digital EQUIPMENT CORPORATION

DRAWING DIRECTORY

CUSTOMER PRINT SET INDEX

SEQUENCE		SEQUENCE	

THIS IS PRINT SET

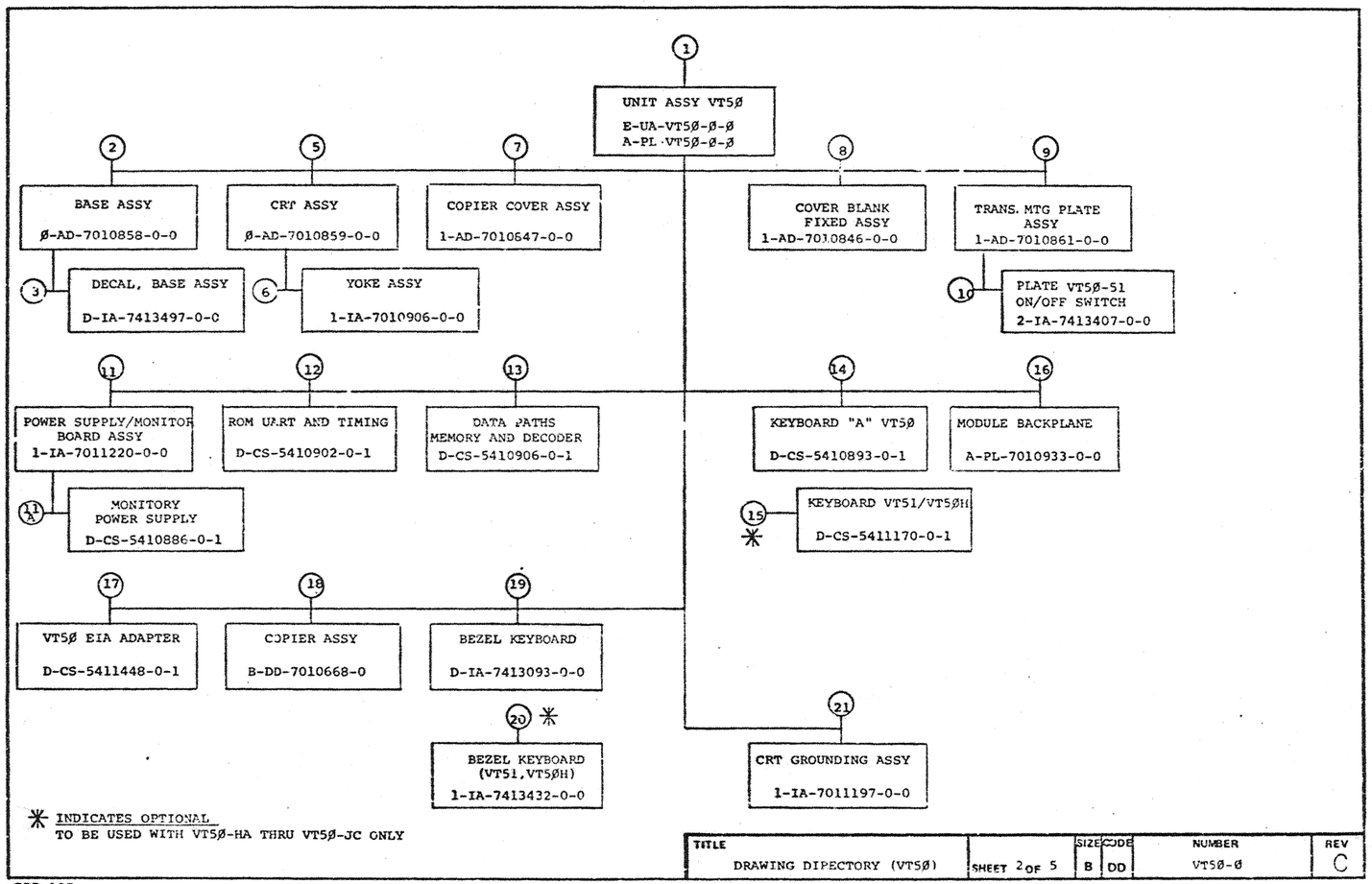
UNIT VARIATIONS

VAR	TITLE	PRINT SET
VT5Ø-AA	KYBD DISPLAY TERMINAL,	
	CURRENT LOOP 115V 6Ø HZ	
VT5Ø-AB	KYBD DISPLAY TERMINAL,	
	CURRENT LOOP 23ØV 5Ø/6Ø HZ	
VT5Ø-AC	KYBD DISPLAY TERMINAL,	
	CURRENT LOOP 100/127V 5Ø/6Ø HZ	
VT5Ø-BA	KYBD DISPLAY TERMINAL,	
	COPIER,CURRENT LOOP 115V 6Ø HZ	
VT5Ø-BB	KYBD DISPLAY TERMINAL,	
	COPIER, CURRENT LOOP 23ØV 5Ø/6ØHZ	
VT5Ø-BC	KYBD DISPLAY TERMINAL,	
	COPIER,CURRENT LOOP 100/127V 5Ø/6ØHZ	
VT5Ø-HA	KYBD DISPLAY TERMINAL,	
	CURRENT LOOP,DIRECT CURSOR	
	CONTROL 115V 6Ø HZ	
VT5Ø-HB	KYBD DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL 22Ø/24ØV 5Ø/6Ø HZ	
VT5Ø-HC	KYBD DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL 100/127V 5Ø/6Ø HZ	
VT5Ø-JA	KYBD DISPLAY TERMINAL CURRENT	
	LOOP, DIRECT CURSOR CONTROL	
	COPIER 115V 6Ø HZ	
VT5Ø-JB	KYBD DISPLAY TERMINAL CURRENT	
	LOOP, DIRECT CURSOR CONTROL	
	COPIER 22Ø/24ØV 5Ø/6Ø HZ	
VT5Ø-JC	KYBD DISPLAY TERMINAL	
	CURRENT LOOP, DIRECT CURSOR	
	CONTROL COPIER 100/127V 5Ø/6Ø HZ	

REVISIONS		
DATE	CHG. NO.	REV
4/75	VT5Ø-6	A
5/75	VT5Ø-1Ø	B
6/75	VT5Ø-11	C

USED ON OPTION/MODEL	DRN.	DATE	TITLE
VT5Ø	T. CAHILL	2/10/75	DRAWING DIRECTORY (VT5Ø)
	CHK'D. J. CAHILL	DATE 2/10/75	
	PROJ ENG.	DATE	
	PROD.	DATE	SIZE B / CODE DD / NUMBER VT5Ø-Ø / REV C
SHEET 1 OF 5	FIELD SERV.	DATE	DIST

DRB 106



DRB 107

CUSTOMER PRINT SET	MFG SET	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		1	Ø-UA-VT5Ø-Ø-Ø		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	
			1-IA-7011186-0-0			HARNESS POWER SUPPLY	
			1-IA-7011187-0-0			HARNESS YOKE	
			2-IA-7413948-0-0			HARNESS CRT	
		11A	D-CS-5410886-0-1		4	MONITOR POWER SUPPLY	
			K-CO-5410886-0-4		1	X-Y COORDINATE HOLE LOCATION	
			D-AH-5410886-0-5		1	ASSY/DRILLING HOLE LAYOUT	
			L-MH-5410886-0-6		1	MODULE HISTORY	
			E-IA-7412849-0-0		1	SPREADER HEAT	
			E-MD-9606362-0-0		1	PERIPHERY DIE	
		12	D-CS-5410902-0-1		4	ROM UART AND TIMING	
			K-CO-5410902-0-4		1	X-Y COORDINATE HOLE LOCATION	
			D-AH-5410902-0-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410902-0-6		1	MODULE ECO HISTORY	
			E-MD-9606361-0-0		1	PERIPHERY DIE	
		13	D-CS-5410906-0-1		4	DATA PATHS MEMORY AND DECODER	
			K-CO-5410906-0-4		1	X-Y COORDINATE HOLE LOCATION	
			D-AH-5410906-0-5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5410906-0-6		1	MODULE ECO HISTORY	
			E-MD-9606360-0-0		1	PERIPHERY DIE	
			C-AD-7011144-0-0		1	CABLE ASSY	

CUSTOMER PRINT SET	MFG SET	FIND NO.	ELECTRICAL DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		14	D CS-5410893 0 1		4	KEYBOARD "A" VT5Ø	
			K-CO 5410893 0 4		1	X-Y COORDINATE HOLE LOCATION	
			D-AH-5410893 0 5		1	ASSY/DRILLING HOLE LAYOUT	
			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	
		15	D-CS-5411170-0 1		2	KEYBOARD VT51/VT50H	
			K-CO 5411170-0-4		1	X-Y COORDINATE HOLE LOCATION	
			D-AH-5411170-0 5		1	ASSY/DRILLING HOLE LAYOUT	
			B-MH-5411170-0-6		1	MODULE ECO HISTORY	
			D-IA 7010912 0 0		1	CABLE ASSY	
		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	
			A-SP 3700179 0 0		3	PACKAGING INST.	
			A-SP 3700180-0 0		2	PACKAGING INST.	
			A-SP 3700181 0 0		2	PACKAGING INST.	
			A SP 3700182 0 0		2	PACKAGING INST.	
		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	
		18	B-DD 7010668-0			COPIER ASSY	
		19	A-PL-PDPIO-0-SHIP		1	DEC SYSTEM IO SHIPPING LIST	
		20	D-IA-7011089-0-0		1	DEC SYSTEM IO 283 TO VT50 CABLE	

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 (VT5Ø) SHEET 3 OF 5	B	DD	VT5Ø Ø	C

DRB 108

DEC 16-(325)-3062-2B-R972

CUSTOMER PRINT SET	MFG.	SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
			1	Ø-UA-VT5Ø-Ø-Ø		2	UNIT ASSY VT5Ø	
				A-PL-VT5Ø-0-0			UNIT ASSY VT5Ø (PL)	
				C-IA-7010795-0-0		1	CASSETTE COVER	
				D-IA-7412866-0-0		1	LOUVER PLATE	
				C-IA-7413324-0-0		1	BRK'T PC BD TO CRT. (LEFT)	
				C-IA-7413325-0-0		1	BRK'T PC BD TO CRT. (RIGHT)	
				C-IA-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	
				C-IA-7412666-0-0		1	HEAT SINK	
				E-MD-7411540-0-0		45	SHELL VT5Ø	
			2	Ø-AD-7010858-0-0		1	BASE ASSY	
				E-MD-7411539-0-0		2	BASE VT5Ø	
				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 VT5Ø	
				D-DC-7413497-0-1		1	ART WORK (DECAL BASE)	

CUSTOMER PRINT SET	MFG.	SET	FIND NO.	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	
				1-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	STIFFENER, 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 (VT5Ø)	
				1-IA-7011130-0-0		1	HARNESS TRANS. 60 HZ	
				Ø-IA-7011131-0-0		1	HARNESS TRANS. 50 HZ	
			10	2-IA-7413407-0-0		1	PLATE VT5Ø-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	
			18	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 (VT5Ø) SHEET 4 OF 5	B	DD	VT5Ø-Ø	C

DRB 108

DEC 36-(325)-1062-DB-R072

MECHANICAL

CUSTOMER PRINT SET	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE
		9	D-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	MFG. SET	FIND NO.	DRAWING NO.	REV	NO OF SHT	DESCRIPTION	OPTION NO./FILE DATE

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

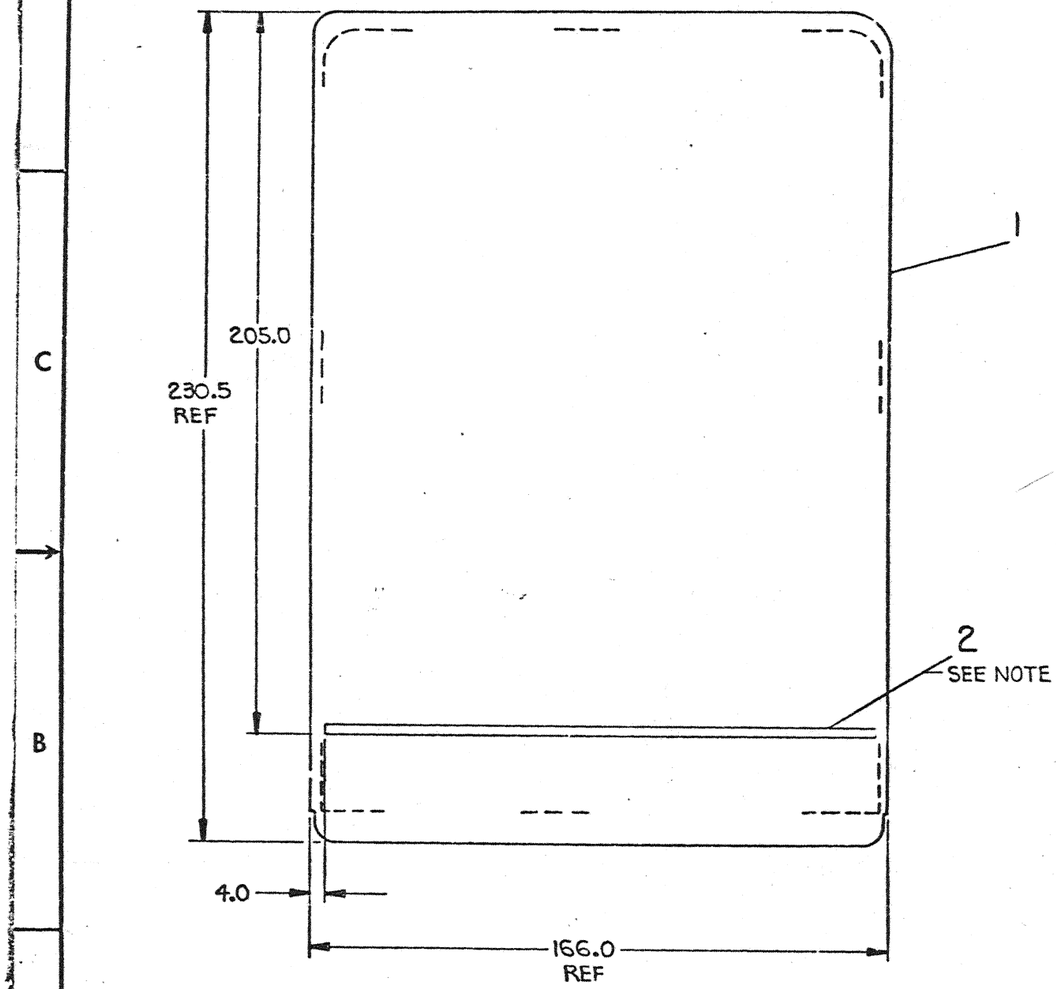
TITLE		SIZE	CODE	NUMBER	REV
DRAWING DIRECTORY	SHEET 5 OF 5	B	DD	VT50 @	C

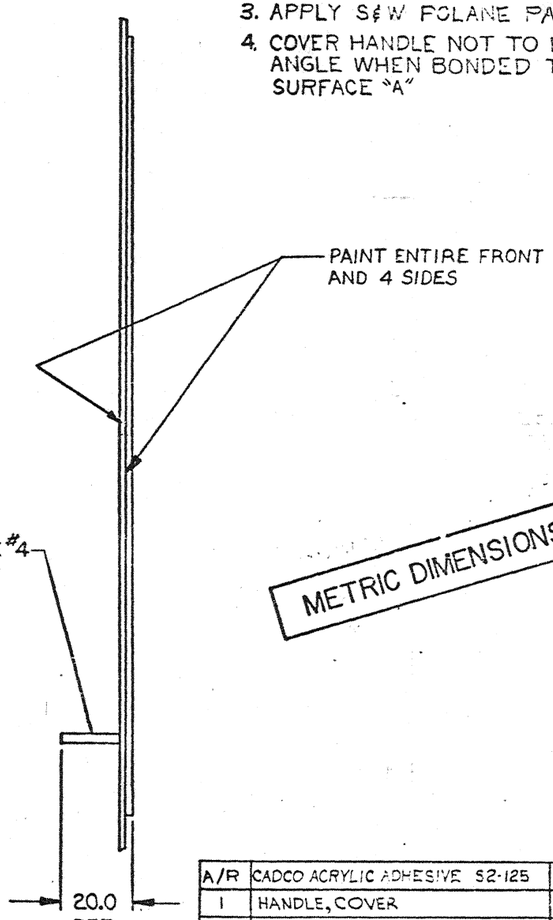
DPB 108

DEC 16-(325)-1062-23-R872

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"





METRIC DIMENSIONS

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	DECIMALS	ANGLES
X.XX=±0.10 X.X =±0.5 X =±2	±.005 ±.010	±0° 30'

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ▽

MATERIAL: SEE PARTS LIST

FINISH: SEE NOTE #2

DRN. S Fabrizio	DATE 1-8-75	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D. A Reuss	DATE 1-13-75	
ENG. W J Balough	DATE	
PROJ. ENG. [illegible]	DATE 1-13-75	
PROD. [illegible]	DATE 1-13-75	

TITLE: COVER, CASSETTE (INTERIM)

NEXT HIGHER ASSY.

SCALE 1/1

SHEET 1 OF 1

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

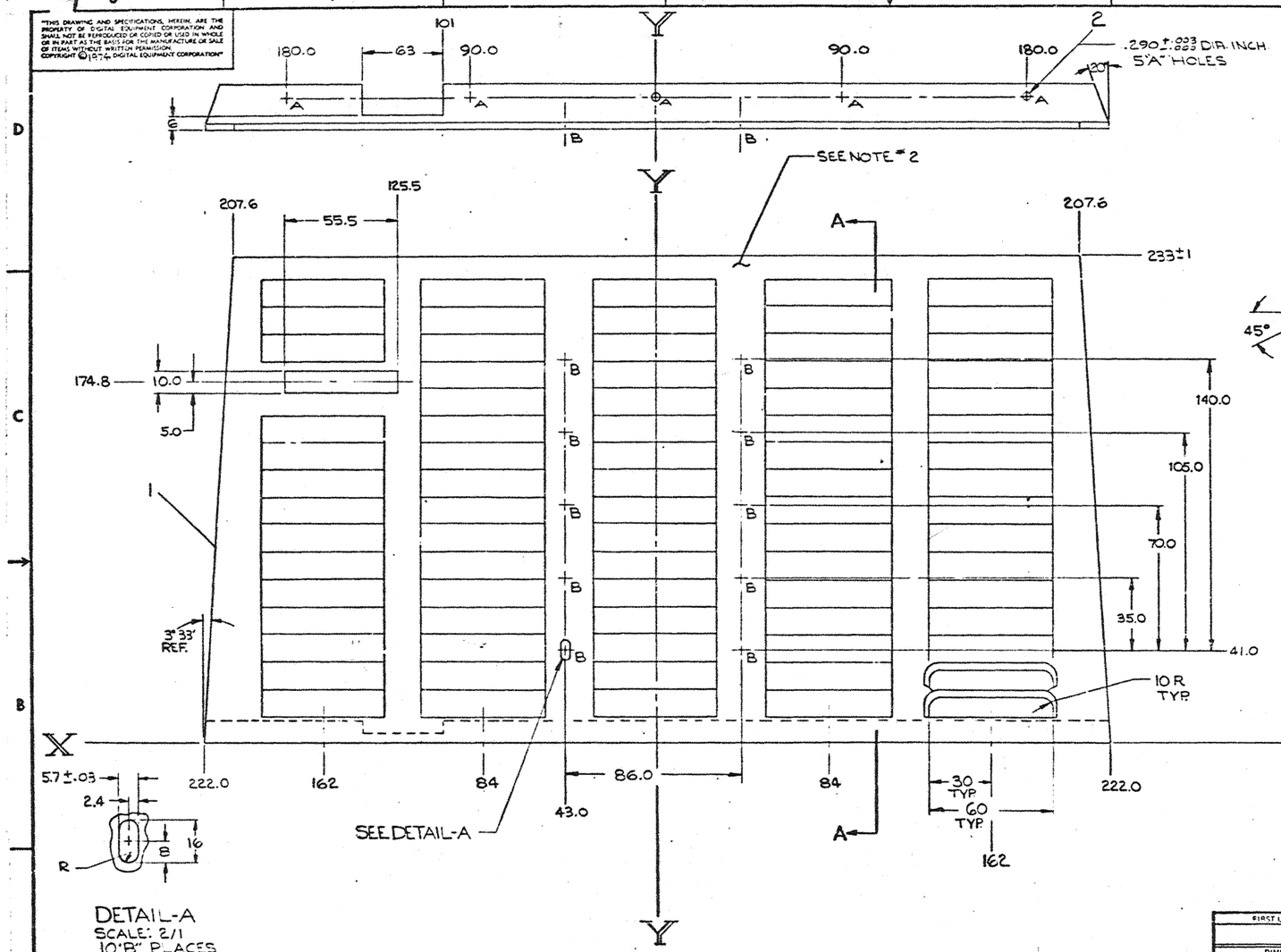
DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
ER	7010795-00001	A	L. BALOGH 1-23-75
ER	7010795-00002	B	L. BALOGH 4-5-75
RH	7010795-00003	C	M. MORGANSTERN 7-3-75
	7010795-000C4	D	M. MORGANSTERN 6-4-75

DEC FORM NO. 3RC 100-B

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

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



REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7412366-0-0001	A	

ITEM NO.	QTY.	DESCRIPTION	PART NO.
5	1	INSERT 8-32	9003872
1	1	PANEL, REAR	

PARTS LIST

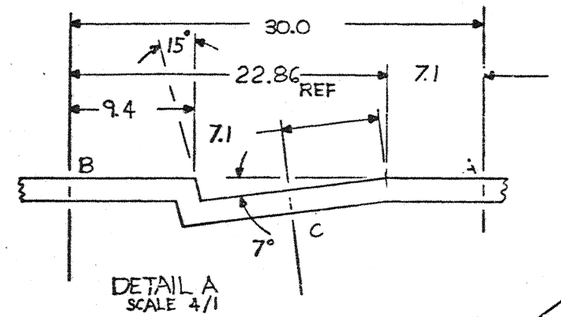
FIRST USED ON OPTION/MODEL	VT50	
DIMENSIONAL TOLERANCE	DRN.	DATE 7-2-74
DIMENSIONS ARE in MILLIMETERS / INCHES	CHK'D	DATE
UNLESS OTHERWISE SPECIFIED	ENG.	DATE
MILLIMETERS: XXX ±0.10, XX ±0.5, X ±2 — INCHES: XXX ±.005, XX ±.02, X ±.1 — ANGLES: ±0° 30'	PROJ. ENG.	DATE
	PROD.	DATE 11/21/74
THIRD ANGLE PROJECTION	REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	NEXT HIGHER ASSY.
	MATERIAL 2.5 MM (.098) THK AL SEE NOTE # 3	E-KA-VT50-0-0
	FINISH 92-00151-47	SCALE 1/1
		SHEET 1 OF 1

digital

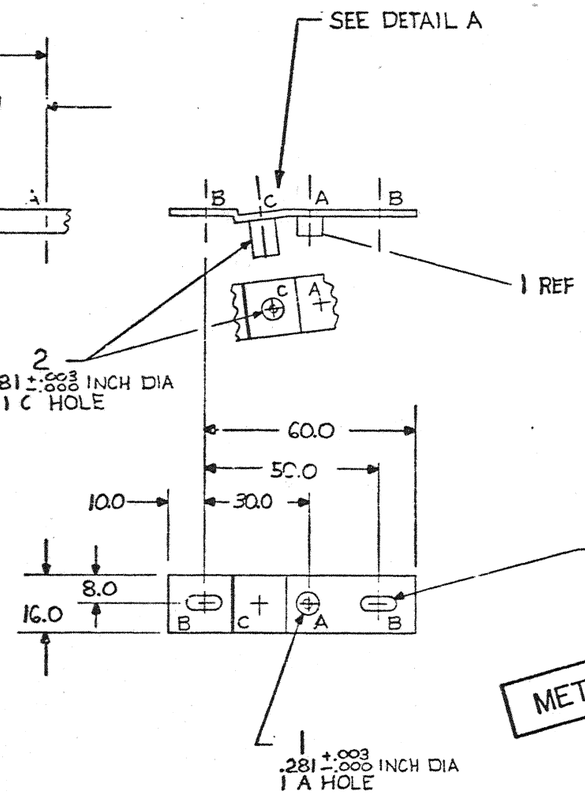
TITLE: HEAT, SINK

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

DIST



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-CO
DRN.	[illegible] DATE 7/1/74
CHK'D.	R. Viard DATE 2/13/75
ENG.	R. Viard DATE 2/13/75
PROJ. ENG.	(Morgantown) DATE 2/13/75
PROD.	[illegible] 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)

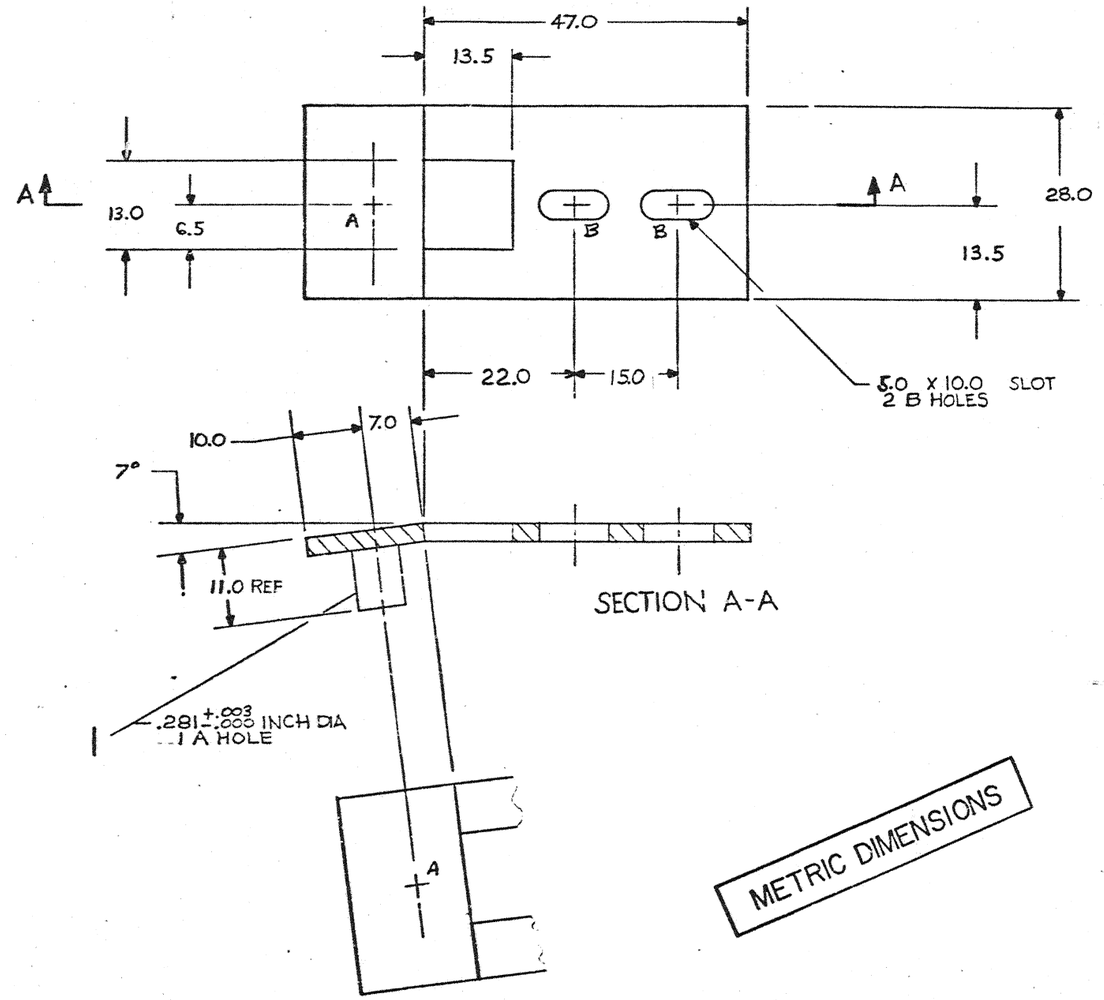
SIZE	CODE	NUMBER	REV.
C	IA	7413324-0-0	

DIST.

REVISIONS		
REV.	CHANGE NO.	CHK

DEC FORM NO. DNC 100-B

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



METRIC DIMENSIONS

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

PARTS LIST

FIRST USED ON OPTION/MODEL: VT5Ø

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: 92002Ø-ØØ

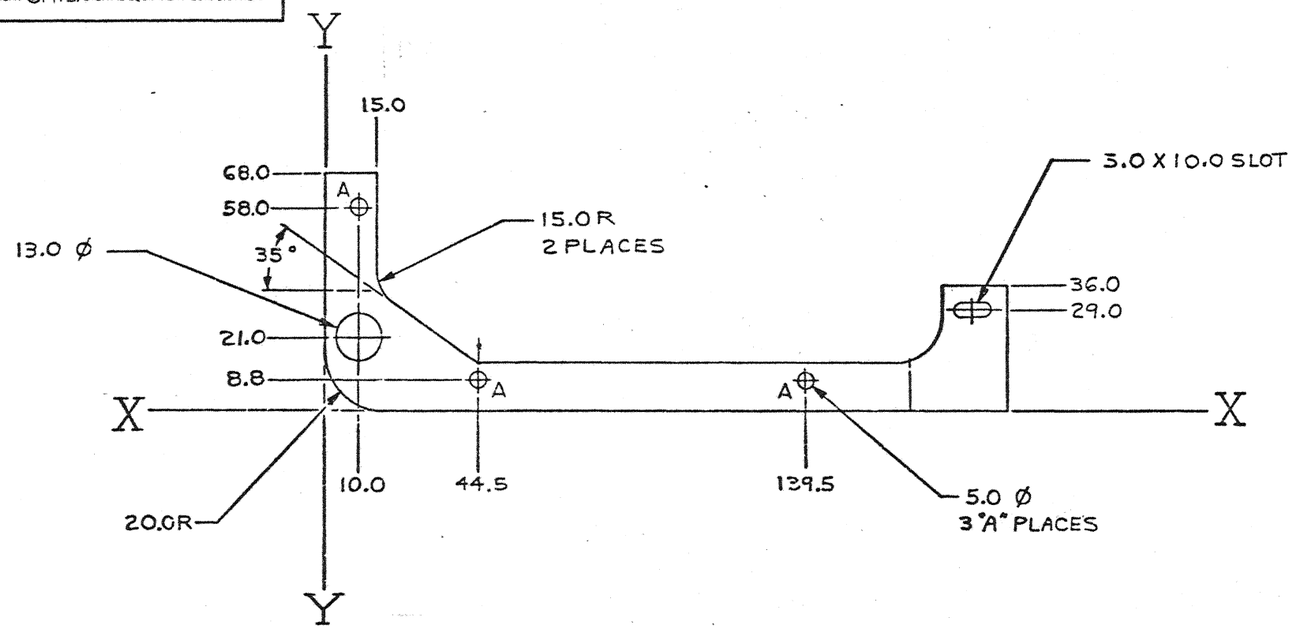
DRN. M. Edwards	DATE 5/1..74	digital	
CHK'D. K. Lia C	DATE 2/3/75		
ENG. K. Lia C	DATE 2/3/75		
PROJ. ENG. Mgr.	DATE 2/3/75	TITLE: BRKT PC BD TO SHELL	
PROD. [illegible]	DATE 2-..-75		
NEXT HIGHER ASSY.		SIZE C / CODE IA / NUMBER 7413326-0-0 / REV.	
Ø-UA-VT5Ø-Ø-Ø		SCALE 2/1	
		SHEET 1 OF 1	DIST.

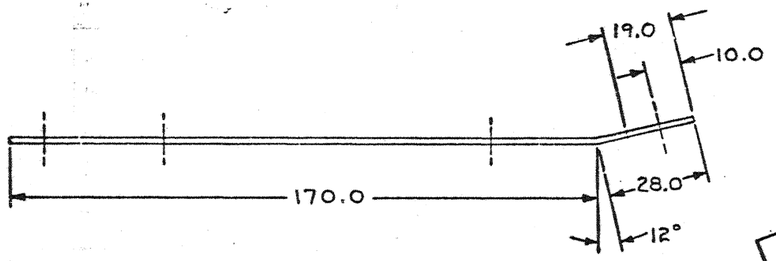
REVISIONS

REV.	CHANGE NO.	CHK

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

DEC FORM NO. DEC 100-B





METRIC DIMENSIONS

REVISIONS		
REV.	CHANGE NO.	CHK

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

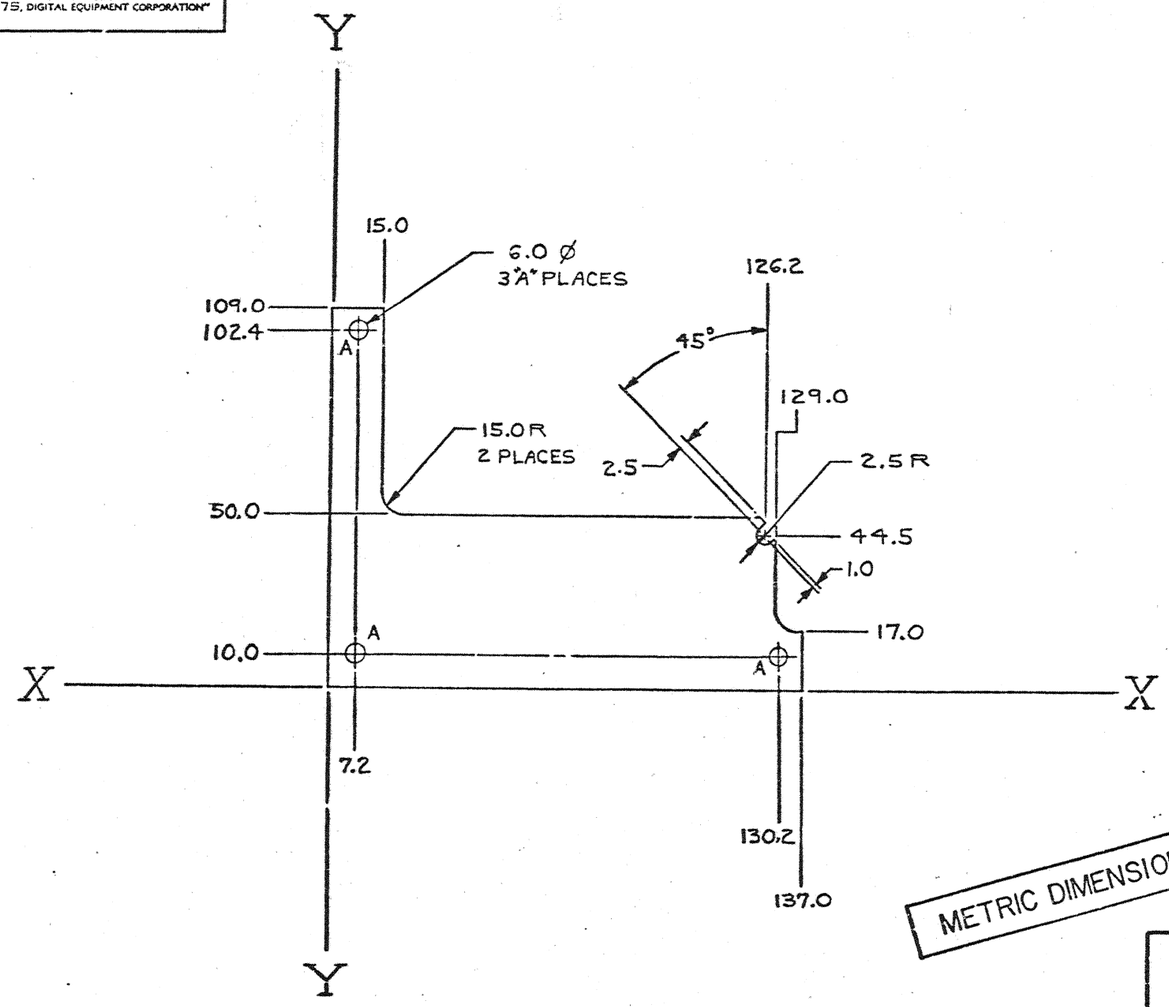
REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN. B.E. Olson	1/10/75	FIRST USED ON VT5Ø
CHK'D R. Niad	2/3/75	digital
ENG. R. Niad	2/3/75	TITLE
PROJ. ENG. Symonds	2/3/75	MTG. BRACKET KYBD RIGHT
PROD.		
NEXT HIGHER ASSY.	D-UA-VT5Ø-Ø-Ø	
MATERIAL 1.5 THK. (.062) CRS	SCALE 1/1	SIZE 2 · CODE MD · NUMBER 7413327-0-0 · REV.
FINISH 9200120-94	SHEET 1 OF 1	DIST.

7413327-0-0 MD 2

DEC FORM NO. DA2-120



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

MATERIAL 1.5 THK. (.062) CRS

FINISH S2C0120-94

DRN. D.E. Olson	1/9/75	FIRST USED ON VT50
CHK'D	2/2/75	
ENG.	2/2/75	
PROJ. ENG. (approved)	2/3/75	
PROD.	2/3/75	
NEXT HIGHER ASSY.		
∅UA-VT50-0-2		
SCALE 1/1		
SHEET 1 OF 1		

digital

TITLE
MTG. BRACKET
KYBD LEFT

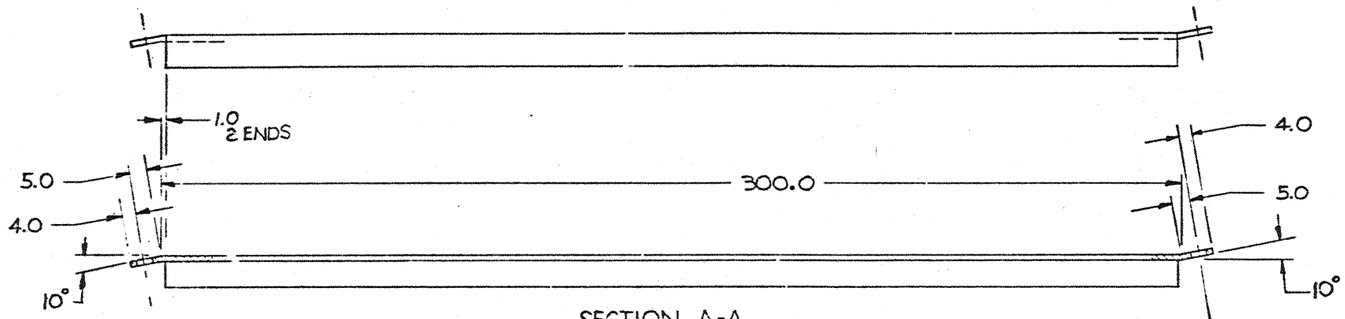
SIZE	CODE	NUMBER	REV.
2	MD	7413328-0-0	

DIST.

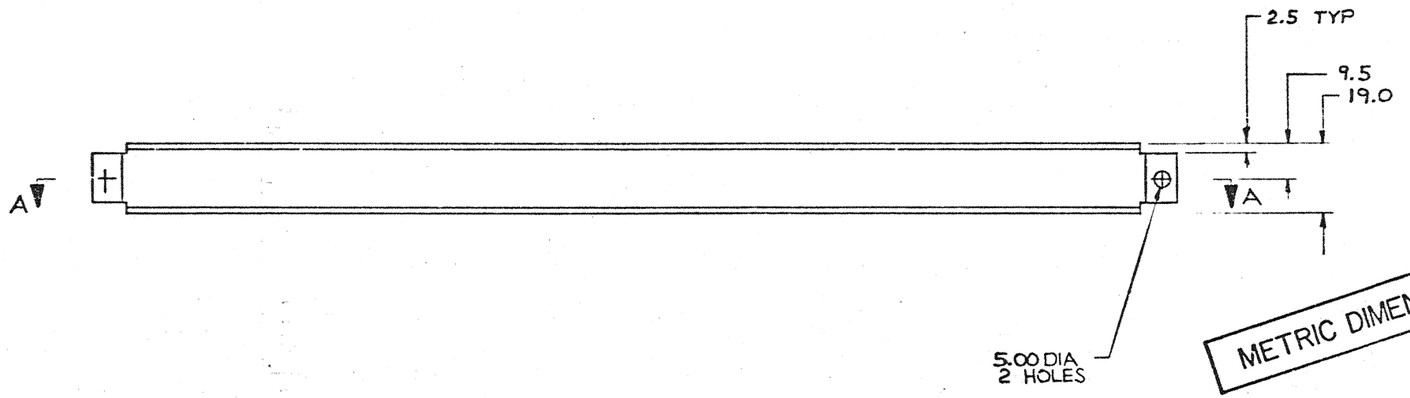
REVISIONS	REV.
CHANGE NO.	
CHK	

DEC FORM NO. DA2-120

2 MD 7413328-0-0



SECTION A-A
SCALE 1/1



METRIC DIMENSIONS

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

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 ALUMINUM
FINISH 9200200-00

DRN. Mc Hutch	DATE 5 Jan 75	digital
CHK'D R Lias	DATE 2/3/75	
ENG. R Lias	DATE 2/3/75	TITLE: BRACKET, CC PIER WELL
PROJ. ENG. Mike Austen	DATE 2/3/75	
PROD. Dan Pearson	DATE 2-4-75	
NEXT HIGHER ASSY.		
Ø-UA-VT5Ø-Ø-Ø		SIZE C · CODE MD · NUMBER 7413400-0-0 · REV.
SCALE 1/1		DIST.
SHEET 1 OF 1		

REVISIONS	REV.
CHANGE NO.	
CHK	

DEC FORM NO. DEC 100-B

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

LEGEND "A"

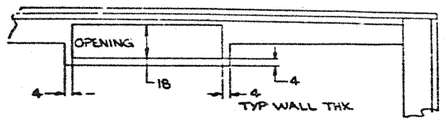
SECTION	SHEET TAKEN	SHEET SHOWN	SECTION	SHEET TAKEN	SHEET SHOWN	SECTION	SHEET TAKEN	SHEET SHOWN
AA-AA	1	6	BA-BA	5	9	CA-CA	7	7
AB-AB	1	7	BB-BB	5	9	CB-CB	7	7
AC-AC	1	11	BC-BC	5	9	CD-CD	7	7
AD-AD	2	2	BD-BD	5	9	CE-CE	7	7
AE-AE	2	2	BE-BE	5	9	CF-CF	7	7
AF-AF	2	2	BF-BF	5	9	CG-CG	10	8
AG-AG	2	2	BG-BG	5	9	CH-CH	10	8
AH-AH	2	2	BH-BH	5	9	CI-CI	10	8
AJ-AJ	2	2	BJ-BJ	5	9	CJ-CJ	10	8
AJ-AJ	2	10	BK-BK	5	11	CK-CK	10	10
AK-AK	2	10	BL-BL	5	11	CL-CL	10	10
AL-AL	2	4	BM-BM	5	11	CM-CM	10	10
AM-AM	2	2	BN-BN	5	11	CN-CN	10	10
AN-AN	2	4	BP-BP	5	9	CO-CO	10	10
AO-AO	4	4	BQ-BQ	5	9	CP-CP	10	10
AP-AP	5	5	BR-BR	5	9	CQ-CQ	10	10
AQ-AQ	5	5	BS-BS	5	9	CR-CR	10	10
AR-AR	5	5	BT-BT	5	9	CS-CS	3	3
AS-AS	5	5	BU-BU	5	9			
AT-AT	5	5	BV-BV	5	9			
AU-AU	5	3	BW-BW	5	9			
AV-AV	5	9	BX-BX	5	9			
AW-AW	5	3	BY-BY	5	9			
AX-AX	5	3	BZ-BZ	7	7			
AY-AY	5	3						
AZ-AZ	5	3						

LEGEND "B"

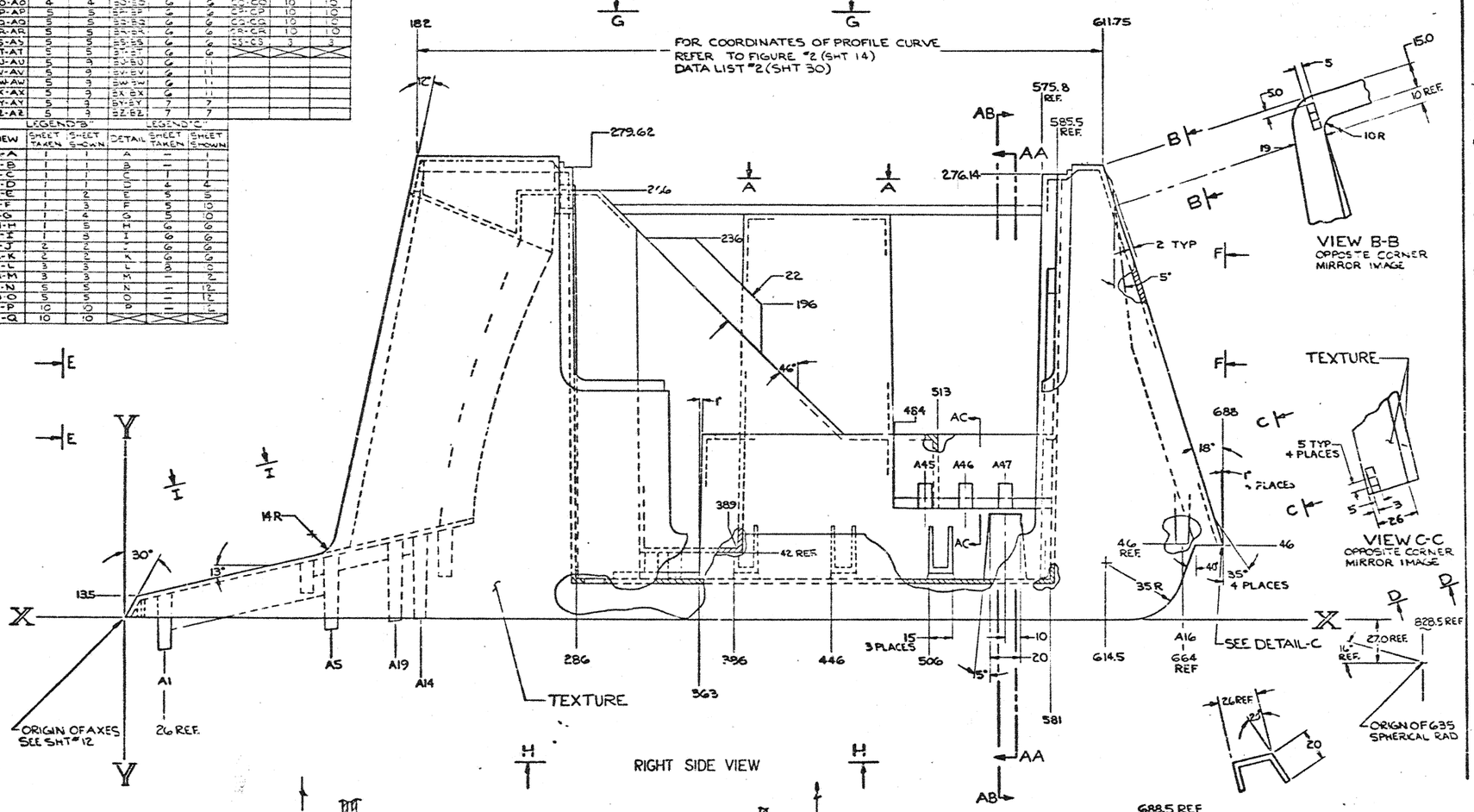
VIEW	SHEET TAKEN	SHEET SHOWN
A-A	1	1
B-B	1	1
C-C	1	1
D-D	1	1
E-E	1	2
F-F	1	3
G-G	1	4
H-H	1	5
I-I	1	3
J-J	2	2
K-K	2	2
L-L	2	2
M-M	3	3
N-N	5	5
O-O	5	5
P-P	10	10
Q-Q	10	10

LEGEND "C"

DETAIL	SHEET TAKEN	SHEET SHOWN
A	—	—
B	1	1
C	1	1
D	1	1
E	5	5
F	5	5
G	9	9
H	9	9
I	9	9
J	9	9
K	9	9
L	9	9
M	9	9
N	11	11
O	11	11
P	11	11
Q	11	11
R	11	11
S	11	11
T	11	11
U	11	11
V	11	11
W	11	11
X	11	11
Y	11	11
Z	11	11

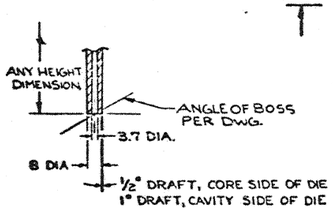


VIEW A-A

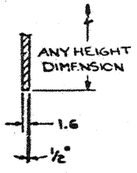


VIEW B-B
OPPOSITE CORNER
MIRROR IMAGE

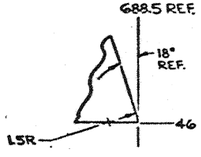
VIEW C-C
OPPOSITE CORNER
MIRROR IMAGE



TYPICAL BOSS DETAIL-A
SCALE: 1/1
ALL CORED HOLES TO BE CORED FROM BOTTOM



TYPICAL RIB DETAIL-B
SCALE: 2/1



VIEW D-D
OPPOSITE CORNER
MIRROR IMAGE

DETAIL-C
SCALE: NONE

METRIC DIMENSIONS

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 APPERANCE 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, A42, A45, A46, A47, A50 THRU A53
    - B. B1, B2 & 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 & A53
    - B. ANY REMAINING BOSSES MAY OR MAY NOT BE CORED THRU.

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

DIMENSIONAL TOLERANCE UNLESS OTHERWISE SPECIFIED: MILLIMETERS .X ±0.5, .XX ±0.25, .XXX ±0.13; ANGLES ±1°	DRAWN	DATE
	CHK 1	DATE
	CHK 2	DATE
	ENG.	DATE
	PROJ ENG.	DATE
	PROD.	DATE
THIRD ANGLE PROJECTION	REMOVE ALL BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓	PLASTIC SHELL ASSY.
	MATERIAL SEE NOTE #4	SIZE VTS2-0-0
	FINISH SEE NOTE #5	SCALE 1/1
		SHEET 1 OF 2 #S

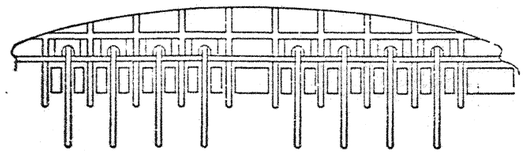
digital

TITLE: SHELL VTSØ

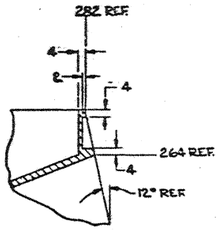
CODE E MD | NUMBER 7411540-0-0 | REV A

DIST.

