



VisualAge Pacbase 2.5

**GCOS7 OLSD  
REFERENCE MANUAL**

DDOD7000021A

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# 1. INTRODUCTION

### BRIEF DESCRIPTION OF THIS MANUAL'S CONTENTS

This manual presents a Screen described in and generated by the OLSA function. It is a complement to the ON-LINE SYSTEMS DEVELOPMENT (OLSD) Reference Manual, which is common to all on-line monitors.

This manual first shows the coding and then the organization of the generated programs.

The structure of a generated program is also detailed and commented upon so as to help users insert their own specific procedures that may be needed in the Screen.

It illustrates the following:

- . The coding of Data Names,
- . Descriptions of segments, screen, work areas, and communication areas,
- . A complete lexicon of variables, indexes and fields used by the automatic functions,
- . A description of the automatic functions, including their generation conditions. (Refer to Chapter "GENERATED PROGRAM: PROCEDURE DIVISION".)

NOTE: The Screen example described in this manual does not illustrate all generation possibilities provided by the OLSA function: segment accesses, cross-references between segments, access conditions, etc.

This manual does NOT contain an exhaustive presentation of the specific information on the use of the OLSA function.



### REMINDERS ON THE OLSD FUNCTION

Based on the Screen descriptions, the OLSD function ensures the following:

- The automatic generation of the Screen map description from layout-type information. (Adaptation to the hardware and on-line monitor is based on an option specified at the Screen level.)
- The automatic generation of the Screen data processing from process-type information:
  - . Screen Call of Elements (-CE) -> Screen data processing
  - . Screen Call of Segments (-CS) -> External data processing
  - . Dialogue Complement (-O) and Dialogue and Screen General Documentation (-G) -> Generation Options
  - . Structured Code (-P) -> Specific processing

All processing is generated in a program structured in "Reception" and "Display", thus ensuring the complete processing of the Screen data.

The program is generated in COBOL. Adaptation to the hardware and the on-line Monitor is based on the options specified at the Screen level.

### REMINDERS ON THE OLSD FUNCTION - Cont'd

It may be necessary to use complementary description lines in order to generate on-line programs:

- . Screen General Documentation (-G),
- . Screen Call of Macro-Structures (-CP),
- . Beginning Insertions (-B),
- . Screen Work Areas (-W).

### SCREEN GENERAL DOCUMENTATION

The General Documentation (-G) lines of the screen or dialogue can be used to override the value of some generated constants. For more details, refer to Chapter "DESCRIPTION OF A TRANSACTION", Subchapter "SCREEN GENERAL DOCUMENTATION (-G)" in the OLSD Reference Manual.

### WORK AREAS

On Work Areas (-W) screens, 'AA' is a reserved value for the CODE FOR COBOL PLACEMENT; it is used internally by the OLSD function.

The automatically generated lines are identified in the COBOL code by the '\*AAnn' character string from columns 72 to 80. They can be overridden on the Work Areas (-W) screen on 'AAnn'-numbered lines.

All the DPS7 generation variants are illustrated in this manual; they are used to generate the same screen: DO0030.

The following table shows the variants documented in this manual:

```

-----
!MULTI-SCREEN 4 C Complete Commented !
-----
!QUESTAR      4 0 Complete Not commented !
-----
!VIP          4 1 Specificities Commented !
-----
!HELP        4 C Complete Commented !
-----

```

VARIANTS AVAILABLE WITH DPS7

```

-----
! 4 C ! MULTI-SCREEN DPS7 !
! 4 1 ! VIP DPS7 !
! 4 0 ! QUESTAR DPS7 !
-----

```

## **2. PRESENTATION OF THE EXAMPLE**

## 2.1. INTRODUCTION

### THE MULTI-SCREEN GENERATION OPTION

The MULTI-SCREEN option allows for the generation of on-line programs for VIP 7700, VIP 7800, QUESTAR and IBM 3270 terminals.

