

LENGTH OF PRG 01000

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73777 P

Line	Ident	MSFMOUNT
1	IDENT	MSFMOUNT
2		
3	INCLUDE	↑SYSMAC
3+001	COSY/ SYSMAC	03 V4.1 08/17/74 0453
4		
5	ENTRY	MSFMOUNT
6		
7	EXT	ARRAYTBL
8	EXT	BIT16
9	EXT	BIT22
10	EXT	BIT23
11	EXT	CONNECT
12	EXT	D10
13	EXT	DKCONTAB
14	EXT	DKSTATAB
15	EXT	DKSTATM1
16	EXT	DKSTATBL
17	EXT	FILE
18	EXT	FREEMEM
19	EXT	GETMEM
20	EXT	IDLE
21	EXT	IOCLEAR
22	EXT	MONREAD
23	EXT	MOUNTRET
24	EXT	MSFBLK
25	EXT	MSFNUMB
26	EXT	MSUNITM1
27	EXT	MSUNITS
28	EXT	NBIT22
29	EXT	NMTWAIT
30	EXT	NUMDKCON
31	EXT	OPMSG
32	EXT	SCREAM
33	EXT	UNCON
34		
35	X1	EQU 1
36	X2	EQU 2
37	X3	EQU 3
38	PSA	EQU 0
39	CNBLK	EQU 0
40		
41	IMPURE	EQU 00000
42		
43	MSLIDEN	EQU 0
44	MSLLFBN	EQU 2
45	MSLHFBN	EQU 3
46	MSLDEV	EQU 7
47		
48	SENSE	EQU 0
49	PFLOC	EQU 1
50		
51	NU	EQU 35B
52		
53	Z	EQU *-4000B

LABEL IDENT
LOW FILE BLOCK NUMBER / USER PACK
HIGH FILE BLOCK NUMBER / NUMBER 0
DEVICE TYPE

NUMBER OF USERS REGISTER FILE LOC
PROGRAM LOADS AT 4000B

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55          FCBDEF
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FCBDEF
*****
FILE CONTROL BLOCK DEFINITIONS
ACCPWORD EQU 0 ACCOUNTING WORD (MUST BE 0)
LP EQU 1 LOAD POINT BLOCK
COREP EQU 2 CORE POINTER IF NON-ZERO
IF BIT23 = 1, CORE BLOCK HAS
BEEN WRITTEN INTO
CBP EQU COREP+1 BLOCK NUMBER OF THE CURRENT BLOC
CPP EQU 4 CURRENT POSITION POINTER
(REL. POSIT. WITHIN BLOCK CBP)
BIT23 SEZ READ-ONLY
BIT22 SEZ AT LOAD POINT
BIT21 SEZ END OF DATA
BIT20 SEZ FILE MARK JUST READ
BIT18 SEZ BINARY RECORD PROCESSE
BIT17 SEZ ABNORMAL/UNAVAILABLE
BIT16 SEZ ADDRESS ERROR
BIT15 SEZ SAVED FILE
NUMBER OF BLOCKS BEYOND
THE CURRENT BLOCK
END POSITION POINTER
BIT22 SEZ THE FILE HAS CHANGED
BIT21 SEZ POSITIONER READY
BIT20 SEZ DESTRUCTIVE READ
FILE DIRECTORY
BITS 15-18 CONTAIN THE HT
BITS 00-14 CONTAIN END POSITION
TOTAL LENGTH IN BLOCKS
AEB EQU BIT16 ADDRESS ERROR STATUS BIT

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*****
*
*   ENTER WITH
*   X2 = BUFFER ADDRESS (IF A MOUNT REQUEST)
*   X3 = RETURN ADDRESS
*
*   THIS CODE MAKES THE ASSUMPTION IN SOME AREAS THAT IT IS
*   RUNNING ON LEVEL ONE
*
*****
    
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00003 20004445
00004 03004327
00005 12000002
00006 46004401
00007 14100004
00010 00704490
00011 04600073
00012 01004403
00013 14477777
00014 01004021

