```
LLL            IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRRR   TTTTTTTTTTTTTTTT   LLL
LLL            IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRRR   TTTTTTTTTTTTTTTT   LLL
LLL            IIIIIIIIII   BBBBBBBBBBBB   RRRRRRRRRRRR   TTTTTTTTTTTTTTTT   LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLL               III       BBBBBBBBBBBB   RRRRRRRRRRR          TTT          LLL
LLL               III       BBBBBBBBBBBB   RRRRRRRRRRR          TTT          LLL
LLL               III       BBB      BBB   RRR   RRR            TTT          LLL
LLL               III       BBB      BBB   RRR   RRR            TTT          LLL
LLL               III       BBB      BBB   RRR    RRR           TTT          LLL
LLL               III       BBB      BBB   RRR     RRR          TTT          LLL
LLL               III       BBB      BBB   RRR      RRR         TTT          LLL
LLLLLLLLLLLLLLL   IIIIIIIIII BBBBBBBBBBBB  RRR      RRR         TTT          LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL   IIIIIIIIII BBBBBBBBBBBB  RRR      RRR         TTT          LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL   IIIIIIIIII BBBBBBBBBBBB  RRR      RRR         TTT          LLLLLLLLLLLLLLL
```

**FILE**ID**LIBCVTOU

```
LL          IIIIII  BBBBBBBB      CCCCCCC  VV      VV  TTTTTTTTTT    000000    UU        UU
LL          IIIIII  BBBBBBBB     CCCCCCCC  VV      VV  TTTTTTTTTT    000000    UU        UU
LL            II    BB      BB  CC          VV    VV       TT       00    00   UU        UU
LL            II    BB      BB  CC          VV    VV       TT       00    00   UU        UU
LL            II    BB      BB  CC          VV    VV       TT       00    00   UU        UU
LL            II    BBBBBBBB    CC          VV    VV       TT       00    00   UU        UU
LL            II    BBBBBBBB    CC          VV    VV       TT       00    00   UU        UU
LL            II    BB      BB  CC          VV    VV       TT       00    00   UU        UU
LL            II    BB      BB  CC           VV  VV        TT       00    00   UU        UU
LL            II    BB      BB  CC           VV  VV        TT       00    00   UU        UU
LL            II    BB      BB  CC            VV VV        TT       00    00   UU        UU    ....
LLLLLLLLLL  IIIIII  BBBBBBBB     CCCCCCC      VV          TT        000000    UUUUUUUUUU       ....
LLLLLLLLLL  IIIIII  BBBBBBBB     CCCCCCC      VV          TT        000000    UUUUUUUUUU       ....

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
```

LIB$AB_CVT_O_U
1-003

H 2
Overpunch to Unsigned Translation Table   15-SEP-1984 23:51:29   VAX/VMS Macro V04-00        Page  1
                                           6-SEP-1984 11:04:51   [LIBRTL.SRC]LIBCVTOU.MAR;1              (1)

```
0000      1              .TITLE  LIB$AB_CVT_O_U   Overpunch to Unsigned Translation Table
0000      2              .IDENT  /1-0037/            ; File: LIBCVTOU.MAR
0000      3
0000      4  ;
0000      5  ;*************************************************************************
0000      6  ;*                                                                       *
0000      7  ;*   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                             *
0000      8  ;*   DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.              *
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0000     23  ;*   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.             *
0000     24  ;*                                                                       *
0000     25  ;*                                                                       *
0000     26  ;*************************************************************************
0000     27  ;
0000     28  ; FACILITY: LIBRARY SUPPORT
0000     29  ;++
0000     30  ; ABSTRACT:
0000     31  ;       This module contains the translation table for overpunch to unsigned
0000     32  ;       conversion using the MOVTC instruction.
0000     33  ;
0000     34  ;
0000     35  ;--
0000     36  ;
0000     37  ; VERSION: 1
0000     38  ;
0000     39  ; HISTORY:
0000     40  ;
0000     41  ; AUTHOR:
0000     42  ;       Marty Jack, 08-Apr-1979
0000     43  ;
0000     44  ; MODIFIED BY:
0000     45  ;
0000     46  ;
0000     47  ;
```

