


```
LL      IIIII  BBBB BBBB  TTTTTTTTTT  AAAAAA  BBBB BBBB  MM      MM      AAAAAA  CCCCCCCC
LL      IIIII  BBBB BBBB  TTTTTTTTTT  AAAAAA  BBBB BBBB  MM      MM      AAAAAA  CCCCCCCC
LL      II     BB      BB  TT      AA      AA  BB      BB  MMMM  MMMM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BB      BB  MMMM  MMMM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BB      BB  MM  MM  MM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BBBB BBBB  MM  MM  MM  AA      AA  CC
LL      II     BBBB BBBB  TT      AA      AA  BBBB BBBB  MM  MM  MM  AA      AA  CC
LL      II     BBBB BBBB  TT      AA      AA  BBBB BBBB  MM  MM  MM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BB      BB  MM  MM  MM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BB      BB  MM  MM  MM  AA      AA  CC
LL      II     BB      BB  TT      AA      AA  BB      BB  MM  MM  MM  AA      AA  CC
LLLLLLLLLL  IIIII  BBBB BBBB  TT      AA      AA  BBBB BBBB  MM  MM  MM  AA      AA  CC
LLLLLLLLLL  IIIII  BBBB BBBB  TT      AA      AA  BBBB BBBB  MM  MM  MM  AA      AA  CC

MM      MM      AAAAAA  RRRRRRRR
MM      MM      AAAAAA  RRRRRRRR
MMMM  MMMM  AA      AA  RR      RR
MMMM  MMMM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RR      RR
MM  MM  MM  AA      AA  RRRRRRRR
MM  MM  MM  AA      AA  RRRRRRRR
MM  MM  AAAAAAAAAA  RR  RR
MM  MM  AAAAAAAAAA  RR  RR
MM  MM  AA      AA  RR      RR
MM  MM  AA      AA  RR      RR
MM  MM  AA      AA  RR      RR
MM  MM  AA      AA  RR      RR
```


.TITLE LIB\$\$TABLE_MACROS - Define macros for LIB\$ tables
.IDENT /1-001/ ; File: LIBTABMAC.MAR Edit: SBL1001

```
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```

++
: FACILITY: General Utility Library

: ABSTRACT:

: This file contains macros that define the various translation
: tables that reside in the Run-Time Library. These macros are
: inserted into [RTL.OBJ]\$MLB during the system build, and are
: invoked by both LIBVECTOR and by the individual source files
: to create object modules.

: The name of each macro is the name of the appropriate table prefixed
: with '\$'.

: ENVIRONMENT: No executable code.

: AUTHOR: Steven B. Lionel, CREATION DATE: 28-October-1982

: MODIFIED BY:

: 1-001 - Original. SBL 28-October-1982

:--

.SBTTL DECLARATIONS

LIBRARY MACRO CALLS:

NONE

EXTERNAL DECLARATIONS:

.DSABL GBL
NONE

; Force all external symbols to be declared

MACROS:

See below

EQUATED SYMBOLS:

NONE

OWN STORAGE:

NONE

PSECT DECLARATIONS:

No generated code or data.

.SBTTL \$LIB\$AB_ASC_EBC

++
FUNCTIONAL DESCRIPTION:

This is the ASCII to EBCDIC translation table, based on
ANSI X3.26 - 1970

All ASCII graphics are translated to their equivalent EBCDIC
graphic except for:

ASCII graphic	EBCDIC graphic
[(left square bracket)	cents sign
! (exclamation point)	short vertical bar
^ (circumflex)	logical not
] (right square bracket)	! (exclamation point)