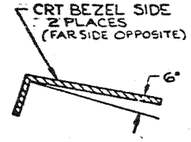
E MD 7411540-0-0 A



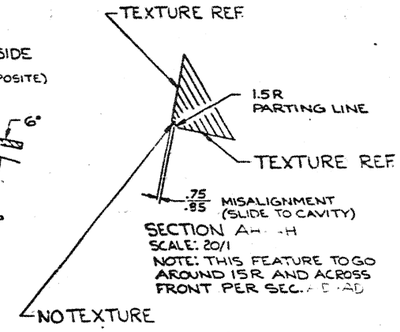
VIEW J-J



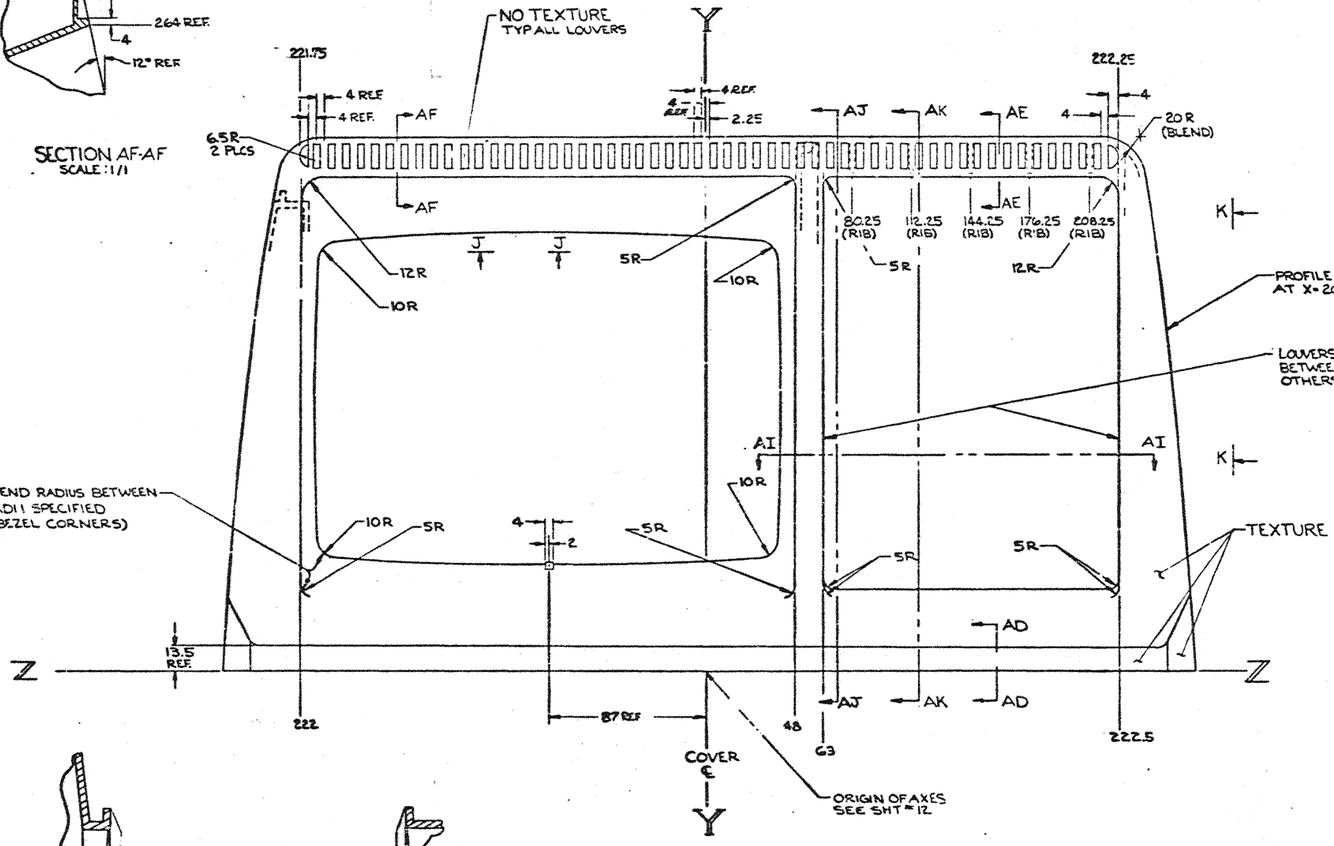
SECTION AF-AF
SCALE: 1/1

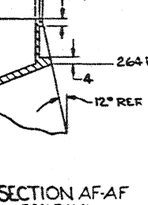


SECTION AG-AG



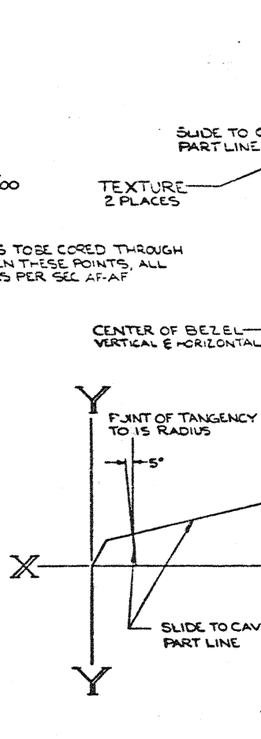
SECTION AH-AH
SCALE: 20/1
NOTE: THIS FEATURE TO GO AROUND 1.5R AND ACROSS FRONT PER SEC. AD-AD



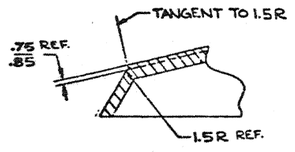


SECTION AI-AI
SCALE: 1/1

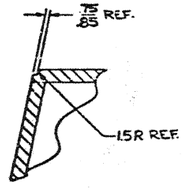
"FRONT" VIEW E-E



VIEW K-K
SCALE: 1/1



SECTION AD-AD
SCALE: 2/1



SECTION AE-AE
SCALE: 2/1

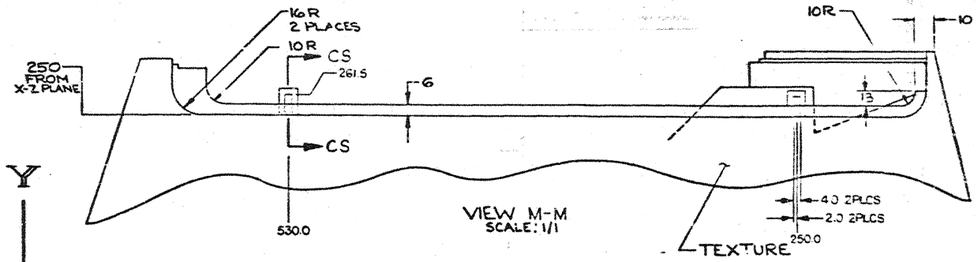
NOTE:
FOR SECTION VIEWS
AK-AK, AJ-AJ
SEE SHT.# 10

METRIC DIMENSIONS

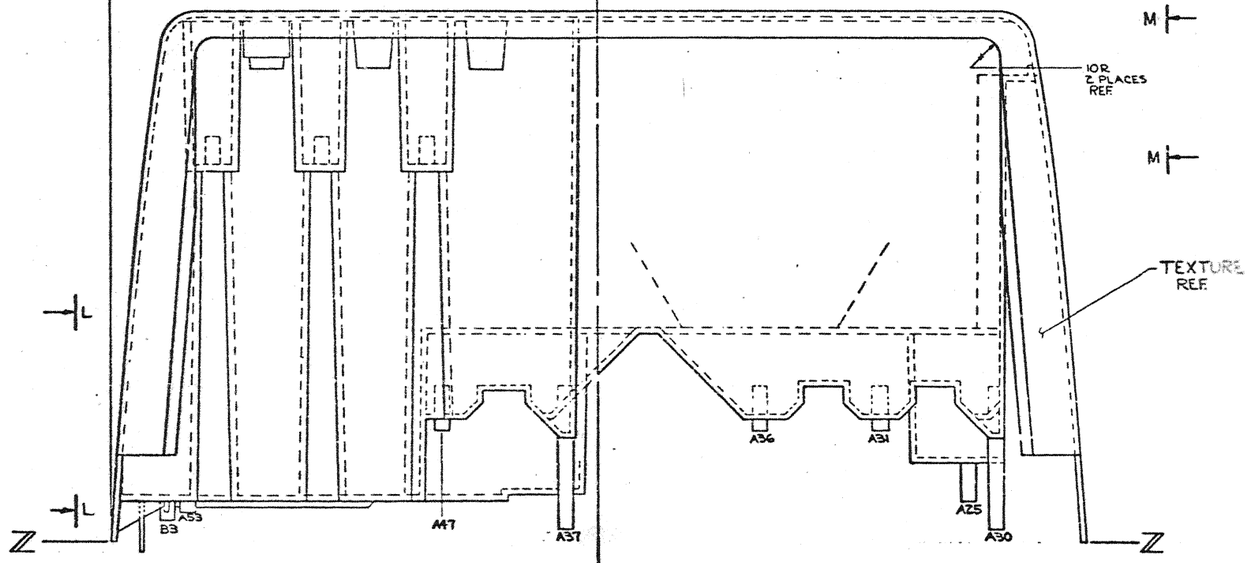
REVISIONS			
ENG	CHANGE NO.	DATE	

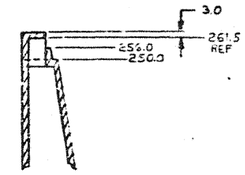
TITLE	SIZE	CODE	NUMBER	REV
SHELL VT5Ø	E	MD	7411540-0-0	A
SCALE 1/1 SHEET 2 OF 45			DWG	

7411540-0-0 A

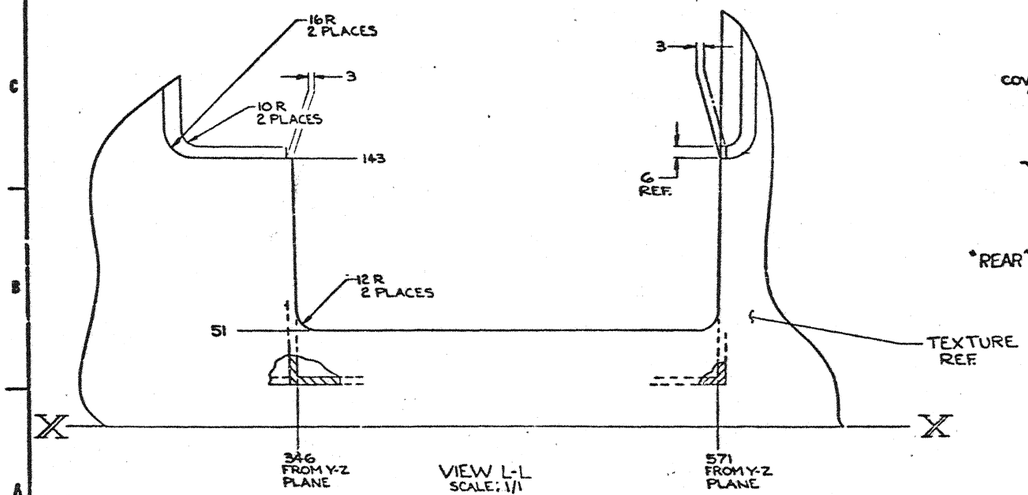


VIEW M-M
SCALE: 1/1





SECTION CS-CS
SCALE: 1/1



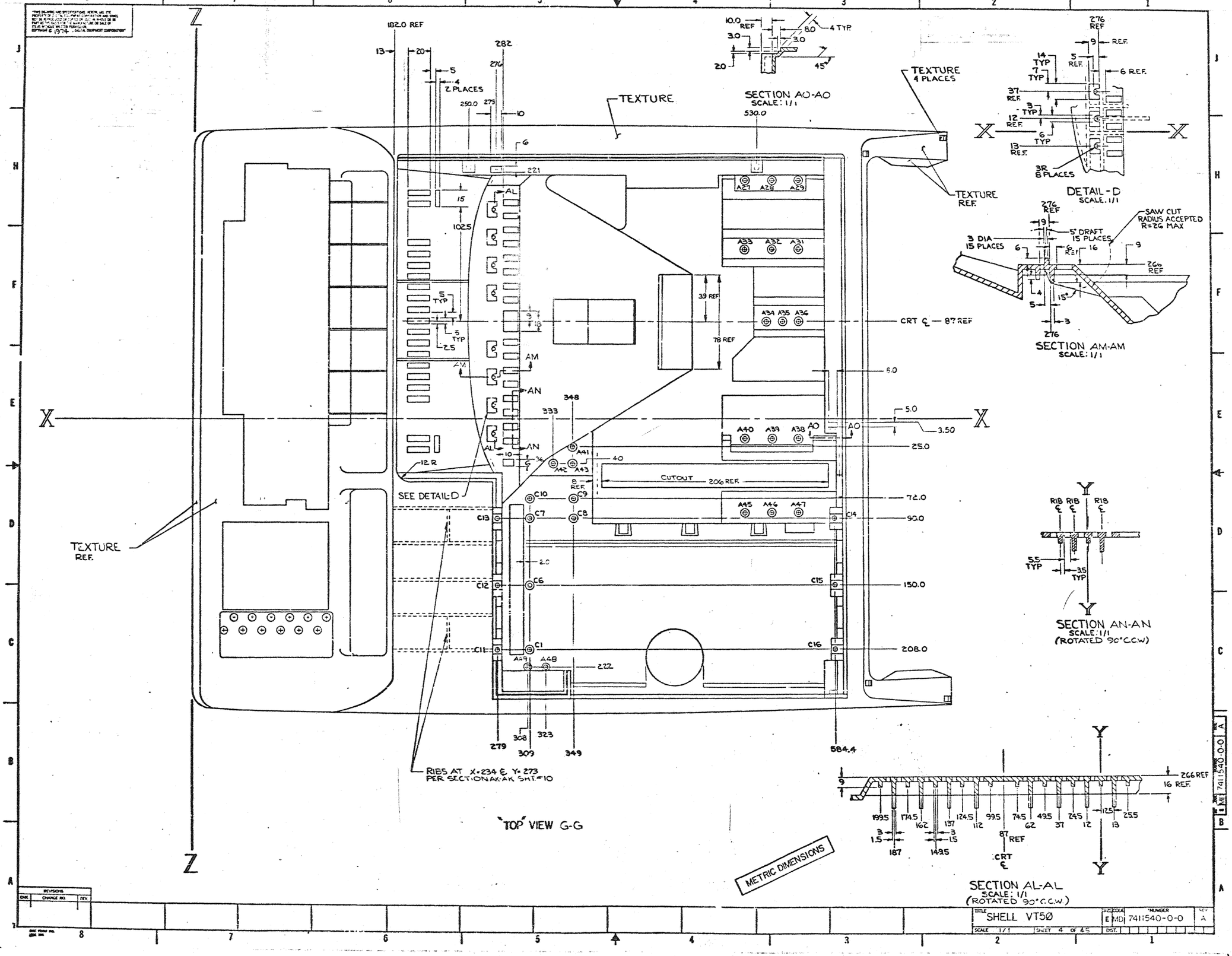
VIEW L-L
SCALE: 1/1

"REAR" VIEW F-F

METRIC DIMENSIONS

REVISIONS		
DATE	CHANGE NO.	REV.

TITLE: SHELL VT50	SIZE: E	CODE: 1V3	NUMBER: 7411540-0-0	REV: A
SCALE: 1/1	SHEET 3 OF 45	DIST.		



REVISIONS		
ECR	CHANGE NO.	REV.

TITLE	SHELL VT50	SIZE/CODE/NUMBER	REV.
SCALE 1/1	SHEET 4 OF 45	E MD 741540-0-0	A
		DIST.	

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. #10 OPPOSITE CORNER MIRROR IMAGE

SEE DETAIL-E

SEE DETAIL-G SHT. #10

PER DETAIL-J (SHT. 6)

BEZEL OPENING

CUTOUT

OPEN

3.60 CORED HOLE (2 BOSSES)

635 R SPHERICAL REF.

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

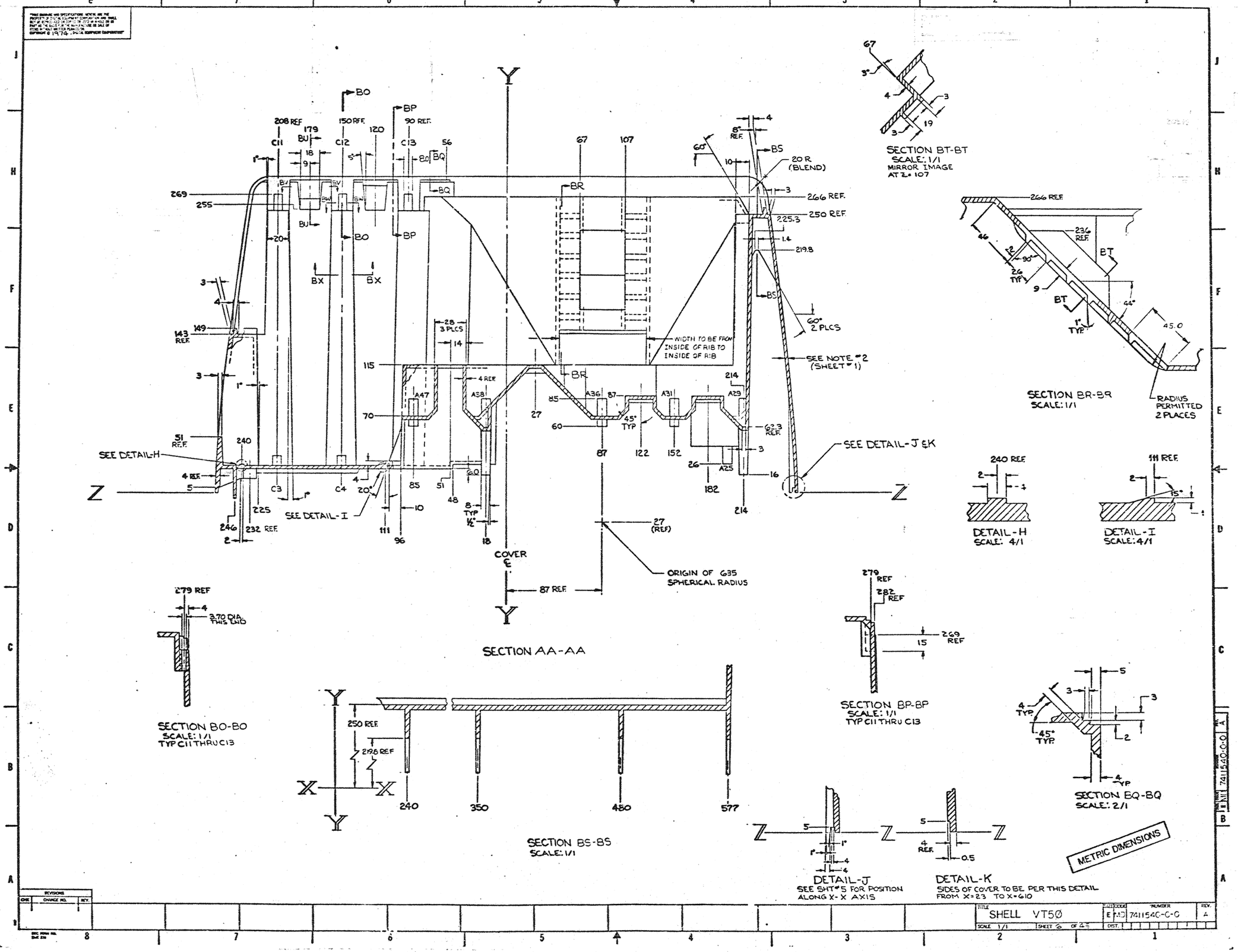
METRIC DIMENSIONS

CRT ℄

COVER ℄

REVISIONS		
DR	CHANGE NO.	ECV

TITLE	SIZE/CODE	NUMBER	REV
SHELL VT50	E 71 C	7411540-0-0	A
SCALE 1/1	SHEET 5 OF 45	DIST.	



SECTION BT-BT
SCALE: 1/1
MIRROR IMAGE AT Z = 107

SECTION BR-BR
SCALE: 1/1

DETAIL-H
SCALE: 4/1

DETAIL-I
SCALE: 4/1

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

SECTION AA-AA

SECTION BS-BS
SCALE: 1/1

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

SECTION BQ-BQ
SCALE: 2/1

DETAIL-J
SEE SHT #5 FOR POSITION ALONG X-X AXIS

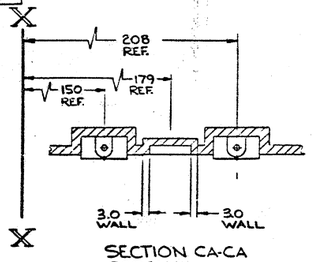
DETAIL-K
SIDES OF COVER TO BE PER THIS DETAIL FROM X=23 TO X=610

METRIC DIMENSIONS

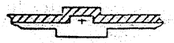
REVISIONS		
ZONE	CHANGE NO.	REV.

TITLE: SHELL VT50		SIZE: E	NUMBER: 7411540-C-0
SCALE: 1/1	SHEET 6 OF 43	DIST.	REV. A

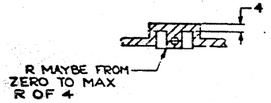
REVISION 7411540-C-0 A



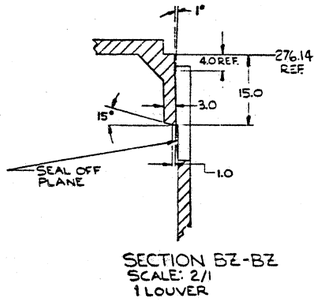
SECTION CA-CA
SCALE: 1/1
1 LOUVER



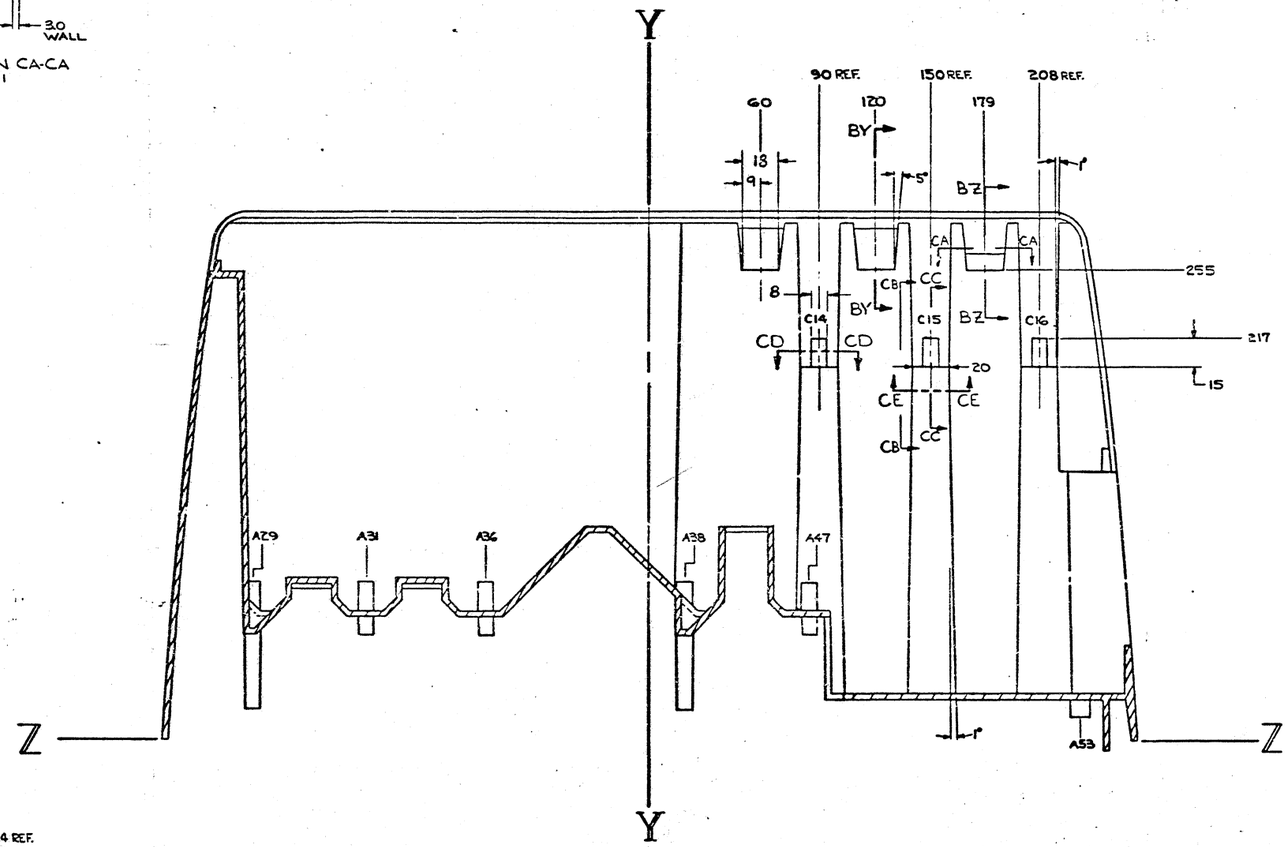
SECTION CE-CE
SCALE: 1/1
TYP C14 THRU C16



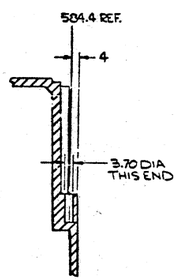
SECTION CD-CD
SCALE: 1/1
TYP C14 THRU C16



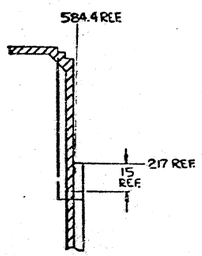
SECTION BZ-BZ
SCALE: 2/1
1 LOUVER



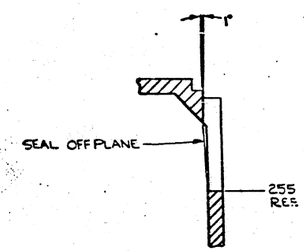
SECTION AB-AB



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



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



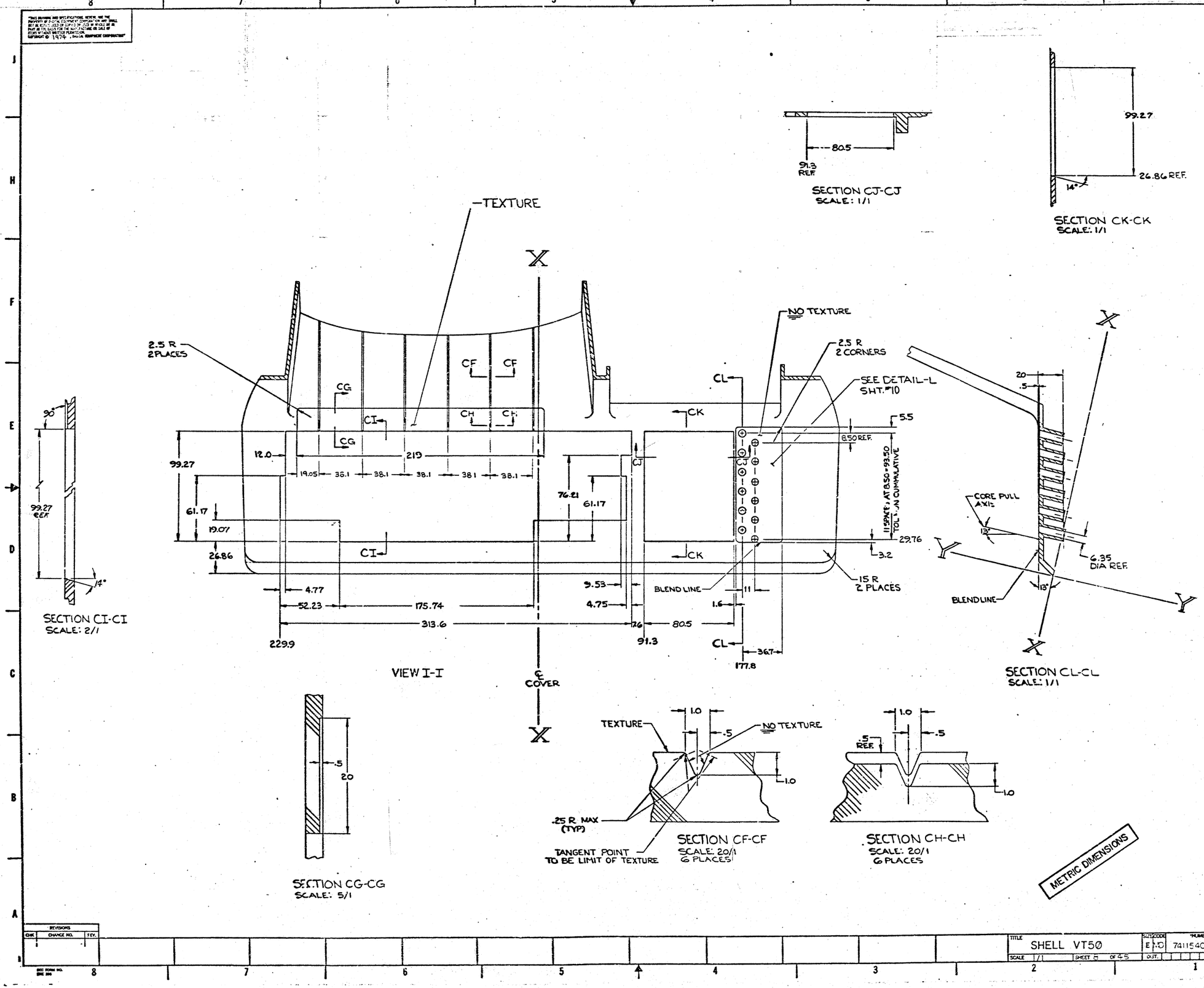
SECTION
SCALE: 2/1
TYP 3 LOUVERS

METRIC DIMENSIONS

REVISIONS		
SYM	CHANGE NO.	REV.

TITLE SHELL VT50		SIZE/CODE E 1-0	NUMBER 7411540-0-0
SCALE 1/1	SHEET 7 OF 45	DIST.	REV. A

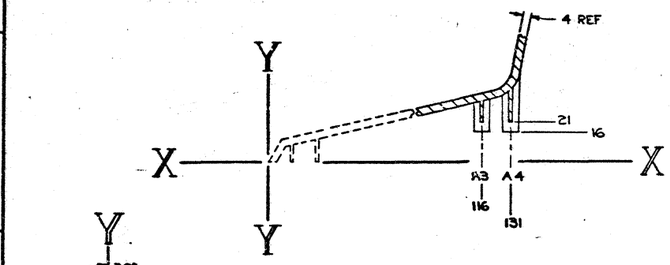
7411540-0-0 A



REVISIONS		
CHK	CHANGE NO.	DIV.

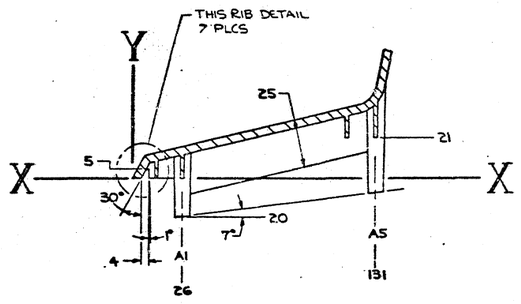
TITLE	SIZE/CODE	NUMBER	REV.
SHELL VT50	E	7411540-0-0	A
SCALE 1/1	SHEET 5 OF 45	DIST.	

7411540-0-0 A



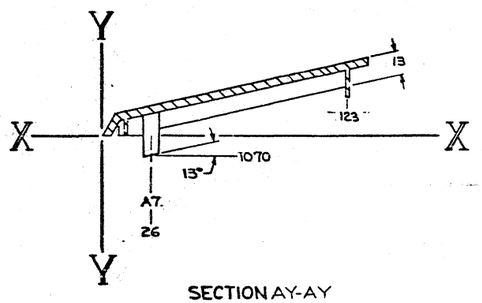
SECTION AU-AU

SECTION AX-AX

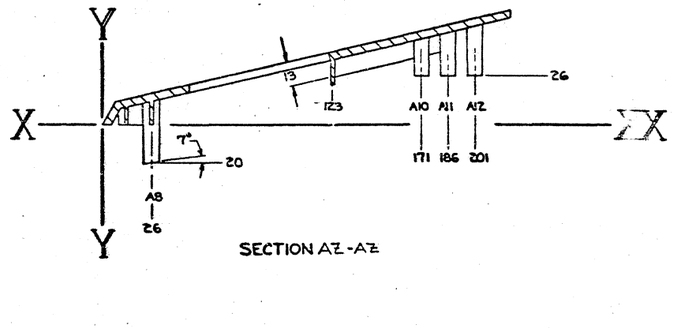


SECTION AV-AV

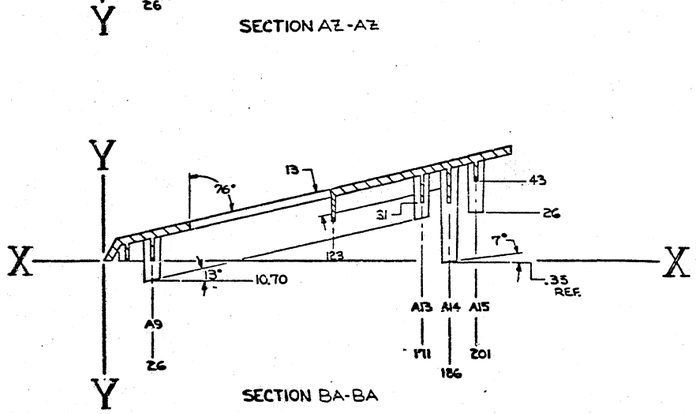
SECTION AW-AW



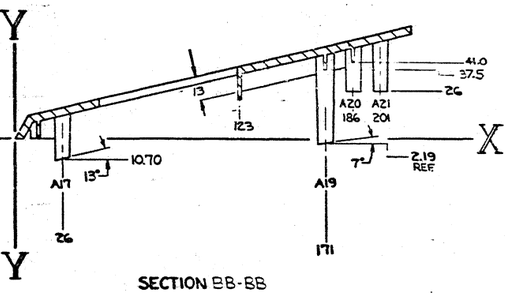
SECTION AY-AY



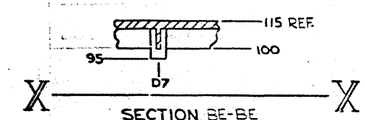
SECTION AZ-AZ



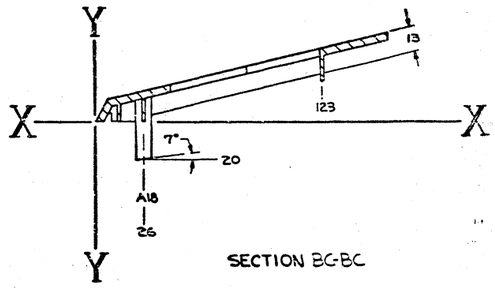
SECTION BA-BA



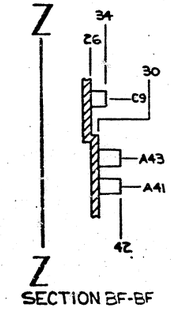
SECTION BB-BB



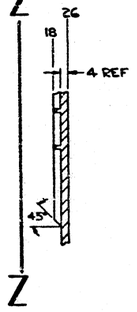
SECTION BE-BE
(TYP "D" BOSS & RIB DETAIL)



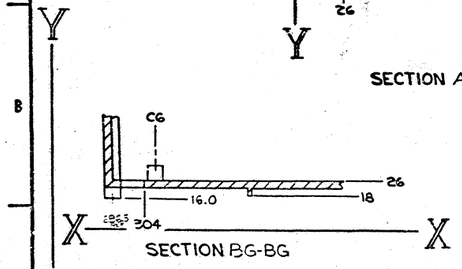
SECTION BC-BC



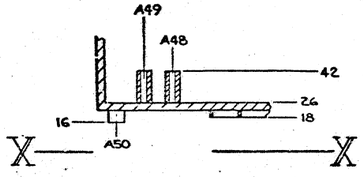
SECTION BF-BF



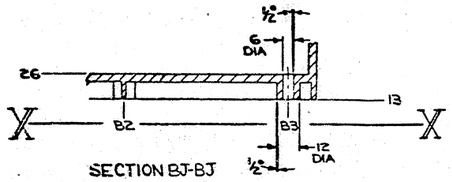
SECTION BH-BH



SECTION BG-BG

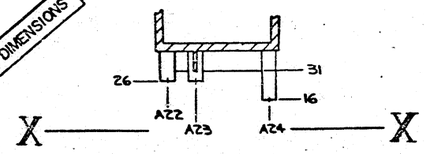


SECTION BI-BI



SECTION BJ-BJ

METRIC DIMENSIONS

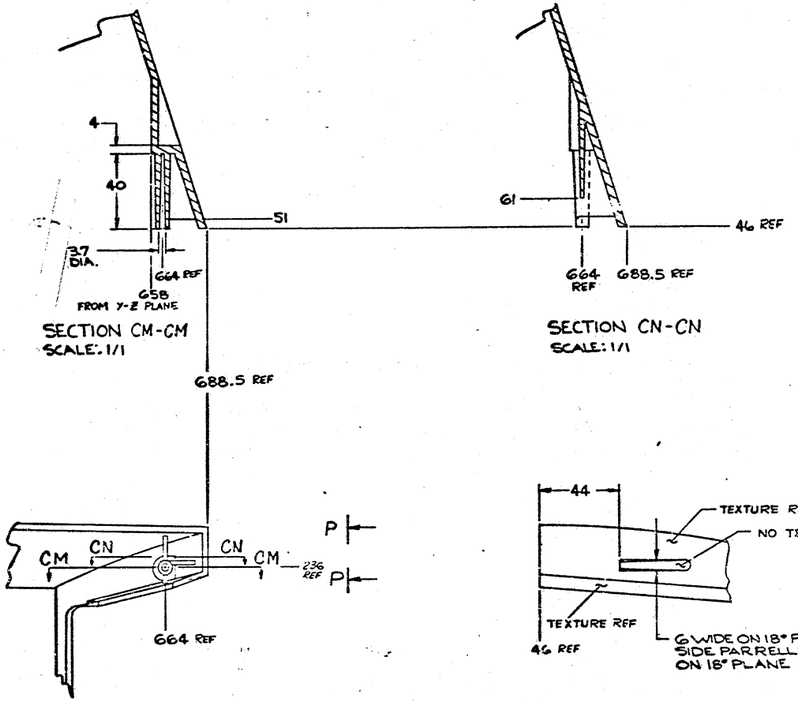


SECTION BD-BD

REVISIONS		
CHK	CHANGE NO.	REV.

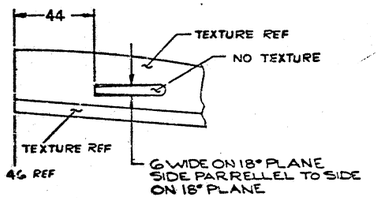
TITLE	SHELL VTØ	SIZE/CODE	NUMBER	REV
SCALE 1/1	SHEET 9 OF 45	E	MD 74115-40-0-0	A
		DIST.		

DRAWING NUMBER MD 74115-40-00 REV A



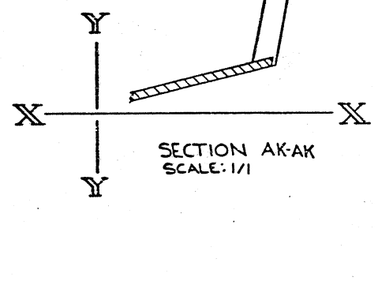
SECTION CM-CM
SCALE: 1/1

SECTION CN-CN
SCALE: 1/1

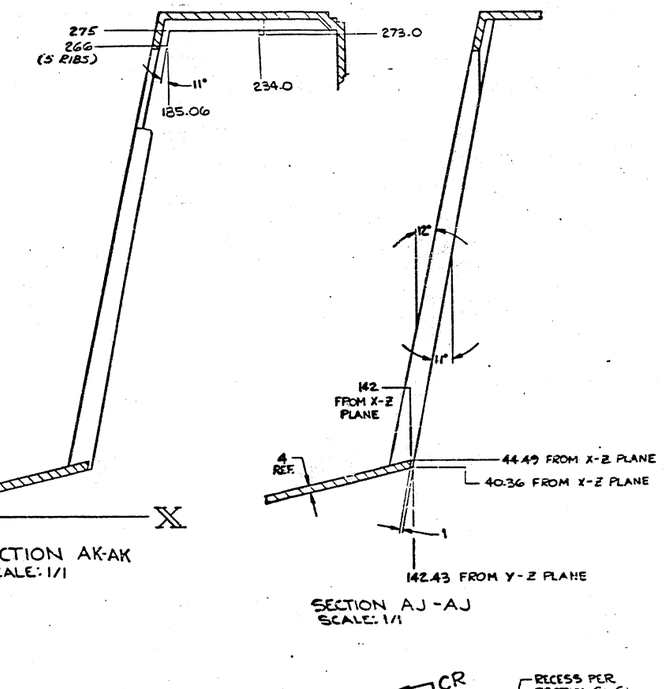


DETAIL-F
SCALE: 1/1
OPPOSITE CORNER MIRROR IMAGE

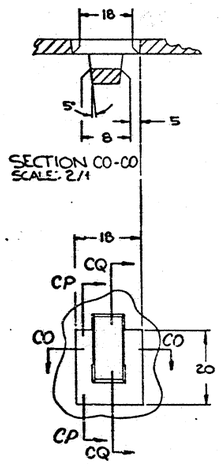
VIEW P-P
SCALE: 1/1



SECTION AK-AK
SCALE: 1/1

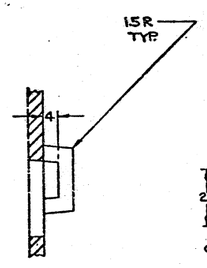


SECTION AJ-AJ
SCALE: 1/1

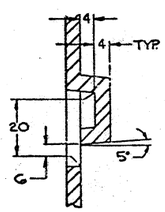


SECTION CO-CO
SCALE: 2/1

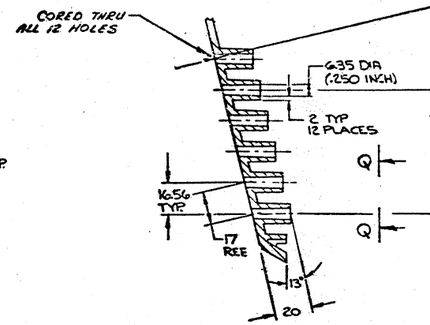
DETAIL-G
SCALE: 2/1
2 PLCS
ROTATE AS REQUIRED



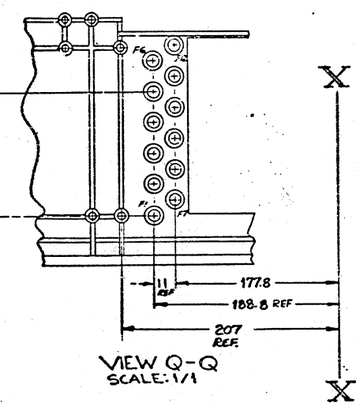
SECTION CP-CP
SCALE: 2/1



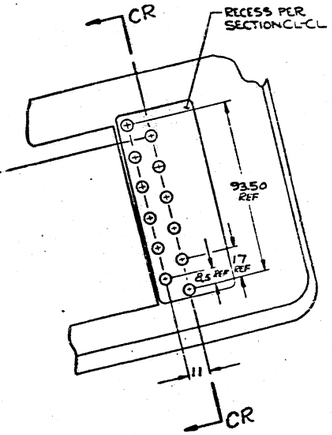
SECTION CQ-CQ
SCALE: 2/1



SECTION CR-CR
SCALE: 1/1



VIEW Q-Q
SCALE: 1/1



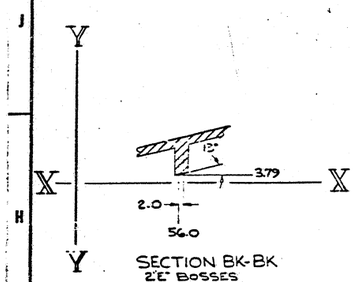
DETAIL-L
SCALE: 1/1

METRIC DIMENSIONS

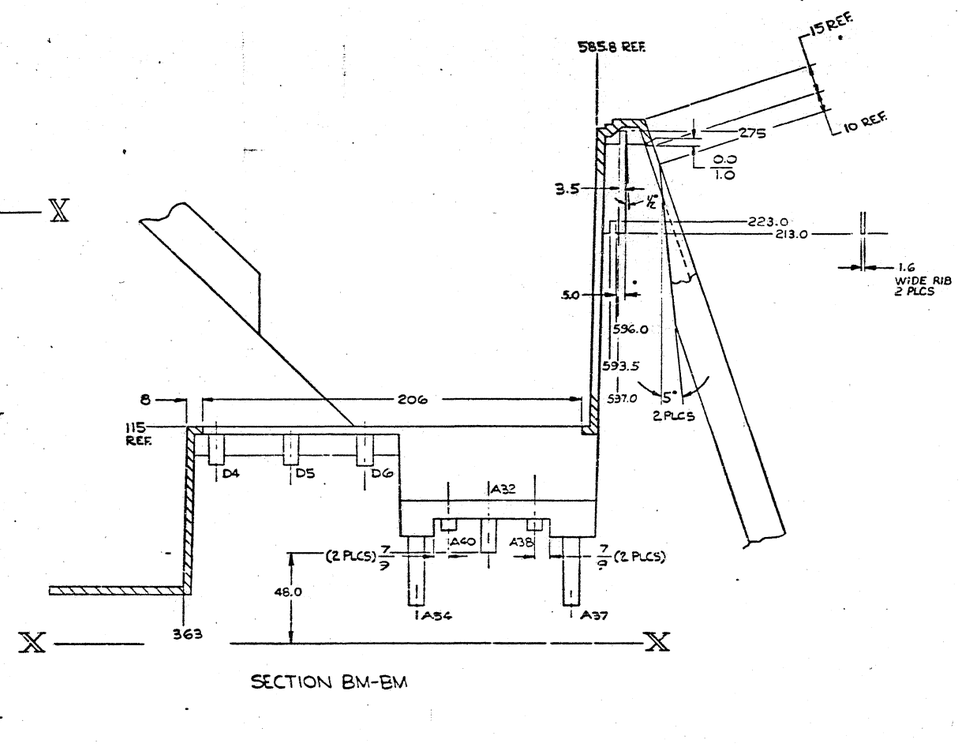
REVISIONS		
ONE	CHANGE NO.	REV.

TITLE	SHELL VT50	SIZE/CODE	NUMBER / REV
		E	7411540-0-0 A
SCALE 1/1	SHEET 10 OF 45	COT.	

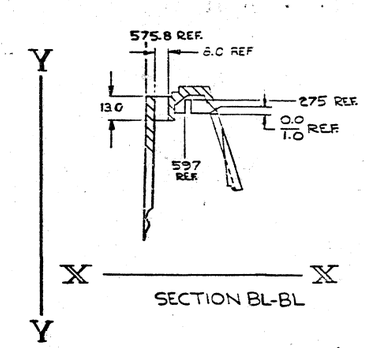
7411540-0-0 A



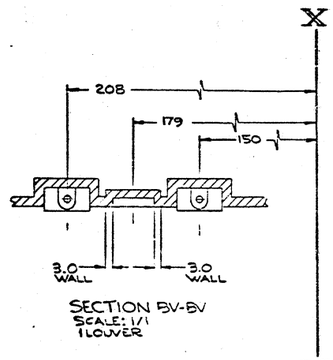
SECTION BK-BK
2 Ø BOSSES
NO CORED HOLE



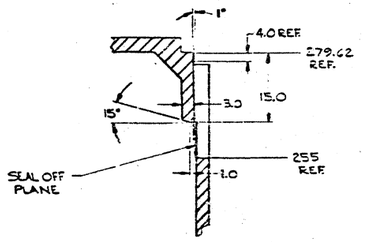
SECTION BM-BM



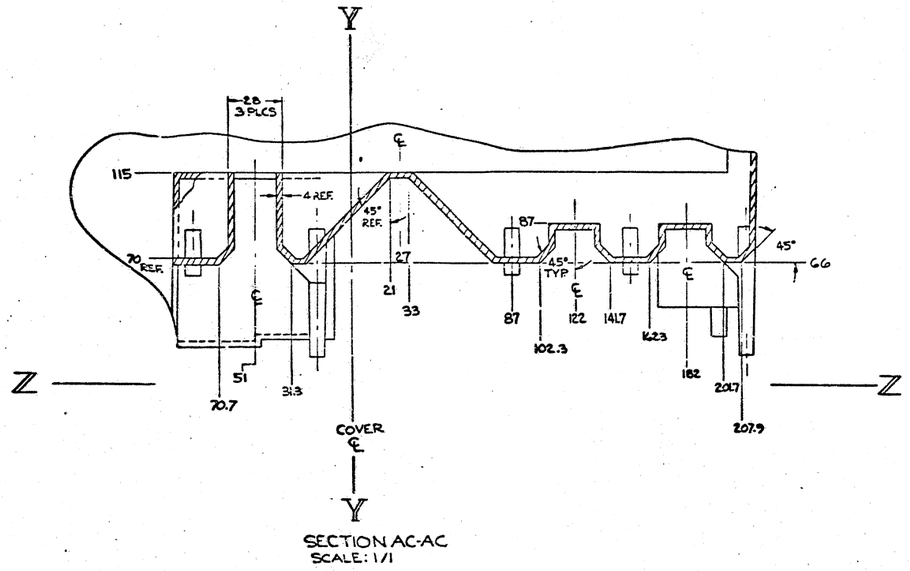
SECTION BL-BL



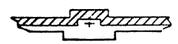
SECTION BV-BV
SCALE: 1/1
1 LOUVER



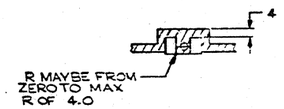
SECTION AZ-AZ
SCALE: 2/1
1 LOUVER



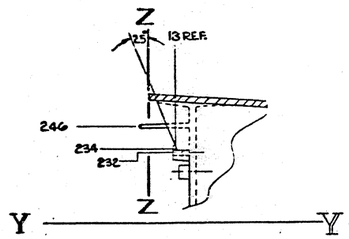
SECTION AC-AC
SCALE: 1/1



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



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



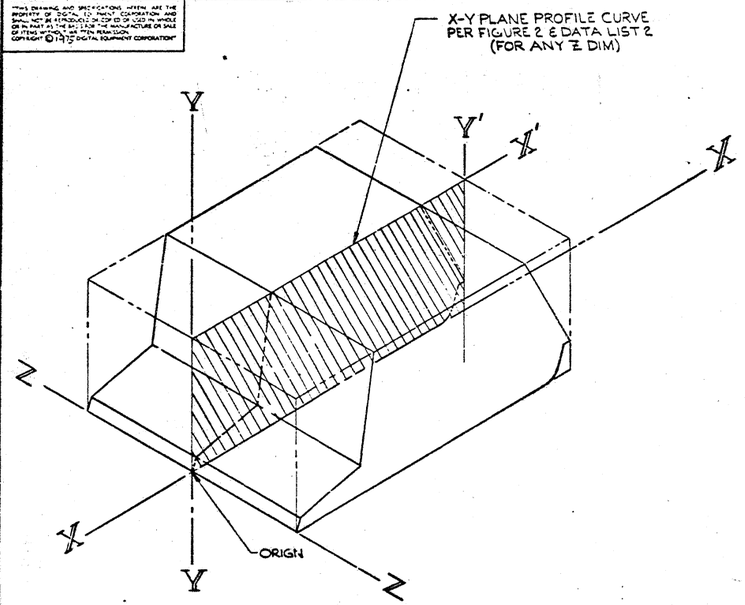
SECTION BN-BN

METRIC DIMENSIONS

REVISIONS		
CHG	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV.
SHELL VT5Ø	E	MD	74-11540-0-0	A
SCALE 1/1	SHEET 1	OF 2	EXT.	

74-11540-00

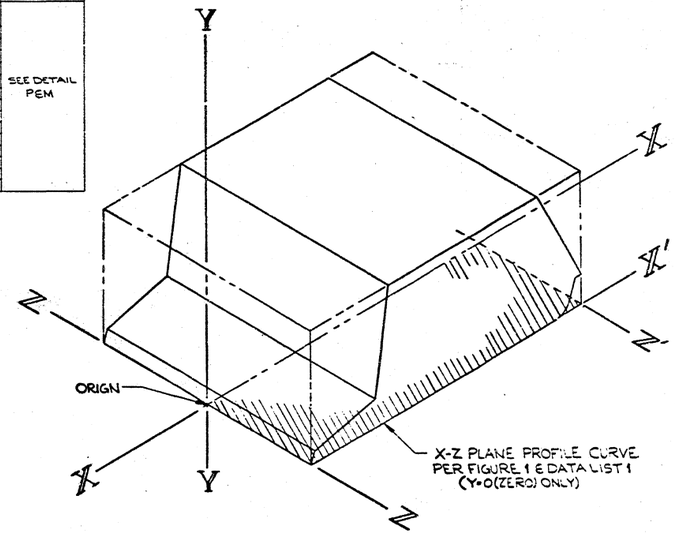


DETAIL-O
SCALE: 1/4

LEGEND D

SHELL PROFILE DIMENSIONAL INFORMATION

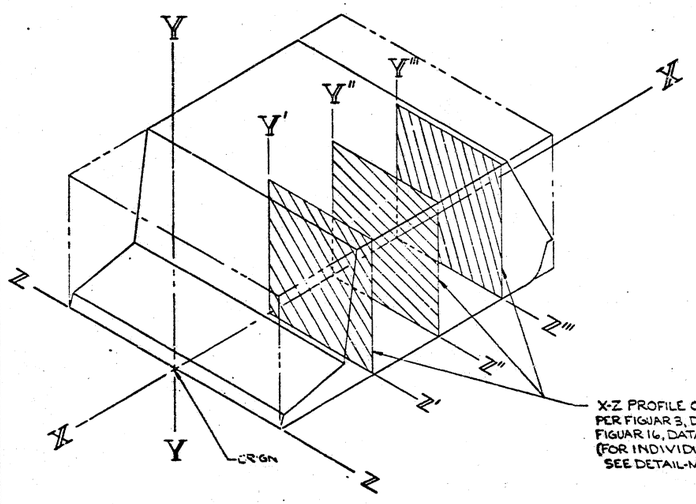
SECTION PLANE	FIGURE NO	FIGURE SHEET	DATA LIST NO	DATA LIST SHEET	REMARKS
X-Z PLANE AT Y=0	1	13	1	29	SEE DETAIL-N
X-Y PLANE ANY Z DIM	2	14	2	30	SEE DETAIL-O
Y-Z PLANE AT X=					
0	3	15	3	31	SEE DETAIL PEM
50	4	16	4	32	
100	5	17	5	33	
150	6	18	6	34	
200	7	19	7	35	
250	8	20	8	36	
300	9	21	9	37	
350	10	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	



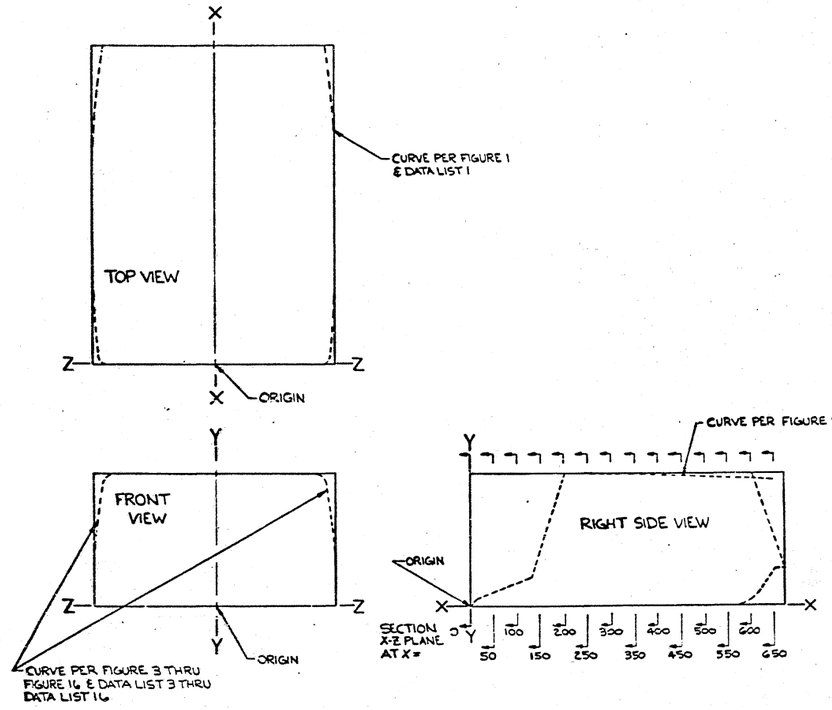
DETAIL-N
SCALE: 1/4

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 A 100% PHOTO REPRODUCTION OF CURVE ORIGINAL IS REQD
6. AXES PER CASTESIAN COORDINATES, ALL DIMENISION 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		
CHK	CHANGE NO	REV.

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	E	MD	7411540-0-0	A
SCALE 1/1 SHEET 12 OF 45	DIST.			

PRINTED IN U.S.A. 7411540-0-0 REV. A SIZE E

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.

