

ADDRESS LENGTH BINARY CONTROL CARDS.

0	0	IDENT	PRINTER
		END	

ENTRY POINTS.

BUFFSIZ	-	400	FRMT.CL	-	1542	READ	-	1777	TITLE	-	1547
SIZE	-	400	EJECTFL	-	1543	LOCATE	-	0	LINECT	-	1552
PPBUFF	-	46	ETEMP	-	1544	STOP	-	4	PRNMFLG	-	1553
FILEBUF	-	1046	TEMP	-	1545	UPDATE	-	1	TIMSG	-	1556
NPOS	-	1447	STOPE	-	1565	FUNNY.C	-	1453	MSGNAME	-	1555
FL.RETUR	-	1450	CALLPP	-	1573	C.BEAD	-	1	LOG2SIZ	-	1554
PARAM	-	40	EVNTDAT	-	1575	C.OWNC	-	15	CLOSE	-	1754
BAD.EVN	-	1451	GETPP	-	1576	C.OPERC	-	16	ATTACH	-	1620
RDY.FLG	-	1452	ECHAN	-	1577	C.SELF	-	17	ATACHAD	-	1622
BCOUNT	-	1454	CAPIN	-	1602	C.PRINT	-	20	ATACHCT	-	1623
EBIT	-	1456	WHAT	-	1604	C.OWNFI	-	21	DETACH	-	1624
LBUFFST	-	24	WHERE	-	1605	C.PPCAL	-	22	DETCHAD	-	1626
TTYBUFF	-	1461	READF	-	1606	C.CPCAL	-	23	DETCHCT	-	1627
LBUFF	-	1461	FADDR	-	1610	C.PPBUF	-	24	LINCALL	-	1630
TITLEFM	-	1505	WDQNT	-	1612	C.FILE	-	25	POPFLG	-	1643
TITLEBU	-	1506	WRITEF	-	1613	C.FILE2	-	26	HYID	-	1735
TITLECT	-	1532	NBUFF	-	1616	C.INTC	-	27	TIMEOUT	-	1775
FDB	-	1533	XPACK	-	1715	C.EQMT	-	30	POPLOOP	-	2356
S.RETUR	-	1537	TINIT	-	1736	C.QF	-	31	POPMMSG	-	2463
NEXTBUF	-	1540	SAVE	-	1764	C.QD	-	32	POPROST	-	2473
PDPBUFF	-	1644	RESTOR	-	1766	C.RESP	-	33	POPRESP	-	2501
FRMTSUP	-	1541	RETURN	-	1770	GOTLOCK	-	1546			

EXTERNAL SYMBOLS.

FL	LINE	EC:CIN	DF:DTC	DF:CLD	EC:RTRN	SLOPPY1	TE:ISEC
EXIT2	SLOPPY	DF:READ	LCI:ASCII	DF:OPRO	EC:ESML	DTSSACI	
EXIT1	EC:SEV	EC:WRIT	DF:DSF	EC:SAVE	EC:SETP	SFQERR	
STATUS	EC:GEVH	DF:ATCH	EC:DSCP	EC:RSTR	EC:GEVF	TYPEOUT	

	IDENT	PRINTER
1	DISKSYS	EQU
	ASCII	MACRO
		DIS
		ENDM
		EXT
	ORGNAME	MICRO
	ORGUSER	MICRO
	ORGCLSCD	MICRO
	VERNO	MICRO
		STRING
		,\$>STRING>\$
		FL,EXIT2,EXIT1,STATUS,LINE,SLOPPY
		1,,#PRINTER#
		1,,*S*
		1,,*CLASS*
		1,,*4.1*

PRINTER DRIVER
READ-WRITE AREA

```

0
0
2 20221116240522000000
4 00000000000000000004
5 00000000000000000024
6 0000000000000000000000 X
7 000000000000000000002040
10 00000000000000000062
11 0000000000000000001736
12 0000000000000000000000
14 0000000000000000000000
15 0000000000000000000000
16 0000000000000000000000
17 0000000000000000000000
20 20221116240522000000
22 0000000000000000001736
23 0000000000000000001736
24 0000000000000000776041 X
25 0000000000000000000001
26 77777777777777777776
27 17200522031400000000
31 15012324052200000000
33 20221614170213000000
35 20221116240522000000
37 0000000000000000000000

```

```

0 IDEC SET
MACRO INDEX,CAP,X
IFC NE, **X**,1
IDEc SET X
*
NM MICRO I+7+$+CAP+S
#NM# EQU IDEC
ENTRY #NM#
IDEc SET IDEC+1
ENDM
*
```

40

```

* ENTRY UFPSIZ,SIZE,PPBUFF,FILEBUF,NPOS,F,RETUR
* ENTRY PARAM
PARAM BSSZ
* ENTRY RAD,EVN,RDY,FLG,BCOUNT,EBTT,IBUFFS,TITLEBUF
* ENTRY IUPPF,TITLEFFM,TITLEBU,TITLEECT,FDB,S,RETUR,NEXTBUF
* ENTRY POPBUF
* ENTRY FRMTSUP,FBMT,CL,EJECTFL,FTEMP,TEMP,STOPP
* ENTRY CALLPP,EVNTDAT,GETPP,ECHAN,CAPIN,WHAT,WHERE
* ENTRY READF,FADDR,WDCNT,WRITEF,NBUFF,XPACK,INIT,SAVE,RESTOR
* ENTRY RETURN,BUS,LOCATE,STOP,UPDATE,FUNNY,C
*
```

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PAGE 3

C.BEAO	INDEX	1
C.OWNCO	INDEX	13
C.OPERA	INDEX	14
C.SELF	INDEX	
C.PRINT	INDEX	
C.OWNFIL	INDEX	
C.PPCALL	INDEX	
C.CPCALL	INDEX	
C.PPBUFF	INDEX	
C.FILE	INDEX	
C.FILE	INDEX	
C.INTC	INDEX	
C.EQMT	INDEX	
C.QF	INDEX	
C.QD	INDEX	
C.RESP	INDEX	

