COBRTL

```
 CCCCCCCC     OOOOOO     BBBBBBBB    SSSSSSSS  PPPPPPPP     AAAAAA   NN      NN   CCCCCCCC
 CCCCCCCC     OOOOOO     BBBBBBBB    SSSSSSSS  PPPPPPPP     AAAAAA   NN      NN   CCCCCCCC
CC          OO    OO    BB      BB  SS        PP      PP   AA    AA  NNNN    NN  CC
CC          OO    OO    BB      BB  SS        PP      PP   AA    AA  NNNN    NN  CC
CC          OO    OO    BB      BB  SS        PP      PP   AA    AA  NN NN   NN  CC
CC          OO    OO    BB      BB  SS        PP      PP   AA    AA  NN NN   NN  CC
CC          OO    OO    BBBBBBBB    SSSSSS    PPPPPPPP     AA    AA  NN  NN  NN  CC
CC          OO    OO    BBBBBBBB    SSSSSS    PPPPPPPP     AA    AA  NN  NN  NN  CC
CC          OO    OO    BB      BB      SS    PP          AAAAAAAAAA NN   NNNN   CC
CC          OO    OO    BB      BB      SS    PP          AAAAAAAAAA NN   NNNN   CC
CC          OO    OO    BB      BB      SS    PP          AA    AA   NN    NN    CC
CC          OO    OO    BB      BB      SS    PP          AA    AA   NN    NN    CC
 CCCCCCCC     OOOOOO     BBBBBBBB    SSSSSSSS  PP          AA    AA  NN    NN     CCCCCCCC
 CCCCCCCC     OOOOOO     BBBBBBBB    SSSSSSSS  PP          AA    AA  NN    NN     CCCCCCCC
```

```
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
```

```
0000    1              .TITLE  COB$AB_SPANC    COBOL SPANC Translation Table
0000    2              .IDENT  /1-0047         ; File: COBSPANC.MAR
0000    3
0000    4
0000    5
0000    6      ;******************************************************************
0000    7      ;*                                                                *
0000    8      ;*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                       *
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0000   24      ;*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.       *
0000   25      ;*                                                                *
0000   26      ;*                                                                *
0000   27      ;******************************************************************
0000   28
0000   29      ; FACILITY: COBOL SUPPORT
0000   30      ;++
0000   31      ; ABSTRACT:
0000   32      ;       This module contains the translatior. table used in conjunction with
0000   33      ;       the SPANC instruction by compiled code.
0000   34      ;
0000   35      ;
0000   36      ;--
0000   37      ;
0000   38      ; VERSION: 1
0000   39      ;
0000   40      ; HISTORY:
0000   41      ;
0000   42      ; AUTHOR:
0000   43      ;       Marty Jack, 11-Mar-1979
0000   44      ;
0000   45      ; MODIFIED BY:
0000   46      ;
0000   47      ;
0000   48      ;
```

COB$AB_SPANC
1-004

COBOL SPANC Translation Table    15-SEP-1984 23:46:41  VAX/VMS Macro V04-00    Page 2
HISTORY ; Detailed Current Edit History  6-SEP-1984 10:49:19  [COBRTL.SRC]COBSPANC.MAR;1    (2)

E 4

```
0000    50              .SBTTL  HISTORY            ; Detailed Current Edit History
0000    51
0000    52
0000    53 ; Edit History for Version 1 of COBSPANC
0000    54 ;
0000    55 ; 1-001 - Original.  MLJ 11-Mar-1979
0000    56 ; 1-002 - Add bit 4 for use in overpunch BLANK WHEN ZERO code.  MLJ 16-Apr-1979
0000    57 ; 1-003 - Cosmetic changes.  RKR 21-OCT-79
0000    58 ; 1-004 - Add bits 5 and 6 for use in COMP-3 IS NUMERIC code.  PDG 24-Oct-1979
```

