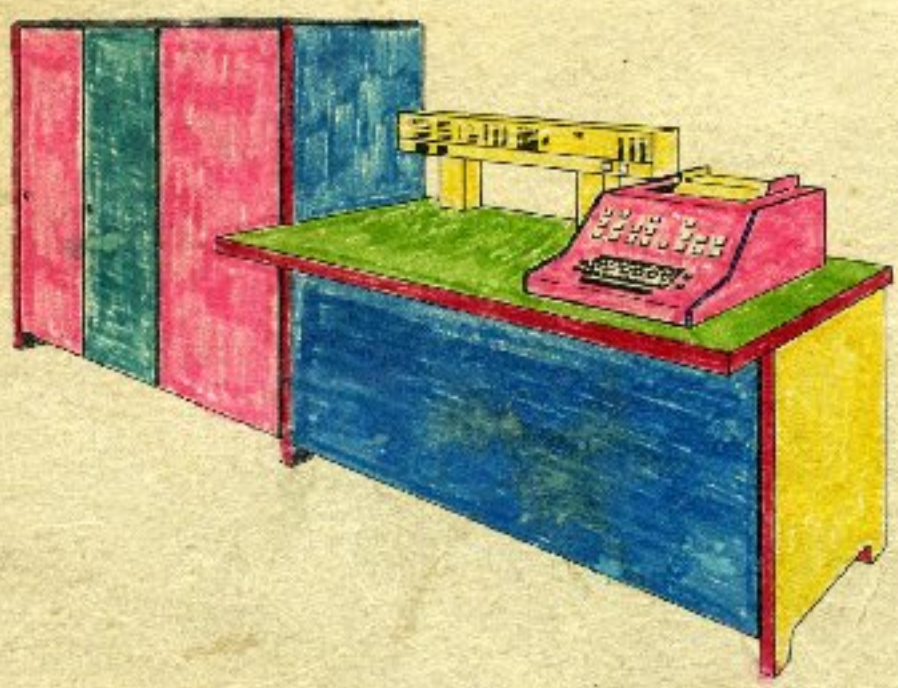


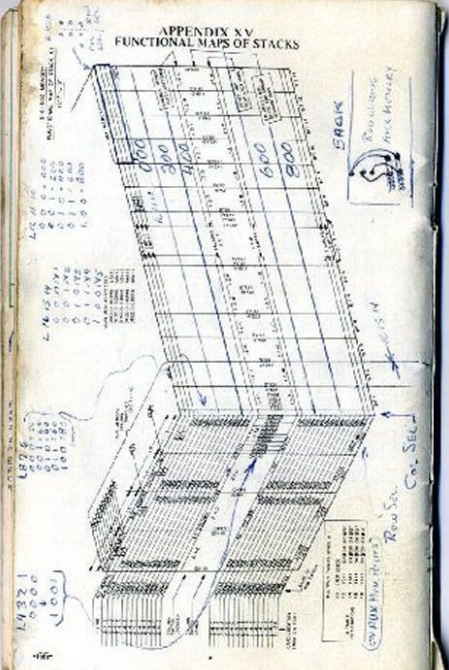
J. STEWARD

C-315 RMC



**TECHNICAL
INFORMATION
HANDBOOK**

APPENDIX XV FUNCTIONAL MAPS OF STACKS



SARK
 ROW 15 N
 ROW 16 N
 ROW 17 N
 ROW 18 N
 ROW 19 N
 ROW 20 N
 ROW 21 N
 ROW 22 N
 ROW 23 N
 ROW 24 N
 ROW 25 N
 ROW 26 N
 ROW 27 N
 ROW 28 N
 ROW 29 N
 ROW 30 N
 ROW 31 N
 ROW 32 N
 ROW 33 N
 ROW 34 N
 ROW 35 N
 ROW 36 N
 ROW 37 N
 ROW 38 N
 ROW 39 N
 ROW 40 N
 ROW 41 N
 ROW 42 N
 ROW 43 N
 ROW 44 N
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 ROW 85 N
 ROW 86 N
 ROW 87 N
 ROW 88 N
 ROW 89 N
 ROW 90 N
 ROW 91 N
 ROW 92 N
 ROW 93 N
 ROW 94 N
 ROW 95 N
 ROW 96 N
 ROW 97 N
 ROW 98 N
 ROW 99 N
 ROW 100 N