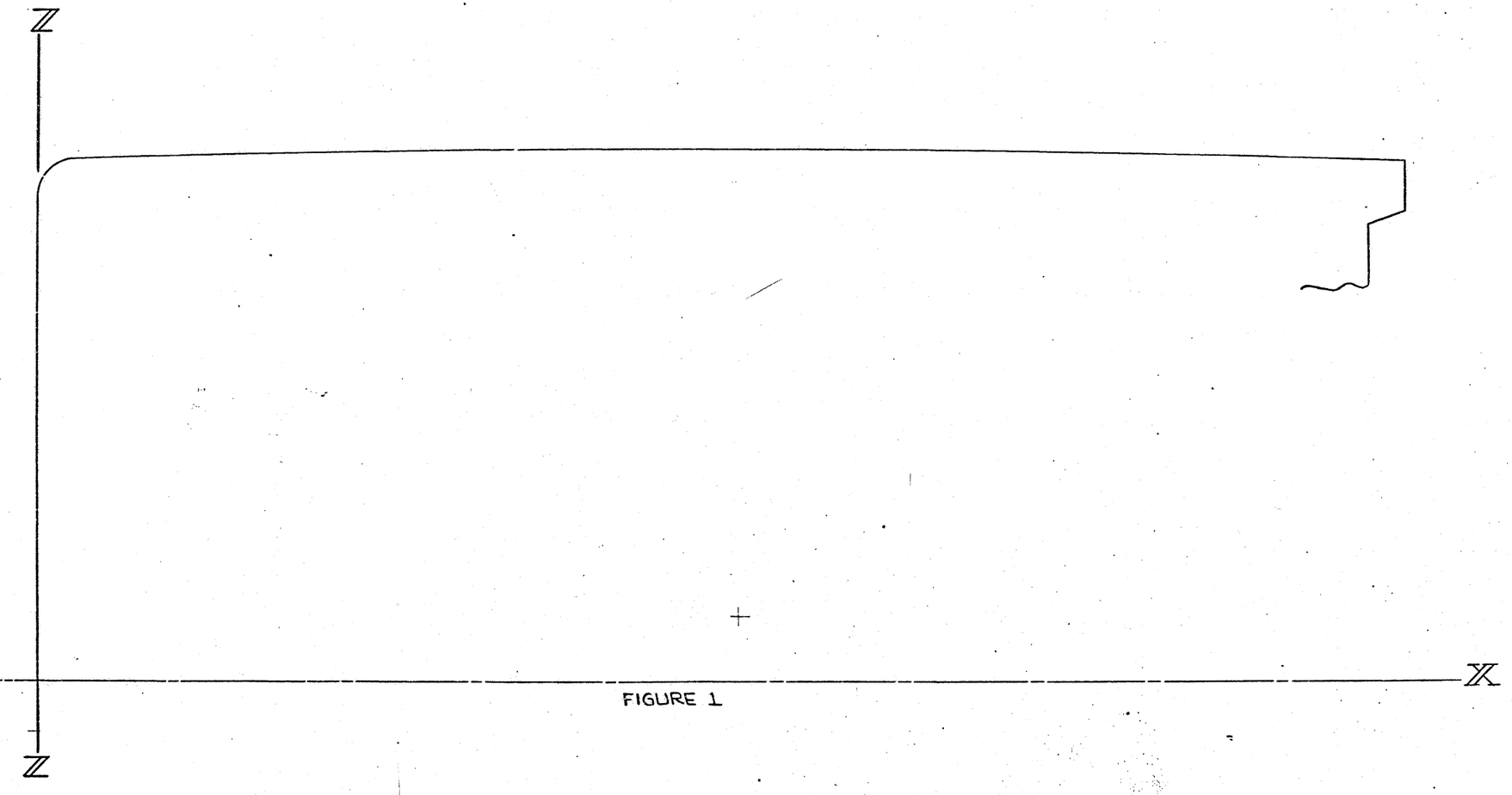


FIGURE 1

REVISIONS		
CHK	CHANGE NO.	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006:1 SHEET 11 OF 45	DIST			

DRAWING NUMBER 7411540-0-0 REV A

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

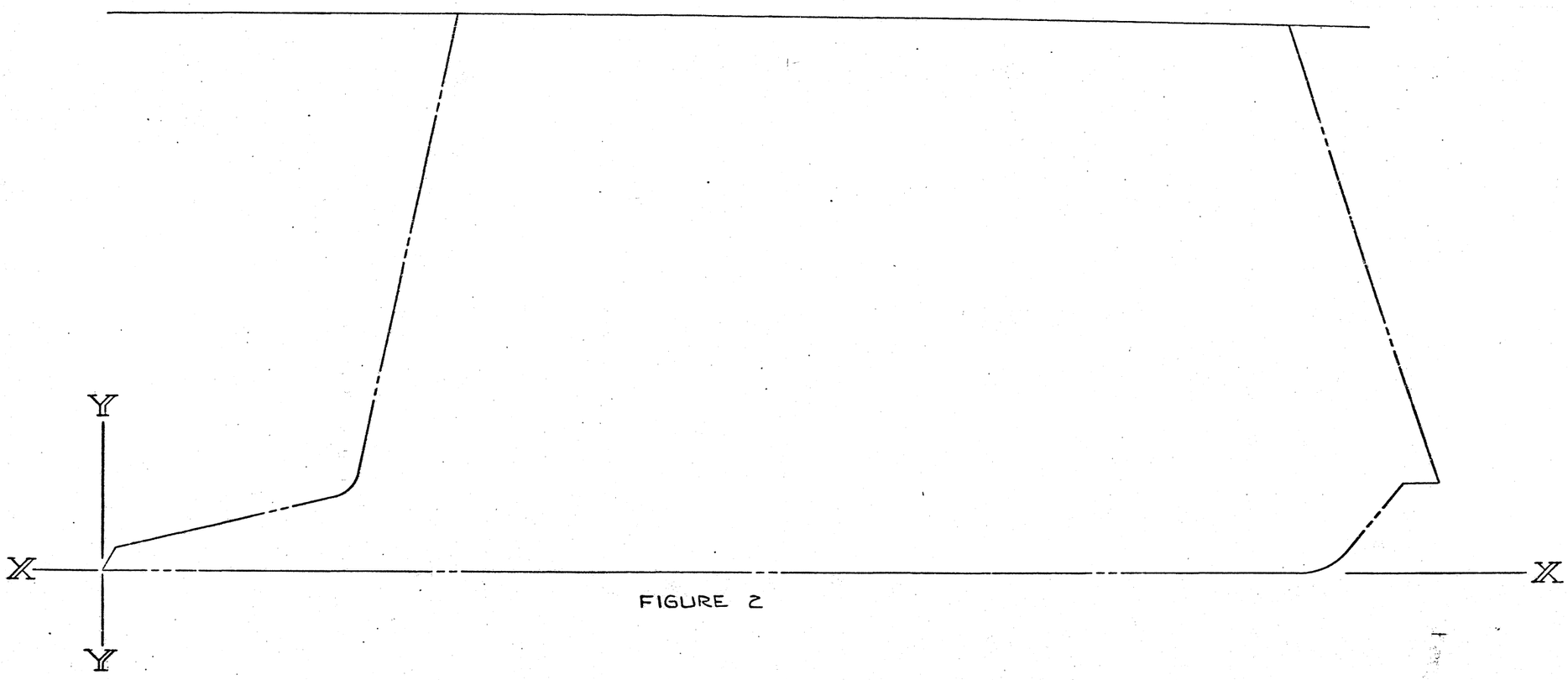


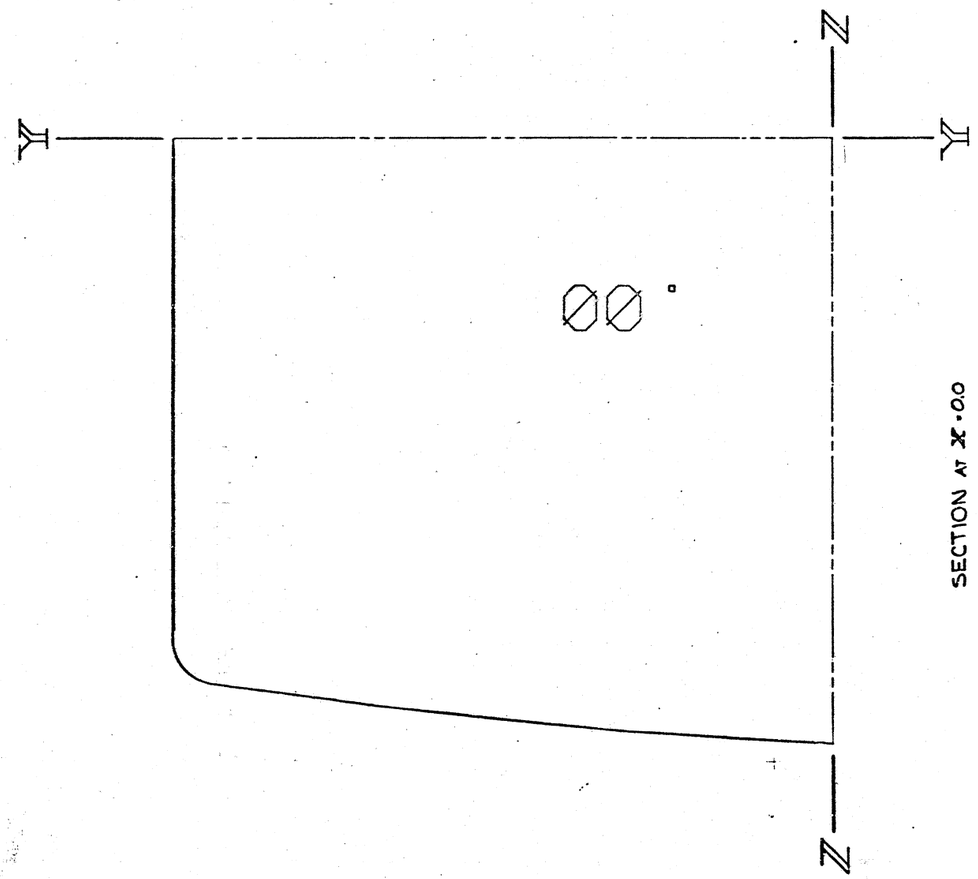
FIGURE 2

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 43		CUST	

7411540-0-0 A

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

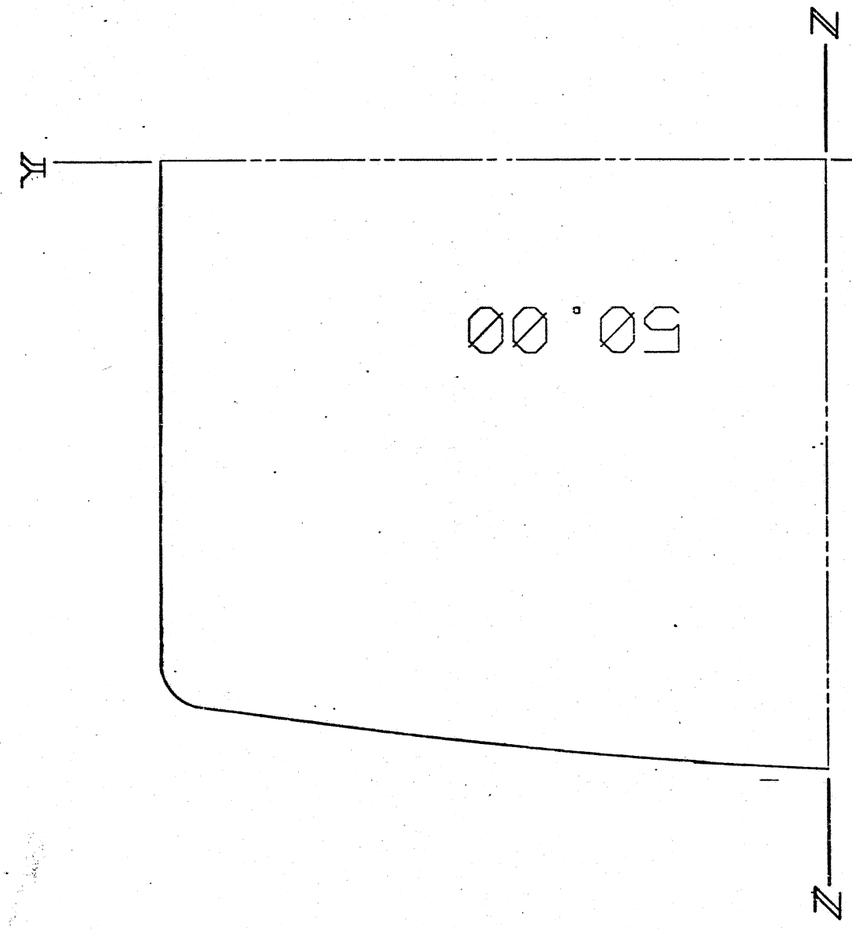
FIGURE 3

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	7411540-0-0	A
SCALE: 1.006 : 1 SHEET 15 OF 45	DIST			

D MD 7411540-0-0 A

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

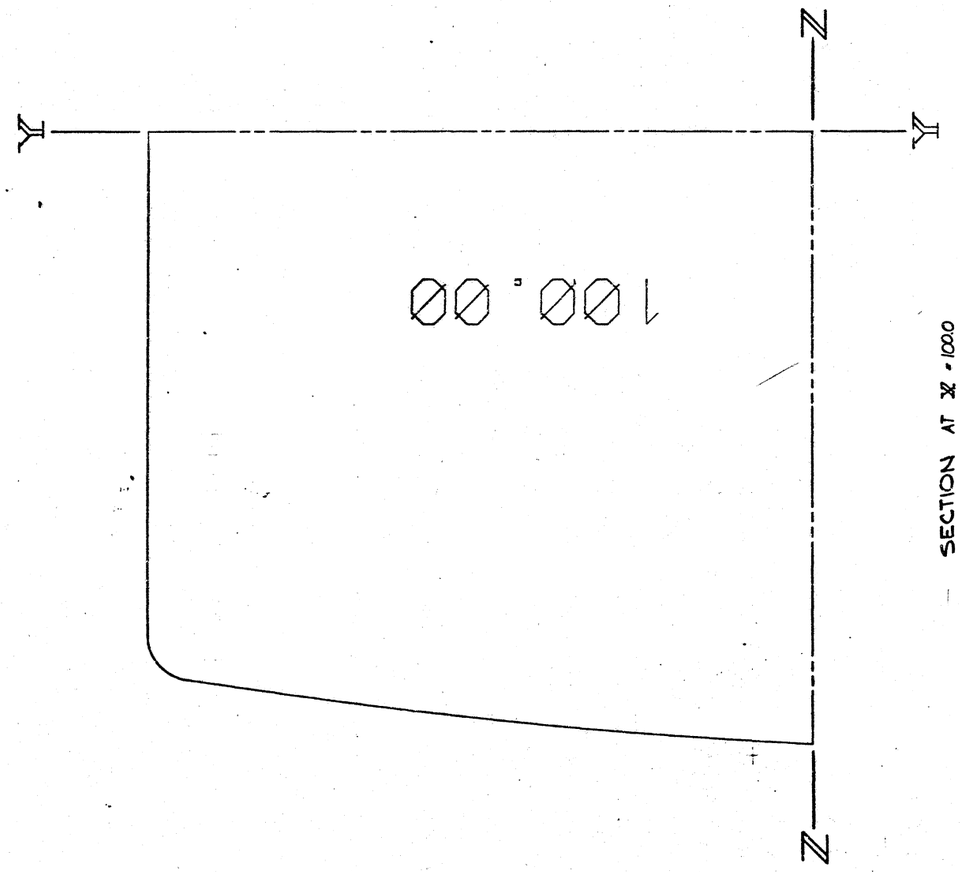
REVISIONS		
CHK	CHANGE NO	REV

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

D:\07411540-0-0 SCALE A

MATERIAL D X 10 | 7411540-0-0 | REV 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



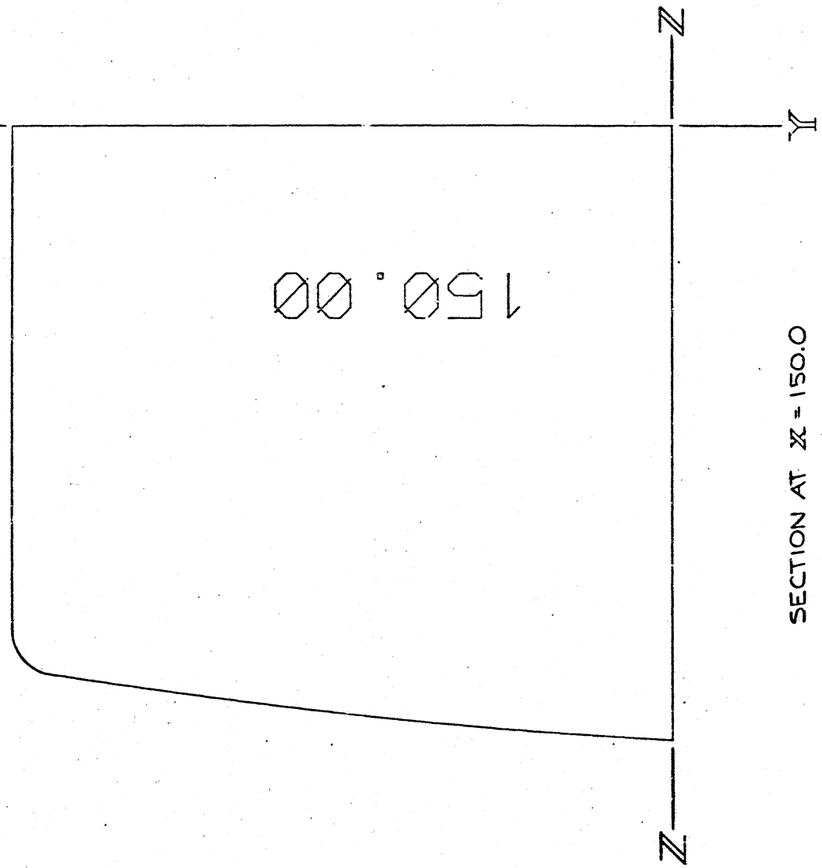
SECTION AT 2" = 100.0

FIGURE 5

REVISIONS		
CHK	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. 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



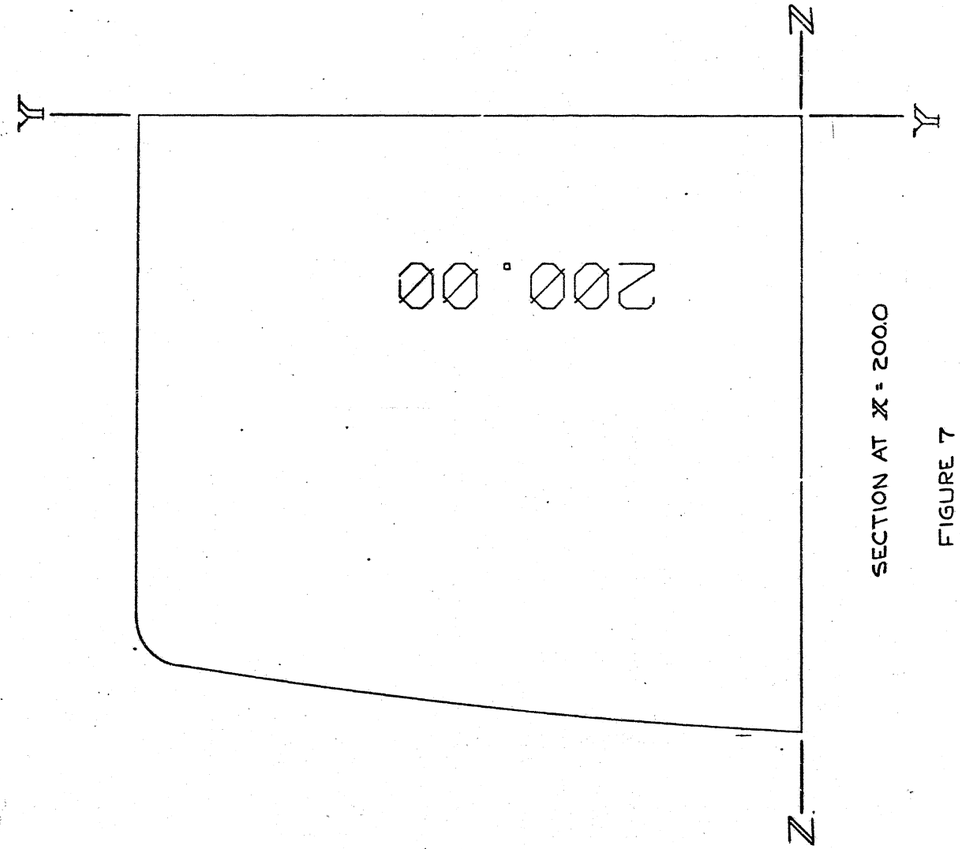
SECTION AT X = 150.0

FIGURE 6

REVISIONS		
CHK	CHANGE NO	REV.

TITLE	SIZE	NO.	NUMBER	REV
SHELL VT5Ø	D	MD	7411540-0-0	A
SCALE: 1.006 : 1	SHEET 18 OF 45			1

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



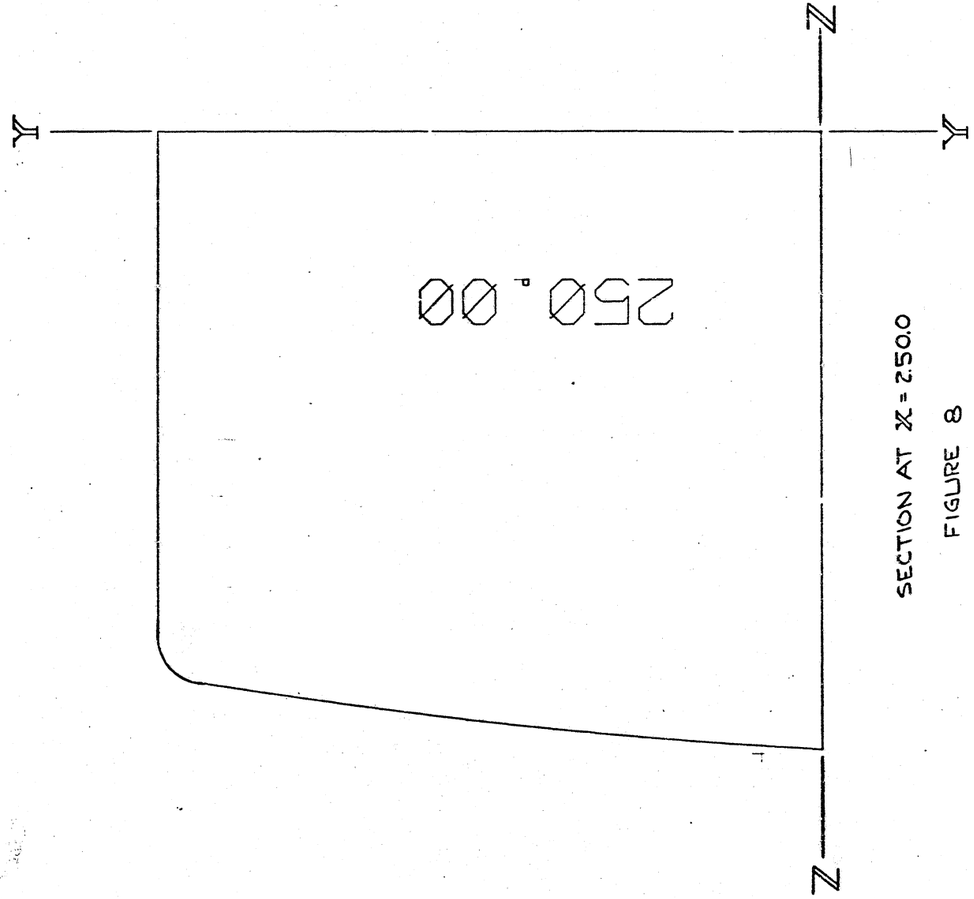
SECTION AT X = 200.0

FIGURE 7

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT5Ø	D	MD	7411540-0-0	A
SCALE 1.006 : 1 SHEET 19 OF 45	DIST.			

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.



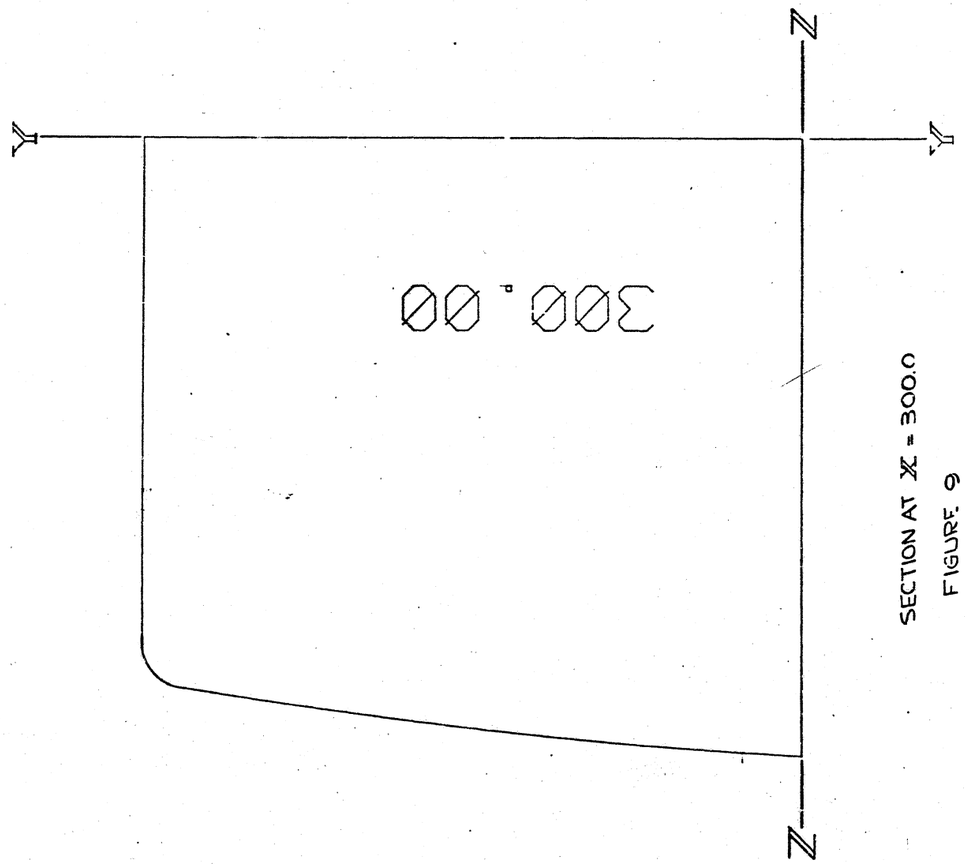
SECTION AT X = 2500
FIGURE 8

REVISIONS		
CHK	CHANGE NO	REV

TITLE		DWG CODE	NUMBER	REV
SHELL VT50			D MD 7411540-0-0	A
SCALE 1.006:1	SHEET 20 OF 45	DIST		

DRAWING NUMBER D MD 7411540-0-0 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 SHRINKAGE FACTOR



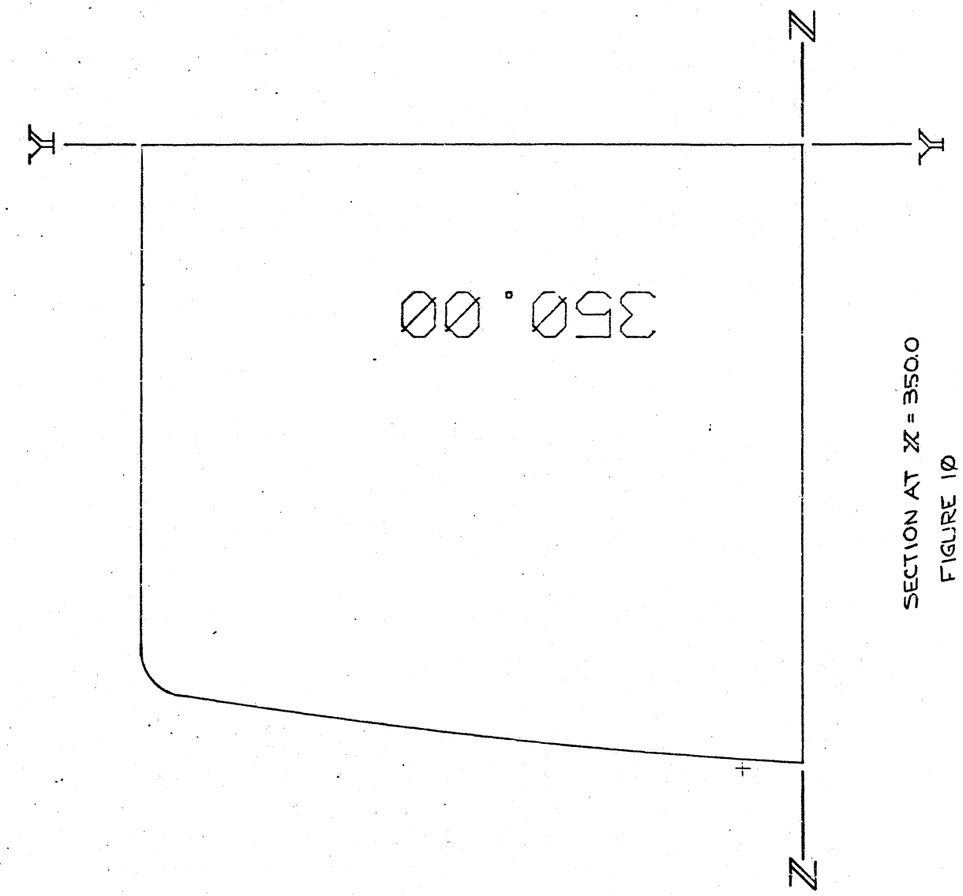
SECTION AT X = 300.0

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			

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 = 350.00
FIGURE 10

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV
SHELL VT50	D	MD	74111540-0-0	A
SCALE: 1.006:1 SHEET 22 OF 45	DIST.			

74111540-0-0 D MD A

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 1006:1 INCLUDES .6% SHRINKAGE FACTOR.

SECTION AT X = 400.0

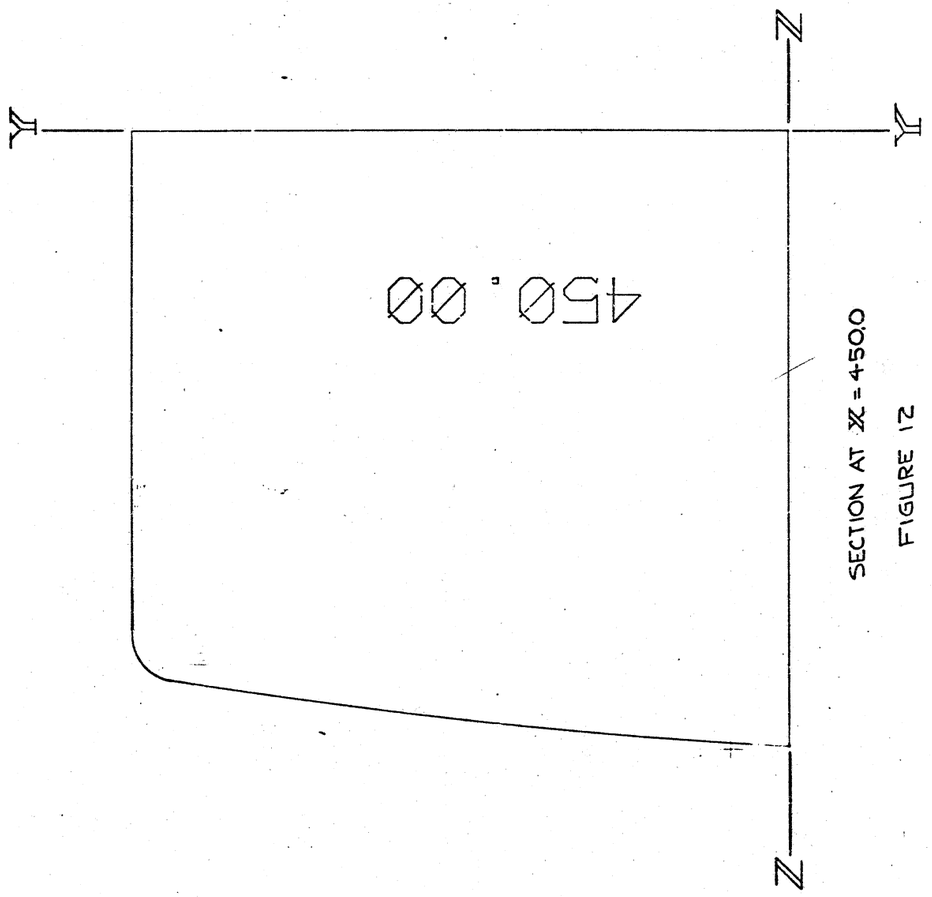
FIGURE 11

REVISIONS		
CHK	CHANGE NO.	REV

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

7411540-0-0 A

NOTES
1. FOR COORDINATES OF PROFILE CURVE REFER TO DATA LIST 12 (SHEET 40)
2. TO BE USED FOR CURVE TEMPLATE PURPOSES ONLY, SCALE OF 1.006:1 INCLUDES 6% SHRINKAGE FACTOR.



SECTION AT X = 4500

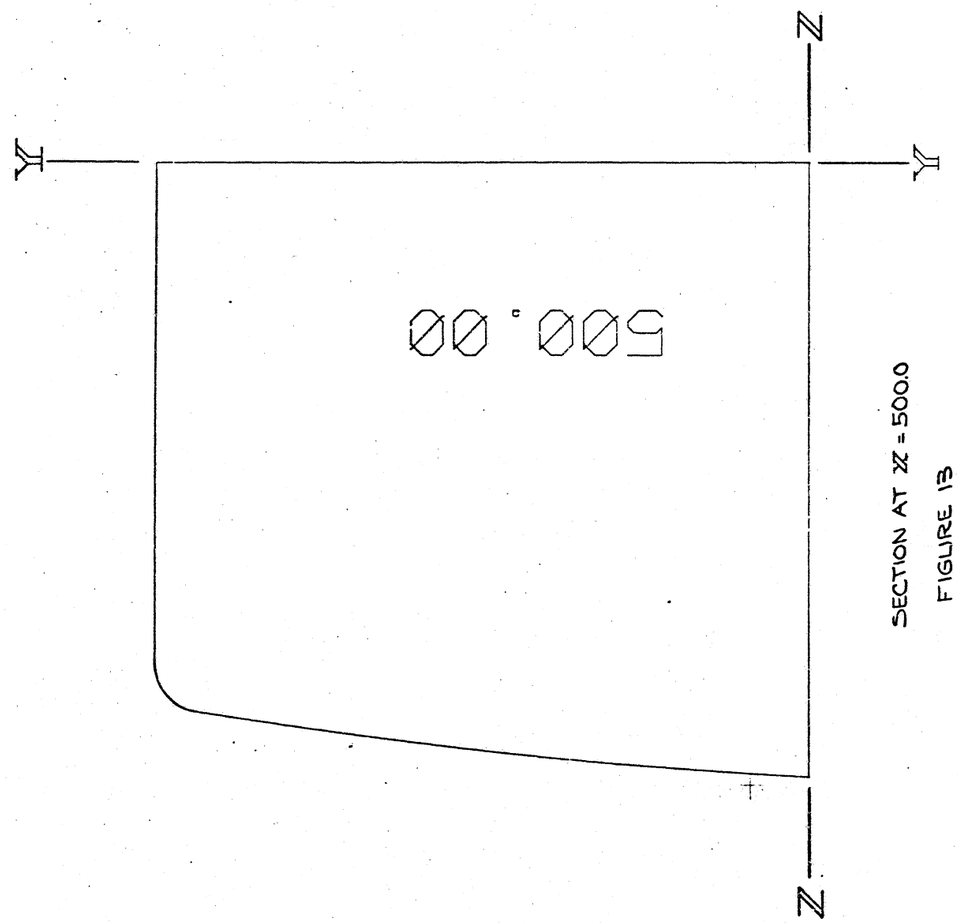
FIGURE 12

REVISIONS		
CHK	CHANGE NO	REV

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

SIZE	CODE	NUMBER	REV
D	MD	7411540-0-0	A

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 ZZ = 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			

DMD 7411540-0-0 A

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

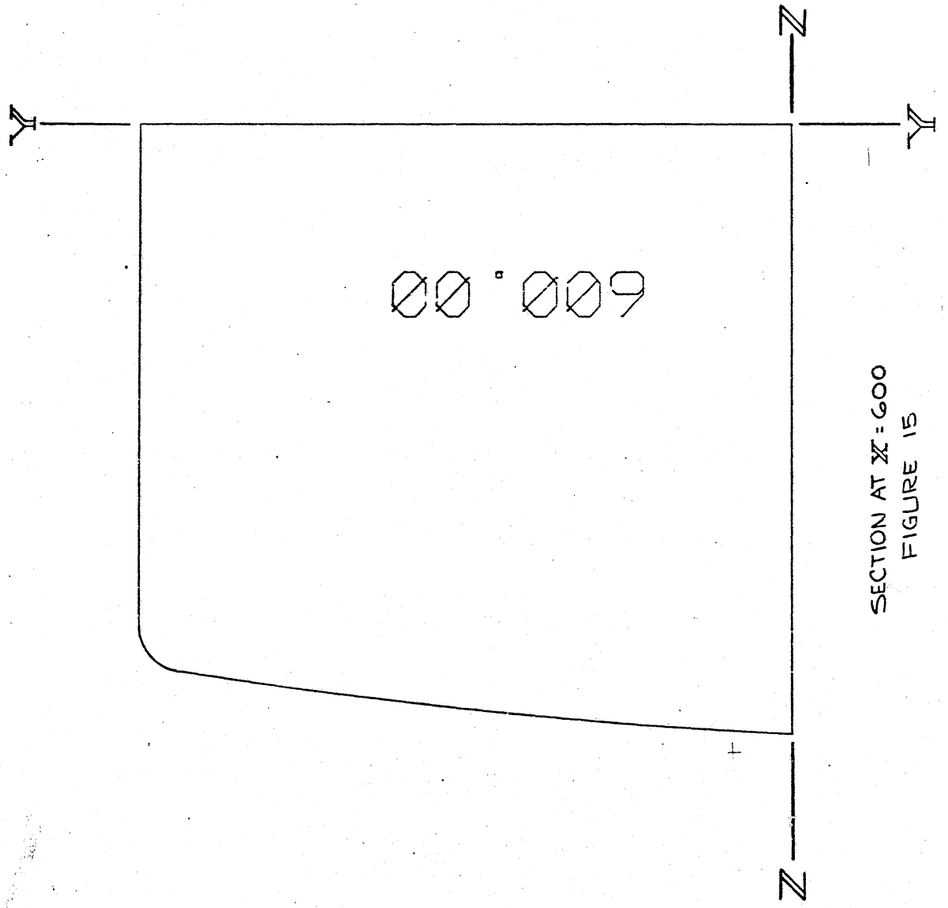
SECTION AT X = 550.00
FIGURE 14

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	

TOLERANCING PER DMD 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.



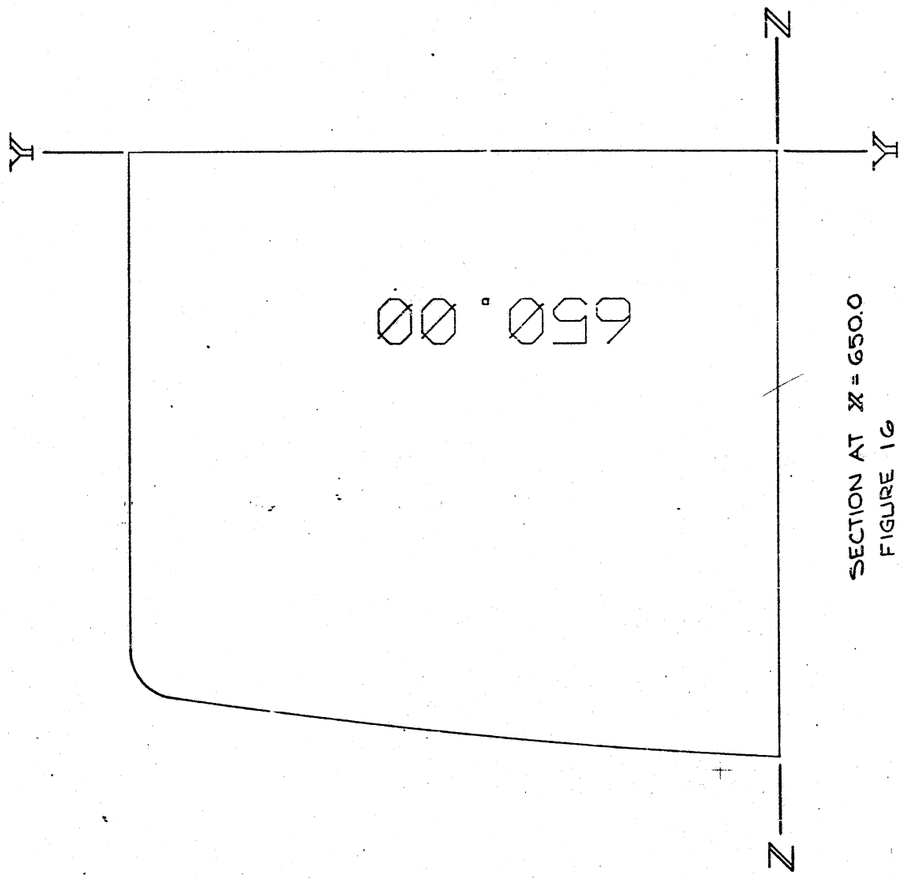
SECTION AT X = 600
FIGURE 15

REVISIONS		
CHK	CHANGE NO.	REV

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

DIGITAL NUMBER D MD 7411540-2-0 REV A

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	7411340-0-0	A
SCALE: 1.006/1 SHEET 3 OF 45	DIST		

X	Z
0.0000000	258.5220000
5.0000000	259.6535700
10.0000000	258.8047600
15.0000000	259.9535700
20.0000000	259.1000000
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.	CHANGE NO.	CHK
	A		

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. D Sullivan	DATE 1-21-74	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSY.		
SCALE 1/1		
SHEET 23 OF 45		

TITLE: SHELL VT50

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

DIST.

DEC FORM NO. DRC 100-B

X	Y
0.0000000	285.0200000
5.0000000	285.0170000
10.0000000	285.0332000
15.0000000	285.0486000
20.0000000	285.0630000
25.0000000	285.0766000
30.0000000	285.0894500
35.0000000	285.1013500
40.0000000	285.1123000
45.0000000	285.1225500
50.0000000	285.1318700
55.0000000	285.1403200
60.0000000	285.1479100
65.0000000	285.1546400
70.0000000	285.1605100
75.0000000	285.1655200
80.0000000	285.1696700
85.0000000	285.1729600
90.0000000	285.1753800
95.0000000	285.1769500
100.0000000	285.1776500
105.0000000	285.1775000
110.0000000	285.1764800
115.0000000	285.1746100
120.0000000	285.1718700
125.0000000	285.1682700
130.0000000	285.1638100
135.0000000	285.1584900
140.0000000	285.1523100
145.0000000	285.1452600
150.0000000	285.1373600
155.0000000	285.1286000
160.0000000	285.1189800
165.0000000	285.1084900
170.0000000	285.0971400
175.0000000	285.0849300
180.0000000	285.0718700
185.0000000	285.0579400
190.0000000	285.0431500
195.0000000	285.0275000
200.0000000	285.0109900
205.0000000	284.9936200
210.0000000	284.9753800
215.0000000	284.9562900
220.0000000	284.9363400
225.0000000	284.9155200
230.0000000	284.8938400
235.0000000	284.8713100
240.0000000	284.8479100
245.0000000	284.8236500
250.0000000	284.7985300
255.0000000	284.7725600
260.0000000	284.7457100
265.0000000	284.7180100
270.0000000	284.6894500
275.0000000	284.6600300
280.0000000	284.6297500
285.0000000	284.5986000
290.0000000	284.5665900

X	Y
295.0000000	284.5337300
300.0000000	284.5000000
305.0000000	284.4654100
310.0000000	284.4299600
315.0000000	284.3936500
320.0000000	284.3564800
325.0000000	284.3184500
330.0000000	284.2795600
335.0000000	284.2398100
340.0000000	284.1991900
345.0000000	284.1577200
350.0000000	284.1153800
355.0000000	284.0721900
360.0000000	284.0281300
365.0000000	283.9832200
370.0000000	283.9374400
375.0000000	283.8908000
380.0000000	283.8433000
385.0000000	283.7949300
390.0000000	283.7457100
395.0000000	283.6956300
400.0000000	283.6446900
405.0000000	283.5928900
410.0000000	283.5402200
415.0000000	283.4866900
420.0000000	283.4323100
425.0000000	283.3770600
430.0000000	283.3209500
435.0000000	283.2639800
440.0000000	283.2061500
445.0000000	283.1474600
450.0000000	283.0879100
455.0000000	283.0275000
460.0000000	282.9662300
465.0000000	282.9040900
470.0000000	282.8411000
475.0000000	282.7772400
480.0000000	282.7125200
485.0000000	282.6469500
490.0000000	282.5805100
495.0000000	282.5132100
500.0000000	282.4450600
505.0000000	282.3760300
510.0000000	282.3061500
515.0000000	282.2354100
520.0000000	282.1638100
525.0000000	282.0913500
530.0000000	282.0180200
535.0000000	281.9438400
540.0000000	281.8687900
545.0000000	281.7928800
550.0000000	281.7161200
555.0000000	281.6384900
560.0000000	281.5600000
565.0000000	281.4806500
570.0000000	281.4004400
575.0000000	281.3193700
580.0000000	281.2374400
585.0000000	281.1546400
590.0000000	281.0709900

X	Y
595.0000000	280.9864700
600.0000000	280.9011000
605.0000000	280.8148600
610.0000000	280.7277700
615.0000000	280.6398100
620.0000000	280.5509900
625.0000000	280.4613100
630.0000000	280.3707700
635.0000000	280.2793700
640.0000000	280.1871100
645.0000000	280.0939800
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 .XX ±.05 .XXX ±.005 ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

DRN.	DATE	12-21-74
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	CODE	NUMBER	REV.
C	MD	7411540-0-0	A

DEC FORM NO. DRC 100-B

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

METRIC DIMENSIONS

Z	Y
230.6000000	285.0000000
230.7631100	280.0000000
231.5168200	275.0000000
232.2611100	270.0000000
232.9961100	265.0000000
233.7215000	260.0000000
234.4376000	255.0000000
235.1442900	250.0000000
235.8415800	245.0000000
236.5294600	240.0000000
237.2079500	235.0000000
237.8770400	230.0000000
238.5367200	225.0000000
239.1870000	220.0000000
239.8278000	215.0000000
240.4593600	210.0000000
241.0814300	205.0000000
241.6941100	200.0000000
242.2973800	195.0000000
242.8912500	190.0000000
243.4757200	185.0000000
244.0507900	180.0000000
244.6164600	175.0000000
245.1727200	170.0000000
245.7195900	165.0000000
246.2570500	160.0000000
246.7851100	155.0000000
247.3037700	150.0000000
247.8133300	145.0000000
248.3120800	140.0000000
248.8033400	135.0000000
249.2843900	130.0000000
249.7568400	125.0000000
250.2182900	120.0000000
250.6711300	115.0000000
251.1145800	110.0000000
251.5486300	105.0000000
251.9732700	100.0000000
252.3885100	95.0000000
252.7943500	90.0000000
253.1907900	85.0000000
253.5777200	80.0000000
253.9554600	75.0000000
254.3236900	70.0000000
254.6825200	65.0000000
255.0319500	60.0000000
255.3719800	55.0000000
255.7026100	50.0000000
256.0238300	45.0000000
256.3356600	40.0000000
256.6380800	35.0000000
256.9311000	30.0000000
257.2147100	25.0000000
257.4889300	20.0000000
257.7537500	15.0000000
258.0091600	10.0000000
258.2551700	5.0000000
258.4917800	0.000

DATA LIST #3
SEE FIGURE 3 SHEET 15

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. W.C. Stuck	DATE	18JAN74
CHK'D.	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
PROD.	DATE	
NEXT HIGHER ASSY.		
SCALE	1:1	
SHEET	31 OF 45	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT5Ø

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

DIST.

DCC 16-(325)-1086-1A-R373
DRB 100

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

X	Y	Z
5.1318700	285.1318700	230.5714300
5.1318700	280.1318700	231.3496600
5.1318700	275.1318700	232.1185200
5.1318700	270.1318700	232.8779500
5.1318700	265.1318700	233.6279800
5.1318700	260.1318700	234.3685900
5.1318700	255.1318700	235.0997900
5.1318700	250.1318700	235.8215800
5.1318700	245.1318700	236.5339600
5.1318700	240.1318700	237.2369300
5.1318700	235.1318700	237.9304900
5.1318700	230.1318700	238.6146400
5.1318700	225.1318700	239.2893800
5.1318700	220.1318700	239.9547000
5.1318700	215.1318700	240.6106200
5.1318700	210.1318700	241.2571300
5.1318700	205.1318700	241.8942300
5.1318700	200.1318700	242.5219200
5.1318700	195.1318700	243.1402000
5.1318700	190.1318700	243.7490600
5.1318700	185.1318700	244.3485200
5.1318700	180.1318700	244.9385700
5.1318700	175.1318700	245.5192100
5.1318700	170.1318700	246.0904300
5.1318700	165.1318700	246.6522500
5.1318700	160.1318700	247.2046500
5.1318700	155.1318700	247.7476500
5.1318700	150.1318700	248.2812400
5.1318700	145.1318700	248.8054100
5.1318700	140.1318700	249.3201600
5.1318700	135.1318700	249.8255000
5.1318700	130.1318700	250.3214000
5.1318700	125.1318700	250.8080100
5.1318700	120.1318700	251.2851400
5.1318700	115.1318700	251.7528500
5.1318700	110.1318700	252.2111600
5.1318700	105.1318700	252.6600500
5.1318700	100.1318700	253.0995400
5.1318700	95.1318700	253.5296100
5.1318700	90.1318700	253.9502700
5.1318700	85.1318700	254.3615200
5.1318700	80.1318700	254.7633700
5.1318700	75.1318700	255.1558000
5.1318700	70.1318700	255.5388200
5.1318700	65.1318700	255.9124300
5.1318700	60.1318700	256.2766400
5.1318700	55.1318700	256.6314300
5.1318700	50.1318700	256.9768100
5.1318700	45.1318700	257.3127800
5.1318700	40.1318700	257.6393400
5.1318700	35.1318700	257.9564900
5.1318700	30.1318700	258.2642400
5.1318700	25.1318700	258.5625600
5.1318700	20.1318700	258.8514800
5.1318700	15.1318700	259.1309900
5.1318700	10.1318700	259.4010900
5.1318700	5.1318665	259.6617900
5.1318700	.1318665	259.9130600

METRIC DIMENSIONS

DATA LIST #4
SEE FIGURE 4 SHEET 16

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.
VT50Ø		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.	[illegible]	1-13-74
CHK'D.	[illegible]	DATE
ENG.	[illegible]	DATE
PROJ. ENG.	[illegible]	DATE
PROD.	[illegible]	DATE

NEXT HIGHER ASSY. —

SCALE 1/1
SHEET 32 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT5Ø

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, SCALE 1:1
DOES NOT INCLUDE SHRINKAGE FACTOR

Z	Y
285.	231.8476188
280.	231.8386188
275.	232.6202000
270.	233.3923700
265.	234.1551300
260.	234.9084800
255.	235.6523000
250.	236.3868000
245.	237.1119700
240.	237.8276300
235.	238.5338000
230.	239.2307100
225.	239.9181200
220.	240.5961200
215.	241.2647000
210.	241.9238500
205.	242.5736000
200.	243.2139200
195.	243.8448300
190.	244.4663200
185.	245.0783900
180.	245.6810400
175.	246.2742000
170.	246.8581000
165.	247.4325000
160.	247.9974800
155.	248.5530500
150.	249.0991900
145.	249.6358200
140.	250.1632400
135.	250.6811300
130.	251.1896100
125.	251.6886700
120.	252.1783100
115.	252.6585400
110.	253.1293400
105.	253.5907300
100.	254.0427000
95	254.4852600
90.	254.9183900
85.	255.3421100
80.	255.7564100
75.	256.1612900
70.	256.5567600
65.	256.9420100
60.	257.3194400
55.	257.6866500
50.	258.0444400
45.	258.3928200
40.	258.7317800
35.	259.0613200
30.	259.3814500
25.	259.6921500
20.	259.9934400
15.	260.2853100
10.	260.5677600
5.	260.8408000
.177543	261.1044200

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: .xxx = .005, .xx = .02, .x = .1
ANGLES: ±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)-1080-1A-R373
DRB 100

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

Y	Z
285.1373600	231.4285900
280.1373600	232.2297700
275.1373600	233.0215300
270.1373600	233.8036600
265.1373600	234.5767700
260.1373600	235.3402600
255.1373600	236.0943200
250.1373600	236.8389600
245.1373600	237.5741800
240.1373600	238.2999700
235.1373600	239.0163400
230.1373600	239.7232800
225.1373600	240.4208000
220.1373600	241.1089000
215.1373600	241.7875700
210.1373600	242.4568200
205.1373600	243.1166500
200.1373600	243.7670500
195.1373600	244.4080300
190.1373600	245.0395900
185.1373600	245.6617200
180.1373600	246.2744200
175.1373600	246.8777100
170.1373600	247.4715700
165.1373600	248.0560100
160.1373600	248.6310200
155.1373600	249.1966100
150.1373600	249.7527700
145.1373600	250.2995100
140.1373600	250.8368300
135.1373600	251.3647300
130.1373600	251.8831900
125.1373600	252.3922400
120.1373600	252.8918600
115.1373600	253.3820600
110.1373600	253.8628400
105.1373600	254.3341900
100.1373600	254.7961200
95.1373630	255.2486300
90.1373630	255.6917100
85.1373630	256.1253600
80.1373630	256.5495900
75.1373630	256.9644100
70.1373630	257.3697900
65.1373630	257.7657500
60.1373630	258.1522900
55.1373630	258.5294100
50.1373630	258.8971100
45.1373630	259.2553800
40.1373630	259.6042100
35.1373630	259.9436300
30.1373630	260.2736200
25.1373630	260.5942000
20.1373630	260.9053500
15.1373630	261.2070700
10.1373630	261.4993700
5.1373634	261.7822500
.1373634	262.0556700

METRIC DIMENSIONS

DATA SHEET #6
SEE FIGURE 6 SHEET 18

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

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

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.		
SCALE	1/1	
SHEET	34 OF 45	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE
SHELL VT50

DIST.

DEC 36-(325)-1080-1A-A373
DRB 100

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

Y	Z
285.0109900	234.7143000
280.0109900	232.5232500
275.0109900	233.3227700
270.0109900	234.1128700
265.0109900	234.0935400
260.0109900	235.6647700
255.0109900	236.4265800
250.0109900	237.1789600
245.0109900	237.9219200
240.0109900	238.6554400
235.0109900	239.3795400
230.0109900	240.0942200
225.0109900	240.7994400
220.0109900	241.4952500
215.0109900	242.1816500
210.0109900	242.8585900
205.0109900	243.5261200
200.0109900	244.1842100
195.0109900	244.8328800
190.0109900	245.4721200
185.0109900	246.1019300
180.0109900	246.7223100
175.0109900	247.3332700
170.0109900	247.9348000
165.0109900	248.5268900
160.0109900	249.1095600
155.0109900	249.6828100
150.0109900	250.2466200
145.0109900	250.8010000
140.0109900	251.3459600
135.0109900	251.8814000
130.0109900	252.4075900
125.0109900	252.9242600
120.0109900	253.4315000
115.0109900	253.9293100
110.0109900	254.4177000
105.0109900	254.8966600
100.0109900	255.3661900
95.0109900	255.8262900
90.0109900	256.2769500
85.0109900	256.7182000
80.0109900	257.1500100
75.0109900	257.5724000
70.0109900	257.9853600
65.0109900	258.3889000
60.0109900	258.7829900
55.0109900	259.1676600
50.0109900	259.5429100
45.0109900	259.9087300
40.0109900	260.2651100
35.0109900	260.6122700
30.0109900	260.9496300
25.0109900	261.2771100
20.0109900	261.5963800
15.0109900	261.9056200
10.0109900	262.2054400
5.0109911	262.4958300
.0109901	262.7767900

METRIC DIMENSIONS

DATA LIST #7
SEE FIGURE 7 SHEET 19

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.
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

DRN.	DATE	1-21-75
CHK'D.	DATE	
ENG.	DATE	
PROJ. ENG.	DATE	
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.

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

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

Z	Y
232.7947700	284.7985300
232.7198600	279.7985300
233.5237600	274.7985300
234.3194100	269.7985300
235.1054300	264.7985300
235.8820100	259.7985300
236.6491600	254.7985300
237.4069000	249.7985300
238.1551800	244.7985300
238.8940400	239.7985300
239.6234600	234.7985300
240.3434600	229.7985300
241.0540200	224.7985300
241.7551600	219.7985300
242.4468600	214.7985300
243.1291300	209.7985300
243.8019600	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	99.7985340
256.2181600	94.7985340
256.6740600	89.7985340
257.1205400	84.7985340
257.5575900	79.7985340
257.9852000	74.7985340
258.4033000	69.7985340
258.8121300	64.7985340
259.2114500	59.7985340
259.6013400	54.7985340
259.9817900	49.7985340
260.3528100	44.7985340
260.7144100	39.7985340
261.0665600	34.7985340
261.4092900	29.7985340
261.7425800	24.7985340
262.0664500	19.7985340
262.3808900	14.7985340
262.6858800	9.7985344
262.9814500	4.7985344

METRIC DIMENSIONS

DATA LIST #8
SEE FIGURE 8 SHEET 20

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.		1-21-75
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE
NEXT HIGHER ASSY.		
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.

REVISIONS: REV. | CHANGE NO. | CHK

DCC 16-(325)-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
232.1000100	264.5000000
232.8171800	279.5000000
233.6249200	274.5000000
234.4232300	269.5000000
235.2121000	264.5000000
235.9915400	259.5000000
236.7615400	254.5000000
237.5221100	249.5000000
238.2732500	244.5000000
239.0149600	239.5000000
239.7472300	234.5000000
240.4700600	229.5000000
241.1834700	224.5000000
241.8874400	219.5000000
242.5819800	214.5000000
243.2670600	209.5000000
243.9427500	204.5000000
244.6089900	199.5000000
245.2657900	194.5000000
245.9131600	189.5000000
246.5511000	184.5000000
247.1796000	179.5000000
247.7986700	174.5000000
248.4083000	169.5000000
249.0085000	164.5000000
249.5992800	159.5000000
250.1806100	154.5000000
250.7525100	149.5000000
251.3149800	144.5000000
251.8680200	139.5000000
252.4116200	134.5000000
252.9457900	129.5000000
253.4705200	124.5000000
253.9858200	119.5000000
254.4916900	114.5000000
254.9881300	109.5000000
255.4751200	104.5000000
255.9526900	99.5000000
256.4208300	94.5000000
256.8795300	89.5000000
257.3288300	84.5000000
257.7686300	79.5000000
258.1990300	74.5000000
258.6200200	69.5000000
259.0315300	64.5000000
259.4336300	59.5000000
259.8263000	54.5000000
260.2095300	49.5000000
260.5833300	44.5000000
260.9477000	39.5000000
261.3026300	34.5000000
261.6481300	29.5000000
261.9842000	24.5000000
262.3108300	19.5000000
262.6280300	14.5000000
262.9357900	9.5000000
263.2341200	4.5000000

METRIC DIMENSIONS

DATA LIST #9
SEE FIGURE 9 SHEET 21

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.
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. [illegible] DATE 12/1/74
CHK'D. [illegible] DATE 12/1/74
ENG. [illegible] DATE [illegible]
PROJ. ENG. [illegible] DATE [illegible]
PROD. [illegible] DATE [illegible]
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.

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
284.1153600	231.9999000
279.1153600	232.8175200
274.1153600	233.6256100
269.1153600	234.4242700
264.1153600	235.2135000
259.1153600	235.9933000
254.1153600	236.7636600
249.1153600	237.5245900
244.1153600	238.2761900
239.1153600	239.0181500
234.1153600	239.7507700
229.1153600	240.4739700
224.1153600	241.1877300
219.1153600	241.8920500
214.1153600	242.5869400
209.1153600	243.2724000
204.1153600	243.9484300
199.1153600	244.6150200
194.1153600	245.2721800
189.1153600	245.9199000
184.1153600	246.5581900
179.1153600	247.1870500
174.1153600	247.8064700
169.1153600	248.4164600
164.1153600	249.0170200
159.1153600	249.6081400
154.1153600	250.1898300
149.1153600	250.7620800
144.1153600	251.3249000
139.1153600	251.8782900
134.1153600	252.4222400
129.1153600	252.9567600
124.1153600	253.4818400
119.1153600	253.9975000
114.1153600	254.5037200
109.1153600	255.0005000
104.1153600	255.4878500
99.1153600	255.9657700
94.1153600	256.4342500
89.1153600	256.8933000
84.1153600	257.3429200
79.1153600	257.7831000
74.1153600	258.2138500
69.1153600	258.6351700
64.1153600	259.0470500
59.1153600	259.4495000
54.1153600	259.8425100
49.1153600	260.2260900
44.1153600	260.6002400
39.1153600	260.9649500
34.1153600	261.3202300
29.1153600	261.6660800
24.1153600	262.0024900
19.1153600	262.3294700
14.1153600	262.6470100
9.1153601	262.9551200
4.1153601	263.2538000

METRIC DIMENSIONS

DATA LIST #10
SEE FIGURE 10 SHEET 22

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.

REVISIONS	REV.	CHANGE NO.	CHK

DEC 16-(325)-1080-1A-R373
DRB 100

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

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

Z	Y
231.	9047788
232.	7282480
233.	5268960
234.	3228960
235.	1188700
235.	8870220
236.	6561300
237.	4150100
238.	1644500
238.	9044780
239.	6350500
240.	3562000
241.	0679200
241.	7702020
242.	4630600
243.	1540900
243.	8281780
244.	4852200
245.	1401480
245.	7850380
246.	4226980
247.	0489280
247.	6663180
248.	2742780
248.	8720080
249.	4619080
250.	0415680
250.	6117980
251.	1725980
251.	7239680
252.	2659980
252.	7984080
253.	3214780
253.	8351080
254.	3373180
254.	8346880
255.	3194280
255.	7953380
256.	2618080
256.	7188480
257.	1664580
257.	6346380
258.	0333880
258.	4526980
258.	8625780
259.	2632280
259.	6548380
260.	0356180
260.	4077780
260.	7734080
261.	1237080
261.	4676280
261.	8026480
262.	1278480
262.	4425980
262.	7487180
263.	0456180

METRIC DIMENSIONS

DATA LIST #11
SEE FIGURE 11 SHEET 23

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	1-21-74
CHK'D.		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.

REVISIONS: REV. | CHANGE NO. | CHK

DEC 16-(325)-1060-1A-R373
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
253.8879100	231.7143000
252.8879100	232.5252100
251.8879100	233.3267000
250.8879100	234.1187600
249.8879100	234.9013900
248.8879100	235.6745900
247.8879100	236.4383500
246.8879100	237.1926900
245.8879100	237.9376000
244.8879100	238.6730800
243.8879100	239.3991300
242.8879100	240.1157500
241.8879100	240.8229500
240.8879100	241.5207100
239.8879100	242.2090400
238.8879100	242.8879400
237.8879100	243.5574200
236.8879100	244.2174600
235.8879100	244.8680700
234.8879100	245.5092500
233.8879100	246.1410100
232.8879100	246.7633300
231.8879100	247.3762300
230.8879100	247.9796900
229.8879100	248.5737300
228.8879100	249.1583400
227.8879100	249.7335100
226.8879100	250.2992600
225.8879100	250.8555800
224.8879100	251.4024700
223.8879100	251.9399200
222.8879100	252.4679500
221.8879100	252.9865500
220.8879100	253.4957200
219.8879100	253.9954600
218.8879100	254.4857700
217.8879100	254.9666500
216.8879100	255.4381000
215.8879100	255.9001300
214.8879100	256.3527200
213.8879100	256.7958800
212.8879100	257.2296100
211.8879100	257.6539100
210.8879100	258.0687800
209.8879100	258.4742300
208.8879100	258.8702500
207.8879100	259.2568300
206.8879100	259.6339900
205.8879100	260.0017100
204.8879100	260.3600000
203.8879100	260.7088700
202.8879100	261.0483100
201.8879100	261.3783100
200.8879100	261.6988900
199.8879100	262.0100400
198.8879100	262.3117600
197.8879100	262.6040500

METRIC DIMENSIONS

DATA LIST #12
SEE FIGURE 12 SHEET 24

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.		1-21-77
CHK'D.		
ENG.		
PROJ. ENG.		
PROD.		

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.

