

```

0001 MTOS9 MACRO REV 06.30 23:58:10 04/18/79
01 .ENT .LO ;FOR XLDR
02 .ENT .HI
03 000020 .RDX 16
04 0010 .RDX0 16
05
06 7000 .LOC 7000
07 7000 .LO=
08
09
10
11 ;*****
12 ;*
13 ;* PATCH TO INTERFACE SWTP *
14 ;* 8K BASIC REV 2.2 TO *
15 ;* MTOS99 AND DRIVERS *
16 ;*
17 ;*****
18
19
20
21 .TITL BPATCH
22
23 ; THIS PATCH ENABLES MTOS TO BE USED TO
24 ; SAVE AND LOAD BASIC SOURCE PROGRAMS, FROM
25 ; BASIC, OFF THE MAGTAPE.
26
27 ; "SAVE #2"
28 ; PROMPTS FOR THE FILE NAME, AND THE FIRST
29 ; RECORD # TO WRITE TO. THE EXTENTION IS SET TO ".BAS"
30
31 ; "LOAD #2"
FUU07000 0000 ; PROMPTS FOR THE RECORD NUMBER OF HE BASIC SOURCE FILE.
32 ;
33
34
35 ; BOTH COMMANDS MAINTAIN ALL DATA POINTERS, WHICH ALLOWS
36 ; SOURCE SAVED FROM REV 2.2 TO BE LOADED TO OTHER REVS,
37 ; AS NO ABSOLUTE ADDRESSES ARE USED IN RELOADING.
38

```

!0002 MTOS9

```
01
02
03
04      1F00      .LOC      1F00      ; PATCH SPACE. ROOM MUST BE MADE.
05
06      SAVE:
07      JSR      CLRTDB
08
09
10
11
12
13
14
15
16 01F00      00BD
17 01F01      0071
18 01F02      007C
19
20      LDX      # FNMSTR      ;PROMPT FOR FILE NAME
21 01F03      00CE
22 01F04      001F
23 01F05      00B3
24      JSR      PDATA
25 01F06      00BD
26 01F07      0070
27 01F08      0030
28
29      NEWN:
30      LDX      # NAME      ;PUT UP TO 10 CHARS IN BLOCK
31 01F09      00CE
32 01F0A      0077
33 01F0B      00F6
34      LDAB     # 10.
35 01F0C      00C6
36 01F0D      000A
37
38      NIN:
39      JSR      INEE
40 01F0E      00BD
41 01F0F      0070
42 01F10      002A
43      CMPA     # 18      ;CHECK FOR ^X
44 01F11      0081
45 01F12      0018
46      BEQ      SAVE
47 01F13      0027
48 01F14      00EB
49      CMPA     # 8      ;BACKSPACE?
50 01F15      0081
51 01F16      0008
52      BNE      NIN2
53 01F17      0026
54 01F18      0008
55      CPX      # NAME      ;DONT BACK UP TOO FAR
56 01F19      008C
57 01F1A      0077
58 01F1B      00F6
59      BEQ      NIN
60 01F1C      0027
61 01F1D      00F0
```

0003 MTOS9

01	01F1E	0009	DEX		
02			BRA	NIN	
03	01F1F	0020			
04	01F20	00ED			
05					
06			NIN2:		
07			CMPA	# 0D	; STOP ON <CR>
08	01F21	0081			
09	01F22	000D			
10			BEQ	NIN3	
11	01F23	0027			
12	01F24	0009			
13	01F25	005D	TSTB		
14			BEQ	NIN	; IGNORE ANY CHARS BEYOND 10.
15	01F26	0027			
16	01F27	00E6			
17			STAA	X 0	
18	01F28	00A7			
19	01F29	0000			
20	01F2A	0008	INX		
21	01F2B	005A	DECB		
22			BRA	NIN	
23	01F2C	0020			
24	01F2D	00E0			
25					
26			NIN3:		; DONE, INSTALL "BAS" AS EXTENTION
27			LDX	# 4241	; ASCII "BA"
28	01F2E	00CE			
29	01F2F	0042			
30	01F30	0041			
31			LDAA	# "S	; "S"
32	01F31	0086			
33	01F32	0053			
34			STX	EXTN	
35	01F33	00FF			
36	01F34	0078			
37	01F35	0000			
38			STAA	EXTN+2	
39	01F36	00B7			
40	01F37	0078			
41	01F38	0002			
42					
43			GN:		
44			LDX	# RCDSTR	; PROMPT FOR RECD #
45	01F39	00CE			
46	01F3A	001F			
47	01F3B	00C6			
48			JSR	PDATA	
49	01F3C	00BD			
50	01F3D	0070			
51	01F3E	0030			
52					
53			JSR	DEC16	; GET RECD #, DECIMAL
54	01F3F	00BD			
55	01F40	0076			
56	01F41	0026			
57			BNE	GN	; BRA ON ERROR
58	01F42	0026			
59	01F43	00F5			
60			STX	DESTR	