```

.MACRO $LIB$AB_ASC_EBC
.BYTE ^0000,^0001,^0002,^0003,^0067,^0055,^0056,^0057 :000-007
.BYTE ^0026,^0005,^0045,^0013,^0014,^0015,^0016,^0017 :010-017
.BYTE ^0020,^0021,^0022,^0023,^0074,^0075,^0062,^0046 :020-027
.BYTE ^0030,^0031,^0077,^0047,^0034,^0035,^0036,^0037 :030-037
.BYTE ^0100,^0117,^0177,^0173,^0133,^0154,^0120,^0175 :040-047
.BYTE ^0115,^0135,^0134,^0116,^0153,^0140,^0113,^0141 :050-057
.BYTE ^0360,^0361,^0362,^0363,^0364,^0365,^0366,^0367 :060-067
.BYTE ^0370,^0371,^0172,^0136,^0114,^0176,^0156,^0157 :070-077
.BYTE ^0174,^0301,^0302,^0303,^0304,^0305,^0306,^0307 :100-107
.BYTE ^0310,^0311,^0321,^0322,^0323,^0324,^0325,^0326 :110-117
.BYTE ^0327,^0330,^0331,^0342,^0343,^0344,^0345,^0346 :120-127
.BYTE ^0347,^0350,^0351,^0112,^0340,^0132,^0137,^0155 :130-137
.BYTE ^0171,^0201,^0202,^0203,^0204,^0205,^0206,^0207 :140-147
.BYTE ^0210,^0211,^0221,^0222,^0223,^0224,^0225,^0226 :150-157
.BYTE ^0227,^0230,^0231,^0242,^0243,^0244,^0245,^0246 :160-167
.BYTE ^0247,^0250,^0251,^0300,^0152,^0320,^0241,^0007 :170-177

.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :200-207
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :210-217
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :220-227
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :230-237
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :240-247
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :250-257
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :260-267
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :270-277
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :300-307
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :310-317
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :320-327
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :330-337
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :340-347
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :350-357
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0077 :360-367
.BYTE ^0077,^0077,^0077,^0077,^0077,^0077,^0077,^0377 :370-377

.ENDM

```

.SBTTL \$LIB\$AB_ASC_EBC_REV

++
FUNCTIONAL DESCRIPTION:

This is the Reversible ASCII to EBCDIC translation table, based on ANSI X3.26 - 1970

All ASCII graphics are translated to their equivalent EBCDIC graphic except for:

ASCII graphic	EBCDIC graphic
[(left square bracket)	cents sign
! (exclamation point)	short vertical bar
^ (circumflex)	logical not
] (right square bracket)	! (exclamation point)

Note that this translation table, unlike LIB\$AB_ASC_EBC, is a one-to-one onto mapping. That is, it has a reverse translation, namely LIB\$AB_EBC_ASC_REV.

```
.MACRO $LIB$AB_ASC_EBC_REV
.BYTE ^X00,^X01,^X02,^X03,^X37,^X2D,^X2E,^X2F : 00-07
.BYTE ^X16,^X05,^X25,^X0B,^X0C,^X0D,^X0E,^X0F : 08-0F
.BYTE ^X10,^X11,^X12,^X13,^X3C,^X3D,^X32,^X26 : 10-17
.BYTE ^X18,^X19,^X3F,^X27,^X1C,^X1D,^X1E,^X1F : 18-1F
.BYTE ^X40,^X4F,^X7F,^X7B,^X5B,^X6C,^X50,^X7D : 20-27
.BYTE ^X4D,^X5D,^X5C,^X4E,^X6B,^X60,^X4B,^X61 : 28-2F
.BYTE ^XF0,^XF1,^XF2,^XF3,^XF4,^XF5,^XF6,^XF7 : 30-37
.BYTE ^XF8,^XF9,^X7A,^X5E,^X4C,^X7E,^X6E,^X6F : 38-3F
.BYTE ^X7C,^XC1,^XC2,^XC3,^XC4,^XC5,^XC6,^XC7 : 40-47
.BYTE ^XC8,^XC9,^XD1,^XD2,^XD3,^XD4,^XD5,^XD6 : 48-4F
.BYTE ^XD7,^XD8,^XD9,^XE2,^XE3,^XE4,^XE5,^XE6 : 50-57
.BYTE ^XE7,^XE8,^XE9,^X4A,^XE0,^X5A,^X5F,^X6D : 58-5F
.BYTE ^X79,^X81,^X82,^X83,^X84,^X85,^X86,^X87 : 60-67
.BYTE ^X88,^X89,^X91,^X92,^X93,^X94,^X95,^X96 : 68-6F
.BYTE ^X97,^X98,^X99,^XA2,^XA3,^XA4,^XA5,^XA6 : 70-77
.BYTE ^XA7,^XA8,^XA9,^XC0,^X6A,^XD0,^XA1,^X07 : 78-7F
.BYTE ^X20,^X21,^X22,^X23,^X24,^X15,^X06,^X17 : 80-87
.BYTE ^X28,^X29,^X2A,^X2B,^X2C,^X09,^X0A,^X1B : 88-8F
.BYTE ^X30,^X31,^X1A,^X33,^X34,^X35,^X36,^X08 : 90-97
.BYTE ^X38,^X39,^X3A,^X3B,^X04,^X14,^X3E,^XE1 : 98-9F
.BYTE ^X41,^X42,^X43,^X44,^X45,^X46,^X47,^X48 : A0-A7
.BYTE ^X49,^X51,^X52,^X53,^X54,^X55,^X56,^X57 : A8-AF
.BYTE ^X58,^X59,^X62,^X63,^X64,^X65,^X66,^X67 : B0-B7
.BYTE ^X68,^X69,^X70,^X71,^X72,^X73,^X74,^X75 : B8-BF
.BYTE ^X76,^X77,^X78,^X80,^X8A,^X8B,^X8C,^X8D : C0-C7
.BYTE ^X8E,^X8F,^X90,^X9A,^X9B,^X9C,^X9D,^X9E : C8-CF
.BYTE ^X9F,^XA0,^XAA,^XAB,^XAC,^XAD,^XAE,^XAF : D0-D7
.BYTE ^XB0,^XB1,^XB2,^XB3,^XB4,^XB5,^XB6,^XB7 : D8-DF
.BYTE ^XB8,^XB9,^XBA,^XBB,^XBC,^XBD,^XBE,^XBF : E0-E7
.BYTE ^XCA,^XCB,^XCC,^XCD,^XCE,^XCF,^XDA,^XDB : E8-EF
.BYTE ^XDC,^XDD,^XDE,^XDF,^XEA,^XEB,^XEC,^XED : F0-F7
.BYTE ^XEE,^XEF,^XFA,^XFB,^XFC,^XFD,^XFE,^XFF : F8-FF
```


;

.ENDM

.SBTTL \$LIB\$AB_CVT_O_U

++
FUNCTIONAL DESCRIPTION:

This is the overpunch to unsigned translation table.
It maps every character to itself except that it maps
the overpunch sign characters to the corresponding
digit.

