```
(PRECOMP (SECTION SYS OCTAL)                                                    0000100
  (LAP (PATCH (ORG)                                                             0000200
    (ENTRY PDOK (LABEL PDOK))                                                   0000300
    (ENTRY PDOK1 (LABEL PDOK1))                                                 0000400
    GO (BUS (D. 1))                                                             0000500
    (BUS (LABEL A))                                                             0000600
    RECOV (BUS (D. 1))                                                          0000700
    (BUS RECOV I)                                                               0000800
    A (LDI 4 (R 7Q6))                                                           0000900
    (LDX (INTCNT . SYS) 0 6)                                                    0001000
    (LDX (CDSW . IC) 0 8)                                                       0001100
    (LDX (INTTY . IO) 0 4)                                                      0001200
    (BXH 2 (8 D) 0)                                                             0001300
    (LDX BPO 0 8)                                                               0001400
    (ARGS)                                                                      0001500
    (CALL START)                                                                0001600
    (BUC (LABEL GO))                                                            0001700
    (1Q6)                                                                       0001800
    (DITTO 4)                                                                   0001900
    PDOK1 (BXL (LABEL PDGONE) 8)                                                0002000
    PDOK (LDX (Z. 2Q1) 0 4)                                                     0002100
    (BXL (LABEL P) 8)                                                           0002200
    (XEC (LABEL P))                                                             0002300
    (BUC 0 4)                                                                   0002400
    P (ATX -1 (4 L) 8)                                                          0002500
    (LDX -1 (4 L) 4)                                                            0002600
    (STX (PDADC . GC) 0 4) PDGONE (LDX PDGONE 0 4) (BUC 3 4) (END))             0002700
  (((DDSW . IC) OWN INTEGER VALUE)                                              0002800
    ((FREEZE . SYS) FLUID BOOLEAN VALUE)                                        0002900
    ((INTCNT . SYS) OWN INTEGER VALUE)                                          0003000
    ((FMCALL . SYS) OWN (FUNCTIONAL NOVALUE) VALUE)                             0003100
    ((INTERRUPT . SYS) FUNCTION (FUNCTIONAL OCTAL) VALUE)                       0003200
    ((INTTY . IC) FUNCTION (FUNCTIONAL NOVALUE) VALUE)                          0003300
    (FPO OWN OCTAL VALUE)                                                       0003400
    (FPP OWN OCTAL VALUE)                                                       0003500
    (CHO OWN OCTAL VALUE)                                                       0003600
    (TRO OWN OCTAL VALUE)                                                       0003700
    (TRP OWN OCTAL VALUE)                                                       0003800
    (BPO OWN OCTAL VALUE)                                                       0003900
    (BPP OWN OCTAL VALUE)                                                       0004000
    (ARO OWN OCTAL VALUE)                                                       0004100
    (ARP OWN OCTAL VALUE)                                                       0004200
    (LSP OWN OCTAL VALUE)                                                       0004300
    (LSO OWN OCTAL VALUE)                                                       0004400
    (TRL OWN OCTAL VALUE)                                                       0004500
    (OBLIST OWN (ARRAY SYMBOL) VALUE)                                           0004600
    (OBLSIZ OWN INTEGER VALUE)                                                  0004700
    (PDOUT OWN SYMBOL VALUE)                                                    0004800
    ((PDADC . GC) OWN OCTAL VALUE)                                              0004900
    ((PDBUF . GC) OWN OCTAL VALUE)                                              0005000
    (START FUNCTION (FUNCTIONAL NOVALUE) VALUE)                                 0005100
    (RECOV FUNCTION (FUNCTIONAL NOVALUE) VALUE)                                 0005200
    (PDGONE FUNCTION (FUNCTIONAL NOVALUE) VALUE)                                0005300
    (FNTRAP FUNCTION (FUNCTIONAL NOVALUE) VALUE)                                0005400
    (FMTRAP FUNCTION (FUNCTIONAL NOVALUE) VALUE)) SYS)                          0005500
  (LAP (PATCH (ORG)                                                             0005600
    (ENTRY RETURN (LABEL RETURN))                                               0005700
    (ENTRY ROUT (LABEL ROUT))                                                   0005800
    (ENTRY FLBIND (LABEL FLBIND))                                               0005900
    (ENTRY FLREST (LABEL FLREST))                                               0006000
    (ENTRY STZENT (LABEL STZENT))                                               0006100
    (ENTRY ONENT (LABEL ONENT))                                                 0006200
    (ENTRY I2OENT (LABEL I2OENT))                                               0006300
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    (ENTRY STBENT (LABEL STBENT))                                          0006400
    (ENTRY B48. (LABEL B48.))                                              0006500
    (ENTRY INTER (LABEL INTER))                                            0006600
    RETURN (LDX 0 8 4)                                                     0006700
    (ATX -1 (4 L) 8)                                                       0006800
    INTER (BPX 1 (6 D) 1)                                                  0006900
    (LDX (FREEZE . SYS) I 3)                                               0007000
    (LDX 100 R 6)                                                          0007100
    (BXE 1 (3 D) 1)                                                        0007200
    (LDX -1 (4 L) 4)                                                       0007300
    (STX (D. 1) L 4)                                                       0007400
    (BPX (D. 1) 8)                                                         0007500
    (LDX (INTERRUPT . SYS) 0 4)                                            0007600
    (BUC 2 4)                                                              0007700
    ROUT (LDX 0 8 4)                                                       0007800
    (ATX -1 (4 L) 8)                                                       0007900
    (BUC 0 4)                                                              0008000
    FLBIND (LDX (Z. 201) 0 4)                                              0008100
    (ATX (Z. 8) 0 3)                                                       0008200
    FLB1 (BAX (D. 1) 3 -1)                                                 0008300
    (LDA 0 (4 L7.123 S))                                                   0008400
    (ADD (Z. 8))                                                           0008500
    (TST 0 4 601)                                                          0008600
    (LDA 0 A)                                                              0008700
    (ECH 0 (4 I))                                                          0008800
    (STF 0 3)                                                              0008900
    (TST 0 4 510)                                                          0009000
    (BAX (LABEL FLB1) 4 1)                                                 0009100
    (BUC 1 4)                                                              0009200
    FLREST (STP (LABEL FLR2) S567.7)                                       0009300
    (LDX -1 (7 L) 3)                                                       0009400
    (ATX (Z. 8) 0 3)                                                       0009500
    FLR1 (BAX (D. 1) 3 -1)                                                 0009600
    (LDB 0 3)                                                              0009700
    (STB 0 (7 I))                                                          0009800
    (TST 0 7 510)                                                          0009900
    (BAX (LABEL FLR1) 7 1)                                                 0010000
    FLR2 (BUC)                                                             0010100
    STZENT (STZ A.)                                                        0010200
    (BUC 0 4)                                                              0010300
    CNENT (LDA 1 (L567.7 R))                                               0010400
    (BUC 0 4)                                                              0010500
    I2OENT (BNZM 0 4)                                                      0010600
    (STZ A.)                                                               0010700
    (BUC 0 4)                                                              0010800
    STBENT (BOZP 0 4)                                                      0010900
    (LDA 1 (L567.7 R)) (BUC 0 4) B48. (1071) (END)) NIL SYS)               0011000
(LAP (PATCH (CRG) (END))                                                   0011100
 ((CONDERR FUNCTION (FUNCTIONAL NOVALUE) VALUE)                            0011200
  (EQUAL. FUNCTION (FUNCTIONAL BOOLEAN SYMBOL SYMBOL) VALUE)               0011300
  (EQUALN. FUNCTION (FUNCTIONAL BOOLEAN SYMBOL SYMBOL) VALUE)              0011400
  (SYMABS FUNCTION (FUNCTIONAL SYMBOL SYMBOL) VALUE)                       0011500
  (SYMSGN FUNCTION (FUNCTIONAL INTEGER SYMBOL) VALUE)                      0011600
  (STIMS FUNCTION (FUNCTIONAL SYMBOL SYMBOL SYMBOL) VALUE)                 0011700
  (STIMR FUNCTION (FUNCTIONAL REAL REAL SYMBOL) VALUE)                     0011800
  (STIMI FUNCTION (FUNCTIONAL SYMBOL INTEGER SYMBOL) VALUE)                0011900
  (SPLUS FUNCTION (FUNCTIONAL SYMBOL SYMBOL SYMBOL) VALUE)                 0012000
  (SPLUR FUNCTION (FUNCTIONAL REAL REAL SYMBOL) VALUE)                     0012100
  (SPLUI FUNCTION (FUNCTIONAL SYMBOL INTEGER SYMBOL) VALUE)                0012200
  (SMINS FUNCTION (FUNCTIONAL SYMBOL SYMBOL SYMBOL) VALUE)                 0012300
  (SMINI FUNCTION (FUNCTIONAL SYMBOL INTEGER SYMBOL) VALUE)                0012400
  (SMINR FUNCTION (FUNCTIONAL REAL REAL SYMBOL) VALUE)                     0012500
  (MINSYM FUNCTION (FUNCTIONAL SYMBOL SYMBOL) VALUE)) SYS)                 0012600
```

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(LAP (PATCH (ORG) (END))                                                0012700
 ((INT2OCT RCUTINE (FUNCTIONAL OCTAL INTEGER) VALUE)                    0012800
  (SYM2OCT FUNCTION (FUNCTIONAL OCTAL SYMBOL) VALUE)                    0012900
  (SYM2INT FUNCTION (FUNCTIONAL INTEGER SYMBOL) VALUE)                  0013000
  (SYM2REAL FUNCTION (FUNCTIONAL REAL SYMBOL) VALUE)                    0013100
  (OCT2SYM FUNCTION (FUNCTIONAL SYMBOL OCTAL) VALUE)                    0013200
  (REAL2SYM FUNCTION (FUNCTIONAL SYMBOL REAL) VALUE)                    0013300
  (INT2SYM FUNCTION (FUNCTIONAL SYMBOL INTEGER) VALUE)                  0013400
  (FORM2SYM FUNCTION (FUNCTIONAL SYMBOL FUNCTIONAL) VALUE)              0013500
  (SYM2FORM FUNCTION (FUNCTIONAL FUNCTIONAL SYMBOL) VALUE)              0013600
  (OCTROUND RCUTINE (FUNCTIONAL OCTAL REAL) VALUE)                      0013700
  (ROUND RCUTINE (FUNCTICNAL INTEGER REAL) VALUE)) LISP))               0013800
                                                                        0013900
****END OF FILE DETECTED
```

```
(APRIL.27.1200 (SECTION SYS OCTAL)                                              C000100
  MACRO1 (((LSHIFT (LAMBDA (L) (CONS (QUOTE SHIFT) (CDR L))))                   C000200
    (RSHIFT (LAMBDA (L)                                                         C000300
      (LIST (QUOTE SHIFT)                                                       C000400
       (CADR L) (CONS (QUOTE MINUS) (CDDR L)))))))                              C000500
  (RCUTINE FXRUB ((X OCTAL)))                                                   C000600
  (DECLARE (GBLIST (ARRAY SYMBOL) OWN)                                          C000700
   (CHO OWN)                                                                    C000800
   (TRO OWN)                                                                    C000900
   (TRP OWN)                                                                    C001000
   (TRM OWN)                                                                    C001100
   (BPO OWN)                                                                    C001200
   (BPP OWN)                                                                    C001300
   (ARO OWN)                                                                    C001400
   (ARP OWN) (LSP OWN) (LSC OWN) (TRL OWN) (PDOUT SYMBOL OWN))                  C001500
  (SECTION (GC SYS) OCTAL)                                                      C001600
  INSTRUCTIONS (((MARKED (LAMBDA NIL (PROG NIL (ATTACH (LIST (QUOTE             C001700
        LDS) (CADR EXP) (QUOTE (I 400150200))))                                 C001800
      (SETQ VREG (QUOTE AC))                                                    C001900
      (SETQ VTYPE (QUOTE BOOLEAN))                                              C002000
      (SETQ VCLASS (QUOTE ACTIVE)) (BLOTCH (QUOTE AC)))))                       C002100
    (UNMARK (LAMBDA NIL (PROG NIL (ATTACH (LIST (QUOTE INS)                     C002200
        (CADR EXP) (QUOTE (I 44Q5))))))))))                                     C002300
  MACRO1 (((LEFT (LAMBDA (X) (ITYBIT T 24 18 (CDR X))))                         C002400
    (RIGHT (LAMBDA (X) (ITYBIT T 0 18 (CDR X))))                                C002500
    (PREFIX (LAMBDA (X) (ITYBIT T 42 6 (CDR X))))                               C002600
    (TAG (LAMBDA (X) (ITYBIT T 18 6 (CDR X))))                                  C002700
    (LEFTX (LAMBDA (X) (ITYBIT NIL 24 18 (CDR X))))                             C002800
    (RIGHTX (LAMBDA (X) (ITYBIT NIL 0 18 (CDR X))))                             C002900
    (ONEMOR (LAMBDA (X)                                                         C003000
      (LIST (QUOTE I20.) (LIST (QUOTE PLUS) (CADR X) 1))))                      C003100
    (ONELSS (LAMBDA (X)                                                         C003200
      (LIST (QUOTE I20.) (LIST (QUOTE PLUS) (CADR X) -1))))                     C003300
    (PLUS (LAMBDA (X)                                                           C003400
      (LIST (QUOTE I20.)                                                        C003500
       (CONS (QUOTE (PLUS . LISP)) (CDR X)))))))                                C003600
  DEFINE (((ITYBIT (LAMBDA (W X Y Z)                                            C003700
      (CONS (QUOTE BIT)                                                         C003800
       (CONS X (CONS Y (COND (W (CONS (CONS (QUOTE CORE) Z) NIL))               C003900
          (T Z))))))))))                                                       C004000
  (DECLARE (GCC OWN)                                                            C004100
   (A OWN)                                                                      C004200
   (B OWN)                                                                      C004300
   (C OWN)                                                                      C004400
   (D OWN)                                                                      C004500
   (X OWN)                                                                      C004600
   (Y OWN)                                                                      C004700
   (Z OWN)                                                                      C004800
   (BOOL BOOLEAN OWN)                                                           C004900
   (XPDP OWN)                                                                   C005000
   (TEMP1 OWN)                                                                  C005100
   (TEMP2 OWN)                                                                  C005200
   (TEMP3 OWN)                                                                  C005300
   (TEMP4 OWN)                                                                  C005400
   (ARYORG OWN)                                                                 C005500
   (ARYCNT OWN)                                                                 C005600
   (BPSORG OWN)                                                                 C005700
   (FREREL OWN)                                                                 C005800
   (PDLREL OWN)                                                                 C005900
   (TRPCNT OWN)                                                                 C006000
   (BPMIN OWN)                                                                  C006100
   (PDADD OWN)                                                                  C006200
   (PDBUF OWN)                                                                  C006300
```

```
(GCERR BOOLEAN CWN)                                                    0006400
(GC1 INTEGER OWN 200)                                                  0006500
(GC2 INTEGER OWN 200)                                                  0006600
(GC3 INTEGER OWN 2000)                                                 0006700
(GC4 REAL OWN 0.1999999999)                                            0006800
(GC5 INTEGER OWN 500)                                                  0006900
(GC6 REAL OWN 0.5)                                                     0007000
(GC7 INTEGER OWN 20000) (GC8 INTEGER OWN 5000))                        0007100
(RCUTINE ((ACPCOK . SYS) NOVALUE) ((X INTEGER)))                       0007200
(RCUTINE ((MINR . LISP) REAL) ((A REAL) (B REAL)))                     0007300
(RCUTINE ((MAXR . LISP) REAL) ((A REAL) (B REAL)))                     0007400
(RCUTINE ((ENTIER . LISP) INTEGER) ((A REAL)))                         0007500
(FUNCTION ((ERROR . LISP) SYMBOL) ((A SYMBOL)))                        0007600
(FUNCTION ((RECLAIM . SYS) INTEGER)                                    0007700
 ((X INTEGER))                                                         0007800
 (BLOCK ((S SYMBOL) (J INTEGER))                                       0007900
  (CODE (LDA (LABEL OFF)) (STF (ENTRY INTER)))                         0008000
  (TRY S L (SET J (BLOCK NIL (IF (NULL PDOUT)                          0008100
      (SET PDOUT (QUOTE G)))                                           0008200
    (SET GCC (PLUS 1 GCC))                                             0008300
    (SET (CORE (S20. OBLIST)) (WCRDCR (CORE (S20. OBLIST)) 4Q7))       0008400
    (RETURN (DRIVER X)))))                                             0008500
  (CODE (LDA (LABEL ON)) (STF (ENTRY INTER)))                          0008600
  (RETURN J)                                                           0008700
  L (CODE (LDA (LABEL ON)) (STF (ENTRY INTER)))                        0008800
  (EXIT S) OFF (CODE (BUC 1 4)) ON (CODE (BPX 1 (6 0) 1))))            0008900
(FUNCTION (DRIVER INTEGER)                                             0009000
 (AA)                                                                  0009100
 (CRG NIL (BLOCK (ZZ)                                                  0009200
   (CODE (STX XPDP 0 8))                                               0009300
   (SET BOOL FALSE)                                                    0009400
   (SET ARYCNT 0)                                                      0009500
   (SCNPDL MRKPDL)                                                     0009600
   (MRKCHR)                                                            0009700
   (MRKTSP)                                                            0009800
   (PRUNVF)                                                            0009900
   (PRUNCB)                                                            0010000
   (PKTSP)                                                             0010100
   (PKFREE)                                                            0010200
   (SET ZZ (GPCALC AA))                                                0010300
   (RELARY)                                                            0010400
   (FXTSP)                                                             0010500
   (FXARY)                                                             0010600
   (FXFREE)                                                            0010700
   (RELBPS)                                                            0010800
   (SET BOOL TRUE)                                                     0010900
   (SCNPDL FIXIT1)                                                     0011000
   (FXBPS)                                                             0011100
   (SET TEMP1 BPC)                                                     0011200
   (SET XPDP (PLUS XPDP -10))                                          0011300
   (IF (LS PDLREL 0)                                                   0011400
    (BLOCK NIL (SET TEMP1 (PLUS TEMP1 PDLREL))                         0011500
     (SET Z (PLUS (SET X XPDP) PDLREL))                                0011600
     M0 (SET (CORE Z) (CORE X))                                        0011700
     (SET Z (CNEMOR Z))                                                0011800
     (IF (NQ (SET X (CNEMOR X)) BPC) (GO M0))                          0011900
     (CODE (ATX PDLREL 0 8))))                                         0012000
   (SET BPP (PACKIT 4Q15 BP0 BPP TEMP1))                               0012100
   (SET BPC TEMP1)                                                     0012200
   A (SET TEMP1 (IF (LS ARYORG ARC) ARYORG ARO))                       0012300
   (SET ARP (PACKIT 4Q7 ARO ARP TEMP1))                                0012400
   (SET ARC TEMP1)                                                     0012500
   (IF (GR ARYCRG ARO)                                                 0012600
```

```
      (BLOCK NIL (SET ARP (SET Z (PLUS (SET X ARP)                          0012700
          (MINUS ARO) ARYORG)))                                             0012800
       (GO L)                                                               0012900
       M (SET (CORE Z) (CORE X))                                            0013000
       L (SET Z (CNELSS Z))                                                 0013100
       (IF (GQ (SET X (CNELSS X)) ARO) (GO M)) (SET ARO ARYORG)))           0013200
     (IF (GR PDLREL 0)                                                      0013300
      (BLOCK NIL (SET BPP (SET Z (PLUS (SET X BPP) PDLREL)))                0013400
       (GO L1)                                                              0013500
       M1 (SET (CORE Z) (CORE X))                                           0013600
       L1 (SET Z (CNELSS Z))                                                0013700
       (IF (GQ (SET X (CNELSS X)) XPDP) (GO M1))                            0013800
       (SET BPC (PLUS BPC PDLREL)) (CODE (ATX PDLREL 0 8))))                0013900
     (IF (EQ PDCUT (QUOTE B)) (ADPCCK PDBUF))                               0014000
     (SET PDCUT NIL)                                                        0014100
     (IF GCERR (ERROR (QUOTE (OUT OF STORAGE)))                             0014200
      (RETURN ZZ)))))                                                       0014300
   MACRO1 (((PLUS (LAMBDA (X)                                               0014400
      (CONS (QUOTE (PLUS . LISP)) (CDR X))))))                              0014500
   (FUNCTION (GPCALC INTEGER)                                               0014600
    ((AA OCTAL))                                                            0014700
    (BLOCK ((A1IU INTEGER (PLUS BPO PDADD TRP (MINUS TRO)                   0014800
       (MINUS XPDP)))                                                       0014900
      (A2IU INTEGER (PLUS BPP BPMIN (MINUS BPO)))                           0015000
      (A3IU INTEGER (PLUS LSO (BLOCK ((I INTEGER ARO)                       0015100
         (ARYCNT INTEGER 0))                                                0015200
        (FOR I (RESET I (PLUS I (BIT 24 18 (CORE I))))                      0015300
         (WHILE (NQ I ARP))                                                 0015400
         (UNLESS (EQ (WORDAND (CORE I) 4Q7) 0))                             0015500
         (SET ARYCNT (PLUS ARYCNT (BIT 24 18 (CORE I)))))                   0015600
        (RETURN ARYCNT)) AA (MINUS LSP))) (ZZ INTEGER))                     0015700
     (SET GCERR FALSE)                                                      0015800
     BACK (BLOCK ((N INTEGER (DIFFERENCE PDBUF (SET ZZ (PLUS LSO            0015900
         (MINUS TRO) (MINUS A1IU) (MINUS A2IU) (MINUS A3IU))))))            0016000
      (IF (AND GCERR (GR N 0))                                              0016100
       (GO PP)                                                              0016200
       (AND (NOT GCERR) (LS (MINUS N) GC8))                                 0016300
       (BLOCK ((BPKEEP INTEGER BPMIN)                                       0016400
         (CK BOCLEAN (UNLBPS (PLUS N GC8 ARO (MINUS BPP)                    0016500
           (MINUS BPMIN)))))                                                0016600
        (SET A2IU (PLUS A2IU BPMIN (MINUS BPKEEP)))                         0016700
        (IF (NOT CK) (SET GCERR TRUE) (SET GCERR FALSE)) (GO BACK))         0016800
       (SET GCERR FALSE)))                                                  0016900
     (BLOCK ((PDEX INTEGER (PLUS BPC (MINUS TRO) (MINUS A1IU)))             0017000
       (BPEX INTEGER (PLUS ARO (MINUS BPO) (MINUS A2IU)))                   0017100
       (LAEX INTEGER (PLUS LSO (MINUS ARO) (MINUS A3IU))))                  0017200
      (IF (AND (GR BPEX GC1) (GR PDEX GC2) (GR LAEX GC3)) (GO PP))          0017300
      LL (BLOCK ((ZE INTEGER (DIFFERENCE ZZ PDBUF)) (ST INTEGER))           0017400
       (SET ST (MIN (TIMES GC4 ZE) GC5))                                    0017500
       (SET PDLREL (PLUS ST PDBUF))                                         0017600
       (SET ZE (DIFFERENCE ZE ST))                                          0017700
       (SET ARYCRG (PLUS PDLREL TRO A1IU A2IU (TIMES GC6 ZE)))              0017800
       (SET PDLREL (DIFFERENCE PDLREL PDEX))) (GO P))                       0017900
     PP (SET PDLREL 0)                                                      0018000
     (SET ARYORG ARO)                                                       0018100
     P (SET BPMIN 0)                                                        0018200
     (SET GC7 A2IU)                                                         0018300
     (SET BPSORG (PLUS BPO PDLREL 1)) (RETURN ZZ)))                         0018400
   MACRO1 (((PLUS (LAMBDA (X)                                               0018500
      (LIST (QUOTE I20.) (CONS (QUOTE (PLUS . LISP)) (CDR X)))))))         0018600
   (FUNCTION (FIXIT1 NOVALUE) ((J OCTAL)) (ORG NIL (FIXIT J)))              0018700
   (FUNCTION (SCNPDL NOVALUE)                                               0018800
    ((FN (FUNCTIONAL NOVALUE OCTAL)))                                       0018900
```

```
(CRG NIL (BLOCK (CURCNE CURLNK (CURPNT XPDP) NXTCNE BITMAP COUNT)   0019000
  MORE (SET CURLNK (RIGHT (SET CURCNE CURPNT)))                     0019100
  (SET NXTCNE (PLUS CURPNT (LEFT (CNELSS CURLNK))))                 0019200
  TO (SET BITMAP (LSHIFT (CORE CURLNK)                              0019300
    (SET COUNT (PLUS CURPNT (MINUS NXTCNE)                          0019400
      (LEFT (CNELSS CURLNK)))))                                     0019500
  (SET COUNT (PLUS 24 (MINUS COUNT)))                               0019600
  XTO (IF (EQUAL (SET CURPNT (ONEMOR CURPNT)) NXTCNE)               0019700
   (BLOCK NIL (SET CURLNK (RIGHT CURLNK)) (GO XT1))                 0019800
   (LS BITMAP 0) (FN CURPNT))                                       0019900
  (SET BITMAP (LSHIFT BITMAP 1))                                    0020000
  (IF (NQ (SET COUNT (ONELSS COUNT)) 0) (GO XTO))                   0020100
  (IF (EQ (TAG (SET CURLNK (RIGHT CURLNK))) 0) (GO TO))             0020200
  T1 (SET CURPNT NXTCNE)                                            0020300
  XT1 (IF (AND BOOL (NQ (SET TEMP1 (RIGHT CURLNK)) 0))              0020400
   (SET (CORE CURCNE)                                               0020500
    (PLUS (CORE CURCNE)                                             0020600
     (IF (EQUAL (WORDAND 1Q15 (SET TEMP1 (CORE TEMP1))) 0)          0020700
      (RIGHTX TEMP1) (LEFTX TEMP1)) (MINUS CURLNK) -1)))            0020800
  (IF (LS CURPNT BPO) (GO MORE)))))                                 0020900
(FUNCTION (MRKPDL NOVALUE)                                          0021000
 (X)                                                                0021100
 (BLOCK NIL (IF (GQ (SET X (CORE X)) 1Q6)                           0021200
   (BLOCK NIL (MARKIT (LEFTX X))                                    0021300
    (IF (NQ (BIT 18 6 X) 0) (MARKIT (ONEMOR (RIGHTX X)))))          0021400
   (BLOCK NIL (IF (GQ X ARO)                                        0021500
     (GO FIX)                                                       0021600
     (LS X TRC)                                                     0021700
     (GO OUT)                                                       0021800
     (LS X TRP)                                                     0021900
     (IF (EQUAL (PREFIX (ONEMOR X)) 12Q) (SET X (CNEMOR X)))        0022000
     (GO OUT)) FIX (MARKIT X) OUT))))                               0022100
(FUNCTION (MARKIT NOVALUE)                                          0022200
 ((X OCTAL))                                                        0022300
 (BLOCK NIL MORE (IF (LS X ARO)                                     0022400
   (IF (AND (LQ TRC X) (LS X TRP) (MARKEM X))                       0022500
    (BLOCK NIL (SET X (MRKTRP X)) (GO MORE)))                       0022600
   (AND (LS X LSC) (MARKEM X))                                      0022700
   (IF (LS X LSP)                                                   0022800
    (MRKARY X)                                                      0022900
    (BLOCK NIL (MARKIT (BIT 24 18 (CORE X)))                        0023000
     (SET X (BIT 0 18 (CORE X))) (GO MORE)))) OUT))                 0023100
(FUNCTION MRKTRP (X)                                                0023200
 (BLOCK NIL (SET TEMP1 (CORE (ONELSS X)))                           0023300
  (CASE (PLUS (PREFIX X) -6)                                        0023400
   (GO T7) (GO T10) (GO T11) (GO T12) (GO T13))                     0023500
  T7 (IF (NQ (WORDAND (CORE X) 4Q6) 0)                              0023600
   (SET (CORE TEMP1) (WORDOR (CORE TEMP1) 4Q7)))                    0023700
  (RETURN (RIGHT X))                                                0023800
  T10 (RETURN (RIGHTX TEMP1))                                       0023900
  T12 (CASE (CNEMOR (RSHIFT (SET TEMP2 (CHEKUP (CORE (ONEMOR X))))  0024000
    3)) (GO XO) (GO X11) (GO XX) (GO X11) (GO X4) (GO X11))         0024100
  XO (IF (EQUAL TEMP2 0) (LABEL XX (MARKIT TEMP1)))                 0024200
  (GO T13)                                                          0024300
  X4 (IF (EQUAL (BIT 42 6 TEMP1) 0)                                 0024400
   (MARKIT (LEFTX TEMP1))                                           0024500
   (BLOCK NIL (IF (EQUAL (WORDAND TEMP1 1Q15) 0)                    0024600
    (MARKIT (LEFTX TEMP1))) (GO T13)))                              0024700
  X5 (IF (MARKEM (SET TEMP1 (ONEMOR (RIGHT (CNELSS X)))))          0024800
   (MARKIT (MRKTRP TEMP1)))                                         0024900
  (GO T13)                                                          0025000
  T11 (IF (EQUAL (BIT 42 6 (SET TEMP2 (CORE (ONEMOR X)))) 1)        0025100
   (MARKEM (LEFTX TEMP2))                                           0025200
```

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    (EQ (BIT 42 6 TEMP2) 2) (MARKIT (LEFTX TEMP2)))                    C025300
   X11 (IF (NQ (SET TEMP2 (LEFTX TEMP1)) 0)                            C025400
    (IF (MARKEM TEMP2) (MRKARY TEMP2))                                 C025500
    (LS TEMP1 TRP)                                                     C025600
    (IF (MARKEM (SET TEMP1 (ONEMOR TEMP1)))                            C025700
     (MARKIT (MRKTRP TEMP1)))) T13 (RETURN (LEFT X))))                 C025800
(FUNCTION CHEKUP (X)                                                   C025900
 (BLOCK NIL (IF (GR (SET TEMP2 (BIT 42 6 X)) 2) (RETURN TEMP2))        C026000
  (CASE (ONEMOR TEMP2) (GO T0) (GO T1) (GO T2))                        C026100
  T0 (RETURN (BIT 18 6 X))                                             C026200
  T1 (SET (CORE TEMP2) (WORDOR (CORE (SET TEMP2 (LEFTX X))) 4Q7))      C026300
  (RETURN (PREFIX (ONEMOR TEMP2)))                                     C026400
  T2 (BLOCK ((Y TEMP1))                                                C026500
   (MARKIT (MRKTRP (LEFTX X)))                                         C026600
   (SET TEMP1 Y) (RETURN (CHEKUP (CORE (ONEMOR (LEFTX X))))))))       C026700
(FUNCTION (MRKARY NOVALUE)                                             C026800
 (X)                                                                   C026900
 (BLOCK (Y Z)                                                          C027000
  (SET ARYCNT (PLUS ARYCNT (LEFT X)))                                  C027100
  (SET Y (ONEMOR X))                                                   C027200
  (SET Z (PLUS X (LEFT X)))                                            C027300
  (CASE (ONEMOR (WORDAND (PREFIX X) 7Q))                               C027400
   (GO T0) (GO TX) (GO TX) (GO TX) (GO TX) (GO T5) (GO TX))            C027500
  T0 (FOR Y (RESET Y (PLUS Y 1))                                       C027600
   (WHILE (NQ Y Z)) (MARKIT (RIGHT Y)))                                C027700
  (GO TX)                                                              C027800
  T5 (FOR Y (RESET Y (PLUS Y 1))                                       C027900
   (WHILE (NQ Y Z))                                                    C028000
   (BLOCK NIL (MARKIT (LEFT Y)) (MARKIT (ONEMOR (RIGHT Y))))) TX))     C028100
(RCUTINE (MARKEM BOOLEAN)                                              C028200
 ((X OCTAL))                                                           C028300
 (IF (NOT (MARKED X))                                                  C028400
  (02B. (SET (CORE X) (WORDOR (CORE X) 4Q7))) FALSE))                  C028500
(FUNCTION (MRKCHR NOVALUE)                                             C028600
 NIL (BLOCK ((X CHO))                                                  C028700
  (FOR X (RESET X (PLUS X 1))                                          C028800
   (WHILE (NQ X TRO)) (MARKIT (RIGHT X)))))                            C028900
(FUNCTION (MRKTSP NOVALUE)                                             C029000
 NIL (BLOCK ((X (ONEMOR TRO)))                                         C029100
  (FOR X (RESET X (PLUS X 3))                                          C029200
   (WHILE (LS X TRP))                                                  C029300
   (IF (NOT (MARKED X))                                                C029400
    (IF (NQ (RIGHT X) 0)                                               C029500
     (LABEL GETUM (BLOCK NIL (SET (CORE X) (WORDOR (CORE X) 4Q7))      C029600
      (MARKIT (MRKTRP X))))                                            C029700
     (BLOCK NIL (CASE (PLUS (PREFIX X) -6)                             C029800
      (GO T7) (GO TS) (GO TX) (GO TX) (GO TS))                         C029900
      T7 (IF (NQ (LEFT (ONEMOR X)) 0) (GO GETUM))                      C030000
      (GO TS)                                                          C030100
      TX (IF (NQ (WORDAND (CORE X) 1Q7) 0) (GO GETUM)) TS))))))        C030200
(FUNCTION (PRUNVF NOVALUE)                                             C030300
 NIL (BLOCK NIL (FOR A (RESET CHO (PLUS A 1))                          C030400
   (WHILE (NQ A TRO)) (IF (NQ A (LEFT A)) (PRUNIT A)))                 C030500
  (FOR A (RESET (PLUS TRO 1) (PLUS A 3))                               C030600
   (WHILE (LS A TRP))                                                  C030700
   (IF (EQUAL (PREFIX A) 7Q)                                           C030800
    (IF (MARKED A)                                                     C030900
     (IF (NQ A (LEFT A)) (PRUNIT A))                                   C031000
     (IF (NOT (OR (EQUAL A (LEFT A)) (EQUAL A (PRUNIT A))))           C031100
      (MARKIT A))))))                                                  C031200
(RCUTINE PRUNIT (X)                                                    C031300
 (BLOCK NIL (SET TEMP1 (LEFT X))                                       C031400
  (SET TEMP2 (CODE (LDA TEMP1 (R L567.7))))                            C031500
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```
    (SET TEMP3 TEMP1)                                                    0031600
    AGAIN (SET TEMP4 (CNEMOR TEMP3))                                     0031700
    (IF (MARKED TEMP3)                                                   0031800
     (SET TEMP2 TEMP4) (SET (RIGHT TEMP2) (RIGHT TEMP4)))               0031900
    (IF (NQ X (SET TEMP3 (RIGHT TEMP4))) (GO AGAIN))                     0032000
    (RETURN (SET (LEFT X) TEMP1))))                                      0032100
  (RCUTINE (PRUNCB NOVALUE)                                              0032200
   NIL (BLOCK NIL (SET A (CNEMOR (S2C. OBLIST)))                         0032300
    (SET B (PLUS A 125))                                                 0032400
    (FOR A (RESET A (PLUS A 1))                                          0032500
     (WHILE (NQ A B))                                                    0032600
     (BLOCK NIL (SET Z (CORE (SET C A)))                                 0032700
      MORE (IF (NQ (SET X Z) 0)                                          0032800
       (BLOCK NIL (SET Z (RIGHT (SET Y (ONEMOR X))))                     0032900
        (IF (MARKED X) (SET C Y) (SET (RIGHT C) Z)) (GO MORE)))))))      0033000
  (RCUTINE (PKTSP NOVALUE)                                               0033100
   NIL (BLOCK ((X CCTAL (PLUS TRP -2)))                                  0033200
    (FOR X (STEP X -3)                                                   0033300
     (WHILE (NOT (MARKED X)))                                            0033400
     (BLOCK NIL (SET TRP (PLUS TRP -3)) (ADPDOK -3)))                    0033500
    (SET TRPCNT 0)                                                       0033600
    (SET TRL 0)                                                          0033700
    (FOR X (STEP X -3 LS TRO)                                            0033800
     (IF (MARKED X)                                                      0033900
      (UNMARK X)                                                         0034000
      (BLOCK NIL (SET (CORE (PLUS X -1)) 0)                              0034100
       (SET (CORE X) 13Q14)                                              0034200
       (SET (CORE (PLUS X 1)) TRL)                                       0034300
       (SET TRL X) (SET TRPCNT (PLUS TRPCNT 1)))))))                     0034400
  (RCUTINE (PKFREE NOVALUE)                                              0034500
   NIL (BLOCK NIL (FOR X (RESET (ONELSS LSO) (PLUS X -1))                0034600
    (WHILE (GQ X LSP))                                                   0034700
    (BLOCK NIL (IF (NOT (MARKED X))                                      0034800
     (BLOCK NIL (FOR LSP (RESET LSP (PLUS LSP 1))                        0034900
      (WHILE (GQ X LSP))                                                 0035000
      (IF (MARKED (LSP . SYS))                                           0035100
       (BLOCK NIL (UNMARK (LSP . SYS))                                   0035200
        (SET (CORE X) (CORE LSP))                                        0035300
        (SET (CORE LSP) X) (SET LSP (ONEMOR LSP)) (GO MORE))))           0035400
      (GC OUT)) (UNMARK X)) MORE)) OUT))                                 0035500
  (RCUTINE (RELBPS NOVALUE)                                              0035600
   NIL (ORG NIL (BLOCK NIL (SET X BPO)                                   0035700
    MORE (SET Y (LEFT X))                                                0035800
    (IF (NQ (WORDAND (CORE X) 4Q15) 0)                                   0035900
     (BLOCK NIL (IF (NQ (WORDAND (CORE (SET Z (RIGHT X))) 1Q15) 0)       0036000
      (SET (LEFT Z) BPSORG) (SET (RIGHT Z) BPSORG))                      0036100
      (SET BPSORG (PLUS BPSORG Y))))                                     0036200
    (IF (NQ (SET X (PLUS X Y)) BPP) (GO MORE)))))                        0036300
  (RCUTINE (RELARY NOVALUE)                                              0036400
   NIL (BLOCK NIL (SET X ARO)                                            0036500
    (SET Z ARYORG)                                                       0036600
    MORE (SET Y (LEFT X))                                                0036700
    (IF (MARKED X) (BLOCK NIL (SET (RIGHT X) Z) (SET Z (PLUS Z Y))))     0036800
    (IF (NQ (SET X (PLUS X Y)) ARP) (GO MORE))))                         0036900
  (RCUTINE (FIXIT NOVALUE)                                               0037000
   (X)                                                                   0037100
   (ORG NIL (IF (LS (SET TEMP1 (CORE X)) 1Q6)                            0037200
    (SET (CORE X) (RELOC TEMP1))                                         0037300
    (NQ (BIT 18 6 TEMP1) 0)                                              0037400
    (SET (LEFT X) (RELOC (LEFTX TEMP1)))                                 0037500
    (BLOCK NIL (SET TEMP1 (PLUS (RIGHTX TEMP1)                           0037600
       (MINUS (SET TEMP2 (LEFTX TEMP1)))))                               0037700
     (SET (LEFTX TEMP2) (SET TEMP2 (RELOC TEMP2)))                       0037800
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    (SET (CORE X) (PLUS TEMP1 TEMP2))))))                                  0037900
  (RCUTINE RELCC (X)                                                       0038000
   (CRG NIL (IF (OR (LS X TRP) (GQ X LSO))                                 0038100
     X (GQ X ARP)                                                          0038200
     (PLUS (IF (GQ X LSP) X (CORE X)) FREREL)                              0038300
     (GQ X ARO) (RIGHT X) (LS X BPC) (PLUS X PCLREL) X)))                  0038400
  (RCUTINE (FXTSP NOVALUE)                                                 0038500
   NIL (BLOCK NIL (FOR X (RESET CHC (PLUS X 1))                            0038600
     (WHILE (NQ X TRO)) (SET (RIGHT X) (RELOC (RIGHT X))))                 0038700
    (FOR X (RESET (PLUS TRC 1) (PLUS X 3))                                 0038800
     (WHILE (LS X TRP))                                                    0038900
     (BLOCK NIL (SET Y (CNELSS X))                                         0039000
      (CASE (PLUS (PREFIX X) -6)                                           0039100
       (GO T7) (GO T10) (GO T11) (GO T12) (GO T13))                        0039200
      T7 (IF (NQ (WORDAND (CORE X) 4Q6) 0)                                 0039300
       (SET (RIGHT Y) (RIGHT (RIGHT Y))))                                  0039400
      (SET Y X)                                                            0039500
      T10 (SET (RIGHT Y) (RELOC (RIGHT Y)))                                0039600
      (GO T13)                                                             0039700
      T12 (IF (EQUAL (SET TEMP1 (FXTYPE (ONEMOR X))) 45Q)                  0039800
       (BLOCK NIL (IF (EQUAL (WORDAND (SET TEMP1 (CORE Y)) 1Q15) 0)        0039900
         (SET (LEFT Y) (RELOC (LEFTX TEMP1)))) (GO T13))                   0040000
       (GR TEMP1 4) (GO X12) (EQUAL TEMP1 0) (GO T10))                     0040100
      (GO T13)                                                             0040200
      T11 (IF (EQUAL (PREFIX (SET TEMP1 (ONEMOR X))) 1)                    0040300
       (SET (LEFT TEMP1) (RIGHT (LEFT TEMP1))))                            0040400
      X12 (FIXIT Y) T13))))                                                0040500
  (RCUTINE FXTYPE (X)                                                      0040600
   (BLOCK NIL (IF (GR (SET TEMP1 (PREFIX X)) 2) (GO TX))                   0040700
    (CASE (ONEMOR TEMP1) (GO T0) (GO T1) (GO T2))                          0040800
    T2 (RETURN (FXTYPE (CNEMOR (LEFT X))))                                 0040900
    T0 (RETURN (TAG X))                                                    0041000
    T1 (SET TEMP1 (PREFIX (ONEMOR (SET TEMP2 (LEFT X)))))                  0041100
    (SET (LEFT X) (RIGHT TEMP2)) TX (RETURN TEMP1)))                       0041200
  (RCUTINE (FXARY NOVALUE)                                                 0041300
   NIL (BLOCK NIL (SET X ARO)                                              0041400
    MORE (SET Y (LEFT X))                                                  0041500
    (IF (MARKED X)                                                         0041600
     (BLOCK NIL (CASE (CNEMOR (WORDAND (PREFIX X) 7))                      0041700
       (GO OK) (GO TX) (GO TX) (GO TX) (GO TX) (GO OK) (GO TX))            0041800
      OK (SET B (PLUS X Y))                                                0041900
      (FOR A (RESET (PLUS X 1) (PLUS A 1))                                 0042000
       (WHILE (NQ A B)) (FIXIT A)) TX))                                    0042100
    (IF (NQ (SET X (PLUS X Y)) ARP) (GO MORE))))                           0042200
  (RCUTINE (FXFREE NOVALUE)                                                0042300
   NIL (BLOCK NIL (FOR X (RESET LSP (PLUS X 1))                            0042400
     (WHILE (NQ X LSO))                                                    0042500
     (BLOCK NIL (SET (LEFT X) (RELCC (LEFT X)))                            0042600
      (SET (RIGHT X) (RELOC (RIGHT X)))))))                                0042700
  (RCUTINE (FXBPS NOVALUE)                                                 0042800
   NIL (CRG NIL (BLOCK NIL (SET TEMP1 BPO)                                 0042900
     MORE (SET TEMP2 (LEFT TEMP1))                                         0043000
     (IF (NQ (WORDAND (CORE TEMP1) 4Q15) 0) (FXFN TEMP1 FALSE))            0043100
     (IF (NQ (SET TEMP1 (PLUS TEMP1 TEMP2)) BPP) (GO MORE)))))             0043200
  (RCUTINE (FXFN NOVALUE)                                                  0043300
   ((Y OCTAL) (BOOL BOOLEAN))                                              0043400
   (CRG NIL (BLOCK NIL (SET Z (PLUS Y (LEFT Y) -1))                        0043500
     (SET X (RIGHT Y))                                                     0043600
     (SET C (PLUS (IF (NQ (WORDAND (CORE X) 1Q15) 0)                       0043700
       (LEFT X) (RIGHT X)) (MINUS Y) -1))                                  0043800
     MORE (SET B (CORE Z))                                                 0043900
     (FOR A (RESET 0 (PLUS A 1))                                           0044000
      (WHILE (NQ A 24))                                                    0044100
```

```
        (BLOCK NIL (IF (GQ Y Z)                                                    0044200
          (GC OUT)                                                                 0044300
          (NQ (WORDAND B 4Q15) 0)                                                  0044400
          (IF (LS (SET D (LEFT Y)) TRP)                                            0044500
           (IF BCCL (FXRUB D))                                                     0044600
           (IF (NOT BOOL) (SET (LEFT Y) (PLUS C D)))))                             0044700
         (IF (NQ (WORDAND B 2Q15) 0)                                               0044800
          (IF (LS (SET D (RIGHT Y)) TRP)                                           0044900
           (IF BCCL (FXRUB D))                                                     0045000
           (IF (NOT BOOL) (SET (RIGHT Y) (PLUS C D)))))                            0045100
         (SET Y (CNEMOR Y)) (SET B (LSHIFT B 2))))                                 0045200
       (SET Z (ONELSS Z)) (GC MORE) OUT)))                                         0045300
    (RCUTINE PACKIT (W X Y Z)                                                      0045400
     (CRG NIL (BLOCK NIL (SET BOOL (NQ X Z))                                       0045500
       AGAIN (SET A (PLUS X (LEFT X)))                                             0045600
       (IF (NQ (WORDAND (CORE X) W) 0)                                             0045700
        (IF BOOL (BLOCK NIL (UNMARK X)                                             0045800
          MORE (SET (CORE Z) (CORE X))                                             0045900
          (SET Z (CNEMOR Z)) (IF (NQ (SET X (ONEMOR X)) A) (GO MORE)))             0046000
         (BLOCK NIL (UNMARK X) (SET X (SET Z A))))                                 0046100
        (SET BOOL (O2B. (SET X A))))                                               0046200
       (IF (NQ X Y) (GO AGAIN)) (RETURN Z)))))                                     0046300
****END OF FILE DETECTED
```

```
(INDEXD (SECTION LISP SYMBOL)                                                    C000100
  (FUNCTION (ERROR SYMBOL) ((M SYMBOL)))                                         C000200
  (FUNCTION (EXIT SYMBOL) ((M SYMBOL)))                                          C000300
  (FUNCTION (LAP SYMBOL) ((X SYMBOL) (Y SYMBOL) (Z SYMBOL)))                     C000400
  (DECLARE TTY. DISC. TAPE. CORE. CRT. (SKIPR. INTEGER OWN)                      C000500
   (SKIPF. INTEGER OWN)                                                          C000600
   (WEOF. INTEGER OWN)                                                           C000700
   (WEOT. INTEGER OWN)                                                           C000800
   (REWIND. INTEGER OWN)                                                         C000900
   (BACKR. INTEGER OWN) (BACKF. INTEGER OWN) (KEY. INTEGER OWN))                 C001000
  (FUNCTION (PRETTYP SYMBOL) ((S SYMBOL)))                                       C001100
  (FUNCTION (OPEN SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                             C001200
  (FUNCTION (SHUT SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                             C001300
  (FUNCTION (POSITION SYMBOL) ((FN SYMBOL) (DL INTEGER)))                        C001400
  (FUNCTION (INPUT SYMBOL) ((X SYMBOL)))                                         C001500
  (FUNCTION (OUTPUT SYMBOL) ((X SYMBOL)))                                        C001600
  (FUNCTION (READ SYMBOL) NIL)                                                   C001700
  (FUNCTION (PRINT SYMBOL) ((X SYMBOL)))                                         C001800
  (FUNCTION (PRIN SYMBOL) ((X SYMBOL)))                                          C001900
  (FUNCTION (PRIN0 SYMBOL) ((X SYMBOL)))                                         C002000
  (FUNCTION (PRINATOM SYMBOL) ((X SYMBOL)))                                      C002100
  (FUNCTION (PRINTOKEN SYMBOL) ((X SYMBOL)) (PRINATOM X))                        C002200
  (FUNCTION (PRINSTRING SYMBOL) ((X SYMBOL)))                                    C002300
  (FUNCTION (SYMPRINT SYMBOL) ((X SYMBOL)))                                      C002400
  (FUNCTION (SYMPRIN SYMBOL) ((X SYMBOL)))                                       C002500
  (FUNCTION (PRINCH SYMBOL) ((X SYMBOL)))                                        C002600
  (FUNCTION (READCH SYMBOL) NIL)                                                 C002700
  (FUNCTION (PRINWORD OCTAL) ((X OCTAL)))                                        C002800
  (FUNCTION (READWORD OCTAL) NIL)                                                C002900
  (FUNCTION (ENDIN NOVALUE) NIL)                                                 C003000
  (FUNCTION (ENDINR NOVALUE) NIL)                                                C003100
  (FUNCTION (ENDOUT NOVALUE) NIL)                                                C003200
  (FUNCTION (ENDOUTR NOVALUE) NIL)                                               C003300
  (FUNCTION (ENDINP NOVALUE) NIL)                                                C003400
  (FUNCTION (ENDOUTP NOVALUE) NIL)                                               C003500
  (FUNCTION (NCP NOVALUE) NIL)                                                   C003600
  (FUNCTION (NILF SYMBOL) NIL)                                                   C003700
  (ROUTINE (CLEAR NOVALUE) ((FN SYMBOL)))                                        C003800
  (FUNCTION (ARREAD SYMBOL) NIL)                                                 C003900
  (ROUTINE GETCHAR ((A (ARRAY OCTAL)) (N INTEGER)))                              C004000
  (SECTION SYS SYMBOL)                                                           C004100
  (FUNCTION MESSAGE (A))                                                         C004200
  (FUNCTION (FNTRAP NOVALUE) NIL)                                                C004300
  (FUNCTION (FMTRAP NOVALUE) NIL)                                                C004400
  (FUNCTION (RECLAIM INTEGER) ((I INTEGER)))                                     C004500
  (FUNCTION ((FVLIS1 . COMPIL) SYMBOL) (ARG))                                    C004600
  (SECTION IC SYMBOL)                                                            C004700
  (DECLARE (XXSAVE SYMBOL FLUID LOC))                                            C004800
  (DECLARE (XXFUNC (FUNCTIONAL SYMBOL) FLUID LOC)))                              C004900
(MACRO1 (SECTION SYS SYMBOL)                                                     C005000
  DEFINE (((WDPART (LAMBDA (A B S M)                                             C005100
     (LIST (QUOTE BIT)                                                           C005200
       A B (COND (M (CADR S))                                                    C005300
         (T (CONS (QUOTE CORE) (CDR S))))))))))                                  C005400
  MACRO1 (((ARSIZE (LAMBDA (S) (CONS (QUOTE LEFTAD) (CDR S))))                  C005500
    (PREFIX (LAMBDA (S) (WDPART 42 6 S NIL)))                                    C005600
    (PREFIM (LAMBDA (S) (WDPART 42 6 S T)))                                      C005700
    (TAG (LAMBDA (S) (WDPART 18 6 S NIL)))                                       C005800
    (TAGIM (LAMBDA (S) (WDPART 18 6 S T)))                                       C005900
    (LEFTAD (LAMBDA (S) (WDPART 24 18 S NIL)))                                   C006000
    (LEFTIM (LAMBDA (S) (WDPART 24 18 S T)))                                     C006100
    (RGHTAD (LAMBDA (S) (WDPART 0 18 S NIL)))                                    C006200
    (RGHTIM (LAMBDA (S) (WDPART 0 18 S T)))                                      C006300
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```
    (WORD1 (LAMBDA (S)                                                    C006400
      (LIST (QUOTE CORE)                                                  C006500
       (LIST (QUOTE I20.) (LIST (QUOTE PLUS) (CADR S) -1)))))             C006600
    (WORD2 (LAMBDA (S) (CONS (QUOTE CORE) (CDR S))))                      C006700
    (WORD3 (LAMBDA (S)                                                    C006800
      (LIST (QUOTE CORE)                                                  C006900
       (LIST (QUOTE I20.) (LIST (QUOTE PLUS) (CADR S) 1)))))              C007000
    (LINK (LAMBDA (S)                                                     C007100
      (LIST (QUOTE RGHTIM) (CONS (QUOTE WORD3) (CDR S)))))                C007200
    (PNAME (LAMBDA (S)                                                    C007300
      (LIST (QUOTE RGHTIM) (CONS (QUOTE WORD1) (CDR S)))))                C007400
    (CORES (LAMBDA (S)                                                    C007500
      (LIST (QUOTE CORE) (CONS (QUOTE S20.) (CDR S)))))                   C007600
    (CHAIN (LAMBDA (S)                                                    C007700
      (LIST (QUOTE LEFTIM) (CONS (QUOTE WORD2) (CDR S)))))                C007800
    (CHAINS (LAMBDA (S)                                                   C007900
      (LIST (QUOTE LEFTIM) (CONS (QUOTE CORES) (CDR S)))))                C008000
    (VCOUNT (LAMBDA (S) (WDPART 0 18 S NIL)))                             C008100
    (TCODE (LAMBDA (S)                                                    C008200
      (WDPART 18 3C (LIST (CAR S) (CONS (QUOTE WORD3) (CDR S))) T)))      C008300
    (TCODES (LAMBDA (S)                                                   C008400
      (LIST (QUOTE TCODE) (CONS (QUOTE S20.) (CDR S)))))                  C008500
    (XMFLAG (LAMBDA (S) (WDPART 22 1 S NIL))))))                          C008600
  (BOUNDS (SECTION SYS OCTAL)                                             C008700
    (DECLARE (TRL OCTAL OWN)                                              C008800
     (FPO OCTAL OWN)                                                      C008900
     (FPP OCTAL OWN)                                                      C009000
     (CHO OCTAL OWN)                                                      C009100
     (TRO OCTAL OWN)                                                      C009200
     (TRP OCTAL OWN)                                                      C009300
     (TRM OCTAL OWN)                                                      C009400
     (BPO OCTAL OWN)                                                      C009500
     (BPP OCTAL OWN)                                                      C009600
     (ARO OCTAL OWN)                                                      C009700
     (ARP OCTAL OWN)                                                      C009800
     (LSP OCTAL OWN) (LSC OCTAL OWN) (DELTRM OCTAL OWN)))                 C009900
  (PREDS (SECTION (LISP SYS) SYMBOL)                                      C010000
    (RCUTINE (NORMSP BOOLEAN)                                             C010100
     ((S SYMBOL)) (EQ (BIT 21 1 (WORD2 (S20. S))) 0Q))                    C010200
    (RCUTINE (ARRAYP BOOLEAN)                                             C010300
     ((S SYMBOL))                                                         C010400
     (AND ((ARSPAC . SYS) S) (EQ (BIT 3 3 (PREFIX (S20. S))) 2)))         C010500
    (RCUTINE (NUMBP BOOLEAN)                                              C010600
     ((S SYMBOL))                                                         C010700
     (CR (GQ (S2C. S) 2Q5)                                                C010800
      (AND ((ARSPAC . SYS) S)                                             C010900
       (LS (PREFIX (S20. S)) 5) (GQ (PREFIX (S20. S)) 2))))               C011000
    (RCUTINE (OCTALP BOOLEAN)                                             C011100
     ((S SYMBOL))                                                         C011200
     (CR (AND (GQ (S2C. S) 2Q5) (LS (S20. S) 4Q5))                        C011300
      (AND ((ARSPAC . SYS) S) (EQ (PREFIX (S20. S)) 2))))                 C011400
    (RCUTINE (INTP BOOLEAN)                                               C011500
     ((S SYMBOL))                                                         C011600
     (CR (GQ (S2C. S) 4Q5)                                                C011700
      (AND ((ARSPAC . SYS) S) (EQ (PREFIX (S20. S)) 3))))                 C011800
    (RCUTINE (REALP BOOLEAN)                                              C011900
     ((S SYMBOL)) (AND ((ARSPAC . SYS) S) (EQ (PREFIX (S20. S)) 4)))      C012000
    (RCUTINE (FORMALP BOOLEAN)                                            C012100
     ((S SYMBOL)) (AND ((ARSPAC . SYS) S) (EQ (PREFIX (S20. S)) 5)))      C012200
    (RCUTINE (OWNP BOOLEAN)                                               C012300
     ((S SYMBOL)) (AND ((TRSPAC . SYS) S) (EQ (PREFIX (S20. S)) 12Q)))    C012400
    (RCUTINE (FLUIDP BOOLEAN)                                             C012500
     ((S SYMBOL)) (AND ((TRSPAC . SYS) S) (EQ (PREFIX (S20. S)) 11Q)))    C012600
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(RCUTINE (FIXP BCOLEAN)                                                    0012700
 ((S SYMBOL))                                                              0012800
 (CR (GQ (S2C. S) 2Q5)                                                     0012900
  (AND ((ARSPAC . SYS) S)                                                  0013000
   (OR (EQ (PREFIX (S2C. S)) 2) (EQ (PREFIX (S2O. S)) 3)))))               0013100
(RCUTINE (IDP BOCLEAN)                                                     0013200
 ((S SYMBOL))                                                              0013300
 (CR (AND ((TRSPAC . SYS) S) (EQ (PREFIX (S2C. S)) 7)) (CHARP S)))         0013400
(RCUTINE (STRINGP BOOLEAN)                                                 0013500
 ((S SYMBOL)) (AND ((ARSPAC . SYS) S) (EQ (PREFIX (S2O. S)) 6)))           0013600
(RCUTINE (LISTP BOOLEAN)                                                   0013700
 ((X SYMBOL))                                                              0013800
 (BLOCK NIL LOOP (IF (ATOM X) (RETURN (NULL X)))                           0013900
  (SET X (CDR X)) (GO LOOP)))                                              0014000
(RCUTINE (ATOM BOOLEAN)                                                    0014100
 ((S SYMBOL)) (OR (LS (S2O. S) LSP) (GQ (S2O. S) LSO)))                    0014200
(RCUTINE (GENIDP BOOLEAN)                                                  0014300
 ((S SYMBOL)) (AND (IDP S) (EQ (BIT 18 1 (WORD2 (S2O. S))) 1)))            0014400
(RCUTINE (CHARP BOOLEAN)                                                   0014500
 ((S SYMBOL)) (AND (LS (S2O. S) TRC) (GQ (S2C. S) CHC)))                   0014600
(RCUTINE (BOOLP BOOLEAN) ((S SYMBOL)) (LS (S2O. S) 2)))                    0014700
(EQUALS (SECTION SYS SYMBOL)                                               0014800
 (FUNCTION (EQUAL. BOOLEAN)                                                0014900
  ((A SYMBOL) (B SYMBOL)) (EQL. A B TRUE))                                 0015000
 (FUNCTION (EQUALN. BOOLEAN)                                               0015100
  ((A SYMBOL) (B SYMBOL)) (EQL. A B NIL))                                  0015200
 (FUNCTION (EQL. BOOLEAN)                                                  0015300
  ((A (ARRAY OCTAL)) (B (ARRAY OCTAL)) (FN BOOLEAN))                       0015400
  (BLOCK NIL (IF (EQN A B) (LABEL LIVE (RETURN TRUE)))                     0015500
   (BLOCK ((BA BOOLEAN (ATOM B)))                                          0015600
    (IF (ATOM A) (IF BA (GO AT) (GO DIE)) BA (GO DIE)))                    0015700
   (RETURN (AND (EQL. (CAR A) (CAR B) FN)                                  0015800
    (EQL. (CDR A) (CDR B) FN)))                                            0015900
   AT (IF (OR (LS (S2O. A) TRP) (LS (S2O. B) TRP)) (GO DIE))               0016000
   (IF (AND FN (NUMBP A) (NUMBP B))                                        0016100
    (BLOCK ((BR BOOLEAN (REALP B)))                                        0016200
     (IF (REALP A)                                                         0016300
      (IF (NOT BR) (SET B (FLOAT B)))                                      0016400
      BR (SET A (FLOAT A))                                                 0016500
      (BLOCK ((BS BOOLEAN (SPACEP. B)))                                    0016600
       (IF (SPACEP. A) (IF BS (GO AR) (GO DIE)) BS (GO DIE))               0016700
       (RETURN (EQ (WORDXOR (S2O. A) (S2O. B)) 4Q5)))) (GO AR)))           0016800
   (IF (NOT (AND (SPACEP. A) (SPACEP. B)))                                 0016900
    (LABEL DIE (RETURN FALSE)))                                            0017000
   AR (BLOCK ((C OCTAL (BIT 24 24 (CORES A)))                              0017100
    (D OCTAL (BIT 24 24 (CORES B))))                                       0017200
    (IF (OR (AND (NOT FN) (NQ C D))                                        0017300
     (NQ (WORDAND (WORDXOR C D) 207777777Q) 0)) (GO DIE))                  0017400
    (BLOCK ((U OCTAL (BIT 18 3 C))                                         0017500
     (V OCTAL (BIT 18 3 D)) (FLAG BOOLEAN NIL))                            0017600
     (SET C (PLUS (BIT 0 18 C) -1))                                        0017700
     TNQ (CASE (PLUS U 1)                                                  0017800
      (CASE (PLUS V 1)                                                     0017900
       (GO SS) (GO CA) (GO SI) (GO SI) (GO SR) (GO DIE))                   0018000
      (IF (EQ V 1) (GO CA) (GO XCH))                                       0018100
      (CASE (PLUS V -1) (GO CA) (GO OI) (GO OR) (GO XCH))                  0018200
      (CASE (PLUS V -2) (GO II) (GO OR) (GO XCH))                          0018300
      (IF (EQ V 4Q) (GO II) (GO XCH))                                      0018400
      (IF (EQ V 5Q) (GO FF) (GO XCH))                                      0018500
      (IF (EQ V 6Q) (GO CA) (GO DIE)))                                     0018600
     XCH (IF (NOT (SET FLAG (NOT FLAG))) (GO DIE))                         0018700
     (CODE (LDA U) (ECH V) (STF U) (LDA A) (ECH B) (STF A))                0018800
     (GO TNQ))                                                             0018900
```

```
      CA (FOR C (STEP C -1 EQ 0) (IF (NQ (A C) (B C)) (GO DIE)))          C019000
      (GO LIVE)                                                           C019100
      SS (FOR C (STEP C -1 EQ 0)                                          C019200
       (IF (NOT (EQL. (C2S. (A C)) (C2S. (B C)) FN)) (GO DIE)))           C019300
      (GO LIVE)                                                           C019400
      OI (IF (LS C 1) (GO LIVE))                                          C019500
      II (FOR C (STEP C -1 EQ 0)                                          C019600
       (IF (NOT (EQ (O2I. (A C)) (O2I. (B C)))) (GO DIE)))                C019700
      (GO LIVE)                                                           C019800
      FF (FOR C (STEP C -1 EQ 0)                                          C019900
       (IF (NOT (EQ (BIT 0 24 (A C)) (BIT 0 24 (B C)))) (GO DIE)))        C020000
      (GO LIVE)                                                           C020100
      SI (FOR C (STEP C -1 EQ 0)                                          C020200
       (IF (NOT (OR (AND (FIXP (O2S. (A C)))                              C020300
            (EQ (SYM2INT (O2S. (A C))) (B C)))                            C020400
           (AND (REALP (O2S. (A C)))                                      C020500
            (EQ (CORE (PLUS (A C) 1)) (FLOAT (B C))))))) (GO DIE)))       C020600
      (GO LIVE)                                                           C020700
      SR (FOR C (STEP C -1 EQ 0)                                          C020800
       (IF (NOT (OR (AND (REALP (O2S. (A C)))                             C020900
            (EQ (O2R. (CORE (PLUS (A C) 1))) (O2R. (B C))))               C021000
           (AND (FIXP (O2S. (A C))) (EQ (O2S. (A C)) (O2R. (B C)))))))    C021100
        (GO DIE)))                                                        C021200
      (GO LIVE)                                                           C021300
      OR (FOR C (STEP C -1 EQ 0)                                          C021400
       (IF (NOT (EQ (FLOAT (A C)) (O2R. (B C)))) (GO DIE)))               C021500
      (GO LIVE)))))                                                       C021600
  (ARRAYS (SECTION SYS SYMBOL)                                            C021700
    (FUNCTION ((COPYARRAY . LISP) SYMBOL)                                 C021800
     ((A (ARRAY OCTAL)))                                                  C021900
     (BLOCK NIL (IF (OR (LS (S2O. A) ARO) (GQ (S2O. A) ARP))              C022000
       (RETURN NIL))                                                      C022100
      (BLOCK ((I INTEGER (ARSIZE (S2O. A))))                              C022200
       (BLOCK ((B (ARRAY OCTAL) (GETARRAY I)))                            C022300
        (FOR I (STEP (PLUS I -1) -1 LS 0) (SET (B I) (A I)))              C022400
        (SET (RGHTAD (S2O. B)) (S2O. B)) (RETURN B)))))                   C022500
    (FUNCTION ((CREATE . LISP) SYMBOL)                                    C022600
     ((N INTEGER) (TYPE SYMBOL) (VALUE SYMBOL))                           C022700
     (BLOCK ((S (ARRAY OCTAL) (GETARRAY (PLUS N 1)))                      C022800
       (P OCTAL 0)                                                        C022900
       (V OCTAL (IF VALUE (CONVRT TYPE VALUE) (DFINIT TYPE)))             C023000
       (X SYMBOL (FINDN TYPE (QUOTE ((SYMBOL . 2Q1)                       C023100
            (OCTAL . 22Q)                                                 C023200
            (INTEGER . 23Q)                                               C023300
            (REAL . 24Q) (FUNCTIONAL . 25Q) (BOOLEAN . 21Q))))))         C023400
      (IF X (SET P (CDR X)) (ERRMSG TYPE TYPMSG))                         C023500
      (SET (PREFIX (S2O. S)) P)                                           C023600
      (IF (LS N 1) (GO R))                                                C023700
      (FOR N (STEP N -1 LS 1) (SET (S N) V)) R (RETURN S)))               C023800
    (RCUTINE (ARSPAC BOOLEAN)                                             C023900
     ((S SYMBOL)) (AND (GQ (S2O. S) ARO) (LS (S2O. S) ARP)))              C024000
    (FUNCTION (GETARRAY SYMBOL)                                           C024100
     ((SIZE INTEGER))                                                     C024200
     (BLOCK ((X OCTAL ARP))                                               C024300
      (IF (LS SIZE 1)                                                     C024400
       (RETURN NIL) (LS (SET ARP (I2C. (PLUS ARP SIZE))) LSP) (GO A))     C024500
      (SET ARP X)                                                         C024600
      (RECLAIM SIZE)                                                      C024700
      (SET X ARP)                                                         C024800
      (SET ARP (I2C. (PLUS ARP SIZE)))                                    C024900
     A (SET (CORE X) (WORDOR X (SHIFT SIZE 24) 22Q14))                    C025000
      (RETURN (O2S. X))))                                                 C025100
    (RCUTINE ((TRUNC. . LISP) SYMBOL)                                     C025200
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((S SYMBOL) (N INTEGER))                                                    0025300
(IF (ARRAYP S)                                                              0025400
 (BLOCK ((Z INTEGER (ARSIZE (S2C. S)))                                      0025500
   (W OCTAL (I2C. (PLUS (S2O. S) (SET N (PLUS N 1))))))                     0025600
  (BLOCK ((I INTEGER (PLUS Z (MINUS N))))                                   0025700
   (IF (NOT (GR Z N))                                                       0025800
    (GO R) (NOT (LS (PLUS Z (S2C. S)) ARP)) (GO B))                         0025900
   (SET (CORE W) (WORDOR W (SHIFT (I2O. I) 24) 22Q14))                      0026000
   A (SET (ARSIZE (S2O. S)) N)                                              0026100
   R (RETURN S) B (SET ARP (PLUS ARP (MINUS I))) (GO A))) NIL))             0026200
(FUNCTION ((SCONCS . LISP) SYMBOL)                                          0026300
 ((A SYMBOL) (B SYMBOL)) (FCONC. A B NIL))                                  0026400
(FUNCTION ((NCONCS . LISP) SYMBOL)                                          0026500
 ((A SYMBOL) (B SYMBOL)) (FCONC. A B TRUE))                                 0026600
(FUNCTION (FCONC. SYMBOL)                                                   0026700
 ((A (ARRAY OCTAL)) (B (ARRAY OCTAL)) (FLAG BOOLEAN))                       0026800
 (BLOCK ((S (ARRAY OCTAL) A)                                                0026900
   (SA SYMBOL (STYPE A)) (SB SYMBOL (STYPE B)))                             0027000
  (IF A (IF B (GO TEST) FLAG (RETURN A) (GO COPY))                          0027100
   B (LABEL BS (SET S B)) (RETURN NIL))                                     0027200
  COPY (SET S (COPYARRAY S))                                                0027300
  R (RETURN S)                                                              0027400
  TEST (IF (NQ SA SB)                                                       0027500
   (ERRMSG (CONS SA SB)                                                     0027600
    (QUOTE (DIFFERENT STRUCTURES. SCONCS OR NCONCS))))                      0027700
  (BLOCK ((C INTEGER (ARSIZE (S2C. A)))                                     0027800
    (D INTEGER (ARSIZE (S2O. B))))                                          0027900
   (BLOCK ((Z INTEGER (PLUS C D -1)))                                       0028000
    (IF (NOT (OR (STRINGP A) (ARRAYP A)))                                   0028100
     (ERRMSG SA (QUOTE (NOT STRING OR ARRAY. SCONCS OR NCONCS)))            0028200
     (EQ C 1)                                                               0028300
     (GO BS) (NQ D 1) (GO MERGE) FLAG (RETURN A) (GO COPY))                 0028400
    MERGE (BLOCK ((I INTEGER (PLUS D -1))                                   0028500
      (E INTEGER)                                                           0028600
      (G INTEGER (SHIFT (TAG (S2C. A)) 3))                                  0028700
      (H INTEGER (SHIFT (TAG (S2C. B)) 3))                                  0028800
      (J OCTAL (I2C. (PLUS (TAG (S2O. A)) (TAG (S2O. B))))))                0028900
     (IF (EQ G 0) (GO Z0) (NOT (GR (PLUS G H) WDSIZE)) (GO Z1))             0029000
     (SET J (I2O. (PLUS J (MINUS (SHIFT WDSIZE -3)))))                      0029100
     (GO Z0)                                                                0029200
     Z1 (SET Z (PLUS Z -1))                                                 0029300
     Z0 (IF (AND FLAG (EQ ARP (PLUS (S2O. A) C))) (GO ES))                  0029400
     (SET FLAG NIL)                                                         0029500
     (SET S (GETARRAY Z))                                                   0029600
     (GO PR)                                                                0029700
     ES (IF (NOT (LS (SET E (PLUS (S2O. A) Z)) LSP)) (GO AR))               0029800
     (SET ARP E)                                                            0029900
     SE (SET S A)                                                           0030000
     (GO PR)                                                                0030100
     AR (RECLAIM I)                                                         0030200
     (SET ARP (PLUS (S2O. A) Z))                                            0030300
     (GO SE)                                                                0030400
     PR (SET (CORES S) (WORDOR (SHIFT (I2O. Z) 24) (S2O. S)))               0030500
     (SET (PREFIX (S2C. S)) (PREFIX (S2O. B)))                              0030600
     (SET (TAG (S2O. S)) J)                                                 0030700
     (IF (NOT FLAG)                                                         0030800
      (FOR E (STEP (PLUS C -1) -1 LS 1) (SET (S E) (A E))))                 0030900
     (IF (OR (EQ G 0) (NOT (LS G WDSIZE))) (GO FILL))                       0031000
     (SET H (MINUS G))                                                      0031100
     (SET G (DIFFERENCE WDSIZE G))                                          0031200
     (FOR E (STEP (PLUS Z -1) -1 LS C)                                      0031300
      (BLOCK NIL (SET I (PLUS I -1)) (SET (S E) (SHIFT (B I) G))))          0031400
     (SET E (PLUS Z -1))                                                    0031500
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        (FOR I (STEP (PLUS D -1) -1 LS 1)                                    0031600
         (BLOCK NIL (SET (S E) (WORDCR (S E) (SHIFT (B I) H)))               0031700
          (SET E (PLUS E -1))))                                              0031800
        (GO R)                                                               0031900
        FILL (SET E Z)                                                       0032000
        (FOR I (STEP I -1 LS 1) (SET (S (SET E (PLUS E -1))) (B I)))         0032100
        (GO R)))))))                                                         0032200
(LISTS (SECTION SYS SYMBOL)                                                  0032300
  (FUNCTION CONS2 (A B)                                                      0032400
   (BLOCK ((S SYMBOL (C2S. (SET LSP (I2O. (PLUS LSP -1))))))                 0032500
    (SET (CORE (S2C. S)) (S2O. B))                                           0032600
    (SET (CAR S) A) (IF (NOT (LS ARP LSP)) (RECLAIM 1)) (RETURN S)))         0032700
  (FUNCTION CONS3 (A B C) (CONS A (CONS B C)))                               0032800
  (FUNCTION CONS4 (A B C D) (CONS A (CONS B (CONS C D))))                    0032900
  (FUNCTION (LIST1 SYMBOL) ((X SYMBOL)) (CONS X NIL))                        0033000
  (FUNCTION (LIST2 SYMBOL) ((X SYMBOL) (Y SYMBOL)) (CONS X Y NIL))           0033100
  (FUNCTION (LIST3 SYMBOL)                                                   0033200
   ((X SYMBOL) (Y SYMBOL) (Z SYMBOL)) (CONS X Y Z NIL))                      0033300
  (FUNCTION (LIST4 SYMBOL)                                                   0033400
   ((X SYMBOL) (Y SYMBOL) (Z SYMBOL) (W SYMBOL)) (CONS X Y Z W NIL))         0033500
  (SECTION (LISP SYS FSM) SYMBOL)                                            0033600
  (FUNCTION LASTN ((I INTEGER) X)                                            0033700
   (BLOCK ((Y (FIRSTN I (SET X (DREVERSE X)))))                              0033800
    (SET X (DREVERSE X)) (RETURN (DREVERSE Y))))                             0033900
  (FUNCTION FIRSTN ((I INTEGER) X)                                           0034000
   (IF (OR (EQ I 0) (NULL X))                                                0034100
    NIL (CONS (CAR X) (FIRSTN (DIFFERENCE I 1) (CDR X)))))                   0034200
  (RCUTINE DREVERSE (L)                                                      0034300
   (BLOCK (M)                                                                0034400
    Z (IF (NULL L) (RETURN M))                                               0034500
    (BLOCK ((N (CDR L))) (SET (CDR L) M) (SET M L) (SET L N))                0034600
    (GO Z)))                                                                 0034700
  (FUNCTION ((EXPLODE . LISP) SYMBOL)                                        0034800
   ((S (ARRAY OCTAL)))                                                       0034900
   (BLOCK ((N INTEGER (STRINGL (IF (STRINGP S)                               0035000
        S (SET S (TOSTRG S))))) (R SYMBOL))                                  0035100
    (IF (LS N 1) (RETURN NIL))                                               0035200
    (FOR N (STEP N -1 LS 1) (SET R (CONS (GETCHAR S N) R)))                  0035300
    (RETURN R)))                                                             0035400
  (FUNCTION ((COMPRESS . LISP) SYMBOL)                                       0035500
   ((L SYMBOL))                                                              0035600
   (BLOCK NIL (FOR FSCHAR (IN L) (MAKEST))                                   0035700
    (SET FSCHAR NIL) (RETURN (MAKEST))))                                     0035800
  (FUNCTION (REVERSE SYMBOL)                                                 0035900
   ((L SYMBOL))                                                              0036000
   (BLOCK ((X SYMBOL) (M SYMBOL))                                            0036100
    (FOR X (IN L) (SET M (CONS X M))) (RETURN M)))                           0036200
  (FUNCTION (LAST SYMBOL)                                                    0036300
   ((L SYMBOL))                                                              0036400
   (BLOCK NIL A (IF (ATOM L)                                                 0036500
     (RETURN L) (NULL (CDR L)) (RETURN (CAR L)))                             0036600
    (SET L (CDR L)) (GO A)))                                                 0036700
  (FUNCTION (FIND SYMBOL)                                                    0036800
   ((A SYMBOL) (B SYMBOL))                                                   0036900
   (BLOCK ((C SYMBOL))                                                       0037000
    (FOR C (IN B)                                                            0037100
     (IF (AND (NOT (ATOM C)) (EQUALN A (CAR C))) (RETURN C)))                0037200
    (RETURN NIL)))                                                           0037300
  (RCUTINE (FINDN SYMBOL)                                                    0037400
   ((A SYMBOL) (B SYMBOL))                                                   0037500
   (BLOCK ((C SYMBOL))                                                       0037600
    (FOR C (IN B)                                                            0037700
     (IF (AND (NOT (ATOM C)) (EQN A (CAR C))) (RETURN C)))                   0037800
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    (RETURN NIL)))                                                          0037900
  (FUNCTION (MEMBER BOOLEAN)                                                0038000
   ((A SYMBOL) (B SYMBOL))                                                  0038100
   (BLOCK NIL L (IF (ATOM B)                                                0038200
     (RETURN NIL) (EQUALN A (CAR B)) (RETURN TRUE))                         0038300
    (SET B (CDR B)) (GO L)))                                                0038400
  (FUNCTION (MAPFN SYMBOL)                                                  0038500
   ((L SYMBOL) (FN (FUNCTIONAL SYMBOL SYMBOL)))                             0038600
   (BLOCK ((X SYMBOL (LIST NIL)))                                           0038700
    (BLOCK ((Y SYMBOL X) (Z SYMBOL))                                        0038800
     A (IF (NULL (SET Z (FN L))) (GO D) (ATOM Z) (GO E))                    0038900
     (SET (CDR Y) Z)                                                        0039000
     B (IF (ATOM (CDR Z)) (GO C))                                           0039100
     (SET Z (CDR Z))                                                        0039200
     (GO B)                                                                 0039300
     C (SET Y Z)                                                            0039400
     D (IF (ATOM L) (LABEL E (RETURN (CDR X))))                             0039500
     (SET L (CDR L)) (GO A))))                                              0039600
  (FUNCTION (MAPCAR SYMBOL)                                                 0039700
   ((L SYMBOL) (FN (FUNCTIONAL SYMBOL SYMBOL)))                             0039800
   (MAPFN L (FUNARG SYMBOL ((J SYMBOL))                                     0039900
     (IF (ATOM J) NIL (LIST (FN (CAR J)))))))                               0040000
  (FUNCTION (MAPLIST SYMBOL)                                                0040100
   ((L SYMBOL) (FN (FUNCTIONAL SYMBOL SYMBOL)))                             0040200
   (MAPFN L (FUNARG SYMBOL ((J SYMBOL))                                     0040300
     (IF (ATOM J) NIL (LIST (FN J))))))                                     0040400
  (FUNCTION (MAP NOVALUE)                                                   0040500
   ((L SYMBOL) (FN (FUNCTIONAL SYMBOL SYMBOL)))                             0040600
   (BLOCK ((J SYMBOL)) (FOR J (ON L) (FN J))))                              0040700
  (FUNCTION (APPEND SYMBOL)                                                 0040800
   ((A SYMBOL) BBB8)                                                        0040900
   (MAPFN A (FUNARG SYMBOL ((J SYMBOL))                                     0041000
     (IF (ATOM J) BBB8 (LIST (CAR J))))))                                   0041100
  (FUNCTION (NCONC SYMBOL)                                                  0041200
   (AAA8 BBB8)                                                              0041300
   (MAPFN (QUOTE (NIL))                                                     0041400
    (FUNARG SYMBOL ((J SYMBOL)) (IF (NULL J) BBB8 AAA8))))                  0041500
  (FUNCTION (DELETEL SYMBOL)                                                0041600
   (AAA8 (B SYMBOL))                                                        0041700
   (MAPFN B (FUNARG SYMBOL ((J SYMBOL))                                     0041800
     (IF (OR (ATOM J) (MEMBER (CAR J) AAA8)) NIL (LIST (CAR J))))))         0041900
  (FUNCTION (LENGTH INTEGER)                                                0042000
   ((L SYMBOL))                                                             0042100
   (BLOCK ((N INTEGER))                                                     0042200
    (FOR L (ON L) (SET N (PLUS N 1))) (RETURN N)))                          0042300
  (ROUTINE (NOFF SYMBOL)                                                    0042400
   ((N INTEGER) (L SYMBOL))                                                 0042500
   (BLOCK NIL (FOR L (ON L) (WHILE (GR N 0)) (SET N (PLUS N -1)))           0042600
    (RETURN L)))                                                            0042700
  (ROUTINE (MAX INTEGER)                                                    0042800
   ((I INTEGER) (J INTEGER)) (IF (GR I J) I J))                             0042900
  (ROUTINE (MIN INTEGER)                                                    0043000
   ((I INTEGER) (J INTEGER)) (IF (LS I J) I J))                             0043100
  (ROUTINE (MINR REAL) ((A REAL) (B REAL)) (IF (LS A B) A B))               0043200
  (ROUTINE (MAXR REAL) ((A REAL) (B REAL)) (IF (GR A B) A B))               0043300
  (FUNCTION (SUBST SYMBOL)                                                  0043400
   ((X SYMBOL) (Y SYMBOL) (Z SYMBOL))                                       0043500
   (IF (EQUALN Y Z)                                                         0043600
    X (ATOM Z) Z (CONS (SUBST X Y (CAR Z)) (SUBST X Y (CDR Z))))))          0043700
(STRING (SECTION (LISP SYS FSM) SYMBOL)                                     0043800
  (FUNCTION (STRINGL INTEGER)                                               0043900
   ((S SYMBOL))                                                             0044000
   (IF (STRINGP S)                                                          0044100
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    (PLUS (TAG (S2C. S)) (TIMES (ARSIZE (S2O. S)) 6) -12)                0044200
    (ERRMSG S (QUOTE (NCT A STRING)))))                                  0044300
  (SECTION (FSM SYS) SYMBOL)                                             0044400
  (FUNCTION (MAKEST SYMBOL)                                              0044500
   NIL (BLOCK ((ST SYMBOL)                                               0044600
    (I OCTAL (I2O. (PLUS 1 (TAG (S2O. BASEST)))))))                      0044700
    (IF (NCT FSCHAR) (GO START))                                         0044800
    (BLOCK ((OCT OCTAL (CH2OCT FSCHAR)))                                 0044900
     (CASE I (GO SO)  (GO S1) (GO S2) (GO S3) (GO S4) (GO S5) (GO S6))   0045000
     SO (SET (BASEST 1) (SHIFT OCT 40))                                  0045100
     (GO R)                                                              0045200
     S1 (SET OCT (SHIFT OCT 32))                                         0045300
     S5 (SET (BASEST 1) (WORDOR OCT (BASEST 1)))                         0045400
     R (SET (TAG (S2O. BASEST)) I)                                       0045500
     (RETURN NIL)                                                        0045600
     S2 (SET OCT (SHIFT OCT 24))                                         0045700
     (GO S5)                                                             0045800
     S3 (SET OCT (SHIFT OCT 16))                                         0045900
     (GO S5)                                                             0046000
     S4 (SET OCT (SHIFT OCT 8))                                          0046100
     (GO S5)                                                             0046200
     S6 (SET WORKST (NCONCS WORKST BASEST))                              0046300
     (SET I 1Q) (GO SO))                                                 0046400
    START (SET ST (NCONCS WORKST BASEST))                                0046500
    (SET WORKST NIL) (SET (TAG (S2C. BASEST)) 0Q) (RETURN ST)))          0046600
  (FUNCTION ((TOSTRG . LISP) SYMBOL)                                     0046700
   ((S SYMBOL))                                                          0046800
   (BLOCK NIL (IF (STRINGP S)                                            0046900
    (RETURN (COPYARRAY S))                                               0047000
    (CHARP S)                                                            0047100
    (GO CH)                                                              0047200
    (IDP S)                                                              0047300
    (GO ID)                                                              0047400
    (NUMBP S)                                                            0047500
    (RETURN (NUMSTR S))                                                  0047600
    (NOT S)                                                              0047700
    (GO NL)                                                              0047800
    (BOOLP S)                                                            0047900
    (GO TR) (FORMALP S) (BLOCK NIL (SET S (QUOTE F.....)) (GO ID)))      0048000
    (ERRMSG S (QUOTE (NOT A TOKEN)))                                     0048100
    CH (SET FSCHAR NIL)                                                  0048200
    (MAKEST)                                                             0048300
    (SET FSCHAR S)                                                       0048400
    (MAKEST)                                                             0048500
    R (SET FSCHAR NIL)                                                   0048600
    (RETURN (MAKEST))                                                    0048700
    ID (IF (AND (GENIDP S) (EQ (WORD1 (S2O. S)) 0Q))                     0048800
     (GENPNAME S))                                                       0048900
    IDS (IF (EQ (BIT 2 1 (TAG (S2O. S))) 0Q)                             0049000
     (BLOCK ((A (ARRAY OCTAL) (GETARRAY 2))                              0049100
       (B OCTAL (TAGIM (WORD3 (S2O. S)))))                               0049200
      (SET (PREFIX (S2O. A)) 6Q)                                         0049300
      (IF (EQ B 0Q) (RETURN (TRUNC. A 0)))                               0049400
      (SET (A 1) (WORD1 (S2O. S)))                                       0049500
      (SET (TAG (S2O. A)) B) (RETURN A)))                                0049600
    (RETURN (COPYARRAY (C2S. (PNAME (S2O. S)))))                         0049700
    TR (SET S TRUE.) (GO IDS) NL (SET S NIL.) (GO IDS)))                 0049800
  (SECTION (SYS FSM LISP) SYMBOL)                                        0049900
  (FUNCTION (NUMSTR SYMBOL)                                              0050000
   ((X SYMBOL))                                                          0050100
   (BLOCK ((I INTEGER))                                                  0050200
    (IF (INTP X)                                                         0050300
     (BLOCK NIL (SET I X)                                                0050400
```

```
 A (IF (LS I 0)                                                          0050500
  (BLOCK NIL (SET FSCHAR (QUOTE '-))                                     0050600
   (MAKEST) (SET I (MINUS I)))))                                         0050700
(REALP X)                                                               0050800
(BLOCK ((X REAL X))                                                     0050900
 (IF (EQ X 0.0) (BLOCK NIL (STMAKE (QUOTE ('0 '. '0))) (GO E)))         0051000
 (IF (LS X 0.0)                                                         0051100
  (BLOCK NIL (SET FSCHAR (QUOTE '-))                                    0051200
   (MAKEST) (SET X (MINUS X))))                                         0051300
 (BLOCK ((J INTEGER (PLUS (BIT 36 11 (R2D. X)) -1025))                  0051400
   (M REAL))                                                            0051500
  (SET I (ENTIER (TIMES 0.3010299954 J)))                               0051600
  C (SET M (EXPT 10.0 (ABS I)))                                         0051700
  (IF (GQ (SET M (IF (LS I 0)                                           0051800
      (TIMES X M) (GR I 0) (QUOTIENT X M) X)) 10.0)                     0051900
   (SET I (PLUS I 1)) (LS M 1.0) (SET I (PLUS I -1)) (GO D))            0052000
  (GO C)                                                                0052100
  D (BLOCK ((K SYMBOL NIL) (CARRY BOOLEAN FALSE))                       0052200
   (SET J 0)                                                            0052300
   (IF (LS I 0) (GO G))                                                 0052400
   (IF (GR I 11) (SET X (QUOTIENT X (EXPT 10.0 (PLUS I -11)))))         0052500
   (BLOCK ((XX INTEGER (ENTIER X)))                                     0052600
    (SET M (TIMES 10.0 (DIFFERENCE X XX)))                              0052700
    LOOP (IF (EQ XX 0) (GO GG))                                         0052800
    (SET K (CONS (OCT2CH (WORDOR 6Q1 (REMAINDER XX 10))) K))            0052900
    (SET J (PLUS J 1))                                                  0053000
    (SET XX (IQUOTIENT XX 10))                                          0053100
    (GO LOOP) GG (SET K (DREVERSE K)))                                  0053200
   G (FOR J (STEP J 1 EQ 12)                                            0053300
    (BLOCK ((XX INTEGER (ENTIER M)))                                    0053400
     (SET K (CONS (OCT2CH (WORDOR 6Q1 XX)) K))                          0053500
     (SET M (TIMES 10.0 (DIFFERENCE M XX)))))                           0053600
   (IF (GR M 5.0) (SET CARRY TRUE))                                     0053700
   (BLOCK ((KK SYMBOL NIL) (EL SYMBOL))                                 0053800
    (FOR EL (IN K)                                                      0053900
     (UNLESS (AND (EQN (IF (NOT CARRY)                                  0054000
         EL (SET EL (IF (EQN EL (QUOTE '9))                             0054100
           (QUOTE '0)                                                   0054200
           (BLOCK NIL (SET CARRY FALSE)                                 0054300
            (RETURN (CHEAT INTEGER SYMBOL (PLUS 1 (CHEAT SYMBOL         0054400
              INTEGER EL))))))))) (QUOTE '0)) (NOT KK)))                0054500
     (SET KK (CONS EL KK))) (SET K KK))                                 0054600
   (IF (LQ (SET I (PLUS I 1)) 0) (GO S))                                0054700
   (SET FSCHAR (CAR K))                                                 0054800
   (MAKEST)                                                             0054900
   (SET K (CDR K))                                                      0055000
   (SET I (PLUS I -1))                                                  0055100
   S (SET FSCHAR (QUOTE '.))                                            0055200
   (MAKEST)                                                             0055300
   U (IF (NULL K)                                                       0055400
    (IF (EQ I 0)                                                        0055500
     (GO E) (BLOCK NIL (SET FSCHAR (QUOTE E)) (MAKEST) (GO A)))         0055600
    (BLOCK NIL (SET FSCHAR (CAR K))                                     0055700
     (MAKEST) (SET K (CDR K)) (GO U))))))                               0055800
(OCTALP X)                                                              0055900
(BLOCK ((Q OCTAL X))                                                    0056000
 (FOR I (STEP 15 -1 EQ 0)                                               0056100
  (WHILE (EQ (BIT 45 3 Q) 0Q)) (SET Q (SHIFT Q 3)))                     0056200
 (FOR I (STEP I -1)                                                     0056300
  (BLOCK NIL (SET FSCHAR (OCT2CH (WORDOR 6Q1 (BIT 45 3 Q))))           0056400
   (MAKEST)                                                             0056500
   (SET Q (SHIFT Q 3))                                                  0056600
   (IF (AND (EQ Q 0) (OR (EQ I 0) (GR I 3))) (GO Q))))                  0056700
```

```
      Q (SET FSCHAR (QUOTE Q)) (MAKEST) (IF (EQ I 0) (GO E))))          C056800
     I (BLOCK ((K SYMBOL NIL))                                          C056900
      X (SET K (CONS (OCT2CH (WORDOR 6Q1 (REMAINDER I 10))) K))         C057000
      (SET I (IQUOTIENT I 10)) (IF (GR I 0) (GO X)) (STMAKE K))         C057100
     E (SET FSCHAR NIL) (RETURN (MAKEST))))                             C057200
 (FUNCTION (STMAKE NOVALUE)                                             C057300
  ((A SYMBOL)) (FOR FSCHAR (IN A) (MAKEST))))                           C057400
(IDENTS (SECTION SYS SYMBOL)                                            C057500
  (DECLARE (GENNO INTEGER OWN 10000) (GENPFX SYMBOL OWN (QUOTE A)))     C057600
  (FUNCTION ((GETID . LISP) SYMBOL)                                     C057700
   ((S (ARRAY OCTAL)))                                                  C057800
   (BLOCK ((B INTEGER (S2O. (OBLIST (BUCKET S))))                       C057900
     (W INTEGER (LEFTAD (S2O. S))))                                     C058000
    (IF (GR W 2)                                                        C058100
     (GO LONG)                                                          C058200
     (EQ (TAG (S2O. S)) 1)                                              C058300
     (RETURN (OCT2CH (BIT 40 8 (S 1))))                                 C058400
     (LS W 2) (SET W 0) (SET W (S 1)))                                  C058500
    SHORT (IF (EQ B 0)                                                  C058600
     (GO NO)                                                            C058700
     (AND (NQ (BIT 20 1 (WORD2 B)) 1) (EQ W (WORD1 B)))                 C058800
     (RETURN (O2S. B)))                                                 C058900
    (SET B (LINK B))                                                    C059000
    (GO SHORT)                                                          C059100
    LONG (SET W (BIT 24 24 (S 1)))                                      C059200
    TEST (IF (EQ B 0)                                                   C059300
     (GO NO)                                                            C059400
     (AND (NQ (BIT 20 1 (WORD2 B)) 0)                                   C059500
      (EQ (BIT 24 24 (WORD1 B)) W) (EQ S (O2S. (PNAME B))))             C059600
     (RETURN (O2S. B))) (SET B (LINK B)) (GO TEST) NO (RETURN NIL)))    C059700
 (FUNCTION (GENPNAME SYMBOL)                                            C059800
  ((S SYMBOL))                                                          C059900
  (BLOCK ((P (ARRAY OCTAL)                                              C060000
    (SCONCS (TOSTRG GENPFX) (NUMSTR GENNO))))                           C060100
   (IF (GQ GENNO 100000) (GO B))                                        C060200
   A (SET (WORD1 (S2O. S)) (P 1))                                       C060300
   (SET (TAGIM (WORD3 (S2O. S))) (TAGIM (CORE (S2O. P))))               C060400
   (SET GENNO (I2O. (PLUS GENNO 1)))                                    C060500
   (RETURN S)                                                           C060600
   B (SET GENNO 0Q)                                                     C060700
   (SET GENPFX (IF (EQ GENPFX (QUOTE Z))                                C060800
     (QUOTE A) (CHEAT INTEGER SYMBOL (PLUS (S2O. GENPFX) 1))))          C060900
   (GO A)))                                                             C061000
 (FUNCTION (GENID SYMBOL)                                               C061100
  NIL (BLOCK ((S SYMBOL ((TRIPLE . SYS))))                              C061200
   (SET (WORD1 (S2O. S)) 0)                                             C061300
   (SET (WORD2 (S2O. S)) 700000001Q6)                                   C061400
   (SET (CHAINS S) (S2O. S)) (SET (WORD3 (S2O. S)) 0) (RETURN S)))      C061500
 (DECLARE (OBLIST (ARRAY SYMBOL) OWN)                                   C061600
  (OBLSIZ INTEGER OWN 125) (BUCKNO INTEGER OWN))                        C061700
 (ROUTINE (BUCKET INTEGER)                                              C061800
  ((S (ARRAY OCTAL)))                                                   C061900
  (SET BUCKNO (IF (LS (LEFTAD (S2O. S)) 2)                              C062000
    1 (PLUS 1 (REMAINDER (ABS (S 1)) OBLSIZ)))))                        C062100
 (SECTION (FSM SYS) SYMBOL)                                             C062200
 (DECLARE (BASEST (ARRAY OCTAL) OWN (QUOTE (*STRING AAAAA)))            C062300
  (WORKST (ARRAY OCTAL) OWN NIL)                                        C062400
  (FSMSYM SYMBOL OWN)                                                   C062500
  (RMSG (ARRAY SYMBOL)                                                  C062600
   OWN (QUOTE (*SYMBOL (*STRING '  IS '  ILLEGAL '  TOKEN '  SYNTAX)   C062700
     (*STRING '  IS '  ILLEGAL '  TOKEN '  IN '  DATUM)                 C062800
     (*STRING '  FILE '  TERMINATOR '  INSIDE '  DATUM)                 C062900
     (*STRING '. '  IS '  ILLEGAL '  AFTER '  LPAR)                    C063000
```

```
      (*STRING '  FOUND '  INSTEAD '  OF '  ')                                  0063100
      '  IN '  OCTTED '  PAIR))))                                               0063200
   (XXCHAR SYMBOL OWN)                                                         0063300
   ((GNLIST . SYS) SYMBOL NIL)                                                 0063400
   (SPFLAG BOOLEAN OWN NIL) (FSCHAR SYMBOL OWN NIL))                           0063500
  (FUNCTION ((MAKID . FSM) SYMBOL)                                             0063600
   NIL (BLOCK ((S SYMBOL ((GETID . LISP) FSMSYM)))                             0063700
    (IF S (RETURN S))                                                          0063800
    (SET S (TRIPLE))                                                           0063900
    (BLOCK ((A (ARRAY OCTAL) FSMSYM)                                           0064000
      (L SYMBOL ((OBLIST . SYS) (BUCKNO . SYS)))                               0064100
      (W2 OCTAL (IF SPFLAG 1Q7 0Q)))                                           0064200
     (BLOCK ((N OCTAL (ARSIZE (S2Q. A))) (W3 OCTAL (S2Q. L)))                  0064300
      (IF (NQ N 2) (GO LONG))                                                  0064400
      (SET (WORD1 (S2Q. S)) (A 1))                                             0064500
      (SET (TAGIM W3) (TAG (S2Q. A)))                                          0064600
      R (SET (WORD3 (S2Q. S)) W3)                                              0064700
      (SET (PREFIM W2) 7Q)                                                     0064800
      (SET (WORD2 (S2Q. S)) W2)                                                0064900
      (SET (CHAINS S) (S2Q. S))                                                0065000
      (SET ((OBLIST . SYS) (BUCKNO . SYS)) S)                                  0065100
      (RETURN S)                                                               0065200
      LONG (IF (GR N 2) (GO L1))                                               0065300
      (SET W2 1Q7)                                                             0065400
      (GO R)                                                                   0065500
      L1 (SET (WORD1 (S2Q. S))                                                 0065600
       (WORDOR (S2Q. FSMSYM) (WORDAND 7777777Q8 (A 1))))                       0065700
      (SET (BIT 20 1 W2) 1Q) (GO R)))))                                        0065800
  (FUNCTION ((MAKEIC . LISP) SYMBOL)                                           0065900
   ((A (ARRAY OCTAL)))                                                         0066000
   (BLOCK NIL (SET SPFLAG (SPELLP A))                                          0066100
    (SET FSMSYM (COPYARRAY A)) (RETURN ((MAKID . FSM)))))                      0066200
  (FUNCTION (MGENID SYMBOL)                                                    0066300
   NIL (BLOCK ((R SYMBOL (FIND FSMSYM GNLIST)))                                0066400
    (IF R (RETURN (CDR R)))                                                    0066500
    (SET GNLIST (CONS (CONS FSMSYM (SET R (GENID))) GNLIST))                   0066600
    (RETURN R)))                                                               0066700
  (FUNCTION ((MAKIDB . FSM) SYMBOL)                                            0066800
   NIL (BLOCK ((A (ARRAY OCTAL) FSMSYM))                                       0066900
    (IF (EQ (LEFTAD (S2Q. A)) 2)                                               0067000
     (BLOCK ((W OCTAL (A 1)))                                                  0067100
      (IF (EQ W (WORD1 (S2Q. TRUE.)))                                          0067200
       (RETURN TRUE)                                                           0067300
       (OR (EQ W (WORD1 (S2Q. NIL.))) (EQ W (WORD1 (S2Q. FALSE.))))           0067400
       (RETURN NIL)))) (SET SPFLAG NIL) (RETURN ((MAKID . FSM)))))             0067500
  (DECLARE (TRUE. SYMBOL OWN (QUOTE (*IDENTIFIER TRUE)))                       0067600
   (FALSE. SYMBOL OWN (QUOTE (*IDENTIFIER FALSE)))                             0067700
   (NIL. SYMBOL OWN (QUOTE (*IDENTIFIER 'N 'I 'L))))                           0067800
  (SECTION (IO FSM LISP SYS) SYMBOL)                                           0067900
  (DECLARE (STSPEL SYMBOL OWN)                                                 0068000
   (STSAVE SYMBOL OWN) (STR.CH INTEGER OWN))                                   0068100
  (FUNCTION ((S.SUPL . IO) SYMBOL)                                             0068200
   NIL (IF (LS (STRINGL STSPEL) STR.CH)                                        0068300
    (OCT2CH 34Q)                                                               0068400
    (BLOCK ((X SYMBOL (GETCHAR STSPEL STR.CH)))                                0068500
     (SET STR.CH (PLUS STR.CH 1)) (RETURN X))))                                0068600
  (SECTION (FSM IC LISP SYS) SYMBOL)                                           0068700
  (FUNCTION (TOKEN INTEGER) NIL)                                               0068800
  (FUNCTION ((PARSE . LISP) INTEGER)                                           0068900
   ((A SYMBOL) (C INTEGER))                                                    0069000
   (BLOCK ((TT (FUNCTIONAL SYMBOL) (XXFUNC . IO))                              0069100
     (ZZ SYMBOL (XXSAVE . IC)))                                                0069200
    (SET (XXFUNC . IO) S.SUPL)                                                 0069300
```

