	
5	A-SP-3700180-0-0	PACKAGING INSTRUCTION: (DATA PATH AND	1
		ROM/UART)	
6	A-SP-3700181-0-0	PACKAGING INSTRUCTION: (POWER SUPPLY	1
		BOARD)	
7	A-SP-3700182-0-0	PACKAGING INSTRUCTION: (KEYBOARD-	1
		CUSTOMER SHIPPING PACKAGE)	

TITLE	NEXT HIGH ASSY	SIZE	CODE	NUMBER	REV.	ECO NO
MODULE PACKAGE (VT50)	B-DD-VT50-0	A	PL	7010933-0-0		
	SHEET 1 OF 1	DIST.				

DEC FORM DEC 16-(325)-1031 SS70
DRA 110

DIGITAL EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

PACKAGING INSTRUCTION REV: _____ DATE: _____

TITLE DATA PATH BOARD, ROM/UART BOARD, POWER SUPPLY BOARD

MATERIAL REQUIREMENTS

Quantity	Purchase Specification No.	Description
1	9905683	Regular Slotted Carton
1	9905677	Laminated Buildup
1	9905678	Scored Sheet with Foam
1	9905680	Die-Cut Carton with Foam
1	9905682	Scored Sheet
A/R	9905729	3-in. wide Glasflex Tape

NOTE
For individual shipment of each of the above packaged components, see the following Packaging Instructions:

Component	FI No.
ROM/UART (5410902) and Data Path (5410906)	A-SP-3700180-0-0
Power Supply Board (5410886)	A-SP-3700181-0-0

PACKAGING INSTRUCTIONS

Step	Procedure
1	Set up Regular Slotted Carton (9905683) using one strip of Glasflex tape across the bottom and one strip across each end.
2	Fold up edges of Scored Sheet with Foam (9905678) *with foam facing up* and place it into the cavity of the Laminated Buildup (9905677). Make sure that the cutouts in the foam match the cutouts in the bottom of the Laminated Buildup.
3	Place Power Supply Board (5410886) in the Scored Sheet and Laminated Buildup assembly by feeding the high voltage lead through the round hole in the foam pad and by feeding the black and red wires through the rectangular hole in the foam pad. Push the power supply down into the cavity in the Laminated Buildup. *Do not bend the pins.*
4	Fold the top flap of the Laminated Buildup down over the Power Supply and feed the tube socket harness through the round hole in the top flap.
5	Fold the bottom flap of the Laminated Buildup down and place the whole assembly into the Regular Slotted Carton. Position the assembly so that the bottom flaps are down and the sloping face is toward the outside end of the Regular Slotted Carton.

ENG	APPD	SIZE	CODE	NUMBER	REV
L. Patton 3/21/75	J W Laurence 3/21/75	A	SP	3700179-0-0	

DEC 8-(881)-1631-8-R671
DRA - 130

SHEET 1 OF 3

PACKAGING INSTRUCTION — CONTINUATION SHEET

TITLE DATA PATH BOARD, ROM/UART BOARD, POWER SUPPLY BOARD

Step	Procedure
6	Fold the Scored Sheet (9905682) into a "W" form and place it between the power supply assembly and the end of the Regular Slotted Carton.
7	Open the two top flaps of the Die-Cut Carton with Foam assembly (9905680) which has been supplied set-up.
8	Place one ROM/UART Board (5410902) in the side of the Die-Cut Carton with the three pieces of foam on the top flap. Place the board into the cavity with the pins facing toward the middle divider. The pins fit into the slots provided in the middle divider.
9	Place one Data Path Board (5410902) into the second cavity with the pin connector toward the middle divider.
10	Close the Die Cut Carton across the top with one strip of Glasflex tape.
11	Place the Die-Cut Carton assembly (tape facing down) into the Regular Slotted Carton.
12	Close and seal the Regular Slotted Carton using one strip of Glasflex tape across the middle and one strip across each end.

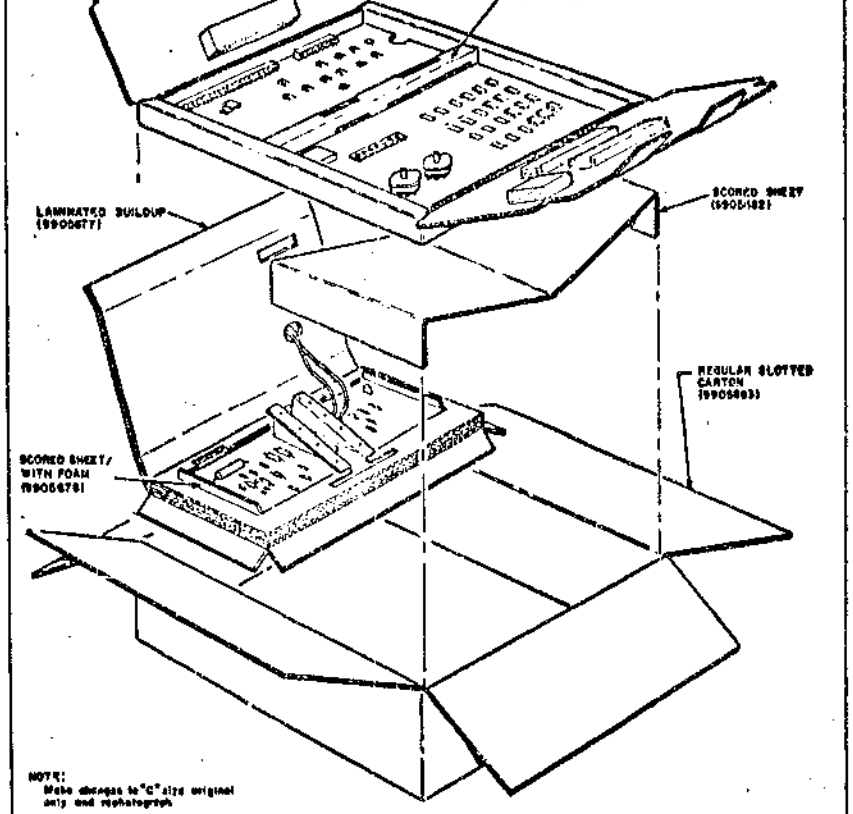
L. Patton 3/21/75 | J W Laurence 3/21/75 | SIZE A | CODE SP | NUMBER 3700179-0-0 | REV