COB$AB_SPANC
1-004

COBOL SPANC Translation Table
DECLARATIONS

F 4

15-SEP-1984 23:46:41   VAX/VMS Macro V04-00        Page   3
6-SEP-1984 10:49:19   [COBRTL.SRC]COBSPANC.MAR;1          (3)

```
0000     60              .SBTTL  DECLARATIONS
0000     61
0000     62  ;
0000     63  ; INCLUDE FILES:
0000     64  ;
0000     65
0000     66  ;
0000     67  ; EXTERNAL SYMBOLS:
0000     68  ;     NONE
0000     69  ;
0000     70
0000     71  ;
0000     72  ; MACROS:
0000     73  ;     NONE
0000     74  ;
0000     75
0000     76  ;
0000     77  ; PSECT DECLARATIONS:
00000000 78        .PSECT  _COB$CODE        PIC, SHR, LONG, EXE, NOWRT
0000     79
0000     80  ;
0000     81  ; EQUATED SYMBOLS:
0000     82  ;     NONE
0000     83  ;
0000     84
0000     85
0000     86  ; OWN STORAGE:
0000     87  ;     NONE
0000     88  ;
```

```
                              0000      90                    .SBTTL  COB$AB_SPANC
                              0000      91
                              0000      92      ;++
                              0000      93      ; FUNCTIONAL DESCRIPTION:
                              0000      94      ;
                              0000      95      ;       This is the translation table used by SPANC instructions in
                              0000      96      ;       compiled code.
                              0000      97      ;
                              0000      98      ;       Bit 0:              Valid ALPHABETIC characters (A-Z, a-z, space)
                              0000      99      ;       Bit 1:              Valid digits
                              0000     100      ;       Bit 2:              Valid overpunch signs
                              0000     101      ;       Bit 3:              Valid separate signs
                              0000     102      ;       Bit 4:              Valid overpunch representations of 0
                              0000     103      ;       Bit 5:              Valid pair of digit nibbles
                              0000     104      ;       Bit 6:              Valid digit nibble, sign nibble
                              0000     105      ;--
                              0000     106
                              0000     107      COB$AB_SPANC::
20 20 20 20 20 20 20 20       0000     108              .BYTE   ^X20,^X20,^X20,^X20,^X20,^X20,^X20,^X20    ; 00-07
40 40 40 40 40 40 20 20       0008     109              .BYTE   ^X20,^X20,^X40,^X40,^X40,^X40,^X40,^X40    ; 08-0F
20 20 20 20 20 20 20 20       0010     110              .BYTE   ^X20,^X20,^X20,^X20,^X20,^X20,^X20,^X20    ; 10-17
40 40 40 40 40 40 20 20       0018     111              .BYTE   ^X20,^X20,^X40,^X40,^X40,^X40,^X40,^X40    ; 18-1F
20 20 20 20 20 20 34 21       0020     112              .BYTE   ^X21,^X34,^X20,^X20,^X20,^X20,^X20,^X20    ; 20-27
40 40 48 40 48 40 20 20       0028     113              .BYTE   ^X20,^X20,^X40,^X48,^X40,^X48,^X40,^X40    ; 28-2F
26 26 26 26 26 26 26 36       0030     114              .BYTE   ^X36,^X26,^X26,^X26,^X26,^X26,^X26,^X26    ; 30-37
54 40 40 40 40 54 26 26       0038     115              .BYTE   ^X26,^X26,^X54,^X40,^X40,^X40,^X40,^X54    ; 38-3F
25 25 25 25 25 25 25 20       0040     116              .BYTE   ^X20,^X25,^X25,^X25,^X25,^X25,^X25,^X25    ; 40-47
45 45 45 45 45 45 45 25       0048     117              .BYTE   ^X25,^X25,^X45,^X45,^X45,^X45,^X45,^X45    ; 48-4F
21 21 21 21 21 25 25 25       0050     118              .BYTE   ^X25,^X25,^X25,^X21,^X21,^X21,^X21,^X21    ; 50-57
40 40 54 40 54 41 21 21       0058     119              .BYTE   ^X21,^X21,^X41,^X54,^X40,^X54,^X40,^X40    ; 58-5F
21 21 21 21 21 21 21 20       0060     120              .BYTE   ^X20,^X21,^X21,^X21,^X21,^X21,^X21,^X21    ; 60-67
41 41 41 41 41 41 41 21       0068     121              .BYTE   ^X21,^X21,^X41,^X41,^X41,^X41,^X41,^X41    ; 68-6F
21 21 21 21 21 21 21 21       0070     122              .BYTE   ^X21,^X21,^X21,^X21,^X21,^X21,^X21,^X21    ; 70-77
40 40 54 40 54 41 21 21       0078     123              .BYTE   ^X21,^X21,^X41,^X54,^X40,^X54,^X40,^X40    ; 78-7F
20 20 20 20 20 20 20 20       0080     124              .BYTE   ^X20,^X20,^X20,^X20,^X20,^X20,^X20,^X20    ; 80-87
40 40 40 40 40 40 20 20       0088     125              .BYTE   ^X20,^X20,^X40,^X40,^X40,^X40,^X40,^X40    ; 88-8F
20 20 20 20 20 20 20 20       0090     126              .BYTE   ^X20,^X20,^X20,^X20,^X20,^X20,^X20,^X20    ; 90-97
40 40 40 40 40 40 20 20       0098     127              .BYTE   ^X20,^X20,^X40,^X40,^X40,^X40,^X40,^X40    ; 98-9F
00 00 00 00 00 00 00 00       00A0     128              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; A0-A7
00 00 00 00 00 00 00 00       00A8     129              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; A8-AF
00 00 00 00 00 00 00 00       00B0     130              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; B0-B7
00 00 00 00 00 00 00 00       00B8     131              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; B8-BF
00 00 00 00 00 00 00 00       00C0     132              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; C0-C7
00 00 00 00 00 00 00 00       00C8     133              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; C8-CF
00 00 00 00 00 00 00 00       00D0     134              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; D0-D7
00 00 00 00 00 00 00 00       00D8     135              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; D8-DF
00 00 00 00 00 00 00 00       00E0     136              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; E0-E7
00 00 00 00 00 00 00 00       00E8     137              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; E8-EF
00 00 00 00 00 00 00 00       00F0     138              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; F0-F7
00 00 00 00 00 00 00 00       00F8     139              .BYTE   ^X00,^X00,^X00,^X00,^X00,^X00,^X00,^X00    ; F8-FF
                              0100     140      ;
                              0100     141              .END
```

