

!A

*** End of Pass 1

*** End of Pass 2

```
0800      1          ttl "Install DOS 4.5L Source Code, INSTALL45L.L"
0800      2      ;
0800      3      ;
0800      4      ; INSTALL45L.L
0800      5      ;
0800      6      ;
0800      7      ; Install DOS 4.5L Source Code
0800      8      ;
0800      9      ; 2024 February 14
0800     10      ;
0800     11      ;
0800     12      ; DOS 4.5L, Build 05
0800     13      ;
0800     14      ; 2022 January 1
0800     15      ;
0800     16      ;
0800     17      ; DOS 4.5, Build 06
0800     18      ;
0800     19      ; 2024 February 14
0800     20      ;
0800     21      ;
0800     22      ; Start of Source Code: 0x4000
0800     23      ; Start of Symbol List: 0x7800
0800     24      ;
0800     25      ;
0800     26      ; Copyright (c) 2024 February 14 by
0800     27      ; Walland Philip Vrbancic Jr.
0800     28      ;
0800     29      ; 6223 East Peabody Street
0800     30      ; Long Beach, California 90808
0800     31      ; Unitied States of America
0800     32      ;
0800     33      ; All Rights Reserved
0800     34      ;
0800     35      ; This software is the confidential and
0800     36      ; proprietary intellectual property of
0800     37      ; Walland Philip Vrbancic Jr.
0800     38      ;
0800     39      ;
0800     40      ; Sector to Memory Address map:
0800     41      ;
0800     42      ; Tk   Sr   Addr   Pgm       Tk   Sr   Addr   Pgm
0800     43      ; --   --   ----   ----       --   --   ----   ----
0800     44      ; 0    0    BF00    BOOT       1    0    AF00    MNGR
0800     45      ; 0    1    BE00    XFER       1    1    AE00    MNGR
0800     46      ; 0    2    BD00    RWTS       1    2    AD00    MNGR
0800     47      ; 0    3    BC00    RWTS       1    3    AC00    MNGR
0800     48      ; 0    4    BB00    RWTS       1    4    AB00    CMD
0800     49      ; 0    5    BA00    RWTS       1    5    AA00    CMD
0800     50      ; 0    6    B900    RWTS       1    6    A900    CMD
0800     51      ; 0    7    B800    DATA      1    7    A800    CMD
0800     52      ; 0    8    B700    DATA      1    8    A700    CMD
0800     53      ; 0    9    B600    DATA      1    9    A600    CMD
0800     54      ; 0    A    B500    DATA      1    A    A500    CMD
0800     55      ; 0    B    B400    MNGR       1    B    A400    CMD
0800     56      ; 0    C    B300    MNGR       1    C    A300    CMD
0800     57      ; 0    D    B200    MNGR       1    D    A200    CMD
0800     58      ; 0    E    B100    MNGR       1    E    A100    CMD
0800     59      ; 0    F    B000    MNGR       1    F    A000    CMD
0800     60      ;                               2    0    9F00    CMD
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0800      61      ;
0800      62      ;
0000      63      ZERO      equ  $00
00FF      64      NEGONE    equ  $FF
0800      65      ;
0002      66      RWTSWRIT  equ  $02
0800      67      ;
0084      68      CTRLD     equ  $84
008D      69      RETURN    equ  $8D
0800      70      ;
0100      71      PAGESIZE  equ  $100
0800      72      ;
03D0      73      DOSWARM   equ  $3D0
03D9      74      RWTS      equ  $3D9
03E8      75      PRTERADR  equ  $3E8
0800      76      ;
1000      77      IMAGBGN   equ  $1000
0800      78      ;
9F00      79      DOSTART   equ  $9F00
B900      80      DOSEND    equ  $B900
B900      81      RWTSTART  equ  $B900
C000      82      BOOTEND   equ  $C000
0800      83      ;
1A00      84      PART1     equ  DOSEND-DOSTART
0700      85      PART2     equ  BOOTEND-RWTSTART
0800      86      ;
2100      87      IMAGLEN   equ  PART1+PART2
0800      88      ;
C000      89      KEY       equ  $C000
C010      90      CLRKEY    equ  $C010
0800      91      ;
FC58      92      HOME      equ  $FC58
FD8E      93      CROUT     equ  $FD8E
