

LABEL 000000000PRINTER00175100CC EX OBJECT/READ;FILE SOURCEFILE=SYMBOL/DCFILL++0000000

OBJECT /READ

SYMBOL/DCFILL

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COMMENT: * TITLE: B5500/B5700 MARK XIV SYSTEM RELEASE * 00000010
* FILE ID: SYMBOL/DCFILL TAPE ID: SYMBOL2/FILE000 * 00000011
* THIS MATERIAL IS PROPRIETARY TO BURROUGHS CORPORATION * 00000012
* AND IS NOT TO BE REPRODUCED, USED, OR DISCLOSED * 00000013
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* BURROUGHS CORPORATION, DETROIT, MICHIGAN 48232 * 00000016
* * 00000017
* COPYRIGHT (C) 1971, 1972 BURROUGHS CORPORATION * 00000018
* AA320206 AA332366 AA386657 *; 00000019
DCFILL/PRT 0000998
LAST PATCHED 12/11/73 0000999

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BEGIN 0001000
INTEGER COMMON; COMMENT FIRST DECLARED; 0001100
DEFINE NOLIST=COMMON=1#; % SUPPRESS ALL PRINTED OUTPUT 0001200
FILE MCP DISK SERIAL"DCMCP""STUFF"(2,10,30); 0002000
FILE INT DISK SERIAL"DCINT""STUFF"(2,10,30); 0003000
FILE DISK DISK SERIAL[1:200]"MCP""PRI"(2,30,SAVE 999); 0004000
FILE PRINT 4(2,15); 0005000
ARRAY CARD[0:3]; 0006000
ARRAY PRTS[0:29]; 0007000
DEFINE NAMESIZE=800#; 0008000
ARRAY NAME[0:NAMESIZE-1]; 0009000
DEFINE NAMSSIZE=1023#; 0010000
ARRAY NAMS[0:NAMSSIZE-1]; 0011000
INTEGER PRTMAX,NAMSMAX; 0012000
DEFINE INAMESIZE=200#; 0013000
ARRAY INAME[0:INAMESIZE-1]; 0014000
DEFINE INAMSSIZE=300#; 0015000
ARRAY INAMS[0:INAMSSIZE-1]; 0016000
INTEGER INAMAX,INAMSMAX; 0017000
INTEGER L; 0018000
REAL LEVEL; 0019000
REAL OPT;%COMPILE-TIME OPTION WORD:ONE BIT PER OPTION 0020000
DEFINE 0021000
BREAKOUT = OPT.[47:1]#; 0022000
CHECKLINK = OPT.[46:1]#; 0023000
DATACOM = OPT.[45:1]#; 0024000
DCLOG = OPT.[44:1]#; 0025000
DCSPO = OPT.[43:1]#; 0026000
DEBUGGING = OPT.[42:1]#; 0027000
DFX = OPT.[41:1]#; 0028000
DISKLOG = OPT.[40:1]#; 0029000
DUMPP = OPT.[39:1]#; 0030000
INQUIRY = OPT.[38:1]#; 0031000
SAVERESULTS = OPT.[37:1]#; 0032000
SHAREDISK = OPT.[36:1]#; 0033000
STATISTICS = OPT.[35:1]#; 0034000
AUXMEMM = OPT.[34:1]#; 0035000
RJE = OPT.[33:1]#; 0035100
B5500LOAD = OPT.[32:1]#; 0035200
SEPTICTANK = OPT.[31:1]#; 0035300
PACKETS = OPT.[30:1]#; 0035400
MONITORR = OPT.[29:1]#; 0035500
MAXOPT = 19#; % UPDATE AS OPTIONS ARE ADDED 0036000
ALPHA ARRAY OPTIONS[C:2*MAXOPT]; 0037000
SWITCH FORMAT MCPOPT=("BREAKOUT") 0038000
("CHECKLINK") 0039000
("DATACOM") 0040000
("DCLOG") 0041000