C.OPERA EQU C.LL.OP
C.SELF EQU
C.PRINT
C.OWNFIL EQU C.OWNCO

```
CVFD MACRO X
CVFD IFC NE,$$XS
VFD A0/PX
ENDM

*
OPER MACRO A,B,Q,D,E,F,G
IF -DEF,A,1
EXT A
VFD 1/1,29/A,30/C,0OPER
CVFD
ENDIF
ENDM

CVFD OPER
*
ECOSOPER MACRO A,B,C,D,E,F,G
ECI:A,B,C,D,E,F,G
ENDM

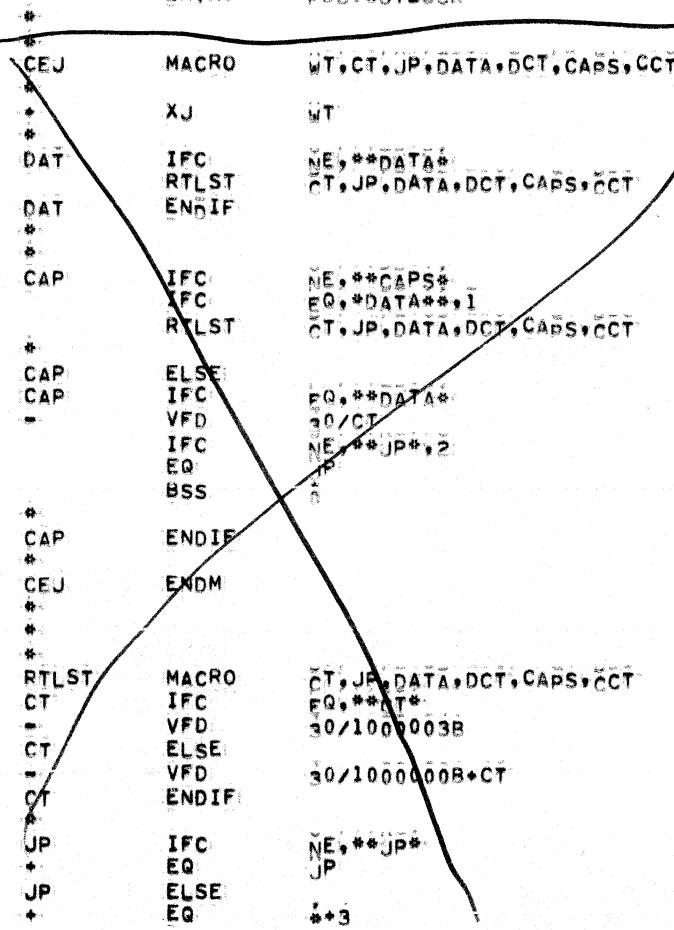
*
DSKOPER MACRO A,B,C,D,E,F,G
OPER DFI:A,B,C,D,E,F,G
ENDM

*
DIROPER MACRO A,B,C,D,E,F,G
DRI:A,B,C,D,E,F,G
ENDM

400 BUFFSIZ EQU 400B
400 SIZE EQU 400B
*
*
*
*
*
46 PPBUFF EQU
        BSSZ      L
        ?#SIZE+PPBUFF=#
*
*
*
*
1046 FILEBUF BSSZ BUFFSIZ
1446 60000000000000000000000000000000 VFD 2/3,58/0
1447 .MARK BSS 1
1448 NPOS BSS 1
1449 F.RETURN BSSZ 1
1450 BAD.EVN BSSZ 1
1451 RDY.FLG BSSZ 1
1452 FUNNY.C DATA 10      # UNKNOWN ERROR COUNTER
1453 0000000000000000000012 BCOUNT BSSZ 2
1454 EBIT BSSZ 1
1455 24 LBUFFSI EQU 20
1456 1457 00000000000000000000144 DATA 100
1458 1460 000000000000000000001461 VFD 60/TTYBUFF
1461 TTYBUFF BSS 0
```

USE /PRINTER/

1461	LBUFF	BSSZ	LBUFFSI
1505 00540000000000000000	TITLEFM	VFD	A/0/7/ASCII7=1,42/0
1506	TITLEBU	BSSZ	LBUFFSI
1532 00000000000000000000	TITLECT	DATA	0
1533	FDB	BSSZ	4
1537 00000000000000000000 X	S.RETURN	VFD	60/LINE
1540 000000000000000000046	NEXTBUF	VFD	A0/PPBUFF+SIZE
1541	FRMTSUB	BSSZ	1
1542 0000000000000000000000	FRMT.CL	VFD	60/0
1543 0000000000000000000005	EJECTFL	DATA	60/0
1544 0000000000000000000000	FTEMP	DATA	60/0
1545	TEMP	BSSZ	1
1546 0000000000000000000000	GOTLOCK	DATA	60
		ENTRY	FDB•GOTLOCK



```

JP      ENDIF
*
VFD    30/*+1
*
DT     IFC   NE,##DATA#
DC     IFC   NE,##DCT#
+
VFD   30/DCT
DC     ELSE
+
VFD   30/1
DC     ENDIF
VFD   30/DATA
DT     ELSE
+
VFD   40/0
DT     ENDIF
*
CP     IFC   NE,##CAPS#
CTC    IFC   NE,##CCT#
+
VFD   30/CCT
CTC    ELSE
+
VFD   30/1
CTC    ENDIF
VFD   30/CAPS
CP     ELSE
+
VFD   40/0
CP     ENDIF
RTLST  ENDM
*
*
*
*
*
```

		ENTRY	TITLE
1547	0000000000000000000000	TITLE	DATA
1550	0400002503		EQ
1551	0000000000000000000000	SAVEFMT	DATA
1552	0000000000000000000000	LINECT	DATA
1553	0000000000000000000000	PRNMFLG	DATA
1554	0000000000000000000000	LOG2SIZ	DATA
1555	0000000000000000000000	MSGNAME	DATA
1556	0000000000000000000000	TIMSG	DATA
1556	55141116052355202211		DIS
			\$ LINES PRINTED BY PRINTER DRIVER ON LP 7.\$
1565		STOP:	INECT,PRNMFLG,TIMSG,MSGNAME,LOG2SIZ
1566	0130001764	BSSZ	
1567	6160000004	CEJ	SAVE
1570	0130001777	SBA	STOP
1571	0130001766	CEJ	READ
1572	0400001565	CEJ	RESTOR
1573	4000000000 X	EQ	STOP
1575		ECSOPER	SEV+C,PPCAL
1576	4000000000 X	EVNTDAT	BSSZ
1576	0000000000000000000023	GETPP	ECSOPER
1577		ECHAN	VFD
			60/C,CPCAL

1600	4000000000 X	GETLOCK	ECSOPER	GEVH,C,PRINT
1602	4000000000 X	CAPIN	ECSOPER	CIN,C,SELF
1604	00000000000000000002	WHAT	VFR	40/2
1605	00000000000000000025	WHERE	VFD	60/C,FILE
1606	4000000000 X	READF	DSKOPER	READ,C,FILE
1610	00000000000000000001	FADDR	DATA 1	
1611	000000000000000001046		VFD	60/FILEBUF
1612	00000000000000000001	WDCNT	VFD	60/1
1613	4000000000 Y	WRITEF	ECSOPER	WRIT,C,PPBUF,0
1616	00000000000000000046	NBUFF	VFD	60/PPBUFF
1617	000000000000000000400		VFD	60/SIZE
*				
*				
		ENTRY	CLOSE,ATTACH,ATACHAD,ATACHCT,DETACH	
		ENTRY	DETACHAD,DETACHCT	
1620	4000000000 X	ATTACH	DSKOPER	ATCH,C,FILE2
1622	0000000000000000000000	ATACHAD	DATA	60/
1623	0000000000000000000000	ATACHCT	DATA	60/
*				
1624	4000000000 X	DETACH	DSKOPER	DTCH,C,FILE2
1626	0000000000000000000000	DETACHAD	VFD	60/0
1627	0000000000000000000000	DETACHCT	DATA	60/
*				
1630	4000000000 X	LINCALL	OPER	1:C,ASCI,0,0
		ENTRY	LINCALL	
1633	0000000000000000000000	PANIC1	DATA	60/
1634	4000000000 X	DPFILE	DSKOPER	DSF,-0
1636	4000000000 X	DPQRD	DSKOPER	READ,C,SD,-1,PPBUFF,0
	1640	QFAD	EQU	PPQRD+2
1643	0000000000000000000000	PPFLG	DATA	60/
		ENTRY	PPFLG	
1644	0000000000 X	PPBUFF	BSSZ	20/
1670	4000000000 X	PPCALL	ECSOPER	SEV
1671	4000000020000000027		VFD	1/1,20/2,30/C,INTC
1672	77777777777777777776	IDNUMA	DATA	-1
1673	4000000000 X	DPHNG	ECSOPER	GEVH,-1 . SAVE THIS WORD
1675		PXPACK	BSSZ	16 . PANIC XPACK
1715		XPACK	BSSZ	20B
1735	77777777777777777776	MYID	DATA	-1
		ENTRY	MYID -	
1736	4000000000 X	INIT	DSKOPER	READ,C,OWNFI,PPBUFF,PPBUFF,DPHNG=PPBUFF+1
*				
1743	4000000000 X	DPFILE	ECSOPER	WRIT
1744	40000000010000000027		VFD	1/1,20/1,30/C,INTC,60/0,60/PPBUFF,60/10
1745	00000000000000000000			
1746	000000000000000001644			
1747	000000000000000000012			
1750	4000000000 Y	PPLOCK	ECSOPER	GEVH
1751	4000000000000000027		VFD	1/1,50/C,INTC
*				
1752	4000000000 X	DSPCAP	ECSOPER	DSCP,C,FILE2
1754	4000000000 X	CLOSE	DSKOPER	CLO,C,FILE2

