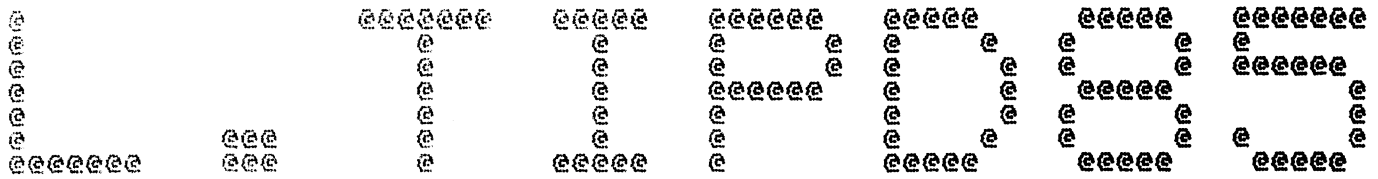
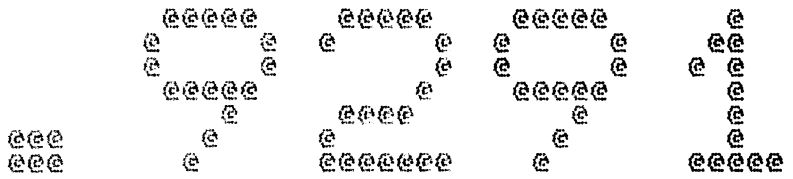
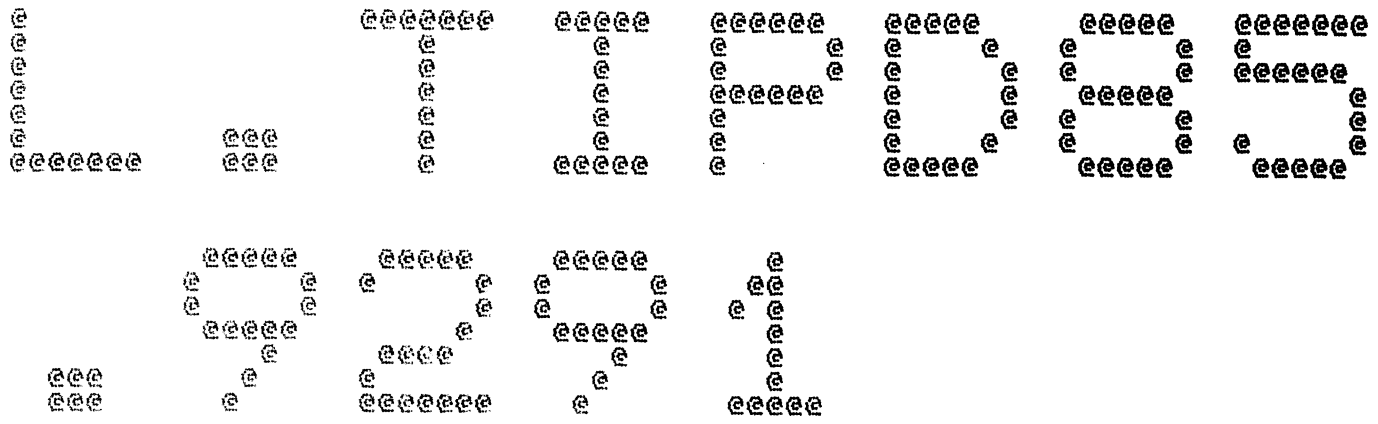




Spool Queue Line #: 32
IRIS LU/Filename : 18/L.TIPD85.9291

Printed on/at : FEB 7, 1990 14:55:02
For Group/User: 0 , 1
On Port No: 5

Print control parameters :
Printer Class code : 0
Form Code/paper type : ?
Print Priority (0-9) : 5
Starting Page Number : 1
This is copy number : 1
Keep file (Y/N) : Y
Notify User when done: N
Comments, optional : For RELSE CNTRL