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1	,"DCSPU")	00042000
2	,"DEBUGGING")	00043000
3	,"DFX")	00044000
4	,"DISKLOG")	00045000
5	,"DUMP")	00046000
6	,"INQUIRY")	00047000
7	,"SAVERESULTS")	00048000
8	,"SHAREDISK")	00049000
9	,"STATISTICS")	00050000
10	,"AUXMEM")	00051000
11	,"RJE")	00051100
12	,"B6500LOAD")	00051200
13	,"SEPTICTANK")	00051300
14	,"PACKETS")	00051400
15	,"MONITOR")	00051500
16	;	00052000
17	BOOLEAN STREAM PROCEDURE BITON(A,N);VALUE N;	00053000
18	BEGIN	00054000
19	SI:=A; SKIP N SB; IF SB THEN TALLY:=1;	00055000
20	BITON:=TALLY;	00056000
21	END BITON;	00057000
22	%	00058000
23	STREAM PROCEDURE SETBIT(A,N);VALUE N;	00059000
24	BEGIN	00060000
25	DI:=A; SKIP N DB; DS:=SET;	00061000
26	END SETBIT;	00062000
27	%	00063000
28	PROCEDURE PRINTOPTIONS;	00064000
29	BEGIN	00065000
30	INTEGER I;	00066000
31	FORMAT MCPHDR("DCMCP,","A5," COMPIL-TIME OPTIONS:");	00067000
32	WRITE(PRINT[DBL],MCPHDR,LEVEL);	00068000
33	FOR I:=13,0,15,1,2,3,4,5,6,7,8,9,18,17,14,10,16,11,12 DO	00069000
34	IF BITON(OPT,47-I) THEN	00070000
35	WRITE(PRINT ,MCPOPT[I]);	00071000
36	WRITE(PRINT[DBL]); WRITE(PRINT[DBL]);	00072000
37	END OF PRINTOPTIONS;	00073000
38	PROCEDURE FILLOPTIONS;	00074000
39	FILL OPTIONS[*] WITH	00075000
40	"GRSD "," " ",%BREAKOUT	00076000
41	"CHECKLIN","KS " ",%CHECKLINK	00077000
42	"DCWRITE"," " ",%DATACOM	00078000
43	"REMOLELO","GGER " ",%DCLOG	00079000
44	"MARKSPOS","TA " ",%DCSPU	00080000
45	"TRACE "," " ",%DEBUGGING	00081000
46	"EQ "," " ",%DFX	00082000
47	"DISKLOG "," " ",%DISKLOG	00083000
48	"PRINTCOR","E " ",%DUMP	00084000
49	"DCB "," " ",%INQUIRY	00085000
50	"SAVERESU","LT " ",%SAVERESULTS	00086000
51	"SYSNO "," " ",%SHAREDISK	00087000
52	"FILLSYST","AT " ",%STATISTICS	00088000
53	"NEXTAUXM","EMWORD " ",%AUXMEM	00089000
54	"RJEWAITQ"," " ",%RJE	00089100
55	"B6500FOR","MATTER " ",%B6500LOAD	00089200
56	"DISPOSAL"," " ",%SEPTICTANK	00089300
57	"PSEUDO "," " ",%PACKETS	00089400
58	"SETMONIT","ORFILE " ",%MONITOR	00089500
59	"LAST";%NEVER USED	00090000
60	BOOLEAN STREAM PROCEDURE EQUAL(S,D);	00091000

	BEGIN	00092000
	SI:=S; DI:=D;	00093000
	IF 16 SC=DC THEN TALLY:=1;	00094000
1	EQUAL:=TALLY;	00095000
2	END EQUAL;	00096000
3	PROCEDURE SETOPTIONS;	00097000
4	BEGIN	00098000
5	INTEGER I;	00099000
6	FOR I:=0 STEP 1 UNTIL MAXOPT-1 DO	00100000
7	IF NOT BITON(OPT,47-I) THEN	00101000
8	IF EQUAL(CARD[1],OPTIONS[2*I]) THEN	00102000
9	BEGIN	00103000
10	SETBIT(OPT,47-I);	00104000
11	I:=MAXOPT+1;%FALL THRU	00105000
12	END;	00106000
13	END SETOPTIONS;	00107000
14	STREAM PROCEDURE MOVE(S,D,W); VALUE W;	00108000
15	BEGIN SI:=S; DI:=D; DS:=W WDS END;	00109000
16	PROCEDURE WRITEARRAY(A,WORDSIZE); VALUE WORDSIZE;	00110000
17	INTEGER WORDSIZE; ARRAY A[];	00111000
18	BEGIN	00112000
19	STREAM PROCEDURE ZEROBUF(B); BEGIN DI:=B;30(DS:=8LIT"0") END;	00113000
20	INTEGER I,SEGS; ARRAY BUF[0:29];	00114000
21	SEGS:=((WORDSIZE+29) DIV 30) - 1;	00115000
22	FOR I:=0 STEP 1 UNTIL SEGS DO BEGIN	00116000
23	ZEROBUF(BUF);	00117000
24	MOVE(A[30*I],BUF,30);	00118000
25	WRITE(DISK,30,BUF[*]) END;	00119000
26	END WRITEARRAY;	00120000
27	BOOLEAN STREAM PROCEDURE SPACES(S);	00121000
28	BEGIN	00122000
29	LABEL EXIT;	00123000
30	SI:=S;	00124000
31	8(IF SC#" " THEN JUMP OUT TO EXIT; SI:=SI+1);	00125000
32	TALLY:=1;	00126000
33	EXIT;	00127000
34	SPACES:=TALLY;	00128000
35	END SPACES;	00129000
36	INTEGER STREAM PROCEDURE ICV(S,T);	00130000
37	BEGIN	00131000
38	SI:=S; SI:=SI+4;	00132000
39	DI:=LOC ICV;	00133000
40	DS:=4 OCT;	00134000
41	SI:=S; DI:=T; SI:=SI+2; DS:= 2 OCT;	00135000
42	END ICV;	00136000
43	REAL PROCEDURE OCTAL(N);	00137000
44	VALUE N;	00138000
45	INTEGER N;	00139000
46	OCTAL:=N.[45:3]&(IF N>7 THEN OCTAL(N.[24:21])ELSE 0)[3:9:39];	00140000
47	PROCEDURE SEQUENCE(ARRAY,LIM,INX,GRTR);	00141000
48	VALUE LIM;	00142000
49	ARRAY ARAY[0];	00143000
50	INTEGER LIM,INX;	00144000
51	BOOLEAN GRTR;	00145000
52	BEGIN	00146000
53	INTEGER I,L;	00147000
54	STREAM PROCEDURE MOVE(S,D,D32,M32);	00148000
55	VALUE D32,M32;	00149000
56	BEGIN	00150000
57	SI:=S; DI:=D;	00151000