00015 04015
00016 53600000
00017 14600012
00018 50004434
00020 53240000
00021 04021
00022 40004434
00023 00704400
00024 05600012
00025 01004015
00026 04600073
00027 01004403
00028 00704400
00030 04600023
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00033 14700010
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00035 42022211 04442 1
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00037 04600025
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00042 03604403
00043 12000003
00044 42022212 04442 2
00045 00704400
00046 04600064
00047 01004403
00050 00704400
00051 03604403
00052 16400010
00053 42022213 04442 3
00054 47104444
00055 20004434
00056 14177777 X
00057 14577777
00060 06177777 X
00061 01004403
00062 47104271
00063 14777000
00064 27004442
00065 14177777 X
00066 06177777 X
00067 01004403
00070 14177777 X
00071 14777007
00072 27004442
00073 06177777 X
00074 01004076
00075 01004403
00076 14177777
    
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MSFMOUNT EQU *
STI BUFFADD,X2 SAVE THE BUFFER ADDRESS
STI EXITADD,X3 SAVE THE RETURN ADDRESS
RTJ CHECKUN CHECK FOR UNEQUIPPED UNITS
LDA BUFFADD DID WE HAVE A MESSAGE TO LOOK AT
AZJ, EQ CHECEXIT JUMP IF NOT
SHA 2 CONVERT TO CHARACTER ADDRESS
SCHA LACHADD
ENI 4,X1 START AFTER THE FOURTH CHARACTER
RTJ LACHIT
ASE 73B MUST BE A COMMA
UJP ERROR
ENA,S -0
UJP PACKDEV2

PACKDEV EQU *-Z
TAI X2 SAVE CURRENT DIGIT IN X2
ENA 10
MUA NUMBER
AIA X2 ADD IN CURRENT DIGIT
PACKDEV2 EQU *-Z
STA NUMBER
RTJ LACHIT
ASG 10
UJP PACKDEV
ASE 73B DELIMITER MUST BE A COMMA
UJP ERROR
RTJ LACHIT
ASE 23B MUST BE C
UJP ERROR
RTJ LACHIT
ENQ 10B GET CHANNEL NUMBER
AQJ, GE ERROR
SACH CHANNEL
RTJ LACHIT
ASE 25B MUST BE E
UJP ERROR
RTJ LACHIT GET EQUIPMENT NUMBER
AQJ, GE ERROR
SHA 3
SACH EQUIPMEN
RTJ LACHIT
ASE 64B MUST BE U
UJP ERROR
RTJ LACHIT GET THE UNIT NUMBER
AQJ, GE ERROR
XOA,S 00010B SET IN THE STATUS FOR AN 854
SACH UNIT
STI CHARPOS,X1 SAVE THE CHARACTER POSITION
LDA NUMBER CHECK IF WE WANT THIS PACK
ENI MSUNITS,X1
ENQ,S 77777B
MEQ MSFNUMB,1
UJP ERROR WE DONT WANT THIS PACK
STI MSFPOS,X1 SAVE THE POSITION IN MSFNUMB
ENQ 77000B LOOK FOR THIS CONTROLLER
LDL CONCODE LOAD THE CONNECT CODE
ENI NUMDKCON,X1
MEQ DKONTAB,1
UJP ERROR
ENI DKSTATBL,X1 CONTROLLER IS NOT ON LINE
ENQ 77007B LOOK TO SEE IF THE DEVICE HAS A P
LDL CONCODE LOOK AT CHANNEL, EQUIPMENT, AND U
MEQ DKSTATAB,1
UJP *-Z+2
UJP ERROR
ENI 77777B,X1
    