DEC 8-(881)-1631-8-R671
DRA - 130

SHEET 2 OF 3

PACKAGING INSTRUCTION REV: _____ DATE: _____

TITLE DATA PATH BOARD, ROM/UART BOARD, POWER SUPPLY BOARD



NOTE:
Make changes to "C" size original only and rephotograph

ENG	APPD	SIZE	CODE	NUMBER	REV
L. Patton 3/21/75	J W Laurence 3/21/75	A	SP	3700179-0-0	

SHEET 3 OF 3

DIGITAL EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

PACKAGING INSTRUCTION	REV:	DATE:
TITLE DATA PATH (5410906) and ROM/UART (5410902) SHIPPING PACKAGE		

MATERIAL REQUIREMENTS

Quantity	Purchase Specification No.	Description
1	9905680	Die-Cut Carton with Foam
1	9905681	Scored Sheet
A/R	9905729	Glasflex Tape

PACKAGING INSTRUCTIONS

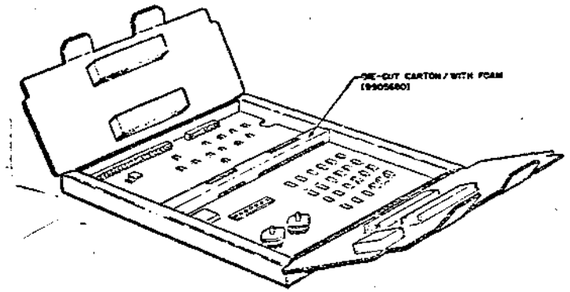
Step	Procedure
1	Open the two top flaps on the Die-Cut with Foam (9905680) which has been supplied set-up.
2	Place one ROM/UART Board (5410902) *components facing up* into the section of the Die-Cut Carton with the three pieces of foam on the top flap. Place the board into the cavity with the pins facing toward the middle divider. The pins fit into the slots provided in the middle divider.
3	Place one Data Path Board (5410902) *components facing up* into the second cavity.
4	Close Die-Cut Carton and seal across the top with one strip of Glasflex tape.
5	Place the Die-Cut Carton assembly (tape face down) into the Scored Sheet (9905681). Fold up each end of the Die-Cut Carton and seal with one strip of tape across the middle and one strip across each end.

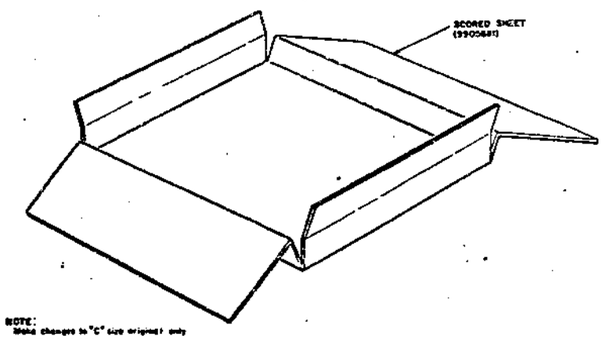
ENG	APPD	SIZE	CODE	NUMBER	REV
C Patton 3/21/75	[illegible] 3/21/75	A	SP	3700180-0-0	

DEC 8-5531-1031-1-8671
DRA - 329

SHEET 1 OF 2

PACKAGING INSTRUCTION	REV:	DATE:
TITLE DATA PATH (5410906) AND ROM/UART (5410902) SHIPPING PACKAGE		





NOTE:
Blank changes to "C" size original only and rephotograph.