	D32(DS:=32 WDS); DS:=M32 WDS;	00152000
	END MOVE;	00153000
	I:=LIM-1;	00154000
1	WHILE(INX:=I:=I-1)≥0 DO	00155000
2	BEGIN	00156000
3	ARRAY[LIM]:=ARRAY[I];	00157000
4	L:=0;	00158000
5	WHILE LIM>INX:=INX+1 AND GRTR DO L:=L+1;	00159000
6	IF L>0 THEN	00160000
7	BEGIN	00161000
8	MOVE(ARRAY[I+1],ARRAY[I],L.[37:6],L.[43:5]);	00162000
9	ARRAY[I+L]:=ARRAY[LIM];	00163000
10	END;	00164000
11	END;	00165000
12	END SEQUENCE;	00166000
13	BOOLEAN PROCEDURE GREATER(ONE,TWO,NAMS);	00167000
14	VALUE ONE,TWO;	00168000
15	REAL ONE,TWO;	00169000
16	ARRAY NAMS[0];	00170000
17	BEGIN	00171000
18	INTEGER STREAM PROCEDURE COMPARISON(W1,W2);	00172000
19	BEGIN	00173000
20	LABEL UNEQ,EXIT;	00174000
21	SI:=W1; DI:=W2;	00175000
22	8(IF SC≠DC THEN JUMP OUT TO UNEQ);	00176000
23	GO TO EXIT;	00177000
24	UNEQ:	00178000
25	SI:=SI-1; DI:=DI-1;	00179000
26	IF SC<DC THEN TALLY:=2 ELSE TALLY:=1;	00180000
27	EXIT;	00181000
28	COMPARISON:=TALLY;	00182000
29	END COMPARISON;	00183000
30	INTEGER L1,L2,L,A1,A2,A,C;	00184000
31	A1:=ONE.[33:15]; A2:=TWO.[33:15];	00185000
32	L:=MIN(L1:=ONE.[18:15],L2:=TWO.[18:15]);	00186000
33	IF L>0 THEN	00187000
34	WHILE L>A AND	00188000
35	(C:=COMPARISON(NAMS[A1],NAMS[A2]))=0 DO	00189000
36	BEGIN	00190000
37	A:=A+1;	00191000
38	A1:=A1+1;	00192000
39	A2:=A2+1;	00193000
40	END;	00194000
41	GREATER:=IF C=0 THEN L1>L2 ELSE C=1;	00195000
42	END GREATER;	00196000
43	PROCEDURE FILLARRAY(NAMS,NAME,NAMAX,NMSIMAX,STUFF,MCP);	00197000
44	VALUE MCP;	00197100
45	ARRAY NAMS,NAME[0];	00198000
46	INTEGER NAMAX,NMSIMAX;	00199000
47	FILE STUFF;	00200000
48	BOOLEAN MCP;	00200050
49	BEGIN	00201000
50	LABEL EOS;	00202000
51	INTEGER NMSI,NAMI,L,KLASS;	00203000
52	WHILE TRUE DO	00204000
53	BEGIN	00205000
54	READ(STUFF,4,CARD[*])[EOS];	00206000
55	IF MCP THEN	00206500
56	SETOPTIONS;	00207000
57	NAME[NAMI:=ICV(CARD,KLASS)-129]I=NMSI;	00208000