```

00077	20100073	X	139	LDA	DKSTATAB,X1	LOAD A CONNECT CODE WORD
00100	03304103		140	AZJ,LT	*-Z+3	JUMP IF UNIT IS NOT PRESENT
00101	02104077		141	IJI	*-Z-2,X1	LOOK THUR ALL POSITIONS FOR THIS
00102	01004403		142	UJP	ERROR	
			143			
00103	14300000		144	ENI	0,X3	ASSIGN A UNIT NUMBER TO THE DEVIC
00104	20377777	X	145	LDA	ARRAYTBL,X3	JUMP IF DEVICE IS NOT BEING USED
00105	03304111		146	AZJ,LT	*-Z+4	
00106	10377777	X	147	ISI	MSUNITM1,X3	
00107	01004104		148	UJP	*-Z-3	
00110	01004403		149	UJP	ERROR	NO TABLE ENTRIES
			150			
00111	14600000		151	ENA	0	
00112	40300104	X	152	STA	ARRAYTBL,X3	SAY THE DEVICE IS PRESENT
00113	53300000		153	TIA	X3	DEVICE NUMBER TO A
00114	12000017		154	SHA	15	
00115	35004442		155	SSA	CONCODE	
00116	40100077	X	156	STA	DKSTATAB,X1	SAVE THE CONNECT CODE
00117	47104264		157	STI	DKSTABX1,X1	SAVE THE POINTER
			158			
00120	21077777	X	159	LQQ	BIT23	REMEMBER THAT WE ARE PROCESSING
00121	54104271		160	LDI	MSFPOS,X1	THE MOUNT REQUEST FOR THIS DEVICE
00122	20177777	X	161	LDA	MSFBLK,X1	FIND THE CONTROL BLOCK
00123	53500000		162	TAI	X1+CNBLK	
00124	41100000		163	STQ	0,X1+CNBLK	
			164			
00125	14300004		165	ENI	4,X3	GET 16 WORDS OF FREE MEMORY
00126	00777777	X	166	RTJ	GETMEM	SAVE THE BLOCK ADDRESS
00127	44004443		167	SWA	FREEBLK	
00130	14177760		168	ENI	-15,X1	
00131	21104612		169	LQQ	FREECOPY+15,X1	MOVE THE NEEDED INFORMATION
00132	41300000		170	STQ	0,X3	TO THE BLOCK
00133	15300001		171	INI	1,X3	
00134	02104131		172	IJI	*-Z-3,X1	
00135	14200017		173	ENI	15,X2	RELOCATE THE INFORMATION
00136	15377776		174	INI	-1,X3	
00137	23423054	04613 0	175	LQCH	RELOCTAB,X2	
00140	04700000		176	QSE	0	SKIP IF NO RELOCATION
00141	34300000		177	RAD	0,X3	
00142	02604136		178	IJD	*-Z-4,X2	
00143	77650001		179	PFA	PFLOC	
00144	34300004		180	RAD	SETPF,X3	SET THE CURRENT PF LOCATION IN
			181			THE FREE STORAGE BLOCK
00145	14604155		182	ENA	CONRETRN	SAVE THE RETURN ADDRESS
00146	44300006		183	SWA	MAINRET,X3	SAY WE WANT THE CHANNEL FOR 2 SEC
00147	14703720		184	ENQ	2000	LOAD THE CONNECT CODE
00150	54104442		185	LDI	CONCODE,X1	SAVE THE CONNECT CODE
00151	47104165		186	STI	CONN,X1	LOAD THE RETURN ADDRESS IN CASE T
00152	54204353		187	LDI	EXITADD,X2	THE CONTROLLER IS BUSY
00153	15300005		188	INI	CONCALL,X3	
00154	01077777	X	189	UJP	CONNECT	

```

192 *****
193 *
194 * RETURN TO HERE AFTER OBTAINING THE PROPER DISK CHANNEL *
195 *
196 * NOTE THAT WE MAY NO LONGER BE ON LEVEL ONE *
*****

