

ALAN  
WUNSCH

WEDGE-64.

AUGUST 29, 1984

(RELEASED VERSION)

TPUG-1983

W-64+.EB50000: C513

50000: C8D7

50000: CFF1

2

50000: C000

50000: C000

50000: C000

150: C000 4C 06 C0

150: C003 4C F0 C1

.FILE8, "W-64+.E8"

.FILE8, "W-64\, E8"

.END 8, "W-64.E8"

\*= \$C000

= \*

.OPT P5

JMP BEGIN

JMP OFF

; DISKDEV .BYTE 8

GETPTR = \$7A

SYNERROR = \$AF08

CHRGET = \$0073

SHIFTKEY = \$028D

CRUNCH = \$A579

CHRGOT = \$0079

PRINT = \$FFD2

PRINT2 = \$E716

RREADY = \$A474

STROUT = \$AB1E

STOPKEY = \$FFE1

INPUT = \$FFCF

TALK = \$FFB4

SERIN = \$FFCF

UNLSN = \$FFAE

UNTALK = \$FFAB

SYSLOAD = \$E175

GET = \$FFE4

NUMCHAR = \$B7

SETLFS = \$FFBA

SETNAM = \$FFBD

OPEN = \$FFCO

FFC6

CHKIN = \$FFC6

0090 = \$90

ST = \$BDCD

PRINTLN = \$BDCD

CLOSE = \$FFC3

0014 = \$14

INTVAL = \$0200

BUFF = \$A3BB

MOVEMEM = \$A3BB

CLALL = \$FFE7

A533 = \$A533

RECHAIN = \$A6BE

BACKTEXT = \$AEFD

COMMA = \$AD9E

EVALEXP = \$AD9E

B7F7 = \$B7F7

A48C = \$A48C

0080 = 128

A437 = \$A437

0037 = \$37

008D = \$BD

0028 = \$28

002A = \$2A

00BB = \$BB

0008 = \$08

BCF3 = \$BCF3

002D = \$2D

E15F = \$E15F

SAVEPROG = \$E15F

STARDEV = \$E15F

ADD: >CHANGE DESCRIPTOR  
Change Basic Line  
>HUNTL Hunt with LIST

>MEM under ROM  
>SEQ modify memory seq. file read

[TOKENIZATION]

CHANGE: >COLOUR  
>MEM Take out Protection  
>↑HI Delete Secret Save  
>RENUM , Renumbers !

- have common error vector  
for all WEDGE errors & messages

650:	BDDD	CONVFAC1	=	\$BDDD
660:	005F	VARPTR	=	\$5F
670:	00FD	STRPTR	=	\$FD
680:	0026	ENDPTR	=	\$26
690:	A96B	INPFXD	=	\$A96B
700:	A613	FINDLN	=	\$A613
	B248	ILLQTY	=	\$B248
720:	0022	RECHNPTR	=	\$22
730:	00FD	MOVEETO	=	\$FD
740:	0026	MOVEFROM	=	\$26
750:	B391	SFXDFL	=	\$B391
760:	0277	KEYB	=	631
770:	00C6	KEYBLEN	=	198
780:	A49F	FOUNDNUM	=	\$A49F
780:	002B	STARTB	=	\$2B
790:	B867	ADDEM	=	\$B867
800:	0019	CNTPTR	=	\$19
810:	BA8C	MEMFAC2	=	\$BA8C

840:	C006 20 B0 C2	BEGIN	JSR INIT
850:	C009 4C 74 A4	READY	JMP RREADY

900:	C00C E6 7A	GETCH2	INC GETPTR
900:	C00E D0 02		BNE NOTO
900:	C010 E6 7B		INC GETPTR+1
910:	C012 20 79 00	NOTO	JSR CHRGOT
910:	C015 BE D8 CF		STX TEMPX
910:	C018 BC D9 CF		STY TEMPY
	C01B BA		TSX
920:	C01C BD 01 01		LDA \$0101, X
920:	C01F C9 BC		CMP #<CALLADD
920:	C021 D0 07		BNE OLDGET
930:	C023 BD 02 01		LDA \$0102, X
930:	C026 C9 A4		CMP #>CALLADD
930:	C028 F0 0F		BEQ GOODCALL
940:	C02A AE D8 CF	OLDGET	LDX TEMPX
940:	C02D AC D9 CF		LDY TEMPY
940:	C030 4C 79 00		JMP CHRGOT
950:	C033 20 40 C7	CKAUTO	JSR AUTOLN
950:	C036 4C 79 00		JMP CHRGOT
960:	C039 20 79 00	GOODCALL	JSR CHRGOT
960:	C03C 90 F5		BCC CKAUTO

990:	C03E C9 3E		CMP #">"
990:	C040 D0 E8		BNE OLDGET
1000:	C042 20 73 00		JSR CHRGET
1000:	C045 68		PLA
1000:	C046 68		PLA
			; CHECK FOR VALID COMMANDS
			;

1040:	C047 A2 00		LDX #0
	C049 BE D7 CF		STX TOKNUM
1050:	C04C A0 00	USERTOK	LDY #0
1060:	C04E BD 3F CE	TOKLOOP	LDA TOKTBL, X
1060:	C051 F0 1C		BEQ GOODTOK
1060:	C053 D1 7A		CMP (GETPTR), Y
1070:	C055 D0 04		BNE NEXTTOK
1070:	C057 E8		INX
1070:	C059 00		TRX

↑ entry from CHRGET.  
} subroutine?

} only allowed from A407

1090: C05B E8 NEXTTOK INX  
 1090: C05C BD 3F CE LDA TOKTBLE, X  
 1090: C05F D0 FA BNE NEXTTOK  
 1090: C061 E8 INX  
 1090: C062 EE D7 CF INC TOKNUM  
 1090: C065 BD 3F CE LDA TOKTBLE, X  
 1100: C068 F0 02 BEQ SERROR2  
 1100: C06A D0 EO BNE USERTOK  
 1120: C06C 4C 04 C3 SERROR2 JMP OURERR

; checkrefs

let run through -

1150: C06F 20 CA C8 GOODTOK JSR UPDATE  
 1160: C072 AD D7 CF LDA TOKNUM  
 1160: C075 0A ASL  
 1160: C076 AA TAX  
 1160: C077 BD 89 C0 LDA TOKADD, X  
 1160: C07A 8D DA CF STA TOKVCTR  
 1160: C07D BD BA C0 LDA TOKADD+1, X  
 1170: C080 8D DB CF STA TOKVCTR+1  
 1180: C083 20 79 00 JSR CHRGOT  
 1180: C086 6C DA CF JMP (TOKVCTR)

1210: C089 97 C8 TOKADD (.WORDADJUST)  
 1220: C08B 35 C7 .WORDAUTO  
 1230: C08D FC C4 .WORDCOLD  
 1240: C08F 0F C7 .WORDCOL  
 1250: C091 76 C7 .WORDDEL  
 1260: C093 B7 C1 .WORDDDS  
 1270: C095 78 C2 .WORDHELP  
 1280: C097 57 C3 .WORDHEX  
 1290: C099 23 C6 .WORDHUNT  
 1300: C09B 16 C5 .WORDDDUMP  
 1310: C09D 7F CB .WORDMEMORY  
 1320: C09F B3 C0 .WORDMERGE  
 1330: COA1 B3 C4 .WORDNAME  
 1340: COA3 F0 C1 .WORDOFF  
 1350: COA5 D7 C8 .WORDRENUM  
 1360: COA7 48 C8 .WORDSAVEM  
 1370: COA9 6A C2 .WORDSEND  
 1380: COAB 0D C2 .WORDSTART  
 1390: COAD 9A C3 .WORDDISK  
 1400: COAF 9F C1 .WORDLOAD  
 1410: COB1 B8 CD .WORDBONJOUR) ←

1440: COB3 A2 11 MERGE LDX #17  
 1440: COB5 BE DC CF STX FILELEN  
 1440: COBB 20 3A C1 JSR INPFILE

1460: COBB 20 94 C1 JSR STRTMSGE  
 1470: COBE A9 02 LDA #2  
 1470: COD0 A2 08 LDX #8 ← DISKDV  
 1470: COD2 A0 00 LDY #0  
 1470: COD4 20 14 C3 JSR OPENFILE  
 1470: COD7 A2 02 CONT1 LDX #2  
 1480: COD9 20 C6 FF JSR CHKIN  
 1490: CODC A2 00 LDX #0  
 1500: COCE 20 8C C1 JSR GETCHR  
 1500: COD1 20 8C C1 JSR GETCHR ; LOAD ADDRESS  
 1510: COD4 20 8C C1 LNLOOP JSR GETCHR  
 1510: COD7 20 8C C1 JSR GETCHR ;LINK  
 1520: CODA 00 00 CMP #0

1530: CODE 4C EA CO JMP PGMOVER  
 1540: COE1 20 F0 CO CONT2 JSR GETLN  
 ;  
 1570: COE4 20 40 CC JSR PUTIN  
 1580: COE7 4C D4 CO JMP LNLOOP  
 ;  
 1600: COEA 20 0E C5 PGMOVER JSR CGRET  
 1610: COED 4C B7 C1 JMP DS  
 ;  
 ; GET A BASIC LINE  
 ;  
 1650: COFO A2 FF GETLN LDX #255  
 1650: COF2 20 BC C1 JSR GETCHR  
 1660: COF5 B5 14 STA INTVAL  
 1660: COF7 20 BC C1 JSR GETCHR  
 1660: COFA B5 15 STA INTVAL+1  
 1670: COFC BE D8 CF STX TEMPX  
 1670: COFF A5 15 LDA INTVAL+1  
 1670: C101 A6 14 LDX INTVAL  
 1670: C103 20 CD BD JSR PRINTLN  
 1670: C106 20 0E C5 JSR CGRET  
 1680: C109 A9 91 LDA #"1"  
 1680: C10B 20 D2 FF JSR PRINT  
 1680: C10E A9 CB LDA #<CRIGHT  
 1680: C110 A0 CE LDY #>CRIGHT  
 1680: C112 20 1E AB JSR STROUT  
 1690: C115 AE D8 CF LDX TEMPX  
 1700: C118 E8 LL5 INX  
 1700: C119 E0 4E CPX #\$4E  
 1700: C11B B0 0A BCS LL4  
 1710: C11D 20 BC C1 JSR GETCHR  
 1710: C120 9D 00 02 STA BUFF,X  
 1710: C123 C9 00 CMP #0  
 1710: C125 D0 F1 BNE LL5  
 1720: C127 E8 LL4 INX  
 1720: C128 E8 INX  
 1730: C129 9D 00 02 STA BUFF,X  
 1740: C12C E8 INX  
 1740: C12D E8 INX  
 1740: C12E E8 INX  
 1750: C12F 86 0B STX \$0B ; BUFF PTR  
 1760: C131 60 RTS  
 ;  
 1780: C132 A9 22 SERROR LDA #34  
 1780: C134 8D DE CF STA DELIM  
 1780: C137 4C 08 AF JMP SYNERROR  
 1790: C13A A2 00 INPFILE LDX #0  
 1790: C13C A0 00 LDY #0  
 1800: C13E CD DE CF CMP DELIM  
 1800: C141 D0 EF BNE SERROR  
 1810: C143 EC DC CF FILELOOP CPX FILELEN  
 1810: C146 F0 30 BEQ STRERR  
 1810: C148 20 9B C1 JSR CHRGET2  
 1810: C14B F0 0C BEQ NAMEDONE  
 1820: C14D CD DE CF CMP DELIM  
 1820: C150 F0 06 BEQ NAMEDON  
 1820: C152 9D A0 CF STA FILENAME,X  
 1830: C155 E8 INX  
 1830: C156 D0 EB BNE FILELOOP  
 1840: C158 C8 NAMEDON INY  
 1850: C159 E0 00 NAMEDONE CPX #0  
 1850: C15B F0 D5 BEQ SERROR  
 1850: C15D B6 B7 STX NUMCHAR  
 1850: C15F A9 00 LDY #0