DEC 16-(325)-1040-1A-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	282.4450600
232.2324400	277.4450600
233.0220700	272.4450600
233.0118800	267.4450600
234.5074700	262.4450600
235.3536200	257.4450600
236.1103600	252.4450600
236.8576700	247.4450600
237.5955500	242.4450600
238.3241100	237.4450600
239.0430400	232.4450600
239.7526500	227.4450600
240.4528300	222.4450600
241.1435900	217.4450600
241.8249200	212.4450600
242.4968300	207.4450600
243.1593100	202.4450600
243.8123600	197.4450600
244.4559900	192.4450600
245.0902000	187.4450600
245.7149800	182.4450600
246.3303300	177.4450600
246.9362600	172.4450600
247.5327600	167.4450600
248.1198400	162.4450600
248.6975000	157.4450600
249.2657200	152.4450600
249.8245200	147.4450600
250.3739000	142.4450600
250.9138500	137.4450600
251.4443800	132.4450600
251.9654000	127.4450600
252.4771000	122.4450600
252.9794100	117.4450600
253.4722300	112.4450600
253.9556300	107.4450600
254.4296100	102.4450600
254.8941000	97.4450570
255.3492000	92.4450570
255.7949800	87.4450570
256.2312500	82.4450570
256.6581000	77.4450570
257.0755200	72.4450570
257.4835200	67.4450570
257.8821000	62.4450570
258.2712400	57.4450570
258.6509600	52.4450570
259.0212600	47.4450570
259.3821300	42.4450570
259.7335700	37.4450570
260.0755900	32.4450570
260.4081800	27.4450570
260.7313500	22.4450570
261.0451000	17.4450570
261.3494200	12.4450570
261.6443100	7.4450569
261.9297800	2.4450569

METRIC DIMENSIONS

DATA LIST #13
SEE FIGURE 13 SHEET 25

REV.	CHANGE NO.	DATE	APPROVED
A			

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 1-21-74
CHK'D. — DATE
ENG. — DATE
PROJ. ENG. — DATE
PROD. — DATE
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 41 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: SHELL VT50

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

DIST.

DEC-15-(125)-1040-1A-R373
DRB 100

DIGITAL EQUIPMENT CORPORATION

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

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

Z	Y
231.8476468	201.7161200
232.0266600	206.7161200
233.4922320	211.7161200
234.9245400	216.7161200
235.6716600	221.7161200
236.4893600	226.7161200
237.1376420	231.7161200
237.8565300	236.7161200
238.5659400	241.7161200
239.2659700	246.7161200
239.9565700	251.7161200
240.6377600	256.7161200
241.3095200	261.7161200
241.9718700	266.7161200
242.6247900	271.7161200
243.2683800	276.7161200
243.9026300	281.7161200
244.5275200	186.7161200
245.1423600	181.7161200
245.7481300	176.7161200
246.3445300	171.7161200
246.9315200	166.7161200
247.5090900	161.7161200
248.0772400	156.7161200
248.6359700	151.7161200
249.1852800	146.7161200
249.7251700	141.7161200
250.2556400	136.7161200
250.7767000	131.7161200
251.2883300	126.7161200
251.7905400	121.7161200
252.2833300	116.7161200
252.7667100	111.7161200
253.2406600	106.7161200
253.7052000	101.7161200
254.1603100	96.7161100
254.6061100	91.7161100
255.0422800	86.7161100
255.4691400	81.7161100
255.8865800	76.7161100
256.2945900	71.7161100
256.6931900	66.7161100
257.0823700	61.7161100
257.4621300	56.7161100
257.8324700	51.7161100
258.1933900	46.7161100
258.5448900	41.7161100
258.8869700	36.7161100
259.2196300	31.7161100
259.5428700	26.7161100
259.8566900	21.7161100
260.1610900	16.7161100
260.4560700	11.7161100
260.7416400	6.7161179

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

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

		DATE
DRN.		1-21-74
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

DEC 16-[325]-1030-1A-R373
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.

Z	Y
230.5714300	288.9011000
231.3535100	275.9011000
232.1261900	278.9011000
232.8804500	265.9011000
233.6433000	268.9011000
234.3977500	255.9011000
235.1227600	258.9011000
235.8403700	245.9011000
236.5645700	248.9011000
237.2713600	235.9011000
237.9807300	238.9011000
238.6536900	225.9011000
239.3352400	228.9011000
240.0043800	215.9011000
240.6641000	218.9011000
241.3144100	205.9011000
241.9553100	208.9011000
242.5868000	195.9011000
243.2088700	198.9011000
243.8215400	185.9011000
244.4247900	188.9011000
245.0186200	175.9011000
245.6030500	178.9011000
246.1780600	165.9011000
246.7436600	168.9011000
247.2998500	155.9011000
247.8466200	158.9011000
248.3839900	145.9011000
248.9119400	148.9011000
249.4304700	135.9011000
249.9396000	138.9011000
250.4393100	125.9011000
250.9296100	128.9011000
251.4105000	115.9011000
251.8819800	118.9011000
252.3442400	105.9011000
252.7966900	108.9011000
253.2399300	95.9010960
253.6737500	98.9010960
254.0981700	85.9010960
254.5131700	88.9010960
254.9187600	75.9010960
255.3149300	78.9010960
255.7017000	65.9010960
256.0790500	68.9010960
256.4469900	55.9010960
256.8055200	58.9010960
257.1546300	45.9010960
257.4943300	48.9010960
257.8246200	35.9010960
258.1454900	38.9010960
258.4569600	25.9010960
258.7590100	28.9010960
259.0516500	15.9010960
259.3348800	18.9010960
259.6086900	5.9010963
259.8730900	8.9010963

METRIC DIMENSIONS

DATA LIST #15
SEE FIGURE 15 SHEET 27

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

		DATE
DRN.	D Sullivan	1-27-74
CHK'D.		DATE
ENG.		DATE
PROJ. ENG.		DATE
PROD.		DATE
NEXT HIGHER ASSY.		
SCALE		
SHEET 43 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

DIGITAL EQUIPMENT CORPORATION

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

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

Y	Z
280.0000000	230.0000000
275.0000000	230.7673800
270.0000000	231.5253500
265.0000000	232.2739200
260.0000000	233.0130000
255.0000000	233.7426500
250.0000000	234.4632000
245.0000000	235.1741600
240.0000000	235.8757100
235.0000000	236.5678500
230.0000000	237.2505900
225.0000000	237.9239300
220.0000000	238.5878600
215.0000000	239.2423900
210.0000000	239.8875200
205.0000000	240.5232400
200.0000000	241.1495600
195.0000000	241.7664700
190.0000000	242.3739800
185.0000000	242.9720800
180.0000000	243.5607900
175.0000000	244.1400800
170.0000000	244.7099800
165.0000000	245.2704700
160.0000000	245.8215500
155.0000000	246.3632300
150.0000000	246.8955100
145.0000000	247.4183800
140.0000000	247.9318500
135.0000000	248.4359200
130.0000000	248.9305800
125.0000000	249.4158400
120.0000000	249.8916900
115.0000000	250.3581400
110.0000000	250.8151800
105.0000000	251.2628200
100.0000000	251.7013600
95.0000000	252.1298900
90.0000000	252.5493200
85.0000000	252.9596500
80.0000000	253.3599700
75.0000000	253.7511800
70.0000000	254.1330000
65.0000000	254.5054100
60.0000000	254.8684100
55.0000000	255.2220100
50.0000000	255.5662100
45.0000000	255.9010000
40.0000000	256.2263900
35.0000000	256.5423700
30.0000000	256.8489500
25.0000000	257.1461300
20.0000000	257.4339000
15.0000000	257.7122700
10.0000000	257.9812400
5.0000000	258.2408000
0.0000000	258.4909500

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

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY √

MATERIAL

FINISH

		DATE
DRN.	D Sullivan	1-27-75
CHK'D.	[illegible]	[illegible]
ENG.	[illegible]	[illegible]
PROJ. ENG.	[illegible]	[illegible]
PROD.	[illegible]	[illegible]

NEXT HIGHER ASSY.

SCALE

SHEET 44 OF 45

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

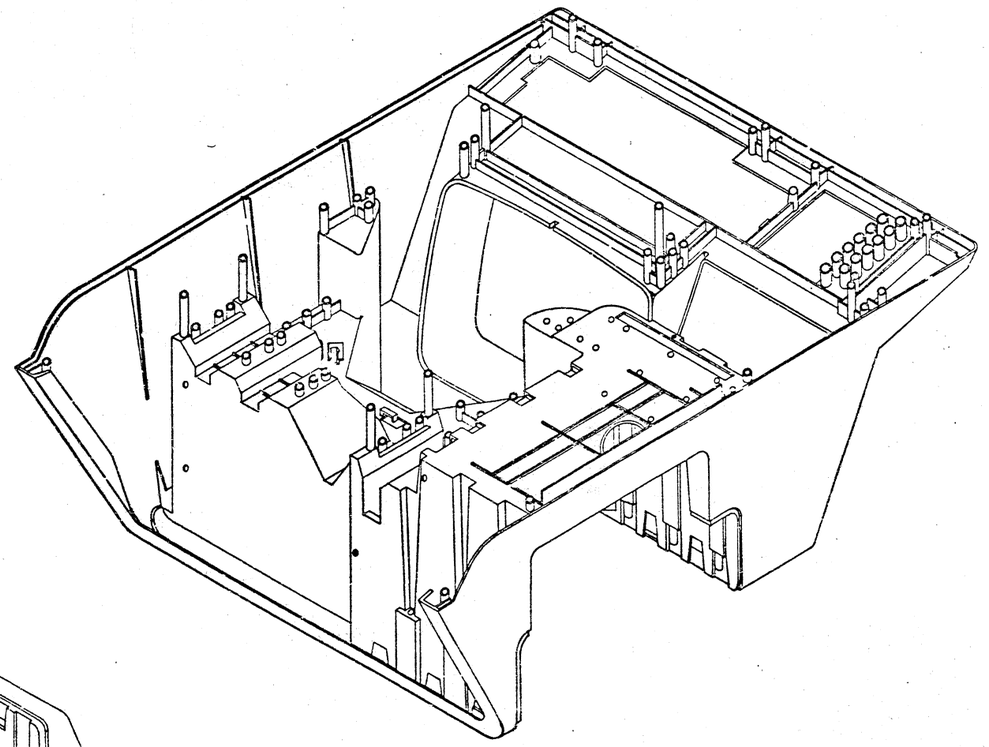
TITLE
SHELL VT5Ø

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

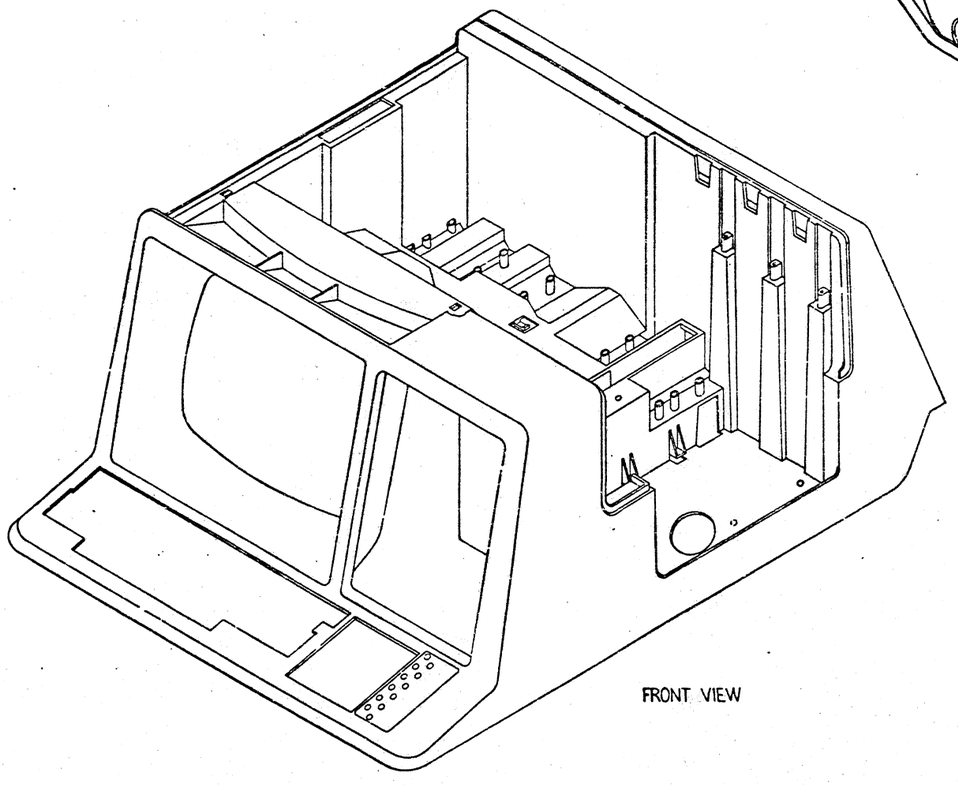
DIST.

REV.	CHANGE NO.	CHK

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



BOTTOM REAR VIEW



FRONT VIEW

REVISIONS		
ZONE	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
SHELL VT50	E	7/D	7411540-0-0	A
SCALE NONE	SHEET 45 OF 45		DIST.	

MD 7411540-0-0 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		7-1-75

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

DEC 3-(491)-1283-N670

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.

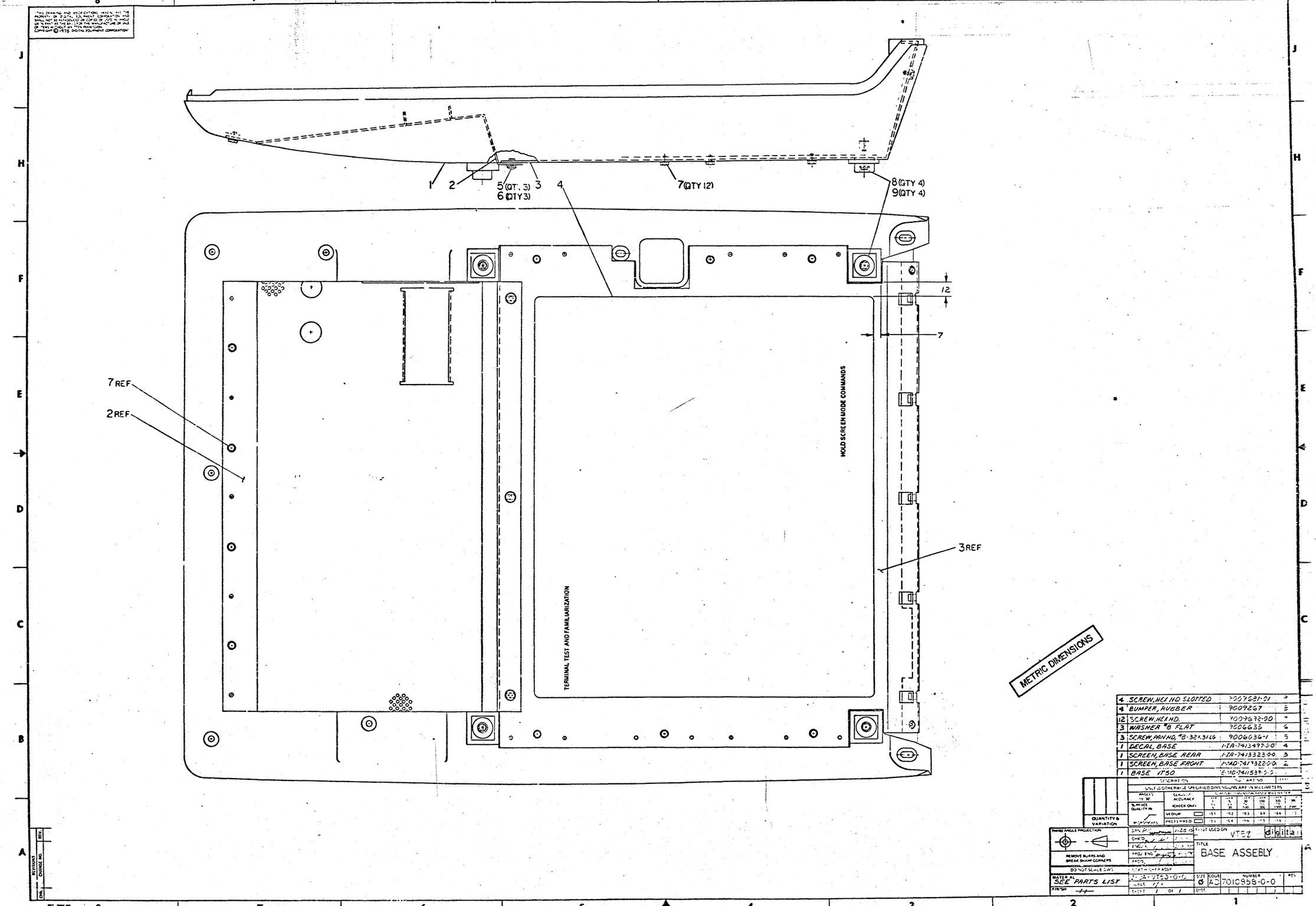
1.2 Applicable document DEC metals quality manual.

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	9057631-01	9
4	BUMPER, RUBBER	9009267	8
12	SCREW, HEX HD.	9009632-00	7
3	WASHER #8 FLAT	9006655	6
3	SCREW, PAN HD, #8-32x.312	9006636-1	5
1	DECAL, BASE	1-EA-7413497-00	4
1	SCREEN, BASE REAR	1-EA-7413323-00	3
1	SCREEN, BASE FRONT	1-MD-7413220-00	2
1	BASE VT50	E-MD-7411539-0-2	

DESCRIPTION — NO. — PART NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±30' — LINEAR ACCURACY — MATERIAL WEIGHTS

SURFACE QUALITY — CHECK ONLY — MEDIUM — PRESTRIPPED

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE PARTS LIST

FINISH

DRN P. [illegible] 1-28-78 — FIRST USED ON VT52 — digital

CHKD

ENGR

PROJ. ENG

PROG

NEXT HIGHER ASSY 1-EA-VT52-0-0

SCALE 1/1 — SHEET 1 OF 1

TITLE: BASE ASSEBLY

SIZE C — CODE Ø — NUMBER AD7010958-0-0 — REV — DWG

REVISIONS — REV. — CHG. ORDER NO.

SEC. ITEM NO. BIO 1.20

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-(491)-1283-N670

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 DIGEC metals quality manual.

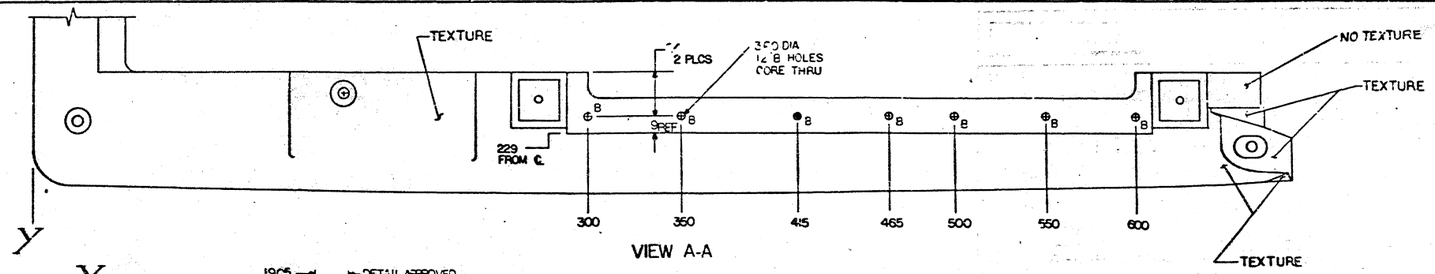
2.0	CHARACTERISTICS	PROCEDURE
2.1	Check location of holes	Use fixture #94-02146-3
2.2	Check holes sizes	Vernier calipers/plug gages
2.3	Material thickness	Vernier calipers
2.4	Workmanship	Visually inspect for:
2.4-1		sink in material
2.4.2		flashing / scratches
2.4.3		color and texture
2.4.4		filled bosses

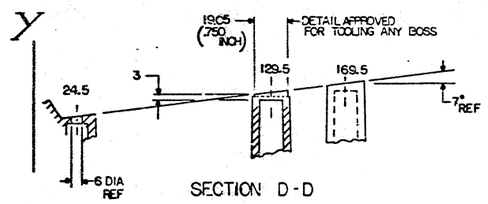
SIZE	CODE	NUMBER	REV
A	II	74 11539-0-0	

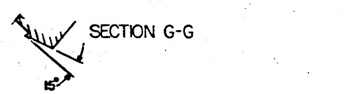
DEC 3-(332)-1283-1A-R175

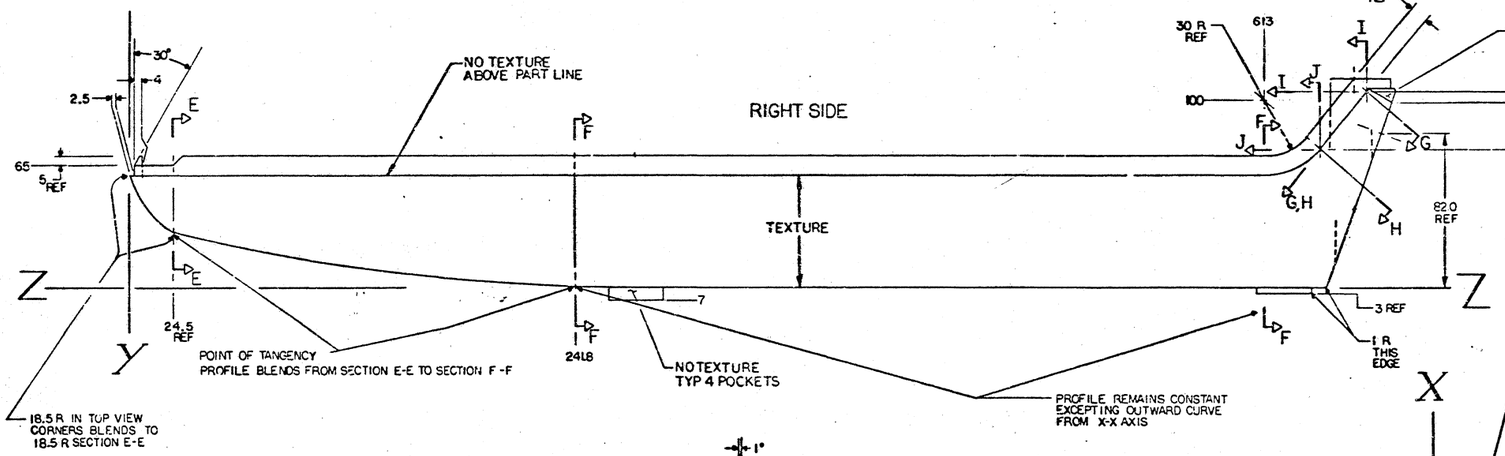
NOTES:

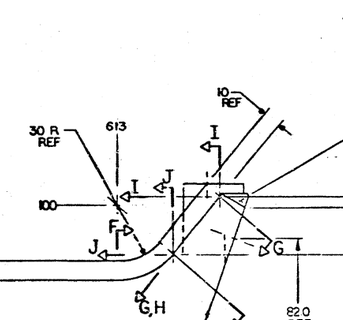
1. BASE IS SYMETRIC ABOUT THE X-X AXIS EXCEPT FOR THE FOLLOWING: A. NOTCH AT 418.5
   B. BOSS AT 129.5 222
   C. BOSS AT 400, 222
   D BOSS AT 169.5, 217
2. DRAFT TO BE 1°
3. ALL DIMENSIONS ARE MILLIMETERS
4. TOLERANCE TO BE:
   ± .1mm FIRST 25 mm
   ± .02mm PER ADDITIONAL 10mm (1cm)
5. NOMINAL WALL 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.4906
10. MATL TO BE GENERAL ELECTRIC NORYL #SE-100-7385.

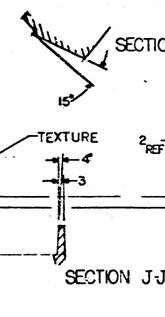


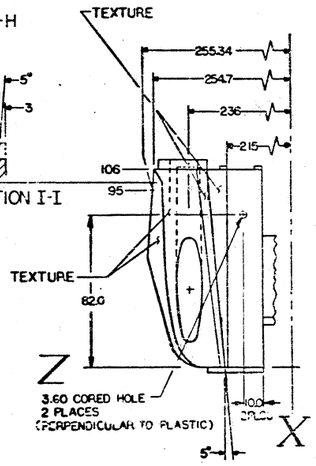


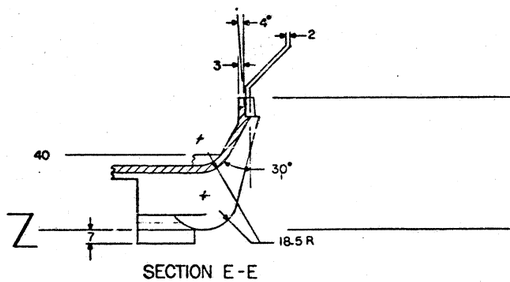


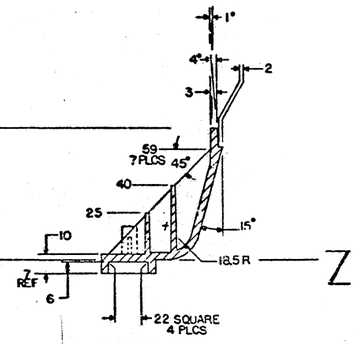


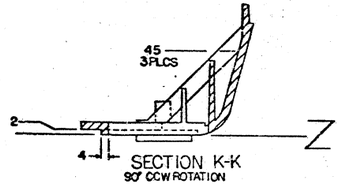


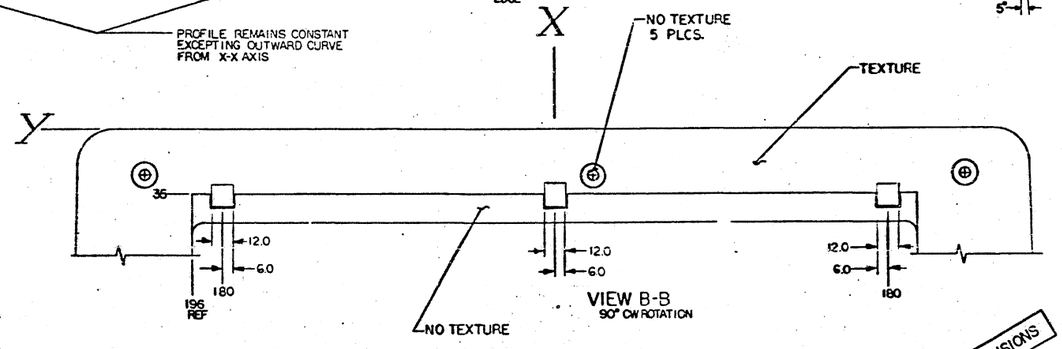


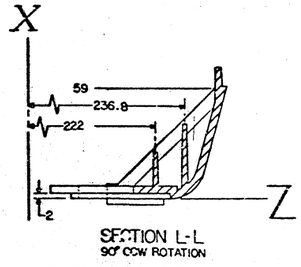


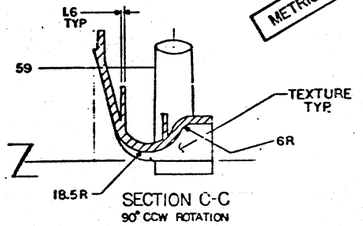








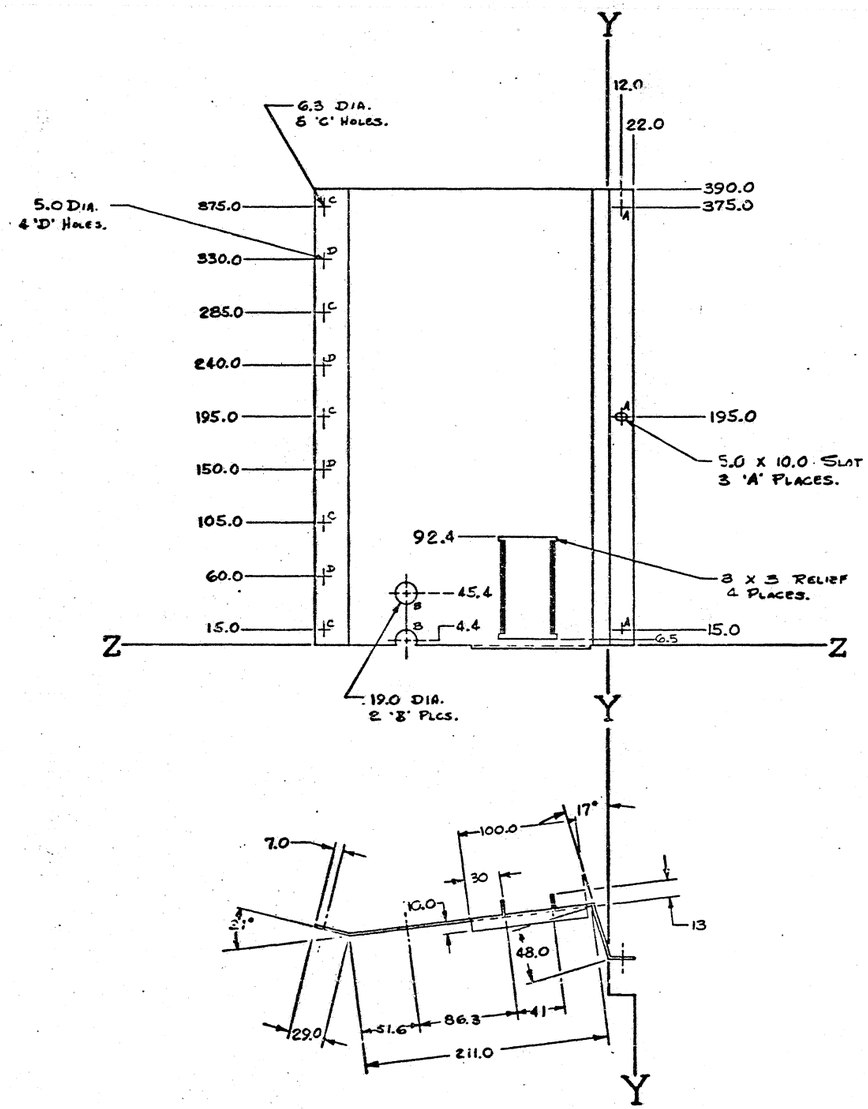




REVISIONS		
ECHG	CHANGE NO.	REV.

TITLE: BASE VT50		SIZE/CODE: E 70	NUMBER: 7411539-0-0	REV: A
SCALE 1/1	SHEET 2 OF 2	DIST.		

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)	NOMINAL DIMENSION RANGE MILLIMETERS					
		OVER 1 TO 5	OVER 5 TO 30	OVER 30 TO 120	OVER 120 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

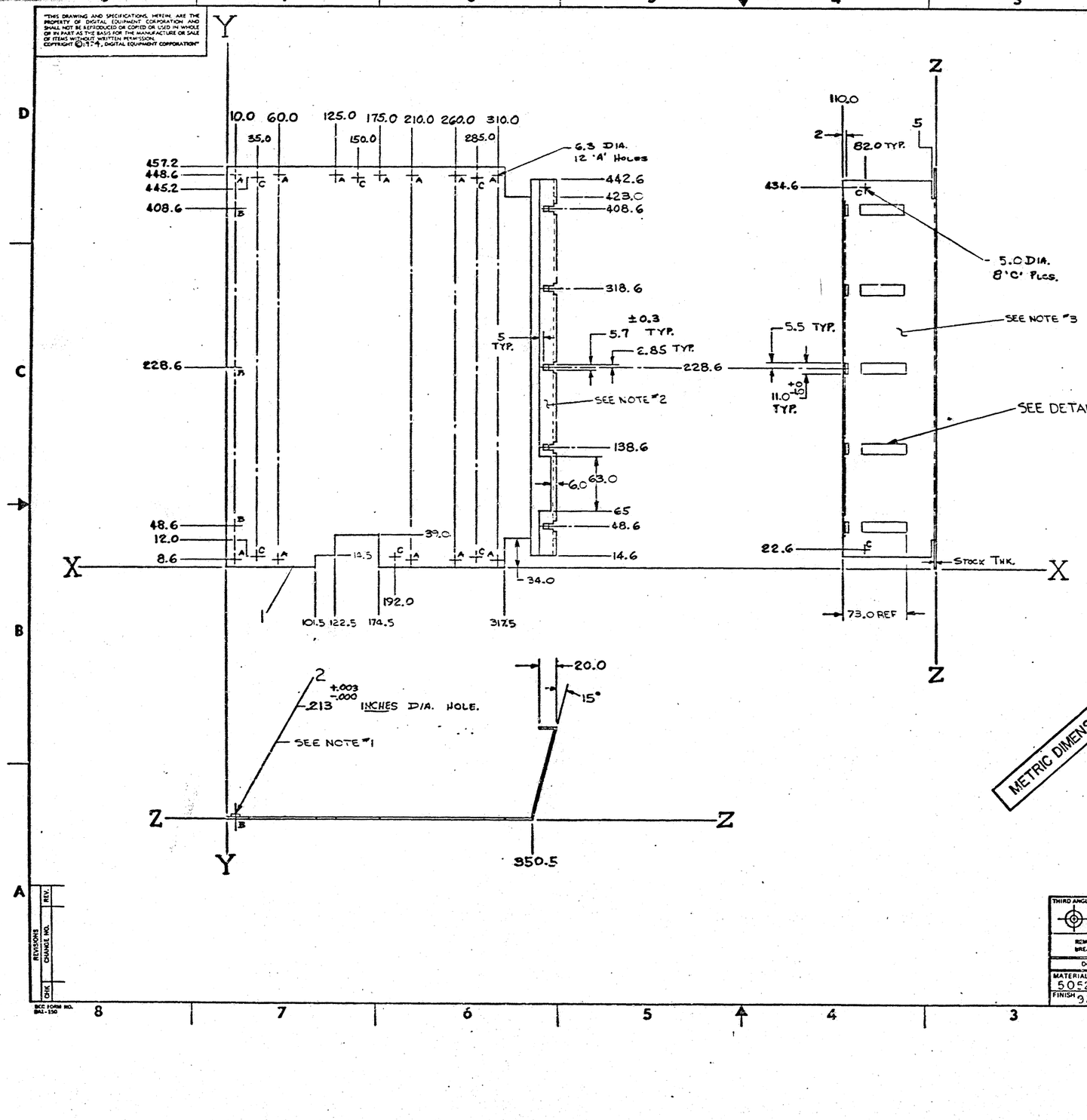
DRN. R A B	12/20/79	FIRST USED ON VT50
CHK'D R A [illegible]	1/14/80	digital
ENG. C N [illegible]	1/17/80	TITLE
PROJ. ENG. [illegible]	2/11/80	SCREEN, BASE, FRONT
PROD. [illegible]	2-11-80	
NEXT HIGHER ASSY.		
MATERIAL SEE NOTES	AD-7010SEB-0-0	SIZE 1 CODE MD NUMBER 7413322-0-0 REV.
FINISH 030020-47	SCALE 1/1	
	SHEET 1 OF 1	DIST.

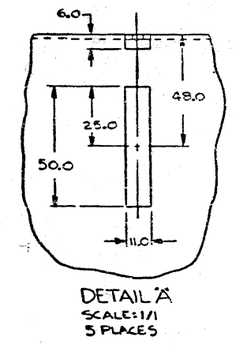
REVISIONS: REV. | CHANGE NO. | CHK

SCC FORM NO. 841-150

1 MD 7413322-0-0

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

ITEM NO.	DWG. PART NO.	DESCRIPTION	QTY
3	9CC9158-3	INSERT "E-32	2
1		SCREEN BASE, REAR	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ± 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER: OVER 1 TO 9	OVER 9 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	±0.8	±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 1.5 (.062) THK 5052-H32

FINISH 92-00150-147

DRN. HAP 3/23/74
CHK'D 4/12/75
ENG. 4/14/75
PROJ. ENG. 4/3/75
PROD. 4/3/75
NEXT HIGHER ASSY.

FIRST USED ON VT50

digital

TITLE
SCREEN, BASE, REAR

SIZE	CODE	NUMBER	REV.
1	1A	7413323-0-0	

SCALE
SHEET 1 OF 1
DIST.

1 1A 7413323-0-0

REVISIONS | REV. | CHANGE NO. | CHK.

BCE FORM NO. 851-150

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

VT50 FEATURES

CONTROL CODES

ESCAPE SEQUENCES

HOLD SCREEN MODE COMMANDS

METRIC DIMENSIONS

REVISIONS	REV.	CHANGE NO.	CHK

DEC FORM NO. BM1-350

1	DECAL, (ARTWORK)	C-DC-7413497-0-1	2
1	DECAL, BASE		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					
SURFACE QUALITY IN ✓ MICROINCHES		OVER 0 TO 3	OVER 3 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
	MEDIUM ☐	±.01	±.02	±.03	±.04	±.06	±.10
	PREFERRED ☐	±.03	±.04	±.05	±.10	±.15	±.25

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTE #1

FINISH —

DRN. P.C. 1-27-75
CHK'D. [illegible] 1-29-75
ENG. [illegible] 1-27-75
PROJ. ENG. [illegible]
PROD. [illegible]
NEXT HIGHER ASSY. D-UA-VT50-0-0
SCALE 1/1
SHEET 1 OF 1

FIRST USED ON VT50

digital

TITLE
DECAL, BASE

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

DIST.

1 IA 7413497-0-0

DRN.		SIZE	REV.
CHK'D		C	
ENG.		SCALE	
PROJ. ENG.		SHEET	
PROD.			
NEXT HIGHER ASSY.			
TITLE		NUMBER	
FIRST USED ON		DIST.	

digital

REVISIONS

REV.	CHANGE NO.	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 appear 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.

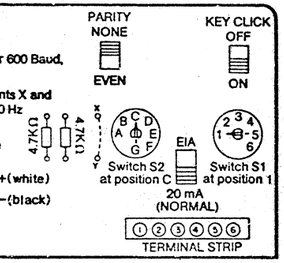
Notes:

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

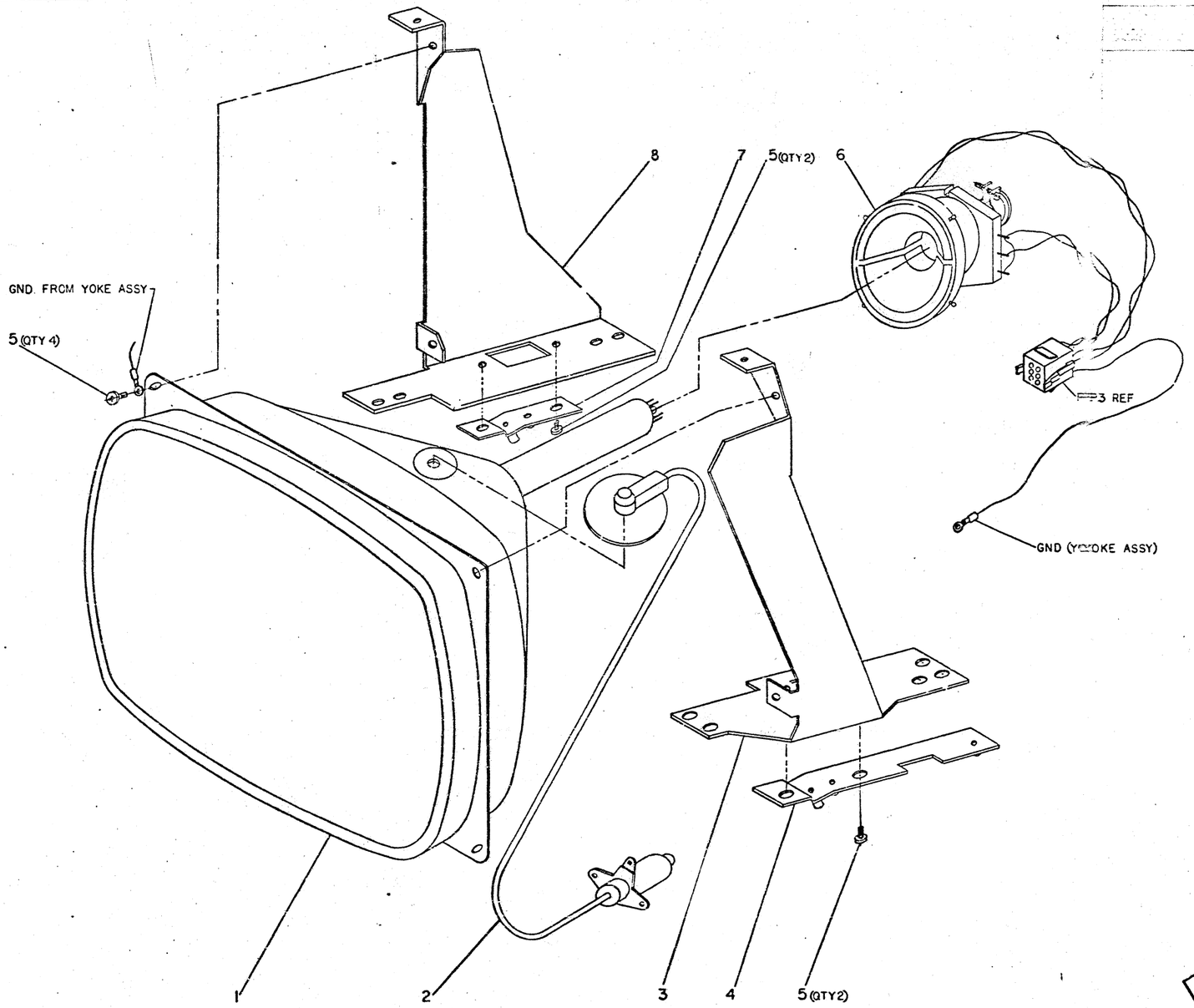
ctrl G	Ring buzzer
ctrl H (or BACKSPACE)	Move cursor left one position
ctrl I (or TAB)	Move cursor to next TAB stop
ctrl J (or LF)	Move cursor down one line
ctrl M (or RETURN)	Move cursor to leftmost position in line
ESC	1. Enter Escape Mode (Prepare to process an Escape Sequence) 2. Exit Escape Mode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

QTY	DESCRIPTION	DWG PART NO	ITEM NO
1	BRACKET, CRT LEFT	1-IA-7413720-00	5
1	BRKT, PC BD TO CRT BRKT LEFT	2-IA-7413328-00	7
1	YOKE ASSEMBLY	3 IA-7010902-00	6
8	SCREW, PNL, PAN HD 8-32×.31	9006036-1	5
1	BRKT, PC BD TO CRT BRKT RT	2 IA-7413325-00	4
1	BRACKET, CRT RIGHT	1-IA-7413327-00	3
1	CONN, HIGH VOLTAGE		2
1	CATHODE RAY TUBE	1211901	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ± 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL MINIMUM RANGE MILLIMETER					
		0 TO 6	6 TO 30	30 TO 120	120 TO 315	315 TO 1000	1000 TO 2500
SURFACE QUALITY 125	MEDIUM	.1	.2	.3	.4	.6	.8
	PREFERRED	.05	.1	.2	.3	.4	.6

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG.

DRN 12-2-75 — FIRST USED ON VT50

CHK

ENGR

APPD

MFG

TITLE: CRT ASSEMBLY

MATERIAL: SEE PARTS LIST

FINISH

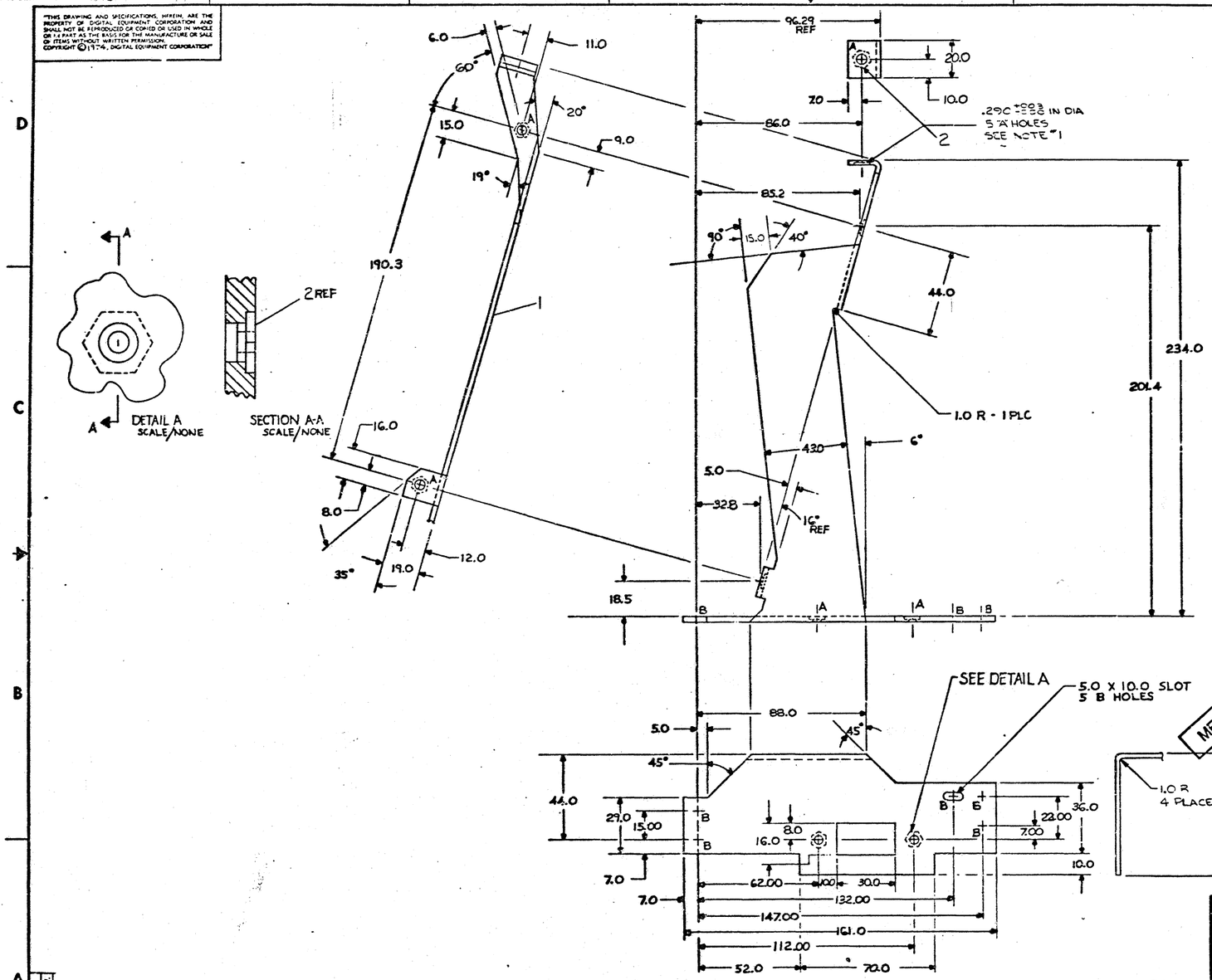
SIZE: B | CODE: AD | NUMBER: 70108599-0-0 | REV.

SCALE

SHEET 1 OF 1 | DIST

REVISIONS		
DWG	CHANGE NO	ATY

70108599-00 AA



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

ITEM NO.	DESCRIPTION	DWG./PART NO.	QTY.
5	INSERT "E-32	9005865	2
1	BRACKET, CTR RIGHT		1

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 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. R.A. HUTNAK 11/19/74
CHK'D
ENG.
PROJ. ENG. 12/3/75
PROG.
NEXT HIGHER ASSY.

FIRST USED ON: VT50

TITLE: BRACKET, CRT RIGHT

MATERIAL: 23(093) THK. CRS
FINISH: 92-00120-94

LAD-TOLERANCED C-C
SCALE 1/1
SHEET 1 OF 1

SIZE 1 | CODE IA | NUMBER 7413320-0-0 | REV

DIST.

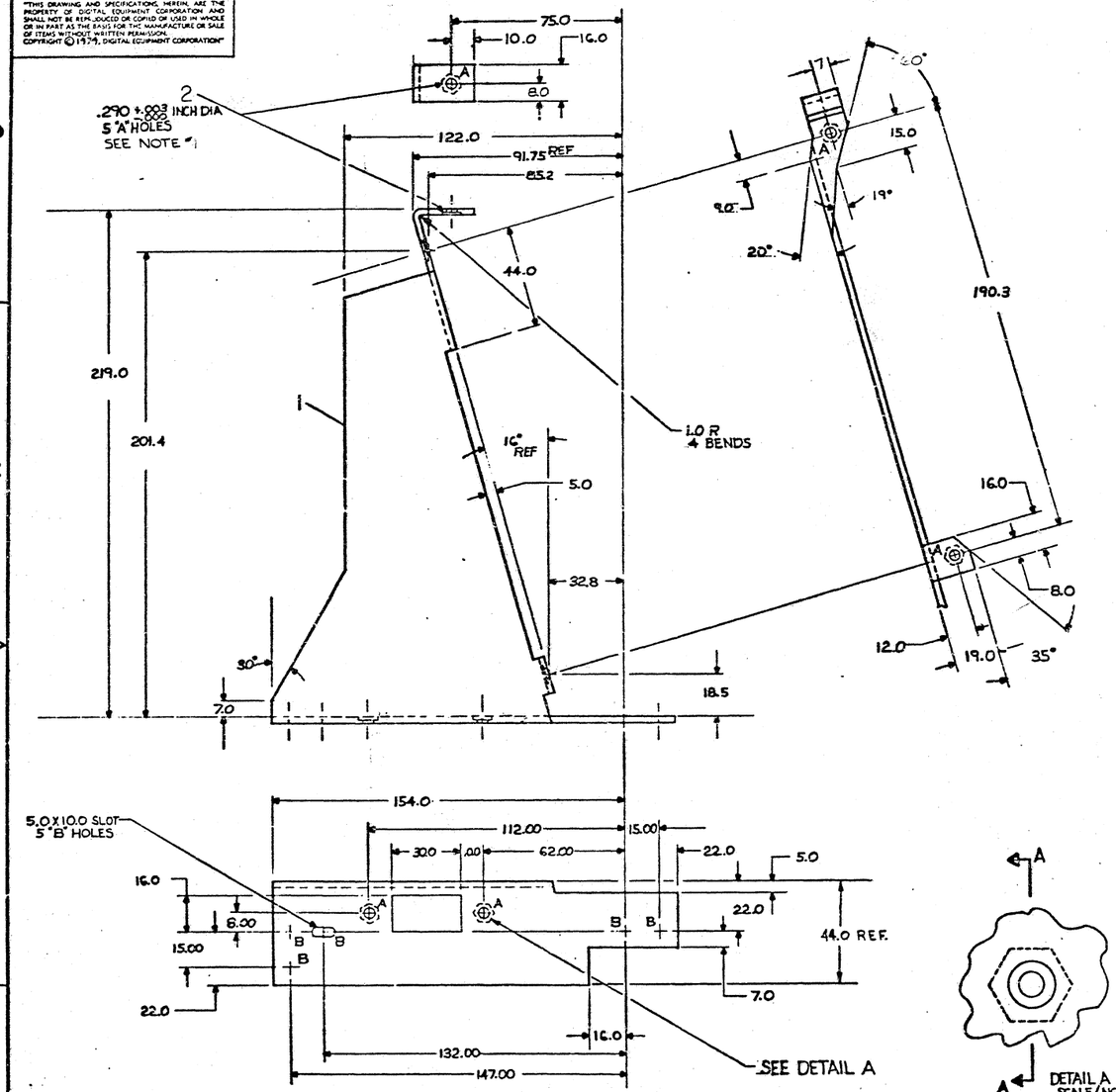
digital

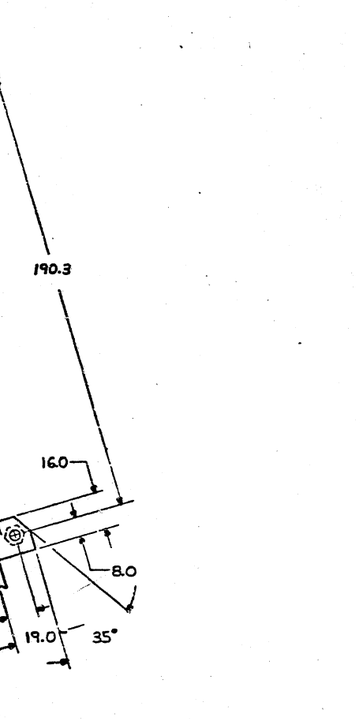
REVISIONS	REV.	CHG. NO.	CHK.

BSC Form no. BE-230

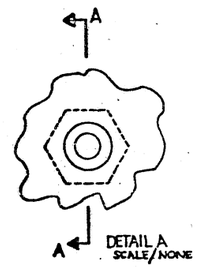
7413320-0-0
1 IA
B
A

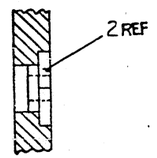
NOTE:
1. INSTALL ITEM 2 INSERT 5 "A" PLACES





METRIC DIMENSIONS





REVISIONS		
CHK	CHANGE NO.	REV.

ITEM NO.	DWG PART NO.	DESCRIPTION	QTY
5	9008865	INSERT 8-32	2
1		BRACKET, CTR LEFT	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 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	R.A. HUTNAK 11/19/74
CHK'D	11/25
ENG.	11/25
PROJ. ENG	12/3/75
PROD.	
NEXT HIGHER ASSY.	

FIRST USED ON: VT50

TITLE: BRACKET, CRT LEFT

MATERIAL	SIZE	CODE	NUMBER	REV
23(093) THK CRS AS 7016 B59-C-C	1	1A	7413321-0-0	
SCALE 1/1				
FINISH 9200120-94	SHEET 1 OF 1	DIST.		

digital

1 1A 7413321-00

ECO RUN/ 1842 - 1520

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

PURCHASE SPECIFICATIONS

TITLE: YOKE DEFLECTION

1. GENERAL DESCRIPTION:
   Deflection Yoke with an inductance of 107 μH $\pm$ 5% horizontal coils connected in parallel, an inductance of 29.9 mH $\pm$ 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 $\pm$ 5%
   C) Resistance: 0.2 Ω $\pm$ 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 $\pm$ .005, two place decimals $\pm$ .02, one place decimal $\pm$ .1; Angles $\pm$ 0° 30'.