LET H 10
 0 0 0 - 000
 0 0 1 - 200
 0 1 0 - 400
 0 1 1 - 600
 1 0 0 - 800

L 14 15 N
 0 0 0 1773
 0 0 1 1782
 0 1 0 1792
 0 1 1 1796
 1 0 0 1797

1876
 00100
 00100
 01100
 01100
 10000

14321
 0000
 1001

ROW 15 N
 ROW 16 N
 ROW 17 N
 ROW 18 N
 ROW 19 N
 ROW 20 N
 ROW 21 N
 ROW 22 N
 ROW 23 N
 ROW 24 N
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 ROW 84 N
 ROW 85 N
 ROW 86 N
 ROW 87 N
 ROW 88 N
 ROW 89 N
 ROW 90 N
 ROW 91 N
 ROW 92 N
 ROW 93 N
 ROW 94 N
 ROW 95 N
 ROW 96 N
 ROW 97 N
 ROW 98 N
 ROW 99 N
 ROW 100 N

Row Sec.
 Col. Sec.

Row Sec.

Col. Sec.

Row Sec.

Col. Sec.

Row Sec.

Col. Sec.

615 CODE CHART

$B_4 - B_1$ \rightarrow $B_0 - B_5$ \downarrow		0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0000	0	NUL	SOH	STX	ETX	EOT	ENQ	ACK	BEL	BS	HT	LF	VT	FF	CR	SO	SI
0001	1	DLE	DC1	DC2	DC3	DC4	NAK	SYN	ETB	CAN	EM	SUB	ESC	FS	GS	RS	US
0010	2	☒	!	"	#	\$	%	&	'	()	*	+	,	-	.	/
0011	3	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0100	4	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0101	5	P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
0110	6	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
0111	7	p	q	r	s	t	u	v	w	x	y	z	{		}	~	DEL

HEXADECIMAL TO DECIMAL CONVERSION TABLE

3rd CHARACTER

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	4096	8192	12288	16384	20480	24576	28672	32768	36864	40960	45056	49152	53248	57344	61440
1	4352	8448	12544	16640	20736	24832	28928	33024	37120	41216	45312	49408	53504	57600	61696
2	4608	8704	12800	16896	20992	25088	29184	33280	37376	41472	45568	49664	53760	57856	61952
3	4864	8960	13056	17152	21248	25344	29440	33536	37632	41728	45824	49920	54016	58112	62208
4	5120	9216	13312	17408	21504	25600	29696	33792	37888	41984	46080	50176	54272	58368	62464
5	5376	9472	13568	17664	21760	25856	29952	34048	38144	42240	46336	50432	54528	58624	62720
6	5632	9728	13824	17920	22016	26112	30208	34304	38400	42496	46792	50888	54984	59080	63176
7	5888	9984	14080	18176	22272	26368	30464	34560	38656	42752	47048	51144	55240	59336	63432
8	6144	10240	14336	18432	22528	26624	30720	34816	38912	43008	47304	51400	55496	59592	63688
9	6400	10496	14592	18688	22784	26880	30976	35072	39168	43264	47560	51656	55752	59848	63944
A	6656	10752	14848	18944	23040	27136	31232	35328	39424	43520	47816	51912	55908	59904	64200
B	6912	11008	15104	19200	23296	27392	31488	35584	39680	43776	48072	52168	56064	60160	64456
C	7168	11264	15360	19456	23552	27648	31744	35840	39936	44032	48328	52424	56320	60416	64712
D	7424	11520	15616	19712	23808	27904	32000	36096	40192	44288	48584	52680	56576	60672	64968
E	7680	11776	15872	19968	24064	28160	32256	36352	40448	44544	48840	52936	56832	60928	65224
F	7936	12032	16128	20224	24320	28416	32512	36608	40704	44800	49096	53192	57088	61184	65480