Spool Queue Line #: 32
IRIS LU/Filename : 18/L.TIPD85.9291

Printed on/at : FEB 7, 1990 14:55:09
For Group/User: 0 , 1
On Port No: 5

Print control parameters :
Printer Class code : 0
Form Code/paper type : ?
Print Priority (0-9) : 5
Starting Page Number : 1
This is copy number : 1
Keep file (Y/N) : Y
Notify User when done: N
Comments, optional : For RELSE CNTRL

```
.EOT   ;"TIP85" (DISCSUBS GROUP 5) FOR IRIS R9.xx
.EOT
.EOT   ;"DSUBDEFS" FOR IRIS
.END
```

```
ASM 18/A.TIPD85.9291!,@18/L.TIPD85.9291!,B050,-B051,B052
FEB  7, 1990  11:42:02


;       Batchfile:   R95JCL.TIPD85
;
;       ; A = 9291
;
;       -R95DEFSPZ
;       -R95DSUBDEFSD
;       R92TIPDSB85SA
;
                    .EOT   ;"TIP85" (DISCSUBS GROUP 5) FOR IRIS R9.xx
```

```
;                        << SI = R92TIPDSB85SA;  BO = 18/A.TIPD85.9291! >>
;DISKSUB NO. 164.

;TYPIST Mux Mode setting Discsub, written by JPMH
;last modified to rev 06 24th August 1982
;source stored as TIP_DSUB.85.S
;LAST EDITED FOR R90.0 BY JAS (6181)



            10          REVIS     =     10        ;new revision



;   CALL 85,A,B,C   - A=0,  B<=rev number of this sub.,
;                           C<=rev number of MUX
;                     A=1,  B=desired mux mode
;                     A=2,  C<=length of our IOB, B unused
;                     A=3,  set mode to 2 and IOB len=B
;                     A=4,  set IOB len to B, only

;A=5   B=0 ECHO BACKSLASH FOR ESC AND CTRL-C
;      B<>0 NO ECHO

                 1                  .TXTM 1
            105000                  .LOC LTP05
   105000       164 DSB164:         TIP05
   105001         3                 START-DSB164
   105002    177564                 DSB164-DSBEND

   105003       402 START:          JMP GO                  ;the real start so we have room for constants

   105004        25 MXDEV:          25                      ;the address of the Mux

   105005     54432 GO:             STA 3,RET               ;the return address
   105006     50452                 STA 2,APT               ;pointer to the arguments
   105007      4440                 JSR PICK                ;go and get the value of the switch
   105010      4412                 JSR LSEND               ;check size of switch and branch


                                ;pointers to the various internal routines
   105011        50 LSTRT:           V0-LSTRT                ;version of this discsub
   105012       107                   V1-LSTRT              ;set Mux to mode B
   105013       144                     V2-LSTRT
   105014       151                       V3-LSTRT
   105015       165                         V4-LSTRT
   105016       167                       V5-LSTRT          ;POINTER TO MODE 5
   105017        14                     EX-LSTRT
   105020        14                   EX-LSTRT
   105021        14                 EX-LSTRT
```