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    (SET (XXSAVE . IO) STSAVE)                                                    0069400
    (SET STSPEL A)                                                                0069500
    (SET STR.CH C)                                                                0069600
    (SET C (TOKEN))                                                               0069700
    (SET STSAVE (XXSAVE . IO))                                                    0069800
    (SET (XXFUNC . IO) TT) (SET (XXSAVE . IO) ZZ) (RETURN C)))                    0069900
  (FUNCTION ((SPELLP . FSM) BOOLEAN)                                              0070000
   ((A (ARRAY OCTAL)))                                                            0070100
   (BLOCK ((L INTEGER (STRINGL A)))                                               0070200
    (RETURN (OR (LS L 1)                                                          0070300
      (AND (LS L 6)                                                               0070400
       (OR (EQ (SET L (A 1)) (WORD1 (S2O. TRUE.)))                                0070500
        (EQ L (WORD1 (S2O. NIL.))) (EQ L (WORD1 (S2O. FALSE.)))))                 0070600
       (LS (BLOCK NIL (SET STSAVE NIL)                                            0070700
        (SET L (PARSE A 1))                                                       0070800
        (IF (GR STR.CH (STRINGL STSPEL)) (RETURN L) (RETURN 0))) 12)              0070900
       (GR L 15))))) (SECTION LISP SYMBOL))                                       0071000
 (ARITH (SECTION SYS SYMBOL)                                                      0071100
   (FUNCTION (SYMSGN INTEGER) ((A SYMBOL)) (SIGN (SYM2REAL A)))                   0071200
   (FUNCTION (SYMABS SYMBOL) ((A SYMBOL)) (TIMES A (SIGN A)))                     0071300
   (FUNCTION (STIMS SYMBOL)                                                       0071400
    ((A SYMBOL) (B SYMBOL))                                                       0071500
    (IF (FIXP A) (TIMES (SYM2INT A) B) (TIMES (SYM2REAL A) B)))                   0071600
   (FUNCTION (STIMR REAL)                                                         0071700
    ((A REAL) (B SYMBOL)) (TIMES A (SYM2REAL B)))                                 0071800
   (FUNCTION (STIMI SYMBOL)                                                       0071900
    ((A INTEGER) (B SYMBOL))                                                      0072000
    (IF (FIXP B) (TIMES A (SYM2INT B)) (TIMES A (SYM2REAL B))))                   0072100
   (FUNCTION (SPLUS SYMBOL)                                                       0072200
    ((A SYMBOL) (B SYMBOL))                                                       0072300
    (IF (FIXP A) (PLUS (SYM2INT A) B) (PLUS (SYM2REAL A) B)))                     0072400
   (FUNCTION (SPLUR REAL)                                                         0072500
    ((A REAL) (B SYMBOL)) (PLUS A (SYM2REAL B)))                                  0072600
   (FUNCTION (SPLUI SYMBOL)                                                       0072700
    ((A INTEGER) (B SYMBOL))                                                      0072800
    (IF (FIXP B) (PLUS A (SYM2INT B)) (PLUS A (SYM2REAL B))))                     0072900
   (FUNCTION (SMINS SYMBOL)                                                       0073000
    ((A SYMBOL) (B SYMBOL))                                                       0073100
    (IF (FIXP B)                                                                  0073200
     (DIFFERENCE A (SYM2INT B)) (DIFFERENCE A (SYM2REAL B))))                     0073300
   (FUNCTION (SMINI SYMBOL)                                                       0073400
    ((A INTEGER) (B SYMBOL))                                                      0073500
    (IF (FIXP B)                                                                  0073600
     (DIFFERENCE A (SYM2INT B)) (DIFFERENCE A (SYM2REAL B))))                     0073700
   (FUNCTION (SMINR REAL)                                                         0073800
    ((A REAL) (B SYMBOL)) (DIFFERENCE A (SYM2REAL B)))                            0073900
   (FUNCTION (MINSYM SYMBOL)                                                      0074000
    ((A SYMBOL))                                                                  0074100
    (IF (FIXP A) (MINUS (SYM2INT A)) (MINUS (SYM2REAL A))))                       0074200
   (SECTION (LISP SYS) SYMBOL)                                                    0074300
   (RCUTINE ((REMAINDER . LISP) INTEGER)                                          0074400
    ((A INTEGER) (B INTEGER))                                                     0074500
    (DIFFERENCE A (TIMES B (IQUOTIENT A B))))                                     0074600
   (RCUTINE (CCTRCUND CCTAL) ((A REAL)) (ROUND A))                                0074700
   (RCUTINE (ROUND INTEGER) ((N REAL)) (ENTIER (PLUS N 0.5)))                     0074800
   (RCUTINE (ENTIER INTEGER)                                                      0074900
    ((N REAL))                                                                    0075000
    (IF (GQ N 0)                                                                  0075100
     (SCALE (BIT 0 36 (R2O. N))                                                   0075200
      (DIFFERENCE (BIT 36 12 (R2O. N)) 2044Q))                                    0075300
     (MINUS (ENTIER (DIFFERENCE (O2R. 200077777777777Q) N)))))                    0075400
   (FUNCTION (EXPT REAL)                                                          0075500
    ((X REAL) (Y INTEGER))                                                        0075600
```

```
 (IF (LS Y 0)                                                                  0075700
  (QUOTIENT 1.0 (EXPT X (MINUS Y)))                                            0075800
  (BLOCK ((R REAL 1.0))                                                        0075900
   A (IF (EQ Y 0) (RETURN R))                                                  0076000
   (SET Y (PLUS Y -1)) (SET R (TIMES R X)) (GO A)))))                          0076100
ITTER (SECTION SYS SYMBOL)                                                     0076200
(RCUTINE (BITTST BOOLEAN)                                                      0076300
 ((X INTEGER) (Y INTEGER))                                                     0076400
 (AND (GQ X 0) (GR Y 0) (LQ (PLUS X Y) WDSIZE)))                               0076500
(DECLARE (WDSIZE INTEGER OWN 48))                                              0076600
(RCUTINE (BITS OCTAL)                                                          0076700
 ((X INTEGER) (Y INTEGER) (Z OCTAL))                                           0076800
 (IF (BITTST X Y)                                                              0076900
  (WORDAND (INVERT (SHIFT (INVERT 0Q) Y))                                      0077000
   (SHIFT Z (MINUS X))) 0Q))                                                   0077100
(RCUTINE (BITSET OCTAL)                                                        0077200
 ((X INTEGER) (Y INTEGER) (Z OCTAL LCC) (W OCTAL))                             0077300
 (IF (BITTST X Y)                                                              0077400
  (SET Z (BLOCK ((MASK OCTAL (INVERT 0Q)))                                     0077500
    (SET Y (PLUS WDSIZE (MINUS Y)))                                            0077600
    (SET MASK (SHIFT (SHIFT (SHIFT MASK (MINUS X)) Y)                          0077700
     (PLUS X (MINUS Y))))                                                      0077800
    (RETURN (WORDOR (WORDAND (SHIFT W X) MASK)                                 0077900
     (WORDAND Z (INVERT MASK))))))) W)))                                       0078000
(CONVERTS (SECTION (LISP SYS) SYMBOL)                                          0078100
 (RCUTINE ((INT2OCT . LISP) OCTAL) ((A INTEGER)) A)                            0078200
 (FUNCTION (SYM2OCT OCTAL)                                                     0078300
  ((S (ARRAY OCTAL)))                                                          0078400
  (BLOCK ((X INTEGER (DIFFERENCE (S2O. S) 4Q5)))                               0078500
   (IF (GQ X 0)                                                               0078600
    (GO A)                                                                     0078700
    (GQ (SET X (PLUS X 2Q5)) 0)                                                0078800
    (GO B)                                                                     0078900
    (OCTALP S)                                                                 0079000
    (RETURN (S 1)) (INTP S) (GO C) (REALP S) (GO D) (NUMERR S))                0079100
   A (SET X (DIFFERENCE X 2Q5))                                                0079200
   B (RETURN (IF (EQ X 0) 0Q (I2O. X)))                                        0079300
   C (SET X (S 1)) (GO B) D (SET X (ENTIER (O2R. (S 1)))) (GO B)))             0079400
 (FUNCTION (SYM2INT INTEGER) ((S SYMBOL)) (O2I. (SYM2OCT S)))                  0079500
 (FUNCTION (SYM2REAL REAL)                                                     0079600
  ((S (ARRAY OCTAL)))                                                          0079700
  (IF (REALP S)                                                                0079800
   (O2R. (S 1)) (FIXP S) (FLOAT (SYM2OCT S)) (NUMERR S)))                      0079900
 (FUNCTION (NUMERR SYMBOL)                                                     0080000
  ((S SYMBOL)) (ERROR (CONS S (QUOTE (NOT A NUMBER)))))                        0080100
 (FUNCTION (OCT2SYM SYMBOL)                                                    0080200
  ((X OCTAL))                                                                  0080300
  (IF (EQ (BIT 16 32 X) 0Q)                                                    0080400
   (O2S. (PLUS X 2Q5))                                                         0080500
   (BLOCK ((A (ARRAY OCTAL) (GETARRAY 2)))                                     0080600
    (SET (PREFIX (S2O. A)) 2) (SET (A 1) X) (RETURN A))))                      0080700
 (FUNCTION (REAL2SYM SYMBOL)                                                   0080800
  ((X REAL))                                                                   0080900
  (BLOCK ((A (ARRAY OCTAL) (GETARRAY 2)))                                      0081000
   (SET (PREFIX (S2O. A)) 4) (SET (A 1) (R2O. X)) (RETURN A)))                 0081100
 (FUNCTION (INT2SYM SYMBOL)                                                    0081200
  ((X INTEGER))                                                                0081300
  (IF (AND (LS X 2Q5) (GQ X 777777777757777Q))                                 0081400
   (O2S. (I2O. (PLUS X 6Q5)))                                                  0081500
   (BLOCK ((A (ARRAY OCTAL) (GETARRAY 2)))                                     0081600
    (SET (PREFIX (S2O. A)) 3) (SET (A 1) (I2O. X)) (RETURN A))))               0081700
 (FUNCTION (CH2OCT OCTAL)                                                      0081800
  ((S SYMBOL))                                                                 0081900
```

```
    (IF (CHARP S)                                                          0082000
     (DIFFERENCE (S2O. S) CHO)                                             0082100
     (ERRMSG S (QUOTE (IS NOT A CHARACTER)))))                             0082200
   (FUNCTION (OCT2CH SYMBOL)                                               0082300
    ((X OCTAL))                                                            0082400
    (IF (AND (LS (SET X (I2O. (PLUS X CHO))) TRO) (GQ X CHO))              0082500
     (O2S. X)                                                              0082600
     (ERRMSG (I2O. (DIFFERENCE X CHO))                                     0082700
      (QUOTE (IS NOT CHARACTER REPRESENTATION)))))                         0082800
   (FUNCTION (FORM2SYM SYMBOL)                                             0082900
    ((X (FUNCTIONAL NOVALUE)))                                             0083000
    (BLOCK ((A (ARRAY OCTAL) (GETARRAY 2)))                                0083100
     (SET (PREFIX (S2O. A)) 5) (SET (A 1) (F2O. X)) (RETURN A)))           0083200
   (FUNCTION (SYM2FORM FUNCTIONAL)                                         0083300
    ((S (ARRAY OCTAL)))                                                    0083400
    (IF (FORMALP S)                                                        0083500
     (O2F. (S 1)) (ERRMSG S (QUOTE (IS NOT A FUNCTIONAL))))))              0083600
 (UTILITY (SECTION SYS SYMBOL)                                             0083700
   (FUNCTION (ERMSG1 SYMBOL) ((A SYMBOL)) (ERROR A))                       0083800
   (FUNCTION (ERRMSG SYMBOL)                                               0083900
    ((A SYMBOL) (B SYMBOL)) (ERROR (CONS A B)))                            0084000
   (FUNCTION (TRIPLE SYMBOL)                                               0084100
    NIL (BLOCK ((X OCTAL TRL))                                             0084200
     (IF (EQ X 0) (GO A))                                                  0084300
     (SET TRL (LINK TRL))                                                  0084400
     (RETURN (O2S. X))                                                     0084500
     A (SET TRP (I2O. (PLUS TRP 3)))                                       0084600
     (ADPDOK 3) (RETURN (O2S. (I2O. (PLUS TRP -2))))))                     0084700
   (ROUTINE (ADPDOK NOVALUE)                                               0084800
    ((C INTEGER))                                                          0084900
    (BLOCK NIL (SET (BIT 24 18 (CORENTRY PDOK1))                           0085000
     (PLUS (BIT 24 18 (CORENTRY PDOK1)) C))                                0085100
     (SET (BIT 24 18 (CORE (PLUS (ENTRY PDOK) 1)))                         0085200
      (PLUS (BIT 24 18 (CORE (PLUS (ENTRY PDOK) 1))) C))))                 0085300
   (ROUTINE (SPACEP. BOOLEAN)                                              0085400
    ((S SYMBOL)) (AND (GQ (S2O. S) TRO) (LS (S2O. S) LSO)))                0085500
   (ROUTINE (TRSPAC BOOLEAN)                                               0085600
    ((S SYMBOL)) (AND (GQ (S2O. S) TRO) (LS (S2O. S) TRP))))               0085700
 (DECLARES (SECTION SYS SYMBOL)                                            0085800
   (DECLARE DECLU SQWKUN)                                                  0085900
   (FUNCTION MAKEFREE (N S STOR TYPE X)                                    0086000
    (BLOCK ((FR (GETFREE N S))                                             0086100
      (TES (FIND STOR KINDLIST))                                           0086200
      (WRD1 OCTAL) (WRD1 FR) (WRD3 OCTAL) (WRD3 FR)                        0086300
     (IF (NULL TES) (GO KINDER))                                           0086400
     (BLOCK ((TEST OCTAL (CDR TES)))                                       0086500
      (IF (EQ TEST 2Q)                                                     0086600
       (GO MS)                                                             0086700
       (NULL (TYPEP TYPE)) (GO TYPERR) (SET TYPE (STANTP TYPE)))           0086800
      (IF (NULL FR) (GO MF))                                               0086900
      (BLOCK ((FG (FVLIST FR)))                                            0087000
       (IF (NQ (CADR FG) TYPE)                                             0087100
        (GO REDEF)                                                         0087200
        (NQ (CADDR FG) X)                                                  0087300
        (GO REDEF)                                                         0087400
        (EQ TEST 0Q)                                                       0087500
        (GO R)                                                             0087600
        (NQ (CDR (FIND (CAR FG) KINDLIST)) TEST) (GO REDEF)))              0087700
      MX (SET (XMFLAG (S2O. FR)) (IF (NQ STOR (QUOTE FREE)) 1Q 0Q))        0087800
      R (RETURN FR)                                                        0087900
      REDEF (IF (NQ (VCOUNT (S2O. FR)) 0Q) (GO RDECER))                    0088000
      (MESSAGE (APPEND (QUOTE (NEW DECLARATION FOR))                       0088100
       (LIST (CONS N S))))                                                 0088200
```

```
    MF (IF (NQ TEST 0) (GO MM))                                                    0088300
    (SET STOR (QUOTE FREE))                                                        0088400
    (SET TEST 11Q)                                                                 0088500
    MM (SET WRD3 (MAKETYPE (LIST TYPE X)))                                         0088600
    (IF (EQ (BIT 24 6 WRD3) 1Q)                                                    0088700
     (SET DCWRD3 (O2S. (BIT 6 18 WRD3))))                                          0088800
    (IF (GR TEST 12Q) (GO FN))                                                     0088900
    (SET TES (FTYPER TYPE))                                                        0089000
    (IF (AND (EQ TEST 12Q) (EQ X (QUOTE VALUE)))                                   0089100
     (SET WRD1 (DFINIT TES)) (SET DCWRD1 (CREATE 1 TES NIL)))                      0089200
    (GO MV)                                                                        0089300
    FN (SET WRD1 (F2O. FNTRAP))                                                    0089400
    (SET (BIT 42 6 WRD1) TEST)                                                     0089500
    (SET TEST 12Q)                                                                 0089600
    MV (IF FR (GO FILL))                                                           0089700
    (SET FR (TRIPLE))                                                              0089800
    (SET (WORD2 (S2O. FR)) 0Q)                                                     0089900
    (SET (CHAINS FR) (S2O. S))                                                     0090000
    (SET (LINK (S2O. FR)) (CHAINS N))                                              0090100
    (SET (CHAINS N) (S2O. FR))                                                     0090200
    FILL (IF DCWRD3 (SET (BIT 6 18 WRD3) (S2O. DCWRD3)))                           0090300
    (IF DCWRD1 (BLOCK NIL (SET (BIT 0 18 WRD1)                                     0090400
       (PLUS 1 (S2O. DCWRD1)))                                                     0090500
      (SET (BIT 24 18 WRD1) (S2O. DCWRD1))))                                       0090600
    (SET (WORD1 (S2O. FR)) WRD1)                                                   0090700
    (SET (TCODES FR) WRD3)                                                         0090800
    (SET (PREFIX (S2O. FR)) TEST)                                                  0090900
    (GO MX)                                                                        0091000
    MS (BLOCK ((FG (GETFREE TYPE X)))                                              0091100
     (IF (NULL FG) (GO NOPDER))                                                    0091200
     (IF (AND (EQN TYPE N) (EQN X S))                                              0091300
      (BLOCK NIL (SET (TCODES FR) (SYNTYPE FR)) (GO R)))                           0091400
     (IF (NULL (SET TES (SYNGET FG FR))) (GO SYNER))                               0091500
     (SET FG (FVLIST TES))                                                         0091600
     (IF (SET FR (MAKEFREE N S (CAR FG) (CADR FG) (CADDR FG)))                     0091700
      (SET (TCODES FR) (WORDOR 2Q8 (SHIFT (S2O. TES) 6))))                         0091800
     (GO R)))                                                                      0091900
   KINDER (SET TES (CONS STOR (QUOTE (INVALID KIND))))                             0092000
    (GO ERR)                                                                       0092100
    TYPERR (SET TES (CONS TYPE (QUOTE (INVALID TYPE))))                            0092200
    (GO ERR)                                                                       0092300
    RDECER (SET TES (CONS (FVLIST FR)                                              0092400
     (APPEND (QUOTE (NOT CHANGED TO)) (LIST (LIST STOR TYPE X)))))                 0092500
    (GO ERR)                                                                       0092600
    SYNER (SET TES (QUOTE (CIRCULAR SYNONYM)))                                     0092700
    (GO MNS)                                                                       0092800
    NOPDER (SET TES (QUOTE (NO PRIOR DECLARATION)))                                0092900
    MNS (SET TES (APPEND (LIST STOR (CONS TYPE X)) TES))                           0093000
    ERR (MESSAGE (CONS (CONS N S) TES))))                                          0093100
(DECLARE (KINDLIST SYMBOL OWN (QUOTE ((STET . 0Q)                                  0093200
     (MEANS . 2Q)                                                                  0093300
     (FREE . 11Q)                                                                  0093400
     (FLUID . 11Q)                                                                 0093500
     (OWN . 12Q)                                                                   0093600
     (FUNCTION . 21Q)                                                              0093700
     (MACRO . 22Q) (INSTRUCTIONS . 23Q) (ROUTINE . 24Q)))))                        0093800
(ROUTINE (SYNTYPE OCTAL) ((A SYMBOL)) (TCODES (SYNGET A NIL)))                     0093900
(ROUTINE (SYNGET SYMBOL)                                                           0094000
 ((A SYMBOL) (B SYMBOL))                                                           0094100
 (BLOCK ((C OCTAL))                                                                0094200
  L (IF (EQN A B) (RETURN NIL))                                                    0094300
  (SET C (TCODES A))                                                               0094400
  (IF (NQ (BIT 24 6 C) 2Q) (RETURN A))                                             0094500
```

```
    (SET A (O2S. (BIT 6 18 C))) (GO L)))                                    C094600
  (FUNCTION (MAKETYPE OCTAL)                                                C094700
   ((TYPE SYMBOL LEXICAL))                                                  C094800
   (BLOCK ((J OCTAL LEXICAL 0Q))                                            C094900
    (BLOCK ((AA (ARRAY OCTAL) FREE)                                         C095000
      (NN INTEGER FREE 1)                                                   C095100
      (RR INTEGER FREE 0)                                                   C095200
      (PP INTEGER FREE 42)                                                  C095300
      (WWL OCTAL FREE LOC J) (HERE BOOLEAN FREE TRUE))                      C095400
     (TYPROL TYPE)                                                          C095500
     (RETURN (IF (EQ NN 1)                                                  C095600
       (BIT 42 6 WWL)                                                       C095700
       (LS NN 6)                                                            C095800
       (BIT 18 30 WWL) (WORDOR 1Q8 (SHIFT (S2O. AA) 6)))))))                C095900
  (FUNCTION (TYPROL NOVALUE)                                                C096000
   ((X SYMBOL LEXICAL))                                                     C096100
   (IF (ATOM X)                                                             C096200
    (BLOCK ((TC OCTAL LEXICAL 0Q))                                          C096300
     (IF (NUMBP X)                                                          C096400
      (SET TC X)                                                            C096500
      (SET X (FINDX X (QUOTE ((SYMBOL . 0Q)                                C096600
          (BOOLEAN . 1Q)                                                    C096700
          (OCTAL . 2Q)                                                      C096800
          (INTEGER . 3Q)                                                    C096900
          (REAL . 4Q)                                                       C097000
          (FUNCTIONAL . 5Q)                                                 C097100
          (ARRAY . 12Q1)                                                    C097200
          (LOC . 11Q1) (NOVALUE . 37Q) (INDEF . 37Q)))))                    C097300
      (SET TC (CDR X)) (GO R))                                              C097400
     (IF HERE (GO STUFF)                                                    C097500
      (AND (EQ TC 77Q) (OR (EQ PP 0) (EQ NN 5))) (GO R))                    C097600
     (IF (EQ (SET NN (PLUS NN 1)) 6)                                        C097700
      (SET AA (CREATE 1 (QUOTE OCTAL) WWL))                                 C097800
      (EQ PP 0Q)                                                            C097900
      (BLOCK NIL (SET AA (NCONCS AA (CREATE 1 (QUOTE OCTAL) 0Q)))           C098000
       (SET PP 48)) (GO UPP))                                               C098100
     (SET RR (PLUS RR 1))                                                   C098200
     (LOCSET WWL (AA RR))                                                   C098300
     UPP (SET PP (PLUS PP -6))                                              C098400
     STUFF (SET HERE (IF (EQ (BIT 6 6 TC) 0Q) NIL TRUE))                    C098500
     (SET WWL (WORDOR (SHIFT (BIT 0 6 TC) PP) WWL)) R)                      C098600
    (BLOCK NIL (IF (NULL (CDR X))                                           C098700
      (GO CN)                                                               C098800
      (TMODEP (CADR X))                                                     C098900
      (SET X (REVERSE X))                                                   C099000
      (EQ (CAR X) (QUOTE FUNCTIONAL))                                       C099100
      (SET X (APPEND (CONS 45Q (CDR X)) (QUOTE (77Q)))))                    C099200
     ON (MAPCAR X TYPROL)))))                                               C099300
(RETRIEVE (SECTION (LISP SYS) SYMBOL)                                       C099400
  (FUNCTION ALLDEC (X)                                                      C099500
   (IF (NOT (IDP X))                                                        C099600
    NIL (BLOCK ((Y (O2S. (BIT 24 18 (CORE (S2O. X))))) Z)                   C099700
     (FOR Y (RESET Y (O2S. (BIT 0 18 (CORE (PLUS (S2O. Y) 1)))))            C099800
      (WHILE (NQ X Y)) (SET Z (CONS ((VARNAME . SYS) Y) Z)))                C099900
     (RETURN Z))))                                                          C100000
  (FUNCTION FINDEC (N SN)                                                   C100100
   (BLOCK ((T OCTAL (S2O. (GETFREE N SN))))                                 C100200
    (RETURN (IF (EQ T 0)                                                    C100300
     NIL (LIST T (CORE (PLUS T -1))                                         C100400
      ((FVLIS1 . COMPIL) (O2S. T)))))))                                     C100500
  (SECTION SYS SYMBOL)                                                      C100600
  (ROUTINE (GETFREE SYMBOL)                                                 C100700
   ((N SYMBOL) (S SYMBOL))                                                  C100800
```

```
 (BLOCK ((P OCTAL (CHAINS N)))                                          0100900
  L (IF (EQN (C2S. P) N)                                                0101000
    (RETURN NIL) (EQN (C2S. (CHAIN P)) S) (RETURN (O2S. P)))            0101100
   (SET P (LINK P)) (GC L)))                                            0101200
(FUNCTION (FVLIST SYMBOL)                                               0101300
 ((S SYMBOL)) (IF S (CONS (FVKIND S) (GETYPE S)) NIL))                  0101400
(FUNCTION (FVKIND SYMBOL)                                               0101500
 ((S SYMBOL))                                                           0101600
 (IF (EQ (BIT 42 6 (WORD3 (S2O. S))) 2Q)                                0101700
  (QUOTE MEANS)                                                         0101800
  (EQ (PREFIX (WORD2 (S2O. S))) 11Q)                                    0101900
  (IF (EQ (XMFLAG (S2C. S)) 0Q) (QUOTE FREE) (QUOTE FLUID))             0102000
  (EQ (WORDAND 1614 (WORD3 (S2O. S))) 0Q)                               0102100
  (QUOTE OWN)                                                           0102200
  (BLOCK ((X SYMBOL (FINDN (BIT 0 3 (PREFIX (WORD1 (S2O. S))))         0102300
      (QUOTE ((0C . OWN)                                                0102400
        (1Q . FUNCTION)                                                 0102500
        (2Q . MACRO) (3Q . INSTRUCTIONS) (4Q . ROUTINE))))))            0102600
   (IF X (RETURN (CDR X)) (RETURN (QUOTE UNKNOWN))))))                  0102700
(DECLARE (AA (ARRAY OCTAL))                                             0102800
 (NN INTEGER)                                                           0102900
 (WWL OCTAL LOC) (RR INTEGER) (PP INTEGER) (WW OCTAL))                  0103000
(FUNCTION GETYPE (S)                                                    0103100
 (IF (EQ (BIT 42 6 (WORD3 (S2O. S))) 2Q)                                0103200
  (BLOCK ((Q SYMBOL (VARNAME (O2S. (BIT 24 18 (WORD3 (S2O. S)))))))     0103300
   (RETURN (LIST (CAR Q) (CDR Q))))                                     0103400
  (BLOCK ((WW OCTAL FREE (SYNTYPE S))                                   0103500
    (AA (ARRAY OCTAL) FREE)                                             0103600
    (PP INTEGER FREE 42) (RR INTEGER FREE 1))                           0103700
   (IF (EQ (BIT 24 6 WW) 0Q)                                            0103800
    (SET PP 0) (EQ (BIT 24 6 WW) 1Q) (GO A) (SET PP 24))                0103900
   R (RETURN (RDTYPE))                                                  0104000
   A (SET AA (O2S. (BIT 6 18 WW))) (SET WW (AA 1)) (GO R))))            0104100
(FUNCTION RDTYPE NIL (DETYPE (RDTYPC)))                                 0104200
(FUNCTION DETYPE ((TC OCTAL))                                           0104300
 (LIST (STANTP (DTYP TC))                                               0104400
  (IF (EQ (BIT 3 1 TC) 0Q) (QUOTE VALUE) (QUOTE LOC))))                 0104500
(FUNCTION DTYP ((TC OCTAL))                                             0104600
 (IF (EQ (BIT 5 1 TC) 0Q)                                               0104700
  (CDR (FINDN (WORDAND TC 27Q) STYPES))                                 0104800
  (BLOCK ((N OCTAL (RDTYPC)))                                           0104900
   (BLOCK ((J (LIST (IF (NQ N 37Q) (DTYP N) (QUOTE NOVALUE))            0105000
       (QUOTE FUNCTIONAL))))                                            0105100
    LOOP (SET N (RDTYPC))                                               0105200
    (IF (NQ N 77Q)                                                      0105300
     (BLOCK NIL (SET J (CONS (IF (NQ N 37Q)                             0105400
         (DETYPE N) (LIST (QUOTE INDEF) (RDTYPE))) J)) (GO LOOP)))      0105500
    (RETURN (REVERSE J))))))                                            0105600
(ROUTINE (RDTYPC OCTAL)                                                 0105700
 NIL (BLOCK ((TC OCTAL (BIT PP 6 WW)))                                  0105800
  (IF (NQ PP 0) (SET PP (PLUS PP -6)) AA (GO ARR) (GO B))               0105900
  RT (RETURN TC)                                                        0106000
  B (SET WW (INVERT 0Q))                                                0106100
  R (SET PP 42)                                                         0106200
  (GO RT)                                                               0106300
  ARR (IF (LS (SET RR (PLUS RR 1)) (ARSIZE (S2O. AA)))                  0106400
   (SET WW (AA RR)) (GO B)) (GO R))))                                   0106500
(TYPEQ (SECTION SYS SYMBOL)                                             0106600
 (FUNCTION (TYPEP BOOLEAN)                                              0106700
  ((J SYMBOL)) (OR (STYPEP J) (ATYPEP J) (FUNTYP J)))                   0106800
 (FUNCTION (STYPEP BOOLEAN)                                             0106900
  ((J SYMBOL))                                                          0107000
  (MEMBER J (QUOTE (BOOLEAN INTEGER OCTAL REAL SYMBOL))))               0107100
```

```
(FUNCTION (ATYPEP BOOLEAN)                                              0107200
 ((J SYMBOL))                                                           0107300
 (AND (NOT (ATOM J))                                                    0107400
  (EQN (CAR J) (QUOTE ARRAY))                                           0107500
  (CDR J) (NULL (CDDR J)) (FTYPP (CADR J))))                            0107600
(FUNCTION (FUNTYP BOOLEAN)                                              0107700
 ((J SYMBOL))                                                           0107800
 (AND (NOT (ATOM J))                                                    0107900
  (EQN (CAR J) (QUOTE FUNCTIONAL))                                      0108000
  (SET J (CDR J))                                                       0108100
  (VTYPEP (CAR J))                                                      0108200
  (BLOCK NIL LOOP (IF (NULL (SET J (CDR J)))                            0108300
    (RETURN TRUE)                                                       0108400
    (AND (EQN (LENGTH J) 1) (INDEFP (CAR J)))                           0108500
    (RETURN TRUE) (PTYPEP (CAR J)) (GO LOOP)))))                        0108600
(FUNCTION (FTYPP BOOLEAN)                                               0108700
 ((J SYMBOL)) (OR (STYPEP J) (EQN J (QUOTE FUNCTIONAL))))               0108800
(FUNCTION (VTYPEP BOOLEAN)                                              0108900
 ((J SYMBOL)) (OR (FTYPP J) (EQN J (QUOTE NOVALUE))))                   0109000
(FUNCTION (INDEFP BOOLEAN) ((J SYMBOL)) NIL)                            0109100
(FUNCTION (PTYPEP BOOLEAN)                                              0109200
 ((J SYMBOL))                                                           0109300
 (IF (ATOM J)                                                           0109400
  (FTYPP J)                                                             0109500
  (AND (FTYPP (CAR J))                                                  0109600
   (OR (NULL (CDR J)) (AND (TMODEP (CADR J)) (NULL (CDDR J)))))))       0109700
(FUNCTION (TMODEP BOOLEAN)                                              0109800
 ((J SYMBOL)) (MEMBER J (QUOTE (LOC VALUE))))                           0109900
(RCUTINE (FTYPER SYMBOL)                                                0110000
 ((TYPE SYMBOL))                                                        0110100
 (IF (ATOM TYPE)                                                        0110200
  TYPE (EQ (CAR TYPE) (QUOTE FUNCTIONAL))                               0110300
  (QUOTE FUNCTIONAL) (QUOTE SYMBOL)))                                   0110400
(FUNCTION STANTP (TYPE)                                                 0110500
 (IF (NOT (FUNTYP TYPE))                                                0110600
  TYPE (CONS (CAR TYPE) (CADR TYPE) (MAPCAR (CDDR TYPE) TPFIX))))       0110700
(FUNCTION TPFIX (A)                                                     0110800
 (IF (ATOM A)                                                           0110900
  (CONS A (QUOTE (VALUE)))                                              0111000
  (EQ (CAR A) (QUOTE INDEF))                                            0111100
  (LIST (QUOTE INDEF) (TPFIX (CADR A))) A)))                            0111200
(TYPES (SECTION SYS SYMBOL)                                             0111300
 (RCUTINE (DFINIT OCTAL)                                                0111400
  ((TYPE SYMBOL))                                                       0111500
  (IF (NQ TYPE (QUOTE FUNCTIONAL)) 3Q (F2O. FMTRAP)))                   0111600
 (DECLARE (TYPMSG OWN (QUOTE (IS NOT LEGAL TYPE))))                     0111700
 (FUNCTION (CONVRT OCTAL)                                               0111800
  ((TYPE SYMBOL) (VALUE SYMBOL))                                        0111900
  (IF (OR (EQ TYPE (QUOTE SYMBOL)) (EQ TYPE (QUOTE BOOLEAN)))           0112000
   (S2O. VALUE)                                                         0112100
   (OR (EQ TYPE (QUOTE INTEGER)) (EQ TYPE (QUOTE OCTAL)))               0112200
   VALUE (EQ TYPE (QUOTE REAL))                                         0112300
   (R2O. VALUE)                                                         0112400
   (EQ TYPE (QUOTE FUNCTIONAL)) (F2O. VALUE) (ERRMSG TYPE TYPMSG)))     0112500
 (DECLARE (STYPES SYMBOL OWN (QUOTE ((0Q . SYMBOL)                      0112600
    (1Q . BOOLEAN)                                                      0112700
    (2Q . OCTAL)                                                        0112800
    (3Q . INTEGER)                                                      0112900
    (4Q . REAL)                                                         0113000
    (5Q . FUNCTIONAL)                                                   0113100
    (6Q . STRING)                                                       0113200
    (7Q . ID)                                                           0113300
    (1Q1 . QUOTE)                                                       0113400
```

```
        (11Q . FLUID)                                                    0113500
        (12Q . OWN)                                                      0113600
        (13Q . EMPTY)                                                    0113700
        (2Q1 ARRAY SYMBOL)                                               0113800
        (21Q ARRAY BOOLEAN)                                              0113900
        (22Q ARRAY OCTAL)                                                0114000
        (23Q ARRAY INTEGER)                                              0114100
        (24Q ARRAY REAL) (25Q ARRAY FUNCTIONAL)))))                      0114200
    (FUNCTION (STYPE SYMBOL)                                             0114300
     ((S SYMBOL))                                                        0114400
     (BLOCK ((A SYMBOL (IF (SPACEP. S)                                   0114500
         (FINDN (PREFIX (S2O. S)) STYPES) NIL)))                         0114600
      (RETURN (IF A (CAR A) NIL)))))                                     0114700
  (MAKEQUOTE (FUNCTION (MAKEQUOTE SYMBOL)                                0114800
     ((S SYMBOL))                                                        0114900
     (BLOCK ((TR SYMBOL (TRIPLE)))                                       0115000
      (SET (WORD3 (S2O. TR)) 0Q)                                         0115100
      (SET (WORD2 (S2O. TR)) 1000000CCCCCCCC1Q)                          0115200
      (SET (WORD1 (S2O. TR)) (S2O. S)) (RETURN TR))))                    0115300
  (DEBUGER (SECTION (DEBUG SYS) SYMBOL)                                  0115400
    (FUNCTION ((ARTYPE . IO) SYMBOL) ((X SYMBOL)))                       0115500
    (FUNCTION ((ARYCHK . DEBUG) INTEGER)                                 0115600
     ((A SYMBOL) (T SYMBOL) (S INTEGER))                                 0115700
     (IF (NOT (ARRAYP A))                                                0115800
      (S2O. (ERROR (LIST A (QUOTE SUBSCRIPTED))))                        0115900
      (NOT (EQN T ((ARTYPE . IO) A)))                                    0116000
      (S2O. (ERROR (QUOTE (BAD TYPED ARRAY))))                           0116100
      (OR (LQ S C) (GQ S (BIT 24 18 (CORE (S2O. A)))))                   0116200
      (S2O. (ERROR (QUOTE (OUT OF BOUNDS SUBSCRIPT)))) S))               0116300
    (FUNCTION ((ATMCHK . DEBUG) SYMBOL)                                  0116400
     ((X SYMBOL))                                                        0116500
     (IF (ATOM X) (ERROR (CONS X (QUOTE (CAR OR CDR ED)))) X))           0116600
    (FUNCTION ((FUNCHK . DEBUG) NOVALUE)                                 0116700
     ((D SYMBOL) (F (FUNCTIONAL REAL)))                                  0116800
     (BLOCK ((E SYMBOL (CADR (FVLIST (C2S. (I2O. (PLUS (BIT 0 18 (F2O.   0116900
             F)) 1)))))))                                                0117000
      (IF (NOT (OR (EQ (QUOTE NOVALUE) (CADR D))                         0117100
         (EQN (CADR D) (CADR E))))                                       0117200
       (ERROR (QUOTE (FUNCTIONAL VALUE TYPE MISMATCH))))                 0117300
      (IF (NOT (EQ (CDDR D) (CDDR E)))                                   0117400
       (ERROR (QUOTE (ARG OF FUNCTIONAL TYPE MISMATCH)))))))             0117500
                                                                         0117600
****END OF FILE DETECTED
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```
(SEC.LISP (SECTION LISP SYMBOL)                                          0000100
  (FUNCTION (ERROR SYMBOL) ((S SYMBOL)))                                 0000200
  (FUNCTION (PRETTYP SYMBOL) ((S SYMBOL)))                               0000300
  (FUNCTION (FITATOM SYMBOL) ((S SYMBOL)))                               0000400
  (FUNCTION (OPEN SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                     0000500
  (FUNCTION (SHUT SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                     0000600
  (FUNCTION (POSITION SYMBOL) ((F SYMBOL) (A INTEGER)))                  0000700
  (FUNCTION (INPUT SYMBOL) ((X SYMBOL)))                                 0000800
  (FUNCTION (OUTPUT SYMBOL) ((X SYMBOL)))                                0000900
  (FUNCTION (PRINT SYMBOL) ((X SYMBOL)))                                 0001000
  (FUNCTION (PRIN SYMBOL) ((X SYMBOL)))                                  0001100
  (FUNCTION (PRINO SYMBOL) ((X SYMBOL)))                                 0001200
  (FUNCTION (PRINATOM SYMBOL) ((A SYMBOL)))                              0001300
  (FUNCTION (PRINSTRING SYMBOL) ((X SYMBOL)))                            0001400
  (FUNCTION (SYMPRINT SYMBOL) ((X SYMBOL)))                              0001500
  (FUNCTION (SYMPRIN SYMBOL) ((X SYMBOL)))                               0001600
  (FUNCTION (PRINCH SYMBOL) ((X SYMBOL)))                                0001700
  (FUNCTION (READCH SYMBOL) NIL)                                         0001800
  (FUNCTION READ NIL)                                                    0001900
  (FUNCTION PRINARRAY (A))                                               0002000
  (FUNCTION (PRINWORD OCTAL) ((X OCTAL)))                                0002100
  (FUNCTION (READWORD OCTAL) NIL)                                        0002200
  (FUNCTION (ENDIN NOVALUE) NIL)                                         0002300
  (FUNCTION (ENDINR NOVALUE) NIL)                                        0002400
  (FUNCTION (ENDOUT NOVALUE) NIL)                                        0002500
  (FUNCTION (ENDOUTR NOVALUE) NIL)                                       0002600
  (FUNCTION (ENDINP NOVALUE) NIL)                                        0002700
  (FUNCTION (ENDOUTP NOVALUE) NIL)                                       0002800
  (FUNCTION (NCP NOVALUE) NIL)                                           0002900
  (FUNCTION (NILF SYMBOL) NIL)                                           0003000
  (RCUTINE (CLEAR NOVALUE) ((FN SYMBOL)))                                0003100
  (RCUTINE (GET SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                       0003200
  (RCUTINE (GETCHAR SYMBOL) ((A (ARRAY OCTAL)) (CC INTEGER))))           0003300
(ARSIZE (SECTION IO SYMBOL)                                              0003400
  MACRO1(((ARSIZE (LAMBDA (S) (LIST (QUOTE BIT) 24 18                    0003500
    (CONS (QUOTE CORE) (CDR S)))))))))                                   0003600
 (SEC.IO (SECTION (IO SYS) SYMBOL)                                       0003700
  (FUNCTION (CAR. SYMBOL) ((A SYMBOL)) (CAR A))                          0003800
  (FUNCTION (LOGTTY NOVALUE) ((C INTEGER) (M SYMBOL)))                   0003900
  (FUNCTION (B1 SYMBOL) ((S SYMBOL)))                                    0004000
  (FUNCTION (F1 SYMBOL) ((S SYMBOL)))                                    0004100
  (FUNCTION READ NIL)                                                    0004200
  (FUNCTION (CHSUPL SYMBOL) NIL)                                         0004300
  (FUNCTION (TTYSPL SYMBOL) NIL)                                         0004400
  (FUNCTION (TOSTRG SYMBOL) ((A SYMBOL)))                                0004500
  (FUNCTION (CVRTNM INTEGER) ((FN SYMBOL)))                              0004600
  (FUNCTION (SEQNO NOVALUE) NIL)                                         0004700
  (FUNCTION (INTTY NOVALUE) NIL)                                         0004800
  (FUNCTION (INTAPE NOVALUE) NIL)                                        0004900
  (FUNCTION (INDISC NOVALUE) NIL)                                        0005000
  (FUNCTION (OUTTY NOVALUE) NIL)                                         0005100
  (FUNCTION (OUTAPE NOVALUE) NIL)                                        0005200
  (FUNCTION (OUTDISC NOVALUE) NIL)                                       0005300
  (FUNCTION (INTPAS NOVALUE) NIL)                                        0005400
  (FUNCTION (OUTPAS NOVALUE) NIL)                                        0005500
  (FUNCTION (INDCAS NOVALUE) NIL)                                        0005600
  (FUNCTION (OUTDCAS NOVALUE) NIL)                                       0005700
  (RCUTINE (MOVEI INTEGER) ((S INTEGER) (B OCTAL LOC)))                  0005800
  (RCUTINE (MOVEC INTEGER) ((S INTEGER) (B OCTAL LOC)))                  0005900
  (RCUTINE (MODIFY INTEGER) NIL)                                         0006000
  (FUNCTION (RDEC SYMBOL) ((NM INTEGER)))                                0006100
  (RCUTINE (FDEC INTEGER)                                                0006200
   ((NM INTEGER)                                                         0006300
```

```
      (UT INTEGER)                                                              C0006400
      (FM INTEGER)                                                              C0006500
      (SZ INTEGER) (RL INTEGER) (PK INTEGER) (PT INTEGER)))                     C0006600
    (RCUTINE (CVRTN1 INTEGER) ((S OCTAL LOC) (I INTEGER)))                      C0006700
    (RCUTINE (SETBUF NOVALUE) ((SINK OCTAL LOC) (K OCTAL)))                     C0006800
    (FUNCTION (T8X6 BOOLEAN)                                                    C0006900
     ((EOR OCTAL)                                                               C0007000
      (SOURCE OCTAL LOC) (SINK OCTAL LOC) (J INTEGER) (I INTEGER)))             C0007100
    (RCUTINE (T8X12 NOVALUE) NIL)                                               C0007200
    (RCUTINE (T12X8 INTEGER) NIL)                                               C0007300
    (FUNCTION (TRANDC INTEGER) ((CH OCTAL) (J INTEGER)))                        C0007400
    (FUNCTION (TRANTP INTEGER) ((CH OCTAL) (J INTEGER)))                        C0007500
    (FUNCTION (T6X8 NOVALUE)                                                    C0007600
     ((COL INTEGER) (WHAT (FUNCTIONAL INTEGER OCTAL INTEGER))))                 C0007700
    (RCUTINE (T75 BOOLEAN) NIL)                                                 C0007800
    (RCUTINE (GETCHAR SYMBOL) ((A OCTAL LOC) (CC INTEGER)))                     C0007900
    (RCUTINE (SETCHAR SYMBOL) ((CH SYMBOL) (A OCTAL LOC) (CC INTEGER))))        C0008000
  (DSPCHR (LAP (FUNCTION ((NCP . LISP) NOVALUE)                                 C0008100
      NIL (CRG)                                                                 C0008200
      (BEGIN)                                                                   C0008300
      (END)                                                                     C0008400
      (RETURN)                                                                  C0008500
      (ENTRY FIXBUF (LABEL BUF))                                                C0008600
      (ENTRY DCALL (LABEL DEC))                                                 C0008700
      (ENTRY DNAME ((LABEL DEC) 2))                                             C0008800
      (ENTRY DUNIT ((LABEL DEC) 3))                                             C0008900
      (ENTRY DFORM ((LABEL DEC) 4))                                             C0009000
      (ENTRY DSIZE ((LABEL DEC) 6))                                             C0009100
      (ENTRY DREEL ((LABEL DEC) 8))                                             C0009200
      (ENTRY DPRCTK ((LABEL DEC) 9))                                            C0009300
      (ENTRY DPOST ((LABEL DEC) 10))                                            C0009400
      (ENTRY DSTAT ((LABEL DEC) 11))                                            C0009500
      (ENTRY MCALL (LABEL MOOV))                                                C0009600
      (ENTRY MNAME ((LABEL MOOV) 2))                                            C0009700
      (ENTRY MINCUT ((LABEL MOOV) 3))                                           C0009800
      (ENTRY MLOC ((LABEL MOOV) 5))                                             C0009900
      (ENTRY MSECTR ((LABEL MOOV) 7))                                           C0010000
      (ENTRY MWDSIN ((LABEL MOOV) 9))                                           C0010100
      (ENTRY MSTAT ((LABEL MOOV) 10))                                           C0010200
      (ENTRY MSIZE ((LABEL MOOV) 12))                                           C0010300
      (ENTRY MPOST ((LABEL MOOV) 13))                                           C0010400
      (ENTRY BELL (LABEL BELLS))                                                C0010500
      (ENTRY TAPOS (LABEL POS))                                                 C0010600
      (ENTRY TNAME ((LABEL POS) 2))                                             C0010700
      (ENTRY ACTION ((LABEL POS) 3))                                            C0010800
      (ENTRY RESCUE (LABEL RES))                                                C0010900
      (ENTRY DEFILE (LABEL DEF))                                                C0011000
      (ENTRY DFNAME ((LABEL DEF) 2))                                            C0011100
      (ENTRY DELETE (LABEL DEL))                                                C0011200
      (ENTRY DLNAME ((LABEL DEL) 2))                                            C0011300
      (ENTRY DLSTAT ((LABEL DEL) 3))                                            C0011400
      (ENTRY REFILE (LABEL REF))                                                C0011500
      (ENTRY RFNAME ((LABEL REF) 2))                                            C0011600
      (ENTRY RWDSIN ((LABEL REF) 4))                                            C0011700
      (ENTRY RFSTAT ((LABEL REF) 5))                                            C0011800
      (ENTRY RFORM ((LABEL REF) 6))                                             C0011900
      (ENTRY INSERT (LABEL INS))                                                C0012000
      (ENTRY ISNAME ((LABEL INS) 2))                                            C0012100
      (ENTRY INNAME ((LABEL INS) 4))                                            C0012200
      (ENTRY INSTAT ((LABEL INS) 5))                                            C0012300
      (ENTRY INSIZE ((LABEL INS) 7))                                            C0012400
      (ENTRY MODFY (LABEL MOD))                                                 C0012500
      (ENTRY MDNAME ((LABEL MOD) 2))                                            C0012600
```

```
(ENTRY MDSIZE ((LABEL MOD) 4))                                  0012700
(ENTRY MDSTAT ((LABEL MOD) 5))                                  0012800
(ENTRY DSPCHR 312Q)                                             0012900
(ENTRY IN (LABEL INK))                                          0013000
(ENTRY OUT (LABEL OUTK))                                        0013100
DEC (433162473131011 3Q)                                        0013200
(263143256C600606Q)                                             0013300
(1636370117177777Q)                                             0013400
(644531636C600C1Q1)                                             0013500
(264651446C6C0521Q)                                             0013600
(456444662462016Q1)                                             0013700
(1)                                                             0013800
(512525436C6C0604Q)                                             0013900
(0)                                                             0014000
(47514663254 2Q4)                                               0014100
(4746626360 6Q5)                                                0014200
(634562632163Q4)                                                0014300
MOOV (433162473131011 4Q)                                       0014400
(444665256C600606Q)                                             0014500
(1636370117177777Q)                                             0014600
(466463476463046Q1)                                             0014700
(234651253167016Q2)                                             0014800
(0 ((LABEL BUF) 1))                                             0014900
(243162233167016Q2)                                             0015000
(0)                                                             0015100
(662462314560016Q2)                                             0015200
(0)                                                             0015300
(634562632163Q4)                                                0015400
(456444662462016Q1)                                             0015500
(0)                                                             0015600
(4746626360 6Q5)                                                0015700
BELLS (433162473131010 5Q)                                      0015800
(444665256C600606Q)                                             0015900
(1636370117177777Q)                                             0016000
(466463476463046Q1)                                             0016100
(234651253167016Q1)                                             0016200
(0 (LABEL BELL1))                                               0016300
BELL1 (700C700C3Q4)                                             0016400
POS (433162473131010 3Q)                                        0016500
(632147446465060 6Q)                                            0016600
(0)                                                             0016700
(464763314645Q4)                                                0016800
RES (433162473131010 2Q)                                        0016900
(512562236425016Q1)                                             0017000
(0)                                                             0017100
DEF (433162473131010 2Q)                                        0017200
(242526314325060 6Q)                                            0017300
(0)                                                             0017400
DEL (433162473131010 3Q)                                        0017500
(242543256325060 6Q)                                            0017600
(0)                                                             0017700
(634562632163Q4)                                                0017800
REF (433162473131010 6Q)                                        0017900
(512526314325060 6Q)                                            0018000
(0)                                                             0018100
(662462314560016Q2)                                             0018200
(0)                                                             0018300
(634562632163Q4)                                                0018400
(264651446C6Q5)                                                 0018500
INS (433162473131010 7Q)                                        0018600
(314562255163060 6Q)                                            0018700
(0)                                                             0018800
(314545214425060 6Q)                                            0018900
```

```
     (0)                                                                    C019000
     (634562632163Q4)                                                       C019100
     (4564446624620160Q1)                                                   C019200
     (0)                                                                    C019300
     MOD (43316247313101C5Q)                                                C019400
     (4446243126700606Q)                                                    C019500
     (0)                                                                    C019600
     (4564446624620102)                                                     C019700
     (0)                                                                    C019800
     (634562632163Q4)                                                       C019900
     BUF (6Q14 C. 0 520)                                                    C020000
     (60606C606C606C6Q1)                                                    C020100
     (DITTO 519)                                                            C020200
     INK (3145476463600402) OUTK (466463476463042)) NIL LISP))              C020300
(CNVRTB (FUNCTION ((NILF . LISP) SYMBOL) NIL NIL)                           C020400
  (SECTION IC SYMBOL)                                                       C020500
  (DECLARE (CNVRTB (ARRAY OCTAL)                                            C020600
    CWN (QUOTE (*OCTAL 600100400066C5 60010001006100010                     C020700
     600100200620C02Q 770200030063000 60010004006400040                     C020800
     600100500650C05Q 600100060066C006Q 52010007006700 7Q                   C020900
     600100100070001Q1 60010011007100110 32010012000000 12Q                 C021000
     600100130075001 3Q 60010014004700140 32020015007200 15Q                C021100
     600100160076C016Q 60010017004300170 60010020005300 2Q1                 C021200
     600100210101C021Q 60010022010200220 60010023010300 23Q                 C021300
     600100240104C024Q 60010025010500250 60010026010600 26Q                 C021400
     600100270107C027Q 60010030011000 3Q1 60010031011100 31Q                C021500
     600100320015C032Q 60010033005600330 60010034005100 34Q                 C021600
     600100350045C035Q 60010036013400360 60010037013700 37Q                 C021700
     602200400055C4Q1 60010041011200410 60010042011300 42Q                  C021800
     170400430114C043Q 53050044011500440 35210045011600 45Q                 C021900
     200100460117C046Q 14030047012000470 74050050012100 5Q1                 C022000
     340500510122C051Q 54050052000700520 20120053004400 53Q                 C022100
     732300540052C054Q 40130055013500550 33160056007300 56Q                 C022200
     611100570136C057Q 14006000400060Q1 11400610057006 1Q                   C022300
     214006201230062Q 31400630124006 3Q 41400640125006 4Q                   C022400
     514006501260065Q 61400660127006 6Q 71400670130006 7Q                   C022500
     101500700131007Q1 11150071013200 71Q 15050072007700 72Q                C022600
     560500730054C073Q 76110074005000 74Q 13110075013300 75Q                C022700
     161100760074C076Q 72010077000300 77Q 60010100000001 4Q1                C022800
     212101010C000101Q 22210102000001 02Q 23210103000001 03Q                C022900
     242101040C000104Q 25170105000001 05Q 26210106000001 06Q                C023000
     272101070C000107Q 30210110000001 1Q1 31210111000001 11Q                C023100
     412101120C000112Q 42210113000001 13Q 43210114000001 14Q                C023200
     442101150C000115Q 45210116000001 16Q 46210117000001 17Q                C023300
     472101200C000121Q 50200121000001 21Q 51210122000001 22Q                C023400
     622101230000012 3Q 63210124000001 24Q 64210125000001 25Q                C023500
     652101260000012 6Q 66210127000001 27Q 67210130000001 3Q1                C023600
     702101310C000131Q 71210132000001 32Q 75050133000001 33Q                C023700
     360501340000134Q 55050135000001 35Q 57050136000001 36Q                 C023800
     370501370000137Q 600101Q10 2101010108 2201010208 2301010308            C023900
     2401010408 2501010508 2601010608 2701010708 3001011Q9 3101011108       C024000
     4101011208 4201011308 4301011408 4401011508 4501011608                 C024100
     4601011708 4701012Q9 5001012108 5101012208 6201012308 6301012408       C024200
     6401012508 6501012608 6601012708 6701013Q9 7001013108 7101013208       C024300
     7501013308 6001004Q9 5501013508 6001004Q9 60010177Q8))))               C024400
(VARIABLES (SECTION SYS SYMBOL)                                             C024500
  (DECLARE (CHC OCTAL OWN)                                                  C024600
    (XXDLIM SYMBOL CWN (QUOTE '.))                                          C024700
    (XXCHAR SYMBOL CWN)                                                     C024800
    (GNMODE BOOLEAN FLUID NIL)                                              C024900
    (PRMODE BOOLEAN FLUID NIL) (OTTY SYMBOL OWN) (ITTY SYMBOL OWN))         C025000
  (SECTION LISP SYMBOL)                                                     C025100
  (DECLARE (TTY. SYMBOL FLUID (QUOTE ((UNIT . TTY)                          C025200
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      (FORM . ASCII) (RECORD . 1) (HORIZONTAL 1 73 72))))                C0025300
    (TAPE. SYMBOL FLUID (QUOTE ((UNIT . TAPE)                            C0025400
      (FORM . BCD)                                                       C0025500
      (RECORD . 30) (HORIZONTAL 1 73 80) (VERTICAL 1 51 50))))           C0025600
    (DISC. SYMBOL FLUID (QUOTE ((UNIT . DISC)                            C0025700
      (FORM . BCD)                                                       C0025800
      (RECORD . 51) (HORIZONTAL 1 73 80) (VERTICAL 1 51 50))))           C0025900
    (CORE. SYMBOL FLUID (QUOTE ((UNIT . CORE)                            C0026000
      (FORM . ASCII) (RECORD . 1))))                                     C0026100
    (CRT. SYMBOL FLUID (QUOTE ((UNIT . CRT)                              C0026200
      (FORM . BINARY) (RECORD . 680))))                                  C0026300
    (SKIPR. INTEGER OWN 1)                                               C0026400
    (SKIPF. INTEGER OWN 2)                                               C0026500
    (WEOF. INTEGER OWN 3)                                                C0026600
    (WEOT. INTEGER OWN 4)                                                C0026700
    (REWIND. INTEGER OWN 5)                                              C0026800
    (BACKR. INTEGER OWN 6)                                               C0026900
    (BACKF. INTEGER OWN 7) (KEY. INTEGER OWN 8))                         C0027000
  (SECTION (IO SYS) SYMBOL)                                              C0027100
  (DECLARE (DDSW INTEGER OWN)                                            C0027200
    (CURCOL INTEGER FLUID LOC)                                           C0027300
    (ICURCOL INTEGER FLUID LOC)                                          C0027400
    (CURLINE INTEGER FLUID LOC)                                          C0027500
    (ICURLINE INTEGER FLUID LOC)                                         C0027600
    (SUMLINE INTEGER FLUID LOC)                                          C0027700
    (ISUMLINE INTEGER FLUID LOC)                                         C0027800
    (LMG INTEGER FLUID LOC)                                              C0027900
    (ILMG INTEGER FLUID LOC)                                             C0028000
    (RMG INTEGER FLUID LOC)                                              C0028100
    (IRMG INTEGER FLUID LOC)                                             C0028200
    (MAXCOL INTEGER FLUID LOC)                                           C0028300
    (IMAXCOL INTEGER FLUID LOC)                                          C0028400
    (TOP INTEGER FLUID LOC)                                              C0028500
    (ITOP INTEGER FLUID LOC)                                             C0028600
    (BOT INTEGER FLUID LOC)                                              C0028700
    (IBOT INTEGER FLUID LOC)                                             C0028800
    (PAGE INTEGER FLUID LOC)                                             C0028900
    (IPAGE INTEGER FLUID LOC)                                            C0029000
    (RECORD INTEGER FLUID LOC)                                           C0029100
    (IRECORD INTEGER FLUID LOC)                                          C0029200
    (SIZE INTEGER FLUID LOC)                                             C0029300
    (ISIZE INTEGER FLUID LOC)                                            C0029400
    (COUNT INTEGER FLUID LOC)                                            C0029500
    (ICOUNT INTEGER FLUID LOC)                                           C0029600
    (MAXSEC INTEGER FLUID LOC)                                           C0029700
    (IMAXSEC INTEGER FLUID LOC)                                          C0029800
    (SECTOR INTEGER FLUID LOC)                                           C0029900
    (ISECTOR INTEGER FLUID LOC)                                          C0030000
    (STATUS INTEGER FLUID LOC)                                           C0030100
    (ISTATUS INTEGER FLUID LOC)                                          C0030200
    (TTYMAX INTEGER FLUID LOC)                                           C0030300
    (NAME INTEGER FLUID LOC)                                             C0030400
    (INAME INTEGER FLUID LOC)                                            C0030500
    (BUFLOC (ARRAY OCTAL) FLUID)                                         C0030600
    (IBUFLOC (ARRAY OCTAL) FLUID)                                        C0030700
    (LINELOC OCTAL FLUID LOC)                                            C0030800
    (ILINELOC OCTAL FLUID LOC)                                           C0030900
    (FIXLOC OCTAL FLUID LOC)                                             C0031000
    (CURFN SYMBOL FLUID)                                                 C0031100
    (ICURFN SYMBOL FLUID)                                                C0031200
    (RMGO (FUNCTIONAL NOVALUE) FLUID LOC)                                C0031300
    (IRMGO (FUNCTIONAL NOVALUE) FLUID LOC)                               C0031400
    (BOTO (FUNCTIONAL NOVALUE) FLUID LOC)                                C0031500
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    (IBOTO (FUNCTIONAL NOVALUE) FLUID LOC)                                  C031600
    (MOVE (FUNCTIONAL NOVALUE) FLUID LOC)                                   C031700
    (IMOVE (FUNCTIONAL NOVALUE) FLUID LOC)                                  C031800
    (XXFUNC (FUNCTIONAL SYMBOL) FLUID LOC)                                  C031900
    (KEY (FUNCTIONAL NOVALUE) FLUID LOC)                                    C032000
    (IKEY (FUNCTIONAL NOVALUE) FLUID LOC)                                   C032100
    (XXSAVE SYMBOL FLUID LOC)                                               C032200
    (FILES. SYMBOL FLUID NIL)                                               C032300
    (WPL INTEGER FLUID LOC)                                                 C032400
    (IWPL INTEGER FLUID LOC)                                                C032500
    (CPW INTEGER FLUID 6)                                                   C032600
    (SHORWD SYMBOL FLUID (QUOTE (*STRING A.WORD)))                          C032700
    (MSG1 SYMBOL CWN (QUOTE (*STRING 'R 'E 'D 'U 'N 'D 'A 'N 'T '  'F       C032800
      'I 'L 'E '  'N 'A 'M 'E ' )))                                         C032900
    (MSG2 SYMBOL CWN (QUOTE (*STRING 'B 'A 'D '  'O 'P 'E 'N '  'A 'R       C033000
      'G '2 ' )))                                                           C033100
    (MSG3 SYMBOL CWN (QUOTE (*STRING 'T 'S 'S '  'R 'E 'J 'E 'C 'T ' ))     C033200
    )                                                                       C033300
    (MSG4 SYMBOL CWN (QUOTE (*STRING 'F 'I 'L 'E '  'N 'O 'T '  'O 'P       C033400
      'E 'N 'E 'D ' )))                                                     C033500
    (MSG5 SYMBOL CWN (QUOTE (*STRING 'N 'O 'T '  'B 'I 'N 'A 'R 'Y '        C033600
      'F 'I 'L 'E ' )))                                                     C033700
    (MSG6 SYMBOL CWN (QUOTE (*STRING 'I 'L 'L 'E 'G 'A 'L '  'U 'N 'I       C033800
      'T ' )))                                                              C033900
    (MSG7 SYMBOL CWN (QUOTE (*STRING 'T 'A 'P 'E '  'X 'F 'E 'R ' )))       C034000
    (MSG8 SYMBOL CWN (QUOTE (*STRING 'F 'I 'L 'E '  'L 'O 'C 'K 'E 'D       C034100
      ' ))))                                                                C034200
  (SECTION (IO SYS) SYMBOL) (DECLARE (BUFIX (ARRAY OCTAL) FLUID)))          C034300
(D.CALLS (SECTION (IO LISP SYS) SYMBOL)                                     C034400
  (RCUTINE (MODIFY INTEGER)                                                 C034500
   NIL (BLOCK NIL (SET (CORENTRY MDNAME) NAME)                              C034600
    (SET (CORENTRY MDSIZE) (TIMES 512 (PLUS 9 MAXSEC)))                     C034700
    (CODE (LDA (ENTRY MODFY) (RA R)) (BUC (ENTRY DSPCHR)))                  C034800
    (RETURN (BIT 0 6 (CORENTRY MDSTAT)))))                                  C034900
  (DECLARE (TO (ARRAY OCTAL)                                                C035000
    CWN (QUOTE (*OCTAL 22Q 3Q1 23Q 21Q 22Q 22Q))))                          C035100
  (FUNCTION (RDEC SYMBOL)                                                   C035200
   ((NM INTEGER))                                                           C035300
   (BLOCK NIL (SET (CORENTRY RFNAME) NM)                                    C035400
    (CODE (LDA (ENTRY REFILE) (RA R)) (BUC (ENTRY DSPCHR)))                 C035500
    (RETURN (LIST (BIT 0 6 (CORENTRY RFSTAT))                               C035600
      (TO (PLUS 1 (BIT 0 6 (CORENTRY RFORM)))) (CORENTRY RWDSIN)))))        C035700
  (RCUTINE (FDEC INTEGER)                                                   C035800
   ((NM INTEGER)                                                            C035900
    (UT INTEGER)                                                            C036000
    (FM INTEGER)                                                            C036100
    (SZ INTEGER) (RL INTEGER) (PK INTEGER) (PT INTEGER))                    C036200
   (BLOCK NIL (SET (BIT 0 6 (CORENTRY DPOST)) PT)                           C036300
    (SET (BIT 0 6 (CORENTRY DPROTK)) PK)                                    C036400
    (SET (CORENTRY DREEL) RL)                                               C036500
    (SET (CORENTRY DSIZE) SZ)                                               C036600
    (SET (BIT 0 6 (CORENTRY DFORM)) FM)                                     C036700
    (SET (BIT 0 6 (CORENTRY DUNIT)) UT)                                     C036800
    (SET (CORENTRY DNAME) NM)                                               C036900
    (CODE (LDA (ENTRY DCALL) (RA R)) (BUC (ENTRY DSPCHR)))                  C037000
    (RETURN (BIT 0 6 (CORENTRY DSTAT))))))                                  C037100
PEN (SECTION (IO LISP SYS) SYMBOL)                                          C037200
  (FUNCTION (ILNLOCK NOVALUE) NIL (POSITION ICURFN KEY.))                   C037300
  (FUNCTION (OUNLOCK NOVALUE) NIL (POSITION CURFN KEY.))                    C037400
  (FUNCTION ((OPEN . LISP) SYMBOL)                                          C037500
   ((FN SYMBOL) (DL SYMBOL))                                                C037600
   (BLOCK NIL (IF (GET FN FILES.) (RETURN (ERROR MSG1)))                    C037700
    (BLOCK ((IA (ARRAY INTEGER) (CREATE 18 (QUOTE INTEGER) 0))              C037800
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```
(FA (ARRAY FUNCTIONAL) (CREATE 8 (QUOTE FUNCTIONAL) NOP))                    0037900
(SA (ARRAY SYMBOL) (CREATE 2 (QUOTE SYMBOL) NIL))                            0038000
(U SYMBOL (GET (QUOTE UNIT) DL))                                             0038100
(F SYMBOL (GET (QUOTE FORM) DL))                                             0038200
(R SYMBOL (GET (QUOTE RECORD) DL))                                           0038300
(H SYMBOL (GET (QUOTE HORIZONTAL) DL))                                       0038400
(V SYMBOL (GET (QUOTE VERTICAL) DL))                                         0038500
(O SYMBOL (GET (QUOTE OVERFLOW) DL))                                         0038600
(X SYMBOL)                                                                   0038700
(T INTEGER 1)                                                                0038800
(Y INTEGER 0)                                                                0038900
(Z OCTAL 22Q)                                                                0039000
(W INTEGER 1) (PROTEC SYMBOL (GET (QUOTE PROTECT) DL)))                      0039100
(IF (NULL (AND U F R H)) (RETURN (ERROR MSG2)))                              0039200
(SET (IA 1) (CADR H))                                                        0039300
(SET (IA 2) (CADDR H))                                                       0039400
(SET (IA 3) (CADDDR H))                                                      0039500
(IF V (BLOCK NIL (SET (IA 4) (CADR V))                                       0039600
  (SET (IA 5) (CADDR V)) (SET (IA 6) (CADDDR V)))                            0039700
 (BLOCK NIL (SET (IA 4) 1) (SET (IA 5) 51) (SET (IA 6) 50)))                 0039800
(SET (IA 7) (CDR R))                                                         0039900
(SET (IA 8)                                                                  0040000
 (IF (EQ (CDR F) (QUOTE BINARY))                                             0040100
  1 (PLUS 1 (IQUOTIENT (PLUS -1 (IA 3)) 6))))                                0040200
TO (SET (IA 9) 1)                                                            0040300
(SET (IA 10) 1)                                                              0040400
(SET (IA 11) 0)                                                              0040500
(SET (IA 12) (CVRTNM FN))                                                    0040600
(SET (IA 13) 1)                                                              0040700
(SET (IA 14) 0)                                                              0040800
(SET (FA 6) CHSUPL)                                                          0040900
(IF (EQ (SET X (CDR U)) (QUOTE TTY))                                         0041000
 (BLOCK NIL (IF (GR (IA 3) 72)                                               0041100
   (BLOCK NIL (SET (IA 3) 72) (SET (IA 2) 73)))                              0041200
  (SET (IA 7) 1)                                                             0041300
  (SET (FA 4) OUTTY)                                                         0041400
  (SET (FA 5) INTTY)                                                         0041500
  (SET (FA 6) TTYSPL) (SET Y (FDEC (IA 12) 8 21Q 19 0 0 0)))                 0041600
 (EQ X (QUOTE TAPE))                                                         0041700
 (BLOCK NIL (IF (NOT (EQ (CDR F) (QUOTE BCD)))                               0041800
   (BLOCK NIL (SET (FA 4) OUTPAS)                                            0041900
    (SET (FA 5) INTPAS) (GO T21)))                                           0042000
  (IF (OR (GR (IA 3) 120)                                                    0042100
    (GR (TIMES (IA 7)                                                        0042200
      (PLUS 1 (IQUOTIENT (PLUS -1 (IA 3)) 8))) 300))                         0042300
   (BLOCK NIL (SET (IA 2) 81)                                                0042400
    (SET (IA 3) 80) (SET (IA 7) 30) (SET (IA 8) 14)))                        0042500
  (SET (FA 4) OUTAPE)                                                        0042600
  (SET (FA 5) INTAPE)                                                        0042700
  (SET Z 23Q)                                                                0042800
  (SET T (PLUS 1 (IQUOTIENT (PLUS -1 (IA 3)) 8)))                            0042900
  T21 (IF (SET X (GET (QUOTE REEL) DL)) (SET Y (CDR X)))                     0043000
  (IF (AND PROTEC (MEMBER (QUOTE WRITE) (CDR PROTEC)))                       0043100
   (SET W 0))                                                                0043200
  (SET Y (FDEC (IA 12) 3 Z (TIMES (IA 7) T) (CVRTNM Y) W 0)))                0043300
 (EQ X (QUOTE DISC))                                                         0043400
 (BLOCK NIL (SET (IA 3) 80)                                                  0043500
  (IF (SET X (GET (QUOTE DISC) DL))                                          0043600
   (SET (IA 12) (CVRTNM (CDR X))))                                           0043700
  (IF (EQ (CDR F) (QUOTE BCD)) (GO T31))                                     0043800
  (SET (FA 4) OUTDCAS)                                                       0043900
  (SET (FA 5) INDCAS)                                                        0044000
  (GO T32)                                                                   0044100
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        T31 (IF (GR (IA 7) 51) (SET (IA 7) 51))                                  0044200
        (SET Z 23Q)                                                              0044300
        (SET (IA 8) 14)                                                          0044400
        (SET (FA 4) OUTDISC)                                                     0044500
        (SET (FA 5) INDISC)                                                      0044600
        T32 (IF (MEMBER (QUOTE OLD) DL) (GO T33))                                0044700
        (SET (IA 15) 7)                                                          0044800
        (SET Y (FDEC (IA 12) 11 Z 4096 0 0 0))                                   0044900
        (GO ALL)                                                                 0045000
        T33 (IF (GR (CAR (SET X (RDEC (IA 12)))) 3)                              0045100
         (BLOCK NIL (IF (GR (CAR X) 4) (GR T 100))                               0045200
           (RETURN (ERROR MSG3))) (SET T (PLUS T 1)) (GO T33)))                  0045300
        (IF (NQ Z (CADR X)) (RETURN (ERROR MSG2)))                               0045400
        (SET (IA 15) (IQUOTIENT (PLUS (CADDR X) -1) 512)) (GO A1))               0045500
       (EQ X (QUOTE CORE))                                                       0045600
       (RETURN (ERROR MSG6))                                                     0045700
       (EQ X (QUOTE CRT))                                                        0045800
       (RETURN (ERROR MSG6))                                                     0045900
       (RETURN (ERROR (QUOTE (NOT A UNIT)))))                                    0046000
      ALL (IF (GR Y 3) (RETURN (ERROR MSG3)))                                    0046100
      A1 (IF (GR (IA 1) (IA 3)) (SET (IA 1) 1))                                  0046200
      (IF (GR (IA 4) (IA 6)) (SET (IA 4) 1))                                     0046300
      (SET (IA 18) 3Q15)                                                         0046400
      (IF C (BLOCK NIL (SET (FA 3) (SET (FA 1) (CADR C)))                        0046500
        (SET (FA 2) (CADDR C))                                                   0046600
        (SET (FA 7) (CADDDR C)) (SET (FA 8) (CADDDDR C)))                        0046700
       (BLOCK NIL (SET (FA 1) ENDIN)                                             0046800
        (SET (FA 3) ENDOUT)                                                      0046900
        (SET (FA 7) IUNLOCK) (SET (FA 8) OUNLOCK)))                              0047000
      (SET FILES. (CONS (CONS FN (APPEND (LIST (CONS (QUOTE BUF)                 0047100
            (CREATE (PLUS 1 (TIMES (IA 7) (IA 8)))                               0047200
             (QUOTE OCTAL) 1002004010020040))                                    0047300
           (CONS (QUOTE SCA) SA)                                                 0047400
           (CONS (QUOTE ICA) IA) (CONS (QUOTE FCA) FA)) DL)) FILES.))            0047500
      (IF PROTEC (SET (CAR FILES.)                                               0047600
        (CONS (CAAR FILES.) (CONS PROTEC (CDAR FILES.)))))                       0047700
      (SET (IA 17) 100) (RETURN (MAPCAR FILES. CAR.))))))                        0047800
(SHUT (SECTION (IO LISP SYS) SYMBOL)                                             0047900
  (FUNCTION ((SHUT . LISP) SYMBOL)                                               0048000
   ((A SYMBOL) (B SYMBOL))                                                       0048100
   (BLOCK ((X SYMBOL (FILES. . IO)) (Y SYMBOL NIL))                              0048200
    A (IF (NULL X)                                                               0048300
     (RETURN (CONS A (QUOTE (NOT A FILE)))) (EQ A (CAAR X)) (GO B))              0048400
    (SET X (CDR (SET Y X)))                                                      0048500
    (GO A)                                                                       0048600
    B (BLOCK ((FL SYMBOL (CAR X)))                                               0048700
     (IF Y (SET (CDR Y) (CDR X)) (SET FILES. (CDR FILES.)))                      0048800
     (IF (EQ A (CURFN . IO)) (OUTPUT (CTTY . SYS)))                              0048900
     (IF (EQ A (ICURFN . IO)) (INPUT (ITTY . SYS)))                              0049000
     (BLOCK ((I (ARRAY INTEGER) (CDR (GET (QUOTE ICA) FL)))                      0049100
       (NM INTEGER) (W OCTAL) (INS BOOLEAN NIL))                                 0049200
      (SET NM (I 12))                                                            0049300
      (IF (OR (EQ (SET X (CDR (GET (QUOTE UNIT) FL))) (QUOTE TTY))               0049400
        (EQ X (QUOTE TAPE)))                                                     0049500
       (BLOCK NIL (SET W (ENTRY DEFILE)) (GO C))                                 0049600
       (NQ X (QUOTE DISC))                                                       0049700
       (RETURN (CONS A (QUOTE (IS CRT OR CORE))))                                0049800
       (EQ (CDR (GET (QUOTE FILE) B)) (QUOTE DELETE))                            0049900
       (BLOCK NIL (SET W (ENTRY DELETE)) (GO C)))                                0050000
      (SET W (ENTRY INSERT))                                                     0050100
      (SET INS TRUE)                                                             0050200
      (SET (CORENTRY INNAME)                                                     0050300
       (IF (SET Y (GET (QUOTE NAME) B))                                          0050400
```