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

3.2 Electrical: (continued)

3.2.4 Vertical Coils:
A) Connection: Shall be in series
B) Inductance: 29.9mH $\pm$ 10%
C) Resistance: 16.4 Ω $\pm$ 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	

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 $\pm$ 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; 1.895 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	

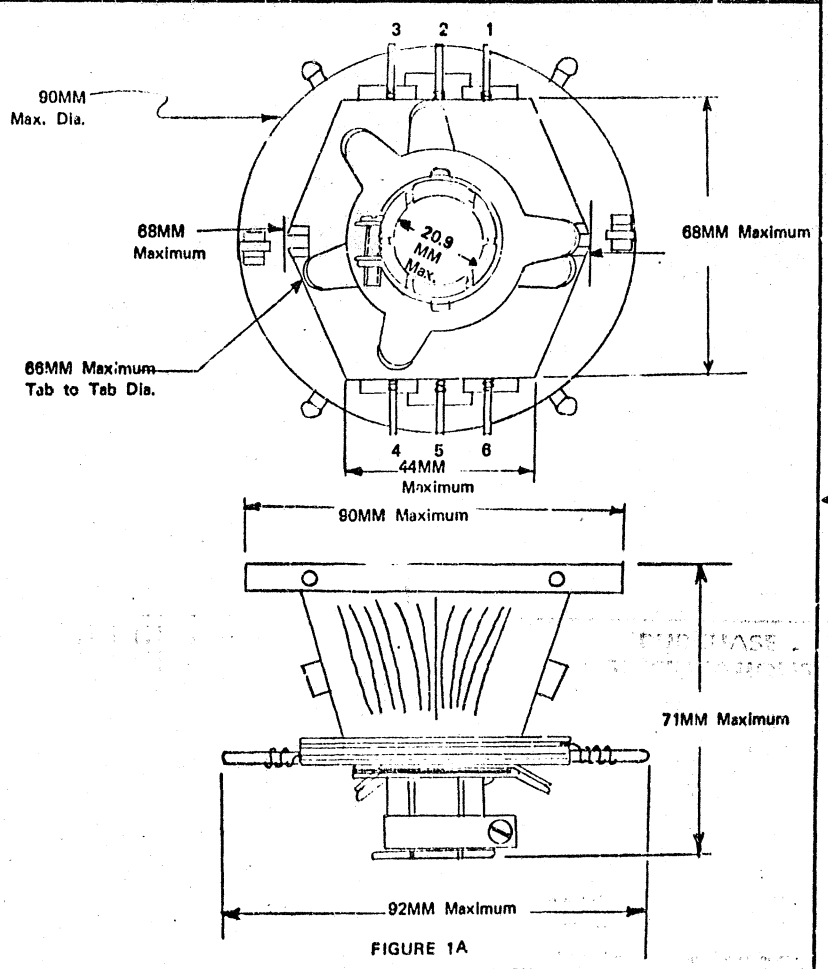


FIGURE 1A
MECHANICAL CONFIGURATION

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

ALTERNATE MECHANICAL CONFIGURATION

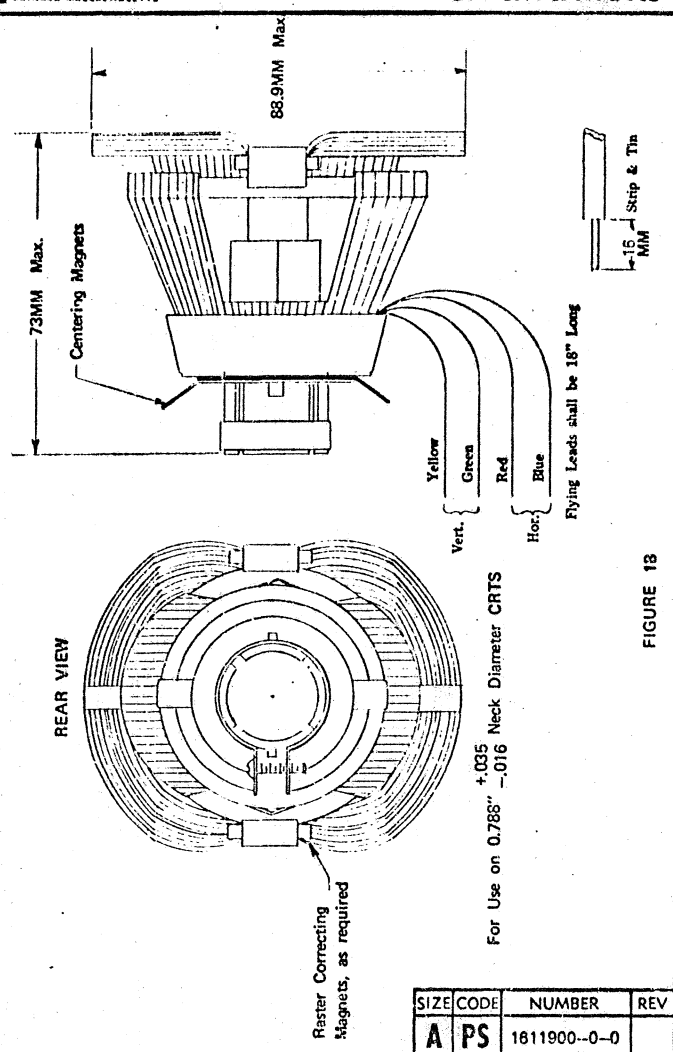


FIGURE 1B

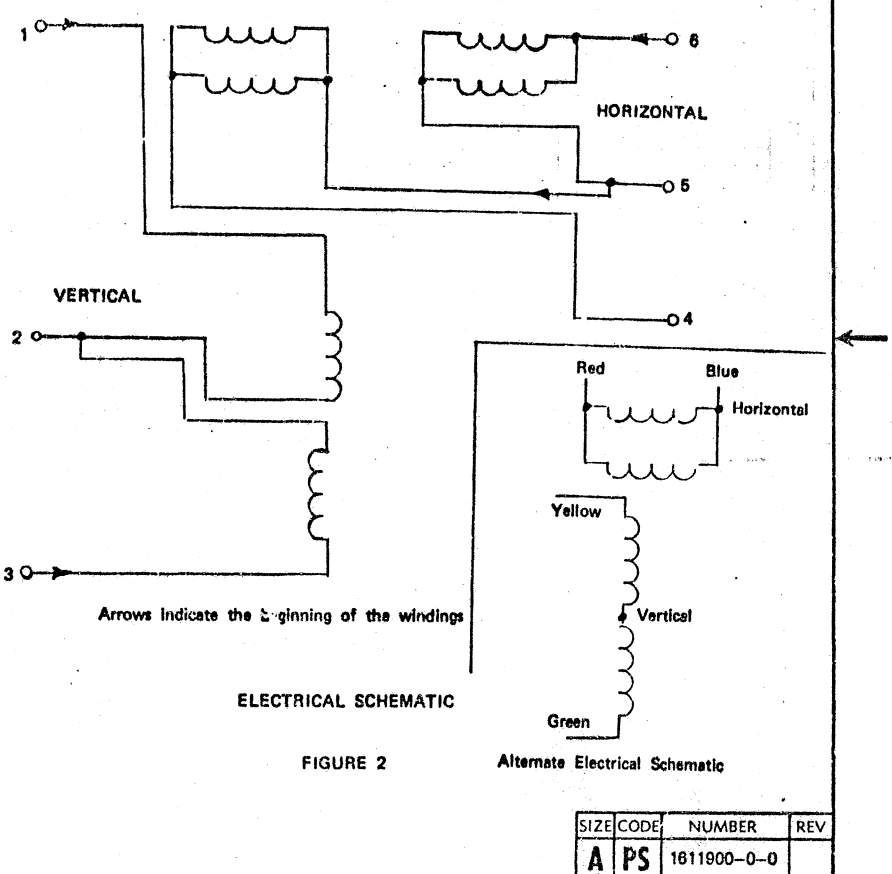
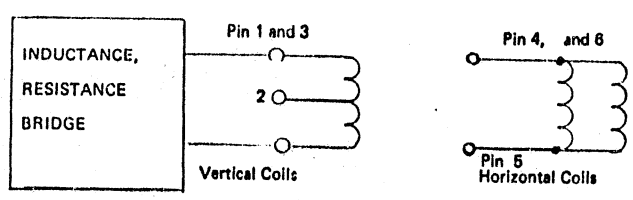


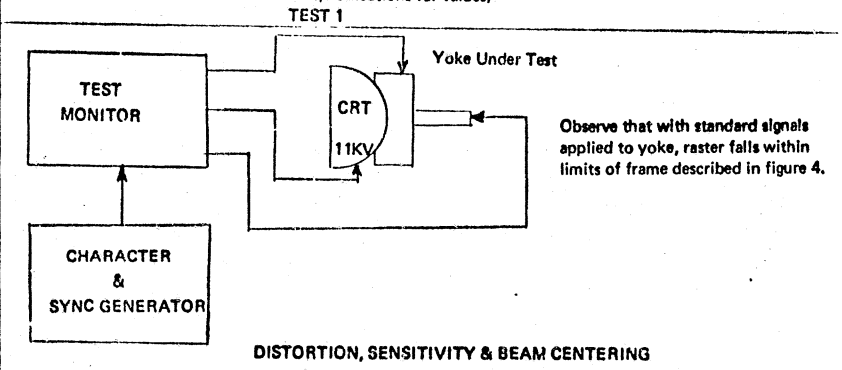
FIGURE 2



INDUCTANCE/RESISTANCE MEASUREMENTS

(measure L & Rdc. See specifications for values)

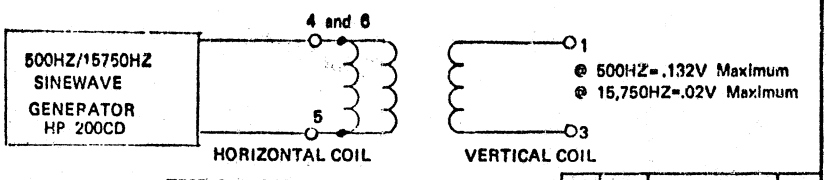
TEST 1



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

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.

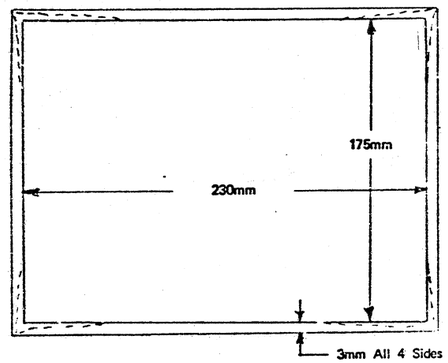
E) Rotate the assembly and note the deflection limits of the spot.

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.

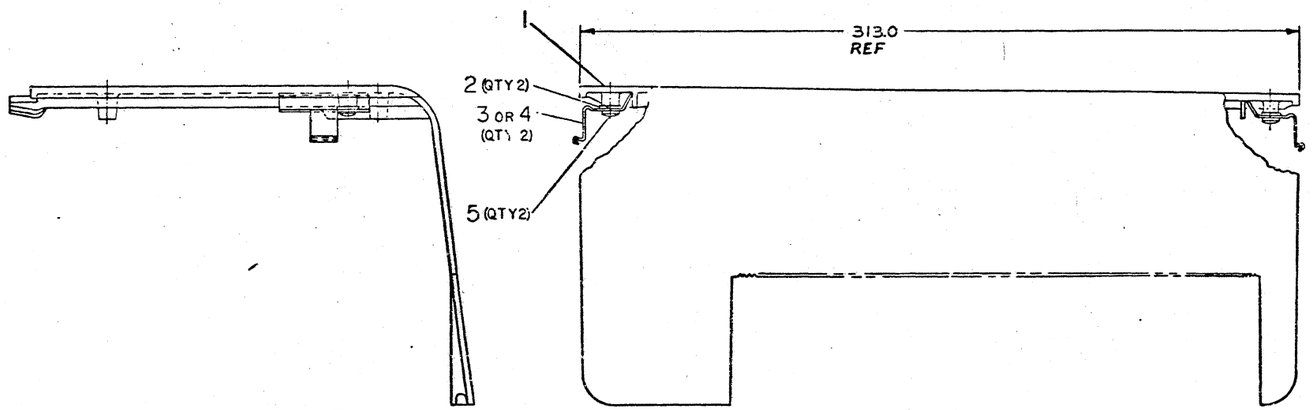
B. With height and width controls set ot produce a rastor 230mm wide by 175mm high, all distortion shall fall within the 3mm wide frame as shown in Figure 4.



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, #8-32 x .25	9007224-1	5
2	-	BRACKET, COPIER COVER	1-MD-7413290-00	4
-	2	BRACKET, COPIER COVER	1-MD-7413300-00	3
2	2	WASHER, FLAT	7006662	2
1	1	COPIER COVER	E-MD-7412574-00	1
		DESCRIPTION	DWG. PART NO.	ITEM NO.

7010847-2-0
7010847-1-0

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

QUANTITY & VARIATION	ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK OPTION)	NOMINAL DIMENSION RANGE MILLIMETER OVER 1 TO 5	OVER 5 TO 10	OVER 10 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000
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 PARTS LIST

FINISH

DRN. Pappalardo 12-9-75
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

digital

TITLE
COPIER COVER ASSEMBLY

SIZE	CODE	NUMBER	REV.
B	AD	7010847-0-0	

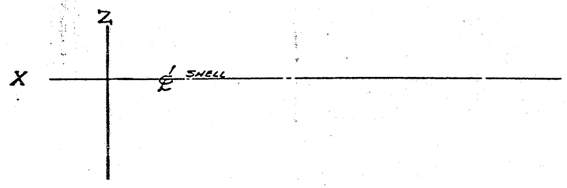
DIST.

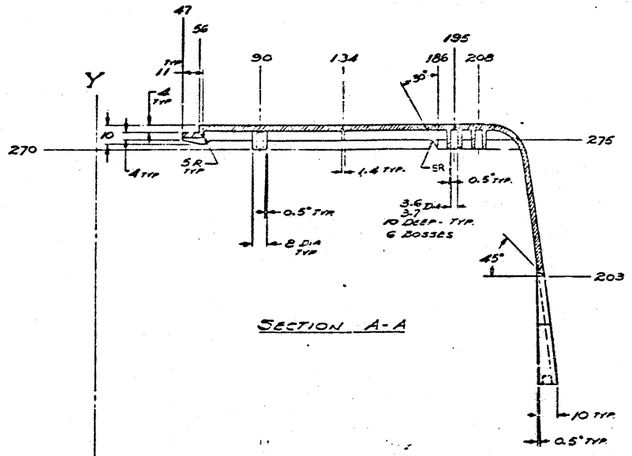
REVISIONS	REV.
CHANGE NO.	
CH	

DEC FORM NO. DA1-320

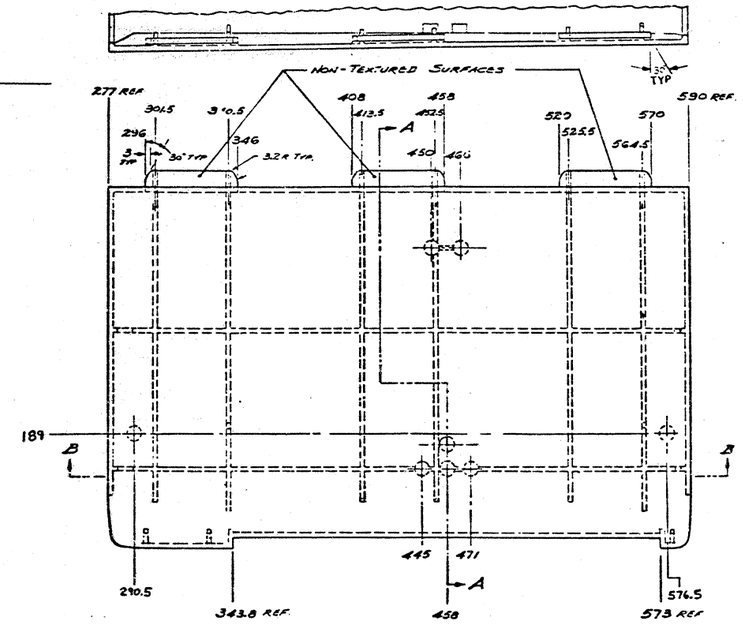
1 AD 7010847-0-0

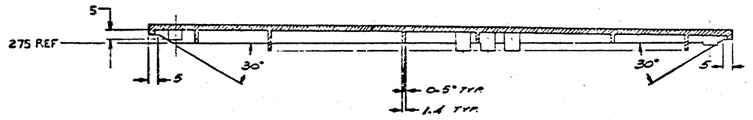
1 AD 7010847-0-0



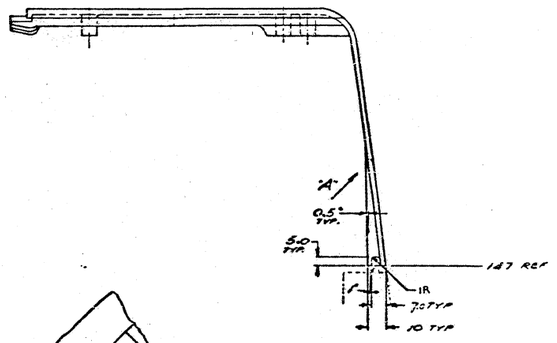


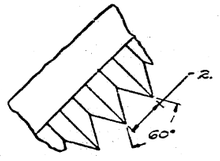
SECTION A-A



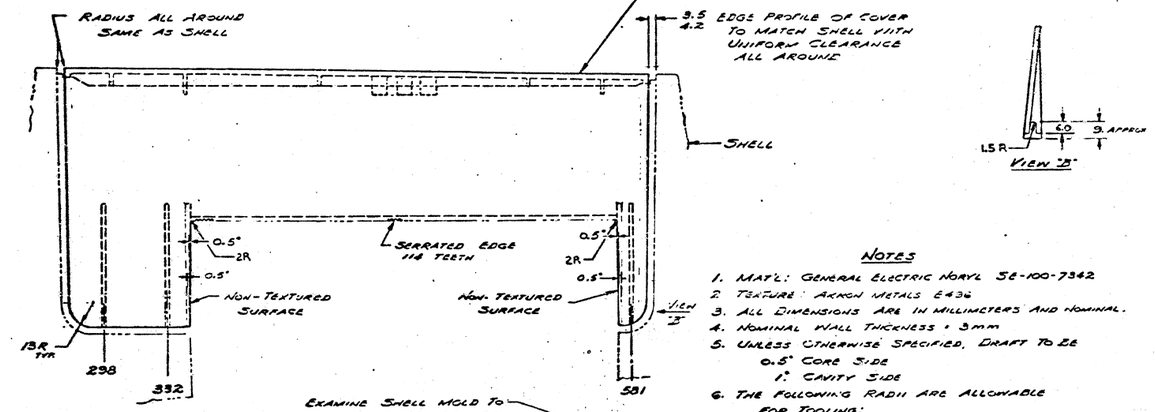


SECTION B-B





DETAIL OF SERRATION AT "A"
SCALE 10X



NOTES

1. MATL: GENERAL ELECTRIC NORYL SE-100-7342
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.

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

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 ±1.	X ±.1	

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL GENERAL ELECTRIC NORYL SE-100-7342

FINISH ARMOR METALS E436

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

NEXT HIGHER ASSY.

SCALE ½
SHEET 1 OF 1

CHG NO. | REVISIONS | REV.

digital

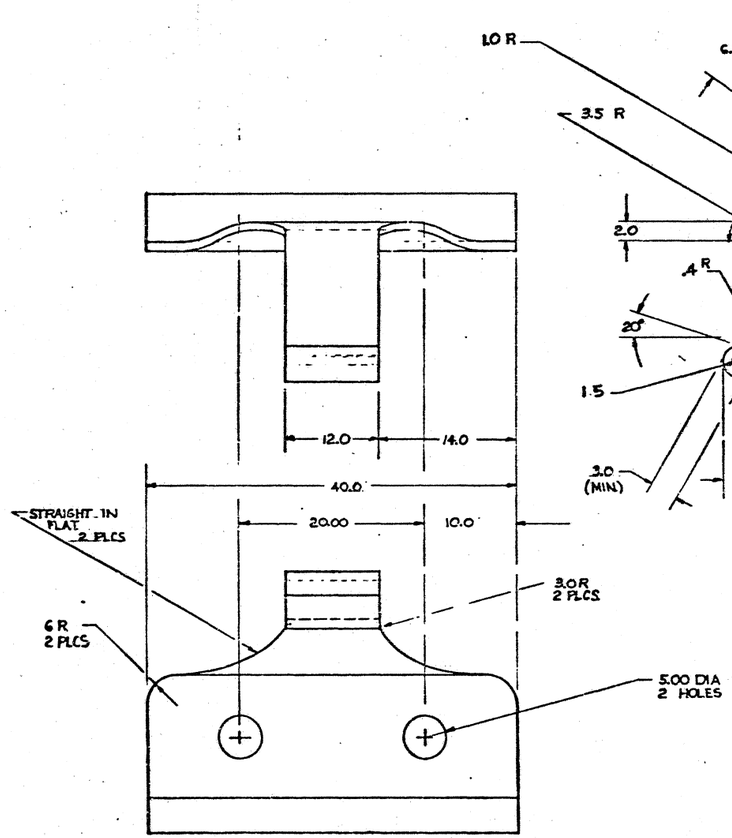
TITLE
COPIER COVER
VT 50

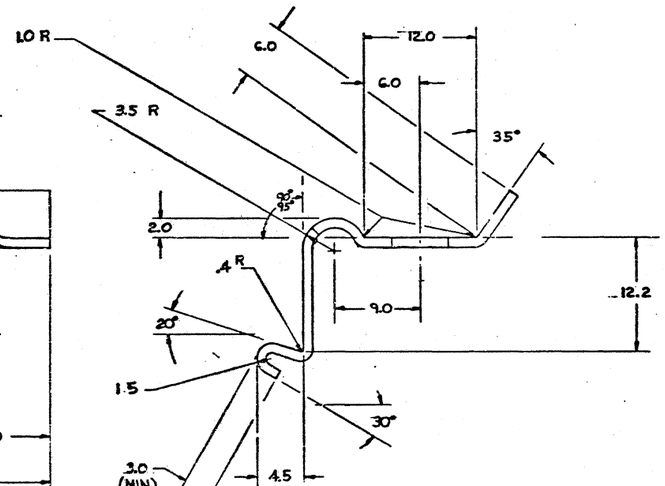
SIZE E | CODE MD | NUMBER 7412574-00 | REV

DIST

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 ±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 NOTE #1

FINISH NONE

DRN R.A. HUTNAK 12/18/74 — FIRST USED ON VT50 — digital

CHK'D K. [illegible] 1/3/75

ENG. K. [illegible] 1/3/75

PROJ. ENG [illegible] 1/3/75

PROD. [illegible] 1-3-75

NEXT HIGHER ASSY.

LDD. 7010647-0-0

SCALE 4/1

SHEET 1 OF 1

TITLE: BRACKET, COPIER COVER

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

DIST.

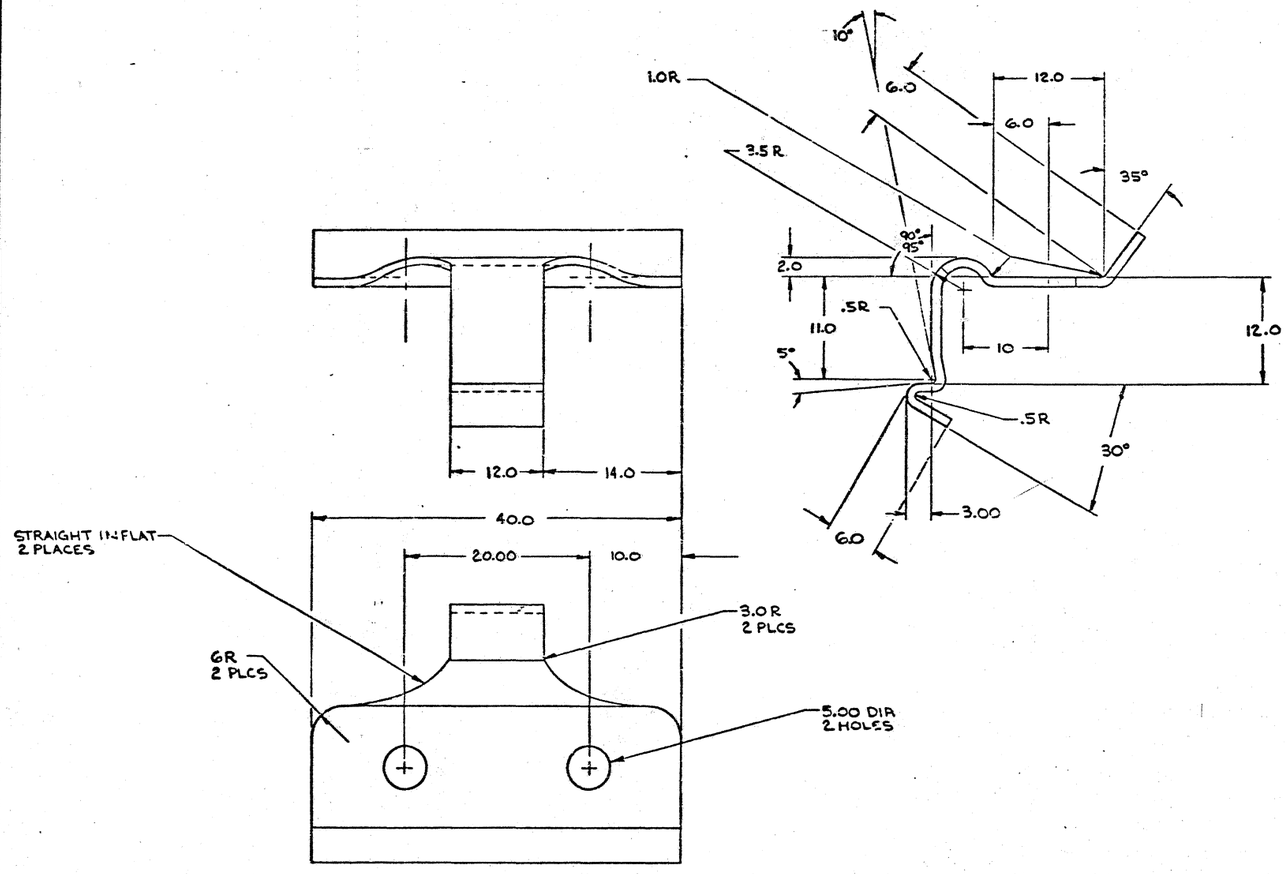
REVISIONS: REV. | CHANGE NO. | CHK

BLC FORM NO. 843-330

7413330-0-0 MD 1

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 (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER: OVER 1 TO 10 / OVER 6 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 NOTE #1

FINISH NONE

DRN [illegible] 5-3-76 — FIRST USED ON VTE6 — digital

CHK'D [illegible] 5-4-76

ENG [illegible] 5-4-76

PROJ. ENG. [illegible] 5/4/76

PROD [illegible]

NEXT HIGHER ASSY.

TITLE: BRACKET, COPIER COVER(REMOVABLE)

AD-[illegible]0847-0-0

SIZE 1 | CODE M.D | NUMBER 74133290-0 | REV.

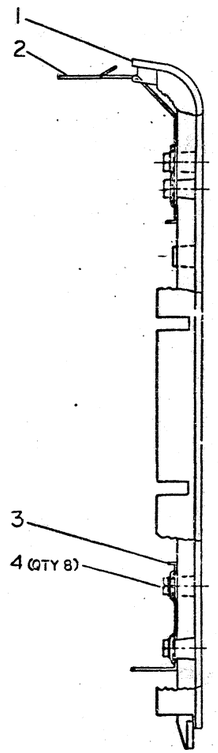
SCALE 1/1

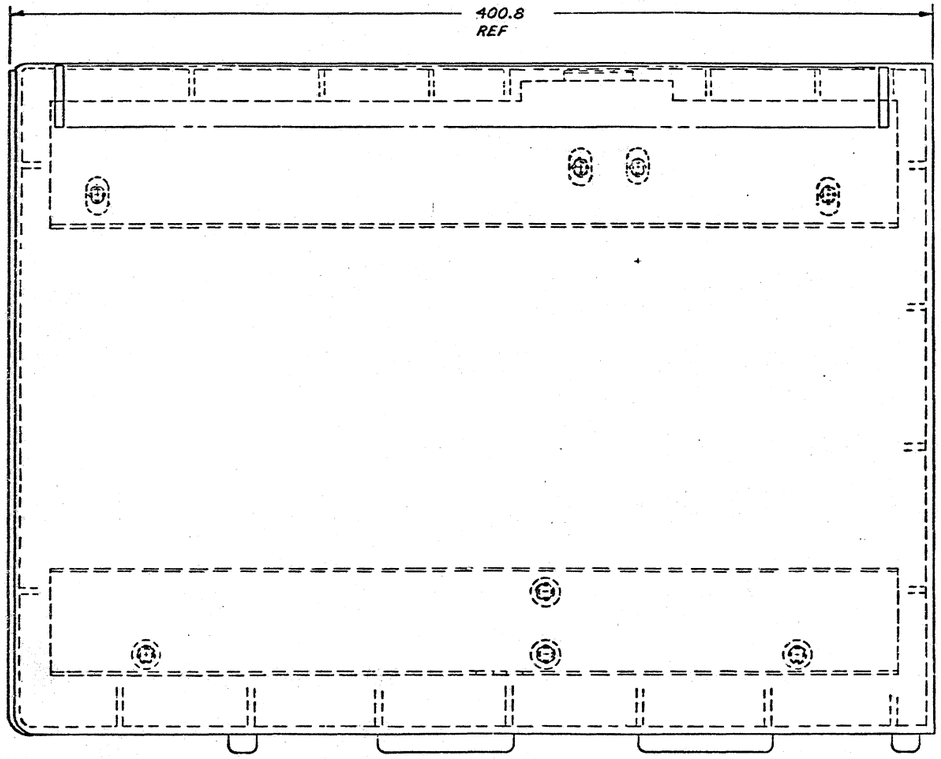
SHEET 1 OF 1 | DIST.

REVISIONS	REV.	CHANGE NO.	CHK

DEC FORM NO. 241-150

1 MO 74133290-0





METRIC DIMENSIONS

8	SCREW, HEX HD. #8x3/8	9009681-5	4
1	STIFFENER, BLANK COVER	D-MD-7413331-0-0	3
1	HOLD DOWN, BLANK COVER	D-MD-7413333-0-0	2
1	FIXED COVER	D-MD-7412573-0-0	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 6	OVER 6 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	±.06	±.10	±.16	±.25

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN [signature] 1-23-75
CHK'D [signature]
ENG [signature]
PROJ. ENG [signature]
PROG. [signature]

NEXT HIGHER ASSY.

FIRST USED ON VT50

digital

TITLE
COVER BLANK
FIXED ASSEMBLY

MATERIAL SEE PARTS LIST
FINISH

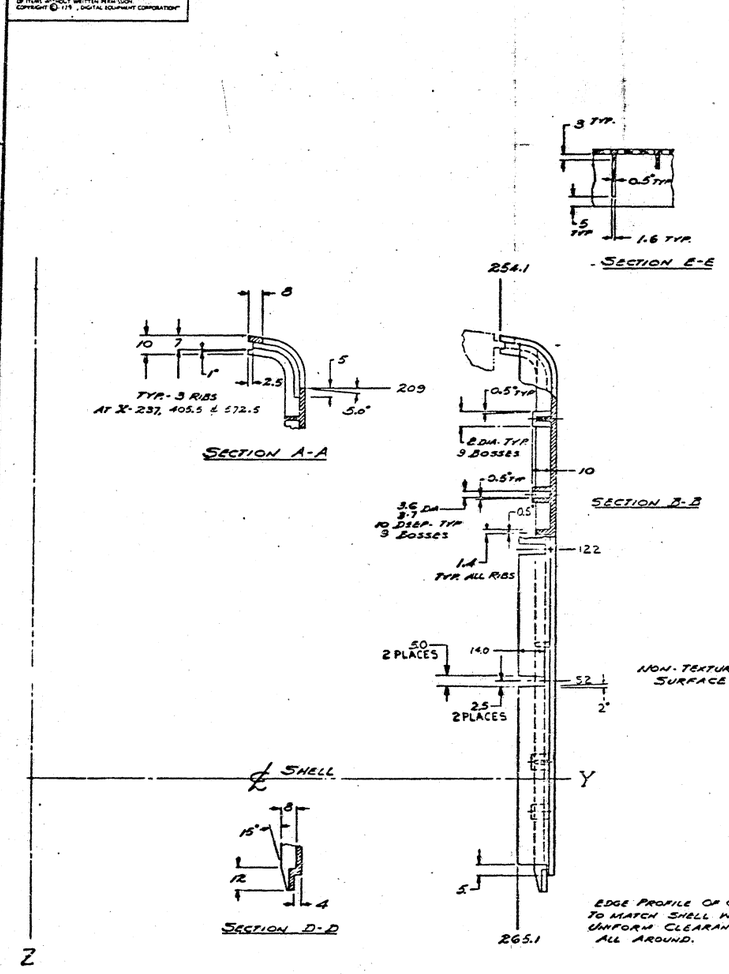
SIZE 1 | CODE AD | NUMBER 7010846-0-0 | REV.

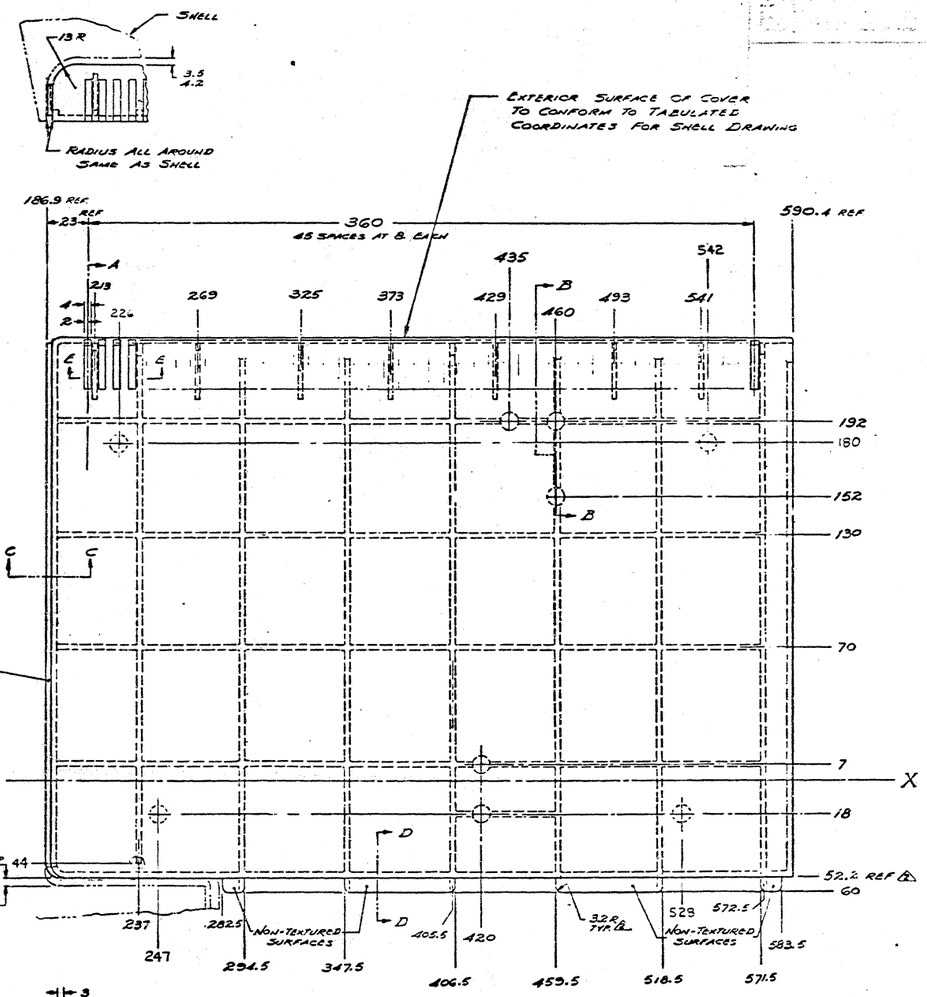
SCALE 1/1
SHEET 1 OF 1
DIST.

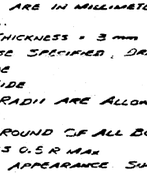
REVISIONS: REV. | CHANGE NO. | D.N.

DEC FORM NO. DNS-150

1 AD 7010846-0-0







NOTES

1. MAT'L: GENERAL ELECTRIC NORYL SE-100-7342
2. TEXTURE: AKRON METALS E496
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 MAX
   b. EXTERNAL APPEARANCE SURFACES 0.5 / 0.8 R
7. XYZ DATUM LINES ARE SAME AS USED ON SHELL DRAWING.

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

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETRES UNLESS OTHERWISE SPECIFIED

MILLIMETRES	INCHES	ANGLES
XXX ±0.10	XXX ±0.005	45' 30'
XX ±0.25	XX ±0.01	
X ±0.5	X ±0.1	

THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP
CONFORM SURFACE QUALITY ✓
NEXT HIGHER ASSY

MATERIAL
FINISH AKRON METALS A-825

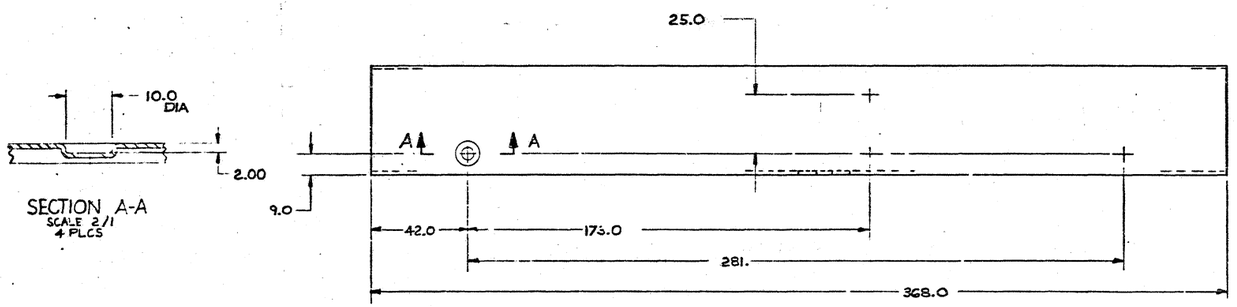
DRN. DATE
CHK'D DATE
ENGR DATE
PROJ ENG DATE
PROD DATE

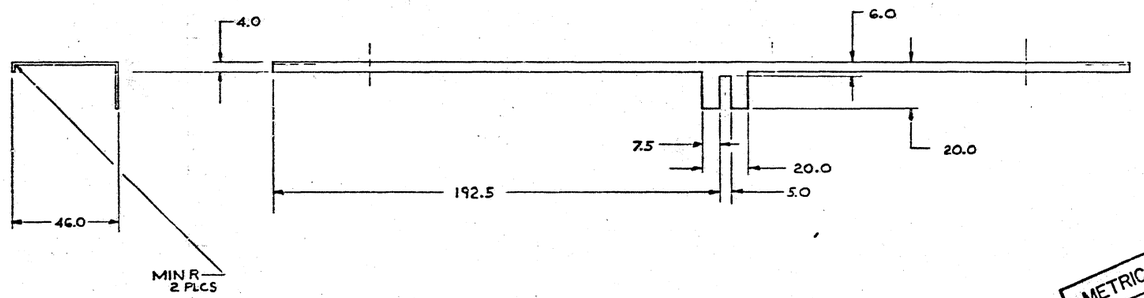
digital

TITLE
FIXED COVER
VT50

SCALE 1/1
SHEET 1 OF 1
SIZE E CODE 14 NUMBER 74125730 REV.
DIST

CHG NO. REVISIONS REV.





METRIC DIMENSIONS

REVISIONS	REV.	CHANGE NO.	CHK

ECO FORM NO. BMD 300-0

DESCRIPTION	DWG./PART NO.	ITEM NO.
*UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	*DECIMAL DIMENSION RANGE INCHES					
		OVER 0 TO 0.2	OVER 0.2 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	±.018	±.025	±.04	±.063	±.1

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG.

DRN.		
CHK'D		
ENG.		
PROJ. ENG.		1/75
PROD.		
NEXT HIGHER ASSY.		
MATERIAL .248 12H THK C.R.S.	LPD-VC12-4630-0	
SCALE 1/1		
FINISH 9300120-68	SHEET 1 OF 1	

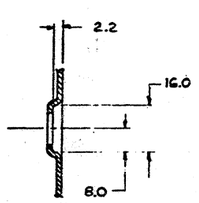
FIRST USED ON VT50

digital

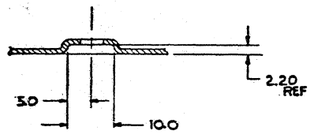
TITLE
STIFFNER,
BLANK COVER

SIZE	CODE	NUMBER	REV.
D		7413331-0-0	
DIST.			

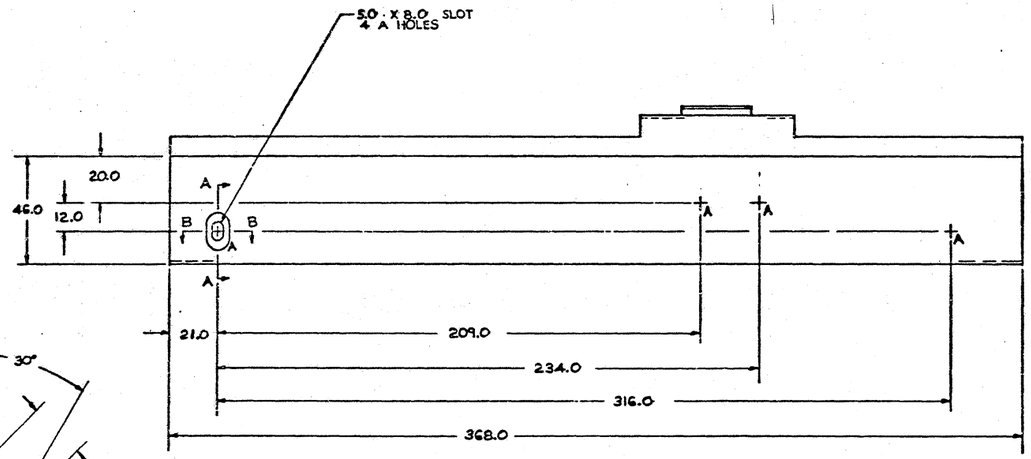
SIZE	CODE	NUMBER	REV.
D	MC	7413331-0-0	

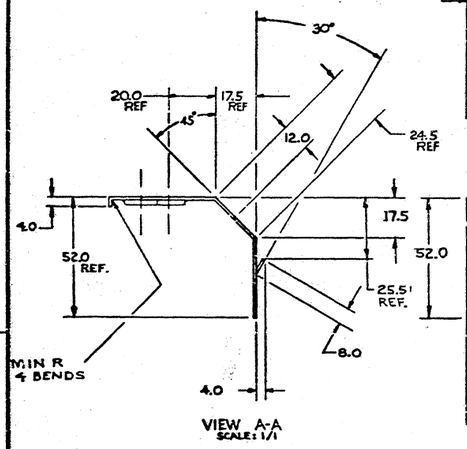


SECTION A-A
SCALE: NONE
TYP 4 PLCS

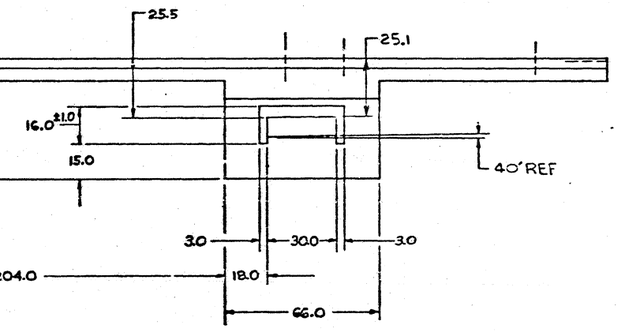


SECTION B-B
SCALE: NONE
TYP 4 PLCS





VIEW A-A
SCALE: 1/1



A
A

METRIC DIMENSIONS

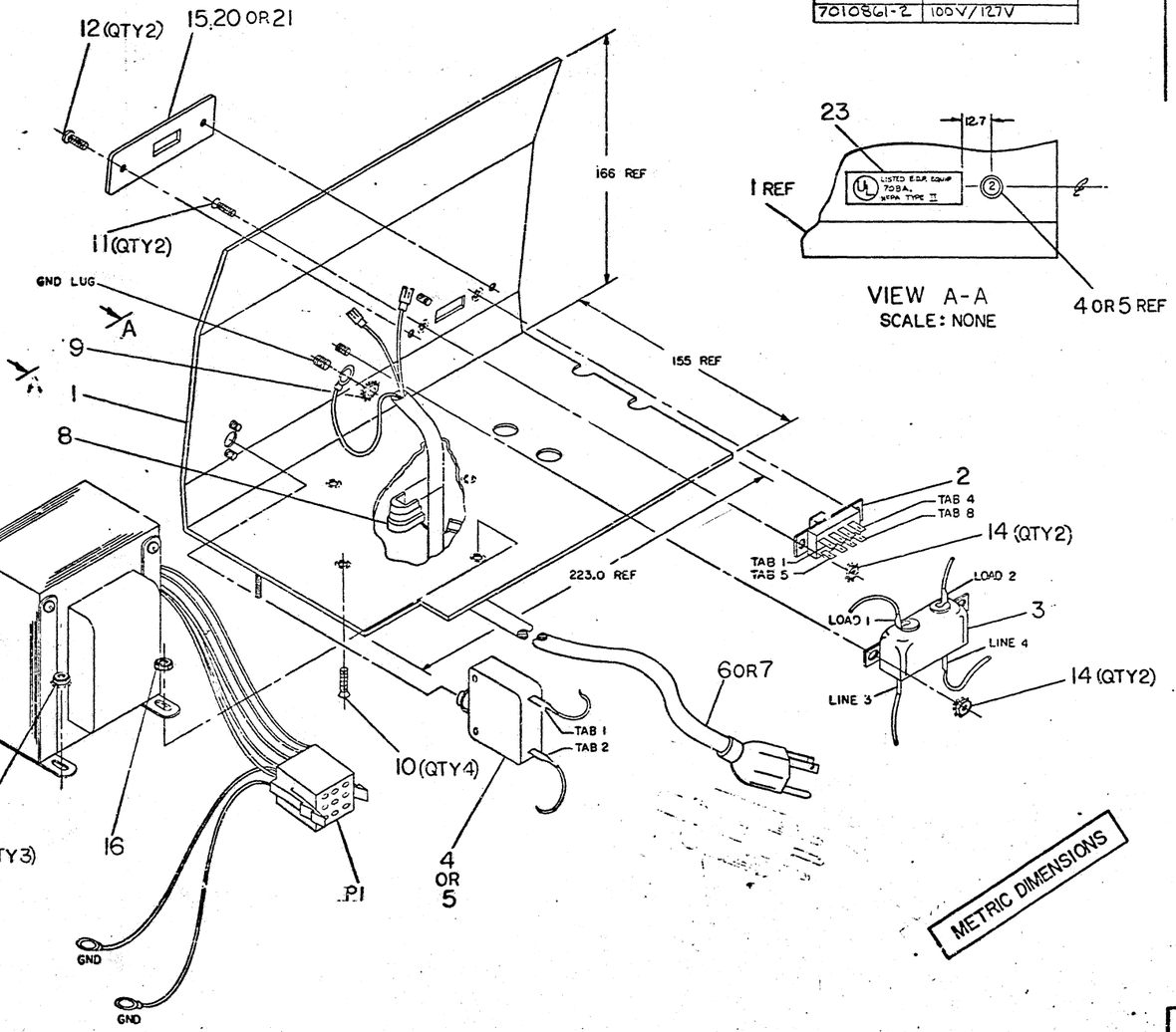
REVISIONS	REV.								
	CHANGE NO.								
	CHK.								

DEC Form 101-1150

	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 10	OVER 10 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
QUANTITY & VARIATION	SURFACE QUALITY IN MICROINCHES	MEDIUM	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
		PREFERRED	±0.2	±0.4	±0.6	±1.0	±1.5	±2.5

THIRD ANGLE PROJECTION	DRN. R.C. HUTNAK	12/17/74	FIRST USED ON: VT50
	CHK'D R. Quinlo	1/3/75	digital
	ENG. R. Quinlo	1/3/75	TITLE: COVER, BLANK HOLD DOWN
REMOVE BURRS AND BREAK SHARP CORNERS	PROJ. ENG. [illegible]	1/3/75	
	PROD. [illegible]	1/3/75	
DO NOT SCALE DWG	NEXT HIGHER ASSY.		
MATERIAL 1.2 (.048) THK. CRS.	92-7010-44-0-0		SIZE 1 CODE MD NUMBER 7413333-0-0 REV
FINISH 92-00120-68	SCALE 1/1		
	SHEET 1 OF 1		DIST.

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

			DESCRIPTION	DWG./PART NO.	ITEM NO.
1	1	1	STICKER, VT50 U.L.	ADC-7403213-0-0	23
1	-	-	HARNESS, TRANSFORMER (50HZ)	C-IA-7011131-1-0	22
1	-	-	PLATE, VT50-51	2-IA-7413407-3-0	21
-	1	-	PLATE, VT50-51	2-IA-7413407-2-0	20
-	1	-	HARNESS, TRANSFORMER (50HZ)	1-IA-7011131-0-0	19
-	-	1	HARNESS, TRANSFORMER (60HZ)	1-IA-7011130-0-0	18
A/R	A/R	A/R	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	C-IA-7011019-1	7
-	-	1	CORD POWER, 115V	C-IA-7011019-0	6
-	1	-	BREAKER CIRCUIT	1210242-01	5
1	-	1	BREAKER CIRCUIT	1210242-00	4
1	1	1	FILTER	1212003	3
1	1	1	SWITCH	1211997	2
1	1	1	PLATE MTG TRANSFORMER	D-IA-7412960-0-0	1

7010861-2
7010861-1
7010861-0

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

	CLASS OF ACCURACY	OVER 0 TO 6	OVER 6 TO 30	OVER 30 TO 120	OVER 120 TO 315	OVER 315 TO 1000	OVER 1000 TO 2000
ANGLES ±0° 30'							
SURFACE QUALITY IN MICROINCHES	CHECK ONLY	1 to 12	3 to 30	10 to 100	10 to 100	25 to 300	50 to 1000
	MEDIUM	±0.1	±0.2	±0.3	±0.4	±0.6	±1.0
	PREFERRED	±0.3	±0.4	±0.6	±1.0	±1.5	±2.5

QUANTITY & VARIATION

THIRD ANGLE PROJECTION	DRN.	9-5-75	FIRST USED ON VT50
	CHK'D.		digital
REMOVE BURRS AND BREAK SHARP CORNERS	ENG.		TITLE TRANSFORMER ASSY
	PROJ. ENG'R		
	PROD'N MGR.		
DO NOT SCALE DWG	NEXT HIGHER ASSY.		
MATERIAL SEE PARTS LIST	C-IA-VT50-3-0		SIZE 1 CODE AD NUMBER 7010861-0-0 REV.
FINISH	SCALE NONE		
	SHEET 1 OF 2		DIST.

REVISIONS			
	CHK	ECO NO.	REV.
1-2	9-5-75	771	

ECO FORM NO. ECO-1320

115 VOLTS
60 HZ

WIRE TABLE										
ITEM NO.	DESCRIPTION		FROM			TO			SIGNAL
	AWG	COLOR	POINT	CONNECTION	WITH	POINT	CONNECTION	WITH	
18	—	—	—	P1	—	—	——	—	
	—	—	1	——	—	—	S1-5	—	
	—	—	2	——	—	—	S1-1	—	
	—	—	3	——	—	—	——	—	NOT USED
	—	—	4	——	—	—	——	—	NOT USED
	18	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	-	

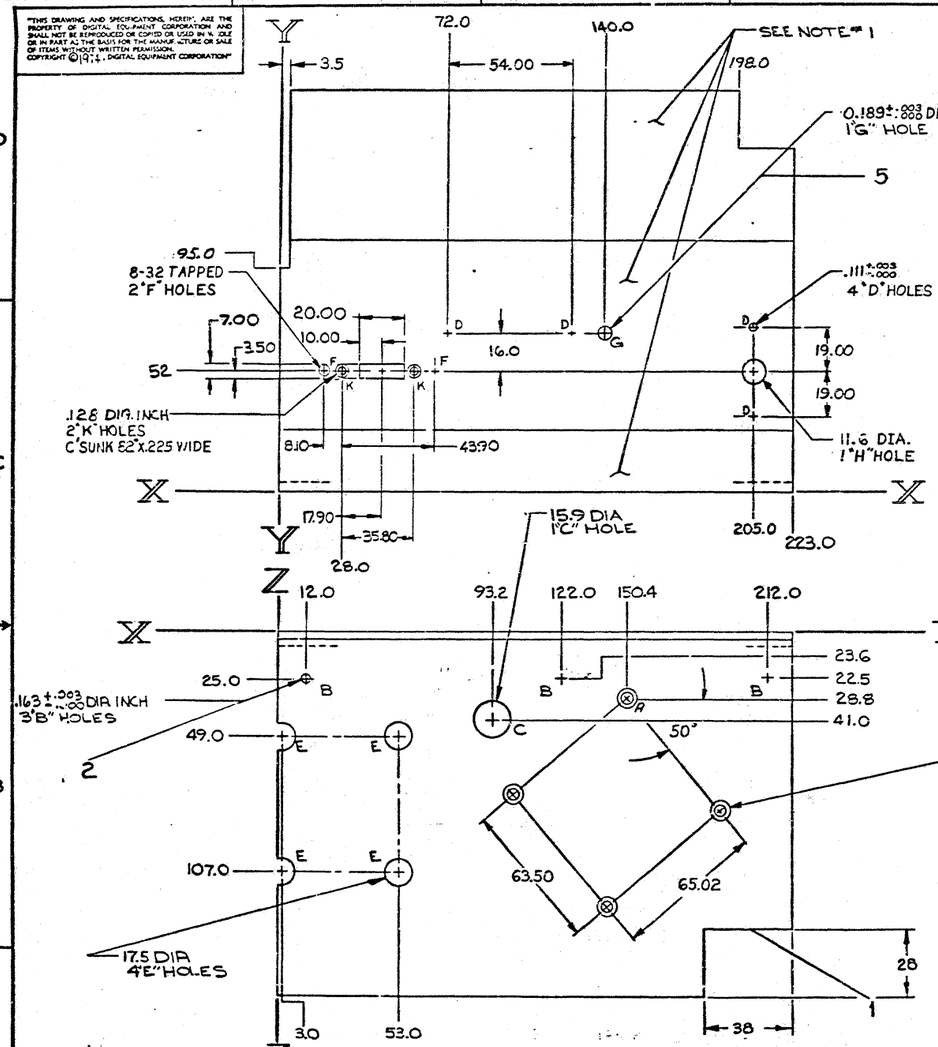
100/127 VOLTS
220/240 VOLTS
50-60 HZ

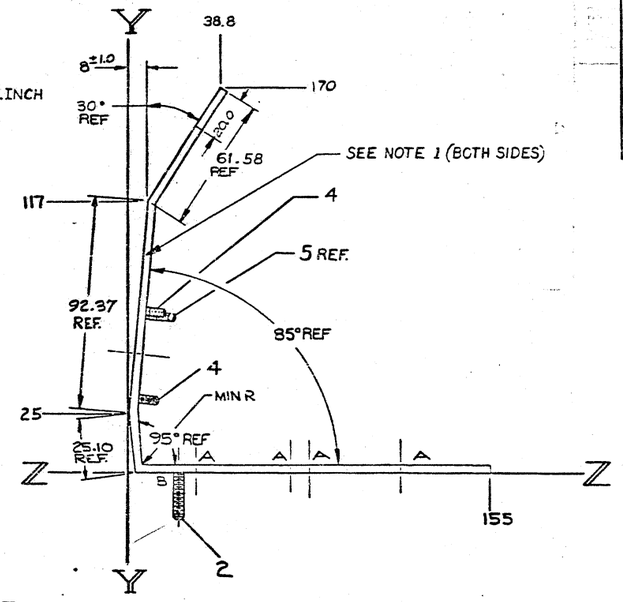
WIRE TABLE										
ITEM NO.	DESCRIPTION		FROM			TO			SIGNAL
	AWG	COLOR	POINT	CONNECTION	WITH	POINT	CONNECTION	WITH	
19or22	—	—	—	P1	—	—	——	—	
	16	BLK	1	——	—	—	S1-1	—	
	18	GRN	2	——	—	—	GND	—	
	18	GRN	3	——	—	—	GND	—	
	14	BLK	12	——	—	—	CB-2	17	
	18	BLK	17	CB-1	15	18	FL LOAD 1	17	
	14	WHT	15	——	—	—	FL 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	BRN	—	——	—	—	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 AD 1





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 DIM	

METRIC DIMENSIONS

FOR ECO REVISION HISTORY SEE NOTES

REVISIONS					REV.
CHK	CHANGE NO.				A
RZH	7412850-00001	G. Jones	11-27-74		
		R. DOANE	12-3-74		B
RZH	7412850-00002	E. Hamilton	12-17-74		
		R. DOANE	1-6-75		C
RZH	7412850-00003	R. GIRARD	2-6-75		
RZH	7412850-00004	Y. GAGE	2-14-75		D

ITEM NO	QTY.	DESCRIPTION	PART NO.
5	1	STUD #10-32 X 1/2	9007173
4	4	STUD #4-40 X (.31 IN) LG	9007162
~~3~~	~~4~~	~~STUD #8-32 X (.50 IN) LG~~	~~9007163~~
2	3	STUD #8-32 X (1.0 IN) LG	9007172
1	1	PLATE, MTG. TRANS.	

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 5.75 MM (.125) THK AL SEE NOTE #2
FINISH (SEE NOTE 1) 92-00151-47

	NAME	DATE
DRN.		
CHK'D		12-3-74
ENG.		1-7-75
PROJ. ENG.		1-7-75
PROD.		10-24-75

NEXT HIGHER ASSY.

E-UA-VT50-0-0

SCALE 1/1
SHEET 1 OF 1

digital

TITLE: PLATE, MTG. TRANSFORMER

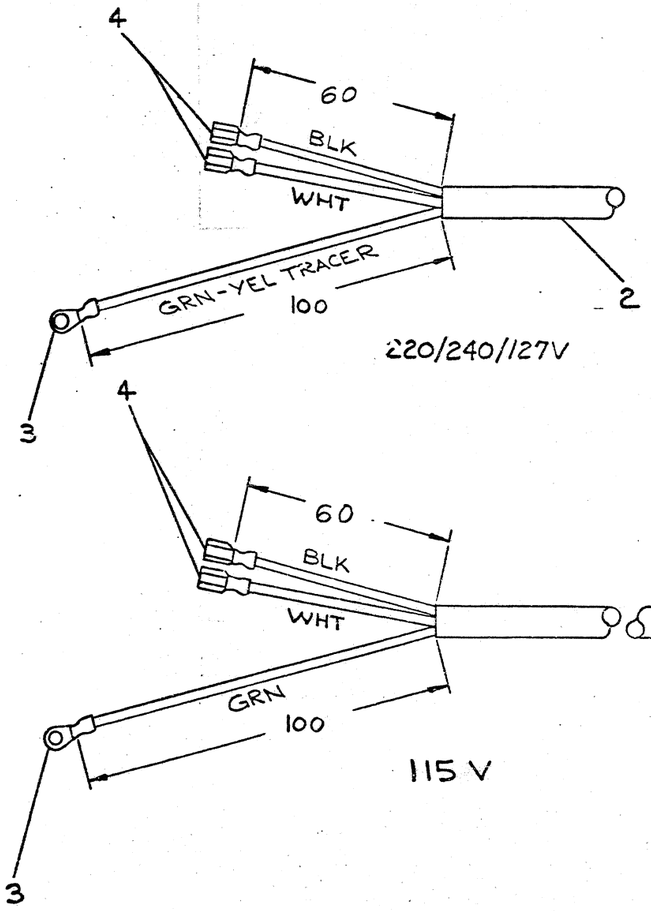
SIZE	CODE	NUMBER	REV.
D	IA	7412850-0-0	D

DIST

7412850-0-0 D/7 D IA 7412850-0-0 D

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

NOTES:



METRIC DIMENSIONS

7011019-1	7011019-0	QTY.	DESCRIPTION	PART NO.	ITEM NO.
			PARTS LIST		
2	2	2	CONN, FASTON (RED)	9007928-01	4
1	1	1	LUG, BARREL RING (BLU)	9007917	3
1	-	1	POWER CORD 220/240/127	1700043	2
-	1	1	POWER CORD 115 V	1700015-9	1

FIRST USED ON OPTION/MODEL: 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

		DATE
DRN.		3/11/75
CHK'D		4-15-75
ENG.		4-25-75
PROJ. ENG.		4-25-75
PROD.		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.