```
.MACRO $LIB$AB_CVT_O_U
.BYTE ^X00,^X01,^X02,^X03,^X04,^X05,^X06,^X07
.BYTE ^X08,^X09,^X0A,^X0B,^X0C,^X0D,^X0E,^X0F
.BYTE ^X10,^X11,^X12,^X13,^X14,^X15,^X16,^X17
.BYTE ^X18,^X19,^X1A,^X1B,^X1C,^X1D,^X1E,^X1F
.BYTE ^X20,^X21,^X22,^X23,^X24,^X25,^X26,^X27
.BYTE ^X28,^X29,^X2A,^X2B,^X2C,^X2D,^X2E,^X2F
.BYTE ^X30,^X31,^X32,^X33,^X34,^X35,^X36,^X37
.BYTE ^X38,^X39,^X30,^X3B,^X3C,^X3D,^X3E,^X3F
.BYTE ^X40,^X41,^X42,^X43,^X44,^X45,^X46,^X47
.BYTE ^X38,^X39,^X31,^X32,^X33,^X34,^X35,^X36
.BYTE ^X37,^X38,^X39,^X53,^X54,^X55,^X56,^X57
.BYTE ^X58,^X59,^X5A,^X30,^X5C,^X30,^X5E,^X5F
.BYTE ^X60,^X61,^X62,^X63,^X64,^X65,^X66,^X67
.BYTE ^X68,^X69,^X6A,^X6B,^X6C,^X6D,^X6E,^X6F
.BYTE ^X70,^X71,^X72,^X73,^X74,^X75,^X76,^X77
.BYTE ^X78,^X79,^X7A,^X30,^X7C,^X30,^X7E,^X7F
.BYTE ^X30,^X81,^X82,^X83,^X84,^X85,^X86,^X87
.BYTE ^X88,^X89,^X8A,^X8B,^X8C,^X8D,^X8E,^X8F
.BYTE ^X90,^X91,^X92,^X93,^X94,^X95,^X96,^X97
.BYTE ^X98,^X99,^X9A,^X9B,^X9C,^X9D,^X9E,^X9F
.BYTE ^XA0,^XA1,^XA2,^XA3,^XA4,^XA5,^XA6,^XA7
.BYTE ^XA8,^XA9,^XAA,^XAB,^XAC,^XAD,^XAE,^XAF
.BYTE ^XB0,^XB1,^XB2,^XB3,^XB4,^XB5,^XB6,^XB7
.BYTE ^XB8,^XB9,^XBA,^XBB,^XBC,^XBD,^XBE,^XBF
.BYTE ^XC0,^XC1,^XC2,^XC3,^XC4,^XC5,^XC6,^XC7
.BYTE ^XC8,^XC9,^XCA,^XCB,^XCC,^XCD,^XCE,^XCF
.BYTE ^XD0,^XD1,^XD2,^XD3,^XD4,^XD5,^XD6,^XD7
.BYTE ^XD8,^XD9,^XDA,^XDB,^XDC,^XDD,^XDE,^XDF
.BYTE ^XE0,^XE1,^XE2,^XE3,^XE4,^XE5,^XE6,^XE7
.BYTE ^XE8,^XE9,^XEA,^XEB,^XEC,^XED,^XEE,^XEF
.BYTE ^XF0,^XF1,^XF2,^XF3,^XF4,^XF5,^XF6,^XF7
.BYTE ^XF8,^XF9,^XFA,^XFB,^XFC,^XFD,^XFE,^XFF