1860: C164 20 CA CB JSR UPDATE  
 1870: C167 A2 A0 LDX #<FILENAME  
 1870: C169 A0 CF LDY #>FILENAME  
 1880: C16B A5 B7 LDA NUMCHAR  
 1880: C16D 20 BD FF JSR SETNAM  
 1890: C170 A9 22 LDA #34  
 1890: C172 8D DE CF STA DELIM  
 1890: C175 4C 79 00 JMP CHRGOT  
 ; STRING TOO LONG MESSAGE  
 1910: C178 A9 22 STRERR LDA #34  
 1910: C17A 8D DE CF STA DELIM  
 1910: C17D A2 17 LDX #23  
 1910: C17F 4C 37 A4 JMP ERROREX  
 ;  
 ; ERROR ROUTINES  
 ;  
 1950: C182 C0 40 STERROR CPY #64  
 1950: C184 D0 03 BNE CONTT  
 1950: C186 4C EA C0 JMP PGMOVER  
 1960: C189 4C B7 C1 CONTT JMP DS  
 ;  
 1980: C18C 20 CF FF GETCHR JSR INPUT  
 1980: C18F A4 90 LDY ST  
 1980: C191 D0 EF BNE STERROR  
 1990: C193 60 RTS  
 2000: C194 A9 BB STRTMSGE LDA #<STMSGE  
 2000: C196 A0 CE LDY #>STMSGE  
 2010: C198 4C 1E AB JMP STROUT  
 2020: C19B C8 CHRGET2 INY  
 2020: C19C B1 7A LDA (GETPTR), Y } not worth it! just do this wherever  
 2020: C19E 60 RTS needed.  
 ;  
 ;  
 2050: C19F A2 11 LOAD LDX #17  
 2050: C1A1 8E DC CF STX FILELEN  
 2050: C1A4 20 3A C1 JSR INPFILE  
 2060: C1A7 A9 01 LDA #1  
 2060: C1A9 A2 08 LDX #8 ← DISKDV  
 2060: C1AB A0 01 LDY #1  
 2070: C1AD 20 BA FF JSR SETLFS  
 2080: C1B0 A9 00 LDA #0  
 2080: C1B2 85 0A STA \$0A  
 2080: C1B4 4C 75 E1 JMP SYSLOAD  
 ;  
 2100: C1B7 A9 01 DS LDA #1  
 2100: C1B9 20 C3 FF JSR CLOSE  
 2100: C1BC A9 02 LDA #2  
 2100: C1BE 20 C3 FF JSR CLOSE  
 2100: C1C1 20 E7 FF JSR CLALL  
 2110: C1C4 A9 20 LDA #32  
 2110: C1C6 20 D2 FF JSR PRINT  
 2120: C1C9 A9 00 LDA #0  
 2120: C1CB 20 BD FF JSR SETNAM  
 2120: C1CE 20 0E C3 JSR OPENCC → OPENCC jumps to DS!  
 2130: C1D1 A2 01 LDX #1  
 2130: C1D3 20 C6 FF JSR CHKIN  
 2140: C1D6 20 CF FF DSLOOP JSR INPUT  
 2140: C1D9 20 D2 FF JSR PRINT  
 2140: C1DC C9 0D CMP #13  
 2140: C1DE D0 F6 BNE DSLOOP  
 2140: C1E0 A9 20 LDA #"  
 2140: C1E2 20 16 E7 JSR PRINT2  
 2150: C1E5 A9 01 LDA #1  
 2150: C1E7 20 C3 FF JSR CLOSE  
 2150: C1EA 20 F7 FF JSR CIAI

2170:	C1F0	A9 8A	OFF	LDA	#<0FFF
2170:	C1F2	A0 CF		LDY	#>0FFF
2170:	C1F4	20 1E AB		JSR	STROUT
2170:	C1F7	20 FD C1		JSR	RESGETT
2170:	C1FA	4C 09 C0		JMP	READY
2190:	C1FD	A2 02	RESGETT	LDX	#2
2190:	C1FF	BD FD C2	RESGET	LDA	SAVETBLE, X
2190:	C202	95 73		STA	CHRGET, X
2200:	C204	A9 00		LDA	#0
2200:	C206	9D FD C2		STA	SAVETBLE, X
2200:	C209	CA		DEX	
2210:	C20A	10 F3		BPL	RESGET
2210:	C20C	60		RTS	
2230:	C20D	A2 11	START	LDX	#17
2230:	C20F	BE DC CF		STX	FILELEN
2230:	C212	20 3A C1		JSR	INPFILE
2240:	C215	A9 02		LDA	#2
2240:	C217	A2 08		LDX	#8 ← DISKDEV
2240:	C219	A0 00		LDY	#\$0
2240:	C21B	20 14 C3		JSR	OPENFILE
2250:	C21E	A2 02		LDX	#2
2250:	C220	20 D6 FF		JSR	CHKIN
2260:	C223	20 CF FF		JSR	INPUT ; LOAD ADDRESS LO-BYTE
2270:	C226	20 64 C2		JSR	TIMER
2280:	C229	AA		TAX	
2280:	C22A	BE D8 CF		STX	TEMPX
2280:	C22D	20 CF FF		JSR	INPUT ; HI-BYTE
2290:	C230	20 64 C2		JSR	TIMER )
2290:	C233	BD D9 CF		STA	TEMPY
2300:	C236	A9 02		LDA	#2
2300:	C238	20 C3 FF		JSR	CLOSE
2300:	C23B	20 E7 FF		JSR	CLALL
2310:	C23E	A9 24		LDA	#"\$"
2310:	C240	20 D2 FF		JSR	PRINT
2320:	C243	AD D9 CF		LDA	TEMPY
2320:	C246	AE D8 CF		LDX	TEMPX
2320:	C249	20 45 C3		JSR	PRINTADD
2330:	C24C	20 09 C5		JSR	SPACE
2330:	C24F	20 D2 FF		JSR	PRINT
2340:	C252	AD D9 CF		LDA	TEMPY
2340:	C255	AE D8 CF		LDX	TEMPX
2340:	C258	20 CD BD		JSR	PRINTLN
2350:	C25B	20 09 C5		JSR	SPACE
2360:	C25E	20 0E C5		JSR	CGRET
2360:	C261	4C B7 C1		JMP	DS
2370:	C264	A0 64	TIMER	LDY	#100
2370:	C266	88	TIMELOOP	DEY	
2370:	C267	DO FD		BNE	TIMELOOP } ?
2370:	C269	60		RTS	
2390:	C26A	A2 50	SEND	LDX	#80 } ? - filename only 55 saved
2390:	C26C	BE DC CF		STX	FILELEN
2390:	C26F	20 3A C1		JSR	INPFILE
2400:	C272	20 0E C3		JSR	OPENCC
2400:	C275	4C B7 C1		JMP	DS
2420:	C278	A9 A0	HELP	LDA	#<COMMANDS
2420:	C27A	A0 CE		LDY	#>COMMANDS
2420:	C27C	20 1E AB		JSR	STROUT
2430:	C27F	A0 00		LDY	#0
2440:	C281	B9 3F CE	LABEL	LDA	TOKTBLE, Y
2440:	C284	BD FF		CMP	BNR

```

2440: C288 20 09 C5      JSR   SPACE
2440: C28B A9 3E          LDA   #">""
2450: C28D 20 D2 FF      JSR   PRINT
2450: C290 B9 3F CE HELPLOOP LDA   TOKTBLE,Y
2460: C293 F0 06          BEQ   END1
2470: C295 20 D2 FF NOTUPARR JSR   PRINT
    0: C298 C8              INY
2470: C299 D0 F5          BNE   HELPLOOP
2480: C29B 20 0E C5 END1  JSR   CGRET
2490: C29E C8              END3  INY
2490: C29F B9 3F CE      LDA   TOKTBLE,Y
2500: C2A2 D0 DD          BNE   LABEL
2510: C2A4 4C 09 CO      JMP   READY
2520: C2A7 C8              END2  INY
2520: C2AB B9 3F CE      LDA   TOKTBLE,Y
2520: C2AB D0 FA          BNE   END2
2520: C2AD 4C 9E C2      JMP   END3

```

Delete along with ↑ HI

```

; INITIALIZE
;

```

```

2560: C2B0 AD 14 CE INIT   LDA   BLOCK
2560: C2B3 C9 A0          CMP   #$AO
2560: C2B5 B0 0D          BCS   OVERIT
2570: C2B7 C5 38          CMP   TOM+1
2570: C2B9 B0 09          BCS   OVERIT
2570: C2BB B5 38          STA   TOM+1
2570: C2BD A9 FF          LDA   #255
2570: C2BF B5 37          STA   TOM
2570: C2C1 20 D3 CC      JSR   NEW

```

```

2590: C2C4 A9 00 OVERIT   LDA   #0
2590: C2C6 BD E2 CF      STA   INCR
    0: C2C9 A9 22          LDA   #34
2590: C2CB BD DE CF      STA   DELIM
2600: C2CE A2 02          LDX   #2
2600: C2D0 A9 02          LDA   #2
2600: C2D2 BD 20 DO      STA   53280
2600: C2D5 A9 0F          LDA   #15
2600: C2D7 BD 21 DO      STA   53281
2600: C2DA A9 00          LDA   #0
2600: C2DC BD 86 02      STA   646
2610: C2DF BD FD C2      LDA   SAVETBLE,X
2610: C2E2 D0 12          BNE   HELLO
2620: C2E4 B5 73 SAVEGET  LDA   CHRGET,X
2620: C2E6 9D FD C2      STA   SAVETBLE,X
2620: C2E9 CA              DEX
2620: C2EA 10 FB          BPL   SAVEGET
2630: C2EC A2 02          LDX   #2
2630: C2EE BD 01 C3 INITGET LDA   GETTBLE,X
2630: C2F1 95 73          STA   CHRGET,X
2630: C2F3 CA              DEX
2630: C2F4 10 F8          BPL   INITGET
2640: C2F6 A9 1E HELLO    LDA   #<HELLO
2640: C2F8 A0 CF          LDY   #>HELLO
2640: C2FA 4C 1E AB      JMP   STROUT

```

init. colours

} do both at once? → change to error vector or to tokens?

if error → they also do crunch routine for basic lines.

} shorten message

```

2660: C2FD 00 00 00 SAVETBLE .BYTE 0,0,0,0
    0: C301 4C GETTBLE .BYTE $4C
2680: C302 0C CO          .WORD GETCH2
2690: C304 A9 05 OURERR   LDA   #<OURMSGE
2690: C306 A0 CF          LDY   #>OURMSGE
2700: C308 20 1E AB      JSR   STROUT
2700: C30B 4C 09 CO      JMP   READY

```

} → use syntax error instead

← DISK DEV

```

2730: C310 A2 08          LDX #8
2730: C312 A0 0F          LDY #15
2730: C314 20 BA FF OPENFILE JSR SETLFS
2740: C317 20 C0 FF          JSR OPEN    ; COMMAND CHANNEL OPEN !
2750: C31A A4 90          LDY ST
2760: C31C F0 0C          BEQ OPENED
    TO: C31E C9 80          CMP #DEVNP
2770: C320 D0 05          BNE JUMPDS
2770: C322 A2 05          LDX #5
2770: C324 4C 37 A4          JMP ERROREX
2770: C327 4C B7 C1 JUMPDS JMP DS
2780: C32A 60          OPENED RTS
    ;
    ;
2810: C32B 18          PRINTNIB CLC
2810: C32C 69 F6          ADC #$F6
2810: C32E 90 02          BCC ADD2
2820: C330 69 06          ADC #$06
2820: C332 69 3A          ADD2 ADC #$3A
2820: C334 4C D2 FF          JMP PRINT
    ;
2840: C337 48          PRINTBYT PHA
2840: C338 4A          LSR
2840: C339 4A          LSR
2840: C33A 4A          LSR
2840: C33B 4A          LSR
2840: C33C 20 2B C3          JSR PRINTNIB
2850: C33F 68          PLA
2850: C340 29 0F          AND #$0F
2850: C342 4C 2B C3          JMP PRINTNIB
    ;
2870: C345 20 37 C3 PRINTADD JSR PRINTBYT
    TO: C348 8A          TXA
2870: C349 4C 37 C3          JMP PRINTBYT
    ;
2890: C34C 20 C0 FF OUROPEN JSR OPEN
2890: C34F A4 90          LDY ST
2890: C351 F0 03          BEQ OKST
2890: C353 4C B7 C1          JMP DS
    TO: C356 60          OKST RTS
    ;
    ;
2930: C357 20 79 A5 HEX          JSR CRUNCH
2930: C35A 20 73 00          JSR CHRGET
2930: C35D C9 24          CMP#"$"
2930: C35F F0 21          BEQ HEX2
2930: C361 20 9E AD          JSR EVALEXP
2930: C364 20 F7 B7          JSR FLFXD
2940: C367 20 09 C5          JSR SPACE
2940: C36A A9 24          LDA#"$"
2940: C36C 20 D2 FF          JSR PRINT
2940: C36F          LDX INTVAL
2950: C371 A5 15          LDA INTVAL+1
2960: C373 20 45 C3          JSR PRINTADD
2970: C376 20 09 C5 HEXEND JSR SPACE
2970: C379 20 0E C5          JSR CGRET
    TO: C37C 4C 09 C0          JMP READY
    ;
2990: C37F 4C 08 AF ABCDEF JMP SYNERROR
3000: C382 20 BF C4 HEX2          JSR INFADD
3010: C385 8D D8 CF          STA TEMPX
3010: C388 20 09 C5          JSR SPACE
3010: C38B 20 9B C1          JSR CHRGET2
    TO: C38F D0 FF          RNF ABCDEF

```

CPY! ←

; ;

PRINTNIB CLC

ADC #\$F6

BCC ADD2

ADC #\$06

ADC #\$3A

PRINT

; ;

PRINTBYT PHA

LSR

LSR

LSR

LSR

PRINTNIB

PLA

AND #\$0F

PRINTNIB

; ;

PRINTADD JSR PRINTBYT

TXA

; ;

PRINTBYT

; ;

OUROPEN JSR OPEN

LDY ST

BEQ OKST

JMP DS

← check device not present !