198
199 CONRETRN EQU *-Z
200 STI EXITADD,X2 SAVE THE RETURN ADDRESS
201 LDI FREEBLK,X1 LOAD THE FREE STORAGE ADDRESS
202 LDA PFSAVE,X1 REMEMBER WHAT WAS IN PF1
203 SWA EXITPF1 SO WE CAN RESTORE IT
204 LDI MSFPOS,X1 HAS THE DEVICE BEEN UNEQUIPPED
205 LDA MSFBLK,X1
206 AZJ,LT CALUNCON
207
208
209 CONN ENI 100,X3 TRY TO REALLY MAKE THE CONNECT
210 EQU *-Z
211 CON IMPURE,0
212 IJD *-Z-1,X3
213 EXS 0001B,SENSE CHECK FOR READY
214 EXS 0002B,SENSE AND NOT BUSY
215 IJD CONN,X3
216 ENA UNCONRET
217 IJD CALUNCON,X3 JUMP IF WE CONNECTED OK
218
219 RTJ TAKEOFF TAKE THE DEVICE BACK OFF LINE
220 ENA *-Z+2 ENTER THE RETURN ADDRESS
221 UJP CALUNCON GIVE UP THE CHANNEL
222 ECHA CANTCON SAY WE CAN'T CONNECT TO THE DEVIC
223 ENQ CANTCONL
224 UJP CALLOP
225
226 CALUNCON EQU *-Z
227 LDI FREEBLK,X2
228 SWA MAINRET,X2
229 INI SETPF,X2 ENTER THE RETURN FOR UNCON
230 UJP UNCON GIVE UP THE CHANNEL
231
232 UNCONRET EQU *-Z
233 LDI MSFPOS,X1 HAS THE DEVICE BEEN UNEQUIPPED
234 LDA MSFBLK,X1 JUMP IF IT HAS
235 AZJ,LT CHECEXIT
236
237 PFA PFLOC GET THE CORE ADDRESS WE ARE USING
238 ENQ 0
239 SHAQ -24+6+11-2 SAVE ADDRESS IN HIGH Q
240 LDI DKSTABX1,X1 LOAD THE CONNECT CODE
241 LDA DKSTATAB,X1 EXTRACT UNIT NUMBER
242 SHAQ -15 MERGE SECTOR ADD WITH CORE ADDRESS
243 INQ LABEL
244 LDI FREEBLK,X3 LOAD THE ADDRESS OF THE FREE STOR
245 LDA FREECOPY+ASAVE RESTORE THE JUMP IN ASAVE
246 AIA X3 RELOCATE INTO THE BLOCK
247 STA ASAVE,X3
248 ENA IORET
249 SWA MAINRET,X3 SET THE RETURN ADDRESS
250 INI SAVEA,X3 SET THE RETURN ADDRESS
251 ENI MONREAD,X2
252 ENA 0 ENTER IO TYPE CODE
253 ENI 64,X1 WE WANT SECTOR ZERO
254 RTJ FILE READ IN THE FIRST SECTOR
255 LDI FREEBLK,X3 LOAD THE FREE STORAGE BLOCK ADDRE
256 LDA PFSAVE,X3
257 LDQ APFLOC LOAD A APF PCLOC INSTRUCTION
258 STQ PFSAVE,X3 STORE THE APF IN THE BLOCK
259 LDI EXITADD,X2 LOAD THE RETURN ADDRESS
260 UJP PFSAVE,X3 AND EXIT

```

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00155 04155
00156 47204353
00157 54104443
00160 20100016
00160 44004352
00161 54104271
00162 20100122 X
00163 03304202

00164 14300144
00165 04165
00165 77000000
00166 02704165
00167 77200001
00170 77200002
00171 02704165
00172 14604206
00173 02704202

00174 00704355
00175 14604177
00176 01004202
00177 11022346 04471 2
00200 14700035
00201 01004325

00202 04202
00203 54204443
00203 44200006
00204 15200004
00205 01077777 X

00206 04206
00207 54104271 X
00210 20100162 X
00210 03304327

00211 77650001
00212 14700000
00213 13077766
00214 54104264
00215 20100116 X
00216 12077760
00217 13077771
00220 15700700
00221 54304443
00222 20004573
00223 53340000
00224 40300000
00225 14604243
00226 44300006
00227 15300001
00230 14277777 X
00231 14600000
00232 14100100
00233 00777777 X
00234 54304443
00235 20300016
00236 21004600
00237 41300016
00240 54204353
00241 01300016

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00242 01004406
 04243
00243 47304353
00244 54104271
00245 20100207 X
00246 03304327
00247 14100077
00250 14477777
00251 36104700
00252 02504251
00253 03104410
00254 03304410
00255 25004700
00256 33004432
00257 13400000
00260 03104410
00261 20004702
00262 31004434
00263 03104410

00264 14100000
 04264
00265 20100215 X
00266 17477077
00267 35004707
00270 40100265 X
 04271
00271 14100000
00272 13000030
00273 20100245 X
00274 53600000
00275 41200000
00276 14600000
00277 40200005
00300 14477776
00301 34077777 X
00302 20004703
00303 40200007
00304 15600001
00305 40200003
00306 20077777 X
00307 35200004
00310 40200004
00311 20100060 X
00312 40200001
00313 35077777 X
00314 40100311 X
00315 37077777 X
00316 14100004
00317 13077747
00320 51077777 X
00321 43422330
 04466 0
00322 02504317

00323 11022316
 04463 2
00324 14700030
 04325
00325 14204327
00326 01077777 X

 04327
00327 00704507