0004 MTOS9

01 01F44 00FF
 02 01F45 0077
 03 01F46 00EA

04

05

06

07

08 01F47 00FE

09 01F48 0000

10 01F49 002E

11

12 01F4A 00FF

13 01F4B 0077

14 01F4C 00E4

15

16 01F4D 00FE

17 01F4E 0000

18 01F4F 002A

19

20 01F50 00FF

21 01F51 0077

22 01F52 00E6

23

24

25 01F53 00CE

26 01F54 0000

27 01F55 0000

28

29 01F56 00FF

30 01F57 0078

31 01F58 000D

32

33

34 01F59 00CE

35 01F5A 001F

36 01F5B 00D5

37

38 01F5C 00BD

39 01F5D 0070

40 01F5E 0030

41

42

43 01F5F 0086

44 01F60 0003

45

46 01F61 00BD

47 01F62 0071

48 01F63 00E6

49

50

51 01F64 0026

52 01F65 003A

53

54

55 01F66 00CE

56 01F67 0077

57 01F68 00D5

58

59 01F69 00BD

60 01F6A 0077

; NOW SET UP DATA POINTERS FROM BASIC'S PAGE ZERO

LDX 002E ; BEGINNING OF SOURCE.

STX LOWADR

LDX 002A ; NEXT BYTE ABOVE.

STX HIADR

LDX # 0 ; SET RUN ADDRESS.

STX RUN

LDX # CRSTR ; PRINT <CR><LF>.

JSR PDATA

LDAA # 3 ; SET AS WRITING.

JSR FORK

BNE PTCHERR ; ON ERROR...

LDX # RECORD ; TYPE NEXT AVAIL #

JSR OUTDEC

01F6B 002C
01F6C 005F

CLRB
BRA

PTCHERR

01F6D 0020
01F6E 0031

!0006 MTOS9

01
02
03

LOAD:

05 LDX # RCDSTR ;PROMPT FOR RECD #,

06 01F6F 00CE

07 01F70 001F

08 01F71 00C6

09 JSR PDATA

10 01F72 00BD

11 01F73 0070

12 01F74 0030

13 JSR DEC16

14 01F75 00BD

15 01F76 0076

16 01F77 0026

USERN:

18 STX DESTR ;START LOADING,

19 01F78 00FF

20 01F79 0077

21 01F7A 00EA

22 JSR ZAPFLG

23 01F7B 00BD

24 01F7C 0070

25 01F7D 00D2

26 LDX # 1 ;SET # OF FILES, (1),

27 01F7E 00CE

28 01F7F 0000

29 01F80 0001

31 STX NRECDS

32 01F82 0077

33 01F83 00EC

34 LDAB # -1

35 01F84 00C6

36 01F85 00FF

37 STAB ALTFLG ;SET TO LOAD TO...

38 01F86 00F7

39 01F87 0077

40 01F88 00EE

41 LDX 002E ;(BEGINNING) ...ALTADR

42 01F89 00FE

43 01F8A 0000

44 01F8B 002E

45 LDX # CRSTR

46 01F8C 00CE

47 01F8D 001F

48 01F8E 00D5

49 JSR PDATA

50 01F8F 00BD

51 01F90 0070

52 01F91 0030

54 LDAA # 2 ;SET AS READING

55 01F92 0086

56 01F93 0002

57 JSR FORK

58 01F94 00BD

59 01F95 0071

60 01F96 00E6

0007 MTOS9

01

02

03 01F97 0026

04 01F98 0007

BNE PTCHERR

LDX ALTADR ; THIS POINTS TO THE NEXT UNUSED.

06 01F99 00FE

07 01F9A 0077

08 01F9B 00E8

STX 002A ; TELL BASIC.