; ;

CRUNCH JSR

CHRGET JSR

#" JSR

HEX2 BEQ

EVALEXP JSR

FLFXD JSR

SPACE JSR

#" LDA

PRINT JSR

INTVAL LDX

INTVAL+1 LDA

PRINTADD JSR

SPACE JSR

CGRET JSR

READY JMP

; ;

SYNERROR JMP

INFADD JSR

TEMPX STA

SPACE JSR

CHRGET2 JSR

ABCDEF RNF

3010:	C391	AE	D8	CF	LDX	TEMPX
3010:	C394	20	CD	BD	JSR	PRINTLN
3020:	C397	4C	76	C3	JMP	HEXEND
3040:	C39A	8D	A1	CF	DISK	STA FILENAME+1
3050:	C39D	A0	FF		LDY	#255
3050:	C39F	A9	24		LDA	#"\$"
3050:	C3A1	8D	A0	CF	STA	FILENAME
3060:	C3A4	20	9B	C1	CATLOOP2	JSR CHRGET2
3060:	C3A7	99	A1	CF	STA	FILENAME+1, Y
3070:	C3AA	F0	07		BEQ	CNAMEOK2
3070:	C3AC	C0	31		CPY	#49
3070:	C3AE	90	F4		BCC	CATLOOP2
3070:	C3B0	4C	78	C1	JMP	STRERR
3080:	C3B3	C8			CNAMEOK2	INY
3080:	C3B4	B4	B7		STY	NUMCHAR
3080:	C3B6	C8			INY	
3080:	C3B7	A9	00		LDA	#0
3080:	C3B9	99	A2	CF	STA	FILENAME+2, Y
3080:	C3BC	A9	01		LDA	#1
3080:	C3BE	A2	08		LDX	#8
3090:	C3C0	A0	60		LDY	#\$60
3100:	C3C2	20	BA	FF	JSR	SETLFS
3100:	C3C5	20	0E	C5	JSR	CGRET
3110:	C3C8	20	AE	FF	JSR	UNLSN
3110:	C3CB	20	AB	FF	JSR	UNTALK
3110:	C3CE	A5	B7		LDA	NUMCHAR
3110:	C3D0	A2	A0		LDX	#<FILENAME
3110:	C3D2	A0	CF		LDY	#>FILENAME
3120:	C3D4	20	BD	FF	JSR	SETNAM
3120:	C3D7	20	CO	FF	JSR	OPEN
3120:	C3DA	A2	01		LDX	#1
3120:	C3DC	20	C6	FF	JSR	CHKIN
3130:	C3DF	20	CF	FF	JSR	SERIN
3130:	C3E2	20	CF	FF	JSR	SERIN
3140:	C3E5	20	CF	FF	GETLINK2	JSR SERIN
3140:	C3E8	20	CF	FF	JSR	SERIN
3140:	C3EB	A6	90		LDX	ST
3140:	C3ED	D0	2D		BNE	CATDONE ; IGNORE LINK
3150:	C3EF	A9	20		LDA	#32
3150:	C3F1	20	16	E7	JSR	PRINT2
3160:	C3F4	20	CF	FF	JSR	SERIN
3160:	C3F7	AA			TAX	
3160:	C3FB	20	CF	FF	JSR	SERIN
3160:	C3FB	20	CD	BD	JSR	PRINTLN ; PRINT PGM # BLOCKS
3170:	C3FE	A9	20		LDA	#" "
3170:	C400	20	16	E7	JSR	PRINT2
3170:	C403	20	16	E7	JSR	PRINT2
3170:	C406	20	16	E7	JSR	PRINT2
3170:	C409	20	16	E7	JSR	PRINT2
3180:	C40C	20	CF	FF	DIRLOOP2	JSR SERIN
3180:	C40F	20	16	E7	JSR	PRINT2
3180:	C412	D0	F8		BNE	DIRLOOP2
3190:	C414	A9	0D		LDA	#13
3190:	C416	20	16	E7	JSR	PRINT2
3190:	C419	4C	28	C4	JMP	GETLINK3
3200:	C41C	20	AB	FF	CATDONE	JSR UNTALK
3210:	C41F	20	0E	C5	JSR	CGRET
3210:	C422	20	D2	FF	JSR	PRINT
3220:	C425	4C	B7	C1	JMP	DS
3240:	C428	20	CF	FF	GETLINK3	JSR SERIN
3240:	C42B	20	CF	FF	JSR	SERIN
3240:	C42E	A4	00		LDY	ST

DISKDEV

Dev. N.P.?

make sub. do twice?

4 calls in a row?

used over and over & separate sub.?

3250:	C432	A9 20	LDA	#32
3250:	C434	20 16 E7	JSR	PRINT2
3260:	C437	20 CF FF	JSR	SERIN
3260:	C43A	AA	TAX	
3260:	C43B	20 CF FF	JSR	SERIN
3260:	C43E	20 CD BD	JSR	PRINTLN ; PRINT PGM # BLOCKS
70:	C441	A9 20	LDA	#32
3270:	C443	20 16 E7	JSR	PRINT2
3280:	C446	20 CF FF DIRLOOP3	JSR	SERIN
3280:	C449	20 16 E7	JSR	PRINT2
3280:	C44C	F0 CE	BEQ	CATDONE
3280:	C44E	C9 22	CMP	#34
3280:	C450	D0 F4	BNE	DIRLOOP3
3290:	C452	A0 12	LDY	#18
3300:	C454	20 CF FF CALNLOOP	JSR	SERIN
3300:	C457	C9 00	CMP	#0
3300:	C459	F0 C1	BEQ	CATDONE
3300:	C45B	20 16 E7	JSR	PRINT2
3300:	C45E	88	DEY	
3300:	C45F	D0 F3	BNE	CALNLOOP
3310:	C461	A9 20	LDA	" "
3310:	C463	20 16 E7	JSR	PRINT2
3310:	C466	20 16 E7	JSR	PRINT2
3320:	C469	A9 3A	LDA	" ":"
3320:	C46B	20 D2 FF	JSR	PRINT
3330:	C46E	20 CF FF CALNLP2	JSR	SERIN
3330:	C471	20 16 E7	JSR	PRINT2
3330:	C474	D0 F8	BNE	CALNLP2
3340:	C476	20 FF C6	JSR	STOPSHFT
3340:	C479	F0 A1	BEQ	CATDONE
3350:	C47B	A9 0D	LDA	#13
750:	C47D	20 16 E7	JSR	PRINT2
70:	C480	4C 28 C4	JMP	GETLINK3
3370:	C483	C9 22 NAME	CMP	#34
3370:	C485	F0 2D	BEQ	USERNAME
3380:	C487	A9 38	LDA	#<NAMESTR
3380:	C489	A0 CE	LDY	#>NAMESTR
3380:	C48B	20 1E AB	JSR	STROUT
3400:	C48E	A9 22	LDA	#34
3400:	C490	20 D2 FF	JSR	PRINT
3410:	C493	A9 A0	LDA	#<FILENAME
3410:	C495	A0 CF	LDY	#>FILENAME
3410:	C497	20 1E AB	JSR	STROUT
3420:	C49A	A9 22	LDA	#34
3420:	C49C	20 D2 FF	JSR	PRINT
3430:	C49F	A9 DA	LDA	#<USERSTRG
3430:	C4A1	A0 CE	LDY	#>USERSTRG
3430:	C4A3	20 1E AB	JSR	STROUT
3440:	C4A6	20 0E C5	JSR	CGRET
3440:	C4A9	A9 91	LDA	"1"
3440:	C4AB	20 D2 FF	JSR	PRINT
3450:	C4AE	A2 FF	LDX	#\$FF
3450:	C4B0	9A	TXS	
3450:	C4B1	4C 80 A4	JMP	RREADY+12
70:	C4B4	A2 46 USERNAME	LDX	#70
3470:	C4B6	8E DC CF	STX	FILELEN
3470:	C4B9	20 3A C1	JSR	INPFILE
3470:	C4BC	4C 09 C0	JMP	READY
3480:	C4BF	A9 00 INPADD	LDA	#0
3480:	C4C1	8D D9 CF	STA	TEMPY
3480:	C4C4	A8	TAY	
3480:	C4C5	20 D1 C4	JMP	TNPRTVTE

3490:	C4C9	8E DD CF	STX	TEMP8
3490:	C4CC	A9 00	LDA	#0
3490:	C4CE	8D D9 CF	STA	TEMPY
3500:	C4D1	20 DB C4	JSR	INPNIB
3510:	C4D4	0A	ASL	
3510:	C4D5	0A	ASL	
0:	C4D6	0A	ASL	
3510:	C4D7	0A	ASL	
3520:	C4D8	8D D9 CF	STA	TEMPY
3530:	C4DB	20 9B C1	JSR	CHRGET2
3540:	C4DE	C9 30	CMP	#"0"
3540:	C4E0	90 17	BCC	SERROR3
3550:	C4E2	C9 3A	CMP	#"::"
3550:	C4E4	90 0A	BCC	09
3560:	C4E6	C9 41	CMP	#"A"
3560:	C4EB	90 0F	BCC	SERROR3
3570:	C4EA	C9 47	CMP	#"G"
3570:	C4EC	B0 0B	BCS	SERROR3
3580:	C4EE	E9 06	SBC	#\$06
3590:	C4F0	29 0F	AND	#\$0F
3600:	C4F2	0D D9 CF	ORA	TEMPY
3610:	C4F5	AE DD CF	LDX	TEMP8
3620:	C4F8	60	RTS	
3630:	C4F9	4C 08 AF	JMP	SYNERROR
3640:	C4FC	A9 00	LDA	#0
3640:	C4FE	A2 02	LDX	#2
3640:	C500	9D FD C2	COLDLOOP	STA SAVETBLE, X
3640:	C503	CA	DEX	
3640:	C504	10 FA	BPL	COLDLOOP
3640:	C506	4C E2 FC	JMP	64738
3650:	C509	A9 20	LDA	#" "
7~50:	C50B	4C D2 FF	JMP	PRINT - do with BIT disguised! - also Quot.
50:	C50E	A9 0D	CGRET	LDA #13
3660:	C510	4C D2 FF	JMP	PRINT
50000:	C513			.FILE8, "W-64+.E8"

;;
 ; W-64+ - FILE#2

130:	C513	4C 09 C0	FINI	JMP	READY
140:	C516	A5 2D	DUMP	LDA	VARSTART
140:	C518	A6 2E		LDX	VARSTART+1
150:	C51A	85 5F		STA	VARPTR
150:	C51C	86 60		STX	VARPTR+1
150:	C51E	4C 36 C5		JMP	GETVAR
170:	C521	20 FF C6	NEXTVAR	JSR	STOPSHFT
170:	C524	F0 ED		BEQ	FINI
170:	C526	20 0E C5		JSR	CGRET
180:	C529	A9 07		LDA	#7
180:	C52B	18		CLC	
180:	C52C	65 5F		ADC	VARPTR
180:	C52E	85 5F		STA	VARPTR
190:	C530	A5 60		LDA	VARPTR+1
190:	C532	69 00		ADC	#0
190:	C534	85 60		STA	VARPTR+1
210:	C536	20 09 C5	GETVAR	JSR	SPACE
0:	C539	A5 60		LDA	VARPTR+1
220:	C53B	C5 30		CMP	STARAY+1
220:	C53D	90 08		BCC	DUMPOK
230:	C53F	D0 D2		BNE	FINI
240:	C541	A5 5F		LDA	VARPTR
250:	C543	C5 2F		CMP	STARAY
250:	C545	B0 CC		BCS	FINI