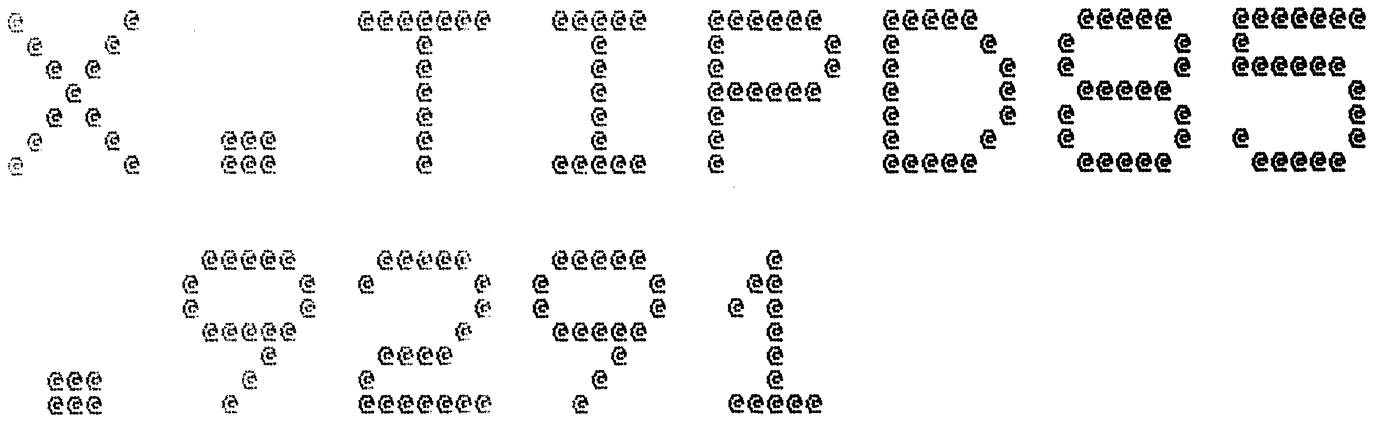
; << SI = R92TIPDSB85SA; BO = 18/A.TIPD85.9291! >>

```
105022  40420 LSEND:    STA 0,SWTCH          ;store switch for reference
105023 126420           SUBZ 1,1             ;should not be less than 1
105024 106032           SGE 0,1
105025   2412 EX:       JMP @RET             ;it is so do an error return
105026  24410           LDA 1,SIZE           ;the valid maximum switch
105027 106433           SLE 0,1              ;it should be less than equal
105030   2407           JMP @RET             ;its not so do an error return
105031 171000           MOV 3,2              ;A3 has the address of LSTART
105032 117000           ADD 0,3              ;it now has the address of the pointer
105033  35400           LDA 3,0,3            ;load the pointer value
105034 173000           ADD 3,2              ;add the pointer to address of LSTART
105035   1000           JMP 0,2              ;jump to this, the real address

105036     11 SIZE:     LSEND-LSTRT          ;the number of routines here
105037      0 RET:      00000                ;temporary storage of return
105040      0 RETS:     00000                ;used for subroutine RTN addresses
105041     10 RNUM:     REVIS                ;the revision number
105042      0 SWTCH:    0                    ;temporary storage of A


;;;;;;;;PICKN returns the value of the switch in A0;;;;;;;;;;;;;;;;
105043  30415 PICKN:    LDA 2,APT
105044  24002           LDA 1,C2
105045 133000           ADD 1,2
105046  50412           STA 2,APT


;;;;;;;;;PICK returns the value of the next parameter in A0;;;;;;;;;
;         A2 points to the parameters table entry
105047  54771 PICK:     STA 3,RETS           ;store the return address
105050  25001           LDA 1,1,2            ;number type of the parameter
105051  31000           LDA 2,0,2            ;address of the parameter
105052 102520           SUBZL 0,0            ;make a one as a so DECIMAL loads
105053   6120           DECIMAL              ;DA gets the parameter
105054   6121           FIX                  ;A1 gets the value of the DA
105055   2762           JMP @RET             ;fix had an error so return
105056 121000           MOV 1,0              ;put the parameter value in
105057   2761           JMP @RETS            ;return

105060      0 APT:      0                    ;used for storage of pointer


;;;;;;return value of this discsub in second parameter
105061 102420 VO:       SUBZ 0,0             ;sign of revision is +ve
105062  24757           LDA  1,RNUM          ;revision number
105063   6122           FLOAT                ;convert to a decimal
105064  30774           LDA 2,APT            ;the pointer to the arguments
105065  25003           LDA 1,3,2            ;number type of B
105066  31002           LDA 2,2,2            ;address of B
105067 102420           SUBZ 0,0             ;tells Decimal to do a store
105070   6120           DECIMAL              ;store the Revision in B
105071  34100           LDA 3,.INFO          ;the address of the INFO table
105072  30425           LDA 2,INTPOS         ;displacement to interupt table
```

```
;                    << SI = R92TIPDSB85SA;  BO = 18/A.TIPD85.9291! >>

105073 173020           ADDZ 3,2                    ;A2 gets address of INT table
105074  24710           LDA 1,MXDEV                 ;device code of Mux driver
105075  35462           LDA 3,SCON.,3               ;the system state word is now in A3
105076  20420           LDA 0,M3MSK                 ;the MK3 flag bit
105077 117414           AND# 0,3,SZR                ;is this a MK3 ????
105100 126520           SUBZL 1,1                   ;YES, so set device code for MUX=1
105101 133020           ADDZ 1,2                    ;address of pointer in the interupt table
105102  31000           LDA 2,0,2                   ;address of of routine
105103  25374           LDA 1,-4,2                  ;the actual value
105104 102420 PUTC:     SUBZ 0,0                    ;sign of rev number
105105   6122           FLOAT                       ;convert it to decimal
105106  30752           LDA 2,APT                   ;where the arguements go
105107  25005           LDA 1,5,2                   ;the number type of C
105110  31004           LDA 2,4,2                   ;address of C
105111 102420           SUBZ 0,0                    ;tell DECIMAL to store
105112   6120           DECIMAL                     ;store the rev number
105113  34724 EXIT:     LDA 3,RET                   ;the return address
105114   1401           JMP 1,3                     ;do a skip return

105115 177776 CM2:      177776                      ;mask to turn off lsbit
105116    400 M3MSK:    M3                          ;the bit in the system state word
105117    130 INTPOS:   INVT.                       ;displacement to interupt table from INFO

;;;;;; set the Mux mode to B ;;;;;;;;;;;;;;;;;;;;;;;;;;;;