LIB$AB_CVT_O_U
1-003

I  2
Overpunch to Unsigned Translation Table  15-SEP-1984 23:51:29  VAX/VMS Macro V04-00      Page  2
HISTORY  ; Detailed Current Edit History  6-SEP-1984 11:04:51  [LIBRTL.SRC]LIBCVTOU.MAR;1      (2)

```
        0000    49              .SBTTL  HISTORY            ; Detailed Current Edit History
        0000    50
        0000    51
        0000    52 ; Edit History for Version 1 of LIBCVTOU
        0000    53 ;
        0000    54 ; 1-001 - Original.  MLJ 8-Apr-1979
        0000    55 ; 1-002 - Made LIBCVTOU out of rev. 1 of COBCVTOU. RKR 21-Aug-1979
        0000    56 ; 1-003 - Cosmetic changes.  RKR 21-OCT-79
```

```
0000         58              .SBTTL  DECLARATIONS
0000         59
0000         60  ;
0000         61  ; INCLUDE FILES:
0000         62  ;
0000         63  ;
0000         64  ;
0000         65  ; EXTERNAL SYMBOLS:
0000         66  ;     NONE
0000         67  ;
0000         68
0000         69  ;
0000         70  ; MACROS:
0000         71  ;     NONE
0000         72  ;
0000         73
0000         74  ;
0000         75  ; PSECT DECLARATIONS:
00000000     76              .PSECT  _LIB$CODE        PIC, SHR, LONG, EXE, NOWRT
0000         77
0000         78  ;
0000         79  ; EQUATED SYMBOLS:
0000         80  ;     NONE
0000         81  ;
0000         82
0000         83  ;
0000         84  ; OWN STORAGE:
0000         85  ;     NONE
0000         86  ;
```

```
                               0000        88              .SBTTL  LIB$AB_CVT_O_U
                               0000        89
                               0000        90      ;++
                               0000        91      ; FUNCTIONAL DESCRIPTION:
                               0000        92      ;
                               0000        93      ;       This is the overpunch to unsigned translation table.
                               0000        94      ;       It maps every character to itself except that it maps
                               0000        95      ;       the overpunch sign characters to the corresponding
                               0000        96      ;       digit.
                               0000        97      ;
                               0000        98      ;--
                               0000        99
                               0000       100      LIB$AB_CVT_O_U::
07 06 05 04 03 02 01 00        0000       101              .BYTE   ^X00,^X01,^X02,^X03,^X04,^X05,^X06,^X07
0F 0E 0D 0C 0B 0A 09 08        0008       102              .BYTE   ^X08,^X09,^X0A,^X0B,^X0C,^X0D,^X0E,^X0F
17 16 15 14 13 12 11 10        0010       103              .BYTE   ^X10,^X11,^X12,^X13,^X14,^X15,^X16,^X17
1F 1E 1D 1C 1B 1A 19 18        0018       104              .BYTE   ^X18,^X19,^X1A,^X1B,^X1C,^X1D,^X1E,^X1F
27 26 25 24 23 22 30 20        0020       105              .BYTE   ^X20,^X30,^X22,^X23,^X24,^X25,^X26,^X27
2F 2E 2D 2C 2B 2A 29 28        0028       106              .BYTE   ^X28,^X29,^X2A,^X2B,^X2C,^X2D,^X2E,^X2F
37 36 35 34 33 32 31 30        0030       107              .BYTE   ^X30,^X31,^X32,^X33,^X34,^X35,^X36,^X37
30 3E 3D 3C 3B 30 39 38        0038       108              .BYTE   ^X38,^X39,^X30,^X3B,^X3C,^X3D,^X3E,^X30
37 36 35 34 33 32 31 40        0040       109              .BYTE   ^X40,^X31,^X32,^X33,^X34,^X35,^X36,^X37
36 35 34 33 32 31 39 38        0048       110              .BYTE   ^X38,^X39,^X31,^X32,^X33,^X34,^X35,^X36
57 56 55 54 53 39 38 37        0050       111              .BYTE   ^X37,^X38,^X39,^X53,^X54,^X55,^X56,^X57