X

```

270: C549 B1 5F      LDA   (VARPTR),Y
280: C54B 10 03      BPL   NOTINT
290: C54D 4C C4 C5    JMP   INTEGER
300: C550 20 D2 FF NOTINT  JSR   PRINT
310: C553 20 14 C6    JSR   INCPTR
320: C556 C9 80      CMP   #$80
330: C558 B0 2E      BCS   STRING
340: C55A 20 D2 FF FLOWING  JSR   PRINT
340: C55D 20 18 C6    JSR   EQUALS
340: C560 A9 9D      LDA   #)=" why again?
340: C562 20 D2 FF    JSR   PRINT
350: C565 20 14 C6    JSR   INCPTR
360: C568 98          TYA
360: C569 18          CLC
360: C56A 65 5F      ADC   VARPTR
360: C56C 8D DB CF    STA   TEMPX
360: C56F A5 60      LDA   VARPTR+1
360: C571 69 00      ADC   #0
360: C573 8D D9 CF    STA   TEMPY
370: C576 AD D8 CF    LDA   TEMPX
370: C579 AC D9 CF    LDY   TEMPY
370: C57C 20 A2 BB    JSR   LOADFAC1
380: C57F 20 DD BD    JSR   CONVFAC1
390: C582 20 1E AB    JSR   STROUT
400: C585 4C 21 C5    JMP   NEXTVAR

        ;
420: C588 29 7F STRING  AND   #$7F
420: C58A 20 D2 FF    JSR   PRINT
420: C58D A9 24      LDA   #"""
420: C58F 20 D2 FF    JSR   PRINT
430: C592 20 18 C6    JSR   EQUALS
440: C595 A9 22      LDA   #34
440: C597 20 D2 FF    JSR   PRINT
440: C59A 20 14 C6    JSR   INCPTR
440: C59D 8D DF CF    STA   STRLEN
450: C5A0 20 14 C6    JSR   INCPTR
450: C5A3 85 FD      STA   STRPTR
460: C5A5 20 14 C6    JSR   INCPTR
460: C5A8 85 FE      STA   STRPTR+1
470: C5AA AC DF CF    LDY   STRLEN
470: C5AD F0 0D      BEQ   QUOTE
480: C5AF A0 00      LDY   #0
480: C5B1 B1 FD      PRLOOP  LDA   (STRPTR),Y
490: C5B3 20 D2 FF    JSR   PRINT
490: C5B6 C8          INY
490: C5B7 CC DF CF    CPY   STRLEN
490: C5BA D0 F5      BNE   PRLOOP
500: C5BC A9 22      QUOTE   LDA   #34
500: C5BE 20 D2 FF    JSR   PRINT
510: C5C1 4C 21 C5    JMP   NEXTVAR

        ;
530: C5C4 29 7F INTEGER  AND   #$7F
530: C5C6 20 D2 FF    JSR   PRINT
540: C5C9 20 14 C6    JSR   INCPTR
540: C5CC 29 7F      AND   #$7F
540: C5CE 20 D2 FF    JSR   PRINT
550: C5D1 A9 25      LDA   #%""
550: C5D3 20 D2 FF    JSR   PRINT
560: C5D6 20 18 C6    JSR   EQUALS
560: C5D9 20 14 C6    JSR   INCPTR
560: C5DC 8D E0 CF    STA   TEMPA ; GET HI BYTE
                                ; HAS HIGH BIT SET IF NEG'VE
580: C5DF 10 22      BPL   PLUS
590: C5E1 A9 2D      LDA   #"-"
590: C5E3 20 D2 FF    TDD   DDTRNT

```

600:	C5E9	49 FF	EOR	##FF
600:	C5EB	18	CLC	
600:	C5EC	69 00	ADC	#0
610:	C5EE	48	PHA	
610:	C5EF	20 14 C6	JSR	INC PTR
610:	C5F2	49 FF	EOR	##FF
610:	C5F4	AA	TAX	
610:	C5F5	E8	INX	
610:	C5F6	D0 07	BNE	PULL
610:	C5F8	68	PLA	
610:	C5F9	18	CLC	
610:	C5FA	69 01	ADC	#1
610:	C5FC	4C 0E C6	JMP	PRINTIT
620:	C5FF	68	PULL	PLA
620:	C600	4C 0E C6	JMP	PRINTIT
630:	C603	AD E0 CF	LDA	TEMPA
630:	C606	29 7F	AND	##7F
640:	C608	48	PHA	
640:	C609	20 14 C6	JSR	INC PTR
650:	C60C	AA	TAX	
660:	C60D	68	PLA	
670:	C60E	20 CD BD	JSR	PRINTLN
680:	C611	4C 21 C5	JMP	NEXTVAR

700:	C614	C8	(INC PTR)	INY
700:	C615	B1 5F		LDA (VARPTR), Y
710:	C617	60		RTS
720:	C618	20 09 C5	EQUALS	JSR SPACE
720:	C61B	A9 3D		LDA #'"='"
720:	C61D	20 D2 FF		JSR PRINT
720:	C620	4C 09 C5		JMP SPACE

;  
; H U N T  
;

760:	C623	20 79 A5	HUNT	JSR CRUNCH
760:	C626	20 73 00		JSR CHRGET
760:	C629	A2 50		LDX #80
760:	C62B	BE DC CF		STX FILELEN
770:	C62E	BD DE CF		STA DELIM
770:	C631	20 3A C1		JSR INPFILE

790:	C634	F0 03		BEQ ONLYDL
800:	C636	20 FD AE		JSR COMMA
810:	C639	20 C7 C7	ONLYDL	JSR LNRANGE

830:	C63C	A4 FD		LDY STRPTR
830:	C63E	A6 FE		LDX STRPTR+1
830:	C640	B4 14		STY INTVAL
830:	C642	86 15		STX INTVAL+1
840:	C644	A9 04		LDA #4
840:	C646	18		CLC
840:	C647	65 B7		ADC NUMCHAR
840:	C649	85 B7		STA NUMCHAR
850:	C64B	20 13 A6		JSR FINDLN

870:	C64E	20 FF C6	NEWLINE	JSR STOPSHFT
870:	C651	F0 4C		BEQ ALLGONE
870:	C653	A0 01		LDY #1
880:	C655	B1 5F		LDA (VARPTR), Y ;HB LINK
890:	C657	F0 46		BEQ ALLGONE

910:	C659	C8		INY
910:	C65A	B1 5F		LDA (VARPTR), Y
920:	C65C	B5 14		STA INTVAL
930:	C65E	CB		; GET LN#

}  
} must  
should be a ROM routine  
to print + or - integer val!

) not work it!

940:	C661	85	15		STA	INTVAL+1	
960:	C663	A5	15		LDA	INTVAL+1	
970:	C665	C5	27		CMP	ENDPTR+1	
980:	C667	90	0A		BCC	HUNTLOOP	; CHECK HB
990:	C669	D0	34		BNE	ALLGONE	
1010:	C66B	A5	14		LDA	INTVAL	
1020:	C66D	C5	26		CMP	ENDPTR	
1030:	C66F	F0	02		BEQ	HUNTLOOP	; CHECK LB
1040:	C671	B0	2C		BCS	ALLGONE	
1060:	C673	A0	04	HUNTLOOP	LDY	#4	
1070:	C675	B1	5F	KEEPTRY	LDA	(VARPTR), Y	
1080:	C677	F0	19		BEQ	NEXTLINE	
1090:	C679	D9	9C	CF	CMP	FILENAME-4, Y	
1100:	C67D	F0	09		BEQ	OKSO FAR	
1120:	C67E	E6	5F		INC	VARPTR	
1130:	C680	D0	02		BNE	OKKKK	
1140:	C682	E6	60		INC	VARPTR+1	
1150:	C684	4C	73	C6	OKKKK	JMP	HUNTLOOP
1170:	C687	C8		OKSO FAR	INY		; GOOD CHR->GET NEXT
1180:	C688	C4	B7		CPY	NUMCHAR	
1190:	C68A	D0	E9		BNE	KEEPTRY	
1210:	C68C	20	13	A6	JSR	FINDLN	-
1210:	C68F	20	A2	C6	JSR	PRLINE	; BINGO!
1240:	C692	98		NEXTLINE	TYA		
1250:	C693	38			SEC		
1260:	C694	65	5F		ADC	VARPTR	; UPDATE PTR TO
1270:	C696	85	5F		STA	VARPTR	
1280:	C698	90	B4		BCC	NEWLINE	; NEXT LINE
1290:	C69A	E6	60		INC	VARPTR+1	
1290:	C69C	4C	4E	C6	JMP	NEWLINE	
1310:	C69F	4C	09	C0	ALLGONE	JMP	READY
1330:	C6A2	A0	01	PRLINE	LDY	#1	UNCRUNCH !
1330:	C6A4	20	09	C5	JSR	SPACE	
1340:	C6A7	B4	0F		STY	\$0F	
1350:	C6A9	B1	5F		LDA	(VARPTR), Y	
1360:	C6AB	F0	29		BEQ	LAB1	
1370:	C6AD	20	D7	AA	JSR	\$AAD7	
1380:	C6B0	C8			INY		
1380:	C6B1	B1	5F		LDA	(VARPTR), Y	
1390:	C6B3	AA			TAX		
1400:	C6B4	C8			INY		
1400:	C6B5	B1	5F		LDA	(VARPTR), Y	
1410:	C6B7	B4	49		STY	\$49	
1420:	C6B9	20	CD	BD	JSR	PRINTLN	
1430:	C6BC	A9	20		LDA	" "	
1440:	C6BE	A4	49	LAB8	LDY	\$49	
1450:	C6C0	29	7F		AND	##\$7F	
1470:	C6C2	20	47	AB LAB4	JSR	\$AB47	
1470:	C6C5	C9	22		CMP	##\$22	
1480:	C6C7	D0	06		BNE	LAB2	
1490:	C6C9	A5	0F		LDA	\$0F	
1500:	C6CB	49	FF		EOR	##\$FF	
1510:	C6CD	85	0F		STA	\$0F	

1550:	C6D2	B1	5F		LDA	(VARPTR),Y
1560:	C6D4	D0	01		BNE	LAB3
1580:	C6D6	60		LAB1	RTS	; ALL DONE!
1600:	C6D7	10	E9	;	LAB3	BPL LAB4
1610:	C6D9	C9	FF		CMP	#\$FF
1620:	C6DB	F0	E5		BEQ	LAB4
1630:	C6DD	24	0F		BIT	\$OF
1640:	C6DF	30	E1		BMI	LAB4
1660:	C6E1	38			SEC	
1660:	C6E2	E9	7F		SBC	#\$7F
1670:	C6E4	AA			TAX	
1680:	C6E5	84	49		STY	\$49
1690:	C6E7	A0	FF		LDY	#\$FF
1700:	C6E9	CA		LAB7	DEX	
1710:	C6EA	F0	0B		BEQ	LAB5
1730:	C6EC	C8		;	INY	
1730:	C6ED	B9	9E	AO	LDA	\$A09E,Y
1740:	C6F0	10	FA		BPL	LAB6
1750:	C6F2	30	F5		BMI	LAB7
1770:	C6F4	C8		;	INY	
1770:	C6F5	B9	9E	AO	LDA	\$A09E,Y
1780:	C6FB	30	C4		BMI	LAB8
1790:	C6FA	20	47	AB	JSR	\$AB47
1800:	C6FD	D0	F5		BNE	LAB5
1820:	C6FF	20	E1	FF	STOPSHFT	JSR STOPKEY
1830:	C702	F0	07		BEQ	GOBACK
1840:	C704	AD	8D	02	SHIFTON	LDA SHIFTKEY
1850:	C707	C9	01		CMP	#1
1860:	C709	F0	F9		BEQ	SHIFTON
1870:	C70B	60		;	GOBACK	RTS
1890:	C70C	4C	48	B2	ILLEGAL	JMP ILLQTY
1910:	C70F	F0	1E		COL	BEQ READYYYYY
1910:	C711	20	DA	CA		JSR GETFXD
1910:	C714	DO	F6			BNE ILLEGAL
1920:	C716	BD	20	DO		STA 53280
1930:	C719	20	FD	AE		JSR COMMA
1940:	C71C	20	DA	CA		JSR GETFXD
1940:	C71F	DO	EB			BNE ILLEGAL
1950:	C721	BD	21	DO		STA 53281
1960:	C724	20	FD	AE		JSR COMMA
1970:	C727	20	DA	CA		JSR GETFXD
1970:	C72A	DO	E0			BNE ILLEGAL
1980:	C72C	BD	86	02		STA 646
1990:	C72F	4C	09	CO	READYYYYY	JMP READY
2030:	C732	4C	48	B2	TOOBIG	;
2040:	C735	20	DA	CA	AUTO	JMP ILLQTY
2050:	C738	DO	F8			JSR GETFXD
2060:	C73A	BD	E2	CF		BNE TOOBIG
2060:	C73D	4C	09	CO		STA INCR
2090:	C740	20	6B	A9	AUTOLN	JMP READY
2090:	C743	AC	E2	CF		LDY INCR
2090:	C744	F0	2B			RED GORARVA