COB$AB_SPANC        00000000 RG    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
_COB$CODE                     00000100 (  256.)  01 (  1.)    PIC  USR  CON  REL  LCL    SHR    EXE   RD   NOWRT  NOVEC  LONG

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

Phase                    Page faults    CPU Time        Elapsed Time
-----                    -----------    --------        ------------
Initialization                   30    00:00:00.05      00:00:00.99
Command processing              109    00:00:00.30      00:00:02.84
Pass 1                           64    00:00:00.44      00:00:02.37
Symbol table sort                 0    00:00:00.00      00:00:00.00
Pass 2                           42    00:00:00.20      00:00:01.39
Symbol table output               2    00:00:00.01      00:00:00.01
Psect synopsis output             2    00:00:00.01      00:00:00.01
Cross-reference output            0    00:00:00.00      00:00:00.00
Assembler run totals            251    00:00:01.01      00:00:07.61

The working set limit was 900 pages.
2693 bytes (6 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 1 non-local and 0 local symbols.
141 source lines were read in Pass 1, producing 8 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

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

Macro library name                            Macros defined
------------------                            --------------
_$255$DUA28:[SYSLIB]STARLET.MLB;2                   0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS$:COBSPANC/OBJ=OBJ$:COBSPANC MSRC$:COBSPANC/UPDATE=(ENH$:COBSPANC)

COBRMSBLO
LIS

COBSPANC
LIS

COBSWITCH
LIS

COBRESTVA
LIS

CONVSHR
MAP

CONVCOMIO
LIS

COBSETSWI
LIS

CONVDEF
MDL

CONVLINK
REQ

COBSPANC2
LIS

CONV

CONVERT
MAP

CONVCALL
LIS

COBVECTOR
LIS

CONVERT
REQ

RECLAIM
MAP

ADDKEY
LIS