```
        (I2O. (CVRTNM (CDR Y))) (I2C. NM)))                                0050500
      (SET (CORENTRY INSIZE) (I2O. (TIMES 512 (PLUS (I 15) 1))))           0050600
      C (SET (CCRE (PLUS 2 W)) (I2C. NM))                                  0050700
      D (CCDE (LCA W) (BUC (ENTRY CSPCHR)))                                0050800
      (IF (OR (NCT INS) (LC (CORENTRY INSTAT) 3)) (GO LOG))                0050900
      (SET INS FALSE)                                                      0051000
      (GO C)                                                               0051100
      LOG (IF (SET Y (GET (QUOTE LCG) B)) (LOGTTY 9 (CDR Y)))))            0051200
    (RETURN (MAPCAR FILES. CAR.)))))                                       0051300
(IN.CUT (SECTICN (IO LISP SYS) SYMBCL)                                     0051400
  (FLNCTION ((CUTPLT . LISP) SYMBOL)                                       0051500
   ((FN SYMBCL))                                                           0051600
   (IF (EQN FN CURFN)                                                      0051700
    FN (BLCCK ((DL SYMBCL (GET FN FILES.)))                                0051800
     (IF (NULL DL) (RETURN (ERROR MSG4)))                                  0051900
     (BLOCK ((IA (ARRAY INTEGER) (CDR (GET (QUCTE ICA) (CDR DL))))         0052000
       (FA (ARRAY FUNCTICNAL) (CDR (GET (QUOTE FCA) (CDR DL))))           0052100
       (X SYMBCL (GET (QUOTE PROTECT) (CDR DL))) (Y INTEGER ))             0052200
      (IF (AND X (MEMBER (QUOTE WRITE) (CDR X))) (RETURN NIL))             0052300
      (SET BUFLCC (CDR (GET (QUOTE BUF) (CDR DL))))                        0052400
      (LOCSET LMG (IA 1))                                                  0052500
      (LOCSET RMG (IA 2))                                                  0052600
      (LOCSET MAXCCL (IA 3))                                               0052700
      (LOCSET TOP (IA 4))                                                  0052800
      (LOCSET BCT (IA 5))                                                  0052900
      (LOCSET PAGE (IA 6))                                                 0053000
      (LOCSET RECORD (IA 7))                                               0053100
      (LOCSET WPL (IA 8))                                                  0053200
      (LOCSET CURCCL (IA 9))                                               0053300
      (LOCSET CURLINE (IA 10))                                             0053400
      (LOCSET SUMLINE (IA 11))                                             0053500
      (LOCSET NAME (IA 12))                                                0053600
      (LOCSET STATLS (IA 13))                                              0053700
      (LOCSET SECTCR (IA 14))                                              0053800
      (LOCSET MAXSEC (IA 15))                                              0053900
      (LOCSET SIZE (IA 16))                                                0054000
      (LOCSET CCUNT (IA 17))                                               0054100
      (LOCSET RMGO (FA 3))                                                 0054200
      (LOCSET BCTO (FA 2))                                                 0054300
      (LOCSET MCVE (FA 4))                                                 0054400
      (LOCSET KEY (FA 8))                                                  0054500
      (IF (GR SUMLINE 1) (SET Y (TIMES (PLUS -1 SUMLINE) WPL)))            0054600
      (LOCSET LINELOC (BUFLOC Y))                                          0054700
      (SET X CURFN) (SET CURFN FN) (RETURN X)))))                          0054800
  (FLNCTION ((INPUT . LISP) SYMBOL)                                        0054900
   ((FN SYMBCL))                                                           0055000
   (IF (EQN FN ICURFN)                                                     0055100
    FN (BLCCK ((DL SYMBCL (GET FN FILES.)))                                0055200
     (IF (NULL DL) (RETURN (ERROR MSG4)))                                  0055300
     (BLOCK ((IA (ARRAY INTEGER) (CDR (GET (QUOTE ICA) (CDR DL))))         0055400
       (FA (ARRAY FUNCTICNAL) (CDR (GET (QUOTE FCA) (CDR DL))))           0055500
       (SA (ARRAY SYMBCL) (CDR (GET (QUOTE SCA) (CDR DL))))               0055600
       (X SYMBCL (GET (QUOTE PROTECT) (CDR DL))) (Y INTEGER ))             0055700
      (IF (AND X (MEMBER (QUOTE READ) (CDR X))) (RETURN NIL))              0055800
      (SET IBUFLCC (CDR (GET (QUOTE BUF) (CDR DL))))                       0055900
      (LOCSET ILMG (IA 1))                                                 0056000
      (LOCSET IRMG (IA 2))                                                 0056100
      (LOCSET IMAXCOL (IA 3))                                              0056200
      (LOCSET ITOP (IA 4))                                                 0056300
      (LOCSET IBCT (IA 5))                                                 0056400
      (LOCSET IPAGE (IA 6))                                                0056500
      (LOCSET IRECCRD (IA 7))                                              0056600
      (LOCSET IWPL (IA 8))                                                 0056700
```

```
      (LOCSET ICURCOL (IA 9))                                          0056800
      (LOCSET ICURLINE (IA 10))                                        0056900
      (LOCSET ISUMLINE (IA 11))                                        0057000
      (LOCSET INAME (IA 12))                                           0057100
      (LOCSET ISTATUS (IA 13))                                         0057200
      (LOCSET ISECTOR (IA 14))                                         0057300
      (LOCSET IMAXSEC (IA 15))                                         0057400
      (LOCSET ISIZE (IA 16))                                           0057500
      (LOCSET ICOUNT (IA 17))                                          0057600
      (LOCSET TTYMAX (IA 18))                                          0057700
      (LOCSET IRMGC (FA 1))                                            0057800
      (LOCSET IBCTC (FA 2))                                            0057900
      (LOCSET IMOVE (FA 5))                                            0058000
      (LOCSET XXFUNC (FA 6))                                           0058100
      (LOCSET IKEY (FA 7))                                             0058200
      (LOCSET XXSAVE (SA 1))                                           0058300
      (IF (GR ISUMLINE 1) (SET Y (TIMES (PLUS -1 ISUMLINE) IWPL)))     0058400
      (LOCSET ILINELOC (IBUFLOC Y))                                    0058500
      (SET X ICURFN) (SET ICURFN FN) (RETURN X))))))                   0058600
(DEFINITION (SECTION (IC LISP SYS) SYMBOL)                             0058700
  (FUNCTION ((POSITION . LISP) SYMBOL)                                 0058800
   ((F SYMBOL) (A INTEGER))                                            0058900
   (BLOCK ((DL SYMBOL (GET F FILES.)))                                 0059000
    (IF (NULL DL)                                                      0059100
     (RETURN (ERROR MSG4)) (OR (LS A 1) (GR A 8)) (RETURN NIL))        0059200
    (BLOCK ((U SYMBOL (GET (QUOTE UNIT) (CDR DL))))                    0059300
     (IF (NULL U)                                                      0059400
      (RETURN (ERROR MSG6))                                            0059500
      (EQ (CDR U) (QUOTE TAPE))                                        0059600
      (GO T0) (EQ (CDR U) (QUOTE DISC)) (GO D0) (RETURN NIL))          0059700
     T0 (BLOCK ((N INTEGER 1))                                         0059800
      (IF (LS A 3) (SET DL (INPUT F)) (SET DL (OUTPUT F)))             0059900
      (CASE A (GO T1)                                                  0060000
       (GO T2) (GO T3) (GO T4) (GO T5) (GO T6) (GO T7) (GO T8))        0060100
      T1 (SET N 0)                                                     0060200
      T2 (BLOCK ((X INTEGER (TIMES IRECORD (PLUS 1 (IQUOTIENT (PLUS    0060300
            -1 IMAXCOL) 8)))) (S INTEGER 0))                           0060400
       T21 (SET S (MOVEI X FIXLOC))                                    0060500
       (IF (OR (EQ N 0) (GQ S 4)) (GO T22))                            0060600
       (SET N (PLUS N 1))                                              0060700
       (GO T21)                                                        0060800
       T22 (SET ISUMLINE 0)                                            0060900
       (IF (LS S 4)                                                    0061000
        (SET U 1)                                                      0061100
        (GR S 5)                                                       0061200
        (BLOCK NIL (INPUT DL) (RETURN (ERROR MSG7)))                   0061300
        (LS N 2)                                                       0061400
        (SET U (IF (EQ S 4) (QUOTE ECF) (QUOTE EOT)))                  0061500
        (SET U (PLUS N -1))) (INPUT DL) (RETURN U))                    0061600
      T5 (SET COUNT 100)                                               0061700
      T3 T4 T6 T7 (SET (CORENTRY TNAME) NAME)                          0061800
      (SET (BIT 0 6 (CORENTRY ACTION)) (PLUS A 1))                     0061900
      (CODE (LDA (ENTRY TAPOS) (R L567.7)) (BUC (ENTRY DSPCHR)))       0062000
      T8 (SET SUMLINE 0) (SET STATUS 1) (OUTPUT DL) (RETURN F))        0062100
     D0 (BLOCK ((N INTEGER 1))                                         0062200
      (IF (OR (EQ A 3) (EQ A 4))                                       0062300
       (SET DL (OUTPUT F)) (SET DL (INPUT F)))                         0062400
      (SET U F)                                                        0062500
      (CASE A (GO D1)                                                  0062600
       (GO D2) (GO D3) (GO D4) (GO D5) (GO D6) (GO D7) (GO D8))        0062700
      D1 (IF (EQ ISECTOR IMAXSEC) (SET N 0))                           0062800
      (GO D21)                                                         0062900
      D2 (SET N (DIFFERENCE IMAXSEC ISECTOR))                          0063000
```

```
      D21 (IF (GR N 0) (SET U N) (SET U (QUOTE EOF)))                    C063100
      (SET ISECTOR (PLUS ISECTOR N))                                     C063200
      (GO D8)                                                            C063300
      D3 D4 (PRINC (OCT2CH 34Q))                                         C063400
      (ENDOUT)                                                           C063500
      (IF (NQ SUMLINE 1) (ENDOUTR))                                      C063600
      (OUTPUT DL)                                                        C063700
      (RETURN U)                                                         C063800
      D6 (IF (GR ISECTOR 1)                                              C063900
       (BLOCK NIL (SET ISECTOR (PLUS ISECTOR -1)) (GO D8)))              C064000
      D5 D7 (SET ICOUNT 100)                                             C064100
      (SET ISECTOR 0)                                                    C064200
      D8 (SET ISUMLINE 0) (SET ISTATUS 1) (INPUT DL) (RETURN U))))))     C064300
(READF (SECTION (IC LISP SYS) SYMBOL)                                    C064400
  (FUNCTION ((ENDIN . LISP) NOVALUE)                                     C064500
   NIL (BLOCK ((INDEX INTEGER 0))                                        C064600
    (IF (EQ ISUMLINE 0) (BLOCK NIL (ENDINR) (GO E2)))                    C064700
    (SET ISUMLINE (PLUS ISUMLINE 1))                                     C064800
    (SET ISTATUS 1)                                                      C064900
    (IF (GR ISUMLINE IRECORD) (BLOCK NIL (SET ISUMLINE 0) (GO E1)))      C065000
    (SET ICURCOL ILMG)                                                   C065100
    (IF (GR ISUMLINE 1) (SET INDEX (TIMES (PLUS -1 ISUMLINE) IWPL)))     C065200
    (LOCSET ILINELOC (IBUFLOC INDEX))                                    C065300
    E2 (SET ICURLINE (PLUS ICURLINE 1))                                  C065400
    R1 (IF (EQ ICURLINE IBOT) (IBOTC))                                   C065500
    (IF (GR ICURLINE IPAGE) (ENDINP)) E1))                               C065600
  (FUNCTION ((ENDINR . LISP) NOVALUE)                                    C065700
   NIL (BLOCK NIL (CLEAR ICURFN)                                         C065800
    (SET ISTATUS 2)                                                      C065900
    (IMOVE)                                                              C066000
    (SET ISUMLINE 1)                                                     C066100
    (SET ICURCOL ILMG)                                                   C066200
    (LOCSET ILINELOC (IBUFLOC 0))                                        C066300
    (IF (GQ ISTATUS 4) (SETCHAR (OCT2CH 34Q) ILINELOC ICURCOL))))        C066400
  (FUNCTION ((ENDINP . LISP) NOVALUE)                                    C066500
   NIL (BLOCK ((X INTEGER (PLUS ITOP IPAGE (MINUS ICURLINE)))            C066600
     (Y INTEGER 0))                                                      C066700
    (FOR Y (STEP 1 1 GR X)                                               C066800
     (BLOCK NIL (ENDIN) (IF (GR ISTATUS 2) (GO T1))))                    C066900
    T1 (SET ICURLINE ITOP)))                                             C067000
  (FUNCTION ((READWORD . LISP) OCTAL)                                    C067100
   NIL (BLOCK ((X OCTAL))                                                C067200
    (IF (EQ 6 IWPL)                                                      C067300
     (ERROR MSG5)                                                        C067400
     (EQ ISTATUS 4)                                                      C067500
     (IKEY)                                                              C067600
     (EQ ISUMLINE 0)                                                     C067700
     (ENDINR)                                                            C067800
     (GR ISUMLINE ISIZE) (ENDINR) (EQ ISTATUS 4) (RETURN X))             C067900
    (SET X (IBUFLOC ISUMLINE))                                           C068000
    (SET ISUMLINE (PLUS 1 ISUMLINE)) (RETURN X)))                        C068100
  (FUNCTION ((READCH . LISP) SYMBOL)                                     C068200
   NIL (BLOCK ((SW INTEGER 1) (X SYMBOL (OCT2CH 0Q)))                    C068300
    (IF XXSAVE (BLOCK NIL (SET X XXSAVE) (SET XXSAVE NIL) (GO BB))       C068400
     (EQ ISTATUS 4)                                                      C068500
     (IF (EQ 0 ISUMLINE)                                                 C068600
      (BLOCK NIL (IKEY) (ENDINR))                                        C068700
      (BLOCK NIL (SET ISUMLINE 0) (SET X (OCT2CH 34Q)) (GO BB))))        C068800
    (IF (EQ ISUMLINE 0) (ENDINR))                                        C068900
    (IF (EQ ICURCOL IRMG)                                                C069000
     (BLOCK NIL (SET ISTATUS 0)                                          C069100
      (IRMCO) (IF (GR ISTATUS 0) (SET SW 2))))                           C069200
    (IF (GR ICURCOL IMAXCOL) (BLOCK NIL (SET SW 2) (ENDIN)))             C069300
```

```
    (CASE SW (GC AA) (GC BB))                                              C069400
    AA (SET X ((GETCHAR . IO) ILINELCC ICURCOL))                           0069500
    (SET ICURCCL (PLUS ICURCOL 1)) BB (RETURN X)))                         C069600
  (SECTION (IO LISP SYS) SYMBOL)                                           0069700
  (FUNCTION ((GETID . LISP) SYMBOL) ((A SYMBOL)))                          0069800
  (FUNCTION ((MAKEID . LISP) SYMBOL) ((A (ARRAY OCTAL))))                  0069900
  (FUNCTION ((MAKIC . FSM) SYMBOL) NIL)                                    0070000
  (FUNCTION ((MAKICB . FSM) SYMBOL) NIL)                                   0070100
  (FUNCTION ((MGENID . FSM) SYMBOL) NIL)                                   0070200
  (FUNCTION ((SYM2CCT . LISP) OCTAL) ((A SYMBOL)))                         0070300
  (FUNCTION (RCNV CCTAL)                                                   0070400
   ((A SYMBOL)) (BLOCK ((B REAL A)) (RETURN (R2D. B))))                    0070500
  (FUNCTION (ICNV CCTAL)                                                   0070600
   ((A SYMBOL)) (BLOCK ((B INTEGER A)) (RETURN (I2D. B))))                 0070700
  (FUNCTION (RCFUNC SYMBCL) NIL)                                           0070800
  (FUNCTION (SYMARY SYMBCL) NIL)                                           0070900
  (FUNCTION (BCLARY SYMBCL) NIL)                                           0071000
  (FUNCTION (FNCARY SYMBCL) NIL)                                           0071100
  (FUNCTION (NUMULT SYMBCL)                                                0071200
   ((TYPE SYMBCL) (CNV (FUNCTIONAL CCTAL SYMBOL)))                         0071300
   (ERROR (QUOTE (MULTI.DIMENSIONAL ARRAYS ILLEGAL))))                     0071400
  (DECLARE (READL BOOLEAN FLUID NIL) (READA BOOLEAN FLUID NIL))            0071500
  (FUNCTION (RCWREAD SYMBOL)                                               0071600
   ((TYPE SYMBCL) (CNV (FUNCTIONAL CCTAL SYMBOL)) (L SYMBOL))              0071700
   (BLOCK ((S SYMBCL))                                                     0071800
    A (SET S (READ))                                                       0071900
    (IF READL (BLOCK NIL (SET L (CONS (CNV S) L)) (GO A))                  0072000
     (NQ S 3) (RETURN (ERRCR (QUOTE (ILLEGAL ARRAY SYNTAX)))))             0072100
    (BLOCK ((I INTEGER (LENGTH L)))                                        0072200
     (BLOCK ((AR (ARRAY OCTAL) (CREATE I TYPE O)))                         0072300
      (FOR I (STEP I -1 LS 1)                                              0072400
       (BLOCK NIL (SET (AR I) (CAR L)) (SET L (CDR L))))                   0072500
      (RETURN AR)))))                                                      0072600
  (FUNCTION ((ARREAD . LISP) SYMBOL)                                       0072700
   NIL (BLOCK ((TYPE SYMBOL (READ)))                                       0072800
    (IF (EQ TYPE (QUOTE FUNCTION))                                         0072900
     (RETURN (RCFUNC))                                                     0073000
     (EQ TYPE (QUOTE SYMBOL))                                              0073100
     (RETURN (SYMARY))                                                     0073200
     (EQ TYPE (QUOTE BOOLEAN))                                             0073300
     (RETURN (BCLARY))                                                     0073400
     (EQ TYPE (QUOTE FUNCTIONAL)) (RETURN (FNCARY)))                       0073500
    (BLOCK ((CNV (FUNCTIONAL OCTAL SYMBOL)))                               0073600
     (IF (EQ TYPE (QUOTE REAL))                                            0073700
      (SET CNV RCNV)                                                       0073800
      (EQ TYPE (QUOTE INTEGER))                                            0073900
      (SET CNV ICNV)                                                       0074000
      (EQ TYPE (QUOTE OCTAL))                                              0074100
      (SET CNV SYM2OCT)                                                    0074200
      (RETURN (ERRCR (CONS TYPE (QUOTE (ILLEGAL ARRAY TYPE))))))          0074300
     (BLOCK ((READL BOOLEAN FLUID TRUE)                                    0074400
       (READA BOOLEAN FLUID TRUE) (L SYMBOL))                              0074500
      (SET L (READ))                                                       0074600
      (IF READA (SET READA NIL) (RETURN (NUMULT TYPE CNV)))                0074700
      (RETURN (IF READL (RCWREAD TYPE CNV (LIST (CNV L)))                  0074800
        (EQ L 3)                                                           0074900
        (CREATE O TYPE C)                                                  0075000
        (ERRCR (QUOTE (ILLEGAL ARRAY SYNTAX))))))))))                      0075100
  (FUNCTION ((RDLIST . LISP) SYMBOL)                                       0075200
   NIL (BLOCK ((S SYMBOL (LIST NIL))                                       0075300
    (R SYMBCL) (READL BOOLEAN FLUID TRUE) (P SYMBOL))                      0075400
    (SET P S)                                                              0075500
    A (SET R (READ))                                                       0075600
```

```
      (IF READL (BLOCK NIL (SET P (SET (CDR P) (LIST R))) (GO A)))          C0075700
      (CASE R (BLOCK NIL (SET (CDR P) (READ))                               C0075800
        (SET READL TRUE)                                                    C0075900
        (SET R (READ))                                                      C0076000
        (IF (OR READL (NQ R 2)) (GO ERR) (RETURN (CDR S))))                 C0076100
       (RETURN (CDR S)) (GO ERR))                                           C0076200
      ERR (RETURN (ERROR (QUOTE (ILLEGAL LIST STRUCTURE))))))               C0076300
    (SECTION FSM SYMBOL)                                                    C0076400
    (FUNCTION (TOKEN INTEGER) NIL)                                          C0076500
    (DECLARE (FSMSYM SYMBOL OWN)                                            C0076600
     (FSMOCT OCTAL OWN) (FSMREL REAL OWN) (SPFLAG BOOLEAN OWN NIL))         C0076700
    (SECTION (IO LISP FSM SYS) SYMBOL)                                      C0076800
    (FUNCTION ((READ . IO) SYMBOL)                                          C0076900
     NIL (BLOCK ((N INTEGER))                                               C0077000
      A (CASE (SET N (TOKEN))                                               C0077100
       (RETURN (MGENID))                                                    C0077200
       (RETURN FSMSYM)                                                      C0077300
       (RETURN FSMOCT)                                                      C0077400
       (RETURN (C2I. FSMOCT))                                               C0077500
       (RETURN FSMREL)                                                      C0077600
       (BLOCK ((Y (ARRAY OCTAL) FSMSYM))                                    C0077700
        (BLOCK ((X SYMBOL (READ)))                                          C0077800
         (IF (NUMBP X)                                                      C0077900
          (RETURN (IF (EQ ((GETCHAR . LISP) Y 1) (QUOTE '+))                C0078000
            X (MINUS X)))) (SET FSMSYM (SCONCS Y FSMSYM)) (GO B2)))         C0078100
       (RETURN (RDLIST))                                                    C0078200
       (IF READA (BLOCK NIL (SET READA NIL) (RETURN 5))                     C0078300
        (RETURN (ARREAD)))                                                  C0078400
       (GO A)                                                               C0078500
       (GO A)                                                               C0078600
       (RETURN ((MAKEID . LISP) FSMSYM))                                    C0078700
       (RETURN (MAKIDB))                                                    C0078800
       (LABEL MID (BLOCK NIL (SET SPFLAG NIL)                               C0078900
         (RETURN ((MAKID . FSM)))))                                         C0079000
       (GO MID)                                                             C0079100
       (LABEL GID (RETURN ((GETID . LISP) FSMSYM)))                         C0079200
       (IF (OR READA READL)                                                 C0079300
        (BLOCK NIL (ERROR (QUOTE (DATA.SEPARATOR READ WITHIN                C0079400
          S.EXPRESSION))) (GO A)) (GO GID)) (GO B1))                        C0079500
      B1 (IF READL (BLOCK NIL (SET READL NIL)                               C0079600
       (RETURN (PLUS N -10))))                                              C0079700
      B2 (RETURN (ERROR (CONS FSMSYM (QUOTE (ILLEGAL S.EXPRESSION)))))))    C0079800
    (FUNCTION ((READ . LISP) SYMBOL)                                        C0079900
     NIL (BLOCK ((READL BOOLEAN FLUID FALSE)                                C0080000
       (READA BOOLEAN FLUID FALSE)) (RETURN ((READ . IO))))))               C0080100
(PRINTF (SECTION (IO LISP SYS) SYMBOL)                                      C0080200
    (FUNCTION ((ENDOLT . LISP) NOVALUE)                                     C0080300
     NIL (BLOCK ((INDEX INTEGER 0))                                         C0080400
      (SET SUMLINE (PLUS SUMLINE 1))                                        C0080500
      (SET STATUS 1)                                                        C0080600
      (IF (GR SUMLINE RECORD) (BLOCK NIL (ENDOUTR) (GO E1)))                C0080700
      (SET CURCOL LMG)                                                      C0080800
      (IF (GR SUMLINE 1) (SET INDEX (TIMES (PLUS -1 SUMLINE) WPL)))         C0080900
      (LOCSET LINELOC (BUFLOC INDEX))                                       C0081000
      E1 (SET CURLINE (PLUS CURLINE 1))                                     C0081100
      P1 (IF (EQ CURLINE BOT) (BOTO))                                       C0081200
      (IF (GR CURLINE PAGE) (ENDOUTP))))                                    C0081300
    (FUNCTION ((ENDOLTR . LISP) NOVALUE)                                    C0081400
     NIL (BLOCK NIL (MOVE)                                                  C0081500
      (CLEAR CURFN)                                                         C0081600
      (SET SUMLINE 1) (SET CURCOL LMG) (LOCSET LINELOC (BUFLOC 0))))        C0081700
    (FUNCTION ((ENDOLTP . LISP) NOVALUE)                                    C0081800
     NIL (BLOCK ((X INTEGER (PLUS TOP PAGE (MINUS CURLINE)))                C0081900
```

```
    (Y INTEGER 0))                                                          0082000
   (FOR Y (STEP 1 1 GR X) (ENDOUT)) T1 (SET CURLINE TOP)))                  0082100
 (FUNCTION ((PRINSTRING . LISP) SYMBOL)                                     0082200
  ((SS SYMBOL))                                                             0082300
  (BLOCK ((X INTEGER (STRINGL SS))                                          0082400
    (Y INTEGER) (Z INTEGER 1) (SA (ARRAY OCTAL) SS))                        0082500
   (BLOCK ((LMG INTEGER FLUID LOC Z))                                       0082600
    (IF (NULL (PRMODE . SYS))                                               0082700
     (BLOCK NIL (FOR Y (STEP 1 1 GR X)                                      0082800
       (PRINCH ((GETCHAR . LISP) SA Y))) (GO XT)))                          0082900
    (PRINCH (CCT2CH 43Q))                                                   0083000
    (FOR Y (STEP 1 1 GR X)                                                  0083100
     (BLOCK ((Z SYMBOL ((GETCHAR . LISP) SA Y)))                            0083200
      (IF (OR (EQ Z (QUOTE '))                                             0083300
        (EQ Z (CCT2CH 43Q)) (EQ Z (CCT2CH 3Q)))                            0083400
       (PRINCH (QUOTE ''))                                                  0083500
       (NCT (NORMSP Z))                                                     0083600
       (BLOCK ((CH SYMBOL (NUMSTR (CH2OCT Z))))                             0083700
        (PRINCH XXCHAR)                                                     0083800
        (PRINCH (QUOTE C))                                                  0083900
        (BLOCK ((PRMODE BOOLEAN FLUID FALSE)) (PRINSTRING CH))              0084000
        (PRINCH XXDLIM) (GO XTFOR)))                                        0084100
      (PRINCH Z)                                                            0084200
      (IF (EQ Z (XXCHAR . SYS)) (PRINCH (QUOTE I))) XTFOR))                 0084300
   T1 (PRINCH (OCT2CH 43Q)) XT (RETURN SS))))                               0084400
 (FUNCTION ((PRINID . LISP) SYMBOL)                                         0084500
  ((TT SYMBOL))                                                             0084600
  (BLOCK NIL (IF (NOT (IDP TT))                                             0084700
    (RETURN NIL)                                                            0084800
    (AND (GNMODE . SYS) (GENIDP TT))                                        0084900
    (BLOCK NIL (PRINCH (XXCHAR . SYS)) (PRINCH (QUOTE G))))                 0085000
   (IF (NORMSP TT)                                                          0085100
    (BLOCK (((PRMODE . SYS) BOOLEAN FLUID FALSE))                           0085200
     (PRINSTRING (TOSTRG TT)) (GO XT))                                      0085300
    (PRMODE . SYS) (PRINCH (XXCHAR . SYS)))                                 0085400
   T2 (PRINSTRING (TOSTRG TT)) XT (RETURN TT)))                             0085500
 (RCUTINE (IDNAME SYMBOL)                                                   0085600
  ((A SYMBOL))                                                              0085700
  (BLOCK NIL X (IF (IDP (SET A (O2S. (BIT 0 18 (CORE (PLUS 1 (S2O. A)       0085800
        ))))))) (RETURN A) (GO X))))                                        0085900
 (FUNCTION ((FVLIST . SYS) SYMBOL) ((S SYMBOL)))                            0086000
 (FUNCTION ((PRINATOM . LISP) SYMBOL)                                       0086100
  (TT)                                                                      0086200
  (BLOCK ((X SYMBOL))                                                       0086300
   (IF (IDP TT)                                                             0086400
    (BLOCK NIL (PRINID TT) (GO B))                                          0086500
    (ARRAYP TT)                                                             0086600
    (BLOCK NIL (PRINARRAY TT) (GO B))                                       0086700
    (STRINGP TT)                                                            0086800
    (SET X TT) (NUMBP TT) (SET X (NUMSTR TT)) (GO C))                       0086900
   A (PRINSTRING X)                                                         0087000
   B (RETURN TT)                                                            0087100
   C (IF (FORMALP TT)                                                       0087200
    (PRINSTRING (QUOTE (*STRING FORMAL ' )))                                0087300
    (OR (CWNP TT) (FLUIDP TT))                                              0087400
    (GO D) (BCDLP TT) (BLOCK NIL (SET X (TOSTRG TT)) (GO A)))               0087500
   ERR (SET X (SCONCS (TOSTRG (QUOTE LA)) (NUMSTR (S2O. TT))))             0087600
   (GO A)                                                                   0087700
   D (SET X (CONS (IDNAME TT) (O2S. (BIT 24 18 (CORE (S2O. TT))))))         0087800
   (PRIN (CONS X (FVLIST TT))) (GO B)))                                     0087900
 (FUNCTION O2B2S ((X OCTAL)) (NQ X 0))                                      0088000
 (FUNCTION O2F2S ((X OCTAL)) (O2F. X))                                      0088100
 (FUNCTION O2R2S ((X OCTAL)) (O2R. X))                                      0088200
```

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(FUNCTION C2I2S ((X OCTAL)) (O2I. X))                                    0088300
(FUNCTION ARTYPE ((S SYMBOL))                                            0088400
 (CASE (PLUS 1 (BIT 42 3 (CORE (S2O. S))))                               0088500
  (QUOTE SYMBOL)                                                         0088600
  (QUOTE BOOLEAN)                                                        0088700
  (QUOTE OCTAL)                                                          0088800
  (QUOTE INTEGER)                                                        0088900
  (QUOTE REAL)                                                           0089000
  (QUOTE FUNCTIONAL) (ERROR (QUOTE (ILLEGAL ARRAY TYPE)))))              0089100
(FUNCTION PRINSMAR ((X (ARRAY SYMBOL)) (N INTEGER))                      0089200
 (BLOCK ((I INTEGER 1))                                                  0089300
  (FOR I (STEP I 1 EQ N)                                                 0089400
   (BLOCK ((S SYMBOL (X I)))                                             0089500
    (PRINCH (QUOTE ' ))                                                  0089600
    (IF (OR (ARRAYP S) (FORMALP S)) (PRINCH (QUOTE '.)))                 0089700
    (PRINO S))) (RETURN X)))                                             0089800
(FUNCTION (PRINARRAY . LISP)                                             0089900
 ((X (ARRAY OCTAL)))                                                     0090000
 (IF (NOT (ARRAYP X))                                                    0090100
  X (BLOCK ((N INTEGER (ARSIZE (S2O. X)))                                0090200
    (TYPE SYMBOL (ARTYPE X)))                                            0090300
   (PRINCH (QUOTE ' ))                                                   0090400
   (PRINO TYPE)                                                          0090500
   (IF (EQ TYPE (QUOTE SYMBOL))                                          0090600
    (PRINSMAR X N)                                                       0090700
    (BLOCK ((I INTEGER 1)                                                0090800
      (CNV (FUNCTIONAL SYMBOL OCTAL)                                     0090900
       (IF (EQ TYPE (QUOTE BOOLEAN))                                     0091000
        C2B2S (EQ TYPE (QUOTE FUNCTIONAL))                               0091100
        C2F2S (EQ TYPE (QUOTE REAL))                                     0091200
        C2R2S (EQ TYPE (QUOTE INTEGER))                                  0091300
        C2I2S (EQ TYPE (QUOTE OCTAL)) OCT2SYM OCT2SYM)))                 0091400
     (FOR I (STEP I 1 EQ N)                                              0091500
      (BLOCK NIL (PRINCH (QUOTE ' )) (PRINO (CNV (X I))))))))            0091600
   (PRINCH (QUOTE ' )) (RETURN X))))                                     0091700
(FUNCTION ((PRINWORD . LISP) OCTAL)                                      0091800
 ((X OCTAL))                                                             0091900
 (BLOCK NIL (IF (EQ 6 WPL)                                               0092000
   (ERROR MSG5)                                                          0092100
   (EQ STATUS 4)                                                         0092200
   (KEY)                                                                 0092300
   (GR SUMLINE RECORD) (ENDOUTR) (EQ SUMLINE 0) (SET SUMLINE 1))         0092400
  (SET (BUFLOC SUMLINE) X)                                               0092500
  (SET SUMLINE (PLUS 1 SUMLINE)) (RETURN X)))                            0092600
(FUNCTION ((PRINT . LISP) SYMBOL)                                        0092700
 ((X SYMBOL)) (BLOCK NIL (PRIN X) (ENDOUT) (RETURN X)))                  0092800
(FUNCTION ((PRINO . LISP) SYMBOL)                                        0092900
 ((X SYMBOL))                                                            0093000
 (BLOCK ((J SYMBOL))                                                     0093100
  (IF (ATOM X) (GO P4))                                                  0093200
  (SET J X)                                                              0093300
  (PRINCH (QUOTE '())                                                    0093400
   P1 (PRINO (CAR J))                                                    0093500
   (IF (NULL (CDR J)) (GO P3))                                           0093600
   (PRINCH (QUOTE ' ))                                                   0093700
   (IF (ATOM (CDR J)) (GO P2))                                           0093800
   (SET J (CDR J))                                                       0093900
   (GO P1)                                                               0094000
   P2 (PRINCH (QUOTE '.))                                                0094100
   (PRINCH (QUOTE ' )) (PRINATOM (CDR J)) P3 (PRINCH (QUOTE ')))         0094200
  (RETURN X) P4 (PRINATOM X) XT (RETURN X)))                             0094300
(FUNCTION ((SYMPRINT . LISP) SYMBOL)                                     0094400
 ((X SYMBOL)) (BLOCK NIL (SYMPRIN X) (ENDOUT) (RETURN X)))               0094500
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  (FUNCTION ((SYMPRIN . LISP) SYMBOL)                                          C094600
   ((X SYMBOL))                                                                C094700
   (BLOCK (((PRMODE . SYS) BOOLEAN FLUID TRUE)) (RETURN (PRIN0 X))))           C094800
  (FUNCTION ((PRIN . LISP) SYMBOL)                                             C094900
   ((X SYMBOL))                                                                C095000
   (BLOCK (((PRMODE . SYS) BOOLEAN FLUID FALSE))                               C095100
    (RETURN (PRIN0 X))))                                                       C095200
  (FUNCTION ((PRINCH . LISP) SYMBOL)                                           C095300
   ((X SYMBOL))                                                                C095400
   (BLOCK ((SW INTEGER 1))                                                     C095500
    (IF (EQ STATUS 4) (KEY))                                                   C095600
    (IF (EQ SUMLINE 0)                                                         C095700
     (BLOCK NIL (SET SUMLINE 1)                                                C095800
      (SET CURCOL LMG) (LOCSET LINELOC (BUFLOC 0))))                           C095900
    (IF (EQ X (OCT2CH 0Q)) (BLOCK NIL (SET SW 2) (ENDOUT)))                    C096000
    (IF (EQ CURCOL RMG) (RMGO))                                                C096100
    (IF (GR CURCOL MAXCOL) (ENDOUT))                                           C096200
    (CASE SW (GO AA) (GO BB))                                                  C096300
    AA (SETCHAR X LINELOC CURCOL)                                              C096400
    (SET CURCOL (PLUS CURCOL 1)) BB (RETURN X))))                              C096500
(MOVEO (SECTION (IC LISP SYS) SYMBOL)                                          C096600
  (ROUTINE (MOVEC INTEGER)                                                     C096700
   ((S INTEGER) (B OCTAL LOC))                                                 C096800
   (BLOCK NIL (CODE (ADR A.) (STF (ENTRY MLOC)))                               C096900
    (SET (CORENTRY MSIZE) S)                                                   C097000
    (SET (CORENTRY MNAME) NAME)                                                C097100
    (SET (CORENTRY MINOUT) (CORENTRY OUT))                                     C097200
    (SET (CORENTRY MSECTR) SECTOR)                                             C097300
    (CODE (LDA (ENTRY MCALL) (RA R)) (BUC (ENTRY DSPCHR)))                     C097400
    (RETURN (BIT 0 6 (CORENTRY MSTAT))))))                                     C097500
  (FUNCTION (OUTTY NOVALUE)                                                    C097600
   NIL (BLOCK NIL (SETCHAR (OCT2CH 3) LINELOC CURCOL)                          C097700
    (T8X12) (MOVEO 19 FIXLOC) XT))                                             C097800
  (FUNCTION (OUTAPE NOVALUE)                                                   C097900
   NIL (BLOCK ((Y INTEGER 0) (J INTEGER 2) (I INTEGER 1))                      C098000
    (SETBUF FIXLOC 6060606060606061Q)                                          C098100
    (SETCHAR (OCT2CH 36Q) LINELOC CURCOL)                                      C098200
    T0 (LOCSET LINELOC (BUFLOC Y))                                             C098300
    T1 (IF (T8X6 77Q LINELOC FIXLOC J I) (GO T2))                              C098400
    (SET J (PLUS J 1))                                                         C098500
    (SET I (PLUS I 1))                                                         C098600
    (IF (LQ I MAXCOL) (GO T1))                                                 C098700
    (SET I 0)                                                                  C098800
    (T8X6 77Q LINELOC FIXLOC J I)                                              C098900
    (SET J (PLUS J 2))                                                         C099000
    (SET I 1)                                                                  C099100
    (SET Y (PLUS Y WPL))                                                       C099200
    (GO T0)                                                                    C099300
    T2 (IF (LQ (MOVEO (TIMES RECORD (PLUS 1 (IQUOTIENT (PLUS MAXCOL            C099400
          -1) 8))) FIXLOC) 3) (GO XT)) (SET STATUS 5) XT))                     C099500
  (FUNCTION (OUTDISC NOVALUE)                                                  C099600
   NIL (BLOCK ((Y INTEGER 0) (J INTEGER 1) (I INTEGER 1))                      C099700
    (IF (LQ SECTOR MAXSEC) (GO T1))                                            C099800
    (IF (LQ (MODIFY) 3) (GO T0))                                               C099900
    (SET STATUS 4)                                                             C100000
    (GO XT)                                                                    C100100
    T0 (SET MAXSEC (PLUS MAXSEC 8))                                            C100200
    T1 (SETBUF FIXLOC 6060606060606061Q)                                       C100300
    (SETCHAR (OCT2CH 36Q) LINELOC 8Q)                                          C100400
    T2 (LOCSET LINELOC (BUFLOC Y))                                             C100500
    T3 (IF (T8X6 76Q LINELOC FIXLOC J I) (GO T4))                              C100600
    (SET J (PLUS J 1))                                                         C100700
    (SET I (PLUS I 1))                                                         C100800
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    (IF (LS I 80) (GO T3))                                                    0100900
    (IF (T8X6 76Q LINELOC FIXLOC J I) (GO T4))                                0101000
    (SET I 0)                                                                 0101100
    (T8X6 76Q LINELOC FIXLOC J I)                                             0101200
    (SET J (PLUS J 1))                                                        0101300
    (SET I 1)                                                                 0101400
    (SET Y (PLUS Y WPL))                                                      0101500
    (GO T2)                                                                   0101600
    T4 (SEQNC)                                                                0101700
    (IF (LQ (MOVEO 512 FIXLOC) 3) (GO T5))                                    0101800
    (SET STATUS 5) (GO XT) T5 (SET SECTOR (PLUS SECTOR 1)) XT))               0101900
  (FUNCTION (OUTPAS NOVALUE)                                                  0102000
   NIL (BLOCK ((X INTEGER))                                                   0102100
    (LOCSET LINELOC (BUFLOC 0))                                               0102200
    (SET X (MOVEC (TIMES RECORD WPL) LINELOC))                                0102300
    (IF (LQ X 3) (GO XT)) (SET STATUS 5) XT))                                 0102400
  (FUNCTION (OUTDCAS NOVALUE)                                                 0102500
   NIL (BLOCK ((X INTEGER)                                                    0102600
     (Y INTEGER) (Z INTEGER (TIMES RECORD WPL)))                              0102700
    (SET Y (IQUOTIENT (PLUS Z -1) 512))                                       0102800
    (IF (LQ (PLUS SECTOR Y) MAXSEC) (GO T1))                                  0102900
    (SET X (MODIFY))                                                          0103000
    (IF (LQ X 3) (GO TO))                                                     0103100
    (SET STATUS 4)                                                            0103200
    (GO XT)                                                                   0103300
    TO (SET MAXSEC (PLUS MAXSEC 8))                                           0103400
    T1 (LOCSET LINELOC (BUFLOC 0))                                            0103500
    (SET X (MOVEC Z LINELOC))                                                 0103600
    (IF (LQ X 3) (GO T2))                                                     0103700
    (SET STATUS 5) (GO XT) T2 (SET SECTOR (PLUS SECTOR Y 1)) XT))             0103800
  (FUNCTION (T8X6 BOOLEAN)                                                    0103900
   ((EOR OCTAL)                                                               0104000
    (SOURCE OCTAL LOC) (SINK OCTAL LOC) (J INTEGER) (I INTEGER))              0104100
   (BLOCK ((X OCTAL))                                                         0104200
    (IF (EQ I 0) (BLOCK NIL (SET X 32Q14) (GO AB)))                           0104300
    (SET X (CH2OCT ((GETCHAR . IO) SOURCE I)))                                0104400
    (CODE (BXE (LABEL TEOR) A 36Q) (BXE (LABEL TEOF) A 34Q))                  0104500
    (SET X (CNVRTB (PLUS X 1)))                                               0104600
    AB (CODE (LDL X L7.0)                                                     0104700
     T1 (BUC (LABEL T2) 0 3)                                                  0104800
     (STZ A.)                                                                 0104900
     (RETURN)                                                                 0105000
     T2 (LDA J)                                                               0105100
     (STZ B.)                                                                 0105200
     (SOR A.)                                                                 0105300
     (LDM A.)                                                                 0105400
     (SFC 3 R)                                                                0105500
     (ADD SINK RA)                                                            0105600
     (AOR A. (RA S))                                                          0105700
     (LDX A. 0 2)                                                             0105800
     (STZ A.)                                                                 0105900
     (SFC -3 R)                                                               0106000
     (XEC (LABEL T3) A)                                                       0106100
     (BUC C 3)                                                                0106200
     T3 (STL 0 (S7.0 2))                                                      0106300
     (STL C (S7.1 2))                                                         0106400
     (STL C (S7.2 2))                                                         0106500
     (STL C (S7.3 2))                                                         0106600
     (STL 0 (S7.4 2))                                                         0106700
     (STL 0 (S7.5 2))                                                         0106800
     (STL C (S7.6 2))                                                         0106900
     (STL C (S7.7 2))                                                         0107000
     TEOF (LDL 77Q (L567.7 R))                                                0107100
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      (LDA 80 (L567.7 R))                                                    0107200
      (BSX ((LABEL T2) 1) 3 ((LABEL TEOR) 2))                                0107300
      TEOR (LDL ECR RA)                                                      0107400
      (BUC (LABEL T2) 0 3) (LDA 1 (RA R)) (RETURN))))                        0107500
   (RCUTINE (T8X12 NOVALUE)                                                  0107600
   NIL (BLOCK ((C INTEGER)                                                   0107700
      (Y INTEGER 0) (I INTEGER 1) (J INTEGER 1))                             0107800
     ST (LOCSET LINELOC (BUFLOC Y))                                          0107900
     ST1 (IF (EQ 3 (SET C (PLUS (MINUS CHO)                                  0108000
        (S20. ((GETCHAR . IO) LINELOC I))))) (GO TEOM))                      0108100
     (SET C (BIT 24 12 (CNVRTB (PLUS C 1))))                                 0108200
     (CODE (LDL C) (LDA J) (BUC (LABEL T2) 0 3))                             0108300
     (SET I (PLUS I 1))                                                      0108400
     (SET J (PLUS J 1))                                                      0108500
     (IF (LQ I MAXCOL) (GO ST1))                                             0108600
     (SET Y (PLUS Y WPL))                                                    0108700
     (SET I 1)                                                               0108800
     (GO ST)                                                                 0108900
     T2 (CODE (STZ B.)                                                       0109000
      (SOR A.)                                                               0109100
      (LDM A.)                                                               0109200
      (SFC 2 R)                                                              0109300
      (ADD (ENTRY FIXBUF) (RA R))                                            0109400
      (AOR A. (RA S))                                                        0109500
      (LDX A. 0 2)                                                           0109600
      (STZ A.)                                                               0109700
      (SFC -2 R)                                                             0109800
      (XEC (LABEL T3) A)                                                     0109900
      (BUC 0 3)                                                              0110000
      T3 (STL 0 (S67.1 2))                                                   0110100
      (STL 0 (S67.3 2)) (STL 0 (S67.5 2)) (STL 0 (S67.7 2)))                 0110200
     TEOM (CODE (LDL 15Q (RA R))                                             0110300
      (LDA J)                                                                0110400
      (BUC (LABEL T2) 0 3)                                                   0110500
      (LDL 3 (RA R)) (LDA J) (AOR A. (RA S)) (BUC (LABEL T2) 3)))))          0110600
(MOVEI (ROUTINE (MOVEI INTEGER)                                              0110700
   ((S INTEGER) (B OCTAL 1CC))                                               0110800
   (BLOCK NIL (CODE (AOR A.) (STF (ENTRY MLOC)))                             0110900
    (SET (CORENTRY MSIZE) S)                                                 0111000
    (SET (CORENTRY MNAME) INAME)                                             0111100
    (SET (CORENTRY MINCLT) (CORENTRY IN))                                    0111200
    (SET (CORENTRY MSECTR) ISECTOR)                                          0111300
    (CODE (LDA (ENTRY MCALL) (RA R)) (BUC (ENTRY DSPCHR)))                   0111400
    (SET ISIZE (CORENTRY MWDSIN))                                            0111500
    (RETURN (BIT 0 6 (CORENTRY MSTAT)))))                                    0111600
  (FUNCTION (INTTY NOVALUE)                                                  0111700
   NIL (BLOCK NIL (IF (NQ DDSW 0) (IOINI))                                   0111800
    (BLOCK ((X INTEGER (TIMES IRECORD (PLUS 1 (IQUOTIENT (PLUS               0111900
          IMAXCOL -1) 4)))))                                                 0112000
     (CODE (LDA (ENTRY BELL) (R L567.7))                                     0112100
      (BUC (ENTRY DSPCHR)) (STX (DDSW . IO) 0 8))                            0112200
     (MOVEI X FIXLOC) (SET DDSW 0) (SET TTYMAX (T12X8)))))                   0112300
  (FUNCTION (INTAPE NOVALUE)                                                 0112400
   NIL (BLOCK ((X INTEGER (TIMES IRECORD (PLUS 1 (IQUOTIENT (PLUS            0112500
         IMAXCOL -1) 8)))))                                                  0112600
    (IF (LQ (SET X (PLUS -1 (MOVEI X FIXLOC))) 2)                            0112700
     (T6X8 IMAXCOL TRANTP) (SET ISTATUS X))))                                0112800
  (FUNCTION (INDISC NOVALUE)                                                 0112900
   NIL (BLOCK ((X INTEGER))                                                  0113000
    T0 (IF (LQ ISECTOR IMAXSEC) (GO T1))                                     0113100
    (SET ISTATUS 4)                                                          0113200
    (GO XT)                                                                  0113300
    T1 (SET X (MOVEI 512 FIXLOC))                                            0113400
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    (SET ISECTOR (PLUS ISECTOR 1))                                          0113500
    (IF (LQ X 3) (GO T2))                                                   0113600
    (SET ISTATUS 5)                                                         0113700
    (GO XT) T2 (IF (T75) (GO T0)) (T6X8 80 TRANDC) XT))                     0113800
  (FUNCTION (INTPAS NOVALUE)                                                0113900
   NIL (BLOCK ((X INTEGER))                                                 0114000
    (LOCSET ILINELOC (IBUFLOC 0))                                           0114100
    (SET X (PLUS -1 (MOVEI (TIMES IRECORD IWPL) ILINELOC)))                 0114200
    (IF (LQ X 2) (GO XT)) (SET ISTATUS X) XT))                              0114300
  (FUNCTION (INDCAS NOVALUE)                                                0114400
   NIL (BLOCK ((X INTEGER)                                                  0114500
     (Y INTEGER) (Z INTEGER (TIMES IRECORD IWPL)))                          0114600
    (SET Y (PLUS 1 (IQUOTIENT (PLUS Z -1) 512)))                            0114700
    (IF (LQ (PLUS ISECTOR Y) IMAXSEC) (GO T0))                              0114800
    (SET ISTATUS 4)                                                         0114900
    (GO XT)                                                                 0115000
    T0 (LOCSET ILINELOC (IBUFLOC 0))                                        0115100
    (SET X (MOVEI Z ILINELOC))                                              0115200
    (IF (LQ X 3) (GO T1))                                                   0115300
    (SET ISTATUS 5) (GO XT) T1 (SET ISECTOR (PLUS ISECTOR Y 1)) XT))         0115400
  (RCUTINE (T12X8 INTEGER)                                                  0115500
   NIL (BLOCK ((Y INTEGER 1)                                                0115600
     (B6 INTEGER)                                                           0115700
     (I INTEGER 48)                                                         0115800
     (OCT OCTAL)                                                            0115900
     (L INTEGER)                                                            0116000
     (CH OCTAL 0)                                                           0116100
     (S INTEGER 1)                                                          0116200
     (SO (ARRAY OCTAL) (C2S. (ENTRY FIXBUF))) (J INTEGER))                  0116300
    ST (SET L Y)                                                            0116400
    (SET B6 48)                                                             0116500
    (SET OCT 0)                                                             0116600
    (SET J 1)                                                               0116700
    ST1 (IF (LS (SET I (PLUS I -12)) 0)                                     0116800
     (BLOCK NIL (SET I 36) (SET S (PLUS S 1))))                             0116900
    (SET CH (WORDAND 177Q (BIT I 12 (SC S))))                               0117000
    (IF (EQ CH 3Q)                                                          0117100
     (IF (EQ Y 1) (GO B) (GO B0))                                           0117200
     (LS (SET B6 (PLUS B6 -8)) 0)                                           0117300
     (BLOCK NIL (SET (IBUFLOC L) OCT)                                       0117400
      (SET L (PLUS L 1)) (SET B6 40) (SET OCT 0)))                          0117500
    (BITSET B6 8 OCT (BIT 0 12 (CNVRTB (PLUS CH 1))))                       0117600
    T0 (SET J (PLUS J 1))                                                   0117700
    (IF (LQ J IMAXCOL) (GO ST1))                                            0117800
    (SET Y (PLUS Y IWPL))                                                   0117900
    (SET (IBUFLOC L) OCT)                                                   0118000
    (GO ST)                                                                 0118100
    B0 (SET J 3Q15) B (SET (IBUFLOC L) OCT) (RETURN (PLUS J 1))))           0118200
  (FUNCTION (T6X8 NOVALUE)                                                  0118300
   ((COL INTEGER) (WHAT (FUNCTIONAL INTEGER OCTAL INTEGER)))                0118400
   (BLOCK ((Y INTEGER 1)                                                    0118500
     (B6 INTEGER)                                                           0118600
     (I INTEGER 48)                                                         0118700
     (OCT OCTAL)                                                            0118800
     (L INTEGER)                                                            0118900
     (CH OCTAL 0)                                                           0119000
     (S INTEGER 1)                                                          0119100
     (SO (ARRAY OCTAL) (C2S. (ENTRY FIXBUF))) (J INTEGER))                  0119200
    ST (SET L Y)                                                            0119300
    (SET B6 48)                                                             0119400
    (SET OCT 0)                                                             0119500
    (SET J 1)                                                               0119600
    ST1 (IF (LS (SET I (PLUS I -6)) 0)                                      0119700
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      (BLOCK NIL (SET I 42) (SET S (PLUS S 1))))                                    0119800
     (CASE (WHAT (SET CH (BIT I 6 (SC S))) J) (GO TO) (GO B) NIL)                   0119900
     CNV (IF (LS (SET B6 (PLUS B6 -8)) 0)                                           0120000
      (BLOCK NIL (SET (IBUFLOC L) OCT)                                              0120100
       (SET L (PLUS L 1)) (SET B6 40) (SET OCT 0)))                                 0120200
     (BITSET B6 8 OCT (BIT 12 12 (CNVRTB (PLUS CH 1))))                            0120300
     TO (SET J (PLUS J 1))                                                          0120400
     (IF (LQ J CCL) (GO ST1))                                                       0120500
     (SET Y (PLUS Y IWPL))                                                          0120600
     (SET (IBUFLOC L) OCT)                                                          0120700
     (GO ST)                                                                        0120800
    B (SET (IBUFLOC L) OCT) (SET (IBUFLOC (PLUS Y IWPL)) 74Q13)))                   0120900
   (RCUTINE (T75 BOCLEAN)                                                           0121000
    NIL (EQ 75Q (BIT 0 6 (CORE (PLUS 10 (ENTRY FIXBUF))))))                         0121100
  (ALX (SECTION (LISP SYS) SYMBOL)                                                  0121200
   (FUNCTION DEVTYPE (FILE)                                                         0121300
    (IF (SET FILE (GET FILE (FILES. . IO)))                                         0121400
     (CDR (GET (QUOTE UNIT) FILE)) NIL))                                            0121500
   (SECTION (IO LISP SYS) SYMBOL)                                                   0121600
   (RCUTINE ((CLEAR . LISP) NOVALUE)                                                0121700
    ((FN SYMBOL))                                                                   0121800
    (BLOCK ((DL SYMBOL (GET FN FILES.)) (BB (ARRAY OCTAL)))                         0121900
     (IF (NULL DL) (GO XT))                                                         0122000
     (SET BB (CDR (GET (QUOTE BUF) (CDR DL))))                                      0122100
     TO (SETBUF (BB 0) 0) XT))                                                      0122200
   (FUNCTION (SEQNO NOVALUE)                                                        0122300
    NIL (BLOCK ((C INTEGER COUNT)                                                   0122400
      (L INTEGER 10) (N INTEGER) (S INTEGER (PLUS -1 SUMLINE)))                     0122500
     (FOR N (STEP 1 1 GR S)                                                         0122600
      (BLOCK ((Z INTEGER (CVRTNM C)))                                               0122700
       (IF (LS C 1000)                                                              0122800
        (SET Z (BIT 30 18 Z))                                                       0122900
        (LS C 10000) (SET Z (BIT 24 24 Z)) (SET Z (BIT 18 30 Z)))                   0123000
       (SET (BIT 6 42 (BUFIX L)) Z)                                                 0123100
       (SET L (PLUS L 10)) (SET C (PLUS C 100))))                                   0123200
     (SET (BIT 24 24 (BUFIX 511)) COUNT)                                            0123300
     (SET (BIT C 24 (BUFIX 511)) (PLUS C -100))                                     0123400
     (SET (BIT 24 24 (BUFIX 512)) S)                                                0123500
     (SET (BIT 0 24 (BUFIX 512)) RECORD) (SET COUNT C)))                            0123600
   (RCUTINE ((GET . LISP) SYMBOL)                                                   0123700
    ((AA SYMBOL) (X SYMBOL))                                                        0123800
    (BLOCK ((Y SYMBOL))                                                             0123900
     G1 (IF (NULL X) (RETURN NIL))                                                  0124000
     (SET Y (CAR X))                                                                0124100
     (IF (ATOM Y) (GO G2) (EQN (CAR Y) AA) (RETURN Y))                              0124200
     G2 (SET X (CDR X)) (GO G1)))                                                   0124300
   (FUNCTION (CVRTNM INTEGER)                                                       0124400
    ((FN SYMBOL))                                                                   0124500
    (BLOCK ((ST (ARRAY OCTAL) (TOSTRG FN)))                                         0124600
     (RETURN (CVRTN1 (ST 0) 1))))                                                   0124700
   (FUNCTION (CHSUPL SYMBOL)                                                        0124800
    NIL (BLOCK ((X SYMBOL))                                                         0124900
     A (IF (NQ (S2O. (SET X (READCH))) (CHO . SYS))                                 0125000
      (RETURN X)                                                                    0125100
      (RETURN (CCT2CH (CASE ISTATUS 37Q 36Q 34Q 31Q 0Q))))))                        0125200
   (FUNCTION (TTYSPL SYMBOL)                                                        0125300
    NIL (BLOCK ((X SYMBOL))                                                         0125400
     A (IF (NQ (S2O. (SET X (READCH))) (CHO . SYS))                                 0125500
      (RETURN X)                                                                    0125600
      (GQ ICURCOL TTYMAX)                                                           0125700
      (BLOCK NIL (ENDIN) (GO A))                                                    0125800
      (RETURN (CCT2CH (CASE ISTATUS 37Q 36Q 34Q 31Q 0Q))))))                        0125900
   (RCUTINE ((GETCHAR . LISP) SYMBOL)                                               0126000
```

```
 ((A (ARRAY OCTAL)) (B INTEGER)) ((GETCHAR . IO) (A 0) B))                    0126100
(RCUTINE ((GETCHAR . IO) SYMBOL)                                              0126200
 ((SS OCTAL LOC) (CC INTEGER))                                                0126300
 (BLOCK NIL (CODE (SCR A.)                                                    0126400
   (LDM A.)                                                                   0126500
   (MUL 1 (R L7))                                                             0126600
   (DVD 6 (R L7))                                                             0126700
   (ADD SS RA)                                                                0126800
   (AOR A. (RA S))                                                            0126900
   (LDA 0 A)                                                                  0127000
   (TST B. 7004Q3)                                                            0127100
   (BSX (LABEL G1) 1 -8)                                                      0127200
   (BSX (LABEL G1) 1 -16)                                                     0127300
   (BSX (LABEL G1) 1 -24)                                                     0127400
   (BSX (LABEL G1) 1 16)                                                      0127500
   (BSX (LABEL G1) 1 8)                                                       0127600
   (BSX (LABEL G1) 1 0)                                                       0127700
  G1 (CYA 0 (R 1))                                                            0127800
   (ANA (NUMBER 377Q)) (ADD (CHO . SYS) RA) (RETURN))))                       0127900
(RCUTINE ((SETCHAR . IO) SYMBOL)                                              0128000
 ((CH SYMBOL) (SS OCTAL LOC) (CC INTEGER))                                    0128100
 (BLOCK NIL (CODE (SCR A.)                                                    0128200
   (LDM A.)                                                                   0128300
   (MUL 1 (R L7))                                                             0128400
   (DVD 6 (R L7))                                                             0128500
   (ADD SS RA)                                                                0128600
   (AOR A. (RA S))                                                            0128700
   (LDX A. 0 2)                                                               0128800
   (TST B. 7004Q3)                                                            0128900
   (BSX (LABEL S1) 1 8)                                                       0129000
   (BSX (LABEL S1) 1 16)                                                      0129100
   (BSX (LABEL S1) 1 24)                                                      0129200
   (BSX (LABEL S1) 1 -16)                                                     0129300
   (BSX (LABEL S1) 1 -8)                                                      0129400
   (BSX (LABEL S1) 1 0)                                                       0129500
  S1 (LDB 377Q (RA R))                                                        0129600
   (LDA CH RA)                                                                0129700
   (SUB (CHO . SYS) (RA S))                                                   0129800
   (LDM A.)                                                                   0129900
   (CYA C (R 1))                                                              0130000
   (CYB 0 (R 1)) (CON 0 (624Q4 2)) (LDA CH RA) (RETURN))))                    0130100
(RCUTINE (CVRTNI INTEGER)                                                     0130200
 ((S OCTAL LOC) (I INTEGER))                                                  0130300
 (BLOCK NIL (CODE (STZ PUSHA.)                                                0130400
   TO (ARGS)                                                                  0130500
   (LDA S)                                                                    0130600
   (STF PUSHP.)                                                               0130700
   (LDA I RA)                                                                 0130800
   (CALL (GETCHAR . IO))                                                      0130900
   (SUB (CHO . SYS) (RA S))                                                   0131000
   (ADD 1 (R L567.7))                                                         0131100
   (ADD (CNVRTB . IO) L567.7)                                                 0131200
   (LDA C (L7.0 A))                                                           0131300
   (ADD TOP.)                                                                 0131400
   (CYA -6 R)                                                                 0131500
   (STF TOP.)                                                                 0131600
   (AOR I RA) (BXL (LABEL TO) A 8) (LDA TOP.) (RETURN))))                     0131700
(RCUTINE ((SETBUF . IC) NOVALUE)                                              0131800
 ((SINK OCTAL LOC) (K OCTAL))                                                 0131900
 (BLOCK NIL (CODE (LDI 4 (R 7Q6))                                             0132000
   (LDX SINK 0 2)                                                             0132100
   (LDX SINK (I L) 4)                                                         0132200
   (BAX (D. 2) 4 -1) (STF 1 (2 D)) (BPX (D. -1) 4 1))))                       0132300
```

```
(RCUTINE (INCMCV NOVALUE)                                                    0132400
 ((INC INTEGER))                                                             0132500
 (SET (BIT 0 6 (CORENTRY MCALL))                                             0132600
  (PLUS INC (BIT 0 6 (CORENTRY MCALL)))))                                    0132700
(FUNCTION (LCGTTY NOVALUE)                                                   0132800
 ((C INTEGER) (M SYMBOL))                                                    0132900
 (BLOCK ((OUTF SYMBOL (OUTPUT (QUOTE OTTY))))                                0133000
  (INCMOV 1)                                                                 0133100
  (SET (BIT C 6 (CORENTRY MPOST)) C)                                         0133200
  (PRINT M) (INCMOV -1) (OUTPUT OUTF)))                                      0133300
(FUNCTION TOSTRG (A)                                                         0133400
 (IF (STRINGP A)                                                             0133500
  A (AND (IDP A) (NOT (GENIDP A)))                                           0133600
  (IF (CHARP A)                                                              0133700
   (BLOCK NIL (SET (BIT 18 6 (CORE (S2O. SHORWD))) 1)                        0133800
    (SET (CORE (PLUS 1 (S2O. SHORWD))) (SHIFT (CH2OCT A) 4))                 0133900
    (RETURN SHORWD))                                                         0134000
   (BLOCK ((X OCTAL (BIT 18 6 (CORE (PLUS 1 (S2O. A)))))                     0134100
     (Y OCTAL (CORE (PLUS -1 (S2O. A)))))                                    0134200
    (IF (EQ 0 X) (RETURN (O2S. (BIT 0 18 Y))))                               0134300
    (SET (CORE (PLUS 1 (S2O. SHORWD))) Y)                                    0134400
    (SET (BIT 18 6 (CORE (S2O. SHORWD))) X) (RETURN SHORWD)))                0134500
  (NUMBP A) (NUMSTR A) ((TOSTRG . LISP) A)))                                 0134600
(FUNCTION (TRANDC INTEGER)                                                   0134700
 ((CH OCTAL) (J INTEGER))                                                    0134800
 (IF (NQ J 8C)                                                               0134900
  3 (OR (EQ CH 32Q) (LS CH 76Q))                                             0135000
  1 (EQ CH 76Q)                                                              0135100
  2 (BLOCK NIL (SET ISECTOR (PLUS IMAXSEC 1)) (RETURN 2))))                  0135200
(FUNCTION (TRANTP INTEGER)                                                   0135300
 ((CH OCTAL) (J INTEGER)) (IF (EQ CH 32Q) 1 (EQ CH 77Q) 2 3)))               0135400
RETTYP (SECTION (IO LISP SYS) SYMBOL)                                        0135500
(FUNCTION ((FITATOM . LISP) SYMBOL)                                          0135600
 ((T SYMBOL))                                                                0135700
 (BLOCK ((L INTEGER))                                                        0135800
  (IF (OR (ARRAYP T) (FLUIDP T) (OWNP T) (FORMALP T)) (GO EO))               0135900
  (SET L (STRINGL (TOSTRG T)))                                               0136000
  (IF (LQ (PLUS CURCOL L 2) (IF (GR RMG MAXCOL) MAXCOL RMG))                 0136100
   (GO RET)) EO (ENDOUT) RET (RETURN (PRINATOM T))))                         0136200
(FUNCTION (B1 SYMBOL)                                                        0136300
 ((S SYMBOL))                                                                0136400
 (BLOCK NIL (IF (GR CURCOL LMG) (ENDOUT))                                    0136500
  (PRINCH (QUOTE '())                                                        0136600
  (FITATOM (CAR S))                                                          0136700
  (PRINCH (QUOTE ' ))                                                        0136800
  (BLOCK ((Z INTEGER (DIFFERENCE CURCOL LMG))                                0136900
    (LM INTEGER CURCOL) (E SYMBOL))                                          0137000
   (BLOCK ((LMG INTEGER FLUID LOC LM))                                       0137100
    (FOR E (IN (CDR S))                                                      0137200
     (BLOCK NIL (IF (IDP E)                                                  0137300
       (BLOCK NIL (ENDOUT)                                                   0137400
        (SET CURCOL (PLUS LMG (MINUS Z)))                                    0137500
        (FITATOM E) (PRINCH (QUOTE ' )))                                     0137600
       (BLOCK NIL (IF (GR CURCOL LMG) (ENDOUT) (SET CURCOL LMG))             0137700
        (F1 E))))))) (PRINCH (QUOTE ')')) (RETURN S)))                       0137800
(DECLARE (L1 SYMBOL FLUID (QUOTE (IF FOR AND OR FUNCTION RCUTINE             0137900
   SECTION MACRO)))                                                          0138000
 (L2 SYMBOL FLUID (QUOTE (BLOCK DECLARE CODE)))                              0138100
 (INDENT INTEGER OWN 4))                                                     0138200
(FUNCTION (F1 SYMBOL)                                                        0138300
 ((S SYMBOL))                                                                0138400
 (BLOCK ((Z INTEGER (IF (GR LMG INDENT) 7 (PLUS LMG 1))))                    0138500
  (BLOCK ((LMG INTEGER FLUID LOC Z))                                         0138600
```

```
      (IF (ATOM S)                                                          0138700
       (RETURN (FITATOM S))                                                 0138800
       (ATOM (CDR S))                                                       0138900
       (GO T1)                                                              0139000
       (MEMBER (CAR S) L2)                                                  0139100
       (RETURN (B1 S))                                                      0139200
       (AND (MEMBER (CAR S) L1) (GR CURCOL LMG))                            0139300
       (ENDOUT) (EQ (CAR S) (QUOTE LAP)) (GO T2))                           0139400
      T1 (BLOCK ((J SYMBOL S)                                               0139500
        (L INTEGER (IF (AND (ATOM (CAR S))                                  0139600
            (NOT (OR (ARRAYP (CAR S))                                       0139700
              (OWNP (CAR S)) (FLUIDP (CAR S)) (FORMALP (CAR S)))))          0139800
          (STRINGL (TOSTRG (CAR S))) 8)))                                   0139900
       (IF (GR (PLUS CURCOL L 2) (IF (GR RMG MAXCOL) MAXCOL RMG))           0140000
        (ENDOUT))                                                           0140100
       (PRINCH (QUOTE '())                                                  0140200
        T11 (F1 (CAR J))                                                    0140300
        (IF (NULL (CDR J)) (GO T13))                                        0140400
        (PRINCH (QUOTE ' ))                                                 0140500
        (IF (ATOM (CDR J)) (GO T12))                                        0140600
        (SET J (CDR J))                                                     0140700
        (GO T11)                                                            0140800
        T12 (PRINCH (QUOTE '.))                                             0140900
        (PRINCH (QUOTE ' )) (FITATOM (CDR J)) T13 (PRINCH (QUOTE ')))       0141000
       (RETURN S))                                                          0141100
      T2 (IF (GR CURCOL LMG) (ENDOUT))                                      0141200
      (PRINCH (QUOTE '())                                                   0141300
       (FITATOM (CAR S))                                                    0141400
       (PRINCH (QUOTE ' ))                                                  0141500
       (BLOCK ((LM INTEGER CURCOL))                                         0141600
        (BLOCK ((LMG INTEGER FLUID LOC LM))                                 0141700
         (B1 (CADR S))                                                      0141800
         (ENDOUT) (F1 (CADDR S)) (ENDOUT) (F1 (CADDDR S))))                 0141900
       (PRINCH (QUOTE '))) (RETURN S))))                                    0142000
   (FUNCTION ((PRETTYP . LISP) SYMBOL)                                      0142100
    ((S SYMBOL))                                                            0142200
    (BLOCK ((ZZ INTEGER 1))                                                 0142300
     (BLOCK ((LMG INTEGER FLUID LOC ZZ))                                    0142400
      (IF (ATOM S) (FITATOM S) (F1 S)) (ENDOUT) (RETURN S)))))              0142500
****END OF FILE DETECTED
```

```
(FSMDEC (SECTION IC SYMBOL)                                                    C0001CC
  (DECLARE (XXFUNC (FUNCTIONAL SYMBOL) FLUID LOC)                              C0002CC
   (XXSAVE SYMBOL FLUID LOC))                                                  C0003CC
  (SECTION SYS SYMBOL)                                                         C0004CC
  (DECLARE (CHC OCTAL OWN) (XXCHAR SYMBOL OWN))                                C0005CC
  (SECTION (FSM SYS) SYMBOL)                                                   C0006CC
  (DECLARE (FSCHAR SYMBOL OWN)                                                 C0007CC
   (FSMSYM SYMBOL OWN)                                                         C0008CC
   (FSMOCT OCTAL OWN)                                                          C0009CC
   (FSMREL REAL OWN)                                                           C0010CC
   (FSNUL BOOLEAN OWN FALSE)                                                   C0011CC
   (CHARRAY (ARRAY OCTAL)                                                      C0012CC
    OWN (QUOTE (*OCTAL 5065064000007Q 5065071000007Q 5065071000007Q            C0013CC
     3065073312004Q 5065071000007Q 5065071000007Q 5065071000007Q               C0014CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0015CC
     5065071000007Q 5065071000007Q 3065073312004Q 5065071000007Q               C0016CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0017CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0018CC
     5065071000007Q 5065071000007Q 5065071020004Q 5065071000007Q               C0019CC
     5065071000007Q 5065071020004Q 5065071000007Q 3065073312004Q               C0020CC
     3065073312004Q 2065072100010Q 5065071000007Q 5065071000007Q               C0021CC
     5065072400006Q 5065072117004Q 5065071000005Q 5065071000007Q               C0022CC
     5065072217004Q 5065072107004Q 5065072122004Q 5065072100011Q               C0023CC
     5075072100012Q 5065072117004Q 5075072100012Q 5054132100113Q               C0024CC
     5065072100011Q 5012112100102Q 5012112100102Q 5012112100102Q               C0025CC
     5012112100102Q 5012112100102Q 5012112100102Q 5012112100102Q               C0026CC
     5012112100102Q 5023122100103Q 5023122100103Q 5065072100011Q               C0027CC
     3065073117004Q 5065072100011Q 5065072100011Q 5065072100011Q               C0028CC
     5065071000007Q 5065071000007Q 5105072100101Q 5105072100101Q               C0029CC
     4105072100101Q 5105072100101Q 5035052100101Q 5105072100101Q               C0030CC
     5105072100101Q 5105072100101Q 1105072100101Q 5105072100101Q               C0031CC
     5105072100101Q 5105072100101Q 5105072100101Q 5105072100101Q               C0032CC
     5105072100101Q 5105072100101Q 5041042100101Q 5105072100101Q               C0033CC
     5105072100101Q 5105072100101Q 5105072100101Q 5105072100101Q               C0034CC
     5105072100101Q 5105072100101Q 5105072100101Q 5105072100101Q               C0035CC
     5065072110004Q 5065072100011Q 5065072123004Q 5065072100011Q               C0036CC
     5065072100011Q 5065071000007Q 5065071000007Q 5065071000007Q               C0037CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0038CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0039CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0040CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0041CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0042CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0043CC
     5065071000007Q 5065071000007Q 5065071000007Q 5065071000007Q               C0044CC
     5065071000007Q)))  (CARCDR BOOLEAN OWN))                                  C0045CC
  MACRO1 (((STRSP (LAMBDA (A) (QUOTE 2)))                                     C0046CC
    (UNSOCT (LAMBDA (A) (QUOTE 3)))                                           C0047CC
    (UNSINT (LAMBDA (A) (QUOTE 4)))                                           C0048CC
    (UNSREL (LAMBDA (A) (QUOTE 5)))                                           C0049CC
    (STRNM (LAMBDA (A) (QUOTE 11)))                                           C0050CC
    (LITRL (LAMBDA (A) (QUOTE 12)))                                           C0051CC
    (DLITRL (LAMBDA (A) (QUOTE 13)))                                          C0052CC
    (GENSP (LAMBDA (A) (QUOTE 1)))                                            C0053CC
    (OPRTR (LAMBDA (A) (QUOTE 14)))                                           C0054CC
    (UMARK (LAMBDA (A) (QUOTE 15)))                                           C0055CC
    (SIGN (LAMBDA (A) (QUOTE 6)))                                             C0056CC
    (DOT (LAMBDA (A) (QUOTE 17)))                                             C0057CC
    (LPAR (LAMBDA (A) (QUOTE 7)))                                             C0058CC
    (RPAR (LAMBDA (A) (QUOTE 18)))                                            C0059CC
    (LBRAC (LAMBDA (A) (QUOTE 8)))                                            C0060CC
    (RBRAC (LAMBDA (A) (QUOTE 19)))                                           C0061CC
    (DATSEP (LAMBDA (A) (QUOTE 16)))                                          C0062CC
    (UNREC (LAMBDA (A) (QUOTE 20)))                                           C0063CC
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      (REMARK (LAMBDA (A) (QUOTE 9)))                                          C006400
      (SPACER (LAMBDA (A) (QUOTE 10)))                                         C006500
      (F1 (LAMBDA (A) (LIST (QUOTE BIT) 0 6 (CADR A))))                        C006600
      (F2 (LAMBDA (A) (LIST (QUOTE BIT) 6 3 (CADR A))))                        C006700
      (F3 (LAMBDA (A) (LIST (QUOTE BIT) 9 6 (CADR A))))                        C006800
      (F4 (LAMBDA (A) (LIST (QUOTE BIT) 15 3 (CADR A))))                       C006900
      (F5 (LAMBDA (A) (LIST (QUOTE BIT) 18 3 (CADR A))))                       C007000
      (F6 (LAMBDA (A) (LIST (QUOTE BIT) 21 3 (CADR A))))                       C007100
      (F7 (LAMBDA (A) (LIST (QUOTE BIT) 24 3 (CADR A))))                       C007200
      (F8 (LAMBDA (A) (LIST (QUOTE BIT) 27 3 (CADR A))))                       C007300
      (F9 (LAMBDA (A) (LIST (QUOTE BIT) 30 6 (CADR A))))                       C007400
      (F10 (LAMBDA (A) (LIST (QUOTE BIT) 36 3 (CADR A))))))                    C007500
   (FUNCTION (MAKEST SYMBOL) NIL))                                             C007600
(CHREAD (FUNCTION (CHREAD NOVALUE)                                            C007700
   NIL (BLOCK NIL A1 (SET FSCHAR ((XXFUNC . IO)))                             C007800
    A14 (IF (EQ FSCHAR ((OCT2CH . LISP) OQ))                                  C007900
     (LABEL A15 (IF FSNUL (RETURN NIL) (GO A1)))                              C008000
     (BLOCK NIL (IF (NQ FSCHAR (XXCHAR . SYS)) (RETURN NIL))                  C008100
      A2 (CHREAD)                                                             C008200
      (CASE (F10 (CHARRAY (PLUS 1 (S2O. FSCHAR)                               C008300
          (MINUS (CHO . SYS)))))                                              C008400
       (GO E1) (GO E2) (GO B3) (GO E4) (GO B1))                               C008500
      E1 (SET FSCHAR (XXCHAR . SYS))                                          C008600
      (RETURN NIL)                                                            C008700
      E2 (CHREAD)                                                             C008800
      (CASE (F5 (CHARRAY (PLUS 1 (S2O. FSCHAR)                                C008900
          (MINUS (CHO . SYS))))) (GO B1) (GO E2) (GO B3) (GO E2))             C009000
      B1 (SET FSCHAR ((OCT2CH . LISP) 25Q))                                   C009100
      (RETURN NIL)                                                            C009200
      B3 (SET FSCHAR ((OCT2CH . LISP) OQ))                                    C009300
      (GO A15)                                                                C009400
      E4 (BLOCK ((C OCTAL OQ)                                                 C009500
        (E INTEGER O) (I INTEGER O) (S INTEGER 1))                            C009600
       CO (CHREAD)                                                            C009700
       (CASE (F6 (CHARRAY (PLUS 1 (S2O. FSCHAR)                               C009800
           (MINUS (CHO . SYS))))                                              C009900
        (GO C1) (GO C2) (GO C3) (GO C4) (GO C5) (GO CO) (GO CE))              C010000
       C1 (CASE S (GO C1S1)                                                   C010100
        (GO C1S2) (GO C1S3) (GO C1S4) (GO C1S3))                              C010200
       C1S1 (SET S 2)                                                         C010300
       C1S2 (SET O (WORDOR (SHIFT C 3)                                        C010400
         (DIFFERENCE (S2O. FSCHAR) (S2O. (QUOTE '0)))))                       C010500
       C1S4 (SET I (PLUS (TIMES 10 I)                                         C010600
         (DIFFERENCE (S2O. FSCHAR) (S2O. (QUOTE '0)))))                       C010700
       (GO CO)                                                                C010800
       C1S3 (SET E (PLUS (TIMES 10 E)                                         C010900
         (DIFFERENCE (S2O. FSCHAR) (S2O. (QUOTE '0)))))                       C011000
       (GO CO)                                                                C011100
       C2 (CASE S (GO C2S1)                                                   C011200
        (GO C2S1) (GO C1S3) (GO C1S4) (GO C1S3))                              C011300
       C2S1 (SET S 4)                                                         C011400
       (GO C1S4)                                                              C011500
       C3 (CASE S (GO CE) (GO C3S2) (GO C3S3) (GO C3S2))                      C011600
       CE (SET FSCHAR ((OCT2CH . LISP) 25Q))                                  C011700
       (RETURN NIL)                                                           C011800
       C3S2 (SET O I)                                                         C011900
       C3S2A (IF (EQ E O) (GO CR))                                            C012000
       (SET E (PLUS E -1))                                                    C012100
       (SET O (TIMES 10 O))                                                   C012200
       (GO C3S2A)                                                             C012300
       C3S3 (SET O (SHIFT O (TIMES 3 E)))                                     C012400
       CR (IF (AND (LQ O O) (LQ O 177Q))                                      C012500
        (SET FSCHAR ((OCT2CH . LISP) O))                                      C012600
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          (SET FSCHAR ((CCT2CH . LISP) 25Q)))                                    0012700
        (GO A14)                                                                 0012800
        C4 (CASE S (GO CE) (GO C4S2) (GO CE))                                    0012900
        C4S2 (SET S 3)                                                           0013000
        (GO CO)                                                                  0013100
        C5 (CASE S (GO CE) (GO C5S2) (GO CE) (GO C5S2) (GO CE))                  0013200
        C5S2 (SET S 5) (GO CO)))))))                                             0013300
(STSP (FUNCTION (STSP BOOLEAN)                                                   0013400
   NIL (BLOCK ((I INTEGER))                                                      0013500
    S0 (CHREAD)                                                                  0013600
    (SET I (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)                        0013700
       (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))                              0013800
    (CASE (PLUS 1 (F4 I))                                                        0013900
     (GO S1) (GO S4) (GO S3) (GO S0) (GO S5))                                    0014000
    S1 (MAKEST)                                                                  0014100
    (SET (XXSAVE . IO) FSCHAR)                                                   0014200
    (SET FSCHAR NIL)                                                             0014300
    (SET FSMSYM (MAKEST))                                                        0014400
    (RETURN FALSE)                                                               0014500
    S3 (SET FSNUL TRUE)                                                          0014600
    (CHREAD)                                                                     0014700
    (SET FSNUL FALSE)                                                            0014800
    S4 (MAKEST)                                                                  0014900
    (GO S0) S5 (SET FSCHAR NIL) (SET FSMSYM (MAKEST)) (RETURN TRUE))))           0015000
(LTRL (FUNCTION (LTRL NOVALUE)                                                   0015100
   NIL (BLOCK ((P INTEGER 1))                                                    0015200
    F1 (MAKEST)                                                                  0015300
    (CASE P (GO P1) (GO P2) (GO P3) (GO P4) (GO P5))                             0015400
    P1 (IF (EQ FSCHAR (QUOTE 'C)) (SET P 2) (SET P 5))                           0015500
    (GO P5)                                                                      0015600
    P2 (IF (OR (EQ FSCHAR (QUOTE 'A)) (EQ FSCHAR (QUOTE 'D)))                    0015700
     (SET P 3) (SET P 5))                                                        0015800
    (GO P5)                                                                      0015900
    P3 (IF (EQ FSCHAR (QUOTE 'R))                                                0016000
     (BLOCK NIL (SET P 4) (GO P5)) (GO P2))                                      0016100
    P4 (SET P 5)                                                                 0016200
    P5 (CHREAD)                                                                  0016300
    (IF (EQ (F2 (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)                   0016400
         (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))) 1) (GO F1))               0016500
    (SET (XXSAVE . IO) FSCHAR)                                                   0016600
    (SET FSCHAR NIL)                                                             0016700
    (SET FSMSYM (MAKEST)) (SET CARCOR (EQ P 4)) (RETURN NIL))))                  0016800
(CPER1 (FUNCTION (CPER1 NOVALUE)                                                 0016900
   NIL (BLOCK NIL F1 (MAKEST)                                                    0017000
    (CHREAD)                                                                     0017100
    (IF (EQ (F1 (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)                   0017200
         (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))) 9) (GO F1))               0017300
    (SET (XXSAVE . IO) FSCHAR)                                                   0017400
    (SET FSCHAR NIL) (SET FSMSYM (MAKEST)) (RETURN NIL))))                       0017500
(CPER2 (FUNCTION (CPER2 INTEGER)                                                 0017600
   NIL (BLOCK NIL (MAKEST)                                                       0017700
    (CHREAD)                                                                     0017800
    (SET (XXSAVE . IO) FSCHAR)                                                   0017900
    (SET FSCHAR NIL)                                                             0018000
    (SET FSMSYM (MAKEST))                                                        0018100
    (CASE (PLUS 1 (F7 (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER (XXSAVE             0018200
         . IO)) (MINUS (CHEAT OCTAL INTEGER (CHO . SYS)))))))                    0018300
     (RETURN (CPRTR)) (RETURN (SIGN))))))                                        0018400
(DCTL (FUNCTION (DCTL BOOLEAN)                                                   0018500
   NIL (BLOCK ((I INTEGER))                                                      0018600
    (CHREAD)                                                                     0018700
    (MAKEST)                                                                     0018800
    (IF (AND (NE (SET I (F1 (CHARRAY (PLUS (CHEAT SYMBOL INTEGER                 0018900
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          FSCHAR)                                                          C019000
          (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))) 1)))) 1)               C019100
     (NQ I 11))                                                            C019200
     (BLOCK NIL (SET (XXSAVE . IO) FSCHAR)                                 C019300
     (SET FSCHAR NIL) (SET FSMSYM (MAKEST)) (RETURN FALSE))                C019400
     (BLOCK NIL G (CHREAD)                                                 C019500
     (IF (EQ (F2 (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)            C019600
          (MINUS (CHEAT OCTAL INTEGER (CHO . SYS)))))) 1)                  C019700
      (BLOCK NIL (MAKEST) (GO G))                                          C019800
      (BLOCK NIL (SET (XXSAVE . IC) FSCHAR)                                C019900
       (SET FSCHAR NIL) (SET FSMSYM (MAKEST)) (RETURN TRUE)))))))))       C020000
(TOKEN (FUNCTION (TOKEN INTEGER)                                           C020100
   NIL (BLOCK ((I INTEGER)                                                 C020200
     (S INTEGER) (DP INTEGER) (ES SYMBOL) (K1 INTEGER) (K2 INTEGER))       C020300
     (CHREAD)                                                              C020400
     (SET I (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)                 C020500
       (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))                        C020600
     (CASE (F1 I)                                                          C020700
      (GO C1)                                                              C020800
      (GO C2)                                                              C020900
      (GO C3)                                                              C021000
      (GO C4)                                                              C021100
      (GO C5) (GO C6) (GO C7) (GO C8) (GO C9) (GO C10) (GO C11))           C021200
     C1 (LTRL)                                                             C021300
     (RETURN (LITRL))                                                      C021400
     C2 (SET S 1)                                                          C021500
     (SET FSMOCT 0)                                                        C021600
     (SET FSMOCT (WORDOR (SHIFT FSMOCT 3)                                  C021700
       (DIFFERENCE (S2C. FSCHAR) (S2C. (QUOTE '0)))))                      C021800
     C21 (SET K1 0)                                                        C021900
     (SET K2 0)                                                            C022000
     (GO I1S2)                                                             C022100
     C3 (SET S 2)                                                          C022200
     (GO C21)                                                              C022300
     N (CHREAD)                                                            C022400
     (SET I (CHEAT OCTAL INTEGER (F9 (CHARRAY (PLUS 1 (CHEAT SYMBOL        C022500
          INTEGER FSCHAR)                                                  C022600
          (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))))                   C022700
     (CASE I (GO I1)                                                       C022800
      (GO I2) (GO I3) (GO I4) (GO I5) (GO I6) (GO I7) (GO AU))             C022900
     I1 (CASE S (GO I1S1)                                                  C023000
      (GO I1S2)                                                            C023100
      (GO I1S2)                                                            C023200
      (GO I1S2)                                                            C023300
      (GO I1S5) (GO I1S6) (GO I1S2) (GO I1S6) (GO I1S9))                   C023400
     I1S1 (SET FSMOCT (WORDOR (SHIFT FSMOCT 3)                             C023500
       (DIFFERENCE (S2C. FSCHAR) (S2C. (QUOTE '0)))))                      C023600
     I1S2 (SET K1 (PLUS (TIMES K1 10)                                      C023700
       (DIFFERENCE (S2C. FSCHAR) (S2C. (QUOTE '0)))))                      C023800
     (MAKEST)                                                              C023900
     (GO N)                                                                C024000
     I1S5 (SET DP (PLUS 1 DP))                                             C024100
     (GO I1S2)                                                             C024200
     I1S6 (SET S 7)                                                        C024300
     (GO I1S2)                                                             C024400
     I1S9 (SET S 3)                                                        C024500
     (GO I1S2)                                                             C024600
     I2 (CASE S (GO I2S1)                                                  C024700
      (GO I1S2)                                                            C024800
      (GO I1S2)                                                            C024900
      (GO I1S2)                                                            C025000
      (GO I1S5) (GO I1S6) (GO I1S2) (GO I1S6) (GO I1S9))                   C025100
     I2S1 (SET S 2)                                                        C025200
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(GO I1S2)                                                                    0025300
I3 (MAKEST)                                                                  0025400
(CASE S (GO I3S1) (GO I3S1) (GO U) (GO U) (GO I3S5) (GO U))                  0025500
I3S1 (SET S 9)                                                               0025600
(SET DP 0)                                                                   0025700
I3S1A (SET K2 K1)                                                            0025800
(SET K1 0)                                                                   0025900
(GO N)                                                                       0026000
I3S5 (SET ES (QUOTE '+))                                                     0026100
(SET S 6)                                                                    0026200
(GO I3S1A)                                                                   0026300
I4 (MAKEST)                                                                  0026400
(CASE S (GO I4S1) (GO U))                                                    0026500
I4S1 (SET S 4)                                                               0026600
(GO I3S1A)                                                                   0026700
I5 (MAKEST)                                                                  0026800
(CASE S (GO I5S1) (GO I5S1) (GO U))                                          0026900
I5S1 (SET DP 0)                                                              0027000
(SET S 5)                                                                    0027100
(GO N)                                                                       0027200
I6 (CASE S (GO IFIN)                                                         0027300
 (GO IFIN)                                                                   0027400
 (GO IFINE) (GO OFIN) (GO RFIN) (GO AU) (GO RFINE) (GO AU))                  0027500
I7 (CASE S (GO IFIN)                                                         0027600
 (GO IFIN)                                                                   0027700
 (GO IFINE) (GO OFIN) (GO RFIN) (GO I7S6) (GO AU))                           0027800
I7S6 (SET ES FSCHAR)                                                         0027900
(SET S 8)                                                                    0028000
(MAKEST)                                                                     0028100
(GO N)                                                                       0028200
AU (MAKEST)                                                                  0028300
U (SET (XXSAVE . IO) FSCHAR)                                                 0028400
(SET FSCHAR NIL)                                                             0028500
(SET FSMSYM (MAKEST))                                                        0028600
(RETURN (UNREC))                                                             0028700
OFIN (SET FSMOCT (SHIFT FSMOCT (TIMES 3 K1)))                                0028800
(SET I (UNSOCT))                                                             0028900
NRET (SET (XXSAVE . IO) FSCHAR)                                              0029000
(SET FSCHAR NIL)                                                             0029100
(SET FSMSYM (MAKEST))                                                        0029200
(RETURN I)                                                                   0029300
IFINE (SET I K1)                                                             0029400
(SET K1 K2)                                                                  0029500
(SET K2 I)                                                                   0029600
IFIN (SET I (UNSINT))                                                        0029700
IFIN1 (IF (EQ C K2) (GO IFIN2))                                              0029800
(SET K2 (PLUS K2 -1))                                                        0029900
(SET K1 (TIMES 10 K1))                                                       0030000
(GO IFIN1)                                                                   0030100
IFIN2 (SET FSMOCT (CHEAT INTEGER OCTAL K1))                                  0030200
(GO NRET)                                                                    0030300
RFINE (SET I K1)                                                             0030400
(SET K1 K2)                                                                  0030500
(SET K2 I)                                                                   0030600
RFIN (SET I (UNSREL))                                                        0030700
(SET FSMREL (CHEAT REAL REAL K1))                                            0030800
(IF (EQ ES (QUOTE '-)) (SET K2 (MINUS K2)))                                  0030900
(SET DP (DIFFERENCE K2 DP))                                                  0031000
(SET FSMREL (TIMES FSMREL (EXPT 10.0 DP)))                                   0031100
(GO NRET)                                                                    0031200
C4 (MAKEST)                                                                  0031300
(SET FSCHAR NIL)                                                             0031400
(SET FSMSYM (MAKEST))                                                        0031500
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(RETURN (F3 I))                                                          0031600
C5 (CHREAD)                                                              0031700
(IF (NQ FSCHAR (QUOTE 'R)) (GO C5A))                                     0031800
C5R (CHREAD)                                                             0031900
(CASE (F5 (CHARRAY (PLUS 1 (S2C. FSCHAR) (MINUS (CHO . SYS)))))          0032000
 (GO C5R1) (GO C5R2) (GO C5R3) (GO C5R))                                 0032100
C5R1 (SET (XXSAVE . IO) FSCHAR)                                          0032200
(GO C7)                                                                  0032300
C5R2 (MAKEST)                                                            0032400
(GO C5R)                                                                 0032500
C5R3 (SET FSCHAR NIL)                                                    0032600
(SET FSMSYM (MAKEST))                                                    0032700
(RETURN (REMARK))                                                        0032800
C5A (IF (NQ FSCHAR (QUOTE ' ))                                           0032900
 (GO C5B) (IF (STSP) (RETURN (STRNM)) (RETURN (UNREC))))                 0033000
C5B (IF (NQ FSCHAR (QUOTE 'G)) (GO C5C))                                 0033100
(CHREAD)                                                                 0033200
(CASE (F1 (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)                 0033300
    (MINUS (CHEAT OCTAL INTEGER (CHO . SYS))))))                         0033400
 (GO C51)                                                                0033500
 (GO C52)                                                                0033600
 (GO C52)                                                                0033700
 (GO C52)                                                                0033800
 (GO C55)                                                                0033900
 (GO C52) (GO C52) (GO C52) (GO C59) (GO C510) (GO C511))                0034000
C51 (LTRL)                                                               0034100
(RETURN (GENSP))                                                         0034200
C52 (SET (XXSAVE . IO) FSCHAR)                                           0034300
(GO C7)                                                                  0034400
C55 (IF (STSP) (RETURN (GENSP)) (RETURN (UNREC)))                        0034500
C59 (OPER1)                                                              0034600
(RETURN (GENSP))                                                         0034700
C510 (IF (EQ (CPER2) (CPRTR))                                            0034800
 (RETURN (GENSP)) (RETURN (UNREC)))                                      0034900
C511 (MAKEST)                                                            0035000
(IF (DCTL) (RETURN (GENSP)) (RETURN (UNREC)))                            0035100
C5C (IF (NQ FSCHAR (QUOTE 'H)) (GO C5R1))                                0035200
(SET FSMCCT 0)                                                           0035300
C5CG (CHREAD)                                                            0035400
(SET I (DIFFERENCE (S2C. FSCHAR) CHO))                                   0035500
(IF (AND (GQ I 60Q) (LQ I 71Q))                                          0035600
 (SET I (PLUS I 777777777777717Q)) (GO C5C2))                            0035700
C5C1 (SET FSMOCT (PLUS (SHIFT FSMOCT 4) I))                              0035800
(MAKEST)                                                                 0035900
(GO C5CG)                                                                0036000
C5C2 (IF (AND (GQ I 101Q) (LQ I 106Q))                                   0036100
 (BLOCK NIL (SET I (PLUS I 777777777777771Q1)) (GO C5C1))                0036200
 (BLOCK NIL (SET I (UNSOCT)) (GO NRET)))                                 0036300
C6 (IF (STSP) (RETURN (STRSP)) (RETURN (UNREC)))                         0036400
C7 (MAKEST)                                                              0036500
(SET FSCHAR NIL)                                                         0036600
(SET FSMSYM (MAKEST))                                                    0036700
(RETURN (UNREC))                                                         0036800
C8 (SET FSMCCT 1)                                                        0036900
(SET FSMSYM (QUOTE (*STRING ' )))                                        0037000
C81 (CHREAD)                                                             0037100
(IF (EQ FSCHAR (QUOTE ' ))                                               0037200
 (BLOCK NIL (SET FSMCCT (PLUS FSMOCT 1)) (GO C81)))                      0037300
(SET (XXSAVE . IO) FSCHAR)                                               0037400
(RETURN (SPACER))                                                        0037500
C9 (OPER1)                                                               0037600
(RETURN (OPRTR))                                                         0037700
C10 (RETURN (OPER2))                                                     0037800
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      C11 (MAKEST)                                                                  0037900
      (CHREAD)                                                                      0038000
      (SET (XXSAVE . IC) FSCHAR)                                                    0038100
      (IF (EQ (F2 (SET I (CHARRAY (PLUS 1 (CHEAT SYMBOL INTEGER FSCHAR)             0038200
            (MINUS (CHEAT OCTAL INTEGER (CHO . SYS)))))))) 0)                       0038300
       (BLOCK NIL (SET FSCHAR NIL)                                                  0038400
        (SET FSMSYM (MAKEST)) (RETURN (DOT))))                                      0038500
      (IF (OR (EQ (F1 I) 1) (EQ (F1 I) 11))                                         0038600
       (BLOCK NIL (IF (DOTL) (RETURN (CLITRL)) (RETURN (UNREC))))                   0038700
       (BLOCK NIL (SET K1 0) (SET K2 0) (GO I5S1))))))                              0038800
                                                                                    0038900

****END OF FILE DETECTED
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(DUMMYS (SECTION SYS SYMBOL)                                                    C000100
  (DECLARE ((PDBUF . GC) OCTAL OWN 100)                                         C000200
   ((PDADD . GC) OCTAL OWN 0) ((BPMIN . GC) OCTAL OWN 0))                       C000300
  (DECLARE ((BACTRC . LISP) SYMBOL FREE)                                        C000400
   ((PRNERR . LISP) BOOLEAN FREE TRUE)                                          C000500
   ((INTERACT . LISP) BOOLEAN FLUID)                                            C000600
   ((SIGNON . LISP)                                                             C000700
    SYMBOL OWN (QUOTE (*STRING 'L 'I 'S 'P '2 '  'N 'E 'W '  'C 'I 'G)         C000800
    )) ((MSGFILE . SUPV) SYMBOL OWN (QUOTE (OTTY))))                            C000900
  (DECLARE ((FSCHAR . FSM) SYMBOL OWN NIL))                                     C001000
  (DECLARE (FMCALL (FUNCTIONAL NOVALUE) OWN)                                    C001100
   (GNLIST SYMBOL FREE NIL)                                                     C001200
   (LAPSTOP BOOLEAN FREE)                                                       C001300
   (AA (ARRAY OCTAL) FREE)                                                      C001400
   (RR INTEGER FREE) (PP INTEGER FREE) (WW OCTAL FREE))                         C001500
  (DECLARE ((LAPSTL . LAP) SYMBOL OWN)                                          C001600
   ((ERRFLG . SUPV) BOOLEAN FREE)                                               C001700
   ((FIXLOC . IO) OCTAL FLUID LOC)                                              C001800
   ((BUFIX . IO) (ARRAY OCTAL) FLUID))                                          C001900
  (DECLARE ((SECTOR . IO) INTEGER FLUID LOC))                                   C002000
  (DECLARE ((FILES. . IO) SYMBOL FREE)                                          C002100
   ((ICURFN . IO) SYMBOL FLUID)                                                 C002200
   ((CURFN . IO) SYMBOL FLUID)                                                  C002300
   ((TTY. . LISP) SYMBOL FREE)                                                  C002400
   ((DISC. . LISP) SYMBOL FREE) ((TAPE. . LISP) SYMBOL FREE))                   C002500
  (RCUTINE ((FXFN . GC) NOVALUE) ((X OCTAL) (B BOOLEAN)))                       C002600
  (FUNCTION (SUPV SYMBOL) NIL)                                                  C002700
  (FUNCTION (EVAL SYMBOL) ((E SYMBOL)))                                         C002800
  (FUNCTION ((MAKEST . FSM) SYMBOL) NIL)                                        C002900
  (FUNCTION ((CVRTNM . IO) INTEGER) ((A SYMBOL)))                               C003000
  (FUNCTION (LAPGO SYMBOL) NIL)                                                 C003100
  (RCUTINE (SYNTYPE OCTAL) ((A SYMBOL)))                                        C003200
  (RCUTINE (RDTYPC OCTAL) NIL)                                                  C003300
  (RCUTINE (ADPOCK NOVALUE) ((X INTEGER)))                                      C003400
  (FUNCTION ((PRETTYP . LISP) SYMBOL) ((X SYMBOL)))                             C003500
  (FUNCTION ((PRINWORD . LISP) OCTAL) ((X OCTAL)))                              C003600
  (RCUTINE ((GET . LISP) SYMBOL) ((FN SYMBOL) (DL SYMBOL)))                     C003700
  (FUNCTION ((ENDINR . LISP) NOVALUE) NIL)                                      C003800
  (FUNCTION ((ENDOUTR . LISP) NOVALUE) NIL)                                     C003900
  (FUNCTION ((LISP . LISP) SYMBOL)                                              C004000
   ((IN SYMBOL) (OUT SYMBOL) (FORM SYMBOL)))                                    C004100
  (DECLARE (ITTY SYMBOL OWN (QUOTE ITTY))                                       C004200
   (OTTY SYMBOL OWN (QUOTE OTTY))                                               C004300
   (INERR BOOLEAN FLUID FALSE)                                                  C004400
   (TRACING BOOLEAN FREE FALSE)                                                 C004500
   ((GC7 . GC) INTEGER OWN)                                                     C004600
   (FREEZE BOOLEAN FREE FALSE)                                                  C004700
   (INTCNT INTEGER OWN 3000)                                                    C004800
   (SUPVFN (FUNCTIONAL SYMBOL SYMBOL SYMBOL SYMBOL) OWN)                        C004900
   (TRYPT OCTAL FLUID 400020)                                                   C005000
   (TRYVAR SYMBOL OWN)                                                          C005100
   (EOFCH SYMBOL OWN) (XXCHAR SYMBOL OWN) (PDOUT SYMBOL OWN))                   C005200
  (DECLARE (DUMPS SYMBOL OWN NIL) (LFILES SYMBOL OWN NIL)))                     C005300
(INDEX (SECTION SYS SYMBOL)                                                     C005400
  (RCUTINE (FNCALD FUNCTIONAL) ((RA OCTAL)))                                    C005500
  (RCUTINE (LARG SYMBOL) ((FN (FUNCTIONAL NOVALUE))))                           C005600
  (RCUTINE (RESUME OCTAL)                                                       C005700
   ((FN (FUNCTIONAL NOVALUE)) (MODE BOOLEAN)))                                  C005800
  (SECTION SYS SYMBOL)                                                          C005900
  (FUNCTION (MESSAGE SYMBOL) ((M SYMBOL)))                                      C006000
  (RCUTINE ((MEMBERN . LISP) BOOLEAN) ((X SYMBOL) (L SYMBOL)))                  C006100
  (FUNCTION ((CELE . LISP) SYMBOL) ((X SYMBOL) (L SYMBOL)))                     C006200
  (FUNCTION (GETFN SYMBOL) ((N SYMBOL) (S SYMBOL)))                             C006300
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(FUNCTION (GETFRT SYMBOL) ((N SYMBOL) (S SYMBOL)))                    C0064C0
(FUNCTION (GETFN1 SYMBOL) ((N SYMBOL) (S SYMBOL) (L SYMBOL)))         C0065C0
(FUNCTION (VARNAME SYMBOL) ((X SYMBOL)))                              C0066C0
(RCUTINE (UNLDN SYMBOL) ((FN (FUNCTIONAL NOVALUE))))                  C0067C0
(FUNCTION (FACTIVE BOOLEAN) ((FN (FUNCTIONAL NOVALUE))))              C0068C0
(SECTION SYS SYMBOL)                                                  C0069C0
(FUNCTION ((ERROR . LISP) SYMBOL) ((S SYMBOL)))                       C0070C0
(FUNCTION (CONDERR NOVALUE) NIL)                                      C0071C0
(FUNCTION ((EXIT . LISP) SYMBOL) ((S SYMBOL)))                        C0072C0
(FUNCTION ((BACKFUNCTIONS . LISP) SYMBOL) ((I INTEGER)))              C0073C0
(FUNCTION (BACKUP SYMBOL) ((S SYMBOL) (I INTEGER) (M BOOLEAN)))       C0074C0
(RCUTINE (FLREST BOOLEAN)                                             C0075C0
 ((A INTEGER) (R INTEGER) (P INTEGER) (M BOOLEAN)))                   C0076C0
(SECTION SYS SYMBOL)                                                  C0077C0
(FUNCTION ((TRACEARGS . LISP) SYMBOL) ((L SYMBOL)))                   C0078C0
(FUNCTION (TRACEA NOVALUE) NIL)                                       C0079C0
(FUNCTION ((TRACER . LISP) SYMBOL)                                    C0080C0
 ((N SYMBOL) (S SYMBOL) (FT (FUNCTIONAL NOVALUE))))                   C0081C0
(FUNCTION ((UNTRACE . LISP) SYMBOL) ((L SYMBOL)))                     C0082C0
(FUNCTION ((UNTRACER . LISP) SYMBOL) ((N SYMBOL) (S SYMBOL)))         C0083C0
(SECTION SYS SYMBOL)                                                  C0084C0
(FUNCTION (FTRANS SYMBOL) ((P SYMBOL)))                               C0085C0
(FUNCTION (ONTRAC NOVALUE)                                            C0086C0
 ((FN (FUNCTIONAL NOVALUE)) (FT (FUNCTIONAL NOVALUE))))               C0087C0
(FUNCTION (OFFTRAC SYMBOL) ((FN (FUNCTIONAL NOVALUE))))               C0088C0
(RCUTINE (SETFD NOVALUE) ((FD SYMBOL) (J INTEGER)))                   C0089C0
(RCUTINE (SETRAP NOVALUE)                                             C0090C0
 ((FN (FUNCTIONAL NOVALUE)) (FT (FUNCTIONAL NOVALUE))))               C0091C0
(FUNCTION (UNDEFN NOVALUE) ((FN (FUNCTIONAL NOVALUE)) (S SYMBOL)))    C0092C0
(RCUTINE (VREFCT NOVALUE) ((V SYMBOL) (I INTEGER)))                   C0093C0
(SECTION SYS SYMBOL)                                                  C0094C0
(FUNCTION (FNTRAP NOVALUE) NIL)                                       C0095C0
(FUNCTION (FMTRAP NOVALUE) NIL)                                       C0096C0
(FUNCTION (LCTRAP NOVALUE) NIL)                                       C0097C0
(FUNCTION (PCGONE NOVALUE) NIL)                                       C0098C0
(FUNCTION (SCS SYMBOL) ((M SYMBOL)))                                  C0099C0
(SECTION SYS SYMBOL)                                                  C0100C0
(FUNCTION ((EXCISE . LISP) SYMBOL) ((N SYMBOL) (S SYMBOL)))           C0101C0
(FUNCTION (EXCISE SYMBOL) ((FD SYMBOL)))                              C0102C0
(RCUTINE (FXRUB OCTAL) ((I OCTAL)))                                   C0103C0
(SECTION SYS SYMBOL)                                                  C0104C0
(FUNCTION (GETBPS INTEGER) ((I INTEGER)))                             C0105C0
(FUNCTION (FITBPS INTEGER) ((I INTEGER)))                             C0106C0
(FUNCTION (PACBPS NOVALUE) ((R INTEGER)))                             C0107C0
(FUNCTION (UNLBPS BOOLEAN) ((I INTEGER)))                             C0108C0
(FUNCTION (INTERRUPT OCTAL) NIL)                                      C0109C0
(FUNCTION (ITRAP1 NOVALUE) NIL)                                       C0110C0
(RCUTINE (FIXBPI NOVALUE) ((BP INTEGER) (A INTEGER) (B INTEGER)))     C0111C0
(SECTION SYS SYMBOL)                                                  C0112C0
(FUNCTION ((DUMPSEC . LISP) SYMBOL)                                   C0113C0
 ((LNAME SYMBOL) (OUT SYMBOL) (SEC SYMBOL)))                          C0114C0
(FUNCTION ((DUMPL . LISP) SYMBOL)                                     C0115C0
 ((LNAME SYMBOL) (OUT SYMBOL) (L SYMBOL)))                            C0116C0
(FUNCTION (DUMPFN SYMBOL) ((X SYMBOL) (LSIZE INTEGER LOC)))           C0117C0
(FUNCTION ((UNLOADL . LISP) SYMBOL) ((LNAME SYMBOL)))                 C0118C0
(FUNCTION ((UNLOADFN . LISP) SYMBOL) ((NAME SYMBOL) (SEC SYMBOL)))    C0119C0
(FUNCTION (UNLDFN SYMBOL) ((V SYMBOL) (LL SYMBOL)))                   C0120C0
(SECTION SYS SYMBOL)                                                  C0121C0
(FUNCTION ((LOADL . LISP) SYMBOL) ((LNAME SYMBOL)))                   C0122C0
(FUNCTION ((OPENL . LISP) SYMBOL) ((X SYMBOL)))                       C0123C0
(FUNCTION (READLIB INTEGER)                                           C0124C0
 ((FILE SYMBOL) (SECT INTEGER) (I INTEGER)))                          C0125C0
(RCUTINE (INLIB INTEGER)                                              C0126C0
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     ((BP INTEGER) (NAME INTEGER) (SECT INTEGER) (I INTEGER)))                C012700
    (FUNCTION (REMFN NOVALUE) ((FD SYMBOL)))                                  C012800
    (FUNCTION ((REMOVEL . LISP) SYMBOL) ((LNAME SYMBOL)))                     C012900
    (SECTION SYS SYMBOL)                                                      C013000
    (FUNCTION ((START . SYS) NOVALUE) NIL)                                    C013100
    (FUNCTION (SYSINI NOVALUE) NIL)                                           C013200
    (FUNCTION (PRBACK NOVALUE) ((X SYMBOL)))                                  C013300
    (FUNCTION (ICINI NOVALUE) NIL)                                            C013400
    (FUNCTION (RESTART NOVALUE) NIL)                                          C013500
    (FUNCTION (RECOV NOVALUE) NIL)                                            C013600
    (FUNCTION (LSUPV NOVALUE)                                                 C013700
     ((INFILE SYMBOL) (OUTFILE SYMBOL) (FORM SYMBOL)))                        C013800
    (SECTION LAP SYMBOL) (SECTION SYS OCTAL))                                 C013900
  (MACROS DEFINE (((MSUBST (LAMBDA (L S)                                      C014000
       (SUBST (CADR L) (QUOTE ALPHA) S)))))                                   C014100
    MACRO1 (((VAR2FUNC (LAMBDA (L)                                            C014200
       (MSUBST L (QUOTE (C2F. (I2O. (PLUS (S2O. ALPHA) 2Q7 -1)))))))         C014300
      (FUNC2VAR (LAMBDA (L)                                                   C014400
       (MSUBST L (QUOTE (C2S. (I2O. (PLUS (BIT 0 18 (F2O. ALPHA)) 1))))       C014500
       )))                                                                    C014600
      (FUNCD (LAMBDA (L)                                                      C014700
       (MSUBST L (QUOTE (CORE (BIT 0 18 (F2O. ALPHA)))))))                    C014800
      (TRAPP (LAMBDA (L)                                                      C014900
       (MSUBST L (QUOTE (C2S. (BIT 24 18 (FUNCD ALPHA)))))))                 C015000
      (LADDR (LAMBDA (L) (MSUBST L (QUOTE (BIT 24 18 (CORE ALPHA))))))       C015100
      (RADDR (LAMBDA (L) (MSUBST L (QUOTE (BIT 0 18 (CORE ALPHA))))))        C015200
      (SLADDR (LAMBDA (L)                                                     C015300
       (MSUBST L (SUBST (GENID)                                               C015400
         (QUOTE X)                                                            C015500
         (QUOTE (BLOCK ((X OCTAL LEXICAL (CORE ALPHA)))                       C015600
           (RETURN (CODE (LDA X (L567.3 S))))))))))                           C015700
     (SRADDR (LAMBDA (L)                                                      C015800
       (MSUBST L (SUBST (GENID)                                               C015900
         (QUOTE X)                                                            C016000
         (QUOTE (BLOCK ((X OCTAL LEXICAL (CORE ALPHA)))                       C016100
           (RETURN (CODE (LDA X (L567.7 S))))))))                             C016200
      (FNSTAT (LAMBDA (L)                                                     C016300
       (MSUBST L (QUOTE (SHIFT (FUNCD ALPHA) -45)))))                         C016400
      (FREADY (LAMBDA (L)                                                     C016500
       (MSUBST L (QUOTE (EQ (WORDAND (FUNCD ALPHA) 2O15) 0))))))              C016600
      (IDLINK (LAMBDA (L)                                                     C016700
       (MSUBST L (QUOTE (C2S. (RADDR (PLUS (S2O. ALPHA) 1)))))))             C016800
      (AGE (LAMBDA (L)                                                        C016900
       (SUBST (CDR L)                                                         C017000
        (QUOTE A) (QUOTE (BIT 18 3 (CORE (S2O. . A)))))))                     C017100
      (TRAPEQ (LAMBDA (L)                                                     C017200
       (SUBST (CADR L)                                                        C017300
        (QUOTE FN)                                                            C017400
        (SUBST (CADDR L)                                                      C017500
         (QUOTE FT) (QUOTE (EQ (O2F. (BIT 0 24 (FUNCD FN))) FT))))))         C017600
      (ROUTINEDIES (LAMBDA (L) NIL))))                                        C017700
    MACRO1 (((TRAPM (LAMBDA (L)                                               C017800
       (SUBST (CADDDR L)                                                      C017900
        (QUOTE EXP)                                                           C018000
        (SUBST (CADR L)                                                       C018100
         (QUOTE FNAME)                                                        C018200
         (SUBST (CADDR L)                                                     C018300
          (QUOTE MODE)                                                        C018400
          (QUOTE (BLOCK ((ALA. OCTAL (CODE)))                                 C018500
            (BLOCK ((FNAME (FUNCTIONAL NOVALUE)                               C018600
               ((FNCALL . SYS) (CODE (LDA 0 8))))                             C018700
              (BLOCK ((SLA. SYMBOL (IF (EQ ((LARG . SYS) FNAME)               C018800
                   (QUOTE S)) (O2S. ALA.) NIL)))                              C018900
```

```
              EXP (BLOCK ((CA OCTAL ((RESUME . SYS) FNAME MODE)))          C019000
               (SET (FMCALL . SYS) FNAME)                                  C019100
               (IF SLA. (SET ALA. (S2C. SLA.)))                            C019200
               (CODE (LDA ALA.) (BUC CA I))))))))))))                      C019300
    (TRACEM (LAMBDA (L)                                                    C019400
     (LIST (QUOTE (TRAPM . SYS)) (GENSYM) TRUE (CADR L)))))))              C019500
(TRAPM (SECTION SYS SYMBOL)                                                C019600
  (RCUTINE (FNCALD FUNCTIONAL)                                             C019700
   ((RA OCTAL))                                                            C019800
   (BLOCK ((FA OCTAL (RADDR (PLUS RA -1))))                                C019900
    (IF (EQ (BIT 42 6 (CORE FA)) 0) (SET FA (RADDR FA)))                   C020000
    (RETURN (O2F. (WORDCR 207 FA)))))                                      C020100
  (RCUTINE (LARG SYMBOL)                                                   C020200
   ((FN (FUNCTIONAL NOVALUE)))                                             C020300
   (BLOCK ((WW OCTAL FREE (SYNTYPE (FUNC2VAR FN)))                         C020400
     (PP INTEGER FREE 12)                                                  C020500
     (RR INTEGER FREE 1)                                                   C020600
     (AA (ARRAY OCTAL) FREE) (LA SYMBOL) (C OCTAL))                        C020700
    (IF (EQ (BIT 24 6 WW) 1)                                               C020800
     (BLOCK NIL (SET AA (O2S. (BIT 6 18 WW)))                              C020900
      (SET WW (AA 1)) (SET PP 30)))                                        C021000
    (FOR C (LOCP (RDTYPC))                                                 C021100
     (WHILE (NQ C 63))                                                     C021200
     (SET LA (IF (CR (RELATION 0 LS C LS 5)                                C021300
        (AND (EQ C 31) (RDTYPC))) (QUOTE A) (QUOTE S))))                   C021400
    (RETURN LA)))                                                          C021500
  (RCUTINE (RESUME OCTAL)                                                  C021600
   ((FN (FUNCTIONAL NOVALUE)) (MODE BOOLEAN))                              C021700
   (BLOCK ((CP OCTAL))                                                     C021800
    A (IF (EQ (FNSTAT FN) 0)                                               C021900
     (SET CP (BIT C 18 (FUNCD FN)))                                        C022000
     (AND (FREADY FN) MODE)                                                C022100
     (SET CP (BIT 24 18 (FUNCD FN)))                                       C022200
     (BLOCK NIL (SET FN (O2F. (BIT 0 24 (FUNCD FN)))) (GO A)))             C022300
    (RETURN (IF (LARG FN) (PLUS CP 2) (PLUS CP 1))))))                     C022400
(SLBFNS (SECTION SYS SYMBOL)                                               C022500
  (FUNCTION (MESSAGE SYMBOL)                                               C022600
   ((M SYMBOL))                                                            C022700
   (BLOCK ((K SYMBOL))                                                     C022800
    (FOR K (IN (MSGFILE . SUPV))                                           C022900
     (BLOCK ((OUT SYMBOL (OUTPUT K))) (PRETTYP M) (OUTPUT OUT)))           C023000
    (RETURN M)))                                                           C023100
  (RCUTINE ((MEMBERN . LISP) BOOLEAN)                                      C023200
   ((X SYMBOL) (L SYMBOL))                                                 C023300
   (BLOCK ((Y SYMBOL)) (FOR Y (IN L) (IF (EQN X Y) (RETURN TRUE)))))       C023400
  (FUNCTION ((CELE . LISP) SYMBOL)                                         C023500
   ((X SYMBOL) (L SYMBOL))                                                 C023600
   (BLOCK ((P SYMBOL) (M SYMBOL))                                          C023700
    (FOR L (ON L) (IF (NQ (CAR (SET P L)) X) (GO A)))                      C023800
    (RETURN NIL)                                                           C023900
    A (IF (NULL (SET M (CDR P)))                                           C024000
     (RETURN L) (EQ (CAR M) X) (SET (CDR P) (CDR M)) (SET P M))            C024100
    (GO A)))                                                               C024200
  (FUNCTION (GETFN SYMBOL)                                                 C024300
   ((N SYMBOL) (S SYMBOL))                                                 C024400
   (GETFN1 N S (QUOTE (FUNCTION MACRO INSTRUCTIONS))))                     C024500
  (FUNCTION (GETFRT SYMBOL)                                                C024600
   ((N SYMBOL) (S SYMBOL))                                                 C024700
   (GETFN1 N S (QUOTE (FUNCTION MACRO INSTRUCTIONS ROUTINE))))             C024800
  (FUNCTION (GETFN1 SYMBOL)                                                C024900
   ((N SYMBOL) (S SYMBOL) (L SYMBOL))                                      C025000
   (BLOCK ((X SYMBOL (GETFREE N S)))                                       C025100
    (IF (AND X (MEMBER (FVKIND X) L)) (RETURN X))))                        C025200
```