105120  30740 V1:       LDA 2,APT                   ;the argument pointers
105121  24002           LDA 1,C2                    ;we wish to add 2 to skip switch
105122 133000           ADD 1,2                     ;set the mode to B
105123   4724           JSR PICK                    ;get the value in A0

;;;;;; sets our mux port to the mode contained in A0 and exits ;;;;;;;
105124  34005 SETMX:    LDA 3,RUP                   ;A3 gets our PCB pointer
105125  40427           STA 0,MUXMD                 ;note the mode required
105126  24002           LDA 1,C2                    ;maximum mode that can be set
105127 122032           SGE 1,0                     ;are we requesting mode 0,1 or 2  ????
105130   2112           JMP @.NRET                  ;NO, generate an error return
105131  60277           INTDS                       ;since MUX may use TTN word
105132  25437           LDA 1,TTN.,3                ;the TTN word, for mode setting
105133  30420           LDA 2,CM3K                  ;negate of bits we want to clear
105134 147400           AND 2,1                     ;A1 now contains TTN word without new bits
105135 103300           ADDS 0,0                    ;multiply by 1000 octal
105136 123020           ADDZ 1,0                    ;set new value into TTN word
105137  41437           STA 0,TTN.,3                ;retore the set value
105140  25412           LDA 1,FLW.,3                ;the flag word for <control-e> supress
105141  30754           LDA 2,CM2                   ;used to clear echo supress flag
105142 151140           MOVOL 2,2                   ;convert form 177776 to 177775
105143 147400           AND 2,1                     ;clear it
105144  30410           LDA 2,MUXMD                 ;the desired MUX mide
105145  20002           LDA 0,C2                    ;incase we need to swtich it on
105146 151014           SKZ 2,2                     ;is the mode zero ????
105147 107020           ADDZ 0,1                    ;NO, so set the supress flag
105150  45412           STA 1,FLW.,3                ;replace the updated value
105151  60177           INTEN                       ;YES, re-enable interupts
105152    741           JMP EXIT                    ;we have finished
```

```
;                    << SI = R92TIPDSB85SA;  BO = 18/A.TIPD85.9291! >>

105153 174777 CM3K:   -1-3000                    ;used to clear 1k and 2k bits
105154      0 MUXMD:  0                          ;the more required of the MUX


;;;;;;get the length of our IOB ;;;;;;;;;;;;;;;;;;;;;;
105155  30005 V2:     LDA 2,RUP                  ;pointer to our PCB
105156  21002         LDA 0,2,2                  ;the begining of our IOB
105157  25003         LDA 1,3,2                  ;the end
105160 106400         SUB 0,1                    ;the length
105161    723         JMP PUTC                   ;put it into C and return


;;;;;;set IOB length to 8 and mode to 3;;;;;;;;;;;;;;;;;
105162  30676 V3:     LDA 2,APT                  ;pointer to arguments
105163  24002         LDA 1,C2                   ;we wish to skip the switch
105164 133000         ADD 1,2                    ;pointer is past it
105165   4662         JSR PICK                   ;get value of B in AO
105166  32004         LDA 2,@PIB                 ;address of our partition
105167  41057         STA 0,57,2                 ;set the length for SPINPUT
105170  20003         LDA 0,C3                   ;three, for the Mux mode
105171  24651         LDA 1,SWTCH                ;was the swith 3 or 4
105172 122414         SUB# 1,0,SZR               ;if it was 3, skip
105173    720         JMP EXIT                   ;since it was 4 we exit
105174  20002         LDA 0,C2                   ;we wish to enter mode 2
105175    727         JMP SETMX                  ;set Mux and return

;;;;;;;;;;set IOB with no change to mode;;;;;;;;;;;;;;;;;
105176    764 V4:     JMP V3                     ;code is identical

105177 173777 CM4K:  -1-4000;MASK TO TURN OFF BIL 11
105200   4643 V5:    JSR     PICKN      ;GET THE MODE IN AO
105201  34005        LDA     3,RUP      ;A3 GETS OUR PCB POINTER
105202  60277        INTDS   ;SINCE MUX MAY USE TTN WORD
105203  25437        LDA     1,TTN.,3;THE TTN WORD FOR SWITCH SETTING
105204  30773        LDA     2,CM4K     ;THE MASK TO CLEAR THE BIT
105205 147400        AND     2,1        ;CLEAR BIL 11 IN TTN WORD
105206 150000        COM     2,2        ;INCASE WE NEED TO SET ON
105207 101014        MOV#    0,0,SZR    ;ARE WE ASKED TOSET ON ????
105210 147000        ADD     2,1        ;YES, SET ON THE FLAG
105211  45437        STA     1,TTN.,3;STORE THE UPDATED VALUE
105212  60177        INTEN   ;RE-ENABLE INTERRUPTS
105213    700        JMP     EXIT       ;WE ARE DONE

        105214          DSBEND=.

             0        .ERR    DSB164+400<.;OVERFLOW CHECK

                  .END
```

