

[illegible][illegible]

```

XX      XX  DDDDDDDD  SSSSSSSS  TTTTTTTTTT  RRRRRRRR  IIIIII  NN      NN  GGGGGGGG
XX      XX  DDDDDDDD  SSSSSSSS  TTTTTTTTTT  RRRRRRRR  IIIIII  NN      NN  GGGGGGGG
XX      XX  DD        DD  SS        TT        RR        II        NN      NN  GG
XX      XX  DD        DD  SS        TT        RR        II        NN      NN  GG
  XX  XX  DD        DD  SS        TT        RR        II        NNNN  NN  GG
  XX  XX  DD        DD  SS        TT        RR        II        NNNN  NN  GG
    XX  DD        DD  SS        TT        RR        II        NN  NN  NN  GG
    XX  DD        DD  SS        TT        RR        II        NN  NN  NN  GG
  XX  XX  DD        DD  SS        TT        RR        II        NN      NN  GG  GGGGGG
  XX  XX  DD        DD  SS        TT        RR        II        NN      NN  GG  GGGGGG
XX      XX  DD        DD  SS        TT        RR        II        NN      NN  GG      GG
XX      XX  DD        DD  SS        TT        RR        II        NN      NN  GG      GG
XX      XX  DDDDDDDD  SSSSSSSS  TT        RR        IIIIII  NN      NN  GGGGGG
XX      XX  DDDDDDDD  SSSSSSSS  TT        RR        IIIIII  NN      NN  GGGGGG

```



```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS

```


(1) 35
(1) 49
(1) 111

DECLARATIONS
Stored commands for word PFN arrays
Stored commands for longword PFN arrays

```
0000 1      .TITLE XDSTRING      XDELTA Stored Command Strings
0000 2      .IDENT 'V04-000'
0000 3
0000 4 *****
0000 5
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0000 24     *
0000 25 *****
0000 26
0000 27     Modified by:
0000 28
0000 29     V02-003 LJK0030      Lawrence J. Kenah      10-Jun-1981
0000 30     Add second set of stored text strings to accomodate the
0000 31     longword PFN arrays that result when more than 32 Mbytes
0000 32     of physical memory is present on the system.
0000 33
```

```
0000 35 .SUBTITLE DECLARATIONS
0000 36
0000 37 :
0000 38 : Equated Symbols:
0000 39 :
0000000D 0000 40 CR='015
0000000A 0000 41 LF='012
0000 42
0000 43 :
0000 44 : Own Storage:
0000 45 :
00000000 0000 46 .PSECT Z$DEBUGXDSTR,BYTE
0000 47
```



```
0000 49 .SUBTITLE Stored commands for word PFN arrays
0000 50 :
0000 51 : This first set of stored commands assumes that the PFN data base link
0000 52 : arrays contain word elements. This initial contents of both XE and XF
0000 53 : cause this initialization sequence to take place.
0000 54 :
0000 55 XDSSGT_WORD PFN::
0000 56 .ASCII <CR>^L^<CR>
0004 57 .ASCII ^X6/Q,6;X^<CR> ;SET X REGISTERS 6 THROUGH D
000D 58 .ASCII ^X7/Q,7;X^<CR>
0016 59 .ASCII ^X8/Q,8;X^<CR>
001F 60 .ASCII ^X9/Q,9;X^<CR>
0028 61 .ASCII ^XA/Q,A;X^<CR>
0031 62 .ASCII ^XE+70[W]^L^<CR> ;CR, LF
003C 63 .ASCII ^XB/Q,B;X^<CR>
0045 64 .ASCII ^XC/Q,C;X^<CR>
004E 65 .ASCII ^XD/Q,D;X^<CR>
0057 66 :
0057 67 : See ASSUME macros at bottom of page for meaning of hard coded constants
0057 68 :
0057 69 .ASCII ^XE=Q+8F,E;X^<CR> ;XE PRINTS PFN DATA BASE FOR PFN IN X0
0063 70 .ASCII ^XF=Q+7A,F;X^<CR> ;XF PRINTS PFN DATA BASE FOR PFN IN R0
006F 71 .BYTE 0 ;TERMINATOR FOR INITIAL LOAD OF XE AND XF
0070 72
0070 73 XDSSCRLFMSG:
0070 74 .BYTE CR,LF
0072 75 XDSS$PFNMSG:
0072 76 .ASCII ^ PFNDATA^
007A 77
007A 78 XDSS$PFNR0:
007A 79 .BYTE CR
007B 80 .ASCII ^XF-A[W]^L^<CR> ;CRLF
0085 81 .ASCII ^R0[W/Q,0^ <^X3B> ^X^ ;DISPLAY PFN, SET X0
008F 82 XDSS$PFNX0:
008F 83 .BYTE CR
0090 84 .ASCII ^XF-A[W]^L^+2[L]^L^+4'^^ ;CRLF 'PFN DATA'
009C 85
00A1 86 .BYTE CR
00A2 87 .ASCII ^LWX0=^ ;DISPLAY PFN
00A7 88 .ASCII ^X0+XC[B/^ ;DISPLAY STATE
00AF 89 .ASCII ^X0+XD[B/^ ;DISPLAY TYPE
00B7 90 .ASCII ^X0+2+X9[W/^ ;DISPLAY REFCOUNT
00C1 91 .ASCII ^X0+2+XB/^ ;DISPLAY BLINK/WSLX
00C9 92 .ASCII ^X0+2+XA/^ ;DISPLAY FLINK/SHRCNT
00D1 93 .ASCII ^X0+4+X7[L/^ ;DISPLAY PTE POINTER
00DB 94 .ASCII ^X0+4+X8/^ ;DISPLAY BACKUP ADDRESS
00E3 95 .ASCII ^X0+2+X6[W/^ ;DISPLAY SWAP VBN
00ED 96 .ASCII ^XF-A[W]^L^<CR> ;FINAL CRLF, SET LONGWORD DISPLAY
00F7 97 .BYTE 0
00F8 98 :
00F8 99 : The difference between the initial and working contents of both XE and
00F8 100 : XF must be hard coded into ASCII strings. The ASSUME macros here make
00F8 101 : sure that these strings are properly initialized in the event that text
00F8 102 : is added to cause these differences to change. A third assumption, the
00F8 103 : location of the CRLF string, is also checked with the ASSUME macro.
00F8 104 :
```