FIX UP

2100: C74B C9 00 CMP #0  
2100: C74D F0 24 BEQ GOBACK4  
2110: C74F AD E2 CF LDA INCR  
2120: C752 18 CLC  
2120: C753 65 14 ADC INTVAL  
2120: C755 A8 TAY  
2120: C756 A5 15 LDA INTVAL+1  
2120: C758 69 00 ADC #0  
2130: C75A 20 88 CD JSR FXDFL  
2140: C75D A2 00 LDX #0  
2140: C75F BD 01 01 KEYBLOOP LDA \$0101,X  
2140: C762 F0 06 BEQ KEYBDONE  
2140: C764 9D 77 02 STA KEYB,X  
2140: C767 E8 INX  
2140: C768 D0 F5 BNE KEYBLOOP  
2150: C76A E8 KEYBDONE INX  
2160: C76B A9 20 LDA #"  
2160: C76D 9D 77 02 STA KEYB,X  
2170: C770 E8 INX  
2170: C771 86 C6 STX KEYBLEN  
2180: C773 4C 9F A4 GOBACK4 JMP FOUNDNUM  
  
2200: C776 F0 4C DEL BEQ READYY  
2210: C778 20 79 A5 JSR CRUNCH  
2210: C77B 20 73 00 JSR CHRGET  
2210: C77E 20 C7 C7 JSR LNRANGE  
2220: C781 A5 FD LDA STRPTR  
2220: C783 A6 FE LDX STRPTR+1  
2230: C785 85 14 STA INTVAL  
2230: C787 86 15 STX INTVAL+1  
2240: C789 20 13 A6 JSR FINDLN  
2250: C78C A5 5F LDA VARPTR  
2260: C78E A6 60 LDX VARPTR+1  
2260: C790 85 FD STA MOVETO  
2260: C792 86 FE STX MOVETO+1  
2270: C794 A6 26 LDX ENDPTR  
2270: C796 A4 27 LDY ENDPTR+1  
2280: C798 E8 INX  
2280: C799 D0 01 BNE STORE  
2280: C79B C8 INY  
2280: C79C B6 14 STORE STX INTVAL  
2280: C79E B4 15 STY INTVAL+1  
2290: C7A0 20 13 A6 JSR FINDLN  
2290: C7A3 A5 5F LDA VARPTR  
2290: C7A5 A6 60 LDX VARPTR+1  
2290: C7A7 85 26 STA MOVEFROM  
2290: C7A9 86 27 STX MOVEFROM+1  
  
2310: C7AB 20 13 C8 JSR DELMEM  
2320: C7AE 20 33 A5 JSR RECHAIN  
2330: C7B1 A5 22 LDA RECHNPTR  
2330: C7B3 18 CLC  
2330: C7B4 69 02 ADC #2  
2330: C7B6 85 2D STA VARSTART  
2340: C7B8 A5 23 LDA RECHNPTR+1  
2340: C7BA 69 00 ADC #0  
2340: C7BC 85 2E STA VARSTART+1  
2350: C7BE 20 D3 CC JSR NEW  
2350: C7C1 4C 09 C0 JMP READY  
2360: C7C4 4C 08 AF READYY JMP SYNERRO  
  
2400: C7C7 A0 FF LNRANGE LDY #\$FF  
2400: C7C8 00 00 LDY ENDPTR+1

2420:	C7CC	84 26	STY	ENDPTR
2420:	C7CE	84 FD	STY	STRPTR
2420:	C7D0	84 FE	STY	STRPTR+1
2430:	C7D2	20 79 00	JSR	CHRGOT
2430:	C7D5	F0 2A	BEQ	GOBACK2
2440:	C7D7	90 0F	BCC	PAR1
2450:	C7DB	D0 25	BNE	LASTLBL
2460:	C7DD	20 73 00	JSR	CHRGET
2460:	C7E0	B0 03	BCS	BADPAR
2460:	C7E2	4C 05 C8	JMP	PAR2
		;		
2480:	C7E5	4C 08 AF	JMP	SYNERROR
		;		
2500:	C7EB	20 6B A9	PAR1	JSR INPFD
2510:	C7EB	A5 14	LDA	INTVAL
2510:	C7ED	A6 15	LDX	INTVAL+1
2520:	C7EF	B5 FD	STA	STRPTR
2520:	C7F1	86 FE	STX	STRPTR+1
2530:	C7F3	20 79 00	JSR	CHRGOT
2530:	C7F6	C9 AB	CMP	##AB
2530:	C7FB	D0 EB	BNE	BADPAR
2540:	C7FA	20 73 00	JSR	CHRGET
2540:	C7FD	F0 02	BEQ	GOBACK2
2550:	C7FF	90 04	BCC	PAR2
2560:	C801	60	GOBACK2	RTS
2570:	C802	4C 08 AF	LASTLBL	JMP SYNERROR
		;		
2590:	C805	20 6B A9	PAR2	JSR INPFD
2600:	C808	A5 14	LDA	INTVAL
2600:	C80A	A6 15	LDX	INTVAL+1
2610:	C80C	B5 26	STA	ENDPTR
2610:	C80E	86 27	STX	ENDPTR+1
2620:	C810	4C 79 00	JMP	CHRGOT
2630:	C813	A0 00	DELMEM	LDY #0
2640:	C815	A5 27	DELLOOP	LDA MOVEFROM+1
2640:	C817	C5 2E		CMP VARSTART+1
2650:	C819	90 08	BCC	STARTDEL
2660:	C81B	D0 18	BNE	DELDONE
2670:	C81D	A5 26	LDA	MOVEFROM
2670:	C81F	C5 2D	CMP	VARSTART
2680:	C821	B0 12	BCS	DELDONE
		;		
2700:	C823	B1 26	STARTDEL	LDA (MOVEFROM), Y
2710:	C825	91 FD	STA (MOVETO), Y	
2720:	C827	E6 26	INC	MOVEFROM
2720:	C829	D0 02	BNE	XXX
2730:	C82B	E6 27	INC	MOVEFROM+1
2740:	C82D	E6 FD	XXX	INC MOVETO
2740:	C82F	D0 02	BNE	YYY
2750:	C831	E6 FE		INC MOVETO+1
2760:	C833	D0 EO	YYY	BNE DELLOOP
		;		
2790:	C835	60	DELDONE	RTS
		;		
2800:	C836	A5 7A	SGETPTR	LDA GETPTR
2820:	C838	A6 7B		LDX GETPTR+1
2830:	C83A	85 5F	STA	VARPTR
2830:	C83C	86 60	STX	VARPTR+1
2840:	C83E	60		RTS
		;		
2860:	C83F	A5 5F	RGETPTR	LDA VARPTR
2880:	C841	AA 40		LDY VARPTR+1

2870:	C845	B6	7B		STX	GETPTR+1	
2880:	C847	60			RTS		
	;						
2900:	C848	20	4E	C8	JSR	SAVEEEE	
2900:	C84B	4C	B7	C1	JMP	DS	
	;						
2910:	C84E	A2	11	SAVEEEE	LDX	#17	
2920:	C850	8E	DC	CF	STX	FILELEN	
2930:	C853	20	3A	C1	JSR	INPFILE	
2940:	C856	A9	01	SAVEEEE2	LDA	#1	
2940:	C858	A2	08		LDX	#8	
2940:	C85A	A8			TAY		
2940:	C85B	20	BA	FF	JSR	SETLFS	
	;						
2960:	C85E	20	79	00	JSR	CHRGOT	
2960:	C861	C9	2C		CMP	#" , "	
2960:	C863	F0	0C		BEQ	MLSAVE	
2970:	C865	A9	2B		LDA	#STARTB	
2970:	C867	A6	2D		LDX	VARSTART	
2980:	C869	A4	2E		LDY	VARSTART+1	
2990:	C86B	20	5F	E1	JSR	SAVEPROG	
2990:	C86E	4C	0E	C5	JMP	CGRET	
	;						
3020:	C871	20	BF	C4	JSR	INPADD	
3030:	C874	85	FD		STA	STRPTR	
3030:	C876	86	FE		STX	STRPTR+1	
3040:	C878	20	CA	C8	JSR	UPDATE	
3040:	C87B	20	73	00	JSR	CHRGET	
3050:	C87E	C9	2C		CMP	#" , "	
3050:	C880	D0	12		BNE	MLSERR	
3060:	C882	20	BF	C4	JSR	INPADD	
3070:	C885	8E	D8	CF	STX	TEMPX	
3070:	C888	AA			TAX		
3070:	C889	20	CA	C8	JSR	UPDATE	
3070:	C88C	AC	D8	CF	LDY	TEMPX	
3080:	C88F	A9	FD		LDA	#STRPTR	
3090:	C891	4C	6B	C8	JMP	SAVEIT	
	;						
3110:	C894	4C	0B	AF	MLSERR	JMP	SYNERROR
	;						
3130:	C897	A2	00	ADJUST	LDX	#0	
3130:	C899	AD	B6	02	LDA	646	
3130:	C89C	BD	E0	CF	STA	TEMPA	
3140:	C89F	BE	E1	CF	STX	TEMPB	
3140:	C8A2	BD	F5	CE	LDA	COLTBLE, X	
3140:	C8A5	20	D2	FF	JSR	PRINT	
3140:	C8A8	A9	DE		LDA	#<REVERSE	
3140:	C8AA	A0	CE		LDY	#>REVERSE	
3150:	C8AC	20	1E	AB	JSR	STROUT	
3150:	C8AF	AE	E1	CF	LDX	TEMPB	
3150:	C8B2	E8			INX		
3150:	C8B3	E0	10		CPX	#16	
3150:	C8B5	D0	E8		BNE	COLLOOP	
3160:	C8B7	AD	E0	CF	LDA	TEMPA	
3160:	C8BA	BD	B6	02	STA	646	
3170:	C8BD	A9	0D		LDA	#13	
3170:	C8BF	A2	05		LDX	#5	
3170:	C8C1	20	D2	FF	JSR	PRINT	
3170:	C8C4	CA			DEX		
3170:	C8C5	D0	FA		BNE	RETLOOP	
3180:	CBC7	4C	09	CO	JMP	READY	
	;						
3200:	CBCA	98		UPDATE	TYA		

Delete this

3200: C8CE 85 7A STA GETPTR  
3200: C8D0 A5 7B LDA GETPTR+1  
3200: C8D2 69 00 ADC #0  
3200: C8D4 85 7B STA GETPTR+1  
3210: C8D6 60 RTS

50000: CBD7 .FILE8, "W-64\.\EB"  
; W-64.\ FILE#3

120: CBD7 20 79 A5 RENUM JSR CRUNCH  
120: C8DA 20 73 00 JSR CHRGET  
120: C8DD A9 0A LDA #10  
120: C8DF 85 28 STA RENINC  
130: C8E1 A9 64 LDA #100  
130: C8E3 8D E3 CF STA RENSTART  
140: C8E6 A9 00 LDA #0  
140: C8E8 8D E4 CF STA RENSTART+1  
150: C8EB 20 79 00 JSR CHRGOT  
160: C8EE F0 1E BEQ RENDEF  
170: C8F0 20 DA CA JSR GETFXD  
180: C8F3 8D E3 CF STA RENSTART  
180: C8F6 BE E4 CF STX RENSTART+1  
  
200: C8F9 20 FD AE JSR COMMA  
210: C8FC 20 DA CA JSR GETFXD  
210: C8FF F0 03 BEQ OKINC  
220: C901 4C 48 B2 JMP ILLQTY  
230: C904 B5 28 OKINC STA RENINC  
  
C906 20 79 00 JSR CHRGOT  
250: C909 F0 03 BEQ RENDEF  
260: C90B 20 FD AE JSR COMMA  
  
280: C90E 20 C7 C7 RENDEF JSR LNRANGE  
  
300: C911 AD E3 CF LDA RENSTART  
300: C914 AE E4 CF LDX RENSTART+1  
310: C917 85 14 STA INTVAL  
310: C919 86 15 STX INTVAL+1  
320: C91B 20 13 A6 JSR FINDLN  
330: C91E A0 03 LDY #3  
330: C920 B1 5F LDA (VARPTR), Y  
330: C922 C5 FE CMP STRPTR+1  
330: C924 90 3E BCC RANGEBAD  
330: C926 D0 07 BNE YOUBET  
330: C928 88 DEY  
340: C929 B1 5F LDA (VARPTR), Y  
340: C92B C5 FD CMP STRPTR  
340: C92D 90 35 BCC RANGEBAD  
350: C92F A5 FD YOUBET LDA STRPTR  
350: C931 A6 FE LDX STRPTR+1  
360: C933 85 14 STA INTVAL  
360: C935 86 15 STX INTVAL+1  
370: C937 20 13 A6 JSR FINDLN  
380: C93A A5 5F LDA VARPTR  
390: C93C A6 60 LDX VARPTR+1  
390: C93E 8D E5 CF STA RENGET  
390: C941 BE E6 CF STX RENGET+1  
  
