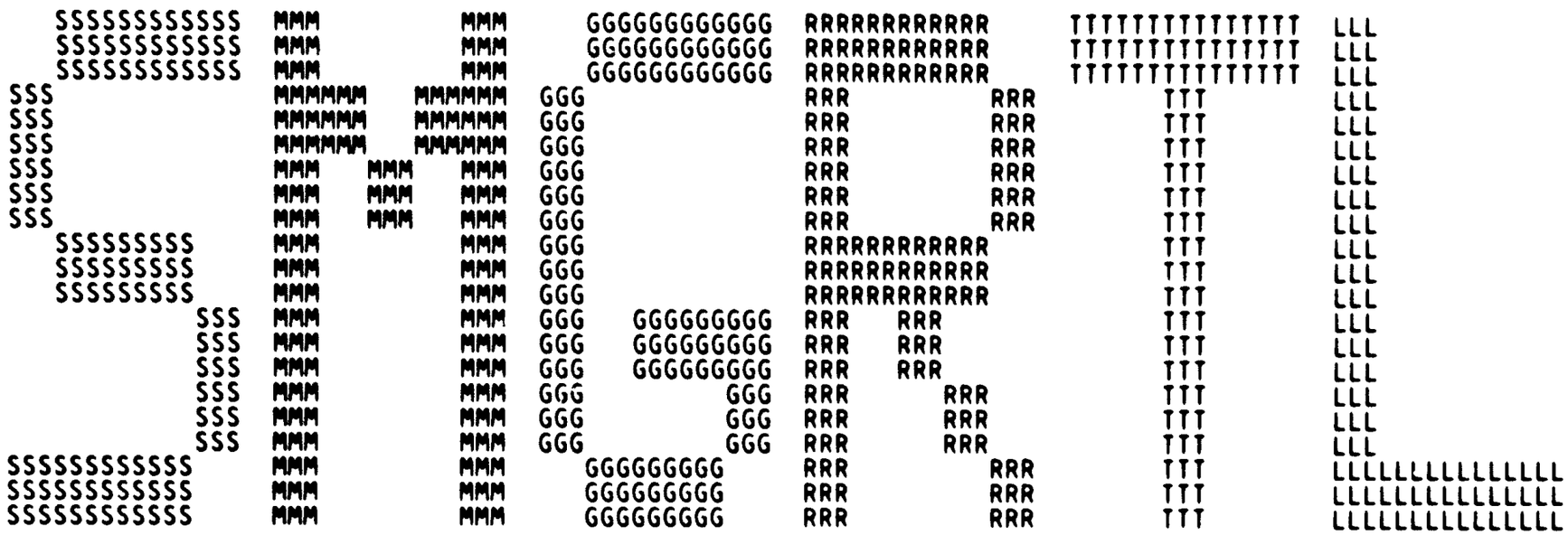

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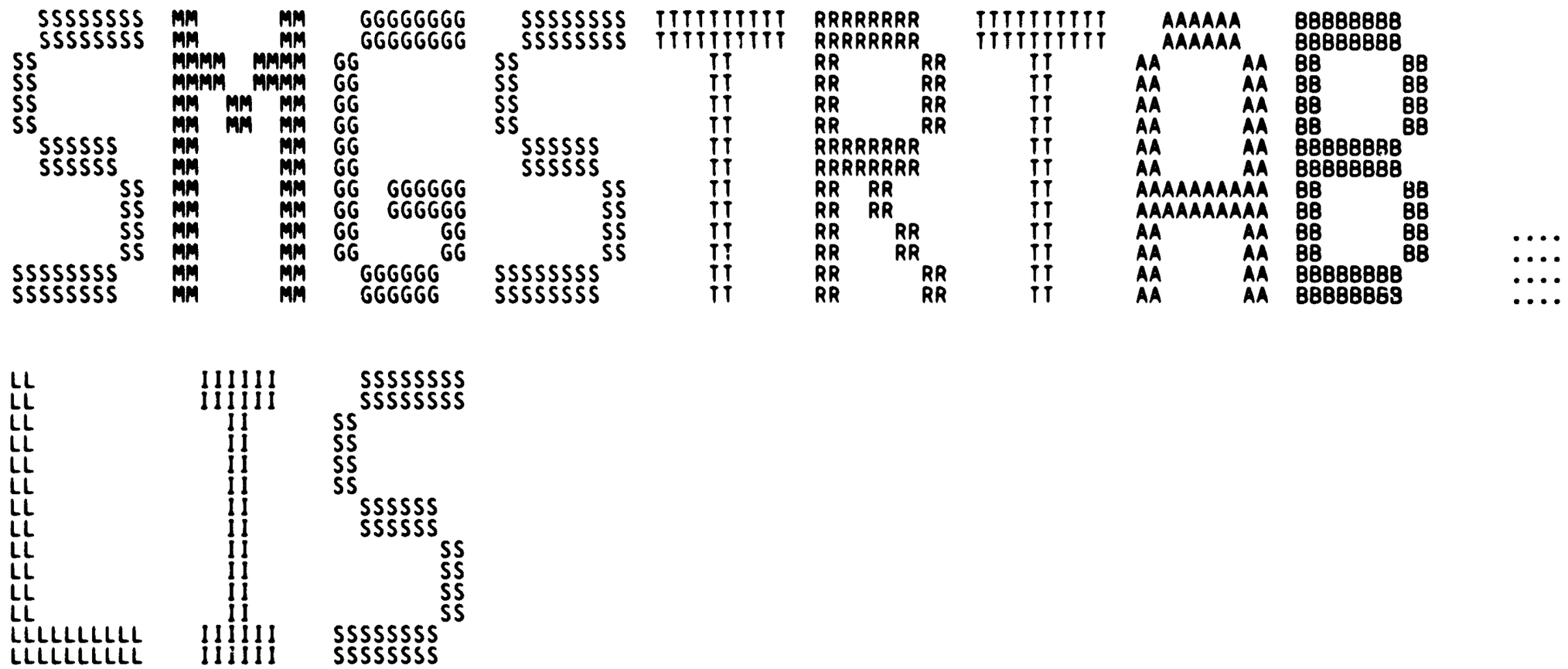
SSSSSSSS MM MM GGGGGGGG SSSSSSSS TTTTTTTTTT RRRRRRRR TTTTTTTTTT AAAAAA BBBBBBBB
SSSSSSSS MM MM GGGGGGGG SSSSSSSS TTTTTTTTTT RRRRRRRR TTTTTTTTTT AAAAAA BBBBBBBB
SS MMMM MMMM GG SS TT RR RR TT AA AA BB BB
SS MMMM MMMM GG SS TT RR RR TT AA AA BB BB
SS MM MM MM GG SS TT RR RR TT AA AA BB BB
SS MM MM MM GG SS TT RR RR TT AA AA BB BB
SSSSSS MM MM GG SSSSSS TT RRRRRRRR TT AA AA BBBBBBBB
SSSSSS MM MM GG SSSSSS TT RRRRRRRR TT AA AA BBBBBBBB
SS MM MM GG GGGGGG SS TT RR RR TT AAAAAAAAAA BB BB
SS MM MM GG GGGGGG SS TT RR RR TT AAAAAAAAAA BB BB
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SS MM MM GG GG SS TT RR RR TT AA AA BB BB
SSSSSSSS MM MM GGGGGG SSSSSSSS TT RR RR TT AA AA BBBBBBBB
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:     1          0001  0 MODULE SMG$STRING_TABLES( %TITLE 'TPARSE tables for string capabilities'
:     2          0002  0                     IDENT = '1-003'         ! File: SMGSTRTAB.B32 Edit: PLL1003
:     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                                  *
:     9          0009  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
:    10          0010  1 !*  ALL RIGHTS RESERVED.                                                      *
:    11          0011  1 !*                                                                           *
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:    13          0013  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
:    14          0014  1 !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER   *
:    15          0015  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
:    16          0016  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY   *
:    17          0017  1 !*  TRANSFERRED.                                                              *
:    18          0018  1 !*                                                                           *
:    19          0019  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE   *
:    20          0020  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
:    21          0021  1 !*  CORPORATION.                                                              *
:    22          0022  1 !*                                                                           *
:    23          0023  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS   *
:    24          0024  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
:    25          0025  1 !*                                                                           *
:    26          0026  1 !*                                                                           *
:    27          0027  1 !*****************************************************************************
:    28          0028  1 !
:    29          0029  1
:    30          0030  1 !++
:    31          0031  1 ! FACILITY:     Screen Management
:    32          0032  1 !
:    33          0033  1 ! ABSTRACT:
:    34          0034  1 !
:    35          0035  1 !       This module contains the LIB$TPARSE state tables used to parse
:    36          0036  1 !       string capabilities in an ascii TERMTABLE.TXT file.
:    37          0037  1 !
:    38          0038  1 ! ENVIRONMENT:  User mode - AST reentrant
:    39          0039  1 !
:    40          0040  1 ! AUTHOR: P. Levesque CREATION DATE: 30-Jan-1984
:    41          0041  1 !
:    42          0042  1 ! MODIFIED BY:
:    43          0043  1 !
:    44          0044  1 ! 1-001 - Original.  PLL 30-Jan-1984
:    45          0045  1 !  -002 - Add SMG$K_BEGIN_NORMAL_RENDITION.  PLL 15-Mar-1984
:    46          0046  1 !         Enhance state tables to accept only !UL FAO directive.
:    47          0047  1 !         Allow comments on lines not terminated by a comma.
:    48          0048  1 !  -003 - Change implementation of control characters.  PLL 5-Jul-1984
:    49          0049  1 !--
:    50          0050  1
```

```
;    52          0051  1 %SBTTL 'Declarations'
;    53          0052  1 !
;    54          0053  1 ! SWITCHES:
;    55          0054  1 !
;    56          0055  1
;    57          0056  1 !
;    58          0057  1 ! LINKAGES:
;    59          0058  1 !
;    60          0059  1 !       NONE
;    61          0060  1 !
;    62          0061  1 ! TABLE OF CONTENTS:
;    63          0062  1 !
;    64          0063  1
;    65          0064  1 FORWARD ROUTINE
;    66          0065  1         CONVERT_CONTROL,                ! convert ^ to control character
;    67          0066  1         CONVERT_ESCAPE,                 ! convert $ to escape character
;    68          0067  1         EXPRESSION_ERROR,               ! signal an invalid expression error
;    69          0068  1         END_ARITH_CAP,                  ! end an arithmetic expression
;    70          0069  1         INIT_ARITH_CAP,                 ! prepare for arithmetic expression
;    71          0070  1         INSERT_CARROT,                  ! insert ^ into a string
;    72          0071  1         INSERT_DOLLAR,                  ! insert $ into a string
;    73          0072  1         INSERT_EXCLAMATION,             ! insert ! into a string
;    74          0073  1         INSERT_PARENTHESIS,             ! insert ( into a string
;    75          0074  1         INVALID_DIRECTIVE,              ! signal invalid directive
;    76          0075  1         NOT_STRING,                     ! signal an unknown capability name                54
;    77          0076  1         STORE_OPERAND,                  ! store number & operator
;    78          0077  1         STORE_SUBSTITUTION;             ! store % flag in arithmetic cap
;    79          0078  1
;    80          0079  1 !
;    81          0080  1 ! INCLUDE FILES:
;    82          0081  1 !                                                                                          54
;    83          0082  1
;    84          0083  1 REQUIRE 'RTLIN:SMGPROLOG';              ! Defines psects, macros, etc.
;    85          0161  1
;    86          0162  1 LIBRARY 'RTLML:SMGTPALIB';              ! Definitions and macros used
;    87          0163  1                                         ! to create TERMTABLE.EXE
;    88          0164  1 LIBRARY 'RTLTPAMAC';                    ! TPARSE library of macros                         50
;    89          0165  1
;    90          0166  1 !
;    91          0167  1 ! EQUATED SYMBOLS:
;    92          0168  1 !
;    93          0169  1
;    94          0170  1 LITERAL
;    95          0171  1         SINGLE_QUOTE = %X'27',
;    96          0172  1         DOUBLE_QUOTE = %X'22',
;    97          0173  1         LEFT_PAREN = %X'28',
;    98          0174  1         RIGHT_PAREN = %X'29';
;    99          0175  1
;   100          0176  1 !
;   101          0177  1 ! FIELDS:
;   102          0178  1 !
;   103          0179  1 !       NONE                                                                               43
;   104          0180  1 !
;   105          0181  1 ! PSECTS:
;   106          0182  1 !
;   107          0183  1
;   108          0184  1 !
```

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;  109          0185  1 ! EXTERNAL REFERENCES:
;  110          0186  1 !
;  111          0187  1 EXTERNAL ROUTINE
;  112          0188  1          OTS$CVT_TI_L,                  ! convert ascii digits to integer
;  113          0189  1          SMG$$BLANKS_OFF,               ! turn off flag to process blanks
;  114          0190  1          SMG$$BLANKS_ON,                ! turn on flag to process blanks
;  115          0191  1          SMG$$COPY_CAP,                 ! copy a string capability into TERMTABLE
;  116          0192  1          SMG$$FLUSH_ARITHMETIC,         ! flush expression data to TERMTABLE.EXE
;  117          0193  1          SMG$$FLUSH_SAVED_BUFFER,       ! flush saved token to TERMTABLE.EXE
;  118          0194  1          SMG$$MISSING_END,              ! signal error
;  119          0195  1          SMG$$NEXT_RECORD,              ! get next record from TERMTABLE.TXT                  45
;  120          0196  1          SMG$$SAVE_TOKEN_STRING,        ! store count & ptr to token
;  121          0197  1          SMG$$STORE_CAP_MASK,           ! remember capability number
;  122          0198  1          SMG$$SYNTAX_ERROR;             ! signal syntax error
;  123          0199  1
;  124          0200  1 EXTERNAL                                                                                      45
;  125          0201  1          SMG$_ERRAT_LIN,                ! error in line n at or near 'x'
;  126          0202  1          SMG$_INVDIR,                   ! invalid directive
;  127          0203  1          SMG$_INVEXP,                   ! invalid expression
;  128          0204  1          SMG$_MISTERNAM,                ! missing terminal name
;  129          0205  1          SMG$_NOTSTRCAP,                ! not a string capability                             4E
;  130          0206  1          SMG$_SYNERR;                   ! syntax error
;  131          0207  1
;  132          0208  1 EXTERNAL
;  133          0209  1          SMG$$MASK_ADR,                 ! used by TPARSE action routines
;  134          0210  1          SMG$$NEXT_NEGATIVE_NUMBER,     ! used to set terminal number
;  135          0211  1          SMG$$CURRENT_LINE,             ! current input line - maintained
;  136          0212  1                                         ! for error messages
;  137          0213  1          SMG$$DATA_OFFSET;              ! offset into data buffer
;  138          0214  1
;  139          0215  1 !
;  140          0216  1 ! OWN STORAGE:
;  141          0217  1 !
;  142          0218  1 ! NONE
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;  144          0219  1 %SBTTL 'SMG$$STRING_TABLES - TPARSE tables for string capabilities'
;  145          0220  1 !++
;  146          0221  1 ! FUNCTIONAL DESCRIPTION:
;  147          0222  1 !
;  148          0223  1 !       The following are the state tables used to parse string
;  149          0224  1 !       capabilities in a terminal definition.
;  150          0225  1 !
;  151          0226  1 !--
;  152          0227  1
;  153          0228  1 $INIT_STATE (SMG$$A_STRING_STATES, SMG$$A_STRING_KEYWDS);
;  154          0229  1                                 ! set up state tables, key words
;  155          0230  1
;  156          0231  1 !+
;  157          0232  1 ! Begin scanning loop.  Look for the start of a capability.
;  158          0233  1 ! Skip over blanks and comments.
;  159          0234  1 !-
;  160          0235  1
;  161        P 0236  1 $STATE (BEGIN_SCAN,
;  162        P 0237  1     ((END_OF_LINE), BEGIN_SCAN, SMG$$NEXT_RECORD),
;  163        P 0238  1     ('!', BEGIN_SCAN, SMG$$NEXT_RECORD),
;  164        P 0239  1     ((CAPABILITY), BEGIN_SCAN, SMG$$BLANKS_OFF),
;  165        P 0240  1     (TPA$_LAMBDA, TPA$_EXIT)
;  166          0241  1     );
;  167          0242  1
;  168          0243  1 !+
;  169          0244  1 ! This state indicates the end of a line.  A comment also signals the
;  170          0245  1 ! end of a line.
;  171          0246  1 !-
;  172          0247  1
;  173        P 0248  1 $STATE (END_OF_LINE,
;  174        P 0249  1     (TPA$_EOS, TPA$_EXIT),
;  175        P 0250  1     ('!', TPA$_EXIT),
;  176        P 0251  1     (TPA$_LAMBDA, TPA$_FAIL)
;  177          0252  1     );
;  178          0253  1
;  179          0254  1 !+
;  180          0255  1 ! Find the capability name and determine if it's one that we expect.
;  181          0256  1 ! The string up to the '=' sign should be the capability name.
;  182          0257  1 !-
;  183          0258  1
;  184        P 0259  1 $STATE (CAPABILITY,
;  185        P 0260  1     ((STRING_NAME), EQUALS_STRING, SMG$$BLANKS_OFF),
;  186        P 0261  1     ('END', TPA$_FAIL),
;  187        P 0262  1     ('BOOLEAN', TPA$_FAIL),
;  188        P 0263  1     ('NUMERIC', TPA$_FAIL),
;  189        P 0264  1     ('STRING', BEGIN_SCAN),
;  190        P 0265  1     ('REQUIRE', TPA$_FAIL, SMG$$MISSING_END),
;  191        P 0266  1     ('NAME', TPA$_FAIL, SMG$$MISSING_END),
;  192        P 0267  1     (TPA$_SYMBOL, , NOT_STRING)
;  193          0268  1     );
;  194          0269  1
;  195          0270  1 !+
;  196          0271  1 ! Determine if string capability name is valid.
;  197          0272  1 !-
;  198          0273  1
;  199        P 0274  1 $STATE (STRING_NAME,
;  200        P 0275  1     ('BEGIN_ALTERNATE_CHAR', TPA$_EXIT, , SMG$K_BEGIN_ALTERNATE_CHAR, SMG$$MASK_ADR),
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;  201          P 0276  1     ('BEGIN_BLINK', TPA$_EXIT, , SMG$K_BEGIN_BLINK, SMG$$MASK_ADR),
;  202          P 0277  1     ('BEGIN_BOLD', TPA$_EXIT, , SMG$K_BEGIN_BOLD, SMG$$MASK_ADR),
;  203          P 0278  1     ('BEGIN_DELETE_MODE', TPA$_EXIT, , SMG$K_BEGIN_DELETE_MODE, SMG$$MASK_ADR),
;  204          P 0279  1     ('BEGIN_INSERT_MODE', TPA$_EXIT, , SMG$K_BEGIN_INSERT_MODE, SMG$$MASK_ADR),
;  205          P 0280  1     ('BEGIN_LINE_DRAWING_CHAR', TPA$_EXIT, , SMG$K_BEGIN_LINE_DRAWING_CHAR, SMG$$MASK_ADR),
;  206          P 0281  1     ('BEGIN_NORMAL_RENDITION', TPA$_EXIT, , SMG$K_BEGIN_NORMAL_RENDITION, SMG$$MASK_ADR),
;  207          P 0282  1     ('BEGIN_REVERSE', TPA$_EXIT, , SMG$K_BEGIN_REVERSE, SMG$$MASK_ADR),
;  208          P 0283  1     ('BEGIN_UNDERSCORE', TPA$_EXIT, , SMG$K_BEGIN_UNDERSCORE, SMG$$MASK_ADR),
;  209          P 0284  1     ('BOTTOM_T_CHAR', TPA$_EXIT, , SMG$K_BOTTOM_T_CHAR, SMG$$MASK_ADR),
;  210          P 0285  1     ('CLEAR_TAB', TPA$_EXIT, , SMG$K_CLEAR_TAB, SMG$$MASK_ADR),
;  211          P 0286  1     ('CR_GRAPHIC', TPA$_EXIT, , SMG$K_CR_GRAPHIC, SMG$$MASK_ADR),
;  212          P 0287  1     ('CROSS_CHAR', TPA$_EXIT, , SMG$K_CROSS_CHAR, SMG$$MASK_ADR),
;  213          P 0288  1     ('CURSOR_DOWN', TPA$_EXIT, , SMG$K_CURSOR_DOWN, SMG$$MASK_ADR),
;  214          P 0289  1     ('CURSOR_LEFT', TPA$_EXIT, , SMG$K_CURSOR_LEFT, SMG$$MASK_ADR),
;  215          P 0290  1     ('CURSOR_NEXT_LINE', TPA$_EXIT, , SMG$K_CURSOR_NEXT_LINE, SMG$$MASK_ADR),
;  216          P 0291  1     ('CURSOR_POSITION_REPORT', TPA$_EXIT, , SMG$K_CURSOR_POSITION_REPORT, SMG$$MASK_ADR),
;  217          P 0292  1     ('CURSOR_PRECEEDING_LINE', TPA$_EXIT, , SMG$K_CURSOR_PRECEEDING_LINE, SMG$$MASK_ADR),
;  218          P 0293  1     ('CURSOR_RIGHT', TPA$_EXIT, , SMG$K_CURSOR_RIGHT, SMG$$MASK_ADR),
;  219          P 0294  1     ('CURSOR_UP', TPA$_EXIT, , SMG$K_CURSOR_UP, SMG$$MASK_ADR),
;  220          P 0295  1     ('DARK_SCREEN', TPA$_EXIT, , SMG$K_DARK_SCREEN, SMG$$MASK_ADR),
;  221          P 0296  1     ('DELETE_CHAR', TPA$_EXIT, , SMG$K_DELETE_CHAR, SMG$$MASK_ADR),
;  222          P 0297  1     ('DELETE_LINE', TPA$_EXIT, , SMG$K_DELETE_LINE, SMG$$MASK_ADR),
;  223          P 0298  1     ('DEVICE_ATTRIBUTES', TPA$_EXIT, , SMG$K_DEVICE_ATTRIBUTES, SMG$$MASK_ADR),
;  224          P 0299  1     ('DOUBLE_HIGH_BOTTOM', TPA$_EXIT, , SMG$K_DOUBLE_HIGH_BOTTOM, SMG$$MASK_ADR),
;  225          P 0300  1     ('DOUBLE_HIGH_TOP', TPA$_EXIT, , SMG$K_DOUBLE_HIGH_TOP, SMG$$MASK_ADR),
;  226          P 0301  1     ('DOUBLE_WIDE', TPA$_EXIT, , SMG$K_DOUBLE_WIDE, SMG$$MASK_ADR),
;  227          P 0302  1     ('DUPLICATE', TPA$_EXIT, , SMG$K_DUPLICATE, SMG$$MASK_ADR),
;  228          P 0303  1     ('END_ALTERNATE_CHAR', TPA$_EXIT, , SMG$K_END_ALTERNATE_CHAR, SMG$$MASK_ADR),
;  229          P 0304  1     ('END_BLINK', TPA$_EXIT, , SMG$K_END_BLINK, SMG$$MASK_ADR),
;  230          P 0305  1     ('END_BOLD', TPA$_EXIT, , SMG$K_END_BOLD, SMG$$MASK_ADR),
;  231          P 0306  1     ('END_DELETE_MODE', TPA$_EXIT, , SMG$K_END_DELETE_MODE, SMG$$MASK_ADR),
;  232          P 0307  1     ('END_INSERT_MODE', TPA$_EXIT, , SMG$K_END_INSERT_MODE, SMG$$MASK_ADR),
;  233          P 0308  1     ('END_LINE_DRAWING_CHAR', TPA$_EXIT, , SMG$K_END_LINE_DRAWING_CHAR, SMG$$MASK_ADR),
;  234          P 0309  1     ('END_REVERSE', TPA$_EXIT, , SMG$K_END_REVERSE, SMG$$MASK_ADR),
;  235          P 0310  1     ('END_UNDERSCORE', TPA$_EXIT, , SMG$K_END_UNDERSCORE, SMG$$MASK_ADR),
;  236          P 0311  1     ('ERASE_TO_END_DISPLAY', TPA$_EXIT, , SMG$K_ERASE_TO_END_DISPLAY, SMG$$MASK_ADR),
;  237          P 0312  1     ('ERASE_TO_END_LINE', TPA$_EXIT, , SMG$K_ERASE_TO_END_LINE, SMG$$MASK_ADR),
;  238          P 0313  1     ('ERASE_WHOLE_DISPLAY', TPA$_EXIT, , SMG$K_ERASE_WHOLE_DISPLAY, SMG$$MASK_ADR),
;  239          P 0314  1     ('ERASE_WHOLE_LINE', TPA$_EXIT, , SMG$K_ERASE_WHOLE_LINE, SMG$$MASK_ADR),
;  240          P 0315  1     ('FF_GRAPHIC', TPA$_EXIT, , SMG$K_FF_GRAPHIC, SMG$$MASK_ADR),
;  241          P 0316  1     ('HOME', TPA$_EXIT, , SMG$K_HOME, SMG$$MASK_ADR),
;  242          P 0317  1     ('HORIZONTAL_BAR', TPA$_EXIT, , SMG$K_HORIZONTAL_BAR, SMG$$MASK_ADR),
;  243          P 0318  1     ('HT_GRAPHIC', TPA$_EXIT, , SMG$K_HT_GRAPHIC, SMG$$MASK_ADR),
;  244          P 0319  1     ('INDEX', TPA$_EXIT, , SMG$K_INDEX, SMG$$MASK_ADR),
;  245          P 0320  1     ('INIT_STRING', TPA$_EXIT, , SMG$K_INIT_STRING, SMG$$MASK_ADR),
;  246          P 0321  1     ('INSERT_CHAR', TPA$_EXIT, , SMG$K_INSERT_CHAR, SMG$$MASK_ADR),
;  247          P 0322  1     ('INSERT_LINE', TPA$_EXIT, , SMG$K_INSERT_LINE, SMG$$MASK_ADR),
;  248          P 0323  1     ('INSERT_PAD', TPA$_EXIT, , SMG$K_INSERT_PAD, SMG$$MASK_ADR),
;  249          P 0324  1     ('KEY_0', TPA$_EXIT, , SMG$K_KEY_0, SMG$$MASK_ADR),
;  250          P 0325  1     ('KEY_1', TPA$_EXIT, , SMG$K_KEY_1, SMG$$MASK_ADR),
;  251          P 0326  1     ('KEY_2', TPA$_EXIT, , SMG$K_KEY_2, SMG$$MASK_ADR),
;  252          P 0327  1     ('KEY_3', TPA$_EXIT, , SMG$K_KEY_3, SMG$$MASK_ADR),
;  253          P 0328  1     ('KEY_4', TPA$_EXIT, , SMG$K_KEY_4, SMG$$MASK_ADR),
;  254          P 0329  1     ('KEY_5', TPA$_EXIT, , SMG$K_KEY_5, SMG$$MASK_ADR),
;  255          P 0330  1     ('KEY_6', TPA$_EXIT, , SMG$K_KEY_6, SMG$$MASK_ADR),
;  256          P 0331  1     ('KEY_7', TPA$_EXIT, , SMG$K_KEY_7, SMG$$MASK_ADR),
;  257          P 0332  1     ('KEY_8', TPA$_EXIT, , SMG$K_KEY_8, SMG$$MASK_ADR),
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;  258        P 0333  1     ('KEY_9', TPA$_EXIT, , SMG$K_KEY_9, SMG$$MASK_ADR),
;  259        P 0334  1     ('KEY_BACKSPACE', TPA$_EXIT, , SMG$K_KEY_BACKSPACE, SMG$$MASK_ADR),
;  260        P 0335  1     ('KEY_COMMA', TPA$_EXIT, , SMG$K_KEY_COMMA, SMG$$MASK_ADR),
;  261        P 0336  1     ('KEY_DOWN_ARROW', TPA$_EXIT, , SMG$K_KEY_DOWN_ARROW, SMG$$MASK_ADR),
;  262        P 0337  1     ('KEY_E1', TPA$_EXIT, , SMG$K_KEY_E1, SMG$$MASK_ADR),
;  263        P 0338  1     ('KEY_E2', TPA$_EXIT, , SMG$K_KEY_E2, SMG$$MASK_ADR),
;  264        P 0339  1     ('KEY_E3', TPA$_EXIT, , SMG$K_KEY_E3, SMG$$MASK_ADR),
;  265        P 0340  1     ('KEY_E4', TPA$_EXIT, , SMG$K_KEY_E4, SMG$$MASK_ADR),
;  266        P 0341  1     ('KEY_E5', TPA$_EXIT, , SMG$K_KEY_E5, SMG$$MASK_ADR),
;  267        P 0342  1     ('KEY_E6', TPA$_EXIT, , SMG$K_KEY_E6, SMG$$MASK_ADR),
;  268        P 0343  1     ('KEY_ENTER', TPA$_EXIT, , SMG$K_KEY_ENTER, SMG$$MASK_ADR),
;  269        P 0344  1     ('KEY_F1', TPA$_EXIT, , SMG$K_KEY_F1, SMG$$MASK_ADR),
;  270        P 0345  1     ('KEY_F2', TPA$_EXIT, , SMG$K_KEY_F2, SMG$$MASK_ADR),
;  271        P 0346  1     ('KEY_F3', TPA$_EXIT, , SMG$K_KEY_F3, SMG$$MASK_ADR),
;  272        P 0347  1     ('KEY_F4', TPA$_EXIT, , SMG$K_KEY_F4, SMG$$MASK_ADR),
;  273        P 0348  1     ('KEY_F5', TPA$_EXIT, , SMG$K_KEY_F5, SMG$$MASK_ADR),
;  274        P 0349  1     ('KEY_F6', TPA$_EXIT, , SMG$K_KEY_F6, SMG$$MASK_ADR),
;  275        P 0350  1     ('KEY_F7', TPA$_EXIT, , SMG$K_KEY_F7, SMG$$MASK_ADR),
;  276        P 0351  1     ('KEY_F8', TPA$_EXIT, , SMG$K_KEY_F8, SMG$$MASK_ADR),
;  277        P 0352  1     ('KEY_F9', TPA$_EXIT, , SMG$K_KEY_F9, SMG$$MASK_ADR),
;  278        P 0353  1     ('KEY_F10', TPA$_EXIT, , SMG$K_KEY_F10, SMG$$MASK_ADR),
;  279        P 0354  1     ('KEY_F11', TPA$_EXIT, , SMG$K_KEY_F11, SMG$$MASK_ADR),
;  280        P 0355  1     ('KEY_F12', TPA$_EXIT, , SMG$K_KEY_F12, SMG$$MASK_ADR),
;  281        P 0356  1     ('KEY_F13', TPA$_EXIT, , SMG$K_KEY_F13, SMG$$MASK_ADR),
;  282        P 0357  1     ('KEY_F14', TPA$_EXIT, , SMG$K_KEY_F14, SMG$$MASK_ADR),
;  283        P 0358  1     ('KEY_F15', TPA$_EXIT, , SMG$K_KEY_F15, SMG$$MASK_ADR),
;  284        P 0359  1     ('KEY_F16', TPA$_EXIT, , SMG$K_KEY_F16, SMG$$MASK_ADR),
;  285        P 0360  1     ('KEY_F17', TPA$_EXIT, , SMG$K_KEY_F17, SMG$$MASK_ADR),
;  286        P 0361  1     ('KEY_F18', TPA$_EXIT, , SMG$K_KEY_F18, SMG$$MASK_ADR),
;  287        P 0362  1     ('KEY_F19', TPA$_EXIT, , SMG$K_KEY_F19, SMG$$MASK_ADR),
;  288        P 0363  1     ('KEY_F20', TPA$_EXIT, , SMG$K_KEY_F20, SMG$$MASK_ADR),
;  289        P 0364  1     ('KEY_LEFT_ARROW', TPA$_EXIT, , SMG$K_KEY_LEFT_ARROW, SMG$$MASK_ADR),
;  290        P 0365  1     ('KEY_MINUS', TPA$_EXIT, , SMG$K_KEY_MINUS, SMG$$MASK_ADR),
;  291        P 0366  1     ('KEY_PERIOD', TPA$_EXIT, , SMG$K_KEY_PERIOD, SMG$$MASK_ADR),
;  292        P 0367  1     ('KEY_PF1', TPA$_EXIT, , SMG$K_KEY_PF1, SMG$$MASK_ADR),
;  293        P 0368  1     ('KEY_PF2', TPA$_EXIT, , SMG$K_KEY_PF2, SMG$$MASK_ADR),
;  294        P 0369  1     ('KEY_PF3', TPA$_EXIT, , SMG$K_KEY_PF3, SMG$$MASK_ADR),
;  295        P 0370  1     ('KEY_PF4', TPA$_EXIT, , SMG$K_KEY_PF4, SMG$$MASK_ADR),
;  296        P 0371  1     ('KEY_RIGHT_ARROW', TPA$_EXIT, , SMG$K_KEY_RIGHT_ARROW, SMG$$MASK_ADR),
;  297        P 0372  1     ('KEY_UP_ARROW', TPA$_EXIT, , SMG$K_KEY_UP_ARROW, SMG$$MASK_ADR),
;  298        P 0373  1     ('LABEL_F1', TPA$_EXIT, , SMG$K_LABEL_F1, SMG$$MASK_ADR),
;  299        P 0374  1     ('LABEL_F2', TPA$_EXIT, , SMG$K_LABEL_F2, SMG$$MASK_ADR),
;  300        P 0375  1     ('LABEL_F3', TPA$_EXIT, , SMG$K_LABEL_F3, SMG$$MASK_ADR),
;  301        P 0376  1     ('LABEL_F4', TPA$_EXIT, , SMG$K_LABEL_F4, SMG$$MASK_ADR),
;  302        P 0377  1     ('LABEL_F5', TPA$_EXIT, , SMG$K_LABEL_F5, SMG$$MASK_ADR),
;  303        P 0378  1     ('LABEL_F6', TPA$_EXIT, , SMG$K_LABEL_F6, SMG$$MASK_ADR),
;  304        P 0379  1     ('LABEL_F7', TPA$_EXIT, , SMG$K_LABEL_F7, SMG$$MASK_ADR),
;  305        P 0380  1     ('LABEL_F8', TPA$_EXIT, , SMG$K_LABEL_F8, SMG$$MASK_ADR),
;  306        P 0381  1     ('LABEL_F9', TPA$_EXIT, , SMG$K_LABEL_F9, SMG$$MASK_ADR),
;  307        P 0382  1     ('LABEL_F10', TPA$_EXIT, , SMG$K_LABEL_F10, SMG$$MASK_ADR),
;  308        P 0383  1     ('LABEL_F11', TPA$_EXIT, , SMG$K_LABEL_F11, SMG$$MASK_ADR),
;  309        P 0384  1     ('LABEL_F12', TPA$_EXIT, , SMG$K_LABEL_F12, SMG$$MASK_ADR),
;  310        P 0385  1     ('LABEL_F13', TPA$_EXIT, , SMG$K_LABEL_F13, SMG$$MASK_ADR),
;  311        P 0386  1     ('LABEL_F14', TPA$_EXIT, , SMG$K_LABEL_F14, SMG$$MASK_ADR),
;  312        P 0387  1     ('LABEL_F15', TPA$_EXIT, , SMG$K_LABEL_F15, SMG$$MASK_ADR),
;  313        P 0388  1     ('LABEL_F16', TPA$_EXIT, , SMG$K_LABEL_F16, SMG$$MASK_ADR),
;  314        P 0389  1     ('LABEL_F17', TPA$_EXIT, , SMG$K_LABEL_F17, SMG$$MASK_ADR),
```