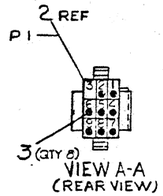
REVISIONS: REV. | CHANGE NO. | CHK

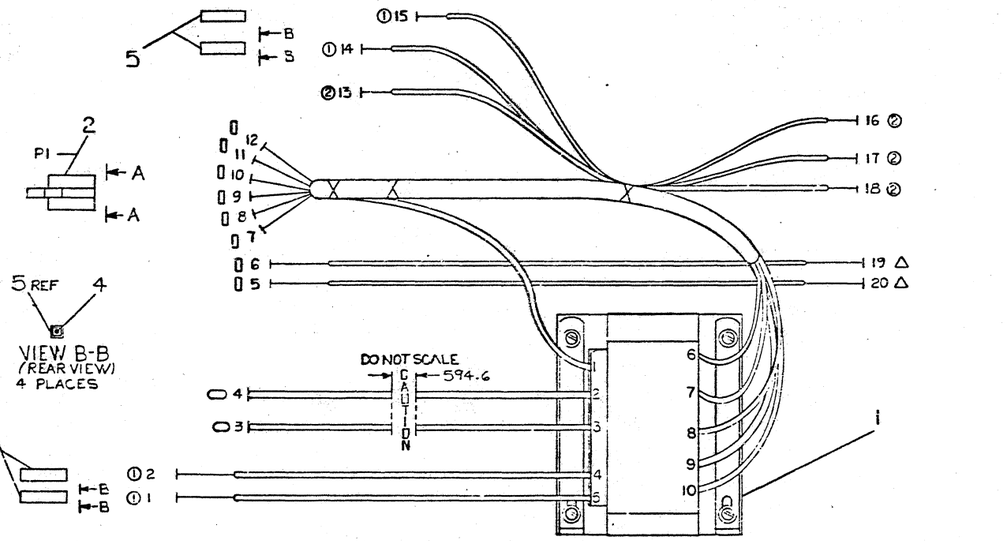
DEC FORM NO. DRC 100-B

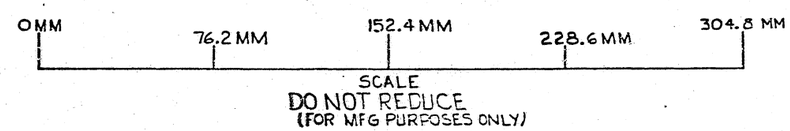
WIRE TABLE

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.







METRIC DIMENSIONS

X	3	CABLE TIES	9007031	13
②	4	QUICK CONN. FEMALE	9007228	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	TERM., QUICKCONNECT	9007930-00	6
	4	HOUSING (FASTAB)	1210820-01	5
①	4	MINI FASTAB	1210820-04	4
▯	8	SOCKET, TERM	1209379-00	3
	1	CONN. 9 SKT	1209350-09	2
	1	TRANSFORMER	1611533	1

DESCRIPTION | DWG. PART NO. | ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

SURFACE QUALITY IN MICROINCHES	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER: OVER 0 TO 5	OVER 5 TO 30	OVER 30 TO 100	OVER 100 TO 300	OVER 300 TO 1000	OVER 1000 TO 2000
ANGLES ±0°30'	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 | SYMBOL

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL

FINISH

DRN. | CHK. 4-18-75 | ENG. 4-25-75 | PROJ. ENG. 4-25-75 | PROD.

NEXT HIGHER ASSY.

1-A0-7010636-0-0

SCALE 1/1 | SHEET 1 OF 1

FIRST USED ON VT50

digital

TITLE: HARNESS, TRANSFORMER (50HZ)

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

DIST.

REVISIONS | REV. | CHARGE NO. | CHK.

BCC FORM NO. BA3-150

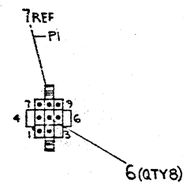
7011130-0-0

WIRE TABLE

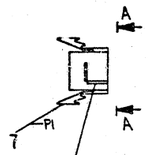
ITEM NO.	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM TERM	TO POINT	TO CONNECTION	TO TERM	REMARKS
1	16	BLK		T1-2		1		2&3	
4	18	GRN			5	5	P1-2	8&7	
4	18	GRN			5	4	P1-1		
1 OR 17	16	VIO		T1-7		6	P1-4		
		VIO		T1-6		7	P1-5		
		VIO/BLK		T1-1		8	P1-6		
		BLU		T1-5		9	P1-7		
		BLU		T1-3		10	P1-8		
	16	BLU/BLK		T1-4		11	P1-9	6&7	
8	14	BLK	12		9				
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		9				
11	18	BLK	17		12	18		12	
1 OR 17	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				
1 OR 17	16	RED/YEL		T1-9		26		15	SEE NOTE #1
	16	RED/YEL		T1-11		27		15	

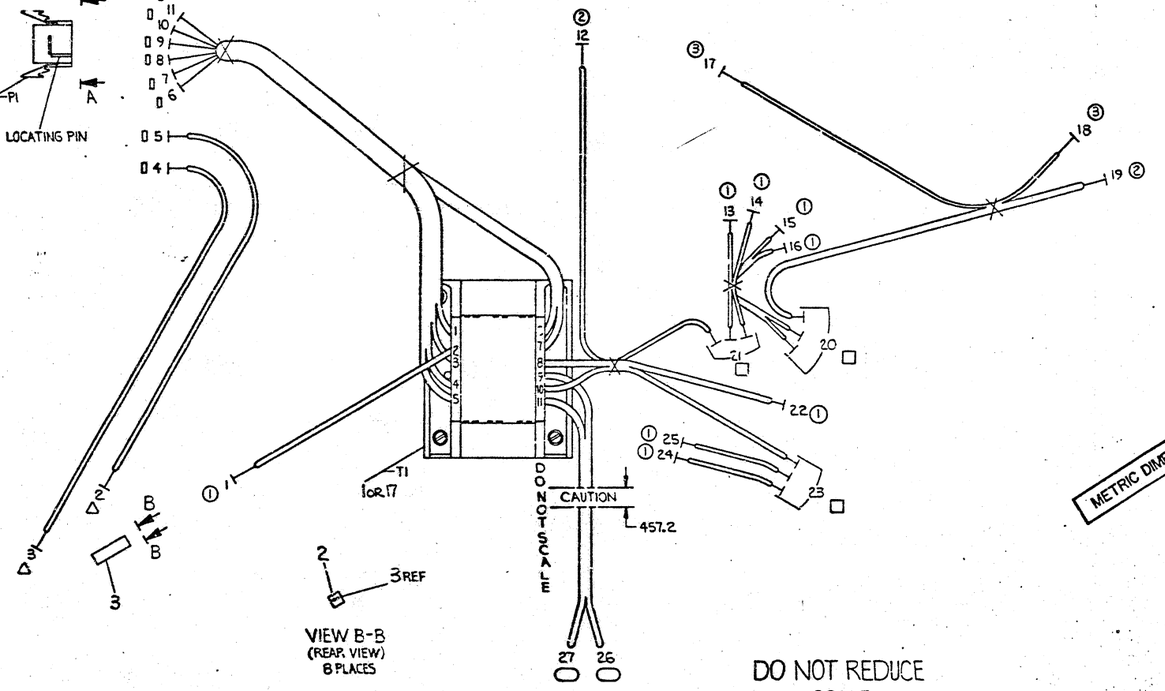
LEGEND	
NUMBER	VARIATION
70111311-0	220/240 VOLTS
70111311-1	100/127 VOLTS

NOTES:
1. POINTS 26 & 27 ARE NOT USED AT PRESENT TIME, COIL WIRES AND HOLD IN PLACE WITH CABLE TIE (ITEM #6). SHRINK TUBING (ITEM #5) TO BE USED AT END OF WIRES.



VIEW A-A
(REAR VIEW)





VIEW B-B
(REAR VIEW)
8 PLACES

METRIC DIMENSIONS

DO NOT REDUCE
SCALE

Ø MM	76.2 MM	152.4 MM	228.6 MM	304.8 MM

(FOR MFG. PURPOSES ONLY)

ITEM	QTY	REQ'D	DESCRIPTION		PART NO.	
	1	-	XFMR, 100/127 V		10-12133	17
	6	6	TIE, CABLE		9007121	6
	AR	A/R	SHRINK TUBING	(WHT)	9107459-09	5
	A/R	A/R	WIRE, #18 AWG STRD	(WHT)	9107360-09	4
	AR	A/R	WIRE, #14 AWG STRD	(WHT)	9107370-09	18
4	2	2	TERM, QUICK CONNECT		9007917	12
	A/R	A/R	WIRE, #18 AWG STRD	(BLK)	9107360-00	
3	3	3	SPLICE, WIRE	18-10 AWG	9007239	3
2	2	2	TERM, QUICK CONNECT		9007919	9
	A/R	A/R	WIRE, #14 AWG STRD	(BLK)	9107370-00	8
	1	1	CONN, 2 SKT - HOUSING		12059350-09	7
5	8	8	CONN, SKT		2359179-30	6
6	2	2	TERM, RING		9007937-00	5
	A/R	A/R	WIRE, #18 AWG STRD	(GRN)	9107360-05	4
	3	3	HOUSING, FASTAB SKT		2-0820-1	3
1	8	8	TERM, MINI FASTAB		2-0325-2	2
	1	1	XFMR, 220/240 V, 50 HZ		9-3060-00	1

DESCRIPTION — DWG. PART NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES	CLASS OF ACCURACY (CHECK ONE)	NOMINAL SIZE	OVER 6 UP TO 30	OVER 30 UP TO 120	OVER 120 UP TO 315	OVER 315 UP TO 1000
±0°30'	SURFACE QUALITY in MICROINCHES	MEDIUM ☐	±0.1	±0.2	±0.3	±0.4
		PREFINISHED ☐	±0.3	±0.4	±0.5	±0.8

QUANTITY & VARIATION

REVISIONS	CHANGE NO.	REV.

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE THIS

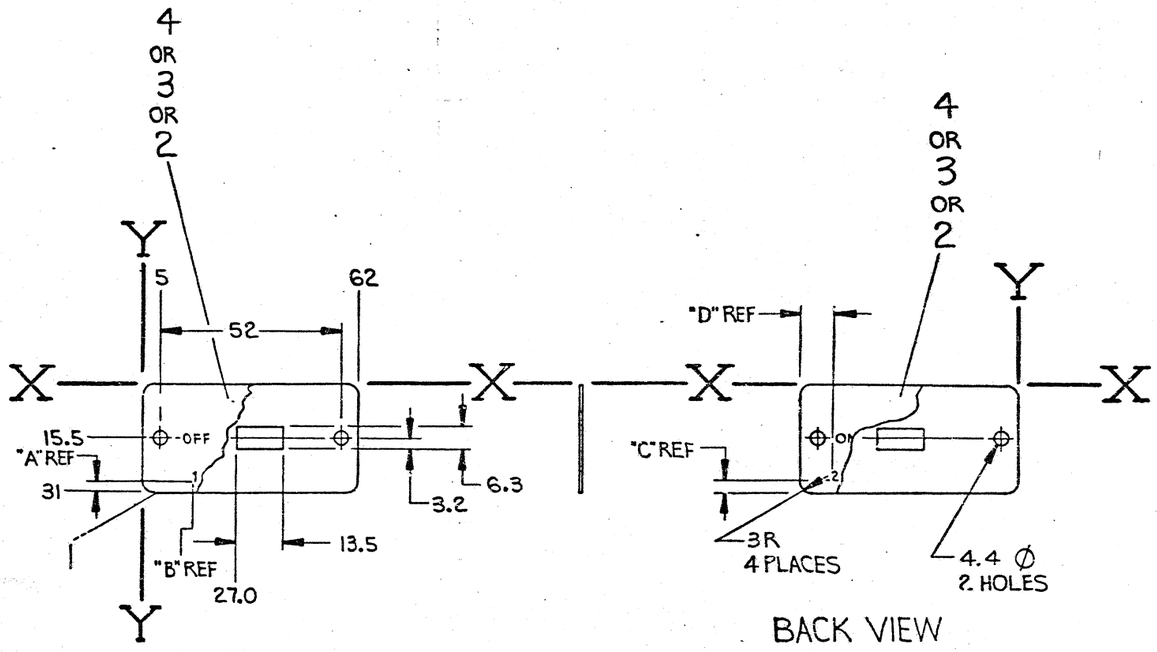
DRN		PARTS USED ON: VT53
CHK'D		
ENG		TITLE: HARNESS, TRANSFORMER 50-E
PROJ ENG		
PROD		
NEXT HIGHER ASSY:		

MATERIAL: SEE PARTS LIST
FINISH: —

1-12-70108811-0-0	SIZE: Ø	CODE: TA	NUMBER: 70-11311-0-0
SCALE: 1/1	DIST:		REV:
SHEET 1 OF			

LEGEND

PART NO.	VARIATION	"A" REF	"B" REF	"C" REF	"D" REF
7413407-1-0	15 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

QUANTITY & VARIATION 7413407-3-0	7413407-2-0	7413407-1-0	DESCRIPTION	DWG./PART NO.	ITEM NO.
1	—	—	SILK SCREEN (LT GRY)	A-SS-7413407-0-3	4
—	1	—	SILK SCREEN (LT GRY)	A-SS-7413407-0-2	3
—	—	1	SILK SCREEN (LT GRY)	A-SS-7413407-0-1	2
1	1	1	PLATE		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	±0.5	±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. Rider 1-9-75
CHK'D S. Rider 1-27-5
ENG L. Brothers 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

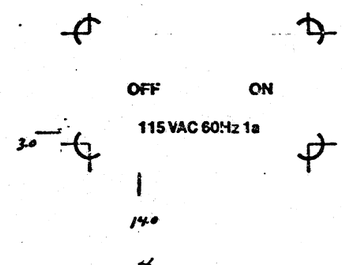
SIZE	CODE	NUMBER	REV.
2	IA	7413407-0-0	A

DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7413407-00001	A	Initials 2-28-75
	M. MORGANSTERN		[signature]

DEC FORM NO. DA2-120

7413407-0-0 A IA 2



SPEC # 9200101-68 GRAY

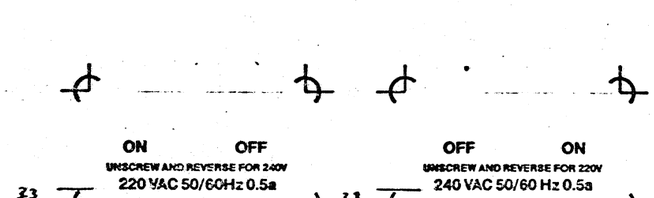
REVISIONS		
CHK	CHANGE NO.	REV.
J.H.	7413407-00001	A

I. Dorcus 8-5-75

O.K. INSPECTED BY MI 27

DATE 1-15-75

DRN. I. Dorcus	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. Z. Balog	1-27-75	
NEXT HIGHER ASSY.		
SCALE		SIZE A / CODE 55 / NUMBER 7413407-0-1 / REV. A
SHEET OF		DIST.

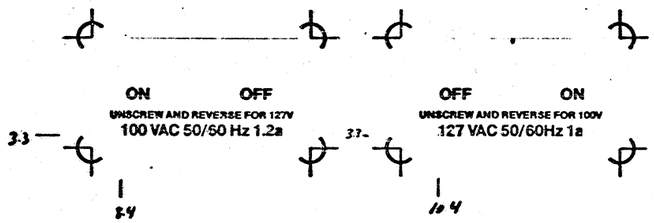


SPEC # 9200101-68 GRAY

REVISIONS			
CHK	CHANGE NO.	REV.	
BJ	7413407-0000	A	

O.K.
AMT. TO STOCK .....
INSPECTED BY .....
DATE 1/27/75

DRN. J Demers	1-14-75	FIRST USED ON VT50	digital		
CHK'D.	1-27-75				
ENG.	1-27-75	TITLE switch PLATE VT50-BA			
PROJ. ENG.					
PROD	1-27-75				
NEXT HIGHER ASSY.					
		SIZE	CODE	NUMBER	REV.
SCALE		A	55	7413407-0-2	A
SHEET OF		DIST.			



REVISIONS		
CHK	CHANGE NO.	REV.
[illegible]	7413407-0000/	A
	L Demers 3-5-75	
	Morgan Miller	

O.K.
AMT. TO STOCK .....
INSPECTED BY .....
DATE 3/21/75
PART # DEC-3-(4472)-1-69-M172

SPEC # 9200101-68 GRAY

DRN. L Demers	1-14-75	FIRST USED ON VT50			digital
CHK'D [illegible]	1-27-75	TITLE SWITCH PLATE VT50-CA			
ENG. [illegible]	1-27-75				
PROJ. ENG. [illegible]	1-27-75				
PROD. L Babcock	1-27-75				
NEXT HIGHER ASSY.			SIZE	CODE	NUMBER / REV.
SCALE			A	55	7413407-0-3 / 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]	4-29-75

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-(382)-1079-A/971
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ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE VT50 ENGINEERING SPECIFICATION

20 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-(381)-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-(381)-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-(381)-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 18-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	←
Ø		.	ENTER

Key Legend	Code Transmitted	Function
.	$Ø56_8$	Period
Ø thru 9	$Ø6Ø_8$ thru $Ø71_8$	Numerics Ø thru 9
ENTER	$Ø15_8$	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" 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 350090-1) 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	[signature]	3-25-75
B	REPLACED SHT'S 2 & 3	VT50-00008	BUZYNSKI	4-75	[signature]	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
[signature]	[signature]	A	SP	VT5Ø-Ø-2	B

DEC 16-(392)0079-N971
DRA 107

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 as 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 lease one pass.

MAINDEC-11-DZVTC- (Latest Revision)

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

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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

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 [signature] APPD [signature] SIZE A CODE SP NUMBER VT50-0-3 REV A

DEC 16-(392)-1079-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 tes'ing while being exercised by the VT50 Acceptance Test Program MAINDEC-11-DZVTC-A. The parameters of this testing are stated in Figure 1.

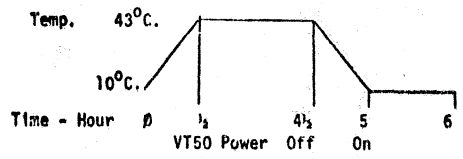


FIGURE 1

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 A CODE SP NUMBER VT50-0-3 REV A

DEC FORM NO DEC 16-(381)-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 A CODE SP NUMBER VT50-0-3 REV 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 Tighten Screw
Termianl 2	Green Wire
Terminal 3	Red Wire
Terminal 4	White Wire
Terminal 5	Black Wire
Terminal 6	NC Tighten Screw

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

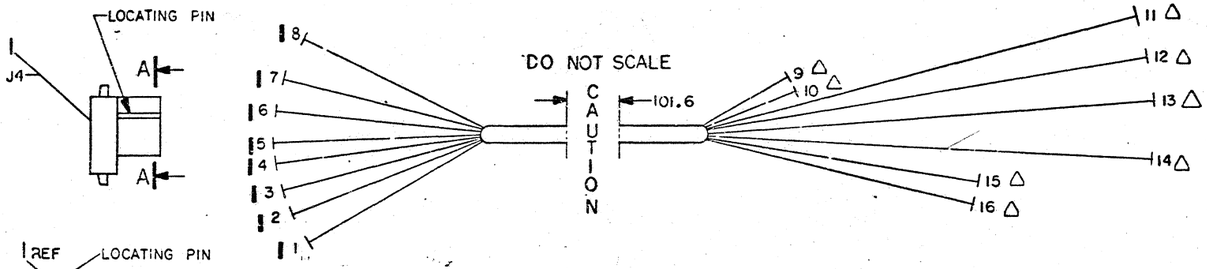
DEC FORM NO DEC 16-(381)-1022-N370
DRA 108

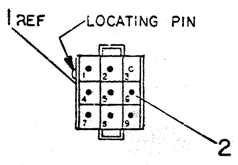
SHEET 4 OF 4

WIRE TABLE

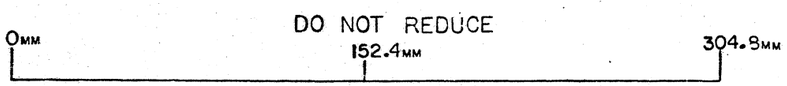
ITEM NO	DESCRIPTION AWG	COLOR	FROM POINT	FROM CONNECTION	FROM WITH	TO POINT	TO CONNECTION	TO WITH	WIRE LENGTH
3	18	BLU	1	J4-7	ITEM #2	15	——	TIN	390 MM
3	▲	BLU	2	J4-8	▲	16	——	▲	390 MM
4		BLU/BLK	3	J4-9		11	——		450 MM
5		VIO	4	J4-4		9	——		300 MM
5		VIO	5	J4-5		10	——		300 MM
6		VIO/BLK	6	J4-6		12	——	▼	450 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



FOR MANUFACTURING PURPOSES ONLY

METRIC DIMENSIONS

△	ITEM	DESCRIPTION	DWG./PART NO.	ITEM NO.
960 MM	A/R	WIRE #18 AWG (GRN)	9107360-55	7
550 MM	A/R	WIRE #18 AWG TRACER (VIO/BLK)	9107410 -70	6
600 MM	A/R	WIRE #18 AWG (VIO)	9107360-77	5
450 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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

SYM.	DESCRIPTION	NOMINAL DIMENSION RANGE MILLIMETER						
	ANGLES 10° 30'							
	CLASS OF ACCURACY (CHECK ONE)	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							
	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: ——

DRN: [illegible] 4/11/75 FIRST USED ON: VT50

CHK: [illegible]

ENG: [illegible]

PROJ. ENG: [illegible]

PROD: [illegible]

NEXT HIGHER ASSY.

TITLE: HARNESS, POWER SUPPLY

SIZE: 1 | CODE: IA | NUMBER: 7011186-0-0 | REV.

SCALE: 1/1

SHEET 1 OF 1 | DIST.

digital

REVISIONS	REV.
CHANGE NO.	
CHK	

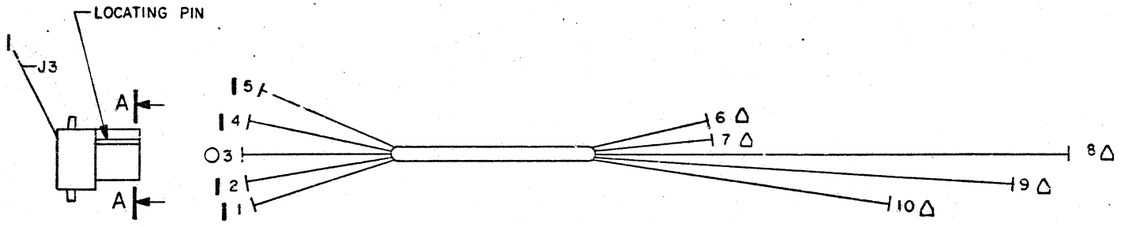
DEC FORM NO. 8U1-150

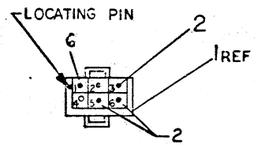
7011186-0-0

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	——		200MM
3	19	GREEN	3	J1-4		10	——		250 MM
4	22 TWP	RED	4	J1-6		9	——		360 MM
		BLACK	5	J1-3	ITEM #2	9	——	TIN	330 MM

NOTES:





VIEW A-A
REAR VIEW
SCALE : NONE

DO NOT REDUCE

0MM — 152.4MM — 304.8MM

FOR MANUFACTURING PURPOSES ONLY

METRIC DIMENSIONS

SYM	QTY	DESCRIPTION	DWG. PART NO.	ITEM NO
○	1	PIN (MALE)	1209378-0-0	6
200 MM	A/R	WIRE #22 AWG TWP (BLUE/WHT)	9107420 -69	5
360 MM	A/R	WIRE #22 AWG TWP (BLK/RED)	9107470 -02	4
280 MM	A/R	WIRE #19 AWG (GRN)	9107360-55	3
	4	PIN (MALE)	1209378-03	2
	1	CONN 6 PIN (MALE)	1209351-06	1

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 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

DRAWN M. Morganstern 1/6/75
CHK'D A. Wall/Hicks
ENGR [illegible]
PROJ. ENG'R [illegible]
PROD. [illegible]

NEXT HIGHER ASSY.: 1A-7011220-0-0

SCALE 1/1

SHEET 1 OF 1

FIRST USED ON: VT50

TITLE: HARNESS, YOKE

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

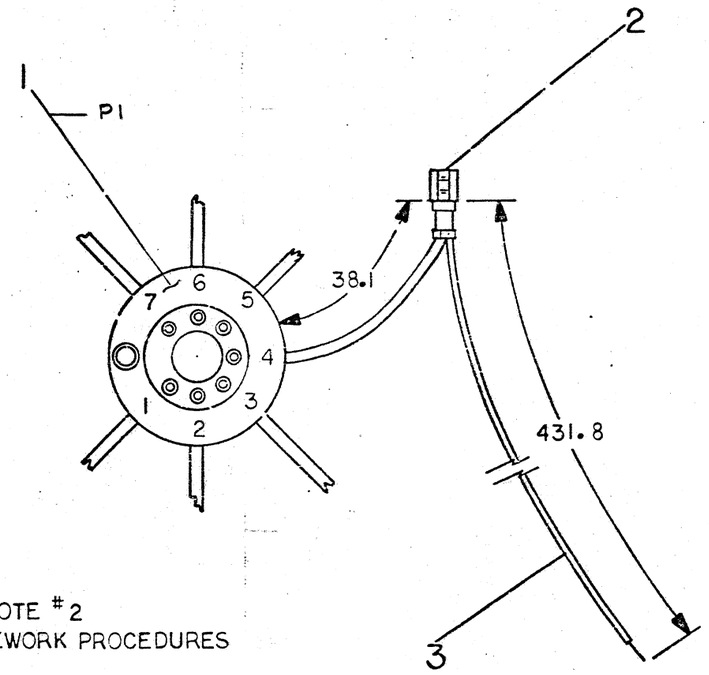
DIST.

REVISIONS	CHANGE NO.	REV.
CHK	7011187-00001	A

M. MORGANSTERN 1/6/75

DEC FORM NO. 6161-1/30

1 1A 7011187-0-0 A



SEE NOTE # 2
FOR REWORK PROCEDURES

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.

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

DRN George Drum 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	IA	7413948-0-0	

DIST.

7413948-0-0 IA 2 B

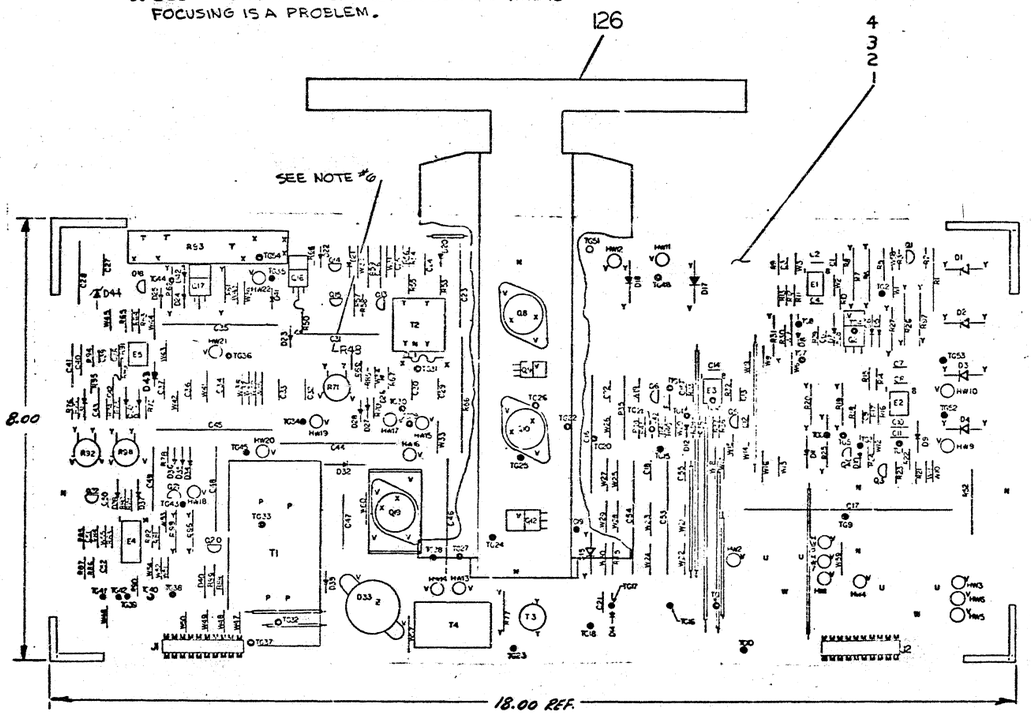
REVISIONS	REV.
CHANGE NO.	
CHK	

DEC FORM NO. DA2-12C

NOTES:

1. THERE IS NO ETCH BETWEEN T1 AND D33
2. ETCH & PUNCH/DRILL FOR TO5 AND TO220
3. CURRENT LOOP 4 INCH LENGTH 22 AWG WIRE
4. ~~ETCH BUT DO NOT SOLDER~~
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				
REF		X-Y COORDINATE HOLE LOCATION	K-CO-5410886-0-4	1
REF		ASSY/DRILLING HOLE LAYOUT	D-AH-5410886-0-5	2
REF		MODULE ECO HISTORY	B-WH-5410886-0-6	3
1		ETCH CIRCUIT BOARD	5010885	4
2	C50,52	CAP 100 PF 100V 5% DM	1000016	5
2	C9,38	CAP 470 PF 100V 5% DM	1000024	6
2	C25,40	CAP .33 UF 20V 10% S.TANT	1005328	7
1	C41	CAP 6.8 UF 35V 10% S.TANT	1005305	8
1	C26	CAP 15 UF 20V 10% S.TANT	1004812	9
1	C42	CAP 1 UF 35V 10% S.TANT	1001776	10
1	C43	CAP .47 UF 35V 10% S.TANT	1005965	11
1	C31	CAP .47 UF 100V 10% MYLAR	1000040	12
1	C39	CAP 270 PF 100V 5% DM	1000022	13
2	C28,49	CAP 25 UF 25V 6% AL EL	1000075	14
1	C17	CAP 1900 UF 40V	1011607	18
6	C4,6,7,11,12,13,	CAP .01 UF 100V 20% DISC	1001610-1	19
4	C55,21,18,22	CAP .1 UF 100V 20% DISC	1000030	20
9	C29,32,33,36,30,34,24,37, C27	CAP .022 UF 600V	1011846	21
4	C16,44,35,45	CAP 1000UF 16V	1011849-02	22
2	C23,48	CAP 25 UF 150V	1011349-00	23
1	C47	CAP .068 UF 600V	1011847	24
1	C46	CAP 7.0 UF 200V	1011848	25
2	C53,54	CAP 600 UF 25V	1011849-01	26
2	C2, C51	CAP 180 PF 100V 5% DM	1000020	27
				28
1	D44	DIODE IN967A	1110028	29
5	D6	DIODE IN4732A 4.7V	1105138	30
4	D21,38,37,43	DIODE D672	1105275	31
8	D22,27,28,25,24,23,941,042	DIODE IN4004	1105796	32
2	D40,7	DIODE IN752 A 5.6V 5% ZENER	1102808	33
3	D34,35,36	DIODE IN3648 13V 5% ZENER	1103988	34
5	D1,2,3,4,15	DIODE IN5624	1110420	35
2	D17,18	DIODE MR752	1110615	36
3	D8,9,14	DIODE 4W5.1Z1 5.1V 1% ZENER	1105873	37
1	D12	DIODE IN754A 6.8V 5% ZENER	1103991	38
4	D31, 10,29,30,	DIODE D664	1100114	39
1	D11	DIODE IN4730A 2.4V 5% ZENER	1101938	40
1	D32	DIODE MR852	1109634-04	41
2	D39,20	DIODE MR812	1111854-00	42
1	D26	DIODE MR817	1111654-01	43
1	D33	DIODE H-V DIODE ASSY (20KV)	11-12553	44
1		MOBSON P92 CAP	1213126	45
2		TIE WRAP	9007031	46
1	R28	RES. 5.6K, 1/2 W, 5%	1301874	47
1	R61	RES. .47, 2W, 5%	1305258	48
1	R73	RES. 5.1 1/4W 5%	1309422	49
2	R63, R50	RES. 27 1/4W 5%	1301522	50
1	R55	RES. 220 1/4W 5%	1300271	51
3	R50,74,68	RES. 330 1/4W 5%	1300295	52
1	R59	RES. 390 1/2W 5%	1300308	53
1	R57	RES. 47 1W 5%	1302199	54
QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

FIRST USED ON OPTION MODEL	ETCH BOARD REV
VT50	D

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 AS STATED ABOVE

IC PIN LOCATIONS

REVISIONS			
REV	CHANGE NO	DATE	CHK
B	DAL-1867-1	9-19-75	M.MORGANSTERN
C	5410886-00003	9-19-75	M.MORGANSTERN
D	5410886-00002	3-2-75	M.MORGANSTERN
E	5410886-00001	8-4-75	M.MORGANSTERN
F	DAL-1867-1	10-29-75	M.MORGANSTERN
G	5410886-00004	11-3-75	M.MORGANSTERN
H	5410886-00005	11-3-75	M.MORGANSTERN
J	5410886-00006	11-3-75	M.MORGANSTERN
K	5410886-00007	9-19-75	M.MORGANSTERN

DEC NO.	EIA NO.	DEC NO.	EIA NO.
SEMICONDUCTOR CONVERSION CHART			

DRN K. Wilson 7/7/76
CHK D Lucy 7/7/76
ENG Lois 7/7/76
PROJ MGR
PROD C Mango 7/7/76
NEXT HIGHER ASSY
SCALE NONE
SHEET OF

digital EQUIPMENT CORPORATION

TITLE: MONITOR POWER SUPPLY

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

DIST

DC: 5410886-0-1

DEC FORM NO. DRD 131 B

QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
1	R28	RES 5.6K 1/4W 5%	13-01874	116
1	T1	TRAN AT 2072 (FLY BACK XFMRL)	16-11896	117
1	T2	TRAN DRIVER XFMR U9737 (7.5:1)	16-11897	118
1	T4	TRAN AT 4072 (LINEARITY COIL)	16-11899	119
1	T3	TRAN U9934 (SIZE COIL)	16-11898	120
1		CRT CONN. (WITH (4) 1K 1/2W RES.	1212127	121
1	E4	IC DEC 7406	1910741	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	HW1-HW22	EYELET GS4-3	9007836	127
52	W1,2,3,4,W5,W8,W15,W19, W20,W26,W34 W39,W40,W42, W43,W45-W50-W53,W58 W7,W16,W17,W18 W21;W25, W27-W33,W35-W37,W41,W44, W56,W57,W59 AND W61 W62	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	R2?23 90 58 81 84 64. 70 82 78 93 85 86	RES. 1K 1/4W 5%	1300365	56
2	R80,87	RES. 2K 1/4W 5%	1302388	57
5	R29,33,36,60,95	RES. 10K 1/4W 5%	1300479	58
3	R34,91,54	RES. 100K 1/4W 5%	1302400	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	R72,67 R48	RES. 270K 1/4W 10%	1301310	64
2	R53,65	RES. 470 1/4W 5%	1300316	65
1	R77	RES. 120 1W 5%	1301838	66
2	R34,89	RES. 100 1/2W 5%	1300228	67
2	R96,99	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%	1300229	71
2	R97,27	RES. 130,2W5%	1303832	72
1	R32	RES. 1 MEG 1/4W 5%	1309595	73
1	R9	RES. 6.8K 1/4W 5%	1301423	74
1	R11	RES. 330K 1/4W 5%	1302091	75
1	R13	RES. 10K 1/8W 1%	1303312	76
2	R12,15	RES. 4.99K 1.8W 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%	1302177	80
1	R14	RES. 4.7K 1/4W 5%	1300447	81
1	R17	RES. 12.1K 1.8W 1%	1303213	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. 75 2W 5%	1303039	88
1	R8	RES 2.7M 1/4W 5%	1309680	89
3	R30,42,41,	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	R19	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. 5Ω, 10%, 10W	13-11342	102
1	R47	RES 35K 1/4W 5%	13-02394	103
1	Q17	TRANS. D45C8	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	Q10	TRANS. 2N3791	1509581	108
2	Q1,4	TRANS. MXAA55	1510706	109
2	Q2,12	TRANS. 2N5294	1510377	110
3	Q5,6,3	TRANS. MXAA05	1510705	111
1	Q8	TRANS. 2N3055	1505819	112
1	Q9	TRANS. 2N4923	1509604	113
1	Q16	TRANS D44C8	1510421	114
1	Q19	TRANS. BUY69C BDY98	15-11852	115

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
MONITOR POWER SUPPLY	D	CS	5410886-0-1	X
SCALE	SHEET 2 OF 4		CIST.	

5410886-0-1 REV X
DCS 5410886-0-1 REV X

SYNC H
HORIZ L
VIDEO H
NOMINAL 9.5 V
SEE NOTE 1
SEE NOTE 2
SEE NOTE 3
H YOKE 180 uh .2Ω
V YOKE 16 Ω 30 Mh
TO CRT
11KV ANODE CONNECTOR
+365 V GRID SCREEN PIN 6
+450 V GRID FOCUS PIN 7
-85V INTENSITY GRID 1 INTENSITY PIN 1
-12 VDC PIN 3 PIN 4
TO CATHODE PIN 2
NOTE
THE ABOVE 1K RESISTORS ARE INSTALLED IN THE CRT CONNECTOR

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
MONITOR/POWER SUPPLY	D	CS	5410886-0-1	F
SCALE	SHEET	OF	DIST.	

IN5629 D4 D2 D3 D1 HW9 HW10 HW8 HW18 HW12 HW1

T1 TO PRINTER

R1 12 2W R2 100 R3 82 R5 3.9K ½W R6 75 2W R7 75 2W R10 100 R28 5.6K R97 130 2W R26 130 2W R11 330K R12 4.99K 1% R13 10K 1% R31 511 1/2W 1% R9 6.8K R29 10K R30 1Ø

Q1 A55 Q10 2N3771 Q2 2N5294

HW2 6ØØØuf 4Ø V HW7 NOT ON BOARD

D6 IN4732A 4.7V D7 IN752A 5.6V D8 MS.121 5.1V

C1 *15Ø pf C2 18Ø pf ** C3 *24ØØ pf C4 .01 C6 .01 C55 .1 C53 6Ø4uf 25V C7 .01 C8 **47Ø pf C9 *15Ø pf C11 .01 C10 *33ØØ pf C16 15ØØ uf 16V C17 19ØØ uf 4Ø V C18 .1 uf C54 6ØØ uf 25V C21 .1uf C22 .1 C12 .01 uf C13 *47ØØ pf C14 .01 uf ** C15 *47Ø pf

R14 4.7K R15 4.99K 1% R16 47K R17 12.1K 1% R18 18ØK R23 1K R24 15ØØ R19 3Ø3 1W R20 33Ø 1W R21 1ØØ R52 .5 2W R22 9.3K R25 1.5K 1/2W R45 22Ø 1/2W R32 1MEG R33 10K R36 10K R39 1K R37 1.5K R35 .08 5W R38 1ØØ R44 39 R43 15Ø R34 1Ø 1/2W R42 1Ø R41 1Ø R40 12K

Q3 A25 Q4 A55 Q12 2N5294 Q9 2N4923 Q5 A25 Q6 A25

D10 G64 D9 MS.1A21 5.1V D17 MR752 D18 MR752 D15 IN5624 D11 ¼ M2.4 A25 2.4V D12 IN754A 6.8V Q8 2N3055 D14 MS.121

HW4 HW3 18,ØØØuf 25V NOT ON BOARD

9.38V NOMINAL +15V

J1-12 +15V @ 1.45A
J2-7 GND REMOTE SENSE
J2-8 J2-9 J2-10 GND
J2-3 -5V @ 15MA
J2-2 -12V @ .5Ø
J1-1 +5V @ 4.5A
J2-5 J2-6
J2-4 +5V REMOTE SENSE

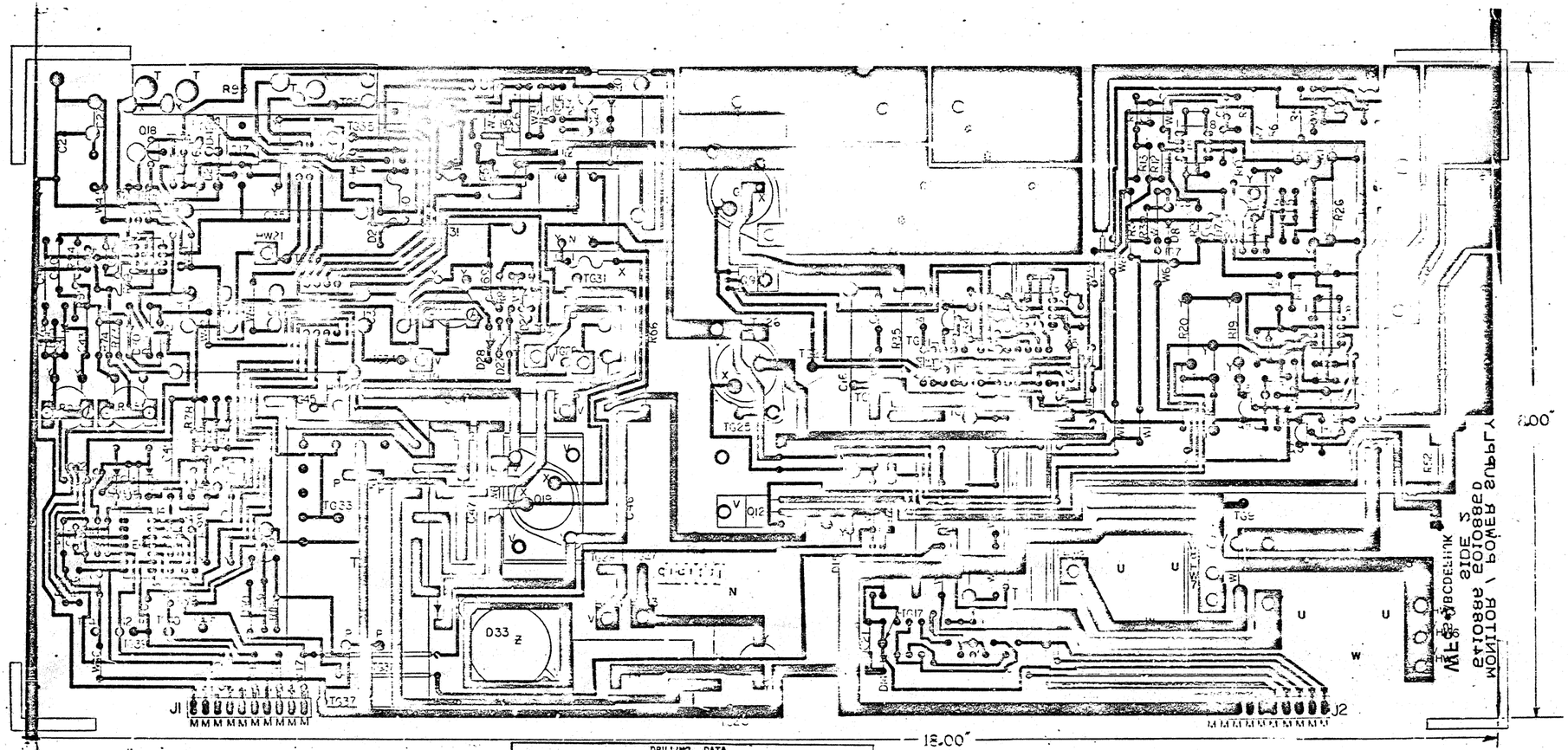
3Ø1C E1 3Ø1C E2 3Ø1C E3

⏚ =

* = 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	03	5410886-2-1	K
SCALE	SHEET = OF =		DIST.	



NOTES:
1. Z,W,U, HOLES TO BE PUNCHED WITH PERIPHERY DIE. REF DWG. E-TA-SCICS65-0-0.
2. NO REFERENCE HOLES OR PRODUCTION CLUSTER.
3. USE NEW EXCELLON OFFSET 14.2"

HOLE LETTER	DRILLING DATA: DRILL SIZES FOR PTH BOARDS BEFORE PLATE	AFTER PLATE	FOR NON-PTH BOARDS	CAN TAKE GRIPLETS YES	NO	QTY OF HOLES
NONE			.035 (.420)			
T			#2 (.221)			83
X			#4 (.209)			34
V			#24 (.136)			39
M			#32 (.116)			40
W			3/16 (.375)			2
U			#7 (.201)			4
N			1/8 (.125)			7
P			#1 (.150)			1
S			#52 (.063)			4
T			#15 (.180)			3

BOARD FABRICATION INFORMATION

BOARD SIZE 8X18

BOARD MATERIAL .062 STOCK 1 SIDE COPPER

EYELET ☐ PLATED THRU ☐

1 SIDED ☒ MULTI-LAYER ☐

NOTCH BEFORE GOLD PLATING ☐

NOTCH AFTER GOLD PLATING ☐

ETCH REV C

EQUIPMENT CORPORATION

TITLE: MONITOR POWER SUPPLY

SIZE E | CODE AH | NUMBER 5410886-0-5 | REV.

MS 40311

REV	NUMBER	SIZE	CODE
M		B	

PRODUCT LINE 98

DATE RELEASED 2-10-75

RELEASED BY M. MORGANSTERN

MODULE ECO HISTORY

PAGE 1 OF 1

RELEASED CS REV P

RELEASED ETCH BD REV P

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 E5	2	0
00004	R.PUCCI	4-17-75	F	—		X		X			ADD TWO CAPS	2	0
00004A	R.PUCCI	5-8-75	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-5410686-0-6 ECO #7	0	0

REVISIONS		
CHK	CHG NO	REV
VA-00001	A	B
VA-00002	B	C
VA-00003	C	D
VA-00004	D	E
VA-00004A	E	F
VA-00005	F	H
VA-00006	H	J
VA-00007	J	K
VA-00009	K	L
WE-00010	L	M
VA-0007A	M	

DRN. E. Wilson DATE

CHK'D DATE

ENG. DATE

PROD. DATE

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE MODULE ECO HISTORY

SIZE	CODE	NUMBER	REV
B		54105[illegible]-0-[illegible]	M

DEC 16-(32s)-1026-4971

DRB 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		CHHilliard	6/30/75	[illegible]	7-7-75

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

DEC 3-(491)-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	

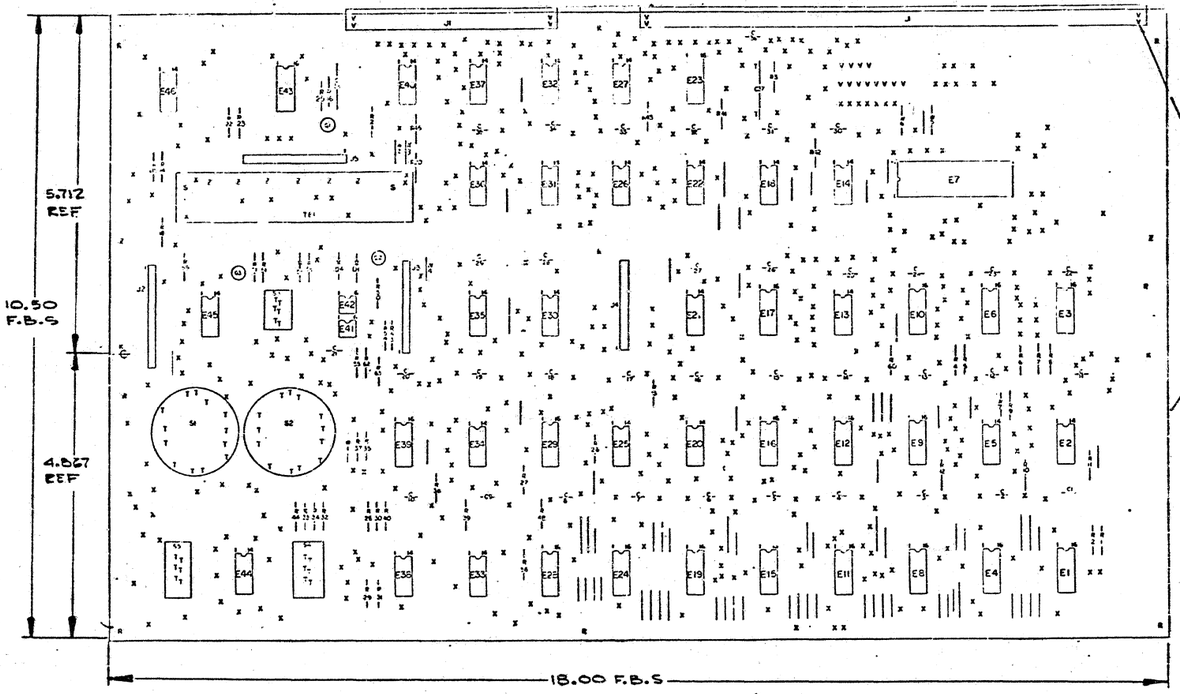
DEC 3-(332)-1283-1A-R175

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 (VT5ØB)
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-Ø	BASIC VT5Ø
5410902-1	HEAT CYCLED SYSTEM TESTED 5410902-Ø
5410902-2	VT MODEL WITH DIRECT CURSOR CONTROL AND COPIER SUPPORT
5410902-3	HEAT CYCLED SYSTEM TESTED 5410902-2
5410902-4	BASIC VT5Ø WITH COPIER SUPPORT
5410902-5	HEAT CYCLED SYSTEM TESTED 5410902-4

QTY	VARIATION	ITEM E3 LEGEND
		E1 E4 E8 E11 E15 E19 E24 E28
4	5410902-Ø	23082A2 23084A2 — — 23083A2 23085A2 — —
8	5410902-2	E2Ø-2 E2Ø-4 E2Ø-6 E2Ø-8 E2Ø-3 E2Ø-5 E2Ø-7 E2Ø-9
6	5410902-4	B2Ø-2 B2Ø-4 B2Ø-6 — B2Ø-3 B2Ø-5 B2Ø-7 —



REF				
REF		X-Y COORDINATE HOLE		1
REF		ASSY-DRILLING HOLE LAYOUT	D-IM-5410902-0-1	2
REF		MODULE ECO HISTORY	B-MH-5410902-0-1	3
1		ETCHED CIRCUIT BOARD	5010901	4
38	C1 THRU C36, C41, C 12	CAP. .01UF. 100V. ±20%	1001610-01	5
1	C37	CAP. 30 U.F. 25V	1001796	6
1	C38	CAP. 33 U.F. 10V. ±10%	1000076	7
1	D1	DIODE, MDL1301	1105±10	8
2	D4, D5	DIODE, D472	1105275	9
21	E1-E8, E26-E34, E38 E44, E53, E54	RES 1K 1/4W 5%	1300365	10
22	E9-E15, E18, E20, E25 E35, E37, E39-E43, E45 E48, E58, E59, E60, E61	RES 4.7K 1/4W 5%	1300447	11
2	E21, E22	RES 2.2K 1/4W 5%	1300417	12
1	E55	RES 120K 1/4W 5%	1300539	13
1	E51	RES 150 1/4W 5%	1300260	14
2	E16, E56	RES 39K 1/4W 5%	1302314	15
1	E36	RES 220 1/4W 5%	1300271	16
1	E62	RES 1.78Ø 1/4W 5%	1301601	17
1	E63	RES 7.5K 1/4W 5%	1301422	18
2	E33, E36	I.C DEC 74197	1910035	19
3	E2, E25 E40	I.C DEC 7474	1905647	20
7	E9, E21, E27, E30, E32 E36, E43	I.C DEC 7400	1905576	21
6	E9, E12, E16, E23, E29, E39	I.C DEC 74161	1910650	22
1	E20	I.C DEC 7490	1909051	23
2	E13, E34	I.C DEC 7404	1909686	24
4	E26, E31, E37, E44	I.C DEC 7402	1904004	25
4	E3, E6, E10, E17	I.C DEC 74153	1909937	26
1	E35	I.C DEC 74H1Ø	1909057	27
1	E45	I.C DEC 7430	1905580	28
1	E7	I.C DEC 1402 UART ASYNCH	1912469	29
2	E14, E22	I.C DEC 7495	1909085	30
1	E18	I.C DEC 7430	1905978	31
1	E46	OSCILLATOR	1812131	32
—	SEE LEGEND	I.C DEC 5603A	2300048	33
2	E41, E42	OPTO-ISOLATOR	1610727	34
3	Q1, Q2, Q3	TEXAS 6431	1509338	35
3	S3, S4, S5	SWITCH, SLIDE	1212Ø1.9	36
2	S1, S2	SWITCH, ROTARY	1270002	37
77	——	PINS "P"	9009607	38
42	——	PINS STRAIGHT	9009605	39
1	TB	STRIP, TERMINAL	1211905	40
56		JUMPERS	9107560-01	41
549		EYELETS	9006735	42
1	SOCKET	~~TEST 40 PIN~~	~~3-0747~~	~~43~~
19		JUMPER, INSULATED	9009155	44

QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

ETCH BOARD REV. C

74153	8	16
7490	10	5
74161	8	16
IC TYPE	GND	+5V

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

IC PIN LOCATIONS

REV.	CHANGE NO.	CHK	DATE
J	ORIGINATED	M. Morganstern	7/31/75
H	5410902-00009	M. Morganstern	7/31/75

FIRST USED ON OPTION MODEL: VT5Ø

SEMICONDUCTOR CONVERSION CHART

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

DRN: M. Morganstern 7/31/75
CHKD: [illegible]
ENG: [illegible]
PROJ. LDR: [illegible]
PROD: [illegible]
NEXT HIGHER ASSY

digital

TITLE: ROM UART AND TIMING

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

SCALE —
SHEET 1 OF 5
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 FLAG H

RUT 1 T2 L

RUT 2 INIT L

RUT 2 B OSC A

RUT 2 INIT H

SYNC L

HORIZ L

BINIT L

TSC L

VERT H

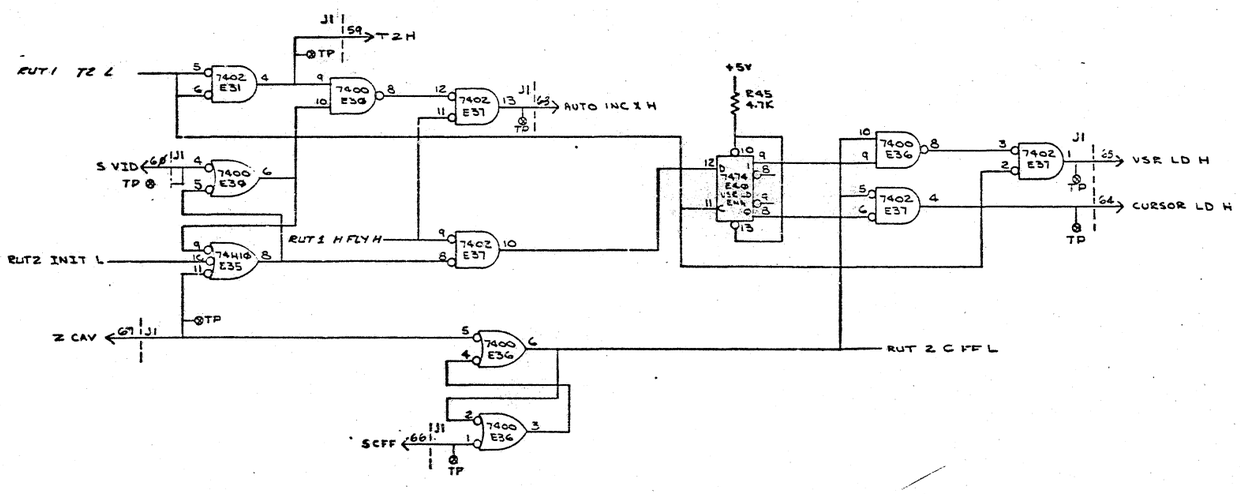
60 HZ

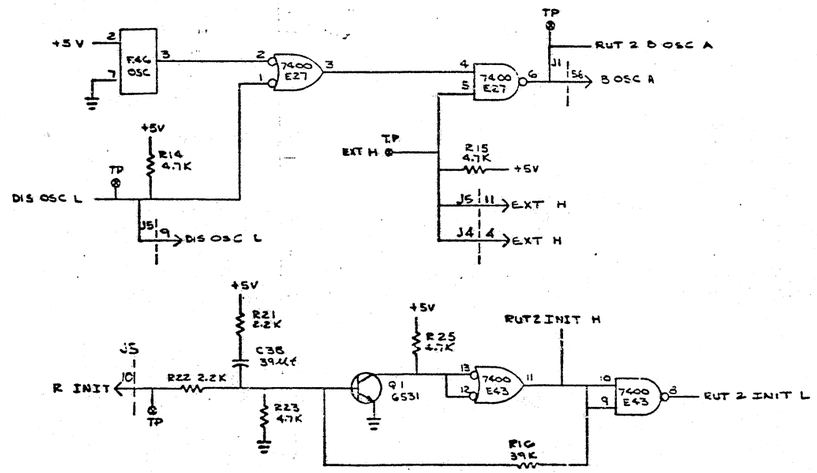
+ INSERT JUMPER FOR 50HZ VT50

REVISIONS		
DR	CHANGE NO.	REV.