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  (FUNCTION (VARNAME SYMBOL)                                                C0025300
   ((X SYMBOL))                                                             C0025400
   (CONS (BLOCK ((Y SYMBOL X))                                              C0025500
     (FOR Y (LOOP (IDLINK Y))                                               C0025600
      (UNLESS (NQ (BIT 42 6 (CORE (S2O. Y))) 7)) (RETURN Y)))               C0025700
    (O2S. (LADDR (S2O. X)))))                                               C0025800
  (RCUTINE (UNLDN SYMBOL)                                                   C0025900
   ((FN (FUNCTIONAL NOVALUE)))                                              C0026000
   (IF (FREADY FN)                                                          C0026100
    NIL (ATOM (TRAPP FN)) (TRAPP FN) (CDR (TRAPP FN))))                     C0026200
  (FUNCTION (FACTIVE BOOLEAN)                                               C0026300
   ((FN (FUNCTIONAL NOVALUE)))                                              C0026400
   (BLOCK ((BP INTEGER (PLUS (BIT 0 18 (FUNCD FN)) -1))                     C0026500
     (P INTEGER) (R INTEGER) (A INTEGER))                                   C0026600
    (CODE (STX P 0 8))                                                      C0026700
    A (FOR A (RESET (CORE P) (RADDR A))                                     C0026800
     (WHILE (NQ (BIT 18 6 (CORE A)) 1)) NIL)                                C0026900
    (IF (EQ A BP)                                                           C0027000
     (RETURN TRUE)                                                          C0027100
     (LS (SET P (PLUS P (LADDR (PLUS (CORE P) -1)))) BPO) (GO A)))))        C0027200
(ERROR (SECTION SYS SYMBOL)                                                 C0027300
  (FUNCTION ((ERROR . LISP) SYMBOL)                                         C0027400
   ((S SYMBOL))                                                             C0027500
   (BLOCK NIL (IF (AND (NOT INERR) (OR (PRNERR . LISP) INTERACT))           C0027600
     (BLOCK (((INERR . SYS) TRUE)) (MESSAGE S)))                            C0027700
    (IF (NOT INTERACT) (EXIT S))                                            C0027800
    (RETURN (SLPVFN ITTY OTTY (QUOTE IL)))))                                C0027900
  (FUNCTION (CONDERR NOVALUE)                                               C0028000
   NIL (ERROR (QUOTE (IF EXPRESSION UNSATISFIED))))                         C0028100
  (FUNCTION ((EXIT . LISP) SYMBOL)                                          C0028200
   ((S SYMBOL))                                                             C0028300
   (BLOCK NIL (SET (BACTRC . LISP) NIL) (BACKUP S 50000 TRUE)))             C0028400
  (FUNCTION ((BACKFUNCTIONS . LISP) SYMBOL)                                 C0028500
   ((I INTEGER))                                                            C0028600
   (BLOCK (((BACTRC . LISP) SYMBOL FREE))                                   C0028700
    (BACKUP NIL (PLUS I 1) FALSE) (RETURN (CDR (BACTRC . LISP)))))          C0028800
  (FUNCTION (BACKUP SYMBOL)                                                 C0028900
   ((S SYMBOL) (I INTEGER) (M BOOLEAN))                                     C0029000
   (BLOCK ((A INTEGER) (R INTEGER) (P INTEGER))                             C0029100
    (CODE (STX P 0 8))                                                      C0029200
    (FOR I (STEP I -1 EQ 0)                                                 C0029300
     (WHILE (LS P BPO))                                                     C0029400
     (BLOCK NIL (SET R (CORE P))                                            C0029500
      (SET P (PLUS P (SLADDR (PLUS R -1))))                                 C0029600
      (FOR A (RESET R (RADDR A))                                            C0029700
       (WHILE (NQ (BIT 18 6 (CORE A)) 1)) NIL)                              C0029800
      (IF (EQ (RADDR A) 0)                                                  C0029900
       (GO L) (AND M (FLREST A R P TRUE)) (GO BACK))                        C0030000
      (SET P (PLUS P (MINUS BPO)))                                          C0030100
      (SET (BACTRC . LISP)                                                  C0030200
       (CONS (VARNAME (C2S. (I2O. (PLUS (RADDR A) 1))))                     C0030300
        (BACTRC . LISP))) (SET P (PLUS P BPO)) L))                          C0030400
    (IF (NOT M) (RETURN S))                                                 C0030500
    BACK (SET A (PLUS A (TRYPT . SYS)))                                     C0030600
    (CODE (LDA S) (LDX A 0 4) (LDX P 0 8) (BUC 0 4))))                      C0030700
  (LAP (PATCH (CRG)                                                         C0030800
    (ENTRY FLRCAL (LABEL A))                                                C0030900
    A (BSX (ENTRY FLREST) 7) (END)) NIL SYS)                                C0031000
  (RCUTINE (FLREST BOOLEAN)                                                 C0031100
   ((A INTEGER) (R INTEGER) (P INTEGER) (M BOOLEAN))                        C0031200
   (BLOCK ((B INTEGER)                                                      C0031300
     (BC INTEGER) (J INTEGER) (K INTEGER) (V INTEGER))                      C0031400
    (SET B (PLUS A (LADDR A)))                                              C0031500
```

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    (FOR A (STEP A 1)                                                                    C031600
     (WHILE (LS A B))                                                                    C031700
     (BLOCK NIL (IF (LS (SET BC (PLUS BC -2)) 0)                                         C031800
       (BLOCK NIL (SET B (PLUS B -1)) (SET BC 46)))                                      C031900
      (IF (NOT (AND (GR A R)                                                           C032000
         (EQ (WORDAND (CORE A) 770000007777777Q) (CORENTRY FLRCAL))                    C032100
         (EQ (WORDAND (SHIFT (CORE B) (MINUS BC)) 3Q) 2)                               C032200
         (LS (SET J (LADDR A)) R))) (GO L))                                            C032300
      (SET K (PLUS P (SLADDR (PLUS J -1))))                                            C032400
      (FOR J (STEP J 1)                                                                C032500
       (BLOCK NIL (SET K (PLUS K -1))                                                  C032600
        (SET V (RADDR J))                                                              C032700
        (IF (AND M (EQN (O2S. (I2O. (PLUS V 1))) TRYVAR))                              C032800
         (RETURN TRUE))                                                                C032900
        (SET (CORE V) (CORE K))                                                        C033000
        (IF (EQ (BIT 43 1 (CORE J)) 1) (GO L)))) L)))))                                C033100
(TRACE (SECTION SYS SYMBOL)                                                            C033200
  (FUNCTION ((TRACEARGS . LISP) SYMBOL)                                                C033300
   ((L SYMBOL))                                                                        C033400
   (MAPCAR L (FUNARG SYMBOL ((X SYMBOL))                                               C033500
     (IF (ATOM X) NIL (TRACER (CAR X) (CDR X) TRACEA)))))                              C033600
  (FUNCTION (TRACEA NOVALUE)                                                           C033700
   NIL (TRAPM FN TRUE (IF (NOT TRACING)                                                C033800
     (BLOCK ((V SYMBOL (FUNC2VAR FN))                                                  C033900
       (TRACING BOOLEAN FREE TRUE) (L SYMBOL) (J INTEGER))                             C034000
      (SET L (CDDADR (FVLIST V)))                                                      C034100
      (SET J (LENGTH L))                                                               C034200
      (MESSAGE (CONS (VARNAME V)                                                       C034300
        (QUOTE OF)                                                                     C034400
        (MAPCAR L (FUNARG SYMBOL ((X SYMBOL))                                          C034500
          (BLOCK ((W OCTAL))                                                           C034600
           (SET W (IF (EQ (SET J (PLUS J -1)) 0)                                       C034700
             (IF SLA. (S2O. SLA.) ALA.)                                                C034800
             (CORE (PLUS (CODE (LDA ALA.)) J 1))))                                     C034900
           (IF (EQ (CADR X) (QUOTE LOC)) (SET W (CORE W)))                             C035000
           (SET X (CAR X))                                                             C035100
           (RETURN (IF (EQ X (QUOTE OCTAL))                                           C035200
             W (EQ X (QUOTE INTEGER))                                                  C035300
             (C2I. W)                                                                  C035400
             (EQ X (QUOTE REAL))                                                       C035500
             (C2R. W)                                                                  C035600
             (EQ X (QUOTE FUNCTIONAL)) (O2F. W) (O2S. W))))))))))))))                  C035700
  (FUNCTION ((TRACER . LISP) SYMBOL)                                                   C035800
   ((N SYMBOL) (S SYMBOL) (FT (FUNCTIONAL NOVALUE)))                                   C035900
   (BLOCK ((X SYMBOL (GETFN N S)))                                                     C036000
    (IF (NULL X) (RETURN NIL))                                                         C036100
    (ONTRAC (VAR2FUNC X) FT) (RETURN (CONS N S))))                                     C036200
  (FUNCTION ((UNTRACE . LISP) SYMBOL)                                                  C036300
   ((L SYMBOL))                                                                        C036400
   (MAPCAR L (FUNARG SYMBOL ((X SYMBOL))                                               C036500
     (IF (ATOM X) NIL (UNTRACER (CAR X) (CDR X))))))                                   C036600
  (FUNCTION ((UNTRACER . LISP) SYMBOL)                                                 C036700
   ((N SYMBOL) (S SYMBOL))                                                             C036800
   (BLOCK ((X SYMBOL (GETFN N S)))                                                     C036900
    (RETURN (IF (OR (NULL X) (NULL (OFFTRAC (VAR2FUNC X))))                            C037000
     NIL (CONS N S))))))                                                               C037100
(NCD (SECTION SYS SYMBOL)                                                              C037200
  (FUNCTION (FTRANS SYMBOL)                                                            C037300
   ((P SYMBOL))                                                                        C037400
   (BLOCK ((FN (FUNCTIONAL NOVALUE) (VAR2FUNC (CAR P)))                                C037500
     (FNT (FUNCTIONAL NOVALUE) (VAR2FUNC (CDR P)))                                   C037600
     (FREEZE BOOLEAN FREE TRUE))                                                     C037700
    (BLOCK ((S SYMBOL) (J INTEGER))                                                    C037800
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      (IF (NOT (FREADY FNT))                                                    C037900
       (IF (NULL (SET S (UNLDN FNT))) (RETURN NIL) (LOADL S)))                  C038000
      (REMFN (CDR P))                                                           C038100
      (SET S (OFFTRAC FNT))                                                     C038200
      (EXCISF (CAR P))                                                          C038300
      (SET J (PLUS (BIT 0 18 (FUNCD FNT)) -1))                                  C038400
      (SET (RADDR J) (BIT 0 18 (F2D. FN)))                                      C038500
      (SETFD (CAR P) J)                                                         C038600
      (VREFCT (CAR P) 1)                                                        C038700
      (VREFCT (CDR P) -1)                                                       C038800
      (UNDEFN FNT S) (RETURN (VARNAME (CAR P))))))                              C038900
   (FUNCTION (ONTRAC NOVALUE)                                                   C039000
    ((FN (FUNCTIONAL NOVALUE)) (FT (FUNCTIONAL NOVALUE)))                       C039100
    (IF (FREADY FN)                                                             C039200
     (SETRAP FN FT)                                                             C039300
     (SET (TRAPP FN)                                                            C039400
      (CONS FT (IF (ATOM (TRAPP FN)) (TRAPP FN) (CDR (TRAPP FN)))))))))         C039500
   (FUNCTION (OFFTRAC SYMBOL)                                                   C039600
    ((FN (FUNCTIONAL NOVALUE)))                                                 C039700
    (BLOCK ((S SYMBOL))                                                         C039800
     (IF (NOT (FREADY FN))                                                      C039900
      (IF (NOT (ATOM (TRAPP FN)))                                               C040000
       (BLOCK NIL (SET S (CAR (TRAPP FN)))                                      C040100
        (SET (TRAPP FN) (CDR (TRAPP FN)))))                                     C040200
       (IF (NQ (FNSTAT FN) 0)                                                   C040300
        (BLOCK NIL (SET S (C2F. (BIT 0 24 (FUNCD FN))))                         C040400
         (SET (FUNCD FN)                                                        C040500
          (WORDOR (WORDAND 7Q14 (FUNCD FN))                                     C040600
           (BIT 24 18 (FUNCD FN)))))))) (RETURN S)))                            C040700
   (ROUTINE (SETFD NOVALUE)                                                     C040800
    ((FD SYMBOL) (J INTEGER))                                                   C040900
    (BLOCK ((FN (FUNCTIONAL NOVALUE) (VAR2FUNC FD)) (S SYMBOL))                 C041000
     (SET S (TRAPP FN))                                                         C041100
     (SET (FUNCD FN)                                                            C041200
      (WORDOR (WORDAND 7Q14 (FUNCD FN)) (I2D. (PLUS J 1))))                     C041300
     (IF (NOT (ATOM S))                                                         C041400
      (SETRAP FN (O2F. (CORE (PLUS (S2D. (CAR S)) 1)))))))                      C041500
   (ROUTINE (SETRAP NOVALUE)                                                    C041600
    ((FN (FUNCTIONAL NOVALUE)) (FT (FUNCTIONAL NOVALUE)))                       C041700
    (BLOCK NIL (IF (EQ (FNSTAT FN) 0)                                           C041800
     (BLOCK NIL (SET (BIT 45 3 (FUNCD FN)) 1Q)                                  C041900
      (SET (BIT 24 18 (FUNCD FN)) (BIT 0 18 (FUNCD FN))))))                     C042000
     (SET (BIT 0 24 (FUNCD FN)) (BIT 0 24 (F2D. FT))))))                        C042100
   (FUNCTION (UNDEFN NOVALUE)                                                   C042200
    ((FN (FUNCTIONAL NOVALUE)) (S SYMBOL))                                      C042300
    (BLOCK NIL (SET (FUNCD FN)                                                  C042400
     (WORDOR 2Q15 (WORDAND 7Q14 (FUNCD FN)) (F2D. (FNTRAP . SYS))))             C042500
     (IF S (SET (TRAPP FN) (LIST S))))))                                        C042600
   (ROUTINE (VREFCT NOVALUE)                                                    C042700
    ((V SYMBOL) (I INTEGER))                                                    C042800
    (SET (RADDR (S2C. V)) (PLUS (RADDR (S2D. V)) I))))                          C042900
  (FNTRAP (SECTION SYS SYMBOL)                                                  C043000
   (FUNCTION (FNTRAP NOVALUE)                                                   C043100
    NIL (TRAPM FN NIL (BLOCK ((X SYMBOL (FUNC2VAR FN)))                         C043200
     (ROUTINEDIES FN)                                                           C043300
     (ERROR (CONS (VARNAME X) (QUOTE UNDEFINED) (FVLIST X))))))                C043400
   (FUNCTION (FMTRAP NOVALUE)                                                   C043500
    NIL (ERROR (QUOTE (UNSET FUNCTIONAL VARIABLE APPLIED))))                    C043600
   (FUNCTION (LDTRAP NOVALUE)                                                   C043700
    NIL (TRAPM FN NIL (BLOCK ((X SYMBOL (TRAPP FN)))                            C043800
     (IF (NOT (ATOM X)) (SET X (CDR X))) (LOADL X))))                           C043900
   (FUNCTION (PDGONE NOVALUE)                                                   C044000
    NIL (TRAPM FN NIL (BLOCK ((J INTEGER (CODE (LDA (Z. 8))))                   C044100
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      (P SYMBOL PDCUT))                                                    C044200
     (ADPDCK (MINUS (PDBUF . GC)))                                         C044300
     (SET PDCUT (QUOTE B))                                                 C044400
     (IF (EQ P (QUOTE B)) (SOS (QUOTE PDGONE)))                            C044500
     (IF (NULL P) (RECLAIM 0))                                             C044600
     (SET (PDACC . GC) 0)                                                  C044700
     (IF (NULL P) (MESSAGE (QUOTE (STACK GREW))))))))                      C044800
  (FUNCTION (SCS SYMBOL)                                                   C044900
   ((M SYMBOL))                                                            C045000
   (BLOCK NIL (TRY M E (MESSAGE (LIST (QUOTE SCS) M))) E (CODE (0)))))     C045100
(EXCISE (SECTION SYS SYMBOL)                                               C045200
  (FUNCTION ((EXCISE . LISP) SYMBOL)                                       C045300
   ((N SYMBOL) (S SYMBOL))                                                 C045400
   (BLOCK ((X SYMBOL (GETFRT N S)))                                        C045500
    (RETURN (IF (NULL X) NIL (EXCISE X)))))                               C045600
  (FUNCTION (EXCISE SYMBOL)                                               C045700
   ((FD SYMBOL))                                                           C045800
   (BLOCK ((FN (FUNCTIONAL NOVALUE) (VAR2FUNC FD))                         C045900
     (S SYMBOL) (J INTEGER) (FREEZE BOOLEAN FREE TRUE))                    C046000
    (IF (NOT (FREADY FN))                                                  C046100
     (IF (NULL (SET S (UNLON FN))) (RETURN NIL) (LOADL S)))                C046200
    (SET S (CFETRAC FN))                                                   C046300
    (IF (FACTIVE FN)                                                       C046400
     (BLOCK NIL (IF S (CNTRAC FN S))                                       C046500
      (ERROR (CONS (VARNAME FD) (QUOTE (ACTIVE CANT EXCISE))))))          C046600
    (REMFN FD)                                                             C046700
    (SET J (PLUS (BIT 0 18 (FUNCD FN)) -1))                                C046800
    (SET (BIT 42 6 (CORE J)) 00)                                           C046900
    (IF (GQ J BPO) ((FXFN . GC) J TRUE) (GO A))                            C047000
    (IF (EQ (PLUS J (LADDR J)) BPP)                                        C047100
     (SET BPP J)                                                           C047200
     (SET (BPMIN . GC) (PLUS (BPMIN . GC) (MINUS (LADDR J)))))             C047300
    A (UNDEFN FN S) (RETURN (VARNAME FD))))                                C047400
  (RCUTINE (FXRUB OCTAL)                                                   C047500
   ((I OCTAL))                                                             C047600
   (BLOCK ((J OCTAL (BIT 42 6 (CORE (PLUS I 1)))))                         C047700
    (IF (LS I TRO)                                                         C047800
     (GO R)                                                                C047900
     (AND (LQ 7 J) (LQ J 31))                                              C048000
     (SET I (I2O. (PLUS I 1))) (SET J (BIT 42 6 (CORE I))))                C048100
    (IF (EQ J 7)                                                           C048200
     (SET (LADDR (PLUS I 1)) (PLUS (LADDR (PLUS I 1)) -1))                 C048300
     (SET (RADDR I) (PLUS (RADDR I) -1))) R)))                             C048400
(GETBPS (SECTION SYS SYMBOL)                                               C048500
  (FUNCTION (GETBPS INTEGER)                                               C048600
   ((I INTEGER))                                                           C048700
   (BLOCK ((BP INTEGER) (J INTEGER) (K INTEGER))                           C048800
    A (SET J (PLUS ARO (MINUS BPP)))                                       C048900
    (SET K (PLUS J (MINUS (BPMIN . GC))))                                  C049000
    (IF (AND (LS (PLUS I (BPMIN . GC)) 0)                                  C049100
      (NQ (SET BP (FITBPS I)) 0))                                          C049200
     (GO R)                                                                C049300
     (GQ J I)                                                              C049400
     (BLOCK NIL (SET BP BPP) (SET BPP (PLUS BPP I)) (GO R)))               C049500
    (INTERRUPT)                                                            C049600
    (IF (GQ K I)                                                           C049700
     (BLOCK NIL (PACBPS 0) (GO A))                                         C049800
     (AND (NOT FREEZE)                                                     C049900
      (GR (DIFFERENCE BPP BPO) (GC7 . GC)) (UNLBPS I))                     C050000
     (GO A)                                                                C050100
     (BLOCK NIL (SET (BPMIN . GC) (PLUS (BPMIN . GC) I))                   C050200
      (RECLAIM 0) (GO A)))                                                 C050300
    R (SET (CORE BP) 0) (SET (LADDR BP) I) (RETURN BP)))                   C050400
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(FUNCTION (FITBPS INTEGER)                                              C050500
 ((I INTEGER))                                                          C050600
 (BLOCK ((BP INTEGER)                                                   C050700
   (BS INTEGER) (BMP INTEGER) (BMS INTEGER 50000))                      C050800
  (FOR BP (RESET BPO (PLUS BP (LADDR BP)))                              C050900
   (WHILE (NQ BP BPP))                                                  C051000
   (IF (EQ (BIT 42 6 (CORE BP)) 0)                                      C051100
    (SET BS (PLUS BS (LADDR BP)))                                       C051200
    (AND (GQ BS I) (LS BS BMS))                                         C051300
    (BLOCK NIL (SET BMP (PLUS BP (MINUS BS)))                           C051400
     (SET BMS BS) (SET BS 0)) (SET BS 0)))                              C051500
  (SET (BPMIN . GC) (PLUS (BPMIN . GC) BS))                             C051600
  (SET BPP (PLUS BPP (MINUS BS)))                                       C051700
  (IF (EQ BMS 50000)                                                    C051800
   (RETURN 0)                                                           C051900
   (GR BMS I))                                                          C052000
   (BLOCK NIL (SET (CORE (PLUS BMP I)) 0)                               C052100
    (SET (LADDR (PLUS BMP I)) (PLUS BMS (MINUS I)))))                   C052200
  (SET (BPMIN . GC) (PLUS (BPMIN . GC) I)) (RETURN BMP)))               C052300
(FUNCTION (PACBPS NOVALUE)                                              C052400
 ((R INTEGER))                                                          C052500
 (CRG NIL (BLOCK ((A INTEGER)                                           C052600
   (P INTEGER) (D INTEGER) (I INTEGER))                                 C052700
  REASSIGN (SET A (PLUS BPO R 1))                                       C052800
  (FOR P (RESET BPO (PLUS P (LADDR P)))                                 C052900
   (WHILE (NQ P BPP))                                                   C053000
   (UNLESS (EQ (BIT 42 6 (CORE P)) 0))                                  C053100
   (BLOCK NIL (SET D (RADDR P))                                         C053200
    (IF (NQ (WORDAND 1Q15 (CORE D)) 0)                                  C053300
     (SET (LADDR D) (I2C. A)) (SET (RADDR D) (I2C. A)))                 C053400
    (SET A (PLUS A (LADDR P)))))                                        C053500
  FIXRETS (CODE (STX P 0 8))                                            C053600
  (FOR P (RESET P (PLUS P I))                                           C053700
   (WHILE (NQ P BPO))                                                   C053800
   (BLOCK NIL (FOR A (RESET (CORE P) (RADDR A))                         C053900
    (WHILE (NQ (BIT 18 6 (CORE A)) 1)) NIL)                             C054000
    (SET I (SLADDR (PLUS (CORE P) -1)))                                 C054100
    (IF (NQ (SET D (RADDR A)) 0)                                        C054200
     (SET (CORE P)                                                      C054300
      (PLUS (CORE P)                                                    C054400
       (MINUS A)                                                        C054500
       -1 (IF (NQ (WORDAND 1Q15 (CORE D)) 0)                            C054600
        (LADDR D) (RADDR D)))))))                                       C054700
  MOVEBPIS (SET P BPO)                                                  C054800
  (SET BPO (SET A (PLUS P (IF (GR R 0) 0 R))))                          C054900
  (FOR P (RESET P (PLUS P I))                                           C055000
   (WHILE (NQ P BPP))                                                   C055100
   (UNLESS (BLOCK NIL (SET I (LADDR P))                                 C055200
    (RETURN (EQ (BIT 42 6 (CORE P)) 0))))                               C055300
   (IF (EQ A P)                                                         C055400
    (SET A (PLUS A (LADDR P)))                                          C055500
    (BLOCK NIL (FIXBPI P P (PLUS A R))                                  C055600
     (FOR D (STEP P 1 EQ (PLUS P (LADDR P)))                            C055700
      (BLOCK NIL (SET (CORE A) (CORE D)) (SET A (PLUS A 1)))))))        C055800
  (SET BPP A) (SET (BPMIN . GC) 0))))                                   C055900
(FUNCTION (UNLBPS BOOLEAN)                                              C056000
 ((I INTEGER))                                                          C056100
 (BLOCK ((N INTEGER)                                                    C056200
   (X SYMBOL) (V SYMBOL) (FN (FUNCTIONAL NOVALUE)))                     C056300
  (FOR N (STEP 7 -1 EQ -2)                                              C056400
   (IF (LQ I (PLUS ARG (MINUS BPP) (MINUS (BPMIN . GC))))               C056500
    (RETURN TRUE)                                                       C056600
    (FOR X (IN DUMPS)                                                   C056700
```

```
        (FOR V (IN (CADDR X))                                                  0056800
         (IF (EQ (FNSTAT (SET FN (VAR2FUNC V))) 1)                             0056900
          (IF (AND (EQ (AGE V) N) (TRAPEQ FN ITRAP1))                          0057000
           (BLOCK NIL (SET (FUNCD FN)                                          0057100
             (WORDOR (WORDAND 7Q14 (FUNCD FN))                                 0057200
              (BIT 24 18 (FUNCD FN)))) (UNLDFN V X)))                          0057300
          (AND (LS N 0) (FREADY FN)) (UNLDFN V X))))))                         0057400
      (RETURN FALSE)))                                                         0057500
    (FUNCTION (INTERRUPT OCTAL)                                                0057600
     NIL (BLOCK ((ALA. OCTAL (CODE)))                                          0057700
      (BLOCK ((X SYMBOL) (V SYMBOL) (FN (FUNCTIONAL NOVALUE)))                 0057800
       (FOR X (IN DUMPS)                                                       0057900
        (FOR V (IN (CADDR X))                                                  0058000
         (UNLESS (NOT (FREADY (SET FN (VAR2FUNC V))))                          0058100
         (IF (EQ (FNSTAT FN) 0)                                                0058200
          (BLOCK NIL (SETRAP FN ITRAP1) (SET (AGE V) 0))                       0058300
          (TRAPEQ FN ITRAP1)                                                   0058400
          (IF (LS (AGE V) 7) (SET (AGE V) (PLUS (AGE V) 1))))))                0058500
       (CODE (LDX (INTCNT . SYS) 0 6)) (SET INTCNT INTCNT))                    0058600
      (RETURN ALA.)))                                                          0058700
    (FUNCTION (ITRAP1 NOVALUE)                                                 0058800
     NIL (BLOCK ((ALA. OCTAL (CODE)))                                          0058900
      (BLOCK ((FN (FUNCTIONAL NOVALUE)                                         0059000
         ((FNCALL . SYS) (CODE (LDA 0 8)))))                                   0059100
       (SET (FUNCD FN)                                                         0059200
        (WORDOR (WORDAND 7Q14 (FUNCD FN)) (BIT 24 18 (FUNCD FN))))            0059300
       (BLOCK ((CA OCTAL ((RESUME . SYS) FN NIL)))                             0059400
        (SET (FMCALL . SYS) FN) (CODE (LDA ALA.) (BUC CA I))))))               0059500
    (RCUTINE (FIXBPI NOVALUE)                                                  0059600
     ((BP INTEGER) (A INTEGER) (B INTEGER))                                    0059700
     (CRG NIL (BLOCK ((I INTEGER (LADDR BP))                                   0059800
       (D INTEGER (PLUS B (MINUS A))))                                         0059900
      (BLOCK ((BE INTEGER (PLUS BP I)) (BW OCTAL) (C INTEGER 0))               0060000
       (FOR BP (STEP BP 1)                                                     0060100
        (WHILE (LS BP BE))                                                     0060200
        (BLOCK NIL (IF (LS (SET C (PLUS C -1)) 0)                              0060300
          (BLOCK NIL (SET BE (PLUS BE -1))                                     0060400
           (SET BW (CORE BE)) (SET C 23)))                                     0060500
         (IF (AND (NQ (WORDAND BW 4Q15) 0)                                     0060600
           (LQ A (LADDR BP)) (LS (LADDR BP) (PLUS A I)))                       0060700
          (SET (LADDR BP) (PLUS (LADDR BP) D)))                                0060800
         (IF (AND (NQ (WORDAND BW 2Q15) 0)                                     0060900
           (LQ A (RADDR BP)) (LS (RADDR BP) (PLUS A I)))                       0061000
          (SET (RADDR BP) (PLUS (RADDR BP) D)))                                0061100
         (SET BW (SHIFT BW 2))))))))))                                         0061200
(DUMP (SECTION SYS SYMBOL)                                                     0061300
   (FUNCTION ((DUMPSEC . LISP) SYMBOL)                                         0061400
    ((LNAME SYMBOL) (OUT SYMBOL) (SEC SYMBOL))                                 0061500
    (BLOCK ((I INTEGER 1) (L SYMBOL) (A SYMBOL))                               0061600
     (FOR I (STEP I 1 GR OBLSIZ)                                               0061700
      (FOR A (RESET (OBLIST I) (IDLINK A))                                     0061800
       (WHILE A) (IF (GETFREE A SEC) (SET L (CONS (CONS A SEC) L)))))          0061900
     (RETURN (DUMPL LNAME OUT L))))                                            0062000
   (FUNCTION ((DUMPL . LISP) SYMBOL)                                           0062100
    ((LNAME SYMBOL) (OUT SYMBOL) (L SYMBOL))                                   0062200
    (BLOCK ((LSIZE INTEGER 0)                                                  0062300
     (B SYMBOL) (LF SYMBOL) (S SYMBOL) (M SYMBOL) (X SYMBOL))                  0062400
     (IF (NOT (AND (IDP LNAME) (IDP OUT) (LISTP L)))                           0062500
      (ERROR (QUOTE (BAD ARGS TO DUMPL))))                                     0062600
     (OPENL OUT)                                                               0062700
     (SET B (GET (QUOTE BUF) (GET OUT (FILES. . IO))))                         0062800
     (SET LF (FINDN OUT LFILES))                                               0062900
     (SET (CDR B) (CREATE 512 (QUOTE OCTAL) 0))                                0063000
```

```
    (SET S (OUTPUT OUT))                                                    C063100
    (SET (SECTOR . IO) (CDR LF))                                            C063200
    (IF (FINDN LNAME DUMPS) (SET L (APPEND (REMOVEL LNAME) L)))             C063300
    (FOR X (IN L) (IF (SET X (DUMPFN X LSIZE)) (SET M (CONS X M))))         C063400
    (SET M (REVERSE M))                                                     C063500
    (ENDOUTR)                                                               C063600
    (SET DUMPS (CONS (LIST LNAME (LIST OUT (CDR LF) LSIZE) M NIL)           C063700
      DUMPS))                                                               C063800
    (SET (CDR LF) (SECTOR . IO))                                            C063900
    (OUTPUT S) (SET (CDR B) NIL) (RETURN (MAPCAR M VARNAME))))              C064000
  (FUNCTION (DUMPFN SYMBOL)                                                 C064100
   ((X SYMBOL) (LSIZE INTEGER LOC))                                         C064200
   (BLOCK ((V SYMBOL)                                                       C064300
     (FN (FUNCTIONAL NOVALUE))                                              C064400
     (S SYMBOL)                                                             C064500
     (A (ARRAY OCTAL))                                                      C064600
     (BP INTEGER) (I INTEGER) (FREEZE BOOLEAN FREE TRUE))                   C064700
    (IF (OR (ATOM X) (NULL (SET V (GETFN (CAR X) (CDR X)))))                C064800
     (RETURN NIL))                                                          C064900
    (SET FN (VAR2FUNC V))                                                   C065000
    (IF (NOT (READY FN))                                                    C065100
     (IF (NULL (SET S (UNLOAD FN))) (RETURN NIL) (LOADL S)))                C065200
    A (SET BP (PLUS -1 (IF (EQ (FNSTAT FN) 0)                               C065300
       (BIT 0 18 (FUNCD FN)) (BIT 24 18 (FUNCD FN)))))                      C065400
    (IF (LS BP BP0) (RETURN NIL))                                           C065500
    (IF (NULL A)                                                            C065600
     (BLOCK NIL (SET A (CREATE (LADDR BP) (QUOTE OCTAL) 0)) (GO A)))        C065700
    (FOR I (STEP (LADDR BP) -1 EQ 0)                                        C065800
     (SET (A I) (CORE (PLUS BP I -1))))                                     C065900
    (FIXBPI (PLUS (S20. A) 1) BP 2Q5)                                       C066000
    (FOR I (STEP 1 1 GR (LADDR BP))                                         C066100
     (BLOCK NIL (PRINWORD (A I)) (SET LSIZE (PLUS LSIZE 1))))               C066200
    (IF (EQ (PLUS (S20. A) I) ARP) (SET ARP (S20. A))) (RETURN V)))         C066300
  (FUNCTION ((UNLOADL . LISP) SYMBOL)                                       C066400
   ((LNAME SYMBOL))                                                         C066500
   (BLOCK ((LL SYMBOL (FINDN LNAME DUMPS)) (X SYMBOL))                      C066600
    (IF (NULL LL)                                                           C066700
     (ERROR (CONS LNAME (QUOTE (ILLEGAL LIBRARY FILE NAME)))))              C066800
    (FOR X (IN (CADDR LL)) (UNLDFN X LL))))                                 C066900
  (FUNCTION ((UNLOADFN . LISP) SYMBOL)                                      C067000
   ((NAME SYMBOL) (SEC SYMBOL))                                             C067100
   (BLOCK ((V SYMBOL (GETFN NAME SEC)) (LL SYMBOL))                         C067200
    (IF (NULL V) (RETURN NIL))                                              C067300
    (FOR LL (IN DUMPS)                                                      C067400
     (UNLESS (NOT (MEMBERN V (CADDR LL))))                                  C067500
     (BLOCK NIL (UNLDFN V LL) (GO R))) R))                                  C067600
  (FUNCTION (UNLDFN SYMBOL)                                                 C067700
   ((V SYMBOL) (LL SYMBOL))                                                 C067800
   (IF (NOT FREEZE)                                                         C067900
    (BLOCK ((FN (FUNCTIONAL NOVALUE) (VAR2FUNC V))                          C068000
      (BP INTEGER) (S SYMBOL) (FREEZE BOOLEAN FREE TRUE))                   C068100
     (SET S (OFFTRAC FN))                                                   C068200
     (IF (OR (NOT (READY FN)) (FACTIVE FN))                                 C068300
      (BLOCK NIL (IF S (CNTRAC FN S)) (GO R)))                              C068400
     (SET BP (PLUS (BIT 0 18 (FUNCD FN)) -1))                               C068500
     (SET (BIT 42 6 (CORE BP)) 0Q)                                          C068600
     (SET (BPMIN . GC) (PLUS (BPMIN . GC) (MINUS (LADDR BP))))              C068700
     (SET (FUNCD FN)                                                        C068800
      (WORDOR 2Q15 (WORDAND (FUNCD FN) 7Q14)                                C068900
       (BIT 0 24 (F2O. LDTRAP))))                                           C069000
     (SET (TRAPP FN) (CAR LL))                                              C069100
     (IF S (SET (TRAPP FN) (CONS S (CAR LL)))) R) NIL)))                    C069200
(LOADL (SECTION SYS SYMBOL)                                                 C069300
```

```
(FUNCTION ((LOADL . LISP) SYMBOL)                                          C069400
 ((LNAME SYMBOL))                                                          C069500
 (BLOCK ((LL SYMBOL (FINDN LNAME DUMPS))                                   C069600
   (BP INTEGER)                                                            C069700
   (I INTEGER)                                                             C069800
   (J INTEGER)                                                             C069900
   (M SYMBOL) (U SYMBOL) (FF (FUNCTIONAL SYMBOL SYMBOL)))                  C070000
  (IF (NULL LL)                                                            C070100
   (ERROR (CONS LNAME (QUOTE (NOT LIBRARY FILE NAME)))))                   C070200
  (SET M (CADR LL))                                                        C070300
  (IF (SET U (CDDDR M)) (BLOCK NIL (SET FF (CAR U)) (FF (CDR U))))         C070400
  (SET I (CADDR M))                                                        C070500
  (IF (GR I (DIFFERENCE ARO BPP)) (UNLOADL LNAME))                         C070600
  (SET BP (READLIB (CAR M) (CADR M) I))                                    C070700
  (SET J (PLUS BP I))                                                      C070800
  (FOR BP (RESET BP (PLUS BP (LADDR BP)))                                  C070900
   (WHILE (LS BP J))                                                       C071000
   (BLOCK ((FN (FUNCTIONAL NOVALUE)                                        C071100
     (O2F. (WORDOR 2Q7 (RADDR BP)))))                                      C071200
    (SET U (FUNC2VAR FN))                                                  C071300
    (IF (OR (FREADY FN) (NOT (MEMBERN U (CADDR LL))))                      C071400
     (BLOCK NIL (SET (BIT 42 6 (CORE BP)) 0Q)                              C071500
      (SET (BPMIN . GC) (PLUS (BPMIN . GC) (MINUS (LADDR BP))))            C071600
      (GC R))) (SETFD U BP) (FIXBPI BP 2Q5 BP) R))                         C071700
  (RETURN LNAME)))                                                         C071800
(FUNCTION ((OPENL . LISP) SYMBOL)                                          C071900
 ((X SYMBOL))                                                              C072000
 (BLOCK ((S SYMBOL (FINDN X LFILES)) (Y SYMBOL))                           C072100
  (IF (GET X (FILES. . IO))                                                C072200
   (IF S (RETURN NIL)                                                      C072300
    (ERROR (CONS X (QUOTE (NOT LIBRARY FILE))))))                          C072400
  (IF S (SET Y (LIST (QUOTE OLD)))                                         C072500
   (SET LFILES (CONS (CONS X 0) LFILES)))                                  C072600
  (OPEN X (APPEND Y (APPEND (QUOTE ((FORM . BINARY)                        C072700
       (RECORD . 512))) DISC.)))                                           C072800
  (SET (CDR (GET (QUOTE BUF) (GET X (FILES. . IO)))) NIL)                  C072900
  (RETURN X)))                                                             C073000
(FUNCTION (READLIB INTEGER)                                                C073100
 ((FILE SYMBOL) (SECT INTEGER) (I INTEGER))                                C073200
 (BLOCK (((SHORW . IO) (QUOTE (*STRING ANYSIX))))                          C073300
  (BLOCK ((NAME INTEGER ((CVRTNM . IO) FILE)))                             C073400
   (OPENL FILE)                                                            C073500
   (BLOCK ((BP INTEGER (GETBPS I)))                                        C073600
    (BLOCK ((B INTEGER BP) (J INTEGER I) (K INTEGER) (S INTEGER))          C073700
     (FOR J (RESET J (PLUS J (MINUS K)))                                   C073800
      (WHILE (NQ J 0))                                                     C073900
      (BLOCK NIL (IF (GR (INLIB B NAME SECT (SET K (MIN J (TIMES           C074000
            512 (SET S (PLUS 8 (MINUS (REMAINDER SECT 8))))))))) 3)       C074100
        (BLOCK NIL (SET (CORE BP) 0)                                       C074200
         (SET (LADDR BP) I)                                                C074300
         (SET (BPMIN . GC) (PLUS (BPMIN . GC) (MINUS I)))                  C074400
         (ERROR (QUOTE (READLIB ERROR)))))                                 C074500
        (SET B (PLUS B K)) (SET SECT (PLUS SECT S))))                      C074600
      (RETURN BP))))))                                                     C074700
(RCUTINE (INLIB INTEGER)                                                   C074800
 ((BP INTEGER) (NAME INTEGER) (SECT INTEGER) (I INTEGER))                  C074900
 (BLOCK NIL (SET (CORENTRY MNAME) NAME)                                    C075000
  (SET (CORENTRY MINCUT) (CORENTRY IN))                                    C075100
  (SET (CORENTRY MLOC) BP)                                                 C075200
  (SET (CORENTRY MSECTR) SECT)                                             C075300
  (SET (CORENTRY MSIZE) I)                                                 C075400
  (CODE (LDA (ENTRY MCALL) (RA R)) (BUC (ENTRY DSPCHR)))                   C075500
  (RETURN (BIT 0 6 (CORENTRY MSTAT)))))                                    C075600
```

```
(FUNCTION (REMFN NOVALUE)                                                    C075700
 ((FD SYMBOL))                                                               C075800
 (BLOCK ((X SYMBOL))                                                         C075900
  (FOR X (IN DUMPS)                                                          C076000
   (UNLESS (NOT (MEMBERN FD (CADDR X))))                                     C076100
   (BLOCK NIL (IF (SET (CADDR X) (DELE FD (CADDR X)))                        C076200
    (SET (CADDDR X) (CONS FD (CADDDR X))) (REMOVEL (CAR X))))))))            C076300
(FUNCTION ((REMOVEL . LISP) SYMBOL)                                          C076400
 ((LNAME SYMBOL))                                                            C076500
 (BLOCK ((LL SYMBOL (FINDN LNAME DUMPS))                                     C076600
  (FREEZE BCCLEAN FREE TRUE))                                                C076700
  (IF (NULL LL) (RETURN NIL))                                                C076800
  (LOADL (CAR LL))                                                           C076900
  (SET DUMPS (DELE LL DUMPS))                                                C077000
  (RETURN (MAPCAR (CADDR LL) VARNAME)))))                                    C077100
(START (SECTION SYS SYMBOL)                                                  C077200
 (FUNCTION ((START . SYS) NOVALUE)                                           C077300
  NIL (BLOCK ((X SYMBOL))                                                    C077400
   (IOINI)                                                                   C077500
   A (RESTART)                                                               C077600
   (TRY X E (SUPVFN ITTY CTTY (QUOTE IL)))                                   C077700
   (GO A) E (TRY X A (PRBACK X)) (GO A)))                                    C077800
 (FUNCTION (SYSINI NOVALUE)                                                  C077900
  NIL (BLOCK ((X (ARRAY OCTAL) (02S. (ENTRY FIXBUF))))                       C078000
   (SET (BUFIX . IC) X)                                                      C078100
   (LOCSET (FIXLOC . IC) (X 0))                                              C078200
   (SET ECFCH (OCT2CH 34Q))                                                  C078300
   (SET XXCHAR (OCT2CH 14Q1))                                                C078400
   (SET TRYVAR (GETFREE (QUOTE TRYPT) (QUOTE SYS)))                          C078500
   (CODE (LDA (TRP . SYS))                                                   C078600
    (ADD (PDBUF . GC))                                                       C078700
    (STA (ENTRY PDCK1) S7.123)                                               C078800
    (ADD (NUMBER 25)) (STA ((ENTRY PDCK) 1) S7.123))))                       C078900
 (FUNCTION (PRBACK NOVALUE)                                                  C079000
  ((X SYMBOL))                                                               C079100
  (BLOCK NIL (SET BACKTRACE BACTRC)                                          C079200
   (MESSAGE (APPEND (QUOTE (TOP LEVEL EXIT VALUE)) X))                       C079300
   (MESSAGE (CONS (QUOTE BACKTRACE) (LASTN PRNMAX BACKTRACE)))))             C079400
 (FUNCTION (ICINI NOVALUE)                                                   C079500
  NIL (BLOCK NIL (SET (FILES. . IC) NIL)                                     C079600
   (SET (ICURFN . IC) (SET (CURFN . IC) NIL))                                C079700
   (SET (CORENTRY DNAME) (CORE (PLUS (ENTRY BELL) 2)))                       C079800
   (SET (BIT 0 6 (CORENTRY DUNIT)) 1Q1)                                      C079900
   (SET (BIT 0 6 (CORENTRY DFORM)) 21Q)                                      C080000
   (SET (CORENTRY DSIZE) 1)                                                  C080100
   (CODE (LDA (ENTRY DCALL) (L567.7 R)) (BUC (ENTRY DSPCHR)))                C080200
   (OPEN ITTY TTY.)                                                          C080300
   (OPEN CTTY TTY.) (INPUT ITTY) (OUTPUT OTTY) (MESSAGE SIGNON)))            C080400
 (FUNCTION (RESTART NOVALUE)                                                 C080500
  NIL (BLOCK NIL (SET (FSCHAR . FSM) NIL)                                    C080600
   ((MAKEST . FSM)) (SET (BACTRC . LISP) NIL)))                              C080700
 (FUNCTION (RECOV NOVALUE) NIL (CODE (0)))                                   C080800
 (FUNCTION (LSUPV NOVALUE)                                                   C080900
  ((INFILE SYMBOL) (OUTFILE SYMBOL) (FORM SYMBOL))                           C081000
  (BLOCK ((A SYMBOL)                                                         C081100
   (B SYMBOL)                                                                C081200
   (G (FUNCTIONAL SYMBOL))                                                   C081300
   (INF SYMBOL (INPUT INFILE)) (OUT SYMBOL (OUTPUT OUTFILE)))                C081400
   (ENDIN)                                                                   C081500
   A (SET A (READ))                                                          C081600
   B (IF (NOT (ATOM A))                                                      C081700
    (IF (EQ (CAR A) (QUOTE LAP))                                             C081800
     (GO LAP) (EQ INFILE ITTY) (GO PR) (GO A))                               C081900
```

```
     (OR (EQN A EOFCH) (EQ A (QUOTE STOP)) (EQ A (QUOTE END)))          C082000
     (GO EXIT))                                                         C082100
    AT (SET B (READ))                                                   C082200
    (IF (EQ A (QUOTE DISC))                                             C082300
     (SET A (OPEN (CAR B) (APPEND (CDR B) DISC.)))                      C082400
     (EQ A (QUOTE TAPE))                                                C082500
     (SET A (OPEN (CAR B) (APPEND (CDR B) TAPE.)))                      C082600
     (EQ A (QUOTE LSUPV))                                               C082700
     (LSUPV (CAR B) (CADR B) (QUOTE IL))                                C082800
     (EQ A (QUOTE ID))                                                  C082900
     (SET A (S2C. B))                                                   C083000
     (EQ A (QUOTE TRACEARGS))                                           C083100
     (SET A (TRACEARGS B))                                              C083200
     (EQ A (QUOTE UNTRACE))                                             C083300
     (SET A (UNTRACE B))                                                C083400
     (EQ A (QUOTE DUMPSEC))                                             C083500
     (SET A (DUMPSEC (CAR B) (CADR B) (CADDR B)))                       C083600
     (EQ A (QUOTE DUMPL))                                               C083700
     (SET A (DUMPL (CAR B) (CADR B) (CADDR B)))                         C083800
     (EQ A (QUOTE UNLOADL))                                             C083900
     (SET A (UNLOADL B))                                                C084000
     (EQ A (QUOTE EVAL))                                                C084100
     (SET A (EVAL B))                                                   C084200
     (EQ A (QUOTE FREE))                                                C084300
     (BLOCK ((V SYMBOL (GETFREE (CAR B) (CDR B))))                      C084400
      (IF V (SET A (LIST A (S2C. V)                                     C084500
         (CORE (PLUS (S2C. V) -1)) (FVLIST V)))))                       C084600
     (EQ A (QUOTE LAPSTOP))                                             C084700
     (BLOCK NIL (IF (NOT B) (SET A (LAPGO))) (SET LAPSTOP B))           C084800
     (EQ A (QUOTE SUPV)) (SUPV) (BLOCK NIL (SET A B) (GO B)))           C084900
    (GO PR)                                                             C085000
    LAP (SET (ERRFLG . SUPV) FALSE)                                     C085100
    (SET A (LAP (CADR A) (CADDR A) (CADDDR A)))                         C085200
    (IF (ERRFLG . SUPV) (GO A) (NQ (CDR A) (QUOTE RUN)) (GO PR))        C085300
    (SET B A)                                                           C085400
    (SET G (VAR2FUNC (GETFREE (CAR B) (CDR B))))                        C085500
    (SET A (G))                                                         C085600
    (EXCISE (CAR B) (CDR B))                                            C085700
    PR (PRETTYP A) (GO A) EXIT (INPUT INF) (OUTPUT OUT))))              C085800
                                                                        C085900
****END OF FILE DETECTED
```

```
(DUMMY (SECTION (LAP SYS) SYMBOL)                                          C000100
  (FUNCTION ((LAP . LISP) SYMBOL)                                          C000200
   ((A SYMBOL) (B SYMBOL) (C SYMBOL)))                                     C000300
  (FUNCTION (LAPP SYMBOL)                                                  C000400
   ((LISTING SYMBOL) (DLIST SYMBOL) (SNAME SYMBOL FLUID)))                 C000500
  (FUNCTION (LAPDECLARE NOVALUE) ((D SYMBOL)))                             C000600
  (FUNCTION (FREEDECL SYMBOL) ((D SYMBOL)))                                C000700
  (FUNCTION (FORMALIZE SYMBOL) ((V SYMBOL) (D SYMBOL)))                    C000800
  (FUNCTION (VNAMER SYMBOL) ((N SYMBOL)))                                  C000900
  (FUNCTION (LAP1 NOVALUE) ((MODE SYMBOL) (PDK INTEGER)))                  C001000
  (ROUTINE (LAPPUSH1 NOVALUE) ((N INTEGER)))                               C001100
  (ROUTINE (LAPPOP1 NOVALUE) ((N INTEGER)))                                C001200
  (ROUTINE (NUMADDR BOOLEAN) ((X SYMBOL)))                                 C001300
  (FUNCTION (ROUTP SYMBOL) ((V SYMBOL)))                                   C001400
  (FUNCTION (LAP2 NOVALUE) ((MODE SYMBOL) (PDK INTEGER)))                  C001500
  (FUNCTION (FLBIND SYMBOL) ((L SYMBOL)))                                  C001600
  (FUNCTION (FLRESTS SYMBOL) NIL)                                          C001700
  (FUNCTION (LAPADDR NOVALUE) ((X SYMBOL) (P BOOLEAN)))                    C001800
  (FUNCTION (LAPABSADDR INTEGER) ((X SYMBOL)))                             C001900
  (FUNCTION (LAPADD1 BOOLEAN) ((X SYMBOL) (P BOOLEAN)))                    C002000
  (FUNCTION (LAPTAG NOVALUE) ((X SYMBOL)))                                 C002100
  (FUNCTION (BYTMD SYMBOL) ((L SYMBOL)))                                   C002200
  (FUNCTION (APMOD SYMBOL) ((P OCTAL) (A SYMBOL)))                         C002300
  (FUNCTION (LAPPUSH NOVALUE) ((N INTEGER) (B OCTAL)))                     C002400
  (ROUTINE (LAPPOP NOVALUE) ((N INTEGER)))                                 C002500
  (FUNCTION (LAPCALL2 NOVALUE) NIL)                                        C002600
  (FUNCTION (BPINSTR NOVALUE) ((C OCTAL) (R INTEGER) (Y SYMBOL)))          C002700
  (FUNCTION (BPINST NOVALUE)                                               C002800
   ((C OCTAL) (L INTEGER) (X SYMBOL) (R INTEGER) (Y SYMBOL)))              C002900
  (ROUTINE (BPADDR OCTAL)                                                  C003000
   ((C INTEGER) (M SYMBOL) (A INTEGER) (H SYMBOL)))                        C003100
  (ROUTINE (BPLOC INTEGER) ((C INTEGER)))                                  C003200
  (FUNCTION (REMWORD NOVALUE) ((C OCTAL) (R INTEGER) (Y SYMBOL)))          C003300
  (FUNCTION (NOUP SYMBOL) ((N INTEGER) (X SYMBOL)))                        C003400
  (FUNCTION (LAPNIX NOVALUE) ((M SYMBOL)))                                 C003500
  (ROUTINE (LAPID SYMBOL) ((X SYMBOL)))                                    C003600
  (ROUTINE (LAPFREE SYMBOL) ((N SYMBOL) (SN SYMBOL)))                      C003700
  (FUNCTION ((LAPGC . SYS) SYMBOL) NIL)                                    C003800
  (FUNCTION (PRINCOM NOVALUE) ((M SYMBOL) (I INTEGER)))                    C003900
  (FUNCTION (BLANKS NOVALUE) ((I INTEGER)))                                C004000
  (FUNCTION (PRINOCT NOVALUE) ((C OCTAL) (I INTEGER))))                    C004100
(LAPINIT (SECTION CPCODE SYMBOL)                                           C004200
  (DECLARE (PER OCTAL OWN 4Q13)                                            C004300
   (XEC OCTAL OWN 1Q14)                                                    C004400
   (BUC OCTAL OWN 14Q13)                                                   C004500
   (BUS OCTAL OWN 15Q13)                                                   C004600
   (SFC OCTAL OWN 2Q14)                                                    C004700
   (SFA OCTAL OWN 201Q12)                                                  C004800
   (CYC OCTAL OWN 24Q13)                                                   C004900
   (CYA OCTAL OWN 241Q12)                                                  C005000
   (CYB OCTAL OWN 242Q12)                                                  C005100
   (STF OCTAL OWN 5Q14)                                                    C005200
   (STZ OCTAL OWN 51Q13)                                                   C005300
   (ADD OCTAL OWN 1Q15)                                                    C005400
   (ADM OCTAL OWN 104Q13)                                                  C005500
   (SUB OCTAL OWN 11Q14)                                                   C005600
   (SBM OCTAL OWN 114Q13)                                                  C005700
   (MUL OCTAL OWN 12Q14)                                                   C005800
   (DVD OCTAL OWN 134Q13)                                                  C005900
   (LDA OCTAL OWN 2Q15)                                                    C006000
   (LDM OCTAL OWN 204Q13)                                                  C006100
   (LDC OCTAL OWN 21Q14)                                                   C006200
   (LMC OCTAL OWN 214Q13)                                                  C006300
```

```
(LDB OCTAL CWN 22Q14)                                                    C006400
(LBC OCTAL CWN 224Q13)                                                   C006500
(LDL OCTAL CWN 23Q14)                                                    C006600
(LLC OCTAL CWN 234Q13)                                                   C006700
(FAD OCTAL CWN 3Q15)                                                     C006800
(FAM OCTAL CWN 304Q13)                                                   C006900
(FSB OCTAL CWN 31Q14)                                                    C007000
(FSM OCTAL CWN 314Q13)                                                   C007100
(FLT OCTAL CWN 32Q14)                                                    C007200
(FRN OCTAL CWN 324Q13)                                                   C007300
(FMP OCTAL CWN 33Q14)                                                    C007400
(FDV OCTAL CWN 334Q13)                                                   C007500
(CAS OCTAL CWN 4Q15)                                                     C007600
(INS OCTAL CWN 404Q13)                                                   C007700
(COM OCTAL CWN 41Q14)                                                    C007800
(TST OCTAL CWN 414Q13)                                                   C007900
(LDX OCTAL CWN 42Q14)                                                    C008000
(ATX OCTAL CWN 424Q13)                                                   C008100
(CON OCTAL CWN 43Q14)                                                    C008200
(ANA OCTAL CWN 430004Q10)                                                C008300
(XOR OCTAL CWN 43003Q11)                                                 C008400
(CRA OCTAL CWN 430034Q10)                                                C008500
(ANS OCTAL CWN 430204Q10)                                                C008600
(STMZ OCTAL CWN 430274Q10)                                               C008700
(LDS OCTAL CWN 434Q13)                                                   C008800
(STS OCTAL CWN 44Q14)                                                    C008900
(LDI OCTAL CWN 444Q13)                                                   C009000
(STA OCTAL CWN 5Q15)                                                     C009100
(STB OCTAL CWN 504Q13)                                                   C009200
(STL OCTAL CWN 51Q14)                                                    C009300
(STP OCTAL CWN 514Q13)                                                   C009400
(STX OCTAL CWN 52Q14)                                                    C009500
(ECH OCTAL CWN 524Q13)                                                   C009600
(AOR OCTAL CWN 53Q14)                                                    C009700
(SOR OCTAL CWN 534Q13)                                                   C009800
(ATR OCTAL CWN 54Q14)                                                    C009900
(BOZ OCTAL CWN 6002Q12)                                                  C010000
(BNZ OCTAL CWN 6012Q12)                                                  C010100
(BOZP OCTAL CWN 6Q15)                                                    C010200
(BNZP OCTAL CWN 601Q13)                                                  C010300
(BOZM OCTAL CWN 6001Q12)                                                 C010400
(BNZM OCTAL CWN 6011Q12)                                                 C010500
(BSN OCTAL CWN 604Q13)                                                   C010600
(BSG OCTAL CWN 61Q14)                                                    C010700
(BOP OCTAL CWN 61000177Q8)                                               C010800
(BOM OCTAL CWN 61040177Q8)                                               C010900
(BAR OCTAL CWN 614Q13)                                                   C011000
(BXH OCTAL CWN 7Q15)                                                     C011100
(BXL OCTAL CWN 71Q14)                                                    C011200
(BXE OCTAL CWN 72Q14)                                                    C011300
(BSX OCTAL CWN 73Q14)                                                    C011400
(BAX OCTAL CWN 74Q14)                                                    C011500
(BPX OCTAL CWN 75Q14) (BMX OCTAL CWN 76Q14))                             C011600
(SECTION MODCODE SYMBOL)                                                 C011700
(DECLARE (A OCTAL OWN 17Q)                                               C011800
(AC OCTAL OWN 17Q)                                                       C011900
(A. OCTAL OWN 17Q)                                                       C012000
(I OCTAL OWN 2Q1)                                                        C012100
(C OCTAL OWN 4Q1)                                                        C012200
(L OCTAL OWN 4Q6)                                                        C012300
(R OCTAL OWN 1Q7)                                                        C012400
(S OCTAL OWN 4Q4)                                                        C012500
(T OCTAL OWN 4Q5) (N OCTAL OWN 1Q7) (RA OCTAL OWN 37Q3))                 C012600
```

```
    (SECTION (LAP SYS) SYMBOL)                                          C012700
    (DECLARE (ENTRIES SYMBOL OWN))                                      C012800
    (DECLARE ((LAPSTCP . SYS) BOOLEAN FREE) (LAPSTL SYMBOL OWN))        C012900
    (DECLARE (SNAME SYMBOL FLUID)                                       C013000
     (FNAME SYMBOL FLUID)                                               C013100
     (FSEC SYMBOL FLUID)                                                C013200
     (ROUT BOOLEAN FLUID)                                               C013300
     (FDESC SYMBOL FLUID)                                               C013400
     (FSIZ INTEGER FLUID)                                               C013500
     (ORIGIN BOOLEAN FLUID)                                             C013600
     (ORGMODE BOOLEAN FLUID)                                            C013700
     (ILC INTEGER FLUID)                                                C013800
     (RLC INTEGER FLUID)                                                C013900
     (PDC INTEGER FLUID)                                                C014000
     (PDMAP SYMBOL FLUID)                                               C014100
     (MAPS SYMBOL FLUID)                                                C014200
     (PDMIN INTEGER FLUID)                                              C014300
     (PDMAX INTEGER FLUID)                                              C014400
     (LABELS SYMBOL FLUID)                                              C014500
     (ALIST SYMBOL FLUID)                                               C014600
     (APLIST SYMBOL FLUID)                                              C014700
     (FL SYMBOL FLUID)                                                  C014800
     (FA INTEGER FLUID)                                                 C014900
     (FM SYMBOL FLUID)                                                  C015000
     (FR INTEGER FLUID)                                                 C015100
     (TAG INTEGER FLUID)                                                C015200
     (LG SYMBOL FLUID)                                                  C015300
     (IT SYMBOL FLUID) (ERRS BOOLEAN FLUID) (OUTLAP SYMBOL OWN)))       C015400
  (MACROS (SECTION SYS SYMBOL)                                          C015500
    MACRO1 (((FLVAL (LAMBDA (X)                                         C015600
        (LIST (QUOTE CORE)                                              C015700
         (LIST (QUOTE PLUS)                                             C015800
          -1 (APPEND (QUOTE (CHEAT SYMBOL INTEGER)) (CDR X))))))))      C015900
    (ROUTINE (SETFD NOVALUE) ((FD SYMBOL) (J INTEGER)))                 C016000
    (FUNCTION (MESSAGE SYMBOL) ((M SYMBOL)))                            C016100
    (FUNCTION (EXCISE SYMBOL) ((V SYMBOL)))                             C016200
    (FUNCTION (FTRANS SYMBOL) ((P SYMBOL)))                             C016300
    (FUNCTION (GETBPS INTEGER) ((I INTEGER)))                           C016400
    (ROUTINE (VREFCT NOVALUE) ((V SYMBOL)(I INTEGER)))                  C016500
    (DECLARE ((ERRFLG . SUPV) BOOLEAN FREE)))                           C016600
  (LAP (SECTION (LAP SYS) SYMBOL)                                       C016700
    (FUNCTION ((LAP . LISP) SYMBOL)                                     C016800
     ((A SYMBOL) (B SYMBOL) (C SYMBOL))                                 C016900
     (BLOCK ((APLIST SYMBOL FREE NIL)) (RETURN (LAPP A B C))))          C017000
    (FUNCTION (LAPP SYMBOL)                                             C017100
     ((LISTING SYMBOL) (DLIST SYMBOL) (SNAME SYMBOL FLUID))             C017200
     (BLOCK ((FNAME SYMBOL FLUID)                                       C017300
       (FSEC SYMBOL FLUID)                                              C017400
       (ROUT BOOLEAN FLUID)                                             C017500
       (FDESC SYMBOL FLUID)                                             C017600
       (FSIZ INTEGER FLUID)                                             C017700
       (ORIGIN BOOLEAN FLUID)                                           C017800
       (ORGMODE BOOLEAN FLUID)                                          C017900
       (ILC INTEGER FLUID)                                              C018000
       (RLC INTEGER FLUID)                                              C018100
       (PDC INTEGER FLUID)                                              C018200
       (PDMAP SYMBOL FLUID)                                             C018300
       (MAPS SYMBOL FLUID)                                              C018400
       (PDMIN INTEGER FLUID)                                            C018500
       (PDMAX INTEGER FLUID)                                            C018600
       (LABELS SYMBOL FLUID)                                            C018700
       (ALIST SYMBOL FLUID)                                             C018800
       (FL SYMBOL FLUID)                                                C018900
```

```
 (HA INTEGER FLUID)                                                    C019000
 (HM SYMBOL FLUID)                                                     C019100
 (HR INTEGER FLUID)                                                    C019200
 (TAG INTEGER FLUID)                                                   C019300
 (LG SYMBOL FLUID)                                                     C019400
 (IT SYMBOL FLUID)                                                     C019500
 (ERRS BOOLEAN FLUID)                                                  C019600
 (FD SYMBOL)                                                           C019700
 (A SYMBOL) (D SYMBOL) (I INTEGER) (J INTEGER) (PATCH BOOLEAN))        C019800
(SET DLIST (MAPCAR DLIST FREEDECL))                                    C019900
(IF (EQ (CAR LISTING) (QUOTE PATCH))                                   C020000
 (GO B) (EQ (CAR LISTING) (QUOTE ROUTINE)) (SET ROUT TRUE))            C020100
(SET FNAME (VNAMER (CAADR LISTING)))                                   C020200
(SET FSEC (CDR FNAME))                                                 C020300
(SET D (CADDR LISTING))                                                C020400
(SET A (LIST (CAR LISTING)                                             C020500
  (FORMALIZE (CADADR LISTING) D) (QUOTE VALUE)))                       C020600
(SET FD (FREEDECL (CONS FNAME A)))                                     C020700
(SET FDESC (FREEDECL (CONS (CONS (GENID) (QUOTE TEMP)) A)))            C020800
(SET FNAME (CAR FNAME))                                                C020900
(IF (NULL FD) (GO ERRS))                                               C021000
(SET FSIZ (PLUS FPP (SET ILC 1)))                                      C021100
(SET LG (CDDDR LISTING))                                               C021200
(GO LAP1)                                                              C021300
B (SET FNAME (QUOTE PATCH))                                            C021400
(SET ILC (SET FSIZ FPP))                                               C021500
(SET ORIGIN (SET ORGMODE (SET PATCH TRUE)))                            C021600
(SET LG (CDR LISTING))                                                 C021700
LAP1 (SET PDMAX 1)                                                     C021800
(SET RLC (SET PDC (SET PDMIN 0)))                                      C021900
(IF D (SET PDC 1))                                                     C022000
(LAP1 (QUOTE END) 0)                                                   C022100
J (LAP1 NIL 0)                                                         C022200
(IF LG (GO J) ERRS (GO ERRS) (NOT PATCH) (VREFCT FDESC 1))             C022300
(IF (NOT ORIGIN) (GO C) (NOT ORGMODE) (SET ILC FSIZ))                  C022400
(SET FSIZ (PLUS ILC RLC (MINUS FPP)))                                  C022500
(SET ORGMODE TRUE)                                                     C022600
(SET RLC ILC)                                                          C022700
(SET J (SET ILC FPP))                                                  C022800
(IF PATCH (GO E) (GO D))                                               C022900
C (SET FSIZ (PLUS ILC RLC))                                            C023000
(SET I (IQUOTIENT (PLUS FSIZ 23) 24))                                  C023100
(SET FSIZ (PLUS FSIZ I))                                               C023200
(SET J (GETBPS FSIZ))                                                  C023300
(FOR I (STEP I -1 EQ 0) (SET (CORE (PLUS J FSIZ (MINUS I))) 0Q))       C023400
(SET RLC ILC)                                                          C023500
(SET ILC 0)                                                            C023600
D (SETFD FDESC J)                                                      C023700
(BPINST 40CCCOC001Q6 FSIZ (QUOTE A) (S20. FDESC) (QUOTE F))            C023800
(PRINCOM NIL 0)                                                        C023900
(SET LG (CDDDR LISTING))                                               C024000
(SET MAPS (LIST (CONS 0 (PLUS ILC -1)) (CONS -1 (PLUS ILC -1))))       C024100
(GO LAP2)                                                              C024200
E (SET LG (CDR LISTING))                                               C024300
(SET MAPS (QUOTE ((0 . 4002Q1) (-1 . 0))))                             C024400
LAP2 (SET PDC (MINUS (LENGTH D)))                                      C024500
(SET ALIST (SET FL NIL))                                               C024600
(LAPDECLARE D)                                                         C024700
(IF PDMAP (SET (CDR PDMAP) NIL))                                       C024800
(SET PDMIN 0)                                                          C024900
(LAP2 (QUOTE END) 0)                                                   C025000
K (LAP2 NIL 0)                                                         C025100
(IF LG (GO K))                                                         C025200
```

```
     (IF PATCH (GO R)                                                    C025300
      ERRS (BLOCK NIL (EXCISE FDESC) (GO ERRS))                          C025400
      (AND LAPSTOP (NQ FSEC (QUOTE RUN)))                                C025500
      (SET LAPSTL (CONS (CONS FD FDESC) LAPSTL))                         C025600
      (FTRANS (CONS FD FDESC)))                                          C025700
     R (RETURN (CONS FNAME FSEC))                                        C025800
     ERRS (SET (ERRFLG . SUPV) TRUE) (GO R))))                           C025900
 (LAPDECLARE (FUNCTION (LAPDECLARE NOVALUE)                              C026000
    ((D SYMBOL))                                                         C026100
    (BLOCK ((V SYMBOL) (DT SYMBOL) (DF SYMBOL) (DL SYMBOL))              C026200
     A (IF (NULL D) (GO EXIT))                                           C026300
     (SET V (CAR D))                                                     C026400
     (SET D (CDR D))                                                     C026500
     (SET DT (CADR V))                                                   C026600
     (SET DF (OR (MEMBER (QUOTE FREE) (CDDR V))                          C026700
       (MEMBER (QUOTE FLUID) (CDDR V))))                                 C026800
     (SET DL (MEMBER (QUOTE LOC) (CDDR V)))                              C026900
     (SET V (CAR V))                                                     C027000
     (IF (AND (ATOM V) (NOT DF)) (GO C))                                 C027100
     (SET V (VNAMER V))                                                  C027200
     (MAKEFREE (CAR V)                                                   C027300
      (CDR V) (QUOTE STET) DT (IF DL (QUOTE LOC) (QUOTE VALUE)))         C027400
     (SET DF (IF DL (QUOTE (LOC)) (QUOTE (FLUID))))                      C027500
     C (LAPPUSH 1 (IF (OR DL (EQ DT (QUOTE SYMBOL))                      C027600
        (NOT (ATOM DT))) IQ OQ))                                         C027700
     (IF (EQ PDC 0) (SET PDC 1))                                         C027800
     (SET ALIST (CONS (CONS V PDC DF) ALIST)) (GO A) EXIT))              C027900
   (FUNCTION (FREEDECL SYMBOL)                                           C028000
    ((D SYMBOL))                                                         C028100
    (BLOCK ((N SYMBOL))                                                  C028200
     (SET N (VNAMER (CAR D)))                                            C028300
     (RETURN (MAKEFREE (CAR N)                                           C028400
       (CDR N)                                                           C028500
       (IF (OR (EQ (CADR D) (QUOTE FREE))                                C028600
         (EQ (CADR D) (QUOTE FLUID))) (QUOTE STET) (CADR D))             C028700
       (CADDR D)                                                         C028800
       (IF (MEMBER (QUOTE LOC) (CDDDR D))                                C028900
        (QUOTE LOC) (QUOTE VALUE))))))                                   C029000
   (FUNCTION (FORMALIZE SYMBOL)                                          C029100
    ((V SYMBOL) (D SYMBOL))                                              C029200
    (CONS (QUOTE FUNCTIONAL)                                             C029300
     V (MAPCAR D (FUNCTION ((G02446 . G02447) SYMBOL)                    C029400
       ((J SYMBOL))                                                      C029500
       (IF (MEMBER (QUOTE LOC) (CDDR J))                                 C029600
        (LIST (FTYPER (CADR J)) (QUOTE LOC)) (FTYPER (CADR J))))))))     C029700
   (FUNCTION (VNAMER SYMBOL)                                             C029800
    ((N SYMBOL)) (IF (ATOM N) (CONS N SNAME) N)))                        C029900
 (LAP1 (FUNCTION (LAP1 NOVALUE)                                          C030000
    ((MODE SYMBOL) (PDK INTEGER))                                        C030100
    (BLOCK ((CP SYMBOL) (X SYMBOL) (U SYMBOL))                           C030200
     A (IF (NULL LG)                                                     C030300
      (GO E)                                                             C030400
      (AND (NOT (ATOM (CAR LG))) (EQ (CAAR LG) (QUOTE DITTO)))           C030500
      (GO DITTO))                                                        C030600
     (SET IT (CAR LG))                                                   C030700
     (SET LG (CDR LG))                                                   C030800
     V (IF (NOT (ATOM IT))                                               C030900
      (GO B)                                                             C031000
      (OR (IDP IT) (FIXP IT)) (GO LABEL) IT (LAPNIX (QUOTE ITEM)))       C031100
     (GO A)                                                              C031200
     LABEL (SET U (FIND IT LABELS))                                      C031300
     (IF U (LAPNIX (QUOTE (MULTIPLE LABEL)))                             C031400
      (SET LABELS (CONS (CONS IT ILC) LABELS)))                          C031500
```

```
(GO A)                                                                  C031600
B (SET OP (CAR IT))                                                     C031700
(SET X (CDR IT))                                                        C031800
(SET U (FINDN OP (QUOTE ((ORG . 0)                                      C031900
    (ENTRY . 0)                                                         C032000
    (BEGIN . 2)                                                         C032100
    (RETURN . 1)                                                        C032200
    (BLOCK . 0)                                                         C032300
    (DECLARE . 0)                                                       C032400
    (END . 0)                                                           C032500
    (ARGS . 0)                                                          C032600
    (CALL . 2)                                                          C032700
    (CALL1 . 1)                                                         C032800
    (CALL2 . 1)                                                         C032900
    (FLBIND . 1)                                                        C033000
    (PUSHA. . 0) (PUSHP. . 0) (POP. . 0) (COMMENT . 0)))))              C033100
(IF (NULL U)                                                            C033200
 (GO C)                                                                 C033300
 (AND (EQ OP (QUOTE BEGIN)) ROUT) (SET U (QUOTE (BEGIN . 1))))          C033400
(SET ILC (PLUS ILC (CDR U)))                                            C033500
(IF (EQ OP (QUOTE ORG))                                                 C033600
 (GO ORG)                                                               C033700
 (EQ OP (QUOTE BLOCK))                                                  C033800
 (GO BLOCK)                                                             C033900
 (EQ OP (QUOTE DECLARE))                                                C034000
 (GO DECLARE)                                                           C034100
 (EQ OP (QUOTE END))                                                    C034200
 (GO END)                                                               C034300
 (EQ OP (QUOTE ARGS))                                                   C034400
 (GO ARGS)                                                              C034500
 (EQ OP (QUOTE CALL))                                                   C034600
 (GO CALL)                                                              C034700
 (EQ OP (QUOTE CALL2))                                                  C034800
 (GO CALL2)                                                             C034900
 (EQ OP (QUOTE CALL1))                                                  C035000
 (GO CALL1)                                                             C035100
 (EQ OP (QUOTE FLBIND))                                                 C035200
 (GO FLBIND)                                                            C035300
 (EQ OP (QUOTE PUSHA.))                                                 C035400
 (GO PUSHA.)                                                            C035500
 (EQ OP (QUOTE PUSHP.))                                                 C035600
 (GO PUSHP.) (EQ OP (QUOTE POP.)) (GO POP.))                            C035700
(GO A)                                                                  C035800
C (IF (NULL X)                                                          C035900
 (GO D)                                                                 C036000
 (OR (EQ (CAR X) (QUOTE PUSHP.)) (EQ (CAR X) (QUOTE PUSHA.)))           C036100
 (LAPPUSH1 1)                                                           C036200
 (EQ (CAR X) (QUOTE POP.))                                              C036300
 (LAPPOP1 1) (NUMADDR (CAR X)) (SET RLC (PLUS RLC 1)))                  C036400
(IF (AND (CDR X) (CDDR X) (NUMADDR (CADDR X)))                          C036500
 (SET RLC (PLUS RLC 1)))                                                C036600
D (SET ILC (PLUS ILC 1))                                                C036700
(GO A)                                                                  C036800
DITTO (IF (EQ (CADAR LG) 0) (GO W))                                     C036900
(SET LG (CONS (LIST (QUOTE DITTO) (PLUS (CADAR LG) -1))                 C037000
  (CDR LG)))                                                            C037100
(GO V)                                                                  C037200
W (SET LG (CDR LG))                                                     C037300
(GO A)                                                                  C037400
ORG (SET ORIGIN TRUE)                                                   C037500
(IF ORGMODE (SET FSIZ ILC))                                             C037600
(SET ORGMODE (OR (NULL X) (NULL (CAR X))))                              C037700
(SET ILC (IF ORGMODE FSIZ (LAPABSADDR (CAR X))))                        C037800
```

```
      (GO A)                                                                    0037900
      BLOCK (BLOCK ((FL SYMBOL FLUID)) (LAP1 (QUOTE DECLARE) PDC))              0038000
      (GO A)                                                                    0038100
      DECLARE (LAPPOP1 (DIFFERENCE PDC PDK))                                    0038200
      (LAPPUSH1 (LENGTH X))                                                     0038300
      (IF (EQ MODE (QUOTE DECLARE))                                             0038400
       (SET MODE (QUOTE END)) (LAPNIX (QUOTE (DECLARE MISPLACED))))             0038500
      (GO A)                                                                    0038600
      END (IF (NOT (EQ MODE (QUOTE END)))                                       0038700
       (LAPNIX (QUOTE (END MISPLACED))))                                        0038800
      R (SET ILC (PLUS ILC (LENGTH FL)))                                        0038900
      (LAPPOP1 (DIFFERENCE PDC PDK))                                            0039000
      (GO EXIT)                                                                 0039100
      ARGS (BLOCK ((FL SYMBOL FLUID)) (LAP1 (QUOTE CALL) PDC))                  0039200
      (GO A)                                                                    0039300
      CALL CALL2 (IF (ROUTP (CAR X))                                            0039400
       (SET ILC (PLUS ILC -1))                                                  0039500
       (BLOCK NIL (IF ROUT (LAPNIX (QUOTE (FUNCTION CALL))))                    0039600
        (SET RLC (PLUS RLC (TIMES (MAX 0 (IQUOTIENT (PLUS PDC (MINUS           0039700
              PDMIN) -1) 24)) 2))) (SET PDMIN PDC)))                            0039800
      CALL1 (IF (EQ MODE (QUOTE CALL)) (GO R))                                  0039900
      (LAPNIX (QUOTE (MISPLACED CALL)))                                         0040000
      (GO A)                                                                    0040100
      FLBIND (IF (NULL X) (GO A))                                               0040200
      (SET U (LENGTH X))                                                        0040300
      (SET ILC (PLUS ILC U))                                                    0040400
      (LAPPUSH1 U)                                                              0040500
      (SET FL (CONS NIL FL))                                                    0040600
      (GO A)                                                                    0040700
      PUSHA. PUSHP. (LAPPUSH1 (CAR X))                                          0040800
      (GO A)                                                                    0040900
      POP. (LAPPOP1 (CAR X))                                                    0041000
      (GO A)                                                                    0041100
      E (SET IT NIL)                                                            0041200
      (IF (NULL MODE) (GO EXIT))                                                0041300
      (LAPNIX (QUOTE (END MISSING))) (GO R) EXIT))                              0041400
    (ROUTINE (LAPPUSH1 NOVALUE)                                                 0041500
     ((N INTEGER))                                                              0041600
     (BLOCK NIL (SET PDC (PLUS PDC N)) (SET PDMAX (MAX PDMAX PDC))))            0041700
    (ROUTINE (LAPPOP1 NOVALUE)                                                  0041800
     ((N INTEGER))                                                              0041900
     (BLOCK NIL (SET PDC (DIFFERENCE PDC N))                                    0042000
      (SET PDMIN (MIN PDMIN PDC))))                                             0042100
    (ROUTINE (NUMADDR BOOLEAN)                                                  0042200
     ((X SYMBOL)) (AND (NOT (ATOM X)) (EQ (CAR X) (QUOTE NUMBER))))            0042300
    (FUNCTION (ROUTP SYMBOL)                                                    0042400
     ((V SYMBOL))                                                               0042500
     (BLOCK NIL (SET V (VNAMER V))                                              0042600
      (IF (SET V (GETFREE (CAR V) (CDR V)))                                     0042700
       (RETURN (EQ (FVKIND V) (QUOTE ROUTINE))))))                              0042800
  (LAP2 (FUNCTION (LAP2 NOVALUE)                                                0042900