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;  315          P 0390  1      ('LABEL_F18', TPA$_EXIT, , SMG$K_LABEL_F18, SMG$$MASK_ADR),
;  316          P 0391  1      ('LABEL_F19', TPA$_EXIT, , SMG$K_LABEL_F19, SMG$$MASK_ADR),
;  317          P 0392  1      ('LABEL_F20', TPA$_EXIT, , SMG$K_LABEL_F20, SMG$$MASK_ADR),
;  318          P 0393  1      ('LEFT_T_CHAR', TPA$_EXIT, , SMG$K_LEFT_T_CHAR, SMG$$MASK_ADR),
;  319          P 0394  1      ('LF_GRAPHIC', TPA$_EXIT, , SMG$K_LF_GRAPHIC, SMG$$MASK_ADR),
;  320          P 0395  1      ('LIGHT_SCREEN', TPA$_EXIT, , SMG$K_LIGHT_SCREEN, SMG$$MASK_ADR),
;  321          P 0396  1      ('LOWER_LEFT_CORNER', TPA$_EXIT, , SMG$K_LOWER_LEFT_CORNER, SMG$$MASK_ADR),
;  322          P 0397  1      ('LOWER_RIGHT_CORNER', TPA$_EXIT, , SMG$K_LOWER_RIGHT_CORNER, SMG$$MASK_ADR),
;  323          P 0398  1      ('NAME', TPA$_EXIT, SMG$K_NAME, SMG$$MASK_ADR),
;  324          P 0399  1      ('NEWLINE_CHAR', TPA$_EXIT, , SMG$K_NEWLINE_CHAR, SMG$$MASK_ADR),
;  325          P 0400  1      ('PAD_CHAR', TPA$_EXIT, , SMG$K_PAD_CHAR, SMG$$MASK_ADR),
;  326          P 0401  1      ('REQUEST_CURSOR_POSITION', TPA$_EXIT, , SMG$K_REQUEST_CURSOR_POSITION, SMG$$MASK_ADR),
;  327          P 0402  1      ('RESTORE_CURSOR', TPA$_EXIT, , SMG$K_RESTORE_CURSOR, SMG$$MASK_ADR),
;  328          P 0403  1      ('REVERSE_INDEX', TPA$_EXIT, , SMG$K_REVERSE_INDEX, SMG$$MASK_ADR),
;  329          P 0404  1      ('RIGHT_T_CHAR', TPA$_EXIT, , SMG$K_RIGHT_T_CHAR, SMG$$MASK_ADR),
;  330          P 0405  1      ('SAVE_CURSOR', TPA$_EXIT, , SMG$K_SAVE_CURSOR, SMG$$MASK_ADR),
;  331          P 0406  1      ('SCROLL_FORWARD', TPA$_EXIT, , SMG$K_SCROLL_FORWARD, SMG$$MASK_ADR),
;  332          P 0407  1      ('SCROLL_REVERSE', TPA$_EXIT, , SMG$K_SCROLL_REVERSE, SMG$$MASK_ADR),
;  333          P 0408  1      ('SEL_ERASE_TO_END_DISPLAY', TPA$_EXIT, , SMG$K_SEL_ERASE_TO_END_DISPLAY, SMG$$MASK_ADR),
;  334          P 0409  1      ('SEL_ERASE_TO_END_LINE', TPA$_EXIT, , SMG$K_SEL_ERASE_TO_END_LINE, SMG$$MASK_ADR),
;  335          P 0410  1      ('SEL_ERASE_WHOLE_DISPLAY', TPA$_EXIT, , SMG$K_SEL_ERASE_WHOLE_DISPLAY, SMG$$MASK_ADR),
;  336          P 0411  1      ('SEL_ERASE_WHOLE_LINE', TPA$_EXIT, , SMG$K_SEL_ERASE_WHOLE_LINE, SMG$$MASK_ADR),
;  337          P 0412  1      ('SET_APPLICATION_KEYPAD', TPA$_EXIT, , SMG$K_SET_APPLICATION_KEYPAD, SMG$$MASK_ADR),
;  338          P 0413  1      ('SET_CHAR_NOT_SEL_ERASE', TPA$_EXIT, , SMG$K_SET_CHAR_NOT_SEL_ERASE, SMG$$MASK_ADR),
;  339          P 0414  1      ('SET_CHAR_SEL_ERASE', TPA$_EXIT, , SMG$K_SET_CHAR_SEL_ERASE, SMG$$MASK_ADR),
;  340          P 0415  1      ('SET_CURSOR_ABS', TPA$_EXIT, , SMG$K_SET_CURSOR_ABS, SMG$$MASK_ADR),
;  341          P 0416  1      ('SET_NUMERIC_KEYPAD', TPA$_EXIT, , SMG$K_SET_NUMERIC_KEYPAD, SMG$$MASK_ADR),
;  342          P 0417  1      ('SET_SCROLL_REGION', TPA$_EXIT, , SMG$K_SET_SCROLL_REGION, SMG$$MASK_ADR),
;  343          P 0418  1      ('SET_TAB', TPA$_EXIT, , SMG$K_SET_TAB, SMG$$MASK_ADR),
;  344          P 0419  1      ('SINGLE_HIGH', TPA$_EXIT, , SMG$K_SINGLE_HIGH, SMG$$MASK_ADR),
;  345          P 0420  1      ('TAB_CHAR', TPA$_EXIT, , SMG$K_TAB_CHAR, SMG$$MASK_ADR),
;  346          P 0421  1      ('TOP_T_CHAR', TPA$_EXIT, , SMG$K_TOP_T_CHAR, SMG$$MASK_ADR),
;  347          P 0422  1      ('TRUNCATION_ICON', TPA$_EXIT, , SMG$K_TRUNCATION_ICON, SMG$$MASK_ADR),
;  348          P 0423  1      ('UNDERLINE_CHAR', TPA$_EXIT, , SMG$K_UNDERLINE_CHAR, SMG$$MASK_ADR),
;  349          P 0424  1      ('UPPER_LEFT_CORNER', TPA$_EXIT, , SMG$K_UPPER_LEFT_CORNER, SMG$$MASK_ADR),
;  350          P 0425  1      ('UPPER_RIGHT_CORNER', TPA$_EXIT, , SMG$K_UPPER_RIGHT_CORNER, SMG$$MASK_ADR),
;  351          P 0426  1      ('VERTICAL_BAR', TPA$_EXIT, , SMG$K_VERTICAL_BAR, SMG$$MASK_ADR),
;  352          P 0427  1      ('VT_GRAPHIC', TPA$_EXIT, , SMG$K_VT_GRAPHIC, SMG$$MASK_ADR),
;  353          P 0428  1      ('WIDTH_NARROW', TPA$_EXIT, , SMG$K_WIDTH_NARROW, SMG$$MASK_ADR),
;  354          P 0429  1      ('WIDTH_WIDE', TPA$_EXIT, , SMG$K_WIDTH_WIDE, SMG$$MASK_ADR),
;  355          P 0430  1      ('PRIVATE_STR_1', TPA$_EXIT, , SMG$K_PRIVATE_STR_1, SMG$$MASK_ADR),
;  356          P 0431  1      ('PRIVATE_STR_2', TPA$_EXIT, , SMG$K_PRIVATE_STR_2, SMG$$MASK_ADR),
;  357          P 0432  1      ('PRIVATE_STR_3', TPA$_EXIT, , SMG$K_PRIVATE_STR_3, SMG$$MASK_ADR),
;  358          P 0433  1      ('PRIVATE_STR_4', TPA$_EXIT, , SMG$K_PRIVATE_STR_4, SMG$$MASK_ADR),
;  359          P 0434  1      ('PRIVATE_STR_5', TPA$_EXIT, , SMG$K_PRIVATE_STR_5, SMG$$MASK_ADR),
;  360          P 0435  1      ('PRIVATE_STR_6', TPA$_EXIT, , SMG$K_PRIVATE_STR_6, SMG$$MASK_ADR),
;  361          P 0436  1      ('PRIVATE_STR_7', TPA$_EXIT, , SMG$K_PRIVATE_STR_7, SMG$$MASK_ADR),
;  362          P 0437  1      ('PRIVATE_STR_8', TPA$_EXIT, , SMG$K_PRIVATE_STR_8, SMG$$MASK_ADR),
;  363          P 0438  1      ('PRIVATE_STR_9', TPA$_EXIT, , SMG$K_PRIVATE_STR_9, SMG$$MASK_ADR),
;  364          P 0439  1      ('PRIVATE_STR_10', TPA$_EXIT, , SMG$K_PRIVATE_STR_10, SMG$$MASK_ADR),
;  365          P 0440  1      (TPA$_LAMBDA, TPA$_FAIL)
;  366            0441  1      );
;  367            0442  1
;  368            0443  1 !+
;  369            0444  1 ! Found a name, now look for the value.  Skip over the intervening
;  370            0445  1 ! equals sign.  (If we get to '=', then we also have a capability
;  371            0446  1 ! name/number to remember.)
```

```
;  372          0447  1 !-
;  373          0448  1
;  374        P 0449  1 $STATE (EQUALS_STRING,
;  375        P 0450  1     ((END_OF_LINE), EQUALS_STRING, SMG$$NEXT_RECORD),
;  376        P 0451  1     ('=', STRING_CAP_VALUE, SMG$$STORE_CAP_MASK),
;  377        P 0452  1     (TPA$_SYMBOL, , SMG$$SYNTAX_ERROR),
;  378        P 0453  1     (TPA$_ANY, , SMG$$SYNTAX_ERROR)
;  379          0454  1     );
;  380          0455  1
;  381          0456  1 !+
;  382          0457  1 ! We have found a capability name, now we need to decipher its value.
;  383          0458  1 ! We found a string capability name so this better be a string value.
;  384          0459  1 !-
;  385          0460  1
;  386        P 0461  1 $STATE (STRING_CAP_VALUE,
;  387        P 0462  1     ((END_OF_LINE), STRING_CAP_VALUE, SMG$$NEXT_RECORD),
;  388        P 0463  1     ((STRING_CAP), BEGIN_SCAN),
;  389        P 0464  1     (TPA$_SYMBOL, , SMG$$SYNTAX_ERROR),
;  390        P 0465  1     (TPA$_ANY, , SMG$$SYNTAX_ERROR)
;  391          0466  1     );
;  392          0467  1
;  393        P 0468  1 $STATE (COMMA,
;  394        P 0469  1     (',', TPA$_EXIT, SMG$$BLANKS_OFF),
;  395        P 0470  1     (TPA$_BLANK, COMMA, SMG$$BLANKS_OFF),
;  396        P 0471  1     ((END_OF_LINE), TPA$_EXIT, SMG$$NEXT_RECORD),
;  397        P 0472  1     (TPA$_ANY, , SMG$$SYNTAX_ERROR)
;  398          0473  1     );
;  399          0474  1
;  400          0475  1 !+
;  401          0476  1 ! A string capability requires further parsing.  There may be an embedded
;  402          0477  1 ! special character, an FAO call, or arithmetic.  A matching quote indicates
;  403          0478  1 ! the end of the string value, which should be stored in TERMTABLE.EXE.
;  404          0479  1 !-
;  405          0480  1
;  406        P 0481  1  $STATE (STRING_CAP,
;  407        P 0482  1     (SINGLE_QUOTE, SINGLE_QUOTE_STRING, SMG$$BLANKS_ON),
;  408        P 0483  1     (DOUBLE_QUOTE, DOUBLE_QUOTE_STRING, SMG$$BLANKS_ON),
;  409        P 0484  1     (TPA$_ANY, TPA$_FAIL)
;  410          0485  1     );
;  411          0486  1
;  412        P 0487  1 $STATE (SINGLE_QUOTE_STRING,
;  413        P 0488  1     ((UNDERSCORE), SINGLE_QUOTE_STRING),
;  414        P 0489  1     ('$', SINGLE_QUOTE_STRING, CONVERT_ESCAPE),
;  415        P 0490  1     ((CARROT), SINGLE_QUOTE_STRING),
;  416        P 0491  1     ((FAO_STRING), SINGLE_QUOTE_STRING),
;  417        P 0492  1     ((ARITH_CAP), SINGLE_QUOTE_STRING),
;  418        P 0493  1     (SINGLE_QUOTE, COMMA, SMG$$COPY_CAP),
;  419        P 0494  1     (TPA$_BLANK, SINGLE_QUOTE_STRING, SMG$$SAVE_TOKEN_STRING),
;  420        P 0495  1     (DOUBLE_QUOTE, , SMG$$SYNTAX_ERROR),
;  421        P 0496  1     (TPA$_ANY, SINGLE_QUOTE_STRING, SMG$$SAVE_TOKEN_STRING),
;  422        P 0497  1     (TPA$_LAMBDA, TPA$_EXIT)
;  423          0498  1     );
;  424          0499  1
;  425        P 0500  1 $STATE (DOUBLE_QUOTE_STRING,
;  426        P 0501  1     ((UNDERSCORE), DOUBLE_QUOTE_STRING),
;  427        P 0502  1     ('$', DOUBLE_QUOTE_STRING, CONVERT_ESCAPE),
;  428        P 0503  1     ((CARROT), DOUBLE_QUOTE_STRING),
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```
;  429          P 0504  1     ((FAO_STRING), DOUBLE_QUOTE_STRING),
;  430          P 0505  1     ((ARITH_CAP), DOUBLE_QUOTE_STRING),
;  431          P 0506  1     (DOUBLE_QUOTE, COMMA, SMG$$COPY_CAP),
;  432          P 0507  1     (TPA$_BLANK, DOUBLE_QUOTE_STRING, SMG$$SAVE_TOKEN_STRING),
;  433          P 0508  1     (SINGLE_QUOTE, , SMG$$SYNTAX_ERROR),
;  434          P 0509  1     (TPA$_ANY, DOUBLE_QUOTE_STRING, SMG$$SAVE_TOKEN_STRING),
;  435          P 0510  1     (TPA$_LAMBDA, TPA$_EXIT)
;  436            0511  1     );
;  437            0512  1
;  438            0513  1 !+
;  439            0514  1 ! Underscore is used to insert special characters into a string as
;  440            0515  1 ! normal text.  If this underscore is followed by a special character,
;  441            0516  1 ! skip over it and just store the special character.
;  442            0517  1 !-
;  443            0518  1
;  444          P 0519  1 $STATE (UNDERSCORE,
;  445          P 0520  1     (' ', UNDERSCORE2),
;  446          P 0521  1     (TPA$_LAMBDA, TPA$_FAIL)
;  447            0522  1     );
;  448            0523  1
;  449          P 0524  1 $STATE (UNDERSCORE2,
;  450          P 0525  1     ('$', TPA$_EXIT, INSERT_DOLLAR),
;  451          P 0526  1     ('^', TPA$_EXIT, INSERT_CARROT),
;  452          P 0527  1     ('!', TPA$_EXIT, INSERT_EXCLAMATION),
;  453          P 0528  1     ('(', TPA$_EXIT, INSERT_PARENTHESIS),
;  454          P 0529  1     (TPA$_LAMBDA, TPA$_FAIL)
;  455            0530  1     );
;  456            0531  1
;  457            0532  1 !+
;  458            0533  1 ! If we find a ^, advance to the next character and call the conversion
;  459            0534  1 ! routine.  The conversion routine will complain if this is a control
;  460            0535  1 ! sequence we don't know about.
;  461            0536  1 !-
;  462            0537  1
;  463          P 0538  1 $STATE (CARROT,
;  464          P 0539  1     ('^', CONTROL_CHAR),
;  465          P 0540  1     (TPA$_LAMBDA, TPA$_FAIL)
;  466            0541  1     );
;  467            0542  1
;  468          P 0543  1 $STATE (CONTROL_CHAR,
;  469          P 0544  1     (TPA$_ANY, TPA$_EXIT, CONVERT_CONTROL)
;  470            0545  1     );
;  471            0546  1
;  472            0547  1 !+
;  473            0548  1 ! Check for a FAO directive.  Make sure it's one we understand.
;  474            0549  1 !-
;  475          P 0550  1 $STATE (FAO_STRING,
;  476          P 0551  1     ('!', , SMG$$SAVE_TOKEN_STRING),
;  477          P 0552  1     (TPA$_LAMBDA, TPA$_FAIL)
;  478            0553  1     );
;  479            0554  1
;  480          P 0555  1 $STATE (,
;  481          P 0556  1     ('U', , SMG$$SAVE_TOKEN_STRING),
;  482          P 0557  1     (TPA$_SYMBOL, TPA$_FAIL, INVALID_DIRECTIVE),
;  483          P 0558  1     (TPA$_ANY, TPA$_FAIL, INVALID_DIRECTIVE)
;  484            0559  1     );
;  485            0560  1
```

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;  486          P 0561  1 $STATE (,
;  487          P 0562  1     ('L', TPA$_EXIT, SMG$$SAVE_TOKEN_STRING, SMG$K_FAO_STRING, SMG$$MASK_ADR),
;  488          P 0563  1     (TPA$_SYMBOL, TPA$_FAIL, INVALID_DIRECTIVE),
;  489          P 0564  1     (TPA$_ANY, TPA$_FAIL, INVALID_DIRECTIVE)
;  490            0565  1     );
;  491            0566  1
;  492            0567  1 !+
;  493            0568  1 ! Parse arithmetic string.  We can't complete arithmetic processing until
;  494            0569  1 ! run-time, but here we pre-compile as much as possible.  Arithmetic
;  495            0570  1 ! expressions are stored as number, op, number, op, number ... etc.
;  496            0571  1 !-
;  497            0572  1
;  498          P 0573  1 $STATE (ARITH_CAP,
;  499          P 0574  1     (LEFT_PAREN, ARITH_CAP2, INIT_ARITH_CAP),
;  500          P 0575  1     (TPA$_BLANK, ARITH_CAP),
;  501          P 0576  1     (TPA$_LAMBDA, TPA$_FAIL)
;  502            0577  1     );
;  503            0578  1
;  504          P 0579  1 $STATE (ARITH_CAP2,
;  505          P 0580  1     ((OPERAND), TPA$_EXIT),                 ! errors handled in OPERAND
;  506          P 0581  1     (TPA$_LAMBDA, TPA$_FAIL)                ! return w/out consuming next token
;  507            0582  1     );
;  508            0583  1
;  509          P 0584  1 $STATE (OPERATOR,
;  510          P 0585  1     ('+', OPERAND, , SMG$K_ADD, SMG$$MASK_ADR),
;  511          P 0586  1     ('-', OPERAND, , SMG$K_SUBTRACT, SMG$$MASK_ADR),
;  512          P 0587  1     ('*', OPERAND, , SMG$K_MULTIPLY, SMG$$MASK_ADR),
;  513          P 0588  1     ('/', OPERAND, , SMG$K_DIVIDE, SMG$$MASK_ADR),
;  514          P 0589  1     (RIGHT_PAREN, TPA$_EXIT, END_ARITH_CAP),
;  515          P 0590  1     (TPA$_ANY, , EXPRESSION_ERROR)
;  516            0591  1     );
;  517            0592  1
;  518          P 0593  1 $STATE (OPERAND,
;  519          P 0594  1     (TPA$_DECIMAL, OPERATOR, STORE_OPERAND),
;  520          P 0595  1     ((SUBSTITUTION), OPERATOR),
;  521          P 0596  1     (TPA$_SYMBOL, , EXPRESSION_ERROR),
;  522          P 0597  1     (TPA$_ANY, , EXPRESSION_ERROR)
;  523            0598  1     );
;  524            0599  1
;  525          P 0600  1 $STATE (SUBSTITUTION,
;  526          P 0601  1     ('%'),
;  527          P 0602  1     (TPA$_LAMBDA, TPA$_FAIL)
;  528            0603  1     );
;  529            0604  1
;  530            0605  1     ! % should be followed by a number
;  531          P 0606  1 $STATE (,
;  532          P 0607  1     (TPA$_DECIMAL, TPA$_EXIT, STORE_SUBSTITUTION),
;  533          P 0608  1     (TPA$_ANY, , EXPRESSION_ERROR)
;  534            0609  1     );
;  535            0610  1
;  536            0611  1
```

```
;  538          0612  1 %SBTTL 'CONVERT_CONTROL - Convert ^ to control character'
;  539          0613  1 ROUTINE CONVERT_CONTROL =
;  540          0614  1
;  541          0615  1 !++
;  542          0616  1 ! FUNCTIONAL DESCRIPTION:
;  543          0617  1 !
;  544          0618  1 !       Stores a control character in the current capability string in
;  545          0619  1 !       TERMTABLE.EXE.
;  546          0620  1 !
;  547          0621  1 ! CALLING SEQUENCE:
;  548          0622  1 !
;  549          0623  1 !       status = CONVERT_CONTROL ()
;  550          0624  1 !
;  551          0625  1 ! FORMAL PARAMETERS:
;  552          0626  1 !
;  553          0627  1 !       NONE
;  554          0628  1 !
;  555          0629  1 ! IMPLICIT INPUTS:
;  556          0630  1 !
;  557          0631  1 !       AP      Points to TPARSE parameter block
;  558          0632  1 !
;  559          0633  1 ! IMPLICIT OUTPUTS:
;  560          0634  1 !
;  561          0635  1 !       NONE
;  562          0636  1 !
;  563          0637  1 ! COMPLETION STATUS:
;  564          0638  1 !
;  565          0639  1 !        SS$_NORMAL
;  566          0640  1 !
;  567          0641  1 ! SIDE EFFECTS:
;  568          0642  1 !
;  569          0643  1 !--
;  570          0644  1
;  571          0645  2     BEGIN
;  572          0646  2     BUILTIN
;  573          0647  2         CALLG,
;  574          0648  2         AP;
;  575          0649  2     MAP
;  576          0650  2         AP : REF BLOCK [,BYTE];
;  577          0651  2     BIND
;  578          0652  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  579          0653  2     LOCAL
;  580          0654  2         CONTROL_CHAR : BYTE,            ! char following ctrl
;  581          0655  2         MOVE_CHAR : BYTE;               ! code to place in cap string
;  582          0656  2
;  583          0657  2 !+
;  584          0658  2 ! The NAME capability should have preceeded this.  Complain if it
;  585          0659  2 ! didn't.
;  586          0660  2 !-
;  587          0661  2
;  588          0662  2     IF CAP_PTRS EQL 0
;  589          0663  2     THEN
;  590          0664  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  591          0665  2
;  592          0666  2 !+
;  593          0667  2 ! Control must be followed by a valid character in order to constitute
;  594          0668  2 ! a control code.  The character can be shifted or not (lower or upper
```

```
;  595          0669  2 ! case).
;  596          0670  2 ! Since we have already seen a control character, we can translate on
;  597          0671  2 ! the second character in the control string.
;  598          0672  2 !-
;  599          0673  2
;  600          0674  2     CONTROL_CHAR = .(.AP [TPA$L_TOKENPTR]) <0,8>;
;  601          0675  2 !+
;  602          0676  2 ! A control character is in the range 00 - 1F (hex) but is expressed as
;  603          0677  2 ! 40 - 5F (hex).  Strip off extra bit to get the control character.
;  604          0678  2 !-
;  605          0679  2
;  606          0680  2     MOVE_CHAR = .CONTROL_CHAR AND NOT (%X'40');
;  607          0681  2
;  608          0682  2 !+
;  609          0683  2 ! We now have the byte which must be moved into the capability string.
;  610          0684  2 ! This may not be the first byte of the string - check for saved characters
;  611          0685  2 ! which have not been copied yet, and append in the control code.
;  612          0686  2 !-
;  613          0687  2
;  614          0688  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);       ! copy saved string
;  615          0689  2
;  616          0690  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  617          0691  2     AP [PARAM_L_SAVED_TOKENSTR] = MOVE_CHAR;    ! control char is now 'saved'
;  618          0692  2
;  619          0693  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);       ! append control char
;  620          0694  2
;  621          0695  2     RETURN (SS$_NORMAL);
;  622          0696  2
;  623          0697  1     END;                                    ! end of routine CONVERT_CONTROL

;                                                                   .TITLE  SMG$STRING_TABLES TPARSE tables for string capa
;                                                                           bilities
;                                                                   .IDENT  \1-003\
;                                                                   .PSECT  _LIB$KEY1$,NOWRT,  SHR,  PIC,1

                                                        00000 ;TPA$KEYSTO
                                                              U.29:    .BLKB   0
                                                        00000 ;TPA$KEYST
                                                              U.31:    .ASCII  \END\                                  ;
                                                        00003         .BYTE   -1                                     ;
                                                        00004 ;TPA$KEYSTO
                                                              U.34:    .BLKB   0
                                                        00004 ;TPA$KEYST
                                                              U.36:    .ASCII  \BOOLEAN\                              ;
                                                        0000B         .BYTE   -1                                     ;
                                                        0000C ;TPA$KEYSTO
                                                              U.39:    .BLKB   0
                                                        0000C ;TPA$KEYST
                                                              U.41:    .ASCII  \NUMERIC\                              ;
                                                        00013         .BYTE   -1                                     ;
                                                        00014 ;TPA$KEYSTO
                                                              U.44:    .BLKB   0
                                                        00014 ;TPA$KEYST
                                                              U.46:    .ASCII  \STRING\                               ;
                                                        0001A         .BYTE   -1                                     ;
```

```
                                                        0001B ;TPA$KEYSTO
                                                              U.49:   .BLKB   0
                                  45  52  49  55  51  45  52   0001B ;TPA$KEYST
                                                              U.51:   .ASCII  \REQUIRE\
                                                        FF    00022         .BYTE   -1
                                                        00023 ;TPA$KEYSTO
                                                              U.55:   .BLKB   0
                                              45  4D  41  4E  00023 ;TPA$KEYST
                                                              U.57:   .ASCII  \NAME\
                                                        FF    00027         .BYTE   -1
                                                        FF    00028 ;TPA$KEYFILL
                                                              U.63:   .BYTE   -1
                                                        00029 ;TPA$KEYSTO
                                                              U.64:   .BLKB   0
45  54  41  4E  52  45  54  4C  41  5F  4E  49  47  45  42  00029 ;TPA$KEYST
                                                              U.66:   .ASCII  \BEGIN_ALTERNATE_CHAR\
                                          52  41  48  43  5F  00038
                                                        FF    0003D         .BYTE   -1
                                                        0003E ;TPA$KEYSTO
                                                              U.71:   .BLKB   0
                  4B  4E  49  4C  42  5F  4E  49  47  45  42  0003E ;TPA$KEYST
                                                              U.73:   .ASCII  \BEGIN_BLINK\
                                                        FF    00049         .BYTE   -1
                                                        0004A ;TPA$KEYSTO
                                                              U.78:   .BLKB   0
                      44  4C  4F  42  5F  4E  49  47  45  42  0004A ;TPA$KEYST
                                                              U.80:   .ASCII  \BEGIN_BOLD\
                                                        FF    00054         .BYTE   -1
                                                        00055 ;TPA$KEYSTO
                                                              U.85:   .BLKB   0
4F  4D  5F  45  54  45  4C  45  44  5F  4E  49  47  45  42  00055 ;TPA$KEYST
                                                              U.87:   .ASCII  \BEGIN_DELETE_MODE\
                                              45  44  00064
                                                        FF    00066         .BYTE   -1
                                                        00067 ;TPA$KEYSTO
                                                              U.92:   .BLKB   0
4F  4D  5F  54  52  45  53  4E  49  5F  4E  49  47  45  42  00067 ;TPA$KEYST
                                                              U.94:   .ASCII  \BEGIN_INSERT_MODE\
                                              45  44  00076
                                                        FF    00078         .BYTE   -1
                                                        00079 ;TPA$KEYSTO
                                                              U.99:   .BLKB   0
57  41  52  44  5F  45  4E  49  4C  5F  4E  49  47  45  42  00079 ;TPA$KEYST
                                                              U.101:  .ASCII  \BEGIN_LINE_DRAWING_CHAR\
                                  52  41  48  43  5F  47  4E  49  00088
                                                        FF    00090         .BYTE   -1
                                                        00091 ;TPA$KEYSTO
                                                              U.106:  .BLKB   0
45  52  5F  4C  41  4D  52  4F  4E  5F  4E  49  47  45  42  00091 ;TPA$KEYST
                                                              U.108:  .ASCII  \BEGIN_NORMAL_RENDITION\
                                      4E  4F  49  54  49  44  4E  000A0
                                                        FF    000A7         .BYTE   -1
                                                        000A8 ;TPA$KEYSTO
                                                              U.113:  .BLKB   0
        45  53  52  45  56  45  52  5F  4E  49  47  45  42  000A8 ;TPA$KEYST
                                                              U.115:  .ASCII  \BEGIN_REVERSE\
                                                        FF    000B5         .BYTE   -1
```

```
                                                        000B6 ;TPA$KEYSTO
                                                              U.120:  .BLKB   0
52  4F  43  53  52  45  44  4E  55  5F  4E  49  47  45  42  000B6 ;TPA$KEYST
                                                              U.122:  .ASCII  \BEGIN_UNDERSCORE\
                                                          45  000C5
                                                          FF  000C6           .BYTE   -1
                                                              000C7 ;TPA$KEYSTO
                                                              U.127:  .BLKB   0
        52  41  48  43  5F  54  5F  4D  4F  54  54  4F  42  000C7 ;TPA$KEYST
                                                              U.129:  .ASCII  \BOTTOM_T_CHAR\
                                                          FF  000D4           .BYTE   -1
                                                              000D5 ;TPA$KEYSTO
                                                              U.134:  .BLKB   0
                        42  41  54  5F  52  41  45  4C  43  000D5 ;TPA$KEYST
                                                              U.136:  .ASCII  \CLEAR_TAB\
                                                          FF  000DE           .BYTE   -1
                                                              000DF ;TPA$KEYSTO
                                                              U.141:  .BLKB   0
                    43  49  48  50  41  52  47  5F  52  43  000DF ;TPA$KEYST
                                                              U.143:  .ASCII  \CR_GRAPHIC\
                                                          FF  000E9           .BYTE   -1
                                                              000EA ;TPA$KEYSTO
                                                              U.148:  .BLKB   0
                    52  41  48  43  5F  53  53  4F  52  43  000EA ;TPA$KEYST
                                                              U.150:  .ASCII  \CROSS_CHAR\
                                                          FF  000F4           .BYTE   -1
                                                              000F5 ;TPA$KEYSTO
                                                              U.155:  .BLKB   0
                4E  57  4F  44  5F  52  4F  53  52  55  43  000F5 ;TPA$KEYST
                                                              U.157:  .ASCII  \CURSOR_DOWN\
                                                          FF  00100           .BYTE   -1
                                                              00101 ;TPA$KEYSTO
                                                              U.162:  .BLKB   0
                54  46  45  4C  5F  52  4F  53  52  55  43  00101 ;TPA$KEYST
                                                              U.164:  .ASCII  \CURSOR_LEFT\
                                                          FF  0010C           .BYTE   -1
                                                              0010D ;TPA$KEYSTO
                                                              U.169:  .BLKB   0
4E  49  4C  5F  54  58  45  4E  5F  52  4F  53  52  55  43  0010D ;TPA$KEYST
                                                              U.171:  .ASCII  \CURSOR_NEXT_LINE\
                                                          45  0011C
                                                          FF  0011D           .BYTE   -1
                                                              0011E ;TPA$KEYSTO
                                                              U.176:  .BLKB   0
4E  4F  49  54  49  53  4F  50  5F  52  4F  53  52  55  43  0011E ;TPA$KEYST
                                                              U.178:  .ASCII  \CURSOR_POSITION_REPORT\
                            54  52  4F  50  45  52  5F  00120
                                                          FF  00134           .BYTE   -1
                                                              00135 ;TPA$KEYSTO
                                                              U.183:  .BLKB   0
49  44  45  45  43  45  52  50  5F  52  4F  53  52  55  43  00135 ;TPA$KEYST
                                                              U.185:  .ASCII  \CURSOR_PRECEEDING_LINE\
                            45  4E  49  4C  5F  47  4E  00144
                                                          FF  0014B           .BYTE   -1
                                                              0014C ;TPA$KEYSTO
                                                              U.190:  .BLKB   0
            54  48  47  49  52  5F  52  4F  53  52  55  43  0014C ;TPA$KEYST
```

```
                                                                  U.192:  .ASCII  \CURSOR_RIGHT\
                                                        FF  00158         .BYTE   -1
                                                            00159 ;TPA$KEYSTO
                                                                  U.197:  .BLKB   0
                                50  55  5F  52  4F  53  52  55  43  00159 ;TPA$KEYST
                                                                  U.199:  .ASCII  \CURSOR_UP\
                                                        FF  00162         .BYTE   -1
                                                            00163 ;TPA$KEYSTO
                                                                  U.204:  .BLKB   0
                        4E  45  45  52  43  53  5F  4B  52  41  44  00163 ;TPA$KEYST
                                                                  U.206:  .ASC'I  \DARK_SCREEN\
                                                        FF  0016E         .BYTE   -1
                                                            0016F ;TPA$KEYSTO
                                                                  U.211:  .BLKB   0
                        52  41  48  43  5F  45  54  45  4C  45  44  0016F ;TPA$KEYST
                                                                  U.213:  .ASCII  \DELETE_CHAR\
                                                        FF  0017A         .BYTE   -1
                                                            0017B ;TPA$KEYSTO
                                                                  U.218:  .BLKB   0
                        45  4E  49  4C  5F  45  54  45  4C  45  44  0017B ;TPA$KEYST
                                                                  U.220:  .ASCII  \DELETE_LINE\
                                                        FF  00186         .BYTE   -1
                                                            00187 ;TPA$KEYSTO
                                                                  U.225:  .BLKB   0
54  55  42  49  52  54  54  41  5F  45  43  49  56  45  44  00187 ;TPA$KEYST
                                                                  U.227:  .ASCII  \DEVICE_ATTRIBUTES\
                                                        53  45  00196
                                                        FF  00198         .BYTE   -1
                                                            00199 ;TPA$KEYSTO
                                                                  U.232:  .BLKB   0
54  4F  42  5F  48  47  49  48  5F  45  4C  42  55  4F  44  00199 ;TPA$KEYST
                                                                  U.234:  .ASCII  \DOUBLE_HIGH_BOTTOM\
                                                    4D  4F  54  001A8
                                                        FF  001AB         .BYTE   -1
                                                            001AC ;TPA$KEYSTO
                                                                  U.239:  .BLKB   0
50  4F  54  5F  48  47  49  48  5F  45  4C  42  55  4F  44  001AC ;TPA$KEYST
                                                                  U.241:  .ASCII  \DOUBLE_HIGH_TOP\
                                                        FF  001BB         .BYTE   -1
                                                            001BC ;TPA$KEYSTO
                                                                  U.246:  .BLKB   0
                        45  44  49  57  5F  45  4C  42  55  4F  44  001BC ;TPA$KEYST
                                                                  U.248:  .ASCII  \DOUBLE_WIDE\
                                                        FF  001C7         .BYTE   -1
                                                            001C8 ;TPA$KEYSTO
                                                                  U.253:  .BLKB   0
                                45  54  41  43  49  4C  50  55  44  001C8 ;TPA$KEYST
                                                                  U.255:  .ASCII  \DUPLICATE\
                                                        FF  001D1         .BYTE   -1
                                                            001D2 ;TPA$KEYSTO
                                                                  U.260:  .BLKB   0
43  5F  45  54  41  4E  52  45  54  4C  41  5F  44  4E  45  001D2 ;TPA$KEYST
                                                                  U.262:  .ASCII  \END_ALTERNATE_CHAR\
                                                    52  41  48  001E1
                                                        FF  001E4         .BYTE   -1
                                                            001E5 ;TPA$KEYSTO
                                                                  U.267:  .BLKB   0
```

```
                                4B 4E 49 4C 42 5F 44 4E 45  001E5 ;TPA$KEYST
                                                            U.269:  .ASCII  \END_BLINK\
                                                         FF 001EE           .BYTE   -1
                                                            001EF ;TPA$KEYSTO
                                                            U.274:  .BLKB   0
                                   44 4C 4F 42 5F 44 4E 45  001EF ;TPA$KEYST
                                                            U.276:  .ASCII  \END_BOLD\
                                                         FF 001F7           .BYTE   -1
                                                            001F8 ;TPA$KEYSTO
                                                            U.281:  .BLKB   0
45 44 4F 4D 5F 45 54 45 4C 45 44 5F 44 4E 45  001F8 ;TPA$KEYST
                                                            U.283:  .ASCII  \END_DELETE_MODE\
                                                         FF 00207           .BYTE   -1
                                                            00208 ;TPA$KEYSTO
                                                            U.288:  .BLKB   0
45 44 4F 4D 5F 54 52 45 53 4E 49 5F 44 4E 45  00208 ;TPA$KEYST
                                                            U.290:  .ASCII  \END_INSERT_MODE\
                                                         FF 00217           .BYTE   -1
                                                            00218 ;TPA$KEYSTO
                                                            U.295:  .BLKB   0
4E 49 57 41 52 44 5F 45 4E 49 4C 5F 44 4E 45  00218 ;TPA$KEYST
                                                            U.297:  .ASCII  \END_LINE_DRAWING_CHAR\
                                        52 41 48 43 5F 47  00227
                                                         FF 0022D           .BYTE   -1
                                                            0022E ;TPA$KEYSTO
                                                            U.302:  .BLKB   0
                     45 53 52 45 56 45 52 5F 44 4E 45  0022E ;TPA$KEYST
                                                            U.304:  .ASCII  \END_REVERSE\
                                                         FF 00239           .BYTE   -1
                                                            0023A ;TPA$KEYSTO
                                                            U.309:  .BLKB   0
                  45 52 4F 43 53 52 45 44 4E 55 5F 44 4E 45  0023A ;TPA$KEYST
                                                            U.311:  .ASCII  \END_UNDERSCORE\
                                                         FF 00248           .BYTE   -1
                                                            00249 ;TPA$KEYSTO
                                                            U.316:  .BLKB   0
49 44 5F 44 4E 45 5F 4F 54 5F 45 53 41 52 45  00249 ;TPA$KEYST
                                                            U.318:  .ASCII  \ERASE_TO_END_DISPLAY\
                                        59 41 4C 50 53  00258
                                                         FF 0025D           .BYTE   -1
                                                            0025E ;TPA$KEYSTO
                                                            U.323:  .BLKB   0
49 4C 5F 44 4E 45 5F 4F 54 5F 45 53 41 52 45  0025E ;TPA$KEYST
                                                            U.325:  .ASCII  \ERASE_TO_END_LINE\
                                                    45 4E  0026D
                                                         FF 0026F           .BYTE   -1
                                                            00270 ;TPA$KEYSTO
                                                            U.330:  .BLKB   0
53 49 44 5F 45 4C 4F 48 57 5F 45 53 41 52 45  00270 ;TPA$KEYST
                                                            U.332:  .ASCII  \ERASE_WHOLE_DISPLAY\
                                           59 41 4C 50  0027F
                                                         FF 00283           .BYTE   -1
                                                            00284 ;TPA$KEYSTO
                                                            U.337:  .BLKB   0
4E 49 4C 5F 45 4C 4F 48 57 5F 45 53 41 52 45  00284 ;TPA$KEYST
                                                            U.339:  .ASCII  \ERASE_WHOLE_LINE\
                                                         45 00293
```

```
                                                    FF  00294          .BYTE   -1                                      ;
                                                        00295 ;TPA$KEYSTO
                                                              U.344:    .BLKB   0
                                43  49  48  50  41  52  47  5F  46  46  00295 ;TPA$KEYST
                                                              U.346:    .ASCII  \FF_GRAPHIC\                           ;
                                                    FF  0029F          .BYTE   -1                                      ;
                                                        002A0 ;TPA$KEYSTO
                                                              U.351:    .BLKB   0
                                            45  4D  4F  48  002A0 ;TPA$KEYST
                                                              U.353:    .ASCII  \HOME\                                 ;
                                                    FF  002A4          .BYTE   -1                                      ;
                                                        002A5 ;TPA$KEYSTO
                                                              U.358:    .BLKB   0
    52  41  42  5F  4C  41  54  4E  4F  5A  49  52  4F  48  002A5 ;TPA$KEYST
                                                              U.360:    .ASCII  \HORIZONTAL_BAR\                       ;
                                                    FF  002B3          .BYTE   -1                                      ;
                                                        002B4 ;TPA$KEYSTO
                                                              U.365:    .BLKB   0
                                43  49  48  50  41  52  47  5F  54  48  002B4 ;TPA$KEYST
                                                              U.367:    .ASCII  \HT_GRAPHIC\                           ;
                                                    FF  002BE          .BYTE   -1                                      ;
                                                        002BF ;TPA$KEYSTO
                                                              U.372:    .BLKB   0
                                        58  45  44  4E  49  002BF ;TPA$KEYST
                                                              U.374:    .ASCII  \INDEX\                                ;
                                                    FF  002C4          .BYTE   -1                                      ;
                                                        002C5 ;TPA$KEYSTO
                                                              U.379:    .BLKB   0
                            47  4E  49  52  54  53  5F  54  49  4E  49  002C5 ;TPA$KEYST
                                                              U.381:    .ASCII  \INIT_STRING\                          ;
                                                    FF  002D0          .BYTE   -1                                      ;
                                                        002D1 ;TPA$KEYSTO
                                                              U.386:    .BLKB   0
    52  41  48  43  5F  54  52  45  53  4E  49  002D1 ;TPA$KEYST
                                                              U.388:    .ASCII  \INSERT_CHAR\                          ;
                                                    FF  002DC          .BYTE   -1                                      ;
                                                        002DD ;TPA$KEYSTO
                                                              U.393:    .BLKB   0
    45  4E  49  4C  5F  54  52  45  53  4E  49  002DD ;TPA$KEYST
                                                              U.395:    .ASCII  \INSERT_LINE\                          ;
                                                    FF  002E8          .BYTE   -1                                      ;
                                                        002E9 ;TPA$KEYSTO
                                                              U.400:    .BLKB   0
        44  41  50  5F  54  52  45  53  4E  49  002E9 ;TPA$KEYST
                                                              U.402:    .ASCII  \INSERT_PAD\                           ;
                                                    FF  002F3          .BYTE   -1                                      ;
                                                        002F4 ;TPA$KEYSTO
                                                              U.407:    .BLKB   0
                                    30  5F  59  45  4B  002F4 ;TPA$KEYST
                                                              U.409:    .ASCII  \KEY_0\                                ;
                                                    FF  002F9          .BYTE   -1                                      ;
                                                        002FA ;TPA$KEYSTO
                                                              U.414:    .BLKB   0
                                    31  5F  59  45  4B  002FA ;TPA$KEYST
                                                              U.416:    .ASCII  \KEY_1\                                ;
                                                    FF  002FF          .BYTE   -1                                      ;
                                                        00300 ;TPA$KEYSTO
```

```
                                                        U.421:  .BLKB   0
                                32  5F  59  45  4B  00300 ;TPA$KEYST
                                                        U.423:  .ASCII  \KEY_2\
                                            FF  00305           .BYTE   -1
                                                00306 ;TPA$KEYSTO
                                                        U.428:  .BLKB   0
                                33  5F  59  45  4B  00306 ;TPA$KEYST
                                                        U.430:  .ASCII  \KEY_3\
                                            FF  0030B           .BYTE   -1
                                                0030C ;TPA$KEYSTO
                                                        U.435:  .BLKB   0
                                34  5F  59  45  4B  0030C ;TPA$KEYST
                                                        U.437:  .ASCII  \KEY_4\
                                            FF  00311           .BYTE   -1
                                                00312 ;TPA$KEYSTO
                                                        U.442:  .BLKB   0
                                35  5F  59  45  4B  00312 ;TPA$KEYST
                                                        U.444:  .ASCII  \KEY_5\
                                            FF  00317           .BYTE   -1
                                                00318 ;TPA$KEYSTO
                                                        U.449:  .BLKB   0
                                36  5F  59  45  4B  00318 ;TPA$KEYST
                                                        U.451:  .ASCII  \KEY_6\
                                            FF  0031D           .BYTE   -1
                                                0031E ;TPA$KEYSTO
                                                        U.456:  .BLKB   0
                                37  5F  59  45  4B  0031E ;TPA$KEYST
                                                        U.458:  .ASCII  \KEY_7\
                                            FF  00323           .BYTE   -1
                                                00324 ;TPA$KEYSTO
                                                        U.463:  .BLKB   0
                                38  5F  59  45  4B  00324 ;TPA$KEYST
                                                        U.465:  .ASCII  \KEY_8\
                                            FF  00329           .BYTE   -1
                                                0032A ;TPA$KEYSTO
                                                        U.470:  .BLKB   0
                                39  5F  59  45  4B  0032A ;TPA$KEYST
                                                        U.472:  .ASCII  \KEY_9\
                                            FF  0032F           .BYTE   -1
                                                00330 ;TPA$KEYSTO
                                                        U.477:  .BLKB   0
    45  43  41  50  53  4B  43  41  42  5F  59  45  4B  00330 ;TPA$KEYST
                                                        U.479:  .ASCII  \KEY_BACKSPACE\
                                            FF  0033D           .BYTE   -1
                                                0033E ;TPA$KEYSTO
                                                        U.484:  .BLKB   0
                        41  4D  4D  4F  43  5F  59  45  4B  0033E ;TPA$KEYST
                                                        U.486:  .ASCII  \KEY_COMMA\
                                            FF  00347           .BYTE   -1
                                                00348 ;TPA$KEYSTO
                                                        U.491:  .BLKB   0
57  4F  52  52  41  5F  4E  57  4F  44  5F  59  45  4B  00348 ;TPA$KEYST
                                                        U.493:  .ASCII  \KEY_DOWN_ARROW\
                                            FF  00356           .BYTE   -1
                                                00357 ;TPA$KEYSTO
                                                        U.498:  .BLKB   0
                            31  45  5F  59  45  4B  00357 ;TPA$KEYST
```

```
                                    U.500:  .ASCII  \KEY_E1\            ;
                         FF  0035D          .BYTE   -1                  ;
                             0035E ;TPA$KEYST0
                                   U.505:   .BLKB   0
           32 45 5F 59 45 4B  0035E ;TPA$KEYST
                                   U.507:   .ASCII  \KEY_E2\            ;
                         FF  00364          .BYTE   -1                  ;
                             00365 ;TPA$KEYST0
                                   U.512:   .BLKB   0
           33 45 5F 59 45 4B  00365 ;TPA$KEYST
                                   U.514:   .ASCII  \KEY_E3\            ;
                         FF  0036B          .BYTE   -1                  ;
                             0036C ;TPA$KEYST0
                                   U.519:   .BLKB   0
           34 45 5F 59 45 4B  0036C ;TPA$KEYST
                                   U.521:   .ASCII  \KEY_E4\            ;
                         FF  00372          .BYTE   -1                  ;
                             00373 ;TPA$KEYST0
                                   U.526:   .BLKB   0
           35 45 5F 59 45 4B  00373 ;TPA$KEYST
                                   U.528:   .ASCII  \KEY_E5\            ;
                         FF  00379          .BYTE   -1                  ;
                             0037A ;TPA$KEYST0
                                   U.533:   .BLKB   0
           36 45 5F 59 45 4B  0037A ;TPA$KEYST
                                   U.535:   .ASCII  \KEY_E6\            ;
                         FF  00380          .BYTE   -1                  ;
                             00381 ;TPA$KEYST0
                                   U.540:   .BLKB   0
  52 45 54 4E 45 5F 59 45 4B  00381 ;TPA$KEYST
                                   U.542:   .ASCII  \KEY_ENTER\         ;
                         FF  0038A          .BYTE   -1                  ;
                             0038B ;TPA$KEYST0
                                   U.547:   .BLKB   0
           31 46 5F 59 45 4B  0038B ;TPA$KEYST
                                   U.549:   .ASCII  \KEY_F1\            ;
                         FF  00391          .BYTE   -1                  ;
                             00392 ;TPA$KEYST0
                                   U.554:   .BLKB   0
           32 46 5F 59 45 4B  00392 ;TPA$KEYST
                                   U.556:   .ASCII  \KEY_F2\            ;
                         FF  00398          .BYTE   -1                  ;
                             00399 ;TPA$KEYST0
                                   U.561:   .BLKB   0
           33 46 5F 59 45 4B  00399 ;TPA$KEYST
                                   U.563:   .ASCII  \KEY_F3\            ;
                         FF  0039F          .BYTE   -1                  ;
                             003A0 ;TPA$KEYST0
                                   U.568:   .BLKB   0
           34 46 5F 59 45 4B  003A0 ;TPA$KEYST
                                   U.570:   .ASCII  \KEY_F4\            ;
                         FF  003A6          .BYTE   -1                  ;
                             003A7 ;TPA$KEYST0
                                   U.575:   .BLKB   0
           35 46 5F 59 45 4B  003A7 ;TPA$KEYST
                                   U.577:   .ASCII  \KEY_F5\            ;
                         FF  003AD          .BYTE   -1                  ;
```

```
                                                003AE ;TPA$KEYSTO
                                                      U.582:  .BLKB   0
                                    36  46  5F  59  45  4B  003AE ;TPA$KEYST
                                                      U.584:  .ASCII  \KEY_F6\                ;
                                                FF    003B4        .BYTE   -1                   ;
                                                003B5 ;TPA$KEYSTO
                                                      U.589:  .BLKB   0
                                    37  46  5F  59  45  4B  003B5 ;TPA$KEYST
                                                      U.591:  .ASCII  \KEY_F7\                ;
                                                FF    003BB        .BYTE   -1                   ;
                                                003BC ;TPA$KEYSTO
                                                      U.596:  .BLKB   0
                                    38  46  5F  59  45  4B  003BC ;TPA$KEYST
                                                      U.598:  .ASCII  \KEY_F8\                ;
                                                FF    003C2        .BYTE   -1                   ;
                                                003C3 ;TPA$KEYSTO
                                                      U.603:  .BLKB   0
                                    39  46  5F  59  45  4B  003C3 ;TPA$KEYST
                                                      U.605:  .ASCII  \KEY_F9\                ;
                                                FF    003C9        .BYTE   -1                   ;
                                                003CA ;TPA$KEYSTO
                                                      U.610:  .BLKB   0
                                30  31  46  5F  59  45  4B  003CA ;TPA$KEYST
                                                      U.612:  .ASCII  \KEY_F10\               ;
                                                FF    003D1        .BYTE   -1                   ;
                                                003D2 ;TPA$KEYSTO
                                                      U.617:  .BLKB   0
                                31  31  46  5F  59  45  4B  003D2 ;TPA$KEYST
                                                      U.619:  .ASCII  \KEY_F11\               ;
                                                FF    003D9        .BYTE   -1                   ;
                                                003DA ;TPA$KEYSTO
                                                      U.624:  .BLKB   0
                                32  31  46  5F  59  45  4B  003DA ;TPA$KEYST
                                                      U.626:  .ASCII  \KEY_F12\               ;
                                                FF    003E1        .BYTE   -1                   ;
                                                003E2 ;TPA$KEYSTO
                                                      U.631:  .BLKB   0
                                33  31  46  5F  59  45  4B  003E2 ;TPA$KEYST
                                                      U.633:  .ASCII  \KEY_F13\               ;
                                                FF    003E9        .BYTE   -1                   ;
                                                003EA ;TPA$KEYSTO
                                                      U.638:  .BLKB   0
                                34  31  46  5F  59  45  4B  003EA ;TPA$KEYST
                                                      U.640:  .ASCII  \KEY_F14\               ;
                                                FF    003F1        .BYTE   -1                   ;
                                                003F2 ;TPA$KEYSTO
                                                      U.645:  .BLKB   0
                                35  31  46  5F  59  45  4B  003F2 ;TPA$KEYST
                                                      U.647:  .ASCII  \KEY_F15\               ;
                                                FF    003F9        .BYTE   -1                   ;
                                                003FA ;TPA$KEYSTO
                                                      U.652:  .BLKB   0
                                36  31  46  5F  59  45  4B  003FA ;TPA$KEYST
                                                      U.654:  .ASCII  \KEY_F16\               ;
                                                FF    00401        .BYTE   -1                   ;
                                                00402 ;TPA$KEYSTO
                                                      U.659:  .BLKB   0
```