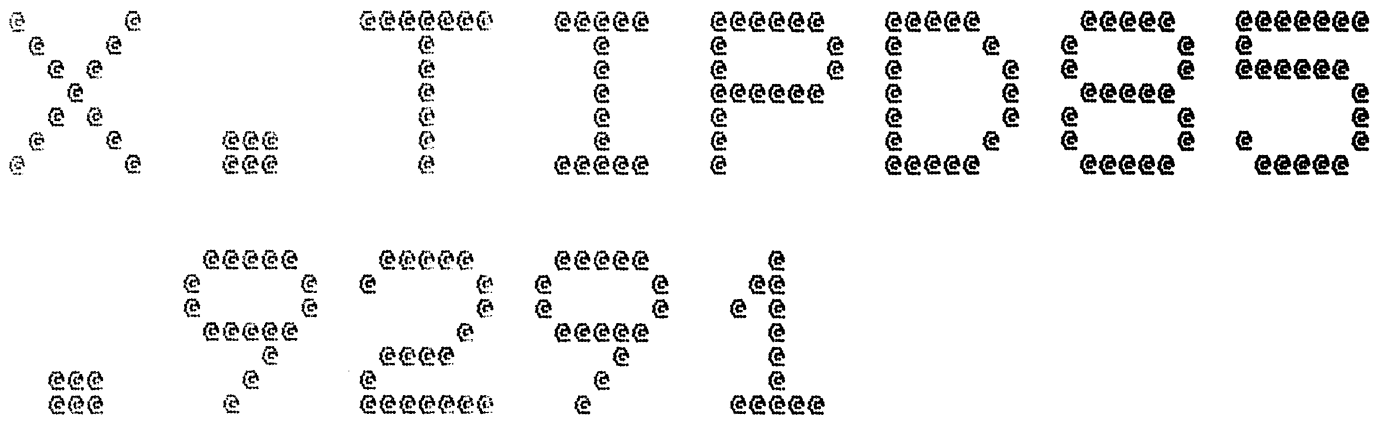
```
APT     105060   BINDI     6115   BINMU     6116   BPI         16   BSACF       75
BUMPU     6117   C10         30   C100        51   C1000       67   C11         31
C12         32   C13         33   C14         34   C15         35   C16         36
C160       174   C163       175   C166       176   C17         37   C170K       21
C171       177   C177        52   C1777       70   C2           2   C20         42
C200        53   C2000       71   C205        54   C215        55   C240        56
C244        57   C260        60   C271        61   C3           3   C300        62
C334        63   C37         43   C377        64   C4          24   C40         44
C400        65   C4000       72   C5          25   C6          26   C600       100
C7          27   C77         50   C774C       22   C777        66   CALL      6101
CHANH     6106   CM2     105115   CM3K    105153   CM400       23   CM4K    105177
DA         160   DAC        164   DAS         165   DATAP     6110   DB         166
DBA         41   DBC        172   DBS         173   DECIM     6120   DFTCA     34106
DMCAL     34110  DQUEU     6105   DSB16   105000   DSBEN   105214   ERRF        76
ESCF        73   ETSF        74   EX      105025   EXIT    105113   FINDL     6123
FIX       6121   FLAGC     6102   FLOAT     6122   FREEN     6107   GETBY     6124
GO      105005   HALTS     6153   INBYT     6125   INSTB     6126   INTPO   105117
IOCAL     34103  IOP          6   ISA2D     6127   ISA2L     6130   JFLTO       151
LACNT      4000  LAFSE    13000   LALCO    47400   LALLO     1400   LATOE     36000
LBAKU   106000   LBILD     5000   LBUIL     4400   LCALL    75000   LCHAN     41000
LCHFL     30000  LCHSU    61000   LCLEA     7400   LCLOS     7000   LCLPY     76000
LCNVA     11400  LCNVD    12000   LCOMM    33400   LDALC     2000   LDALL      1000
LDB7A   114000   LDB7B   114400   LDB7C   115000   LDB7D   115400   LDB7E   116000
LDB7F   116400   LDB7G   117000   LDB7H   117400   LDB7I   120000   LDEKE     52400
LDELE      3400  LDIRE    50400   LDLTP    20400   LDREN     37400  LDSB1       400
LDSB2     22400  LDSB3    47000   LDSB4    65000   LDSB5     77000  LDSB6   106400
LDSB7   113400   LECHO    37000   LEO87   105400   LERRO     23000  LFAUL       400
LFFIL      2400  LFIXD    57400   LFNDC   112000   LFNDL     20000  LFOFI     17000
LGETR     10000  LGHOP   107400   LGHOS   107000   LGMUX     16000  LHCON     17400