5F 5E 30 5C 30 5A 59 58        0058       112              .BYTE   ^X58,^X59,^X5A,^X30,^X5C,^X30,^X5E,^X5F
67 66 65 64 63 62 61 60        0060       113              .BYTE   ^X60,^X61,^X62,^X63,^X64,^X65,^X66,^X67
6F 6E 6D 6C 6B 6A 69 68        0068       114              .BYTE   ^X68,^X69,^X6A,^X6B,^X6C,^X6D,^X6E,^X6F
77 76 75 74 73 72 71 70        0070       115              .BYTE   ^X70,^X71,^X72,^X73,^X74,^X75,^X76,^X77
7F 7E 30 7C 30 7A 79 78        0078       116              .BYTE   ^X78,^X79,^X7A,^X30,^X7C,^X30,^X7E,^X7F
87 86 85 84 83 82 81 80        0080       117              .BYTE   ^X80,^X81,^X82,^X83,^X84,^X85,^X86,^X87
8F 8E 8D 8C 8B 8A 89 88        0088       118              .BYTE   ^X88,^X89,^X8A,^X8B,^X8C,^X8D,^X8E,^X8F
97 96 95 94 93 92 91 90        0090       119              .BYTE   ^X90,^X91,^X92,^X93,^X94,^X95,^X96,^X97
9F 9E 9D 9C 9B 9A 99 98        0098       120              .BYTE   ^X98,^X99,^X9A,^X9B,^X9C,^X9D,^X9E,^X9F
A7 A6 A5 A4 A3 A2 A1 A0        00A0       121              .BYTE   ^XA0,^XA1,^XA2,^XA3,^XA4,^XA5,^XA6,^XA7
AF AE AD AC AB AA A9 A8        00A8       122              .BYTE   ^XA8,^XA9,^XAA,^XAB,^XAC,^XAD,^XAE,^XAF
B7 B6 B5 B4 B3 B2 B1 B0        00B0       123              .BYTE   ^XB0,^XB1,^XB2,^XB3,^XB4,^XB5,^XB6,^XB7
BF BE BD BC BB BA B9 B8        00B8       124              .BYTE   ^XB8,^XB9,^XBA,^XBB,^XBC,^XBD,^XBE,^XBF
C7 C6 C5 C4 C3 C2 C1 C0        00C0       125              .BYTE   ^XC0,^XC1,^XC2,^XC3,^XC4,^XC5,^XC6,^XC7
CF CE CD CC CB CA C9 C8        00C8       126              .BYTE   ^XC8,^XC9,^XCA,^XCB,^XCC,^XCD,^XCE,^XCF
D7 D6 D5 D4 D3 D2 D1 D0        00D0       127              .BYTE   ^XD0,^XD1,^XD2,^XD3,^XD4,^XD5,^XD6,^XD7
DF DE DD DC DB DA D9 D8        00D8       128              .BYTE   ^XD8,^XD9,^XDA,^XDB,^XDC,^XDD,^XDE,^XDF
E7 E6 E5 E4 E3 E2 E1 E0        00E0       129              .BYTE   ^XE0,^XE1,^XE2,^XE3,^XE4,^XE5,^XE6,^XE7
EF EE ED EC EB EA E9 E8        00E8       130              .BYTE   ^XE8,^XE9,^XEA,^XEB,^XEC,^XED,^XEE,^XEF
F7 F6 F5 F4 F3 F2 F1 F0        00F0       131              .BYTE   ^XF0,^XF1,^XF2,^XF3,^XF4,^XF5,^XF6,^XF7
FF FE FD FC FB FA F9 F8        00F8       132              .BYTE   ^XF8,^XF9,^XFA,^XFB,^XFC,^XFD,^XFE,^XFF
                               0100       133      ;
                               0100       134              .END
```

LIB$AB_CVT_O_U    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
_LIB$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                  31       00:00:00.05    00:00:02.69
Command processing             113       00:00:00.29    00:00:02.75
Pass 1                          66       00:00:00.45    00:00:02.73
Symbol table sort                0       00:00:00.00    00:00:00.00
Pass 2                          38       00:00:00.21    00:00:03.97
Symbol table output              2       00:00:00.01    00:00:00.00
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           254       00:00:01.02    00:00:12.16
```

The working set limit was 900 pages.
2639 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.
134 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$:LIBCVTOU/OBJ=OBJ$:LIBCVTOU MSRC$:LIBCVTOU/UPDATE=(ENH$:LIBCVTOU)

LIBCVTTPU
LIS

LIBCVTLO
LIS

LIBDAY
LIS

LIBDECOVE
LIS

LIBCVTOU
LIS

LIBCVTPTU
LIS

LIBCVTTPO
LIS

LIBDECODF
LIS

LIBDOCOM
LIS

LIBCVTTPZ
LIS

LIBDATETI
LIS

LIBDELETE
LIS

LIBCVTPTO
LIS

LIBDAYWK
LIS

LIBCVTPTZ
LIS