    ((MODE SYMBOL) (PDK INTEGER))                                               0043000
    (BLOCK ((CT SYMBOL)                                                         0043100
      (OP SYMBOL)                                                               0043200
      (OPV OCTAL)                                                               0043300
      (RA INTEGER)                                                              0043400
      (RM SYMBOL) (X SYMBOL) (U SYMBOL) (V SYMBOL) (L SYMBOL))                  0043500
     A (IF L (GO K) (NULL LG) (GO E))                                           0043600
     (SET X (SET CT (CAR LG)))                                                  0043700
     (SET LG (CDR LG))                                                          0043800
     (GO M)                                                                     0043900
     K (SET CT NIL)                                                             0044000
     L (SET X (CAR L))                                                          0044100
```

```
    (SET L (CDR L))                                                          0044200
    M (IF (NOT (ATOM X)) (GO Z) X (PRINCOM CT 26))                           0044300
    (GO A)                                                                   0044400
    Z (IF (EQ (CAR X) (QUOTE DITTO)) (GO DITTO))                             0044500
    (SET IT X)                                                               0044600
    B (SET OP (CAR IT))                                                      0044700
    (SET X (CDR IT))                                                         0044800
    (IF (EQ OP (QUOTE ORG))                                                  0044900
     (GO ORG)                                                                0045000
     (EQ OP (QUOTE ENTRY))                                                   0045100
     (GO ENTRY)                                                              0045200
     (EQ OP (QUOTE BEGIN))                                                   0045300
     (GO BEGIN)                                                              0045400
     (EQ OP (QUOTE RETURN))                                                  0045500
     (GO RETURN)                                                             0045600
     (EQ OP (QUOTE BLOCK))                                                   0045700
     (GO BLOCK)                                                              0045800
     (EQ OP (QUOTE DECLARE))                                                 0045900
     (GO DECLARE)                                                            0046000
     (EQ OP (QUOTE END))                                                     0046100
     (GO END)                                                                0046200
     (EQ OP (QUOTE ARGS))                                                    0046300
     (GO ARGS)                                                               0046400
     (EQ OP (QUOTE CALL))                                                    0046500
     (GO CALL)                                                               0046600
     (EQ OP (QUOTE CALL1))                                                   0046700
     (GO CALL1)                                                              0046800
     (EQ OP (QUOTE CALL2))                                                   0046900
     (GO CALL2)                                                              0047000
     (EQ OP (QUOTE FLBIND))                                                  0047100
     (GO FLBIND)                                                             0047200
     (EQ OP (QUOTE PUSHA.))                                                  0047300
     (GO PUSHA.)                                                             0047400
     (EQ OP (QUOTE PUSHP.))                                                  0047500
     (GO PUSHP.)                                                             0047600
     (EQ OP (QUOTE POP.))                                                    0047700
     (GO POP.) (EQ OP (QUOTE COMMENT)) (GO COMMENT))                         0047800
    C (SET OPV (IF (NUMBP OP)                                                0047900
      OP (SET U (GETFREE OP (QUOTE OPCODE)))                                 0048000
      (FLVAL U) (BLOCK NIL (LAPNIX (QUOTE OPCODE)) (RETURN OC))))            0048100
    (SET HM (SET RM NIL))                                                    0048200
    (SET TAG 0)                                                              0048300
    (IF (NULL X) (GO D))                                                     0048400
    (LAPADDR (CAR X) TRUE)                                                   0048500
    (SET RA HA)                                                              0048600
    (SET RM HM)                                                              0048700
    (SET HM NIL)                                                             0048800
    (SET X (CDR X))                                                          0048900
    (IF (NULL X) (GO D))                                                     0049000
    (LAPTAG (CAR X))                                                         0049100
    (SET X (CDR X))                                                          0049200
    (IF (NULL X) (GO D))                                                     0049300
    (LAPADDR (CAR X) NIL)                                                    0049400
    D (SET OPV (WORDOR OPV (SHIFT TAG 18)))                                  0049500
    (BPINST OPV HA HM RA RM)                                                 0049600
    (GO P)                                                                   0049700
    DITTO (IF (EQ (CADR X) 0) (GO Q))                                        0049800
    (SET L (CONS IT (LIST (QUOTE DITTO) (PLUS (CADR X) -1)) L))              0049900
    (GO L)                                                                   0050000
    ORG (SET ORGMODE (OR (NULL X) (NULL (CAR X))))                           0050100
    (SET ILC (IF ORGMODE FPP (BLOCK NIL (LAPABSADDR (CAR X))                 0050200
       (RETURN HA))))                                                        0050300
    (GO Q)                                                                   0050400
```

```
ENTRY (LAPABSADDR (CADR X))                                          C0050500
(IF (FINDN (CAR X) ENTRIES) (LAPNIX (QUOTE (ENTRY REDEFINED))))      C0050600
(SET ENTRIES (CONS (CONS (CAR X) (DRIVE OCTAL HA)) ENTRIES))         C0050700
(SET CT (APPEND CT (LIST (QUOTE *=) (DRIVE OCTAL HA))))              C0050800
(GO G)                                                               C0050900
BEGIN (SET IT (QUOTE (STP 0 8)))                                     C0051000
(IF ROUT (GO B))                                                     C0051100
(SET L (CONS (IF (LS PDMAX 25)                                       C0051200
   (QUOTE (XEC (ENTRY PDOK1)))                                       C0051300
   (APPEND (QUOTE (BPX (ENTRY PDOK) 8)) (LIST PDMAX))) L))           C0051400
(GO B)                                                               C0051500
RETURN (SET IT (IF ROUT (QUOTE (BUC (ENTRY ROUT)))                   C0051600
  (QUOTE (BUC (ENTRY RETURN)))))                                     C0051700
(GO B)                                                               C0051800
BLOCK (PRINCOM CT 31)                                                C0051900
(BLOCK ((ALIST SYMBOL FLUID ALIST) (FL SYMBOL FLUID NIL))            C0052000
 (LAP2 (QUOTE DECLARE) PDC))                                         C0052100
(GO A)                                                               C0052200
DECLARE (LAPPOP (DIFFERENCE PDC PDK))                                C0052300
(LAPDECLARE X)                                                       C0052400
(IF (EQ MODE (QUOTE DECLARE))                                        C0052500
 (SET MODE (QUOTE END)) (LAPNIX (QUOTE (DECLARE MISPLACED))))        C0052600
(PRINCOM CT 3)                                                       C0052700
(GO A)                                                               C0052800
END (IF FL (GO FLRESTS)                                              C0052900
 (NOT (EQ MODE (QUOTE END))) (LAPNIX (QUOTE (END MISPLACED))))       C0053000
(IF CT (PRINCOM CT 31))                                              C0053100
(LAPPOP (DIFFERENCE PDC PDK))                                        C0053200
(GO EXIT)                                                            C0053300
FLRESTS (SET L (APPEND (FLRESTS) (CONS IT L)))                       C0053400
(GO L)                                                               C0053500
ARGS (PRINCOM CT 31)                                                 C0053600
(BLOCK ((FL SYMBOL FLUID)) (LAP2 (QUOTE CALL) PDC))                  C0053700
(GO A)                                                               C0053800
CALL (IF (ROUTP (CAR X))                                             C0053900
 (BLOCK NIL (SET IT (CONS (QUOTE CALL1) X)) (GO B)))                 C0054000
(SET L (CONS (QUOTE (CALL2)) L))                                     C0054100
(GO G)                                                               C0054200
CALL1 CALL2 (IF (NOT (EQ MODE (QUOTE CALL)))                         C0054300
 (BLOCK NIL (IF (NULL L) (SET L (QUOTE (NIL))))                      C0054400
  (LAPNIX (QUOTE (MISPLACED CALL))))                                 C0054500
 (BLOCK NIL (SET MODE (QUOTE END))                                   C0054600
  (SET L (CONS (QUOTE (END)) L))))                                   C0054700
(IF (EQ OP (QUOTE CALL1)) (GO G))                                    C0054800
(LAPCALL2)                                                           C0054900
(PRINCOM NIL 0)                                                      C0055000
(GO L)                                                               C0055100
G (SET IT (SUBST (CAR X) (QUOTE W) (QUOTE (BPX W (8 I) PDS.))))      C0055200
(GO B)                                                               C0055300
FLBIND (SET L (APPEND (IF X (FLBIND X) (QUOTE (NIL))) L))            C0055400
(GO L)                                                               C0055500
PUSHA. (LAPPUSH (CAR X) 0Q)                                          C0055600
(GO P)                                                               C0055700
PUSHP. (LAPPUSH (CAR X) 1Q)                                          C0055800
(GO P)                                                               C0055900
POP. (LAPPOP (CAR X))                                                C0056000
(GO P)                                                               C0056100
COMMENT (GO P)                                                       C0056200
P (PRINCOM CT 7)                                                     C0056300
(GO A)                                                               C0056400
C (IF CT (PRINCOM CT 31))                                            C0056500
(GO A)                                                               C0056600
E (SET IT NIL)                                                       C0056700
```

```
      (IF (NULL MODE) (GO EXIT))                                          0056800
      (LAPNIX (QUOTE (END MISSING)))                                      0056900
      (SET L (CONS (QUOTE (END)) L)) (GO K) EXIT)))                       0057000
 (FLBIND (FUNCTION (FLBIND SYMBOL)                                        0057100
    ((L SYMBOL))                                                          0057200
    (BLOCK (V M U (CP OCTAL 2Q14) (N INTEGER (LENGTH L)))                 0057300
      (SET FL (CONS (PLUS ILC 1) FL))                                     0057400
      A (SET V (VNAMER (CAR L)))                                          0057500
      (IF (NULL (SET U (FIND V ALIST))) (GO E))                           0057600
      (SET M (CONS (IF U (LIST (IF (EQ (CADDR U) (QUOTE LOC))             0057700
           CP (PLUS CP 1Q14)) V 0 (MINUS (CADR U)))                       0057800
        (BLOCK NIL (LAPNIX (LIST V)) (RETURN (QUOTE (0))))) M))           0057900
      B (SET CP CQ)                                                       0058000
      (IF (SET L (CDR L)) (GO A))                                         0058100
      (RETURN (CONS (QUOTE (BSX (ENTRY FLBIND) 3 TOP.))                   0058200
        (LIST (QUOTE PUSHP.) N) M))                                       0058300
      E (LAPNIX V) (SET M (CONS (QUOTE (0)) M)) (GO B)))                  0058400
   (FUNCTION (FLRESTS SYMBOL)                                             0058500
    NIL (BLOCK ((U SYMBOL))                                               0058600
      (SET U (MAPCAR FL (FUNCTION ((G02448 . G02449) SYMBOL)              0058700
         ((J SYMBOL))                                                     0058800
         (SUBST J (QUOTE W)                                               0058900
          (QUOTE (BSX (ENTRY FLREST) 7 (CRG. W))))))))                    0059000
      (SET FL NIL) (RETURN U))))                                          0059100
 (LAPADDR (FUNCTION (LAPADDR NOVALUE)                                     0059200
    ((X SYMBOL) (P BOOLEAN))                                              0059300
    (BLOCK ((HR INTEGER) (U SYMBOL))                                      0059400
      (SET HA (SET HR 0))                                                 0059500
      (SET HM NIL)                                                        0059600
      X (IF (NULL X)                                                      0059700
       (GO EXIT)                                                          0059800
       (LAPADDI X P)                                                      0059900
       (GO A)                                                             0060000
       (IDP X)                                                            0060100
       (GO B)                                                             0060200
       (ATOM X)                                                           0060300
       (BLOCK NIL (LAPNIX (LIST (QUOTE FIELD) X)) (GO EXIT))              0060400
       (IDP (CDR X))                                                      0060500
       (GO V2)                                                            0060600
       (EQ (CAR X) (QUOTE NUMBER))                                        0060700
       (GO NUMBER)                                                        0060800
       (EQ (CAR X) (QUOTE QUOTE))                                         0060900
       (GO QUOTE)                                                         0061000
       (EQ (CAR X) (QUOTE ID))                                            0061100
       (GO ID) (EQ (CAR X) (QUOTE LAP)) (GO LAP))                         0061200
      SUM (IF (NOT (LAPADDI (CAR X) P))                                   0061300
       (LAPNIX (LIST (QUOTE SUMMAND) (CAR X))))                           0061400
      (IF (SET X (CDR X)) (GO SUM))                                       0061500
      A (IF (OR ORIGIN (EQ HR 0))                                         0061600
       (SET HM (QUOTE A))                                                 0061700
       (EQ HR 1) (SET HM (QUOTE R)) (LAPNIX (QUOTE RELOCATION)))          0061800
      (GO EXIT)                                                           0061900
      B (IF (EQ X (QUOTE PUSHA.))                                         0062000
       (LAPPUSH 1 0Q)                                                     0062100
       (EQ X (QUOTE PUSHP.))                                              0062200
       (LAPPUSH 1 1Q) (EQ X (QUOTE POP.)) (LAPPOP 1) (GO V1))             0062300
      (IF (NOT P)                                                         0062400
       (BLOCK NIL (LAPNIX (LIST (QUOTE DECREMENT) X)) (GO EXIT)))         0062500
      (SET HA (MINUS (IF (EQ X (QUOTE POP.)) (PLUS PDC 1) PDC)))          0062600
      (SET HM (QUOTE A))                                                  0062700
      (SET TAG 8)                                                         0062800
      (GO EXIT)                                                           0062900
      V1 (IF (NULL (SET U (FIND X ALIST))) (GO V6) P (SET TAG 8))         0063000
```

```
    V5 (SET HA (MINUS (CADR U)))                                          0063100
    (SET HM (QUOTE A))                                                    0063200
    (GO EXIT)                                                             0063300
    V6 (IF (NULL (SET U (FIND X APLIST))) (GO V3) P (SET TAG 7))          0063400
    (GO V5)                                                               0063500
    V2 V3 (SET X (VNAMER X))                                              0063600
    (SET U (CDR X))                                                       0063700
    (SET X (CAR X))                                                       0063800
    V4 (IF (NULL (SET U (LAPFREE X U)))                                   0063900
     (BLOCK NIL (LAPNIX (QUOTE VARIABLE)) (GO EXIT)))                     0064000
    (SET HA (S2C. U))                                                     0064100
    (SET HM (QUOTE F))                                                    0064200
    (GO EXIT)                                                             0064300
    NUMBER (SET HA RLC)                                                   0064400
    (SET HM (QUOTE R))                                                    0064500
    (REMWORD (IF (FIXP (CADR X))                                          0064600
      (I2C. (CADR X)) (R2C. (CADR X))) 0 NIL)                             0064700
    (GO EXIT)                                                             0064800
    QUOTE (SET HA (S2C. (MAKEQUOTE (CADR X))))                            0064900
    (SET HM (QUOTE F))                                                    0065000
    (GO EXIT)                                                             0065100
    ID (SET HA (S2C. (LAPID (CADR X))))                                   0065200
    (SET HM (QUOTE S))                                                    0065300
    (GO EXIT)                                                             0065400
    LAP (SET X (BLOCK ((APLIST SYMBOL FREE ALIST))                        0065500
      (RETURN (LAPP (CADR X) (CADDR X) (CADDDR X))))) (GO X) EXIT))       0065600
  (FUNCTION (LAPABSADDR INTEGER)                                          0065700
   ((X SYMBOL))                                                           0065800
   (BLOCK NIL (LAPADDR X NIL)                                             0065900
    (IF (OR (EQ HM (QUOTE R)) (EQ HM (QUOTE F)) (EQ HM (QUOTE S)))        0066000
     (LAPNIX (QUOTE (ABS ADDRESS)))) (RETURN HA)))                        0066100
  (FUNCTION (LAPADD1 BOOLEAN)                                             0066200
   ((X SYMBOL) (P BOOLEAN))                                               0066300
   (BLOCK ((V INTEGER) (R INTEGER) (S BOOLEAN))                           0066400
    A (IF (FIXP X)                                                        0066500
     (SET V X)                                                            0066600
     (EQ X (QUOTE A.))                                                    0066700
     (SET V 777621Q)                                                      0066800
     (EQ X (QUOTE Z.))                                                    0066900
     (SET V 7776Q2)                                                       0067000
     (EQ X (QUOTE B.))                                                    0067100
     (SET V 777622Q)                                                      0067200
     (EQ X (QUOTE L.))                                                    0067300
     (SET V 777745Q)                                                      0067400
     (EQ X (QUOTE PDS.))                                                  0067500
     (SET V (PLUS PDC 1))                                                 0067600
     (EQ X (QUOTE TOP.))                                                  0067700
     (BLOCK NIL (IF P (SET TAG 8)) (SET V (MINUS PDC)))                   0067800
     (EQ X (QUOTE D.))                                                    0067900
     (BLOCK NIL (SET R 1) (SET V ILC))                                    0068000
     (EQ X (QUOTE ORG.))                                                  0068100
     (SET R 1)                                                            0068200
     (ATOM X)                                                             0068300
     (RETURN NIL)                                                         0068400
     (EQ (CAR X) (QUOTE LABEL))                                           0068500
     (BLOCK ((U SYMBOL))                                                  0068600
      (SET R 1)                                                           0068700
      (SET U (FIND (CADR X) LABELS))                                      0068800
      (IF U (SET V (CDR U)) (LAPNIX X)))                                  0068900
     (EQ (CAR X) (QUOTE ENTRY))                                           0069000
     (BLOCK ((U SYMBOL))                                                  0069100
      (SET U (FIND (CADR X) ENTRIES))                                     0069200
      (IF U (SET V (CDR U)) (LAPNIX X)))                                  0069300
```

```
     (EQ (CAR X) (QUOTE MINUS)) (GO M) (RETURN NIL))                    0069400
    (IF S (BLOCK NIL (SET V (MINUS V)) (SET R (MINUS R))))              0069500
    (SET HA (PLUS HA V))                                                0069600
    (SET HR (PLUS HR R))                                                0069700
    (RETURN TRUE) M (SET S (NOT S)) (SET X (CADR X)) (GO A)))           0069800
(FUNCTION (LAPTAG NOVALUE)                                              0069900
   ((X SYMBOL))                                                         0070000
   (BLOCK ((U SYMBOL) (V SYMBOL))                                       0070100
    (IF (NULL X) (RETURN NIL) (ATOM X) (GO A))                          0070200
    (SET U (CDR X))                                                     0070300
    (SET X (CAR X))                                                     0070400
    A (SET TAG (PLUS TAG (IF (FIXP X)                                   0070500
       X (SET V (GETFREE X (QUOTE MCDCCDE)))                            0070600
       (FLVAL V)                                                        0070700
       (SET V (BYTMD (EXPLODE X)))                                      0070800
       V (BLOCK NIL (LAPNIX (QUOTE TAG)) (RETURN 0Q)))))                0070900
    (IF (NULL U) (GO EXIT))                                             0071000
    (SET X (CAR U)) (SET U (CDR U)) (GO A) EXIT))                       0071100
  (FUNCTION (BYTMD SYMBOL)                                              0071200
   ((L SYMBOL))                                                         0071300
   (BLOCK ((X SYMBOL)                                                   0071400
     (C SYMBOL) (LF SYMBOL) (RT SYMBOL) (I INTEGER))                    0071500
    (IF (OR (EQ (SET C (CAR L)) (QUOTE 'L)) (EQ C (QUOTE 'S)))          0071600
     (SET L (CDR L)) (RETURN NIL))                                      0071700
    A (IF (NULL L)                                                      0071800
     (GO COMP)                                                          0071900
     (SET X (FIND (CAR L)                                               0072000
       (QUOTE (('0 . 0Q)                                                0072100
          ('1 . 1Q)                                                     0072200
          ('2 . 2Q)                                                     0072300
          ('3 . 3Q) ('4 . 4Q) ('5 . 5Q) ('6 . 6Q) ('7 . 7Q)))))         0072400
     (SET RT (CONS (CDR X) RT))                                         0072500
     (NOT (EQ (CAR L) (QUOTE '.)))                                      0072600
     (RETURN NIL) (BLOCK NIL (SET LF RT) (SET RT NIL)))                 0072700
    (SET L (CDR L))                                                     0072800
    (GO A)                                                              0072900
    COMP (IF (NOT RT)                                                   0073000
     (RETURN NIL)                                                       0073100
     (NOT LF)                                                           0073200
     (RETURN (APMOD 0Q RT)) (NOT (EQ C (QUOTE 'S))) (GO C2))            0073300
    (SET C LF)                                                          0073400
    (SET LF RT)                                                         0073500
    (SET RT C)                                                          0073600
    C2 (IF (LS (SET I (DIFFERENCE (CAR LF) (CAR RT))) 0)                0073700
     (SET I (PLUS 8 I)))                                                0073800
    (IF (GQ (LENGTH LF) (LENGTH RT)) (RETURN (APMOD I LF)))             0073900
    (SET LF NIL)                                                        0074000
    B (IF (NULL RT) (RETURN (APMOD I LF)))                              0074100
    (SET LF (CONS (WORDAND 7Q (PLUS I (CAR RT))) LF))                   0074200
    (SET RT (CDR RT)) (GO B)))                                          0074300
  (FUNCTION (APMOD SYMBOL)                                              0074400
   ((P OCTAL) (A SYMBOL))                                               0074500
   (BLOCK ((X OCTAL))                                                   0074600
    (SET X (WORDOR (SHIFT P 18) 377Q2))                                 0074700
    A (IF (NULL A) (RETURN X))                                          0074800
    (SET X (WORDXOR X (SHIFT 2Q4 (MINUS (CAR A)))))                     0074900
    (SET A (CDR A)) (GO A))))                                           0075000
(PDMAP (FUNCTION (LAPPUSH NOVALUE)                                      0075100
   ((N INTEGER) (B OCTAL))                                              0075200
   (BLOCK NIL (SET PDC (PLUS PDC N))                                    0075300
    (SET PDMAP (NCONC (NDUP N B) PDMAP))))                              0075400
  (RCUTINE (LAPPOP NOVALUE)                                             0075500
   ((N INTEGER))                                                        0075600
```

```
    (BLOCK NIL (SET PDC (DIFFERENCE PDC N))                                  C075700
     (SET PDMIN (MIN PDMIN PDC)) (SET PDMAP (NOFF N PDMAP))))                C075800
   (FUNCTION (LAPCALL2 NOVALUE)                                              C075900
    NIL (BLOCK ((C INTEGER)                                                  C076000
     (M SYMBOL) (H OCTAL) (L SYMBOL) (I INTEGER))                            C076100
     (SET C PDC)                                                             C076200
     (SET M PDMAP)                                                           C076300
     A (SET H 0Q)                                                            C076400
     (SET I 23)                                                              C076500
     B (IF (NULL M) (GO C))                                                  C076600
     (SET H (WORDOR H (SHIFT (CAR M) I)))                                    C076700
     (SET M (CDR M))                                                         C076800
     (IF (EQ I 0) (GO C))                                                    C076900
     (SET I (PLUS I -1))                                                     C077000
     (GO B)                                                                  C077100
     C (SET L (CONS (CONS C H) L))                                           C077200
     (SET C (MAX (DIFFERENCE C 24) 0))                                       C077300
     (IF (GR C PDMIN) (GO A))                                                C077400
     D (IF (LS (CAADR MAPS) C) (GO DD))                                      C077500
     (SET MAPS (CDR MAPS))                                                   C077600
     (GO D)                                                                  C077700
     DD (SET (CAAR MAPS) (MIN (CAAR MAPS) PDMIN))                            C077800
     (SET PDMIN PDC)                                                         C077900
     E (SET I (CDAR MAPS))                                                   C078000
     (SET M (CAR L))                                                         C078100
     (SET L (CDR L))                                                         C078200
     (IF (NULL L) (GO R))                                                    C078300
     (REMWORD (SHIFT (PLUS (CAR M) 1) 24) 0 (QUOTE R))                       C078400
     (SET MAPS (CONS (CONS (CAR M) RLC) MAPS))                               C078500
     (REMWORD (SHIFT (CDR M) 24) I (QUOTE R))                                C078600
     (GO E)                                                                  C078700
     R (SET MAPS (CONS (CONS (CAR M) ILC) MAPS))                             C078800
     (BPINSTR (SHIFT (CDR M) 24) I (QUOTE R)))))                             C078900
 (BPGEN (FUNCTION (BPINSTR NOVALUE)                                          C079000
    ((C OCTAL) (R INTEGER) (Y SYMBOL)) (BPINST C 0 NIL R Y))                 C079100
   (FUNCTION (BPINST NOVALUE)                                                C079200
    ((C OCTAL) (L INTEGER) (X SYMBOL) (R INTEGER) (Y SYMBOL))                C079300
    (BLOCK ((FL SYMBOL FLUID))                                               C079400
     (SET C (WORDOR C (SHIFT (BPADDR L X ILC (QUOTE L)) 24)                  C079500
       (BPADDR R Y ILC (QUOTE R))))                                          C079600
     (SET R (BPLOC ILC))                                                     C079700
     (SET (CORE R) C)                                                        C079800
     (SET ILC (PLUS ILC 1))                                                  C079900
     (IF ORGMODE (SET FPP (PLUS FPP 1)))                                     C080000
     (IF OUTLAP (BLOCK ((S SYMBOL (OUTPUT OUTLAP)))                          C080100
       (PRINOCT R 6) (BLANKS 2) (PRINOCT C 16) (OUTPUT S)))                  C080200
     (IF FL (LAPNIX (QUOTE RELOC)))))                                        C080300
   (RCUTINE (BPADDR OCTAL)                                                   C080400
    ((C INTEGER) (M SYMBOL) (A INTEGER) (H SYMBOL))                          C080500
    (BLOCK ((U INTEGER))                                                     C080600
     (IF (NULL M) (RETURN 0Q) (EQ M (QUOTE A)) (GO R) ORIGIN (GO A))         C080700
     (SET U (PLUS (BPLOC FSIZ) (MINUS (IQUOTIENT A 24)) -1))                 C080800
     (SET (CORE U)                                                           C080900
      (WORDOR (CORE U)                                                       C081000
       (SHIFT (IF (EQ H (QUOTE L)) 4Q15 2Q15)                                C081100
        (TIMES -2 (REMAINDER A 24)))))                                       C081200
     A (IF (EQ M (QUOTE F))                                                  C081300
      (SET C (PLUS C -1))                                                    C081400
      (AND (EQ M (QUOTE R))                                                  C081500
       (OR ORIGIN (AND (NOT (LS C 0)) (LS C FSIZ))))                         C081600
      (SET C (BPLOC C)) (NOT (EQ M (QUOTE S))) (SET FL TRUE))                C081700
     R (RETURN (BIT 0 18 C))))                                               C081800
   (RCUTINE (BPLOC INTEGER)                                                  C081900
```

```
   ((C INTEGER))                                                                C0082000
   (IF ORIGIN C FDESC (PLUS (BIT 0 18 (CORE (PLUS (S2D. FDESC) -1)))            C0082100
     -1 C) 0))                                                                  C0082200
  (FUNCTION (REMWORD NOVALUE)                                                   C0082300
   ((C OCTAL) (R INTEGER) (Y SYMBOL))                                           C0082400
   (BLOCK ((ILC INTEGER FLUID RLC))                                             C0082500
    (BPINSTR C R Y) (PRINCOM NIL 0) (SET RLC (PLUS RLC 1)))))                   C0082600
(LAPLIB (FUNCTION (NDUP SYMBOL)                                                 C0082700
   ((N INTEGER) (X SYMBOL))                                                     C0082800
   (BLOCK ((U SYMBOL))                                                          C0082900
    A (IF (EQ N 0) (RETURN U))                                                  C0083000
    (SET U (CONS X U)) (SET N (PLUS N -1)) (GO A)))                             C0083100
  (FUNCTION (LAPNIX NOVALUE)                                                    C0083200
   ((M SYMBOL))                                                                 C0083300
   (BLOCK NIL (SET ERRS TRUE)                                                   C0083400
    (MESSAGE (CONS (QUOTE UNDEFINED)                                            C0083500
      (APPEND (IF (ATOM M) (LIST M) M)                                          C0083600
       (APPEND (QUOTE (IN ITEM)) (LIST IT)))))                                  C0083700
    (MESSAGE (LIST (QUOTE LOCATION)                                             C0083800
      (I2D. (BPLOC ILC)) (QUOTE FUNCTION) (CONS FNAME FSEC))))))                C0083900
(LAPID (ROUTINE (LAPID SYMBOL)                                                  C0084000
   ((X SYMBOL))                                                                 C0084100
   (BLOCK NIL (IF (NOT (CHARP X))                                               C0084200
     (SET (BIT 24 18 (CORE (PLUS (S2C. X) 1)))                                  C0084300
      (I2D. (PLUS 1 (BIT 24 18 (CORE (PLUS (S2D. X) 1)))))))                    C0084400
    (RETURN X)))                                                                C0084500
  (ROUTINE (LAPFREE SYMBOL)                                                     C0084600
   ((N SYMBOL) (SN SYMBOL))                                                     C0084700
   (BLOCK ((U SYMBOL (GETFREE N SN)))                                           C0084800
    (IF (NULL U) (RETURN NIL))                                                  C0084900
    (SET (BIT 0 18 (CORE (S2D. U)))                                             C0085000
     (I2D. (PLUS 1 (BIT 0 18 (CORE (S2D. U))))) (RETURN U)))                    C0085100
  (FUNCTION ((LAPGC . SYS) SYMBOL)                                              C0085200
   NIL (BLOCK ((X SYMBOL (MAPCAR LAPSTL FTRANS)))                               C0085300
    (SET LAPSTL NIL) (RETURN X)))                                               C0085400
  (FUNCTION (PRINCOM NOVALUE)                                                   C0085500
   ((M SYMBOL) (I INTEGER))                                                     C0085600
   (BLOCK NIL (IF OUTLAP (BLOCK ((S SYMBOL (OUTPUT OUTLAP)))                    C0085700
     (BLANKS I) (IF M (PRINT M) (ENDOUT)) (OUTPUT S)))))                       C0085800
  (FUNCTION (BLANKS NOVALUE)                                                    C0085900
   ((I INTEGER))                                                                C0086000
   (BLOCK NIL (FOR I (STEP I -1 EQ 0) (PRINCH (QUOTE ' )))))                    C0086100
  (FUNCTION (PRINOCT NOVALUE)                                                   C0086200
   ((C OCTAL) (I INTEGER))                                                      C0086300
   (BLOCK NIL (FOR I (STEP I -1 EQ 0)                                           C0086400
    (PRINTOKEN (O2I. (BIT 0 3 (SHIFT C (TIMES -3 (PLUS I -1))))))))))))))))) C0086500
(INDEXER DEFINE (((INDEXER (LAMBDA (N L)                                        C0086600
      (TEDFILER (CONS N (MAPCON L (FUNCTION (LAMBDA (J)                         C0086700
            (MAPCON (TEDSEEKER (CAR J))                                         C0086800
             (FUNCTION (LAMBDA (J)                                              C0086900
               (COND ((OR (ATOM (CAR J))                                        C0087000
                          (NOT (MEMBER (CAAR J)                                 C0087100
                                       (QUOTE (SECTION ROUTINE FUNCTION)))))) NIL)  C0087200
                     (T (LIST (CONS (CAAR J)                                    C0087300
                              (CONS (CADAR J)                                   C0087400
                               (COND ((NULL (CDDAR J)) NIL)                     C0087500
                                (T (LIST (CADDAR J))))))))))))))))))))))))))))) C0087600
****END OF FILE DETECTED
```

```
(PCSTCOMP (SECTION LAP SYMBOL)                                                  C000100
  (DECLARE (ENTRIES SYMBOL OWN ENTRIES))                                        C000200
  (SECTION SYS OCTAL)                                                           C000300
  (DECLARE (FPC OWN FPO)                                                        C000400
    (FPP OWN FPP)                                                               C000500
    (CHO OWN CHC)                                                               C000600
    (TRO OWN TRC)                                                               C000700
    (TRP OWN TRP)                                                               C000800
    (TRM OWN TRM)                                                               C000900
    (BPO OWN BPC)                                                               C001000
    (BPP OWN BPP)                                                               C001100
    (ARO OWN ARC)                                                               C001200
    (ARP OWN ARP)                                                               C001300
    (LSP OWN LSP)                                                               C001400
    (LSO OWN LSC)                                                               C001500
    (CBLIST (ARRAY SYMBOL)                                                      C001600
     OWN (CONS (QUOTE *SYMBOL)                                                  C001700
      (MAPCAR OBLIST (FUNCTION (LAMBDA (J)                                      C001800
          (COND ((NULL (CDR J)) NIL)                                            C001900
           ((MEMBER (CAAR J) (QUOTE (TRUE FALSE)))                             C002000
            (LIST (QUOTE *IDENTIFIER) (CAAR J))) (T (CAAR J))))))))))           C002100
    (CBLSIZ INTEGER OWN CBLSIZ) (TRL OWN)))                                     C002200
****END OF FILE DETECTED
```

```
(SECTION (SECTION (COMPIL SUPV SYS LISP) SYMBOL))                    0000100
(HELP (DECLARE (SLIST SYMBOL FLUID)                                  0000200
    (SNAME SYMBOL FLUID)                                             0000300
    (STYPE SYMBOL FLUID)                                             0000400
    ((DEBUG . LISP) BOOLEAN FLUID)                                   0000500
    (FKIND SYMBOL FLUID)                                             0000600
    (FORG SYMBOL FLUID)                                              0000700
    (SCLASS SYMBOL FLUID)                                            0000800
    (PCLASS SYMBOL FLUID)                                            0000900
    (TGO SYMBOL FLUID)                                               0001000
    (FGO SYMBOL FLUID)                                               0001100
    (XGO SYMBOL FLUID)                                               0001200
    (TERGO SYMBOL FLUID)                                             0001300
    (ALIST SYMBOL FLUID)                                             0001400
    (APLIST SYMBOL FLUID)                                            0001500
    (IRLIST SYMBOL FLUID)                                            0001600
    (GOLIST SYMBOL FLUID)                                            0001700
    (LABELS SYMBOL FLUID)                                            0001800
    (EXP SYMBOL FLUID)                                               0001900
    (TERMINS SYMBOL FLUID)                                           0002000
    (LISTING SYMBOL FLUID)                                           0002100
    (REMOTES SYMBOL FLUID)                                           0002200
    (REFLIST SYMBOL FLUID)                                           0002300
    (FNAME SYMBOL FLUID)                                             0002400
    (FTYPE SYMBOL FLUID)                                             0002500
    (VCLASS SYMBOL FLUID)                                            0002600
    (VTYPE SYMBOL FLUID)                                             0002700
    (VREG SYMBOL FLUID)                                              0002800
    (VADDR SYMBOL FLUID)                                             0002900
    (VIND SYMBOL FLUID)                                              0003000
    (VINV SYMBOL FLUID)                                              0003100
    (VBYTE SYMBOL FLUID)                                             0003200
    (VBLOT SYMBOL FLUID)                                             0003300
    (XTYPE SYMBOL FLUID)                                             0003400
    (XREG SYMBOL FLUID)                                              0003500
    (XLOC SYMBOL FLUID)                                              0003600
    (XBYTE SYMBOL FLUID)                                             0003700
    (CV SYMBOL FLUID)                                                0003800
    (CT SYMBOL FLUID)                                                0003900
    (CM SYMBOL FLUID)                                                0004000
    (CF SYMBOL FLUID)                                                0004100
    (CL SYMBOL FLUID)                                                0004200
    (CI SYMBOL FLUID)                                                0004300
    (FTLIST SYMBOL FLUID)                                            0004400
    (CRGP SYMBOL FLUID) (INSTRUCTION SYMBOL FLUID))                  0004500
   (FUNCTION (COMER2 SYMBOL)                                         0004600
    ((X SYMBOL) (Y SYMBOL)) (COMERR (CONS X Y)))                     0004700
   (FUNCTION COMERR (J)                                              0004800
    (BLOCK NIL (SET ERRFLG TRUE)                                     0004900
     (SET VADDR (GENID))                                             0005000
     (SET VCLASS (QUOTE LOC))                                        0005100
     (SET VTYPE (QUOTE SYMBOL))                                      0005200
     (RETURN (SUPCTY (APPEND (QUOTE (ERROR.. IN FUNC))               0005300
        (LIST FNAME J))))))                                          0005400
   (FUNCTION ((DEBUGGING . COMPIL) BOOLEAN)                          0005500
    NIL (AND (NOT (FKIND . COMPIL)) (DEBUG . LISP)))                 0005600
   (FUNCTION (ATTACH SYMBOL)                                         0005700
    ((L SYMBOL)) (SET LISTING (CONS L LISTING)))                     0005800
   (FUNCTION (ATTACHGO SYMBOL)                                       0005900
    ((L SYMBOL))                                                     0006000
    (BLOCK NIL (IF (LASTBRANCH) (RETURN NIL))                        0006100
     (ATTACH (LIST (QUOTE BUC) (LABELER L)))                         0006200
     (IF (NOT (MEMBER L LABELS))                                     0006300
```

```
      (SET GOLIST (CONS (CONS (QUOTE GO) LISTING) GOLIST)))))                C0064CC
    (FUNCTION (ATTACHLAB SYMBOL)                                             C0065CC
     ((L SYMBOL)) (BLOCK NIL (ATTACH L) (SET LABELS (CONS L LABELS))))       C0066CC
    (FUNCTION (REMOTE SYMBOL)                                                C0067CC
     ((L SYMBOL)) (SET REMOTES (CONS L REMOTES)))                            C0068CC
    (FUNCTION (BLOTTO SYMBOL)                                                C0069CC
     NIL (SET VBLOT (QUOTE (AC L B X1 X2 X3 X4))))                           C0070CC
    (FUNCTION (BLOTCH SYMBOL)                                                C0071CC
     ((X SYMBOL))                                                            C0072CC
     (IF (MEMBER X VBLOT) NIL (SET VBLOT (CONS X VBLOT))))                   C0073CC
    (FUNCTION (UNION SYMBOL)                                                 C0074CC
     ((A SYMBOL) (B SYMBOL))                                                 C0075CC
     (BLOCK NIL L (IF (NULL B)                                               C0076CC
       (RETURN A) (NOT (MEMBER (CAR B) A)) (SET A (CONS (CAR B) A)))         C0077CC
      (SET B (CDR B)) (GO L)))                                               C0078CC
    (FUNCTION (FVTYPE SYMBOL)                                                C0079CC
     ((X SYMBOL))                                                            C0080CC
     (IF (NUMBP X)                                                           C0081CC
      (IF (FIXP X)                                                           C0082CC
       (IF (EQUALN X (WORDOR X 0Q)) (QUOTE OCTAL) (QUOTE INTEGER))           C0083CC
       (QUOTE REAL))                                                         C0084CC
      (MEMBER X (QUOTE (TRUE FALSE NIL)))                                    C0085CC
      (QUOTE BOOLEAN) (QUOTE SYMBOL)))                                       C0086CC
    (FUNCTION (LABELER SYMBOL) ((X SYMBOL)) (LIST (QUOTE LABEL) X))          C0087CC
    (FUNCTION (GETN SYMBOL)                                                  C0088CC
     ((L SYMBOL) (P SYMBOL))                                                 C0089CC
     (BLOCK NIL A (IF (NULL L)                                               C0090CC
       (RETURN L) (EQUALN (CAR L) P) (RETURN (CADR L)))                      C0091CC
      (SET L (CDR L)) (GO A)))                                               C0092CC
    (FUNCTION (ITYPE SYMBOL)                                                 C0093CC
     ((J SYMBOL))                                                            C0094CC
     (IF (EQN J (QUOTE NUMBER))                                              C0095CC
      C.O (EQN J (QUOTE OCTAL))                                              C0096CC
      CQ (EQN J (QUOTE INTEGER))                                             C0097CC
      C (EQN J (QUOTE REAL))                                                 C0098CC
      C.O (EQN J (QUOTE FUNCTIONAL)) (QUOTE (FMTRAP . SYS)) NIL)))           C0099CC
  (TOP1 (FUNCTION (GENID2 SYMBOL) NIL (GENID))                               C0100CC
    (DECLARE (INST1 SYMBOL FLUID)                                            C0101CC
     (INST2 SYMBOL FLUID) (INST3 SYMBOL FLUID))                              C0102CC
    (FUNCTION (NEXLST SYMBOL)                                                C0103CC
     NIL (BLOCK ((X SYMBOL))                                                 C0104CC
      (RETURN (IF (CDDDR LISTING)                                            C0105CC
        (IF (SET X (CAR LISTING))                                            C0106CC
         (BLOCK NIL (SET LISTING (CDR LISTING)) (RETURN X))                  C0107CC
         (BLOCK NIL (SET LISTING (CDR LISTING))                              C0108CC
          (RETURN (NEXLST)))) NIL))))                                        C0109CC
    (FUNCTION (REVLST SYMBOL)                                                C0110CC
     NIL (BLOCK ((INST1 SYMBOL)                                              C0111CC
       (INST2 SYMBOL) (INST3 SYMBOL) (LST SYMBOL))                           C0112CC
      (SET INST1 (CAR LISTING))                                              C0113CC
      (SET INST2 (CADR LISTING))                                             C0114CC
      (SET INST3 (CADDR LISTING))                                            C0115CC
      (SET LISTING (CDDDR LISTING))                                          C0116CC
      A (OR (REVADR) (REVBUC) (REVLDA) (REVSTZ) (REVWRD) (REVZER))           C0117CC
      (IF INST1 (SET LST (CONS INST1 LST)))                                  C0118CC
      (SET INST1 INST2)                                                      C0119CC
      (SET INST2 INST3)                                                      C0120CC
      (IF (SET INST3 (NEXLST)) (GO A))                                       C0121CC
      (RETURN (NCONC (NCONC (REVERSE LISTING)                                C0122CC
        (LIST INST2 INST1)) LST))))                                          C0123CC
    (FUNCTION (REVTST BOOLEAN)                                               C0124CC
     ((A SYMBOL) (B SYMBOL))                                                 C0125CC
     (AND (SIM (QUOTE (STF . S.)) A)                                         C0126CC
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     (SIM (QUOTE (LDA . S.)) B) (EQ (CDR A) (CDR B))))                    0012700
    (FUNCTION (ACRTST BOOLEAN)                                            0012800
     ((L SYMBOL))                                                         0012900
     (OR (SIM (QUOTE (OR. ((NUMBER 1) S) (1 (L567.7 R S)))) L)            0013000
      (BLOCK NIL (SET VINV (NOT VINV)))                                   0013100
      (SIM (QUOTE (OR. ((NUMBER -1) S) (-1 (L567.7 R S)))) L)))           0013200
    (FUNCTION (REVZER BOOLEAN)                                            0013300
     NIL (IF (SIM (QUOTE (XOR (NUMBER (OR. 0Q 7777777777777770))))       0013400
       INST1)                                                             0013500
      (BLOCK NIL (IF (EQUALN (CADADR INST1) 0Q)                           0013600
        (GO X)                                                            0013700
        (IF (SIM (QUOTE ((OR. LDA LDC) . S.)) INST2)                      0013800
         (BLOCK NIL (SET INST2 (CONS (CDR (FINDN (CAR INST2)              0013900
              (QUOTE ((LDA . LDC) (LDC . LDA))))) (CDR INST2)))           0014000
          X (SET INST1 NIL)) (SET INST1 (QUOTE (LDC A.))))))              0014100
       (RETURN TRUE)) FALSE))                                             0014200
    (FUNCTION (REVSTZ BOOLEAN)                                            0014300
     NIL (IF (NOT (SIM (QUOTE (BUC (LABEL ID.))) INST1))                  0014400
      NIL (EQ (QUOTE (STZ A.)) INST2)                                     0014500
      (REVENT (QUOTE (ENTRY STZENT)))                                     0014600
      (SIM (QUOTE (LDA 1 ((OR. L4567.7 L567.7) R))) INST2)                0014700
      (REVENT (QUOTE (ENTRY CNENT))) NIL))                                0014800
    (FUNCTION (REVENT BOOLEAN)                                            0014900
     ((X SYMBOL))                                                         0015000
     (BLOCK NIL (SET INST2 (LIST (QUOTE BSX) X 4 (CADR INST1)))           0015100
      (SET INST1 NIL) (RETURN TRUE)))                                     0015200
    (FUNCTION (REVAOR BOOLEAN)                                            0015300
     NIL (BLOCK ((VINV SYMBOL))                                           0015400
      (IF (AND (NOT (ATOM INST2))                                         0015500
        (CDR INST2)                                                       0015600
        (REVTST INST1 INST3)                                              0015700
        (ACRTST (CDR INST2))                                              0015800
        (OR (EQN (CAR INST2) (QUOTE ADD))                                 0015900
         (AND (EQN (CAR INST2) (QUOTE SUB))                               0016000
          (BLOCK NIL (SET VINV (NOT VINV)) (RETURN TRUE)))))              0016100
       (BLOCK NIL (SET INST1 (SET INST2 NIL))                             0016200
        (SET INST3 (CONS (IF VINV (QUOTE SOR) (QUOTE AOR))                0016300
         (CDR INST3))) (RETURN TRUE)))))                                  0016400
    (FUNCTION (REVBUC BOOLEAN)                                            0016500
     NIL (AND (SIM (QUOTE (BUC (LABEL ID.))) INST2)                       0016600
      (EQN (CADADR INST2) INST1)                                          0016700
      (BLOCK NIL (SET INST2 INST1) (SET INST1 NIL) (RETURN TRUE))))       0016800
    (FUNCTION (REVLDA BOOLEAN)                                            0016900
     NIL (AND (OR (REVTST INST1 INST2) (REVTST INST2 INST1))              0017000
      (BLOCK NIL (SET INST1 NIL) (RETURN TRUE))))                         0017100
    (FUNCTION (REVWRD BOOLEAN)                                            0017200
     NIL (BLOCK NIL (IF (AND (SIM (QUOTE ((OR. ANA ORA XOR) N. L.))       0017300
         INST1) (MEMBER (QUOTE R) (CADDR INST1)))                         0017400
       (SET INST1 (LIST (CAR INST1)                                       0017500
         (LIST (QUOTE NUMBER) (CADR INST1))))) (RETURN NIL))))            0017600
  (DECL (FUNCTION (FUNCTIC SYMBOL)                                        0017700
    ((EXP SYMBOL))                                                        0017800
    (BLOCK ((FN SYMBOL (FNAMER)))                                         0017900
     (RETURN (BLOCK ((FKIND SYMBOL (EQ (QUOTE ROUTINE) (CAR EXP)))        0018000
       (FNAME SYMBOL (CAR FN))                                            0018100
       (FTYPE SYMBOL (CADR FN)) (EXPR SYMBOL (CADDDR EXP)))               0018200
      (RETURN (BLOCK ((XTYPE SYMBOL (IF (NQ (QUOTE NOVALUE) FTYPE)        0018300
          FTYPE (BLOCK NIL (SET FTYPE STYPE)))))                          0018400
       (RETURN (BLOCK ((LISTING SYMBOL)                                   0018500
          (ALIST SYMBOL)                                                  0018600
          (FORG SYMBOL)                                                   0018700
          (CRGP SYMBOL)                                                   0018800
          (FTLIST SYMBOL)                                                 0018900
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          (REMCTES SYMBOL) (REFLIST SYMBOL) (VBLOT SYMBOL))                    0019000
         (FNDEC EXP)                                                           0019100
         (ATTACH (CAR EXP))                                                    0019200
         (ATTACH FN)                                                           0019300
         (FNBIND)                                                              0019400
         (COMLCK 4)                                                            0019500
         (COMVAL (IF (NULL XTYPE)                                              0019600
           (LIST (QUOTE BLOCK) NIL EXPR) EXPR)                                 0019700
          XTYPE (QUOTE VALUE) (QUOTE AC))                                      0019800
         (IF FCRG (BLOCK NIL (SET (CDR ORGP)                                   0019900
            (CONS (CAR ORGP) (CDR ORGP))) (SET (CAR ORGP) FCRG)))              0020000
         (ATTACH (QUOTE (END)))                                                0020100
         (ATTACH (QUOTE (RETURN)))                                             0020200
         (LSTLST REMCTES)                                                      0020300
         (RETURN (LIST (QUOTE LAP) (REVLST) REFLIST SNAME)))))))))            0020400
(FUNCTION (FNDEC SYMBOL)                                                       0020500
 ((EXP SYMBOL))                                                                0020600
 (BLOCK ((FNA SYMBOL (FNAMER)))                                                0020700
  (RETURN (BLOCK ((FNAME SYMBOL (CAR FNA)))                                    0020800
   (RETURN (BLOCK ((LISTING SYMBOL)                                            0020900
      (ALIST SYMBOL)                                                           0021000
      (REFLIST SYMBOL)                                                         0021100
      (FTLIST SYMBOL) (ORGP SYMBOL) (VBLOT SYMBOL))                            0021200
     (FNBIND)                                                                  0021300
     (MAKEFREE (CAR FNAME)                                                     0021400
      (CDR FNAME)                                                              0021500
      (CAR EXP)                                                                0021600
      (CONS (QUOTE FUNCTIONAL) (CADR FNA) (REVERSE FTLIST))                    0021700
      (QUOTE VALUE)) (RETURN FNAME))))))                                       0021800
(FUNCTION (MAKEFREE . COMPIL)                                                  0021900
 (A B C D E) ((KEEPER . SUPV) ((MAKEFREE . SYS) A B C D E)))                   0022000
(FUNCTION DECL1 (J)                                                            0022100
 (BLOCK ((DV FLUID) (DT FLUID) (DF FLUID) (DL FLUID) (DM FLUID) K)             0022200
  (IF (NULL (SET K (ORDER J)))                                                 0022300
   (RETURN NIL)                                                                0022400
   (EQ DF (QUOTE LEXICAL))                                                     0022500
   (GO ERR)                                                                    0022600
   (MEMBER K (QUOTE (NORMAL OWN)))                                             0022700
   (BLOCK NIL (MAKEFREE (GETVAR DV)                                            0022800
     (GETSEC DV) (IF DF DF (QUOTE FREE)) (GETYPE DT) (GETLOC DL))              0022900
    (IF (AND (EQ PASS 2) DI)                                                   0023000
     (EVAL (LIST (QUOTE SET) DV (CAR DI)))) (RETURN DV))                       0023100
   (EQ K (QUOTE MEANS))                                                        0023200
   (BLOCK ((X (BLOCK ((DV FLUID DI) (REFLIST FLUID))                           0023300
      (IF (GETGLB DV) (RETURN DV)))))                                          0023400
    (RETURN (IF (NOT X)                                                        0023500
      (COMER2 J (QUOTE (NO PRIOR DECLARATION)))                                0023600
      (BLOCK NIL (IF (EQ DM (SET DV (CONS (GETVAR DV)                          0023700
          (GETSEC DV)))) (SET X DM))                                           0023800
       (MAKEFREE (CAR DV) (CDR DV) (QUOTE MEANS) (CAR X) (CDR X))              0023900
       (RETURN DV)))))                                                         0024000
   (LABEL ERR (COMER2 J (QUOTE (ILLEGAL TOP DECLARATION)))))))))               0024100
(FUNCTION FVLIS1 (X)                                                           0024200
 (BLOCK ((J (FVLIST X)))                                                       0024300
  (RETURN (IF (MEMBER (CAR J) (QUOTE (MACRO INSTRUCTIONS)))                    0024400
   (LIST (CAR J) (CADR J) X) J))))                                             0024500
(FUNCTION (GETSEC SYMBOL)                                                      0024600
 ((V SYMBOL))                                                                  0024700
 (IF (ATOM V) SNAME (SIM (QUOTE (ID. . ID.)) V) (CDR V) SNAME))                0024800
(FUNCTION (GETVAR SYMBOL) ((V SYMBOL)) (IF (ATOM V) V (CAR V)))                0024900
(FUNCTION (DEFAULT SYMBOL) ((X SYMBOL)) (SECSET SLIST X))                      0025000
(FUNCTION (SECSET SYMBOL)                                                      0025100
 ((N SYMBOL) (TYP SYMBOL))                                                     0025200
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 (BLOCK NIL (IF (NOT (FTYPP TYP))                                          0025300
   (COMER2 TYP (QUOTE (INVALID DEFAULT TYPE)))                             0025400
   (RETURN (CONS (SET SNAME (CAR (SET SLIST (IF (MEMBER (QUOTE LISP)       0025500
          (IF (ATOM N) (SET N (LIST N)) N))                                0025600
        N (APPEND N (QUOTE (LISP)))))))) (SET STYPE TYP))))))             0025700
(FUNCTION (ANYVARS SYMBOL)                                                 0025800
 ((D SYMBOL))                                                              0025900
 (NOT (SIM (QUOTE ((C. 0 1000 (ID. SWITCH . S.)))) D)))                    0026000
(FUNCTION (GETLEX SYMBOL)                                                  0026100
 ((V SYMBOL))                                                              0026200
 (BLOCK ((A SYMBOL))                                                       0026300
  (IF (NULL (SET A (FIND V ALIST))) (GO L))                                0026400
  (SET DV V)                                                               0026500
  (RETURN (CONS (QUOTE LEXICAL) (CDR A)))                                  0026600
  L (IF (NULL (SET A (FIND V APLIST))) (RETURN NIL))                       0026700
  (SET DV V)                                                               0026800
  (RETURN (CONS (QUOTE LEXICAL)                                            0026900
    (IF (MEMBER A IRLIST)                                                  0027000
     (LIST (CADR A) (QUOTE LOC))                                           0027100
     (BLOCK NIL (SET IRLIST (CONS A IRLIST))                               0027200
      (RETURN (CDR A))))))))                                               0027300
(FUNCTION (GETGLB SYMBOL)                                                  0027400
 ((V SYMBOL))                                                              0027500
 (IF (NOT (ATOM V))                                                        0027600
  (GETDEC (CAR V) (CDR V))                                                 0027700
  (BLOCK ((SLIST SYMBOL SLIST))                                            0027800
   (RETURN (BLOCK ((A SYMBOL))                                             0027900
     L (IF (NULL SLIST)                                                    0028000
      (IF (AND (NQ (O2S. (BIT 24 18 (CORE (S2O. V)))) V)                   0028100
        (EQ (O2S. (BIT 0 18 (CORE (PLUS 1 (BIT 24 18 (CORE (S2O. V))      0028200
             ))))) V))                                                     0028300
       (BLOCK (ERRFLG)                                                     0028400
        (COMERR (APPEND (QUOTE (WILL USE DECLARATION FOR))                 0028500
          (LIST (CONS V (SET A (O2S. (BIT 24 18 (CORE (BIT 24 18           0028600
                (CORE (S2O. V))))))))))) (RETURN (GETDEC V A)))            0028700
       (RETURN NIL)) (SET A (GETDEC V (CAR SLIST))) (RETURN A))            0028800
     (SET SLIST (CDR SLIST)) (GO L))))))                                   0028900
(FUNCTION (GETFRV SYMBOL)                                                  0029000
 ((V SYMBOL))                                                              0029100
 (BLOCK ((A SYMBOL (IF (ATOM V) (GETLEX V) NIL)))                          0029200
  (RETURN (IF A A (GETGLB V)))))                                           0029300
(FUNCTION (GETDEC SYMBOL)                                                  0029400
 ((V SYMBOL) (S SYMBOL))                                                   0029500
 (BLOCK ((A SYMBOL))                                                       0029600
  (IF (SET A (GETDC V S)) (ADREF A)) (RETURN A)))                          0029700
(FUNCTION (GETDC SYMBOL)                                                   0029800
 ((V SYMBOL) (S SYMBOL))                                                   0029900
 (BLOCK ((A SYMBOL))                                                       0030000
  (RETURN (IF (NULL (SET A (FVLIS1 (GETFREE V S))))                        0030100
    (IF (AND (EQN S (QUOTE LISP))                                          0030200
      (SIM (QUOTE (C (C. 1 10000 (CR. A D)) R))                            0030300
       (SET A (EXPLODE V)))) (LIST (QUOTE MACRO) NIL A) NIL)               0030400
    (EQN (CAR A) (QUOTE MEANS))                                            0030500
    (BLOCK NIL (IF (NOT DM) (SET DM (CONS V S)))                           0030600
     (RETURN (GETDC (CADR A) (CADDR A))))                                 0030700
    (BLOCK NIL (SET DV (CONS V S)) (RETURN A))))))                         0030800
(FUNCTION (ADREF SYMBOL)                                                   0030900
 ((A SYMBOL))                                                              0031000
 (BLOCK NIL (IF (AND (NOT (MEMBER (CAR A)                                  0031100
      (QUOTE (INSTRUCTIONS MACRO)))) (NOT (FIND DV REFLIST)))              0031200
   (SET REFLIST (CONS (CONS DV A) REFLIST)))))                             0031300
(FUNCTION (FNBINC SYMBOL)                                                  0031400
 NIL (BLOCK ((VADDR SYMBOL) (VCLASS SYMBOL) (VTYPE SYMBOL))                0031500
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   (RETURN (BIND (CADDR EXP)                                              0031600
     (FUNARG NOVALUE ((X SYMBOL))                                         0031700
      (BLOCK NIL (SET ORGP (ATTACH X))                                    0031800
       (IF X (ATTACH (QUOTE (STF TOP.))))                                 0031900
       (ATTACH (QUOTE (BEGIN)))))                                         0032000
     (FUNARG SYMBOL ((X SYMBOL))                                          0032100
      (BLOCK NIL (IF (NOT (EQN X (QUOTE NORMAL)))                         0032200
       (GO ER2) DI (GO ER1))                                              0032300
       (SET FTLIST (CONS (IF (EQN DL (QUOTE LOC))                         0032400
          (LIST (FTYPER DT) DL) (FTYPER DT)) FTLIST))                     0032500
       (RETURN X)                                                         0032600
       ER1 (SET X (QUOTE PRESET))                                         0032700
       ER2 (COMER2 X (QUOTE (ILLEGAL IN FUNC DEC))))))))))               0032800
  (FUNCTION (BKBIND SYMBOL)                                               0032900
   NIL (BLOCK ((ANY BOOLEAN (ANYVARS (CADR EXP))))                        0033000
    (IF ANY (ATTACH (QUOTE (BLOCK))))                                     0033100
    (BLOCK ((P (BIND (CADR EXP)                                           0033200
        (FUNARG NOVALUE ((X SYMBOL))                                      0033300
         (ATTACH (CONS (QUOTE DECLARE) X)))                               0033400
        (FUNARG SYMBOL ((X SYMBOL))                                       0033500
         (BLOCK ((Y SYMBOL) (Z SYMBOL))                                   0033600
          (IF (AND (EQN DL (QUOTE LOC)) (NULL DI))                        0033700
           (SET X (QUOTE (LOC WITHOUT PRESET)))                           0033800
           (EQN X (QUOTE NORMAL))                                         0033900
           (GO NORMAL)                                                    0034000
           (EQN X (QUOTE SWITCH))                                         0034100
           (GO SWITCH) (EQN X (QUOTE ASSIGNED)) (GO ASSIGNED))            0034200
          (COMER2 X (QUOTE (ILLEGAL IN BLOCK DEC)))                       0034300
          (RETURN NIL)                                                    0034400
          SWITCH (COMSWITCH DI DV)                                        0034500
          (RETURN NIL)                                                    0034600
          NORMAL (SET Y (FTYPER DT))                                      0034700
          ASSIGNED (SET Z (COMPUSH (IF DI (CAR DI) (ITYPE Y))             0034800
            Y (GETLOC DL)))                                               0034900
          (IF (NULL Y)                                                    0035000
           (SET DT (IF (EQN Z (QUOTE FUNCTIONAL))                         0035100
             (QUOTE SYMBOL) Z))) (RETURN X))))))                          0035200
    (RETURN (IF ANY P TRUE)))))                                           0035300
  (FUNCTION (BIND SYMBOL)                                                 0035400
   ((L SYMBOL)                                                            0035500
    (F1 (FUNCTIONAL NOVALUE SYMBOL))                                      0035600
    (F2 (FUNCTIONAL SYMBOL SYMBOL)))                                      0035700
   (BLOCK ((A SYMBOL)                                                     0035800
     (H SYMBOL)                                                           0035900
     (FL SYMBOL)                                                          0036000
     (TEMP SYMBOL)                                                        0036100
     (X SYMBOL)                                                           0036200
     (Y SYMBOL)                                                           0036300
     (DV SYMBOL) (DT SYMBOL) (DF SYMBOL) (DL SYMBOL) (DI SYMBOL))         0036400
    A (IF (NULL L)                                                        0036500
     (GO D)                                                               0036600
     (NULL (SET X (ORDER (CAR L))))                                       0036700
     (GO C)                                                               0036800
     (EQN X (QUOTE NORMAL)) (GO NEXT) (NULL (F2 X)) (GO C))               0036900
    NEXT (IF (EQN DF (QUOTE LEXICAL))                                     0037000
     (GO LEXICAL)                                                         0037100
     (AND (SET TEMP (GETDC (GETVAR (SET Y DV)) (GETSEC DV)))              0037200
      (EQN (CAR TEMP) (QUOTE FLUID)))                                     0037300
     (GO VERIFY2)                                                         0037400
     (NULL DF)                                                            0037500
     (GO LEXCAL)                                                          0037600
     (BLOCK NIL (SET DF (QUOTE FREE)) (RETURN TEMP)) (GO VERIFY1))        0037700
    (GENDTDL)                                                             0037800
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    (DECL1 (LIST DV DT DF DL))                                                  C037900
    (GO NEXT)                                                                   C038000
    VERIFY1 (IF (NOT (OR (EQN (CAR TEMP) (QUOTE FREE))                          C038100
       (EQN (CAR TEMP) (QUOTE FLUID))))                                         C038200
     (COMER2 DV (QUOTE (BAD REDEF))))                                           C038300
    VERIFY2 (SET DF (CAR TEMP))                                                 C038400
    (IF (NULL DT)                                                               C038500
     (SET DT (CADR TEMP))                                                       C038600
     (NOT (EQ DT (CADR TEMP))) (COMER2 DV (QUOTE (TYPE MISMATCH))))             C038700
    (IF (NULL DL)                                                               C038800
     (SET DL (CADDR TEMP))                                                      C038900
     (NOT (EQN DL (CADDR TEMP)))                                                C039000
     (COMER2 DV (QUOTE (TRANS MODE MISMATCH))))                                 C039100
    (ADREF TEMP)                                                                C039200
    CNWARD (IF (AND (EQN X (QUOTE NORMAL)) (NULL (F2 X))) (GO C))               C039300
    (SET H (CONS (LIST DV DT DF DL) H))                                         C039400
    (IF (NOT (ATOM DV))                                                         C039500
     (SET FL (CONS DV FL)) (SET A (CONS (LIST DV DT DL) A)))                    C039600
    C (SET L (CDR L))                                                           C039700
    (GO A)                                                                      C039800
    LEXCAL (SET DV Y)                                                           C039900
    (SET DF (QUOTE LEXICAL))                                                    C040000
    LEXICAL (GENDTDL)                                                           C040100
    (GO ONWARD)                                                                 C040200
    D (F1 (REVERSE H))                                                          C040300
    (SET ALIST (NCONC A ALIST))                                                 C040400
    (RETURN (IF FL (BLOCK NIL (ATTACH (CONS (QUOTE FLBIND)                      C040500
       (SET FL (REVERSE FL)))) (BLOCTTO) (RETURN FL)) NIL))))                   C040600
(FUNCTION (GENDTDL SYMBOL)                                                      C040700
 NIL (BLOCK NIL (SET DT (GETYPE DT)) (SET DL (GETLOC DL))))                     C040800
(FUNCTION (GETYPE SYMBOL) ((X SYMBOL)) (IF X X STYPE))                          C040900
(FUNCTION (GETLOC SYMBOL) ((X SYMBOL)) (IF X X (QUOTE VALUE)))                  C041000
(FUNCTION (ORDER SYMBOL)                                                        C041100
 ((L SYMBOL))                                                                   C041200
 (BLOCK ((M SYMBOL (QUOTE NORMAL)))                                             C041300
  (RETURN (BLOCK NIL (SET DT (SET DF (SET DL (SET DI NIL))))                    C041400
    (IF (SIM (QUOTE V.) L)                                                      C041500
     (SET L (LIST L))                                                           C041600
     (NOT (LISTP L))                                                            C041700
     (RETURN (BLOCK NIL (COMER2 L (QUOTE (IMPROPER DECLARATION))))))            C041800
    (IF (NOT (SIM (QUOTE V.) (SET DV (CAR L))))                                 C041900
     (RETURN (BLOCK NIL (COMER2 DV (QUOTE (IMPROPER VARIABLE)))))               C042000
     (NULL (SET L (CDR L)))                                                     C042100
     (RETURN (BLOCK NIL (TESLEX) (RETURN M)))                                   C042200
     (TYPEP (CAR L))                                                            C042300
     (SET DT (STANTP (CAR L)))                                                  C042400
     (EQN (CAR L) (QUOTE MEANS))                                                C042500
     (GO MEANS)                                                                 C042600
     (EQN (CAR L) (QUOTE ASSIGNED))                                             C042700
     (GO ASSIGNED)                                                              C042800
     (EQN (CAR L) (QUOTE SWITCH)) (GO SWITCH) (GO TRY2))                        C042900
    (IF (NULL (SET L (CDR L))) (RETURN M))                                      C043000
    TRY2 (IF (NOT (MEMBER (CAR L)                                               C043100
       (QUOTE (FLUID FREE LEXICAL OWN))))                                       C043200
     (GO TRY3) (EQN (SET DF (CAR L)) (QUOTE OWN)) (SET M DF))                   C043300
    TRYA (TESLEX)                                                               C043400
    (IF (NULL (SET L (CDR L))) (RETURN M))                                      C043500
    TRY3 (TESLEX)                                                               C043600
    (IF (NOT (TMODEP (CAR L))) (GO TRY4))                                       C043700
    (SET DL (CAR L))                                                            C043800
    LESS1 (IF (NULL (SET L (CDR L))) (RETURN M))                                C043900
    TRY4 (IF (NOT (EQ (LENGTH (SET DI L)) 1))                                   C044000
     (COMER2 (CAR L) (QUOTE (IGNORED IN DEC))))                                 C044100
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      (GO LESS1)                                                          0044200
      MEANS (IF (SIM (QUOTE (MEANS V.)) L) (GO COMMON))                   0044300
      ERROR (COMER2 (CAR L) (QUOTE (DEC FORMAT ERROR)))                   0044400
      (RETURN NIL)                                                        0044500
      ASSIGNED (IF (NOT (SIM (QUOTE (ASSIGNED (ANY. LOC VALUE) S.)) L)    0044600
       ) (GO ERROR))                                                      0044700
      (SET DF (QUOTE LEXICAL))                                            0044800
      (SET M (QUOTE ASSIGNED))                                            0044900
      (GO TRYA)                                                           0045000
      COMMON (SET DI (CADR L))                                            0045100
      (RETURN (CAR L)) SWITCH (SET DI (CDR L)) (RETURN (CAR L))))))       0045200
(FUNCTION (TESLEX SYMBOL)                                                 0045300
 NIL (IF (NOT (ATOM DV))                                                  0045400
  (BLOCK NIL (IF (EQN DF (QUOTE LEXICAL))                                 0045500
    (COMER2 DV (QUOTE (INVALID AS LEXICAL))) DF (RETURN NIL))             0045600
   (SET DF (QUOTE FREE))) NIL))                                           0045700
(FUNCTION (FPNAME SYMBOL)                                                 0045800
 ((N SYMBOL) (TY SYMBOL)) (LIST (CONS (GETVAR N) (GETSEC N)) TY))         0045900
(FUNCTION (FNAMER SYMBOL)                                                 0046000
 NIL (BLOCK ((N SYMBOL (CADR EXP)))                                       0046100
  (RETURN (IF (SIM (QUOTE V.) N)                                          0046200
    (FPNAME N STYPE)                                                      0046300
    (SIM (QUOTE (V. V.)) N)                                               0046400
    (BLOCK ((TY SYMBOL (CADR N)))                                         0046500
     (RETURN (IF (VTYPEP TY)                                              0046600
       (FPNAME (CAR N) TY)                                                0046700
       (BLOCK NIL (COMER2 TY (QUOTE (ILL FUNC TYPE)))                     0046800
        (RETURN (FPNAME (CAR N) STYPE))))))                               0046900
    (BLOCK NIL (COMER2 N (QUOTE (BAD FUN NAME)))                          0047000
     (RETURN (FPNAME (GENID) STYPE)))))))                                 0047100
(IDCLE (FUNCTION (COMTERM SYMBOL)                                         0047200
  ((X SYMBOL))                                                            0047300
  (BLOCK ((SCLASS SYMBOL)                                                 0047400
    (PCLASS SYMBOL)                                                       0047500
    (VCLASS SYMBOL)                                                       0047600
    (VTYPE SYMBOL)                                                        0047700
    (VREG SYMBOL)                                                         0047800
    (VADDR SYMBOL) (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL))            0047900
   (COMEXP X)                                                             0048000
   (ATTACH (VLIST)) (SET TERMINS (CONS LISTING TERMINS))))                0048100
(FUNCTION (COMSTAT SYMBOL)                                                0048200
 ((X SYMBOL))                                                             0048300
 (BLOCK ((SCLASS SYMBOL)                                                  0048400
   (VCLASS SYMBOL)                                                        0048500
   (VTYPE SYMBOL)                                                         0048600
   (VREG SYMBOL)                                                          0048700
   (VADDR SYMBOL) (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL))             0048800
  (SET SCLASS (QUOTE TRUE)) (COMEXP X)))                                  0048900
(FUNCTION (COMVAL SYMBOL)                                                 0049000
 ((X SYMBOL) (XTYPE SYMBOL) (XLOC SYMBOL) (XREG SYMBOL))                  0049100
 (BLOCK ((SCLASS SYMBOL)                                                  0049200
   (PCLASS SYMBOL)                                                        0049300
   (VCLASS SYMBOL)                                                        0049400
   (VTYPE SYMBOL)                                                         0049500
   (VREG SYMBOL)                                                          0049600
   (VADDR SYMBOL)                                                         0049700
   (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL) (TERGO SYMBOL))             0049800
  (COMEXP X)                                                              0049900
  (SET X VTYPE)                                                           0050000
  (IF (EQN (GETLOC XLOC) (QUOTE LOC))                                     0050100
   (BLOCK NIL (IF (NOT (EQN XTYPE VTYPE))                                 0050200
     (COMERR (QUOTE (NQ TYPES FOR LOC ARG))))                             0050300
   (MAKELOC) (SET XTYPE VTYPE) G01568))                                   0050400
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    (MOVACTIVE (MAKTYP) XREG NIL) (RETURN X)))                                  0050500
  (FUNCTION (COMPUSH SYMBOL)                                                    0050600
   ((X SYMBOL) (XTYPE SYMBOL) (XLOC SYMBOL))                                    0050700
   (BLOCK ((SCLASS SYMBOL)                                                      0050800
     (PCLASS SYMBOL)                                                            0050900
     (VCLASS SYMBOL)                                                            0051000
     (VTYPE SYMBOL)                                                             0051100
     (VREG SYMBOL)                                                              0051200
     (VADDR SYMBOL)                                                             0051300
     (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL) (TERGO SYMBOL))                 0051400
    (COMEXP X)                                                                  0051500
    (SET X VTYPE)                                                               0051600
    (IF (EQN (GETLOC XLOC) (QUOTE LOC))                                         0051700
     (BLOCK NIL (IF (AND XTYPE (NOT (EQN XTYPE VTYPE)))                         0051800
       (COMERR (QUOTE (NO TYPES FOR LOC ARG))))                                 0051900
      (MAKELOC) (SET XTYPE VTYPE) G01569))                                      0052000
    (MOVPDS (IF (NULL XTYPE)                                                    0052100
      VTYPE (EQN XTYPE (QUOTE NUMBER))                                          0052200
      (IF (MEMBER VTYPE (QUOTE (REAL INTEGER OCTAL)))                           0052300
       VTYPE (QUOTE REAL)) XTYPE) NIL) (RETURN X)))                             0052400
  (FUNCTION (MAKTYP SYMBOL)                                                     0052500
   NIL (IF (NULL XTYPE)                                                         0052600
    VTYPE (EQN XTYPE (QUOTE NUMBER))                                            0052700
    (IF (MEMBER VTYPE (QUOTE (REAL INTEGER OCTAL)))                             0052800
     VTYPE (QUOTE REAL)) XTYPE))                                                0052900
  (FUNCTION (COMTERMINS SYMBOL)                                                 0053000
   NIL (BLOCK ((W SYMBOL) (X SYMBOL))                                           0053100
    (IF (NULL (SET W TERMINS))                                                  0053200
     (RETURN (COMERR (QUOTE (NO EXIT GIVEN)))) (SET X XTYPE) (GO C))            0053300
    (SET X (GVTYPE (CAAR W)))                                                   0053400
    A (IF (NULL (SET W (CDR W)))                                                0053500
     (GO C) (EQN X (GVTYPE (CAAR W))) (GO A))                                   0053600
    (SET X (QUOTE SYMBOL))                                                      0053700
    C (SET W TERMINS)                                                           0053800
    (BLOCK ((LISTING SYMBOL)                                                    0053900
      (VCLASS SYMBOL)                                                           0054000
      (VTYPE SYMBOL)                                                            0054100
      (VREG SYMBOL)                                                             0054200
      (VADDR SYMBOL) (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL))                0054300
     L (IF (NULL W) (GO G01570))                                                0054400
     (INHERIT (CAAR W))                                                         0054500
     (IF (NULL VCLASS) (GO NL))                                                 0054600
     (SET LISTING NIL)                                                          0054700
     (MOVACTIVE X (QUOTE AC) NIL)                                               0054800
     (IF (NULL LISTING) (GO NL))                                                0054900
     (SET (CAR (CAR W)) (CAR LISTING))                                          0055000
     (IF (CDR LISTING)                                                          0055100
      (SET (CDR (CAR W)) (NCONC (CDR LISTING) (CDAR W))))                       0055200
     I (SET W (CDR W))                                                          0055300
     (GO L) NL (SET (CAR (CAR W)) NIL) (GO I) G01570)                           0055400
    (SET VTYPE X)                                                               0055500
    (SET VREG (QUOTE AC)) (SET VCLASS (QUOTE ACTIVE))))                         0055600
  (FUNCTION (COMEXP SYMBOL)                                                     0055700
   ((EXP SYMBOL))                                                               0055800
   (IF (SIM (QUOTE V.) EXP)                                                     0055900
    (COMVAR EXP)                                                                0056000
    (ATOM EXP)                                                                  0056100
    (COMDATUM)                                                                  0056200
    (NOT (SIM (QUOTE V.) (CAR EXP)))                                            0056300
    (COMER2 (CAR EXP) (QUOTE (ILLEGAL FORM NAME)))                              0056400
    (BLOCK ((D SYMBOL) (DV SYMBOL))                                             0056500
     (RETURN (IF (NULL (SET D (GETFRV (CAR EXP))))                              0056600
       (COMER2 (CAR EXP) (QUOTE (NO DEC YET)))                                  0056700
```

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        (EQN (CAR D) (QUOTE INSTRUCTIONS))                                    0056800
        (BLOCK ((Y (FUNCTIONAL SYMBOL)))                                      0056900
         (SET Y (CADDR D)) (RETURN (Y)))                                      0057000
        (EQN (CAR D) (QUOTE MACRO))                                           0057100
        (IF (NOT (ATOM (CADDR D)))                                            0057200
         (COMEXP (MAKECARCDR (CDADDR D)))                                     0057300
         (BLOCK ((Z (FUNCTIONAL SYMBOL SYMBOL)))                              0057400
          (SET Z (CADDR D)) (RETURN (COMEXP (Z EXP)))))                       0057500
        (ATYPEP (CADR D))                                                     0057600
        (COMSUB D)                                                            0057700
        (AND FKIND (NOT (EQN (CAR D) (QUOTE ROUTINE))))                       0057800
        (COMER2 DV (QUOTE (USED IN ROUTINE)))                                 0057900
        (FUNTYP (CADR D))                                                     0058000
        (COMFUNC DV D EXP)                                                    0058100
        (COMERR (APPEND (QUOTE (I DO NOT BELIEVE)) (LIST DV)))))))))          0058200
    (FUNCTION (COMPAR SYMBOL)                                                 0058300
     ((DEC SYMBOL) (E SYMBOL))                                                0058400
     (BLOCK ((VT SYMBOL) (VL SYMBOL))                                         0058500
      L (IF (AND (NULL E) (NULL DEC))                                         0058600
       (RETURN NIL) (NOT (AND E DEC)) (RETURN (COMLOK 0)))                    0058700
      (SET VT (IF (ATOM (SET VL (CAR DEC))) VL (CAR VL)))                     0058800
      (SET VL (IF (ATOM VL) (QUOTE VALUE) (CADR VL)))                         0058900
      (IF (SET DEC (CDR DEC))                                                 0059000
       (COMPUSH (CAR E) VT VL) (COMVAL (CAR E) VT VL (QUOTE AC)))             0059100
      (SET E (CDR E)) (GO L)))                                                0059200
    (FUNCTION (COMFUNC SYMBOL)                                                0059300
     ((NAM SYMBOL) (DECL SYMBOL) (X SYMBOL))                                  0059400
     (BLOCK NIL (IF (AND (DEBUGGING)                                          0059500
        (NOT (EQ (CAR DECL) (QUOTE ROUTINE)))                                 0059600
        (NOT (EQ (CAR DECL) (QUOTE FUNCTION))))                               0059700
       (COMSTAT (LIST (QUOTE (FUNCHK . DEBUG))                                0059800
        (LIST (QUOTE QUOTE) (CADR DECL)) NAM)))                               0059900
      (ATTACH (QUOTE (ARGS)))                                                 0060000
      (COMPAR (CDDADR DECL) (CDR X))                                          0060100
      (ATTACH (LIST (QUOTE CALL)                                              0060200
        (IF (OR (EQN (CAR DECL) (QUOTE ROUTINE))                              0060300
          (EQN (CAR DECL) (QUOTE FUNCTION)))                                  0060400
         NAM (BLOCK NIL (ATTACH (LIST (QUOTE LDB) NAM (MAKIND DECL)))         0060500
          (ATTACH (QUOTE (STB (FMCALL . SYS))))                               0060600
          (RETURN (QUOTE (FMCALL . SYS))))))))                                0060700
      (BLOTTO)                                                                0060800
      (IF (EQN (SET VTYPE (CADADR DECL)) (QUOTE NOVALUE))                     0060900
       (BLOCK NIL (SET VTYPE (QUOTE BOOLEAN))                                 0061000
        (SET VCLASS (QUOTE DATUM)) G01571)                                    0061100
       (BLOCK NIL (SET VCLASS (QUOTE ACTIVE))                                 0061200
        (SET VREG (QUOTE AC)) G01572))))                                      0061300
    (FUNCTION (COMVAR SYMBOL)                                                 0061400
     ((DV SYMBOL))                                                            0061500
     (BLOCK ((D SYMBOL))                                                      0061600
      (IF (OR (NULL (SET D (GETFRV DV)))                                      0061700
        (MEMBER (CAR D) (QUOTE (MACRO INSTRUCTIONS ROUTINE))))                0061800
       (RETURN (COMER2 DV (QUOTE (ILLEGALLY USED))))                          0061900
       (EQN (CAR D) (QUOTE FUNCTION)) (GO FUNC))                              0062000
      (SET VCLASS (QUOTE LOC))                                                0062100
      (SET VADDR DV)                                                          0062200
      (SET VIND (CR (EQN (CADDR D) (QUOTE LOC))                               0062300
        (NOT (MEMBER (CAR D) (QUOTE (LEXICAL OWN))))))                        0062400
      (GO L)                                                                  0062500
      FUNC (ATTACH (LIST (QUOTE LDA) DV (QUOTE (2Q1 R L4567.7))))             0062600
      (BLOTCH (SET VREG (QUOTE AC)))                                          0062700
      (SET VCLASS (QUOTE ACTIVE))                                             0062800
      L (RETURN (SET VTYPE (FTYPER (CADR D))))))                              0062900
    (FUNCTION (COMDATUM SYMBOL)                                               0063000
```

```
   NIL (BLOCK NIL (SET VCLASS (QUOTE DATUM))                                0063100
    (SET VTYPE (FVTYPE EXP)) (SET VADDR EXP)))                              0063200
  (FUNCTION (CCMSUB SYMBOL)                                                 0063300
   ((D SYMBOL))                                                             0063400
   (BLOCK NIL (CCMVAL (IF (DEBUGGING)                                       0063500
     (CONS (QUOTE (ARYCHK . DEBUG))                                         0063600
      DV (LIST (QUOTE QUOTE) (CADADR D)) (CDR EXP)) (CADR EXP))             0063700
    (QUOTE INTEGER) NIL (QUOTE AC))                                         0063800
    (ATTACH (LIST (QUOTE ADD)                                               0063900
     DV (LIST (QUOTE T) (MAKIND D) (QUOTE L01234567.3))))                   0064000
    (SET VCLASS (QUOTE LOC))                                                0064100
    (SET VTYPE (CADADR D)) (SET VREG (QUOTE AC)) (SET VADDR 0)))            0064200
  (FUNCTION (MAKIND SYMBOL)                                                 0064300
   ((D SYMBOL))                                                             0064400
   (IF (OR (EQN (CADDR D) (QUOTE LOC))                                      0064500
    (MEMBER (CAR D) (QUOTE (FREE FLUID)))) (QUOTE I) 0))                    0064600
  (FUNCTION (MAKECARCDR SYMBOL)                                             0064700
   ((J SYMBOL))                                                             0064800
   (IF (NULL (CDR J))                                                       0064900
    (IF (CCMLCK 2) NIL (CADR EXP))                                          0065000
    (LIST (IF (EQN (CAR J) (QUOTE A)) (QUOTE CAR) (QUOTE CDR))              0065100
     (MAKECARCDR (CDR J)))))                                                0065200
  (MACRO ((ORG . LISP) SYMBOL)                                              0065300
   ((X SYMBOL))                                                             0065400
   (IF (NOT (SIM (QUOTE (V. (OR. N. NIL) S.)) X))                           0065500
    (BLOCK NIL (COMERR (QUOTE (BAD ORG))))                                  0065600
    (BLOCK NIL (SET FORG (CONS (QUOTE ORG)                                  0065700
     (IF (CADR X) (LIST (CADR X)) NIL))) (RETURN (CADDR X))))))             0065800
(PREC (INSTRUCTIONS ((IF . LISP) NOVALUE)                                   0065900
  NIL (BLOCK NIL (SET EXP (CDR EXP))                                        0066000
   (RETURN (IF (OR (NULL EXP) (NULL (CDR EXP)))                             0066100
    (COMERR (QUOTE (BAD IF)))                                               0066200
    SCLASS (IFST EXP XGO)                                                   0066300
    PCLASS (IFPRED EXP) TERGO (IFEXPT EXP) (IFEXP EXP)))))                  0066400
  (FUNCTION (IFPREC SYMBOL)                                                 0066500
   ((X SYMBOL))                                                             0066600
   (BLOCK ((GEN SYMBOL) (TG SYMBOL) (FG SYMBOL))                            0066700
    (SET VCLASS (QUOTE PREDICATE))                                          0066800
    (SET TG (IF TGC TGO (GENID)))                                           0066900
    (SET FG (IF FGC FGO (GENID)))                                           0067000
    A (IF (NULL X) (GO N) (NULL (CDR X)) (GO NC))                           0067100
    (SET GEN NIL)                                                           0067200
    (IF (EQN (CADR X) (QUOTE TRUE))                                         0067300
     (COMPACT (CAR X) TG NIL)                                               0067400
     (EQN (CADR X) (QUOTE FALSE))                                           0067500
     (COMPACT (CAR X) FG NIL)                                               0067600
     (BLOCK NIL (SET GEN (GENID))                                           0067700
      (COMPACT (CAR X) NIL GEN)                                             0067800
      (COMPACT (CADR X) TG FG) (ATTACHLAB GEN) G01573))                     0067900
    (SET X (CDDR X))                                                        0068000
    (GO A)                                                                  0068100
    NC (COMPACT (CAR X) TGC FGO)                                            0068200
    (GO R)                                                                  0068300
    N (IF GEN (CALERR))                                                     0068400
    R (IF (NOT TGO) (ATTACHLAB TG) (NOT FGO) (ATTACHLAB FG))))              0068500
  (FUNCTION (IFST SYMBOL)                                                   0068600
   ((EXP SYMBOL) (NAME SYMBOL))                                             0068700
   (BLOCK ((GEN SYMBOL) (XGO SYMBOL) (Z SYMBOL))                            0068800
    (SET XGO NAME)                                                          0068900
    A (IF (NULL EXP)                                                        0069000
     (GO E)                                                                 0069100
     (NULL (CDR EXP))                                                       0069200
     (GO L1)                                                                0069300
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    (AND (CDDR EXP) (NULL (CDDDR EXP)) (IFGO (CADDR EXP)))                0069400
    (GO L3) (IFGO (CADR EXP)) (GO B) (NULL XGO) (SET XGO (GENID)))        0069500
   (IF (NULL (CDDR EXP)) (GO L2))                                         0069600
   (SET GEN (GENIC))                                                      0069700
   (COMPRED (CAR EXP) NIL GEN)                                            0069800
   (COMSTAT (CADR EXP))                                                   0069900
   (IF (NCT (LASTBRANCH)) (ATTACHGC XGO))                                 0070000
   (ATTACHLAB GEN)                                                        0070100
   I (SET EXP (CDDR EXP))                                                 0070200
   (GO A)                                                                 0070300
   L2 (COMPREC (CAR EXP) NIL XGO)                                         0070400
   (COMSTAT (CADR EXP))                                                   0070500
   (GO E)                                                                 0070600
   L3 (COMPREC (CAR EXP)                                                  0070700
    (IF (SET Z (IFGO (CADR EXP))) (CADADR EXP) NIL)                       0070800
    (CADR (CADDR EXP)))                                                   0070900
   (IF (NCT Z) (CCMSTAT (CADR EXP)))                                      0071000
   (GO E)                                                                 0071100
   B (COMPRED (CAR EXP) (CADADR EXP) NIL)                                 0071200
   (GO I)                                                                 0071300
   L1 (COMSTAT (CAR EXP))                                                 0071400
   E (IF (AND XGO (NCT NAME)) (ATTACHLAB XGO))))                          0071500
 (FUNCTION (IFEXPT SYMBOL)                                                0071600
  ((X SYMBOL))                                                            0071700
  (BLOCK ((GEN SYMBOL))                                                   0071800
   A (IF (NULL (CDR X)) (GO B))                                           0071900
   (SET GEN (GENIC))                                                      0072000
   (IF (NULL (CDDR X)) (GC C))                                            0072100
   (COMPRED (CAR X) NIL GEN)                                              0072200
   (COMTERM (CADR X))                                                     0072300
   (SET X (CDR X))                                                        0072400
   C (ATTACHGC TERGO)                                                     0072500
   (ATTACHLAB GEN)                                                        0072600
   I (SET X (CDR X))                                                      0072700
   (GO A)                                                                 0072800
   C (COMPRED (CAR X) GEN NIL)                                            0072900
   (CALERR) (GC D) B (COMTERM (CAR X))))                                  0073000
 (FUNCTION (IFEXP SYMBOL)                                                 0073100
  ((EXP SYMBOL))                                                          0073200
  (BLOCK ((TERMINS SYMBOL)                                                0073300
    (LABELS SYMBOL) (GCLIST SYMBOL) (TERGO SYMBOL) (X SYMBOL))            0073400
   (SET TERGO (GENID))                                                    0073500
   (IFEXPT EXP)                                                           0073600
   (ATTACHLAB TERGO)                                                      0073700
   (COMTERMINS)                                                           0073800
   (IF (SET X (COMGOES (QUOTE TRUE)))                                     0073900
    (COMER2 (QUCTE (UNDEFINED LABELS)) X))))                              0074000
 (FUNCTION (IFGC SYMBOL) ((X SYMBOL)) (SIM (QUOTE (GO ID.)) X))           0074100
 (FUNCTION (CCMPRED SYMBOL)                                               0074200
  ((X SYMBOL) (TG SYMBOL) (FG SYMBOL))                                    0074300
  (BLOCK ((SCLASS SYMBOL) (PCLASS SYMBOL) (XTYPE SYMBOL))                 0074400
   (SET PCLASS (QUCTE TRUE)) (COMPACT X TG FG)))                          0074500
 (FUNCTION (CCMPACT SYMBOL)                                               0074600
  ((X SYMBOL) (TGC SYMBOL) (FGO SYMBOL))                                  0074700
  (BLOCK ((XTYPE SYMBOL)                                                  0074800
    (VCLASS SYMBOL)                                                       0074900
    (VTYPE SYMBOL)                                                        0075000
    (VREG SYMBOL)                                                         0075100
    (VADDR SYMBOL) (VIND SYMBOL) (VINV SYMBOL) (VBYTE SYMBOL))            0075200
   (SET XTYPE (QUCTE BCOLEAN))                                            0075300
   (COMEXP X)                                                             0075400
   (IF (EQN VCLASS (QUCTE PREDICATE))                                     0075500
    (GO P)                                                                0075600
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     (NULL VCLASS)                                                              0075700
     (RETURN (COMERR (QUOTE (NOVALUE PREDICATE))))                              0075800
     (EQN VCLASS (QUOTE DATUM))                                                 0075900
     (IF (MEMBER VADDR (QUOTE (NIL FALSE))) (GO A) NIL)                         0076000
     (MEMBER VTYPE (QUOTE (SYMBOL BCCLEAN))) (GO B))                            0076100
    (BRANCHER (QUOTE ((TGO (BUC)))))                                            0076200
    (GO P)                                                                      0076300
    A (BRANCHER (QUOTE ((FGO (BUC)))))                                          0076400
    (GO P)                                                                      0076500
    B (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                                 0076600
    (BRANCHER (QUOTE ((FGO (BOZP) (BNZP)))))                                    0076700
    P (IF (AND TGO FGO (NOT (LASTBRANCH)))                                      0076800
     (BRANCHER (QUOTE ((TGO (BUC))))))))                                        0076900
  (FUNCTION (MAKEPRED SYMBOL)                                                   0077000
   NIL (COMEXP (LIST (QUOTE IF) EXP (QUOTE TRUE) NIL)))                         0077100
  (FUNCTION (COMBOOL SYMBOL)                                                    0077200
   ((MODE SYMBOL))                                                              0077300
   (BLOCK ((H SYMBOL) (G SYMBOL) (I SYMBOL))                                    0077400
    (IF (OR SCLASS (NOT PCLASS))                                                0077500
     (RETURN (MAKEPRED)) (NULL (CDR EXP)) (GO D))                               0077600
    (SET H (CDR EXP))                                                           0077700
    A (IF (NULL (CDR H)) (GO B))                                                0077800
    (SET I (IF MODE FGO TGO))                                                   0077900
    (SET I (IF I I G G (SET G (GENID))))                                        0078000
    (COMPACT (CAR H) (IF MODE NIL I) (IF MODE I NIL))                           0078100
    (SET H (CDR H))                                                             0078200
    (GO A)                                                                      0078300
    B (COMPACT (CAR H) TGO FGO)                                                 0078400
    (SET VCLASS (QUOTE PREDICATE))                                              0078500
    (IF (NULL G) (GO C))                                                        0078600
    (ATTACHLAB G)                                                               0078700
    C (RETURN NIL) D (SET VCLASS (QUOTE DATUM)) (SET VADDR MODE)))              0078800
  (FUNCTION (BRANCHER SYMBOL)                                                   0078900
   ((BLIST SYMBOL))                                                             0079000
   (BLOCK ((I SYMBOL)                                                           0079100
     (B SYMBOL)                                                                 0079200
     (Z1 SYMBOL) (Z2 SYMBOL) (X SYMBOL) (Z SYMBOL) (DGO SYMBOL))                0079300
    A (IF (NULL BLIST) (GO R))                                                  0079400
    (SET I (SET B (CAR BLIST)))                                                 0079500
    (SET BLIST (CDR BLIST))                                                     0079600
    B (IF (EQN (CAR B) (QUOTE TGO))                                             0079700
     (GO TG)                                                                    0079800
     (EQN (CAR B) (QUOTE FGO))                                                  0079900
     (GO FG) (MEMBER (CADDR B) (QUOTE (TGO FGO))) (SET B (CDDR B)))             0080000
    (GO B)                                                                      0080100
    TG (SET Z1 TGO)                                                             0080200
    (SET Z2 FGO)                                                                0080300
    (GO C)                                                                      0080400
    FG (SET Z1 FGO)                                                             0080500
    (SET Z2 TGO)                                                                0080600
    C (SET Z (IF Z1 Z1 BLIST (IF (NULL DGO) (SET DGO (GENID)) DGO)              0080700
      (CDDR B) (BLOCK NIL (SET B (CDR B)) (RETURN Z2)) NIL))                    0080800
    (IF (NOT Z) (GO A))                                                         0080900
    (SET X (CONS (CAADR B) (LABELER Z) (CDADR B)))                              0081000
    (ATTACH X)                                                                  0081100
    M (IF (AND BLIST (NOT Z1)) (GO A))                                          0081200
    (SET Z (IF (EQN (CAR X) (QUOTE BUC)) (QUOTE GO) (QUOTE ADDR)))              0081300
    (SET GOLIST (CONS (CONS Z LISTING) GOLIST))                                 0081400
    (GO A) R (IF DGO (ATTACH DGO))))                                            0081500
  (FUNCTION (COMREL SYMBOL)                                                     0081600
   ((J SYMBOL))                                                                 0081700
   (BLOCK NIL (IF (OR SCLASS (NOT PCLASS)) (RETURN (MAKEPRED)))                 0081800
    (COMVAL (CONS (QUOTE DIFFERENCE) (CDR EXP))                                 0081900
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      (QUOTE NUMBER) NIL (QUOTE AC))                                          0082000
     (BRANCHER J) (SET VCLASS (QUOTE PREDICATE))))                            0082100
   (FUNCTION (NCTF SYMBOL)                                                    0082200
    NIL (BLOCK ((J SYMBOL))                                                   0082300
     (IF (OR SCLASS (NOT PCLASS)) (RETURN (MAKEPRED)))                        0082400
     (SET J TGO) (SET TGO FGO) (SET FGO J) (COMEXP (CADR EXP))))              0082500
   (FUNCTION (CALERR NOVALUE)                                                 0082600
    NIL (BLOCK NIL (ATTACH (QUOTE (ARGS)))                                    0082700
     (CALCOMP (QUOTE CONDERR))))                                              0082800
   (INSTRUCTIONS ((AND . LISP) NOVALUE) NIL (COMBOOL (QUOTE TRUE)))           0082900
   (INSTRUCTIONS ((OR . LISP) NOVALUE) NIL (COMBOOL NIL))                     0083000
   (INSTRUCTIONS ((NULL . LISP) NOVALUE) NIL (NOTF))                          0083100
   (INSTRUCTIONS ((NOT . LISP) NOVALUE) NIL (NOTF))                           0083200
   (INSTRUCTIONS ((QUOTE . LISP) NOVALUE)                                     0083300
    NIL (BLOCK NIL (IF (COMLCK 2) (RETURN NIL))                               0083400
     (SET VCLASS (QUOTE DATUM))                                               0083500
     (SET VTYPE (FVTYPE (SET VADDR (CADR EXP)))))))                           0083600
(BRANCH (INSTRUCTIONS ((GO . LISP) NOVALUE)                                   0083700
    NIL (BLOCK ((A SYMBOL))                                                   0083800
     (IF (OR (NOT SCLASS) (COMLCK 2))                                         0083900
      (RETURN (COMER2 EXP (QUOTE (ILLEGAL GO))))                             0084000
      (NOT (ATOM (CADR EXP))) (GO SW))                                        0084100
     (SET A (CADR EXP))                                                       0084200
     (GO C)                                                                   0084300
     SW (SET A (CAADR EXP))                                                   0084400
     (COMVAL (CADADR EXP) (QUOTE INTEGER) NIL (QUOTE AC))                     0084500
     C (ATTACHGO A)))                                                         0084600
   (INSTRUCTIONS ((RETURN . LISP) NOVALUE)                                    0084700
    NIL (IF (OR (NOT SCLASS) (COMLCK 2))                                      0084800
     (COMER2 EXP (QUOTE (ILLEGAL RETURN)))                                    0084900
     (AND (LASTBRANCH) TERMINS)                                               0085000
     NIL (BLOCK ((SCLASS SYMBOL))                                             0085100
      (IF PCLASS (RETURN (COMPACT (CADR EXP) TGO FGO)))                       0085200
      (COMTERM (CADR EXP))                                                    0085300
      (IF (NOT (LASTBRANCH)) (ATTACHGO TERGO)))))                             0085400
   (INSTRUCTIONS ((LABEL . LISP) NOVALUE)                                     0085500
    NIL (BLOCK NIL (IF (COMLCK 3)                                             0085600
      (RETURN NIL)                                                            0085700
      (AND (IDP (CADR EXP)) (OR SCLASS PCLASS))                               0085800
      (ATTACHLAB (CADR EXP)) (COMER2 (CADR EXP) (QUOTE (BAD LABEL))))        0085900
     (COMEXP (CADDR EXP))))                                                   0086000
   (FUNCTION (COMSWITCH SYMBOL)                                               0086100
    ((L SYMBOL) (V SYMBOL))                                                   0086200
    (BLOCK NIL (REMOTE V)                                                     0086300
     (REMOTE (LIST (QUOTE BUC) (LIST (QUOTE LABEL) V) (QUOTE A)))             0086400
     A (IF (NULL L) (GO B))                                                   0086500
     (REMOTE (LIST (QUOTE BUC) (LABELER (CAR L))))                            0086600
     (SET GOLIST (CONS (CONS (QUOTE GO) REMOTES) GOLIST))                     0086700
     (SET L (CDR L)) (GO A) B (SET LABELS (CONS V LABELS))))                  0086800
   (FUNCTION (COMGOES SYMBOL)                                                 0086900
    ((P SYMBOL))                                                              0087000
    (BLOCK ((L SYMBOL)                                                        0087100
      (M SYMBOL) (X SYMBOL) (Y SYMBOL) (G1 SYMBOL) (G2 SYMBOL))               0087200
     A (IF (NULL GOLIST)                                                      0087300
      (GO B)                                                                  0087400
      (NOT (MEMBER (CADAR (GOGET (CAR GOLIST))) LABELS))                      0087500
      (SET L (CONS (CAR GOLIST) L)))                                          0087600
     (SET GOLIST (CDR GOLIST))                                                0087700
     (GO A)                                                                   0087800
     B (IF (AND L (NOT (ATOM P)))                                             0087900
      (GO E) (OR (NULL P) (NOT (ATOM P))) (ATTACH (QUOTE (END))))             0088000
     (RETURN L)                                                               0088100
     E (SET X (LASTBRANCH))                                                   0088200
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      (SET G1 (LABELER (GENID)))                                              0088300
      (IF X (GO G))                                                           0088400
      (SET G2 (LABELER (GENID)))                                              0088500
      (ATTACH (LIST (QUOTE BSX) G1 4 G2))                                     0088600
      G (ATTACH (CADR G1))                                                    0088700
      (ATTACH (QUOTE (END)))                                                  0088800
      (ATTACH (QUOTE (BUC 0 4)))                                              0088900
      (IF (NOT X) (ATTACH (CADR G2)))                                         0089000
      C (IF (NULL L) (RETURN GOLIST))                                         0089100
      (SET X (GOGET (CAR L)))                                                 0089200
      (SET Y (LIST (QUOTE BSX) G1 4 (CAR X)))                                 0089300
      (IF (EQN (CAAR L) (QUOTE GO))                                           0089400
       (GO H) (SET G2 (GOMEMBER Y GOLIST)) (GO P))                            0089500
      (SET G2 (LABELER (GENID)))                                              0089600
      (REMOTE (CADR G2))                                                      0089700
      (REMOTE Y)                                                              0089800
      (SET GOLIST (CONS (CONS (QUOTE DECR) REMOTES) GOLIST))                  0089900
      P (SET (CAR X) G2)                                                      0090000
      (GO Q)                                                                  0090100
      H (SET (CAR (CDAR L)) Y)                                                0090200
      (SET GOLIST (CONS (CONS (QUOTE DECR) (CDAR L)) GOLIST))                 0090300
      Q (SET L (CDR L)) (GO C)))                                              0090400
    (FUNCTION (LASTBRANCH SYMBOL)                                             0090500
     NIL (AND (NOT (ATOM (CAR LISTING)))                                      0090600
      (MEMBER (CAAR LISTING) (QUOTE (BUC BSX BAX)))))                         0090700
    (FUNCTION (GOGET SYMBOL)                                                  0090800
     ((L SYMBOL))                                                             0090900
     (BLOCK ((X SYMBOL) (Y SYMBOL))                                           0091000
      (SET X (CAR L))                                                         0091100
      (SET Y (CDADR L))                                                       0091200
      (RETURN (IF (EQN X (QUOTE GO))                                          0091300
        Y (EQN X (QUOTE ADDR)) Y (EQN X (QUOTE DECR)) (CDDR Y) NIL))))        0091400
    (FUNCTION (GOMEMBER SYMBOL)                                               0091500
     ((X SYMBOL) (L SYMBOL))                                                  0091600
     (BLOCK ((P SYMBOL))                                                      0091700
      A (IF (NULL L) (RETURN NIL))                                            0091800
      (SET P (CDAR L))                                                        0091900
      (IF (NOT (EQ (CAR P) X)) (GO B) (ATOM (CADR P)) (GO R))                 0092000
      (SET (CDR P) (CONS (GENID) (CDR P)))                                    0092100
      R (RETURN (LABELER (CADR P))) B (SET L (CDR L)) (GO A))))               0092200
  (COMPARE (INSTRUCTIONS ((EQN . LISP) NOVALUE)                               0092300
    NIL (IF (COMLOK 3)                                                        0092400
     NIL (OR SCLASS (NOT PCLASS))                                             0092500
     (MAKEPRED)                                                               0092600
     (BLOCK ((A SYMBOL) (B SYMBOL))                                           0092700
      (SET A (COMTOP (QUOTE SYMBOL) (CADR EXP)))                              0092800
      (SET B (COMTOP (QUOTE SYMBOL) (CADDR EXP)))                             0092900
      (IF (AND (EQN (GVCLAS A) (QUOTE DATUM)) (IDP (GVADDR A)))               0093000
       (EQBXE A B)                                                            0093100
       (AND (EQN (GVCLAS B) (QUOTE DATUM)) (IDP (GVADDR B)))                  0093200
       (EQBXE B A) (EQXCR (LIST A B NIL))))))                                 0093300
    (INSTRUCTIONS ((EQ . LISP) NOVALUE) NIL (EQHLP (QUOTE EQUAL.)))           0093400
    (INSTRUCTIONS ((EQUALN . LISP) NOVALUE)                                   0093500
     NIL (EQHLP (QUOTE EQUALN.)))                                             0093600
    (INSTRUCTIONS ((NQ . LISP) NOVALUE)                                       0093700
     NIL (COMEXP (LIST (QUOTE NOT) (CONS (QUOTE EQUAL) (CDR EXP)))))          0093800
    (INSTRUCTIONS ((LS . LISP) NOVALUE)                                       0093900
     NIL (COMREL (QUOTE ((FGC (BOZ)) (FGC (BOP) (BOM))))))                    0094000
    (INSTRUCTIONS ((GR . LISP) NOVALUE)                                       0094100
     NIL (COMREL (QUOTE ((FGC (BOZ)) (FGC (BOM) (BOP))))))                    0094200
    (INSTRUCTIONS ((LQ . LISP) NOVALUE)                                       0094300
     NIL (COMREL (QUOTE ((TGC (BOZ)) (FGC (BOP) (BOM))))))                    0094400
    (INSTRUCTIONS ((GQ . LISP) NOVALUE)                                       0094500
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 NIL (COMREL (QUOTE ((TGO (BOZ)) (FGO (BOM) (BOP))))))                    0094600
(MACRO ((EQUAL . LISP) SYMBOL)                                            0094700
 ((X SYMBOL)) (CONS (QUOTE EQ) (CDR X)))                                  0094800
(FUNCTION (COMGLITCH SYMBOL)                                              0094900
 ((L SYMBOL))                                                             0095000
 (BLOCK ((VCLASS SYMBOL)                                                  0095100
   (VTYPE SYMBOL)                                                         0095200
   (VREG SYMBOL)                                                          0095300
   (VADDR SYMBOL)                                                         0095400
   (LISTING SYMBOL)                                                       0095500
   (VBYTE SYMBOL) (VBLOT SYMBOL) (VIND SYMBOL) (VINV SYMBOL))             0095600
  (RESTORE L)                                                             0095700
  (IF (AND (EQN VCLASS (QUOTE DATUM)) (NOT (NUMBP VADDR)))                0095800
   (MOVACTIVE VTYPE (QUOTE AC) NIL))                                      0095900
  (SET VTYPE (QUOTE OCTAL)) (RETURN (CLUNK))))                            0096000
(FUNCTION (EQXOR SYMBOL)                                                  0096100
 ((L SYMBOL))                                                             0096200
 (BLOCK ((INSTRUCTION SYMBOL))                                            0096300
  (SET INSTRUCTION (QUOTE XOR))                                           0096400
  (INHERIT (CAR (SET L (WRDHLP (LIST (COMGLITCH (CAR L))                  0096500
       (COMGLITCH (CADR L)) NIL)))))                                      0096600
  (LSTLST (CADR L))                                                       0096700
  (MOVACTIVE (QUOTE OCTAL) (QUOTE AC) NIL)                                0096800
  (BRANCHER (QUOTE ((FGO (BNZP) (BOZP)))))                                0096900
  (SET VCLASS (QUOTE PREDICATE))))                                        0097000
(FUNCTION (EQBXE SYMBOL)                                                  0097100
 ((A SYMBOL) (B SYMBOL))                                                  0097200
 (BLOCK NIL (RESTORE A)                                                   0097300
  (RESTORE B)                                                             0097400
  (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                               0097500
  (BRANCHER (SUBST (GVADDR A)                                             0097600
   (QUOTE Z) (QUOTE ((TGO (BXE AC (ID Z))) (FGO (BUC))))))                0097700
  (SET VCLASS (QUOTE PREDICATE))))                                        0097800
(FUNCTION (EQNIL SYMBOL)                                                  0097900
 ((L SYMBOL))                                                             0098000
 (BLOCK NIL (LSTLST (LAST (CAR L)))                                       0098100
  (LSTLST (LAST (CADR L)))                                                0098200
  (INHERIT (QUOTE (DATUM BOOLEAN NIL NIL NIL NIL NIL NIL)))))             0098300
(FUNCTION (EQSUB SYMBOL)                                                  0098400
 ((L SYMBOL))                                                             0098500
 (BLOCK ((X SYMBOL))                                                      0098600
  (SET X (CDDDDR (CDDDR (IF (FULLW (GVBYTE (CAR L)))                      0098700
      (CAR L)                                                             0098800
      (FULLW (GVBYTE (CADR L)))                                           0098900
      (CADR L)                                                            0099000
      (CAR (SET L (CONS (BLOCK ((VCLASS SYMBOL)                           0099100
           (VTYPE SYMBOL)                                                 0099200
           (VREG SYMBOL)                                                  0099300
           (VADDR SYMBOL)                                                 0099400
           (VBYTE SYMBOL)                                                 0099500
           (VBLOT SYMBOL)                                                 0099600
           (VIND SYMBOL) (VINV SYMBOL) (LISTING SYMBOL))                  0099700
          (RESTORE (CAR L))                                               0099800
          (MOVACTIVE VTYPE (QUOTE AC) NIL) (RETURN (CLUNK)))              0099900
         (CDR L))))))))                                                   0100000
  (SET (CAR X)                                                            0100100
   (IF (MEMBER (QUOTE MINUS) (CAR X))                                     0100200
    (DELETEL (QUOTE MINUS) (CAR X)) (CONS (QUOTE MINUS) (CAR X))))       0100300
  (COMARI 0 L (SPLUS . SYS)                                               0100400
   PLIALG PLSMOV PLIMVP PLSPDL PLRALG PLSMOV PLRMVP PLSPDL)               0100500
  (IF VCLASS (BLOCK NIL (MOVACTIVE VTYPE (QUOTE AC) NIL)                  0100600
   (BRANCHER (QUOTE ((FGO (BNZ) (BOZ)))))                                0100700
   (SET VCLASS (QUOTE PREDICATE)) GO1574)                                 0100800
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      (INHERIT (QUOTE (DATUM BOOLEAN NIL TRUE NIL NIL NIL NIL))))))      0100900
    (FUNCTION (EQHLP SYMBOL)                                             0101000
     ((FCN SYMBOL))                                                      0101100
     (BLOCK ((TA SYMBOL) (TB SYMBOL) (A SYMBOL) (B SYMBOL) (X SYMBOL))   0101200
      (IF (CCMLCK 3)                                                     0101300
       (RETURN NIL) (OR SCLASS (NOT PCLASS)) (RETURN (MAKEPRED)))        0101400
      (SET X (COMARGS))                                                  0101500
      (SET TA (GVTYPE (SET A (CAR X))))                                  0101600
      (SET TB (GVTYPE (SET B (CADR X))))                                 0101700
      (IF (OR (AND (EQN TA TB)                                           0101800
         (MEMBER TA (QUOTE (OCTAL FUNCTIONAL BOOLEAN))))                 0101900
        (AND (EQN TA (QUOTE BOOLEAN)) (EQN TB (QUOTE SYMBOL)))           0102000
        (AND (EQN TA (QUOTE SYMBOL)) (EQN TB (QUOTE BOOLEAN))))         0102100
       (RETURN (EQXOR X))                                                0102200
       (AND (MEMBER TA (QUOTE (OCTAL INTEGER REAL)))                     0102300
        (MEMBER TB (QUOTE (OCTAL INTEGER REAL))))                        0102400
       (RETURN (IF (AND (NOT (EQN TA TB)) (EQN FCN (QUOTE EQUALN.)))     0102500
         (EQNIL X) (EQSUB X)))                                           0102600
       (NOT (OR (EQN (QUOTE SYMBOL) TA) (EQN (QUOTE SYMBOL) TB)))        0102700
       (RETURN (EQNIL X))                                                0102800
       (AND (EQN TB (QUOTE SYMBOL))                                      0102900
        (OR (NOT (EQN TA (QUOTE SYMBOL)))                                0103000
         (NOT (EQN (GVCLAS A) (QUOTE DATUM))) (NOT (IDP (GVADDR A)))))) 0103100
       (BLOCK NIL (SET A B)                                              0103200
        (SET TA TB) (SET TB (GVTYPE (SET B (CAR X)))) G01575))           0103300
      (IF (AND (IDP (GVADDR A)) (EQN (GVCLASS A) (QUOTE DATUM)))         0103400
       (RETURN (EQBXE A B)))                                             0103500
      (ATTACH (QUOTE (ARGS)))                                            0103600
      (RESTORE A)                                                        0103700
      (MOVPDS (QUOTE SYMBOL) NIL)                                        0103800
      (RESTORE B)                                                        0103900
      (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                          0104000
      (CALCOMP FCN) (SET VTYPE (QUOTE BOOLEAN)))))                       0104100
  (BLOCK (INSTRUCTIONS ((CODE . LISP) NOVALUE)                           0104200
     NIL (BLOCK NIL (BLOTTO)                                             0104300
      (INHERIT (QUOTE (ACTIVE OCTAL AC NIL NIL NIL NIL NIL)))            0104400
      (LSTLST (REVERSE (CDR EXP)))))                                     0104500
    (INSTRUCTIONS ((BLOCK . LISP) NOVALUE)                               0104600
     NIL (BLOCK ((P SYMBOL) (X SYMBOL))                                  0104700
      (IF (AND SCLASS (NOT (ANYVARS (CADR EXP))))                        0104800
       (RETURN (BLOCK NIL (MAPCAR (CADR EXP)                             0104900
          (FUNARG SYMBOL ((J SYMBOL)) (COMSWITCH (CDDR J) (CAR J))))     0105000
         (RETURN (COMBLOCK (CDDR EXP))))))                               0105100
       (SET X ALIST)                                                     0105200
       (BLOCK ((ALIST SYMBOL) (LABELS SYMBOL) (GOLIST SYMBOL))           0105300
        (SET ALIST X)                                                    0105400
        (SET P (IF (NULL (CADR EXP)) (QUOTE TRUE) (BKBIND)))             0105500
        (IF SCLASS (CCMBLOCK (CDDR EXP))                                 0105600
         PCLASS (BLOCK ((X SYMBOL))                                      0105700
          (IF (NULL TGC) (SET X (SET TGC (GENID))))                      0105800
          (IF (NULL FGC) (SET X (SET FGC (IF X X (GENID)))))             0105900
          (CCMBLOCK (CDDR EXP))                                          0106000
          (SET VCLASS (QUOTE PREDICATE))                                 0106100
          (IF (NULL X) (GO G01578))                                      0106200
          (ATTACHLAB X) (SET TGO NIL) G01578)                            0106300
         TERGC (CCMBLOCK (CDDR EXP))                                     0106400
        (BLOCK ((TERMINS SYMBOL) (TERGC SYMBOL))                         0106500
         (SET TERGC (GENID))                                             0106600
         (COMBLOCK (CDDR EXP)) (ATTACHLAB TERGO) (COMTERMINS) G01579))   0106700
       (SET X (CCMGOES P)) G01577)                                       0106800
      (IF (OR SCLASS PCLASS TERGO)                                       0106900
       (SET GOLIST (NCONC X GOLIST))                                     0107000
       X (COMER2 (QUOTE (UNDEFINED LABELS))                              0107100
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      (MAPCAR X (FUNARG SYMBOL ((J SYMBOL)) (CADAR (GOGET J))))))))      0107200
   (FUNCTION (COMBLOCK SYMBOL)                                           0107300
    ((L SYMBOL))                                                         0107400
    (BLOCK ((X SYMBOL) (XGO SYMBOL))                                     0107500
     A (IF (NULL L)                                                      0107600
      (GO B)                                                             0107700
      (NOT (ATOM (SET X (CAR L))))                                       0107800
      (BLOCK ((XGO SYMBOL (IF (SIM (QUOTE (S. (GO ID.) . S.)) L)         0107900
          (CADADR L) NIL))) (COMSTAT X))                                 0108000
      (IDP X)                                                            0108100
      (ATTACHLAB X) (NULL X) NIL (COMER2 X (QUOTE (NOT A LABEL))))       0108200
     (SET L (CDR L))                                                     0108300
     (GO A)                                                              0108400
     B (IF (AND (NOT SCLASS) (NOT (LASTBRANCH)))                         0108500
      (COMSTAT (LIST (QUOTE RETURN) (ITYPE XTYPE))))))                   0108600
   (MACRO ((ORDER . LISP) SYMBOL)                                        0108700
    ((EXP SYMBOL))                                                       0108800
    (IF (COMLCK 2)                                                       0108900
     NIL (ATOM (CADR EXP))                                               0109000
     (CADR EXP)                                                          0109100
     (BLOCK ((X SYMBOL) (Y SYMBOL))                                      0109200
      (SET X (MAPCAR (CDADR EXP)                                         0109300
        (FUNARG SYMBOL ((J SYMBOL))                                      0109400
         (LIST (GENID) (QUOTE ASSIGNED) J))))                            0109500
      (SET Y (CONS (CAADR EXP)                                           0109600
        (MAPCAR X (FUNARG SYMBOL ((J SYMBOL)) (CAR J)))))                0109700
      (RETURN (LIST (QUOTE BLOCK)                                        0109800
        (IF SCLASS Y (LIST (QUOTE RETURN) Y))))))))                      0109900
(CASE (MACRO ((CASE . LISP) SYMBOL)                                      0110000
   ((X SYMBOL))                                                          0110100
   (IF (LS (LENGTH X) 3)                                                 0110200
    (BLOCK NIL (COMERR (QUOTE (BAD CASE))) (RETURN (ITYPE XTYPE)))       0110300
    (BLOCK (LABELS)                                                      0110400
     (RETURN (BLOCK ((M (MAPCAR (CDDR X)                                 0110500
          (FUNARG SYMBOL ((J SYMBOL))                                    0110600
           (IF (SIM (QUOTE (GO ID.)) J)                                  0110700
            (BLOCK NIL (SET LABELS (CONS (CADR J) LABELS)))              0110800
            (BLOCK NIL (SET LABELS (CONS (GENID) LABELS))                0110900
             (RETURN (LIST (QUOTE BLOCK)                                 0111000
               NIL (CAR LABELS)                                          0111100
               (IF SCLASS J (LIST (QUOTE RETURN) J))))))))))             0111200
       (RETURN (APPEND (QUOTE (BLOCK NIL))                               0111300
         (CONS (CONS (QUOTE CASEGO)                                      0111400
           (CADR X)) (REVERSE LABELS)) M))))))))                         0111500
  (INSTRUCTIONS ((CASEGO . LISP) NOVALUE)                                0111600
   NIL (BLOCK ((L (LIST (LIST (QUOTE LABEL) (GENID)) -1)))               0111700
    (COMVAL (CADR EXP) (QUOTE INTEGER) NIL (QUOTE AC))                   0111800
    (LSTLST (SUBST L (QUOTE L)                                           0111900
      (SUBST (LENGTH (CDDR EXP))                                         0112000
       (QUOTE N)                                                         0112100
       (QUOTE ((BUC L A)                                                 0112200
         (BOP L) (SUB N (L567.7 R S)) (BOZ L) (BOM L))))))               0112300
    (MAP (CDDR EXP)                                                      0112400
     (FUNARG SYMBOL ((J SYMBOL))                                         0112500
      (BLOCK NIL (ATTACH (LIST (QUOTE BUC) (LABELER (CAR J))))           0112600
       (IF (NOT (MEMBER (CAR J) LABELS))                                 0112700
        (SET GOLIST (CONS (CONS (QUOTE GO) LISTING) GOLIST))))))         0112800
    (ATTACH (CADAR L)))))                                                0112900
(ZAPZAP (MACRO ((LIST . LISP) SYMBOL)                                    0113000
   ((EXP SYMBOL))                                                        0113100
   (IF (GR (LENGTH EXP) 2)                                               0113200
    (LISTX (CDR EXP))                                                    0113300
    (CDR EXP) (CONS (QUOTE (LIST1 . SYS)) (CDR EXP)) NIL))               0113400
```

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(MACRO ((CONS . LISP) SYMBOL)                                                    C113500
 ((EXP SYMBOL))                                                                  C113600
 (IF (LS (LENGTH EXP) 3)                                                         C113700
  (BLOCK NIL (COMLCK 3)) (LISTX (CDR EXP))))                                     C113800
(INSTRUCTIONS ((SHIFT . LISP) NOVALUE) NIL (SHIFTER (QUOTE CYC)))                C113900
(INSTRUCTIONS ((SCALE . LISP) NOVALUE) NIL (SHIFTER (QUOTE SFA)))                C114000
(INSTRUCTIONS ((CYCLE . LISP) NOVALUE) NIL (SHIFTER (QUOTE CYA)))                C114100
(FUNCTION (LISTX SYMBOL)                                                         C114200
 ((X SYMBOL))                                                                    C114300
 (BLOCK ((L SYMBOL))                                                             C114400
  (SET L (LENGTH X))                                                             C114500
  (RETURN (IF (GR L 4)                                                           C114600
    (LIST (QUOTE (CONS4 . SYS))                                                  C114700
     (CAR X) (CADR X) (CADDR X) (LISTX (CDDDR X)))                               C114800
    (CONS (CDR (FIND L (CDR (FIND (CAR EXP)                                      C114900
          (QUOTE ((LIST (2 LIST2 . SYS)                                          C115000
                   (3 LIST3 . SYS) (4 LIST4 . SYS))                              C115100
                  (CONS (2 CONS2 . SYS)                                          C115200
                   (3 CONS3 . SYS) (4 CONS4 . SYS)))))))) X)))))                 C115300
(FUNCTION (SHIFTER SYMBOL)                                                       C115400
 ((C SYMBOL))                                                                    C115500
 (IF (COMLCK 3)                                                                  C115600
  NIL (BLOCK ((X SYMBOL))                                                        C115700
   (COMEXP1 (CADDR EXP))                                                         C115800
   (SET VINV (IF (MEMBER (QUOTE MINUS) VINV) NIL (QUOTE (MINUS))))              C115900
   (IF (EQN VCLASS (QUOTE DATUM))                                                C116000
    (BLOCK NIL (VSET (COMDAT (CLUNK)))                                           C116100
     (SET X (CNVDATM VTYPE VADDR (QUOTE INTEGER))) G01583)                       C116200
    (MOVPDS (QUOTE INTEGER) NIL))                                                C116300
   (COMTYP (QUOTE OCTAL) (CADR EXP))                                             C116400
   (MOVACTIVE (QUOTE OCTAL) (QUOTE AC) NIL)                                      C116500
   (IF (EQN C (QUOTE CYC)) (ATTACH (QUOTE (STZ B.))))                            C116600
   (ATTACH (CONS C (IF X (LIST X (QUOTE R)) (QUOTE (POP.)))))))))))              C116700
(FUNARG (MACRO ((FUNCTION . LISP) SYMBOL) ((X SYMBOL)) (COMPILER X))             C116800
 (INSTRUCTIONS ((FUNARG . LISP) NOVALUE)                                         C116900
  NIL (IF (NOT (AND (SIM (QUOTE (V. A. (OR. L. NIL) S.)) EXP)                    C117000
     (OR (VTYPEP (CADR EXP)) (NOT (CADR EXP)))))                                C117100
   (COMER2 EXP (QUOTE (NOT LEGAL FUNARG)))                                       C117200
   (OR SCLASS PCLASS)                                                            C117300
   (BLOCK NIL (SET VCLASS (QUOTE DATUM))                                         C117400
    (SET VTYPE (QUOTE BOOLEAN)) (SET VADDR (QUOTE TRUE)))                        C117500
   (BLOCK ((APLIST SYMBOL (APPEND ALIST APLIST))                                 C117600
    (FEXP SYMBOL (LIST (QUOTE FUNCTION)                                          C117700
     (LIST (GENID) (IF (CADR EXP) (CADR EXP) STYPE))                             C117800
     (CADDR EXP) (CADDDR EXP))))                                                 C117900
    (RETURN (BLOCK ((IR SYMBOL) (C SYMBOL))                                      C118000
     (BLOCK ((IRLIST SYMBOL))                                                    C118100
      (SET C (FUNCTIO FEXP)) (SET IR IRLIST) G01584)                             C118200
     (IF ERRFLG (RETURN NIL)                                                     C118300
      (NCT IR) (RETURN (COMEXP (COMPILER FEXP))))                                C118400
     (BLOCK ((IRLIST SYMBOL))                                                    C118500
      (ATTACH (LIST (QUOTE LDA)                                                  C118600
       (FUNCTIO (BLOCK NIL (SET (CAR (CDDDR FEXP))                               C118700
        (LIST (QUOTE BLOCK)                                                      C118800
         NIL (QUOTE (CODE (LDX (FMCALL . SYS) L 7)))                             C118900
         (LIST (QUOTE BLOCK)                                                     C119000
          (MAPCAR IR (FUNCTION (G01586 SYMBOL)                                   C119100
           ((J SYMBOL))                                                          C119200
           (LIST (CAR J) (CADR J) (QUOTE LOC) (CAR J))))                         C119300
          (LIST (QUOTE RETURN) (CADDDR FEXP)))))                                 C119400
        (RETURN FEXP))) (QUOTE (2Q1 R L4567.7)))) G01585)                        C119500
     (ATTACH (QUOTE (STX A. L 8)))                                               C119600
     (INHERIT (QUOTE (ACTIVE FUNCTIONAL AC NIL NIL NIL (AC) NIL)))               C119700
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        L (IF (NULL IR)                                                          0119800
          (RETURN NIL)                                                           0119900
          (NCT (CR (MEMBER (SET C (CAR IR)) ALIST) (MEMBER C IRLIST)))           0120000
          (SET IRLIST (CONS C IRLIST))) (SET IR (CDR IR)) (GO L)))))))           0120100
(TRY (MACRO ((TRY . LISP) SYMBOL)                                                0120200
   ((EXP SYMBOL))                                                                0120300
   (IF (COMLCK 4)                                                                0120400
    NIL (BLOCK ((G1 SYMBOL) (G2 SYMBOL))                                         0120500
     (RETURN (APPEND (SUBST (SET G1 (GENID))                                     0120600
        (QUOTE X)                                                                0120700
        (QUOTE (BLOCK (((TRYPT . SYS)                                            0120800
            OCTAL FLUID (CODE (LDA ((LABEL X) (MINUS ORG.))                      0120900
              (L567.7 R)))))))                                                   0121000
       (LIST (CADDR EXP)                                                         0121100
        (LIST (QUOTE GO) (SET G2 (GENID)))                                       0121200
        G1 (CONS (QUOTE SET)                                                     0121300
         (LIST (CADR EXP) (QUOTE (C2S. (CODE)))))                                0121400
        (LIST (QUOTE GO) (CADDR EXP)) G2)))))))                                  0121500
(RELATE (MACRO ((RELATION . LISP) SYMBOL)                                        0121600
   ((EXP SYMBOL))                                                                0121700
   (BLOCK ((L SYMBOL (LENGTH EXP)))                                              0121800
    (RETURN (IF (OR (LS L 4) (NOT (EQ (REMAINDER L 2) 0)))                       0121900
      (COMLCK 0) (LIST (QUOTE AND) (REL. (CADR EXP) (CDDR EXP))))))))            0122000
  (FUNCTION (REL. SYMBOL)                                                        0122100
   ((A SYMBOL) (R SYMBOL))                                                       0122200
   (IF (NULL R)                                                                  0122300
    (QUOTE TRUE)                                                                 0122400
    (AND (CKREL. (CADR R)) (OR (NULL (CDDR R)) (OKREL. (CADDR R))))             0122500
    (RELCON A (CADR R) R)                                                        0122600
    (BLOCK ((G SYMBOL (GENID)))                                                  0122700
     (RETURN (LIST (QUOTE BLOCK)                                                 0122800
       (LIST (LIST G (QUOTE ASSIGNED) (CADR R)))                                 0122900
       (LIST (QUOTE RETURN) (RELCON A G R))))))))                                0123000
  (FUNCTION (RELCON SYMBOL)                                                      0123100
   ((A SYMBOL) (B SYMBOL) (C SYMBOL))                                            0123200
   (LIST (QUOTE AND) (LIST (CAR C) A B) (REL. B (CDDR C))))                      0123300
  (FUNCTION (OKREL. SYMBOL)                                                      0123400
   ((X SYMBOL)) (SIM (QUOTE (OR. A. V. (QUOTE S.))) X)))                         0123500
****END OF FILE DETECTED
```

```
(SECTION (SECTION (COMPIL SUPV SYS LISP) SYMBOL))                              C000100
(VHELP (DECLARE (INTLST SYMBOL FLUID)                                          C000200
    (REALST SYMBOL FLUID)                                                      C000300
    (SYMLST SYMBOL FLUID) (LOCLST SYMBOL FLUID))                               C000400
   (FUNCTION (GVCLASS SYMBOL) ((X SYMBOL)) (GVCLAS X))                         C000500
   (FUNCTION (GVCLAS SYMBOL) ((X SYMBOL)) (CAR X))                             C000600
   (FUNCTION (GVTYPE SYMBOL) ((X SYMBOL)) (CADR X))                            C000700
   (FUNCTION (GVREG SYMBOL) ((X SYMBOL)) (CADDR X))                            C000800
   (FUNCTION (GVADDR SYMBOL) ((X SYMBOL)) (CADDDR X))                          C000900
   (FUNCTION (GVIND SYMBOL) ((X SYMBOL)) (CAR (CDDDDR X)))                     C001000
   (FUNCTION (GVBYTE SYMBOL) ((X SYMBOL)) (CADR (CDDDDR X)))                   C001100
   (FUNCTION (GVBLOT SYMBOL) ((X SYMBOL)) (CADDR (CDDDDR X)))                  C001200
   (FUNCTION (GVINV SYMBOL) ((X SYMBOL)) (CADDDR (CDDDDR X)))                  C001300
   (FUNCTION (VLIST SYMBOL)                                                    C001400
    NIL (LIST VCLASS VTYPE VREG VADDR VIND VBYTE VBLOT VINV))                  C001500
   (FUNCTION (VSET SYMBOL)                                                     C001600
    ((X SYMBOL))                                                               C001700
    (BLOCK NIL (SET VCLASS (GVCLAS X))                                         C001800
     (SET VTYPE (GVTYPE X))                                                    C001900
     (SET VREG (GVREG X))                                                      C002000
     (SET VADDR (GVADDR X))                                                    C002100
     (SET VIND (GVIND X))                                                      C002200
     (SET VBYTE (GVBYTE X))                                                    C002300
     (SET VBLOT (GVBLOT X)) (SET VINV (GVINV X))))                             C002400
   (FUNCTION (INHERIT SYMBOL)                                                  C002500
    ((B SYMBOL))                                                               C002600
    (BLOCK ((A SYMBOL))                                                        C002700
     (SET A (UNION VBLOT (GVBLOT B))) (VSET B) (SET VBLOT A)))                 C002800
   (FUNCTION (LSTLST SYMBOL)                                                   C002900
    ((LST SYMBOL)) (IF LST (SET LISTING (NCONC LST LISTING)) NIL))             C003000
   (FUNCTION (CLUNK SYMBOL) NIL (NCONC (VLIST) (LIST LISTING)))                C003100
   (FUNCTION (RESTORE SYMBOL)                                                  C003200
    ((X SYMBOL)) (BLOCK NIL (INHERIT X) (RETURN (LSTLST (LAST X))))))          C003300
(COMPILER (FUNCTION (COMTOP SYMBOL)                                            C003400
    ((X SYMBOL) (E SYMBOL))                                                    C003500
    (BLOCK ((VCLASS SYMBOL)                                                    C003600
      (VTYPE SYMBOL)                                                           C003700
      (VREG SYMBOL)                                                            C003800
      (VADDR SYMBOL)                                                           C003900
      (VIND SYMBOL)                                                            C004000
      (VBYTE SYMBOL) (VBLOT SYMBOL) (VINV SYMBOL) (LISTING SYMBOL))            C004100
     (COMTYP X E) (RETURN (CLUNK))))                                           C004200
   (FUNCTION (CALCOMP SYMBOL)                                                  C004300
    ((DV SYMBOL))                                                              C004400
    (BLOCK NIL (BLOTTO)                                                        C004500
     (ATTACH (LIST (QUOTE CALL)                                                C004600
      (CONS DV (QUOTE SYS)) (GETDEC DV (QUOTE SYS))))))                        C004700
   (FUNCTION (COMARGS SYMBOL)                                                  C004800
    NIL (BLOCK ((L SYMBOL) (M SYMBOL))                                         C004900
     (SET L EXP)                                                               C005000
     (SET M (LIST NIL))                                                        C005100
     TAG (IF (NULL (SET L (CDR L))) (RETURN M))                                C005200
     (BLOCK ((VCLASS SYMBOL)                                                   C005300
       (VTYPE SYMBOL)                                                          C005400
       (VREG SYMBOL)                                                           C005500
       (VADDR SYMBOL)                                                          C005600
       (VIND SYMBOL)                                                           C005700
       (VBYTE SYMBOL) (VBLOT SYMBOL) (VINV SYMBOL) (LISTING SYMBOL))           C005800
      (COMEXP1 (CAR L)) (SET M (CONS (CLUNK) M)) G01595) (GO TAG)))            C005900
   (FUNCTION (COMTYP SYMBOL)                                                   C006000
    ((XTYPE SYMBOL) (EXP SYMBOL))                                              C006100
    (BLOCK ((SCLASS SYMBOL) (PCLASS SYMBOL) (TERGO SYMBOL))                    C006200
     (COMEXP EXP)                                                              C006300
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    (IF (EQN VCLASS (QUOTE DATUM))                                          C006400
     (GO DAT)                                                               C006500
     (EQN XTYPE VTYPE)                                                      C006600
     (RETURN NIL)                                                           C006700
     (AND (EQN VTYPE (QUOTE OCTAL))                                         C006800
      (EQN XTYPE (QUOTE INTEGER)) (NOT VBYTE)) (GO OCTINT))                 C006900
    XYZ (MOVACTIVE XTYPE (QUOTE AC) NIL)                                    C007000
    (RETURN NIL)                                                            C007100
    OCTINT (SET VTYPE (QUOTE INTEGER))                                      C007200
    (RETURN NIL)                                                            C007300
    DAT (INHERIT (COMDAT (NCONC (VLIST) (QUOTE (NIL)))))                    C007400
    (SET VADDR (CNVDATM VTYPE VADDR XTYPE)) (SET VTYPE XTYPE)))             C007500
  (FUNCTION (COMDAT SYMBOL)                                                 C007600
   ((FORM SYMBOL))                                                          C007700
   (BLOCK ((VCLASS SYMBOL)                                                  C007800
     (VTYPE SYMBOL)                                                         C007900
     (VBYTE SYMBOL)                                                         C008000
     (VIND SYMBOL)                                                          C008100
     (VBLOT SYMBOL)                                                         C008200
     (VREG SYMBOL) (VINV SYMBOL) (VADDR SYMBOL) (LISTING SYMBOL))           C008300
    (RESTORE FORM)                                                          C008400
    (IF (MEMBER (QUOTE MINUS) VINV) (SET VADDR (MINUS VADDR)))              C008500
    (IF (MEMBER (QUOTE RECIP) VINV)                                         C008600
     (BLOCK NIL (SET VADDR (IQUOTIENT 1.0 VADDR))                           C008700
      (SET VTYPE (QUOTE REAL)) G01596))                                     C008800
    (SET VINV NIL) (RETURN (CLUNK))))                                       C008900
  (FUNCTION (COMEXP1 SYMBOL)                                                C009000
   ((EXP SYMBOL))                                                           C009100
   (BLOCK ((PCLASS SYMBOL)                                                  C009200
     (SCLASS SYMBOL) (TERGO SYMBOL) (XTYPE SYMBOL))                         C009300
    (RETURN (COMEXP EXP))))                                                 C009400
  (FUNCTION (COMLCK SYMBOL)                                                 C009500
   ((NUM SYMBOL))                                                           C009600
   (BLOCK NIL (IF (EQ (LENGTH EXP) NUM) (RETURN NIL))                       C009700
    (COMER2 (CAR EXP) (QUOTE (WRONG NUM OF ARGS)))                          C009800
    (INHERIT (QUOTE (DATUM INTEGER NIL 0 NIL NIL NIL NIL NIL)))             C009900
    (RETURN TRUE)))                                                         C010000
  (FUNCTION (VINDX SYMBOL)                                                  C010100
   NIL (AND (EQN VCLASS (QUOTE LOC))                                        C010200
    (NOT VIND)                                                              C010300
    (NOT VINV)                                                              C010400
    (OR (NULL VBYTE)                                                        C010500
     (EQN VBYTE (QUOTE RH))                                                 C010600
     (AND (NOT (ATOM VBYTE))                                                C010700
      (EQ (CAR VBYTE) 0) (GR (CADR VBYTE) 23)))))                           C010800
  (FUNCTION (COMCAR SYMBOL)                                                 C010900
   ((B SYMBOL))                                                             C011000
   (BLOCK NIL (IF (COMLCK 2) (RETURN NIL))                                  C011100
    (COMEXP1 (CADR EXP))                                                    C011200
    (IF (EQN VTYPE (QUOTE SYMBOL)) (GO A))                                  C011300
    (COMER2 (CADR EXP) (QUOTE (NOT SYMBOL)))                                C011400
    A (IF (VINDX) (GO LOC))                                                 C011500
    (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                               C011600
    (SET VCLASS (QUOTE LOC))                                                C011700
    (SET VADDR 0)                                                           C011800
    (SET VBYTE B) (RETURN NIL) LOC (SET VIND TRUE) (SET VBYTE B))))         C011900
  (TIMUM (FUNCTION (COMCPT SYMBOL)                                          C012000
   ((FRMLST SYMBOL)                                                         C012100
    (ALGFCN (FUNCTIONAL SYMBOL))                                            C012200
    (MOVE (FUNCTIONAL SYMBOL SYMBOL))                                       C012300
    (MOVEP (FUNCTIONAL SYMBOL SYMBOL)) (MOVPDL (FUNCTIONAL SYMBOL)))        C012400
   (BLOCK ((LISTING SYMBOL)                                                 C012500
     (VCLASS SYMBOL)                                                        C012600
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     (VTYPE SYMBOL)                                                          C012700
     (VREG SYMBOL)                                                           C012800
     (VADDR SYMBOL)                                                          C012900
     (VIND SYMBOL)                                                           C013000
     (VBYTE SYMBOL)                                                          C013100
     (VBLOT SYMBOL)                                                          C013200
     (VINV SYMBOL)                                                           C013300
     (FORM SYMBOL) (LOCLST SYMBOL) (ACTLST SYMBOL) (TEM SYMBOL))             C013400
    (SET ACTLST (LIST NIL))                                                  C013500
    (IF (NOT (SET FORM (CAR FRMLST))) (RETURN NIL))                          C013600
    A1 (IF (EQN (SET TEM (GVCLAS FORM)) (QUOTE ACTIVE))                      C013700
     (GO B1)                                                                 C013800
     (EQN TEM (QUOTE DATUM))                                                 C013900
     (GO C1) (AND (NOT (GVREG FORM)) (MOVEP FORM)) (GO C2))                  C014000
    (SET FORM (MOVE FORM))                                                   C014100
    B1 (SET ACTLST (CONS FORM ACTLST))                                       C014200
    A2 (IF (SET FORM (CAR (SET FRMLST (CDR FRMLST))))                        C014300
     (GO A1)                                                                 C014400
     (SET FORM (CAR ACTLST)) (GO D1) (CDR LOCLST) (GO E1))                   C014500
    RET (RETURN (LIST (VLIST) LISTING))                                      C014600
    C1 (SET FORM (COMDAT FORM))                                              C014700
    C2 (RESTORE FORM)                                                        C014800
    (SET (CAR (CDDDDR (CDDDDR FORM))) NIL)                                   C014900
    (SET LOCLST (CONS FORM LOCLST))                                          C015000
    (GO A2)                                                                  C015100
    E1 (INHERIT (QUOTE (NIL NIL NIL NIL NIL NIL NIL NIL)))                   C015200
    (ALGFCN)                                                                 C015300
    (GO RET)                                                                 C015400
    D1 (RESTORE FORM)                                                        C015500
    (IF LOCLST (ALGFCN))                                                     C015600
    (IF (NOT (SET FORM (CAR (SET ACTLST (CDR ACTLST))))) (GO RET))           C015700
    (SET LOCLST (LIST (MOVPDL))) (GO D1)))                                   C015800
  (FUNCTION (COMARI SYMBOL)                                                  C015900
   ((DATUM SYMBOL)                                                           C016000
    (LST SYMBOL)                                                             C016100
    (FCN (FUNCTIONAL SYMBOL SYMBOL SYMBOL))                                  C016200
    (IALGFCN SYMBOL)                                                         C016300
    (IMOVE SYMBOL)                                                           C016400
    (IMOVEP SYMBOL)                                                          C016500
    (IMOVPDL SYMBOL)                                                         C016600
    (RALGFCN SYMBOL)                                                         C016700
    (RMOVE SYMBOL) (RMOVEP SYMBOL) (RMOVPDL SYMBOL))                         C016800
   (BLOCK ((INTLST SYMBOL)                                                   C016900
     (REALST SYMBOL)                                                         C017000
     (SYMLST SYMBOL)                                                         C017100
     (DATA SYMBOL) (TEM SYMBOL) (TYPE SYMBOL) (FORM SYMBOL))                 C017200
    (IF (GR (SET TEM (LENGTH LST)) 2)                                        C017300
     (GO MANY) (NOT (EQUALN TEM 1)) (GO ARG1))                               C017400
    (COMERR (QUOTE (0 ARG TO ARITH)))                                        C017500
    NRET (RETURN (LIST NIL))                                                 C017600
    ARG1 (IF (EQN (GVCLAS (CAR LST)) (QUOTE DATUM))                          C017700
     (SET (CAR LST) (COMDAT (CAR LST))))                                     C017800
    (RESTORE (CAR LST))                                                      C017900
    (GO NRET)                                                                C018000
    MANY (SET DATA DATUM)                                                    C018100
    (SET INTLST (SET REALST (SET SYMLST (LIST NIL))))                        C018200
    PARC (SET TYPE (GVTYPE (SET FORM (CAR LST))))                            C018300
    (IF (EQN (GVCLAS FORM) (QUOTE DATUM))                                    C018400
     (BLOCK NIL (IF (NUMBP (GVADDR FORM)) (GO XYZ))                          C018500
      (COMER2 (GVADDR FORM) (QUOTE (IS NON NUM DATA IN ARITH)))              C018600
      (GO G01597)                                                            C018700
      XYZ (RESTORE (SET FORM (COMDAT FORM)))                                 C018800
      (SET DATA (FCN DATA (GVADDR FORM))) G01597)                            C018900
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      (EQN TYPE (QUOTE SYMBOL))                                              C019000
      (SET SYMLST (CONS FORM SYMLST))                                        C019100
      (OR (EQN TYPE (QUOTE REAL)) (MEMBER (QUOTE RECIP) VINV))               C019200
      (SET REALST (CONS FORM REALST))                                        C019300
      (MEMBER TYPE (QUOTE (INTEGER OCTAL)))                                  C019400
      (SET INTLST (CONS FORM INTLST))                                        C019500
      (COMER2 TYPE (QUOTE (TYPE ARG TC ARITH))))                             C019600
     (IF (CAR (SET LST (CDR LST)))                                           C019700
      (GO PARC)                                                              C019800
      (EQ DATA DATUM)                                                        C019900
      (GO NO)                                                                C020000
      (FIXP DATA)                                                            C020100
      (SET INTLST (CONS (LIST (QUOTE DATUM)                                  C020200
         (QUOTE INTEGER) NIL DATA NIL NIL VBLOT NIL NIL) INTLST))            C020300
      (SET REALST (CONS (LIST (QUOTE DATUM)                                  C020400
         (QUOTE REAL) NIL DATA NIL NIL VBLOT NIL NIL) REALST)))              C020500
    NO (SET INTLST (COMCPT INTLST IALGFCN IMOVE IMOVEP IMOVPDL))             C020600
     (IF (NOT (CAR REALST))                                                  C020700
      (IF INTLST (GO INTUP) (GO NOUP))                                       C020800
      INTLST (BLOCK ((VCLASS SYMBOL)                                         C020900
        (VTYPE SYMBOL)                                                       C021000
        (VADDR SYMBOL)                                                       C021100
        (VREG SYMBOL)                                                        C021200
        (VIND SYMBOL)                                                        C021300
        (VBYTE SYMBOL) (VBLOT SYMBOL) (VINV SYMBOL) (LISTING SYMBOL))        C021400
       (VSET (CAR INTLST))                                                   C021500
       (SET LISTING (CADR INTLST))                                           C021600
       (MOVACTIVE (QUOTE REAL) (QUOTE AC) NIL)                               C021700
       (SET REALST (CONS (CLUNK) REALST)) G01598))                           C021800
     (SET REALST (COMOPT REALST RALGFCN RMOVE RMOVEP RMOVPDL))               C021900
     REALUP (LSTLST (CADR REALST))                                           C022000
     (INHERIT (CAR REALST))                                                  C022100
     (RETURN SYMLST)                                                         C022200
     INTUP (SET REALST INTLST)                                               C022300
     (GO REALUP)                                                             C022400
     NOUP (INHERIT (QUOTE (NIL NIL NIL NIL NIL NIL NIL NIL)))                C022500
     (RETURN SYMLST))))                                                      C022600
 (COMHLP (INSTRUCTIONS ((FLOAT . LISP) NOVALUE)                              C022700
    NIL (BLOCK NIL (IF (COMLOK 2) (RETURN NIL))                              C022800
     (COMTYP (QUOTE INTEGER) (CADR EXP))                                     C022900
     (MOVACTIVE (QUOTE REAL) (QUOTE AC) NIL)))                               C023000
   (INSTRUCTIONS ((PROP . LISP) NOVALUE) NIL (COMCAR (QUOTE ( 18))))         C023100
   (INSTRUCTIONS ((CAR . LISP) NOVALUE)                                      C023200
    NIL (COMCADR (QUOTE (24 18))))                                           C023300
   (INSTRUCTIONS ((CDR . LISP) NOVALUE) NIL (COMCADR (QUOTE ( 24))))         C023400
   (FUNCTION ((COMCADR . COMPIL) SYMBOL)                                     C023500
    ((X SYMBOL))                                                             C023600
    (BLOCK ((EXP FLUID (IF (DEBUGGING)                                       C023700
        (LIST (CAR EXP)                                                      C023800
         (CONS (QUOTE (ATMCHK . DEBUG)) (CDR EXP))) EXP)))                   C023900
     (RETURN (COMCAR X))))                                                   C024000
   (INSTRUCTIONS ((BIT . LISP) NOVALUE)                                      C024100
    NIL (BLOCK ((NB SYMBOL) (EL SYMBOL))                                     C024200
     (IF (COMLOK 4)                                                          C024300
      (RETURN NIL)                                                           C024400
      (AND (NUMBP (CADR EXP)) (NUMBP (CADDR EXP))) (GO CK))                  C024500
     (RETURN (COMEXP (CONS (QUOTE (BITS . SYS)) (CDR EXP))))                 C024600
     CK (COMTYP (QUOTE OCTAL) (CADDDR EXP))                                  C024700
     (IF VINV (MOVACTIVE VTYPE (QUOTE AC) NIL))                              C024800
     (SET VBYTE (WHATBITS VBYTE))                                            C024900
     (IF (AND (LS (SET NB (PLUS (CADR EXP) (CAR VBYTE))) 48)                 C025000
       (LS (PLUS NB (SET EL (CADDR EXP))) 49)                                C025100
       (LS EL (PLUS 1 (CADR VBYTE)))) (GO FIN))                              C025200
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    (MOVACTIVE VTYPE (QUOTE AC) NIL)                                    C025300
    (SET VBYTE (LIST (CADR EXP) (CADDR EXP)))                           C025400
    (RETURN NIL) FIN (SET VBYTE (LIST NB EL)))))                        C025500
(TIMER (MACRO ((RECIP . LISP) SYMBOL)                                   C025600
  ((EXP SYMBOL))                                                        C025700
  (IF (COMLOK 2) NIL (LIST (QUOTE QUOTIENT) 1.0 (CADR EXP))))           C025800
 (INSTRUCTIONS ((IQUOTIENT . LISP) NOVALUE)                             C025900
  NIL (BLOCK NIL (DIVIDE. (QUOTE INTEGER) (QUOTE LDA))                  C026000
   (ATTACH (QUOTE (MUL 1 (L567.7 R S))))                                C026100
   (ATTACH1 (CONS (QUOTE DVD)                                           C026200
     (MOVARG (QUOTE INTEGER) (QUOTE AC) NIL (QUOTE LDA))))              C026300
   (INHERIT (QUOTE (ACTIVE INTEGER AC NIL NIL NIL (AC B) NIL)))))       C026400
 (INSTRUCTIONS ((QUOTIENT . LISP) NOVALUE)                              C026500
  NIL (BLOCK NIL (DIVIDE. (QUOTE REAL) (QUOTE FAD))                     C026600
   (ATTACH1 (CONS (QUOTE FDV)                                           C026700
     (MOVARG (QUOTE REAL) (QUOTE AC) NIL (QUOTE FAC))))                 C026800
   (INHERIT (QUOTE (ACTIVE REAL AC NIL NIL NIL (AC B) NIL)))))          C026900
 (INSTRUCTIONS ((TIMES . LISP) NOVALUE)                                 C027000
  NIL (BLOCK ((TYPE SYMBOL)                                             C027100
    (PARITY SYMBOL) (FORM SYMBOL) (SYM SYMBOL))                         C027200
   (SET SYM (COMARI 1 (COMARGS)                                         C027300
     (STIMS . SYS)                                                      C027400
     MPIALG PLSMOV PLIMVP PLSPDL MPRALG PLSMOV PLRMVP PLSPDL))          C027500
   (IF VCLASS (IF (SET FORM (CAR SYM)) (GO TIM) (RETURN NIL))           C027600
    (CAR SYM) (GO INT))                                                 C027700
   (INHERIT (QUOTE (DATUM INTEGER NIL 1 NIL NIL NIL NIL)))              C027800
   (RETURN NIL)                                                         C027900
   INT (RESTORE (CAR SYM))                                              C028000
   LOOP (IF (NOT (SET FORM (CAR (SET SYM (CDR SYM)))))                  C028100
    (RETURN NIL))                                                       C028200
   TIM (ATTACH (QUOTE (ARGS)))                                          C028300
   (SET TYPE VTYPE)                                                     C028400
   (IF (EQN VTYPE (QUOTE SYMBOL)) (GO ST))                              C028500
   (MOVPDS VTYPE NIL)                                                   C028600
   (INHERIT FORM)                                                       C028700
   (SET PARITY VINV)                                                    C028800
   AT (SET VINV NIL)                                                    C028900
   (LSTLST (LAST FORM))                                                 C029000
   (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                            C029100
   (CALCOMP (IF (EQN TYPE (QUOTE SYMBOL))                               C029200
     (QUOTE STIMS)                                                      C029300
     (EQN TYPE (QUOTE REAL)) (QUOTE STIMR) (QUOTE STIMI)))              C029400
   (INHERIT (QUOTE (ACTIVE NIL AC NIL NIL NIL NIL NIL)))                C029500
   (BLOTTC)                                                             C029600
   (SET VINV PARITY)                                                    C029700
   (SET VTYPE (IF (EQN TYPE (QUOTE REAL)) TYPE (QUOTE SYMBOL)))         C029800
   (GO LOOP)                                                            C029900
   ST (SET PARITY VINV)                                                 C030000
   (SET VINV NIL)                                                       C030100
   (MOVPDS VTYPE NIL)                                                   C030200
   (INHERIT FORM)                                                       C030300
   (SET PARITY (IF (NOT (EQ (MEMBER (QUOTE MINUS) VINV)                 C030400
       (MEMBER (QUOTE MINUS) PARITY))) (QUOTE (MINUS)) NIL))            C030500
   (GO AT)))                                                            C030600
 (FUNCTION (DIVIDE. SYMBOL)                                             C030700
  ((XTYPE SYMBOL) (INST SYMBOL))                                        C030800
  (BLOCK ((X SYMBOL))                                                   C030900
   (IF (COMLOK 3) (RETURN (CLUNK)))                                     C031000
   (COMTYP XTYPE (CADDR EXP))                                           C031100
   (IF (OR VREG VINV (NOT (EXHOCKY INST NIL))) (MOVPDS XTYPE NIL))      C031200
   (SET X (VLIST))                                                      C031300
   (COMVAL (CADR EXP) XTYPE NIL (QUOTE AC)) (INHERIT X)))               C031400
 (FUNCTION (MPYALG SYMBOL)                                              C031500
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    ((TYPE SYMBOL) (XREG SYMBOL) (INST SYMBOL))                                C031600
    (BLOCK ((PARITY SYMBOL))                                                   C031700
     (IF (NOT VCLASS)                                                          C031800
      (BLOCK NIL (INHERIT (CAR LOCLST))                                        C031900
       (SET LOCLST (CDR LOCLST)) GO1599))                                      C032000
     LOOP (IF (NOT (AND (FULLW VBYTE)                                          C032100
        (EQN VCLASS (QUOTE ACTIVE)) (EQN (QUOTE AC) VREG)))                    C032200
      (MOVACTIVE VTYPE (QUOTE AC) NIL))                                        C032300
      (SET PARITY (IF (EQ (MEMBER (QUOTE MINUS) VINV)                          C032400
        (MEMBER (QUOTE MINUS) (GVINV (CAR LOCLST))))                           C032500
       NIL (QUOTE (MINUS))))                                                   C032600
      (INHERIT (CAR LOCLST))                                                   C032700
      (ATTACH1 (CONS INST (MOVARG (IF (EQN TYPE (QUOTE INTEGER))               C032800
         VTYPE TYPE) (QUOTE AC) NIL (QUOTE LDA))))                             C032900
      (INHERIT (QUOTE (ACTIVE NIL NIL NIL NIL NIL (AC B) NIL)))                C033000
      (SET VINV PARITY)                                                        C033100
      (SET VREG XREG)                                                          C033200
      (SET VTYPE TYPE) (IF (SET LOCLST (CDR LOCLST)) (GO LOOP))))              C033300
    (FUNCTION (MPIALG SYMBOL)                                                  C033400
     NIL (MPYALG (QUOTE INTEGER) (QUOTE B) (QUOTE MUL)))                       C033500
    (FUNCTION (MPRALG SYMBOL)                                                  C033600
     NIL (MPYALG (QUOTE REAL) (QUOTE AC) (QUOTE FMP))))                        C033700
  (ADDER (INSTRUCTIONS ((PLUS . LISP) NOVALUE)                                 C033800
    NIL (BLOCK ((SYM SYMBOL)                                                   C033900
      (FORM SYMBOL)                                                            C034000
      (VPS SYMBOL) (VPT SYMBOL) (VAS SYMBOL) (PTYPE SYMBOL))                   C034100
     (SET SYM (COMARI 0 (COMARGS)                                              C034200
      (SPLUS . SYS)                                                            C034300
      PLIALG PLSMOV PLIMVP PLSPDL PLRALG PLSMOV PLRMVP PLSPDL))                C034400
     (IF VCLASS (IF (SET FORM (CAR SYM)) (GO PLU) (RETURN NIL))                C034500
      (CAR SYM) (GO COP))                                                      C034600
     (INHERIT (QUOTE (DATUM INTEGER NIL 0 NIL NIL NIL NIL)))                   C034700
     (RETURN NIL)                                                              C034800
     COP (RESTORE (CAR SYM))                                                   C034900
     LOOP (IF (NOT (SET FORM (CAR (SET SYM (CDR SYM)))))                       C035000
      (RETURN NIL))                                                            C035100
     PLU (ATTACH1 (LIST (QUOTE ARGS)))                                         C035200
     (MOVPDS VTYPE NIL)                                                        C035300
     (SET PTYPE (SET VPT VTYPE))                                               C035400
     (SET VPS (IF (MEMBER (QUOTE MINUS) VINV) FALSE 1))                        C035500
     (RESTORE FORM)                                                            C035600
     (SET VAS (IF (MEMBER (QUOTE MINUS) VINV) FALSE 1))                        C035700
     (SET VPT (IF (EQN VPT (QUOTE SYMBOL))                                     C035800
       (QUOTE (SPLUS SMINS))                                                   C035900
       (EQN VPT (QUOTE REAL))                                                  C036000
       (QUOTE (SPLUR SMINR)) (QUOTE (SPLUI SMINI))))                           C036100
     (SET VPT (IF (EQUALN VPS VAS) (CAR VPT) (CADR VPT)))                      C036200
     (SET VINV (IF (MEMBER (QUOTE RECIP) VINV) (QUOTE (RECIP)) NIL))           C036300
     (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                                 C036400
     (IF (EQN PTYPE (QUOTE REAL)) (SET VTYPE (QUOTE REAL)))                    C036500
     (CALCOMP VPT) (GO LOOP)))                                                 C036600
    (FUNCTION (MOVPRO SYMBOL)                                                  C036700
     ((FORM SYMBOL) (I SYMBOL))                                                C036800
     (BLOCK ((VCLASS SYMBOL)                                                   C036900
       (VTYPE SYMBOL)                                                          C037000
       (VREG SYMBOL)                                                           C037100
       (VADDR SYMBOL)                                                          C037200
       (VBYTE SYMBOL)                                                          C037300
       (VBLOT SYMBOL) (VINV SYMBOL) (VINO SYMBOL) (LISTING SYMBOL))            C037400
      (VSET FORM) (RETURN (EXHOCKY I NIL))))                                   C037500
    (FUNCTION (PLIMVP SYMBOL)                                                  C037600
     ((FORM SYMBOL)) (MOVPRO FORM (QUOTE LDA)))                                C037700
    (FUNCTION (PLRMVP SYMBOL)                                                  C037800
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 ((FORM SYMBOL)) (MOVPRD FORM (QUOTE FAD)))                                  0037900
(FUNCTION (PLSMOV SYMBOL)                                                    0038000
 ((FORM SYMBOL))                                                             0038100
 (BLOCK ((LISTING SYMBOL))                                                   0038200
  (RESTORE FORM)                                                             0038300
  (MOVACTIVE VTYPE (QUOTE AC) NIL) (RETURN (CLUNK))))                        0038400
(FUNCTION (PLSPDL SYMBOL)                                                    0038500
 NIL (BLOCK ((TEM SYMBOL) (BYTE SYMBOL))                                     0038600
  (SET TEM (VLIST))                                                          0038700
  (SET BYTE (IF (BLOCK ((LISTING SYMBOL))                                    0038800
     (MOVPDS VTYPE VBYTE)                                                    0038900
     (RETURN (EXPOCKY (IF (EQN (QUOTE REAL) VTYPE)                           0039000
        (QUOTE FAD) (QUOTE LDA)) NIL))) VBYTE NIL))                          0039100
  (VSET TEM)                                                                 0039200
  (MOVPDS VTYPE BYTE) (RETURN (NCONC (VLIST) (LIST NIL)))))                  0039300
(FUNCTION (PLSALG SYMBOL)                                                    0039400
 ((TYPE SYMBOL) (BLOT SYMBOL) (ADD SYMBOL) (SUB SYMBOL))                     0039500
 (BLOCK ((ACS SYMBOL) (LCS SYMBOL))                                          0039600
  (IF VCLASS (GO TAG))                                                       0039700
  (INHERIT (CAR LOCLST))                                                     0039800
  (SET LOCLST (CDR LOCLST))                                                  0039900
  TAG (MOVACTIVE TYPE (QUOTE AC) NIL)                                        0040000
  (SET ACS (IF (MEMBER (QUOTE MINUS) VINV)                                   0040100
    (QUOTE (MINUS)) FALSE))                                                  0040200
  LOOP (INHERIT (CAR LOCLST))                                                0040300
  (SET LCS (IF (MEMBER (QUOTE MINUS) VINV) (QUOTE (MINUS)) FALSE))           0040400
  (ATTACH1 (CONS (IF (EQN ACS LCS) ADD SUB)                                  0040500
    (MOVARG (IF (EQN TYPE (QUOTE INTEGER)) VTYPE TYPE)                       0040600
     (QUOTE AC) NIL (QUOTE LDA))))                                           0040700
  (IF (SET LOCLST (CDR LOCLST)) (GO LOOP))                                   0040800
  (INHERIT (LIST (QUOTE ACTIVE)                                              0040900
    TYPE (QUOTE AC) NIL NIL NIL BLOT ACS)) (RETURN NIL)))                    0041000
(FUNCTION (PLIALG SYMBOL)                                                    0041100
 NIL (PLSALG (QUOTE INTEGER)                                                 0041200
  (QUOTE (AC)) (QUOTE ADD) (QUOTE SUB)))                                     0041300
(FUNCTION (PLRALG SYMBOL)                                                    0041400
 NIL (PLSALG (QUOTE REAL) (QUOTE (AC B)) (QUOTE FAD) (QUOTE FSB)))           0041500
(FUNCTION (MINUS1 SYMBOL) ((J SYMBOL)) (MINUS J))                            0041600
(FUNCTION (COMINV SYMBOL)                                                    0041700
 ((INV SYMBOL) (CTH SYMBOL) (FCN (FUNCTIONAL SYMBOL SYMBOL)))                0041800
 (BLOCK NIL (IF (COMLOK 2) (RETURN NIL))                                     0041900
  (COMEXP1 (CADR EXP))                                                       0042000
  (IF (EQN VCLASS (QUOTE DATUM))                                             0042100
   (GO DAT)                                                                  0042200
   (MEMBER VTYPE (QUOTE (OCTAL INTEGER REAL SYMBOL))) (GO NUM))              0042300
  (COMERR (QUOTE (NON NUM ARG TO INV)))                                      0042400
  (RETURN NIL)                                                               0042500
  NUM (IF (NOT (FULLW VBYTE)) (MOVACTIVE VTYPE (QUOTE AC) NIL))              0042600
  (IF (EQN VTYPE (QUOTE OCTAL)) (SET VTYPE (QUOTE INTEGER)))                 0042700
  (SET VINV (IF (MEMBER INV VINV) NIL (LIST INV)))                           0042800
  (RETURN NIL)                                                               0042900
  DAT (IF (NUMBP VADDR) (GO DAT1))                                           0043000
  (COMER2 (CADR EXP) (QUOTE (NON NUM DATA TO INV)))                          0043100
  (RETURN NIL)                                                               0043200
  DAT1 (IF (EQ (SET VADDR (FCN VADDR)) 0)                                    0043300
   (SET VADDR (ITYPE VTYPE))) (INHERIT (COMDAT (CLUNK)))))                   0043400
(MACRO ((DIFFERENCE . LISP) SYMBOL)                                          0043500
 ((EXP SYMBOL))                                                              0043600
 (IF (COMLOK 3)                                                              0043700
  C (LIST (QUOTE PLUS)                                                       0043800
   (CADR EXP) (LIST (QUOTE MINUS) (CADDR EXP)))))                            0043900
(INSTRUCTIONS ((MINUS . LISP) NOVALUE)                                       0044000
 NIL (COMINV (QUOTE MINUS) (QUOTE RECIP) MINUS1))                            0044100
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(INSTRUCTIONS ((ABS . LISP) NOVALUE)                                    0044200
 NIL (BLOCK ((Y SYMBOL))                                                0044300
  (IF (COMLCK 2) (RETURN NIL))                                          0044400
  START (COMEXP1 (CADR EXP))                                            0044500
  (IF (EQN (QUOTE DATUM) VCLASS)                                        0044600
   (GO DAT)                                                             0044700
   (EQN VTYPE (QUOTE SYMBOL))                                           0044800
   (GO SYM)                                                             0044900
   (MEMBER VTYPE (QUOTE (OCTAL INTEGER REAL))) (GO NUM))                0045000
  ERR (COMERR (QUOTE (NON NUM ARG TO ABS)))                             0045100
  (RETURN NIL)                                                          0045200
  DAT (IF (NOT (NUMBP VADDR)) (GO ERR))                                 0045300
  (INHERIT (COMDAT (CLUNK)))                                            0045400
  (SET VADDR (ABS VADDR))                                               0045500
  (RETURN NIL)                                                          0045600
  SYM (ATTACH (QUOTE (ARGS)))                                           0045700
  (MOVACTIVE (QUOTE SYMBOL) (QUOTE AC) NIL)                             0045800
  (CALCOMP (QUOTE SYMABS))                                              0045900
  (GO HOME)                                                             0046000
  NUM (IF (NOT (SET Y (MOVARG VTYPE (QUOTE AC) NIL (QUOTE LDA))))      0046100
   (SET Y (QUOTE (A.))))                                                0046200
  (ATTACH (CONS (QUOTE LDM) Y))                                         0046300
  (INHERIT (LIST (QUOTE ACTIVE)                                         0046400
    VTYPE (QUOTE AC) NIL NIL NIL (QUOTE AC) VINV))                      0046500
  HOME (SET VINV (IF (MEMBER (QUOTE RECIP) VINV)                        0046600
    (QUOTE RECIP) NIL))))                                               0046700
(INSTRUCTIONS ((SIGN . LISP) NOVALUE)                                   0046800
 NIL (BLOCK NIL (IF (COMLCK 2) (RETURN NIL))                            0046900
  (COMEXP1 (CADR EXP))                                                  0047000
  (MOVACTIVE VTYPE (QUOTE AC) NIL)                                      0047100
  (IF (EQN VTYPE (QUOTE SYMBOL))                                        0047200
   (GO S)                                                               0047300
   (MEMBER VTYPE (QUOTE (FUNCTIONAL BOOLEAN)))                          0047400
   (COMERR (QUOTE (ILLEG TYP TO SIGN))))                                0047500
  (ATTACH (QUOTE (BOZ (D. 4))))                                         0047600
  (ATTACH (QUOTE (PER 0 0 43Q)))                                        0047700
  (ATTACH (QUOTE (LDA B.)))                                             0047800
  (ATTACH (QUOTE (CON 1 (R L7.7 3Q5))))                                 0047900
  B (INHERIT (QUOTE (ACTIVE INTEGER AC NIL NIL NIL NIL NIL)))           0048000
  (RETURN NIL)                                                          0048100
  S (ATTACH (QUOTE (ARGS))) (CALCOMP (QUOTE SYMSGN)) (GO B))))          0048200
(CHEAT (FUNCTION (CHIZLE SYMBOL)                                        0048300
   ((FROM SYMBOL) (TO SYMBOL))                                          0048400
   (BLOCK NIL (IF (COMLCK 2) (RETURN NIL))                              0048500
    (COMTYP FROM (CADR EXP))                                            0048600
    (IF (EQN VCLASS (QUOTE DATUM)) (MOVACTIVE VTYPE (QUOTE AC) NIL))    0048700
    (IF (AND (OR (EQN FROM (QUOTE INTEGER))                             0048800
       (EQN TO (QUOTE INTEGER)) (EQN TO (QUOTE REAL))) VBYTE)           0048900
     (MOVACTIVE VTYPE (QUOTE AC) NIL))                                  0049000
    DAT (SET VTYPE TO) (RETURN NIL)))                                   0049100
  (FUNCTION (FTYPEP SYMBOL)                                             0049200
   ((X SYMBOL))                                                         0049300
   (IF (FTYPP X)                                                        0049400
    NIL (BLOCK NIL (COMER2 X (QUOTE (NOT A TYPE)))                      0049500
     (INHERIT (QUOTE (DATUM OCTAL NIL 0 NIL NIL NIL NIL)))              0049600
     (RETURN TRUE))))                                                   0049700
(INSTRUCTIONS ((CORE . LISP) NOVALUE)                                   0049800
 NIL (BLOCK NIL (IF (COMLCK 2) (RETURN NIL))                            0049900
  (COMEXP1 (CADR EXP))                                                  0050000
  (IF (EQN (QUOTE DATUM) VCLASS)                                        0050100
   (GO DAT)                                                             0050200
   (AND (OR (EQN VTYPE (QUOTE INTEGER)) (EQN (QUOTE OCTAL) VTYPE))      0050300
    (VINDX)) (GO LOC))                                                  0050400
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      XYZ (MCVACTIVE (QUOTE INTEGER) (QUOTE AC) NIL)                          C050500
      (INHERIT (QUOTE (LOC OCTAL AC 0 NIL NIL NIL NIL)))                      C050600
      (RETURN NIL)                                                            C050700
      LOC (SET VTYPE (QUOTE OCTAL))                                           C050800
      (SET VIND TRUE)                                                         C050900
      (SET VBYTE NIL)                                                         C051000
      (RETURN NIL)                                                            C051100
      DAT (INHERIT (COMDAT (VLIST)))                                          C051200
      (SET VADDR (CNVDATM VTYPE VADDR (QUOTE INTEGER)))                       C051300
      (SET VCLASS (QUOTE LOC)) (SET VTYPE (QUOTE OCTAL))))                    C051400
    (INSTRUCTIONS ((CHEAT . LISP) NOVALUE)                                    C051500
     NIL (IF (CR (COMLCK 4)                                                   C051600
       (FTYPEP (CADR EXP)) (FTYPEP (CADDR EXP)))                              C051700
      NIL (BLOCK ((X SYMBOL EXP) (EXP SYMBOL (CDDR EXP)))                     C051800
       (RETURN (CHIZLE (CADR X) (CADDR X))))))                               C051900
    (INSTRUCTIONS ((DRIVE . LISP) NOVALUE)                                    C052000
     NIL (IF (CR (COMLCK 3) (FTYPEP (CADR EXP)))                              C052100
      NIL (COMTYP (CADR EXP) (CADDR EXP))))                                   C052200
    (INSTRUCTIONS ((CORENTRY . LISP) NOVALUE)                                 C052300
     NIL (IF (COMLCK 2)                                                       C052400
      NIL (BLOCK NIL (INHERIT (QUOTE (LOC OCTAL NIL NIL NIL NIL NIL NIL)      C052500
       )) (SET VADDR (CONS (QUOTE ENTRY) (CDR EXP))))))                       C052600
    (INSTRUCTIONS ((ENTRY . LISP) NOVALUE)                                    C052700
     NIL (IF (COMLCK 2)                                                       C052800
      NIL (BLOCK NIL (ATTACH (CONS (QUOTE LDA)                                C052900
         (LIST EXP (QUOTE (L567.7 R))))                                       C053000
       (INHERIT (QUOTE (ACTIVE OCTAL AC NIL NIL NIL NIL NIL))))))))          C053100
    (INSTRUCTIONS ((S2O. . LISP) NOVALUE)                                     C053200
     NIL (CHIZLE (QUOTE SYMBOL) (QUOTE OCTAL)))                               C053300
    (INSTRUCTIONS ((R2O. . LISP) NOVALUE)                                     C053400
     NIL (CHIZLE (QUOTE REAL) (QUOTE OCTAL)))                                 C053500
    (INSTRUCTIONS ((B2O. . LISP) NOVALUE)                                     C053600
     NIL (CHIZLE (QUOTE BOOLEAN) (QUOTE OCTAL)))                              C053700
    (INSTRUCTIONS ((I2O. . LISP) NOVALUE)                                     C053800
     NIL (CHIZLE (QUOTE INTEGER) (QUOTE OCTAL)))                              C053900
    (INSTRUCTIONS ((F2O. . LISP) NOVALUE)                                     C054000
     NIL (CHIZLE (QUOTE FUNCTIONAL) (QUOTE OCTAL)))                           C054100
    (INSTRUCTIONS ((O2S. . LISP) NOVALUE)                                     C054200
     NIL (CHIZLE (QUOTE OCTAL) (QUOTE SYMBOL)))                               C054300
    (INSTRUCTIONS ((O2R. . LISP) NOVALUE)                                     C054400
     NIL (CHIZLE (QUOTE OCTAL) (QUOTE REAL)))                                 C054500
    (INSTRUCTIONS ((O2B. . LISP) NOVALUE)                                     C054600
     NIL (CHIZLE (QUOTE OCTAL) (QUOTE BOOLEAN)))                              C054700
    (INSTRUCTIONS ((O2I. . LISP) NOVALUE)                                     C054800
     NIL (CHIZLE (QUOTE OCTAL) (QUOTE INTEGER)))                              C054900
    (INSTRUCTIONS ((O2F. . LISP) NOVALUE)                                     C055000
     NIL (CHIZLE (QUOTE OCTAL) (QUOTE FUNCTIONAL))))                          C055100
  (WORDS (MACRO ((INVERT . LISP) SYMBOL)                                      C055200
     ((EXP SYMBOL))                                                           C055300
     (IF (COMLCK 2)                                                           C055400
      NIL (LIST (QUOTE WORDXOR) 7777777777777777Q (CADR EXP))))               C055500
    (INSTRUCTIONS ((WORDOR . LISP) NOVALUE)                                   C055600
     NIL (COMWRD OO (QUOTE ORA)                                               C055700
      (FUNARG SYMBOL ((A SYMBOL) (B SYMBOL)) (WORDOR A B))))                  C055800
    (INSTRUCTIONS ((WORDAND . LISP) NOVALUE)                                  C055900
     NIL (COMWRD 7777777777777777Q (QUOTE ANA)                                C056000
      (FUNARG SYMBOL ((A SYMBOL) (B SYMBOL)) (WORDAND A B))))                 C056100
    (INSTRUCTIONS ((WORDXOR . LISP) NOVALUE)                                  C056200
     NIL (COMWRD OO (QUOTE XOR)                                               C056300
      (FUNARG SYMBOL ((A SYMBOL) (B SYMBOL)) (WORDXOR A B))))                 C056400
    (FUNCTION (WRDHLP SYMBOL)                                                 C056500
     ((LST SYMBOL))                                                           C056600
     (COMOPT LST (FUNCTION (G01600 SYMBOL)                                    C056700
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      NIL (BLOCK NIL (IF VCLASS (GO TAG))                                    C056800
       (INHERIT (CAR LOCLST))                                                C056900
       (SET LOCLST (CDR LOCLST))                                             C057000
       TAG (MOVACTIVE (QUOTE OCTAL) (QUOTE AC) NIL)                          C057100
       LOP (INHERIT (CAR LOCLST))                                            C057200
       (ATTACH1 (CONS INSTRUCTION (MOVARG (QUOTE OCTAL)                      C057300
          (QUOTE AC) NIL (QUOTE LDA))))                                      C057400
       (IF (SET LOCLST (CDR LOCLST)) (GO LOP))                               C057500
       (INHERIT (QUOTE (ACTIVE OCTAL AC NIL NIL NIL (AC) NIL)))))            C057600
     PLSMOV (FUNCTION (G01601 SYMBOL)                                        C057700
      ((FORM SYMBOL))                                                        C057800
      (AND (NOT (GVBYTE FORM)) (MOVPRD FORM (QUOTE LDA))))                   C057900
     (FUNCTION (G01602 SYMBOL)                                               C058000
      NIL (BLOCK NIL (MOVPDS (QUOTE OCTAL) NIL)                              C058100
       (RETURN (NCONC (VLIST) (LIST NIL)))))))                               C058200
   (FUNCTION (COMWRD SYMBOL)                                                 C058300
    ((IDATA SYMBOL)                                                          C058400
     (INSTRUCTION SYMBOL) (LOGFCN (FUNCTIONAL SYMBOL SYMBOL SYMBOL)))        C058500
    (BLOCK ((TEM SYMBOL)                                                     C058600
      (LST SYMBOL) (DATA SYMBOL) (EX SYMBOL) (DATLST SYMBOL))                C058700
     (SET DATA IDATA)                                                        C058800
     (SET LST (QUOTE (NIL)))                                                 C058900
     (IF (EQ (LENGTH EXP) 1) (GO NOARG))                                     C059000
     (SET EX EXP)                                                            C059100
     LOOP (IF (NULL (SET EX (CDR EX))) (GO BEG))                             C059200
     (SET TEM (CAR EX))                                                      C059300
     (BLOCK ((VCLASS SYMBOL)                                                 C059400
       (VTYPE SYMBOL)                                                        C059500
       (VREG SYMBOL)                                                         C059600
       (VADDR SYMBOL)                                                        C059700
       (VIND SYMBOL) (VBYTE SYMBOL) (VINV SYMBOL) (LISTING SYMBOL))          C059800
      (COMTYP (QUOTE OCTAL) TEM)                                             C059900
      (IF (EQN (QUOTE DATUM) VCLASS) (GO DAT))                               C060000
      (SET LST (CONS (CLUNK) LST))                                           C060100
      (GO G01603)                                                            C060200
      DAT (SET DATA (LOGFCN DATA VADDR))                                     C060300
      (SET DATLST (NCONC DATLST LISTING)) G01603)                            C060400
     (GO LOOP)                                                               C060500
     BEG (LSTLST DATLST)                                                     C060600
     (IF (NOT (EQUALN DATA IDATA))                                           C060700
      (SET LST (CONS (LIST (QUOTE DATUM)                                     C060800
         (QUOTE OCTAL) NIL DATA NIL NIL NIL NIL NIL) LST)))                  C060900
     (SET LST (WRDHLP LST))                                                  C061000
     (IF LST (GO FIN))                                                       C061100
     NOARG (INHERIT (LIST (QUOTE DATUM)                                      C061200
       (QUOTE OCTAL) NIL IDATA NIL NIL NIL NIL))                             C061300
     (RETURN NIL) FIN (INHERIT (CAR LST)) (LSTLST (CADR LST)))))             C061400
 (ASSIGN (FUNCTION (SET. SYMBOL)                                             C061500
    ((X SYMBOL))                                                             C061600
    (MOVLOC (GVTYPE X) (GVADDR X) (GVREG X) (GVIND X) (GVBYTE X)))           C061700
   (FUNCTION (EQTYPE SYMBOL)                                                 C061800
    ((A SYMBOL) (B SYMBOL))                                                  C061900
    (IF (EQN A B)                                                            C062000
     A (OR (AND (EQN (QUOTE OCTAL) A) (EQN (QUOTE INTEGER) B))               C062100
      (AND (EQN (QUOTE INTEGER) A) (EQN (QUOTE OCTAL) B)))                   C062200
     (QUOTE OCTAL) NIL))                                                     C062300
   (FUNCTION (FULLP SYMBOL)                                                  C062400
    ((TYP SYMBOL) (BYTE SYMBOL))                                             C062500
    (BLOCK ((X SYMBOL))                                                      C062600
     (RETURN (OR (FULLW BYTE)                                                C062700
       (AND (EQN (QUOTE SYMBOL) TYP)                                         C062800
        (GR (SET X (CADR (WHATBITS BYTE))) 17)                               C062900
        (EQ (REMAINDER X 6) 0))))))                                          C063000
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(INSTRUCTIONS ((SET . LISP) NOVALUE)                                    C063100
 NIL (BLOCK ((X SYMBOL) (XBLOT SYMBOL) (TYP SYMBOL) (FREG SYMBOL))      C063200
  (IF (COMLCK 3) (RETURN NIL))                                          C063300
  (BLOCK ((VCLASS SYMBOL)                                               C063400
    (VTYPE SYMBOL)                                                      C063500
    (VREG SYMBOL)                                                       C063600
    (VADDR SYMBOL)                                                      C063700
    (VIND SYMBOL)                                                       C063800
    (VINV SYMBOL) (VBLOT SYMBOL) (VBYTE SYMBOL) (LISTING SYMBOL))       C063900
   (COMEXP1 (CADR EXP)) (SET X (CLUNK)) G01604)                         C064000
  (IF (AND (EQN (GVCLAS X) (QUOTE LOC)) (NOT VINV)) (GO BEG))           C064100
  (COMER2 (CADR EXP) (QUOTE (NON LOC 1 ARG TO SET)))                    C064200
  (INHERIT (QUOTE (DATUM OCTAL NIL OG NIL NIL NIL NIL)))                C064300
  (RETURN NIL)                                                          C064400
  BEG (SET FREG (IF (NOT (MEMBER (QUOTE AC)                             C064500
      (SET XBLOT (GVBLOT X))))                                          C064600
    (QUOTE AC)                                                          C064700
    (NOT (MEMBER (QUOTE B) XBLOT))                                      C064800
    (QUOTE B) (NOT (MEMBER (QUOTE L) XBLOT)) (QUOTE L) NIL))            C064900
  (IF SCLASS (GO STAT)                                                  C065000
   (SET TYP (EQTYPE XTYPE (GVTYPE X))) (GO ETYP))                       C065100
  (COMEXP1 (CADDR EXP))                                                 C065200
  (IF (MEMBER (QUOTE X2) XBLOT)                                         C065300
   (GO VREGP)                                                           C065400
   (AND (SET TYP (EQTYPE (GVTYPE X) VTYPE))                             C065500
    (NOT (EQN VCLASS (QUOTE DATUM)))) (GO SAVE))                        C065600
  VREGP (IF (NOT VREG) (GO OK))                                         C065700
  SAFE (MOVPDS VTYPE NIL)                                               C065800
  OK (SET TYP (VLIST))                                                  C065900
  (IF (EQN VADDR (QUOTE POP.)) (SET VADDR (QUOTE TOP.)))                C066000
  (LSTLST (LAST X))                                                     C066100
  (SET. X)                                                              C066200
  (INHERIT TYP)                                                         C066300
  (IF (AND (EQN VCLASS (QUOTE LOC)) (EQN VADDR (QUOTE POP.)))           C066400
   (MOVACTIVE VTYPE (QUOTE AC) NIL))                                    C066500
  (RETURN NIL)                                                          C066600
  ETYP (COMTYP TYP (CADDR EXP))                                         C066700
  (IF (MEMBER (QUOTE X2) XBLOT) (GO VREGP))                             C066800
  SAVE (IF (NOT (FULLP TYP (GVBYTE X)))                                 C066900
   (GO VREGP)                                                           C067000
   (MEMBER VREG XBLOT)                                                  C067100
   (IF FREG (GO MACT) (GO SAFE))                                        C067200
   (EQN VCLASS (QUOTE ACTIVE))                                          C067300
   (IF (AND (NOT VINV) (FULLP VTYPE VBYTE)) (GO OK) (GO MACT))          C067400
   (NOT FREG) (GO OK))                                                  C067500
  MACT (MOVACTIVE TYP FREG NIL)                                         C067600
  (GO OK)                                                               C067700
  STAT (COMTYP (GVTYPE X) (CADDR EXP))                                  C067800
  (IF (OR (AND VREG (MEMBER (QUOTE X2) XBLOT))                          C067900
    (AND (SET TYP (MEMBER VREG XBLOT)) (NOT FREG)))                     C068000
   (MOVPDS VTYPE NIL) (AND TYP FREG) (MOVACTIVE VTYPE FREG NIL))        C068100
  (LSTLST (LAST X)) (SET. X)))                                          C068200
(INSTRUCTIONS ((LOCSET . LISP) NOVALUE)                                 C068300
 NIL (BLOCK ((TYP SYMBOL) (BLOT SYMBOL) (LST SYMBOL))                   C068400
  (IF (COMLCK 3) (RETURN NIL))                                          C068500
  (COMEXP1 (CADDR EXP))                                                 C068600
  (IF (AND (EQN (QUOTE LOC) VCLASS) (FULLW VBYTE) (NOT VINV))           C068700
   (GO A))                                                              C068800
  (COMER2 (CADDR EXP) (QUOTE (NON FULL LOC 2 ARG IN LOCSET)))           C068900
  A (SET TYP VTYPE)                                                     C069000
  (MAKELOC)                                                             C069100
  (SET BLOT VBLOT)                                                      C069200
  (SET LST LISTING)                                                     C069300
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    (VSET (QUOTE (NIL NIL NIL NIL NIL NIL NIL NIL)))                    C069400
    (SET LISTING NIL)                                                   C069500
    (COMEXP1 (CADR EXP))                                                C069600
    (IF (EQN VTYPE TYP) (GO XGQ))                                       C069700
    (COMERR (QUOTE (UNEQ TYPES IN LOCSET)))                             C069800
XGQ (IF (AND (EQN VCLASS (QUOTE LOC))                                   C069900
      (NOT VREG)                                                        C070000
      VIND (NOT LISTING) (FULLW VBYTE) (NOT VBLOT) (NOT VINV))          C070100
     (GO B))                                                            C070200
    (COMER2 (CADR EXP) (QUOTE (NON LOC VAR 1 ARG TO LOCSET)))           C070300
    B (SET LISTING (CONS (LIST (QUOTE STF) VADDR) LST))                 C070400
    (INHERIT (QUOTE (LOC NIL AC 0 NIL NIL NIL NIL)))                    C070500
    (SET VTYPE TYP) (SET VBLOT BLOT))))                                 C070600
(FCR (FUNCTION (FORSET SYMBOL)                                          C070700
   ((X SYMBOL))                                                         C070800
   (IF (AND (ATOM X) (EQN X VADDR))                                     C070900
    NIL (FCRX (LIST (QUOTE SET) VADDR X))))                             C071000
  (FUNCTION (FCRX SYMBOL)                                               C071100
   ((X SYMBOL)) (SET LISTING (NCONC LISTING (LIST X))))                 C071200
  (FUNCTION (FCRTRM SYMBOL)                                             C071300
   NIL (BLOCK ((X SYMBOL))                                              C071400
    (SET X (CDDDR EXP))                                                 C071500
    (IF (SIM (QUOTE (WHILE S.)) (CAR X))                                C071600
     (BLOCK NIL (FCRX (LIST (QUOTE IF)                                  C071700
        (LIST (QUOTE NOT) (CADAR X)) (LIST (QUOTE GO) FGO)))            C071800
      (SET X (CDR X)) GO1605))                                          C071900
    (IF (SIM (QUOTE (UNLESS S.)) (CAR X))                               C072000
     (BLOCK NIL (FCRX (LIST (QUOTE IF)                                  C072100
        (CADAR X) (LIST (QUOTE GO) TGO))) (SET X (CDR X)) GO1606))      C072200
    (FORX (CAR X))))                                                    C072300
(MACRO ((FCR . LISP) SYMBOL)                                            C072400
  ((EXP SYMBOL))                                                        C072500
  (BLOCK ((TGO SYMBOL)                                                  C072600
    (FGO SYMBOL)                                                        C072700
    (L SYMBOL)                                                          C072800
    (LISTING SYMBOL)                                                    C072900
    (G SYMBOL)                                                          C073000
    (G1 SYMBOL)                                                         C073100
    (G2 SYMBOL) (FL SYMBOL) (CFL SYMBOL) (VADDR SYMBOL))                C073200
   (IF (NOT (SIM (QUOTE (FOR S. (CR. ((OR. LOOP IN ON) S.)             C073300
        ((CR. RESET STEP) S. S.)                                        C073400
        (STEP S. S. (CR. EQ NQ LQ GQ LS GR) S.) NIL)                    C073500
       (ANY. (WHILE S.)) (ANY. (UNLESS S.)) S.)) EXP)) (GO E))          C073600
    (SET TGO (GENID))                                                   C073700
    (SET L (GENID))                                                     C073800
    (SET FGO (GENID))                                                   C073900
    (SET G1 (GENID))                                                    C074000
    (SET G2 (GENID))                                                    C074100
    (SET VADDR (CADR EXP))                                              C074200
    (IF (NULL (SET FL (CADDR EXP)))                                     C074300
     (BLOCK NIL (FCRX TGO) (FORX L) (FCRTRM) GO1607)                    C074400
     (EQN (SET CFL (CAR FL)) (QUOTE LOOP))                              C074500
     (BLOCK NIL (FCRX TGO)                                              C074600
      (FORX L) (FORSET (CADR FL)) (FCRTRM) GO1608)                      C074700
     (EQN CFL (QUOTE RESET))                                            C074800
     (BLOCK NIL (FCRSET (CADR FL))                                      C074900
      (FORX L) (FCRTRM) (FORX TGO) (FORSET (CADDR FL)) GO1609)          C075000
     (OR (EQN CFL (QUOTE IN)) (EQN CFL (QUOTE ON)))                     C075100
     (BLOCK NIL (SET G (LIST (LIST G1 (QUOTE SYMBOL) (CADR FL))))       C075200
      (FORX L)                                                          C075300
      (FORX (LIST (QUOTE IF)                                            C075400
        (LIST (QUOTE NULL) G1) (LIST (QUOTE GO) FGO)))                  C075500
      (FORSET (IF (EQN (CAR FL) (QUOTE ON))                             C075600
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        G1 (LIST (QUOTE CAR) G1)))                                          0075700
      (FORTRM)                                                              0075800
      (FORX TGC)                                                            0075900
      (FORX (LIST (QUOTE SET) G1 (LIST (QUOTE CDR) G1))) G01610)            0076000
    (EQN CFL (QUOTE STEP))                                                  0076100
    (BLOCK NIL (IF (NUMBP (SET CFL (CADDR FL)))                             0076200
      (SET G1 CFL) (SET G (LIST (LIST G1 (QUOTE ASSIGNED) CFL))))           0076300
      (FORSET (CADR FL))                                                    0076400
      (FORX L)                                                              0076500
      (IF (SET CFL (CDDDR FL))                                              0076600
       (BLOCK NIL (IF (NUMBP (CADR CFL))                                    0076700
         (SET G2 (CADR CFL))                                                0076800
         (SET G (NCONC G (LIST (LIST G2 (QUOTE ASSIGNED)                    0076900
             (CADR CFL))))))                                                0077000
        (FORX (LIST (QUOTE IF)                                              0077100
          (LIST (CAR CFL) VADDR G2) (LIST (QUOTE GO) FGO))) G01612))        0077200
      (FORTRM)                                                              0077300
      (FORX TGC) (FORSET (LIST (QUOTE PLUS) VADDR G1)) G01611))             0077400
    (RETURN (NCONC (NCONC (LIST (QUOTE BLOCK) G) LISTING)                   0077500
      (LIST (LIST (QUOTE GO) L) FGO)))                                      0077600
    E (COMERR (QUOTE (ILLEGAL FOR STATEMENT))))))                          0077700
****END OF FILE DETECTED
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(MCVEPO (FUNCTION (REVA2L SYMBOL)                                              0000100
   ((XREG SYMBOL))                                                             0000200
   (BLOCK ((VREG SYMBOL)) (SET VREG XREG) (RETURN (TRANSA2L))))                0000300
  (FUNCTION (LXN SYMBOL)                                                       0000400
   ((N SYMBOL)) (IF (GR (ABS N) 377777Q) NIL (LIST N (QUOTE R))))              0000500
  (FUNCTION SYMCD (S)                                                          0000600
   (BLOCK NIL (IF (IDP S)                                                      0000700
     (RETURN (LIST (QUOTE ID) S))                                              0000800
     (BOOLP S)                                                                 0000900
     (RETURN (IF S 1 0))                                                       0001000
     (INTP S)                                                                  0001100
     (IF (LS (ABS S) 2Q5) (RETURN (WORDOR 0 (PLUS 6Q5 S))))                    0001200
     (OCTALP S)                                                                0001300
     (IF (EQ 0 (WORDAND 777777777776Q5 S)) (RETURN (WORDOR 2Q5 S))))           0001400
    (RETURN (LIST (QUOTE QUOTE) S))))                                          0001500
  (FUNCTION (SPARAM SYMBOL)                                                    0001600
   ((XBYTE SYMBOL))                                                            0001700
   (BLOCK ((I SYMBOL) (TO SYMBOL))                                             0001800
    (RETURN (LIST (IF (AND (EQ (CADR (SET I (WHATBITS VBYTE)))                 0001900
         (CADR (SET TO (WHATBITS XBYTE))))                                     0002000
        (OR (EQN VTYPE (QUOTE INTEGER))                                        0002100
         (LS (PLUS (CAR I) (CADR I)) 48)))                                     0002200
      (QUOTE SHIFT) (QUOTE MASK))                                              0002300
     (DIFFERENCE (CAR I) (CAR TO)) (QUOTE R)))))                               0002400
  (FUNCTION (WHATBITS SYMBOL)                                                  0002500
   ((X SYMBOL))                                                                0002600
   (IF (NULL X)                                                                0002700
    (QUOTE (0 48))                                                             0002800
    (ATOM X)                                                                   0002900
    (BLOCK NIL (COMER2 X (QUOTE (ILLEGAL BYTE VALUE)))                         0003000
     (RETURN (QUOTE (0 48)))) X))                                              0003100
  (FUNCTION (SVACT SYMBOL)                                                     0003200
   ((R SYMBOL) (B SYMBOL))                                                     0003300
   (BLOCK NIL (SET VCLASS (QUOTE ACTIVE))                                      0003400
    (SET VREG R) (SET VBYTE B) (SET VADDR (SET VIND NIL))))                    0003500
  (FUNCTION (BBND SYMBOL)                                                      0003600
   ((B SYMBOL))                                                                0003700
   (AND (EQ (REMAINDER (CAR (SET B (WHATBITS B))) 6) 0)                        0003800
    (EQ (REMAINDER (CADR B) 6) 0)))                                            0003900
  (FUNCTION (ISINV SYMBOL)                                                     0004000
   ((X SYMBOL))                                                                0004100
   (BLOCK ((Y SYMBOL))                                                         0004200
    (SET Y 0)                                                                  0004300
    AA (IF (CLVINV X) (GO BB))                                                 0004400
    (RETURN (EQ 1 (REMAINDER Y 2))) BB (SET Y (PLUS Y 1)) (GO AA)))            0004500
  (FUNCTION (CLVINV SYMBOL)                                                    0004600
   ((X SYMBOL))                                                                0004700
   (IF (ATOM VINV)                                                             0004800
    (IF (EQN VINV X) (BLOCK NIL (SET VINV NIL) (RETURN TRUE)) NIL)             0004900
    (BLOCK ((A SYMBOL))                                                        0005000
     S (IF (NULL VINV)                                                         0005100
      (RETURN (BLOCK NIL (SET VINV (REVERSE A)) (RETURN NIL)))                 0005200
      (EQN (CAR VINV) X)                                                       0005300
      (RETURN (BLOCK NIL (SET VINV (APPEND (REVERSE A) (CDR VINV)))            0005400
       (RETURN TRUE))))                                                        0005500
     (SET A (CONS (CAR VINV) A)) (SET VINV (CDR VINV)) (GO S))))               0005600
  (FUNCTION (LCPC SYMBOL)                                                      0005700
   ((R SYMBOL))                                                                0005800
   (IF (NOT (MEMBER R (QUOTE (AC B L))))                                       0005900
    (BLOCK NIL (COMER2 R (QUOTE (NOT LEGAL REGISTER FOR LDA CLASS)))           0006000
     (RETURN (IF (ISINV (QUOTE MINUS))                                         0006100
      (QUOTE LCADCOMP) (QUOTE LOAC))))                                         0006200
    (ISINV (QUOTE MINUS))                                                      0006300
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   (CADR (SASSOC R (QUOTE ((AC LDC) (B LBC) (L LLC))) CADRNIL))          0006400
   (CADR (SASSOC R (QUOTE ((AC LDA) (B LDB) (L LDL))) CADRNIL))))        0006500
 (FUNCTION (LDCMP SYMBOL)                                                0006600
  ((R SYMBOL))                                                           0006700
  (BLOCK ((VINV SYMBOL))                                                 0006800
   (SET VINV (QUOTE (MINUS))) (RETURN (LOPC R))))                        0006900
 (FUNCTION (CADRNIL SYMBOL) NIL (QUOTE (NIL NIL)))                       0007000
 (FUNCTION (TRANSA2L SYMBOL)                                             0007100
  NIL (IF (NUMBP VREG)                                                   0007200
   (CONS VREG (QUOTE (Z.)))                                              0007300
   (CADR (SASSOC VREG (QUOTE ((AC A.) (B B.) (L L.))) CADRNIL))))        0007400
 (FUNCTION (CONVP SYMBOL)                                                0007500
  ((NEW SYMBOL))                                                         0007600
  (CADR (SASSOC NEW (CDR (SASSOC VTYPE (QUOTE ((OCTAL (INTEGER OI)       0007700
         (REAL IR)                                                       0007800
         (SYMBOL (OCT2SYM . LISP)) (BOOLEAN TRU) (OCTAL V))              0007900
        (INTEGER (REAL IR)                                               0008000
         (SYMBOL (INT2SYM . LISP))                                       0008100
         (OCTAL MZ) (BOOLEAN TRU) (INTEGER V))                           0008200
        (REAL (INTEGER (ROUND . LISP))                                   0008300
         (SYMBOL (REAL2SYM . LISP))                                      0008400
         (OCTAL (OCTROUND . LISP)) (BOOLEAN TRU) (REAL V))               0008500
        (SYMBOL (INTEGER (SYM2INT . LISP))                               0008600
         (REAL (SYM2REAL . LISP))                                        0008700
         (OCTAL (SYM2OCT . LISP))                                        0008800
         (BOOLEAN SP) (FUNCTIONAL (SYM2FORM . LISP)) (SYMBOL V))         0008900
        (FUNCTIONAL (SYMBOL (FORM2SYM . LISP))                           0009000
         (BOOLEAN TRU) (FUNCTIONAL V))                                   0009100
        (BOOLEAN (SYMBOL V) (BOOLEAN V))))                               0009200
      (FUNCTION (G01613 SYMBOL) NIL (QUOTE (A (A A)))))) CADRNIL)))      0009300
(FUNCTION (ADDRMODS SYMBOL)                                              0009400
 ((I SYMBOL) (R SYMBOL))                                                 0009500
 (IF (NULL I)                                                            0009600
  (IF (NULL R)                                                           0009700