2nd CHARACTER

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	0	16	32	48	64	80	96	112	128	144	160	176	192	208	224
1	1	17	33	49	65	81	97	113	129	145	161	177	193	209	225
2	2	18	34	50	66	82	98	114	130	146	162	178	194	210	226
3	3	19	35	51	67	83	99	115	131	147	163	179	195	211	227
4	4	20	36	52	68	84	100	116	132	148	164	180	196	212	228
5	5	21	37	53	69	85	101	117	133	149	165	181	197	213	229
6	6	22	38	54	70	86	102	118	134	150	166	182	198	214	230
7	7	23	39	55	71	87	103	119	135	151	167	183	199	215	231
8	8	24	40	56	72	88	104	120	136	152	168	184	200	216	232
9	9	25	41	57	73	89	105	121	137	153	169	185	201	217	233
A	10	26	42	58	74	90	106	122	138	154	170	186	202	218	234
B	11	27	43	59	75	91	107	123	139	155	171	187	203	219	235
C	12	28	44	60	76	92	108	124	140	156	172	188	204	220	236
D	13	29	45	61	77	93	109	125	141	157	173	189	205	221	237
E	14	30	46	62	78	94	110	126	142	158	174	190	206	222	238
F	15	31	47	63	79	95	111	127	143	159	175	191	207	223	239

1st CHARACTER

315 LANGUAGE CODE

NUMERIC BITS	
ZONE BITS	0000 0001 0010 0011 0100 0101 0110 0111 1000 1001 1010 1011 1100 1101 1110 1111
00	0 1 2 3 4 5 6 7 8 9 @ * SPACE & • -
01	¢ A B C D E F G H I □ Δ m n o p
10	+ J K L M N O P Q R % £ \$ () /
11	* # S T U V W X Y Z d s u v w x



The National Cash Register Company Dayton 9, Ohio

F for LH Register Column	0	1	2	3	4	5	6	7
F for RH Register Column	8	9	@	*	SP	&	•	-

CODE	C	F	Q	G	CODE	C	F	Q	G	CODE	C	F	Q	G	CODE	C	F	Q	G
LD	1				TEST:RH	sp	1			SCWD:E	0	4			TYPE:A	-	1		3
ST	2				SETF:RH	sp	2			SCWA:G	0	4			PPT:C	-	1		4
ADD	3				SETF:RH	sp	3			SCWA:L	0	4			PPT:S	-	1		5
SUB	4				CLRF:RH	sp	4			SCWA:E	0	4			TYPE:AP	-	2		1
*MULT	5				CLRF:RH	sp	5			LOAD	0	5	0		RPT:S	-	2		2
*COMP	6				JUMP:IP	sp	6			LOAD:XR	0	5	1		RPT:C	-	2		3
TEST:G	7	0			JUMP:IP	sp	7			LOAD:XL	0	5	2		RPT:CX	-	2		4
TEST:L	7	1			JUMP:IP	sp	8			LOAD:XB	0	5	3		RCOL:F	-	2		5
TEST:E	7	2			**MLBA	sp	6			STDA	0	6	0		RCOL	-	2		6
TEST:--	7	3			**SKIP	sp	7			PAST:XR	0	6	1		RCOL:TF	-	2		7
TEST:B	7	4			EDIT	sp	8			PAST:XL	0	6	2		RCOL:T	-	2		7
TEST:5	7	5			SUPP	sp	9			PAST:XB	0	6	3		STRT:S	-	3		0
JUMP	7	6			*CNT	sp	1			LD	0	7	0	0	RCK	-	3		1
TEST:D	7	7			LD	R	0	2	0	LD	0	7	0	1	PKT	-	3		2
TEST:T	7	7			LD	J	0	2	0	LD	0	7	0	2	STOP:S	-	3		3
**DLR	7	7			SLD	R	0	2	0	SLD	0	7	0	3	PRNT	-	3		4
**SETF:+	7	7	1		SLD	J	0	2	0	SLD	0	7	0	4	PNCH	-	3		4
**SETF:0	7	7	2		MOVE:RR	0	2	0	4	MOVE:RR	0	2	0	5	RMT	-	4		0
**SETF:--	7	7	3		MOVE:JR	0	2	0	5	MOVE:JR	0	2	0	6	WMT	-	4		1
**SETF:D	7	7	6		MOVE:RJ	0	2	0	6	MOVE:RJ	0	2	0	7	BACK	-	4		2
**SETF:T	7	7	7		MOVE:JJ	0	2	0	7	MOVE:JJ	0	2	0	8	WIND	-	4		3
*SHFT:AR	8	0			ST	R	0	2	0	ST	0	2	0	9	WIND:L	-	4		4
*SHFT:OR	8	1			ST	J	0	2	0	ST	0	2	0	0	RCC	-	5		0
*SHFT:RR	8	2			AUG	R	0	2	1	AUG	0	2	1	1	WCC	-	5		1
*SHFT:DL	8	3			AUG	J	0	2	1	AUG	0	2	1	2	RQ	-	6		0
*SHFT:RC	8	4			SAUG:R	0	2	1	2	SAUG:R	0	2	1	3	WQ	-	6		1
*SHFT:LC	8	8			SAUG:J	0	2	1	3	SAUG:J	0	2	1	3					
*SHFT:AL	8	7			MOVE:B	0	3	0		MOVE:B	0	3	0						
*ADD:IN	9				MOVE:E	0	3	1		MOVE:E	0	3	1						
*BADD	9				**SPRD:B	0	3	0		**SPRD:B	0	3	0						
*DIV	9				**SPRD:E	0	3	1		**SPRD:E	0	3	1						
TEST:ILH	sp	0			SCWD:G*	0	4			SCWD:G*	0	4			TYPE:D	-	1		2
					SCWD:L*	0	4			SCWD:L*	0	4							