```
*****  
* RETURN HERE AFTER READING IN THE DISK LABEL *  
* NOTE: PROGRAM IS RUNNING ON LEVEL ONE AGAIN *  
*****  
  
IORET UJP BADREAD ERROR READING IN THE LABEL  
EQU *-Z  
STI EXITADD,X3 SAVE THE RETURN  
LDI MSFPOS,X1 LOAD THE POSITION IN MSFBLK  
LDA MSFBLK,X1  
AZJ,LT CHECEXIT JUMP IF DEVICE HAS BEEN UNEQUIPPE  
ENI 1008-1,X1 CHECK THE LABEL FOR PARITY  
ENA,S -0  
SCA LABELBUF,X1  
IJD *-Z-1,X1  
AZJ,NE BADLABEL JUMP IF BAD LABEL  
AZJ,LT BADLABEL  
LDAQ LABELBUF+MSLIDEN CHECK FOR PROPER LABEL  
SBAQ OS3USER  
SCAQ 0  
AZJ,NE BADLABEL  
LDA LABELBUF+MSLLFBN LOAD THE USER PACK NUMBER  
SBA NUMBER  
AZJ,NE BADLABEL  
  
*****  
* AT THIS POINT WE HAVE DECIDED TO LET THE USER HAVE THE DEVICE *  
*****  
  
DKSTABX1 EQU *-Z  
ENI IMPURE,X1 ENTER THE POSITION IN DKSTAB  
LDA DKSTATAB,X1 LOAD THE CONNECT CODE  
ANA,S 77077B CLEAR THE TYPE BIT  
SSA LABELBUF+MSLDEV SET IN THE REAL TYPE BIT  
STA DKSTATAB,X1 SAVE THE CORRECT CONNECT CODE  
  
MSFPOS EQU *-Z  
ENI IMPURE,X1 ENTER POSITION IN MSFNUMB/MSFBLK  
SHAQ 24 SAVE CONNECT CODE IN Q  
LDA MSFBLK,X1 LOAD THE POINTER TO THE CONTROL B  
YAI X2+CNBLK  
STQ 0,X2+CNBLK SAVE THE CONNECT CODE IN THE CONT  
ENA 0 SET THE WALL CLOCK TIME TO  
STA BLKR,X2+CNBLK ZERO FOR THE ACCOUNTING  
ENA,S -1  
RAD SCREAM TURN OFF THE NOISE  
LDA LABELBUF+MSLHFBN LOAD THE NUMBER OF BLOCKS ON THE  
STA TFL,X2+CNBLK  
INA 1 GENERATE AN ILLEGAL CURRENT SEEK  
STA CBP,X2+CNBLK  
LDA AEB LOAD THE ADDRESS ERROR BIT  
SSA CPP,X2+CNBLK AND SET IT INTO THE STATUS TO  
STA CPP,X2+CNBLK FORCE THE USER TO DO A SEEK  
LDA MSFNUMB,X1 LOAD THE PACK NUMBER  
STA LP,X2+CNBLK SAVE IN THE CONTROL BLOCK  
SSA BIT22 REMEMBER THE PACK NUMBER  
STA MSFNUMB,X1 TO PREVENT SOME ELSE WANTING THE  
LPA NBIT22 SAME PACK  
ENI 4,X1  
SHAQ -24  
DVA D10  
SQCH DEVOK,X1  
IJD *-Z-3,X1  
  
CALLOP EQU *-Z  
ENI *-Z+2,X2  
UJP OPMSG PRINT OUT DEVICE IS MOUNTED  
  
CHECEXIT EQU *-Z  
RTJ CHECKUN HAVE ANY DEVICES BEEN UNEQUIPPED
```

00330	20004443		341	LDA	FREEBLK	FREE THE BLOCK OF FREE STORAGE
00331	14300004		342	ENI	4,X3	
00332	04600000		343	ASE	0	SKIP IF WE NEVER ASKED FOR THE ST
00333	00777777	X	344	RTJ	FREEMEM	
00334	47004443		345	STI	FREEBLK,0	FORGET WE EVER HAD IT
00335	20004445		346	LDA	BUFFADD	LOAD THE ADDRESS OF THE REQUEST M
00336	14300005		347	ENI	5,X3	
00337	04600000		348	ASE	0	SKIP IF NO BLOCK PRESENT
00340	00700333	X	349	RTJ	FREEMEM	
00341	47004445		350	STI	BUFFADD,0	
00342	14377777	X	351			
00343	53130035		352	ENI	IDLE,X3+PSA	START WITH IDLE AND CLEAR
00344	01004351		353	TMI	NU,X1	MOUNTING WAIT FOR ALL USERS
00345	14477777	X	354	UJP	*-Z+5	
00346	00777777	X	355	ENA,S	NMTWAIT	
00347	20300000		356	RTJ	IOCLEAR	
00350	53700000		357	LDA	0,X3+PSA	ADVANCE TO THE NEXT USER
00351	02504345		358	TAI	X3+PSA	
	04352		359	IJD	*-Z-4,X1	
00352	14600000		360			
	04353		361	EXITPF1	EQU	TELL OPMSG WHAT TO PUT IN THE
00353	14300000		362		ENI	PAGE FILE
00354	01077777	X	363	EXITADD	EQU	
			364		ENI	ENTER THE RETURN ADDRESS
			365		UJP	NOW EXIT