USE

#40

PRINTER DRIVER
READ-WRITE AREA

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1756 4000000000 X	OPENF	DSKOPER	OPORC, C, FILE2
1760 4000000000 X	INOPEN	DSKOPER	OPORC, C, OWNFI
1762 4000000000 X	INCLOS	DSKOPER	CLO, C, OWNFI
1764 4000000000 X	SAVE	ECSOPER	SAVE, XPACK
1766 4000000000 X	RESTOR	ECSOPER	RSTR, XPACK
1770 4000000000 X	RETURN	ECSOPER	RTRN
*			
1771 4000000000 X	PSAVE	ECSOPER	SAVE, PXPACK
1773 4000000000 X	PRESTOR	ECSOPER	RSTR, PXPACK
*			
*			
*			
1775 4000000000 X	TIMEOUT	ECSOPER	GEVH
1776 4000000000 X		VFD	1/1, 29/FXTE:1SEC, 30/C, OPERC
00000000016			
ENTRY TIMEOUT			
*			
*			
*			
*			
*			
1777 00000000000000000001	BREAD	VFD	10/C, READ
0	LOCATE	EQU	11
4	STOP	EQU	41
1	UPDATE	EQU	41

PRINTER DRIVER
MACROS AND R-O DATA

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2000	17252420252400000000	NULL	DATA	\\$OUTPUT
2001	24232355641123135523	INTROD	ASCII	(TSS DISK SYSTEM PRINTER DRIVER VER #VERNO#)
2006	05162405225524112414	TITLEIN	ASCII	(ENTER TITLE LINE)
2010	23031720055506172215	QUERY	ASCII	(SCOPE FORMAT CONVENTIONS >)
2013	05260310550314050122	INITL	ASCII	(EVCH CLEARED)
2015	22050317260522315516	CANTFIX	ASCII	(RECOVERY NOT POSSIBLE)
2020	01021722240000000000	ABORT	ASCII	(ABORT)
2021	06111405551617245523	NTSYSTXT	ASCII	(FILE NOT SYSTEM STANDARD TEXT)
*				
*				
		FCNS	MACRO	A•B•C•D•E
			VFD	12/A•12/B,12/C,12/D,12/E
			ENDM	
			FCNS	
2025	00100004000400100005	INITLINE	VFD	10B•4,4•10B,5
2026	76770001002000000000	INITEV	VFD	12/7677B,12/1,12/20B,24/0
2027	06660001002000000001	INITEV1	VFD	12/666B,12/1,12/20B,12/0,12/1
2030	40000000000 X	SETESM	ECSOPER	FSML•**1
2032	0000400000000000000000	SETPC	VFD	13/1,47/0 .. PANICS ONLY SSS
2033	40000000000 X		ECSOPER	SETP+C,OWNC,-1,=XEXIT2
*				
		TESTCHAR	MACRO	CHAR•MASK,USE,FOUND,NTFOUND
			MX•MASK	40-7
			LX•MASK	49
			SA•USE	1 BUFF
			BX•USE	-X•MASK*X•USE
			AX•USE	49
			SX•USE	Y•USE-ASCII>CHAR
			IFC	NE•**FOUND*,1
			ZR	X•USE,FOUND
			IFC	NE,**NTFOUND*,1
			NZ	Y•USE,NTFOUND
		TESTCHAR	ENDM	
*				
*				
*				
		LINEIN	MACRO	W
			SX7	1
			SA7	INCALL+1
			IF	-DEF•INCALL
			EXT	INCALL
			ENDIF	
			CEJ	INCALL...,W-1,20B
		LINEIN	ENDM	
*				
		LINEOUT	MACRO	W
			SX7	100
			SA7	W+1
			SX7	W-1
			SX6	20B
			LX6	30
			BX7	X6+X7
			SA7	INCALL+2
			SX7	2

	SA7	INCALL+1	
	IF	-DEF, LINCALL	
	EXT	INCALL	
	ENDIF		
LINEOUT	CEJ	INCALL	
JIMGREY	ENDM		
	MACRO	A,WHAT	
	LOCAL	RET	
	CEJ	SAVE	
	SB1	WHAT	
IN	IFC	EQ,*A*IN*	
	PDPTST	RET=1	
	LINEIN	WHAT	
	ENRIF		
	IFC	EQ,\$ASOUTS	
	SB7	RET	
	PDPTST	EXPDPMSG,T	
	EQ	EXTYPEOUT	
	ENDIF		
RET	CEJ	RESTOR	
	ENDM		
*	MACROS		
*			
*			
PUTCHAR	MACRO	A,L	
	LOCAL	Z	
*			
	LX3	B3,X,A	* SHIFT CHARACTER
	HX7	X7+X3	* ADD
	SB3	B7-6	* DECREMENT SHIFT COUNT
	SB5	B6+1	* INCREMENT CHARATER COUNT
	GE	B1,B0+2	* JUMP IF ROOM LEFT IN OUTOUT WORD
	SB3	60-6	* RESET SHIFT COUNT
	SA7	A7+1	* STORE WORD
	SX7	0	
	SB7	132	* MAX CHAR COUNT
	LE	B8,B7,Z	* LINE NOT FULL, JUMP
	CALL	EBUFF	
Z	BSS	0	
*			
PUTCHAR	ENDM		
*			
*			
GETCHAR	MACRO	A,L	
	LOCAL	Z	
*			
	BX,A	-Y0*X1	* GET CHARACTER
	LX1	7	* MOVE CHARACTERS
	SB4	B4-1	* DECREMENT CHAR COUNT
	NE	B4,B0,Z	* WORD NOT EMPTY, JUMP
	CALL	NWORD	* GET NEW WORD
Z	BSS	0	* DONE
*			

GETCHAR ENDM

*
*

CALL MACRO LOCAL WHAT,RETURN
X
IFC EQ, **RETURN**
SB7 X
ELSE
SB7 RETURN
ENDIF
EQ WHAT
BSS 0
CALL ENDM

*
*

SAVEN MACRO LOCAL L
Z,Y

*
* SB3 B3-12 * LEAVE SPOT FOR N
GE B3,B0,Y * JUMP IF ROOM LEFT
SA7 A7+1 * STORE WORD
SB3 65-12
SX7 0
Y SX6 B3 * SAVE SHIFT COUNT
SX2 A7+1 * NEXT LOCATION
LX2 18 * POSITION LOCATION
BX6 X4+X2 * POSITION AND SHIFT SAVE
SA6 NPOS
SB3 B3-6 * NEXT THING IS A CHARACTER
GE B3,B0,Z * JUMP IF ROOM LEFT
SA7 A7+1 * STORE WORD
SB3 65-6 * RESET SHIFT COUNT
SX7 0 * ZERO OUTPUT WORD
BSS 0 * DONE

*
* SAVEN ENDM

*
*

INSERTN MACRO REG,L

*
* SA2 NPOS * GET INFO
SB7 X2 * SHIFT COUNT
AX2 18 * ADDRESS
SA2 X2 * WORD TO INSERT IN
SX3 REG * N ITSELF
AX3 1 * CHAR COUNT / 2
LX3 B7,X3 * POSITION N
BX6 X3+X2 * N INSERTED
SA6 A2 * STORE