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                                37  31  46  5F  59  45  4B  00402 ;TPA$KEYST
                                                              U.661:  .ASCII  \KEY_F17\
                                                          FF  00409           .BYTE   -1
                                                              0040A ;TPA$KEYSTO
                                                              U.666:  .BLKB   0
                                38  31  46  5F  59  45  4B  0040A ;TPA$KEYST
                                                              U.668:  .ASCII  \KEY_F18\
                                                          FF  00411           .BYTE   -1
                                                              00412 ;TPA$KEYSTO
                                                              U.673:  .BLKB   0
                                39  31  46  5F  59  45  4B  00412 ;TPA$KEYST
                                                              U.675:  .ASCII  \KEY_F19\
                                                          FF  00419           .BYTE   -1
                                                              0041A ;TPA$KEYSTO
                                                              U.680:  .BLKB   0
                                30  32  46  5F  59  45  4B  0041A ;TPA$KEYST
                                                              U.682:  .ASCII  \KEY_F20\
                                                          FF  00421           .BYTE   -1
                                                              00422 ;TPA$KEYSTO
                                                              U.687:  .BLKB   0
57  4F  52  52  41  5F  54  46  45  4C  5F  59  45  4B  00422 ;TPA$KEYST
                                                              U.689:  .ASCII  \KEY_LEFT_ARROW\
                                                          FF  00430           .BYTE   -1
                                                              00431 ;TPA$KEYSTO
                                                              U.694:  .BLKB   0
                            53  55  4E  49  4D  5F  59  45  4B  00431 ;TPA$KEYST
                                                              U.696:  .ASCII  \KEY_MINUS\
                                                          FF  0043A           .BYTE   -1
                                                              0043B ;TPA$KEYSTO
                                                              U.701:  .BLKB   0
                        44  4F  49  52  45  50  5F  59  45  4B  0043B ;TPA$KEYST
                                                              U.703:  .ASCII  \KEY_PERIOD\
                                                          FF  00445           .BYTE   -1
                                                              00446 ;TPA$KEYSTO
                                                              U.708:  .BLKB   0
                                31  46  50  5F  59  45  4B  00446 ;TPA$KEYST
                                                              U.710:  .ASCII  \KEY_PF1\
                                                          FF  0044D           .BYTE   -1
                                                              0044E ;TPA$KEYSTO
                                                              U.715:  .BLKB   0
                                32  46  50  5F  59  45  4B  0044E ;TPA$KEYST
                                                              U.717:  .ASCII  \KEY_PF2\
                                                          FF  00455           .BYTE   -1
                                                              00456 ;TPA$KEYSTO
                                                              U.722:  .BLKB   0
                                33  46  50  5F  59  45  4B  00456 ;TPA$KEYST
                                                              U.724:  .ASCII  \KEY_PF3\
                                                          FF  0045D           .BYTE   -1
                                                              0045E ;TPA$KEYSTO
                                                              U.729:  .BLKB   0
                                34  46  50  5F  59  45  4B  0045E ;TPA$KEYST
                                                              U.731:  .ASCII  \KEY_PF4\
                                                          FF  00465           .BYTE   -1
                                                              00466 ;TPA$KEYSTO
                                                              U.736:  .BLKB   0
57  4F  52  52  41  5F  54  48  47  49  52  5F  59  45  4B  00466 ;TPA$KEYST
                                                              U.738:  .ASCII  \KEY_RIGHT_ARROW\
```

```
                                                    FF  00475          .BYTE   -1                                      ;
                                                        00476 ;TPA$KEYSTO
                                                              U.743:    .BLKB   0
                57  4F  52  52  41  5F  50  55  5F  59  45  4B  00476 ;TPA$KEYST
                                                              U.745:    .ASCII  \KEY_UP_ARROW\                         ;
                                                    FF  00482          .BYTE   -1                                      ;
                                                        00483 ;TPA$KEYSTO
                                                              U.750:    .BLKB   0
                    31  46  5F  4C  45  42  41  4C  00483 ;TPA$KEYST
                                                              U.752:    .ASCII  \LABEL_F1\                             ;
                                                    FF  0048B          .BYTE   -1                                      ;
                                                        0048C ;TPA$KEYSTO
                                                              U.757:    .BLKB   0
                    32  46  5F  4C  45  42  41  4C  0048C ;TPA$KEYST
                                                              U.759:    .ASCII  \LABEL_F2\                             ;
                                                    FF  00494          .BYTE   -1                                      ;
                                                        00495 ;TPA$KEYSTO
                                                              U.764:    .BLKB   0
                    33  46  5F  4C  45  42  41  4C  00495 ;TPA$KEYST
                                                              U.766:    .ASCII  \LABEL_F3\                             ;
                                                    FF  0049D          .BYTE   -1                                      ;
                                                        0049E ;TPA$KEYSTO
                                                              U.771:    .BLKB   0
                    34  46  5F  4C  45  42  41  4C  0049E ;TPA$KEYST
                                                              U.773:    .ASCII  \LABEL_F4\                             ;
                                                    FF  004A6          .BYTE   -1                                      ;
                                                        004A7 ;TPA$KEYSTO
                                                              U.778:    .BLKB   0
                    35  46  5F  4C  45  42  41  4C  004A7 ;TPA$KEYST
                                                              U.780:    .ASCII  \LABEL_F5\                             ;
                                                    FF  004AF          .BYTE   -1                                      ;
                                                        004B0 ;TPA$KEYSTO
                                                              U.785:    .BLKB   0
                    36  46  5F  4C  45  42  41  4C  004B0 ;TPA$KEYST
                                                              U.787:    .ASCII  \LABEL_F6\                             ;
                                                    FF  004B8          .BYTE   -1                                      ;
                                                        004B9 ;TPA$KEYSTO
                                                              U.792:    .BLKB   0
                    37  46  5F  4C  45  42  41  4C  004B9 ;TPA$KEYST
                                                              U.794:    .ASCII  \LABEL_F7\                             ;
                                                    FF  004C1          .BYTE   -1                                      ;
                                                        004C2 ;TPA$KEYSTO
                                                              U.799:    .BLKB   0
                    38  46  5F  4C  45  42  41  4C  004C2 ;TPA$KEYST
                                                              U.801:    .ASCII  \LABEL_F8\                             ;
                                                    FF  004CA          .BYTE   -1                                      ;
                                                        004CB ;TPA$KEYSTO
                                                              U.806:    .BLKB   0
                    39  46  5F  4C  45  42  41  4C  004CB ;TPA$KEYST
                                                              U.808:    .ASCII  \LABEL_F9\                             ;
                                                    FF  004D3          .BYTE   -1                                      ;
                                                        004D4 ;TPA$KEYSTO
                                                              U.813:    .BLKB   0
                30  31  46  5F  4C  45  42  41  4C  004D4 ;TPA$KEYST
                                                              U.815:    .ASCII  \LABEL_F10\                            ;
                                                    FF  004DD          .BYTE   -1                                      ;
                                                        004DE ;TPA$KEYSTO
```

```
                                                    U.820:  .BLKB   0
                31  31  46  5F  4C  45  42  41  4C 004DE ;TPA$KEYST
                                                    U.822:  .ASCII  \LABEL_F11\
                                                FF  004E7           .BYTE   -1
                                                    004E8 ;TPA$KEYSTO
                                                    U.827:  .BLKB   0
                32  31  46  5F  4C  45  42  41  4C 004E8 ;TPA$KEYST
                                                    U.829:  .ASCII  \LABEL_F12\
                                                FF  004F1           .BYTE   -1
                                                    004F2 ;TPA$KEYSTO
                                                    U.834:  .BLKB   0
                33  31  46  5F  4C  45  42  41  4C 004F2 ;TPA$KEYST
                                                    U.836:  .ASCII  \LABEL_F13\
                                                FF  004FB           .BYTE   -1
                                                    004FC ;TPA$KEYSTO
                                                    U.841:  .BLKB   0
                34  31  46  5F  4C  45  42  41  4C 004FC ;TPA$KEYST
                                                    U.843:  .ASCII  \LABEL_F14\
                                                FF  00505           .BYTE   -1
                                                    00506 ;TPA$KEYSTO
                                                    U.848:  .BLKB   0
                35  31  46  5F  4C  45  42  41  4C 00506 ;TPA$KEYST
                                                    U.850:  .ASCII  \LABEL_F15\
                                                FF  0050F           .BYTE   -1
                                                    00510 ;TPA$KEYSTO
                                                    U.855:  .BLKB   0
                36  31  46  5F  4C  45  42  41  4C 00510 ;TPA$KEYST
                                                    U.857:  .ASCII  \LABEL_F16\
                                                FF  00519           .BYTE   -1
                                                    0051A ;TPA$KEYSTO
                                                    U.862:  .BLKB   0
                37  31  46  5F  4C  45  42  41  4C 0051A ;TPA$KEYST
                                                    U.864:  .ASCII  \LABEL_F17\
                                                FF  00523           .BYTE   -1
                                                    00524 ;TPA$KEYSTO
                                                    U.869:  .BLKB   0
                38  31  46  5F  4C  45  42  41  4C 00524 ;TPA$KEYST
                                                    U.871:  .ASCII  \LABEL_F18\
                                                FF  0052D           .BYTE   -1
                                                    0052E ;TPA$KEYSTO
                                                    U.876:  .BLKB   0
                39  31  46  5F  4C  45  42  41  4C 0052E ;TPA$KEYST
                                                    U.878:  .ASCII  \LABEL_F19\
                                                FF  00537           .BYTE   -1
                                                    00538 ;TPA$KEYSTO
                                                    U.883:  .BLKB   0
                30  32  46  5F  4C  45  42  41  4C 00538 ;TPA$KEYST
                                                    U.885:  .ASCII  \LABEL_F20\
                                                FF  00541           .BYTE   -1
                                                    00542 ;TPA$KEYSTO
                                                    U.890:  .BLKB   0
    52  41  48  43  5F  54  5F  54  46  45  4C 00542 ;TPA$KEYST
                                                    U.892:  .ASCII  \LEFT_T_CHAR\
                                                FF  0054D           .BYTE   -1
                                                    0054E ;TPA$KEYSTO
                                                    U.897:  .BLKB   0
        43  49  48  50  41  52  47  5F  46  4C 0054E ;TPA$KEYST
```

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                                                                                U.899:  .ASCII  \LF_GRAPHIC\                    ;
                                                                        FF      00558           .BYTE   -1                      ;
                                                                                00559 ;TPA$KEYSTO
                                                                                U.904:  .BLKB   0
                        4E  45  45  52  43  53  5F  54  48  47  49  4C  00559 ;TPA$KEYST
                                                                                U.906:  .ASCII  \LIGHT_SCREEN\                  ;
                                                                        FF      00565           .BYTE   -1                      ;
                                                                                00566 ;TPA$KEYSTO
                                                                                U.911:  .BLKB   0
4E  52  4F  43  5F  54  46  45  4C  5F  52  45  57  4F  4C  00566 ;TPA$KEYST
                                                                                U.913:  .ASCII  \LOWER_LEFT_CORNER\             ;
                                                                52  45  00575                                                   ;
                                                                FF      00577           .BYTE   -1                              ;
                                                                        00578 ;TPA$KEYSTO
                                                                                U.918:  .BLKB   0
52  4F  43  5F  54  48  47  49  52  5F  52  45  57  4F  4C  00578 ;TPA$KEYST
                                                                                U.920:  .ASCII  \LOWER_RIGHT_CORNER\            ;
                                                            52  45  4E  00587                                                   ;
                                                            FF      0058A           .BYTE   -1                              ;
                                                                    0058B ;TPA$KEYSTO
                                                                                U.925:  .BLKB   0
                                                    45  4D  41  4E  0058B ;TPA$KEYST
                                                                                U.927:  .ASCII  \NAME\                          ;
                                                                FF      0058F           .BYTE   -1                              ;
                                                                        00590 ;TPA$KEYSTO
                                                                                U.932:  .BLKB   0
                        52  41  48  43  5F  45  4E  49  4C  57  45  4E  00590 ;TPA$KEYST
                                                                                U.934:  .ASCII  \NEWLINE_CHAR\                  ;
                                                                        FF      0059C           .BYTE   -1                      ;
                                                                                0059D ;TPA$KEYSTO
                                                                                U.939:  .BLKB   0
                                52  41  48  43  5F  44  41  50  0059D ;TPA$KEYST
                                                                                U.941:  .ASCII  \PAD_CHAR\                      ;
                                                                        FF      005A5           .BYTE   -1                      ;
                                                                                005A6 ;TPA$KEYSTO
                                                                                U.946:  .BLKB   0
5F  52  4F  53  52  55  43  5F  54  53  45  55  51  45  52  005A6 ;TPA$KEYST
                                                                                U.948:  .ASCII  \REQUEST_CURSOR_POSITION\       ;
                                4E  4F  49  54  49  53  4F  50  005B5                                                           ;
                                                                FF      005BD           .BYTE   -1                              ;
                                                                        005BE ;TPA$KEYSTO
                                                                                U.953:  .BLKB   0
    52  4F  53  52  55  43  5F  45  52  4F  54  53  45  52  005BE ;TPA$KEYST
                                                                                U.955:  .ASCII  \RESTORE_CURSOR\                ;
                                                                        FF      005CC           .BYTE   -1                      ;
                                                                                005CD ;TPA$KEYSTO
                                                                                U.960:  .BLKB   0
        58  45  44  4E  49  5F  45  53  52  45  56  45  52  005CD ;TPA$KEYST
                                                                                U.962:  .ASCII  \REVERSE_INDEX\                 ;
                                                                        FF      005DA           .BYTE   -1                      ;
                                                                                005DB ;TPA$KEYSTO
                                                                                U.967:  .BLKB   0
            52  41  48  43  5F  54  5F  54  48  47  49  52  005DB ;TPA$KEYST
                                                                                U.969:  .ASCII  \RIGHT_T_CHAR\                  ;
                                                                        FF      005E7           .BYTE   -1                      ;
                                                                                005E8 ;TPA$KEYSTO
                                                                                U.974:  .BLKB   0
```

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                52 4F 53 52 55 43 5F 45 56 41 53  005E8 ;TPA$KEYST
                                                        U.976:  .ASCII  \SAVE_CURSOR\
                                                  FF    005F3          .BYTE   -1
                                                        005F4 ;TPA$KEYSTO
                                                        U.981:  .BLKB   0
    44 52 41 57 52 4F 46 5F 4C 4C 4F 52 43 53   005F4 ;TPA$KEYST
                                                        U.983:  .ASCII  \SCROLL_FORWARD\
                                                  FF    00602          .BYTE   -1
                                                        00603 ;TPA$KEYSTO
                                                        U.988:  .BLKB   0
    45 53 52 45 56 45 52 5F 4C 4C 4F 52 43 53   00603 ;TPA$KEYST
                                                        U.990:  .ASCII  \SCROLL_REVERSE\
                                                  FF    00611          .BYTE   -1
                                                        00612 ;TPA$KEYSTO
                                                        U.995:  .BLKB   0
4E 45 5F 4F 54 5F 45 53 41 52 45 5F 4C 45 53   00612 ;TPA$KEYST
                                                        U.997:  .ASCII  \SEL_ERASE_TO_END_DISPLAY\
                   59 41 4C 50 53 49 44 5F 44  00621
                                                  FF    0062A          .BYTE   -1
                                                        0062B ;TPA$KEYSTO
                                                        U.1002: .BLKB   0
4E 45 5F 4F 54 5F 45 53 41 52 45 5F 4C 45 53   0062B ;TPA$KEYST
                                                        U.1004: .ASCII  \SEL_ERASE_TO_END_LINE\
                      45 4E 49 4C 5F 44 0063A
                                                  FF    00640          .BYTE   -1
                                                        00641 ;TPA$KEYSTO
                                                        U.1009: .BLKB   0
45 4C 4F 48 57 5F 45 53 41 52 45 5F 4C 45 53   00641 ;TPA$KEYST
                                                        U.1011: .ASCII  \SEL_ERASE_WHOLE_DISPLAY\
                   59 41 4C 50 53 49 44 5F 00650
                                                  FF    00658          .BYTE   -1
                                                        00659 ;TPA$KEYSTO
                                                        U.1016: .BLKB   0
45 4C 4F 48 57 5F 45 53 41 52 45 5F 4C 45 53   00659 ;TPA$KEYST
                                                        U.1018: .ASCII  \SEI_ERASE_WHOLE_LINE\
                      45 4E 49 4C 5F 44 00668
                                                  FF    0066D          .BYTE   -1
                                                        0066E ;TPA$KEYSTO
                                                        U.1023: .BLKB   0
4E 4F 49 54 41 43 49 4C 50 50 41 5F 54 45 53   0066E ;TPA$KEYST
                                                        U.1025: .ASCII  \SET_APPLICATION_KEYPAD\
                   44 41 50 59 45 4B 5F 0067D
                                                  FF    00684          .BYTE   -1
                                                        00685 ;TPA$KEYSTO
                                                        U.1030: .BLKB   0
45 53 5F 54 4F 4E 5F 52 41 48 43 5F 54 45 53   00685 ;TPA$KEYST
                                                        U.1032: .ASCII  \SET_CHAR_NOT_SEL_ERASE\
                   45 53 41 52 45 5F 4C 00694
                                                  FF    0069B          .BYTE   -1
                                                        0069C ;TPA$KEYSTO
                                                        U.1037: .BLKB   0
52 45 5F 4C 45 53 5F 52 41 48 43 5F 54 45 53   0069C ;TPA$KEYST
                                                        U.1039: .ASCII  \SET_CHAR_SEL_ERASE\
                                  45 53 41 006AB
                                                  FF    006AE          .BYTE   -1
                                                        006AF ;TPA$KEYSTO
                                                        U.1044: .BLKB   0
```

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                53 42 41 5F 52 4F 53 52 55 43 5F 54 45 53  006AF ;TPA$KEYST
                                                              U.1046: .ASCII  \SET_CURSOR_ABS\
                                                           FF 006BD        .BYTE   -1
                                                              006BE ;TPA$KEYSTO
                                                              U.1051: .BLKB   0
59 45 4B 5F 43 49 52 45 4D 55 4E 5F 54 45 53  006BE ;TPA$KEYST
                                                              U.1053: .ASCII  \SET_NUMERIC_KEYPAD\
                                                        44 41 50 006CD
                                                           FF 006D0        .BYTE   -1
                                                              006D1 ;TPA$KEYSTO
                                                              U.1058: .BLKB   0
49 47 45 52 5F 4C 4C 4F 52 43 53 5F 54 45 53  006D1 ;TPA$KEYST
                                                              U.1060: .ASCII  \SET_SCROLL_REGION\
                                                        4E 4F 006E0
                                                           FF 006E2        .BYTE   -1
                                                              006E3 ;TPA$KEYSTO
                                                              U.1065: .BLKB   0
                                  42 41 54 5F 54 45 53  006E3 ;TPA$KEYST
                                                              U.1067: .ASCII  \SET_TAB\
                                                           FF 006EA        .BYTE   -1
                                                              006EB ;TPA$KEYSTO
                                                              U.1072: .BLKB   0
                48 47 49 48 5F 45 4C 47 4E 49 53  006EB ;TPA$KEYST
                                                              U.1074: .ASCII  \SINGLE_HIGH\
                                                           FF 006F6        .BYTE   -1
                                                              006F7 ;TPA$KEYSTO
                                                              U.1079: .BLKB   0
                                  52 41 48 43 5F 42 41 54  006F7 ;TPA$KEYST
                                                              U.1081: .ASCII  \TAB_CHAR\
                                                           FF 006FF        .BYTE   -1
                                                              00700 ;TPA$KEYSTO
                                                              U.1086: .BLKB   0
                            52 41 48 43 5F 54 5F 50 4F 54  00700 ;TPA$KEYST
                                                              U.1088: .ASCII  \TOP_T_CHAR\
                                                           FF 0070A        .BYTE   -1
                                                              0070B ;TPA$KEYSTO
                                                              U.1093: .BLKB   0
4E 4F 43 49 5F 4E 4F 49 54 41 43 4E 55 52 54  0070B ;TPA$KEYST
                                                              U.1095: .ASCII  \TRUNCATION_ICON\
                                                           FF 0071A        .BYTE   -1
                                                              0071B ;TPA$KEYSTO
                                                              U.1100: .BLKB   0
   52 41 48 43 5F 45 4E 49 4C 52 45 44 4E 55  0071B ;TPA$KEYST
                                                              U.1102: .ASCII  \UNDERLINE_CHAR\
                                                           FF 00729        .BYTE   -1
                                                              0072A ;TPA$KEYSTO
                                                              U.1107: .BLKB   0
4E 52 4F 43 5F 54 46 45 4C 5F 52 45 50 50 55  0072A ;TPA$KEYST
                                                              U.1109: .ASCII  \UPPER_LEFT_CORNER\
                                                        52 45 00739
                                                           FF 0073B        .BYTE   -1
                                                              0073C ;TPA$KEYSTO
                                                              U.1114: .BLKB   0
52 4F 43 5F 54 48 47 49 52 5F 52 45 50 50 55  0073C ;TPA$KEYST
                                                              U.1116: .ASCII  \UPPER_RIGHT_CORNER\
                                                        52 45 4E 0074B
                                                           FF 0074E        .BYTE   -1
```

```
                                                        0074F ;TPA$KEYSTO
                                                              U.1121: .BLKB   0
        52  41  42  5F  4C  41  43  49  54  52  45  56  0074F ;TPA$KEYST
                                                              U.1123: .ASCII  \VERTICAL_BAR\
                                                        FF    0075B         .BYTE   -1
                                                        0075C ;TPA$KEYSTO
                                                              U.1128: .BLKB   0
            43  49  48  50  41  52  47  5F  54  56      0075C ;TPA$KEYST
                                                              U.1130: .ASCII  \VT_GRAPHIC\
                                                        FF    00766         .BYTE   -1
                                                        00767 ;TPA$KEYSTO
                                                              U.1135: .BLKB   0
        57  4F  52  52  41  4E  5F  48  54  44  49  57  00767 ;TPA$KEYST
                                                              U.1137: .ASCII  \WIDTH_NARROW\
                                                        FF    00773         .BYTE   -1
                                                        00774 ;TPA$KEYSTO
                                                              U.1142: .BLKB   0
            45  44  49  57  5F  48  54  44  49  57      00774 ;TPA$KEYST
                                                              U.1144: .ASCII  \WIDTH_WIDE\
                                                        FF    0077E         .BYTE   -1
                                                        0077F ;TPA$KEYSTO
                                                              U.1149: .BLKB   0
    31  5F  52  54  53  5F  45  54  41  56  49  52  50  0077F ;TPA$KEYST
                                                              U.1151: .ASCII  \PRIVATE_STR_1\
                                                        FF    0078C         .BYTE   -1
                                                        0078D ;TPA$KEYSTO
                                                              U.1156: .BLKB   0
    32  5F  52  54  53  5F  45  54  41  56  49  52  5U  0078D ;TPA$KEYST
                                                              U.1158: .ASCII  \PRIVATE_STR_2\
                                                        FF    0079A         .BYTE   -1
                                                        0079B ;TPA$KEYSTO
                                                              U.1163: .BLKB   0
    33  5F  52  54  53  5F  45  54  41  56  49  52  50  0079B ;TPA$KEYST
                                                              U.1165: .ASCII  \PRIVATE_STR_3\
                                                        FF    007A8         .BYTE   -1
                                                        007A9 ;TPA$KEYSTO
                                                              U.1170: .BLKB   0
    34  5F  52  54  53  5F  45  54  41  56  49  52  50  007A9 ;TPA$KEYST
                                                              U.1172: .ASCII  \PRIVATE_STR_4\
                                                        FF    007B6         .BYTE   -1
                                                        007B7 ;TPA$KEYSTO
                                                              U.1177: .BLKB   0
    35  5F  52  54  53  5F  45  54  41  56  49  52  50  007B7 ;TPA$KEYST
                                                              U.1179: .ASCII  \PRIVATE_STR_5\
                                                        FF    007C4         .BYTE   -1
                                                        007C5 ;TPA$KEYSTO
                                                              U.1184: .BLKB   0
    36  5F  52  54  53  5F  45  54  41  56  49  52  50  007C5 ;TPA$KEYST
                                                              U.1186: .ASCII  \PRIVATE_STR_6\
                                                        FF    007D2         .BYTE   -1
                                                        007D3 ;TPA$KEYSTO
                                                              U.1191: .BLKB   0
    37  5F  52  54  53  5F  45  54  41  56  49  52  50  007D3 ;TPA$KEYST
                                                              U.1193: .ASCII  \PRIVATE_STR_7\
                                                        FF    007E0         .BYTE   -1
                                                        007E1 ;TPA$KEYSTO
                                                              U.1198: .BLKB   0
```