```

368 *****
369 *
370 * ROUTINE TO CHANGE THE TABLES SO THAT A UNIT IS TAKEN OFF LINE *
371 * RETURNS WITH CNBLK POINTER IN X1 *
372 *
*****
374
375
376 TAKEOFF EQU *-Z
377 UJP IMPURE
378 LDI DKSTABX1,X1 LOAD POINTER INTO DKSTATAB
379 LDA DKSTATAB,X1 LOAD THE CONNECT CODE
380 SHA -15 EXTRACT THE DEVICE NUMBER FROM IT
381 TAI X2
382 ANI 37B,X2
383 ENA,S 77777B
384 STA ARRAYTBL,X2 SAY DEVICE IS NOT ON LINE
385 UJP *-Z+3
386 LOA DKSTATAB,X1 LOAD A CONNECT CODE
387 STA DKSTATM1,X1 REPLACE PREVIOUS ENTRY
388 ISI DKSTATBL,X1 SKIP IF DONE
389 UJP *-Z-3
390 LDI MSFPCS,X1 TELL THE CONTROL BLOCK THAT IT
391 LDA MSFBLK,X1 WAS NOT MOUNTED
392 TAI X1+CNBLK
393 ENA,S 77760B
394 STA 0,X1+CNBLK
395 UJP TAKEOFF
396
397
398
399 LACHIT EQU *-Z
400 UJP IMPURE
401 LACHADD EQU *-Z
402 LACH IMPURE,X1
403 IJI LACHIT,X1
404
405
406 ERROR EQU *-Z
407 ECHA NOACCEPT
408 ENQ NOACCEPT
409 UJP CALLOP

```

```

00355 04355
00356 01000000
00357 54104264 X
00358 20100270 X
00359 12077760
00360 53600000
00361 17200037
00362 14477777
00363 40200112 X
00364 01004370
00365 20100357 X
00366 40177777 X
00367 10100070 X
00370 01004366
00371 54104271
00372 20100273 X
00373 53500000
00374 14477760
00375 40100000
00376 01004355
00377

00400 04400
00401 01000000
00402 04401 00000 0
00403 22400000
00404 02104400

00403 04403
00404 11022230 04446 0
00405 14700041
00406 01004325

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*****
*
* THIS ROUTINE IS ENTERED WHEN A FATAL DISK ERROR OCCURES WHEN
* READING A DISK LABEL OR WHEN A LABEL IS BAD. IT CHECKS TO
* SEE IF THE OPERATOR INSTRUCTED THAT A LABEL BE WRITTEN OR
* FAKED
*
*****
    
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00406 04406
00407 47304353
      14300000
      04410
00410 54104444
00411 00704400
00412 04600073
00413 01004426
00414 14200007
00415 20204432
00416 40204700
00417 02604415
00420 00704400
00421 14700026
00422 03404264
00423 14700043
00424 04300000
00425 03404264
      04426
00426 00704355
00427 11022403
00430 14700027
00431 01004325

      04432
      04432
00432 46620360
      04434
00434 00000000
00435 00077340
00436 00000000
00437 00000000
00440 00000000
00441 00000000
      00010
    
```

04500 3

```

BADREAD EQU *-Z
      STI EXITADD,X3
      ENI 0,X3
BADLABEL EQU *-Z
      LDI CHARPOS,X1
      RTJ LACHIT
      ASE H#,#
      UJP BADPRINT
      ENI MOVE,-1,X2
      LDA MOVE,X2
      STA LABELBUF,X2
      IJD *-Z-2,X2
      RTJ LACHIT
      ENQ H#F#
      AQJ, EQ OKSTABX1
      ENQ H#L#
      ISE 0,X3
      AQJ, EQ OKSTABX1
BADPRINT EQU *-Z
      RTJ TAKEOFF
      ECHA LABMESS
      ENQ LABMESSL
      UJP CALLOP