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

DCS 5410902-0-1 REV J



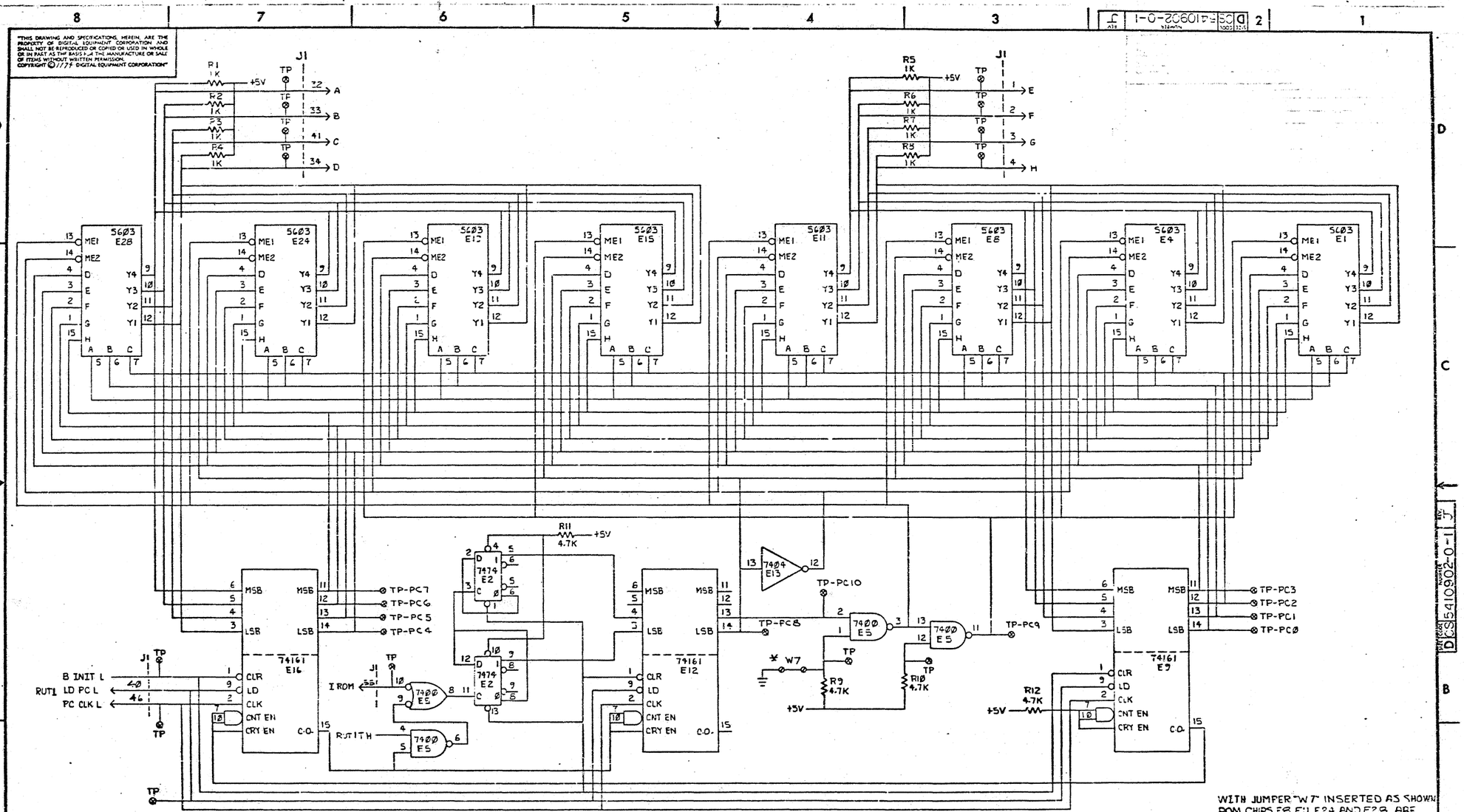


REVISIONS		
CHK	CHANGE NO.	REV

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

J 1-0-2060175 SCS D 2

CS 5410902-0-1 J



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	J
SCALE — SHEET 2 OF 5	DIST.			

5410902-0-1 J

* NOTE: JUMPER W3 INSTALLED & JUMPER W2 CUT FOR 5410902-2 (VT50#H, VT50#J) VARIATION ONLY

NOTE: JUMPER W4 INSTALLED ON 5410902-2 (VT50#H, VT50#J) VARIATION ONLY

RECEIVE LOOP

TRANSMIT LOOP

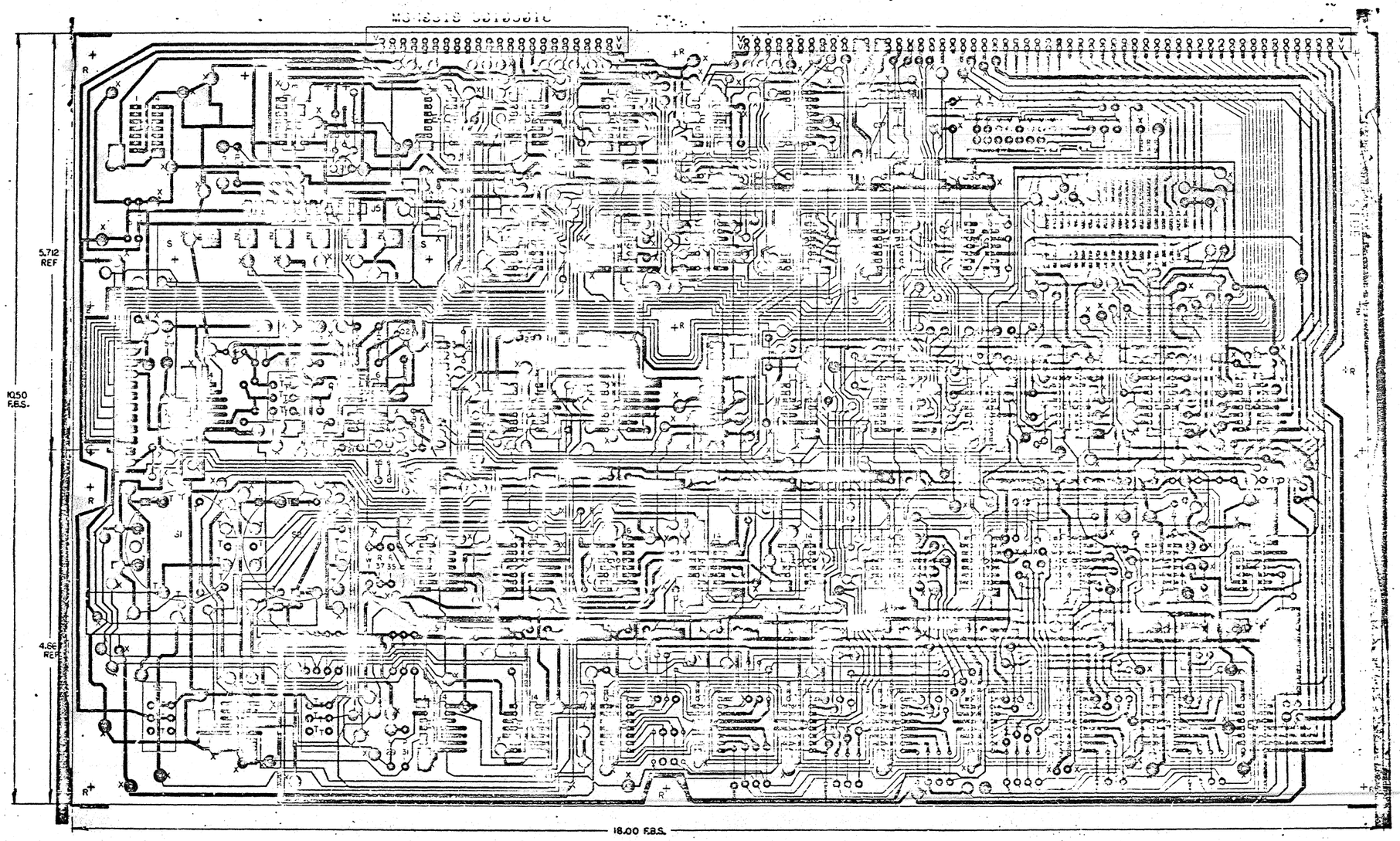
MUX A*	MUX B*	
0	0	KBM
0	1	40 c
1	0	AC
1	1	UART

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	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	SLOTS	QTY OF HOLES
NONE		.043 (.042 DIA.)		
X		.045 DIA.		
T		.035 DIA.		48
S		.035 DIA.		8
R		.075 DIA.		2
V		.039 DIA.		156

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

EQUIPMENT CORPORATION

TITLE: ROM UART & TIMING

FIRST USED ON: 5410902

SIZE: E | DRAWING NO: 5410902-0-5 | REV: J

SCALE: 2:1

DESIGN REV: C

MS 40318

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

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 PRODUSE 5410902-1 THRU 5410902-3	1. 2 2. 8	1. NONE 2. 4
00002	MISITANO	2-4-75	C	B		✓		✓			CHANGE R50 TO 39KΩ	0	0
00003	BUZYNSKI	2-27-75	D	B		✓			✓	2 AND 3 NOT COMPATIBLE	1. DOCUMENT CHANGE REQUIRED TO PRODUSE 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 -2 VARIATION (VT50 H, VT50 J)	1	—
00006	DICKENSON	4-14-75	H	C		✓		✓			NEW ETCH REV C INITIALIZE CIRCUIT CHANGE TO ELIMINATE E43-74123	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.A.	00005	E
M.F.	00006	F
M.F.	00007	H
V.A.	00008	J

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

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

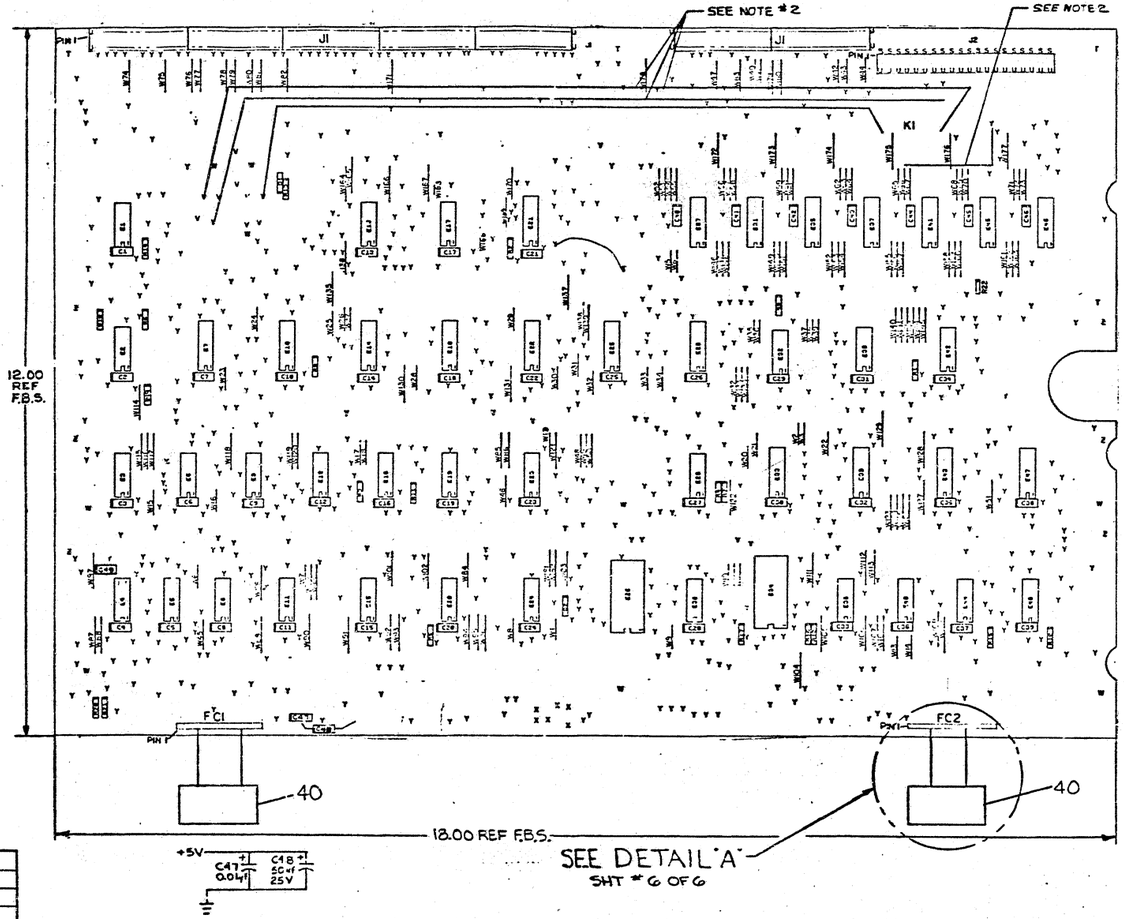
TITLE: MODULE ECO HISTORY

SIZE	CODE	NUMBER	REV.
B	[illegible]	5410902-0-6	J

DEC 15-(326)-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-CO-5410906-4	1
REF		ASSY DRILLING HOLE LAYOUT	E-AH-5410906-5	2
REF		MODULE ECO HISTORY	B-MH-5410906-6	3
1		ETCHED CIRCUIT BOARD	5010906	4
1	C48	CAPACITOR 50uf 25V	1001798	5
47	C1 THRU C47	CAPACITOR .01 DISC	1001610-01	6
2	D1,D2	DIODE 1N4	1100114	7
1	S1	SLIDE SWITCH	1210919	8
1	K1	RELAY PHILIPS 12V DC 19A111 AE	1212049-0-0	9
1	J1	11 PIN SIDE ENTRY AMP CONNECTOR	1211851	10
2	J2,	10 PIN BOTTOM ENTRY AMP CONNECTOR	1211850	11
1	R13	RESISTOR 10Ω OHM 1/4W 5%	1300229	12
7	R2,R3,R4,R7,R10,R21,22.	RESISTOR 1K 1/4W 5%	1300365	13
14	R1,R5,R6,R8,R9,R11,R12, R15,R17,R18,	RESISTOR 4.7K 1/4W 5%	1300447	14
~~1~~	~~R24~~	~~RESISTOR 470 1/4W 5%~~	1300316	15
1	R20	RESISTOR 47 1/4W 5%	1300282	16
5	E15,E20,E32,E38,E42	IC DEC 7495	1909055	17
6	E5,E8,E9,E19,E40,E44	IC DEC 7400	1905575	18
2	E17,E24	IC DEC 74H30	1909060	19
1	E21	IC DEC 74157	1910655	20
5	E14,E18,E22,E25,E28	IC DEC 74193	1910019	21
2	E7,E10	IC DEC 7485	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 7406	1910741	27
1	E34	IC DEC 74150	1910153	28
3	E33,E37,E47	IC DEC 7442	1910046	29
1	E43	IC DEC 74155	1910556	30
2	E13,E48	IC DEC 74H11	1909267	31
1	E4	IC DEC 7402	1909004	32
7	E27,E31,E35,E37,E41,245, 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		EFFLET	9007831	35
180		JUMPERS	9007560-01	36
~~1~~		~~24 PIN IC SOCKET~~	~~1210643~~	37
A/R		WIRE 30 AWG. INSULATED	9105740	38
10		JUMPERS INS	9009165	39
2		CABLE ASSY.	5410906-0-0	40
1		TERMINAL	9007930	41
A/R		WIRE 18 AWG INSULATED	9107340-55	42
1	C49	CAP 82pF 100V 5%	1000015	43
QTY	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

IC 74150	12	24
IC 7475	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
A	5410906-00001	
B	CANCELLED	
C	5410906-00002	
D	5410906-00003	
E		
F		
G		
H	5410906-00006	
J	5410906-00007	
K	5410906-00008	

REVISIONS

FIRST USED ON OPTION MODEL: VT50

ETCH BOARD REV: C

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

SEMICONDUCTOR CONVERSION CHART

DRN. M. Lawrence DATE 14 JUN 74
CHK'D A.F. Dickinson DATE 14 JUN 74
ENG. M. Morgenstern DATE 7 JAN 75
PROJ. ENG. M. Morgenstern DATE 7 JAN 75
PROG. M. Morgenstern DATE 7 JAN 75

NEXT HIGHER ASSY: B-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.

DP3-X0
DP3-X1
DP3-X2
DP3-X3
DP1-A5
DP1-A4
DP3-Y0
DP3-Y1
DP1-A1
DP1-A0

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

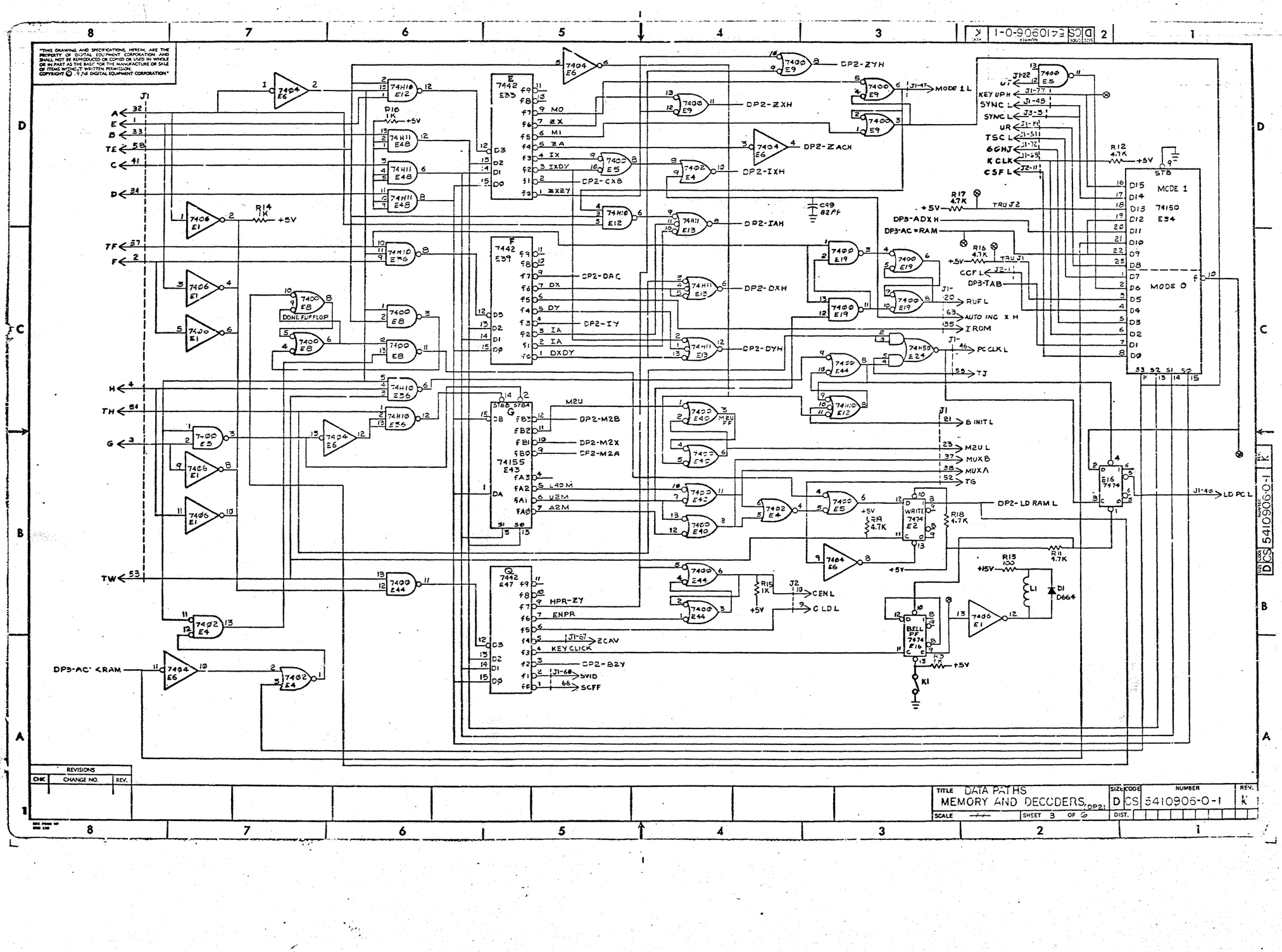
DP2-LD RAM L
R22 1K +5V

74157 E21
R2 4.7K +5V
DP3-X5
DP3-Y3
DP3-X4
DP3-Y2
DP3-X6
74S158 E17
DPI-A0
DPI-A1
DPI-A4
DPI-A5

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

REVISIONS		
OK	CHANGE NO.	REV.

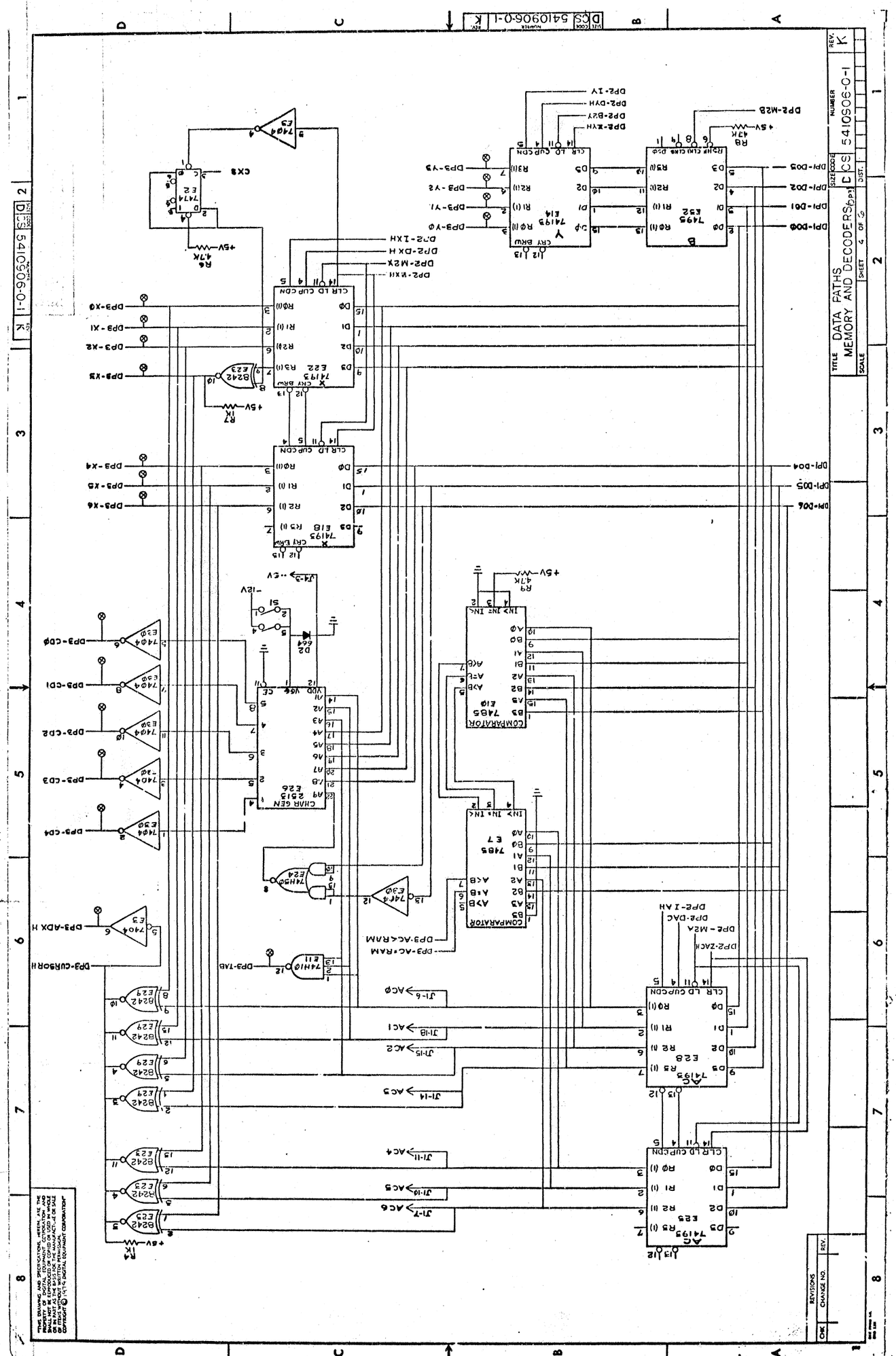
TITLE	DATA PATHS (DPI) MEMORY AND DECODERS	SIZE	CODE	NUMBER	REV.
		D	CS	5410906-0-1	K
SCALE	SHEET 2 OF 6	DIST.			



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	SIZE	CODE	NUMBER	REV.
DATA PATHS MEMORY AND DECODERS (DP2)	D	CS	5410906-0-1	K
SCALE —	SHEET 3 OF 6	DIST.		

DCS 5410906-0-1 REVISIONS K


DCS 5410906-0-1 K
TITLE DATA PATHS MEMORY AND DECODERS
SIZE CODE D
NUMBER 5410906-0-1
REV K
SHEET 4 OF 6
DIST.
SCALE
REVISIONS
CHK
CHANGE NO.
REV.
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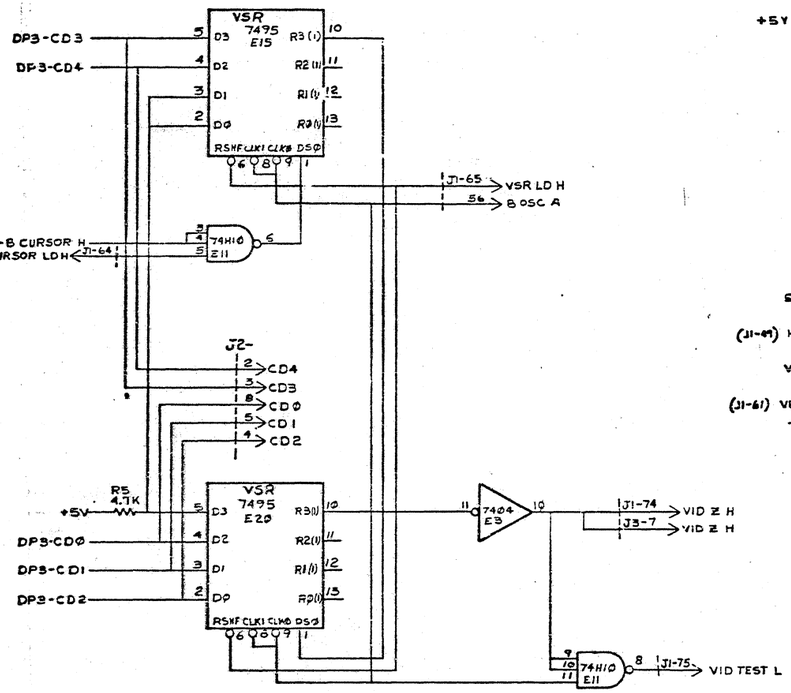
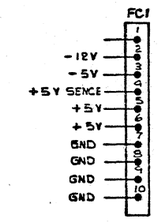
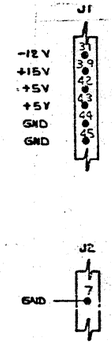
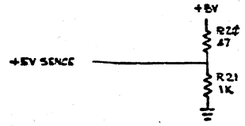
DPI-DO0
DPI-DO1
DPI-DO2
DPI-DO3
DPI-DO4
DPI-DO5
DPI-DO6
DP2-M2B
DP2-IV
DP2-ZXH
DP2-BXY
DP2-DYH
DP2-M2X
DP2-IXH
DP2-DXH
DP2-ZACH
DP2-DAC
DP2-IAH
DP2-M2A
DP3-AC<RAM
DP3-AC>RAM
DP3-TAB
DP3-CUR50RH
DP3-ADXH
DP3-CD0
DP3-CD1
DP3-CD2
DP3-CD3
DP3-CD4
DP3-X0
DP3-X1
DP3-X2
DP3-X3
DP3-X4
DP3-X5
DP3-X6
DP3-Y0
DP3-Y1
DP3-Y2
DP3-Y3
CHAR GEN 2513 E26
COMPARATOR 7485 E19
COMPARATOR 7485 E7
74S74 E14
74S95 E32
74S195 E28
74S195 E5
74S195 E18
74S195 E22
74174 E2
74H50 E24
74H10 E11
74S04 E30
74S04 E3
74S04 E29
74S04 E31
74S04 E20
B242 E23
B242 E29
B242 E27
B242 E25
A242 E33
B242 E21
R1 1K
R2 1K
R3 1K
R4 1K
R5 1K
R6 4.7K
R7 1K
R8 4.7K
R9 4.7K
+5V
-12V
CX8
S1
D2 6641
J1-6 ACØ
J1-18 AC1
J1-15 AC2
J1-14 AC3
J1-11 AC4
J1-10 AC5
J1-7 AC6
J4-3 -12V







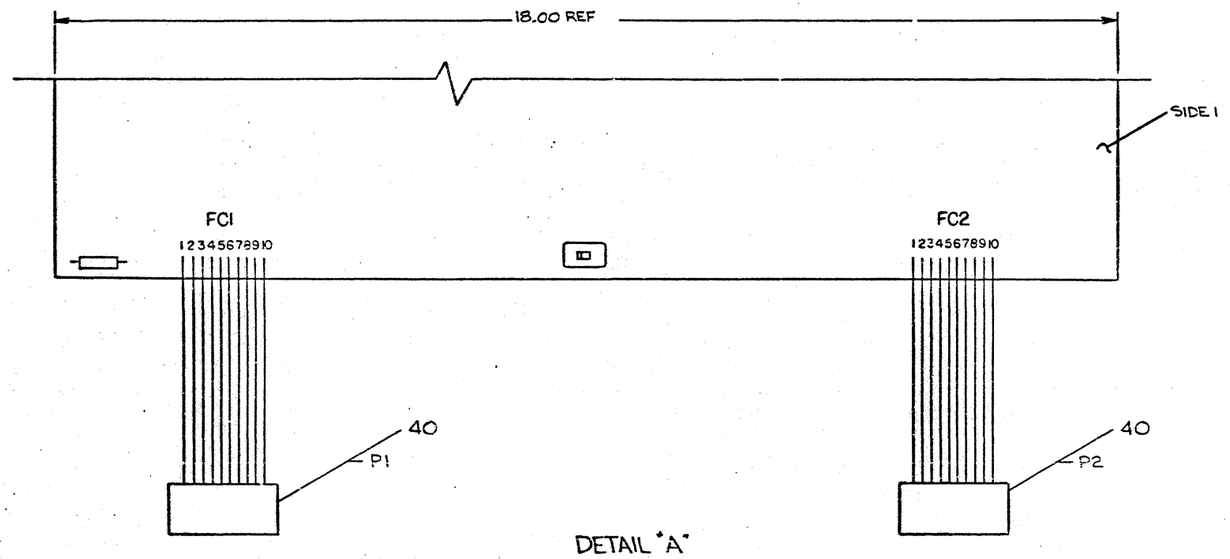


REVISIONS		
CHK	CHANGE NO.	REV.

TITLE	DATA PATHS MEMORY AND DECODERS (2P4)	SIZE	NUMBER	REV.
		D	DCS 5410906-0-1	K
SCALE	SHEET 5 OF 6	DIST.		

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		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV.
DATA PATHS MEMORY AND DECODER	D	CS	5410906-0-1	K
SCALE	SHEET 5 OF 5	DIST.		

CH CUT
SIDE 2

J2 SIDE 1

MS-100

Radio Shack

12.000 F.B.S.

CH CUT
SIDE 1

REV	M
NUMBER	5410926-0-6
SIZE	B
CODE	MH

PRODUCT LINE VT50

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?			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	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 NOISE IMMUNITY	4	NONE
00008	WHITTLESEY	8-7-75	K	—		X		X			ADD CAP C48	1	0
0008A	WHITTLESEY	2-SEPT-75	L	—		X		X			CHG VALUE OF C49 TO 82PF	1	1
00009	PUCCI	27-OCT-75	M			X		X			DOCUMENTATION CORRECTION	0	0

REVISIONS	CHK	CHG NO.	REV.
V1		00002	B
V1		00003	C
V1		00004	D
V1		00005	E
V1		0005A	F
V1		00006	H
V1		00007	J
V1		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

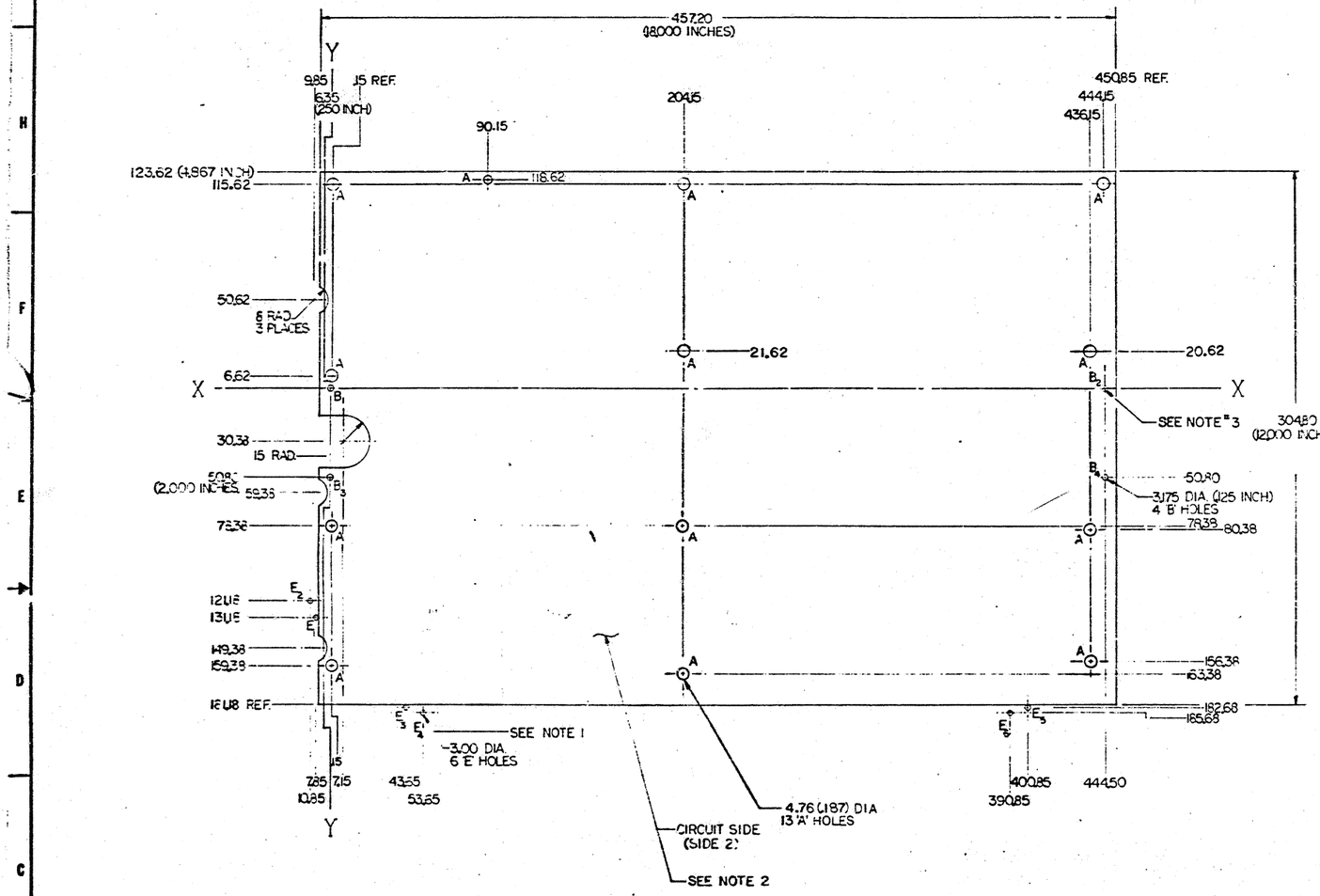
PROD'N [illegible] DATE 1-10-75

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE MODULE ECO HISTORY

SIZE B | CODE MH | NUMBER 5410926-0-6 | REV. M

DEC 16-13261-1026-N971
DRB 104



NOTES.

1. A_1 TOOL TO BE DESIGNED WITH ALL PINS E_1 THRU E_5 INSTALLED.

   B_1 E_1, E_3 & E_5 TO BE SPRING LOADED RETRACTABLE.

   C_1 E_2, E_4, 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 & BOTTOM PLATE. DO NOT INSTALL PUNCHES IN B_1-B_2 DATUM.

METRIC DIMENSIONS

ITEM (#)	QTY.	DESCRIPTION	PART NO.
FIRST USED ON OPTION MODEL: VT 5*		PARTS LIST	

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETRE / INCHES
UNLESS OTHERWISE SPECIFIED

SPLUS ETCHG	INCHES	ANGLES
.XXX ±0.010	.XXX ±0.005	1/2°
.XX ±0.03	.XX ±0.010	
.X ±0.1	.X ±0.3	

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

NEXT HIGHER ASSY.

MATERIAL —

FINISH —

B-DD-VT5-B-2

SCALE

SHEET OF

DRN. DATE

CHK'D DATE

ENG DATE

APPROV DATE

digital

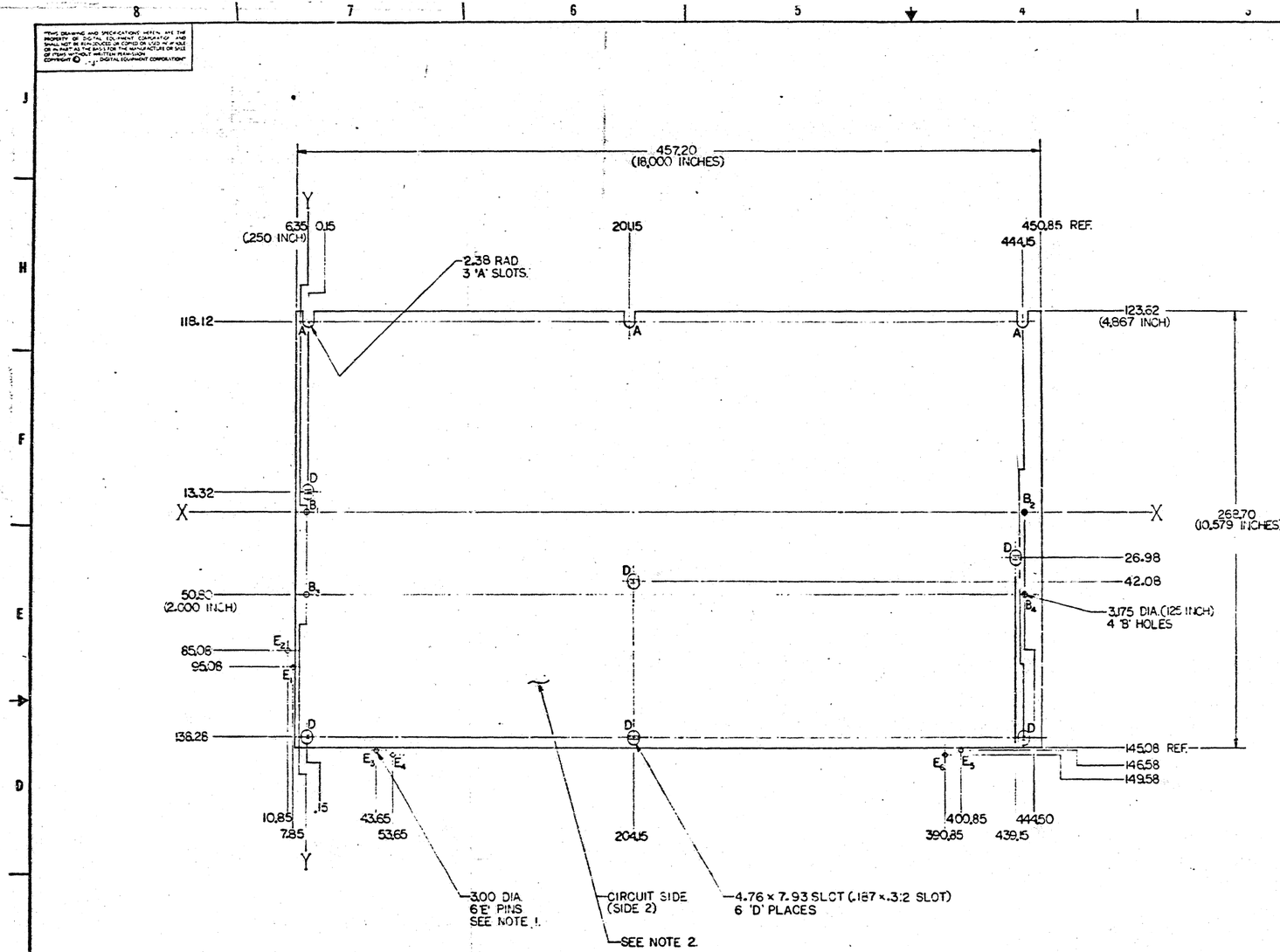
TITLE
PERIPHERAL
REAR PROCESSOR

SIZE | CODE | NUMBER | REV.
B | MD | 9805360-0-0

DIST.

REVISIONS: REV. | DESCRIPTION | CHG NO.

9805360-0-0



NOTES:

1a. TOOL TO BE DESIGNED WITH ALL PINS E_1 THRU E_6 INSTALLED.

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

1c. E_2, E_3 & 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 MODEL: VT 52	QTY.	DESCRIPTION	PART NO.
PARTS LIST			

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
X.XX ± 0.10	XXX ± 0.005	±0°30'
X.X ± 0.03	XX ± 0.01	
X ± 0.2	X ± 0.01	

THIRD ANGLE PROJECTION

REMOVE BURR AND BREAK SHARP CORNERS SUITABLE QUALITY ✓

MATERIAL: B-DD-VT50-0-0

FINISH:

NEXT HIGHER ASSY.:

SCALE 1/1

SHEET 1 OF 1

DRN. [illegible] DATE 1-Feb-79
CHK'D [illegible] DATE 1-Feb-79
ENG. [illegible] DATE 1-Feb-79
QA [illegible] DATE
PROJ. [illegible] DATE

digital

TITLE: PERIPHERY DIE FRONT PROCESSOR

SIZE CODE: E NUMBER: 9606361-0-0 REV.

DIST

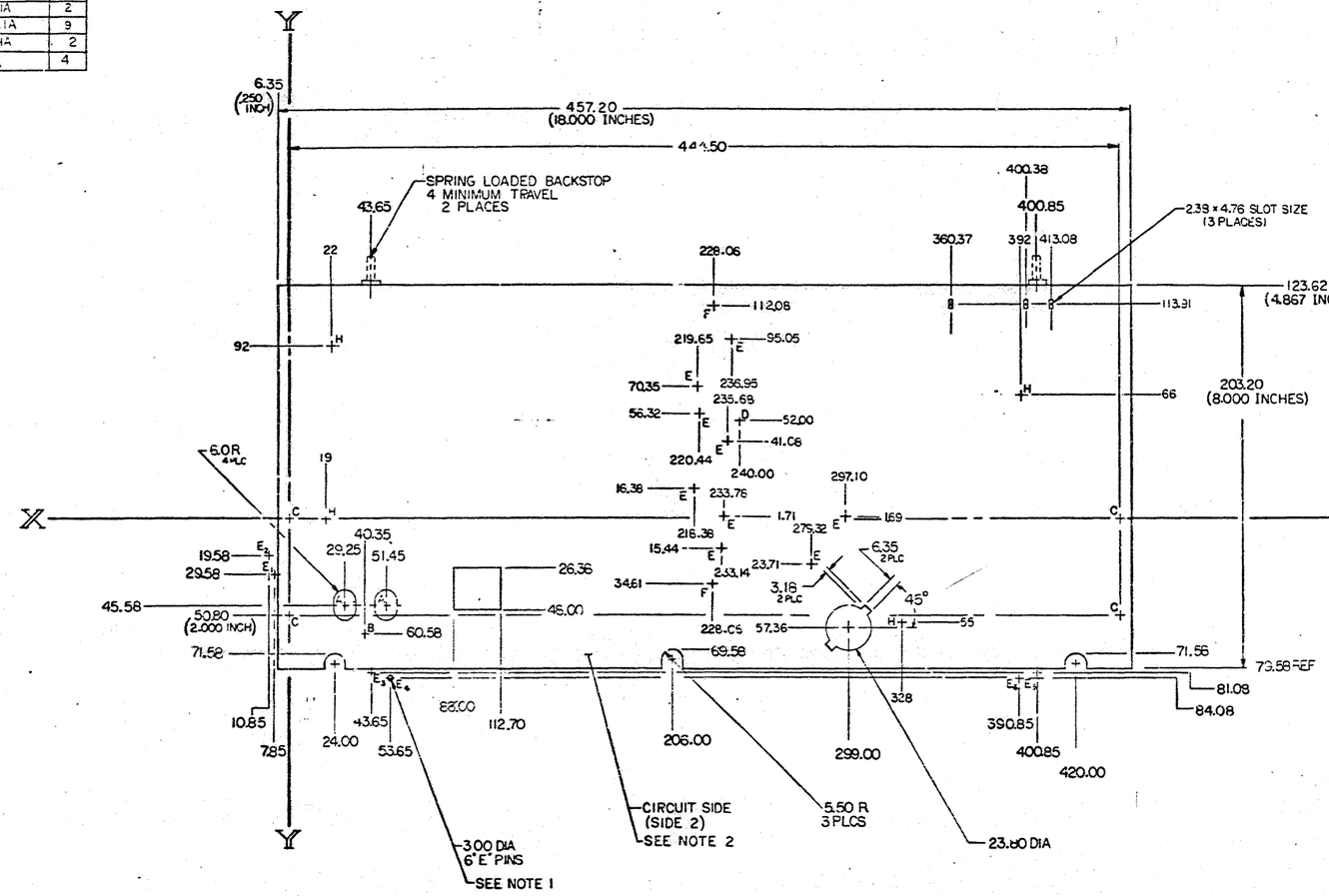
CHG. CHANGE NO. REVISIONS REV.

MD 9606361-0-0

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 E6 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 OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
VT50	PARTS LIST			

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

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

THIRD ANGLE PROJECTION
REMOVE BURRS AND BREAK SHARP
CONFORM SURFACE QUALITY √
MATERIAL
FINISH

DRN. DATE
CHK'D DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE
NEXT HIGHER ASSY.
B-DD-VT50-0-0

digital

TITLE PERIPHERY DIE, PWR SUP/MONITOR

SIZE C | CODE VD | NUMBER 9606362-0-0 | REV.
SCALE 1/1
SHEET 1 OF 1 | DST

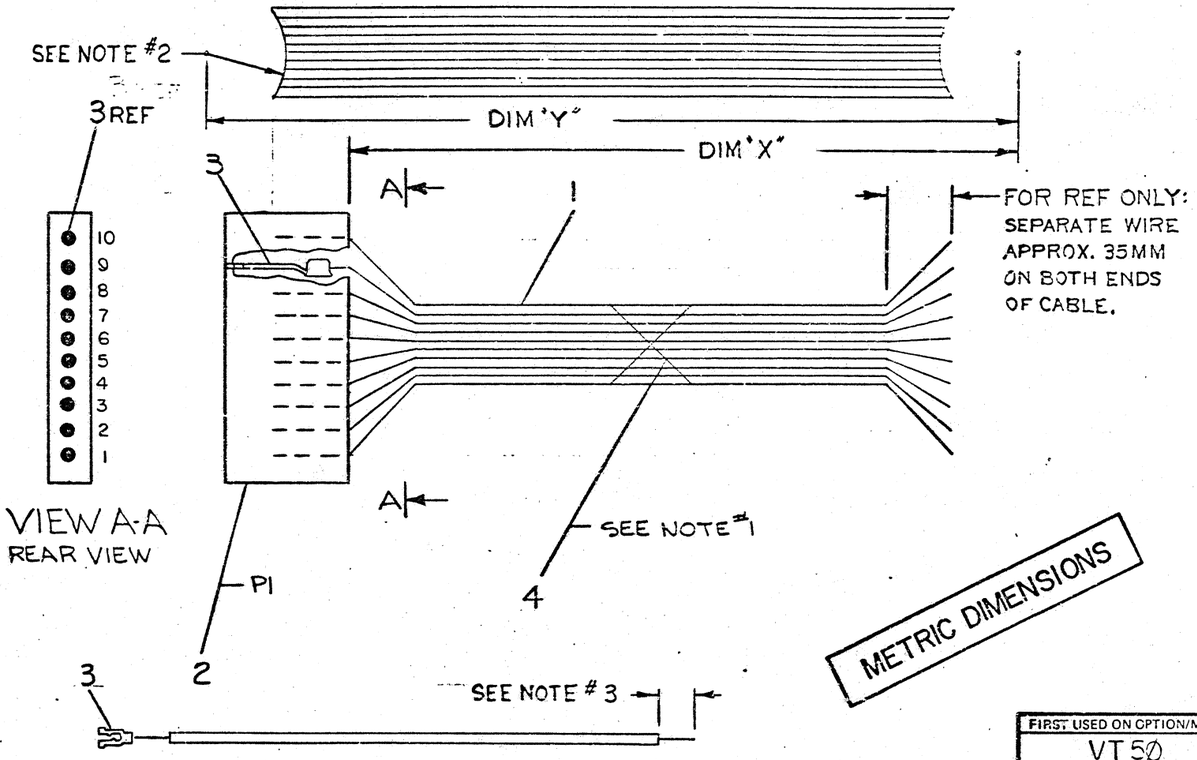
MT 9606362-0-0 A

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
2	10	CONTACT, CABLE	9009609-00
3	1	HOUSING, CONN 10 PIN	1211355-01
4	A/R	CABLE, RIBBON	9107575-00

PARTS LIST

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

FIRST USED ON OPTION/MODEL: 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 √

DRN. G. Hay	DATE 4/7/75	digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
CHK'D.	DATE 4/8/75	
ENG.	DATE 4/9/75	
PROJ. ENG.	DATE 4/9/75	
PROD.	DATE 5/26/75	

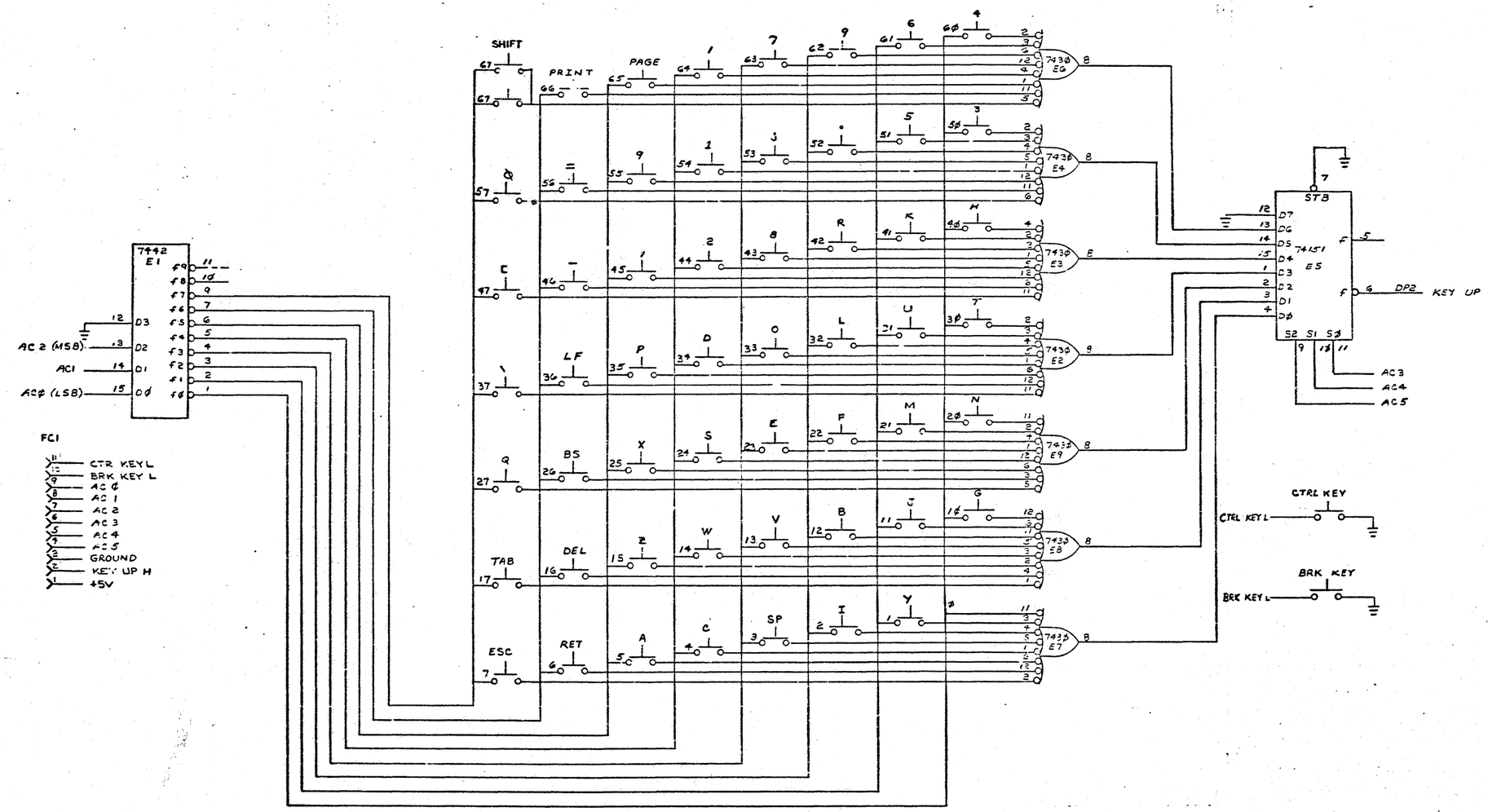
MATERIAL: SEE PARTS LIST
FINISH
NEXT HIGHER ASSY.: D-CS-5410906-0-1
SCALE
SHEET 1 OF 1

TITLE: CABLE ASSY MEMORY & DECODER

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

DIST.

DEC FORM NO. DRC 100-B



REVISIONS		
CHK	CHANGE NO	REV

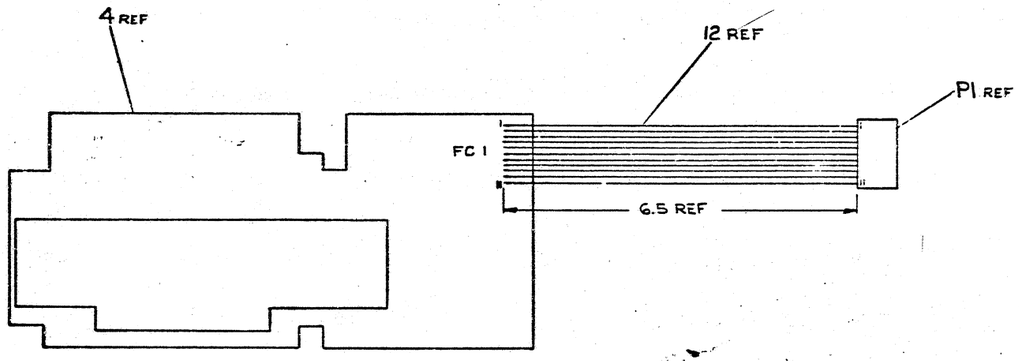
TITLE	SIZE	CODE	NUMBER	REV.
KEYBOARD A VT50	D	CS	5410893-0-1	F
SCALE	SHEET 2 OF 4	DIST.		

DEC FORM NO. BRD 130

DCS 5410893-0-1 F

WIRE TABLE

ITEM NO	DESCRIPTION AWG	COLOR	FROM CONN	WITH	TO CONN	WITH	REMARKS
12	22	BLK	P1-1	——	FC1-1	SOLDER	+5V
		BRN	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

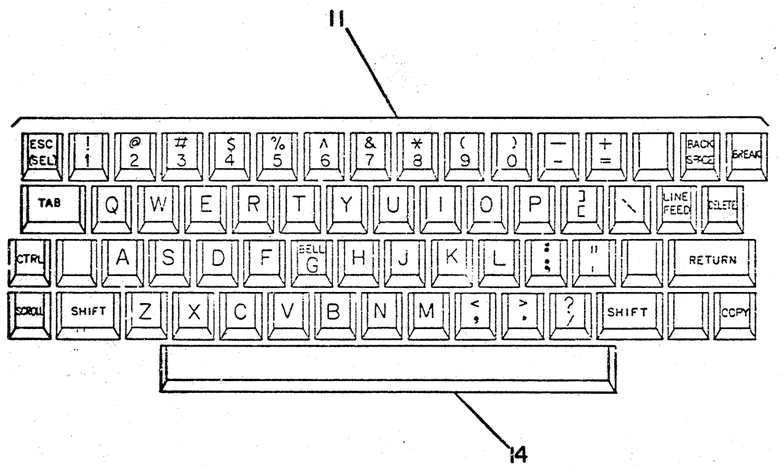


REVISIONS		
CHK	CHANGE NO	REV

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

DEC FORM 22 0880 137

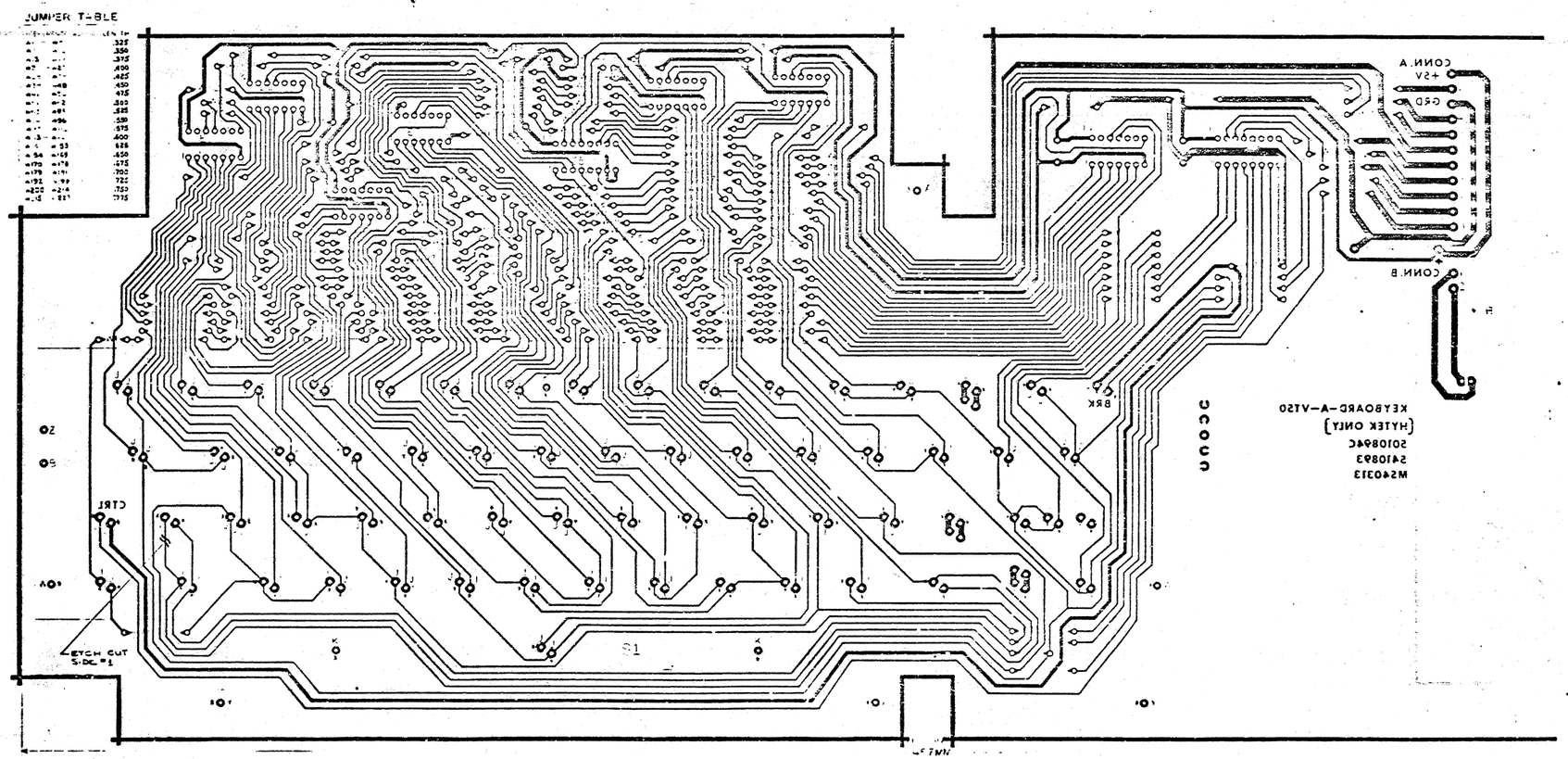
5410893-0-1 F DCS



REVISIONS		
CHK	CHANGE NO	REV

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

DCS 5410893-0-1 F



NOTES:

1. UNLESS OTHERWISE INDICATED ALL DIMENSIONS ARE ±.010 INCH.
2. ALL DIMENSIONS ARE IN INCHES WITH METRIC EQUIVALENTS SHOWN IN MILLIMETERS.
3. ENGINEER WITH SUPPLY BLANK MATERIAL.
4. SEE D.I.A. DRAWING FOR COMPLETE BOARD DIMENSIONS.
5. BY MANUFACTURE NAME BY CINCINNATI MILACRON.
6. BY MATERIAL SHALL BE REINFORCED EPOXY GLASS.
7. HOLES ARE STATISTICALLY LOCATED WITH RESPECT TO EACH OTHER.
8. BOARD ASSEMBLY TO MEET MIL-STD WORKMANSHIP REQUIREMENTS.
9. DO NOT DIGITIZE "B" HOLES.