FD8E      94      PRBYTE    equ  $FD8E
FD8E      95      COUT      equ  $FD8E
0800      96      ;
0800      97      ;
0900      98              org  $900
0900      99              obj  $900
0900      100             usr
0900      101            ;
0900      102            ;
0900 20 58 FC 103             jsr  HOME
0903      104            ;
0903 A0 00      105             ldy  #MSG1-MESGS
0905 20 95 09 106             jsr  PRTMSG
0908      107            ;
0908 A0 25      108             ldy  #MSG2-MESGS
090A 20 95 09 109             jsr  PRTMSG
090D      110            ;
090D A0 3C      111             ldy  #MSG3-MESGS
090F 20 95 09 112             jsr  PRTMSG
0912      113            ;
0912 A0 5B      114             ldy  #MSG4-MESGS
0914 20 95 09 115             jsr  PRTMSG
0917      116            ;
0917 20 88 09 117             jsr  GETKEY
091A      118            ;
091A A0 A0      119             ldy  #MSG5-MESGS
091C 20 95 09 120             jsr  PRTMSG
091F      121            ;

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091F A9 10      122      lda /IMAGBGN
0921 8D A7 0A   123      sta USRBUF+1
0924           124      ;
0924 A2 21      125      ldx /IMAGLEN
0926 20 31 09   126      jsr WRDATA
0929           127      ;
0929 A0 B9      128      ldy #MESG6-MESGS
092B 20 95 09   129      jsr PRTMESG
092E           130      ;
092E 4C D0 03   131      jmp DOSWARM
0931           132      ;
0931           133      ;
0931 8E 9D 0A   134 WRDATA stx COUNTER
0934           135      ;
0934 A0 9E      136      ^1 ldy #TBLTYPE
0936 A9 0A      137      lda /TBLTYPE
0938           138      ;
0938 20 D9 03   139      jsr RWTS
093B B0 1B      140      bcs >3
093D           141      ;
093D A9 AE      142      lda #". "
093F 20 ED FD   143      jsr COUT
0942           144      ;
0942 EE A7 0A   145      inc USRBUF+1
0945           146      ;
0945 CE A3 0A   147      dec SNUM
0948 10 08      148      bpl >2
094A           149      ;
094A A9 0F      150      lda #15
094C 8D A3 0A   151      sta SNUM
094F           152      ;
094F CE A2 0A   153      dec TNUM
0952           154      ;
0952 CE 9D 0A   155      ^2 dec COUNTER
0955 D0 DD      156      bne <1
0957           157      ;
0957 60          158      rts
0958           159      ;
0958 A0 E5      160      ^3 ldy #ERRMESG-MESGS
095A 20 95 09   161      jsr PRTMESG
095D           162      ;
095D AD AB 0A   163      lda ERRCODE
0960 20 DA FD   164      jsr PRBYTE
0963           165      ;
0963 20 8E FD   166      jsr CROUT
0966 20 8E FD   167      jsr CROUT
0969           168      ;
0969 AD AB 0A   169      lda ERRCODE
096C           170      ;
096C 4A          171      lsr
096D 4A          172      lsr
096E 4A          173      lsr
096F 4A          174      lsr
0970           175      ;
0970 A8          176      tay
0971           177      ;
0971 BE 80 09   178      ldx RWTS2FM,Y
0974 20 85 09   179      jsr PRTEROR
0977           180      ;
0977 20 8E FD   181      jsr CROUT
097A 20 8E FD   182      jsr CROUT

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097D      183 ;
097D 4C D0 03 184      jmp DOSWARM
0980      185 ;
0980      186 ;
0980 03 04 07 187 RWTS2FM hex 0304070B08
0983 0B 08
0985      188 ;
0985 6C E8 03 189 PRTEROR jmp (PRTERADR)
0988      190 ;
0988      191 ;
0988 2C 10 C0 192 GETKEY bit CLRKEY
098B      193 ;
098B AD 00 C0 194 ^1 lda KEY
098E      195 ;
098E EA      196      nop
098F      197 ;
098F 10 FA      198      bpl <1
0991      199 ;
0991 2C 10 C0 200      bit CLRKEY
0994      201 ;
0994 60      202      rts
0995      203 ;
0995      204 ;
0995 B9 A1 09 205 PRTMSG lda MSGS,Y
0998 F0 06 206      beq >1
099A      207 ;
099A 20 ED FD 208      jsr COUT
099D      209 ;
099D C8      210      iny
099E D0 F5 211      bne PRTMSG
09A0      212 ;
09A0 60      213 ^1 rts