ENG.	APPD.	SIZE	CODE	NUMBER
Bill Patton 3/21/75	W Lawrence 3/21/75	A	SP	3700180-0-0

SHEET 2 OF 2

DIGITAL EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

PACKAGING INSTRUCTION	REV:	DATE:
TITLE POWER SUPPLY BOARD (5410886)		

MATERIAL REQUIREMENTS

Quantity	Purchase Specification No.	Description
1	9905679	Regular Slotted Carton
1	9905678	Scored Sheet/with Foam
1	9905677	Laminated Buildup
A/R	--	Glasflex Tape

PACKAGING INSTRUCTIONS

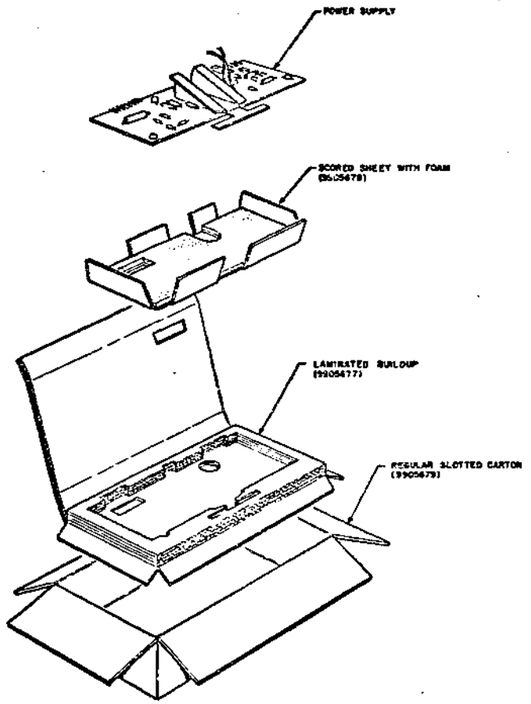
Step	Procedure
1	Set up Regular Slotted Carton (9905679) using one strip of Glasflex tape across the bottom and one strip across each end.
2	Fold up edges of the Scored Sheet with Foam (9905678) *with foam facing up* and place it into the cavity of the Laminated Buildup (9905677). Make sure that the cutouts in the foam match the cutout in the bottom of the Laminated Buildup.
3	Place the Power Supply Board (5410886) in the Scored Sheet and Laminated Buildup assembly by feeding the high voltage lead through the round hole in the foam pad, and by feeding the black and red wires through the rectangular hole in the foam pad. Push the power supply down into the cavity. *Do not bend the pins.*
4	Fold the top flap of the Laminated Buildup down over the Power Supply Board and feed the tube socket harness through the round hole in the top flap.
5	Fold the three bottom flaps of the Laminated Buildup down and place the whole assembly into the set up Regular Slotted Carton.
6	Close and seal the Regular Slotted Carton using one strip of Glasflex tape across the middle and one strip across each end.

ENG	APPD	SIZE	CODE	NUMBER	REV
C. Potter 2/21/75	J. Lawrence 3/21/75	A	SP	3700181-0-0	

DEC 8-1553-1032-8-9673
DRA - 129

SHEET 1 OF 2

PACKAGING INSTRUCTION	REV:	DATE:
TITLE POWER SUPPLY BOARD (5410886) SHIPPING PACKAGE		



NOTE:
Make changes to "C" size original only and rephotograph.

ENG.	APPD.	SIZE	CODE	NUMBER
C. Potter 2/21/75	J. Lawrence 3/21/75	A	SP	3700181-0-0

SHEET 2 OF 2

DIGITAL EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

PACKAGING INSTRUCTION	REV:	DATE:
TITLE KEYBOARD (5410893) CUSTOMER SHIPPING PACKAGE		

MATERIAL REQUIREMENTS

Quantity	Purchase Specification No.	Description
1	9905676	Die-Cut Sheet with Foam
1	9905679	Regular Slotted Carton
A/R	9905729	3-in. wide Glasflex Tape

PACKAGING INSTRUCTIONS

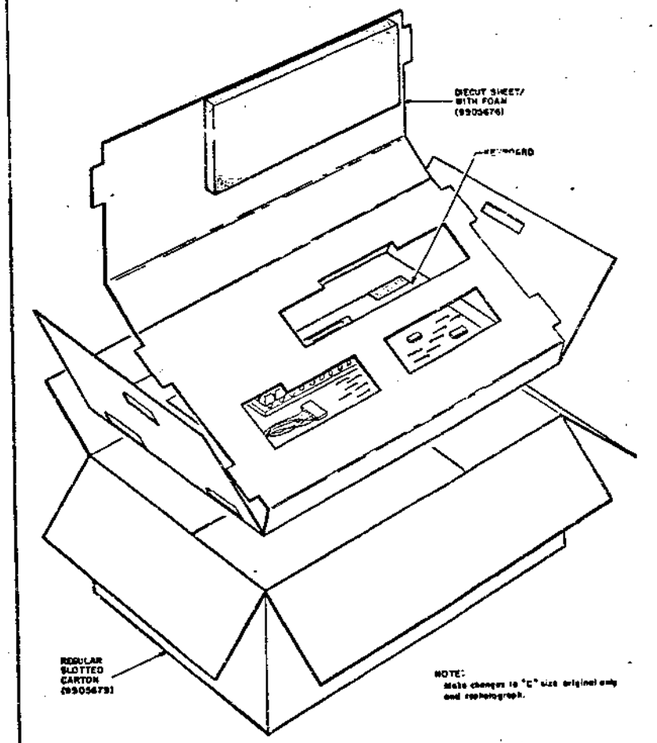
Step	Procedure
1	Place keyboard on Die-Cut Sheet with Foam (9905676) with spacer bar toward the *"Spacer Bar Here"* printing on the Die-Cut Sheet.
2	Fold the rear sheet down and over the keyboard so that the keys and covered wires fit up through the cutouts in the sheet.
3	Fold up and down over the keyboard so that the foam is held down on top of the keys.
4	Fold the two side pieces up so that the tabs (6) on the part holding the keyboard down fit into the slots in the side pieces.
5	Set up Regular Slotted Carton and tape with one strip of Glasflex tape across the middle and one strip across each end.
6	Place Die-Cut Sheet with Foam and keyboard assembly into the Regular Slotted Carton *with the keys facing up.*
7	Close and seal carton with one strip of Glasflex tape across the middle and one strip across each end.