410: C944 A5 26 LDA ENDPTR  
410: C946 A6 27 LDX ENDPTR+1  
420: C948 BD E9 CF STA RENENDLN

430: C94E 03 14 STX INTVAL  
430: C950 86 15 STX INTVAL+1  
440: C952 E6 14 INC INTVAL  
440: C954 D0 02 BNE STCOUNT  
450: C956 E6 15 INC INTVAL+1  
460: C958 20 F5 CC STCOUNT JSR COUNTEM  
  
;:  
490: C95B 20 E2 CA JSR MULT  
490: C95E A5 BE LDA RENTEMP+1  
490: C960 C9 FA CMP #\$FA  
490: C962 90 0A BCC RANGEOK  
500: C964 A9 1B RANGEBAD LDA #<RENMSGE1  
500: C966 A0 CE LDY #>RENMSGE1  
500: C968 20 1E AB JSR STROUT  
500: C96B 4C 09 CO JMP READY  
  
;:  
520: C96E 20 13 A6 RANGEOK JSR FINDLN  
520: C971 20 3F CB JSR RGETPTR  
530: C974 A0 01 LDY #1  
530: C976 B1 7A LDA (GETPTR), Y  
530: C978 F0 11 BEQ THEMEAT  
540: C97A A0 03 LDY #3  
540: C97C A5 BE LDA RENTEMP+1  
540: C97E D1 7A CMP (GETPTR), Y  
540: C980 90 09 BCC THEMEAT  
550: C982 D0 E0 BNE RANGEBAD  
560: C984 A5 8D LDA RENTEMP  
560: C986 88 DEY  
560: C987 D1 7A CMP (GETPTR), Y  
560: C989 B0 D9 BCS RANGEBAD  
570: C98B A5 2B THEMEAT LDA STARTB  
570: C98D A6 2C LDX STARTB+1  
;:  
580: C98F 85 7A STA GETPTR  
580: C991 86 7B STX GETPTR+1  
  
;:  
; PASS1  
;  
620: C993 A0 00 RESETQU LDY #0  
620: C995 84 08 STY QU MODE  
630: C997 A0 01 LINKLOPP LDY #1  
630: C999 B1 7A LDA (GETPTR), Y  
630: C99B D0 03 BNE LINKOK  
640: C99D 4C 27 CB RENDONE1 JMP PASS2  
  
;:  
660: C9A0 C8 LINKOK INY  
660: C9A1 B1 7A LDA (GETPTR), Y  
660: C9A3 85 14 STA INTVAL  
660: C9A5 C8 INY  
660: C9A6 B1 7A LDA (GETPTR), Y  
660: C9A8 85 15 STA INTVAL+1  
670: C9AA A0 04 LDY #4  
670: C9AC 20 CA C8 JSR UPDATE  
670: C9AF 20 A2 CD JSR SGETPTR3  
670: C9B2 A0 FF LDY #\$FF  
680: C9B4 C8 ALOOP INY  
680: C9B5 B1 7A ALOOP2 LDA (GETPTR), Y  
680: C9B7 F0 1D BEQ RLNDONE  
690: C9B9 C9 22 CMP #34  
;:  
C9BB F0 10 BEQ QUFOUND  
700: C9BD A6 08 LDX QU MODE  
700: C9BF D0 F3 BNE ALOOP  
710: C9C1 A2 06 LDX #6  
710: C9C3 DD 14 CE TABLELOP CMP RENTBLE-1, X  
710: C9C6 F0 15 BEQ RENBINGO  
720: C9C8 CA DEX

730: C9CB F0 E7 BEQ HLOOP  
750: C9CD A5 08 QUFOUND LDA QU MODE  
750: C9CF 49 FF EOR #\$FF  
750: C9D1 B5 08 STA QU MODE  
760: C9D3 4C B4 C9 JMP ALOOP  
770: C9D6 C8 RLNDONE INY  
780: C9D7 20 CA C8 JSR UPDATE  
780: C9DA 4C 93 C9 JMP RESETQU  
800: C9DD 48 RENBINGO PHA  
800: C9DE 20 CA C8 JSR UPDATE  
800: C9E1 A0 00 LDY #0  
800: C9E3 68 PLA  
810: C9E4 C9 CB CMP #\$CB  
810: C9E6 D0 07 BNE RENBING2  
810: C9EB 20 73 00 JSR CHRGET  
820: C9EB C9 A4 CMP #\$A4  
820: C9ED D0 C6 BNE ALOOP2  
830: C9EF 20 73 00 RENBING2 JSR CHRGET  
830: C9F2 B0 C1 BCS ALOOP2  
850: C9F4 20 36 CD JSR SINTVAL  
850: C9F7 20 4C CD JSR SGETPTR2  
850: C9FA 20 79 00 JSR CHRGOT  
850: C9FD 20 F3 BC JSR STRFAC  
850: CA00 20 F7 B7 JSR FLFXD  
870: CA03 20 62 CD JSR CKRANGE  
870: CA06 F0 03 BEQ NEEDCHNG  
880: CA08 4C C2 CA JMP AFTERNUM  
910: CA0B A5 14 NEEDCHNG LDA INTVAL  
910: CA0D A6 15 LDX INTVAL+1  
920: CA0F 8D E9 CF STA RENENDLN  
920: CA12 BE EA CF STX RENENDLN+1  
930: CA15 20 F5 CC JSR COUNTEM  
930: CA18 F0 06 BEQ SOMELAB  
930: CA1A A9 FF LDA #\$FF  
930: CA1C B5 BB STA RENCOUNT  
930: CA1E B5 BC STA RENCOUNT+1  
940: CA20 20 09 C5 SOMELAB JSR SPACE  
960: CA23 20 E2 CA JSR MULT  
970: CA26 A6 8D LDX RENTEMP  
970: CA28 A5 BE LDA RENTEMP+1  
980: CA2A 86 14 STX INTVAL  
980: CA2C B5 15 STA INTVAL+1  
990: CA2E 20 CD BD JSR PRINTLN  
1000: CA31 A4 8D LDY RENTEMP  
1000: CA33 A5 BE LDA RENTEMP+1  
1000: CA35 20 88 CD JSR FXDFL  
1020: CA38 20 AD CD JSR RGETPTR3  
1020: CA3B A2 FF LDX #\$FF  
1040: CA3D A0 00 DOITLOOP LDY #0  
1040: CA3F E8 INX  
1050: CA40 A5 7B LDA GETPTR+1  
1050: CA42 CD E8 CF CMP TEMP+1  
1060: CA45 90 09 BCC NOPROB2  
1060: CA47 D0 13 BNE DONETHIS  
1070: CA49 A5 7A LDA GETPTR

1080: CA4E B0 0C BCS DONETHIS  
1090: CA50 B1 7A NOPROB2 LDA (GETPTR),Y  
1090: CA52 9D 00 02 STA BUFF,X  
1090: CA55 C8 INY  
1100: CA56 20 CA C8 JSR UPDATE  
1100: CA59 4C 3D CA JMP DOITLOOP  
110: CA5C A0 00 DONETHIS LDY #0  
110: CA5E AD 00 01 LDA \$0100  
1110: CA61 C9 2D CMP #"-"  
1110: CA63 D0 04 BNE BIGLOOP  
1110: CA65 9D 00 02 STA BUFF,X  
1110: CA68 E8 INX  
1120: CA69 B9 01 01 BIGLOOP LDA \$0101,Y  
1120: CA6C F0 07 BEQ DONEPT2  
1120: CA6E 9D 00 02 STA BUFF,X  
1120: CA71 C8 INY  
1120: CA72 E8 INX  
1120: CA73 D0 F4 BNE BIGLOOP  
1130: CA75 8E EC CF DONEPT2 STX TEMP  
1130: CA78 20 57 CD JSR RGETPTR2  
1130: CA7B 20 79 00 JSR CHRGOT  
1130: CA7E 20 F3 BC JSR STRFAC  
1130: CA81 20 79 00 JSR CHRGOT  
1140: CA84 AE EC CF LDX TEMP  
1140: CA87 A0 00 LDY #0  
1140: CA89 C9 00 BIG2LOOP CMP #0  
1140: CA8B 9D 00 02 STA BUFF,X  
1140: CA8E F0 07 BEQ DONEPT3  
1150: CA90 E8 INX  
1150: CA91 C8 INY  
1150: CA92 B1 7A LDA (GETPTR),Y  
1150: CA94 4C 89 CA JMP BIG2LOOP  
  
;  
1170: CA97 E8 DONEPT3 INX  
1170: CA98 E8 INX  
1170: CA99 9D 00 02 STA BUFF,X  
1170: CA9C E8 INX  
1170: CA9D E8 INX  
1170: CA9E E8 INX  
1170: CA9F B6 0B STX \$0B  
1180: CAA1 20 41 CD JSR RINTVAL  
1180: CAA4 20 40 CC JSR PUTIN  
1190: CAA7 20 57 CD JSR RGETPTR2  
1190: CAAA 20 F3 BC JSR STRFAC  
1200: CAAD A5 FD LDA STRPTR  
1200: CAAF A6 FE LDX STRPTR+1  
1210: CAB1 85 14 STA INTVAL  
1210: CAB3 B6 15 STX INTVAL+1  
1220: CAB5 20 13 A6 JSR FINDLN  
1220: CAB8 A5 5F LDA VARPTR  
1220: CABA A6 60 LDX VARPTR+1  
1230: CABC 8D E5 CF STA RENGET  
1230: CABF 8E E6 CF STX RENGET+1  
  
;  
1250: CAC2 20 41 CD AFTERNUM JSR RINTVAL  
  
;  
1270: CAC5 20 79 00 JSR CHRGOT  
1270: CAC8 C9 2C CMP #", "  
1270: CACA F0 0B BEQ GETNEXT1  
1280: CACC C9 AB CMP #\$AB  
1280: CACE F0 07 BEQ GETNEXT1  
1290: CAD0 A0 00 LDY #0  
1290: CAD2 84 08 STY QUMODE  
1290: CAD4 4C B5 C9 JMP ALOOP2

```

1350: CADA 20 6B A9 GETFXD    JSR   INPFXD
1350: CADD A5 14      GETINT    LDA   INTVAL
1360: CADF A6 15      LDX   INTVAL+1
1360: CAE1 60          RTS

;
1390: CAE2 A5 28      MULT     LDA   RENINC
1390: CAE4 8D EB CF    STA   TEMPG
1390: CAE7 AD E3 CF    LDA   RENSTART
1390: CAEA AE E4 CF    LDX   RENSTART+1
1400: CAED 85 8D      STA   RENTEMP
1400: CAEF 86 8E      STX   RENTEMP+1
1410: CAF1 A9 00      LDA   #0
1410: CAF3 85 2A      STA   MULTFLAG

;
1430: CAF5 A2 08      MULTLOOP LDX   #8
1440: CAF7 46 28      MULTLOOP LSR   RENINC
1450: CAF9 90 11      BCC   DONTADD
1460: CAFB A5 2A      LDA   MULTFLAG
1460: CAFD DO 1C      BNE   MULTEMP
1470: CAFF A5 8B      LDA   RENCOUNT
1480: CBO1 18          CLC
1480: CBO2 65 8D      ADC   RENTEMP
1490: CBO4 85 8D      STA   RENTEMP
1500: CBO6 A5 8C      LDA   RENCOUNT+1
1510: CBO8 65 8E      ADC   RENTEMP+1
1520: CBOA 85 8E      STA   RENTEMP+1

;
1540: CBOC 06 8B      DONTADD ASL   RENCOUNT
1550: CBOE 26 8C      ROL   RENCOUNT+1
1560: CB10 26 2A      ROL   MULTFLAG
1570: CB12 CA          DEX
1580: CB13 DO E2      BNE   MULTLOOP

;
1600: CB15 AD EB CF    LDA   TEMPG
1600: CB18 85 28      STA   RENINC
1610: CB1A 60          RTS
1620: CB1B A9 FF      MULTEMP LDA   #$FF
1630: CB1D 85 8D      STA   RENTEMP
1630: CB1F 85 8E      STA   RENTEMP+1
1630: CB21 AD EB CF    LDA   TEMPG
1630: CB24 85 28      STA   RENINC
1640: CB26 60          RTS

;
1660: CB27 AD E5 CF  PASS2  LDA   RENGET
1660: CB2A AE E6 CF    LDX   RENGET+1

;
1680: CB2D 85 7A      STA   GETPTR
1680: CB2F 86 7B      STX   GETPTR+1
1690: CB31 A0 01      PASS2LP LDY   #1
1690: CB33 B1 7A      LDA   (GETPTR), Y
1690: CB35 F0 42      BEQ   PASS2DN
1700: CB37 A0 03      LDY   #3
1700: CB39 B1 7A      LDA   (GETPTR), Y
1710: CB3B C5 27      CMP   ENDPTR+1
1710: CB3D 90 0B      BCC   NOPROB
1710: CB3F DO 38      BNE   PASS2DN
1720: CB41 88          DEY
1720: CB42 B1 7A      LDA   (GETPTR), Y
1730: CB44 C5 26      CMP   ENDPTR
1730: CB46 90 02      BCC   NOPROB
1730: CB48 DO 2F      BNE   PASS2DN