DRILLING DATA

HOLE LETTER	FOR PTH BOARDS: DRILL SIZES BEFORE PLATE	AFTER PLATE	FOR NON-PTH BOARDS	CAN TAKE GRIPLETS YES	NO	QTY OF HOLES
NONE		X	.031 (.0625)			
A		X	.1110			
M		X	.1285 (.1405)			
K		X	.1405 (.1495)			
Y		X	.1495 (.1595)			
J		X	.152 (.1625)			
B		X	.157 to .201			

BOARD FABRICATION INFORMATION

BOARD SIZE 5.500 X 15.000

BOARD MATERIAL

EYELET PLATED THRU

/ SIDED / MULTI-LAYER

NOTCH BEFORE GOLD PLATING

NOTCH AFTER GOLD PLATING

DRAWN		digital EQUIPMENT CORPORATION	
CHK'D			
ENGR			
MFG			
NEXT ASSY USED IN			
SCALE		SIZE 5410893	REV F
STOCK REV C		MS	

REV.	NUMBER	SIZE	CODE
E	9-0-E5801745	B	MH4W

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.A.	00001	A
V.A.	00002	B
V.A.	00003	C
V.A.	00004	D
V.A.	00005	E

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

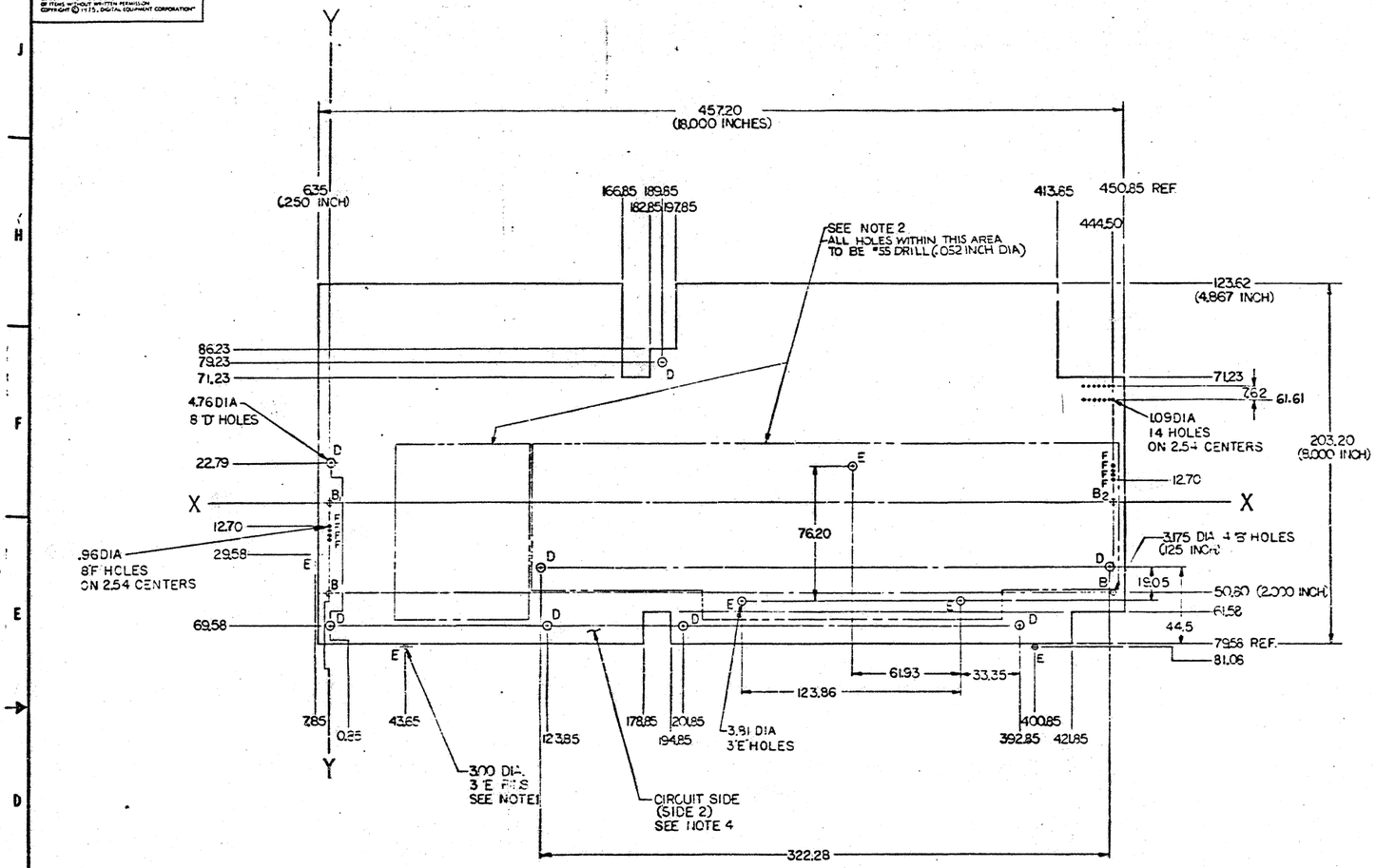
EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: MODULE ECO HISTORY

SIZE	CODE	NUMBER	REV.
B	MH	54-10893-0-6	F

DEC 10-(326)-1026-N971

DRB 104



NOTES:

1. PUT 3.175 DIA (.125 INCH) HOLES IN TOP AND BOTTOM PLATES. DO NOT INSTALL ALL PUNCHES IN B_1 & B_2 DATUM HOLES.
2. REFER TO ARTWORK FOR KEYTAB SWITCH HOLE LOCATION DIAGRAM 169-H.
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 OPTION/MODEL: VT 50	QTY.	DESCRIPTION	PART NO.	ITEM NO.
		PARTS LIST		

DIMENSIONAL TOLERANCE
DIMENSIONS ARE IN MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

MILLIMETERS	INCHES	ANGLES
X.XX ±0.10	XX. ±.005	±0° 30'
X.X ±0.05	XX.X ±.02	
X ±0.2	X.XX ±.01	

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓

MATERIAL —

FINISH —

	NAME	DATE
DRN.		
CHK'D.		
ENG.		5-22-75
PROJ. ENG.		
PRODUCT		
NEXT HIGHER ASSY.		

digital

TITLE: PERIPHERY DIE HYTEK KEY ARRAY

SIZE	CODE	NO.	REV.
B	MD	9606359-0-0	

SCALE 1:1 SHEET OF DIST

CHG. REV. CHANGE NO. DESCRIPTION

9606359-0-0 B

WIRE TABLE

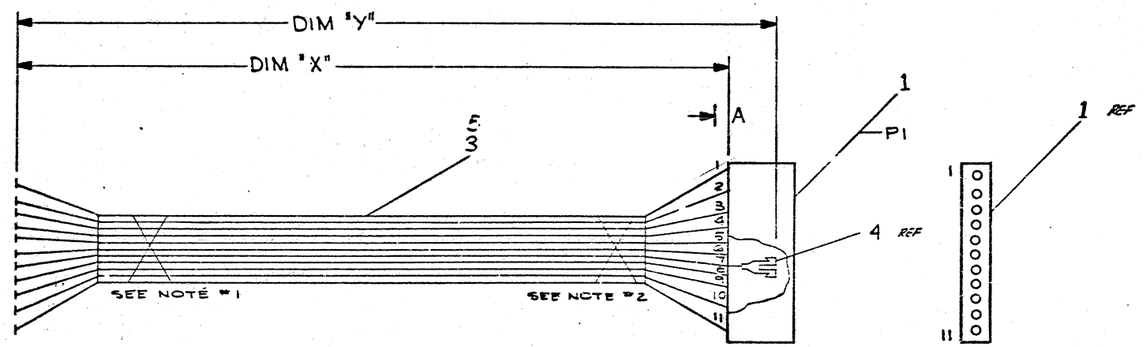
ITEM NO	DESCRIPTION AWG	COLOR	FROM CONNECT ON	FROM WITH	TO CONNECTION	TO WITH	REMARKS
3	22	BLACK			P1-1	4	
		BROWN			P1-2		
		RED			P1-3		
		ORANGE			P1-4		
		YELLOW			P1-5		
		GREEN			P1-6		
		BLUE			P1-7		
		VIOLET			P1-8		
		GRAY			P1-9		
3		WHITE			P1-10		
5	22	BLUE			P1-11	4	

LEGEND

NUMBER	DIM "X" VARIATION	DIM "Y" PRECUT
7010912-0H	6.75 INS	8.0 INS

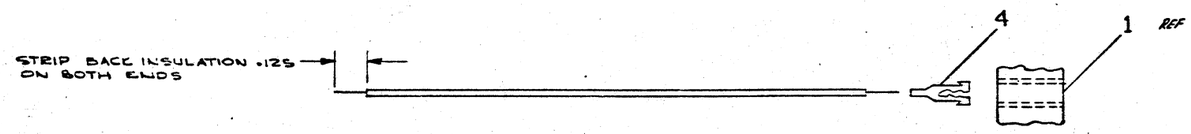
NOTES:

1. USE TIE WRAP (X) ITEM #2 1.9 INS FROM KEYBOARD END OF CABLE.
2. USE TIE WRAP (X) ITEM #2 1.0 INS FROM P1 END OF CABLE



A

VIEW A-A



A/R	WIRE, STRND, #22 AWG	9175-50-66	5
11	CONTACT RECP.	90C 1609	4
A/R	CABLE R BRN 20COND FLAT AWG	9107575	3
2	TIE WRAP - 1.5M	9007880	2
1	CONN. RECP HOUSING 11 PN	211855	1
	DESCRIPTION	DEC PART NO.	ITEM NO

* UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

ANGLES	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	±.008	±.012	±.016	±.024	±.04
	PREFERRED	±.012	±.016	±.025	±.04	±.063	±.1

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE PARTS LIST

FINISH

DRN mcfarlane 3-81

CHK'D.

ENG.

PROJ. ENG.

PROD.

NEXT HIGHER ASSY.

FIRST USED ON VT-2H

digital

TITLE KEYBOARD CABLE VT51/VT50H (VT50H CABLE)

SIZE D | CODE | NUMBER 7010912-0-0 | REV. A

SCALE

SHEET 1 OF 1 | DIST.

REVISIONS	REV.	CHANGE NO.	CHK
	A	7010912-0X01	J BUZYNSKI

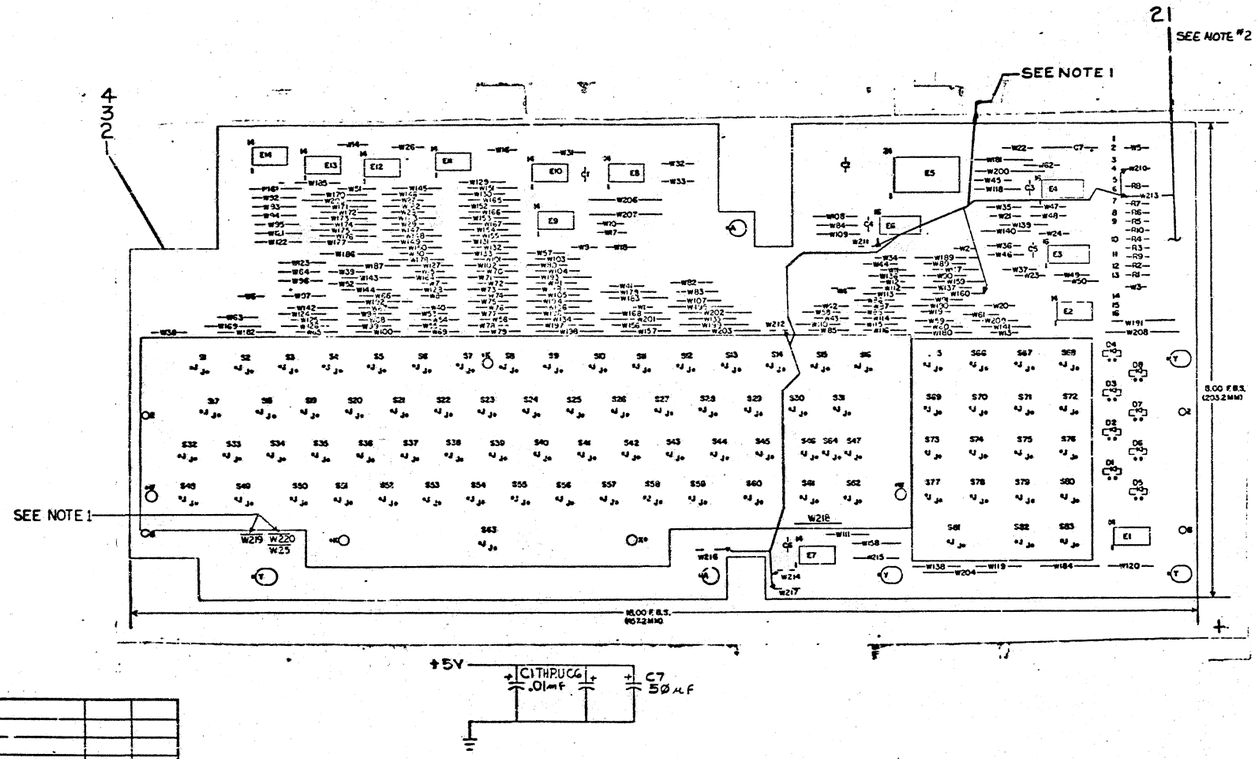
SLM #700

DEC FORM NO. BID 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
5411170-0	THIS VARIATION IS NOT PRESENTLY USED
5411170-1	HEAT CYCLED, SYSTEM TESTED 5411170-0
5411170-2	BASIC VT50H
5411170-3	HEAT CYCLED, SYSTEM TESTED 5411170-2



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

IC PIN LOCATIONS

QTY 5411170-2	QTY 5411170-0	REF. DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.
REF	REF		X-Y COORDINATE HOLE LOCATION	K-CO-5411170-0-4	1
REF	REF		ASS'Y/DRILLING HOLE LAYOUT	E-AH-5411170-0-5	2
REF	REF		MODULE ECO HISTORY	B-MH-5411170-0-6	3
1	1		ETCH CIRCUIT BOARD	5011169	4
6	6	C1-C6	CAP .01 mf 100V, 20% DISC	1001610-01	5
1	1	C7	CAP 50 mf, 25V	1001796	6
1	-	63 KEY ARRAY	HITEK KEYCAPS (1 SET)	1212287-05	7
1	-		KEYCAP (REPEAT)	1212287-43	8
1	1		SPACE BAR, BLUE	1211557-01	9
1	-	19 KEY ARRAY	HITEK KEYCAPS (1 SET)	1212287-00	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%	1300295	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 ASS'Y	7009892	18
1	1	S65-S83	19 KEYSWITCH ASS'Y	7009890	19
218	218	W1-W210, W212-W218, W220	REEL JUMPER	9107560-/	20
1	-		CABLE KEYBOARD VT50/VT50H	D-IA-7013412-0-0	21

PARTS LIST

FIRST USED ON OPTION MODEL: VT51/VT50

ETCH BOARD REV. C

J. BUZYNSKI 12-12-75
T.H. Simmons 5-9-75
TM 5411170-0001
ORIGINATED
CHANGE NO.
REVISIONS
REV. A B C

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

SEMICONDUCTOR CONVERSION CHART

DRN. DATE 5/16/75
CHK DATE
ENG. DATE
PROJ. ENG. DATE
PROD. DATE
NEXT HIGHER ASSY: 0-UA-VT50-0-0
SCALE
SHEET 1 OF 4
DIST.

digital

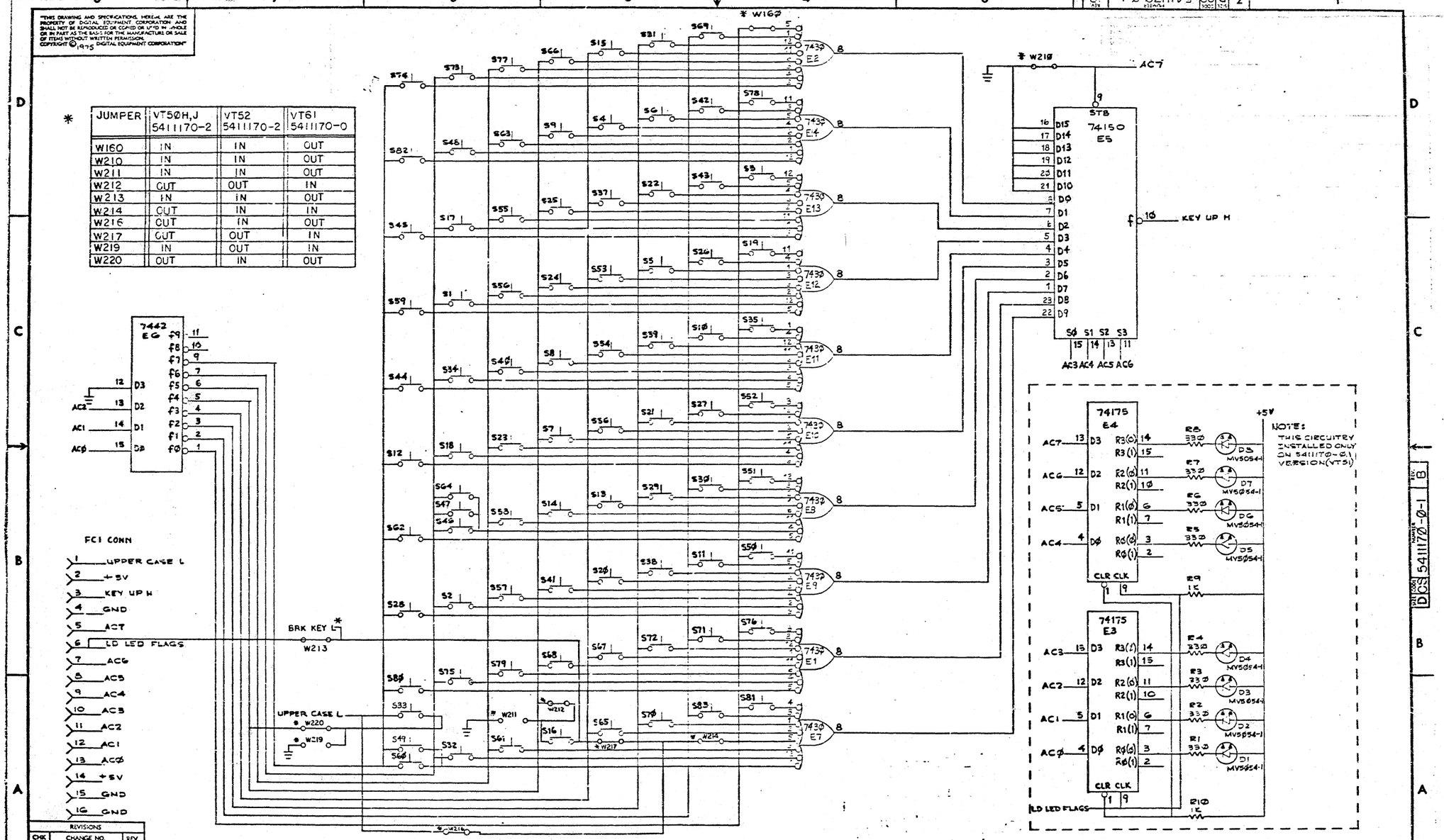
TITLE: KEYBOARD VT51/VT50H

SIZE D | CODE DCS | NUMBER 5411170-0-1 | REV. B

MFG CODE DCS 5411170-0-1 REV B

* 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

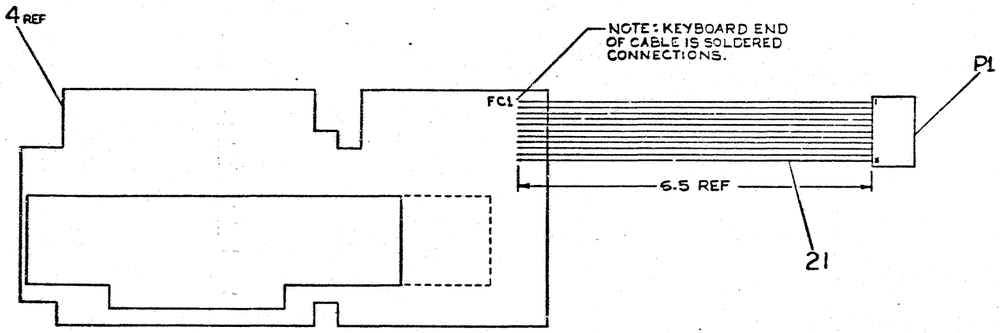


REVISIONS		
CHK	CHANGE NO.	REV.

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

WIRE TABLE

ITEM NO	DESCRIPTION AWG	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	FC1-5	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

THIRD ANGLE PROJECTION	DRN.	FIRST USED ON	VT52H/VT51
	CHK'D	TITLE	KEYBOARD VT51/VT50H
REMOVE BURRS AND BREAK SHARP CORNERS	ENG.		(CABLE CONN)
DO NOT SCALE DWG	PROJ. ENG.	NEXT HIGHER ASSY.	
MATERIAL	PROD.	SIZE D	CODE DCS	NUMBER 5411170-0-1	REV. B
FINISH	SCALE	SHEET 3 OF 4	DIST:

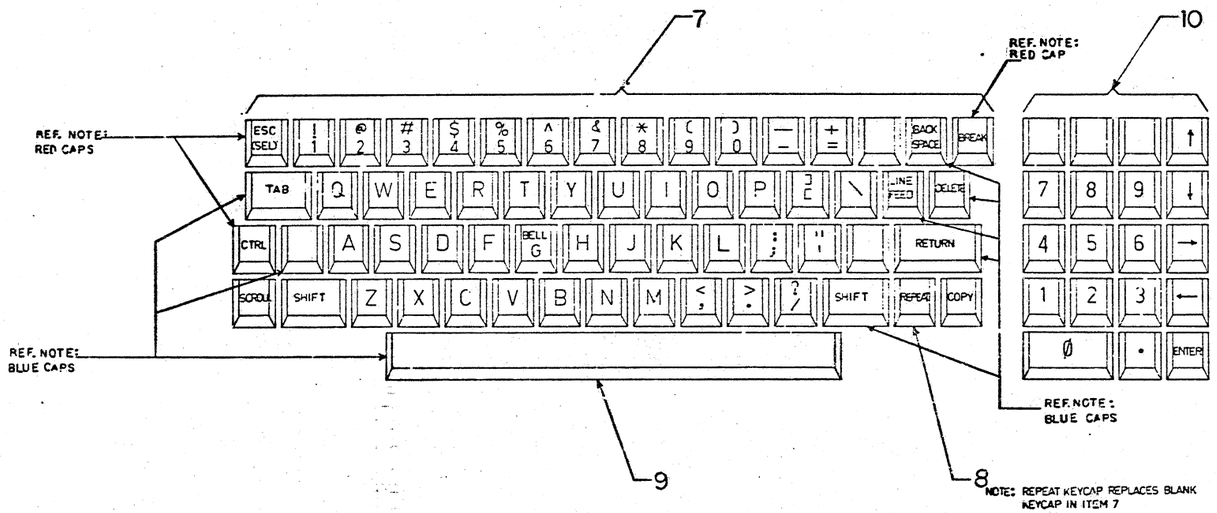
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

ANGLES	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE INCHES					
		OVER 0 TO 0.2	OVER 0.2 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
SURFACE QUALITY IN MICROINCHES	MEDIUM	±.004	±.009	±.012	±.016	±.024	±.06
	PREFERRED	±.012	±.016	±.025	±.04	±.063	±.1

QUANTITY & VARIATION

REVISIONS REV.	CHANGE NO.	CHK.

SEE FORM NO. SRB 1254



DRN. Ed Maxwell	3-...	FIRST USED ON VT50H/VT51	digital
CHK'D	...	TITLE KEYBOARD VT52H/VT51 (VT52H KEYCAPS)	
ENG.	...		
PROJ. ENG.	...		
PROD	...		
NEXT HIGHER ASSY.		SIZE D CODE CS NUMBER 54-11170-0-0 REV. B	
SCALE NONE		DIST.	
SHEET 4 OF 4			

REVISIONS: REV. | CHANGE NO. | CHK

54-11170-0-0 REV. B

DEC FORM NO. BMD 102-0

JUMPER TABLE

REFERENCE NO.	LENGTH (INCHES)
	ON .300 CENTERS
	ON .350 CENTERS
W1—W3, W11, W12, W14	ON .375 CENTERS
W4, W5, W6, W7, W8, W9, W10, W13	ON .400 CENTERS
W15 — W17, W17 — W19	ON .425 CENTERS
W16 — W18, W18 — W20	ON .450 CENTERS
W21 — W24, W23 — W25	ON .500 CENTERS
W22 — W27	ON .550 CENTERS
W26 — W28	ON .600 CENTERS
W29 — W30	ON .650 CENTERS
W31 — W32	ON .700 CENTERS
W33 — W34	ON .750 CENTERS
W35 — W36, W37 — W38	ON .800 CENTERS
W39 — W40	ON .850 CENTERS
W41 — W42	ON .900 CENTERS
W43 — W44	ON .950 CENTERS
W45 — W46	ON 1.000 CENTERS
W47 — W48	ON 1.050 CENTERS
W49 — W50	ON 1.100 CENTERS
W51 — W52	ON 1.150 CENTERS
W53 — W54	ON 1.200 CENTERS
W55 — W56	ON 1.250 CENTERS
W201 — W203	ON 1.300 CENTERS
W204	ON 1.350 CENTERS
W205 — W206	ON 1.400 CENTERS

VT51/VT52II KEYBOARD
54111-70
50111-R-C-P2
B5AC0334

8.00 F.B.S.
(203.2 MM)

18.00 F.B.S.
(457.2 MM)

EQUIPMENT CORPORATION

VT61/VT62II
KEYBOARD

REV. C | NUMBER 5411170-0-6 | SIZE B | CODE MH

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?			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	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.	
MH	00001	A	MV. COIL A.
			MV. COIL B.
	00002	C	

DRN. J BUZYNSKI	DATE 3-17-75	
CHK'D J BUZYNSKI	DATE 3-17-75	
ENG. [signature]	DATE 3-18-75	
PROD. [signature]	DATE 3-21-75	

DEC 16-L3261-1026-N971

DRB 104

EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

MODULE ECO HISTORY

SIZE B | CODE MH | NUMBER 5411170-0-6 | REV. C

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PARTS LIST

MADE BY J. CAHILL	CHECKED J. CAHILL	SECTION 1
DATE 3/6/75	DATE 3/6/75	
ENG DATE	PROD DATE	ISSUED SECT. 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 (VT5Ø)	B-DD-VT5Ø-Ø	A	PL	7010933-0-0		
	SHEET 1 OF 1	DIST.				

DEC FORM DEC 16 (325)-1031 N870
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	PI 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
R. Patton 3/21/75	J. W Lawrence 3/21/75	A	SP	3700179-0-0	

DEC 8-(5511)-1031-1-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.

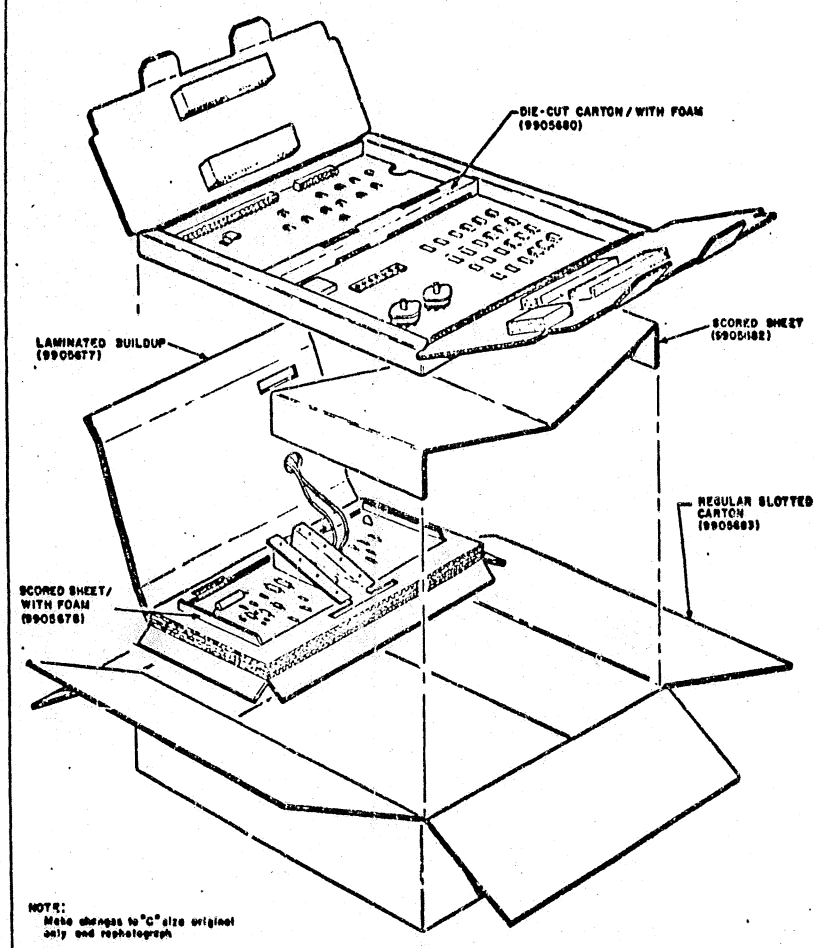
ENG	APPD	SIZE	CODE	NUMBER	REV
R. Patton 3/21/75	J. W Lawrence 3/21/75	A	SP	3700179-0-0	

DEC 8-(5511)-1031-2-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
Rick Patton 3/21/75	J. W Lawrence 3/21/75	A	SP	3700179-0-0

SMO-100

SHEET 3 OF 3

CONTINUATION SHEET

Step

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.

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

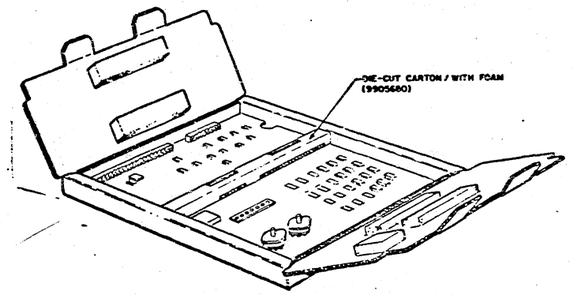
PACKAGING INSTRUCTIONS

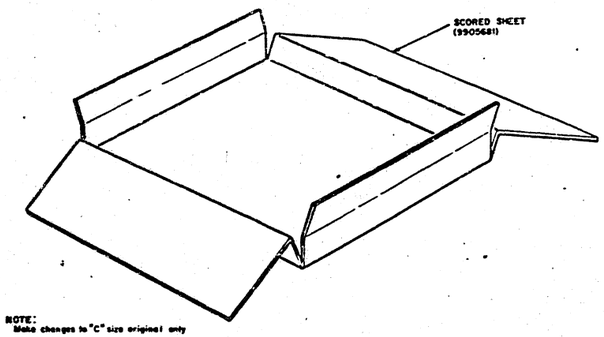
Step	Procedure
1	Open the two top flaps on the Die-Cut with Foam (9905680) which has been supplied set-up.
2	Place one ROM/UART Board (5410902) *components facing up* into the section of the Die-Cut Carton with the three pieces of foam on the top flap. Place the board into the cavity with the pins facing 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	W Lawrence 3/21/75	A	SP	3700180-0-0	

DEC 8-1551J-1031-1-R671
DRA - 129

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





NOTE:
Make 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

DEC-100

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

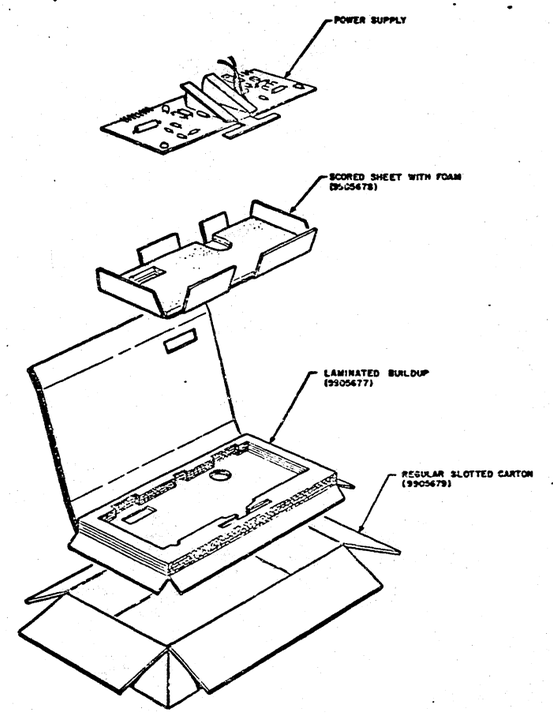
PACKAGING INSTRUCTIONS

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
E. Pitta 3/21/75	J. Lawrence 3/21/75	A	SP	3700181-0-0	

DEC 8-(551)-1031-1-R671
DRA - 129

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
E. Pitta 3/21/75	J. Lawrence 3/21/75	A	SP	3700181-0-0

DRD-109

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 colored 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.

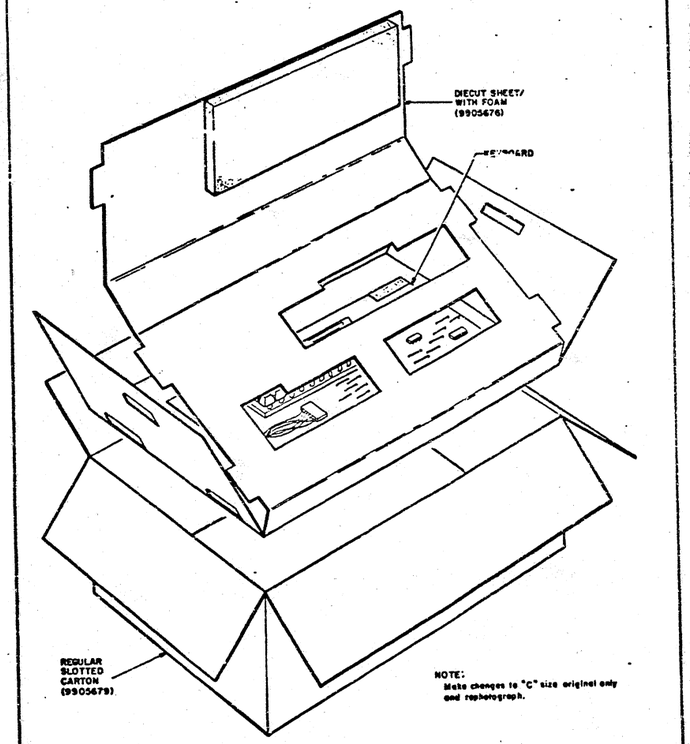
ENG	APPD	SIZE	CODE	NUMBER	REV
E. Patten 3/21/75	W. Laurenz 3/21/75	A	SP	3700182-0-0	

DEC 8-(551)-1031-1-R571
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
Pat Patten 3/21/75	J. W. Laurenz 3/21/75	A	SP	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/R					N/R

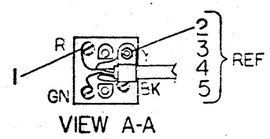
TITLE VT5Ø SHIPPING LIST DECsystem-1Ø	ASSY NO.	SIZE A	CODE PL	NUMBER PDP1Ø-Ø-SHIP
	SHEET 1 OF 1	DIST.		REV. – ECO NO VT50-00010

DEC FORM DEC 16-(325)-1031-N870
DRA 110

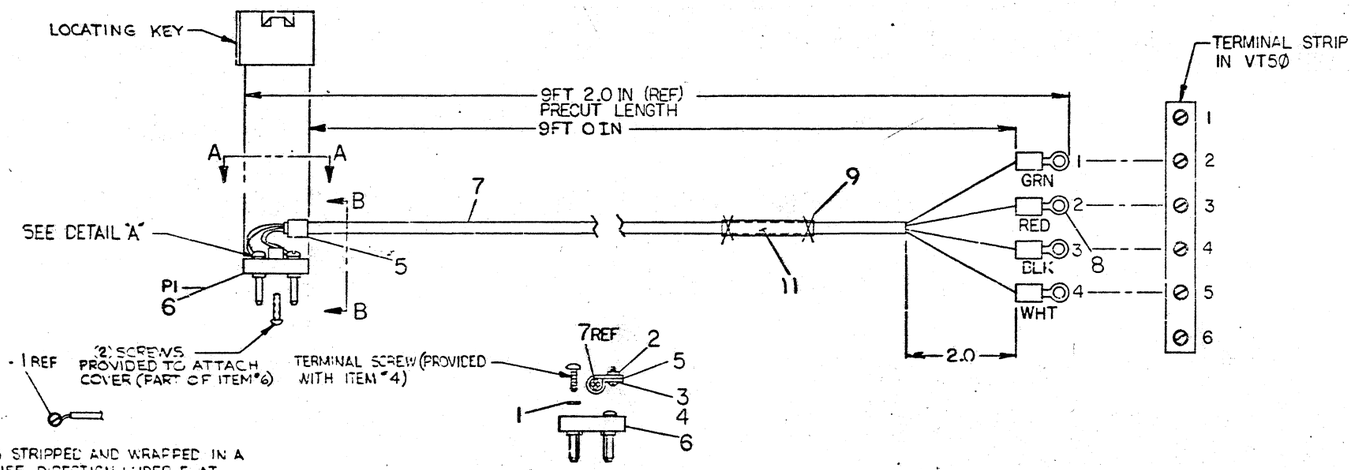
WIRE TABLE

WIRE DESCRIPTION			FROM			TO			
		COLOR	POINT	CONNECTOR	WITH	POINT	CONNECTOR	WITH	SIGNAL
7	22	RED	—	P1-R	—	2	—	ITEM 8	KEYBOARD-(OUTPUT)
"	"	BLK	—	P1-BK	—	3	—	"	PRINTER-(INPUT)
"	"	GRN	—	P1-GN	—	1	—	"	KEYBOARD-(OUTPUT)
7	22	WHT	—	P1-Y	—	4	—	ITEM 8	PRINTER-(INPUT)

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



VIEW A-A



DETAIL "A"

VIEW B-B

ITEM NO.	DESCRIPTION	PART NO.	QTY.
11	LABEL, CABLE ID	9009532	1
10	CONN, TELEPHONE (JACK)	1205357-02	1
9	CABLE, TIE	9007880	3
8	TERMINAL RING TONGUE	900 930-00	4
7	CABLE, 4 CONDUCTOR	9 07706	A/R
6	CONN TELEPHONE (PLUG)	1205357-01	1
5	CABLE CLAMP, 2	9007079	1
4	WASHER, FLAT NYLON #4	9006708	1
3	SCR, NYLON BIND, HD 4-40 X .38	9006401-4	1
2	NUT, NYLON 4-40	9007932	1
1	WASHER FLAT #4	9007172	4

PARTS LIST

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

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS / INCHES
UNLESS OTHERWISE SPECIFIED

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

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

DRN. — DATE
CHKD. — DATE 2-24-72
ENG. — DATE
PROJ. ENG. — DATE
PROD. — DATE
NEXT HIGHER ASSY.

MATERIAL: SEE PARTS LIST
FINISH

digital

TITLE: 25JB CONN TO VT50 TERM

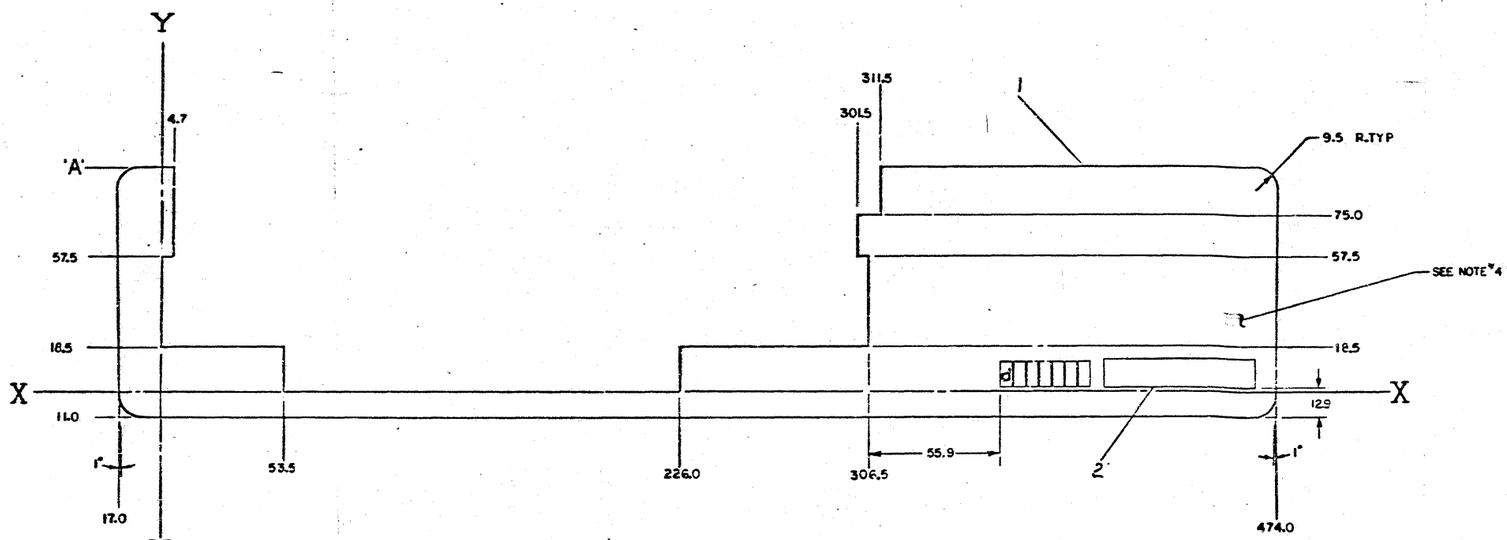
SIZE D | CODE 14 | NUMBER 70110-69-0-0 | REV. D

SCALE
SHEET OF
DIST.

REVISIONS	REV.	CHANGE NO.	CHK

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 S&W POLANE PAINT ON -2.
4. APPLY 3M TAPE #4032 ON ENTIRE SURFACE FAR SIDE.



REVISIONS		
CHK	CHANGE NO.	REV.
	7413093-0(X)1 1-23-75 L. BALOGH	A
	7413093-0002 L. BALOGH	B

QTY.	DESCRIPTION	PART NO.	ITEM NO.
A/R	TAPE 3M 4032	3612357	3
1	SILK SCREEN	B-SC-7413093-0-1	2
1	BEZEL, KEYBOARD (VT50, VT51)		1

PARTS LIST

FIRST USED ON OPTION/MODEL

DIMENSIONAL TOLERANCE
DIMENSIONS ARE MILLIMETERS
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 SEE TABLE
FINISH SEE NOTES

		DATE
DRN.		7-1-74
CHK'D		
ENG.		
PROJ. ENG.		
PROD.		

NEXT HIGHER ASSY. D-UA-VT52-0-0
SCALE 1/1
SHEET 1 OF 1

digital

TITLE
BEZEL, KEYBOARD
(VT50, VT51)

SIZE	CODE	NUMBER	REV.
D		7413093-0-0	5

DIST.

13.95

digital decscope

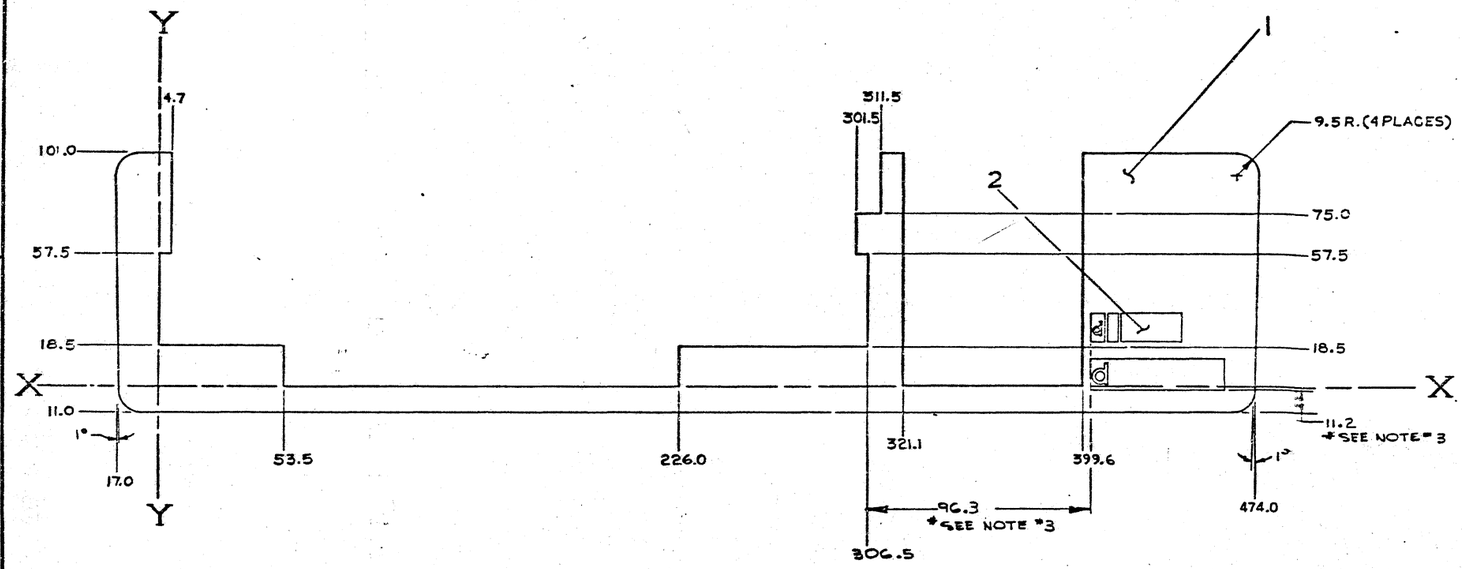
55,880

SPEC# 9200101-68 GRAY

DRN. J DEMERS 2-20-75	FIRST USED ON VT50	digital	
CHK'D [illegible] 2-20-75			
ENG. [illegible] 2-20-75	TITLE BEZEL KEYBOARD VT50		
PROJ. ENG. [illegible] 2-21-75			
PROD. [illegible] 2-21-75			
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.		

REVISIONS		
CHK	CHANGE NO.	REV.

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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETER

ANGLES ±0° 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 0 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 ☐	±.01	±.02	±.03	±.04	±.06	±.10
✓	PREFERRED ☒	±.03	±.04	±.06	±.10	±.15	±.25

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

MATERIAL SEE NOTE #1

FINISH SEE NOTE #2

DRN: [illegible] 5/20/76
CHK: [illegible] 5/21/76
ENG: [illegible]
PROJ ENG.
PROD. [illegible] 8-4-76
NEXT HIGHER ASSY.
SCALE 1/1
SHEET 1 OF 1

FIRST USED ON: VT50H/V51

digital

TITLE: BEZEL KEYBOARD (VT50H)

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

DIST.

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7413432-00001	A	[illegible] 4-27-76
[illegible]			JENZ/HSK1 [illegible]

DEC FORM NO. 84-150

1 1A 7413432-0-0 A

11.2

digital

decscope

96.3

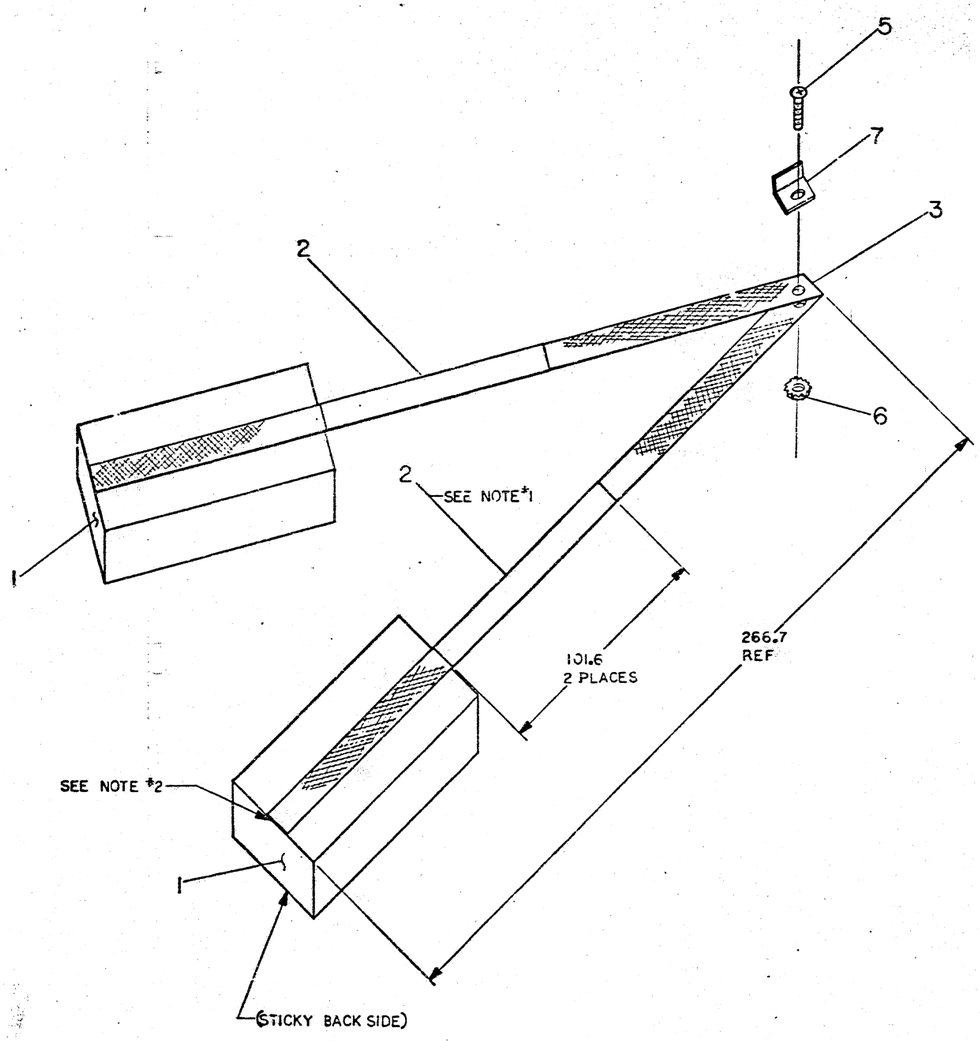
REVISIONS	CHANGE NO.	REV.
CHK		

SPEC # 9200100-68 GRAY

DRN. J Demeo 3-20-75	FIRST USED ON VT51 & VT50H	digital		
CHK'D				
ENG. [signature] 3-4-75	TITLE KEYBOARD (VT51 + VT50+)			
PROJ. ENG.				
PROD.				
NEXT HIGHER ASSY.				
	SIZE	CODE	NUMBER	REV.
SCALE	A	55	7413432-0-1	
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	9007253	7
1	NUT KEPS #6-32	9008185	6
1	SCR PHL FAN HD #6-32X.50LG	9006024-1	5
A/R	CEMENT HYSOL CONTACT	9007534	4
1	STRAP GND	2-MD-7413953-0-0	3
A/R	TUBING PVC (12.70 MM, BLK)	9107246	2
2	SUPPORT CRT GROUNDING	2-MD-7413757-0-0	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS

ANGLES ±30' 30'	CLASS OF ACCURACY (CHECK ONE)	NOMINAL DIMENSION RANGE MILLIMETER					
		OVER 0 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 ☐	±01	±02	±03	±04	±06	±10
	PREFERRED ☐	±03	±04	±06	±10	±16	±25

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DPN: [illegible] 4/17/75
CHK'D: [illegible]
ENG.: [illegible] 4/7/75
PROJ. ENG.: [illegible] 4/24/75
PROD.: [illegible]

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

FINISH

FIRST USED ON: VT50

TITLE: CRT, GROUNDING ASSEMBLY

MATERIAL	SIZE	CODE	NUMBER	REV.
SEE PARTS LIST	1	TA	7011197-0-0	

SCALE NONE

SHEET 1 OF 1

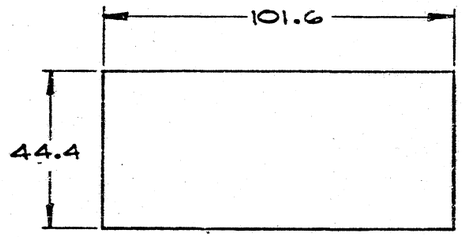
DIST.

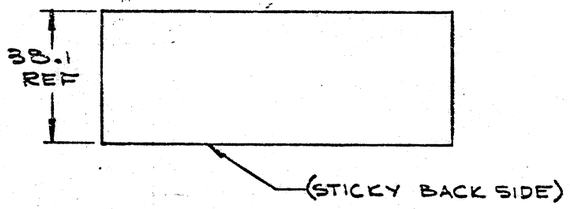
TA 7011197-0-0

REVISIONS	REV.	CHANGE NO.	CHK.

ENG FORM NO. BA-130

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





1	FOAM 1/2 X 54 X 30" (GRY)	9008259-01	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 NOTE #1

FINISH

DRN. George Drazin 4/14/75
CHK'D 4.29.75
ENG. 5/1-/75
PROJ. ENG. 4/21/75
PROD. 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	

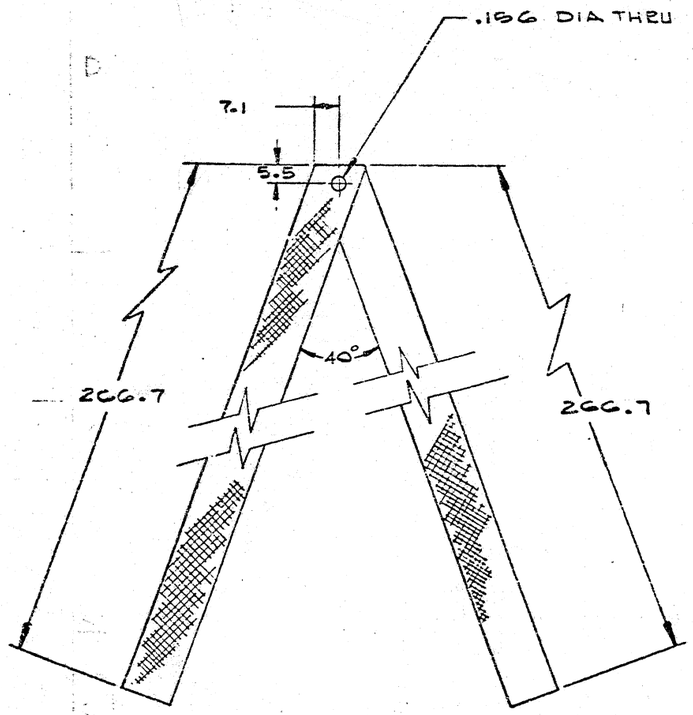
DIST.

REVISIONS	REV.	CHANGE NO.	CHK

DEC FORM NO. DA2-120

7413757-0-0 MD 2 B

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



METRIC DIMENSIONS

1	SHIELDING, BRAIDED	9107682	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

DRN	Jerry Drayton	4/18/75
CHK'D	[illegible]	4/18/75
ENG.	[illegible]	5/12/75
PROJ. ENG	[illegible]	4/29/75
PROD.		

NEXT HIGHER ASSY. I-IA-7011197-0-0

SCALE NONE

SHEET OF

FIRST USED ON VT50

digital

TITLE

STRAP, BRAIDED

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

DIST.

7413956-0-0 MD 2 B

REVISIONS | REV. | CHANGE NO. | CHK

DEC FORM NO. DA2-120