ENG	APPD	SIZE	CODE	NUMBER	REV
C Patton 3/21/75	W. Lawrence 3/21/75	A	59	3700182-0-0	

DEC 8-(553)-2031-1-R671
DRA - 129

SHEET 1 OF 2

PACKAGING INSTRUCTION	REV:	DATE:
TITLE KEYBOARD(5410893) CUSTOMER SHIPPING PACKAGE		



NOTE:
Make changes to "C" size original only and rephotograph.

ENG.	APPD.	SIZE	CODE	NUMBER
Robb Patton 3/21/75	J. W. Lawrence 3/21/75	A	59	3700182-0-0

SHEET 2 OF 2

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY S. R. HOLMES	CHECKED S. R. HOLMES	SECTION
DATE 7 April 1975	DATE 7 April 1975	
ENG S. R. HOLMES	PROD S. R. HOLMES	ISSUED SECT.
DATE 4-11-75	DATE 4-11-75	

ITEM NO.	DWG NO. / PART NO.	DESCRIPTION	QUANTITY/VARIATION VT5Ø-CA	VT5Ø-CB	VT5Ø-CC	VT5Ø-DA	VT5Ø-DB	VT5Ø-DC
1	MD-1Ø-DCVTA	VTØ5, VTØ6, VT5Ø Diagnostic; with Listing	1	1	1	1	1	1
2	7011089	DECsystem-1Ø "283B Conn to VT50 Term" Cable NOTE: Insure that this cable is shipped with terminal, usually installed by Manufacturer. If cable is not installed from the Manufacturer insure parts required to create cable in field are shipped i.e., -add: 1-1205857-0-2, and 1-1205857-0-1, 1-7011089-0-0 cable print to contents of the shipping container.	1	1	1	1	1	1
3	DEC-ØØ-HVT5A-A-D	VT5Ø Video Terminal Programmer's Manual NOTE: Insure 1 manual per VT5Ø shipped. Terminal usually contains a manual when shipped from Manufacturer.	1	1	1	1	1	1
4	VT5Ø-TT #1	VT5Ø Tech Tip #1, VT5Ø Installation and Maintenance Guide. NOTE: 1 per site.	N/A					N/A

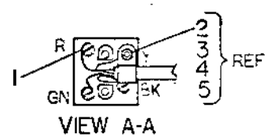
TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
VT5Ø SHIPPING LIST DECsystem-1Ø	SHEET 1 OF 1	A	PL	PDP1Ø-Ø-SHIP	–	VT50-00010
		DIST.				

DEC FORM DEC 16-(325)-1031-%%70
DRA 110

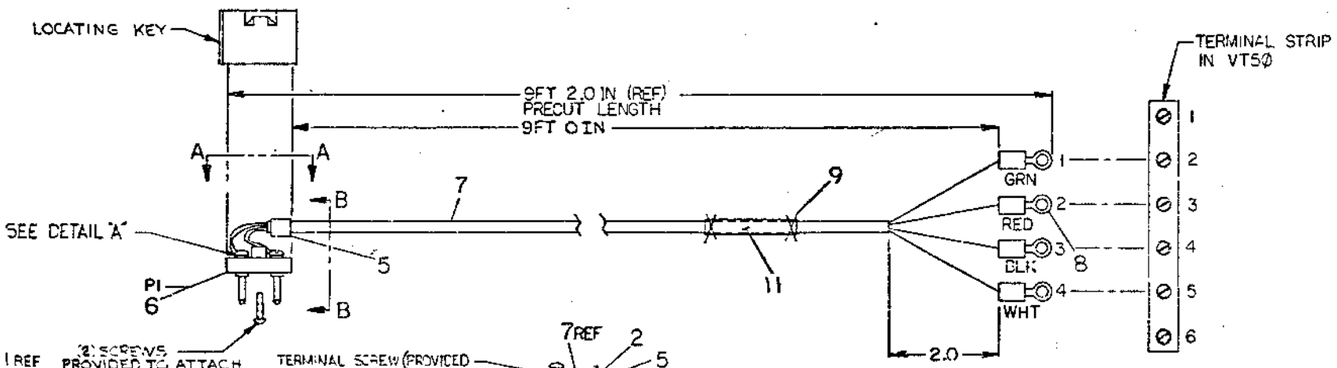
WIRE TABLE

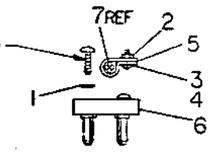
WIRE DESCRIPTION COLOR	WIRE DESCRIPTION PRINT	FROM CONNECTOR	FROM WITH	FROM POINT	TO CONNECTOR	TO WITH	SIGNAL
RED	—	P1-R	—	2	—	ITEM #8	KEYBOARD-(OUTPUT)
BLK	—	P1-BK	—	3	—	↑	PRINTER-(INPUT)
GRN	—	P1-GN	—	1	—	↓	KEYBOARD-(OUTPUT)
WHT	—	P1-Y	—	4	—	ITEM #8	PRINTER-(OUTPUT)

NOTES:
1. DISCARD SMALL SCREW SUPPLIED WITH PLUG (ITEM #6).
2. ATTACH CONN (ITEM #1) TO CABLE WITH ONE (1) CABLE TIE (ITEM #9) DO NOT REMOVE CONN FROM BAG.