09A1      214 ;
09A1      215 ;
09A1      216 MSGS:
09A1      217 ;
09A1 8D      218 MSG1 byt RETURN
09A2 D2 E5 E1 219      asc "Reading DOS 4.5L file into memory."
09A5 E4 E9 EE
09A8 E7 A0 C4
09AB CF D3 A0
09AE B4 AE B5
09B1 CC A0 E6
09B4 E9 EC E5
09B7 A0 E9 EE
09BA F4 EF A0
09BD ED E5 ED
09C0 EF F2 F9
09C3 AE
09C4 8D 00 220      byt RETURN,ZERO
09C6      221 ;
09C6 84      222 MSG2 byt CTRLD
09C7 C2 CC CF 223      asc "BLOAD DOS4.5L,A$1000"
09CA C1 C4 A0
09CD C4 CF D3
09D0 B4 AE B5
09D3 CC AC C1
09D6 A4 B1 B0
09D9 B0 B0
09DB 8D 00 224      byt RETURN,ZERO
09DD      225 ;

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09DD 8D          226  MSG3      byt RETURN
09DE C4 CF D3    227          asc "DOS 4.5L file now in memory."
09E1 A0 B4 AE
09E4 B5 CC A0
09E7 E6 E9 EC
09EA E5 A0 EE
09ED EF F7 A0
09F0 E9 EE A0
09F3 ED E5 ED
09F6 EF F2 F9
09F9 AE
09FA 8D 00      228          byt RETURN,ZERO
09FC          229  ;
09FC 8D 8D      230  MSG4      byt RETURN,RETURN
09FE C9 EE F3   231          asc "Insert diskette into Slot 6, Drive 2."
0A01 E5 F2 F4
0A04 A0 E4 E9
0A07 F3 EB E5
0A0A F4 F4 E5
0A0D A0 E9 EE
0A10 F4 EF A0
0A13 D3 EC EF
0A16 F4 A0 B6
0A19 AC A0 C4
0A1C F2 E9 F6
0A1F E5 A0 B2
0A22 AE
0A23 8D 8D      232          byt RETURN,RETURN
0A25 D0 F2 E5   233          asc "Press any key to continue."
0A28 F3 F3 A0
0A2B E1 EE F9
0A2E A0 EB E5
0A31 F9 A0 F4
0A34 EF A0 E3
0A37 EF EE F4
0A3A E9 EE F5
0A3D E5 AE
0A3F 8D 00      234          byt RETURN,ZERO
0A41          235  ;
0A41 8D 8D      236  MSG5      byt RETURN,RETURN
0A43 C9 EE F3   237          asc "Installing DOS 4.5L."
0A46 F4 E1 EC
0A49 EC E9 EE
0A4C E7 A0 C4
0A4F CF D3 A0
0A52 B4 AE B5
0A55 CC AE
0A57 8D 8D 00   238          byt RETURN,RETURN,ZERO
0A5A          239  ;
0A5A 8D 8D 8D   240  MSG6      byt RETURN,RETURN,RETURN
0A5D C9 EE F3   241          asc "Installation of DOS 4.5L is complete."
0A60 F4 E1 EC
0A63 EC E1 F4
0A66 E9 EF EE
0A69 A0 EF E6
0A6C A0 C4 CF
0A6F D3 A0 B4
0A72 AE B5 CC
0A75 A0 E9 F3
0A78 A0 E3 EF
0A7B ED F0 EC
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0A7E E5 F4 E5
0A81 AE
0A82 8D 8D 8D 242      byt RETURN,RETURN,RETURN,ZERO
0A85 00
0A86      243      ;
0A86 8D 8D 244      ERRMSG byt RETURN,RETURN
0A88 C5 F2 F2 245      asc "Error from RWTS = 0x"
0A8B EF F2 A0
0A8E E6 F2 EF
0A91 ED A0 D2
0A94 D7 D4 D3
0A97 A0 BD A0
0A9A B0 F8
0A9C 00      246      byt ZERO
0A9D      247      ;
0A9D      248      ;
0A9D      249      COUNTER dfs 1,ZERO
0A9E      250      ;
0A9E      251      ;
0A9E      252      TBLTYPE dfs 1,1      ; IOB structure block
0A9F 60      253      SNUM16 hex 60      ; slot * 16
0AA0      254      DNUM dfs 1,2      ; drive number
0AA1      255      VOLEXPT dfs 1,ZERO      ; volume number
0AA2      256      TNUM dfs 1,2      ; track number
0AA3      257      SNUM dfs 1,ZERO      ; sector number
0AA4 00 00 258      DCTADR adr *-*      ; address of DCT table
0AA6 00 10 259      USRBUF adr IMAGBGN      ; user buffer address
0AA8      260      IOCBPHAS dfs 1,ZERO      ; half phases per track
0AA9 00      261      BYTCNT byt PAGESIZE      ; bytes to read/write
0AAA      262      CMDCODE dfs 1,RWTSWRIT      ; command
0AAB      263      ERRCODE dfs 1,ZERO      ; return error code
0AAC      264      VOLFND dfs 1,ZERO      ; return volume found
0AAD      265      SLOTFND dfs 1,ZERO      ; return slot found
0AAE      266      DRVFND dfs 1,ZERO      ; return drive found
0AAF      267      ;
0AAF      268      ;

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BSAVE INSTALL45L,D1,A\$0900,B,L\$01AF

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0AAF      269      usr INSTALL45L,D1
0AAF      270      ;
0AAF      271      ;
0AAF      272      stt "INSTALL45L Symbol Table"
0AAF      273      ;
0AAF      274      ;
0AAF      275      end 111