*
* INSERTN ENDM

*
*

* GETBUFF MACRO RETURN
LOCAL X
SB2 B2+20B * TRY NEXT LINE
SA2 NBUFF * START OF THIS HALF
SX2 X2+SIZE * END OF THIS HALF
BX2 -X2
SX2 X2+B2 * COMPARE
NZ X2,X * JUMP IF ROOM LEFT
CALL SENDEV,RETURN * GET NEXT BUFFER HALF
BSS 0
X
GETBUFF ENDM

*
* BREAKPT MACRO ON
IFC NE **ON**
RJ STOPE
ELSE
NO
NO
NO
NO
ENDIF
ENDM

*
* CALLINE MACRO WHAT,RET
SB4 R
SA1 WHAT
SB7 RET
LXI A0:49
EQ LINE
CALLINE ENDM

*
PDPTST MACRO LABEL,XREG
SA,XREG EXPDPFLG
NZ X,XREG,LABEL * JUMP IF PDP IS TRUE
ENDM

2037	0400002522		ERROR	EQ	ERROR1	
2040			PRINTER	BSS	0	
2040	0130002030			CEJ	SETESM	
2041	0130001760			CEJ	TNIOPEN,,,,,C.OWNERI . OPEN CODE FILE	
2045	0130001736			CEJ	TNIT # INITIALIZE SCRATCH AREA	
2046	5110001643			PDPTST	PDPINI,I . DO PDP INITIALIZATION IF NECESSARY	
2047	0130001762			CEJ	TNICLOS . CLOSE CODE FILE	
2050	0130001764			JIMGREY	OUT.INTROD . INTRODUCE SELF	
2055	10144			BX1	x4	
	10255			BX5	x5	
	6110001533			SB1	FDB	
2056	6170000026			SB7	C.FILE2	
	6160000000			SB6	LOCATE	
2057	0311002060	*		NZ	y1,*+1	
	5110002000			SA1	NULL	
2060	0130001777			CEJ	READ * GET OUTPUT FILE	
2061	7130000200			SX3	IS7 * SYSTEXT BIT	
	5120001533			SA2	FDB	
2062	11332			BX3	x3*x2 * GET SYSTEXT BIT	
	0313002076			NZ	x3,ASK	
2063	0130001764			JIMGREY	OUT,NTSYSXTX * ISSUE MESSAGES	
2070	0130001764			JIMGREY	OUT,ABORT	
2075	0400000000	X		EQ	EXIT1 * ABORT	
2076	0130001756		ASK	CEJ	OPENF,,,,,C.FILE2 . OPEN PRINTER FILE	
2102	0130001764			JIMGREY	OUT,TITLEIN . ASK FOR TITLE LINE	
2107	5110001505			SA1	TITLEFM	
2110	0130001764			JIMGREY	IN,TITLEBU . READ IT IN	
2121	10611			BX6	y1	
	54610			SA6	A1 . RESET FIRST WORD OF BUFFER	
	*					
2122	0130001764			JIMGREY	OUT,QUERY	
2127	0130001764			JIMGREY	IN,LBUFF	
2140	7160000000			SX6	TESTCHAR 0 * ASSUME SCOPE CONTROLS	
	43045			TESTCHAR	y,0,1,C.SCOPE	
2143	7160000001			SX6	1	
2144	5160001541		C.SCOPE	SA6	FRMTSUP	
2145	0130001602			CEJ	CAPIN * GET SDEVICE STUFF	
2146	0130001606			CEJ	READF	
2147	5110001046			SA1	FILEBUFI	
	7261000003			SX6	x1+3	
2150	5160001604			SA6	WHAT	
	7170000024			SX7	C.PPBUIF	
2151	5170001605			SA7	WHERE	
2152	0130001602			CEJ	CAPIN * PP BUFFER	
2153	7266000001			SX6	y6+1	
	7170000022			SX7	C.PPCAL	
2154	54770			SA7	A7	
	54660			SA6	A6	
2155	0130001602			CEJ	CAPIN * CENTRAL TO PP EVENT CHANNEL	
2156	7266000001			SX6	x6+1	
	7170000023			SX7	C.CPCAL	
2157	54660			SA6	A6	
	54770			SA7	A7	

PRINTER DRIVER
INITIALIZATION

2160 0130001602
 2161 0130001752
 2162 5170001635
 2163 0130001634
 2167 5110001651

43072
 I 20103
 2170 15660 7266000006
 2171 5160001554 7170000026
 2172 5170001607 7160000000
 2173 5160001610 7170000400
 2174 5170001612
 2175 0130001600
 2176 5160001546

43672

15776

2177 5170001735
 2200 0130002325
 2201 0200002203
 2202 0200002200
 2203 43361 5120002026

10622

2204 5160001575
 2205 0130001573
 2206 7266777774

0336002212

2207 0130001576
 2210 0130001576
 2211 0400002205
 2212 0130001576
 2213 5170001451

INI

15773

2214 7277774100 0317002212

2215 0130001764
 2222 0130001613
 2223 6120000046

2224 6160000010 6130000060

2225 43065 5140002027

INI+1

5140001456
 2226 12643 5160001575
 2227 0130001573
 2230 0130001576
 2231 43660

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PRN.G0 CEU CAPIN * PP TO CENTRAL EVENT CHANNEL
 BSS * PDP LOOP RETURNS TO HERE
 CEJ DSPCAP * GET ECS MOT/UN NAME
 SA7 DSPFILE+1
 CEJ DSPFILE+,, PDPBUFF+1,A * GET FILE DESCRIPTOR
 SA1 PDPBUFF+5 * GET PROPER WORD
 MX0 58
 LX1 * POSITION BITS
 BX6 -X0*X
 SX6 X6+*
 SA6 LOG2SIZ
 SX7 * FILE2
 SA7 READF+1
 SX6
 FADDR
 BUFFSIZ
 SA6 WDCNT
 CEU GETLOCK * GET PRINTER EVENT
 SA6 +XGOTLOCK
 MX6 60-2
 BX7 -X6*X7
 SA7 MYID * SAVE SEQUENCE IDENTIFIER
 CEJ GETXTRA+1 * CLEAR ANY EXTRA EVENTS FROM
 JP +2 * SEQUENCE CHANNEL
 JP +2
 MX3 60-11
 SA2 TNITEV * BEGIN TO CLEAR EVENT CHANNEL
 BX6 Y2
 SA6 EVNTDAT * SPECIAL EVENT
 CEJ CALLPP * SEND IT
 SX6 X6-3 * WHAT HAPPENED ?
 NG X6,EV,WAIT
 CEJ GETPP * REJECTED, GET ONE AND RETRY
 CEJ GETPP * GET TWO TO MAKE SURE
 EQ FV,WAIT1
 CEJ GETPP
 SA7 BAD,EVN * SAVE RESPONSE
 BX7 -X3*X7
 SX7 Y7-3677B * CHECK FOR SPECIAL ONE
 NZ X7,EV,WAIT * NOT YET
 JIMGREY OUT,INITL * LET THE WORLD KNOW S
 CEJ WRITEF * WRITE BUFFER OUT
 SB2 PDPUFF * INITIALIZE REGISTERS
 SB3 60-12
 SB6 8
 MX0 60-7 * ASCII CHAR MASK
 SA4 TNITEV1 * GET ERROR BIT
 SA3 FBIT * GET ERROR BIT
 BX6 X4+X3 * ADD ERROR BIT
 SA6 FVNTDAT * STORE EVENT
 CEJ CALLPP * SEND EVENT
 CEJ GETPP * GET IT BACK
 MX6 60-12