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NAME[NAMI],[3:5]:=KLASS-1; 00209000
NAMAX:=MAX(NAMAX,NAMI); 00210000
L:=3; 00211000
1 WHILE SPACES(CARD[L]) DO L:=L-1; 00212000
2 NAME[NAMI],[18:15]:=L; 00213000
3 MOVE(CARD[1],NAMS[NMSI],L); 00214000
4 NMSI:=NMSI+L; 00215000
5 END; 00217000
6 EOS; 00218000
7 IF MCP AND AUXMEMM=1 THEN MONITORR:=0; 00218100
8 NMSIMAX:=NMSI; 00218500
9 CLOSE(STUFF); 00219000
10 END FILLARRAY; 00220000
11 PROCEDURE SORTANDLIST(IMAX,NAME,NAMS); 00221000
12 VALUE IMAX; 00222000
13 INTEGER IMAX; 00223000
14 ARRAY NAME,NAMS[0]; 00224000
15 BEGIN 00225000
16 INTEGER I; 00226000
17 ARRAY ALFA[0:NAMESIZE-1]; ARRAY LINE[0:14]; 00227000
18 FORMAT F(X8,2(X1,A4," ; ",5X8)); 00228000
19 FOR I:=0 STEP 1 UNTIL IMAX DO ALFA[I]:=I; 00229000
20 SEQUENCE(ALFA,IMAX:=IMAX+1,1, 00230000
21 GREATER(NAME[ALFA[IMAX]],NAME[ALFA[I]],NAMS)); 00231000
22 IMAX:=IMAX-1; 00232000
23 IF NOLIST THEN ELSE 00232500
24 IF IMAX GTR INAMESIZE THEN PRINTOPTIONS; 00233000
25 FOR I:=0 STEP 1 UNTIL IMAX DO 00234000
26 BEGIN 00235000
27 IF NOLIST THEN NAME[I],[8:10]:=ALFA[I] ELSE 00235300
28 BEGIN 00235400
29 WRITE(LINE[*],F,OCTAL(I+129),OCTAL(ALFA[I]+129)); 00236000
30 MOVE(NAMS[NAME[I],[33:15]],LINE[2], 00237000
31 NAME[I],[18:15]); 00238000
32 MOVE(NAMS[NAME[ALFA[I]],[33:15]],LINE[8], 00239000
33 NAME[ALFA[I]],[18:15]); 00240000
34 NAME[I],[8:10]:=ALFA[I]; 00241000
35 WRITE(PRINT,15,LINE[*]); 00242000
36 END; 00242500
37 END; 00243000
38 END SORTANDLIST; 00244000
39 LEVEL:="XV,2 "; % 5 CHR = LEFT JUSTIFIED 00245000
40 FILLOPTIONS; 00246000
41 FILLARRAY(NAMS,NAME,PRTMAX,NAMSMAX,MCP,TRUE); 00247000
42 FILLARRAY(INAMS,INAME,INAMAX,INAMSMAX,INI,FALSE); 00248000
43 SORTANDLIST(PRTMAX,NAME,NAMS); WRITE(PRINT[PAGE]); 00249000
44 SORTANDLIST(INAMAX,INAME,INAMS); 00250000
45 PRTS[00]:=LEVEL; 00251000
46 PRTS[01]:=OPT; 00252000
47 PRTS[02]:=PRTMAX; 00253000
48 PRTS[03]:=NAMSMAX; 00254000
49 PRTS[04]:=INAMAX; 00255000
50 PRTS[05]:=INAMSMAX; 00256000
51 WRITEARRAY(PRTS,30); 00257000
52 WRITEARRAY(NAME,PRTMAX+1); 00258000
53 WRITEARRAY(NAMS,NAMSMAX); 00259000
54 WRITEARRAY(INAME,INAMAX+1); 00260000
55 WRITEARRAY(INAMS,INAMSMAX); 00261000
56 LOCK(DISK,*); 00262000
57 END. 00263000
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END;END. LAST CARD ON OCRDING TAPE

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SI ← A; DI ← B; SI ← SI + 4;

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LABEL

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LABEL 00000000PRINTER00175100CC EX OBJECT/READ;FILE SOURCEFILE=SYMBOL/DCFILL←+0000000

OBJECT /READ

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