

000330 IDENT SPITTER
PROGRAM LENGTH

BLOCKS

000000 000330 PROGRAM# LOCAL

ENTRY POINTS

000002 SETMIN

000005 FORCE

000246 SP60

000077 SP30

000042 SP15

EXTERNAL SYMBOLS

CBLKT CR
OD.FIL OD.REL
STARP TO.UDS

CRDESCR CW
OD.TXT SD.EXPR
TTDESCR

CWDESCR
SD.SYMT

SAVEREG
STARB

RESTREG
STARL

MPCHRWT
STARO

ENTRY
SYS MACRO
XJ
VFD
ENDM

SETMIN, FORCE, SP60, SP30, SP15

W

W

30/0

0000002

IP2 EQU

2

0000004

IP4 EQU

4

0000041

LTT.TXT EQU

418

NONO VFD

30/0

NONONO VFD

15/0

000000 00000000000
000001 00000

.. TEXT TABLE TYPE FOR LOADER

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*
* SETMIN IS THE ACTION PERFORMED BY THE TOKEN PROCESSOR WHEN A ↑-↑ LABEL-PART
* IS ENCOUNTERED. IT SAVES A5-X5 AND B2 FOR THE TOKEN PROCESSOR.
*
000002 5110000000 X          SETMIN  SA1  STARP
                                           SX1  X1
                                           MX6  1
000003 20673                LX6  60-1
                                           BX6  X6+X1
                                           SA6  A1+0
                                           JP   B7
                                           .. FORCE FLAG := ↑NO↑
                                          
*
* SB7 RETURN ADDRESS
* JP FORCE
*
* SAVES A1, A5-X5, B2, B6, AND X0
*
000005 5120000000 X          FORCE  SA2  CWDESCR
                                           SB3  X2          * STATE
000006 0230000007 +          FORCEJ  JP   B3+FORCE0
*
000007 5130000000 X          FORCE0  SA3  STARP
                                           JP   FORCE3
000010 0270000000 +          +      JP   B7          * RETURN (NO ACTION NEEDED IN STATE 1)
000011 5130000001 +          +      SA3  NONONO          * STATE 2
                                           JP   FORCE1
000012 5130000000 +          +      SA3  NONO          * STATE 3
                                           JP   FORCE1
000013 7130046000 +          +      SX3  460006          * STATE 4
000014 55421          +          +      SA4  A2-B1          * CW
                                           BX6  X4+X3
                                           SA4  STARO
000015 73741          5140000000 X  SX7  X4+B1          * INCREMENT ORIGIN COUNTER
                                           SA7  A4
                                           SA4  STARL
000016 73741          5140000000 X  SX7  X4+B1          * INCREMENT LOCATION COUNTER
                                           SA7  A4
                                           SA3  OD.TXT
000017 53430          5130000000 X  SA4  X3
                                           SX1  B1          * =1
                                           SA6  X3
000020 0354000270 +          OR   X4,ET4          .. BLOCK IS FULL
                                           IX7  X3+X1          * INCREMENT BUFFER POINTER
                                           SA7  A3
000021 43404          54730          ETR4  MX4  4
                                           BX4  X4+X2          * EXTRACT RELOCATION BYTE
                                           BX6  X1
                                           SA6  A2          * RESET NEXT STATE TO 1
                                           SA2  CR
000022 5120000000 X          SA3  A2+B1          * CRDESCR
                                           SB3  X3
                                           LX4  B3,X4
000023 22434          63330

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SPITTER .. OUTPUT EATER
INSTRUCTION OUTPUTTING ROUTINES

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	7273777773		SX7	X3-4	
	12624		BX6	X2+X4	
000024	0307000026 +		ZR	X7, FORCE2	* CR IS FULL
	54730		SA7	A3	
	54620		SA6	A2	
000025	0270000000		JP	B7	* RETURN
		*			
000026	54720	FORCE2	SA7	A2	* ZERO CR
	5120000000 X		SA2	OD.REL	
	53320		SA3	X2	
000027	0353000325 +		OR	X3, ER4	* BLOCK IS FULL
	53620		SA6	X2	* STORE BYTE WORD
	76610		SX6	B1	
000030	36626		IX6	X2+X6	
	54620		SA6	A2	
	7160000074		SX6	60	
000031	5160000000 X		SA6	CRDESCR	
	0270000000		JP	B7	* RETURN
		*			
000032	6243777741	FORCE3	SB4	X3-30	* *P-30
	6130000003		SB3	3	* STATE = 3
000033	0604000034 +		LE	B4, B0, FORCE4	
	66310		SB3	B1	* STATE = 1
	76340		SX3	B4	* *P = *P-30
000034	6243777760	FORCE4	SB4	X3-15	
	0704000036 +		GT	B4, B0, FORCE5	
000035	63430		SB4	X3	
	66331		SB3	B3+B1	
000036	6154777760	FORCE5	SB5	B4-15	
	0450000006 +		ZR	B5, FORCEJ	* ALREADY AT A GOOD BOUNDARY
000037	6133000001		SB3	B3+1	
	6153777773		SB5	B3-4	
000040	0605000008 +		LE	B5, B0, FORCEJ	* NOW AT A GOOD BOUNDARY
	7130000000		SX3	0	
000041	0200000014 +		JP	FORCEI	* FILL CURRENT WORD WITH ZEROS
		*			
000042	5110000000 X	SP15	SA1	CW	
	5120000000 X		SA2	STARP	.. FORCE FLAG IN UPPER TWO BITS OF STARP
000043	0332000044 +		NG	X2, SP15A	.. FF = *YES*, DO NOT RESET
	73620		SX6	X2	.. FF != *DO NOT CARE*
	54620		SA6	A2	
000044	54211	SP15A	SA2	A1+B1	.. CWDESCR
	63220		SB2	X2	* STATE
	73770		SX7	X7	* GET RID OF GARBAGE
000045	0220000046 +		JP	SPIT15.A+B2	
		*			
000046	6120000042 +	SPIT15.A	SB2	SP15	* STATE V = OFF OF THE EVEN 15-BIT BOUNDARIES
	02000000316 +		JP	VAR	
000047	0200000075 +	+	JP	SPIT15.B	* STATE 1 = AT LEFT EDGE
000050	0200000072 +	+	JP	SPIT15.C	* STATE 2 = AFTER 15 BITS
000051	0200000070 +	+	JP	SPIT15.D	* STATE 3 = AFTER 30 BITS
000052	12617	+	BX6	X1+X7	* STATE 4 = AFTER 45 BITS
	5110000000 X		SA1	STARO	

000053	54710	73711		SX7	X1+B1	
	5110000000 X			SA7	A1	* INCREMENTED ORIGIN COUNTER
000054	54710	73711		SA1	STARL	
	5110000000 X			SX7	X1+B1	
	53310			SA7	A1	* INCREMENTED LOCATION COUNTER
000055	76710			SA1	OD.TXT	* OUTPUT DESCRIPTOR FOR TEXT TABLE
	53610			SA3	X1	
	0353000262 +			SX7	B1	.. =1
000056	76710			SA6	X1	.. STORE TEXT WORD
	53610			OR	X3,ETI	* END OF BLOCK REACHED
	36617			SX7	B1	* =1
	54610			SA6	X1	* STORE TEXT WORD
000057	54720		ETP1	IX6	X1+X7	* INCREMENT BUFFER POINTER
	43004			SA6	A1	
	11702			SA7	A2	* RESET CRDESCR TO STATE 1
000060	5110000000 X			MX0	4	
	54211			BX7	X0*X2	* EXTRACT RELOCATION BYTE
	63220			SA1	CR	
000061	22727			SA2	A1+B1	* CRDESCR
	12717			SB2	X2	
	7262777773			LX7	B2,X7	
000062	0306000064 +			BX7	X1+X7	
	54620			SX6	X2-4	
	54710			ZR	X6,SP15.E1	* CR NOW CONTAINS 15 BYTES
000063	0270000000			SA6	A2	
				SA7	A1	
000064	54610			JP	B7	* EXIT SPIT15
	5110000000 X		* SP15.E1	SA6	A1	* ZERO CR
	53410			SA1	OD.REL	
000065	0354000322 +			SA4	X1	
	53730			OR	X4,ERI	* BLOCK IS FULL
	76610			SA7	X3	* STORE RELOCATION-BYTE WORD
000066	36616			SA6	B1	* =1
	54610			IX6	X1+X6	* INCREMENT BUFFER POINTER
	7160000074			SA6	A1	
000067	54620			SA6	60	
	0270000000			SA6	A2	* RESET CRDESCR
				JP	B7	* EXIT SPIT15
000070	20717		* SPIT15.D	LX7	15	* ADD
	12717			BX7	X1+X7	* BITS
	54710			SA7	A1	* TO TEXT
	76610			SA6	B1	* AND
000071	36626			IX6	X2+X6	* INCREMENT
	54620			SA6	A2	* STATE
	0270000000			JP	B7	* EXIT SPIT15
000072	20736		* SPIT15.C	LX7	30	
	12717			BX7	X1+X7	
	54710			SA7	A1	
000073	7160000003			SA6	3	* NEXT STATE (KNOW REL. BYTE IS 0 SO FAR)
	54620			SA6	A2	

000074	0270000000		JP	B7	* EXIT SPIT15
000075	20755				
	54710				
		7160000002			
000076	54620				
	0270000000				
000077	5120000000 X				
	5140000000 X				
000100	53440				
	10544				
	54441				
	63220				
000101	0375000215 +				
	5110000000 X				
000102	0331000103 +				
	73610				
	54610				
000103	43052				
	15340				
	21422				
000104	0314000327 +				
	55121				
	73770				
000105	0220000106 +				
000106	6120000077 +				
	0200000316 +				
000107	0200000124 +				
000110	0200000147 +				
000111	0200000165 +				
000112	5140000000 X				
	73641				
	54640				
000113	5140000000 X				
	73641				
	54640				
000114	7160046000				
	12616				
000115	5110000000 X				
	53410				
	53610				
000116	0354000264 +				
	76410				
	36614				
000117	54610				
000120	43004				
	11002				
	5110000000 X				
000121	54211				
	63220				

SP30	SA2	CWDESCR	
	SA4	SD.EXPR	
	SA4	X4	.. EXPR : BLOCK
	BX6	X4	.. A5 MUST BE SAVED FOR MAIN STATE MACHINE
	SA4	A4+B1	.. EXPR : VALUE
	S82	X2	.. STATE OF CURRENT WORD
	ID	X5, LINKUDS	.. EXPR IS SIMPLE UNDEFINED SYMBOL REF
	SA1	STARP	.. UPPER TWO BITS CONTAIN FORCE FLAG
	NG	X1, SP30A	.. FF = ^YES^, DO NOT CLEAR
	SX6	X1	.. FF := ^DO NO CARE^
	SA6	A1	
	MX0	60-18	
	BX3	-X0*X4	* TRUNCATE TO 18 BITS
	AX4	18	* X4 SHOULD CONTAIN ALL SIGN BITS
	NZ	X4, E, TRUNC	* ERROR: EXPR TOO LARGE
	SA1	A2-B1	.. CW
	SX7	X7	.. GET RID OF GARBAGE WITH INSTRUCTION
	JP	B2+SPIT30.A	.. BRANCH ON STATE
SPIT30.A	S82	SP30	* STATE V
	JP	VAR	
	JP	SPIT30.B	* STATE 1
	JP	SPIT30.C	* 2
	JP	SPIT30.D	* 3
	SA4	STARO	* 4
	SX6	X4+B1	
	SA6	A4	* INCREMENTED ORIGIN COUNTER
	SA4	STARL	
	SX6	X4+B1	
	SA6	A4	* INCREMENTED LOCATION COUNTER
	SX6	460008	
	BX6	X1+X6	* FINISH CURRENT WORD WITH SINGLE NO OP
	SA1	OD.TXT	
	SA4	X1	
	SA6	X1	.. STORE TEXT WORD IN BUFFER
	OR	X4, ET2	* BLOCK IS FULL
	SX4	B1	* =1
	IX6	X1+X4	* INCREMENT POINTER
	SA6	A1	
	MX0	4	
	BX0	X0*X2	* EXTRACT RELOCATION BYTE
	SA1	CR	
	SA2	A1+B1	* CRDESCR
	S82	X2	

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000122	7262777773	22020	LX0	B2,X0	
		0306000133 +	SX6	X2-4	
000123	54620		ZR	X6,SP30.E1	* CR IS FULL
	12610		SA6	A2	
	54610		BX6	X1+X0	
000124	20755	SPIT30.B	SA6	A1	
	20336		LX7	45	* F, I, J
	12773		LX3	30	* K
	73150		BX7	X7+X3	
000125	5170000000 X		SA1	X5	* BLOCK OF EXPR
	0301000131 +		SA7	CW	
000126	5120000000 X		ZR	X1,SP30.B1	* ABS, RELOC IS 00XX
	37312		SA2	STAR8	* CURRENT BLOCK
	43601		IX3	X1-X2	
000127	11595		MX6	1	
	0313000140 +		BX5	X6*X5	* S BIT, SIGN(BLOCK(EXPR))
	20573		NZ	X3,SP30.B2	* BLOCK(EXPR) .NE. CURRENT BLOCK
000130	12165		LX5	60-1	
000131	7170000003	SP30.B1	BX1	X6+X5	* RELOC = ISXX
	12717		SX7	3	* NEXT STATE
	54771		BX7	X1+X7	
000132	0270000000		SA7	A7+B1	* CWDESCR
			JP	B7	* EXIT SPIT30
000133	54610	SP30.E1	SA6	A1	* ZERO CR
	5120000000 X		SA2	OD.REL	
	53420		SA4	X2	
000134	0354000323 +		OR	X4,ER2	* BLOCK IS FULL
	12610		BX6	X1+X0	
	53620		SA6	X2	* STORE BYTE WORD
000135	76610		SX6	B1	* =1
	36626		IX6	X2+X6	* INCREMENT POINTER
	54620		SA6	A2	
000136	7160000074		SX6	60	
	5160000000 X		SA6	CRDESCR	* RESET
000137	0200000124 +		JP	SPIT30.B	* NOW SPIT FOR REAL
000140	5130000000 X	SP30.B2	SA3	STAR0	* GET ORIGIN COUNTER
	20322		LX3	18	* POSITION FOR FILL ENTRY
	20144		LX1	18+18	* BLOCK OF EXPR
000141	20673		LX6	60-1	* UPPER FLAG
	20571		LX5	60-3	* POSITION SIGN
	12665		BX6	X6+X5	
	12661		BX6	X6+X1	
000142	12663		BX6	X6+X3	
	12662		BX6	X6+X2	* INSERT CURRENT BLOCK
	5110000000 X		SA1	OD.FIL	
000143	53210		SA2	X1	
	0352000317 +		OR	X2,EF1	* BLOCK IS FULL
	53610		SA6	X1	
000144	76610		SX6	B1	
	36616		IX6	X1+X6	
	54610		SA6	A1	

SPLITTER ** OUTPUT EATER
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000145	7170000003		SX7	3	
		5170000000 X	SA7	CWDESCR	
000146	0270000000		JP	B7	* EXIT SPIT30
000147	20736				
	12717		LX7	30	
		20317	BX7	X1+X7	
			LX3	15	
		12773	BX7	X7+X3	
000150	54710		SA7	A1	* CW
	73150		SA1	X5	* BLOCK(EXPR)
		0301000154 +	ZH	X1,SP30.C1	* ABS, RELOC = 0000
000151	5140000000 X		SA4	STARB	* CURRENT BLOCK
		37314	IX3	X1-X4	
		43601	MX5	1	
000152	11565		BX5	X6+X5	* S BIT, SIGN(BLOCK(EXPR))
		0313000156 +	NZ	X3,SP30.C2	* BLOCK(EXPR) .NE. CURRENT BLOCK
		20572	LX5	60-2	
000153	20673		LX6	60-1	
	12165		BX1	X6+X5	* RELOC = 0150
000154	7170000004		SX7	4	* NEXT STATE
		12717	BX7	X1+X7	
		54720	SA7	A2	* CWDESCR
000155	0270000000		JP	B7	* EXIT SPIT30
000156	5130000000 X				
		20322	SA3	STARO	* ORIGIN COUNTER
			LX3	18	* POSITION FOR FILL ENTRY
		20144	LX1	18+18	* BLOCK(EXPR), FIXUP
000157	20672		LX6	60-2	* MIDDLE FLAG
		20571	LX5	60-3	* SIGN
		12665	BX6	X6+X5	
		12661	BX6	X6+X1	
000160	12663		BX6	X6+X3	
		12664	BX6	X6+X4	* INSERT CURRENT BLOCK
		5110000000 X	SA1	OD.FIL	
000161	53310		SA3	X1	
		0353000320 +	OR	X3.EF2	* BLOCK IS FULL
		53610	SA6	X1	* PUT ENTRY IN FILL TABLE
000162	76610		SX6	B1	
		36616	IX6	X1+X6	
		54610	SA6	A1	
000163	7170000004		SX7	4	* NEXT STATE
		54720	SA7	A2	* RELOC = 0000
000164	0270000000		JP	B7	* EXIT SPIT30
000165	20717				
	12717		LX7	15	
		5110000000 X	BX7	X1+X7	
			SA1	OD.TXT	
000166	12773		BX7	X7+X3	
		53310	SA3	X1	
		53710	SA7	X1	.. STORE TEXT WORD IN BUFFER
		76710	SX7	B1	.. =1
000167	0353000266 +		OR	X3.ET3	* BLOCK IS FULL
		36617	IX6	X1+X7	.. INCREMENT BUFFER POINTER

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000170	73150	54610	ETR3	SA6	A1	
	0301000174 +			SX1	X5	* BLOCK(EXPR)
	43601			ZR	X1,SP30.D1	* ABS, RELOC = XX00
000171	5130000000 X			MX6	1	
	37413			SA3	STARB	* CURRENT BLOCK
	11565			IX4	X1-X3	
000172	0314000207 +			BX5	X6*X5	* S BIT, SIGN(BLOCK(EXPR))
	20571			NZ	X4,SP30.D4	* BLOCK(EXPR) .NE. CURRENT BLOCK
	20672			LX5	60-3	
000173	12165			LX6	60-2	
000174	54720		SP30.D1	BX1	X6*X5	* RELOC = XX16
	43002			SA7	A2	.. RESET CWDESCR
	11002			MX0	2	
	12001			BX0	X0*X2	* EXTRACT RELOC BITS
000175	5110000000 X			BX0	X0*X1	
	54211			SA1	CR	
	63220			SA2	A1+B1	* CRDESCR
000176	22020			SB2	X2	
	12610			LX0	B2,X0	
	7272777773			BX6	X1+X0	
000177	0307000203 +			SX7	X2-4	
	54610			ZR	X7,SP30.D3	* CR IS FULL
	54720			SA6	A1	
000200	5110000000 X		SP30.D2	SA7	A2	
	73611			SA1	STAR0	
	54610			SX6	X1+B1	
000201	5110000000 X			SA6	A1	* INCREMENTED ORIGIN COUNTER
	73611			SA1	STARL	
	54610			SX6	X1+B1	
000202	0270000000			SA6	A1	* INCREMENTED LOCATION COUNTER
				JP	B7	* EXIT SPIT30
000203	54710		SP30.D3	SA7	A1	* ZERO CR
	7170000074			SX7	60	
	54720			SA7	A2	* RESET CRDESCR
000204	5110000000 X			SA1	OD.REL	
	53210			SA2	X1	
000205	0352000324 +			OR	X2,ER3	* BUFFER IS FULL
	53610			SA6	X1	
	76610			SX6	B1	
000206	36616			IX6	X1+X6	
	54610			SA6	A1	
	0200000200 +			JP	SP30.D2	
000207	5140000000 X		SP30.D4	SA4	STAR0	* ORIGIN COUNTER
	20422			LX4	18	* POSITION FOR FILL TABLE ENTRY
	20144			LX1	18+18	* BLOCK(EXPR)
000210	20571			LX5	60-3	* POSITION SIGN
	12651			BX6	X5+X1	
	12664			BX6	X6+X4	
	12663			BX6	X6+X3	.. ADD CURRENT BLOCK
000211	5110000000 X			SA1	OD.FIL	
	53310			SA3	X1	


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OR      X3,EF3      * BLOCK IS FULL
SA6     X1
IX6     X1+X7        .. INCREMENT BUFFER POINTER
SA6     A1
BX1     X1-X1        * RELOC = XX00
JP      SP30,D1

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*
* SP30 JUMPS TO LINKUDS WHEN AN INSTRUCTION TO BE SPIT REFERENCES (SIMPLY)
* AN UNDEFINED SYMBOL. THE REGISTERS CONTAIN:
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* A4 ➤ ADDRESS OF EXPR STACK WORD FOR VALUE
* B2 ➤ CW STATE
* X4 ➤ UDS TABLE POINTER FROM REFERENCED SYMBOL
* X5 ➤ SYMBOL TABLE POINTER FOR THE UNDEFINED SYMBOL

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* SAVES B7 AND X7 FOR SP30.

```

LUDS0  SB7  B6
        BX7  X0
LINKUDS SA1  STARB
        JP   B2+LUDS1
LUDS1  SB2  SP30
        JP   VAR
        *    MX5  1
        JP   LUDS2
        *    MX5  1
        LX5  60-1
        JP   LUDS2
        *    BX5  X5-X5
        JP   LUDS2
        *    SB6  B7
        MX5  1
        BX0  X7
        SB2  B1
        SB7  LUDS0
        JP   FORCE
LUDS2  BX6  X1
        SA6  A4-B1
        LX6  30+17
        BX6  X5+X5
        MX0  2+11
        SA1  TD.UDS
        LX1  60-2*18
        SB2  X1
        SA3  STAR0
        LX3  30
        SX4  X4-0
        NG   X4,LUDS6
LUDS3  SA2  B2+X4
        BX5  X0*X2
        BX5  X5-X6
        ZR   X5,LUDS5
        SX4  X2-0

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```

000232 0322000230 +
          74520
          43052
000233 15440
          0200000235 +
000234 5110000000 X
          21144
          36515
000235 56220
          0302000315 +
          12663
000236 12664
          53122
          54610
          10611
000237 56620
          53150
          43052
          11601
000240 12662
          54610
          7160400000
000241 54640
          0200000077 +
000242 43021
          20057
          15620
          12663
000243 54620
          11602
          21636
000244 7266400000
          54640
000245 0200000077 +

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PL      X2,LUDS3      .. KEEP LOOKING
SX5     A2
MX0     60-18
BX4     -X0*X4      .. TRIM X4 TO 18 BITS AGAIN
JP      LUDS4
SA1     SD.SYMT
AX1     18+18
IX5     X1+X5      .. MAKE X5 BE AN ABSOLUTE PTR INTO THE SYMBOL TABLE
SA2     B2      .. UDST[0] = FREE CHAIN POINTER
ZR      X2,UDSTFULL
BX6     X6+X3      .. ADD NEW REF ADDRESS TO ENTRY
BX6     X6+X4      .. ADD PTR (=-0 OR 10 EXPR TABLE)
SA1     B2+X2
SA6     A1
BX6     X1
SA6     B2      .. UPDATE FREE CHAIN POINTER
SA1     X5      .. WORD TO POINT TO NEW ENTRY
MX0     60-18
BX6     X0*X1      .. CLEAR OLD PTR
BX6     X6+X2      .. AND ADD NEW ONE
SA6     A1
SX6     400000B
SA6     A4      .. EXPR : VALUE = 400000B
JP      SP30      .. GO OUTPUT INSTRUCTION IN X7
MX0     I7
LX0     60-2-11      .. MASK FOR REF ADDR FIELD
BX6     -X0*X2      .. CLEAR OLD ADDRESS
BX6     X6+X3      .. AND ADD NEW (WHICH IS *0)
SA6     A2      .. RETURN ENTRY TO TABLE
BX6     X0*X2      .. EXTRACT OLD ADDRESS
AX6     30
SX6     400000B+X6      .. MAKE IT OUT OF BOUNDS
SA6     A4      .. AND STORE IT AS EXPR : VALUE
JP      SP30      .. DONE

```

```

* SP60 PUTS A 60-BIT WORD IN THE CURRENT TEXT TABLE. ENTER THROUGH SP60X
* IF *P = 60 (SAVES A CALL TO FORCE), PARAMETERS:

```

```

*
*      X0 = WORD TO BE OUTPUT
*      B6 = RETURN ADDRESS

```

```

* SAVES A1, A5, AND B2.

```

```

000246 6170000247 +
          0200000005 +
000247 5120000000 X
          5130000000 X
000250 73731
          54730
          5130000000 X
000251 73731
          54730
          53320

```

```

SP60    SB7    SP60X
JP      FORCE
SP60X   SA2     OD.TXT
SA3     STARO
SX7     X3+B1
SA7     A3      * INCREMENT ORIGIN COUNTER
SA3     STARL
SX7     X3+B1
SA7     A3      * INCREMENT LOCATION COUNTER
SA3     X2

```

```

                                76510
000252 10600                    SX5 B1      * =1
                                BX6 X0
                                SA6 X2
                                OR  X3,ET5  .. BLOCK IS FULL
                                IX7 X2+X5
                                SA7 A2      * INCREMENTED BUFFER POINTER
000253 36725                    SA2 CRDESCR
                                SX7 X2-4
                                NZ  X7,SP60Y
000254 512000000 X              ETR5 SA2 A2-B1  * CR
                                SA7 A2      * ZERO CR
                                SA3 OD.REL
                                SA4 X3
                                OR  X4,ER5  * BLOCK IS FULL
                                SA6 X3
                                IX6 X3+X5
                                SA6 A3      * UPDATED BUFFER POINTER
000255 0317000261 +            SX7 60
                                SA7 CRDESCR  * RESET CRDESCR
                                JP  B6
                                *
000256 513000000 X              ET1 SB4 0      .. *0 IS OK
                                SB3 ETR1      .. RETURN ADDRESS
                                JP  EMPTYTXT
000257 0354000326 +            ET2 SB4 0
                                SB3 ETR2
                                JP  EMPTYTXT
000260 54630                    ET3 SB4 1      .. *0 IS BEHIND
                                SB3 ETR3
                                JP  EMPTYTXT
000261 517000000 X              ET4 SB4 0      .. *0 IS OK
                                SB3 ETR4
                                JP  EMPTYTXT
000262 6140000000              ET5 SB4 0
                                SB3 ETR5
                                *
                                *
                                * EMPTYTXT TERMINATES THE CURRENT TEXT TABLE, CREATES A NEW FILE BLOCK,
                                * SLIDES THE TEXT TABLE BUFFER MAP ENTRY TO THE NEW FILE ADDRESS, AND
                                * THEN STARTS A NEW TEXT TABLE. PARAMETERS:
                                *
                                * B4 * POSSIBLE CORRECTION TO *0 (=0 OR 1)
                                * B3 * RETURN ADDRESS
                                *
                                * SAVES ALL REGISTERS WITH SAVEREG, RESTREG
                                *
000273 000000000 X              EMPTYTXT SYS SAVEREG  .. SAVE ALL REGISTERS
000274 5110000000 X              SA1 TTDESCR
                                SA4 OD.TXT  .. OUTPUT DESCRIPTOR FIRST WORD
000275 21422                    AX4 18
                                SX3 X4      .. FILE BLOCK SIZE
                                BX7 X4
                                AX7 18
                                SX7 X7      .. CM START ADDRESS OF BUFFER
                                73340
                                10744
                                21722
000276 73770
```