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        38  5F  52  54  53  5F  45  54  41  56  49  52  50  007E1 ,TPA$KEYST
                                                            U.1200: .ASCII  \PRIVATE_STR_8\                 ;
                                                        FF  007EE           .BYTE   -1                      ;
                                                            007EF ;TPA$KEYSTO
                                                            U.1205: .BLKB   0
        39  5F  52  54  53  5F  45  54  41  56  49  52  50  007EF ;TPA$KEYST
                                                            U.1207: .ASCII  \PRIVATE_STR_9\                 ;
                                                        FF  007FC           .BYTE   -1                      ;
                                                            007FD ;TPA$KEYSTO
                                                            U.1212: .BLKB   0
    30  31  5F  52  54  53  5F  45  54  41  56  49  52  50  007FD ;TPA$KEYST
                                                            U.1214: .ASCII  \PRIVATE_STR_10\                ;
                                                        FF  0080B           .BYTE   -1                      ;
                                                        FF  0080C ;TPA$KEYFILL
                                                            U.1221: .BYTE   -1                              ;

                                                                    .PSECT  _LIB$STATE$,NOWRT,  SHR,  PIC,1

                                                            00000 SMG$$A_STRING_STATES::
                                                                    .BLKB   0
                                                            00000 BEGIN_SCAN:
                                                                    .BLKB   0
                                                         99F8  00000 ;TPA$TYPE
                                                            U.2:    .WORD   -26120                          ;
                                                         0000* 00002 ;TPA$SUBEXP
                                                            U.4:    .WORD   <<U.3-U.4>-2>                   ;
                                                    00000000* 00004 ;TPA$ACTION
                                                            U.5:    .LONG   <<SMG$$NEXT_RECORD-U.5>-4>      ;
                                                         0000* 00008 ;TPA$TARGET
                                                            U.6:    .WORD   <<BEGIN_SCAN-U.6>-2>            ;
                                                         9021  0000A ;TPA$TYPE
                                                            U.7:    .WORD   -28639                          ;
                                                    00000000* 0000C ;TPA$ACTION
                                                            U.8:    .LONG   <<SMG$$NEXT_RECORD-U.8>-4>      ;
                                                         0000* 00010 ;TPA$TARGET
                                                            U.9:    .WORD   <<BEGIN_SCAN-U.9>-2>            ;
                                                         99F8  00012 ;TPA$TYPE
                                                            U.10:   .WORD   -26120                          ;
                                                         0000* 00014 ;TPA$SUBEXP
                                                            U.12:   .WORD   <<U.11-U.12>-2>                 ;
                                                    00000000* 00016 ;TPA$ACTION
                                                            U.13:   .LONG   <<SMG$$BLANKS_OFF-U.13>-4>      ;
                                                         0000* 0001A ;TPA$TARGET
                                                            U.14:   .WORD   <<BEGIN_SCAN-U.14>-2>           ;
                                                         15F6  0001C ;TPA$TYPE
                                                            U.15:   .WORD   5622                            ;
                                                         FFFF  0001E ;TPA$TARGET
                                                            U.16:   .WORD   -1                              ;
                                                            00020 ;END_OF_LINE
                                                            U.3:    .BLKB   0
                                                         11F7  00020 ;TPA$TYPE
                                                            U.17:   .WORD   4599                            ;
                                                         FFFF  00022 ;TPA$TARGET
                                                            U.18:   .WORD   -1                              ;
                                                         1021  00024 ;TPA$TYPE
                                                            U.19:   .WORD   4129                            ;
                                                         FFFF  00026 ;TPA$TARGET
```

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                                                U.20:    .WORD   -1                                      ;
                    15F6  00028                 ;TPA$TYPE
                                                U.21:    .WORD   5622                                    ;
                    FFFE  0002A                 ;TPA$TARGET
                                                U.22:    .WORD   -2                                      ;
                          0002C                 ;CAPABILITY
                                                U.11:    .BLKB   0
                    99F8  0002C                 ;TPA$TYPE
                                                U.23:    .WORD   -26120                                  ;
                    0000* 0002E                 ;TPA$SUBEXP
                                                U.25:    .WORD   <<U.24-U.25>-2>                         ;
                00000000* 00030                 ;TPA$ACTION
                                                U.26:    .LONG   <<SMG$$BLANKS_OFF-U.26>-4>              ;
                    0000* 00034                 ;TPA$TARGET
                                                U.28:    .WORD   <<U.27-U.28>-2>                         ;
                    1100  00036                 ;TPA$TYPE
                                                U.32:    .WORD   4352                                    ;
                    FFFE  00038                 ;TPA$TARGET
                                                U.33:    .WORD   -2                                      ;
                    1101  0003A                 ;TPA$TYPE
                                                U.37:    .WORD   4353                                    ;
                    FFFE  0003C                 ;TPA$TARGET
                                                U.38:    .WORD   -2                                      ;
                    1102  0003E                 ;TPA$TYPE
                                                U.42:    .WORD   4354                                    ;
                    FFFE  00040                 ;TPA$TARGET
                                                U.43:    .WORD   -2                                      ;
                    1103  00042                 ;TPA$TYPE
                                                U.47:    .WORD   4355                                    ;
                    0000* 00044                 ;TPA$TARGET
                                                U.48:    .WORD   <<BEGIN_SCAN-U.48>-2>                   ;
                    9104  00046                 ;TPA$TYPE
                                                U.52:    .WORD   -28412                                  ;
                00000000* 00048                 ;TPA$ACTION
                                                U.53:    .LONG   <<SMG$$MISSING_END-U.53>-4>             ;
                    FFFE  0004C                 ;TPA$TARGET
                                                U.54:    .WORD   -2                                      ;
                    9105  0004E                 ;TPA$TYPE
                                                U.58:    .WORD   -28411                                  ;
                00000000* 00050                 ;TPA$ACTION
                                                U.59:    .LONG   <<SMG$$MISSING_END-U.59>-4>             ;
                    FFFE  00054                 ;TPA$TARGET
                                                U.60:    .WORD   -2                                      ;
                    85F1  00056                 ;TPA$TYPE
                                                U.61:    .WORD   -31247                                  ;
                00000000V 00058                 ;TPA$ACTION
                                                U.62:    .LONG   <<NOT_STRING-U.62>-4>                   ;
                          0005C                 ;STRING_NAME
                                                U.24:    .BLKB   0
                    7106  0005C                 ;TPA$TYPE
                                                U.67:    .WORD   28934                                   ;
                00000000* 0005E                 ;TPA$ADDR
                                                U.68:    .LONG   <<SMG$$MASK_ADR-U.68>-4>                ;
                000001B9  00062                 ;TPA$MASK
                                                U.69:    .LONG   441                                     ;
                    FFFF  00066                 ;TPA$TARGET
                                                U.70:    .WORD   -1                                      ;
```

```
                     7107  00068 ;TPA$TYPE
                           U.74:    .WORD   28935                                   ;
00000000*            0006A ;TPA$ADDR
                           U.75:    .LONG   <<SMG$$MASK_ADR-U.75>-4>                ;
000001BA             0006E ;TPA$MASK
                           U.76:    .LONG   442                                     ;
                     FFFF  00072 ;TPA$TARGET
                           U.77:    .WORD   -1                                      ;
                     7108  00074 ;TPA$TYPE
                           U.81:    .WORD   28936                                   ;
00000000*            00076 ;TPA$ADDR
                           U.82:    .LONG   <<SMG$$MASK_ADR-U.82>-4>                ;
000001BB             0007A ;TPA$MASK
                           U.83:    .LONG   443                                     ;
                     FFFF  0007E ;TPA$TARGET
                           U.84:    .WORD   -1                                      ;
                     7109  00080 ;TPA$TYPE
                           U.88:    .WORD   28937                                   ;
00000000*            00082 ;TPA$ADDR
                           U.89:    .LONG   <<SMG$$MASK_ADR-U.89>-4>                ;
000001BC             00086 ;TPA$MASK
                           U.90:    .LONG   444                                     ;
                     FFFF  0008A ;TPA$TARGET
                           U.91:    .WORD   -1                                      ;
                     710A  0008C ;TPA$TYPE
                           U.95:    .WORD   28938                                   ;
00000000*            0008E ;TPA$ADDR
                           U.96:    .LONG   <<SMG$$MASK_ADR-U.96>-4>                ;
000001BD             00092 ;TPA$MASK
                           U.97:    .LONG   445                                     ;
                     FFFF  00096 ;TPA$TARGET
                           U.98:    .WORD   -1                                      ;
                     710B  00098 ;TPA$TYPE
                           U.102:   .WORD   28939                                   ;
00000000*            0009A ;TPA$ADDR
                           U.103:   .LONG   <<SMG$$MASK_ADR-U.103>-4>               ;
000001BE             0009E ;TPA$MASK
                           U.104:   .LONG   446                                     ;
                     FFFF  000A2 ;TPA$TARGET
                           U.105:   .WORD   -1                                      ;
                     710C  000A4 ;TPA$TYPE
                           U.109:   .WORD   28940                                   ;
00000000*            000A6 ;TPA$ADDR
                           U.110:   .LONG   <<SMG$$MASK_ADR-U.110>-4>               ;
00000253             000AA ;TPA$MASK
                           U.111:   .LONG   595                                     ;
                     FFFF  000AE ;TPA$TARGET
                           U.112:   .WORD   -1                                      ;
                     710D  000B0 ;TPA$TYPE
                           U.116:   .WORD   28941                                   ;
00000000*            000B2 ;TPA$ADDR
                           U.117:   .LONG   <<SMG$$MASK_ADR-U.117>-4>               ;
000001BF             000B6 ;TPA$MASK
                           U.118:   .LONG   447                                     ;
                     FFFF  000BA ;TPA$TARGET
                           U.119:   .WORD   -1                                      ;
                     710E  000BC ;TPA$TYPE
```

```
                                U.123:  .WORD   28942                           ;
00000000*  000BE                ;TPA$ADDR
                                U.124:  .LONG   <<SMG$$MASK_ADR-U.124>-4>       ;
000001C0   000C2                ;TPA$MASK
                                U.125:  .LONG   448                             ;
    FFFF   000C6                ;TPA$TARGET
                                U.126:  .WORD   -1                              ;
    710F   000C8                ;TPA$TYPE
                                U.130:  .WORD   28943                           ;
00000000*  000CA                ;TPA$ADDR
                                U.131:  .LONG   <<SMG$$MASK_ADR-U.131>-4>       ;
000001C1   000CE                ;TPA$MASK
                                U.132:  .LONG   449                             ;
    FFFF   000D2                ;TPA$TARGET
                                U.133:  .WORD   -1                              ;
    7110   000D4                ;TPA$TYPE
                                U.137:  .WORD   28944                           ;
00000000*  000D6                ;TPA$ADDR
                                U.138:  .LONG   <<SMG$$MASK_ADR-U.138>-4>       ;
000001C2   000DA                ;TPA$MASK
                                U.139:  .LONG   450                             ;
    FFFF   000DE                ;TPA$TARGET
                                U.140:  .WORD   -1                              ;
    7111   000E0                ;TPA$TYPE
                                U.144:  .WORD   28945                           ;
00000000*  000E2                ;TPA$ADDR
                                U.145:  .LONG   <<SMG$$MASK_ADR-U.145>-4>       ;
00000249   000E6                ;TPA$MASK
                                U.146:  .LONG   585                             ;
    FFFF   000EA                ;TPA$TARGET
                                U.147:  .WORD   -1                              ;
    7112   000EC                ;TPA$TYPE
                                U.151:  .WORD   28946                           ;
00000000*  000EE                ;TPA$ADDR
                                U.152:  .LONG   <<SMG$$MASK_ADR-U.152>-4>       ;
000001C3   000F2                ;TPA$MASK
                                U.153:  .LONG   451                             ;
    FFFF   000F6                ;TPA$TARGET
                                U.154:  .WORD   -1                              ;
    7113   000F8                ;TPA$TYPE
                                U.158:  .WORD   28947                           ;
00000000*  000FA                ;TPA$ADDR
                                U.159:  .LONG   <<SMG$$MASK_ADR-U.159>-4>       ;
000001C4   000FE                ;TPA$MASK
                                U.160:  .LONG   452                             ;
    FFFF   00102                ;TPA$TARGET
                                U.161:  .WORD   -1                              ;
    7114   00104                ;TPA$TYPE
                                U.165:  .WORD   28948                           ;
00000000*  00106                ;TPA$ADDR
                                U.166:  .LONG   <<SMG$$MASK_ADR-U.166>-4>       ;
000001C5   0010A                ;TPA$MASK
                                U.167:  .LONG   453                             ;
    FFFF   0010E                ;TPA$TARGET
                                U.168:  .WORD   -1                              ;
    7115   00110                ;TPA$TYPE
                                U.172:  .WORD   28949                           ;
```

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                                00000000* 00112 ;TPA$ADDR
                                          U.173:  .LONG   <<SMG$$MASK_ADR-U.173>-4>                ;
                                0000024F  00116 ;TPA$MASK
                                          U.174:  .LONG   591                                      ;
                                    FFFF  0011A ;TPA$TARGET
                                          U.175:  .WORD   -1                                       ;
                                    7116  0011C ;TPA$TYPE
                                          U.179:  .WORD   28950                                    ;
                                00000000* 0011E ;TPA$ADDR
                                          U.180:  .LONG   <<SMG$$MASK_ADR-U.180>-4>                ;
                                00000247  00122 ;TPA$MASK
                                          U.181:  .LONG   583                                      ;
                                    FFFF  00126 ;TPA$TARGET
                                          U.182:  .WORD   -1                                       ;
                                    7117  00128 ;TPA$TYPE
                                          U.186:  .WORD   28951                                    ;
                                00000000* 0012A ;TPA$ADDR
                                          U.187:  .LONG   <<SMG$$MASK_ADR-U.187>-4>                ;
                                00000250  0012E ;TPA$MASK
                                          U.188:  .LONG   592                                      ;
                                    FFFF  00132 ;TPA$TARGET
                                          U.189:  .WORD   -1                                       ;
                                    7118  00134 ;TPA$TYPE
                                          U.193:  .WORD   28952                                    ;
                                00000000* 00136 ;TPA$ADDR
                                          U.194:  .LONG   <<SMG$$MASK_ADR-U.194>-4>                ;
                                000001C6  0013A ;TPA$MASK
                                          U.195:  .LONG   454                                      ;
                                    FFFF  0013E ;TPA$TARGET
                                          U.196:  .WORD   -1                                       ;
                                    7119  00140 ;TPA$TYPE
                                          U.200:  .WORD   28953                                    ;
                                00000000* 00142 ;TPA$ADDR
                                          U.201:  .LONG   <<SMG$$MASK_ADR-U.201>-4>                ;
                                000001C7  00146 ;TPA$MASK
                                          U.202:  .LONG   455                                      ;
                                    FFFF  0014A ;TPA$TARGET
                                          U.203:  .WORD   -1                                       ;
                                    711A  0014C ;TPA$TYPE
                                          U.207:  .WORD   28954                                    ;
                                00000000* 0014E ;TPA$ADDR
                                          U.208:  .LONG   <<SMG$$MASK_ADR-U.208>-4>                ;
                                000001C8  00152 ;TPA$MASK
                                          U.209:  .LONG   456                                      ;
                                    FFFF  00156 ;TPA$TARGET
                                          U.210:  .WORD   -1                                       ;
                                    711B  00158 ;TPA$TYPE
                                          U.214:  .WORD   28955                                    ;
                                00000000* 0015A ;TPA$ADDR
                                          U.215:  .LONG   <<SMG$$MASK_ADR-U.215>-4>                ;
                                000001C9  0015E ;TPA$MASK
                                          U.216:  .LONG   457                                      ;
                                    FFFF  00162 ;TPA$TARGET
                                          U.217:  .WORD   -1                                       ;
                                    711C  00164 ;TPA$TYPE
                                          U.221:  .WORD   28956                                    ;
                                00000000* 00166 ;TPA$ADDR
```

```
                                                U.222:  .LONG   <<SMG$$MASK_ADR-U.222>-4>       ;
000001CA  0016A                                 ;TPA$MASK
                                                U.223:  .LONG   458                             ;
    FFFF  0016E                                 ;TPA$TARGET
                                                U.224:  .WORD   -1                              ;
    711D  00170                                 ;TPA$TYPE
                                                U.228:  .WORD   28957                           ;
00000000* 00172                                 ;TPA$ADDR
                                                U.229:  .LONG   <<SMG$$MASK_ADR-U.229>-4>       ;
000001CB  00176                                 ;TPA$MASK
                                                U.230:  .LONG   459                             ;
    FFFF  0017A                                 ;TPA$TARGET
                                                U.231:  .WORD   -1                              ;
    711E  0017C                                 ;TPA$TYPE
                                                U.235:  .WORD   28958                           ;
00000000* 0017E                                 ;TPA$ADDR
                                                U.236:  .LONG   <<SMG$$MASK_ADR-U.236>-4>       ;
000001CC  00182                                 ;TPA$MASK
                                                U.237:  .LONG   460                             ;
    FFFF  00186                                 ;TPA$TARGET
                                                U.238:  .WORD   -1                              ;
    711F  00188                                 ;TPA$TYPE
                                                U.242:  .WORD   28959                           ;
00000000* 0018A                                 ;TPA$ADDR
                                                U.243:  .LONG   <<SMG$$MASK_ADR-U.243>-4>       ;
000001CD  0018E                                 ;TPA$MASK
                                                U.244:  .LONG   461                             ;
    FFFF  00192                                 ;TPA$TARGET
                                                U.245:  .WORD   -1                              ;
    7120  00194                                 ;TPA$TYPE
                                                U.249:  .WORD   28960                           ;
00000000* 00196                                 ;TPA$ADDR
                                                U.250:  .LONG   <<SMG$$MASK_ADR-U.250>-4>       ;
000001CE  0019A                                 ;TPA$MASK
                                                U.251:  .LONG   462                             ;
    FFFF  0019E                                 ;TPA$TARGET
                                                U.252:  .WORD   -1                              ;
    7121  001A0                                 ;TPA$TYPE
                                                U.256:  .WORD   28961                           ;
00000000* 001A2                                 ;TPA$ADDR
                                                U.257:  .LONG   <<SMG$$MASK_ADR-U.257>-4>       ;
000001CF  001A6                                 ;TPA$MASK
                                                U.258:  .LONG   463                             ;
    FFFF  001AA                                 ;TPA$TARGET
                                                U.259:  .WORD   -1                              ;
    7122  001AC                                 ;TPA$TYPE
                                                U.263:  .WORD   28962                           ;
00000000* 001AE                                 ;TPA$ADDR
                                                U.264:  .LONG   <<SMG$$MASK_ADR-U.264>-4>       ;
000001D0  001B2                                 ;TPA$MASK
                                                U.265:  .LONG   464                             ;
    FFFF  001B6                                 ;TPA$TARGET
                                                U.266:  .WORD   -1                              ;
    7123  001B8                                 ;TPA$TYPE
                                                U.270:  .WORD   28963                           ;
00000000* 001BA                                 ;TPA$ADDR
                                                U.271:  .LONG   <<SMG$$MASK_ADR-U.271>-4>       ;
```

```
000001D1  001BE ,TPA$MASK
                U.272:  .LONG   465                                     ;
    FFFF  001C2 ;TPA$TARGET
                U.273:  .WORD   -1                                      ;
    7124  001C4 ;TPA$TYPE
                U.277:  .WORD   28964                                   ;
00000000* 001C6 ;TPA$ADDR
                U.278:  .LONG   <<SMG$$MASK_ADR-U.278>-4>               ;
000001D2  001CA ;TPA$MASK
                U.279:  .LONG   466                                     ;
    FFFF  001CE ;TPA$TARGET
                U.280:  .WORD   -1                                      ;
    7125  001D0 ;TPA$TYPE
                U.284:  .WORD   28965                                   ;
00000000* 001D2 ;TPA$ADDR
                U.285:  .LONG   <<SMG$$MASK_ADR-U.285>-4>               ;
000001D3  001D6 ;TPA$MASK
                U.286:  .LONG   467                                     ;
    FFFF  001DA ;TPA$TARGET
                U.287:  .WORD   -1                                      ;
    7126  001DC ;TPA$TYPE
                U.291:  .WORD   28966                                   ;
00000000* 001DE ;TPA$ADDR
                U.292:  .LONG   <<SMG$$MASK_ADR-U.292>-4>               ;
000001D4  001E2 ;TPA$MASK
                U.293:  .LONG   468                                     ;
    FFFF  001E6 ;TPA$TARGET
                U.294:  .WORD   -1                                      ;
    7127  001E8 ;TPA$TYPE
                U.298:  .WORD   28967                                   ;
00000000* 001EA ;TPA$ADDR
                U.299:  .LONG   <<SMG$$MASK_ADR-U.299>-4>               ;
000001D5  001EE ;TPA$MASK
                U.300:  .LONG   469                                     ;
    FFFF  001F2 ;TPA$TARGET
                U.301:  .WORD   -1                                      ;
    7128  001F4 ;TPA$TYPE
                U.305:  .WORD   28968                                   ;
00000000* 001F6 ;TPA$ADDR
                U.306:  .LONG   <<SMG$$MASK_ADR-U.306>-4>               ;
000001D6  001FA ;TPA$MASK
                U.307:  .LONG   470                                     ;
    FFFF  001FE ;TPA$TARGET
                U.308:  .WORD   -1                                      ;
    7129  00200 ;TPA$TYPE
                U.312:  .WORD   28969                                   ;
00000000* 00202 ;TPA$ADDR
                U.313:  .LONG   <<SMG$$MASK_ADR-U.313>-4>               ;
000001D7  00206 ;TPA$MASK
                U.314:  .LONG   471                                     ;
    FFFF  0020A ;TPA$TARGET
                U.315:  .WORD   -1                                      ;
    712A  0020C ;TPA$TYPE
                U.319:  .WORD   28970                                   ;
00000000* 0020E ;TPA$ADDR
                U.320:  .LONG   <<SMG$$MASK_ADR-U.320>-4>               ;
000001D8  00212 ;TPA$MASK
```

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                                U.321:  .LONG   472                             ;
            FFFF  00216 ;TPA$TARGET
                                U.322:  .WORD   -1                              ;
            712B  00218 ;TPA$TYPE
                                U.326:  .WORD   28971                           ;
      00000000* 0021A ;TPA$ADDR
                                U.327:  .LONG   <<SMG$$MASK_ADR-U.327>-4>       ;
      000001D9  0021E ;TPA$MASK
                                U.328:  .LONG   473                             ;
            FFFF  00222 ;TPA$TARGET
                                U.329:  .WORD   -1                              ;
            712C  00224 ;TPA$TYPE
                                U.333:  .WORD   28972                           ;
      00000000* 00226 ;TPA$ADDR
                                U.334:  .LONG   <<SMG$$MASK_ADR-U.334>-4>       ;
      000001DA  0022A ;TPA$MASK
                                U.335:  .LONG   474                             ;
            FFFF  0022E ;TPA$TARGET
                                U.336:  .WORD   -1                              ;
            712D  00230 ;TPA$TYPE
                                U.340:  .WORD   28973                           ;
      00000000* 00232 ;TPA$ADDR
                                U.341:  .LONG   <<SMG$$MASK_ADR-U.341>-4>       ;
      000001DB  00236 ;TPA$MASK
                                U.342:  .LONG   475                             ;
            FFFF  0023A ;TPA$TARGET
                                U.343:  .WORD   -1                              ;
            712E  0023C ;TPA$TYPE
                                U.347:  .WORD   28974                           ;
      00000000* 0023E ;TPA$ADDR
                                U.348:  .LONG   <<SMG$$MASK_ADR-U.348>-4>       ;
      0000024A  00242 ;TPA$MASK
                                U.349:  .LONG   586                             ;
            FFFF  00246 ;TPA$TARGET
                                U.350:  .WORD   -1                              ;
            712F  00248 ;TPA$TYPE
                                U.354:  .WORD   28975                           ;
      00000000* 0024A ;TPA$ADDR
                                U.355:  .LONG   <<SMG$$MASK_ADR-U.355>-4>       ;
      000001DC  0024E ;TPA$MASK
                                U.356:  .LONG   476                             ;
            FFFF  00252 ;TPA$TARGET
                                U.357:  .WORD   -1                              ;
            7130  00254 ;TPA$TYPE
                                U.361:  .WORD   28976                           ;
      00000000* 00256 ;TPA$ADDR
                                U.362:  .LONG   <<SMG$$MASK_ADR-U.362>-4>       ;
      000001DD  0025A ;TPA$MASK
                                U.363:  .LONG   477                             ;
            FFFF  0025E ;TPA$TARGET
                                U.364:  .WORD   -1                              ;
            7131  00260 ;TPA$TYPE
                                U.368:  .WORD   28977                           ;
      00000000* 00262 ;TPA$ADDR
                                U.369:  .LONG   <<SMG$$MASK_ADR-U.369>-4>       ;
      0000024C  00266 ;TPA$MASK
                                U.370:  .LONG   588                             ;
```

```
                    FFFF  0026A ;TPA$TARGET
                                U.371:  .WORD   -1                                      ;
                    7132  0026C ;TPA$TYPE
                                U.375:  .WORD   28978                                   ;
                00000000* 0026E ;TPA$ADDR
                                U.376:  .LONG   <<SMG$$MASK_ADR-U.376>-4>               ;
                00000251  00272 ;TPA$MASK
                                U.377:  .LONG   593                                     ;
                    FFFF  00276 ;TPA$TARGET
                                U.378:  .WORD   -1                                      ;
                    7133  00278 ;TPA$TYPE
                                U.382:  .WORD   28979                                   ;
                00000000* 0027A ;TPA$ADDR
                                U.383:  .LONG   <<SMG$$MASK_ADR-U.383>-4>               ;
                000001DE  0027E ;TPA$MASK
                                U.384:  .LONG   478                                     ;
                    FFFF  00282 ;TPA$TARGET
                                U.385:  .WORD   -1                                      ;
                    7134  00284 ;TPA$TYPE
                                U.389:  .WORD   28980                                   ;
                00000000* 00286 ;TPA$ADDR
                                U.390:  .LONG   <<SMG$$MASK_ADR-U.390>-4>               ;
                000001DF  0028A ;TPA$MASK
                                U.391:  .LONG   479                                     ;
                    FFFF  0028E ;TPA$TARGET
                                U.392:  .WORD   -1                                      ;
                    7135  00290 ;TPA$TYPE
                                U.396:  .WORD   28981                                   ;
                00000000* 00292 ;TPA$ADDR
                                U.397:  .LONG   <<SMG$$MASK_ADR-U.397>-4>               ;
                000001E0  00296 ;TPA$MASK
                                U.398:  .LONG   480                                     ;
                    FFFF  0029A ;TPA$TARGET
                                U.399:  .WORD   -1                                      ;
                    7136  0029C ;TPA$TYPE
                                U.403:  .WORD   28982                                   ;
                00000000* 0029E ;TPA$ADDR
                                U.404:  .LONG   <<SMG$$MASK_ADR-U.404>-4>               ;
                000001E1  002A2 ;TPA$MASK
                                U.405:  .LONG   481                                     ;
                    FFFF  002A6 ;TPA$TARGET
                                U.406:  .WORD   -1                                      ;
                    7137  002A8 ;TPA$TYPE
                                U.410:  .WORD   28983                                   ;
                00000000* 002AA ;TPA$ADDR
                                U.411:  .LONG   <<SMG$$MASK_ADR-U.411>-4>               ;
                000001E2  002AE ;TPA$MASK
                                U.412:  .LONG   482                                     ;
                    FFFF  002B2 ;TPA$TARGET
                                U.413   .WORD   -1                                      ;
                    7138  002B4 ;TPA$TYPE
                                U.417:  .WORD   28984                                   ;
                00000000* 002B6 ;TPA$ADDR
                                U.418:  .LONG   <<SMG$$MASK_ADR-U.418>-4>               ;
                000001E3  002BA ;TPA$MASK
                                U.419:  .LONG   483                                     ;
                    FFFF  002BE ;TPA$TARGET
```

```
                                U.420:  .WORD   -1                              ;
     7139  002C0                ;TPA$TYPE
                                U.424:  .WORD   28985                           ;
00000000*  002C2                ;TPA$ADDR
                                U.425:  .LONG   <<SMG$$MASK_ADR-U.425>-4>       ;
000001E4   002C6                ;TPA$MASK
                                U.426:  .LONG   484                             ;
     FFFF  002CA                ;TPA$TARGET
                                U.427:  .WORD   -1                              ;
     713A  002CC                ;TPA$TYPE
                                U.431:  .WORD   28986                           ;
00000000*  002CE                ;TPA$ADDR
                                U.432:  .LONG   <<SMG$$MASK_ADR-U.432>-4>       ;
000001E5   002D2                ;TPA$MASK
                                U.433:  .LONG   485                             ;
     FFFF  002D6                ;TPA$TARGET
                                U.434:  .WORD   -1                              ;
     713B  002D8                ;TPA$TYPE
                                U.438:  .WORD   28987                           ;
00000000*  002DA                ;TPA$ADDR
                                U.439:  .LONG   <<SMG$$MASK_ADR-U.439>-4>       ;
000001E6   002DE                ;TPA$MASK
                                U.440:  .LONG   486                             ;
     FFFF  002E2                ;TPA$TARGET
                                U.441:  .WORD   -1                              ;
     713C  002E4                ;TPA$TYPE
                                U.445:  .WORD   28988                           ;
00000000*  002E6                ;TPA$ADDR
                                U.446:  .LONG   <<SMG$$MASK_ADR-U.446>-4>       ;
000001E7   002EA                ;TPA$MASK
                                U.447:  .LONG   487                             ;
     FFFF  002EE                ;TPA$TARGET
                                U.448:  .WORD   -1                              ;
     713D  002F0                ;TPA$TYPE
                                U.452:  .WORD   28989                           ;
00000000*  002F2                ;TPA$ADDR
                                U.453:  .LONG   <<SMG$$MASK_ADR-U.453>-4>       ;
000001E8   002F6                ;TPA$MASK
                                U.454:  .LONG   488                             ;
     FFFF  002FA                ;TPA$TARGET
                                U.455:  .WORD   -1                              ;
     713E  002FC                ;TPA$TYPE
                                U.459:  .WORD   28990                           ;
00000000*  002FE                ;TPA$ADDR
                                U.460:  .LONG   <<SMG$$MASK_ADR-U.460>-4>       ;
000001E9   00302                ;TPA$MASK
                                U.461:  .LONG   489                             ;
     FFFF  00306                ;TPA$TARGET
                                U.462:  .WORD   -1                              ;
     713F  00308                ;TPA$TYPE
                                U.466:  .WORD   28991                           ;
00000000*  0030A                ;TPA$ADDR
                                U.467:  .LONG   <<SMG$$MASK_ADR-U.467>-4>       ;
000001EA   0030E                ;TPA$MASK
                                U.468:  .LONG   490                             ;
     FFFF  00312                ;TPA$TARGET
                                U.469:  .WORD   -1                              ;
```

```
                     7140  00314 ;TPA$TYPE
                                  U.473:  .WORD   28992                           ;
00000000*            00316 ;TPA$ADDR
                                  U.474:  .LONG   <<SMG$$MASK_ADR-U.474>-4>       ;
000001EB             0031A ;TPA$MASK
                                  U.475:  .LONG   491                             ;
                     FFFF  0031E ;TPA$TARGET
                                  U.476:  .WORD   -1                              ;
                     7141  00320 ;TPA$TYPE
                                  U.480:  .WORD   28993                           ;
00000000*            00322 ;TPA$ADDR
                                  U.481:  .LONG   <<SMG$$MASK_ADR-U.481>-4>       ;
000001EC             00326 ;TPA$MASK
                                  U.482:  .LONG   492                             ;
                     FFFF  0032A ;TPA$TARGET
                                  U.483:  .WORD   -1                              ;
                     7142  0032C ;TPA$TYPE
                                  U.487:  .WORD   28994                           ;
00000000*            0032E ;TPA$ADDR
                                  U.488:  .LONG   <<SMG$$MASK_ADR-U.488>-4>       ;
000001ED             00332 ;TPA$MASK
                                  U.489:  .LONG   493                             ;
                     FFFF  00336 ;TPA$TARGET
                                  U.490:  .WORD   -1                              ;
                     7143  00338 ;TPA$TYPE
                                  U.494:  .WORD   28995                           ;
00000000*            0033A ;TPA$ADDR
                                  U.495:  .LONG   <<SMG$$MASK_ADR-U.495>-4>       ;
000001EE             0033E ;TPA$MASK
                                  U.496:  .LONG   494                             ;
                     FFFF  00342 ;TPA$TARGET
                                  U.497:  .WORD   -1                              ;
                     7144  00344 ;TPA$TYPE
                                  U.501:  .WORD   28996                           ;
00000000*            00346 ;TPA$ADDR
                                  U.502:  .LONG   <<SMG$$MASK_ADR-U.502>-4>       ;
000001EF             0034A ;TPA$MASK
                                  U.503:  .LONG   495                             ;
                     FFFF  0034E ;TPA$TARGET
                                  U.504:  .WORD   -1                              ;
                     7145  00350 ;TPA$TYPE
                                  U.508:  .WORD   28997                           ;
00000000*            00352 ;TPA$ADDR
                                  U.509:  .LONG   <<SMG$$MASK_ADR-U.509>-4>       ;
000001F0             00356 ;TPA$MASK
                                  U.510:  .LONG   496                             ;
                     FFFF  0035A ;TPA$TARGET
                                  U.511:  .WORD   -1                              ;
                     7146  0035C ;TPA$TYPE
                                  U.515:  .WORD   28998                           ;
00000000*            0035E ;TPA$ADDR
                                  U.516:  .LONG   <<SMG$$MASK_ADR-U.516>-4>       ;
000001F1             00362 ;TPA$MASK
                                  U.517:  .LONG   497                             ;
                     FFFF  00366 ;TPA$TARGET
                                  U.518:  .WORD   -1                              ;
                     7147  00368 ;TPA$TYPE
```

```
                                        U.522:  .WORD   28999                   ;
00000000*  0036A                    ;TPA$ADDR
                                        U.523:  .LONG   <<SMG$$MASK_ADR-U.523>-4>  ;
000001F2   0036E                    ;TPA$MASK
                                        U.524:  .LONG   498                     ;
    FFFF   00372                    ;TPA$TARGET
                                        U.525:  .WORD   -1                      ;
    7148   00374                    ;TPA$TYPE
                                        U.529:  .WORD   29000                   ;
00000000*  00376                    ;TPA$ADDR
                                        U.530:  .LONG   <<SMG$$MASK_ADR-U.530>-4>  ;
000001F3   0037A                    ;TPA$MASK
                                        U.531:  .LONG   499                     ;
    FFFF   0037E                    ;TPA$TARGET
                                        U.532:  .WORD   -1                      ;
    7149   00380                    ;TPA$TYPE
                                        U.536:  .WORD   29001                   ;
00000000*  00382                    ;TPA$ADDR
                                        U.537:  .LONG   <<SMG$$MASK_ADR-U.537>-4>  ;
000001F4   00386                    ;TPA$MASK
                                        U.538:  .LONG   500                     ;
    FFFF   0038A                    ;TPA$TARGET
                                        U.539:  .WORD   -1                      ;
    714A   0038C                    ;TPA$TYPE
                                        U.543:  .WORD   29002                   ;
00000000*  0038E                    ;TPA$ADDR
                                        U.544:  .LONG   <<SMG$$MASK_ADR-U.544>-4>  ;
000001F5   00392                    ;TPA$MASK
                                        U.545:  .LONG   501                     ;
    FFFF   00396                    ;TPA$TARGET
                                        U.546:  .WORD   -1                      ;
    714B   00398                    ;TPA$TYPE
                                        U.550:  .WORD   29003                   ;
00000000*  0039A                    ;TPA$ADDR
                                        U.551:  .LONG   <<SMG$$MASK_ADR-U.551>-4>  ;
000001F6   0039E                    ;TPA$MASK
                                        U.552:  .LONG   502                     ;
    FFFF   003A2                    ;TPA$TARGET
                                        U.553:  .WORD   -1                      ;
    714C   003A4                    ;TPA$TYPE
                                        U.557:  .WORD   29004                   ;
00000000*  003A6                    ;TPA$ADDR
                                        U.558:  .LONG   <<SMG$$MASK_ADR-U.558>-4>  ;
000001F7   003AA                    ;TPA$MASK
                                        U.559:  .LONG   503                     ;
    FFFF   003AE                    ;TPA$TARGET
                                        U.560:  .WORD   -1                      ;
    714D   003B0                    ;TPA$TYPE
                                        U.564:  .WORD   29005                   ;
00000000*  003B2                    ;TPA$ADDR
                                        U.565:  .LONG   <<SMG$$MASK_ADR-U.565>-4>  ;
000001F8   003B6                    ;TPA$MASK
                                        U.566:  .LONG   504                     ;
    FFFF   003BA                    ;TPA$TARGET
                                        U.567:  .WORD   -1                      ;
    714E   003BC                    ;TPA$TYPE
                                        U.571:  .WORD   29006                   ;
```

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                                00000000* 003BE ;TPA$ADDR
                                          U.572:  .LONG   <<SMG$$MASK_ADR-U.572>-4>        ;
                                000001F9  003C2 ;TPA$MASK
                                          U.573:  .LONG   505                              ;
                                    FFFF  003C6 ;TPA$TARGET
                                          U.574:  .WORD   -1                               ;
                                    714F  003C8 ;TPA$TYPE
                                          U.578:  .WORD   29007                            ;
                                00000000* 003CA ;TPA$ADDR
                                          U.579:  .LONG   <<SMG$$MASK_ADR-U.579>-4>        ;
                                000001FA  003CE ;TPA$MASK
                                          U.580:  .LONG   506                              ;
                                    FFFF  003D2 ;TPA$TARGET
                                          U.581:  .WORD   -1                               ;
                                    7150  003D4 ;TPA$TYPE
                                          U.585:  .WORD   29008                            ;
                                00000000* 003D6 ;TPA$ADDR
                                          U.586:  .LONG   <<SMG$$MASK_ADR-U.586>-4>        ;
                                000001FB  003DA ;TPA$MASK
                                          U.587:  .LONG   507                              ;
                                    FFFF  003DE ;TPA$TARGET
                                          U.588:  .WORD   -1                               ;
                                    7151  003E0 ;TPA$TYPE
                                          U.592:  .WORD   29009                            ;
                                00000000* 003E2 ;TPA$ADDR
                                          U.593:  .LONG   <<SMG$$MASK_ADR-U.593>-4>        ;
                                000001FC  003E6 ;TPA$MASK
                                          U.594:  .LONG   508                              ;
                                    FFFF  003EA ;TPA$TARGET
                                          U.595:  .WORD   -1                               ;
                                    7152  003EC ;TPA$TYPE
                                          U.599:  .WORD   29010                            ;
                                00000000* 003EE ;TPA$ADDR
                                          U.600:  .LONG   <<SMG$$MASK_ADR-U.600>-4>        ;
                                000001FD  003F2 ;TPA$MASK
                                          U.601:  .LONG   509                              ;
                                    FFFF  003F6 ;TPA$TARGET
                                          U.602:  .WORD   -1                               ;
                                    7153  003F8 ;TPA$TYPE
                                          U.606:  .WORD   29011                            ;
                                00000000* 003FA ;TPA$ADDR
                                          U.607:  .LONG   <<SMG$$MASK_ADR-U.607>-4>        ;
                                000001FE  003FE ;TPA$MASK
                                          U.608:  .LONG   510                              ;
                                    FFFF  00402 ;TPA$TARGET
                                          U.609:  .WORD   -1                               ;
                                    7154  00404 ;TPA$TYPE
                                          U.613:  .WORD   29012                            ;
                                00000000* 00406 ;TPA$ADDR
                                          U.614:  .LONG   <<SMG$$MASK_ADR-U.614>-4>        ;
                                000001FF  0040A ;TPA$MASK
                                          U.615:  .LONG   511                              ;
                                    FFFF  0040E ;TPA$TARGET
                                          U.616:  .WORD   -1                               ;
                                    7155  00410 ;TPA$TYPE
                                          U.620:  .WORD   29013                            ;
                                00000000* 00412 ;TPA$ADDR
```

```
                                                U.621:  .LONG   <<SMG$$MASK_ADR-U.621>-4>       ;
00000200  00416                                 ;TPA$MASK
                                                U.622:  .LONG   512                             ;
    FFFF  0041A                                 ;TPA$TARGET
                                                U.623:  .WORD   -1                              ;
    7156  0041C                                 ;TPA$TYPE
                                                U.627:  .WORD   29014                           ;
00000000* 0041E                                 ;TPA$ADDR
                                                U.628:  .LONG   <<SMG$$MASK_ADR-U.628>-4>       ;
00000201  00422                                 ;TPA$MASK
                                                U.629:  .LONG   513                             ;
    FFFF  00426                                 ;TPA$TARGET
                                                U.630:  .WORD   -1                              ;
    7157  00428                                 ;TPA$TYPE
                                                U.634:  .WORD   29015                           ;
00000000* 0042A                                 ;TPA$ADDR
                                                U.635:  .LONG   <<SMG$$MASK_ADR-U.635>-4>       ;
00000202  0042E                                 ;TPA$MASK
                                                U.636:  .LONG   514                             ;
    FFFF  00432                                 ;TPA$TARGET
                                                U.637:  .WORD   -1                              ;
    7158  00434                                 ;TPA$TYPE
                                                U.641:  .WORD   29016                           ;
00000000* 00436                                 ;TPA$ADDR
                                                U.642:  .LONG   <<SMG$$MASK_ADR-U.642>-4>       ;
00000203  0043A                                 ;TPA$MASK
                                                U.643:  .LONG   515                             ;
    FFFF  0043E                                 ;TPA$TARGET
                                                U.644:  .WORD   -1                              ;
    7159  00440                                 ;TPA$TYPE
                                                U.648:  .WORD   29017                           ;
00000000* 00442                                 ;TPA$ADDR
                                                U.649:  .LONG   <<SMG$$MASK_ADR-U.649>-4>       ;
00000204  00446                                 ;TPA$MASK
                                                U.650:  .LONG   516                             ;
    FFFF  0044A                                 ;TPA$TARGET
                                                U.651:  .WORD   -1                              ;
    715A  0044C                                 ;TPA$TYPE
                                                U.655:  .WORD   29018                           ;
00000000* 0044E                                 ;TPA$ADDR
                                                U.656:  .LONG   <<SMG$$MASK_ADR-U.656>-4>       ;
00000205  00452                                 ;TPA$MASK
                                                U.657:  .LONG   517                             ;
    FFFF  00456                                 ;TPA$TARGET
                                                U.658:  .WORD   -1                              ;
    715B  00458                                 ;TPA$TYPE
                                                U.662:  .WORD   29019                           ;
00000000* 0045A                                 ;TPA$ADDR
                                                U.663:  .LONG   <<SMG$$MASK_ADR-U.663>-4>       ;
00000206  0045E                                 ;TPA$MASK
                                                U.664:  .LONG   518                             ;
    FFFF  00462                                 ;TPA$TARGET
                                                U.665:  .WORD   -1                              ;
    715C  00464                                 ;TPA$TYPE
                                                U.669:  .WORD   29020                           ;
00000000* 00466                                 ;TPA$ADDR
                                                U.670:  .LONG   <<SMG$$MASK_ADR-U.670>-4>       ;
```

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                                00000207  0046A ;TPA$MASK
                                          U.671:  .LONG   519                                     ;
                                    FFFF  0046E ;TPA$TARGET
                                          U.672:  .WORD   -1                                      ;
                                    715D  00470 ;TPA$TYPE
                                          U.676:  .WORD   29021                                   ;
                                00000000* 00472 ;TPA$ADDR
                                          U.677:  .LONG   <<SMG$$MASK_ADR-U.677>-4>               ;
                                00000208  00476 ;TPA$MASK
                                          U.678:  .LONG   520                                     ;
                                    FFFF  0047A ;TPA$TARGET
                                          U.679:  .WORD   -1                                      ;
                                    715E  0047C ;TPA$TYPE
                                          U.683:  .WORD   29022                                   ;
                                00000000* 0047E ;TPA$ADDR
                                          U.684:  .LONG   <<SMG$$MASK_ADR-U.684>-4>               ;
                                00000209  00482 ;TPA$MASK
                                          U.685:  .LONG   521                                     ;
                                    FFFF  00486 ;TPA$TARGET
                                          U.686:  .WORD   -1                                      ;
                                    715F  00488 ;TPA$TYPE
                                          U.690:  .WORD   29023                                   ;
                                00000000* 0048A ;TPA$ADDR
                                          U.691:  .LONG   <<SMG$$MASK_ADR-U.691>-4>               ;
                                0000020A  0048E ;TPA$MASK
                                          U.692:  .LONG   522                                     ;
                                    FFFF  00492 ;TPA$TARGET
                                          U.693:  .WORD   -1                                      ;
                                    7160  00494 ;TPA$TYPE
                                          U.697:  .WORD   29024                                   ;
                                00000000* 00496 ;TPA$ADDR
                                          U.698:  .LONG   <<SMG$$MASK_ADR-U.698>-4>               ;
                                0000020B  0049A ;TPA$MASK
                                          U.699:  .LONG   523                                     ;
                                    FFFF  0049E ;TPA$TARGET
                                          U.700:  .WORD   -1                                      ;
                                    7161  004A0 ;TPA$TYPE
                                          U.704:  .WORD   29025                                   ;
                                00000000* 004A2 ;TPA$ADDR
                                          U.705:  .LONG   <<SMG$$MASK_ADR-U.705>-4>               ;
                                0000020C  004A6 ;TPA$MASK
                                          U.706:  .LONG   524                                     ;
                                    FFFF  004AA ;TPA$TARGET
                                          U.707:  .WORD   -1                                      ;
                                    7162  004AC ;TPA$TYPE
                                          U.711:  .WORD   29026                                   ;
                                00000000* 004AE ;TPA$ADDR
                                          U.712:  .LONG   <<SMG$$MASK_ADR-U.712>-4>               ;
                                0000020D  004B2 ;TPA$MASK
                                          U.713:  .LONG   525                                     ;
                                    FFFF  004B6 ;TPA$TARGET
                                          U.714:  .WORD   -1                                      ;
                                    7163  004B8 ;TPA$TYPE
                                          U.718:  .WORD   29027                                   ;
                                00000000* 004BA ;TPA$ADDR
                                          U.719:  .LONG   <<SM $$MASK_ADR-U.719>-4>               ;
                                0000020E  004BE ;TPA$MASK
```

```
                                U.720:  .LONG   526                             ;
    FFFF  004C2                 ;TPA$TARGET
                                U.721:  .WORD   -1                              ;
    7164  004C4                 ;TPA$TYPE
                                U.725:  .WORD   29028                           ;
00000000* 004C6                 ;TPA$ADDR
                                U.726:  .LONG   <<SMG$$MASK_ADR-U.726>-4>       ;
0000020F  004CA                 ;TPA$MASK
                                U.727:  .LONG   527                             ;
    FFFF  004CE                 ;TPA$TARGET
                                U.728:  .WORD   -1                              ;
    7165  004D0                 ;TPA$TYPE
                                U.732:  .WORD   29029                           ;
00000000* 004D2                 ;TPA$ADDR
                                U.733:  .LONG   <<SMG$$MASK_ADR-U.733>-4>       ;
00000210  004D6                 ;TPA$MASK
                                U.734:  .LONG   528                             ;
    FFFF  004DA                 ;TPA$TARGET
                                U.735:  .WORD   -1                              ;
    7166  004DC                 ;TPA$TYPE
                                U.739:  .WORD   29030                           ;
00000000* 004DE                 ;TPA$ADDR
                                U.740:  .LONG   <<SMG$$MASK_ADR-U.740>-4>       ;
00000211  004E2                 ;TPA$MASK
                                U.741:  .LONG   529                             ;
    FFFF  004E6                 ;TPA$TARGET
                                U.742:  .WORD   -1                              ;
    7167  004E8                 ;TPA$TYPE
                                U.746:  .WORD   29031                           ;
00000000* 004EA                 ;TPA$ADDR
                                U.747:  .LONG   <<SMG$$MASK_ADR-U.747>-4>       ;
00000212  004EE                 ;TPA$MASK
                                U.748:  .LONG   530                             ;
    FFFF  004F2                 ;TPA$TARGET
                                U.749:  .WORD   -1                              ;
    7168  004F4                 ;TPA$TYPE
                                U.753:  .WORD   29032                           ;
00000000* 004F6                 ;TPA$ADDR
                                U.754:  .LONG   <<SMG$$MASK_ADR-U.754>-4>       ;
00000213  004FA                 ;TPA$MASK
                                U.755:  .LONG   531                             ;
    FFFF  004FE                 ;TPA$TARGET
                                U.756:  .WORD   -1                              ;
    7169  00500                 ;TPA$TYPE
                                U.760:  .WORD   29033                           ;
00000000* 00502                 ;TPA$ADDR
                                U.761:  .LONG   <<SMG$$MASK_ADR-U.761>-4>       ;
00000214  00506                 ;TPA$MASK
                                U.762:  .LONG   532                             ;
    FFFF  0050A                 ;TPA$TARGET
                                U.763:  .WORD   -1                              ;
    716A  0050C                 ;TPA$TYPE
                                U.767:  .WORD   29034                           ;
00000000* 0050E                 ;TPA$ADDR
                                U.768:  .LONG   <<SMG$$MASK_ADR-U.768>-4>       ;
00000215  00512                 ;TPA$MASK
                                U.769:  .LONG   533                             ;
```

```
                    FFFF  00516 ;TPA$TARGET
                                U.770:  .WORD   -1                                      ;
                    716B  00518 ;TPA$TYPE
                                U.774:  .WORD   29035                                   ;
                00000000* 0051A ;TPA$ADDR
                                U.775:  .LONG   <<SMG$$MASK_ADR-U.775>-4>               ;
                00000216  0051E ;TPA$MASK
                                U.776:  .LONG   534                                     ;
                    FFFF  00522 ;TPA$TARGET
                                U.777:  .WORD   -1                                      ;
                    716C  00524 ;TPA$TYPE
                                U.781:  .WORD   29036                                   ;
                00000000* 00526 ;TPA$ADDR
                                U.782:  .LONG   <<SMG$$MASK_ADR-U.782>-4>               ;
                00000217  0052A ;TPA$MASK
                                U.783:  .LONG   535                                     ;
                    FFFF  0052E ;TPA$TARGET
                                U.784:  .WORD   -1                                      ;
                    716D  00530 ;TPA$TYPE
                                U.788:  .WORD   29037                                   ;
                00000000* 00532 ;TPA$ADDR
                                U.789:  .LONG   <<SMG$$MASK_ADR-U.789>-4>               ;
                00000218  00536 ;TPA$MASK
                                U.790:  .LONG   536                                     ;
                    FFFF  0053A ;TPA$TARGET
                                U.791:  .WORD   -1                                      ;
                    716E  0053C ;TPA$TYPE
                                U.795:  .WORD   29038                                   ;
                00000000* 0053E ;TPA$ADDR
                                U.796:  .LONG   <<SMG$$MASK_ADR-U.796>-4>               ;
                00000219  00542 ;TPA$MASK
                                U.797:  .LONG   537                                     ;
                    FFFF  00546 ;TPA$TARGET
                                U.798:  .WORD   -1                                      ;
                    716F  00548 ;TPA$TYPE
                                U.802:  .WORD   29039                                   ;
                00000000* 0054A ;TPA$ADDR
                                U.803:  .LONG   <<SMG$$MASK_ADR-U.803>-4>               ;
                0000021A  0054E ;TPA$MASK
                                U.804:  .LONG   538                                     ;
                    FFFF  00552 ;TPA$TARGET
                                U.805:  .WORD   -1                                      ;
                    7170  00554 ;TPA$TYPE
                                U.809:  .WORD   29040                                   ;
                00000000* 00556 ;TPA$ADDR
                                U.810:  .LONG   <<SMG$$MASK_ADR-U.810>-4>               ;
                0000021B  0055A ;TPA$MASK
                                U.811:  .LONG   539                                     ;
                    FFFF  0055E ;TPA$TARGET
                                U.812:  .WORD   -1                                      ;
                    7171  00560 ;TPA$TYPE
                                U.816:  .WORD   29041                                   ;
                00000000* 00562 ;TPA$ADDR
                                U.817:  .LONG   <<SMG$$MASK_ADR-U.817>-4>               ;
                0000021C  00566 ;TPA$MASK
                                U.818:  .LONG   540                                     ;
                    FFFF  0056A ;TPA$TARGET
```

```
                                                U.819:  .WORD   -1                                      ;
                                    7172  0056C ;TPA$TYPE
                                                U.823:  .WORD   29042                                   ;
                                00000000* 0056E ;TPA$ADDR
                                                U.824:  .LONG   <<SMG$$MASK_ADR-U.824>-4>               ;
                                0000021D  00572 ;TPA$MASK
                                                U.825:  .LONG   541                                     ;
                                    FFFF  00576 ;TPA$TARGET
                                                U.826:  .WORD   -1                                      ;
                                    7173  00578 ;TPA$TYPE
                                                U.830:  .WORD   29043                                   ;
                                00000000* 0057A ;TPA$ADDR
                                                U.831:  .LONG   <<SMG$$MASK_ADR-U.831>-4>               ;
                                0000021E  0057E ;TPA$MASK
                                                U.832:  .LONG   542                                     ;
                                    FFFF  00582 ;TPA$TARGET
                                                U.833:  .WORD   -1                                      ;
                                    7174  00584 ;TPA$TYPE
                                                U.837:  .WORD   29044                                   ;
                                00000000* 00586 ;TPA$ADDR
                                                U.838:  .LONG   <<SMG$$MASK_ADR-U.838>-4>               ;
                                0000021F  0058A ;TPA$MASK
                                                U.839:  .LONG   543                                     ;
                                    FFFF  0058E ;TPA$TARGET
                                                U.840:  .WORD   -1                                      ;
                                    7175  00590 ;TPA$TYPE
                                                U.844:  .WORD   29045                                   ;
                                00000000* 00592 ;TPA$ADDR
                                                U.845:  .LONG   <<SMG$$MASK_ADR-U.845>-4>               ;
                                00000220  00596 ;TPA$MASK
                                                U.846:  .LONG   544                                     ;
                                    FFFF  0059A ;TPA$TARGET
                                                U.847:  .WORD   -1                                      ;
                                    7176  0059C ;TPA$TYPE
                                                U.851:  .WORD   29046                                   ;
                                00000000* 0059E ;TPA$ADDR
                                                U.852:  .LONG   <<SMG$$MASK_ADR-U.852>-4>               ;
                                00000221  005A2 ;TPA$MASK
                                                U.853:  .LONG   545                                     ;
                                    FFFF  005A6 ;TPA$TARGET
                                                U.854:  .WORD   -1                                      ;
                                    7177  005A8 ;TPA$TYPE
                                                U.858:  .WORD   29047                                   ;
                                00000000* 005AA ;TPA$ADDR
                                                U.859:  .LONG   <<SMG$$MASK_ADR-U.859>-4>               ;
                                00000222  005AE ;TPA$MASK
                                                U.860:  .LONG   546                                     ;
                                    FFFF  005B2 ;TPA$TARGET
                                                U.861:  .WORD   -1                                      ;
                                    7178  005B4 ;TPA$TYPE
                                                U.865:  .WORD   29048                                   ;
                                00000000* 005B6 ;TPA$ADDR
                                                U.866:  .LONG   <<SMG$$MASK_ADR-U.866>-4>               ;
                                00000223  005BA ;TPA$MASK
                                                U.867:  .LONG   547                                     ;
                                    FFFF  005BE ;TPA$TARGET
                                                U.868:  .WORD   -1                                      ;
```

```
                     7179  005C0 ;TPA$TYPE
                                 U.872:  .WORD   29049                                   ;
                00000000* 005C2 ;TPA$ADDR
                                 U.873:  .LONG   <<SMG$$MASK_ADR-U.873>-4>               ;
                00000224  005C6 ;TPA$MASK
                                 U.874:  .LONG   548                                     ;
                     FFFF  005CA ;TPA$TARGET
                                 U.875:  .WORD   -1                                      ;
                     717A  005CC ;TPA$TYPE
                                 U.879:  .WORD   29050                                   ;
                00000000* 005CE ;TPA$ADDR
                                 U.880:  .LONG   <<SMG$$MASK_ADR-U.880>-4>               ;
                00000225  005D2 ;TPA$MASK
                                 U.881:  .LONG   549                                     ;
                     FFFF  005D6 ;TPA$TARGET
                                 U.882:  .WORD   -1                                      ;
                     717B  005D8 ;TPA$TYPE
                                 U.886:  .WORD   29051                                   ;
                00000000* 005DA ;TPA$ADDR
                                 U.887:  .LONG   <<SMG$$MASK_ADR-U.887>-4>               ;
                00000226  005DE ;TPA$MASK
                                 U.888:  .LONG   550                                     ;
                     FFFF  005E2 ;TPA$TARGET
                                 U.889:  .WORD   -1                                      ;
                     717C  005E4 ;TPA$TYPE
                                 U.893:  .WORD   29052                                   ;
                00000000* 005E6 ;TPA$ADDR
                                 U.894:  .LONG   <<SMG$$MASK_ADR-U.894>-4>               ;
                00000227  005EA ;TPA$MASK
                                 U.895:  .LONG   551                                     ;
                     FFFF  005EE ;TPA$TARGET
                                 U.896:  .WORD   -1                                      ;
                     717D  005F0 ;TPA$TYPE
                                 U.900:  .WORD   29053                                   ;
                00000000* 005F2 ;TPA$ADDR
                                 U.901:  .LONG   <<SMG$$MASK_ADR-U.901>-4>               ;
                0000024B  005F6 ;TPA$MASK
                                 U.902:  .LONG   587                                     ;
                     FFFF  005FA ;TPA$TARGET
                                 U.903:  .WORD   -1                                      ;
                     717E  005FC ;TPA$TYPE
                                 U.907:  .WORD   29054                                   ;
                00000000* 005FE ;TPA$ADDR
                                 U.908:  .LONG   <<SMG$$MASK_ADR-U.908>-4>               ;
                00000228  00602 ;TPA$MASK
                                 U.909:  .LONG   552                                     ;
                     FFFF  00606 ;TPA$TARGET
                                 U.910:  .WORD   -1                                      ;
                     717F  00608 ;TPA$TYPE
                                 U.914:  .WORD   29055                                   ;
                00000000* 0060A ;TPA$ADDR
                                 U.915:  .LONG   <<SMG$$MASK_ADR-U.915>-4>               ;
                00000229  0060E ;TPA$MASK
                                 U.916:  .LONG   553                                     ;
                     FFFF  00612 ;TPA$TARGET
                                 U.917:  .WORD   -1                                      ;
                     7180  00614 ;TPA$TYPE
```

```
                                U.921:  .WORD   29056                           ;
00000000* 00616                ;TPA$ADDR
                                U.922:  .LONG   <<SMG$$MASK_ADR-U.922>-4>       ;
0000022A  0061A                 ;TPA$MASK
                                U.923:  .LONG   554                             ;
    FFFF  0061E                 ;TPA$TARGET
                                U.924:  .WORD   -1                              ;
    7181  00620                 ;TPA$TYPE
                                U.928:  .WORD   29057                           ;
00000000* 00622                ;TPA$ADDR
                                U.929:  .LONG   <<SMG$$MASK_ADR-U.929>-4>       ;
0000022B  00626                 ;TPA$MASK
                                U.930:  .LONG   555                             ;
    FFFF  0062A                 ;TPA$TARGET
                                U.931:  .WORD   -1                              ;
    7182  0062C                 ;TPA$TYPE
                                U.935:  .WORD   29058                           ;
00000000* 0062E                ;TPA$ADDR
                                U.936:  .LONG   <<SMG$$MASK_ADR-U.936>-4>       ;
0000022C  00632                 ;TPA$MASK
                                U.937:  .LONG   556                             ;
    FFFF  00636                 ;TPA$TARGET
                                U.938:  .WORD   -1                              ;
    7183  00638                 ;TPA$TYPE
                                U.942:  .WORD   29059                           ;
00000000* 0063A                ;TPA$ADDR
                                U.943:  .LONG   <<SMG$$MASK_ADR-U.943>-4>       ;
0000022D  0063E                 ;TPA$MASK
                                U.944:  .LONG   557                             ;
    FFFF  00642                 ;TPA$TARGET
                                U.945:  .WORD   -1                              ;
    7184  00644                 ;TPA$TYPE
                                U.949:  .WORD   29060                           ;
00000000* 00646                ;TPA$ADDR
                                U.950:  .LONG   <<SMG$$MASK_ADR-U.950>-4>       ;
00000248  0064A                 ;TPA$MASK
                                U.951:  .LONG   584                             ;
    FFFF  0064E                 ;TPA$TARGET
                                U.952:  .WORD   -1                              ;
    7185  00650                 ;TPA$TYPE
                                U.956:  .WORD   29061                           ;
00000000* 00652                ;TPA$ADDR
                                U.957:  .LONG   <<SMG$$MASK_ADR-U.957>-4>       ;
0000022E  00656                 ;TPA$MASK
                                U.958:  .LONG   558                             ;
    FFFF  0065A                 ;TPA$TARGET
                                U.959:  .WORD   -1                              ;
    7186  0065C                 ;TPA$TYPE
                                U.963:  .WORD   29062                           ;
00000000* 0065E                ;TPA$ADDR
                                U.964:  .LONG   <<SMG$$MASK_ADR-U.964>-4>       ;
00000252  00662                 ;TPA$MASK
                                U.965:  .LONG   594                             ;
    FFFF  00666                 ;TPA$TARGET
                                U.966:  .WORD   -1                              ;
    7187  00668                 ;TPA$TYPE
                                U.970:  .WORD   29063                           ;
```

```
00000000* 0066A ;TPA$ADDR
                U.971:  .LONG   <<SMG$$MASK_ADR-U.971>-4>        ;
0000022F  0066E ;TPA$MASK
                U.972:  .LONG   559                              ;
    FFFF  00672 ;TPA$TARGET
                U.973:  .WORD   -1                               ;
    7188  00674 ;TPA$TYPE
                U.977:  .WORD   29064                            ;
00000000* 00676 ;TPA$ADDR
                U.978:  .LONG   <<SMG$$MASK_ADR-U.978>-4>        ;
00000230  0067A ;TPA$MASK
                U.979:  .LONG   560                              ;
    FFFF  0067E ;TPA$TARGET
                U.980:  .WORD   -1                               ;
    7189  00680 ;TPA$TYPE
                U.984:  .WORD   29065                            ;
00000000* 00682 ;TPA$ADDR
                U.985:  .LONG   <<SMG$$MASK_ADR-U.985>-4>        ;
00000231  00686 ;TPA$MASK
                U.986:  .LONG   561                              ;
    FFFF  0068A ;TPA$TARGET
                U.987:  .WORD   -1                               ;
    718A  0068C ;TPA$TYPE
                U.991:  .WORD   29066                            ;
00000000* 0068E ;TPA$ADDR
                U.992:  .LONG   <<SMG$$MASK_ADR-U.992>-4>        ;
00000232  00692 ;TPA$MASK
                U.993:  .LONG   562                              ;
    FFFF  00696 ;TPA$TARGET
                U.994:  .WORD   -1                               ;
    718B  00698 ;TPA$TYPE
                U.998:  .WORD   29067                            ;
00000000* 0069A ;TPA$ADDR
                U.999:  .LONG   <<SMG$$MASK_ADR-U.999>-4>        ;
00000233  0069E ;TPA$MASK
                U.1000: .LONG   563                              ;
    FFFF  006A2 ;TPA$TARGET
                U.1001: .WORD   -1                               ;
    718C  006A4 ;TPA$TYPE
                U.1005: .WORD   29068                            ;
00000000* 006A6 ;TPA$ADDR
                U.1006: .LONG   <<SMG$$MASK_ADR-U.1006>-4>       ;
00000234  006AA ;TPA$MASK
                U.1007: .LONG   564                              ;
    FFFF  006AE ;TPA$TARGET
                U.1008: .WORD   -1                               ;
    718D  006B0 ;TPA$TYPE
                U.1012: .WORD   29069                            ;
00000000* 006B2 ;TPA$ADDR
                U.1013: .LONG   <<SMG$$MASK_ADR-U.1013>-4>       ;
00000235  006B6 ;TPA$MASK
                U.1014: .LONG   565                              ;
    FFFF  006BA ;TPA$TARGET
                U.1015: .WORD   -1                               ;
    718E  006BC ;TPA$TYPE
                U.1019: .WORD   29070                            ;
00000000* 006BE ;TPA$ADDR
```

```
                                U.1020: .LONG   <<SMG$$MASK_ADR-U.1020>-4>      ;
00000236  006C2                ;TPA$MASK
                                U.1021: .LONG   566                             ;
    FFFF  006C6                 ;TPA$TARGET
                                U.1022: .WORD   -1                              ;
    718F  006C8                 ;TPA$TYPE
                                U.1026: .WORD   29071                           ;
00000000* 006CA                 ;TPA$ADDR
                                U.1027: .LONG   <<SMG$$MASK_ADR-U.1027>-4>      ;
00000237  006CE                 ;TPA$MASK
                                U.1028: .LONG   567                             ;
    FFFF  006D2                 ;TPA$TARGET
                                U.1029: .WORD   -1                              ;
    7190  006D4                 ;TPA$TYPE
                                U.1033: .WORD   29072                           ;
00000000* 006D6                 ;TPA$ADDR
                                U.1034: .LONG   <<SMG$$MASK_ADR-U.1034>-4>      ;
00000238  006DA                 ;TPA$MASK
                                U.1035: .LONG   568                             ;
    FFFF  006DE                 ;TPA$TARGET
                                U.1036: .WORD   -1                              ;
    7191  006E0                 ;TPA$TYPE
                                U.1040: .WORD   29073                           ;
00000000* 006E2                 ;TPA$ADDR
                                U.1041: .LONG   <<SMG$$MASK_ADR-U.1041>-4>      ;
00000239  006E6                 ;TPA$MASK
                                U.1042: .LONG   569                             ;
    FFFF  006EA                 ;TPA$TARGET
                                U.1043: .WORD   -1                              ;
    7192  006EC                 ;TPA$TYPE
                                U.1047: .WORD   29074                           ;
00000000* 006EE                 ;TPA$ADDR
                                U.1048: .LONG   <<SMG$$MASK_ADR-U.1048>-4>      ;
0000023A  006F2                 ;TPA$MASK
                                U.1049: .LONG   570                             ;
    FFFF  006F6                 ;TPA$TARGET
                                U.1050: .WORD   -1                              ;
    7193  006F8                 ;TPA$TYPE
                                U.1054: .WORD   29075                           ;
00000000* 006FA                 ;TPA$ADDR
                                U.1055: .LONG   <<SMG$$MASK_ADR-U.1055>-4>      ;
0000023B  006FE                 ;TPA$MASK
                                U.1056: .LONG   571                             ;
    FFFF  00702                 ;TPA$TARGET
                                U.1057: .WORD   -1                              ;
    7194  00704                 ;TPA$TYPE
                                U.1061: .WORD   29076                           ;
00000000* 00706                 ;TPA$ADDR
                                U.1062: .LONG   <<SMG$$MASK_ADR-U.1062>-4>      ;
0000023C  0070A                 ;TPA$MASK
                                U.1063: .LONG   572                             ;
    FFFF  0070E                 ;TPA$TARGET
                                U.1064: .WORD   -1                              ;
    7195  00710                 ;TPA$TYPE
                                U.1068: .WORD   29077                           ;
00000000* 00712                 ;TPA$ADDR
                                U.1069: .LONG   <<SMG$$MASK_ADR-U.1069>-4>      ;
```

```
0000023D  00716 ;TPA$MASK
                U.1070: .LONG   573                                     ;
    FFFF  0071A ;TPA$TARGET
                U.1071: .WORD   -1                                      ;
    7196  0071C ;TPA$TYPE
                U.1075: .WORD   29078                                   ;
00000000* 0071E ;TPA$ADDR
                U.1076: .LONG   <<SMG$$MASK_ADR-U.1076>-4>              ;
0000023E  00722 ;TPA$MASK
                U.1077: .LONG   574                                     ;
    FFFF  00726 ;TPA$TARGET
                U.1078: .WORD   -1                                      ;
    7197  00728 ;TPA$TYPE
                U.1082: .WORD   29079                                   ;
00000000* 0072A ;TPA$ADDR
                U.1083: .LONG   <<SMG$$MASK_ADR-U.1083>-4>              ;
0000023F  0072E ;TPA$MASK
                U.1084: .LONG   575                                     ;
    FFFF  00732 ;TPA$TARGET
                U.1085: .WORD   -1                                      ;
    7198  00734 ;TPA$TYPE
                U.1089: .WORD   29080                                   ;
00000000* 00736 ;TPA$ADDR
                U.1090: .LONG   <<SMG$$MASK_ADR-U.1090>-4>              ;
00000240  0073A ;TPA$MASK
                U.1091: .LONG   576                                     ;
    FFFF  0073E ;TPA$TARGET
                U.1092: .WORD   -1                                      ;
    7199  00740 ;TPA$TYPE
                U.1096: .WORD   29081                                   ;
00000000* 00742 ;TPA$ADDR
                U.1097: .LONG   <<SMG$$MASK_ADR-U.1097>-4>              ;
0000024E  00746 ;TPA$MASK
                U.1098: .LONG   590                                     ;
    FFFF  0074A ;TPA$TARGET
                U.1099: .WORD   -1                                      ;
    719A  0074C ;TPA$TYPE
                U.1103: .WORD   29082                                   ;
00000000* 0074E ;TPA$ADDR
                U.1104: .LONG   <<SMG$$MASK_ADR-U.1104>-4>              ;
00000241  00752 ;TPA$MASK
                U.1105: .LONG   577                                     ;
    FFFF  00756 ;TPA$TARGET
                U.1106: .WORD   -1                                      ;
    719B  00758 ;TPA$TYPE
                U.1110: .WORD   29083                                   ;
00000000* 0075A ;TPA$ADDR
                U.1111: .LONG   <<SMG$$MASK_ADR-U.1111>-4>              ;
00000242  0075E ;TPA$MASK
                U.1112: .LONG   578                                     ;
    FFFF  00762 ;TPA$TARGET
                U.1113: .WORD   -1                                      ;
    719C  00764 ;TPA$TYPE
                U.1117: .WORD   29084                                   ;
00000000* 00766 ;TPA$ADDR
                U.1118: .LONG   <<SMG$$MASK_ADR-U.1118>-4>              ;
00000243  0076A ;TPA$MASK
```

```
                                                U.1119: .LONG   579                                     ;
                                    FFFF  0076E ;TPA$TARGET
                                                U.1120: .WORD   -1                                      ;
                                    719D  00770 ;TPA$TYPE
                                                U.1124: .WORD   29085                                   ;
                                00000000* 00772 ;TPA$ADDR
                                                U.1125: .LONG   <<SMG$$MASK_ADR-U.1125>-4>              ;
                                00000244  00776 ;TPA$MASK
                                                U.1126: .LONG   580                                     ;
                                    FFFF  0077A ;TPA$TARGET
                                                U.1127: .WORD   -1                                      ;
                                    719E  0077C ;TPA$TYPE
                                                U.1131: .WORD   29086                                   ;
                                00000000* 0077E ;TPA$ADDR
                                                U.1132: .LONG   <<SMG$$MASK_ADR-U.1132>-4>              ;
                                0000024D  00782 ;TPA$MASK
                                                U.1133: .LONG   589                                     ;
                                    FFFF  00786 ;TPA$TARGET
                                                U.1134: .WORD   -1                                      ;
                                    719F  00788 ;TPA$TYPE
                                                U.1138: .WORD   29087                                   ;
                                00000000* 0078A ;TPA$ADDR
                                                U.1139: .LONG   <<SMG$$MASK_ADR-U.1139>-4>              ;
                                00000245  0078E ;TPA$MASK
                                                U.1140: .LONG   581                                     ;
                                    FFFF  00792 ;TPA$TARGET
                                                U.1141: .WORD   -1                                      ;
                                    71A0  00794 ;TPA$TYPE
                                                U.1145: .WORD   29088                                   ;
                                00000000* 00796 ;TPA$ADDR
                                                U.1146: .LONG   <<SMG$$MASK_ADR-U.1146>-4>              ;
                                00000246  0079A ;TPA$MASK
                                                U.1147: .LONG   582                                     ;
                                    FFFF  0079E ;TPA$TARGET
                                                U.1148: .WORD   -1                                      ;
                                    71A1  007A0 ;TPA$TYPE
                                                U.1152: .WORD   29089                                   ;
                                00000000* 007A2 ;TPA$ADDR
                                                U.1153: .LONG   <<SMG$$MASK_ADR-U.1153>-4>              ;
                                0000028B  007A6 ;TPA$MASK
                                                U.1154: .LONG   651                                     ;
                                    FFFF  007AA ;TPA$TARGET
                                                U.1155: .WORD   -1                                      ;
                                    71A2  007AC ;TPA$TYPE
                                                U.1159: .WORD   29090                                   ;
                                00000000* 007AE ;TPA$ADDR
                                                U.1160: .LONG   <<SMG$$MASK_ADR-U.1160>-4>              ;
                                0000028C  007B2 ;TPA$MASK
                                                U.1161: .LONG   652                                     ;
                                    FFFF  007B6 ;TPA$TARGET
                                                U.1162: .WORD   -1                                      ;
                                    71A3  007B8 ;TPA$TYPE
                                                U.1166: .WORD   29091                                   ;
                                00000000* 007BA ;TPA$ADDR
                                                U.1167: .LONG   <<SMG$$MASK_ADR-U.1167>-4>              ;
                                0000028D  007BE ;TPA$MASK
                                                U.1168: .LONG   653                                     ;
```

```
                    FFFF  007C2 ;TPA$TARGET
                                U.1169: .WORD   -1                                      ;
                    71A4  007C4 ;TPA$TYPE
                                U.1173: .WORD   29092                                   ;
           00000000* 007C6 ;TPA$ADDR
                                U.1174: .LONG   <<SMG$$MASK_ADR-U.1174>-4>              ;
           0000028E  007CA ;TPA$MASK
                                U.1175: .LONG   654                                     ;
                    FFFF  007CE ;TPA$TARGET
                                U.1176: .WORD   -1                                      ;
                    71A5  007D0 ;TPA$TYPE
                                U.1180: .WORD   29093                                   ;
           00000000* 007D2 ;TPA$ADDR
                                U.1181: .LONG   <<SMG$$MASK_ADR-U.1181>-4>              ;
           0000028F  007D6 ;TPA$MASK
                                U.1182: .LONG   655                                     ;
                    FFFF  007DA ;TPA$TARGET
                                U.1183: .WORD   -1                                      ;
                    71A6  007DC ;TPA$TYPE
                                U.1187: .WORD   29094                                   ;
           00000000* 007DE ;TPA$ADDR
                                U.1188: .LONG   <<SMG$$MASK_ADR-U.1188>-4>              ;
           00000290  007E2 ;TPA$MASK
                                U.1189: .LONG   656                                     ;
                    FFFF  007E6 ;TPA$TARGET
                                U.1190: .WORD   -1                                      ;
                    71A7  007E8 ;TPA$TYPE
                                U.1194: .WORD   29095                                   ;
           00000000* 007EA ;TPA$ADDR
                                U.1195: .LONG   <<SMG$$MASK_ADR-U.1195>-4>              ;
           00000291  007EE ;TPA$MASK
                                U.1196: .LONG   657                                     ;
                    FFFF  007F2 ;TPA$TARGET
                                U.1197: .WORD   -1                                      ;
                    71A8  007F4 ;TPA$TYPE
                                U.1201: .WORD   29096                                   ;
           00000000* 007F6 ;TPA$ADDR
                                U.1202: .LONG   <<SMG$$MASK_ADR-U.1202>-4>              ;
           00000292  007FA ;TPA$MASK
                                U.1203: .LONG   658                                     ;
                    FFFF  007FE ;TPA$TARGET
                                U.1204: .WORD   -1                                      ;
                    71A9  00800 ;TPA$TYPE
                                U.1208: .WORD   29097                                   ;
           00000000* 00802 ;TPA$ADDR
                                U.1209: .LONG   <<SMG$$MASK_ADR-U.1209>-4>              ;
           00000293  00806 ;TPA$MASK
                                U.1210: .LONG   659                                     ;
                    FFFF  0080A ;TPA$TARGET
                                U.1211: .WORD   -1                                      ;
                    71AA  0080C ;TPA$TYPE
                                U.1215: .WORD   29098                                   ;
           00000000* 0080E ;TPA$ADDR
                                U.1216: .LONG   <<SMG$$MASK_ADR-U.1216>-4>              ;
           00000294  00812 ;TPA$MASK
                                U.1217: .LONG   660                                     ;
                    FFFF  00816 ;TPA$TARGET
```

```
                                                U.1218: .WORD   -1                                      ;
                        15F6    00818 ;TPA$TYPE
                                U.1219: .WORD   5622                                    ;
                        FFFE    0081A ;TPA$TARGET
                                U.1220: .WORD   -2                                      ;
                                0081C ;EQUALS_STRING
                                U.27:   .BLKB   0
                        99F8    0081C ;TPA$TYPE
                                U.1222: .WORD   -26120                                  ;
                        0000*   0081E ;TPA$SUBEXP
                                U.1223: .WORD   <<U.3-U.1223>-2>                        ;
                    00000000*   00820 ;TPA$ACTION
                                U.1224: .LONG   <<SMG$$NEXT_RECORD-U.1224>-4>           ;
                        0000*   00824 ;TPA$TARGET
                                U.1225: .WORD   <<U.27-U.1225>-2>                       ;
                        903D    00826 ;TPA$TYPE
                                U.1226: .WORD   -28611                                  ;
                    00000000*   00828 ;TPA$ACTION
                                U.1227: .LONG   <<SMG$$STORE_CAP_MASK-U.1227>-4>        ;
                        0000*   0082C ;TPA$TARGET
                                U.1229: .WORD   <<U.1228-U.1229>-2>                     ;
                        81F1    0082E ;TPA$TYPE
                                U.1230: .WORD   -32271                                  ;
                    00000000*   00830 ;TPA$ACTION
                                U.1231: .LONG   <<SMG$$SYNTAX_ERROR-U.1231>-4>          ;
                        85ED    00834 ;TPA$TYPE
                                U.1232: .WORD   -31251                                  ;
                    00000000*   00836 ;TPA$ACTION
                                U.1233: .LONG   <<SMG$$SYNTAX_ERROR-U.1233>-4>          ;
                                0083A ;STRING_CAP_VALUE
                                U.1228: .BLKB   0
                        99F8    0083A ;TPA$TYPE
                                U.1234: .WORD   -26120                                  ;
                        0000*   0083C ;TPA$SUBEXP
                                U.1235: .WORD   <<U.3-U.1235>-2>                        ;
                    00000000*   0083E ;TPA$ACTION
                                U.1236: .LONG   <<SMG$$NEXT_RECORD-U.1236>-4>           ;
                        0000*   00842 ;TPA$TARGET
                                U.1237: .WORD   <<U.1228-U.1237>-2>                     ;
                        19F8    00844 ;TPA$TYPE
                                U.1238: .WORD   6648                                    ;
                        0000*   00846 ;TPA$SUBEXP
                                U.1240: .WORD   <<U.1239-U.1240>-2>                     ;
                        0000*   00848 ;TPA$TARGET
                                U.1241: .WORD   <<BEGIN_SCAN-U.1241>-2>                 ;
                        81F1    0084A ;TPA$TYPE
                                U.1242: .WORD   -32271                                  ;
                    00000000*   0084C ;TPA$ACTION
                                U.1243: .LONG   <<SMG$$SYNTAX_ERROR-U.1243>-4>          ;
                        85ED    00850 ;TPA$TYPE
                                U.1244: .WORD   -31251                                  ;
                    00000000*   00852 ;TPA$ACTION
                                U.1245: .LONG   <<SMG$$SYNTAX_ERROR-U.1245>-4>          ;
                                00856 COMMA:    .BLKB   0
                        902C    00856 ;TPA$TYPE
                                U.1246: .WORD   -28628                                  ;
                    00000000*   00858 ;TPA$ACTION
```

```
                                U.1247: .LONG   <<SMG$$BLANKS_OFF-U.1247>-4>            ;
     FFFF  0085C                ;TPA$TARGET
                                U.1248: .WORD   -1                                      ;
     91F2  0085E                ;TPA$TYPE
                                U.1249: .WORD   -28174                                  ;
 00000000* 00860                ;TPA$ACTION
                                U.1250: .LONG   <<SMG$$BLANKS_OFF-U.1250>-4>            ;
     0000* 00864                ;TPA$TARGET
                                U.1251: .WORD   <<COMMA-U.1251>-2>                      ;
     99F8  00866                ;TPA$TYPE
                                U.1252: .WORD   -26120                                  ;
     0000* 00868                ;TPA$SUBEXP
                                U.1253: .WORD   <<U.3-U.1253>-2>                        ;
 00000000* 0086A                ;TPA$ACTION
                                U.1254: .LONG   <<SMG$$NEXT_RECORD-U.1254>-4>           ;
     FFFF  0086E                ;TPA$TARGET
                                U.1255: .WORD   -1                                      ;
     85ED  00870                ;TPA$TYPE
                                U.1256: .WORD   -31251                                  ;
 00000000* 00872                ;TPA$ACTION
                                U.1257: .LONG   <<SMG$$SYNTAX_ERROR-U.1257>-4>          ;
           00876                ;STRING_CAP
                                U.1239: .BLKB   0
     9027  00876                ;TPA$TYPE
                                U.1258: .WORD   -28633                                  ;
 00000000* 00878                ;TPA$ACTION
                                U.1259: .LONG   <<SMG$$BLANKS_ON-U.1259>-4>             ;
     0000* 0087C                ;TPA$TARGET
                                U.1261: .WORD   <<U.1260-U.1261>-2>                     ;
     9022  0087E                ;TPA$TYPE
                                U.1262: .WORD   -28638                                  ;
 00000000* 00880                ;TPA$ACTION
                                U.1263: .LONG   <<SMG$$BLANKS_ON-U.1263>-4>             ;
     0000* 00884                ;TPA$TARGET
                                U.1265: .WORD   <<U.1264-U.1265>-2>                     ;
     15ED  00886                ;TPA$TYPE
                                U.1266: .WORD   5613                                    ;
     FFFE  00888                ;TPA$TARGET
                                U.1267: .WORD   -2                                      ;
           0088A                ;SINGLE_QUOTE_STRING
                                U.1260: .BLKB   0
     19F8  0088A                ;TPA$TYPE
                                U.1268: .WORD   6648                                    ;
     0000* 0088C                ;TPA$SUBEXP
                                U.1270: .WORD   <<U.1269-U.1270>-2>                     ;
     0000* 0088E                ;TPA$TARGET
                                U.1271: .WORD   <<U.1260-U.1271>-2>                     ;
     9024  00890                ;TPA$TYPE
                                U.1272: .WORD   -28636                                  ;
 00000000V 00892                ;TPA$ACTION
                                U.1273: .LONG   <<CONVERT_ESCAPE-U.1273>-4>             ;
     0000* 00896                ;TPA$TARGET
                                U.1274: .WORD   <<U.1260-U.1274>-2>                     ;
     19F8  00898                ;TPA$TYPE
                                U.1275: .WORD   6648                                    ;
     0000* 0089A                ;TPA$SUBEXP
                                U.1277: .WORD   <<U.1276-U.1277>-2>                     ;
```

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                    0000* 0089C ;TPA$TARGET
                                U.1278: .WORD   <<U.1260-U.1278>-2>                     ;
                    19F8  0089E ;TPA$TYPE
                                U.1279: .WORD   6648                                    ;
                    0000* 008A0 ;TPA$SUBEXP
                                U.1281: .WORD   <<U.1280-U.1281>-2>                     ;
                    0000* 008A2 ;TPA$TARGET
                                U.1282: .WORD   <<U.1260-U.1282>-2>                     ;
                    19F8  008A4 ;TPA$TYPE
                                U.1283: .WORD   6648                                    ;
                    0000* 008A6 ;TPA$SUBEXP
                                U.1285: .WORD   <<U.1284-U.1285>-2>                     ;
                    0000* 008A8 ;TPA$TARGET
                                U.1286: .WORD   <<U.1260-U.1286>-2>                     ;
                    9027  008AA ;TPA$TYPE
                                U.1287: .WORD   -28633                                  ;
                00000000* 008AC ;TPA$ACTION
                                U.1288: .LONG   <<SMG$$COPY_CAP-U.1288>-4>              ;
                    0000* 008B0 ;TPA$TARGET
                                U.1289: .WORD   <<COMMA-U.1289>-2>                      ;
                    91F2  008B2 ;TPA$TYPE
                                U.1290: .WORD   -28174                                  ;
                00000000* 008B4 ;TPA$ACTION
                                U.1291: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1291>-4>     ;
                    0000* 008B8 ;TPA$TARGET
                                U.1292: .WORD   <<U.1260-U.1292>-2>                     ;
                    8022  008BA ;TPA$TYPE
                                U.1293: .WORD   -32734                                  ;
                00000000* 008BC ;TPA$ACTION
                                U.1294: .LONG   <<SMG$$SYNTAX_ERROR-U.1294>-4>          ;
                    91ED  008C0 ;TPA$TYPE
                                U.1295: .WORD   -28179                                  ;
                00000000* 008C2 ;TPA$ACTION
                                U.1296: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1296>-4>     ;
                    0000* 008C6 ;TPA$TARGET
                                U.1297: .WORD   <<U.1260-U.1297>-2>                     ;
                    15F6  008C8 ;TPA$TYPE
                                U.1298: .WORD   5622                                    ;
                    FFFF  008CA ;TPA$TARGET
                                U.1299: .WORD   -1                                      ;
                          008CC ;DOUBLE_QUOTE_STRING
                                U.1264: .BLKB   0
                    19F8  008CC ;TPA$TYPE
                                U.1300: .WORD   6648                                    ;
                    0000* 008CE ;TPA$SUBEXP
                                U.1301: .WORD   <<U.1269-U.1301>-2>                     ;
                    0000* 008D0 ;TPA$TARGET
                                U.1302: .WORD   <<U.1264-U.1302>-2>                     ;
                    9024  008D2 ;TPA$TYPE
                                U.1303: .WORD   -28636                                  ;
                00000000V 008D4 ;TPA$ACTION
                                U.1304: .LONG   <<CONVERT_ESCAPE-U.1304>-4>             ;
                    0000* 008D8 ;TPA$TARGET
                                U.1305: .WORD   <<U.1264-U.1305>-2>                     ;
                    19F8  008DA ;TPA$TYPE
                                U.1306: .WORD   6648                                    ;
                    0000* 008DC ;TPA$SUBEXP
```

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                                U.1307: .WORD   <<U.1276-U.1307>-2>                     ;
                0000*  008DE   ;TPA$TARGET
                                U.1308: .WORD   <<U.1264-U.1308>-2>                     ;
                19F8   008E0   ;TPA$TYPE
                                U.1309: .WORD   6648                                    ;
                0000*  008E2   ;TPA$SUBEXP
                                U.1310: .WORD   <<U.1280-U.1310>-2>                     ;
                0000*  008E4   ;TPA$TARGET
                                U.1311: .WORD   <<U.1264-U.1311>-2>                     ;
                19F8   008E6   ;TPA$TYPE
                                U.1312: .WORD   6648                                    ;
                0000*  008E8   ;TPA$SUBEXP
                                U.1313: .WORD   <<U.1284-U.1313>-2>                     ;
                0000*  008EA   ;TPA$TARGET
                                U.1314: .WORD   <<U.1264-U.1314>-2>                     ;
                9022   008EC   ;TPA$TYPE
                                U.1315: .WORD   -28638                                  ;
            00000000*  008EE   ;TPA$ACTION
                                U.1316: .LONG   <<SMG$$COPY_CAP-U.1316>-4>              ;
                0000*  008F2   ;TPA$TARGET
                                U.1317: .WORD   <<COMMA-U.1317>-2>                      ;
                91F2   008F4   ;TPA$TYPE
                                U.1318: .WORD   -28174                                  ;
            00000000*  008F6   ;TPA$ACTION
                                U.1319: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1319>-4>     ;
                0000*  008FA   ;TPA$TARGET
                                U.1320: .WORD   <<U.1264-U.1320>-2>                     ;
                8027   008FC   ;TPA$TYPE
                                U.1321: .WORD   -32729                                  ;
            00000000*  008FE   ;TPA$ACTION
                                U.1322: .LONG   <<SMG$$SYNTAX_ERROR-U.1322>-4>          ;
                91ED   00902   ;TPA$TYPE
                                U.1323: .WORD   -28179                                  ;
            00000000*  00904   ;TPA$ACTION
                                U.1324: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1324>-4>     ;
                0000*  00908   ;TPA$TARGET
                                U.1325: .WORD   <<U.1264-U.1325>-2>                     ;
                15F6   0090A   ;TPA$TYPE
                                U.1326: .WORD   5622                                    ;
                FFFF   0090C   ;TPA$TARGET
                                U.1327: .WORD   -1                                      ;
                       0090E   ;UNDERSCORE
                                U.1269: .BLKB   0
                105F   0090E   ;TPA$TYPE
                                U.1328: .WORD   4191                                    ;
                0000*  00910   ;TPA$TARGET
                                U.1330: .WORD   <<U.1329-U.1330>-2>                     ;
                15F6   00912   ;TPA$TYPE
                                U.1331: .WORD   5622                                    ;
                FFFE   00914   ;TPA$TARGET
                                U.1332: .WORD   -2                                      ;
                       00916   ;UNDERSCORE2
                                U.1329: .BLKB   0
                9024   00916   ;TPA$TYPE
                                U.1333: .WORD   -28636                                  ;
            00000000V  00918   ;TPA$ACTION
                                U.1334: .LONG   <<INSERT_DOLLAR-U.1334>-4>              ;
```

```
                    FFFF  0091C ;TPA$TARGET
                                U.1335: .WORD   -1                                      ;
                    905E  0091E ;TPA$TYPE
                                U.1336: .WORD   -28578                                  ;
            00000000V 00920 ;TPA$ACTION
                                U.1337: .LONG   <<INSERT_CARROT-U.1337>-4>              ;
                    FFFF  00924 ;TPA$TARGET
                                U.1338: .WORD   -1                                      ;
                    9021  00926 ;TPA$TYPE
                                U.1339: .WORD   -28639                                  ;
            00000000V 00928 ;TPA$ACTION
                                U.1340: .LONG   <<INSERT_EXCLAMATION-U.1340>-4>         ;
                    FFFF  0092C ;TPA$TARGET
                                U.1341: .WORD   -1                                      ;
                    9028  0092E ;TPA$TYPE
                                U.1342: .WORD   -28632                                  ;
            00000000V 00930 ;TPA$ACTION
                                U.1343: .LONG   <<INSERT_PARENTHESIS-U.1343>-4>         ;
                    FFFF  00934 ;TPA$TARGET
                                U.1344: .WORD   -1                                      ;
                    15F6  00936 ;TPA$TYPE
                                U.1345: .WORD   5622                                    ;
                    FFFE  00938 ;TPA$TARGET
                                U.1346: .WORD   -2                                      ;
                          0093A ;CARROT
                                U.1276: .BLKB   0
                    105E  0093A ;TPA$TYPE
                                U.1347: .WORD   4190                                    ;
                    0000* 0093C ;TPA$TARGET
                                U.1349: .WORD   <<U.1348-U.1349>-2>                     ;
                    15F6  0093E ;TPA$TYPE
                                U.1350: .WORD   5622                                    ;
                    FFFE  00940 ;TPA$TARGET
                                U.1351: .WORD   -2                                      ;
                          00942 ;CONTROL_CHAR
                                U.1348: .BLKB   0
                    95ED  00942 ;TPA$TYPE
                                U.1352: .WORD   -27155                                  ;
            00000000* 00944 ;TPA$ACTION
                                U.1353: .LONG   <<CONVERT_CONTROL-U.1353>-4>            ;
                    FFFF  00948 ;TPA$TARGET
                                U.1354: .WORD   -1                                      ;
                          0094A ;FAO_STRING
                                U.1280: .BLKB   0
                    8021  0094A ;TPA$TYPE
                                U.1355: .WORD   -32735                                  ;
            00000000* 0094C ;TPA$ACTION
                                U.1356: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1356>-4>     ;
                    15F6  00950 ;TPA$TYPE
                                U.1357: .WORD   5622                                    ;
                    FFFE  00952 ;TPA$TARGET
                                U.1358: .WORD   -2                                      ;
                    8055  00954 ;TPA$TYPE
                                U.1359: .WORD   -32683                                  ;
            00000000* 00956 ;TPA$ACTION
                                U.1360: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1360>-4>     ;
                    91F1  0095A ;TPA$TYPE
```

```
                                    U.1361: .WORD   -28175                                  ;
00000000V 0095C                     ;TPA$ACTION
                                    U.1362: .LONG   <<INVALID_DIRECTIVE-U.1362>-4>          ;
    FFFE  00960                     ;TPA$TARGET
                                    U.1363: .WORD   -2                                      ;
    95ED  00962                     ;TPA$TYPE
                                    U.1364: .WORD   -27155                                  ;
00000000V 00964                     ;TPA$ACTION
                                    U.1365: .LONG   <<INVALID_DIRECTIVE-U.1365>-4>          ;
    FFFE  00968                     ;TPA$TARGET
                                    U.1366: .WORD   -2                                      ;
    F04C  0096A                     ;TPA$TYPE
                                    U.1367: .WORD   -4020                                   ;
00000000* 0096C                     ;TPA$ACTION
                                    U.1368: .LONG   <<SMG$$SAVE_TOKEN_STRING-U.1368>-4>     ;
00000000* 00970                     ;TPA$ADDR
                                    U.1369: .LONG   <<SMG$$MASK_ADR-U.1369>-4>              ;
FFFFFFFF  00974                     ;TPA$MASK
                                    U.1370: .LONG   -1                                      ;
    FFFF  00978                     ;TPA$TARGET
                                    U.1371: .WORD   -1                                      ;
    91F1  0097A                     ;TPA$TYPE
                                    U.1372: .WORD   -28175                                  ;
00000000V 0097C                     ;TPA$ACTION
                                    U.1373: .LONG   <<INVALID_DIRECTIVE-U.1373>-4>          ;
    FFFE  00980                     ;TPA$TARGET
                                    U.1374: .WORD   -2                                      ;
    95ED  00982                     ;TPA$TYPE
                                    U.1375: .WORD   -27155                                  ;
00000000V 00984                     ;TPA$ACTION
                                    U.1376: .LONG   <<INVALID_DIRECTIVE-U.1376>-4>          ;
    FFFE  00988                     ;TPA$TARGET
                                    U.1377: .WORD   -2                                      ;
          0098A                     ;ARITH_CAP
                                    U.1284: .BLKB   0
    9028  0098A                     ;TPA$TYPE
                                    U.1378: .WORD   -28632                                  ;
00000000V 0098C                     ;TPA$ACTION
                                    U.1379: .LONG   <<INIT_ARITH_CAP-U.1379>-4>             ;
    0000* 00990                     ;TPA$TARGET
                                    U.1381: .WORD   <<U.1380-U.1381>-2>                     ;
    11F2  00992                     ;TPA$TYPE
                                    U.1382: .WORD   4594                                    ;
    0000* 00994                     ;TPA$TARGET
                                    U.1383: .WORD   <<U.1284-U.1383>-2>                     ;
    15F6  00996                     ;TPA$TYPE
                                    U.1384: .WORD   5622                                    ;
    FFFE  00998                     ;TPA$TARGET
                                    U.1385: .WORD   -2                                      ;
          0099A                     ;ARITH_CAP2
                                    U.1380: .BLKB   0
    19F8  0099A                     ;TPA$TYPE
                                    U.1386: .WORD   6648                                    ;
    0000* 0099C                     ;TPA$SUBEXP
                                    U.1388: .WORD   <<U.1387-U.1388>-2>                     ;
    FFFF  0099E                     ;TPA$TARGET
                                    U.1389: .WORD   -1                                      ;
```

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                    15F6  009A0 ;TPA$TYPE
                                U.1390: .WORD   5622                                    ;
                    FFFE  009A2 ;TPA$TARGET
                                U.1391: .WORD   -2                                      ;
                          009A4 OPERATOR:
                                        .BLKB   0
                    702B  009A4 ;TPA$TYPE
                                U.1392: .WORD   28715                                   ;
            00000000* 009A6 ;TPA$ADDR
                                U.1393: .LONG   <<SMG$$MASK_ADR-U.1393>-4>              ;
            FFFFFFFB  009AA ;TPA$MASK
                                U.1394: .LONG   -5                                      ;
                0000* 009AE ;TPA$TARGET
                                U.1395: .WORD   <<U.1387-U.1395>-2>                     ;
                    702D  009B0 ;TPA$TYPE
                                U.1396: .WORD   28717                                   ;
            00000000* 009B2 ;TPA$ADDR
                                U.1397: .LONG   <<SMG$$MASK_ADR-U.1397>-4>              ;
            FFFFFFFA  009B6 ;TPA$MASK
                                U.1398: .LONG   -6                                      ;
                0000* 009BA ;TPA$TARGET
                                U.1399: .WORD   <<U.1387-U.1399>-2>                     ;
                    702A  009BC ;TPA$TYPE
                                U.1400: .WORD   28714                                   ;
            00000000* 009BE ;TPA$ADDR
                                U.1401: .LONG   <<SMG$$MASK_ADR-U.1401>-4>              ;
            FFFFFFF9  009C2 ;TPA$MASK
                                U.1402: .LONG   -7                                      ;
                0000* 009C6 ;TPA$TARGET
                                U.1403: .WORD   <<U.1387-U.1403>-2>                     ;
                    702F  009C8 ;TPA$TYPE
                                U.1404: .WORD   28719                                   ;
            00000000* 009CA ;TPA$ADDR
                                U.1405: .LONG   <<SMG$$MASK_ADR-U.1405>-4>              ;
            FFFFFFF8  009CE ;TPA$MASK
                                U.1406: .LONG   -8                                      ;
                0000* 009D2 ;TPA$TARGET
                                U.1407: .WORD   <<U.1387-U.1407>-2>                     ;
                    9029  009D4 ;TPA$TYPE
                                U.1408: .WORD   -28631                                  ;
            00000000V 009D6 ;TPA$ACTION
                                U.1409: .LONG   <<END_ARITH_CAP-U.1409>-4>              ;
                FFFF  009DA ;TPA$TARGET
                                U.1410: .WORD   -1                                      ;
                    85ED  009DC ;TPA$TYPE
                                U.1411: .WORD   -31251                                  ;
            00000000V 009DE ;TPA$ACTION
                                U.1412: .LONG   <<EXPRESSION_ERROR-U.1412>-4>           ;
                          009E2 ;OPERAND
                                U.1387: .BLKB   0
                    91F3  009E2 ;TPA$TYPE
                                U.1413: .WORD   -28173                                  ;
            00000000V 009E4 ;TPA$ACTION
                                U.1414: .LONG   <<STORE_OPERAND-U.1414>-4>              ;
                0000* 009E8 ;TPA$TARGET
                                U.1415: .WORD   <<OPERATOR-U.1415>-2>                   ;
                    19F8  009EA ;TPA$TYPE
```

```
                                                U.1416: .WORD   6648                                    ;
                                    0000* 009EC ;TPA$SUBEXP
                                                U.1418: .WORD   <<U.1417-U.1418>-2>                     ;
                                    0000* 009EE ;TPA$TARGET
                                                U.1419: .WORD   <<OPERATOR-U.1419>-2>                   ;
                                        81F1  009F0 ;TPA$TYPE
                                                U.1420: .WORD   -32271                                  ;
                                 00000000V 009F2 ;TPA$ACTION
                                                U.1421: .LONG   <<EXPRESSION_ERROR-U.1421>-4>           ;
                                        85ED  009F6 ;TPA$TYPE
                                                U.1422: .WORD   -31251                                  ;
                                 00000000V 009F8 ;TPA$ACTION
                                                U.1423: .LONG   <<EXPRESSION_ERROR-U.1423>-4>           ;
                                              009FC ;SUBSTITUTION
                                                U.1417: .BLKB   0
                                        0025  009FC ;TPA$TYPE
                                                U.1424: .WORD   37                                      ;
                                        15F6  009FE ;TPA$TYPE
                                                U.1425: .WORD   5622                                    ;
                                        FFFE  00A00 ;TPA$TARGET
                                                U.1426: .WORD   -2                                      ;
                                        91F3  00A02 ;TPA$TYPE
                                                U.1427: .WORD   -28173                                  ;
                                 00000000V 00A04 ;TPA$ACTION
                                                U.1428: .LONG   <<STORE_SUBSTITUTION-U.1428>-4>         ;
                                        FFFF  00A08 ;TPA$TARGET
                                                U.1429: .WORD   -1                                      ;
                                        85ED  00A0A ;TPA$TYPE
                                                U.1430: .WORD   -31251                                  ;
                                 00000000V 00A0C ;TPA$ACTION
                                                U.1431: .LONG   <<EXPRESSION_ERROR-U.1431>-4>           ;

                                                        .PSECT  _LIB$KEY0$,NOWRT,  SHR,  PIC,1

                                      00000 SMG$$A_STRING_KEYWDS::
                                                        .BLKB   0
                                      00000 ;TPA$KEY0
                                                U.1:    .BLKB   0
                                0000* 00000 ;TPA$KEY
                                                U.30:   .WORD   <U.29-U.1>                              ;
                                0000* 00002 ;TPA$KEY
                                                U.35:   .WORD   <U.34-U.1>                              ;
                                0000* 00004 ;TPA$KEY
                                                U.40:   .WORD   <U.39-U.1>                              ;
                                0000* 00006 ;TPA$KEY
                                                U.45:   .WORD   <U.44-U.1>                              ;
                                0000* 00008 ;TPA$KEY
                                                U.50:   .WORD   <U.49-U.1>                              ;
                                0000* 0000A ;TPA$KEY
                                                U.56:   .WORD   <U.55-U.1>                              ;
                                0000* 0000C ;TPA$KEY
                                                U.65:   .WORD   <U.64-U.1>                              ;
                                0000* 0000E ;TPA$KEY
                                                U.72:   .WORD   <U.71-U.1>                              ;
                                0000* 00010 ;TPA$KEY
                                                U.79:   .WORD   <U.78-U.1>                              ;
                                0000* 00012 ;TPA$KEY
```

```
                                U.86:   .WORD   <U.85-U.1>                      ;
0000* 00014                     ;TPA$KEY
                                U.93:   .WORD   <U.92-U.1>                      ;
0000* 00016                     ;TPA$KEY
                                U.100:  .WORD   <U.99-U.1>                      ;
0000* 00018                     ;TPA$KEY
                                U.107:  .WORD   <U.106-U.1>                     ;
0000* 0001A                     ;TPA$KEY
                                U.114:  .WORD   <U.113-U.1>                     ;
0000* 0001C                     ;TPA$KEY
                                U.121:  .WORD   <U.120-U.1>                     ;
0000* 0001E                     ;TPA$KEY
                                U.128:  .WORD   <U.127-U.1>                     ;
0000* 00020                     ;TPA$KEY
                                U.135:  .WORD   <U.134-U.1>                     ;
0000* 00022                     ;TPA$KEY
                                U.142:  .WORD   <U.141-U.1>                     ;
0000* 00024                     ;TPA$KEY
                                U.149:  .WORD   <U.148-U.1>                     ;
0000* 00026                     ;TPA$KEY
                                U.156:  .WORD   <U.155-U.1>                     ;
0000* 00028                     ;TPA$KEY
                                U.163:  .WORD   <U.162-U.1>                     ;
0000* 0002A                     ;TPA$KEY
                                U.170:  .WORD   <U.169-U.1>                     ;
0000* 0002C                     ;TPA$KEY
                                U.177:  .WORD   <U.176-U.1>                     ;
0000* 0002E                     ;TPA$KEY
                                U.184:  .WORD   <U.183-U.1>                     ;
0000* 00030                     ;TPA$KEY
                                U.191:  .WORD   <U.190-U.1>                     ;
0000* 00032                     ;TPA$KEY
                                U.198:  .WORD   <U.197-U.1>                     ;
0000* 00034                     ;TPA$KEY
                                U.205:  .WORD   <U.204-U.1>                     ;
0000* 00036                     ;TPA$KEY
                                U.212:  .WORD   <U.211-U.1>                     ;
0000* 00038                     ;TPA$KEY
                                U.219:  .WORD   <U.218-U.1>                     ;
0000* 0003A                     ;TPA$KEY
                                U.226:  .WORD   <U.225-U.1>                     ;
0000* 0003C                     ;TPA$KEY
                                U.233:  .WORD   <U.232-U.1>                     ;
0000* 0003E                     ;TPA$KEY
                                U.240:  .WORD   <U.239-U.1>                     ;
0000* 00040                     ;TPA$KEY
                                U.247:  .WORD   <U.246-U.1>                     ;
0000* 00042                     ;TPA$KEY
                                U.254:  .WORD   <U.253-U.1>                     ;
0000* 00044                     ;TPA$KEY
                                U.261:  .WORD   <U.260-U.1>                     ;
0000* 00046                     ;TPA$KEY
                                U.268:  .WORD   <U.267-U.1>                     ;
0000* 00048                     ;TPA$KEY
                                U.275:  .WORD   <U.274-U.1>                     ;
0000* 0004A                     ;TPA$KEY
                                U.282:  .WORD   <U.281-U.1>                     ;
```

```
0000* 0004C ;TPA$KEY
                U.289:  .WORD   <U.288-U.1>                     ;
0000* 0004E ;TPA$KEY
                U.296:  .WORD   <U.295-U.1>                     ;
0000* 00050 ;TPA$KEY
                U.303:  .WORD   <U.302-U.1>                     ;
0000* 00052 ;TPA$KEY
                U.310:  .WORD   <U.309-U.1>                     ;
0000* 00054 ;TPA$KEY
                U.317:  .WORD   <U.316-U.1>                     ;
0000* 00056 ;TPA$KEY
                U.324:  .WORD   <U.323-U.1>                     ;
0000* 00058 ;TPA$KEY
                U.331:  .WORD   <U.330-U.1>                     ;
0000* 0005A ;TPA$KEY
                U.338:  .WORD   <U.337-U.1>                     ;
0000* 0005C ;TPA$KEY
                U.345:  .WORD   <U.344-U.1>                     ;
0000* 0005E ;TPA$KEY
                U.352:  .WORD   <U.351-U.1>                     ;
0000* 00060 ;TPA$KEY
                U.359:  .WORD   <U.358-U.1>                     ;
0000* 00062 ;TPA$KEY
                U.366:  .WORD   <U.365-U.1>                     ;
0000* 00064 ;TPA$KEY
                U.373:  .WORD   <U.372-U.1>                     ;
0000* 00066 ;TPA$KEY
                U.380:  .WORD   <U.379-U.1>                     ;
0000* 00068 ;TPA$KEY
                U.387:  .WORD   <U.386-U.1>                     ;
0000* 0006A ;TPA$KEY
                U.394:  .WORD   <U.393-U.1>                     ;
0000* 0006C ;TPA$KEY
                U.401:  .WORD   <U.400-U.1>                     ;
0000* 0006E ;TPA$KEY
                U.408:  .WORD   <U.407-U.1>                     ;
0000* 00070 ;TPA$KEY
                U.415:  .WORD   <U.414-U.1>                     ;
0000* 00072 ;TPA$KEY
                U.422:  .WORD   <U.421-U.1>                     ;
0000* 00074 ;TPA$KEY
                U.429:  .WORD   <U.428-U.1>                     ;
0000* 00076 ;TPA$KEY
                U.436:  .WORD   <U.435-U.1>                     ;
0000* 00078 ;TPA$KEY
                U.443:  .WORD   <U.442-U.1>                     ;
0000* 0007A ;TPA$KEY
                U.450:  .WORD   <U.449-U.1>                     ;
0000* 0007C ;TPA$KEY
                U.457:  .WORD   <U.456-U.1>                     ;
0000* 0007E ;TPA$KEY
                U.464:  .WORD   <U.463-U.1>                     ;
0000* 00080 ;TPA$KEY
                U.471:  .WORD   <U.470-U.1>                     ;
0000* 00082 ;TPA$KEY
                U.478:  .WORD   <U.477-U.1>                     ;
0000* 00084 ;TPA$KEY
```

```
                                                U.485:  .WORD   <U.484-U.1>                     ;
0000* 00086                                     ;TPA$KEY
                                                U.492:  .WORD   <U.491-U.1>                     ;
0000* 00088                                     ;TPA$KEY
                                                U.499:  .WORD   <U.498-U.1>                     ;
0000* 0008A                                     ;TPA$KEY
                                                U.506:  .WORD   <U.505-U.1>                     ;
0000* 0008C                                     ;TPA$KEY
                                                U.513:  .WORD   <U.512-U.1>                     ;
0000* 0008E                                     ;TPA$KEY
                                                U.520:  .WORD   <U.519-U.1>                     ;
0000* 00090                                     ;TPA$KEY
                                                U.527:  .WORD   <U.526-U.1>                     ;
0000* 00092                                     ;TPA$KEY
                                                U.534:  .WORD   <U.533-U.1>                     ;
0000* 00094                                     ;TPA$KEY
                                                U.541:  .WORD   <U.540-U.1>                     ;
0000* 00096                                     ;TPA$KEY
                                                U.548:  .WORD   <U.547-U.1>                     ;
0000* 00098                                     ;TPA$KEY
                                                U.555:  .WORD   <U.554-U.1>                     ;
0000* 0009A                                     ;TPA$KEY
                                                U.562:  .WORD   <U.561-U.1>                     ;
0000* 0009C                                     ;TPA$KEY
                                                U.569:  .WORD   <U.568-U.1>                     ;
0000* 0009E                                     ;TPA$KEY
                                                U.576:  .WORD   <U.575-U.1>                     ;
0000* 000A0                                     ;TPA$KEY
                                                U.583:  .WORD   <U.582-U.1>                     ;
0000* 000A2                                     ;TPA$KEY
                                                U.590:  .WORD   <U.589-U.1>                     ;
0000* 000A4                                     ;TPA$KEY
                                                U.597:  .WORD   <U.596-U.1>                     ;
0000* 000A6                                     ;TPA$KEY
                                                U.604:  .WORD   <U.603-U.1>                     ;
0000* 000A8                                     ;TPA$KEY
                                                U.611:  .WORD   <U.610-U.1>                     ;
0000* 000AA                                     ;TPA$KEY
                                                U.618:  .WORD   <U.617-U.1>                     ;
0000* 000AC                                     ;TPA$KEY
                                                U.625:  .WORD   <U.624-U.1>                     ;
0000* 000AE                                     ;TPA$KEY
                                                U.632:  .WORD   <U.631-U.1>                     ;
0000* 000B0                                     ;TPA$KEY
                                                U.639:  .WORD   <U.638-U.1>                     ;
0000* 000B2                                     ;TPA$KEY
                                                U.646:  .WORD   <U.645-U.1>                     ;
0000* 000B4                                     ;TPA$KEY
                                                U.653:  .WORD   <U.652-U.1>                     ;
0000* 000B6                                     ;TPA$KEY
                                                U.660:  .WORD   <U.659-U.1>                     ;
0000* 000B8                                     ;TPA$KEY
                                                U.667:  .WORD   <U.666-U.1>                     ;
0000* 000BA                                     ;TPA$KEY
                                                U.674:  .WORD   <U.673-U.1>                     ;
0000* 000BC                                     ;TPA$KEY
                                                U.681:  .WORD   <U.680-U.1>                     ;
```

```
0000* 000BE ;TPA$KEY
                U.688:  .WORD   <U.687-U.1>                     ;
0000* 000C0 ;TPA$KEY
                U.695:  .WORD   <U.694-U.1>                     ;
0000* 000C2 ;TPA$KEY
                U.702:  .WORD   <U.701-U.1>                     ;
0000* 000C4 ;TPA$KEY
                U.709:  .WORD   <U.708-U.1>                     ;
0000* 000C6 ;TPA$KEY
                U.716:  .WORD   <U.715-U.1>                     ;
0000* 000C8 ;TPA$KEY
                U.723:  .WORD   <U.722-U.1>                     ;
0000* 000CA ;TPA$KEY
                U.730:  .WORD   <U.729-U.1>                     ;
0000* 000CC ;TPA$KEY
                U.737:  .WORD   <U.736-U.1>                     ;
0000* 000CE ;TPA$KEY
                U.744:  .WORD   <U.743-U.1>                     ;
0000* 000D0 ;TPA$KEY
                U.751:  .WORD   <U.750-U.1>                     ;
0000* 000D2 ;TPA$KEY
                U.758:  .WORD   <U.757-U.1>                     ;
0000* 000D4 ;TPA$KEY
                U.765:  .WORD   <U.764-U.1>                     ;
0000* 000D6 ;TPA$KEY
                U.772:  .WORD   <U.771-U.1>                     ;
0000* 000D8 ;TPA$KEY
                U.779:  .WORD   <U.778-U.1>                     ;
0000* 000DA ;TPA$KEY
                U.786:  .WORD   <U.785-U.1>                     ;
0000* 000DC ;TPA$KEY
                U.793:  .WORD   <U.792-U.1>                     ;
0000* 000DE ;TPA$KEY
                U.800:  .WORD   <U.799-U.1>                     ;
0000* 000E0 ;TPA$KEY
                U.807:  .WORD   <U.806-U.1>                     ;
0000* 000E2 ;TPA$KEY
                U.814:  .WORD   <U.813-U.1>                     ;
0000* 000E4 ;TPA$KEY
                U.821:  .WORD   <U.820-U.1>                     ;
0000* 000E6 ;TPA$KEY
                U.828:  .WORD   <U.827-U.1>                     ;
0000* 000E8 ;TPA$KEY
                U.835:  .WORD   <U.834-U.1>                     ;
0000* 000EA ;TPA$KEY
                U.842:  .WORD   <U.841-U.1>                     ;
0000* 000EC ;TPA$KEY
                U.849:  .WORD   <U.848-U.1>                     ;
0000* 000EE ;TPA$KEY
                U.856:  .WORD   <U.855-U.1>                     ;
0000* 000F0 ;TPA$KEY
                U.863:  .WORD   <U.862-U.1>                     ;
0000* 000F2 ;TPA$KEY
                U.870:  .WORD   <U.869-U.1>                     ;
0000* 000F4 ;TPA$KEY
                U.877:  .WORD   <U.876-U.1>                     ;
0000* 000F6 ;TPA$KEY
```

```
                                                U.884:  .WORD   <U.883-U.1>                     ;
0000* 000F8 ;TPA$KEY
                                                U.891:  .WORD   <U.890-U.1>                     ;
0000* 000FA ;TPA$KEY
                                                U.898:  .WORD   <U.897-U.1>                     ;
0000* 000FC ;TPA$KEY
                                                U.905:  .WORD   <U.904-U.1>                     ;
0000* 000FE ;TPA$KEY
                                                U.912:  .WORD   <U.911-U.1>                     ;
0000* 00100 ;TPA$KEY
                                                U.919:  .WORD   <U.918-U.1>                     ;
0000* 00102 ;TPA$KEY
                                                U.926:  .WORD   <U.925-U.1>                     ;
0000* 00104 ;TPA$KEY
                                                U.933:  .WORD   <U.932-U.1>                     ;
0000* 00106 ;TPA$KEY
                                                U.940:  .WORD   <U.939-U.1>                     ;
0000* 00108 ;TPA$KEY
                                                U.947:  .WORD   <U.946-U.1>                     ;
0000* 0010A ;TPA$KEY
                                                U.954:  .WORD   <U.953-U.1>                     ;
0000* 0010C ;TPA$KEY
                                                U.961:  .WORD   <U.960-U.1>                     ;
0000* 0010E ;TPA$KEY
                                                U.968:  .WORD   <U.967-U.1>                     ;
0000* 00110 ;TPA$KEY
                                                U.975:  .WORD   <U.974-U.1>                     ;
0000* 00112 ;TPA$KEY
                                                U.982:  .WORD   <U.981-U.1>                     ;
0000* 00114 ;TPA$KEY
                                                U.989:  .WORD   <U.988-U.1>                     ;
0000* 00116 ;TPA$KEY
                                                U.996:  .WORD   <U.995-U.1>                     ;
0000* 00118 ;TPA$KEY
                                                U.1003: .WORD   <U.1002-U.1>                    ;
0000* 0011A ;TPA$KEY
                                                U.1010: .WORD   <U.1009-U.1>                    ;
0000* 0011C ;TPA$KEY
                                                U.1017: .WORD   <U.1016-U.1>                    ;
0000* 0011E ;TPA$KEY
                                                U.1024: .WORD   <U.1023-U.1>                    ;
0000* 00120 ;TPA$KEY
                                                U.1031: .WORD   <U.1030-U.1>                    ;
0000* 00122 ;TPA$KEY
                                                U.1038: .WORD   <U.1037-U.1>                    ;
0000* 00124 ;TPA$KEY
                                                U.1045: .WORD   <U.1044-U.1>                    ;
0000* 00126 ;TPA$KEY
                                                U.1052: .WORD   <U.1051-U.1>                    ;
0000* 00128 ;TPA$KEY
                                                U.1059: .WORD   <U.1058-U.1>                    ;
0000* 0012A ;TPA$KEY
                                                U.1066: .WORD   <U.1065-U.1>                    ;
0000* 0012C ;TPA$KEY
                                                U.1073: .WORD   <U.1072-U.1>                    ;
0000* 0012E ;TPA$KEY
                                                U.1080: .WORD   <U.1079-U.1>                    ;
```

```
0000* 00130 ;TPA$KEY
            U.1087: .WORD   <U.1086-U.1>                    ;
0000* 00132 ;TPA$KEY
            U.1094: .WORD   <U.1093-U.1>                    ;
0000* 00134 ;TPA$KEY
            U.1101: .WORD   <U.1100-U.1>                    ;
0000* 00136 ;TPA$KEY
            U.1108: .WORD   <U.1107-U.1>                    ;
0000* 00138 ;TPA$KEY
            U.1115: .WORD   <U.1114-U.1>                    ;
0000* 0013A ;TPA$KEY
            U.1122: .WORD   <U.1121-U.1>                    ;
0000* 0013C ;TPA$KEY
            U.1129: .WORD   <U.1128-U.1>                    ;
0000* 0013E ;TPA$KEY
            U.1136: .WORD   <U.1135-U.1>                    ;
0000* 00140 ;TPA$KEY
            U.1143: .WORD   <U.1142-U.1>                    ;
0000* 00142 ;TPA$KEY
            U.1150: .WORD   <U.1149-U.1>                    ;
0000* 00144 ;TPA$KEY
            U.1157: .WORD   <U.1156-U.1>                    ;
0000* 00146 ;TPA$KEY
            U.1164: .WORD   <U.1163-U.1>                    ;
0000* 00148 ;TPA$KEY
            U.1171: .WORD   <U.1170-U.1>                    ;
0000* 0014A ;TPA$KEY
            U.1178: .WORD   <U.1177-U.1>                    ;
0000* 0014C ;TPA$KEY
            U.1185: .WORD   <U.1184-U.1>                    ;
0000* 0014E ;TPA$KEY
            U.1192: .WORD   <U.1191-U.1>                    ;
0000* 00150 ;TPA$KEY
            U.1199: .WORD   <U.1198-U.1>                    ;
0000* 00152 ;TPA$KEY
            U.1206: .WORD   <U.1205-U.1>                    ;
0000* 00154 ;TPA$KEY
            U.1213: .WORD   <U.1212-U.1>                    ;

                    .EXTRN  OTS$CVT_TI_L, SMG$$BLANKS_OFF
                    .EXTRN  SMG$$BLANKS_ON, SMG$$COPY_CAP
                    .EXTRN  SMG$$FLUSH_ARITHMETIC
                    .EXTRN  SMG$$FLUSH_SAVED_BUFFER
                    .EXTRN  SMG$$MISSING_END
                    .EXTRN  SMG$$NEXT_RECORD
                    .EXTRN  SMG$$SAVE_TOKEN_STRING
                    .EXTRN  SMG$$STORE_CAP_MASK
                    .EXTRN  SMG$$SYNTAX_ERROR
                    .EXTRN  SMG$_ERRAT_IN, SMG$_INVDIR
                    .EXTRN  SMG$_INVEXP, SMG$_MISTERNAM
                    .EXTRN  SMG$_NOTSTRCAP, SMG$_SYNERR
                    .EXTRN  SMG$$MASK_ADR, SMG$$NEXT_NEGATIVE_NUMBER
                    .EXTRN  SMG$$CURRENT_LINE
                    .EXTRN  SMG$$DATA_OFFSET

                    .PSECT  _SMG$CODE,NOWRT,  SHR,  PIC,2
```

```
                                                0004 00000 CONVERT_CONTROL:
                                                           .WORD   Save R2                                          ; 0613
                                 52 00000000G   00  9E 00002        MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2
                                 5E             04  C2 00009        SUBL2   #4, SP
                                       48       AC  D5 0000C        TSTL    72(AP)                                   ; 0662
                                                0D  12 0000F        BNEQ    1$
                                 00000000G      00  9F 00011        PUSHAB  SMG$_MISTERNAM                           ; 0664
                     00000000G   00             01  FB 00017        CALLS   #1, LIB$STOP
                                 50       14    BC  90 0001E 1$:    MOVB    @20(AP), CONTROL_CHAR                    ; 0674
                  6E             50       40    8F  8B 00022        BICB3   #64, CONTROL_CHAR, MOVE_CHAR             ; 0680
                                 62             6C  FA 00027        CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER            ; 0688
                           54    AC             01  D0 0002A        MOVL    #1, 84(AP)                               ; 0690
                           58    AC             6E  9E 0002E        MOVAB   MOVE_CHAR, 88(AP)                        ; 0691
                                 62             6C  FA 00032        CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER            ; 0693
                                 50             01  D0 00035        MOVL    #1, R0                                   ; 0695
                                                04  00038        RET                                              ; 0697

; Routine Size:  57 bytes,    Routine Base:  _SMG$CODE + 0000
```

```
;  625          0698  1 %SBTTL 'CONVERT_ESCAPE - Convert $ to escape character'
;  626          0699  1 ROUTINE CONVERT_ESCAPE =
;  627          0700  1
;  628          0701  1 !++
;  629          0702  1 ! FUNCTIONAL DESCRIPTION:
;  630          0703  1 !
;  631          0704  1 !       Stores an escape character in the current capability string in
;  632          0705  1 !       TERMTABLE.EXE.
;  633          0706  1 !
;  634          0707  1 ! CALLING SEQUENCE:
;  635          0708  1 !
;  636          0709  1 !       status = CONVERT_ESCAPE ()
;  637          0710  1 !
;  638          0711  1 ! FORMAL PARAMETERS:
;  639          0712  1 !
;  640          0713  1 !       NONE
;  641          0714  1 !
;  642          0715  1 ! IMPLICIT INPUTS:
;  643          0716  1 !
;  644          0717  1 !       AP      Points to TPARSE parameter block
;  645          0718  1 !
;  646          0719  1 ! IMPLICIT OUTPUTS:
;  647          0720  1 !
;  648          0721  1 !       NONE
;  649          0722  1 !
;  650          0723  1 ! COMPLETION STATUS:
;  651          0724  1 !
;  652          0725  1 !        SS$_NORMAL
;  653          0726  1 !
;  654          0727  1 ! SIDE EFFECTS:
;  655          0728  1 !
;  656          0729  1 !--
;  657          0730  1
;  658          0731  2     BEGIN
;  659          0732  2     BUILTIN
;  660          0733  2         CALLG,
;  661          0734  2         AP;
;  662          0735  2     MAP
;  663          0736  2         AP : REF BLOCK [,BYTE];                                                    ;
;  664          0737  2     LITERAL
;  665          0738  2         K_ESCAPE = %X'1B';
;  666          0739  2     BIND
;  667          0740  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  668          0741  2
;  669          0742  2 !+
;  670          0743  2 ! The NAME capability should have preceeded this.  Complain if it didn't.
;  671          0744  2 !-
;  672          0745  2
;  673          0746  2     IF CAP_PTRS EQL 0
;  674          0747  2     THEN
;  675          0748  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  676          0749  2
;  677          0750  2 !+
;  678          0751  2 ! Move an escape character into the capability string instead of
;  679          0752  2 ! the $.
;  680          0753  2 !
;  681          0754  2 ! Part of the string may already be copied - append in this part so
```

```
;  682          0755  2 ! as not to overwrite it.
;  683          0756  2 !-
;  684          0757  2
;  685          0758  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  686          0759  2
;  687          0760  2 !+
;  688          0761  2 ! Insert the escape character.
;  689          0762  2 !-
;  690          0763  2
;  691          0764  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  692          0765  2     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT (BYTE (K_ESCAPE));
;  693          0766  2                                   ! escape now 'saved'
;  694          0767  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  695          0768  2
;  696          0769  2     RETURN (SS$_NORMAL);
;  697          0770  2
;  698          0771  1     END;                          ! end of routine CONVERT_ESCAPE


                                    00039          .BLKB   3
                                 1B 0003C P.AAA:   .BYTE   27                                                    ;

                                    0004 00000 CONVERT_ESCAPE:
                                                   .WORD   Save R2                                              ; 0699
                          52 00000000G   00  9E 00002      MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2                  ;
                                  48     AC  D5 00009      TSTL    72(AP)                                       ; 0746
                                         0D  12 0000C      BNEQ    1$                                           ;
                              00000000G  00  9F 0000E      PUSHAB  SMG$_MISTERNAM                               ; 0748
                          00000000G      00  FB 00014      CALLS   #1, LIB$STOP                                 ;
                                  62         6C  FA 0001B 1$:     CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER        ; 0758
                                54    AC     01  D0 0001E      MOVL    #1, 84(AP)                               ; 0764
                                58    AC  DA   AF  9E 00022      MOVAB   P.AAA, 88(AP)                        ; 0765
                                  62         6C  FA 00027      CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER        ; 0767
                                  50         01  D0 0002A      MOVL    #1, R0                                   ; 0769
                                             04  0002D      RET                                              ; 0771

; Routine Size:  46 bytes,    Routine Base:  _SMG$CODE + 003D
```

```
;  700     0772  1 %SBTTL 'EXPRESSION_ERROR - Signal and expression error'
;  701     0773  1 ROUTINE EXPRESSION_ERROR =
;  702     0774  1
;  703     0775  1 !++
;  704     0776  1 ! FUNCTIONAL DESCRIPTION:
;  705     0777  1 !
;  706     0778  1 !       Signal that an invalid arithmetic expression was found.
;  707     0779  1 !
;  708     0780  1 ! CALLING SEQUENCE:
;  709     0781  1 !
;  710     0782  1 !       status = EXPRESSION_ERROR ()
;  711     0783  1 !
;  712     0784  1 ! FORMAL PARAMETERS:
;  713     0785  1 !
;  714     0786  1 !       NONE
;  715     0787  1 !
;  716     0788  1 ! IMPLICIT INPUTS:
;  717     0789  1 !
;  718     0790  1 !       AP      Points to TPARSE parameter block
;  719     0791  1 !
;  720     0792  1 ! IMPLICIT OUTPUTS:
;  721     0793  1 !
;  722     0794  1 !       NONE
;  723     0795  1 !
;  724     0796  1 ! COMPLETION STATUS:
;  725     0797  1 !
;  726     0798  1 !        SS$_NORMAL
;  727     0799  1 !
;  728     0800  1 ! SIDE EFFECTS:
;  729     0801  1 !
;  730     0802  1 !--
;  731     0803  1
;  732     0804  1
;  733     0805  2     BEGIN
;  734     0806  2     BUILTIN
;  735     0807  2         AP;
;  736     0808  2     MAP
;  737     0809  2         AP : REF BLOCK [,BYTE];                                                    ;
;  738     0810  2
;  739     0811  2     SIGNAL_STOP (SMG$_ERRAT_LIN,
;  740     0812  2                  3, .SMG$$CURRENT_LINE,
;  741     0813  2                  .AP [TPA$L_TOKENCNT],
;  742     0814  2                  .AP [TPA$L_TOKENPTR],
;  743     0815  2                  SMG$_INVEXP)
;  744     0816  2
;  745     0817  1     END;                                    ! end of routine EXPRESSION_ERROR


                                0000 00000 EXPRESSION_ERROR:
                                                .WORD   Save nothing                            ; 0773
                     00000000G  00   9F 00002   PUSHAB  SMG$_INVEXP                             ; 0811
                  7E       10   AC   7D 00008   MOVQ    16(AP), -(SP)                          ; 0813
                     00000000G  00   DD 0000C   PUSHL   SMG$$CURRENT_LINE                       ; 0812
                                03   DD 00012   PUSHL   #3                                     ; 0811
```

```
                                00000000G  00  9F 00014         PUSHAB  SMG$_ERRAT_LIN                          ;
                      00000000G  00           06  FB 0001A     CALLS   #6, LIB$STOP                           ;
                                               04 00021       RET                                            ; 0817

; Routine Size:  34 bytes,    Routine Base:  _SMG$CODE + 006B
```

```
;  747          0818  1 %SBTTL 'END_ARITH_CAP - End of arithmetic capability data'
;  748          0819  1 ROUTINE END_ARITH_CAP =
;  749          0820  1
;  750          0821  1 !++
;  751          0822  1 ! FUNCTIONAL DESCRIPTION:
;  752          0823  1 !
;  753          0824  1 !       We have found the end of an arithmetic expression (a right
;  754          0825  1 !       parenthesis).  An arithmetic expression should be terminated
;  755          0826  1 !       by the encoded type SMG$K_STORE, indicating that the final
;  756          0827  1 !       value has been computed.
;  757          0828  1 !
;  758          0829  1 ! CALLING SEQUENCE:
;  759          0830  1 !
;  760          0831  1 !       status = END_ARITH_CAP ()
;  761          0832  1 !
;  762          0833  1 ! FORMAL PARAMETERS:
;  763          0834  1 !
;  764          0835  1 !       NONE
;  765          0836  1 !
;  766          0837  1 ! IMPLICIT INPUTS:
;  767          0838  1 !
;  768          0839  1 !       AP      Points to TPARSE parameter block
;  769          0840  1 !
;  770          0841  1 ! IMPLICIT OUTPUTS:
;  771          0842  1 !
;  772          0843  1 !       NONE
;  773          0844  1 !
;  774          0845  1 ! COMPLETION STATUS:
;  775          0846  1 !
;  776          0847  1 !        SS$_NORMAL
;  777          0848  1 !
;  778          0849  1 ! SIDE EFFECTS:
;  779          0850  1 !
;  780          0851  1 !--
;  781          0852  1
;  782          0853  2     BEGIN
;  783          0854  2
;  784          0855  2     BUILTIN
;  785          0856  2          CALLG,
;  786          0857  2          AP;
;  787          0858  2     MAP
;  788          0859  2          AP : REF BLOCK [,BYTE];
;  789          0860  2
;  790          0861  2 !+
;  791          0862  2 ! Indicate end of computing.
;  792          0863  2 !-
;  793          0864  2
;  794          0865  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  795          0866  2     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT (BYTE (SMG$K_STORE));
;  796          0867  2
;  797          0868  2     CALLG (.AP, SMG$$FLUSH_ARITHMETIC);
;  798          0869  2                                             ! move the data
;  799          0870  2
;  800          0871  2     AP [TPA$V_BLANKS] = 1;                  ! look at blanks again
;  801          0872  2
;  802          0873  2     RETURN (SS$_NORMAL);
;  803          0874  2
```

```
;  804          0875  1     END;                                ! end of routine END_ARITH_CAP


                                                0008D           .BLKB   3
                                          F7    00090 P.AAB:    .BYTE   -9                                       ;


                                                0000 00000 END_ARITH_CAP:
                                                           .WORD   Save nothing                                 ; 0819
                                    54    AC              01  D0 00002        MOVL    #1, 84(AP)               ; 0865
                                    58    AC        F6    AF  9E 00006        MOVAB   P.AAB, 88(AP)            ; 0866
                           00000000G      00              6C  FA 0000B        CALLG   (AP), SMG$$FLUSH_ARITHMETIC  ; 0868
                                    04    AC              01  88 00012        BISB2   #1, 4(AP)                ; 0871
                                          50              01  D0 00016        MOVL    #1, R0                   ; 0873
                                                          04  00019        RET                              ; 0875

; Routine Size:  26 bytes,    Routine Base:  _SMG$CODE + 0091
```

```
;  806          0876  1 %SBTTL 'INIT_ARITH_CAP - Initialize arithmetic capability data'
;  807          0877  1 ROUTINE INIT_ARITH_CAP =
;  808          0878  1
;  809          0879  1 !++
;  810          0880  1 ! FUNCTIONAL DESCRIPTION:
;  811          0881  1 !
;  812          0882  1 !       We have found the beginning of an arithmetic expression (a left
;  813          0883  1 !       parenthesis).  Before moving operands and operators  nto the data
;  814          0884  1 !       area, initialize it as an arithmetic capability, ie. .tart with a
;  815          0885  1 !       negative length and a type of SMG$K_ARITH_STRING.
;  816          0886  1 !
;  817          0887  1 ! CALLING SEQUENCE:
;  818          0888  1 !
;  819          0889  1 !       status = INIT_ARITH_CAP ()
;  820          0890  1 !
;  821          0891  1 ! FORMAL PARAMETERS:
;  822          0892  1 !
;  823          0893  1 !       NONE
;  824          0894  1 !
;  825          0895  1 ! IMPLICIT INPUTS:
;  826          0896  1 !
;  827          0897  1 !       AP      Points to TPARSE parameter block
;  828          0898  1 !
;  829          0899  1 ! IMPLICIT OUTPUTS:
;  830          0900  1 !
;  831          0901  1 !       NONE
;  832          0902  1 !
;  833          0903  1 ! COMPLETION STATUS:
;  834          0904  1 !
;  835          0905  1 !        SS$_NORMAL
;  836          0906  1 !
;  837          0907  1 ! SIDE EFFECTS:
;  838          0908  1 !
;  839          0909  1 !--
;  840          0910  1
;  841          0911  2     BEGIN
;  842          0912  2
;  843          0913  2     BUILTIN
;  844          0914  2         CALLG,
;  845          0915  2         AP;
;  846          0916  2     MAP
;  847          0917  2         AP : REF BLOCK [,BYTE];
;  848          0918  2
;  849          0919  2     LOCAL
;  850          0920  2         FIRST : INITIAL (0),            ! flag to indicate start of string
;  851          0921  2         START_CAP_STRING;               ! where to copy data
;  852          0922  2     MAP
;  853          0923  2         START_CAP_STRING : REF VECTOR [,BYTE,SIGNED];
;  854          0924  2
;  855          0925  2     BIND
;  856          0926  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  857          0927  2
;  858          0928  2 !+
;  859          0929  2 ! The NAME capability should have preceeded any arithmetic capability.
;  860          0930  2 ! Complain if it didn't.
;  861          0931  2 !-
;  862          0932  2
```

```
;  863          0933  2     IF CAP_PTRS EQL 0
;  864          0934  2     THEN
;  865          0935  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  866          0936  2
;  867          0937  2 !+
;  868          0938  2 ! We may have copied some normal text before we encountered an
;  869          0939  2 ! arithmetic expression.  Find the start of the string, and make
;  870          0940  2 ! sure that there isn't some more saved text.
;  871          0941  2 !-
;  872          0942  2
;  873          0943  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  874          0944  2
;  875          0945  2     IF .CAP_PTRS [.AP [PARAM_L_CUR_CAP_NUMBER]] NEQ 0
;  876          0946  2     THEN
;  877          0947  3         BEGIN
;  878          0948  3         !+
;  879          0949  3         ! Not start of the capability string.
;  880          0950  3         !-
;  881          0951  3         START_CAP_STRING = .AP [PARAM_L_CUR_TERM_DEF] +
;  882          0952  3                            .CAP_PTRS [.AP [PARAM_L_CUR_CAP_NUMBER]];
;  883          0953  3         END
;  884          0954  2     ELSE
;  885          0955  2         !+
;  886          0956  2         ! First byte of capability string.  Set offset pointer.
;  887          0957  2         !-
;  888          0958  3         BEGIN
;  889          0959  3         FIRST = 1;
;  890          0960  3         START_CAP_STRING = .AP [PARAM_L_CUR_DATA_BYTE];
;  891          0961  3         CAP_PTRS [.AP [PARAM_L_CUR_CAP_NUMBER]] = .SMG$$DATA_OFFSET;
;  892          0962  3         SMG$$DATA_OFFSET = .SMG$$DATA_OFFSET + 2;
;  893          0963  3                                            ! leave space for at least size, type
;  894          0964  3                                            ! bytes
;  895          0965  2         END;
;  896          0966  2
;  897          0967  2     IF .FIRST
;  898          0968  2     THEN
;  899          0969  2         AP [PARAM_L_CUR_DATA_BYTE] = .AP [PARAM_L_CUR_DATA_BYTE] + 2;
;  900          0970  2                                    ! space for size & type bytes
;  901          0971  2
;  902          0972  2 !+
;  903          0973  2 ! If some other things preceeded this arithmetic expression, we need
;  904          0974  2 ! to move them over by 2 bytes to make room for a size and type.
;  905          0975  2 !-
;  906          0976  2     IF NOT .FIRST
;  907          0977  2     THEN
;  908          0978  3         BEGIN                              ! not first byte in capability
;  909          0979  3         LOCAL
;  910          0980  3             TYPE;
;  911          0981  3         TYPE = .START_CAP_STRING [1];      ! make this a longword
;  912          0982  3
;  913          0983  3         IF .TYPE NEQ SMG$K_ARITH_STRING
;  914          0984  3         THEN
;  915          0985  4             BEGIN                          ! first expression
;  916          0986  4             !+
;  917          0987  4             ! We don't allow mixing of FAO strings and arithmetic
;  918          0988  4             ! expressions.  We know the type isn't arithmetic, so
;  919          0989  4             ! if the length is negative, there must be an FAO string.
```

```
;  920          0990  4              !-
;  921          0991  4              IF .START_CAP_STRING [0] LSS 0
;  922          0992  4              THEN
;  923          0993  4                  SIGNAL_STOP (SMG$_ERRAT_LIN,
;  924          0994  4                               3, .SMG$$CURRENT_LINE,
;  925          0995  4                               .AP [PARAM_L_SAVED_TOKENCNT],
;  926          0996  4                               .AP [PARAM_L_SAVED_TOKENSTR],
;  927          0997  4                               SMG$_SYNERR);
;  928          0998  4
;  929          0999  4              !+
;  930          1000  4              ! Slide over text.
;  931          1001  4              !-
;  932          1002  4              CH$MOVE (.START_CAP_STRING [0] + 2, ! # chars + size, type bytes
;  933          1003  4                       START_CAP_STRING [0],      ! from old location
;  934          1004  4                       START_CAP_STRING [2]);     ! to new
;  935          1005  4
;  936          1006  4              !+
;  937          1007  4              ! Need a negative size.  The size includes the data,
;  938          1008  4              ! the size byte and the type byte.
;  939          1009  4              !
;  940          1010  4              ! Note that right now, the size of the normal text is the size of
;  941          1011  4              ! the entire capability string.
;  942          1012  4              !-
;  943          1013  4              IF .START_CAP_STRING [0] GTR 0
;  944          1014  4              THEN
;  945          1015  4                  START_CAP_STRING [0] = -.START_CAP_STRING [0] - 4;
;  946          1016  4                                         ! size + 2 size & type bytes
;  947          1017  4
;  948          1018  4                  AP [PARAM_L_CUR_DATA_BYTE] = .AP [PARAM_L_CUR_DATA_BYTE] + 2;
;  949          1019  4                                         ! update next free byte
;  950          1020  4                  SMG$$DATA_OFFSET = .SMG$$DATA_OFFSET + 2;
;  951          1021  4                                         ! update next offset
;  952          1022  3                  END;                   ! first expression
;  953          1023  3
;  954          1024  3              END                        ! not first byte in capability
;  955          1025  2              ELSE
;  956          1026  2                  START_CAP_STRING [0] = .START_CAP_STRING [0] - 2;
;  957          1027  2                                         ! include size & type bytes for
;  958          1028  2                                         . arith in count
;  959          1029  2
;  960          1030  2
;  961          1031  2              START_CAP_STRING [1] = SMG$K_ARITH_STRING <0,8>;
;  962          1032  2                                         ! set (or reset) as arith string
;  963          1033  2
;  964          1034  2              AP [TPA$V_BLANKS] = 0;     ! ignore blanks between ( )
;  965          1035  2
;  966          1036  2              RETURN (SS$_NORMAL);
;  967          1037  2
;  968          1038  1              END;                       ! end of routine INIT_ARITH_CAP



                                01FC 00000 INIT_ARITH_CAP:
                                           .WORD   Save R2,R3,R4,R5,R6,R7,R8                    ; 0877
                    58 00000000G   00   9E 00002           MOVAB   LIB$STOP, R8                 ;
```

```
                                57 00000000G   00  9E 00009          MOVAB   SMG$$DATA_OFFSET, R7
                                               53  D4 00010          CLRL    FIRST                                          ; 0911
                                52       48    AC  D0 00012          MOVL    72(AP), R2                                     ; 0926
                                               09  12 00016          BNEQ    1$                                             ; 0933
                                   00000000G   00  9F 00018          PUSHAB  SMG$_MISTERNAM                                 ; 0935
                                68             01  FB 0001E          CALLS   #1, LIB$STOP
                  00000000G     00             6C  FA 00021 1$:      CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER                  ; 0943
                                50       50    AC  D0 00028          MOVL    80(AP), R0                                     ; 0945
                                            6240   B5 0002C          TSTW    (R2)[R0]
                                               0A  13 0002F          BEQL    2$
                                56          6240   3C 00031          MOVZWL  (R2)[R0], START_CAP_STRING                     ; 0952
                                56       48    AC  C0 00035          ADDL2   72(AP), START_CAP_STRING
                                               0E  11 00039          BRB     3$                                             ; 0945
                                53             01  D0 0003B 2$:      MOVL    #1, FIRST                                      ; 0959
                                56       4C    AC  D0 0003E          MOVL    76(AP), START_CAP_STRING                       ; 0960
                             6240              67  B0 00042          MOVW    SMG$$DATA_OFFSET, (R2)[R0]                     ; 0961
                                67             02  C0 00046          ADDL2   #2, SMG$$DATA_OFFSET                           ; 0962
                                07             53  E9 00049 3$:      BLBC    FIRST, 4$                                      ; 0967
                          4C    AC             02  C0 0004C          ADDL2   #2, 76(AP)                                     ; 0969
                                4A             53  E8 00050          BLBS    FIRST, 7$                                      ; 0981
                                50       01    A6  98 00053 4$:      CVTBL   1(START_CAP_STRING), TYPE
                  FFFFFFFE      8F             50  D1 00057          CMPL    TYPE, #-2                                      ; 0983
                                               40  13 0005E          BEQL    8$
                                               66  95 00060          TSTB    (START_CAP_STRING)                             ; 0991
                                               1B  18 00062          BGEQ    5$
                                   00000000G   00  9F 00064          PUSHAB  SMG$_SYNERR                                    ; 0993
                                7E       54    AC  7D 0006A          MOVQ    84(AP), -(SP)                                  ; 0995
                                   00000000G   00  DD 0006E          PUSHL   SMG$$CURRENT_LINE                              ; 0994
                                               03  DD 00074          PUSHL   #3                                             ; 0993
                                   00000000G   00  9F 00076          PUSHAB  SMG$_ERRAT_LIN
                                68             06  FB 0007C          CALLS   #6, LIB$STOP
                                50             66  98 0007F 5$:      CVTBL   (START_CAP_STRING), R0                         ; 1002
                                50             02  C0 00082          ADDL2   #2, R0
                          02    A6             66  50 28 00085       MOVC3   R0, (START_CAP_STRING), 2(START_CAP_STRING)    ; 1004
                                               66  95 0008A          TSTB    (START_CAP_STRING)                             ; 1013
                                               06  15 0008C          BLEQ    6$
                                66             66  8E 0008E          MNEGB   (START_CAP_STRING), (START_CAP_STRING)         ; 1015
                                66             04  82 00091          SUBB2   #4, (START_CAP_STRING)
                             4C    AC          02  C0 00094 6$:      ADDL2   #2, 76(AP)                                     ; 1018
                                67             02  C0 00098          ADDL2   #2, SMG$$DATA_OFFSET                           ; 1020
                                               03  11 0009B          BRB     8$                                             ; 0976
                                66             02  82 0009D 7$:      SUBB2   #2, (START_CAP_STRING)                         ; 1026
                             01    A6          02  8E 000A0 8$:      MNEGB   #2, 1(START_CAP_STRING)                        ; 1031
                             04    AC          01  8A 000A4          BICB2   #1, 4(AP)                                      ; 1034
                                50             01  D0 000A8          MOVL    #1, R0                                         ; 1036
                                               04  000AB            RET                                                    ; 1038

; Routine Size:  172 bytes,    Routine Base:  _SMG$CODE + 00AB
```

```
;  970          1039  1 %SBTTL 'INSERT_CARROT - Insert a ^ in the capability string'
;  971          1040  1 ROUTINE INSERT_CARROT =
;  972          1041  1
;  973          1042  1 !++
;  974          1043  1 ! FUNCTIONAL DESCRIPTION:
;  975          1044  1 !
;  976          1045  1 !       Stores a ^ character in the current capability string in
;  977          1046  1 !       TERMTABLE.EXE.
;  978          1047  1 !
;  979          1048  1 ! CALLING SEQUENCE:
;  980          1049  1 !
;  981          1050  1 !       status = INSERT_CARROT ()
;  982          1051  1 !
;  983          1052  1 ! FORMAL PARAMETERS:
;  984          1053  1 !
;  985          1054  1 !       NONE
;  986          1055  1 !
;  987          1056  1 ! IMPLICIT INPUTS:
;  988          1057  1 !
;  989          1058  1 !       AP      Points to TPARSE parameter block
;  990          1059  1 !
;  991          1060  1 ! IMPLICIT OUTPUTS:
;  992          1061  1 !
;  993          1062  1 !       NONE
;  994          1063  1 !
;  995          1064  1 ! COMPLETION STATUS:
;  996          1065  1 !
;  997          1066  1 !        SS$_NORMAL
;  998          1067  1 !
;  999          1068  1 ! SIDE EFFECTS:
; 1000          1069  1 !
; 1001          1070  1 !--
; 1002          1071  1
; 1003          1072  2     BEGIN
; 1004          1073  2
; 1005          1074  2     BUILTIN
; 1006          1075  2         CALLG,
; 1007          1076  2         AP;
; 1008          1077  2     MAP
; 1009          1078  2         AP : REF BLOCK [,BYTE];
; 1010          1079  2
; 1011          1080  2 !+
; 1012          1081  2 ! If this is not the NAME capability and we have no pointers set up
; 1013          1082  2 ! for the terminal definition, then NAME was not the first capability
; 1014          1083  2 ! in the definition.  Complain.
; 1015          1084  2 !-
; 1016          1085  2
; 1017          1086  3     BEGIN
; 1018          1087  3     BIND
; 1019          1088  3         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
; 1020          1089  3
; 1021          1090  3     IF CAP_PTRS EQL 0
; 1022          1091  3     THEN
; 1023          1092  3         SIGNAL_STOP (SMG$_MISTERNAM);
; 1024          1093  3
; 1025          1094  3 !+
; 1026          1095  3 ! Move the capability data.  The byte count is in the first byte and
```

```
;  1027          1096  3 ! the actual data follows.
;  1028          1097  3 !
;  1029          1098  3 ! Part of the string may already be copied - append in this part so
;  1030          1099  3 ! as not to overwrite it.  (This can happen if escape or control are
;  1031          1100  3 ! part of the sequence.)
;  1032          1101  3 !-
;  1033          1102  3
;  1034          1103  3     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1035          1104  3                                     ! copy saved string
;  1036          1105  3     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  1037          1106  3     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT ('^');
;  1038          1107  3                                     ! carrot is now 'saved'
;  1039          1108  3     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1040          1109  3
;  1041          1110  2     END;                                    ! end of BINDs scope
;  1042          1111  2
;  1043          1112  2     RETURN (SS$_NORMAL);
;  1044          1113  2
;  1045          1114  1     END;                                    ! end of routine INSERT_CARROT


                                                00157              .BLKB   1
                                     00  00  00  5E  00158 P.AAC:   .ASCII  \^\<0><0><0>                                    ;


                                                0004 00000 INSERT_CARROT:
                                                           .WORD   Save R2                                                  ; 1040
                                     52 00000000G   00  9E 00002           MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2
                                           48       AC  D5 00009           TSTL    72(AP)                                   ; 1090
                                                    0D  12 0000C           BNEQ    1$
                                        00000000G   00  9F 0000E           PUSHAB  SMG$_MISTERNAM                           ; 1092
                                00000000G   00      01  FB 00014           CALLS   #1, LIB$STOP
                                            62      6C  FA 0001B 1$:       CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER            ; 1103
                                     54     AC      01  D0 0001E           MOVL    #1, 84(AP)                               ; 1105
                                     58     AC  D7  AF  9E 00022           MOVAB   P.AAC, 88(AP)                            ; 1106
                                            62      6C  FA 00027           CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER            ; 1108
                                            50      01  D0 0002A           MOVL    #1, R0                                   ; 1112
                                                        04 0002D           RET                                              ; 1114

; Routine Size:  46 bytes,    Routine Base:  _SMG$CODE + 015C
```

```
;  1047          1115  1 %SBTTL 'INSERT_DOLLAR - Insert a $ into a capability string'
;  1048          1116  1 ROUTINE INSERT_DOLLAR =
;  1049          1117  1
;  1050          1118  1 !++
;  1051          1119  1 ! FUNCTIONAL DESCRIPTION:
;  1052          1120  1 !
;  1053          1121  1 !       Stores a $ character in the current capability string in
;  1054          1122  1 !       TERMTABLE.EXE.
;  1055          1123  1 !
;  1056          1124  1 ! CALLING SEQUENCE:
;  1057          1125  1 !
;  1058          1126  1 !       status = INSERT_DOLLAR ()
;  1059          1127  1 !
;  1060          1128  1 ! FORMAL PARAMETERS:
;  1061          1129  1 !
;  1062          1130  1 !       NONE
;  1063          1131  1 !
;  1064          1132  1 ! IMPLICIT INPUTS:
;  1065          1133  1 !
;  1066          1134  1 !       AP      Points to TPARSE parameter block
;  1067          1135  1 !
;  1068          1136  1 ! IMPLICIT OUTPUTS:
;  1069          1137  1 !
;  1070          1138  1 !       NONE
;  1071          1139  1 !
;  1072          1140  1 ! COMPLETION STATUS:
;  1073          1141  1 !
;  1074          1142  1 !        SS$_NORMAL
;  1075          1143  1 !
;  1076          1144  1 ! SIDE EFFECTS:
;  1077          1145  1 !
;  1078          1146  1 !--
;  1079          1147  1
;  1080          1148  2     BEGIN
;  1081          1149  2
;  1082          1150  2     BUILTIN
;  1083          1151  2         CALLG,
;  1084          1152  2         AP;
;  1085          1153  2     MAP
;  1086          1154  2         AP : REF BLOCK [,BYTE];
;  1087          1155  2     BIND
;  1088          1156  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  1089          1157  2
;  1090          1158  2 !+
;  1091          1159  2 ! If this is not the NAME capability and we have no pointers set up
;  1092          1160  2 ! for the terminal definition, then NAME was not the first capability
;  1093          1161  2 ! in the definition.  Complain.
;  1094          1162  2 !-
;  1095          1163  2
;  1096          1164  2     IF CAP_PTRS EQL 0
;  1097          1165  2     THEN
;  1098          1166  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  1099          1167  2
;  1100          1168  2 !+
;  1101          1169  2 ! Move the capability data.  The byte count is in the first byte and
;  1102          1170  2 ! the actual data follows.
;  1103          1171  2 !
```

```
;  1104          1172  2 ! Part of the string may already be copied - append in this part so
;  1105          1173  2 ! as not to overwrite it.  (This can happen if escape or control are
;  1106          1174  2 ! part of the sequence.)
;  1107          1175  2 !-
;  1108          1176  2
;  1109          1177  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1110          1178  2                                 ! copy saved string
;  1111          1179  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  1112          1180  2     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT ('$');
;  1113          1181  2                                 ! $ is now 'saved'
;  1114          1182  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1115          1183  2                                 ! append $
;  1116          1184  2
;  1117          1185  2     RETURN (SS$_NORMAL);
;  1118          1186  2
;  1119          1187  1     END;                                ! end of routine INSERT_DOLLAR


                                                0018A             .BLKB   2
                                    00  00  00  24  0018C P.AAD:   .ASCII  \$\<0><0><0>                                ;


                                                0004 00000 INSERT_DOLLAR:
                                                                  .WORD   Save R2                                       ; 1116
                                    52 00000000G  00  9E 00002    MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2                   ;
                                           48     AC  D5 00009    TSTL    72(AP)                                        ; 1164
                                                  0D  12 0000C    BNEQ    1$                                            ;
                                       00000000G  00  9F 0000E    PUSHAB  SMG$_MISTERNAM                                ; 1166
                                00000000G         00  FB 00014    CALLS   #1, LIB$STOP                                  ;
                                           62     6C  FA 0001B 1$:  CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER               ; 1177
                                     54    AC     01  D0 0001E    MOVL    #1, 84(AP)                                    ; 1179
                                     58    AC  D7 AF  9E 00022    MOVAB   P.AAD, 88(AP)                                 ; 1180
                                           62     6C  FA 00027    CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER                 ; 1182
                                           50     01  D0 0002A    MOVL    #1, R0                                        ; 1185
                                                  04  0002D    RET                                                   ; 1187

; Routine Size:  46 bytes,    Routine Base:  _SMG$CODE + 0190
```

```
;  1121          1188  1 %SBTTL 'INSERT_EXCLAMATION - Insert a . into a capability string'
;  1122          1189  1 ROUTINE INSERT_EXCLAMATION =
;  1123          1190  1
;  1124          1191  1 !++
;  1125          1192  1 ! FUNCTIONAL DESCRIPTION:
;  1126          1193  1 !
;  1127          1194  1 !       Stores a ! character in the current capability string in
;  1128          1195  1 !       TERMTABLE.EXE.
;  1129          1196  1 !
;  1130          1197  1 ! CALLING SEQUENCE:
;  1131          1198  1 !
;  1132          1199  1 !       status = INSERT_EXCLAMATION ()
;  1133          1200  1 !
;  1134          1201  1 ! FORMAL PARAMETERS:
;  1135          1202  1 !
;  1136          1203  1 !       NONE
;  1137          1204  1 !
;  1138          1205  1 ! IMPLICIT INPUTS:
;  1139          1206  1 !
;  1140          1207  1 !       AP      Points to TPARSE parameter block
;  1141          1208  1 !
;  1142          1209  1 ! IMPLICIT OUTPUTS:
;  1143          1210  1 !
;  1144          1211  1 !       NONE
;  1145          1212  1 !
;  1146          1213  1 ! COMPLETION STATUS:
;  1147          1214  1 !
;  1148          1215  1 !        SS$_NORMAL
;  1149          1216  1 !
;  1150          1217  1 ! SIDE EFFECTS:
;  1151          1218  1 !
;  1152          1219  1 !--
;  1153          1220  1
;  1154          1221  2     BEGIN
;  1155          1222  2     BUILTIN
;  1156          1223  2         CALLG,
;  1157          1224  2         AP;
;  1158          1225  2     MAP
;  1159          1226  2         AP : REF BLOCK [,BYTE];
;  1160          1227  2     BIND
;  1161          1228  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  1162          1229  2
;  1163          1230  2 !+
;  1164          1231  2 ! If this is not the NAME capability and we have no pointers set up
;  1165          1232  2 ! for the terminal definition, then NAME was not the first capability
;  1166          1233  2 ! in the definition.  Complain.
;  1167          1234  2 !-
;  1168          1235  2
;  1169          1236  2     IF CAP_PTRS EQL 0
;  1170          1237  2     THEN
;  1171          1238  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  1172          1239  2
;  1173          1240  2 !+
;  1174          1241  2 ! Move the capability data.  The byte count is in the first byte and
;  1175          1242  2 ! the actual data follows.
;  1176          1243  2 !
;  1177          1244  2 ! Part of the string may already be copied - append in this part so
```

```
;  1178          1245  2 ! as not to overwrite it.  (This can happen if escape or control are
;  1179          1246  2 ! part of the sequence.)
;  1180          1247  2 !-
;  1181          1248  2
;  1182          1249  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1183          1250  2                                  ! copy saved buffer
;  1184          1251  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  1185          1252  2     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT ('!');
;  1186          1253  2                                  ! exclamation is now 'saved'
;  1187          1254  2     CALLG ( AP, SMG$$FLUSH_SAVED_BUFFER);
;  1188          1255  2                                  ! append !
;  1189          1256  2
;  1190          1257  2     RETURN (SS$_NORMAL);
;  1191          1258  2
;  1192          1259  1     END;                                ! end of routine INSERT_EXCLAMATION


                                                001BE          .BLKB   2
                                     00  00  00  21  001C0 P.AAE:  .ASCII  \!\<0><0><0>                                  ;


                                                0004 00000 INSERT_EXCLAMATION:
                                                           .WORD   Save R2                                                ; 1189
                                           52 00000000G  00  9E 00002          MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2
                                                   48    AC  D5 00009          TSTL    72(AP)                         ; 1236
                                                         0D  12 0000C          BNEQ    1$
                                              00000000G  00  9F 0000E          PUSHAB  SMG$_MISTERNAM                 ; 1238
                                     00000000G  00            01  FB 00014    CALLS   #1, LIB$STOP
                                                62            6C  FA 0001B 1$:  CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER  ; 1249
                                           54   AC            01  D0 0001E    MOVL    #1, 84(AP)                     ; 1251
                                           58   AC      D7    AF  9E 00022    MOVAB   P.AAE, 88(AP)                  ; 1252
                                                62            6C  FA 00027    CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER  ; 1254
                                                50            01  D0 0002A    MOVL    #1, R0                         ; 1257
                                                              04  0002D    RET                                    ; 1259

; Routine Size:  46 bytes,    Routine Base:  _SMG$CODE + 01C4
```

```
;  1194          1260  1 %SBTTL 'INSERT_PARENTHESIS - Insert a ( into a capability string'
;  1195          1261  1 ROUTINE INSERT_PARENTHESIS =
;  1196          1262  1
;  1197          1263  1 !++
;  1198          1264  1 ! FUNCTIONAL DESCRIPTION:
;  1199          1265  1 !
;  1200          1266  1 !       Stores a ( character in the current capability string in
;  1201          1267  1 !       TERMTABLE.EXE.
;  1202          1268  1 !
;  1203          1269  1 ! CALLING SEQUENCE:
;  1204          1270  1 !
;  1205          1271  1 !       status = INSERT_PARENTHESIS ()
;  1206          1272  1 !
;  1207          1273  1 ! FORMAL PARAMETERS:
;  1208          1274  1 !
;  1209          1275  1 !       NONE
;  1210          1276  1 !
;  1211          1277  1 ! IMPLICIT INPUTS:
;  1212          1278  1 !
;  1213          1279  1 !       AP      Points to TPARSE parameter block
;  1214          1280  1 !
;  1215          1281  1 ! IMPLICIT OUTPUTS:
;  1216          1282  1 !
;  1217          1283  1 !       NONE
;  1218          1284  1 !
;  1219          1285  1 ! COMPLETION STATUS:
;  1220          1286  1 !
;  1221          1287  1 !        SS$_NORMAL
;  1222          1288  1 !
;  1223          1289  1 ! SIDE EFFECTS:
;  1224          1290  1 !
;  1225          1291  1 !--
;  1226          1292  1
;  1227          1293  2     BEGIN
;  1228          1294  2     BUILTIN
;  1229          1295  2         CALLG,
;  1230          1296  2         AP;
;  1231          1297  2     MAP
;  1232          1298  2         AP : REF BLOCK [,BYTE];
;  1233          1299  2     BIND
;  1234          1300  2         CAP_PTRS = .AP [PARAM_L_CUR_TERM_DEF] : VECTOR [,WORD];
;  1235          1301  2
;  1236          1302  2 !+
;  1237          1303  2 ! If this is not the NAME capability and we have no pointers set up
;  1238          1304  2 ! for the terminal definition, then NAME was not the first capability
;  1239          1305  2 ! in the definition.  Complain.
;  1240          1306  2 !-
;  1241          1307  2
;  1242          1308  2     IF CAP_PTRS EQL 0
;  1243          1309  2     THEN
;  1244          1310  2         SIGNAL_STOP (SMG$_MISTERNAM);
;  1245          1311  2
;  1246          1312  2 !+
;  1247          1313  2 ! Move the capability data.  The byte count is in the first byte and
;  1248          1314  2 ! the actual data follows.
;  1249          1315  2 !
;  1250          1316  2 ! Part of the string may already be copied - append in this part so
```

```
;  1251          1317  2 ! as not to overwrite it.  (This can happen if escape or control are
;  1252          1318  2 ! part of the sequence.)
;  1253          1319  2 !-
;  1254          1320  2
;  1255          1321  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1256          1322  2                                 ! copy saved string
;  1257          1323  2     AP [PARAM_L_SAVED_TOKENCNT] = 1;
;  1258          1324  2     AP [PARAM_L_SAVED_TOKENSTR] = UPLIT ('(');
;  1259          1325  2                                 ! ( is now saved
;  1260          1326  2     CALLG (.AP, SMG$$FLUSH_SAVED_BUFFER);
;  1261          1327  2                                 ! append (
;  1262          1328  2
;  1263          1329  2     RETURN (SS$_NORMAL);
;  1264          1330  2
;  1265          1331  1     END;                                  ! end of routine INSERT_PARENTHESIS


                                                001F2            .BLKB   2
                                     00  00  00  28  001F4 P.AAF: .ASCII  \(\<0><0><0>                                    ;


                                                0004 00000 INSERT_PARENTHESIS:
                                                           .WORD   Save R2                                                  ; 1261
                                           52 00000000G  00  9E 00002         MOVAB   SMG$$FLUSH_SAVED_BUFFER, R2      ;
                                                   48    AC  D5 00009         TSTL    72(AP)                           ; 1308
                                                         0D  12 0000C         BNEQ    1$                               ;
                                              00000000G  00  9F 0000E         PUSHAB  SMG$_MISTERNAM                   ; 1310
                                  00000000G   00         01  FB 00014         CALLS   #1, LIB$STOP                     ;
                                              62         6C  FA 0001B 1$:     CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER    ; 1321
                                        54    AC         01  D0 0001E         MOVL    #1, 84(AP)                       ; 1323
                                        58    AC      D7 AF  9E 00022         MOVAB   P.AAF, 88(AP)                    ; 1324
                                              62         6C  FA 00027         CALLG   (AP), SMG$$FLUSH_SAVED_BUFFER    ; 1326
                                              50         01  D0 0002A         MOVL    #1, R0                           ; 1329
                                                         04  0002D         RET                                      ; 1331

; Routine Size:  46 bytes,    Routine Base:  _SMG$CODE + 01F8
```

```
;1267     1332  1 %SBTTL 'INVALID_DIRECTIVE - signal invalid directive error'
;1268     1333  1 ROUTINE INVALID_DIRECTIVE =
;1269     1334  1
;1270     1335  1 !++
;1271     1336  1 ! FUNCTIONAL DESCRIPTION:
;1272     1337  1 !
;1273     1338  1 !       Following a !, we have found some directive we don't handle.
;1274     1339  1 !       Signal an error.
;1275     1340  1 !
;1276     1341  1 ! CALLING SEQUENCE:
;1277     1342  1 !
;1278     1343  1 !       status = INVALID_DIRECTIVE ()
;1279     1344  1 !
;1280     1345  1 ! FORMAL PARAMETERS:
;1281     1346  1 !
;1282     1347  1 !       NONE
;1283     1348  1 !
;1284     1349  1 ! IMPLICIT INPUTS:
;1285     1350  1 !
;1286     1351  1 !       AP      Points to TPARSE parameter block
;1287     1352  1 !
;1288     1353  1 ! IMPLICIT OUTPUTS:
;1289     1354  1 !
;1290     1355  1 !       NONE
;1291     1356  1 !
;1292     1357  1 ! COMPLETION STATUS:
;1293     1358  1 !
;1294     1359  1 !        SS$_NORMAL
;1295     1360  1 !
;1296     1361  1 ! SIDE EFFECTS:
;1297     1362  1 !
;1298     1363  1 !--
;1299     1364  1
;1300     1365  1
;1301     1366  2     BEGIN
;1302     1367  2     BUILTIN
;1303     1368  2         AP;
;1304     1369  2     MAP
;1305     1370  2         AP : REF BLOCK [,BYTE];
;1306     1371  2
;1307     1372  2     SIGNAL_STOP (SMG$_ERRAT_LIN,
;1308     1373  2                  3, .SMG$$CURRENT_LINE,
;1309     1374  2                  .AP [TPA$L_TOKENCNT],
;1310     1375  2                  .AP [TPA$L_TOKENPTR],
;1311     1376  2                  SMG$_INVDIR)
;1312     1377  1     END;                        ! end of routine INVALID_DIRECTIVE


                                0000 00000 INVALID_DIRECTIVE:
                                           .WORD   Save nothing                          ;1333
                    00000000G   00  9F 00002       PUSHAB  SMG$_INVDIR                   ;1372
                7E        10    AC  7D 00008       MOVQ    16(AP), -(SP)                 ;1374
                    00000000G   00  DD 0000C       PUSHL   SMG$$CURRENT_LINE             ;1373
                                03  DD 00012       PUSHL   #3                            ;1372
```

```
                                00000000G  00  9F 00014         PUSHAB  SMG$_ERRAT_LIN                          ;
                        00000000G  00              06  FB 0001A         CALLS   #6, LIB$STOP                    ;
                                                   04 00021         RET                                     ; 1377

; Routine Size:  34 bytes,    Routine Base:  _SMG$CODE + 0226
```

```
;  1314          1378  1 %SBTTL 'STORE_OPERAND - Store arithmetic operand'
;  1315          1379  1 ROUTINE STORE_OPERAND =
;  1316          1380  1
;  1317          1381  1 !++
;  1318          1382  1 ! FUNCTIONAL DESCRIPTION:
;  1319          1383  1 !
;  1320          1384  1 !       We have just found an operand which we need to store in TERMTABLE.
;  1321          1385  1 !       We will also check to see if an operator was previously found and
;  1322          1386  1 !       needs to be stored.
;  1323          1387  1 !
;  1324          1388  1 ! CALLING SEQUENCE:
;  1325          1389  1 !
;  1326          1390  1 !       status = STORE_OPERAND ()
;  1327          1391  1 !
;  1328          1392  1 ! FORMAL PARAMETERS:
;  1329          1393  1 !
;  1330          1394  1 !       NONE
;  1331          1395  1 !
;  1332          1396  1 ! IMPLICIT INPUTS:
;  1333          1397  1 !
;  1334          1398  1 !       AP      Points to TPARSE parameter block
;  1335          1399  1 !
;  1336          1400  1 ! IMPLICIT OUTPUTS:
;  1337          1401  1 !
;  1338          1402  1 !       NONE
;  1339          1403  1 !
;  1340          1404  1 ! COMPLETION STATUS:
;  1341          1405  1 !
;  1342          1406  1 !        SS$_NORMAL
;  1343          1407  1 !
;  1344          1408  1 ! SIDE EFFECTS:
;  1345          1409  1 !
;  1346          1410  1 !--
;  1347          1411  1
;  1348          1412  1
;  1349          1413  2     BEGIN
;  1350          1414  2     BUILTIN
;  1351          1415  2         CALLG,
;  1352          1416  2         AP;
;  1353          1417  2     MAP
;  1354          1418  2         AP : REF BLOCK [,BYTE];
;  1355          1419  2     LOCAL
;  1356          1420  2         COPY_BUFFER : VECTOR [7,BYTE]; ! construct bytes to copy here
;  1357          1421  2
;  1358          1422  2     AP [PARAM_L_SAVED_TOKENCNT] = 6;    ! longword + type,size bytes
;  1359          1423  2
;  1360          1424  2     COPY_BUFFER [0] = SMG$K_OPERAND<0,8>; ! type
;  1361          1425  2     COPY_BUFFER [1] = 0;
;  1362          1426  2     CH$MOVE (4, AP [TPA$L_NUMBER], COPY_BUFFER [2]);
;  1363          1427  2                                     ! store binary operand
;  1364          1428  2
;  1365          1429  2 !+
;  1366          1430  2 ! If this is the second operand, then we need to store an operator.
;  1367          1431  2 !-
;  1368          1432  2
;  1369          1433  2     IF .SMG$$MASK_ADR NEQ 0
;  1370          1434  2     THEN
```

```
;  1371          1435  3          BEGIN
;  1372          1436  3          COPY_BUFFER [6] = .SMG$$MASK_ADR;
;  1373          1437  3          AP [PARAM_L_SAVED_TOKENCNT] = .AP [PARAM_L_SAVED_TOKENCNT] + 1;
;  1374          1438  2          END;
;  1375          1439  2
;  1376          1440  2      AP [PARAM_L_SAVED_TOKENSTR] = COPY_BUFFER;
;  1377          1441  2
;  1378          1442  2      CALLG (.AP, SMG$$FLUSH_ARITHMETIC); ! write the buffer
;  1379          1443  2
;  1380          1444  2      SMG$$MASK_ADR = 0;                  ! re-init operator
;  1381          1445  2
;  1382          1446  2      RETURN (SS$_NORMAL);
;  1383          1447  2
;  1384          1448  1      END;                                ! end of routine STORE_OPERAND


                                                0004 00000 STORE_OPERAND:
                                                           .WORD   Save R2                                 ;  1379
                                52 00000000G    00   9E 00002          MOVAB   SMG$$MASK_ADR, R2
                                               5E    08   C2 00009          SUBL2   #8, SP                  ;
                                          54   AC    06   D0 0000C          MOVL    #6, 84(AP)              ;  1422
                                               6E    FD   8F   9B 00010    MOVZBW  #253, COPY_BUFFER       ;  1424
                                          02   AE    1C   AC   D0 00014    MOVL    28(AP), COPY_BUFFER+2   ;  1426
                                               50         62   D0 00019    MOVL    SMG$$MASK_ADR, R0       ;  1433
                                                          07   13 0001C    BEQL    1$                      ;
                                          06   AE         50   90 0001E    MOVB    R0, COPY_BUFFER+6       ;  1436
                                                    54    AC   D6 00022    INCL    84(AP)                  ;  1437
                                          58   AC         6E   9E 00025 1$: MOVAB   COPY_BUFFER, 88(AP)    ;  1440
                                00000000G   00         6C   FA 00029    CALLG   (AP), SMG$$FLUSH_ARITHMETIC ;  1442
                                                       62   D4 00030    CLRL    SMG$$MASK_ADR           ;  1444
                                               50      01   D0 00032    MOVL    #1, R0                  ;  1446
                                                       04   00035    RET                                 ;  1448

; Routine Size:  54 bytes,    Routine Base:  _SMG$CODE + 0248
```

```
;  1386          1449  1 %SBTTL 'STORE_SUBSTITUTION - store substitution flag in arithmetic cap'
;  1387          1450  1 ROUTINE STORE_SUBSTITUTION =
;  1388          1451  1
;  1389          1452  1 !++
;  1390          1453  1 ! FUNCTIONAL DESCRIPTION:
;  1391          1454  1 !
;  1392          1455  1 !       Store an encoded flag indicating that a user argument must be
;  1393          1456  1 !       substituted into the expression at run-time.
;  1394          1457  1 !
;  1395          1458  1 ! CALLING SEQUENCE:
;  1396          1459  1 !
;  1397          1460  1 !       status = STORE_SUBSTITUTION ()
;  1398          1461  1 !
;  1399          1462  1 ! FORMAL PARAMETERS:
;  1400          1463  1 !
;  1401          1464  1 !       NONE
;  1402          1465  1 !
;  1403          1466  1 ! IMPLICIT INPUTS:
;  1404          1467  1 !
;  1405          1468  1 !       AP      Points to TPARSE parameter block
;  1406          1469  1 !
;  1407          1470  1 ! IMPLICIT OUTPUTS:
;  1408          1471  1 !
;  1409          1472  1 !       NONE
;  1410          1473  1 !
;  1411          1474  1 ! COMPLETION STATUS:
;  1412          1475  1 !
;  1413          1476  1 !        SS$_NORMAL
;  1414          1477  1 !
;  1415          1478  1 ! SIDE EFFECTS:
;  1416          1479  1 !
;  1417          1480  1 !--
;  1418          1481  1
;  1419          1482  1
;  1420          1483  2     BEGIN
;  1421          1484  2     BUILTIN
;  1422          1485  2         CALLG,
;  1423          1486  2         AP;
;  1424          1487  2     MAP
;  1425          1488  2         AP : REF BLOCK [,BYTE];
;  1426          1489  2     LOCAL
;  1427          1490  2         COPY_BUFFER : VECTOR [3,BYTE];
;  1428          1491  2
;  1429          1492  2     COPY_BUFFER [0] = SMG$K_SUBSTITUTE <0,8>;
;  1430          1493  2     COPY_BUFFER [1] = .AP [TPA$L_NUMBER];
;  1431          1494  2                       ! store decimal argument number as a byte
;  1432          1495  2     AP [PARAM_L_SAVED_TOKENCNT] = 2;
;  1433          1496  2
;  1434          1497  2 !+
;  1435          1498  2 ! See if there's a saved operator that needs to be inserted.
;  1436          1499  2 !-
;  1437          1500  2
;  1438          1501  2     IF .SMG$$MASK_ADR NEQ 0
;  1439          1502  2     THEN
;  1440          1503  3         BEGIN
;  1441          1504  3         COPY_BUFFER [2] = .SMG$$MASK_ADR;
;  1442          1505  3         AP [PARAM_L_SAVED_TOKENCNT] = .AP [PARAM_L_SAVED_TOKENCNT] + 1;
```

```
;  1443          1506  3          SMG$$MASK_ADR = 0;
;  1444          1507  2          END;
;  1445          1508  2
;  1446          1509  2      AP [PARAM_L_SAVED_TOKENSTR] = COPY_BUFFER;
;  1447          1510  2
;  1448          1511  2      CALLG (.AP, SMG$$FLUSH_ARITHMETIC);
;  1449          1512  2                                              ! move buffer to data area
;  1450          1513  2
;  1451          1514  2      RETURN (SS$_NORMAL);
;  1452          1515  2
;  1453          1516  1      END;                                     ! end of routine STORE_SUBSTITUTION




                                        0004 00000 STORE_SUBSTITUTION:
                                                   .WORD   Save R2                                          ; 1450
                          52 00000000G   00  9E 00002          MOVAB   SMG$$MASK_ADR, R2                    ;
                             5E          04  C2 00009          SUBL2   #4, SP                               ;
                             6E          04  8E 0000C          MNEGB   #4, COPY_BUFFER                      ; 1492
                       01    AE    1C    AC  90 0000F          MOVB    28(AP), COPY_BUFFER+1                ; 1493
                       54    AC          02  D0 00014          MOVL    #2, 84(AP)                           ; 1495
                             50          62  D0 00018          MOVL    SMG$$MASK_ADR, R0                    ; 1501
                                         09  13 0001B          BEQL    1$                                   ;
                       02    AE          50  90 0001D          MOVB    R0, COPY_BUFFER+2                    ; 1504
                                   54    AC  D6 00021          INCL    84(AP)                               ; 1505
                                         62  D4 00024          CLRL    SMG$$MASK_ADR                        ; 1506
                             58    AC          6E  9E 00026 1$:  MOVAB   COPY_BUFFER, 88(AP)                ; 1509
                    00000000G      00          6C  FA 0002A      CALLG   (AP), SMG$$FLUSH_ARITHMETIC          ; 1511
                             50                01  D0 00031      MOVL    #1, R0                               ; 1514
                                               04  00034      RET                                          ; 1516

; Routine Size:  53 bytes,    Routine Base:  _SMG$CODE + 027E
```

```
;1455     1517  1 %SBTTL 'NOT_STRING - signal an unknown capbility name'
;1456     1518  1 ROUTINE NOT_STRING =
;1457     1519  1
;1458     1520  1 !++
;1459     1521  1 ! FUNCTIONAL DESCRIPTION:
;1460     1522  1 !
;1461     1523  1 !       We just found a unknown capability name.  It could be a misspelling
;1462     1524  1 !       or it could be a name misplaced under the wrong heading.  Signal an
;1463     1525  1 !       error.
;1464     1526  1 !
;1465     1527  1 ! CALLING SEQUENCE:
;1466     1528  1 !
;1467     1529  1 !
;1468     1530  1 !       status = NOT_STRING (`
;1469     1531  1 !
;1470     1532  1 ! FORMAL PARAMETERS:
;1471     1533  1 !
;1472     1534  1 !       NONE
;1473     1535  1 !
;1474     1536  1 ! IMPLICIT INPUTS:
;1475     1537  1 !
;1476     1538  1 !       AP      Points to TPARSE parameter block
;1477     1539  1 !
;1478     1540  1 ! IMPLICIT OUTPUTS:
;1479     1541  1 !
;1480     1542  1 !       NONE
;1481     1543  1 !
;1482     1544  1 ! COMPLETION STATUS:
;1483     1545  1 !
;1484     1546  1 !        SS$_NORMAL
;1485     1547  1 !
;1486     1548  1 ! SIDE EFFECTS:
;1487     1549  1 !
;1488     1550  1 !--
;1489     1551  1
;1490     1552  2     BEGIN
;1491     1553  2     BUILTIN
;1492     1554  2         AP;
;1493     1555  2     MAP
;1494     1556  2         AP : REF BLOCK [,BYTE];
;1495     1557  2
;1496     1558  2     SIGNAL_STOP (SMG$_ERRAT_LIN,
;1497     1559  2                  3, .SMG$$CURRENT_LINE,
;1498     1560  2                  .AP [TPA$L_TOKENCNT],
;1499     1561  2                  .AP [TPA$L_TOKENPTR],
;1500     1562  2                  SMG$_NOTSTRCAP)
;1501     1563  1     END;                        ! end of routine NOT_STRING


                                0000 00000 NOT_STRING:
                                                .WORD   Save nothing                    ;1518
                    00000000G   00  9F 00002    PUSHAB  SMG$_NOTSTRCAP                  ;1558
                7E        10    AC  7D 00008    MOVQ    16(AP), -(SP)                   ;1560
                    00000000G   00  DD 0000C    PUSHL   SMG$$CURRENT_LINE               ;1559
```

```
                                        03  DD 00012          PUSHL   #3                                      ; 1558
                                00000000G  00  9F 00014          PUSHAB  SMG$_ERRAT_LIN                          :
                        00000000G  00      06  FB 0001A          CALLS   #6, LIB$STOP                            :
                                           04  00021          RET                                             ; 1563

; Routine Size:  34 bytes,    Routine Base:  _SMG$CODE + 02B3

; 1502          1564  1 !<BLF/PAGE>
```

```
; 1504          1565  1 END                                           ! End of module SMG$STRING_TABLES
; 1505          1566  1
; 1506          1567  0 ELUDOM



                                                                    .EXTRN  LIB$STOP

;                                  PSECT SUMMARY
;
;       Name                            Bytes                           Attributes
;
;  _LIB$KEY0$                             342  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
;  _LIB$STATE$                           2576  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
;  _LIB$KEY1$                            2061  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(1)
;  _SMG$CODE                              725  NOVEC,NOWRT,  RD ,  EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)



;                               Library Statistics
;
;                                        --------  Symbols  --------      Pages       Processing
;       File                             Total     Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776        172         1         581        00:01.0
;  _$255$DUA28:[SMGRTL.OBJ]RTLLIB.L32;1     36          0         0           8        00:00.1
;  _$255$DUA28:[SMGRTL.OBJ]SMGLIB.L32;1    469          0         0          38        00:00.4
;  _$255$DUA28:[SMGRTL.OBJ]SMGTPALIB.L32;1
;                                          41         14        34          10        00:00.1
;  _$255$DUA28:[SYSLIB]TPAMAC.L32;1        42         30        71          14        00:00.1



;                                  COMMAND QUALIFIERS

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

; Size:          694 code + 5010 data bytes
; Run Time:        03:48.4
; Elapsed Time:    10:51.1
; Lines/CPU Min:       411
; Lexemes/CPU-Min:113340
; Memory Used:  758 pages
; Compilation Complete
```

SMGTPALIB
LIS

SMGSTATAB
LIS

SMGSTRTAB
LIS