MOVE EQU *-Z
OS3USER EQU *-Z
      BCD 2,OS3 USER
NUMBER EQU *-Z
      VFD A24/IMPURE
      DEC 203*160
      OCT 0
      OCT 0
      OCT 0
      OCT 0
MOVEL EQU *-Z-MOVE
    
```

```

SAVE THE RETURN ADDRESS
REMEMBER THE DISK ERROR

CHECK FOR MORE INSTRUCTIONS

DELIMITER MUST BE A COMMA

MOVE A FAKE LABEL INTO THE
BUFFER

CHECK WHAT TO DO
#FAKE# WE READ A GOOD LABEL

SHOULD WE #LABEL# THE PACK
DONT IF THERE WAS A DISK ERROR
WRITE OUT A NEW LABEL SOMETIME

REMOVE THE DEVICE FROM THE TABLES

NUMBER OF SECTORS ON AN 854

CODE FOR AN 854
    
```

00442	00004442 00000000 22211 22212 22213	458 459 460 461 462 463 464	CONCODE EQU VFD CHANNEL EQU,C EQUIPMEN EQU,C UNIT EQU,C	*-Z A24/IMPURE CONCODE+CONCODE+CONCODE+CONCODE+1 CHANNEL+1 EQUIPMEN+1
00443	00004443 00000000	465 466 467	FREEBLK EQU VFD	*-Z 09/000,A15/IMPURE ADDRESS OF THE FREE STORAGE BLOCK IF IT HAS BEEN OBTAINED
00444	00004444 00000000	468 469 470	CHARPOS EQU VFD	*-Z 09/000,A15/IMPURE
00445	00004445 00000000	471 472	BUFFADD EQU VFD	*-Z 09/000,A15/IMPURE
00446	25522230 15148 00041	473 474 475 476 477	NOACCEPT EQU,C BCD,C NOACCEPL EQU,C	*-Z 33,ERROR IN DISK PACK MOUNT REQUEST^ *-Z-NOACCEPT
00456	77222271 43162 22303	478 479 480	DEVUNEQM EQU,C BCD,C DEVUNEQ EQU,C	*-Z 10,DISK PACK *-Z
00460	23426067 00025	481 482	BCD,C DEVUNEQL EQU,C	11,XXXXX FREE^ *-Z-DEVUNEQM
00463	22316 25772431 22330	483 484 485	DEVOKMES EQU,C BCD,C	*-Z 10,DISK PACK
00466	67676767 00030	486 487 488	DEVOK EQU,C BCD,C DEVOKMSL EQU,C	*-Z 14,XXXXX ON LINE^ *-Z-DEVOKMES
00471	22346 25772321 00035	489 490 491	CANTCON EQU,C BCD,C	*-Z 29,CAN NOT CONNECT TO DISK PACK^
00500	22403 23427722 00027	492 493 494	CANTCONL EQU,C LABMESS EQU,C BCD,C	*-Z-CANTCON *-Z 23,BAD LABEL ON DISK PACK^
00506		495 496	LABMESSL EQU,C BSS	*-Z-LABMESS 0

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500
501
502

```

*****
*
*   THIS CODE WILL CHECK FOR DEVICES THAT HAVE BEEN UNEQUIPPED
*   AND MAKE ANY CHANGES TO THE TABLES THAT ARE REQUIRED
*
*****
    