.ENDM
```



```

;***
; FUNCTIONAL DESCRIPTION:

```

This is the packed to overpunch translation table.

[illegible]

.ENDM

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.SBTTL \$LIB\$AB_CVTPT_Z

++
FUNCTIONAL DESCRIPTION:

This is the packed to zoned translation table.

It is used in conjunction with a CVTPT machine instruction to convert packed decimal data items to zoned numeric data type. Given the binary representation for the highest addressed byte (that is, the least significant digit and sign) of a data item in the packed decimal data type, the table gives the hex representation of the highest addressed byte in the zoned numeric form of the data item.

.MACRO \$LIB\$AB_CVTPT_Z

		Hex
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	00-07
.BYTE	^X30,^X30,^X30,^X70,^X30,^X70,^X30,^X30	08-0F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	10-17
.BYTE	^X30,^X30,^X31,^X71,^X31,^X71,^X31,^X31	18-1F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	20-27
.BYTE	^X30,^X30,^X32,^X72,^X32,^X72,^X32,^X32	28-2F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	30-37
.BYTE	^X30,^X30,^X33,^X73,^X33,^X73,^X33,^X33	38-3F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	40-47
.BYTE	^X30,^X30,^X34,^X74,^X34,^X74,^X34,^X34	48-4F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	50-57
.BYTE	^X30,^X30,^X35,^X75,^X35,^X75,^X35,^X35	58-5F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	60-67
.BYTE	^X30,^X30,^X36,^X76,^X36,^X76,^X36,^X36	68-6F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	70-77
.BYTE	^X30,^X30,^X37,^X77,^X37,^X77,^X37,^X37	78-7F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	80-87
.BYTE	^X30,^X30,^X38,^X78,^X38,^X78,^X38,^X38	88-8F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	90-97
.BYTE	^X30,^X30,^X39,^X79,^X39,^X79,^X39,^X39	98-9F
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	A0-A7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	A8-BF
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	B0-B7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	B8-BF
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	C0-C7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	C8-CF
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	D0-D7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	D8-DF
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	E0-E7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	E8-EF
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	F0-F7
.BYTE	^X30,^X30,^X30,^X30,^X30,^X30,^X30,^X30	F8-FF

.ENDM

++
FUNCTIONAL DESCRIPTION:

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.ENDM

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.ENDM

.SBTTL \$LIB\$AB_EBC_ASC

++
FUNCTIONAL DESCRIPTION:

This is the EBCDIC to ASCII translation table based on
ANSI X3.26 - 1970

All EBCDIC graphics are translated to the identical ASCII
graphic except for:

EBCDIC graphic	ASCII graphic
cents sign	[(left square bracket)
short vertical bar	! (exclamation point)
logical not	^ (circumflex)
! (exclamation point)	] (right square bracket)

Untranslatable codes map into ^0134 (The ASCII character '\').
Mapping them into ^0032 (The ASCII Substitute char.) would be
more desirable, but could cause trouble with compatibility with
STREAM-ASCII files under RMS-11 which recognizes ^0032 as
a CONTROL-Z signifying an End-of-file.