LEGEND:
 *R = 15 or 15
 **R = 15
 * = 1-7
 * = 1,2,3 = 1,4,5
 #: "Thousands" digit for I

EIA MODEM-TERMINAL INTERFACE

PIN	NAME	↑ TO DTE	↓ TO DCE	FUNCTION	CIRCUIT	
					(CC/ITT)	(EIA)
1	FG			FRAME GROUND	101	(AA)
2	TD		→	TRANSMITTED DATA	103	(BA)
3	RD	↑		RECEIVED DATA	104	(BB)
4	RTS		→	REQUEST TO SEND	105	(CA)
5	CTS	↑		CLEAR TO SEND	106	(CB)
6	DSR	↑		DATA SET READY	107	(CC)
7	SG			SIGNAL GROUND	107	(AB)
8	DCD	↑		DATA CARRIER DETECT	109	(CF)
9		↑		POSITIVE DC TEST VOLTAGE		
10		↓		NEGATIVE DC TEST VOLTAGE		
11				UNASSIGNED		
12	(SIDCD)	↑		SEC. DATA CARRIER DETECT	122	(SCF)
13	(SICTS)	↑		SEC. CLEAR TO SEND	121	(SCB)
14	(SITD)		→	SEC. TRANSMITTED DATA	118	(SBA)
15	TC	↑		TRANSMITTER CLOCK	114	(DB)
16	(SIRD)	↑		SEC. RECEIVED DATA	119	(SBB)
17	RC	↑		RECEIVER CLOCK	115	(DD)
18			→	RECEIVER DIBIT CLOCK		
19	(SIRTS)		→	SEC. REQUEST TO SEND	120	(SCA)
20	(DTR)		→	DATA TERMINAL READY	108,2	(CD)
21	SQ	↑		SIGNAL QUALITY DETECT.	110	(CG)
22	RI	↑		RING INDICATOR	125	(CE)
23			→	DATA RATE SELECT	111/112	(CH/C1)
24	(TC)		→	EXT. TRANSMITTER CLOCK.	113	(DA)
25			→	BUSY		

- POSITIVE VOLTAGE EQUALS BINARY ZERO, SPACE, ON.
- NEGATIVE VOLTAGE EQUALS BINARY ONE, MARK, OFF.

NCR

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