   0 (EQN R (QUOTE AC))                                                  0009800
   15 (NUMBP R)                                                          0009900
   R (COMER2 R (QUOTE (ERROR IN VREG OR XREG NO TAG))))                  0010000
  (NULL R)                                                               0010100
  (QUOTE I)                                                              0010200
  (EQN R (QUOTE AC))                                                     0010300
  (QUOTE (15 I))                                                         0010400
  (NUMBP R)                                                              0010500
  (LIST R (QUOTE I))                                                     0010600
  (ATOM R)                                                               0010700
  (COMER2 R (QUOTE (ILLEG TAG)))                                         0010800
  (NULL (CAR R)) (QUOTE I) (LIST (CAR R) (QUOTE I))))                    0010900
(FUNCTION (BMODS SYMBOL)                                                 0011000
 ((XCLASS SYMBOL) (XBYTE SYMBOL))                                        0011100
 (IF (AND (FULLW VBYTE) (FULLW XBYTE))                                   0011200
  NIL (AND (ATOM VBYTE)                                                  0011300
   (EQN VBYTE XBYTE) (EQN XCLASS (QUOTE ACTIVE)))                        0011400
  VBYTE (BLOCK ((E1 SYMBOL)                                              0011500
    (E2 SYMBOL) (E3 SYMBOL) (L1 SYMBOL) (L2 SYMBOL))                     0011600
   (IF (EQN XCLASS (QUOTE ACTIVE)) (GO A))                               0011700
   (SET E1 (QUOTE S))                                                    0011800
   (SET E2 (TRANS VBYTE))                                                0011900
   (SET E3 (TRANS XBYTE))                                                0012000
   B (IF (OR (NULL E2) (NULL E3))                                        0012100
    (RETURN C)                                                           0012200
    (OR (EQ (SET L1 (LENGTH E2)) (SET L2 (LENGTH E3)))                   0012300
     (EQ L1 1) (EQ L2 1))                                                0012400
    (GO C)                                                               0012500
    (GR L1 L2)                                                           0012600
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      (SET E2 (LIST (LAST E2)))                                          0012700
      (EQN E1 (QUOTE 'L))                                                0012800
      (SET E3 (LIST (LAST E3))) (RETURN 77777777777777Q))                0012900
     C (RETURN (MAKEID (COMPRESS (APPEND (CONS E1 E2)                    0013000
         (CONS (QUOTE '.) E3)))))                                        0013100
     A (SET E1 (QUOTE L))                                                0013200
      (SET E2 (TRANS XBYTE)) (SET E3 (TRANS VBYTE)) (GO B))))            0013300
  (FUNCTION (TRANS SYMBOL)                                               0013400
   ((B SYMBOL))                                                          0013500
   (IF (NULL B)                                                          0013600
    (QUOTE ('7))                                                         0013700
    (ATOM B) (COMER2 B (QUOTE (NOT A BYTE MODIFIER))) (TRANS1 B)))       0013800
  (FUNCTION (TRANS1 SYMBOL)                                              0013900
   ((B SYMBOL))                                                          0014000
   (BLOCK ((R SYMBOL) (N SYMBOL) (A SYMBOL))                             0014100
    (SET R (CAR B))                                                      0014200
    (SET N (CADR B))                                                     0014300
    (IF (OR (GR (SET N (PLUS R N)) 48)                                   0014400
      (NOT (EQ (REMAINDER R 6) 0)) (NOT (EQ (REMAINDER N 6) 0)))         0014500
     (RETURN NIL))                                                       0014600
    X (IF (NULL (CAR (SET A (CONS (GETN (QUOTE (0 '7 6 '6 12 '5 18 '4    0014700
          24 '3 30 '2 36 '1 42 '0)) R) A))))                             0014800
     (RETURN (COMER2 B (QUOTE (ILLEGAL MODIFIER)))))                     0014900
     (IF (EQ (SET R (PLUS R 6)) N) (RETURN A)) (GO X)))                  0015000
  (FUNCTION (TAGF SYMBOL)                                                0015100
   ((B SYMBOL) (A SYMBOL))                                               0015200
   (IF (OR (EQ 0 A) (NULL A))                                            0015300
    (IF (NULL B) 0 B)                                                    0015400
    (EQ 0 B)                                                             0015500
    A (NULL B)                                                           0015600
    A (ATOM A)                                                           0015700
    (IF (ATOM B) (LIST B A) (CONS A B))                                  0015800
    (ATOM B) (CONS B A) (APPEND B A)))                                   0015900
  (FUNCTION SASSOC (X L (FN (FUNCTIONAL SYMBOL)))                        0016000
   (IF (SET X (FIND X L)) X (FN))))                                      0016100
(MOVEP1 (FUNCTION (CNVL2AC SYMBOL)                                       0016200
   ((TYP SYMBOL) (BYT SYMBOL))                                           0016300
   (BLOCK ((A SYMBOL) (B SYMBOL))                                        0016400
    (IF (NULL (SET A (CONVP TYP)))                                       0016500
     (RETURN 0)                                                          0016600
     (NOT (ATOM A))                                                      0016700
     (ATTACH (QUOTE (ARGS)))                                             0016800
     (EQN A (QUOTE V))                                                   0016900
     (RETURN (BLOCK NIL (SET VTYPE TYP) (RETURN 2)))                     0017000
     (EQN A (QUOTE OI))                                                  0017100
     (GO NC)                                                             0017200
     (EQN A (QUOTE TRU))                                                 0017300
     (RETURN 1)                                                          0017400
     (EQN A (QUOTE IR))                                                  0017500
     (IF (NOT (FULLW BYT)) (RETURN 0) NIL)                               0017600
     (NOT (OR (EQN A (QUOTE MZ)) (EQN A (QUOTE SP)))) (RETURN 5))        0017700
    (MOVACTIVE VTYPE (QUOTE AC) NIL)                                     0017800
    (IF (ATOM A) (GO OPEN))                                              0017900
    (ATTACH (LIST (QUOTE CALL) A))                                       0018000
    (BLOTTC)                                                             0018100
    FIN (SVACT (QUOTE AC) NIL)                                           0018200
    (SET VTYPE TYP)                                                      0018300
    (IF (FULLW BYT) (RETURN NIL))                                        0018400
    (RETURN (ACT2ACT (QUOTE AC) BYT))                                    0018500
    OPEN (IF (EQN A (QUOTE IR))                                          0018600
     (BLOCK NIL (ATTACH (QUOTE (FLT (ENTRY B48.))))                      0018700
      (BLOTCH (QUOTE B)))                                                0018800
     (EQN A (QUOTE MZ))                                                  0018900
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    (ATTACH (QUOTE (BUC (ENTRY I2CENT) 0 4)))                          0019000
    (EQN A (QUOTE SP)) (GO S2B))                                       0019100
   (BLOTCH (QUOTE AC))                                                 0019200
   (GO FIN)                                                            0019300
   S2B (ATTACH (QUOTE (BUC (ENTRY STBENT) 0 4)))                       0019400
   (INHERIT (QUOTE (ACTIVE BOOLEAN AC NIL NIL NIL (AC) NIL)))          0019500
   (RETURN NIL)                                                        0019600
   NO (IF (BBND VBYTE) (RETURN 3))                                     0019700
   (RETURN (MCVOI (QUOTE AC) BYT))))                                   0019800
(FUNCTION (DXREG SYMBOL)                                               0019900
 ((R SYMBOL)) (IF (NUMBP R) (QUOTE LDX) (QUOTE LDA)))                  0020000
(FUNCTION (MLDX SYMBOL)                                                0020100
 ((I SYMBOL) (R SYMBOL))                                               0020200
 (IF (NULL (CDR I))                                                    0020300
  (LIST (QUOTE LDX) (CAR I) 0 R)                                       0020400
  (APPEND (CONS (QUOTE LDX) I) (LIST R))))                             0020500
(FUNCTION (L2AP. SYMBOL)                                               0020600
 NIL (BLOCK ((X SYMBOL) (Y SYMBOL))                                    0020700
  (IF (NOT (EQN VCLASS (QUOTE LOC)))                                   0020800
   (RETURN NIL)                                                        0020900
   VIND (GO IND)                                                       0021000
   (NOT (ATOM (SET X VADDR)))                                          0021100
   (GO XRS)                                                            0021200
   (NULL (SET X (CADR (SASSOC VADDR (QUOTE ((A. AC)                    0021300
         (B. B) (L. L))) CADRNIL)))) (RETURN NIL))                     0021400
  (SVACT X VBYTE)                                                      0021500
  (RETURN TRUE)                                                        0021600
  IND (IF (NOT (AND (EQN VADDR (QUOTE A.)) (NULL VREG)))               0021700
   (RETURN NIL))                                                       0021800
  (SET VADDR 0)                                                        0021900
  (SET VIND NIL)                                                       0022000
  (SET VREG 15)                                                        0022100
  (RETURN NIL)                                                         0022200
  XRS (IF (NOT (AND (MEMBER (QUOTE Z.) X) (EQ 2 (LENGTH X))))          0022300
   (RETURN NIL))                                                       0022400
  XRS1 (IF (NUMBP (SET Y (CAR X)))                                     0022500
   (GO XRS2) (NULL (SET X (CDR X))) (RETURN NIL))                      0022600
  (GO XRS1) XRS2 (SVACT Y VBYTE) (RETURN TRUE)))                       0022700
(FUNCTION (ITSTRU SYMBOL)                                              0022800
 ((R SYMBOL) (B SYMBOL))                                               0022900
 (BLOCK NIL (SETTRU) (RETURN (MOVACTIVE (QUOTE BOOLEAN) R B))))        0023000
(FUNCTION (SETTRU SYMBOL)                                              0023100
 NIL (BLOCK NIL (SET VCLASS (QUOTE DATUM))                             0023200
  (SET VTYPE (QUOTE BOOLEAN))                                          0023300
  (SET VADDR (QUOTE TRUE)) (SET VREG (SET VIND (SET VBYTE NIL)))))     0023400
(FUNCTION (LXRM SYMBOL)                                                0023500
 ((B SYMBOL))                                                          0023600
 (IF (OR (NULL B) (AND (NOT (ATOM B)) (EQ 0 (CAR B))))                 0023700
  (QUOTE RA) (AND (NOT (ATOM B)) (EQ (CAR B) 24)) (QUOTE LA) NIL))     0023800
(FUNCTION (BEQ SYMBOL)                                                 0023900
 ((XB SYMBOL)) (OR (EQ VBYTE XB) (AND (FULLW VBYTE) (FULLW XB))))      0024000
(FUNCTION (NADDR SYMBOL)                                               0024100
 ((VAL SYMBOL) (TYPE SYMBOL) (B SYMBOL))                               0024200
 (BLOCK ((C SYMBOL) (V SYMBOL) (VBYTE SYMBOL))                         0024300
  (IF (NUMBP (SET V (BMODS (QUOTE ACTIVE) B)))                         0024400
   (RETURN (SHFTRA VAL TYPE B))                                        0024500
   (EQN VTYPE (QUOTE BOOLEAN))                                         0024600
   (BLOCK NIL (SET VAL (IF (NULL VAL) 0 1)) (SET C V))                 0024700
   (EQN TYPE (QUOTE OCTAL))                                            0024800
   (GO OCF) (NOT (NUMBP VAL)) (SET VAL 0))                             0024900
  ND1 (IF (EQN TYPE (QUOTE INTEGER))                                   0025000
   (SET C (TAGF V (QUOTE S))) (SET C V))                               0025100
  (IF (OR (AND (REALP VAL)                                             0025200
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      (IF (EQ VAL 0) (BLOCK NIL (SET VAL 0) (RETURN NIL)) TRUE))          0025300
     (GR (ABS VAL) 377777Q))                                              0025400
    (RETURN (CONS (LIST (QUOTE NUMBER) VAL) (IF C (LIST C) NIL))))        0025500
   (RETURN (LIST VAL (IF V (TAGF (QUOTE R) C)                             0025600
      (TAGF (QUOTE L567.7) (TAGF (QUOTE R) C)))))                         0025700
  COF (IF (NOT (NUMBP VAL))                                               0025800
   (GO OCF2) (EQ 0 (WORDAND VAL 4Q15)) (GO ND1))                          0025900
   (RETURN (CONS (LIST (QUOTE NUMBER) VAL)                                0026000
    (IF C (LIST C) NIL))) OOF2 (SET VAL 0) (GO ND1)))                     0026100
 (FUNCTION (SHFTRA SYMBOL)                                                0026200
  ((VAL SYMBOL) (TYPE SYMBOL) (B SYMBOL))                                 0026300
  (BLOCK ((V SYMBOL))                                                     0026400
   (SET V (WHATBITS B))                                                   0026500
   (IF (EQN (QUOTE REAL) TYPE)                                            0026600
    (RETURN (IF (EQ 0 VAL) (QUOTE (0 R)) NIL))                            0026700
    (EQN (QUOTE BOOLEAN) TYPE)                                            0026800
    (IF VAL (SET VAL 1) (RETURN (QUOTE (0 R))))                           0026900
    (NOT (NUMBP VAL)) (SET VAL 0))                                        0027000
   NUM (IF (EQN TYPE (QUOTE INTEGER))                                     0027100
    (GO A2)                                                               0027200
    (NOT (EQN TYPE (QUOTE OCTAL)))                                        0027300
    (RETURN NIL)                                                          0027400
    (EQ 0 (WORDAND VAL 4Q15))                                             0027500
    (GO A1)                                                               0027600
    (FULLW B)                                                             0027700
    (RETURN (CONS (LIST (QUOTE NUMBER) VAL) NIL))                         0027800
    (SET VAL (WORDAND VAL (MMSK (LIST 0 (CADR V))))))                     0027900
   A1 (SET B NIL)                                                         0028000
   (GO A3)                                                                0028100
   A2 (SET B (QUOTE (S)))                                                 0028200
   A3 (SET TYPE (IF (LS VAL 0) -1 1))                                     0028300
   (IF (GR (SET VAL (SHIFT (WORDAND (ABS VAL)                             0028400
        (PLUS (SHIFT 1Q (CADR V)) -1))                                    0028500
       (REMAINDER (CAR V) 6))) 37777777Q)                                 0028600
    (RETURN (CONS (LIST (QUOTE NUMBER) (TIMES TYPE VAL)) NIL)))           0028700
   (SET V (GETN (QUOTE (0 (R L4567.7)                                     0028800
       1 (R L3456.7)                                                      0028900
       2 (R L2345.7)                                                      0029000
       3 (R L1234.7)                                                      0029100
       4 (R L0123.7) 5 (R L012.7) 6 (R L01.7) 7 (R L0.7)))                0029200
    (QUOTIENT (CAR V) 6)))                                                0029300
   (RETURN (LIST (WORDOR 0Q (TIMES TYPE VAL))                             0029400
    (APPEND (IF V V (QUOTE (R))) B)))))                                   0029500
 (FUNCTION (MMSK SYMBOL)                                                  0029600
  ((B SYMBOL))                                                            0029700
  (BLOCK NIL (SET B (WHATBITS B))                                         0029800
   (RETURN (WORDAND (SHIFT 3777777777777777Q (CAR B))                     0029900
    (SHIFT 3777777777777777Q (PLUS -47 (CAR B) (CADR B))))))))            0030000
 (FUNCTION (MDECR SYMBOL)                                                 0030100
  NIL (IF (EQN VCLASS (QUOTE ACTIVE))                                     0030200
   (TRANSA2L)                                                             0030300
   (EQN VCLASS (QUOTE LOC))                                               0030400
   (IF (OR VIND VREG) (COMERR (QUOTE (CAN NOT BE A DECR))) VADDR)         0030500
   (NOT (EQN VCLASS (QUOTE DATUM)))                                       0030600
   (COMER2 VCLASS (QUOTE (NOT A LEGAL CLASS)))                            0030700
   (OR (EQN VTYPE (QUOTE REAL))                                           0030800
    (EQN VTYPE (QUOTE OCTAL)) (EQN VTYPE (QUOTE INTEGER)))                0030900
   (LIST (QUOTE NUMBER) VADDR)                                            0031000
   (EQN VTYPE (QUOTE SYMBOL))                                             0031100
   (SYMOD VADDR)                                                          0031200
   (EQN VTYPE (QUOTE BOOLEAN))                                            0031300
   (IF VADDR 1 0) (COMER2 VTYPE (QUOTE (IS NOT A LEGAL DECR))))))         0031400
(MCVEP2 (FUNCTION (CNVD SYMBOL)                                           0031500
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  ((NT SYMBOL))                                                          0031600
  (BLOCK NIL (IF (NULL (CONVP NT))                                       0031700
    (RETURN (COMERR (QUOTE (TYPES NOT CONVERTIBLE)))))                   0031800
   (SET VADDR (CNVDATM VTYPE VADDR NT)) (SET VTYPE NT)))                 0031900
(FUNCTION (CNVDATM SYMBOL)                                               0032000
  ((OTYP SYMBOL) (VAL SYMBOL) (NTYP SYMBOL))                             0032100
  (BLOCK ((W SYMBOL) (VTYPE SYMBOL))                                     0032200
   (IF (OR (EQN NTYP (QUOTE SYMBOL)) (EQN OTYP NTYP)) (RETURN VAL))      0032300
   (SET VTYPE OTYP)                                                      0032400
   (IF (NOT (ATOM (SET W (CONVP NTYP))))                                 0032500
    (GO CC)                                                              0032600
    (NULL W)                                                             0032700
    (RETURN NIL)                                                         0032800
    (EQN W (QUOTE V))                                                    0032900
    (RETURN VAL)                                                         0033000
    (EQN W (QUOTE OI))                                                   0033100
    (RETURN (IF (NUMBP VAL) (PLUS VAL 0) 0))                             0033200
    (EQN W (QUOTE IR))                                                   0033300
    (GO CCC)                                                             0033400
    (EQN W (QUOTE TRU))                                                  0033500
    (RETURN (QUOTE TRUE))                                                0033600
    (EQN W (QUOTE MZ))                                                   0033700
    (RETURN (IF (EQ 0 VAL) 0 (WORDOR OQ VAL)))                           0033800
    (EQN W (QUOTE SP))                                                   0033900
    (RETURN (IF (OR (NULL VAL) (EQN VAL (QUOTE FALSE)))                  0034000
      NIL (QUOTE TRUE))))                                                0034100
   CC (IF (EQN OTYP (QUOTE REAL))                                        0034200
    (IF (NOT (NUMBP VAL))                                                0034300
     (GO CCC)                                                            0034400
     (EQN NTYP (QUOTE INTEGER))                                          0034500
     (RETURN (ENTIER VAL))                                               0034600
     (EQN NTYP (QUOTE OCTAL))                                            0034700
     (RETURN (WORDOR OQ (ENTIER VAL))) NIL)                              0034800
    (EQN OTYP (QUOTE SYMBOL))                                            0034900
    (IF (EQN NTYP (QUOTE FUNCTIONAL))                                    0035000
     (RETURN (COMERR (QUOTE (CNV OF A DATUM TO TYPE FUNCTIONAL))))       0035100
     (MEMBER NTYP (QUOTE (INTEGER OCTAL REAL))) (GO CCC)))               0035200
   (RETURN (COMERR (LIST OTYP (QUOTE TO)                                 0035300
     NTYP (QUOTE (DOESNT MAKE SENSE FOR DATUM)))))                       0035400
   CCC (IF (NOT (NUMBP VAL))                                             0035500
    (BLOCK NIL (COMER2 VAL (QUOTE (IS NOT A NUMBER YOU KNOW)))           0035600
     (SET VAL 0)))                                                       0035700
   (RETURN (IF (EQN NTYP (QUOTE INTEGER))                                0035800
     (ENTIER VAL)                                                        0035900
     (EQN NTYP (QUOTE REAL))                                             0036000
     (FLOAT VAL)                                                         0036100
     (EQN NTYP (QUOTE OCTAL)) (WORDOR OQ (ENTIER VAL)) 0))))             0036200
(FUNCTION (MOVARG SYMBOL)                                                0036300
 ((XTYPE SYMBOL) (XREG SYMBOL) (XBYTE SYMBOL) (ICLASS SYMBOL))           0036400
 (IF (EQN ICLASS (QUOTE BXE))                                            0036500
  (MDECR)                                                                0036600
  (NOT (EQN VTYPE XTYPE))                                                0036700
  (MOVARG2 XTYPE XREG XBYTE ICLASS)                                      0036800
  (NULL (SET XTYPE (EXHOCKY ICLASS XBYTE)))                              0036900
  (MOVACTIVE VTYPE XREG XBYTE)                                           0037000
  (EQN ICLASS (QUOTE LDX)) (CDR (MLDX XTYPE XREG)) XTYPE))               0037100
(FUNCTION (MOVARG2 SYMBOL)                                               0037200
 ((XTYPE SYMBOL) (XREG SYMBOL) (XBYTE SYMBOL) (ICLASS SYMBOL))           0037300
 (BLOCK ((X SYMBOL))                                                     0037400
  (IF (NULL (SET X (CONVP XTYPE)))                                       0037500
   (RETURN (COMERR (QUOTE (TYPE CONV NOT LEGAL))))                       0037600
   (NOT (ATOM X))                                                        0037700
   (RETURN (MOVACTIVE XTYPE XREG XBYTE))                                 0037800
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    (EQN X (QUOTE OI))                                                    0037900
    (GO AFTER)                                                            0038000
    (EQN X (QUOTE V))                                                     0038100
    (GO BEFORE)                                                           0038200
    (EQN X (QUOTE TRU))                                                   0038300
    (GO DAT) (RETURN (MOVACTIVE XTYPE XREG XBYTE)))                       0038400
   AFTER (SET X (MOVARG VTYPE XREG XBYTE ICLASS))                         0038500
   (GO END)                                                               0038600
   BEFORE (SET X (BLOCK ((VTYPE SYMBOL))                                  0038700
     (SET VTYPE XTYPE) (RETURN (MOVARG XTYPE XREG XBYTE ICLASS))))        0038800
   (GO END)                                                               0038900
   DAT (SET X (BLOCK ((VCLASS SYMBOL)                                     0039000
      (VTYPE SYMBOL)                                                      0039100
      (VREG SYMBOL)                                                       0039200
      (VIND SYMBOL) (VBYTE SYMBOL) (VINV SYMBOL) (VADDR SYMBOL))          0039300
     (SETTRU) (RETURN (MOVARG XTYPE XREG XBYTE ICLASS))))                 0039400
   END (IF (NULL X) (SET VTYPE XTYPE)) (RETURN X)))                       0039500
(FUNCTION (EXHOCKY SYMBOL)                                                0039600
 ((C SYMBOL) (B SYMBOL))                                                  0039700
 (BLOCK ((V SYMBOL) (W SYMBOL) (A SYMBOL))                                0039800
  (IF (EQN C (QUOTE LDA))                                                 0039900
   (GO A)                                                                 0040000
   (EQN C (QUOTE LDX))                                                    0040100
   (GO X)                                                                 0040200
   (AND (EQN C (QUOTE FAD)) (FULLW B) (FULLW VBYTE))                      0040300
   (GO F) (RETURN NIL))                                                   0040400
  A (IF (EQN VCLASS (QUOTE DATUM))                                        0040500
   (GO DA)                                                                0040600
   (NUMBP (SET C (BMODS (QUOTE ACTIVE) B)))                               0040700
   (RETURN NIL) (EQN VCLASS (QUOTE ACTIVE)) (GO AA))                      0040800
  (SET V VIND)                                                            0040900
  (SET W VREG)                                                            0041000
  (SET A VADDR)                                                           0041100
  AO (IF (EQN VTYPE (QUOTE INTEGER))                                      0041200
   (SET C (TAGF (IF (FULLW VBYTE) 0 (QUOTE S))                            0041300
     (TAGF C (ADDRMODS V W))))) (SET C (TAGF C (ADDRMODS V W))))          0041400
  (IF (NULL C) (RETURN (LIST A)) (RETURN (LIST A C)))                     0041500
  AA (SET V (SET W NIL))                                                  0041600
  (SET A (TRANSA2L))                                                      0041700
  (GO AO)                                                                 0041800
  DA (IF (AND (EQN VTYPE (QUOTE REAL)) (FULLW B))                         0041900
   (RETURN (LIST (LIST (QUOTE NUMBER) VADDR)))                            0042000
   (OR (EQN VTYPE (QUOTE INTEGER)) (EQN VTYPE (QUOTE OCTAL)))             0042100
   (RETURN (NADDR VADDR VTYPE B))                                         0042200
   (EQN VTYPE (QUOTE SYMBOL))                                             0042300
   (GO DSYM)                                                              0042400
   (EQN VTYPE (QUOTE BOOLEAN))                                            0042500
   (RETURN (NADDR VADDR (QUOTE BOOLEAN) B))                               0042600
   (EQN VTYPE (QUOTE FUNCTIONAL))                                         0042700
   (RETURN (LIST VADDR)) (RETURN NIL))                                    0042800
  DSYM (SET W (QUOTE (R)))                                                0042900
  (IF (AND (NOT (ATOM (SET A (SYMCD VADDR))))                             0043000
    (IF (EQN (CAR A) (QUOTE QUOTE)) (NULL (SET W NIL)) NIL)               0043100
    (FULLW B))                                                            0043200
   (RETURN (LIST A))                                                      0043300
   (FULLW B)                                                              0043400
   (RETURN (CONS A (IF (NULL W) NIL (QUOTE ((R L4567.7))))))              0043500
   (NUMBP (SET V (BMODS (QUOTE ACTIVE) B)))                               0043600
   (RETURN (IF (ATOM A) (SHFTRA A (QUOTE OCTAL) B) NIL))                  0043700
   (NULL W) (RETURN (LIST A V)) (RETURN (LIST A (CONS V W))))             0043800
  X (IF (NOT (EQN (LXRM B) (QUOTE RA)))                                   0043900
   (RETURN NIL)                                                           0044000
   (EQN VCLASS (QUOTE DATUM))                                             0044100
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     (GO LDXR)                                                          0044200
     (NULL (SET A (LXRM VBYTE)))                                        0044300
     (RETURN NIL)                                                       0044400
     (EQN VCLASS (QUOTE ACTIVE))                                        0044500
     (RETURN (IF (EQN A (QUOTE RA))                                     0044600
       (IF (NUMBP VREG)                                                 0044700
        (LIST C (LIST (QUOTE R) VREG))                                  0044800
        (EQN VREG (QUOTE AC))                                           0044900
        (LIST C (QUOTE (R 15))) (LIST (TRANSA2L)))                      0045000
       (LIST (TRANSA2L) A)))                                            0045100
     (RETURN (LIST VADDR (TAGF A (ADDRMODS VIND VREG)))))               0045200
    LDXR (IF (OR (EQN VTYPE (QUOTE INTEGER))                            0045300
      (EQN VTYPE (QUOTE OCTAL)))                                        0045400
     (RETURN (LXN VADDR))                                               0045500
     (EQN VTYPE (QUOTE REAL))                                           0045600
     (RETURN (LXN (ENTIER VADDR)))                                      0045700
     (EQN VTYPE (QUOTE SYMBOL))                                         0045800
     (RETURN (LIST (SYMCD VADDR) (QUOTE R)))                            0045900
     (EQN VTYPE (QUOTE BOOLEAN))                                        0046000
     (RETURN (LIST (IF VADDR 1 0) (QUOTE R)))                           0046100
     (EQN VTYPE (QUOTE FUNCTIONAL))                                     0046200
     (RETURN (LIST (LIST (QUOTE FUNCTION) VADDR) (QUOTE R)))            0046300
     (RETURN NIL))                                                      0046400
    F (IF (EQN VCLASS (QUOTE DATUM))                                    0046500
     (GO FD) (EQN VTYPE (QUOTE REAL)) (GO FR) (RETURN NIL))             0046600
    FD (IF (EQN VTYPE (QUOTE REAL))                                     0046700
     (RETURN (LIST (LIST (QUOTE NUMBER) VADDR)))                        0046800
     (OR (EQN VTYPE (QUOTE INTEGER)) (EQN VTYPE (QUOTE OCTAL)))         0046900
     (RETURN (LIST (LIST (QUOTE NUMBER) (FLOAT VADDR))))                0047000
     (RETURN NIL))                                                      0047100
    FR (IF (EQN VCLASS (QUOTE ACTIVE))                                  0047200
     (RETURN (LIST (TRANSA2L)))                                         0047300
     (EQN VCLASS (QUOTE LOC))                                           0047400
     (RETURN (LIST VADDR (ADDRMODS VIND VREG))))))                      0047500
  (FUNCTION (MCVDI SYMBOL)                                              0047600
   ((XREG SYMBOL) (XBYTE SYMBOL))                                       0047700
   (BLOCK NIL (MCVACTIVE VTYPE XREG XBYTE)                              0047800
    (SET VTYPE (QUOTE INTEGER)) (RETURN NIL))))                         0047900
(MCVEP3 (FUNCTION (MAKELOC SYMBOL)                                      0048000
   NIL (BLOCK NIL (IF (NOT (AND (EQN VCLASS (QUOTE LOC))                0048100
       (FULLW VBYTE) (NULL VINV)))                                      0048200
     (RETURN (COMER2 (VLIST) (QUOTE (NOT LEGAL FOR MAKELOC))))          0048300
     (ATOM VREG)                                                        0048400
     (IF (NULL VREG) (SET VREG 0) NIL) (SET VREG (CAR VREG)))           0048500
    (IF VIND (GO INDIRECT)                                              0048600
     (OR (NULL VADDR) (EQ VADDR 0))                                     0048700
     (GO TONLY)                                                         0048800
     (MEMBER VREG (QUOTE (AC 15)))                                      0048900
     (GO AVADDR)                                                        0049000
     (EQ 0 VREG)                                                        0049100
     (BLOCK NIL (ATTACH (LIST (QUOTE LDX) VADDR (QUOTE R) 4))           0049200
      (SET VREG 4))                                                     0049300
     (ATTACH (LIST (QUOTE BAX) (QUOTE (D. 1)) VREG VADDR)))             0049400
    (BLOTCH VREG)                                                       0049500
    (GO LONLY)                                                          0049600
    AVADDR (ATTACH (LIST (QUOTE ADD) VADDR (QUOTE (R L567.7))))         0049700
    (GO DONE)                                                           0049800
    TONLY (IF (MEMBER VREG (QUOTE (AC 15))) (GO DONE))                  0049900
    LONLY (ATTACH (LIST (QUOTE LDA) (TRANSA2L) (QUOTE L567.7)))         0050000
    (GO DONE)                                                           0050100
    INDIRECT (ATTACH1 (LIST (QUOTE LDA) VADDR VREG))                    0050200
    DONE (SET VTYPE (QUOTE SYMBOL))                                     0050300
    (BLOTCH (QUOTE AC)) (RETURN (SVACT (QUOTE AC) NIL))))               0050400
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(FUNCTION (MOVACTIVE SYMBOL)                                              0050500
 ((XTYPE SYMBOL) (XREG SYMBOL) (XBYTE SYMBOL))                            0050600
 (BLOCK ((S SYMBOL) (R SYMBOL))                                           0050700
  (IF VINV (GO SPECH))                                                    0050800
  MOVA (IF (EQN VTYPE XTYPE)                                              0050900
   (GO NOCNV)                                                             0051000
   (EQN VCLASS (QUOTE LOC))                                               0051100
   (GO L2A)                                                               0051200
   (EQN VCLASS (QUOTE ACTIVE))                                            0051300
   (GO A2L)                                                               0051400
   (EQN VCLASS (QUOTE DATUM))                                             0051500
   (GO CNVDAT)                                                            0051600
   (RETURN (COMER2 VCLASS (QUOTE (NOT A CLASS)))))                        0051700
  CNVDAT (CNVD XTYPE)                                                     0051800
  DAT2ACT (IF (CANSTZ XBYTE (LIST (REVA2L XREG)))                         0051900
   (GO DN)                                                                0052000
   (NULL (SET R (EXHOCKY (DXREG XREG) XBYTE)))                            0052100
   (RETURN (BLOCK NIL (SET VBYTE NIL)                                     0052200
     (MOVACTIVE XTYPE (QUOTE AC) NIL) (ACT2ACT XREG XBYTE)))              0052300
   (NUMBP XREG)                                                           0052400
   (ATTACH1 (MLDX R XREG)) (ATTACH1 (CONS (LOPC XREG) R)))                0052500
  DN (BLOTCH XREG)                                                        0052600
  (RETURN (SVACT XREG XBYTE))                                             0052700
  L2A (IF (OR (EQN VADDR (QUOTE PUSHA.))                                  0052800
    (EQN VADDR (QUOTE PUSHP.))) (SET VADDR (QUOTE POP.)))                 0052900
  A2L (IF (NULL (SET S (CNVL2AC XTYPE (IF (EQN XREG (QUOTE AC))           0053000
       XBYTE NIL))))                                                      0053100
   (RETURN (ACT2ACT XREG XBYTE))                                          0053200
   (EQ 0 S)                                                               0053300
   (GO CNVERR)                                                            0053400
   (EQ S 1)                                                               0053500
   (RETURN (ITSTRU XREG XBYTE))                                           0053600
   (EQ S 2)                                                               0053700
   (GO NOCNV) (EQ 3 S) (RETURN (MOVOI XREG XBYTE)))                       0053800
  CNVERR (COMERR (LIST (VLIST)                                            0053900
    (QUOTE MOVACTIVE)                                                     0054000
    (QUOTE TO) XTYPE XREG XBYTE (QUOTE ILLEGAL) S))                       0054100
  (SET VTYPE XTYPE)                                                       0054200
  (GO MOVA)                                                               0054300
  NOCNV (IF (EQN VCLASS (QUOTE LOC))                                      0054400
   (RETURN (LOC2ACT XREG XBYTE))                                          0054500
   (EQN VCLASS (QUOTE DATUM))                                             0054600
   (GO DAT2ACT)                                                           0054700
   (NOT (EQN VCLASS (QUOTE ACTIVE)))                                      0054800
   (RETURN (BLOCK NIL (COMER2 (VLIST)                                     0054900
     (QUOTE (NOT LEGAL FOR MOVACTIVE)))                                   0055000
    (SVACT XREG XBYTE) (SET VTYPE XTYPE) (RETURN NIL))))                  0055100
  A2A (RETURN (ACT2ACT XREG XBYTE))                                       0055200
  SPECH (IF (AND (EQN VTYPE (QUOTE SYMBOL)) (ISINV (QUOTE MINUS)))        0055300
   (LSYMNS)) (GO MOVA)))                                                  0055400
(FUNCTION (LSYMNS SYMBOL)                                                 0055500
 NIL (BLOCK NIL (ATTACH (QUOTE (ARGS)))                                   0055600
  (MOVACTIVE VTYPE (QUOTE AC) NIL) (CALCOMP (QUOTE MINSYM))))             0055700
(FUNCTION (ACT2ACT SYMBOL)                                                0055800
 ((XREG SYMBOL) (XBYTE SYMBOL))                                           0055900
 (BLOCK ((A SYMBOL))                                                      0056000
  (IF (NOT (EQN VCLASS (QUOTE ACTIVE)))                                   0056100
   (RETURN (BLOCK NIL (COMERR (QUOTE (ACT2ACT ENTERED WITH VCLASS         0056200
       NOT ACTIVE))) (RETURN (MOVACTIVE VTYPE XREG XBYTE))))              0056300
   (EQN VREG XREG) (GO BONLY) (BEQ XBYTE) (GO RONLY))                     0056400
  BOTH (IF (AND (OR (NUMBP VREG) (NUMBP XREG))                            0056500
    (LXRM VBYTE) (LXRM XBYTE))                                            0056600
   (GO HLFS)                                                              0056700
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 (OR (EQN VREG (QUOTE AC)) (EQN VREG (QUOTE B)))                          C056800
 (GO B1)                                                                  C056900
 (OR (EQN XREG (QUOTE AC)) (EQN XREG (QUOTE B)))                          C057000
 (GO R1)                                                                  C057100
 (NOT (NUMBP VREG))                                                       C057200
 (GO ISL) (NULL (SET A (EXHOCKY (QUOTE LDX) XBYTE))) (GO USEB))           C057300
(ATTACH1 (MLDX A XREG))                                                   C057400
(GO DONE1)                                                                C057500
B1 (IF (AND (OR (EQN XREG (QUOTE AC))                                     C057600
    (EQN XREG (QUOTE B)) (EQN XREG (QUOTE L)))                            C057700
  (NOT (NUMBP (SET A (BMODS (QUOTE ACTIVE) XBYTE)))))                     C057800
 (GO B2) (NUMBP XREG) (GO B3))                                            C057900
(ACT2ACT VREG XBYTE)                                                      C058000
(IF (NOT (EQN XREG (QUOTE AC)))                                           C058100
 (GO RONLY)                                                               C058200
 (AND (EQN (QUOTE ANS) (CAR (SET A (CAR LISTING))))                       C058300
  (EQ (CADR A) (TRANSA2L)))                                               C058400
 (SET LISTING (CONS (CONS (QUOTE ANA) (CDR A)) (CDR LISTING)))            C058500
 (GO RONLY))                                                              C058600
(GO DONE)                                                                 C058700
R1 (ACT2ACT XREG (IF XBYTE NIL VBYTE))                                    C058800
(GO BONLY)                                                                C058900
USEB (ACT2ACT (QUOTE B) NIL)                                              C059000
(ATTACH (MLDX (QUOTE (B. RA)) XREG))                                      C059100
(GO DONE1)                                                                C059200
ISL (IF (NUMBP (SET A (BMODS (QUOTE ACTIVE) XBYTE)))                      C059300
 (GO SWAP))                                                               C059400
B2 (ATTACH1 (LIST (LOPC XREG) (TRANSA2L) (IF A A 0)))                     C059500
(GO DONE1)                                                                C059600
B3 (ACT2ACT VREG (QUOTE (0 18)))                                          C059700
(GO XR)                                                                   C059800
BONLY (IF (NOT (ISINV (QUOTE MINUS)))                                     C059900
 (GO NOINV)                                                               C060000
 (NUMBP VREG)                                                             C060100
 (RETURN (BLOCK ((VINV SYMBOL))                                           C060200
   (SET VINV (QUOTE (MINUS)))                                             C060300
   (ACT2ACT (QUOTE AC) XBYTE) (ACT2ACT XREG XBYTE)))                      C060400
 (ATTACH (LIST (LDCMP VREG) (TRANSA2L))))                                 C060500
NOINV (IF (BEQ XBYTE) (RETURN (SVACT XREG XBYTE)))                        C060600
ADJBYT (IF (NUMBP XREG)                                                   C060700
 (GO SWAP)                                                                C060800
 (SET A (EXHOCKY (QUOTE LDA) XBYTE))                                      C060900
 (ATTACH1 (CONS (LOPC XREG) A))                                           C061000
 (EQN VREG (QUOTE L)) (GO TSTL) (GO ABSHFT))                              C061100
(GO DONE)                                                                 C061200
ABSHFT (IF (NOT (EQ 0 (CADR (SET A (SPARAM XBYTE)))))                     C061300
 (ATTACH (CONS (IF (EQN VREG (QUOTE AC))                                  C061400
    (QUOTE SFA) (EQN VREG (QUOTE B)) (QUOTE SFB) (QUOTE SHIFT))           C061500
   (CDR A))))                                                             C061600
(IF (EQN (CAR A) (QUOTE SHIFT)) (GO DONE))                                C061700
MSK (SET VBYTE (CONS (CAR (SET A (WHATBITS XBYTE)))                       C061800
  (IF (GR (CADR (SET VBYTE (WHATBITS VBYTE)))                             C061900
    (CADR (SET A (WHATBITS XBYTE)))) (CDR A) (CDR VBYTE))))               C062000
(IF (OR (EQN VREG (QUOTE B)) (EQN VREG (QUOTE L))) (GO INB))              C062100
(ATTACH (CONS (QUOTE ANA)                                                 C062200
  (NADDR (MMSK VBYTE) (QUOTE OCTAL) NIL)))                                C062300
(GO DONE)                                                                 C062400
INB (ATTACH (CONS (QUOTE LDA)                                             C062500
  (NADDR (MMSK VBYTE) (QUOTE OCTAL) NIL)))                                C062600
(BLOTCH (QUOTE AC))                                                       C062700
(ATTACH (LIST (QUOTE ANS) (TRANSA2L)))                                    C062800
(GO DONE)                                                                 C062900
TSTL (IF (EQ (CADR (SPARAM XBYTE)) 0) (GO MSK))                           C063000
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    SWAP (ACT2ACT (QUOTE B) XBYTE)                                          0063100
    (RETURN (ACT2ACT XREG XBYTE))                                           0063200
    RONLY (IF (NUMBP XREG)                                                  0063300
     (GO STIXR)                                                             0063400
     (NOT (BEQ XBYTE))                                                      0063500
     (GO ER1)                                                               0063600
     (EQN VREG (QUOTE AC))                                                  0063700
     (ATTACH (LIST (QUOTE STF) (REVA2L XREG)))                              0063800
     (ATTACH (LIST (LOPC XREG) (TRANSA2L))))                                0063900
    (GO DONE1)                                                              0064000
    ER1 (ATTACH (LIST (LOPC XREG)                                           0064100
      (TRANSA2L)                                                            0064200
      (IF (NUMBP (SET A (BMODS (QUOTE ACTIVE) XBYTE))) 0 A)))               0064300
    (COMERR (QUOTE (BYTE TROUBLE AT RONLY IN ACT2ACT)))                     0064400
    (GO DONE1)                                                              0064500
    HLFS (IF (NOT (NUMBP VREG))                                             0064600
     (GO HLFS1)                                                             0064700
     (NUMBP XREG)                                                           0064800
     (ATTACH (LIST (QUOTE LDX) 0 VREG XREG))                                0064900
     (SET A (EXHOCKY (QUOTE LDA) XBYTE))                                    0065000
     (ATTACH1 (CONS (LOPC XREG) A)) (GO HLF0))                              0065100
    (GO DONE1)                                                              0065200
    HLF0 (ATTACH (LIST (QUOTE STX) (REVA2L XREG) 0 VREG))                   0065300
    (SVACT XREG NIL)                                                        0065400
    (BLOTCH XREG)                                                           0065500
    (GO RONLY)                                                              0065600
    HLFS1 (IF (EQ 24 (SET A (CAR (WHATBITS VBYTE))))                        0065700
     (SET A (QUOTE LA)) (EQ 0 A) NIL (GO ON))                               0065800
    (ATTACH (LIST (QUOTE LDX) (TRANSA2L) A XREG))                           0065900
    (GO DONE1)                                                              0066000
    ON (IF (EQN (QUOTE L) VREG) (SET A (QUOTE B)) (SET A VREG))             0066100
    (ACT2ACT A NIL)                                                         0066200
    (RETURN (ACT2ACT XREG XBYTE))                                           0066300
    STIXR (IF (NUMBP VREG) (GO XR))                                         0066400
    (ATTACH (LIST (IF (EQN VREG (QUOTE AC))                                 0066500
       (QUOTE STF)                                                          0066600
       (EQN VREG (QUOTE B))                                                 0066700
       (QUOTE STB) (EQN VREG (QUOTE L)) (QUOTE STL) (QUOTE LOADXR))         0066800
      (REVA2L XREG)))                                                       0066900
    (GO DONE1)                                                              0067000
    XR (IF (SET A (EXHOCKY (QUOTE LDX) XBYTE))                              0067100
     (ATTACH1 (MLDX A XREG)) (GO SWAP))                                     0067200
    DONE1 (BLOTCH XREG) DONE (RETURN (SVACT XREG XBYTE)))))                 0067300
(MCVEP4 (FUNCTION (LOC2ACT SYMBOL)                                          0067400
   ((R SYMBOL) (B SYMBOL)) (IF (L2AP.) (ACT2ACT R B) (LC2ACT R B)))         0067500
  (FUNCTION (LC2ACT SYMBOL)                                                 0067600
   ((R SYMBOL) (B SYMBOL))                                                  0067700
   (BLOCK ((X SYMBOL))                                                      0067800
    (IF (NULL (SET X (EXHOCKY (DXREG R) B)))                                0067900
     (GO WORK)                                                              0068000
     (NUMBP R) (ATTACH1 (MLDX X R)) (ATTACH1 (CONS (LOPC R) X)))            0068100
    END (BLOTCH R)                                                          0068200
    (RETURN (SVACT R B))                                                    0068300
    WORK (IF (NUMBP R)                                                      0068400
     (IF (NUMBP (BMODS (QUOTE ACTIVE) B))                                   0068500
      (IF (EQN VADDR (QUOTE A.))                                            0068600
       (SET X (QUOTE AC)) (SET X (QUOTE B))) (SET X (QUOTE L)))             0068700
     (EQN R (QUOTE L)) (SET X (QUOTE B)) (GO SAME))                         0068800
    EX1 (MCVACTIVE VTYPE X B)                                               0068900
    (GO EXIT)                                                               0069000
    SAME (IF (BBND VBYTE)                                                   0069100
     (LC2ACT R VBYTE)                                                       0069200
     (EQ R (QUOTE AC))                                                      0069300
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    (BLOCK NIL (ATTACH1 (LIST (LOPC R) VADDR (ADDRMODS VIND VREG)))   0069400
     (SVACT R VBYTE)                                                  0069500
     (BLOTCH R)                                                       0069600
     (ACT2ACT R (CONS (CAR (WHATBITS B)) (CDR (WHATBITS VBYTE)))))    0069700
    (BLOCK NIL (SET X (QUOTE AC)) (GO EX1)))                          0069800
   EXIT (RETURN (ACT2ACT R B))))                                      0069900
(FUNCTION (MOVPDS SYMBOL)                                             0070000
 ((XTYPE SYMBOL) (XBYTE SYMBOL))                                      0070100
 (BLOCK NIL (MOVLOC XTYPE (IF (OR (EQN XTYPE (QUOTE SYMBOL))         0070200
     (EQN XTYPE (QUOTE FUNCTIONAL)))                                  0070300
    (QUOTE PUSHP.) (QUOTE PUSHA.)) NIL NIL XBYTE)                     0070400
  (SET VADDR (QUOTE POP.))))                                          0070500
(FUNCTION (MOVLOC SYMBOL)                                             0070600
 ((XTYPE SYMBOL)                                                      0070700
  (XADDR SYMBOL) (XREG SYMBOL) (XIND SYMBOL) (XBYTE SYMBOL))          0070800
 (BLOCK ((V SYMBOL) (Y SYMBOL) (L SYMBOL))                            0070900
  (IF (NULL XREG) (RETURN (MVLOCP XTYPE XADDR XREG XIND XBYTE)))      0071000
  (SET V (VLIST))                                                     0071100
  (SET Y (CAR (SET L (BLOCK ((LISTING SYMBOL) (VBLOT SYMBOL))         0071200
      (MVLOCP XTYPE XADDR XREG XIND XBYTE)                            0071300
      (RETURN (CONS VBLOT LISTING))))))                               0071400
  (IF (NOT (DSTRYD XREG Y)) (GO END))                                 0071500
  FNCALL (IF (NULL (SET L (CDR L)))                                   0071600
   (GO NOCALL)                                                        0071700
   (EQN (CAAR L) (QUOTE CALL)) (GO MOVSAV) (GO FNCALL))               0071800
  NOCALL (IF (NOT (ACEQ (QUOTE AC) XREG)) (GO MOVSAV))                0071900
  (VSET V)                                                            0072000
  (SET Y (CAR (SET L (BLOCK ((LISTING SYMBOL) (VBLOT SYMBOL))         0072100
      (MOVACTIVE XTYPE (QUOTE B) XBYTE)                               0072200
      (ACT2LOC XADDR XREG XIND XBYTE)                                 0072300
      (RETURN (CONS VBLOT LISTING))))))                               0072400
  (IF (DSTRYD XREG Y) (GO MOVSAV))                                    0072500
  END (SET LISTING (NCONC (CDR L) LISTING))                           0072600
  (SET VBLOT (UNION VBLOT Y))                                         0072700
  (RETURN NIL)                                                        0072800
  MOVSAV (VSET V)                                                     0072900
  (RETURN (MOVSAV XTYPE XADDR XREG XIND XBYTE NIL))))                 0073000
(FUNCTION (MVLOCP SYMBOL)                                             0073100
 ((XTYPE SYMBOL)                                                      0073200
  (XADDR SYMBOL) (XREG SYMBOL) (XIND SYMBOL) (XBYTE SYMBOL))          0073300
 (BLOCK ((A SYMBOL))                                                  0073400
  (IF (NOT (EQN VTYPE XTYPE)) (GO SE))                                0073500
  ST (IF (OR (EQN VCLASS (QUOTE ACTIVE)) (L2AP.))                     0073600
   (RETURN (ACT2LOC XADDR XREG XIND XBYTE))                           0073700
   (EQN VCLASS (QUOTE LOC))                                           0073800
   (GO EQQ)                                                           0073900
   (NOT (EQN VCLASS (QUOTE DATUM)))                                   0074000
   (RETURN (COMER2 VCLASS (QUOTE (NOT A PROPER CLASS))))              0074100
   (CANSTZ XBYTE (LIST XADDR (ADDRMODS XIND XREG)))                   0074200
   (RETURN (SVLOC XADDR XREG XIND XBYTE)) (FULLW XBYTE) (GO STF))     0074300
  (SET A (QUOTE L))                                                   0074400
  (GO C2)                                                             0074500
  EQQ (IF (AND (BEQ XBYTE)                                            0074600
    (NOT VINV) (EQ XADDR VADDR) (ACEQ XREG VREG) (EQ XIND VIND))      0074700
   (RETURN NIL) (NOT (FULLW XBYTE)) (GO C1))                          0074800
  STF (MOVACTIVE XTYPE (QUOTE AC) NIL)                                0074900
  (RETURN (ACT2LOC XADDR XREG XIND XBYTE))                            0075000
  C1 (IF (BBND XBYTE)                                                 0075100
   (IF (BBND VBYTE) (SET A (QUOTE L)) (SET A (QUOTE B)))              0075200
   (SET A (QUOTE AC)))                                                0075300
  C2 (MOVACTIVE XTYPE A XBYTE)                                        0075400
  (RETURN (ACT2LOC XADDR XREG XIND XBYTE))                            0075500
  SE (IF (EQN VCLASS (QUOTE DATUM))                                   0075600
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    (CNVD XTYPE)                                                          0075700
    (NOT (ATOM (SET A (CONVP XTYPE))))                                    0075800
    (GO STF)                                                              0075900
    (EQN A (QUOTE V))                                                     0076000
    (SET VTYPE XTYPE)                                                     0076100
    (EQN A (QUOTE TRU))                                                   0076200
    (SETTRU) (EQN A (QUOTE OI)) (GC OINK) (GO STF))                       0076300
   (GO ST)                                                                0076400
   OINK (MOVLCC VTYPE XADDR XREG XIND XBYTE)                              0076500
   (SET VTYPE XTYPE) (RETURN NIL)))                                       0076600
(FUNCTION (DSTRYC SYMBOL)                                                 0076700
 ((XREG SYMBOL) (Y SYMBOL))                                               0076800
 (CR (MEMBER (SET XREG (IF (ATOM XREG) XREG (CAR XREG))) Y)               0076900
  (AND (EQN XREG (QUOTE AC)) (MEMBER 15 Y))                               0077000
  (AND (EQ XREG 15) (MEMBER (QUOTE AC) Y))))                              0077100
(FUNCTION (MOVSAV SYMBOL)                                                 0077200
 ((XTYPE SYMBOL)                                                          0077300
  (XADDR SYMBOL)                                                          0077400
  (XREG SYMBOL) (XIND SYMBOL) (XBYTE SYMBOL) (Z SYMBOL))                  0077500
 (BLOCK ((X SYMBOL) (Y SYMBOL))                                           0077600
  (SET X (IF (ATOM XREG) XREG (CAR XREG)))                                0077700
  (IF XIND (BLOCK NIL (ATTACH (IF (AND (NUMBP XREG) (LS XREG 9))          0077800
      (LIST (QUOTE LDX) XADDR XREG XREG)                                  0077900
      (LIST (QUOTE LDA) XADDR 15)))                                       0078000
    (BLOTCH (QUOTE AC)) (SET XIND NIL) (SET XADDR 0) GO1614))             0078100
  (IF (AND (EQN VCLASS (QUOTE LOC))                                       0078200
    (ACEQ (SET Y (IF (ATOM VREG) VREG (CAR VREG))) X))                    0078300
   (COMERR (QUOTE (VREG AND XREG ARE THE SAME FOR MOVLOC))))              0078400
  (SVXREG XADDR X)                                                        0078500
  (IF (AND (EQN VCLASS (QUOTE LOC))                                       0078600
    (MEMBER VADDR (QUOTE (POP. TCP. PUSHA. PUSHP.))))                     0078700
   (SET VADDR (QUOTE (TOP. -1))))                                         0078800
  (MOVLOC XTYPE (QUOTE PCP.) NIL (QUOTE INDIRECT) XBYTE)                  0078900
  (IF (MEMBER XADDR (QUOTE (POP. TOP. PUSHA. PUSHP.)))                    0079000
   (ATTACH (QUOTE (POP. 1)))) (RETURN (SVLOC NIL NIL NIL NIL))))          0079100
(FUNCTION (SVXREG SYMBOL)                                                 0079200
 ((XADDR SYMBOL) (XREG SYMBOL))                                           0079300
 (IF (EQ 0 XADDR)                                                         0079400
  (STXREG XREG (QUOTE PUSHP.))                                            0079500
  (BLOCK NIL (BLOTCH XREG) (RETURN NIL))                                  0079600
  NIL (IF (MEMBER XREG (QUOTE (AC 15)))                                   0079700
   (ATTACH (LIST (QUOTE ADD) XADDR (QUOTE (R L567.7))))                   0079800
   (ATTACH (LIST (QUOTE BAX) (QUOTE (D. 1)) XREG XADDR)))                 0079900
  (STXREG XREG (QUOTE PUSHP.)) NIL))                                      0080000
(FUNCTION (STXREG SYMBOL)                                                 0080100
 ((XREG SYMBOL) (WHERE SYMBOL))                                           0080200
 (BLOCK NIL (IF (OR (EQN XREG (QUOTE AC)) (EQ XREG 15))                   0080300
   (ATTACH (LIST (QUOTE STF) WHERE))                                      0080400
   (ATTACH (LIST (QUOTE STX) WHERE 0 XREG)))))                            0080500
(FUNCTION (CANSTZ SYMBOL)                                                 0080600
 ((XBYTE SYMBOL) (IADR SYMBOL))                                           0080700
 (BLOCK NIL (IF (OR (AND (EQ VADDR 0)                                     0080800
     (OR (MEMBER VTYPE (QUOTE (INTEGER REAL)))                            0080900
      (AND (EQN VTYPE (QUOTE OCTAL))                                      0081000
       (NOT (EQUALN 7777777777777777Q VADDR)))))                          0081100
    (AND (MEMBER VTYPE (QUOTE (SYMBOL BOOLEAN)))                          0081200
     (MEMBER VADDR (QUOTE (NIL FALSE)))))                                 0081300
   (GO X)                                                                 0081400
   (NOT (AND (EQN VTYPE (QUOTE OCTAL))                                    0081500
     (EQUALN VADDR 7777777777777777Q) (FULLW XBYTE)))                     0081600
   (RETURN NIL))                                                          0081700
  (ATTACH1 (IF (EQ IADR (QUOTE (A.)))                                     0081800
   (QUOTE (LDA 77Q (L7.7 R S))) (CONS (QUOTE STMZ) IADR)))                0081900
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   (RETURN TRUE)                                                                0082000
   X (IF (FULLW XBYTE)                                                          0082100
    (ATTACH1 (CONS (QUOTE STZ) IADR))                                           0082200
    (BLOCK NIL (ATTACH1 (COMPMSK XBYTE))                                        0082300
     (ATTACH1 (CONS (QUOTE ANS) IADR)) (BLOTCH (QUOTE AC)) G01615))             0082400
   (RETURN TRUE)))                                                              0082500
 (FUNCTION (ACEQ SYMBOL)                                                        0082600
  ((V SYMBOL) (X SYMBOL))                                                       0082700
  (CR (EQ V X)                                                                  0082800
   (AND (EQN V (QUOTE AC)) (EQ X 15))                                           0082900
   (AND (EQN X (QUOTE AC)) (EQ V 15))))                                         0083000
 (FUNCTION (ACT2LOC SYMBOL)                                                     0083100
  ((XADDR SYMBOL) (XREG SYMBOL) (XIND SYMBOL) (XBYTE SYMBOL))                   0083200
  (BLOCK ((X SYMBOL) (Y SYMBOL))                                                0083300
   C (IF (NOT (EQN VCLASS (QUOTE ACTIVE)))                                      0083400
    (RETURN (BLOCK NIL (COMERR (QUOTE (ACT2LOC ENTERED AND VCLASS IS            0083500
        NOT ACTIVE)))                                                           0083600
      (RETURN (MOVLOC VTYPE XADDR XREG XIND XBYTE))))                           0083700
    VINV (RETURN (BLOCK NIL (MOVACTIVE VTYPE VREG XBYTE)                        0083800
      (RETURN (ACT2LOC XADDR XREG XIND XBYTE))))                                0083900
    (NUMBP VREG)                                                                0084000
    (GO STX)                                                                    0084100
    (FULLW XBYTE)                                                               0084200
    (GO STF) (NUMBP (SET X (BMODS (QUOTE LOC) XBYTE))) (GO MSKS))               0084300
   (ATTACH1 (LIST (STOC VREG) XADDR (TAGF (ADDRMODS XIND XREG) X)))             0084400
   (GO XX)                                                                      0084500
   STF (ATTACH1 (LIST (IF (OR (EQ VREG (QUOTE AC))                              0084600
       (NOT (FULLW VBYTE)))                                                     0084700
      (BLOCK NIL (ACT2ACT (QUOTE AC) NIL) (RETURN (QUOTE STF)))                 0084800
      (STOC VREG)) XADDR (ADDRMODS XIND XREG)))                                 0084900
   (GO XX)                                                                      0085000
   STX (IF (NULL (SET X (STXR XBYTE))) (GO CREG))                               0085100
   (ATTACH1 (LIST (QUOTE STX)                                                   0085200
     XADDR (TAGF (IF (EQN X (QUOTE RA)) 0 X)                                    0085300
      (ADDRMODS XIND XREG)) VREG))                                              0085400
   (GO XX)                                                                      0085500
   CREG (IF (NUMBP (BMODS (QUOTE LOC) XBYTE))                                   0085600
    (SET X (QUOTE AC)) (SET X (QUOTE L)))                                       0085700
   (ACT2ACT X VBYTE)                                                            0085800
   (GO 0)                                                                       0085900
   MSKS (ACT2ACT (QUOTE L) XBYTE)                                               0086000
   (SET X (IF (EQ 0 (SET X (ADDRMODS XIND XREG))) NIL (LIST X)))                0086100
   (SET LISTING (NCONC (REVERSE (LIST (COMPMSK XBYTE)                           0086200
       (APPEND (LIST (QUOTE ANA)                                                0086300
         (IF (MEMBER XADDR (QUOTE (POP. PUSHA. PUSHP.)))                        0086400
          (QUOTE TOP.) XADDR)) X)                                               0086500
       (QUOTE (CRA L.))                                                         0086600
       (APPEND (LIST (QUOTE STF) XADDR) X))) LISTING))                          0086700
   (BLOTCH (QUOTE AC)) XX (RETURN (SVLOC XADDR XREG XIND XBYTE))))              0086800
 (FUNCTION (COMPMSK SYMBOL)                                                     0086900
  ((XBYTE SYMBOL))                                                              0087000
  (BLOCK ((VBYTE SYMBOL))                                                       0087100
   (RETURN (CONS (QUOTE LDA)                                                    0087200
    (NADDR (WORDXOR 7777777777777777Q (MMSK XBYTE))                             0087300
     (QUOTE CCTAL) NIL)))))                                                     0087400
 (FUNCTION (ATTACH1 SYMBOL)                                                     0087500
  ((X SYMBOL))                                                                  0087600
  (BLOCK ((Y SYMBOL))                                                           0087700
   (IF (AND (CDR X) (SET Y (CDDR X))) (GO A))                                   0087800
   (ATTACH X)                                                                   0087900
   (RETURN NIL)                                                                 0088000
   A (IF (ATOM (CAR Y))                                                         0088100
    (IF (NULL (CDR Y))                                                          0088200
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      (IF (EQ 0 (CAR Y))                                                    0088300
        (ATTACH (LIST (CAR X) (CADR X))) (ATTACH X)) (ATTACH X))            0088400
     (GO SBL)) (RETURN NIL) SBL (ATTACH X)))                                0088500
  (FUNCTION (STXR SYMBOL)                                                   0088600
   ((XBYTE SYMBOL))                                                         0088700
   (IF (OR (ATOM XBYTE) (EQ 18 (CADR XBYTE))) (LXRM XBYTE) NIL))            0088800
  (FUNCTION (FULLW SYMBOL)                                                  0088900
   ((XBYTE SYMBOL)) (OR (NULL XBYTE) (EQ XBYTE (QUOTE (0 48)))))            0089000
  (FUNCTION (STOC SYMBOL)                                                   0089100
   ((REG SYMBOL))                                                           0089200
   (IF (MEMBER REG (QUOTE (AC B L)))                                        0089300
    (CADR (SASSOC REG (QUOTE ((AC STA) (B STB) (L STL))) CADRNIL))          0089400
    (BLOCK NIL (COMER2 REG (QUOTE (NOT A LEGAL REGISTER FOR STA CLASS)      0089500
      )) (RETURN (QUOTE STORE)))))                                          0089600
  (FUNCTION (SVLOC SYMBOL)                                                  0089700
   ((ADDR SYMBOL) (REG SYMBOL) (IND SYMBOL) (BYTE SYMBOL))                  0089800
   (BLOCK NIL (SET VCLASS (QUOTE LOC))                                      0089900
    (SET VADDR ADDR) (SET VREG REG) (SET VIND IND) (SET VBYTE BYTE))))      0090000
****END OF FILE DETECTED
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(SIM2 (SECTION MANIP BOOLEAN)                                          C000100
  (FUNCTION ((SIM . LISP) BOOLEAN)                                     C000200
   ((P SYMBOL) (X SYMBOL))                                             C000300
   (IF (ATOM P)                                                        C000400
    (ATMFN P X)                                                        C000500
    (ATOM (CAR P))                                                     C000600
    (IF (EQ (QUOTE OR.) (CAR P)) (ORFN (CDR P) X) (SIMFN P X))         C000700
    (EQ (CAAR P) (QUOTE ANY.))                                         C000800
    (ANYFN P X)                                                        C000900
    (EQ (CAAR P) (QUOTE C.))                                           C001000
    (CNTFN (CADAR P) (CADDAR P) (CADDDAR P) (CDR P) X) (SIMFN P X)))   C001100
  (FUNCTION (SIMFN BOOLEAN)                                            C001200
   ((P SYMBOL) (X SYMBOL))                                             C001300
   (IF (ATOM X)                                                        C001400
    FALSE (AND (SIM (CAR P) (CAR X)) (SIM (CDR P) (CDR X)))))          C001500
  (FUNCTION (ATMFN BOOLEAN)                                            C001600
   ((P SYMBOL) (X SYMBOL))                                             C001700
   (BLOCK ((Z SYMBOL (FIND P METALST)))                                C001800
    (IF (NULL Z) (RETURN (EQUALN P X)))                                C001900
    (BLOCK ((F (FUNCTIONAL BOOLEAN SYMBOL) (CDR Z)))                   C002000
     (RETURN (F X)))))                                                 C002100
  (FUNCTION (ORFN BOOLEAN)                                             C002200
   ((L SYMBOL) (X SYMBOL))                                             C002300
   (BLOCK ((Y SYMBOL))                                                 C002400
    (FOR Y (IN L) (IF (SIM Y X) (RETURN TRUE))) (RETURN FALSE)))       C002500
  (FUNCTION (ANYFN BOOLEAN)                                            C002600
   ((P SYMBOL) (X SYMBOL))                                             C002700
   (IF (ATOM X)                                                        C002800
    (SIM (CDR P) X)                                                    C002900
    (ORFN (CDAR P) (CAR X)) (SIM (CDR P) (CDR X)) (SIM (CDR P) X)))    C003000
  (FUNCTION (CNTFN BOOLEAN)                                            C003100
   ((I INTEGER) (J INTEGER) (M SYMBOL) (P SYMBOL) (X SYMBOL))          C003200
   (IF (EQ I 0)                                                        C003300
    (IF (EQ J 0)                                                       C003400
     (SIM P X)                                                         C003500
     (AND (NOT (ATOM X)) (SIM M (CAR X)))                              C003600
     (CNTFN 0 (DIFFERENCE J 1) M P (CDR X)) (SIM P X))                 C003700
    (AND (NOT (ATOM X))                                                C003800
     (SIM M (CAR X))                                                   C003900
     (CNTFN (DIFFERENCE I 1) (DIFFERENCE J 1) M P (CDR X)))))          C004000
  (DECLARE (METALST SYMBOL))                                           C004100
  (SET METALST (LIST (CONS (QUOTE A.)                                  C004200
     (FUNCTION ((GO2427 . GO2428) BOOLEAN) ((A SYMBOL)) (ATOM A)))     C004300
    (CONS (QUOTE N.)                                                   C004400
     (FUNCTION ((GO2429 . GO2430) BOOLEAN) ((N SYMBOL)) (NUMBP N)))    C004500
    (CONS (QUOTE S.)                                                   C004600
     (FUNCTION ((GO2431 . GO2432) BOOLEAN) ((X SYMBOL)) TRUE))         C004700
    (CONS (QUOTE L.)                                                   C004800
     (FUNCTION ((GO2433 . GO2434) BOOLEAN) ((X SYMBOL)) (LISTP X)))    C004900
    (CONS (QUOTE ID.)                                                  C005000
     (FUNCTION ((GO2435 . GO2436) BOOLEAN) ((X SYMBOL)) (IDP X)))      C005100
    (CONS (QUOTE V.)                                                   C005200
     (FUNCTION ((GO2437 . GO2438) BOOLEAN)                             C005300
      ((X SYMBOL)) (SIM (QUOTE (OR. ID. (ID. . ID.))) X))))))          C005400
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(SLPDEC (SECTION SYS)                                                    0000100
  MACRO1 (((NAME2FUNC (LAMBDA (L)                                        0000200
      (SUBST (CADR L)                                                    0000300
       (QUOTE V)                                                         0000400
       (QUOTE (CHEAT INTEGER FUNCTIONAL (PLUS (S2D. (GETFREE (CAR V)     0000500
            (CDR V))) 17777777Q))))))))                                  0000600
  (SECTION (SUPV COMPIL SYS LISP) SYMBOL)                                0000700
  (FUNCTION ((SIM . LISP) BOOLEAN) ((P SYMBOL) (X SYMBOL)))              0000800
  (DECLARE ((ONEPASS . LISP) BOOLEAN FLUID)                              0000900
   ((LISPVALUE . LISP) SYMBOL FLUID)                                     0001000
   ((TRYLC . LISP) SYMBOL FLUID)                                         0001100
   ((PARENFLAG . LISP) BOOLEAN FLUID)                                    0001200
   ((PRNERR . LISP) BOOLEAN FLUID)                                       0001300
   ((PRNMAX . LISP) INTEGER OWN)                                         0001400
   ((BACTRC . LISP) SYMBOL FLUID)                                        0001500
   ((BACKTRACE . LISP) SYMBOL OWN)                                       0001600
   ((BADEXP . LISP) SYMBOL FLUID)                                        0001700
   ((PRNIL . LISP) BOOLEAN FLUID)                                        0001800
   ((PRNLAP . LISP) BOOLEAN FLUID) ((BINLAP . LISP) BOOLEAN FLUID))      0001900
  (FUNCTION ((FVLIS1 . COMPIL) SYMBOL) ((X SYMBOL)))                     0002000
  (FUNCTION ((COMER2 . COMPIL) SYMBOL) (A B))                            0002100
  (FUNCTION ((FUNCTIO . COMPIL) SYMBOL) (A))                             0002200
  (FUNCTION ((FNDEC . COMPIL) SYMBOL) ((EXP SYMBOL)))                    0002300
  (FUNCTION ((DECL1 . COMPIL) SYMBOL) ((D SYMBOL)))                      0002400
  (FUNCTION ((SECSET . COMPIL) SYMBOL)                                   0002500
   ((IDLIST SYMBOL) (DFTYPE SYMBOL)))                                    0002600
  (FUNCTION ((DEFALLT . COMPIL) SYMBOL) ((DFTYPE SYMBOL)))               0002700
  (DECLARE ((IRLIST . COMPIL) FLUID)                                     0002800
   ((APLIST . COMPIL) FLUID) ((STYPE . COMPIL) FLUID))                   0002900
  (DECLARE (EXITERS SYMBOL OWN)                                          0003000
   (MSGFILE SYMBOL OWN)                                                  0003100
   (INFILE FLUID)                                                        0003200
   (OUTFILE FLUID)                                                       0003300
   (FORMAT FLUID)                                                        0003400
   (INDEV FLUID)                                                         0003500
   (KEEP SYMBOL FLUID)                                                   0003600
   (PASS INTEGER FLUID)                                                  0003700
   (ERRFLG BOOLEAN FLUID) (QUOTARGS SYMBOL FLUID))                       0003800
  (DECLARE ((INTERACT . LISP) BOOLEAN FLUID)                             0003900
   ((OTTY . SYS) SYMBOL OWN) ((ITTY . SYS) SYMBOL OWN))                  0004000
  (FUNCTION ((LCEXP . LCOMP) SYMBOL) ((EXP SYMBOL FREE) (T SYMBOL)))     0004100
  (FUNCTION SLREAD NIL)                                                  0004200
  (SET MSGFILE (QUOTE (OTTY)))                                           0004300
  (SET EXITERS (LIST (QUOTE STOP)                                        0004400
    (QUOTE END) (QUOTE (STOP)) (OCT2CH 34Q) (OCT2CH 31Q)))               0004500
  (SET PRNMAX 15) (SET PRNERR FALSE) (SET BINLAP TRUE))                  0004600
(SUPERVISOR (SECTION (SUPV COMPIL LCOMP SYS))                            0004700
  (FUNCTION (LISP . LISP)                                                0004800
   ((INFILE FLUID) (OUTFILE FLUID) (FORMAT FLUID))                       0004900
   (IF (NOT ONEPASS)                                                     0005000
    (BLOCK ((KEEP FLUID) ((GNLIST . SYS) FLUID))                         0005100
     (RETURN ((LISP . SUPV)))) ((LISP . SUPV))))                         0005200
  (FUNCTION (LISP . SUPV)                                                0005300
   NIL (BLOCK (((STYPE . COMPIL) (QUOTE SYMBOL))                         0005400
     ((LISPVALUE . LISP) NIL)                                            0005500
     ((SLIST . COMPIL) (QUOTE (USER LISP)))                              0005600
     (INDEV FLUID (DEVTYPE INFILE)) R)                                   0005700
    (BLOCK (((SNAME . COMPIL) (CAR (SLIST . COMPIL))))                   0005800
     (MESSAGE (QUOTE LISPENTRY))                                         0005900
     X (IF (MEMBER (SET R (SREAD)) EXITERS) (GO OUT))                    0006000
     (MESSAGE (BLOCK NIL (IF (EQ FORMAT (QUOTE IL))                      0006100
        (SET R (LIST (QUOTE DUMMY) R)))                                  0006200
      (SET R (IF ONEPASS (ED1SUP R) (ED2SUP R)))                         0006300
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      (RETURN (IF (EQ FORMAT (QUOTE IL)) (CADR R) R))))                    C006400
    (GO X) OUT (MESSAGE (QUOTE LISPEXIT)) (RETURN LISPVALUE))))            C006500
(FUNCTION SREAD NIL (BLOCK ((IN (INPUT INFILE)) R)                         C006600
  A (BLOCK (((INTERACT . LISP) FALSE) ((PRNERR . LISP) FALSE))             C006700
   (TRY R ERR (BLOCK NIL (IF PARENFLAG (ENDIN))                            C006800
     (SET R (IF (EQ FORMAT (QUOTE SL)) (SLREAD) (READ))))))               C006900
   (INPUT IN)                                                              C007000
   (IF PRNIL (SPRINT R))                                                   C007100
   (RETURN R)                                                              C007200
   ERR (IF (NQ INDEV (QUOTE TTY))                                          C007300
    (BLOCK NIL (IF PRNERR (MESSAGE R)) (INPUT IN) (EXIT R)))               C007400
   (MESSAGE R)                                                             C007500
   (MESSAGE (QUOTE (*STRING 'B 'A 'D '  'R 'E 'A 'D ', '  'T 'R 'Y '      C007600
     'A 'G 'A 'I 'N '.))) (GO A)))                                         C007700
(FUNCTION SPRINT (X)                                                       C007800
 (BLOCK ((OUT (OUTPUT OUTFILE)))                                           C007900
  (PRETTYP X) (OUTPUT OUT) (RETURN X)))                                    C008000
(FUNCTION ED1SUP (J)                                                       C008100
 (IF (NOT (LISTP J))                                                       C008200
  (CONS J (QUOTE (NOT ED FORMAT)))                                         C008300
  (BLOCK ((PASS 1))                                                        C008400
   (RETURN (CONS (CAR J) (MAPCAR (CDR J) OPERATE))))))                     C008500
(FUNCTION ED2SUP (J)                                                       C008600
 (IF (NOT (LISTP J))                                                       C008700
  (CONS J (QUOTE (NOT ED FORMAT)))                                         C008800
  (BLOCK NIL (IF (GR (LENGTH J) 2)                                         C008900
    (BLOCK (((SNAME . COMPIL) SNAME)                                       C009000
      ((SLIST . COMPIL) SLIST) ((STYPE . COMPIL) STYPE))                   C009100
     (ED1SUP J)))                                                          C009200
   (BLOCK ((PASS 2))                                                       C009300
    (RETURN (CONS (CAR J) (MAPCAR (CDR J) OPERATE)))))))                   C009400
(FUNCTION OPERATE (X)                                                      C009500
 (BLOCK ((ERRFLG FLUID FALSE) Z)                                           C009600
  RESTART (IF (EQ X (QUOTE EXIT))                                          C009700
   (EXIT LISPVALUE)                                                        C009800
   (SET Z (FIND X QUOTARGS))                                               C009900
   (BLOCK (((PARENFLAG . LISP) FALSE))                                     C010000
    (TRY Z EVALER (RETURN (EVALQUOTE (CDR Z)))))                           C010100
   (NOT (LISTP X))                                                         C010200
   (GO EVAL)                                                               C010300
   (OR (EQ (CAR X) (QUOTE FUNCTION)) (EQ (CAR X) (QUOTE ROUTINE)))         C010400
   (IF (SIM (QUOTE ((CR. V. (V. ID.)) L. (ANY. S.))) (CDR X))              C010500
    (BLOCK NIL (SET Z (IF (OR (EQ PASS 1) (NULL (CDDDR X)))                C010600
       (FNDEC X) (COMPILER X))) (GO TESTEM)))                              C010700
   (OR (EQ (CAR X) (QUOTE MACRO))                                          C010800
    (EQ (CAR X) (QUOTE INSTRUCTIONS)))                                     C010900
   (BLOCK NIL (SET Z (FNAID X)) (GO TESTEM))                               C011000
   (EQ (CAR X) (QUOTE DECLARE))                                            C011100
   (BLOCK NIL (SET Z (MAPCAR (CDR X) DECL1)) (GO TESTEM))                  C011200
   (EQ (CAR X) (QUOTE SECTION))                                            C011300
   (IF (SIM (QUOTE ((CR. ID. ((C. 0 10000 ID.))) (ANY. ID.)))              C011400
     (CDR X))                                                              C011500
    (BLOCK NIL (SET Z (SECSET (CADR X)                                     C011600
       (IF (CDDR X) (CADDR X) (QUOTE SYMBOL)))) (GO TESTEM)))              C011700
   (EQ (CAR X) (QUOTE DEFAULT))                                            C011800
   (IF (SIM (QUOTE (ID.)) (CDR X))                                         C011900
    (BLOCK NIL (SET Z (DEFAULT (CADR X))) (GO TESTEM)))                    C012000
   (EQ (CAR X) (QUOTE LAP))                                                C012100
   (IF (SIM (QUOTE ((ID. (V. ID.)                                          C012200
       L. (C. 0 10000 (CR. ID. L.))) L. ID.)) (CDR X))                     C012300
    (BLOCK NIL (SET Z (IF (EQ PASS 2) (LAPP X) (CAADADR X)))               C012400
     (GO TESTEM))) (LABEL EVAL (TRY Z EVALER (RETURN (EVAL X)))))          C012500
  (COMER2 X (QUOTE (SYNTAX ERROR)))                                        C012600
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   TESTEM (IF ERRFLG (GO EVALER))                                          0012700
   RET (RETURN Z)                                                          0012800
   EVALER (IF (OR (NOT INTERACT) (EQ INDEV (QUOTE TTY))) (GO RET))         0012900
   (SET ERRFLG FALSE)                                                      0013000
   (BLOCK (((BADEXP . LISP) X))                                            0013100
    (IF (NOT ((LISP . LISP) ITTY OTTY (QUOTE IL))) (GO RET))               0013200
    (SET X BADEXP) (GO RESTART))))                                         0013300
(FUNCTION EVALQUOTE (FNAME)                                                0013400
 (BLOCK ((FN (FUNCTIONAL SYMBOL FUNCTIONAL) (CDR FNAME)))                  0013500
  (RETURN (FN (CAR FNAME))))))                                             0013600
(FUNCTION LAPP (L)                                                         0013700
 (IF (NOT BINLAP)                                                          0013800
  (BLOCK NIL (IF PRNLAP (SPRINT L)))                                       0013900
  (BLOCK ((X (LAP (CADR L) (CADDR L) (CADDDR L))))                         0014000
   (IF ERRFLG (RETURN (LIST X (QUOTE BAD))) PRNLAP (SPRINT L))             0014100
   (IF (EQ (QUOTE RUN) (CDR X))                                            0014200
    (BLOCK ((V (EVAL (LIST X))))                                           0014300
     (EXCISE (CAR X) (CDR X)) (RETURN V)) (RETURN X)))))                   0014400
(FUNCTION KEEPER (X)                                                       0014500
 (IF (MEMBER X KEEP) KEEP (SET KEEP (CONS X KEEP))))                       0014600
(FUNCTION FNAID (X)                                                        0014700
 (BLOCK NIL (IF (NOT (CR (SIM (QUOTE (INSTRUCTIONS (CR. V. (V.             0014800
         NOVALUE)) NIL S.)) X)                                             0014900
     (SIM (QUOTE (MACRO (OR. V. (V. SYMBOL)) (S.) S.)) X)))                0015000
   (GO HACK))                                                              0015100
  (BLOCK ((Z (CADR X)) (MFLAG BOOLEAN (EQ (CAR X) (QUOTE MACRO))))         0015200
   (IF (EQ PASS 1)                                                         0015300
    (RETURN Z)                                                             0015400
    (AND MFLAG (BLOCK ((Y (CADDR X)))                                      0015500
     (IF (NQ (LENGTH Y) 1)                                                 0015600
      (RETURN TRUE)                                                        0015700
      (SIM (QUOTE V.) (CAR Y))                                             0015800
      (SET (CAADDR X) (LIST (CAR Y) (QUOTE SYMBOL)))                       0015900
      (SIM (QUOTE (V. SYMBOL . S.)) (CAR Y))                               0016000
      (RETURN NIL)                                                         0016100
      (SET (CDAADDR X) (CONS (QUOTE SYMBOL) (CDAR Y))))))))                0016200
    (GO HACK)                                                              0016300
    (BLOCK NIL (IF (SIM (QUOTE V.) (CADR X))                               0016400
     (SET (CADR X)                                                         0016500
      (LIST (CADR X) (IF MFLAG (QUOTE SYMBOL) (QUOTE NOVALUE)))))          0016600
     (RETURN (COMPILER X))))) HACK (COMER2 X (QUOTE (HACK DEF)))))         0016700
(FUNCTION COMPILER (X)                                                     0016800
 (BLOCK ((IRLIST . COMPIL) (APLIST . COMPIL))                              0016900
  (BLOCK ((F (FUNCTIO X)))                                                 0017000
   (RETURN (IF ERRFLG (LIST (CADR X) (QUOTE BAD)) (LAPP F))))))           0017100
(FUNCTION (COMPILER . LISP)                                                0017200
 (J) (BLOCK ((PASS 2)) (RETURN ((COMPILER . SUPV) J))))                    0017300
(FUNCTION (EVAL . LISP)                                                    0017400
 (S D E)                                                                   0017500
 (BLOCK ((SNAME . COMPIL)                                                  0017600
   (SLIST . COMPIL)                                                        0017700
   (STYPE . COMPIL) (PASS 2) ((ERRFLG . SUPV) FALSE))                      0017800
  (OPERATE (LIST (QUOTE SECTION) S D))                                     0017900
  (IF ERRFLG (RETURN NIL)) (RETURN ((EVAL . SUPV) E))))                    0018000
(FUNCTION ((EVAL . SUPV) SYMBOL)                                           0018100
 ((J SYMBOL))                                                              0018200
 (BLOCK ((V SYMBOL (CONS (GENID) (QUOTE RUN))) (L SYMBOL))                 0018300
  (IF (EQ (PASS . SUPV) 1) (RETURN NIL) (NOT TRYLC) (GO BC))               0018400
  LC (BLOCK (((LISTING . LCOMP) SYMBOL FREE))                              0018500
   (TRY L BCP (LCEXP J (QUOTE SYMBOL)))                                   0018600
   (SET L (SUBST (DREVERSE (APPEND (QUOTE ((RETURN) (END)))               0018700
       (LISTING . LCOMP)))                                                 0018800
     (QUOTE E)                                                             0018900
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      (SUBST V (QUOTE V)                                                    0019000
       (QUOTE (LAP (FUNCTION (V SYMBOL)                                     0019100
          NIL (BEGIN) . E) NIL RUN))))))                                    0019200
    (GO RUN)                                                                0019300
    BCP (IF (EQ TRYLC (QUOTE ONLY)) (GO ERROR))                             0019400
    BC (SET L ((FUNCTIO . COMPIL)                                           0019500
      (LIST (QUOTE FUNCTION) (LIST V (QUOTE SYMBOL)) NIL J)))               0019600
    RUN (IF (ERRFLG . SUPV) (GO ERRCR))                                     0019700
    (LAP (CADR L) (CADDR L) (CADDDR L))                                     0019800
    (IF (ERRFLG . SUPV) (GO ERROR))                                         0019900
    (BLOCK ((G (FUNCTIONAL SYMBOL) (NAME2FUNC V))                           0020000
      ((PRNERR . LISP) FALSE)) (TRY L EXERR (SET L (G))))                   0020100
    (EXCISE (CAR V) (CDR V))                                                0020200
    (RETURN L)                                                              0020300
    EXERR (MESSAGE (LIST J (QUOTE (*STRING '  'E 'V 'A 'L '  'E 'X 'I      0020400
       'T '  'V 'A 'L 'U 'E '. '. '. ' )) L))                               0020500
    (MESSAGE (LIST (QUOTE (*STRING 'B 'A 'C 'T 'R 'A 'C 'E '. '. '. '      0020600
       )) BACKTRACE))                                                       0020700
    (EXCISE (CAR V) (CDR V))                                                0020800
    ERROR (EXIT (QUOTE (*STRING 'B 'A 'D '  'E 'V 'A 'L '.)))))             0020900
  (FUNCTION EXCISE (N S)                                                    0021000
   (BLOCK NIL (DELE (GETFREE N S) KEEP)                                     0021100
    (RETURN ((EXCISE . LISP) N S)))))                                       0021200
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```
(LCOMP (SECTION (LCOMP SYS) SYMBOL)                                          C000100
  (DECLARE (LISTING SYMBOL FREE)                                             C000200
   (EXP SYMBOL FREE)                                                         C000300
   (INV SYMBOL FREE)                                                         C000400
   ((TRYLC . LISP) SYMBOL FREE TRUE)                                         C000500
   ((SLIST . COMPIL) SYMBOL FREE)                                            C000600
   ((STYPE . COMPIL) SYMBOL FREE)                                            C000700
   ((ERRFLG . SUPV) BOOLEAN FREE)                                            C000800
   ((PASS . SUPV) INTEGER FREE)                                              C000900
   ((PRNERR . LISP) BOOLEAN FREE))                                           C001000
  MACRO1 (((NAME2FUNC (LAMBDA (L)                                            C001100
      (SUBST (CADR L)                                                        C001200
       (QUOTE V)                                                             C001300
       (QUOTE (CHEAT INTEGER FUNCTIONAL (PLUS (S2D. (GETFREE (CAR V)         C001400
            (CDR V))) 17777777Q))))))))                                      C001500
  (FUNCTION (LCEXP SYMBOL)                                                   C001600
   ((EXP SYMBOL FREE) (T SYMBOL)) (LCCONV (LCE EXP) T))                      C001700
  (FUNCTION (LCE SYMBOL)                                                     C001800
   ((EXP SYMBOL FREE))                                                       C001900
   (BLOCK ((X SYMBOL))                                                       C002000
    (IF (AND (ATOM EXP) (NOT (IDP EXP)))                                     C002100
     (RETURN (LCE (QUOTER EXP))) (LISTP EXP) (RETURN (LCFORM)))              C002200
    (SET X (LCVAR EXP FALSE))                                                C002300
    (IF (NULL X) (LCEXIT))                                                   C002400
    (ATTACH (CONS (QUOTE LDA) (CDR X))) (RETURN (CAR X))))                   C002500
  (FUNCTION (LCFORM SYMBOL)                                                  C002600
   NIL (BLOCK ((V SYMBOL (CAR EXP))                                          C002700
     (D SYMBOL)                                                              C002800
     (C SYMBOL) (X SYMBOL) (L SYMBOL) (A SYMBOL) (T SYMBOL))                 C002900
    (IF (NULL (SET D (LCFREE V))) (LCEXIT))                                  C003000
    (IF (EQ (CAR D) (QUOTE MACRO))                                           C003100
     (BLOCK ((G (FUNCTIONAL SYMBOL SYMBOL) (NAME2FUNC V)))                   C003200
      (RETURN (LCE (G EXP))))                                                C003300
     (EQ (CAR D) (QUOTE INSTRUCTIONS))                                       C003400
     (IF (NQ (CDR V) (QUOTE LLISP))                                          C003500
      (LCEXIT)                                                               C003600
      (BLOCK ((G (FUNCTIONAL SYMBOL) (NAME2FUNC V))                          C003700
        (INV SYMBOL FREE)) (G) (RETURN INV)))                                C003800
     (OR (EQ (CAR D) (QUOTE FUNCTION)) (EQ (CAR D) (QUOTE ROUTINE)))         C003900
     (SET C (LIST (LIST (QUOTE CALL) V)))                                    C004000
     (EQ (CAR (SET X (LCVAR V FALSE))) (QUOTE FUNCTIONAL))                   C004100
     (SET C (SUBST (CDR X)                                                   C004200
       (QUOTE A)                                                             C004300
       (QUOTE ((LDB . A)                                                     C004400
         (STB (FMCALL . SYS)) (CALL (FMCALL . SYS))))))                      C004500
     (LCEXIT))                                                               C004600
    CALL (ATTACH (QUOTE (ARGS)))                                             C004700
    (SET X (CDADR D))                                                        C004800
    (LCNELS (LENGTH X))                                                      C004900
    (IF (NULL (SET L (CDR X))) (GO F2))                                      C005000
    (SET A (CDR EXP))                                                        C005100
    F1 (SET T (IF (EQ (CADAR L) (QUOTE LOC))                                 C005200
      (BLOCK NIL (LCLOC (CAR A) (CAAR L)) (RETURN (QUOTE SYMBOL)))           C005300
      (LCEXP (CAR A) (CAAR L))))                                             C005400
    (SET A (CDR A))                                                          C005500
    (IF (SET L (CDR L)) (BLOCK NIL (LCPUSH T) (GO F1)))                      C005600
    F2 (ATTSEQ C)                                                            C005700
    (SET T (CAR X))                                                          C005800
    (RETURN (IF (NQ T (QUOTE NOVALUE))                                       C005900
      T (BLOCK NIL (ATTACH (QUOTE (STZ A.)))                                 C006000
       (RETURN (QUOTE SYMBOL))))))                                           C006100
  (INSTRUCTIONS ((QUOTE . LLISP) NOVALUE)                                    C006200
   NIL (BLOCK NIL (LCNELS 2)                                                 C006300
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```
    (ATTACH (LIST (QUOTE LDA) (QUOTER (CADR EXP))))                          0006400
    (SET INV (QUOTE SYMBOL))))                                               0006500
  (INSTRUCTIONS ((SET . LLISP) NOVALUE)                                      0006600
   NIL (BLOCK ((X SYMBOL) (T SYMBOL))                                        0006700
    (LCNELS 3)                                                               0006800
    (SET X (LCVAR (CADR EXP) FALSE))                                         0006900
    (IF (NULL X) (LCEXIT))                                                   0007000
    (SET T (LCE (CADDR EXP)))                                                0007100
    (IF (NQ T (CAR X)) (LCPUSH T))                                           0007200
    (LCCONV T (CAR X))                                                       0007300
    (ATTACH (CONS (QUOTE STF) (CDR X)))                                      0007400
    (IF (NQ T (CAR X)) (ATTACH (QUOTE (LDA POP.)))) (SET INV T)))            0007500
  (FUNCTION ((CAR . LLISP) SYMBOL) ((X SYMBOL)) (CAR X))                     0007600
  (FUNCTION ((CDR . LLISP) SYMBOL) ((X SYMBOL)) (CDR X))                     0007700
  (FUNCTION (LCLCC SYMBOL)                                                   0007800
   ((E SYMBOL) (T SYMBOL))                                                   0007900
   (BLOCK ((D SYMBOL (LCVAR E TRUE)))                                        0008000
    (IF (OR (NULL D) (NQ (CAR D) T)) (LCEXIT))                               0008100
    (ATTACH (CONS (QUOTE LDA) (CDR D)))))                                    0008200
  (FUNCTION (LCVAR SYMBOL)                                                   0008300
   ((V SYMBOL) (MLCC BOOLEAN))                                               0008400
   (BLOCK ((D SYMBOL (LCFREE V)) (K SYMBOL) (A SYMBOL))                      0008500
    (IF (NULL D) (RETURN NIL))                                               0008600
    (SET K (CAR D))                                                          0008700
    (IF (AND (EQ K (QUOTE CWN))                                              0008800
      (NQ (CADDR D) (QUOTE LOC)) (NOT (SET MLOC (NOT MLOC))))                0008900
     (SET A (QUOTE (R L4567.7)))                                             0009000
     (AND (EQ K (QUOTE FUNCTION)) (NOT MLOC))                                0009100
     (SET A (QUOTE (2Q1 R L4567.7)))                                         0009200
     (MEMBERN K (QUOTE (CWN FLUID FREE)))                                    0009300
     (SET A (IF MLCC (QUOTE I))) (RETURN NIL))                               0009400
    (RETURN (LIST (FTYPER (CADR D)) V A))))                                  0009500
  (FUNCTION (LCFREE SYMBOL)                                                  0009600
   ((V SYMBOL LCC))                                                          0009700
   (BLOCK ((X SYMBOL) (N SYMBOL V) (S SYMBOL (SLIST . COMPIL)))              0009800
    (IF (ATOM V)                                                             0009900
     (IF (NOT (IDP V)) (RETURN NIL))                                         0010000
     (BLOCK NIL (SET N (CAR V)) (SET S (LIST (CDR V)))))                     0010100
    (FOR S (IN S)                                                            0010200
     (IF (OR (AND (EQ S (QUOTE LISP))                                        0010300
         (SET X (GETFREE N (QUOTE LLISP)))) (SET X (GETFREE N S)))           0010400
      (BLOCK NIL (SET V (VARNAME X))                                         0010500
       (SET X (FVLIST X))                                                    0010600
       (IF (NQ (CAR X) (QUOTE MEANS)) (RETURN X))                            0010700
       (SET V (CONS (CADR X) (CADDR X))) (RETURN (LCFREE V))))))))           0010800
  (FUNCTION (LCCCNV SYMBOL)                                                  0010900
   ((T1 SYMBOL) (T2 SYMBOL))                                                 0011000
   (BLOCK ((X SYMBOL))                                                       0011100
    (IF (EQN T1 T2) (GO R))                                                  0011200
    (IF (SET X (FINDN T1 (QUOTE ((OCTAL . OCT2SYM)                           0011300
         (INTEGER . INT2SYM)                                                 0011400
         (REAL . REAL2SYM) (FUNCTIONAL . FORM2SYM)))))                       0011500
     (ATTCDN (CDR X)))                                                       0011600
    (IF (EQ T2 (QUOTE BOOLEAN))                                              0011700
     (ATTACH (QUOTE (BUC (ENTRY STBENT) 0 4)))                               0011800
     (SET X (FINDN T2 (QUOTE ((OCTAL . SYM2OCT)                              0011900
         (INTEGER . SYM2INT)                                                 0012000
         (REAL . SYM2REAL) (FUNCTIONAL . SYM2FORM)))))                       0012100
     (ATTCDN (CDR X))) R (RETURN T2)))                                       0012200
  (FUNCTION (LCNELS SYMBOL)                                                  0012300
   ((N INTEGER))                                                             0012400
   (IF (AND (LISTP EXP) (EQ (LENGTH EXP) N)) TRUE (LCEXIT)))                 0012500
  (FUNCTION (LCEXIT SYMBOL) NIL (EXIT NIL))                                  0012600
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```
  (FUNCTION (LCPUSH SYMBOL)                                                    C012700
   ((T SYMBOL))                                                                C012800
   (ATTACH (LIST (QUOTE STF)                                                   C012900
     (IF (OR (EQ T (QUOTE SYMBOL)) (EQ T (QUOTE FUNCTIONAL)))                  C013000
      (QUOTE PUSHP.) (QUOTE PUSHA.)))))                                        C013100
  (FUNCTION (ATTCON SYMBOL)                                                    0013200
   ((V SYMBOL))                                                                C013300
   (BLOCK NIL (ATTACH (QUOTE (ARGS)))                                          C013400
    (ATTACH (LIST (QUOTE CALL) (CONS V (QUOTE LISP))))))                       C013500
  (FUNCTION (ATTSEC SYMBOL)                                                    C013600
   ((X SYMBOL)) (BLOCK NIL (FOR X (IN X) (ATTACH X))))                         C013700
  (FUNCTION (ATTACH SYMBOL)                                                    0013800
   ((I SYMBOL)) (BLOCK NIL (SET LISTING (CONS I LISTING))))                    0013900
  (FUNCTION (QUOTER SYMBOL) ((X SYMBOL)) (LIST (QUOTE QUOTE) X)))              0014000
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```
(CCMETA (SECTION (COMETA LISP COMPIL SUPV SYS) SYMBOL)                    0000100
  (DECLARE (COMLST SYMBOL FLUID)                                          0000200
   ((PRNIL . LISP) BOOLEAN FREE FALSE))                                   0000300
  (FUNCTION (CCMETA SYMBOL)                                               0000400
   (X)                                                                    0000500
   (BLOCK NIL (IF (PRNIL . LISP) (SPRINT X) (SUPOTY (CADR X)))            0000600
    (RETURN (IF (EQ (CAR X) (QUOTE SECTION)) (SECSET X) (COMP X)))))      0000700
  (FUNCTION (SECSET SYMBOL)                                               0000800
   (S)                                                                    0000900
   (BLOCK NIL (SET (STYPE . COMPIL) (CADDR S))                            0001000
    (IF (ATOM (SET (SLIST . COMPIL) (CADR S)))                            0001100
     (SET (SLIST . COMPIL) (LIST (SLIST . COMPIL))))                      0001200
    (IF (NOT (MEMBER (QUOTE LISP) (SLIST . COMPIL)))                      0001300
     (SET (SLIST . COMPIL)                                                0001400
      (APPEND (SLIST . COMPIL) (QUOTE (LISP)))))                          0001500
    (RETURN (SET (SNAME . COMPIL) (CAR (SLIST . COMPIL))))))              0001600
  (FUNCTION (COMP SYMBOL)                                                 0001700
   (F)                                                                    0001800
   (BLOCK ((VCLASS . COMPIL)                                              0001900
     (VADDR . COMPIL)                                                     0002000
     ((LISTING . COMPIL) (LIST (QUOTE FUNCTION)))                         0002100
     (REFLIST . COMPIL) (TGO . COMPIL) (FGO . COMPIL))                    0002200
    (MAKEFREE (CADR F)                                                    0002300
     (SNAME . COMPIL)                                                     0002400
     (QUOTE FUNCTION) (QUOTE (FUNCTIONAL SYMBOL)) (QUOTE VALUE))          0002500
    (BLOCK ((N (CONS (CADR F) (SNAME . COMPIL))))                         0002600
     (ATTACH (LIST N (QUOTE SYMBOL)))                                     0002700
     (ATTACH NIL)                                                         0002800
     (ATTACH (QUOTE (BEGIN)))                                             0002900
     (COMVAL (CADDDR F))                                                  0003000
     (ATTACH (QUOTE (END)))                                               0003100
     (ATTACH (QUOTE (RETURN)))                                            0003200
     (SET (LISTING . COMPIL) (DREVERSE (LISTING . COMPIL)))               0003300
     (IF (PRNLAP . LISP)                                                  0003400
      (SPRINT (LIST (QUOTE LAP)                                           0003500
        (LISTING . COMPIL) (REFLIST . COMPIL) (SNAME . COMPIL))))         0003600
     (IF (BINLAP . LISP)                                                  0003700
      (LAP (LISTING . COMPIL) (REFLIST . COMPIL) (SNAME . COMPIL)))       0003800
     (RETURN N))))                                                        0003900
  (FUNCTION (ATTACHG SYMBOL)                                              0004000
   (L) (ATTACH (LIST (QUOTE BUC) (LABELER L))))                           0004100
  (FUNCTION (LABELER SYMBOL) (L) (LIST (QUOTE LABEL) L))                  0004200
  (FUNCTION ATTACHL (L)                                                   0004300
   (BLOCK NIL LOOP (SCOTCH L LISTING)                                     0004400
    (IF (NOT (REFLAB L LISTING)) (RETURN LISTING))                        0004500
    (BLOCK ((K LISTING))                                                  0004600
     A (IF (ATOM (CAR K)) (BLOCK NIL (SET K (CDR K)) (GO A)))             0004700
     (IF (AND (EQ (CAAR K) (QUOTE BUC))                                   0004800
       (NOT (ATOM (CADR K))) (GOHERE L (CADR K)))                         0004900
      (BLOCK NIL (SET (CAAR K)                                            0005000
        (CDR (FINDN (CAADR K) (QUOTE ((BOZ . BNZ) (BNZ . BOZ))))))       0005100
       (SET (CDR K) (CDDR K)) (GO LOOP))))                                0005200
    (RETURN (SET LISTING (CONS L LISTING)))))                             0005300
  (FUNCTION (ATTACH SYMBOL)                                               0005400
   (I)                                                                    0005500
   (BLOCK NIL (IF (ATOM I)                                                0005600
     (SCOTCH I (LISTING . COMPIL))                                        0005700
     (AND (NOT (ATOM (CAR (LISTING . COMPIL))))                           0005800
      (MEMBER (CAAR LISTING) (QUOTE (BUC BSX)))                           0005900
      (NOT (MEMBER I (QUOTE ((ARGS) (END) (CALL))))))                     0006000
     (RETURN (LISTING . COMPIL)))                                         0006100
    (RETURN (SET (LISTING . COMPIL) (CONS I (LISTING . COMPIL))))))       0006200
  (FUNCTION (SCOTCH BOOLEAN)                                              0006300
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 (L LST)                                                                    0006400
 (IF (ATOM (CAR LST))                                                       0006500
  (BLOCK ((B BOOLEAN (SCOTCH L (CDR LST))))                                 0006600
   (IF (NOT B)                                                              0006700
    (RETURN FALSE) (SCOTCH (CAR LST) (CDR LST)) (SCOTCH L LST))             0006800
   (RETURN TRUE))                                                           0006900
  (BLOCK NIL (IF (NOT (GCHERE L (CAR LST))) (RETURN FALSE))                 0007000
   (SET (CAR LST) (CADR LST))                                               0007100
   (SET (CDR LST) (CDDR LST)) (RETURN TRUE))))                              0007200
(FUNCTION (REFLAB BOOLEAN)                                                  0007300
 (L LST)                                                                    0007400
 (BLOCK NIL (FOR LST (IN LST)                                               0007500
  (UNLESS (OR (ATOM LST)                                                    0007600
    (NOT (OR (GCHERE L LST)                                                 0007700
      (AND (EQ (CAR LST) (QUOTE BSX)) (EQ L (CADADDDR LST)))))))))          0007800
  (RETURN TRUE))))                                                          0007900
(FUNCTION (GCHERE BOOLEAN)                                                  0008000
 (L I)                                                                      0008100
 (AND (MEMBER (CAR I) (QUOTE (BUC BOZ BNZ))) (EQN L (CADADR I))))          0008200
(FUNCTION (COMIF NOVALUE)                                                   0008300
 NIL (BLOCK ((X (CDR EXP))                                                  0008400
  (S (XGO . COMPIL))                                                        0008500
  ((XGO . COMPIL) (IF (XGO . COMPIL) (XGO . COMPIL) (GENID))))              0008600
  (IF (NULL X)                                                              0008700
   (GO M) (NULL (CDR X)) (BLOCK NIL (COMSTAT (CAR X)) (GO M)))              0008800
  L (BLOCK ((FG (GENID)))                                                   0008900
   (BLOCK ((F (IF (NULL (CDDR X))                                           0009000
       (XGO . COMPIL) (CDDDR X) FG (BGO (CADDR X) FG)))                     0009100
    (T (BGO (CADR X) NIL)))                                                 0009200
   (BLOCK ((TERGO . COMPIL) ((PCLASS . COMPIL) TRUE))                       0009300
    (COMBOL (CAR X) T F))                                                   0009400
   (IF (NULL T)                                                             0009500
    (BLOCK NIL (COMSTAT (CADR X))                                           0009600
     (IF (NOT (OR (RETP (CADR X)) (AND (NULL (CDDR X)) (NOT S))))           0009700
      (ATTACHG XGO))))                                                      0009800
   (ATTACHL FG)                                                             0009900
   (IF (NULL (SET X (CDDR X)))                                              0010000
    (GO M)                                                                  0010100
    (NOT (NULL (CDR X))) (GO L) (EQ F FG) (COMSTAT (CAR X)))))              0010200
  M (IF (NULL S) (ATTACHL (XGO . COMPIL)))))                                0010300
(FUNCTION (RETP BOOLEAN)                                                    0010400
 (I) (AND (NOT (ATOM I)) (EQ (CAR I) (QUOTE RETURN))))                      0010500
(FUNCTION (BGO SYMBOL)                                                      0010600
 (I L)                                                                      0010700
 (IF (ATOM I)                                                               0010800
  L (EQ (CAR I) (QUOTE GO))                                                 0010900
  (CADR I)                                                                  0011000
  (AND (PCLASS . COMPIL) (RETP I))                                          0011100
  (IF (NULL (CADR I))                                                       0011200
   (FGO . COMPIL) (EQ TRUE (CADR I)) (TGO . COMPIL) L) L))                  0011300
(FUNCTION (COMOR NOVALUE) NIL (COMLOG FALSE))                               0011400
(FUNCTION (COMAND NOVALUE) NIL (COMLOG TRUE))                               0011500
(FUNCTION (COMNOT NOVALUE)                                                  0011600
 NIL (IF (OR (SCLASS . COMPIL) (NOT (PCLASS . COMPIL)))                     0011700
  (MAKEPRED)                                                                0011800
  (COMBOL (CADR (EXP . COMPIL)) (FGO . COMPIL) (TGO . COMPIL))))            0011900
(FUNCTION (MAKEPRED NOVALUE)                                                0012000
 NIL (IF SCLASS NIL (BLOCK ((TER TERGO)                                     0012100
   ((TERGO . COMPIL) (IF TERGO TERGO (GENID)))                              0012200
   (T (GENID)) (F (GENID)) ((PCLASS . COMPIL) TRUE))                        0012300
  (COMBOL EXP T F)                                                          0012400
  (BLOCK ((L (LABELER TERGO)))                                              0012500
   (BLOCK ((T1 (LIST (QUOTE BSX) (QUOTE (ENTRY ONENT)) 4 L))                0012600
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      (F1 (LIST (QUOTE BSX) (QUOTE (ENTRY STZENT)) 4 L)))                C012700
     (IF (SCOTCH T LISTING)                                              0012800
      (BLOCK NIL (ATTACHL T) (ATTACH T1) (ATTACHL F) (ATTACH F1))        0012900
      (BLOCK NIL (ATTACHL F) (ATTACH F1) (ATTACHL T) (ATTACH T1)))       0013000
     (IF (NOT TER) (ATTACHL TERGO))                                      0013100
     (SET VCLASS (QUOTE ACTIVE)))))))                                    0013200
(FUNCTION (CCMLOG NOVALUE)                                               0013300
 ((B BOOLEAN))                                                           0013400
 (IF (NULL (CDR (EXP . COMPIL)))                                         0013500
  (COMPILE B)                                                            0013600
  (OR (SCLASS . COMPIL) (NOT (PCLASS . COMPIL)))                         0013700
  (MAKEPRED)                                                             0013800
  (BLOCK (T (L (GENID)))                                                 0013900
   (FOR T (ON (CDR (EXP . COMPIL)))                                      0014000
    (COMBOL (CAR T)                                                      0014100
     (IF (NULL (CDR T))                                                  0014200
      (TGO . COMPIL) B NIL (TGO . COMPIL) (TGO . COMPIL) L)              0014300
     (IF (NULL (CDR T))                                                  0014400
      (FGO . COMPIL)                                                     0014500
      (NULL B) NIL (FGO . COMPIL) (FGO . COMPIL) L)))                    0014600
   (ATTACHL L))))                                                        0014700
(FUNCTION (CCMBOL NOVALUE)                                               0014800
 (X (TGO . COMPIL) (FGO . COMPIL))                                       0014900
 (BLOCK NIL (BLOCK ((VCLASS . COMPIL) (VADDR . COMPIL))                  0015000
   (COMEXP X)                                                            0015100
   (IF (NQ VCLASS (QUOTE PRED))                                          0015200
    (BLOCK NIL (MOVAC)                                                   0015300
     (IF TGO (ATTACH (LIST (QUOTE BNZ) (LABELER TGO))))                  0015400
     (IF FGO (ATTACH (LIST (IF TGO (QUOTE BUC) (QUOTE BOZ))              0015500
       (LABELER FGO)))))))) (SET VCLASS (QUOTE PRED))))                  0015600
(FUNCTION (MOVAC NOVALUE)                                                0015700
 NIL (IF (NQ (VCLASS . COMPIL) (QUOTE ACTIVE))                           0015800
  (BLOCK NIL (ATTACH (CONS (QUOTE LDA) (VADDR . COMPIL)))                0015900
   (SET (VCLASS . COMPIL) (QUOTE ACTIVE)))))                             0016000
(FUNCTION (CCMGO NOVALUE) NIL (ATTACHG (CADR (EXP . COMPIL))))           0016100
(FUNCTION (CCMQUC NOVALUE)                                               0016200
 NIL (BLOCK NIL (ATTACH (IF (IDP (CADR (EXP . COMPIL)))                  0016300
    (SUBST (CADR EXP) (QUOTE I) (QUOTE (LDA (ID I) (R L4567.7))))        0016400
    (LIST (QUOTE LDA) (EXP . COMPIL))))                                  0016500
  (SET (VCLASS . COMPIL) (QUOTE ACTIVE))))                               0016600
(FUNCTION (CCMSET NOVALUE)                                               0016700
 NIL (BLOCK NIL (COMEXP (CADR (EXP . COMPIL)))                           0016800
  (IF (AND (NULL (CADDR (EXP . COMPIL)))                                 0016900
    (OR (SCLASS . COMPIL) (PCLASS . COMPIL)))                            0017000
   (BLOCK NIL (ATTACH (CONS (QUOTE STZ) (VADDR . COMPIL)))               0017100
    (IF (NOT (SCLASS . COMPIL))                                          0017200
     (BLOCK NIL (IF (FGO . COMPIL) (ATTACHG (FGO . COMPIL)))             0017300
      (SET (VCLASS . COMPIL) (QUOTE PRED)))))                            0017400
   (BLOCK ((L (VADDR . COMPIL)))                                         0017500
    (COMVAL (CADDR (EXP . COMPIL)))                                      0017600
    (ATTACH (CONS (QUOTE STF) L))                                        0017700
    (SET (VCLASS . COMPIL) (QUOTE ACTIVE))))))                           0017800
(FUNCTION (CCMRET NOVALUE)                                               0017900
 NIL (IF (PCLASS . COMPIL)                                               0018000
  (COMBOL (CADR (EXP . COMPIL)) (TGO . COMPIL) (FGO . COMPIL))           0018100
  (BLOCK NIL (COMACT (CADR (EXP . COMPIL)))                              0018200
   (ATTACHG (TERGO . COMPIL)))))                                         0018300
(FUNCTION (CCMBLK NOVALUE)                                               0018400
 NIL (BLOCK ((XGO . COMPIL))                                             0018500
  (IF (TERGO . COMPIL)                                                   0018600
   (BLOCK (T) (FOR T (IN (CDDR (EXP . COMPIL))) (COMSTAT T)))            0018700
   (BLOCK (((TERGO . COMPIL) (GENID)))                                   0018800
    (BLOCK (((TGO . COMPIL)                                              0018900
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        (IF (TGC . COMPIL) (TGO . COMPIL) (TERGO . COMPIL)))          0019000
       ((FGC . COMPIL)                                                0019100
        (IF (FGC . COMPIL) (FGO . COMPIL) (TERGO . COMPIL))))         0019200
      (COMBLK)                                                        0019300
      (IF (PCLASS . COMPIL)                                           0019400
       (IF (NCT (EQN (FGO . COMPIL) (TERGO . COMPIL)))                0019500
        (ATTACHG (FGO . COMPIL))) (COMVAL NIL))                       0019600
      (ATTACHL (TERGO . COMPIL)))))                                   0019700
  (SET (VCLASS . COMPIL)                                              0019800
   (IF (PCLASS . COMPIL) (QUOTE PRED) (QUOTE ACTIVE)))))              0019900
(FUNCTION (COMSTAT NOVALUE)                                           0020000
 (X)                                                                  0020100
 (IF (IDP X)                                                          0020200
  (ATTACH X)                                                          0020300
  (BLOCK (((SCLASS . COMPIL) TRUE)                                    0020400
    (VADDR . COMPIL) (VCLASS . COMPIL)) (COMPILE X))))                0020500
(FUNCTION (COMVAL NOVALUE)                                            0020600
 (X) (BLOCK ((TERGO . COMPIL) (PCLASS . COMPIL)) (COMACT X)))         0020700
(FUNCTION (COMACT NOVALUE)                                            0020800
 (X)                                                                  0020900
 (BLOCK NIL (COMEXP X)                                                0021000
  (IF (NQ (VCLASS . COMPIL) (QUOTE ACTIVE)) (MOVAC))))               0021100
(FUNCTION (COMEXP NOVALUE)                                            0021200
 (X) (BLOCK ((SCLASS . COMPIL)) (COMPILE X)))                         0021300
(FUNCTION (COMPILE NOVALUE)                                           0021400
 ((EXP . COMPIL))                                                     0021500
 (IF (IDP (EXP . COMPIL))                                             0021600
  (COMVAR)                                                            0021700
  (ATOM (EXP . COMPIL))                                               0021800
  (COMDAT)                                                            0021900
  (BLOCK ((X (FIND (CAR (EXP . COMPIL)) COMLST)))                     0022000
   (IF X (BLOCK ((F (FUNCTIONAL NOVALUE) (CDR X))) (F))               0022100
    (COMCAL)))))                                                      0022200
(FUNCTION (COMDAT NOVALUE)                                            0022300
 NIL (IF (PCLASS . COMPIL)                                            0022400
  (BLOCK NIL (IF (NULL (EXP . COMPIL))                                0022500
    (IF (FGO . COMPIL) (ATTACHG (FGO . COMPIL)))                      0022600
    (IF (TGO . COMPIL) (ATTACHG (TGO . COMPIL))))                     0022700
   (SET (VCLASS . COMPIL) (QUOTE PRED)))                              0022800
  (BLOCK NIL (ATTACH (IF (NULL (EXP . COMPIL))                        0022900
     (QUOTE (STZ A.))                                                 0023000
     (EQN (EXP . COMPIL) TRUE)                                        0023100
     (QUOTE (LDA 1 (R L567.7)))                                       0023200
     (LIST (QUOTE LDA) (LIST (QUOTE QUOTE) (EXP . COMPIL)))))         0023300
   (SET (VCLASS . COMPIL) (QUOTE ACTIVE)))))                          0023400
(FUNCTION (COMVAR NOVALUE)                                            0023500
 NIL (BLOCK ((D (FINDEC (EXP . COMPIL) FALSE)))                       0023600
  (SET (VADDR . COMPIL) (LIST D (QUOTE I)))                           0023700
  (SET (VCLASS . COMPIL) (QUOTE LOC))))                               0023800
(FUNCTION (COMCAL NOVALUE) NIL (COMCALL (FINDEC (CAR EXP) EXP)))      0023900
(FUNCTION (COMCALL NOVALUE)                                           0024000
 (D)                                                                  0024100
 (BLOCK (T)                                                           0024200
  (ATTACH (QUOTE (ARGS)))                                             0024300
  (FOR T (CN (CDR EXP))                                               0024400
   (BLOCK NIL (COMVAL (CAR T))                                        0024500
    (IF (NCT (NULL (CDR T))) (ATTACH (QUOTE (STF PUSHP.))))))        0024600
  (ATTACH (LIST (QUOTE CALL) D)) (SET VCLASS (QUOTE ACTIVE))))        0024700
(FUNCTION (FINDEC SYMBOL)                                             0024800
 (VAR X)                                                              0024900
 (BLOCK (S)                                                           0025000
  (FOR S (IN (SLIST . COMPIL))                                        0025100
   (BLOCK ((D (SRDEC VAR S))) (IF D (RETURN D))))                     0025200
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    (MAKEFREE VAR (SNAME . COMPIL)                                          C025300
     (IF (NULL X) (QUOTE FLUID) (QUOTE FUNCTION))                           C025400
     (IF (NULL X)                                                           C025500
      (QUOTE SYMBOL)                                                        C025600
      (CONS (QUOTE FUNCTIONAL) (QUOTE SYMBOL) (MAKSYM (CDR X))))            C025700
     (QUOTE VALUE)) (RETURN (FINDEC VAR X))))                               C025800
   (FUNCTION (MAKSYM SYMBOL)                                                C025900
    (L) (IF (NULL L) NIL (CONS (QUOTE SYMBOL) (MAKSYM (CDR L)))))           C026000
   (FUNCTION (SRDEC SYMBOL)                                                 C026100
    (VAR S)                                                                 C026200
    (BLOCK ((T (GETFREE VAR S)))                                            C026300
     (IF (NULL T) (RETURN FALSE))                                           C026400
     (BLOCK ((D (FVLIST T)))                                                C026500
      (IF (EQ (CAR D) (QUOTE MEANS))                                        C026600
       (RETURN (SRDEC (CADR D) (CADDR D))))                                 C026700
      (BLOCK ((N (CONS VAR S)))                                             C026800
       (IF (NOT (FIND N (REFLIST . COMPIL)))                                C026900
        (SET (REFLIST . COMPIL)                                             C027000
         (CONS (CONS N D) (REFLIST . COMPIL)))) (RETURN N)))))              C027100
   (SET COMLST (LIST (CONS (QUOTE CONS) COMCONS)                            C027200
     (CONS (QUOTE IF) COMIF)                                                C027300
     (CONS (QUOTE OR) COMOR)                                                C027400
     (CONS (QUOTE AND) COMAND)                                              C027500
     (CONS (QUOTE NOT) COMNOT)                                              C027600
     (CONS (QUOTE NULL) COMNOT)                                             C027700
     (CONS (QUOTE GO) COMGO)                                                C027800
     (CONS (QUOTE QUOTE) COMQUO)                                            C027900
     (CONS (QUOTE SET) COMSET)                                              C028000
     (CONS (QUOTE BLOCK) COMBLK)                                            C028100
     (CONS (QUOTE RETURN) COMRET)                                           C028200
     (CONS (QUOTE CAR) COMCAR)                                              C028300
     (CONS (QUOTE CDR) COMCDR)                                              C028400
     (CONS (QUOTE CADR) COMCADR)                                            C028500
     (CONS (QUOTE CDAR) COMCDAR) (CONS (QUOTE CADDR) COMCADDR)))            C028600
   (FUNCTION (COMCAR NOVALUE) NIL (CARCDR (QUOTE (A))))                     C028700
   (FUNCTION (COMCDR NOVALUE) NIL (CARCDR (QUOTE (D))))                     C028800
   (FUNCTION (COMCADR NOVALUE) NIL (CARCDR (QUOTE (A D))))                  C028900
   (FUNCTION (COMCDAR NOVALUE) NIL (CARCDR (QUOTE (D A))))                  C029000
   (FUNCTION (COMCADDR NOVALUE) NIL (CARCDR (QUOTE (A D D))))               C029100
   (FUNCTION (CARCDR NOVALUE)                                               C029200
    (L) (BLOCK NIL (COMVAL (CADR EXP)) (COMNODE L)))                        C029300
   (FUNCTION (COMNODE NOVALUE)                                              C029400
    (L)                                                                     C029500
    (IF (NULL L)                                                            C029600
     NIL (BLOCK NIL (COMNODE (CDR L))                                       C029700
      (ATTACH (IF (EQ (CAR L) (QUOTE A))                                    C029800
       (QUOTE (LDA 0 (L7.123 15))) (QUOTE (LDA 0 (L567.7 15)))))))))        C029900
   (FUNCTION (COMCONS NOVALUE) NIL (COMLNK (QUOTE (CONS2 . SYS))))          C030000
   (FUNCTION (COMLNK NOVALUE)                                               C030100
    (S)                                                                     C030200
    (COMCALL (BLOCK (((SLIST . COMPIL) (LIST (CDR S)))                      C030300
      ((SNAME . COMPIL) (CDR S))) (RETURN (FINDEC (CAR S) EXP))))))         C030400
                                                                            C030500
****END OF FILE DETECTED
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