```

.MACRO $LIB$AB_EBC_ASC
.BYTE ^0000,^0001,^0002,^0003,^0134,^0011,^0134,^0177 :000-007
.BYTE ^0134,^0134,^0134,^0013,^0014,^0015,^0016,^0017 :010-017
.BYTE ^0020,^0021,^0022,^0023,^0134,^0134,^0010,^0134 :020-027
.BYTE ^0030,^0031,^0134,^0134,^0034,^0035,^0036,^0037 :030-037
.BYTE ^0134,^0134,^0134,^0134,^0134,^0012,^0027,^0033 :040-047
.BYTE ^0134,^0134,^0134,^0134,^0134,^0005,^0006,^0007 :050-057
.BYTE ^0134,^0134,^0026,^0134,^0134,^0134,^0134,^0004 :060-067
.BYTE ^0134,^0134,^0134,^0134,^0024,^0025,^0134,^0032 :070-077
.BYTE ^0040,^0134,^0134,^0134,^0134,^0134,^0134,^0134 :100-107
.BYTE ^0134,^0134,^0133,^0056,^0074,^0050,^0053,^0041 :110-117
.BYTE ^0046,^0134,^0134,^0134,^0134,^0134,^0134,^0134 :120-127
.BYTE ^0134,^0134,^0135,^0044,^0052,^0051,^0073,^0136 :130-137
.BYTE ^0055,^0057,^0134,^0134,^0134,^0134,^0134,^0134 :140-147
.BYTE ^0134,^0134,^0174,^0054,^0045,^0137,^0076,^0077 :150-157
.BYTE ^0134,^0134,^0134,^0134,^0134,^0134,^0134,^0134 :160-167
.BYTE ^0134,^0140,^0072,^0043,^0100,^0047,^0075,^0042 :170-177

.BYTE ^0134,^0141,^0142,^0143,^0144,^0145,^0146,^0147 :200-207
.BYTE ^0150,^0151,^0134,^0134,^0134,^0134,^0134,^0134 :210-217
.BYTE ^0134,^0152,^0153,^0154,^0155,^0156,^0157,^0160 :220-227
.BYTE ^0161,^0162,^0134,^0134,^0134,^0134,^0134,^0134 :230-237
.BYTE ^0134,^0176,^0163,^0164,^0165,^0166,^0167,^0170 :240-247
.BYTE ^0171,^0172,^0134,^0134,^0134,^0134,^0134,^0134 :250-257
.BYTE ^0134,^0134,^0134,^0134,^0134,^0134,^0134,^0134 :260-267
.BYTE ^0134,^0134,^0134,^0134,^0134,^0134,^0134,^0134 :270-277
.BYTE ^0173,^0101,^0102,^0103,^0104,^0105,^0106,^0107 :300-307
.BYTE ^0110,^0111,^0134,^0134,^0134,^0134,^0134,^0134 :310-317
.BYTE ^0175,^0112,^0113,^0114,^0115,^0116,^0117,^0120 :320-327

```

```
.BYTE ^0121,^0122,^0134,^0134,^0134,^0134,^0134,^0134 :330-337
.BYTE ^0134,^0134,^0123,^0124,^0125,^0126,^0127,^0130 :340-347
.BYTE ^0131,^0132,^0134,^0134,^0134,^0134,^0134,^0134 :350-357
.BYTE ^0060,^0061,^0062,^0063,^0064,^0065,^0066,^0067 :360-367
.BYTE ^0070,^0071,^0134,^0134,^0134,^0134,^0134,^0377 :370-377
```

```
;
.ENDM
```


.SBTTL \$LIB\$AB_EBC_ASC_REV

++
FUNCTIONAL DESCRIPTION:

This is the Reversible EBCDIC to ASCII translation table based on ANSI X3.26 - 1970

All EBCDIC graphics are translated to the identical ASCII graphic except for:

EBCDIC graphic	ASCII graphic
cents sign	[(left square bracket)
short vertical bar	! (exclamation point)
logical not	^ (circumflex)
! (exclamation point)	] (right square bracket)

Note that this translation table, unlike LIB\$AB_EBC_ASC, is a one-to-one onto mapping. That is, it has a reverse translation, namely LIB\$AB_ASC_EBC_REV.