```

} should be no need for  
this : ch parameters before mult in

1750:	CB4A	A0	02	NOFRUD	LDY	#2	
1750:	CB4C	AD	E3	CF	LDA	RESTART	
1760:	CB4F	91	7A		STA	(GETPTR), Y	
1770:	CB51	C8			INY		
1770:	CB52	AD	E4	CF	LDA	RESTART+1	
1780:	CB55	91	7A		STA	(GETPTR), Y	
1800:	CB57	A0	00		LDY	#0	
1800:	CB59	B1	7A		LDA	(GETPTR), Y	
1800:	CB5B	AA			(TAX) → in need:	LDY, STA ; LDY, STA	
1810:	CB5C	C8			INY		
1810:	CB5D	B1	7A		LDA	(GETPTR), Y	
1820:	CB5F	85	7B		STA	GETPTR+1	
1820:	CB61	B6	7A		STX	GETPTR	
1830:	CB63	A5	28		LDA	RENINC	
1840:	CB65	18			CLC		
1840:	CB66	6D	E3	CF	ADC	RESTART	
1840:	CB69	BD	E3	CF	STA	RESTART	
1850:	CB6C	90	C3		BCC	PASS2LP	
1860:	CB6E	AD	E4	CF	LDA	RESTART+1	
1860:	CB71	69	00		ADC	#0	
1860:	CB73	BD	E4	CF	STA	RESTART+1	
1870:	CB76	4C	31	CB	JMP	PASS2LP	
1890:	CB79	4C	09	CO	PASS2DN	JMP	READY
1920:	CB7C	4C	32	C1	SERROR9	JMP	SERROR
1940:	CB7F	A9	FF	MEMORY	LDA	#\$FF	
1940:	CB81	85	26		STA	ENDPTR	
1940:	CB83	85	27		STA	ENDPTR+1	
1940:	CB85	C6	7A		DEC	GETPTR	
1950:	CB87	A5	7A		LDA	GETPTR	
1950:	CB89	C9	FF		CMP	#\$FF	
1950:	CB8B	D0	02		BNE	NOSUBT	
1960:	CB8D	C6	7B		DEC	GETPTR+1	
1970:	CB8F	20	BF	C4	NOSUBT	JSR	INFADD
1980:	CB92	85	FD		STA	STRPTR	
1980:	CB94	B6	FE		STX	STRPTR+1	
1990:	CB96	20	CA	C8	JSR	UPDATE	
1990:	CB99	20	73	00	JSR	CHRGET	
1990:	CB9C	F0	0B		BEQ	GETGOING	
1990:	CB9E	C9	2C		CMP	#, "	
1990:	CBA0	D0	DA		BNE	SERROR9	
2000:	CBA2	20	BF	C4	JSR	INFADD	
2010:	CBA5	85	26		STA	ENDPTR	
2010:	CBA7	B6	27		STX	ENDPTR+1	
2030:	CBA9	20	0E	C5	GETGOING	JSR	CGRET
2040:	CBAC	20	FF	C6	LLOOPP	JSR	STOPSHFT
2040:	CBAF	F0	C8		BEQ	PASS2DN	
2050:	CBB1	EE	14	CE	INC	BLOCK	
2060:	CBB4	A5	FE		LDA	STRPTR+1	
2060:	CBB6	CD	14	CE	CMP	BLOCK	
2060:	CBB9	90	16		BCC	LETEM1	
2070:	CBBB	AD	14	CE	LDA	BLOCK	
2070:	CBBE	18			CLC		
2070:	CBBF	69	10		ADC	#\$10	
2070:	CBC1	BD	EC	CF	STA	TEMPH	
2070:	CBC4	A4	FE		LDY	STRPTR+1	
2070:	CBC6	CC	EC	CF	CPY	TEMPH	
2070:	CBC9	B0	06		BCS	LETEM1	
2090:	CBCB	CE	14	CE	DEC	BLOCK	

Take out  
protection.

2110: CBD1 CE 14 CE LETEM1 DEC BLOCK  
 2110: CBD4 A9 2E LDA #"."  
 2110: CBD6 20 D2 FF JSR PRINT  
 2120: CBD9 A5 FE LDA STRPTR+1  
 2120: CBDB A6 FD LDX STRPTR  
 2130: CBDD 20 45 C3 JSR PRINTADD  
 . 40: CBE0 A0 00 LDY #0  
 2150: CBE2 20 09 C5 PRINTMOR JSR SPACE  
 2160: CBE5 B1 FD LDA (STRPTR), Y  
 2170: CBE7 8C EC CF STY TEMPH  
 2170: CBEA 20 37 C3 JSR PRINTBYT *no need to save Y*  
 2170: CBED AC EC CF LDY TEMPH  
 2180: CBF0 C8 INY  
 2180: CBF1 C0 08 CPY #8  
 2180: CBF3 D0 ED BNE PRINTMOR  
 2190: CBF5 20 09 C5 JSR SPACE  
 2200: CBF8 A9 12 LDA #"  
 2200: CBFA 20 D2 FF JSR PRINT  
 2210: CBFD A0 00 LDY #0  
 2220: CBFF B1 FD BYTLOOP LDA (STRPTR), Y  
 2230: CC01 A2 00 LDX #0  
 2230: CC03 B6 08 STX QUMODE  
 2240: CC05 C9 A1 CMP #161  
 2240: CC07 B0 0A BCS 0OKK  
 2250: CC09 C9 20 CMP #32  
 2250: CC0B 90 04 BCC NOT0OKK  
 2260: CC0D C9 80 CMP #128  
 2260: CC0F 90 02 BCC 0OKK  
 2270: CC11 A9 2E NOT0OKK LDA #\$2E  
 2280: CC13 20 D2 FF 0OKK JSR PRINT  
 2290: CC16 C8 INY  
 2290: CC17 C0 08 CPY #8  
 2290: CC19 D0 E4 BNE BYTLOOP  
 ;  
 2310: CC1B 98 TYA  
 2310: CC1C 18 CLC  
 2310: CC1D 65 FD ADC STRPTR  
 2310: CC1F 85 FD STA STRPTR  
 2320: CC21 A5 FE LDA STRPTR+1  
 2320: CC23 69 00 ADC #0  
 2320: CC25 85 FE STA STRPTR+1  
 2330: CC27 20 0E C5 JSR CGRET  
 ;  
 2360: CC2A A5 FE LDA STRPTR+1  
 2360: CC2C C5 27 CMP ENDPTR+1  
 2360: CC2E 90 0A BCC GOLLOOPP  
 2370: CC30 D0 0B BNE NOLLOOPP  
 ;  
 2390: CC32 A5 FD LDA STRPTR  
 2390: CC34 C5 26 CMP ENDPTR  
 2390: CC36 90 02 BCC GOLLOOPP  
 2400: CC38 D0 03 BNE NOLLOOPP  
 ;  
 2420: CC3A 4C AC CB GOLLOOPP JMP LL0OPP  
 2430: CC3D 4C 09 C0 NOLLOOPP JMP READY  
 ;  
 ;PUT THE LINE IN  
 2460: CC40 20 13 A6 PUTIN JSR FINDLN ; FIND BASIC LINE  
 2470: CC43 90 44 BCC L1  
 2480: CC45 A0 01 LDY #1  
 2480: CC47 B1 5F LDA (\$5F), Y  
 2490: CC49 85 23 STA \$23  
 2490: CC4B A5 2D LDA \$2D

2500: CC4F A5 60 LDA \$60  
2500: CC51 85 25 STA \$25  
2500: CC53 A5 5F LDA \$5F  
2510: CC55 88 DEY  
2510: CC56 F1 5F SBC (\$5F), Y  
2520: CC58 18 CLC  
2520: CC59 65 2D ADC \$2D  
130: CC5B 85 2D STA \$2D  
2530: CC5D 85 24 STA \$24  
2540: CC5F A5 2E LDA \$2E  
2540: CC61 69 FF ADC #\$FF  
2550: CC63 85 2E STA \$2E  
2550: CC65 E5 60 SBC \$60  
2560: CC67 AA TAX  
2570: CC68 38 SEC  
2570: CC69 A5 5F LDA \$5F  
2580: CC6B E5 2D SBC \$2D  
2580: CC6D A8 TAY  
2590: CC6E B0 03 BCS L2  
2600: CC70 E8 INX  
2600: CC71 C6 25 DEC \$25  
2610: CC73 18 L2 CLC  
2610: CC74 65 22 ADC \$22  
2620: CC76 90 03 BCC L3  
2630: CC78 C6 23 DEC \$23  
2630: CC7A 18 CLC  
2640: CC7B B1 22 L3 LDA (\$22), Y  
2650: CC7D 91 24 STA (\$24), Y  
2660: CC7F C8 INY  
2660: CC80 D0 F9 BNE L3  
2670: CC82 E6 23 INC \$23  
2670: CC84 E6 25 INC \$25  
10: CC86 CA DEX  
2680: CC87 D0 F2 BNE L3  
2690: CC89 20 BE A6 L1 JSR BACKTEXT  
2690: CC8C 20 D3 CC JSR NEW ; UNDER [ NEW ]  
2700: CC8F 20 33 A5 JSR RECHAIN  
2710: CC92 AD 00 02 LDA BUFF  
2720: CC95 F0 3B BEQ RETRN  
2730: CC97 18 CLC  
2730: CC98 A5 2D LDA \$2D  
2740: CC9A 85 5A STA \$5A  
2740: CC9C 65 0B ADC \$0B  
2750: CC9E 85 58 STA \$58  
2750: CCA0 A4 2E LDY \$2E  
2760: CCA2 84 5B STY \$5B  
2770: CCA4 90 01 BCC L4  
2780: CCA6 C8 INY  
2790: CCA7 84 59 L4 STY \$59  
2800: CCA9 20 B8 A3 JSR MOVEMEM ; MOVE MEMORY  
2810: CCAC A5 14 LDA INTVAL  
2810: CCAE A4 15 LDY INTVAL+1  
2820: CCBO 8D FE 01 STA \$01FE  
2820: CCB3 8C FF 01 STY \$01FF  
2830: CCB6 A5 31 LDA \$31  
2830: CCB8 A4 32 LDY \$32 ; END BASIC  
2840: CCBA 85 2D STA \$2D  
2840: CCBC 84 2E STY \$2E ; START BASIC VARS  
130: CCBE A4 0B LDY \$0B  
2860: CCC0 88 DEY  
2870: CCC1 B9 FC 01 L5 LDA \$01FC, Y  
2870: CCC4 91 5F STA (\$5F), Y  
2880: CCC6 88 DEY  
2880: CCC7 10 FB BPL L5  
2890: CCC9 20 BE A6 JSR BACKTEXT

2700: CCCF 20 33 HJ ; JSR RECHAIN  
 2920: CCD2 60 ; RETRN RTS  
 2940: CCD3 A5 37 ; NEW LDA \$37  
 2940: CCD5 A4 38 LDY \$38  
 2950: CCD7 B5 33 STA \$33  
 2950: ;  
 2950: CCD9 84 34 STY \$34  
 2960: CCDB A5 2D LDA \$2D  
 2960: CCDD A4 2E LDY \$2E  
 2970: CCDF B5 2F STA \$2F  
 2970: CCE1 84 30 STY \$30  
 2980: CCE3 B5 31 STA \$31  
 2980: CCE5 84 32 STY \$32  
 2990: CCE7 20 1D AB JSR \$A81D  
 3000: CCEA A2 19 LDX ##\$19  
 3000: CCEC B6 16 STX \$16  
 3010: CCEE A9 00 LDA #0  
 3010: CCF0 B5 3E STA \$3E  
 3010: CCF2 B5 10 STA \$10  
 3020: CCF4 60 RTS  
 ;  
 3040: CCF5 AD E5 CF COUNTEM LDA RENGET  
 3040: CCF8 AE E6 CF LDX RENGET+1  
 3050: CCFB B5 19 STA CNTPTR  
 3050: CCFD B6 1A STX CNTPTR+1  
 3060: CCFF A0 00 LDY #0  
 3060: CD01 84 BB STY RENCOUNT  
 3060: CD03 84 BC STY RENCOUNT+1  
 ;  
 3080: CD05 A0 01 COUNTLP LDY #1  
 3080: CD07 B1 19 LDA (CNTPTR), Y  
 3090: CD09 D0 03 BNE CNTNOVER  
 3090: CD0B A9 01 LDA #1  
 3090: CD0D 60 RTS  
 ;  
 3110: CDOE A0 03 CNTNOVER LDY #3  
 3110: CD10 B1 19 LDA (CNTPTR), Y  
 3120: CD12 CD EA CF CMP RENENDLN+1  
 3130: CD15 90 0B BCC CNTON  
 3140: CD17 D0 08 BNE CNTDONE  
 3150: CD19 88 DEY  
 3150: CD1A B1 19 LDA (CNTPTR), Y  
 3160: CD1C CD E9 CF CMP RENENDLN  
 3170: CD1F 90 01 BCC CNTON  
 ;  
 3190: CD21 60 CNTDONE RTS  
 ;  
 3210: CD22 A0 00 CNTON LDY #0  
 3220: CD24 B1 19 LDA (CNTPTR), Y  
 3220: CD26 AA ;  
 3230: CD27 C8 (TAX) → save this : simply LDA, STA ; LDA, STA.  
 3230: INY  
 3230: CD28 B1 19 LDA (CNTPTR), Y  
 3230: CD2A B5 1A STA CNTPTR+1  
 3230: CD2C B6 19 STX CNTPTR  
 3240: CD2E E6 8B INC RENCOUNT  
 3240: CD30 D0 D3 BNE COUNTLP  
 3250: CD32 E6 8C INC RENCOUNT+1  
 3250: ;  
 3250: CD34 D0 CF BNE COUNTLP  
 ;  
 3270: CD36 A5 14 SINTVAL LDA INTVAL  
 3270: CD38 A6 15 LDX INTVAL+1  
 3280: CD3A BD E0 CF STA TEMPA  
 3280: CD3D BE E1 CF STX TEMPB  
 3290: CD40 60 RTS