10 01F9C 00FF

11 01F9D 0000

12 01F9E 002A

13 01F9F 005F

CLRB

!0009 MTOS9

01
02
03
04

TEXT STRINGS

FNMSTR: ; <CR><LF> " FILENAME ? "

06	01FB3	000D	0D
07	01FB4	000A	0A
08	01FB5	0000	0
09	01FB6	0020	20
10	01FB7	0020	20
11	01FB8	0020	20
12	01FB9	0020	20
13	01FBA	0046	"F
14	01FBB	0049	"I
15	01FBC	004C	"L
16	01FBD	0045	"E
17	01FBE	004E	"N
18	01FBF	0041	"A
19	01FC0	004D	"M
20	01FC1	0045	"E
21	01FC2	0020	20
22	01FC3	003F	"?
23	01FC4	0020	20
24	01FC5	0004	04

25

RCDSTR: ; CRLF " RECORD # ? "

26			
27	01FC6	000D	0D
28	01FC7	000A	0A
29	01FC8	0000	0
30	01FC9	0052	"R
31	01FCA	0045	"E
32	01FCB	0043	"C
33	01FCC	004F	"O
34	01FCD	0052	"R
35	01FCE	0044	"D
36	01FCF	0020	20
37	01FD0	0023	"#
38	01FD1	0020	20
39	01FD2	003F	"?
40	01FD3	0020	20
41	01FD4	0004	4

42	U01FD5	0000	CRSTR: CRLF
43	01FD6	000D	0D
44	01FD7	000A	0A
45	01FD8	0000	0
46	01FD9	0004	4

!0010 MTOS9

02
03

1FDA

.TITL MTOS99

..HI=

.END

;FOR LOADER

0020 TOTAL ERRORS, 00000 PASS 1 ERRORS

0011 MTOS9

ALTAD	0077E8		7/07	7/08					
ALTFL	0077EE		6/39	6/40					
ALIC	000000U		1/32						
BEL	00020E	MC	2/45	2/58	3/10	3/14	8/06		
BNE	00057B	MC	2/51	3/57	4/50	7/02			
BRA	000070	MC	3/02	3/22	5/03				
CLRTD	00717C		2/17	2/18					
CMPA	0009A1	MC	2/42	2/48	3/07				
CPX	00134C	MC	2/54						
CRLF	000000U		9/42						
CRSTR	001FD5		4/35	4/36	6/47	6/48	9/42		
DEC16	007626		3/55	3/56	6/15	6/16			
DESTR	0077EA		4/02	4/03	6/20	6/21			
ERRST	000000U		8/13	8/14					
EXTN	007800		3/36	3/37	3/40	3/41			
FILE	000000U		1/32						
FNMTS	001FB3		2/21	2/22	9/05				
FOR	000000U		1/32						
FORK	0071E6		4/47	4/48	6/59	6/60			
GN	001F39		3/43	3/59					
HE	000000U		1/32						
HIADR	0077E6		4/21	4/22					
INEE	00702A		2/40	2/41					
JSR	000F53	MC	2/07	2/23	2/38	3/48	3/53	4/37	4/45
			4/58	6/09	6/13	6/22	6/49	6/57	8/15
			8/27						
LDAA	0005A8	MC	3/31	4/42	6/54				
LDAB	000614	MC	2/33	6/34					
	00036D	MC	2/19	2/29	3/27	3/44	4/07	4/15	4/24
			4/33	4/54	6/05	6/26	6/41	6/45	7/05
			8/11	8/23					
LOAD	00780B		6/04						
LOWAD	0077E4		4/13	4/14					
NAME	0077F6		2/31	2/32	2/56	2/57			
NERRO	00769E		8/08	8/09	8/31				
NEWN	001F09		2/28						
NIN	001F0E		2/37	2/60	3/04	3/16	3/24		
NIN2	001F21		2/53	3/06					
NIN3	001F2E		3/12	3/26					
NRECD	0077EC		6/32	6/33					
NUMBE	000000U		1/32						
OF	000000U		1/32						
OUT2H	007036		8/29	8/30					
OUTDE	00772C		4/60	5/01					
PDATA	007030		2/25	2/26	3/50	3/51	4/39	4/40	6/11
			6/12	6/51	6/52	8/17	8/18		
PROMP	000000U		1/32						
PTCHE	001FA0		4/52	5/05	7/04	8/04			
RCDST	001FC6		3/46	3/47	6/07	6/08	9/26		
RECOR	0077D5		1/32	4/56	4/57				
RUN	00780D		4/30	4/31					
SAVE	001F00		2/06	2/47					
SOURC	000000U		1/32						
STAA	000830	MC	3/17	3/38					
	000935	MC	6/37	8/19					
STX	00050F	MC	3/34	3/60	4/11	4/19	4/28	6/18	6/30
			7/09						
THE	000000U		1/32						
TOO.F	000000U		8/10						

0012 MTOS9

USERN	001F78		6/17		
XTEMP	0077D9		8/21	8/22	8/25
ZAPFL	0070D2		6/24	6/25	8/26
I	001FDA	EN	1/02	10/02	
..LO	007000	EN	1/01	1/07	