```
.MACRO $LIB$AB_EBC_ASC_REV
.BYTE ^X00,^X01,^X02,^X03,^X9C,^X09,^X86,^X7F : 00-07
.BYTE ^X97,^X8D,^X8E,^X0B,^X0C,^X0D,^X0E,^X0F : 08-0F
.BYTE ^X10,^X11,^X12,^X13,^X9D,^X85,^X08,^X87 : 10-17
.BYTE ^X18,^X19,^X92,^X8F,^X1C,^X1D,^X1E,^X1F : 18-1F
.BYTE ^X80,^X81,^X82,^X83,^X84,^X0A,^X17,^X1B : 20-27
.BYTE ^X88,^X89,^X8A,^X8B,^X8C,^X05,^X06,^X07 : 28-2F
.BYTE ^X90,^X91,^X16,^X93,^X94,^X95,^X96,^X04 : 30-37
.BYTE ^X98,^X99,^X9A,^X9B,^X14,^X15,^X9E,^X1A : 38-3F
.BYTE ^X20,^XA0,^XA1,^XA2,^XA3,^XA4,^XA5,^XA6 : 40-47
.BYTE ^XA7,^XA8,^X5B,^X2E,^X3C,^X28,^X2B,^X21 : 48-4F
.BYTE ^X26,^XA9,^XAA,^XAB,^XAC,^XAD,^XAE,^XAF : 50-57
.BYTE ^XB0,^XB1,^X5D,^X24,^X2A,^X29,^X3B,^X5E : 58-5F
.BYTE ^X2D,^X2F,^XB2,^XB3,^XB4,^XB5,^XB6,^XB7 : 60-67
.BYTE ^XB8,^XB9,^X7C,^X2C,^X25,^X5F,^X3E,^X3F : 68-6F
.BYTE ^XBA,^XBB,^XBC,^XBD,^XBE,^XBF,^XC0,^XC1 : 70-77
.BYTE ^XC2,^X60,^X3A,^X23,^X40,^X27,^X3D,^X22 : 78-7F
.BYTE ^XC3,^X61,^X62,^X63,^X64,^X65,^X66,^X67 : 80-87
.BYTE ^X68,^X69,^XC4,^XC5,^XC6,^XC7,^XC8,^XC9 : 88-8F
.BYTE ^XCA,^X6A,^X6B,^X6C,^X6D,^X6E,^X6F,^X70 : 90-97
.BYTE ^X71,^X72,^XCB,^XCC,^XCD,^XCE,^XCF,^XD0 : 98-9F
.BYTE ^XD1,^X7E,^X73,^X74,^X75,^X76,^X77,^X78 : A0-A7
.BYTE ^X79,^X7A,^XD2,^XD3,^XD4,^XD5,^XD6,^XD7 : A8-AF
.BYTE ^XD8,^XD9,^XDA,^XDB,^XDC,^XDD,^XDE,^XDF : B0-B7
.BYTE ^XE0,^XE1,^XE2,^XE3,^XE4,^XE5,^XE6,^XE7 : B8-BF
.BYTE ^X7B,^X41,^X42,^X43,^X44,^X45,^X46,^X47 : C0-C7
.BYTE ^X48,^X49,^XE8,^XE9,^XEA,^XEB,^XEC,^XED : C8-CF
.BYTE ^X7D,^X4A,^X4B,^X4C,^X4D,^X4E,^X4F,^X50 : D0-D7
.BYTE ^X51,^X52,^XEE,^XEF,^XF0,^XF1,^XF2,^XF3 : D8-DF
.BYTE ^X5C,^X9F,^X53,^X54,^X55,^X56,^X57,^X58 : E0-E7
.BYTE ^X59,^X5A,^XF4,^XF5,^XF6,^XF7,^XF8,^XF9 : E8-EF
```

```
.BYTE ^X30,^X31,^X32,^X33,^X34,^X35,^X36,^X37 ; F0-F7
: .BYTE ^X38,^X39,^XFA,^XFB,^XFC,^XFD,^XFE,^XFF ; F8-FF
.ENDM
```


.SBTTL \$LIB\$AB_UPCASE - String Upcase Translate Table

++
FUNCTIONAL DESCRIPTION:

LIB\$AB_UPCASE is a translate table, suitable for use with a MOVTC instruction, which specified translation of lower case ASCII characters to their upper case equivalent.

Only the characters 'a' through 'z' are translated, all other characters translate to themselves.

--

.MACRO \$LIB\$AB_UPCASE

I=0
.REPEAT <^A/a/-0>
.BYTE I
I=I+1
.ENDR
.REPEAT 26
.BYTE I-<^A/a/-^A/A/>
I=I+1
.ENDR
.REPEAT <255-^A/z/>
.BYTE I
I=I+1
.ENDR
.ENDM
.END

; End of module LIB\$\$TABLE_MACROS

0203 AH-BT13A-SE
VAX/VMS V4.0

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