XDSTRING
V04-000

XDELTA Stored Command Strings
Stored commands for word PFN arrays

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00F8	105	ASSUME <XD\$PFNX0 - XD\$GT_WORD_PFN> EQ <^X8F> ; Stored string for XE
00F8	106	ASSUME <XD\$PFNR0 - XD\$GT_WORD_PFN> EQ <^X7A> ; Stored string for XF
00F8	107	
00F8	108	ASSUME <XD\$CRLFMSG - XD\$GT_WORD_PFN> EQ <^X70>
00F8	109	ASSUME <XD\$PFNR0 - XD\$CRLFMSG> EQ <^X0A>


```
00F8 111 .SUBTITLE Stored commands for longword PFN arrays
00F8 112 :
00F8 113 : This second set of stored commands is identical to the first except for
00F8 114 : those displays that reflect longword (instead of word) PFN sizes. All
00F8 115 : characters that are different are reflected in the comments. INIT detects
00F8 116 : the longword PFN arrays and alters the initial contents of XE and XF to
00F8 117 : this alternate set of stored commands.
00F8 118 :
00F8 119 XDSSGT_LONG PFN::
00F8 120 .ASCII <CR>^L^<CR>
00FC 121 .ASCII ^X6/Q,6;X^<CR> ;SET X REGISTERS 6 THROUGH D
0105 122 .ASCII ^X7/Q,7;X^<CR>
010E 123 .ASCII ^X8/Q,8;X^<CR>
0117 124 .ASCII ^X9/Q,9;X^<CR>
0120 125 .ASCII ^XA/Q,A;X^<CR>
0129 126 .ASCII ^XE+70[L]^L^<CR> ;CR, LF
0134 127 .ASCII ^XB/Q,B;X^<CR>
013D 128 .ASCII ^XC/Q,C;X^<CR>
0146 129 .ASCII ^XD/Q,D;X^<CR>
014F 130 .ASCII ^XE=Q+8F,E;X^<CR> ;XE PRINTS PFN DATA BASE FOR PFN IN XO
015B 131 .ASCII ^XF=Q+7A,F;X^<CR> ;XF PRINTS PFN DATA BASE FOR PFN IN RO
0167 132 .BYTE 0 ;TERMINATOR FOR INITIAL LOAD OF XE AND XF
0168 133
0168 134 XDSSCRLFMSG LONG:
0168 135 .BYTE CR,LF
016A 136 XDSSPFNMSG LONG:
016A 137 .ASCII ^ PFNDATA^
0172 138
0172 139 XDSSPFNRO LONG:
0172 140 .BYTE CR
0173 141 .ASCII ^XF-A[W]^L^<CR> ;CRLF
017D 142 .ASCII ^RO[L/Q,0^ <^X3B> ^X^ ;DISPLAY PFN, SET XO (* [L *)
0187 143 XDSSPFNXO LONG:
0187 144 .BYTE CR
0188 145 .ASCII ^XF-A[W]^L^+2[L]^L^+4'^^ ;CRLF 'PFN DATA'
0194 146
0199 146 .BYTE CR
019A 147 .ASCII ^[LXO=^ ;DISPLAY PFN (* [L *)
019F 148 .ASCII ^X0+XC[B/^ ;DISPLAY STATE
01A7 149 .ASCII ^X0+XD[B/^ ;DISPLAY TYPE
01AF 150 .ASCII ^X0+2+X9[W/^ ;DISPLAY REFCOUNT
01B9 151 .ASCII ^X0+4+XB[L/^ ;DISPLAY BLINK/WSLX (* times 4 , [L added *)
01C3 152 .ASCII ^X0+4+XA/^ ;DISPLAY FLINK/SHRCNT (* times 4 *)
01CB 153 .ASCII ^X0+4+X7/^ ;DISPLAY PTE POINTER (* [L eliminated *)
01D3 154 .ASCII ^X0+4+X8/^ ;DISPLAY BACKUP ADDRESS
01DB 155 .ASCII ^X0+2+X6[W/^ ;DISPLAY SWAP VBN
01E5 156 .ASCII ^XF-A[W]^L^<CR> ;FINAL CRLF, SET LONGWORD DISPLAY
01EF 157 .BYTE 0
01F0 158
01F0 159 :
01F0 160 : The difference between the initial and working contents of both XE and
01F0 161 : XF must be hard coded into ASCII strings. The ASSUME macros here make
01F0 162 : sure that these strings are properly initialized in the event that text
01F0 163 : is added to cause these differences to change. A third assumption, the
01F0 164 : location of the CRLF string, is also checked with the assume macro.
01F0 165 :
01F0 166 ASSUME <XDSSPFNXO_LONG - XDSSGT_LONG_PFN> EQ <^X8F> ; Stored string for XE
```


XDSTRING
V04-000

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XDELTA Stored Command Strings 15-SEP-1984 23:42:35 VAX/VMS Macro V04-00 Page 6
Stored commands for longword PFN arrays 5-SEP-1984 00:08:48 [DELTA.SRC]XDSTRING.MAR;1 (1)

01F0	167	ASSUME <XDSS\$PFNRO_LONG - XDSS\$GT_LONG_PFN> EQ <^X7A> ; Stored string for XF
01F0	168	
01F0	169	ASSUME <XDSS\$CRLFMSG_LONG - XDSS\$GT_LONG_PFN> EQ <^X70>
01F0	170	ASSUME <XDSS\$PFNRO_LONG - XDSS\$CRLFMSG_LONG> EQ <^X0A>
01F0	171	
01F0	172	.END

XDSTRING
Symbol table

XDELTA Stored Command Strings

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VAX/VMS Macro V04-00
[DELTA.SRC]XDSTRING.MAR;1

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```
CR      = 0000000D
LF      = 0000000A
XDSSCRLFMSG      00000070 R      01
XDSSCRLFMSG_LONG 00000168 R      01
XDSSGT_LONG_PFN  000000F8 RG     01
XDSSGT_WORD_PFN  00000000 RG     01
XDSSPFNMSG       00000072 R      01
XDSSPFNMSG_LONG  0000016A R      01
XDSSPFNRO        0000007A R      01
XDSSPFNRO_LONG   00000172 R      01
XDSSPFN XO       0000008F R      01
XDSSPFN XO_LONG  00000187 R      01
```

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes															
ABS	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE					
Z\$DEBUGXDSTR	000001F0 (496.)	01 (1.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE					

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.03	00:00:00.47
Command processing	130	00:00:00.34	00:00:01.89
Pass 1	110	00:00:00.53	00:00:04.52
Symbol table sort	0	00:00:00.00	00:00:00.01
Pass 2	48	00:00:00.28	00:00:01.12
Symbol table output	3	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	330	00:00:01.21	00:00:08.04

The working set limit was 1050 pages.
3379 bytes (7 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 12 non-local and 0 local symbols.
172 source lines were read in Pass 1, producing 12 object records in Pass 2.
1 page of virtual memory was used to define 1 macro.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYS.LIB]STARLET.MLB;2	1
TOTALS (all libraries)	1

6 GETS were required to define 1 macros.

There were no errors, warnings or information messages.

XDSTRING
VAX-11 Macro Run Statistics

XDELTA Stored Command Strings

C 10

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5-SEP-1984 00:08:48

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MACRO/LIS=LIS\$:XDSTRING/OBJ=OBJ\$:XDSTRING MSRC\$:XDSTRING/UPDATE=(ENH\$:XDSTRING)+EXECML\$/LIB

0102 AH-BT13A-SE
VAX/VMS V4.0

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