```
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR      TTTTTTTTTTTTTTT  LLL
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR      TTTTTTTTTTTTTTT  LLL
LLL                 IIIIIIIII     BBBBBBBBBBBB     RRRRRRRRRRRR      TTTTTTTTTTTTTTT  LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBB         BBB  RRR         RRR         TTT        LLL
LLL                    III        BBBBBBBBBBBB     RRRRRRRRRRRR            TTT        LLL
LLL                    III        BBBBBBBBBBBB     RRRRRRRRRRRR            TTT        LLL
LLL                    III        BBBBBBBBBBBB     RRRRRRRRRRRR            TTT        LLL
LLL                    III        BBB         BBB  RRR   RRR               TTT        LLL
LLL                    III        BBB         BBB  RRR   RRR               TTT        LLL
LLL                    III        BBB         BBB  RRR   RRR               TTT        LLL
LLL                    III        BBB         BBB  RRR      RRR            TTT        LLL
LLL                    III        BBB         BBB  RRR      RRR            TTT        LLL
LLL                    III        BBB         BBB  RRR      RRR            TTT        LLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR         TTT        LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR         TTT        LLLLLLLLLLLLLLL
LLLLLLLLLLLLLLL     IIIIIIIII     BBBBBBBBBBBB     RRR         RRR         TTT        LLLLLLLLLLLLLLL
```

FILEID**LIBINSV

```
LL              IIIIII    BBBBBBBB      IIIIII    NN      NN    SSSSSSSS  VV      VV
LL              IIIIII    BBBBBBBB      IIIIII    NN      NN    SSSSSSSS  VV      VV
LL                II      BB      BB      II      NN      NN  SS          VV      VV
LL                II      BB      BB      II      NN      NN  SS          VV      VV
LL                II      BB      BB      II      NNNN    NN  SS          VV      VV
LL                II      BB      BB      II      NNNN    NN  SS          VV      VV
LL                II      BBBBBBBB        II      NN  NN  NN    SSSSSS    VV      VV
LL                II      BBBBBBBB        II      NN  NN  NN    SSSSSS    VV      VV
LL                II      BB      BB      II      NN    NNNN          SS  VV      VV
LL                II      BB      BB      II      NN    NNNN          SS  VV      VV
LL                II      BB      BB      II      NN      NN          SS    VV  VV        ....
LL                II      BB      BB      II      NN      NN          SS    VV  VV        ....
LLLLLLLLLL      IIIIII    BBBBBBBB      IIIIII    NN      NN  SSSSSSSS      VV          ....
LLLLLLLLLL      IIIIII    BBBBBBBB      IIIIII    NN      NN  SSSSSSSS      VV          ....
```

```
LL              IIIIII      SSSSSSSS
LL              IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

(2) 49 DECLARATIONS
(3) 72 LIBSINSV - insert a field

```
0000     1          .TITLE  LIB$INSV - insert a variable length bit field
0000     2          .IDENT  /1-002/                 ; File: LIBINSV.MAR
0000     3
0000     4 ;
0000     5 ;*****************************************************************************
0000     6 ;*                                                                           *
0000     7 ;*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
0000     8 ;*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                   *
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0000    21 ;*                                                                           *
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0000    23 ;*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                  *
0000    24 ;*                                                                           *
0000    25 ;*                                                                           *
0000    26 ;*****************************************************************************
0000    27 ;
0000    28
0000    29 ;++
0000    30 ; FACILITY: General Utility Library
0000    31 ;
0000    32 ; ABSTRACT:
0000    33 ;
0000    34 ;       Insert a portion of the source into an area determined by the base,
0000    35 ;       position, and size.
0000    36 ;
0000    37 ; ENVIRONMENT: User Mode, AST Reentrant
0000    38 ;
0000    39 ;--
0000    40 ; AUTHOR: Donald G. Petersen, CREATION DATE: 30-Dec-77
0000    41 ;
0000    42 ; MODIFIED BY:
0000    43 ;
0000    44 ;       DGP, 30-Dec-77 : VERSION 00
0000    45 ; 01    - Original
0000    46 ; 1-001 - Update version number and copyright notice.  JBS 16-NOV-78
0000    47 ; 1-002 - Add "_" to PSECT directives.  JBS 21-DEC-78
```

```
                     49          .SBTTL  DECLARATIONS
                     50 ;
                     51 ; INCLUDE FILES:
                     52 ;
                     53
                     54 ;
                     55 ; MACROS:
                     56 ;
                     57
                     58 ;
                     59 ; EQUATED SYMBOLS:
                     60 ;
                     61
                     62 ;
                     63 ; OWN STORAGE:
                     64 ;
                     65
                     66 ;
                     67 ; PSECT DECLARATIONS:
                     68 ;
00000000             69          .PSECT _LIB$CODE PIC, SHR, LONG, EXE, NOWRT
                     70
```

```
                                0000     72          .SBTTL  LIB$INSV  - insert a field
                                0000     73 ;++
                                0000     74 ; FUNCTIONAL DESCRIPTION:
                                0000     75 ;
                                0000     76 ;       The field specified by the base, position, and size is replaced by bits
                                0000     77 ;       size-1 : 0 of the source.  If the size is zero, no insertion is performed.
                                0000     78 ;       A reserved operand fault occurs if a size greater than 32 is specified.
                                0000     79 ;
                                0000     80 ; CALLING SEQUENCE:
                                0000     81 ;
                                0000     82 ;       CALL LIB$INSV (src.rl.r, pos.rl.r, size.rbu.r, base.wv.r)
                                0000     83 ;
                   00000004     0000     84          SOURCE = 4                              ; Adr. of source
                   00000008     0000     85          POSITION = 8                            ; Adr. of beginning position
                   0000000C     0000     86          SIZE = 12                               ; Adr. of size to insert
                   00000010     0000     87          BASE = 16                               ; Adr. of base to insert into
                                0000     88 ; INPUT PARAMETERS:
                                0000     89 ;
                                0000     90 ;       NONE
                                0000     91 ;
                                0000     92 ; IMPLICIT INPUTS:
                                0000     93 ;
                                0000     94 ;       NONE
                                0000     95 ;
                                0000     96 ; OUTPUT PARAMETERS:
                                0000     97 ;
                                0000     98 ;       NONE
                                0000     99 ;
                                0000    100 ; IMPLICIT OUTPUTS:
                                0000    101 ;
                                0000    102 ;       NONE
                                0000    103 ;
                                0000    104 ; COMPLETION CODES:
                                0000    105 ;
                                0000    106 ;       NONE
                                0000    107 ;
                                0000    108 ; SIDE EFFECTS:
                                0000    109 ;
                                0000    110 ;       SS$_ROPRAND - a reserved operand fault occurs if:
                                0000    111 ;                     1.) a size greater than 32 is specified
                                0000    112 ;                     2.) a position greater is greater than 31 and the field is in
                                0000    113 ;                         registers
                                0000    114 ;
                                0000    115 ;--
                                0000    116
                           0000 0000    117          .ENTRY LIB$INSV , ^M< >         ; Entry point
                                0002    118
10 BC    0C BC    08 BC    04 BC  F0  0002    119          INSV    @SOURCE(AP), @POSITION(AP), -
                                000B    120                  @SIZE(AP), @BASE(AP)            ; insert source field
                                 04  000B    121          RET
                                000C    122          .END
```

```
BASE            = 00000010
LIB$INSV          00000000 RG    01
POSITION        = 00000008
SIZE            = 0000000C
SOURCE          = 00000004
```

Psect synopsis

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
_LIB$CODE	0000000C (12.)	01 (1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.07	00:00:02.33
Command processing	102	00:00:00.35	00:00:04.44
Pass 1	64	00:00:00.22	00:00:02.96
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.16	00:00:00.87
Symbol table output	1	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	238	00:00:00.83	00:00:10.63

```
The working set limit was 750 pages.
1169 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 5 non-local and 0 local symbols.
122 source lines were read in Pass 1, producing 10 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.
```

Macro library statistics

Macro library name	Macros defined
_255DUA28:[SYSLIB]STARLET.MLB;2	0

```
0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

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

LIBLOCC
LIS

LIBLUN
LIS

LIBMOVC3
LIS

LIBMOVTC
LIS

LIBPOLYF
LIS

LIBINSQTI
LIS

LIBINTOVE
LIS

LIBLEXICA
LIS

LIBPKARIT
LIS

LIBMATCHC
LIS

LIBPOLYD
LIS

LIBLOOKUP
LIS

LIBLPLINE
LIS

LIBMOVC5
LIS

LIBLEN
LIS

LIBMSG
LIS

LIBINSV
LIS

LIBMATCA
LIS

LIBMOVTUC
LIS