VIEW A-A





VIEW B-B

WIRE IS STRIPPED AND WRAPPED IN A CLOCKWISE DIRECTION UNDER FLAT WASHER ITEM #1
DETAIL "A"

QTY.	DESCRIPTION	PART NO.	ITEM NO.
1	LABEL,CABLE ID	9009532	11
1	CONN,TELEPHONE JACK	1205857-02	10
3	CABLE TIE	9007880	9
4	TERM NAL RING TONGUE	900 930-00	8
A/R	CABLE 4 CONDUCTOR	9 07706	7
1	CONN TELEPHONE (PLUG)	1205857-01	6
1	CABLE CLAMP .3	9007079	5
1	WASHER, FLAT NYLON #4	9 07708	4
1	SCR,NYLON BIND HD 4-40X.38	9002401-4	3
1	NUT NYLON 4-40	9007932	2
4	WASHER FLAT #4	9007913	1

PARTS LIST

FIRST USED ON OPTION/MODEL: VT50/DEC SYSTEM 10

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
XXX ±0.10	XXX ±.005	±1° 30'
XX ±0.5	XX ±.02	
X ±2.	X ±.1	

THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL: SEE PARTS LIST
FINISH

DRN. DATE
CHK. DATE 2-24-75
ENG. DATE
PROJ. ENG. DATE
PROD. DATE
NEXT HIGHER ASSY.

digital

TITLE: 2538 CONN TO VT50 TERM

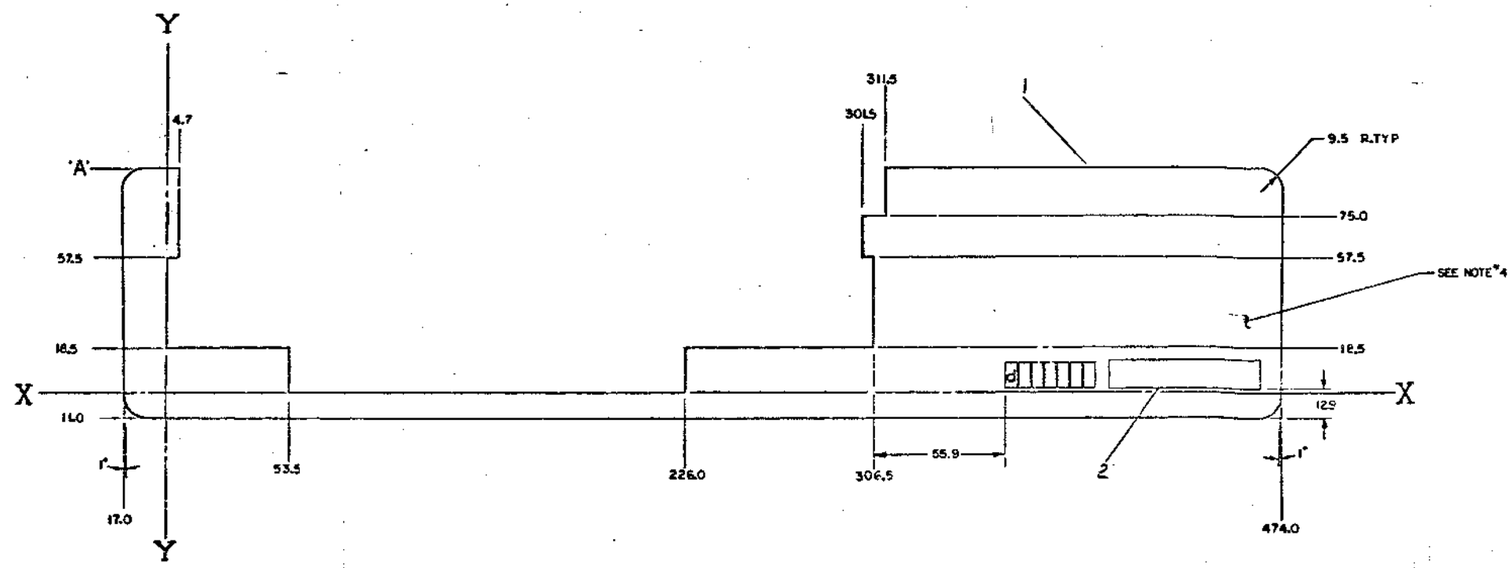
SIZE D | CODE 1A | NUMBER 7 [illegible]-0-0 | REV.
SCALE
SHEET OF | DIST

REVISIONS: REV. | CHANGE NO. | CHK

DRAWING NUMBER D 7[illegible]-0-0

PART NO	DIM 'A'	MAT'L	FINISH	USED ON
-1	96.0	1.02(.040")THK. LEXAN WITH 3M #468 STICK BACK TAPE	92-00001-47	EXP. ABS.
-2	101.0	1.59(1/16")THK LEXAN WITH 3M #4032 STICK BACK TAPE	92-00151-47	INJ. MLD.