LIBCA     44400  LIBEN    45000   LIBTR    45400   LIDAT   103000   LLINK     35400
LLOAD     34400  LLOGI    32000   LLUIN   112400   LMAPB     73000  LMDEO     65000
LMDEI     66000  LMDE5    71400   LMRC3    56400   LMRFH     57000  LMRFI     54000
LMTAP     55400  LMTAS    54400   LMTFP    56000   LMTFY     60400  LMTNX     55000
LMTPL     60000  LOADD     6131   LOPEN     6000   LOPNM     13400  LPATQ   110000
LPEXP     23400  LPFAB    72000   LPFLN    73400   LPFNA      3000  LPFRL     72400
LPFSE     67000  LPFSH    70000   LPFSX    70400   LPLOG     24400  LPPWR     33000
LPRAN     36400  LPRCO    71000   LPSIN    25400   LPSQR     22400  LPTAN     25000
LQIBF     63400  LQICL    63000   LQIOP    62400   LRDFH     26400  LRDIS     31400
LRDSE   110400   LREDC    50000   LREDI    11000   LREDM     14000  LREDP     74000
LRENA     15000  LREOP    53000   LRESO    42000   LRWIT   113000   LRWMB     14400
LRWSX   111400   LS105    77000   LS152   102000   LS153   101000   LS154   100400
LS156   101400   LS157   100000   LSAVE    43000   LSAVP     43400  LSEAB     64000
LSEAR     51000  LSEND   105022   LSETF    40000   LSHUF     52000  LSIGP     12400
LSING     40400  LSMCS   106400   LSPEC    27000   LSTRI     32400  LSTRT   105011
LSYSC     30400  LTP01   102400   LTP03   104000   LTP04   104400   LTP05   105000
LVMUX     42400  LWRIT     47000  LXMIN    62000   M3MSK   105116   MUXMD   105154
MXDEV   105004   OUTBY     6132   OUTTE     6133   PIB          4   PICK    105047
PICKN   105043   PUTBY     6134   PUTC    105104   QCHAR     6103   QUEUE     6104
READB     6135   RELJM     6136   RET     105037   RETS    105040   REVIS       10
RJSR      6136   RNUM    105041   RTP           7   RUP          5   SBA         40
SCDCA     34147  SETMX   105124   SIZE    105036   SPINP     6146   START   105003
STINP     6140   STINT     6147   STORD     6137   STOUT     6141   SWTCH   105042
TASKQ       15   TRAPF     6142   V0      105061   V1      105120   V2      105155
V3      105162   V4      105176   V5      105200   WRITB     6143   XGETB     6144
XPUTB     6145   .ABA         14   .BPS         77   .BSA        10   .DA        174
.DA3       175   .DB         176   .DB3        177   .FLTO      152   .HBA        11
.HXA        12   .INFO       100   .INTR       111   .LCM       114   .NRET      112
.SRET      113   .SSA         13
```