15676		BX6	-X6*X7	
2232 0316000000	x	SX6	X6=666B	. CHECK SEQ NUMBER
	0337002234	NZ	X6,=XSEQERR	
2233 0357002235		NG	X7,INI.21	* ERROR OCCURRED
	0400002237	OR	X7,INI.2	* BAD ERROR BIT
2234 6170002235		EQ	INI.3	
2235 5140001456		CALL	STATUS	* SEE WHAT ERROR WAS
	43651	INI.2	SA4	FBIT * GET OLD ERROR BIT
	13664		MX6	
2236 54640		BX6	y6-X4	* FLIP IT
	0400002225	SA6	A6	* STORE IT
2237	*	EQ	INI.1	* RETRY
		BSS		
2237 0100001547		RJ	TITLE	. PRINT TITLE LINES
2240 7160000000		SX6	TINECT	. ZERO LINE COUNT
	5160001552	SA6	SAVE	
2241 0130001764		CEJ	SEPER1	
2242 6110002271		SB1		
	6170002244	SB7	**2	
2243 0400000000	x	EQ	EXDISASCI	. MAKE FIRST SEPARATOR
2244 0130001766		CEJ	RESTOR	
2245 6140000010		CALLINE	TTYBUFF,INI.4	. PRINT IT
2250 7160000010	*	SX6		
	5160001532	SA6	TITLECT	. SET REPEAT COUNT
2251 0130001764		CEJ	SAVE	
2252 6110002307		SB1	SEPER2	. SECOND LINES OF SEPARATOR
	6170002254	SB7	**2	
2253 0400000000	x	EQ	EXDISASCI	
2254 0130001766	*	CEJ	RESTOR	
2255 6140000010		CALLINE	TTYBUFF,INI.6	. PRINT THIS ONE TOO
2260 5110001532		INI.6	TITLECT	
	7261777776	SA1		
2261 5061000000		SX6	x1-1	
	0316002255	SA6	A1+0	
	*	NZ	X6,INI.5	. LOOP TILL COUNT EXAUSTED
2262 6140000010	*	CALLINE	SKIPHEAD,INI.7	
2265 5110001551	*	SA1	SAVEFMT	
	10611	BX6	y1	
2266 5160001541		SA6	FRMTSUP	. RESTORE FORMAT CONTROL
	6170000000	SB7	LINE	* RETURN
2267 7160000000		SX6		* SET FILE ADDRESS INCREMENT
	0400000000	EQ	EXSLOPPY1	: AND JUMP TO INITIAL READ
2270 00620066400000000000	*	SKIPHEAD	VFD	T1/ASCII9,7/0,7/155B,35/0 * SKIP TO BOTTOM
2271 443430303030303034	*	SEPER1	DATA	10H91XXXXXXXX1
2272 333030303030303035	*		DATA	10H0XXXXXXXXX2
2273 333030303030303036	*		DATA	10H0XXXXXXXXX3

PRINTER DRIVER
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2274	333030303030303037	DATA	10HXXXXXXXXX4
2275	333030303030303040	DATA	10HXXXXXXXXX5
2276	333030303030303041	DATA	10HXXXXXXXXX6
2277	333030303030303042	DATA	10HXXXXXXXXX7
2300	333030303030303043	DATA	10HXXXXXXXXX8
2301	333030303030303044	DATA	10HXXXXXXXXX9
2302	3330303030303030433	DATA	10HXXXXXXXXX10
2303	3330303030303030434	DATA	10HXXXXXXXXX11
2304	3330303030303030435	DATA	10HXXXXXXXXX12
2305	3330303030303030436	DATA	10HXXXXXXXXX13
2306	3330300000000000000000	DATA	0L0XX
*			
2307	31303030303030303030	SEPER2	10HYXXXXXXXXX,10HXXXXXXX,10HX
2312	5555555555555555555555	DATA	10H
2313	55303030303030303030	DATA	10H XXXXXXXXX,10HXXXXXXX,10HX
2316	5555555555555555555555	DATA	10H
2317	55303030303030303030	DATA	10H XXXXXXXXX,10HXXXXXXX,10HX
2322	5555555555555555555555	DATA	10H
2323	55303030303030303055	DATA	10H XXXXXXXXX
2324	0000000000000000000000	DATA	0
*			
*			
	31	ASCII9	EQU 71B
	71	ASCIIY	EQU 71B
	27	ASCII7	EQU 27B
2325	4000000000 X	GETXTRA	ECSOPER GEVF,C,PRINT

	*				
	*				
	GET	MACRO			
		SA1	I•W		
		SA2	I•PDP		
		SB1	?		
		SB6	?		
		SB7	C•W		
		CEJ	READ	• DO LOCATE ON OBJECT	
		RMT			
		DATA	AL•W		
		RMT			
		ENDM			
	*				
	*				
	*				
	POPINI	BSS			
		GET	TNTC		
		GET	EQMT		
		GET	OF		
		GET	OD		
		GET	DES		
2327	5110002545	BX4	X4		
2327	5110002546	LX6			
2333	5110002546	SA6			
2337	5110002547	SX7			
2343	5110002550	BX6			
2347	5110002551	MX7			
2353	10644	BX6			
	20636	SA6			
	5160001672	SX7			
2354	7170000033	BX6			
	12667	MX7			
	43701	BX6			
2355	12667	SA6			
	5160001674	CEJ			
2356	0130001736	ENTRY			
2357	5110001674	SA1			
	43237	MX2			
	20236	LX2			
2360	15612	BX6	-X2*X1		
	5160001672	SA6	TDNUMB		
2361	6170002362	CALL	DPHNG+1		
2362	5170001604	SA7	INIT		
	7170000026	SX7	DPDLOOP		
2363	5170001605	SA7	DPHNG+1		
	7160000031	SX6	• GET ID NUMBER		
2364	5160001603	SA6	21		
2365	0130001602	CEJ	30		
2366	0130001756	CEJ	-X2*X1		
2372	5110001604	SA1	• AND SAVE IN EVENT SLOT		
	10611	BX6	DPRESP		
	20603	LX6	• GET INPUT FILE		
2373	36661	IX6	WHAT		
	5160001640	SA6	• STORE RESPONSE = CLIST INDEX		
2374	0130001636	CEJ	C•FILE2		
	20603	WHAT	WHERE		
2375	5110001650	SA1	C•OF		
	*		CAPIN+1		
			CAPIN	• GET INPUT FILE CAP	
			OPENF.....,C•FILE2	OPEN FILE	
			WHAT	• DESTINATION	
			x1		
			3		
			X6+X1	• INDEX#9= Q FILE ADDRESS	
			OFAD	DPDQRD	• READ PDP QUE ENTRY
				DPDBUFF+4	• JOB NUMBER CELL

ENTER ID

0
= PARAM

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PDP INITIALIZATION

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	43030	MX0	54
2376 11601	20066	LX0	54
	43014	BX6	x0*X1
	20036	MX0	12
2377 20266	11201	LX0	30
	12662	BX2	x0*X1 . SEQ ID
	43006	MX0	54
	11201	BX2	x6+X2
2400 5160001644	5011000001	SA6	6
2401 0311002406	20256	SA1	x0*X1 . PRIORITY LETTER
2402 7232777750	0333002405	NZ	POPBUFF . STORE FIRST WORD OF MESSAGE
2403 7233777773	0323002405	LX2	A1+1
2404 5110002457	0400002406	SX3	x1.COPYID . GO COPY TO IF NON ZERO
	*	NG	6
	*	SX3	x2-1RW . CHECK FIRST LETTER
	*	PL	x3,BOXN . NOT SYSTEM STAFF
	*	SA1	x3-1-IRZ+1RW
	*	EQ	y3,BOXN
2405 5110002453	20236	PROGN	PROGN . GET FIRST OF SYSTEM STAFF HEADER
	12112	COPYID	COPYID . GO ADD TO MESSAGE
	*	SA1	BOXID
	*	LX2	30 . ADD BOX IDENT TO HEADER
	*	BX1	x1+X2
2406 6170000001	COPYID	SB7	1
	10611	BX6	x1
	54667	SA6	A6+B7 . STORE FIRST WORD
	000003	DUP	3*3 . COPY 3 MORE WORDS
	*	SA1	A1+B7
	*	BX6	x1
	*	SA6	A6+B7
	*	BX6	x6-X6
	*	DUP	3*1 . 3 ZERO WORDS
	*	SA6	A6+B7
	*	SA1	POPBUFF . NOW REPEAT HEADER
	*	BX6	x1
2413 54667	10611	SA6	A6+B7
	000004	DUP	4*3 . 4 MORE WORDS
	*	SA1	A1+B7
	*	BX6	x1
	*	SA6	A6+B7
	*	BX6	x6-X6
	*	SA6	A6+B7 . END IN ZERO WORD
2417 5110001644	7120000041	SA1	POPBUFF
2420 20266	12612	SX2	1R6
	54610	LX2	54
	*	BX6	x1+X2 . ADD FORMAT CHARACTER
	*	SA6	A1 . TO MESSAGE
2421 6170000014	7100000077	SB7	12
	*	SX0	77B

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PPD INITIALIZATION

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2422	7120000055		SX2	55B	
2423	5117001644		FIXLOOP	SA1	PPDBUFF+B7
	6177777776			SB7	B7-1
2424	11301		FIXLOP1	BX3	X0*X1
	0313002425			NZ	X3,*+1
	12112			BX1	X1*X2 . ADD BLANK IF ZERO CHARACTER
2425	0330002427			NG	X0, FIXLOP2
	20006			LX0	A
	20206			LX2	6
2426	0400002424			EQ	FIXLOP1
2427	10611		FIXLOP2	BX6	X1
	54610			SA6	A1
	20006			LX0	6
	20206			LX2	6
2430	0670002423			PLI	B7, FIXLOOP . CONTINUE TO END
	6116001644			SB1	PPDBUFF
2431	6170002432			SB7	FIXLOP3
	040000000000 X			EQ	EXDISASCI . MAKE ASCII
2432	6170000023		FIXLOP3	SB7	79
	6160000001			SB6	7
2433	5117001461		FIXLOP4	SA1	TTYBUFF+B7
	10611			BX6	X1
	67776			SB7	B7-B6
2434	5167001506			SA6	TITLEFM+1+B7
	0670002433			PLI	B7, FIXLOP4 . MOVE TITLE INTO TITLE BUFFER
	*				
	*				
2435	7170000002		SX7	2	REQUEST PRINTER
	5170001644		SA7	PPDBUFF	DEVICE DESIRED
2436	7170000004		SX7	4	REQUEST DEVICE REQUEST
	6170002440		CALL	PPRQST	
2440	6170002441		CALL	PPRESP	GOT IT
2441	5170001604		SA7	WHAT	STORE INDEX OF DEVICE
	7160000017		SX6	CSELF	DESTIN
2442	5160001605		SA6	WHERE	
	7170000030		SX7	C_EQMT	FROM WHAT
2443	5170001603		SA7	CAPIN+1	
2444	0130001602		CEJ	CAPIN	GET DEVICE CAPS
2445	43701		MX7	1	
	12667		BX6	X6*X7	
	20737		LX7	31	
2446	5160001614		SA6	WRITEF+1	. PPU FILE CAP
	36667		IX6	X6*X7	
2447	5160001574		SA6	CALLPP+1	. CP TO PP EVCH CAP
	36667		IX6	X6*X7	
2450	5160001577		SA6	GETPP+1	. PP TO CP EVCH CAP
	7160000045		SX6	1R+	
2451	20666		LX6	54	
	5160001644		SA6	PPDBUFF	. NORMAL MESSAGE BRITENESS
2452	0400002161		EQ	PRN.GO	. RETURN TO NORMAL PROCESSING
	*				

PRINTER DRIVER
PDP INITIALIZATION

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2453	02173055005555555555	*	BOXID	VFD	24/4H BOX .6/0,30/5H
2454	55555555555555555555		DIS		3'
2457	23312324051555202217		PROGN	DIS	4•SYSTEM PROGRAMERS† AREA

2463	612077773	PDPMSG	SB2	s4	• MAX WORD COUNT
	6111000004		SB1	R1+4	• MOVE INPUT POINTER A BIT
2464	56112	PDPMSG1	SA1	R1+B2	• GET INPUT WORD
	43260		MX2	60-12	
	15212		BX2	-X2*X1	
2465	5162001653		BX6	y1	
	10611		SA6	R2+PDPBUFF+7	• STORE OUTPUT WORD
	6122000001		SB2	R2+1	
2466	0302002470		ZR	y2,PDPMSG3	• JUMP ON ZERO BYTE
	0720002464		NG	R2,PDPMSG1	• LOOP IF WORDS LEFT
2467	7170000002	PDPMSG2	SX7		• MESSAGE REQUEST
	0400002473		EQ	PDPREQST	• GOTO REQUEST ROUTINE
2470	0620002464	PDPMSG3	PL	R2,PDPMSG1	• JUMP IF WORDS EXHAUSTED
	7160000000		SX6		
2471	5066000001		SA6	R6+1	
	6122000001		SB2	R2+1	
2472	0400002470		EQ	PDPMSG3	• LOOP TILL DONE
			*		
			*		
			*		
2473	5110001672	PDPREQST	SA1	IDNUMB	
	43236		MX2	30	
	11112		BX1	x1*X2	
2474	12771		BX7	y7+X1	
	54710		SA7	A1	
	46000		NO		
2475	0130001750	CEJ	PDPLOCK		• GET PDP LOCK
2476	0130001743	CEJ	PDPFILE		• WRITE REQUEST FILE
2477	0130001670	CEJ	PDPCALL		• SEND REQUEST EVENT
2500	0270000000	JP	R7		• RETURN
			*		
			*		
			*		
		PDPRESP	LEAVES RESPONSE IN X5		
			R7=RETURN		
			*		
		PDPRESP	CEJ	PDPHNG	
			JP	R7	
			*		
			*		
		ENTRY	PDPMSG,PDPREQST,PDPRESP		

*
*
*
*
2503 5110001541 13666 54610 TITLEX SA1 FRMTSUP . GET FORMAT FLAG
BX6 X6=X6
SA6 A1
BX6 X1
SA6 SAVEFMT . SAVE OLD STATE WHILE TURNING ON FORMATS
*
2505 6140000010 CALLINE TITLEFM,TITLE1 . PRINT FIRST TIME
*
2510 5110001505 7160000070 TITLE1 SA1 TITLEFM
SX6 70B . ASCII Y TO RESTORE EJECTS
LX6 60-11
MX2 11
BX1 -X2*X1 . CLEAR FIRST CHARACTER
BX6 X6+X1 . ADD NEW FORMAT CONTROL
SA6 A1
SX6 11
SAA TITLECT
*
2514 6140000010 TITLE2 CALLINE TITLEFM,TITLE3
2517 5110001532 TITLE3 SA1 TITLECT
7261777776 SX6 X1=1
2520 5061000000 NZ SA6 A1=0
0316002514 EQ TITLE . RETURN
2521 0400001547

2522	0130002030		ERROR1	CEJ	SETESM			
2523	0130001771			CEJ	PSAVE	. SAVE REGISTERS		
2524	5110001633			SA1	PANIC1			
	74610			SX6	A1			
				SA6	A1	. SET FLAG NON-ZERO		
2525	0311002534			NZ	X1,ERROR2	. RETURN IF ALREADY ABORTING		
2526	0130001764			JIMGREY	OUT,ERRORMES			
2533	0130002033			CEJ	SETPC			
2534	0130001773		ERROR2	CEJ	BRESTOR	. RESET REGISTERS.		
2535	0130001770			CEJ	RETURN			
	*							
	*							
2536	20221116240522550422		ERRORMES	ASCII	(PRINTER DRIVER WILL NOT ACCEPT PANICS...ABORTING<<)			
2544	2004200000000000000000		I.PDP	DATA	OLPDP			
				LIST				
				HERE				
2545	1116240300000000000000		I.INTC	DATA	OLINTC			*RMT*
2546	0521152400000000000000		I.EQMT	DATA	OLEQMT			*RMT*
2547	2106000000000000000000		I.QF	DATA	OLQF			*RMT*
2550	2104000000000000000000		I.QD	DATA	OLQD			*RMT*
2551	2205232000000000000000		I.RESP	DATA	OLRESP			*RMT*
0			END					1
	35700		STORAGE USED		2177 STATEMENTS	212 SYMBOLS	000013 INVENTED SYMBOLS	
			6600 ASSEMBLY		9,469 SECONDS	675 REFERENCES		

PRINTER DRIVER
SYMBOLIC REFERENCE TABLE.

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ABORT	2020	10/07 L	14/23					
ASCIIY	71	14/35	17/24 D					
ASCII7	27	6/02	17/25 D					
ASCII9	31	16/49	17/23 D					
ASK	2076	14/20	14/24 L					
ATACHAD	1622	8/14 E	8/18 L					
ATACHCT	1623	8/14 E	8/19 L					
ATTACH	1620	8/14 E	8/17 L					
BAD.EVN	1451	3/46 E	5/45 L	15/37 S				
BCOUNT	1454	3/46 E	5/48 L					
BEAD	1777	3/52 E	9/22 L	18/19	18/21	18/23		
		7/47	14/16	18/20	18/22			
BOXID	2453	19/22	21/02 L					
BOXN	2405	19/16	19/18	19/22 L				
BUFSIZ	400	3/43 E	5/30 D	5/41	15/16			
CALLPP	1573	3/50 E	7/50 L	15/30	15/51	20/46 S		
CANTFIX	2015	10/06 L						
CAPIN	1602	3/50 E	14/37	14/49	18/43 S	20/39 S		
		8/02 L	14/44	15/01	18/44	20/40		
CLOSE	1754	8/14 E	8/53 L					
COPYID	2406	19/13	19/20	19/26 L				
C.BEAD	1	4/02 D	9/22					
C.CPCAL	23	4/09 D	7/53	14/51				
C.EQMT	30	4/14 D	18/20	20/38				
C.FILE	25	4/11 D	8/04	8/06				
C.FILE2	26	4/12 D	8/22	9/01	14/12	15/12	18/46	
		8/18	8/53	9/02	14/25	18/40		
C.INTC	27	4/13 D	8/35	8/45	8/50	18/19		
C.OPERC	16	4/04 D	8/03	8/22	8/35	8/50	9/03	9/07
		7/51	8/06	8/26	8/38	8/53	9/04	9/09
		7/53	8/10	8/29	8/43	9/01	9/05	9/10
		8/02	8/18	8/30	8/45	9/02	9/06	9/14
								17/27
C.OWNC	15	4/03 D	10/20					
C.OWNFI	21	4/07 D	8/43	9/03	9/04	14/05		
C.PPBUF	24	4/10 D	8/10	14/42				
C.PPCAL	22	4/08 D	7/51	14/46				
C.PRINT	20	4/06 D	8/02	17/27				
C.QD	32	4/16 D	8/30	18/22				
C.QF	31	4/15 D	18/21	18/42				
C.RESP	33	4/17 D	18/23	18/26				
C.SCOPE	2144	14/35	14/36 L					
C.SELF	17	4/05 D	8/03	20/36				
DETACH	1624	8/14 E	8/21 L					
DETCHAD	1626	8/15 E	8/22 L					
DETCHCT	1627	8/15 E	8/23 L					
DF:ATCH	0	EXTERNAL*	8/17					
DF:CLD	0	EXTERNAL*	8/53	9/03				
DF:DSF	0	EXTERNAL*	8/28					
DF:DTCH	0	EXTERNAL*	8/31					
DF:OPRO	0	EXTERNAL*	9/01	9/02				
DF:READ	0	EXTERNAL*	8/05	8/29	8/42			
DISASCI	0	EXTERNAL*	16/21	16/30	20/19			
DISKSYS	1		2/02 D					

PRINTER DRIVER
SYMBOLIC REFERENCE TABLE.

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DSPCAP	1752		8/52 L	15/03							
DSPFILE	1634		8/28 L	15/04 S	15/05						
EBIT	1456		3/46 E	5/49 L	15/48	16/08					
ECHAN	1577		3/50 E	7/53 L							
EC:ICIN	0	EXTERNAL*	8/02								
EC:DSCP	0	EXTERNAL*	8/02								
EC:ESML	0	EXTERNAL*	10/17								
EC:GEVF	0	EXTERNAL*	17/26								
EC:GEVH	0	EXTERNAL*	7/52	8/01	8/37	8/49	9/13				
EC:IRSTR	0	EXTERNAL*	9/05	9/09							
EC:RTRN	0	EXTERNAL*	9/06								
EC:SAVE	0	EXTERNAL*	9/04	9/08							
EC:SETP	0	EXTERNAL*	10/19								
EC:SEV	0	EXTERNAL*	7/50	8/34							
EC:WRTT	0	EXTERNAL*	8/09	8/44							
EJECTFL	1543		3/49 E	6/10 L							
ERROR	2037		14/01 L								
ERRORMES	2536		24/12	24/17 L							
ERROR1	2522		14/01	24/05 L							
ERROR2	2534		24/10	24/13 L							
EVNTDAT	1575		3/50 E	7/51 L	15/29 S	15/50 S					
EV.WAIT	2212		15/32	15/36 L	15/40						
EV.WAIT1	2205		15/30 L	15/35							
EXIT1	0	EXTERNAL*	14/23								
EXIT2	0	EXTERNAL*	10/20								
FADDR	1610		3/51 E	8/06 L	15/15 S						
FDB	1533		3/47 E	6/05 L	6/14 E	14/11	14/18				
FILEBUF	1046		3/43 E	5/41 L	8/07	14/39					
FIXLOOP	2423		20/02 L	20/15							
FIXLOP1	2424		20/04 L	20/10							
FIXLOP2	2427		20/07	20/11 L							
FIXLOP3	2432		20/18	20/21 L							
FIXLOP4	2433		20/23 L	20/27							
FL	0	EXTERNAL*	3/06	3/19							
FRMTSUP	1541		3/49 E	6/08 L	14/36 S	16/43 S	23/05				
FRMT.CL	1542		3/49 E	6/09 L							
FTEMP	1544		3/49 E	6/11 L							
FUNNY.C	1453		3/52 E	5/47 L							
F.RETUR	1450		3/43 E	5/44 L							
GETLOCK	1600		8/01 L	15/18							
GETPP	1576		3/50 E	7/52 L	15/33	15/34	15/36	15/52	20/48 S		
GETXTRA	2325		15/23	17/26 L							
GOTLOCK	1546		6/13 L	6/14 E	15/19 S						
IDEC	34		3/20 D	4/03 D	4/05 D	4/07	4/10	4/12 D	4/14	4/17	
			4/02 D	4/03	4/05	4/08	4/10 D	4/12	4/15	4/17	D
			4/02 D	4/04 D	4/06	4/08 D	4/10	4/13	4/15 D	4/17	
			4/02 D	4/04 D	4/06 D	4/08	4/11	4/13 D	4/15		
			4/02 D	4/04 D	4/06	4/09	4/11 D	4/13	4/16		
			4/03 D	4/04	4/07	4/09 D	4/11	4/14	4/16 D		
			4/03	4/05	4/07 D	4/09	4/12	4/14 D	4/16		
IDNUMB	1672		8/36 L	18/25 S	18/37 S	22/24					
INI	2203		15/26 L								
INICLOS	1762		9/03 L	14/07							

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SYMBOLIC REFERENCE TABLE.