NOTES:
1. SILK SCREEN "DIGITAL DECSCOPE" LOGO #68 GREY.
2. HARDCOAT AFTER SCREENING. -1 ONLY.
3. APPLY SEW POLANE PAINT ON -2.
4. APPLY 3M TAPE #4032 ON ENTIRE SURFACE FAR SIDE.



REVISIONS		
CHK	CHANGE NO.	REV
	7413093-0(XX)1	A

E. HALOGH

A/R	TAPE 3M 4032	3612357	3
1	SILK SCREEN	B-??-7413093-0-1	2
1	BEZEL KEYBOARD (VT51)		1

PARTS LIST

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

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
XXX ±0.10	XXX ±.005	±0°30'
XX ±0.5	XX ±.02	
X ±2.	X ±.1	

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL SEE TABLE

FINISH SEE NOTES

DRN. [illegible] DATE 4-2-84
CHK R.F. DATE 4/2/84
ENG. [illegible] DATE 4/2/84
PROJ. ENG. [illegible] DATE 4/2/84
PROD. [illegible] DATE 4/2/84
NEXT HIGHER ASSY.
C-CA-VT52-0-0
SCALE 1/1
SHEET 1 OF 1

digital

TITLE
BEZEL, KEYBOARD
(VT50,VT51)

SIZE D | CODE | NUMBER 7413093-0-0 | REV. B
DIST.

DO NOT SCALE 7413093-0-0 B

12.95"

digital decscope

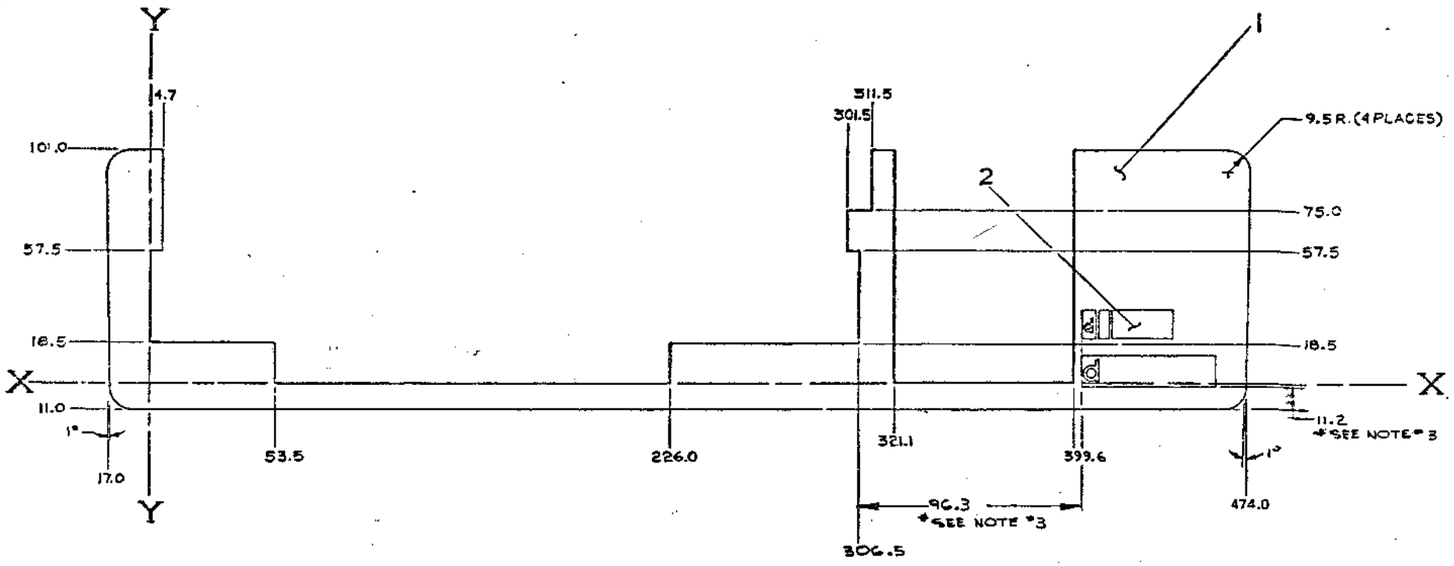
36,880

SPEC# 9200101-68 GRAY

REVISIONS	REV.	CHANGE NO.	CHK

DRN. J Deviers	2-20-76	FIRST USED ON VT50	digital
CHK'D	2-20-76	TITLE BEZEL KEYBOARD VT50	
ENG.	2-24-76		
PROJ. ENG.	2-27-76		
PROD.	4-21-76		
NEXT HIGHER ASSY.			
D-IA-7413093-0-0		SIZE A / CODE 55 / NUMBER 7413093-0-1	REV.
SCALE 1/1			
SHEET 1 OF 1		DIST.	

NOTES:
1. MATERIAL USE 1.02(.040) THK LEXAN WITH 3M # 4032 STICKBACK TAPE TO THE ENTIRE BACK SURFACE OF THE BEZEL
2. APPLY S & W POLANE PAINT 92-00151-47
3. SILK SCREEN DEMINSION ONLY



METRIC DIMENSIONS

A/R	TAPE 3M # 4032	3612357	3
1	SILK SCREEN	7413432-0-1	2
1	BEZEL, KEYBOARD		1
	DESCRIPTION	DWG. PART NO.	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'

SURFACE QUALITY IN MICROINCHES

CLASS OF ACCURACY (CHECK ONE)	OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTE #1
FINISH SEE NOTE #2

DRN. 2-25-
CHK'D
ENG.
PROJ. ENG.
PROD. 2-4-75
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 1 OF 1

FIRST USED ON VT50H/VT51

digital

TITLE
BEZEL KEYBOARD
(VT50H)

SIZE	CODE	NUMBER	REV.
1	IA	7413432-0-0	A

DIST.

REVISIONS

CHK	CHANGE NO.	REV.
	7413432-00001	A
	4-29-75	
	J. RUZYNSKI	

DEC FORM NO. DA1-130

1 IA 7413432-0 A

11.2

digital

decscope

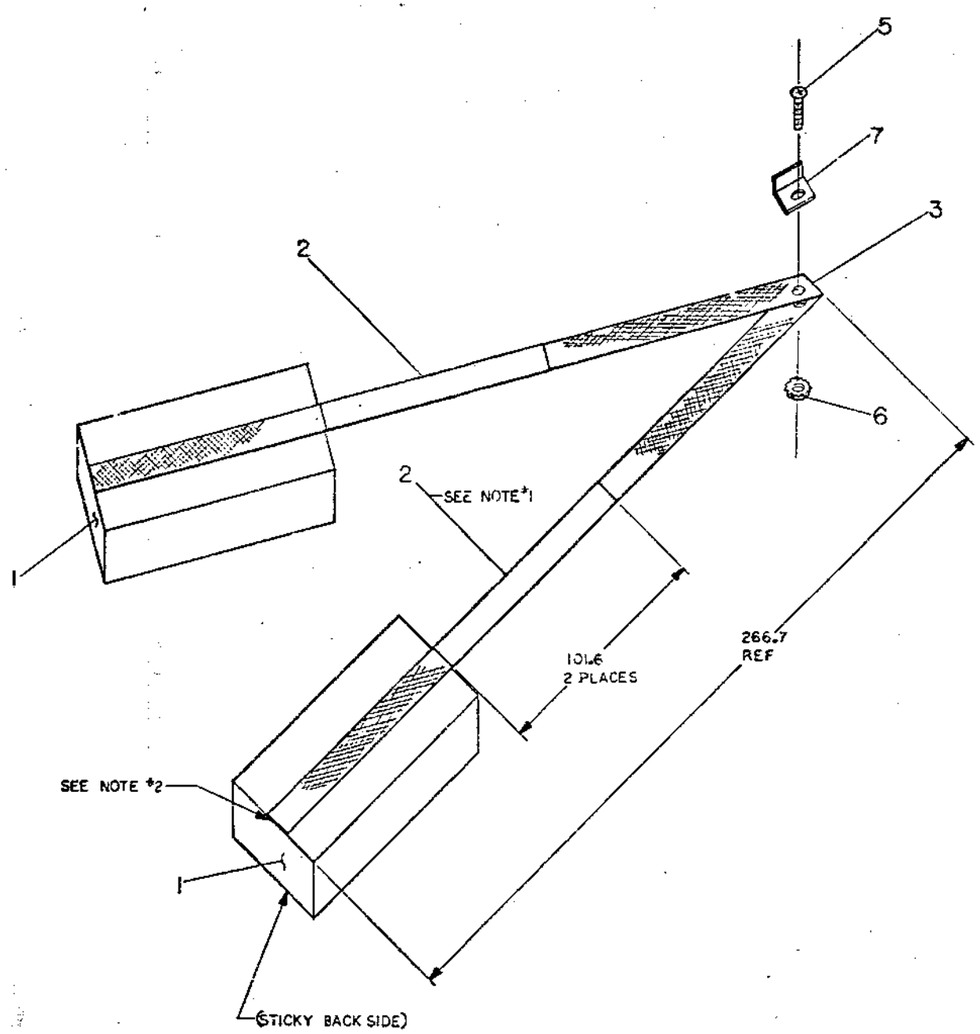
96.3

REVISIONS	REV.	CHK
CHANGE NO.		

SPEC# 9200100-68 GRAY

DRN. J Demers 5-2-75	FIRST USED ON VT51 & VT50H	digital		
CHK'D				
ENG. [signature] 5-4-75	TITLE KEYBOARD (VT51 + VT50+)			
PROJ. ENG.				
PROD.				
NEXT HIGHER ASSY.				
	SIZE A	CODE 55	NUMBER 7413432-0-1	REV.
SCALE				
SHEET OF	DIST.			

NOTES:
1. INSTALL TUBING (ITEM #2) OVER STRAP (ITEM #3) BEFORE CEMENTING TO SUPPORT (ITEM #1)
2. CENTER STRAP ON SUPPORT, USING CEMENT (ITEM #4) ADHERE TOGETHER. DO NOT ALLOW CEMENT ON TOP OF STRAP



METRIC DIMENSIONS

QTY	DESCRIPTION	DWG PART NO.	ITEM NO.
1	MALE FAST ON	9007293	7
1	NUT KEPS #6-32	9008185	6
1	SCR PHL,FAN HD #6-32x.50LG	9006024-1	5
A/R	CEMENT HYBOND CONTACT	9007534	4
1	STRAP GND	2-40-7413958-0-0	3
A/R	TUBING PVC (12.70 MM, BLK)	9107846	2
2	SUPPORT CRT GROUNDING	2 MD-7413757-0-0	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 10	OVER 10 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	101	102	103	104	105	118
	PREFERRED ☐	103	104	106	110	112	125

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL: SEE PARTS LIST

FINISH

DRN [illegible] 4/17/78
CHK'D [illegible]
ENG. [illegible]
PROJ. ENG. [illegible] 4/24/78
PROD [illegible]
NEXT HIGHER ASSY.
70-UA-VT50-2-0
SCALE NONE
SHEET 1 OF 1

FIRST USED ON: VT50

TITLE: CRT, GROUNDING ASSEMBLY

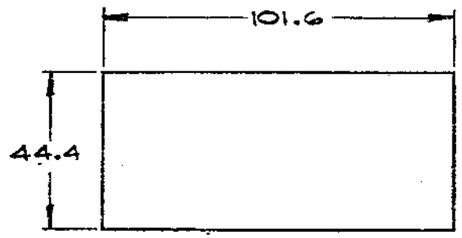
SIZE A | CODE 14 | NUMBER 7011197-0-0 | REV.

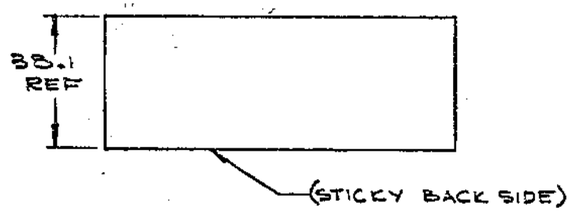
DIST.

7011197-0-0

REVISIONS		
REV.	CHANGE NO.	CHK.

NOTES:
1. MAKE FROM DEC PART "9008259-01





ITEM NO.	DESCRIPTION	DWG./PART NO.	QUANTITY & VARIATION
1	FOAM 1/2 X 54 X 30" (GRY)	9008269-01	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTE #1

FINISH —

DRN Jeremy Dorsey 4/16/75
CHK'D [illegible] 4/23/75
ENG. [illegible] 5/1-/75
PROJ. ENG. [illegible] 4/23/75
PROD. [illegible] 5/1-/75
NEXT HIGHER ASSY. HA-7011197-0-0
SCALE 1/1
SHEET 1 OF 1

FIRST USED ON VT50

digital

TITLE
SUPPORT, CRT GROUNDING

SIZE	CODE	NUMBER	REV.
2	MD	7413757-0-0	

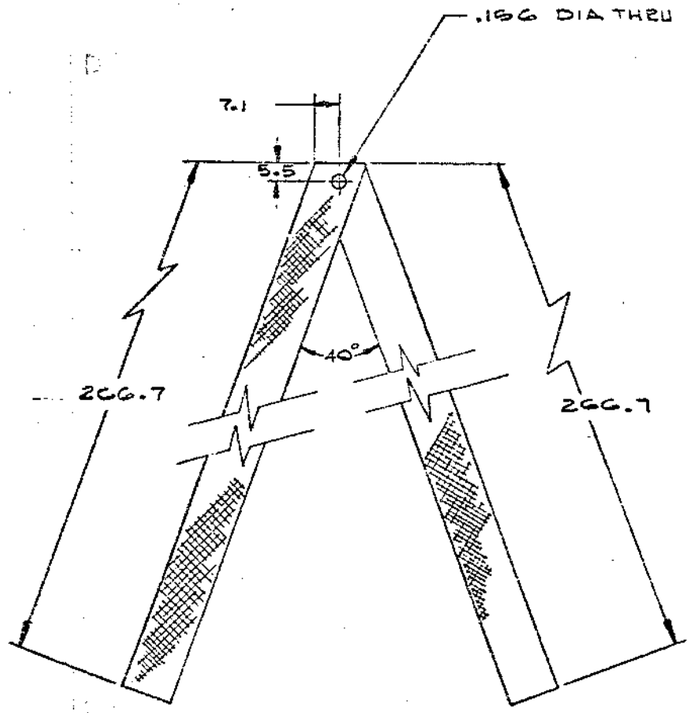
DIST.

REVISIONS | REV. | CHANGE NO. | CHK

DEC FORM NO. 042-120

7413757-0-0 MD 2 B

NOTES:
1. MAKE FROM PURCHASE SPEC A-PS-9107682-0-0



METRIC DIMENSIONS

REVISIONS		
REV.	CHANGE NO.	CHK

ITEM NO.	DWG./PART NO.	DESCRIPTION
1	9107682	SHIELDING, BRAIDED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
SURFACE QUALITY IN ✓ MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4	±0.5	±1.0
	PREFERRED ☐	±0.3	±0.4	±0.6	±1.0	±1.6	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE PARTS LIST

FINISH

DRN [illegible] 4/18/75
CHK'D [illegible] 4/18/75
ENG. [illegible] 5/14/75
PROJ. ENG [illegible] 4/29/75
PROD. [illegible]

NEXT HIGHER ASSY. -IA-701197-0-0

SCALE NONE

SHEET 1 OF

FIRST USED ON VT50

digital

TITLE

STRAP, BRAIDED

SIZE	CODE	NUMBER	REV.
2	MD	7413956-0-0	

DIST.

MD 7413956-0-0

DEC FORM NO. DA2-120