3310:	CD41 AD E0 CF	RINTVAL	LDA	TEMPI
3310:	CD44 AE E1 CF		LDX	TEMPB
3320:	CD47 85 14		STA	INTVAL
3320:	CD49 86 15		STX	INTVAL+1
3330:	CD4B 60		RTS	
;				
3350:	CD4C A5 7A	SGETPTR2	LDA	GETPTR
3350:	CD4E A6 7B		LDX	GETPTR+1
3360:	CD50 8D E7 CF		STA	TEMPC
3360:	CD53 8E E8 CF		STX	TEMPC+1
3370:	CD56 60		RTS	
;				
3390:	CD57 AD E7 CF	RGETPTR2	LDA	TEMPC
3390:	CD5A AE E8 CF		LDX	TEMPC+1
3400:	CD5D 85 7A		STA	GETPTR
3400:	CD5F 86 7B		STX	GETPTR+1
3410:	CD61 60		RTS	
;				
3430:	CD62 A5 15	CKRANGE	LDA	INTVAL+1
3430:	CD64 C5 FE		CMP	STRPTR+1
3440:	CD66 F0 08		BEQ	ISEQU
3450:	CD68 B0 OC		BCS	CKENDPTR
3460:	CD6A A9 01	NOTRNGE	LDA	#1
3460:	CD6C 60		RTS	
3470:	CD6D A9 00	INRANGE	LDA	#0
3470:	CD6F 60		RTS	
;				
3490:	CD70 A5 14	ISEQU	LDA	INTVAL
3490:	CD72 C5 FD		CMP	STRPTR
3500:	CD74 90 F4		BCC	NOTRNGE
;				
3520:	CD76 A5 15	CKENDPTR	LDA	INTVAL+1
3520:	CD78 C5 27		CMP	ENDPTR+1
3530:	CD7A 90 F1		BCC	INRANGE
3540:	CD7C D0 EC		BNE	NOTRNGE
3550:	CD7E A5 14		LDA	INTVAL
3550:	CD80 C5 26		CMP	ENDPTR
3560:	CD82 90 E9		BCC	INRANGE
3570:	CD84 F0 E7		BEQ	INRANGE
3580:	CD86 B0 E2		BCS	NOTRNGE
;				
3600:	CD88 C9 80	FXDFL	CMP	#\$80
3600:	CD8A 90 0F		BCC	SKP32768
3610:	CD8C 29 7F		AND	#\$7F
3620:	CD8E 20 91 B3		JSR	SFXDFL
3620:	CD91 A9 33		LDA	#<CONSTANT
3620:	CD93 A0 CE		LDY	#>CONSTANT
3630:	CD95 20 67 B8		JSR	ADDEM
3640:	CD98 4C 9E CD		JMP	STRIT
;				
3660:	CD9B 20 91 B3	SKP32768	JSR	SFXDFL
3670:	CD9E 20 DD BD	STRIT	JSR	CONVFAC1
3680:	CDA1 60		RTS	
;				
3700:	CDA2 A5 7A	SGETPTR3	LDA	GETPTR
3700:	CDA4 A6 7B		LDX	GETPTR+1
3710:	CDA6 8D ED CF		STA	TEMPI
3710:	CDA9 8E EE CF		STX	TEMPI+1
20:	CDAC 60		RTS	
;				
3740:	CDAD AD ED CF	RGETPTR3	LDA	TEMPI
3740:	CDB0 AE EE CF		LDX	TEMPI+1
3750:	CDB3 85 7A		STA	GETPTR
3750:	CDB5 86 7B		STX	GETPTR+1
3760:	CDB7 60		RTS	

} there is ROM routine  
to do this!

3780:	CDBD	H7	5F	BONJOUR	LDA	#
3780:	CDBA	8D	DE	CF	STA	DELIM
3780:	CDBD	A2	11		LDX	#17
3780:	CDBF	8E	DC	CF	STX	FILELEN
3790:	CDC2	20	79	00	JSR	CHRGOT
3790:	CDC5	20	3A	C1	JSR	INPFILE
3790:	CDCB	20	0E	C5	JSR	CGRET
3810:	CDCB	20	E4	FF	BONGET	JSR GET
3810:	CDCE	F0	FB		BEQ	BONGET
3810:	CDD0	C9	8C		CMP	"", "
3810:	CDD2	F0	03		BEQ	LESAVE
3820:	CDD4	4C	09	C0	JMP	READY
3840:	CDD7	AD	86	02	LESAVE	LDA 646
3840:	CDDA	8D	EB	CF	STA	TEMPG
3840:	CDDD	AD	21	DO	LDA	53281
3840:	CDE0	8D	86	02	STA	646
3850:	CDE3	A0	00		LDY	#0
3850:	CDE5	AD	FE	C2	LDA	SAVETBLE+1
3850:	CDEB	8D	EF	CF	STA	TEMPJ
3850:	CDEB	8C	FE	C2	STY	SAVETBLE+1
3860:	CDEE	AD	FF	C2	LDA	SAVETBLE+2
3860:	CDF1	8D	F0	CF	STA	TEMPJ+1
3860:	CDF4	8C	FF	C2	STY	SAVETBLE+2
3870:	CDF7	20	56	C8	JSR	SAVEEE2
3880:	CDFA	AD	EF	CF	LDA	TEMPJ
3880:	CDFD	8D	FE	C2	STA	SAVETBLE+1
3890:	CEO0	AD	F0	CF	LDA	TEMPJ+1
3890:	CEO3	8D	FF	C2	STA	SAVETBLE+2
3900:	CEO6	A9	93		LDA	#147
3900:	CEO8	20	D2	FF	JSR	PRINT
3910:	CEO8	AD	EB	CF	LDA	TEMPG
3910:	CEOE	8D	86	02	STA	646
3920:	CE11	4C	B7	C1	JMP	DS
3940:	CE14	BF		BLOCK	.BYTE	>BLOCKK-1
3960:	CE15	8A	9B	CB	RENTBLE	.BYTE \$8A, \$9B, \$CB, \$A7, \$8D, \$89
						:RUN, LIST, GO, THEN, GOSUB, GOTO
3980:	CE1B	20	2A	2A	RENMSGE1	.ASC " ** BAD LINE RANGE ** "
3980:	CE31	0D	00		.BYTE	13, 0
3990:	CE33	90	00	00	CONSTANT	.BYTE \$90, 0, 0, 0, 0
4010:	CE38	20	20	20	NAMESTR	.ASC "
4010:	CE3E	00			.BYTE	O
4030:	CE3F	41	44	4A	TOKTBLE	(.ASC "ADJUST")
4030:	CE45	00			.BYTE	O )
4040:	CE46	41	55	54	.ASC	"AUTO"
4040:	CE4A	00			.BYTE	O
4050:	CE4B	43	4F	4C	.ASC	"COLD"
4050:	CE4F	00			.BYTE	O
4060:	CE50	43	4F	4C	.ASC	"COLOUR"
4060:	CE56	00			.BYTE	O
4070:	CE57	44	45	4C	.ASC	"DEL"
4070:	CE5A	00			.BYTE	O
4080:	CE5B	44	53		.ASC	"DS"
4080:	CE5D	00			.BYTE	O
4090:	CE5E	48	45	4C	.ASC	"HELP"
4090:	CE62	00			.BYTE	O
4100:	CE63	48	45	58	.ASC	"HEX"
4100:	CE66	00			.BYTE	O
4110:	CE67	48	55	4E	.ASC	"HUNT"
4110:	CE6B	00			.BYTE	O
4120:	CE6C	4C	4F	4F	.ASC	"LOOK"

DELETE

←

```

4130: CE71 4D 45 4D .ASC "MEM"
4130: CE74 00 .BYTEO
4140: CE75 4D 45 52 .ASC "MERGE"
4140: CE7A 00 .BYTEO
4150: CE7B 4E .ASC "N"
4150: CE7C 00 .BYTEO
4160: CE7D 4F 46 46 .ASC "OFF"
4160: CE80 00 .BYTEO
4170: CE81 52 45 4E .ASC "RENUM"
4170: CE86 00 .BYTEO
4180: CE87 53 41 56 .ASC "SAVE"
4180: CE88 00 .BYTEO
4190: CE8C 53 45 4E .ASC "SEND"
4190: CE90 00 .BYTEO
4200: CE91 53 54 41 .ASC "START"
4200: CE96 00 .BYTEO
4210: CE97 24 .ASC "$"
4210: CE98 00 .BYTEO
4220: CE99 2F .ASC "/"
4220: CE9A 00 .BYTEO
4230: CE9B 5E 48 49 .ASC "^HI"
4230: CE9E 00 .BYTEO
4240: CE9F 00 .BYTEO
;
4260: CEA0 OD COMMANDS .BYTE13
4260: CEA1 20 43 4F .ASC " COMMANDS :"
4260: CEAC OD .BYTE13
4270: CEAD 20 2D 2D .ASC " ----- "
4270: CEB9 OD 00 .BYTE13,0
;
4290: CEBB 11 4D 45 STMSGE .ASC "MERGING LINE: "
4300: CECA 00 .BYTEO
4300: CECB 1D 1D 1D CRIGHT .ASC ""
4320: CED9 00 .BYTEO
;
4340: CEDA 2C 38 3A USERSTRG .ASC ",B:"
4340: CEDD 00 .BYTEO
;
4360: CEDE 12 20 20 REVERSE .ASC "
4370: CEF3 OD 00 .BYTE13,0
4380: CEF5 90 05 1C COLTBLE .ASC "0?<>!56789::"
;
4400: CF05 20 2A 2A DURMSGE .ASC " ** INVALID COMMAND ** " ) → change
4400: CF1C OD 00 .BYTE13,0
4410: CF1E OD HELLO .BYTE13
4410: CF1F 20 57 45 .ASC " WEDGE-64 (C)1983 D.MASON & A.WUNSCHE "
4410: CF45 OD .BYTE13
4420: CF46 20 4D 45 .ASC " MERGE ADAPTED FROM BASIC AID "
4420: CF64 OD .BYTE13
4430: CF65 20 50 45 .ASC " PERMISSION TO USE BUT NOT TO SELL "
4430: CF88 OD 00 .BYTE13,0
4440: CF8A OD OFFF .BYTE13
4440: CF8B 20 57 45 .ASC " WEDGE-64 DISABLED "
4440: CF9E OD 00 .BYTE13,0
;
4460: CFA0 FILENAME == *+55 * Note : put this (and others?) under ROM
4470: CFDD TOKNUM == *+1
4480: CFDB TEMPX == *+1
4480: CFDA TEMPY == *+1
4500: CFDA TOKVCTR == *+2
4510: CFDC FILELEN == *+1-
4520: CFDD TEMPB == *+1
4530: CFDE DELIM == *+1
4540: CFDF STRLEN == *+1
4550: CFE0 TEMPA == *+1

```

4570:	CFE3	RENSRART	**=	*+2
4580:	CFE5	RENGET	**=	*+2
4590:	CFE7	TEMPC	**=	*+2
4600:	CFE9	RENENDLN	**=	*+2
4610:	CFEB	TEMPG	**=	*+1
4610:	CFEC	TEMPH	**=	*+1
4620:	CFED	TEMPI	**=	*+2
4620:	CFEF	TEMPJ	**=	*+2
		;		
		;		