```

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00507 01000000
      04510
00510 20000120 X
00511 210000510 X
00512 141000056 X
00513 061000373 X
00514 010004507
00515 531000000
00516 537000000
00517 201000513 X
00520 536000000
00521 202000000
00522 14577760
00523 034004546
00524 14777777
00525 272000000
00526 141000370 X
00527 061000366 X
00530 000004530
00531 201000527 X
00532 010004535
00533 211000531 X
00534 411000367 X
00535 101000526 X
00536 010004533
00537 12077760
00540 535000000
00541 171000037
00542 14477777
00543 401000364 X
00544 202000001
00545 010004553
      04546
00546 146000000
00547 402000005
00550 14477776
00551 340000301 X
00552 203000314 X
      04553
00553 147000000
00554 413000552 X
00555 413000517 X
00556 17677777
00557 141000004
00560 13077747
00561 510000320 X
00562 43422303 04460 3
00563 025004560
00564 143000003
00565 532000000
00566 007000340 X
00567 142004510
00570 11022271 04456 1
00571 147000025
00572 010000326 X
    
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CHECKUN EQU *-Z
UJP IMPURE
CHECKUN1 EQU *-Z
LDA BIT23
LDQ BIT23
ENI MSUNITS,X1
MEQ MSFBLK,1
UJP CHECKUN
TIA X1
TAI X3
LDA MSFBLK,X1
TAI X2+CNBLK
LDA 0,X2+CNBLK
ENQ,S 777608
AQQ,EQ CHECKUN8
ENQ 777778
LDL 0,X2+CNBLK
ENI DKSTATBL,X1
MEQ DKSTATAB,1
HLT *-Z
LDA DKSTATAB,X1
UJP *-Z+3
LDQ DKSTATAB,X1
STQ DKSTATM1,X1
ISI DKSTATBL,X1
UJP *-Z-3
SHA -15
TAI X1
ANI 378,X1
ENA,S 777778
STA ARRAYTBL,X1
LDA LP,X2+CNBLK
UJP CHECKUN9
CHECKUN8 EQU *-Z
ENA 0
STA BLKR,X2+CNBLK
ENA,S -1
RAD SCREAM
LOA MSFNUMB,X3
CHECKUN9 EQU *-Z
ENQ 0
STQ MSFNUMB,X3
STQ MSFBLK,X3
ANA 777778
ENI 4,X1
SHAQ -24
DVA 010
SQCH DEVUNEQ,X1
IJD *-Z-3,X1
ENI 3,X3
TIA X2+CNBLK
RTJ FREEMEM
ENI CHECKUN1,X2
ECHA DEVUNEQM
ENQ DEVUNEQL
UJP OPMSG
    
```

```

LOOK FOR DEVICES THAT HAVE BEEN U
SAVE MSFBLK POINTER IN X3
LOAD THE CONTROL BLOCK POINTER
HAS THE OPERATOR OK'ED THE PACK
JUMP IF NOT
LOAD THE CONNECT CODE
LOAD THE CONNECT CODE WORD
LOAD A CONNECT CODE WORD
REPLACE PREVIOUS ENTRY
SAVE THE UNIT NUMBER
LOAD THE DEVICE NUMBER
SET THE ACCOUNTING WORD TO ZERO
TURN OFF THE NOISE
LOAD THE PACK NUMBER
FORGET ABOUT THIS DEVICE
PRINT OUT THE DEVICE NUMBER
8 WORD BLOCK
FREE THE CONTROL BLOCK
ENTER THE RETURN ADDRESS
    
```

```

564 *****
565 *
566 * THE FOLLOWING CODE IS MOVED INTO FREE STORAGE TO PROVIDE
567 * A MEANS OF RETURNING TO THIS ROUTINE WHEN PAGE FILE ONE
568 * DOES NOT MAP THE PAGE THE ROUTINE IS IN
*****

570
571
572 FREECOPY EQU *-Z
573 ASAVE EQU *-Z-FREECOPY
574 UJP IOERR
575 SAVEA EQU *-Z-FREECOPY
576 STA ASAVE SAVE A
577 SAVEPF EQU *-Z-FREECOPY
578 PFA PFLOC SAVE PFLOC
579 STA PFSAVE
580 SETPF EQU *-Z-FREECOPY
581 ENA IMPURE SET PFLOC
582 APFLOC EQU *-Z
583 APF PFLOC
584 MAINRET EQU *-Z-FREECOPY
585 UJP IMPURE

586
587 CONCALL EQU *-Z-FREECOPY-2
588 NOP 0
589 UJP 0,X2 IGNORE ANY CHANNEL INTERRUPTS
590 UJP SAVEA CALL WAS QUEUED

591
592 IOERR EQU *-Z-FREECOPY
593 STA ASAVE
594 ENA,S -1
595 RAD MAINRET
596 UJP SAVEPF

597
598 PFSAVE EQU *-Z-FREECOPY
599 APF PFLOC+IMPURE
600 UJP 0,X2

601
602 RELOCTAB EQU,C *-Z
603 8CD 4,1101000001101100

604
605 LABEL EQU 700B
606 LABELBUF EQU 4000B+LABEL STORAGE TO READ LABEL INTO
607
608 ORGR 1000B
609
610 END

```

```

00573 01000012
00574 40000000
00575 77650001
00576 40000016
00577 14600000
00600 77640001
00601 01000000
00602 14000000
00603 01200000
00604 01000001
00605 40000000
00606 14477776
00607 34000006
00610 01000002
00611 77640001
00612 01200000
00613 01010001
00700
04700
01000 P

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NO LINES WITH ERRORS