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INIOPEN	1760	9/02 L	14/04					
INIT	1736	3/09	3/17	3/19	8/42 L	18/31		
		3/13	3/18	3/51 E	14/05			
INITEV	2026	10/15 L	15/27					
INITEV1	2027	10/16 L	15/47					
INITL	2013	10/05 L	15/42					
INITLINE	2025	10/14 L						
INI.1	2225	15/47 L	16/12					
INI.2	2235	16/05	16/08 L					
INI.21	2234	16/04	16/07 L					
INI.3	2237	16/06	16/13 L					
INI.4	2250	16/24	16/25 L					
INI.5	2255	16/33 L	16/37					
INI.6	2260	16/34	16/34 L					
INI.7	2265	16/40	16/41 L					
INTROD	2001	10/02 L	14/09					
I.EQMT	2546	18/19	24/22 L					
I.INTC	2545	18/18	24/21 L					
I.PDP	2544	18/19	18/20	18/21	18/22	18/23	24/18 L	
I.QD	2550	18/21	24/24 L					
I.QF	2547	18/20	24/23 L					
I.RESP	2551	18/22	24/25 L					
LBUFF	1461	3/47 E	6/01 L	14/33	14/33	14/35		
LBUFFSI	24	3/46 E	5/50 D	6/01	6/03			
LC:ASCI	0	EXTERNAL*	8/25					
LINCALL	1630	8/25 L	8/26 E	14/28 S	14/28	14/33 S	14/33	
LINE	0	EXTERNAL*	6/06	16/24	16/34	16/40	16/44	23/12 23/24
LINECT	1552	7/37 L	7/43 E	16/17 S				
LOCATE	0	3/52 E	9/23 D	14/13				
LOG2STZ	1554	7/39 L	7/43 E	15/11 S				
MSGNAME	1555	7/40 L	7/43 E					
MYID	1735	8/40 L	8/41 E	15/22 S				
NBUFF	1616	3/51 E	8/10 L					
NEXTBUF	1540	3/47 E	6/07 L					
NPOS	1447	3/43 E	5/43 L					
NTSYSTXT	2021	10/08 L	14/22					
NULL	2000	10/01 L	14/15					
OPENF	1756	9/01 L	14/24	18/45				
PANIC1	1633	8/27 L	24/07					
PARAM	40	3/44 E	3/45 L					
POPBUFF	1644	3/48 E	8/33 L	15/06	18/53	19/36	20/02	20/31 S 22/16 S
		8/30	8/47	15/06	19/11 S	19/46	20/17	20/51 S
POPCALL	1670	8/34 L	22/32					
POPFIL	1743	8/44 L	22/31					
POPFLG	1643	8/31 L	14/06	14/22	14/26	14/32	15/42	
		8/32 E	14/09	14/23	14/28	14/33	24/12	
POPHNG	1673	8/37 L	8/43	18/30 S	18/33	22/40		
POPINI	2327	14/07	18/17 L					
POPLOCK	1750	8/49 L	22/30					
POPLLOOP	2356	18/31 L	18/32 E					
POPMMSG	2463	14/09	14/23	14/32	22/04 L	24/12		
		14/22	14/26	15/42	22/44 E			
POPMMSG1	2464	22/06 L	22/13	22/16				

P R I N T E R D R I V E R
S Y M B O L I C R E F E R E N C E T A B L E .

C O M P A S S - V E R 2 . 0 8 / 1 9 / 7 1 1 7 . 1 9 . 5 8 .

P A G E 2 8

PDPMMSG2	2467	22/14 L					
PDPMMSG3	2470	22/12	22/16 L	22/20			
PDPRQRD	1636	8/29 L	8/30	18/51			
PDPRESP	2501	18/39	20/35	22/40 L	22/44 E		
PDPRQST	2473	20/34	22/15	22/24 L	22/44 E		
PPBUFF	46	3/43 E	5/37	8/10	8/43	15/43	
		5/36 D	6/07	8/43	8/43		
PRESTOR	1773	9/09 L	24/13				
PRINTER	2040	3/07	14/02 L				
PRNMFLG	1553	7/38 L	7/43 E				
PRN.G0	2161	15/02 L	20/52				
PROGN	2457	19/19	21/04 L				
PSAVE	1771	9/08 L	24/06				
PXPACK	1675	8/38 L	9/09	9/10			
QFAD	1640	8/30 D	18/50 S				
QUERY	2010	10/04 L	14/32				
RDY,FLG	1452	3/46 E	5/46 L				
READF	1606	3/51 E	8/05 L	14/38	15/13 S		
RESTOR	1766	3/51 E	9/05 L	14/22	14/26	14/32	15/42
		7/48	14/09	14/23	14/28	14/33	16/22
RETURN	1770	3/52 E	9/06 L	24/14			24/12
SAVE	1764	3/51 E	9/04 L	14/21	14/25	14/31	15/41
		7/45	14/08	14/22	14/27	14/32	16/18
SAVEFMT	1551	7/36 L	16/41	23/09 S			24/11
SEPER1	2271	16/19	16/51 L				
SEPER2	2307	16/28	17/13 L				
SEQERR	0	EXTERNAL*	16/03				
SETESM	2030		10/17 L	14/03	24/05		
SETPC	2033		10/19 L	24/12			
SIZE	400		3/43 E	5/31 D	5/37	6/07	8/11
SKIPHEAD	2270		16/40	16/49 L			
SLOPPY	0	EXTERNAL*	16/66				
SLOPPY1	0	EXTERNAL*	16/68				
STATUS	0	EXTERNAL*					
STOP	4		3/52 E	7/46	9/24 D		
STOPE	1565		3/49 E	7/44 L	7/49		
S.RETUR	1537		3/47 E	6/06 L			
TEMP	1545		3/49 E	6/12 L			
TE:1SEC	0	EXTERNAL*	9/14				
TIMEOUT	1775		9/13 L	9/16 E			
TIMSG	1556		7/41 L	7/43 E			
TITLE	1547		7/33 E	7/34 L	16/15	23/28	
TITLEBU	1506		3/47 E	6/03 L	14/28		
TITLECT	1532		3/47 E	6/04 L	16/26 S	16/34	23/21 S
TITLEFM	1505		3/47 E	6/02 L	14/26	20/26 S	23/12
TITLEIN	2006		10/03 L	14/26			23/13
TITLEX	2503		7/35	23/05 L			23/24
TITLE1	2510		23/12	23/13 L			
TITLE2	2514		23/23 L	23/27			
TITLE3	2517		23/24	23/24 L			
TTYBUFF	1461		3/46 E	5/52	5/53 L	16/24	16/34
TYPEOUT	0	EXTERNAL*	14/09	14/22	14/23	14/26	20/23
UPDATE	1		3/52 E	9/25 D			15/42

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WDNT	1612	3/51 E	8/08 L	15/17 S			
WHAT	1604	3/50 E	8/03 L	14/41 S	18/39 S	18/46	20/35 S
WHERE	1605	3/50 E	8/04 L	14/43 S	18/41 S	20/37	S
WRITER	1613	3/51 E	8/09 L	15/42	20/44 S		
XPACK	1715	3/51 E	8/39 L	9/05	9/06		
MARK	1446	5/42 L					