000277	73210	36573	7255777776	IX5	X7+X3	
		37652	10511	SX5	X5-1	.. START ADDRESS OF CURRENT TEXT TABLE
			21522	SX2	X1	.. LENGTH OF TABLE EXCLUSIVE OF HEADER
000300	20644	12665	7150000041	IX6	X5-X2	
				BX5	X1	.. MOVE BLOCK, ORG FIELDS TO RIGHT POSITION
000301	20566	53610	21144	AX5	18	
				LX6	2*18	.. ADD TABLE LENGTH FIELD
				BX6	X6+X5	.. TABLE TYPE = TXT
000302	20144	5120000000	X	SX5	LTT.TXT	
				LX5	3*18	.. FINISHED TABLE HEADER
				BX6	X5+X6	.. STORE IN BUFFER
000303	20222	12612	73224	SA6	X1	
				AX1	2*18	.. CLEAR ALL BUT BLOCK FIELD
				LX1	2*18	
				SA2	STARO	.. STARO + (0 OR 1) = CURRENT ORIGIN
000304	54241	43030	54610	SX2	X2+B4	
				LX2	18	
				BX6	X1+X2	.. ADD PTR TO HEAD OF NEW TABLE
				BX6	X6+X7	.. NEW TTDESCR
				SA6	A1	.. SECOND WORD OF OUTPUT DESCRIPTOR
000305	15660	36623	54620	SA2	A4+B1	.. MASK FOR FILE ADDRESS
				MX6	60-36	.. ADDRESS AT WHICH TO CREATE NEXT BLK
				IX6	X2+X3	.. UPDATE OD.TXT[2]
				SA6	A2	.. CLEAR GARBAGE WITH FILE ADDRESS
000306	5160000004	43601	20422	BX6	-X0*X6	.. INPUT PARAMETER FOR CREATE BLOCK
				SA6	CBLKT+IP2	.. AND FOR CHANGE MAP
				SA6	MPCHRWT+IP4	.. X6 = -INFINITE
				MX6	1	.. REPOSITION OD.TXT[1] (WITH NEXT FIELD = 0)
000307				LX4	18	
000310				SYS	CBLKT	
000311	6223777776	53672		SYS	MPCHRWT	.. FILE BLOCK SIZE = 1
				SB2	X3-1	.. MARK LAST WORD OF BUFFER
000312	7277000001	12747	54740	SA6	X7+B2	.. BUFFER START + 1
				SX7	X7+1	.. UPDATE OD.TXT[1]
				BX7	X4+X7	
000313				SA7	A4	
000314	0230000000			SYS	RESTREG	
				JP	B3	

EXT	CBLKT,CR,CRDESCR,CW,CWDESCR
EXT	SAVEREG,RESTREG
EXT	MPCHRWT
EXT	OD.FIL,OD.REL,OD.TXT
EXT	SD.EXPR,SD.SYMT
EXT	STARB,STARL,STARO,STARP
EXT	TD.UDS,TTDESCR

000315	00000000000000000000	UDSTFULL
000316	00000000000000000000	VAR
000317	00000000000000000000	EF1
000320	00000000000000000000	EF2
000321	00000000000000000000	EF3
000322	00000000000000000000	ER1
000323	00000000000000000000	ER2
000324	00000000000000000000	ER3
000325	00000000000000000000	ER4
000326	00000000000000000000	ER5
000327	00000000000000000000	E.TRUNC
000330		

END

616 STATEMENTS

28 SYMBOLS

SPITTER .. OUTPUT EATER
SYMBOLIC REFERENCE TABLE (PAGE-LOCATION)