Spool Queue Line #: 33
IRIS LU/Filename : 18/X.TIPD85.9291

Printed on/at : FEB 7, 1990 14:56:16
For Group/User: 0 , 1
On Port No: 5

Print control parameters :
Printer Class code : 0
Form Code/paper type : ?
Print Priority (0-9) : 5
Starting Page Number : 1
This is copy number : 1
Keep file (Y/N) : Y
Notify User when done: N
Comments, optional : For RELSE CNTRL



Spool Queue Line #: 33
IRIS LU/Filename : 18/X.TIPD85.9291

Printed on/at : FEB 7, 1990 14:56:23
For Group/User: 0 , 1
On Port No: 5

Print control parameters :
Printer Class code : 0
Form Code/paper type : ?
Print Priority (0-9) : 5
Starting Page Number : 1
This is copy number : 1
Keep file (Y/N) : Y
Notify User when done: N
Comments, optional : For RELSE CNTRL

***** J O B S T A T I S T I C S *****

```
  1   TOTAL # DUPLICATE KEYS
  0   TOTAL # DIR. RE-ORGS
127   TOTAL # KEYS INSERTED
  0   TOTAL # ASSEMBLY ERRS
```

.ERR 5.053

.INFO 3.059

.NRET 4.041

APT 2.046 3.029 3.032 3.047: 3.054 4.018 4.031
5.021

C2 3.030 4.032 4.039 4.054 5.022 5.031

C3 5.027

CM2 4.026: 4.050

CM3K 4.044 5.008:

CM4K 5.037: 5.042

DECIM 3.041 3.058 4.022

DSB16 2.037: 2.038 2.039 5.053

DSBEN 2.039 5.051=

EX 2.058 2.059 2.060 3.011:

EXIT 4.023: 4.059 5.030 5.049

FIX 3.042

FLOAT 3.053 4.017

FLW. 4.049 4.057

GO 2.041 2.045:

INTPO 3.060 4.028:

INVT. 4.028

LSEND 2.048 3.008: 3.021

LSTRT 2.052: 2.053 2.054 2.055 2.056 2.057 2.058
2.059 2.060 3.021

LTPOS 2.036

M3 4.027

M3MSK 4.010 4.027:

MUXMD 4.038 4.053 5.009:
MXDEV 2.043: 4.008
PIB 5.025
PICK 2.047 3.037: 4.034 5.024
PICKN 3.029: 5.038
PUTC 4.016: 5.017
RET 2.045 3.011 3.014 3.022: 3.043 4.023
RETS 3.023: 3.037 3.045
REVIS 2.018= 3.024
RNUM 3.024: 3.052
RUP 4.037 5.013 5.039
SCON 4.009
SETMX 4.037: 5.032
SIZE 3.012 3.021:
START 2.038 2.041:
SWTCH 3.008 3.025: 5.028
TIP05 2.037
TTN. 4.043 4.048 5.041 5.047
V0 2.052 3.051:
V1 2.053 4.031:
V2 2.054 5.013:
V3 2.055 5.021: 5.035
V4 2.056 5.035:
V5 2.057 5.038: