


```

BBBBBBBBB      AAAAAA      SSSSSSSS      PPPPPPPP      000000      SSSSSSSS
BBBBBBBBB      AAAAAA      SSSSSSSS      PPPPPPPP      000000      SSSSSSSS
BB          BB  AA          AA  SS          PP          PP  00          00  SS
BB          BB  AA          AA  SS          PP          PP  00          00  SS
BB          BB  AA          AA  SS          PP          PP  00          00  SS
BB          BB  AA          AA  SS          PP          PP  00          00  SS
BBBBBBBBB      AA          AA  SSSSSS      PPPPPPPP      00          00  SSSSSS
BBBBBBBBB      AA          AA  SSSSSS      PPPPPPPP      00          00  SSSSSS
BB          BB  AAAAAAAAAA      SS          PP          00          00  SS
BB          BB  AAAAAAAAAA      SS          PP          00          00  SS
BB          BB  AA          AA  SS          PP          00          00  SS
BB          BB  AA          AA  SS          PP          00          00  SS
BBBBBBBBB      AA          AA  SSSSSSSS      PP          000000      SSSSSSSS
BBBBBBBBB      AA          AA  SSSSSSSS      PP          000000      SSSSSSSS

```

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....
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....
....

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```

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
LLLLLLLLLLL IIIIII      SSSSSSSS
LLLLLLLLLLL IIIIII      SSSSSSSS

```

```

1 0001 0 MODULE BASSPOS (
2 0002 0 IDENT = '1-005'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: String support library
32 0032 1
33 0033 1 ABSTRACT: This module takes 2 input strings of any class and dtype
34 0034 1 and returns the position of the substring in the main string
35 0035 1 starting at an input position
36 0036 1
37 0037 1 ENVIRONMENT: User mode, AST level or not or mixed
38 0038 1
39 0039 1 AUTHOR: R. Will, CREATION DATE: 10-Mar-79
40 0040 1
41 0041 1 MODIFIED BY:
42 0042 1
43 0043 1 R. Will, 10-Mar-79 : VERSION 01
44 0044 1 01 - original
45 0045 1 1-002 - Fix bug with starting pos > searched string length. RW 14-Jul-79
46 0046 1 1-003 - Correct a typo in edit 002. JBS 25-JUL-1979
47 0047 1 1-004 - Make POS agree with DEC BASIC Standard Proposal. RW 23-Sept-79
48 0048 1 1-005 - CALL STR$ DELETE THIS MODULE WHEN COMPILER CALLS STR$. RW 1-NOV-79
49 0049 1 --
50 0050 1
51 0051 1 !<BLF/PAGE>

```

```

: 53      0052 1  | SWITCHES:
: 54      0053 1  |
: 55      0054 1  |
: 56      0055 1  |
: 57      0056 1 SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
: 58      0057 1  |
: 59      0058 1  |
: 60      0059 1  | LINKAGES:
: 61      0060 1  |
: 62      0061 1  |
: 63      0062 1  |
: 64      0063 1  | TABLE OF CONTENTS:
: 65      0064 1  |
: 66      0065 1  |
: 67      0066 1 FORWARD ROUTINE
: 68      0067 1   BAS$POS;                               ! find substring position
: 69      0068 1  |
: 70      0069 1  |
: 71      0070 1  | INCLUDE FILES:
: 72      0071 1  |
: 73      0072 1  |
: 74      0073 1 REQUIRE 'RTLIN:RTLPSECT';                 ! Declare PSECTS code
: 75      0168 1  |
: 76      0169 1  |
: 77      0170 1  | MACROS:
: 78      0171 1  |
: 79      0172 1  |
: 80      0173 1  | EQUATED SYMBOLS:
: 81      0174 1  |
: 82      0175 1  |
: 83      0176 1  | PSECT DECLARATIONS
: 84      0177 1  |
: 85      0178 1 DECLARE_PSECTS (BAS);
: 86      0179 1  |
: 87      0180 1  | OWN STORAGE:
: 88      0181 1  |
: 89      0182 1  |
: 90      0183 1  | EXTERNAL REFERENCES:
: 91      0184 1  |
: 92      0185 1  |
: 93      0186 1 EXTERNAL ROUTINE
: 94      0187 1   STR$POSITION;                             ! do find

```

```

: 96      0188 1 GLOBAL ROUTINE BASSPOS (SRC_DESC,      | descriptor of string to search
: 97      0189 1      SUB_DESC,                      | descriptor of string to find
: 98      0190 1      START_POS,                      | value of position to start search
: 99      0191 1      ) : =
100     0192 1
101     0193 1
102     0194 1  ++
103     0195 1  FUNCTIONAL DESCRIPTION: This routine takes two source strings of any
104     0196 1  dtype and class and finds the position of the substring in the
105     0197 1  source string starting at the input starting position. The routine
106     0198 1  returns the position of the substring in the source string.
107     0199 1  FORMAL PARAMETERS:
108     0200 1
109     0201 1      SRC_DESC.rt.dx                    pointer to descriptor of string to be searched
110     0202 1      SUB_DESC.rt.dx                    pointer to descriptor of string to find
111     0203 1      START_POS.rl.v                     value of position in source to begin search
112     0204 1
113     0205 1  IMPLICIT INPUTS:
114     0206 1      NONE
115     0207 1
116     0208 1  IMPLICIT OUTPUTS:
117     0209 1
118     0210 1      NONE
119     0211 1
120     0212 1
121     0213 1  ROUTINE VALUE:
122     0214 1  COMPLETION CODES:
123     0215 1
124     0216 1      FIND_POS.wlu.v                     value of start position of substr in src strng
125     0217 1
126     0218 1  SIDE EFFECTS:
127     0219 1      NONE
128     0220 1
129     0221 1
130     0222 1  --
131     0223 1
132     0224 2  BEGIN
133     0225 2
134     0226 2  MAP SRC_DESC : REF BLOCK [8,BYTE],
135     0227 2      SUB_DESC : REF BLOCK [8,BYTE];
136     0228 2
137     0229 2  RETURN STR$POSITION (SRC_DESC [0,0,0,0], SUB_DESC [0,0,0,0], START_POS);
138     0230 1  END;

```

```

.TITLE BASSPOS
.IDENT \1-005\

.EXTRN STR$POSITION

.PSECT _BAS$CODE,NOWRT, SHR, PIC,2

.ENTRY BASSPOS, Save nothing
PUSHAB START_POS
MOVQ SRC_DESC, -(SP)
CALLS #3, STR$POSITION
RET

```

```

00000000G 7E 00 0C AC 0000 0000
04 AC 9F 00002
03 FB 00009
04 00010

```

```

: 0188
: 0229
:
: 0230

```

BASSPOS
1-005

H 9
16-Sep-1984 00:58:36
14-Sep-1984 11:56:26

VAX-11 BLISS-32 V4.0-742
[BASRTL.SRC]BASPOS.B32;1

Page 4
(3)

; Routine Size: 17 bytes, Routine Base: _BASSCODE + 0000

```
: 139      0231 1
: 140      0232 1 END
: 141      0233 1
: 142      0234 0 ELUDOM
                                !End of module
```

PSECT SUMMARY

```
:
: Name          Bytes          Attributes
:
: _BASSCODE     17 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:BASPOS/OBJ=OBJ\$:BASPOS MSRC\$:BASPOS/UPDATE=(ENH\$:BASPOS)

```
: Size:          17 code + 0 data bytes
: Run Time:      00:01.7
: Elapsed Time: 00:03.8
: Lines/CPU Min: 8407
: Lexemes/CPU-Min: 23353
: Memory Used: 19 pages
: Compilation Complete
```

0029 AH-BT13A-SE
VAX/VMS V4.0

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BASOPEN
LIS

BASPOWJ
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BASPOS
LIS

BASPOWJ
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BASOPENDE
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BASPOWGG
LIS

BASPOWH
LIS

BASPOWRJ
LIS

BASPOWII
LIS

BASPURJOB
LIS

BASPOWDD
LIS

BASOPENZE
LIS

BASPOWR
LIS

BASPOWJ
LIS

BASPOWR
LIS

BASPOWH
LIS

BASPOWRR
LIS