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CRLKT	0000000	EXTERNAL*	12-00305, 12-00307
CR	0000000	EXTERNAL*	2-00022, 4-00060, 5-00120, 8-00175
CRDESCR	0000000	EXTERNAL*	3-00031, 6-00136, 11-00254, 11-00261
CW	0000000	EXTERNAL*	3-00042, 6-00125
CWDESCR	0000000	EXTERNAL*	2-00005, 5-00077, 7-00145
EF1	0000317	PROGRAM*	6-00143
EF2	0000320	PROGRAM*	7-00161
EF3	0000321	PROGRAM*	9-00212
EMPTYTXT	0000273	PROGRAM*	11-00263, 11-00265, 11-00267, 11-00271
ER1	0000322	PROGRAM*	4-00065
ER2	0000323	PROGRAM*	6-00134
ER3	0000324	PROGRAM*	8-00205
ER4	0000325	PROGRAM*	3-00027
ER5	0000326	PROGRAM*	11-00257
ETR1	0000057	PROGRAM*	11-00262
ETR2	0000120	PROGRAM*	11-00264
ETR3	0000170	PROGRAM*	11-00266
ETR4	0000021	PROGRAM*	11-00270
ETR5	0000254	PROGRAM*	11-00272
ET1	0000262	PROGRAM*	4-00055
ET2	0000264	PROGRAM*	5-00116
ET3	0000266	PROGRAM*	7-00167
ET4	0000270	PROGRAM*	2-00020
ET5	0000272	PROGRAM*	11-00252
E.TRUNC	0000327	PROGRAM*	5-00104
FORCE	0000005	PROGRAM*	9-00223, 10-00246
FORCEJ	0000006	PROGRAM*	3-00036, 3-00040
FORCE0	0000007	PROGRAM*	2-00006
FORCE1	0000014	PROGRAM*	2-00011, 2-00012, 3-00041
FORCE2	0000026	PROGRAM*	3-00024
FORCE3	0000032	PROGRAM*	2-00007
FORCE4	0000034	PROGRAM*	3-00033
FORCE5	0000036	PROGRAM*	3-00034
IP2	0000002		12-00305
IP4	0000004		12-00306
LINKUDS	0000215	PROGRAM*	5-00101
LTT.TXT	0000041		12-00300
LUDS0	0000214	PROGRAM*	9-00223
LUDS1	0000216	PROGRAM*	9-00215
LUDS2	0000224	PROGRAM*	9-00217, 9-00220, 9-00221
LUDS3	0000230	PROGRAM*	10-00232
LUDS4	0000235	PROGRAM*	10-00233
LUDS5	0000242	PROGRAM*	9-00231
LUDS6	0000234	PROGRAM*	9-00227
MPCHRWT	0000000	EXTERNAL*	12-00306, 12-00310
NONO	0000000	PROGRAM*	2-00012
NONONO	0000001	PROGRAM*	2-00011
OD.FIL	0000000	EXTERNAL*	6-00142, 7-00160, 8-00211
OD.REL	0000000	EXTERNAL*	3-00026, 4-00064, 6-00133, 8-00204, 11-00256
OD.TXT	0000000	EXTERNAL*	2-00016, 4-00054, 5-00115, 7-00165, 10-00247, 11-00274
RESTREG	0000000	EXTERNAL*	12-00313
SAVEREG	0000000	EXTERNAL*	11-00273
SD.EXPR	0000000	EXTERNAL*	5-00077

SPITTER ** OUTPUT EATER
SYMBOLIC REFERENCE TABLE (PAGE-LOCATION)

29 APR 70 00:00:00 PAGE NO. 16

SD.SYMT	0000000	EXTERNAL*	10-00234				
SPIT15.A	0000046	PROGRAM*	3-00045				
SPIT15.B	0000075	PROGRAM*	3-00047				
SPIT15.C	0000072	PROGRAM*	3-00050				
SPIT15.D	0000070	PROGRAM*	3-00051				
SPIT30.A	0000106	PROGRAM*	5-00105				
SPIT30.B	0000124	PROGRAM*	5-00107, 6-00137				
SPIT30.C	0000147	PROGRAM*	5-00110				
SPIT30.D	0000165	PROGRAM*	5-00111				
SP15	0000042	PROGRAM*	3-00046				
SP15A	0000044	PROGRAM*	3-00043				
SP15.E1	0000064	PROGRAM*	4-00062				
SP30	0000077	PROGRAM*	5-00106, 9-00216, 10-00241, 10-00245				
SP30A	0000103	PROGRAM*	5-00102				
SP30.B1	0000131	PROGRAM*	6-00125				
SP30.B2	0000140	PROGRAM*	6-00127				
SP30.C1	0000154	PROGRAM*	7-00150				
SP30.C2	0000156	PROGRAM*	7-00152				
SP30.D1	0000174	PROGRAM*	8-00170, 9-00213				
SP30.D2	0000200	PROGRAM*	8-00206				
SP30.D3	0000203	PROGRAM*	8-00177				
SP30.D4	0000207	PROGRAM*	8-00172				
SP30.E1	0000133	PROGRAM*	6-00122				
SP60X	0000247	PROGRAM*	10-00246				
SP60Y	0000261	PROGRAM*	11-00255				
STARB	0000000	EXTERNAL*	6-00126, 7-00151, 8-00171, 9-00215				
STARL	0000000	EXTERNAL*	2-00015, 4-00053, 5-00113, 8-00201, 10-00250				
STARO	0000000	EXTERNAL*	2-00014, 3-00052, 5-00112, 6-00140, 7-00156, 8-00200, 8-00207, 9-00226, 10-00247,				
			12-00302				
STARP	0000000	EXTERNAL*	2-00002, 2-00007, 3-00042, 5-00101				
TD.UDS	0000000	EXTERNAL*	9-00225				
TTDESCR	0000000	EXTERNAL*	11-00274				
UDSTFULL	0000315	PROGRAM*	10-00235				
VAR	0000316	PROGRAM*	3-00046, 5-00106, 9-00216				