```

*** End of Assembly

Symbol List starts at 0x7800, ends at 0x7A1C, used 0x021C, remaining 0x3D80

Symbols unsorted:

ZERO	0000	NEGONE	00FF	RWTSWRIT	0002	CTRLD	0084	RETURN	008D
PAGESIZE	0100	DOSWARM	03D0	RWTS	03D9	PRTERADR	03E8	IMAGBGN	1000
DOSTART	9F00	DOSEND	B900	RWTSTART	B900	BOOTEND	C000	PART1	1A00
PART2	0700	IMAGLEN	2100	KEY	C000	CLRKEY	C010	HOME	FC58
CROUT	FD8E	PRBYTE	FDDA	COUT	FDED	WRDATA	0931	RWTS2FM	0980
PRTERERROR	0985	GETKEY	0988	PRTMSG	0995	MESGS	09A1	MSG1	09A1
MSG2	09C6	MSG3	09DD	MSG4	09FC	MSG5	0A41	MSG6	0A5A
ERRMSG	0A86	COUNTER	0A9D	TBLTYPE	0A9E	SNUM16	0A9F	DNUM	0AA0
VOLEXPT	0AA1	TNUM	0AA2	SNUM	0AA3	DCTADR	0AA4	USRBUF	0AA6
IOCBPHAS	0AA8	BYTCNT	0AA9	CMDCODE	0AAA	ERRCODE	0AAB	VOLFND	0AAC
SLOTFND	0AAD	DRVFND	0AAE						

Symbols alphabetically sorted:

BOOTEND	C000	BYTCNT	0AA9	CLRKEY	C010	CMDCODE	0AAA	COUNTER	0A9D
COUT	FDED	CROUT	FD8E	CTRLD	0084	DCTADR	0AA4	DNUM	0AA0
DOSEND	B900	DOSTART	9F00	DOSWARM	03D0	DRVFND	0AAE	ERRCODE	0AAB
ERRMSG	0A86	GETKEY	0988	HOME	FC58	IMAGBGN	1000	IMAGLEN	2100
IOCBPHAS	0AA8	KEY	C000	MSG1	09A1	MSG2	09C6	MSG3	09DD
MSG4	09FC	MSG5	0A41	MSG6	0A5A	MESGS	09A1	NEGONE	00FF
PAGESIZE	0100	PART1	1A00	PART2	0700	PRBYTE	FDDA	PRTERADR	03E8
PRTERERROR	0985	PRTMSG	0995	RETURN	008D	RWTS	03D9	RWTS2FM	0980
RWTSTART	B900	RWTSWRIT	0002	SLOTFND	0AAD	SNUM	0AA3	SNUM16	0A9F
TBLTYPE	0A9E	TNUM	0AA2	USRBUF	0AA6	VOLEXPT	0AA1	VOLFND	0AAC
WRDATA	0931	ZERO	0000						

Symbols numerically sorted:

ZERO	0000	RWTSWRIT	0002	CTRLD	0084	RETURN	008D	NEGONE	00FF
PAGESIZE	0100	DOSWARM	03D0	RWTS	03D9	PRTERADR	03E8	PART2	0700
WRDATA	0931	RWTS2FM	0980	PRTERERROR	0985	GETKEY	0988	PRTMSG	0995
MESGS	09A1	MSG1	09A1	MSG2	09C6	MSG3	09DD	MSG4	09FC
MSG5	0A41	MSG6	0A5A	ERRMSG	0A86	COUNTER	0A9D	TBLTYPE	0A9E
SNUM16	0A9F	DNUM	0AA0	VOLEXPT	0AA1	TNUM	0AA2	SNUM	0AA3
DCTADR	0AA4	USRBUF	0AA6	IOCBPHAS	0AA8	BYTCNT	0AA9	CMDCODE	0AAA
ERRCODE	0AAB	VOLFND	0AAC	SLOTFND	0AAD	DRVFND	0AAE	IMAGBGN	1000
PART1	1A00	IMAGLEN	2100	DOSTART	9F00	RWTSTART	B900	DOSEND	B900
KEY	C000	BOOTEND	C000	CLRKEY	C010	HOME	FC58	CROUT	FD8E
PRBYTE	FDDA	COUT	FDED						