With this option, a logical description of the screen map is generated as a table which is used by a sub-program for the generation of the physical description; this sub-program builds the type of map according to the value given to the type of terminal. The standard sub-program is ZAR980.

NOTE: Programs generated with this option may not be used together with programs generated with other options.

### CODING OF THE TERMINAL TYPE

Using Procedural Code (-P) lines, the user must code the type of terminal for the initial screen of the dialogue. The value is thus transferred to the other screens of the dialogue by the communication area. (See Subchapter "DESCRIPTION OF VALIDATION AREAS" in this chapter.)

NOTE: If there is no initial screen in the dialogue, the value must be initialized to 0 in each program.

## 2.2. THE 'DO' DIALOGUE

```
-----  
!                BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!  
! ON-LINE DIALOGUE DEFINITION.....: DO                !  
!                !                !                !                !  
! DIALOGUE NAME.....: PACBASE DOCUMENTATION MANAG.    !  
!                !                !                !                !  
! SCREEN SIZE (LINES, COLUMNS) .....: 24            080    !  
! LABEL TYPE, TABS, INITIALIZATION...: L            01      -    !  
! HELP CHARACTER SCREEN, DATA ELEMENT: =            $      !  
!                !                !                !                !  
!                LABELS  DISPLAY  INPUT  ER.MESS.  ER.FL! !  
! INTENSITY ATTRIBUTE .....: N            N            N            B            B ! !  
! PRESENTATION ATTRIBUTE .....: N            N            N            N            N ! !  
! COLOR ATTRIBUTE .....: W            W            W            W            W ! !  
!                !                !                !                !                !  
! TYPE OF COBOL AND MAP TO GENERATE...: 4  C            HB DPS7 (MULTI-SCREENS)    !  
! CONTROL CARD OPTIONS FRONT & BACK...:                (PROGRAM)                (MAP)! !  
! EXTERNAL NAMES .....:                (PROGRAM)                (MAP)! !  
! TRANSACTION CODE.....:                !                !                !                !  
!                !                !                !                !                !  
!                !                !                !                !                !  
! EXPLICIT KEYWORDS...: DOC                !                !                !                !  
! SESSION NUMBER.....: 0169                LIBRARY.....: AD7    LOCK.....:    !  
!                !                !                !                !                !  
! O: C1 CH: Odo                ACTION:                !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO' DIALOGUE

PAGE

15

2  
2

```
-----  
!           BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!  
! DIALOGUE COMPLEMENT....: DO PACBASE DOCUMENTATION MANAG.      !  
!           !                                     !  
! COMMON AREA-DATA STRUCTURE CODE.....: CA                       !  
! ERROR MESSAGE FILE CHARACTERISTICS                               !  
!           ORGANIZATION....: V                                   !  
!           EXTERNAL NAME...: EMTEST                             !  
!           !  
! FIRST SCREEN CODE OF THE DIALOGUE.....: 0060                   !  
!           !  
! COMPLEMENTARY COMMON AREA LENGTH.....: 700                     !  
!           !  
! CODE OF PSB OR SUB-SCHEMA.....:                               !  
!           !  
! OPTIONS : OCF F10 DYNPRT OFF                                    !  
!           !  
!           !  
! SESSION NUMBER      : 0035  LIBRARY      : AD7                  !  
!           !  
! O: C1 CH: Odo O                ACTION:                            !  
-----
```

PRESENTATION OF THE EXAMPLE  
 THE 'DO' DIALOGUE

PAGE

16

2  
 2

```

-----
!                               BULL DPS7 APPLICATION                    *PDLB.NDOC.AD7.247!
! ON-LINE SCREEN GENERAL DOC.      DO      PACBASE DOCUMENTATION MANAG.      !
!
! A LIN : T COMMENT                                LIB !
! . 200 : U DO12 THIS ITEM IS NOT AVAILABLE.      *ACC !
! . 220 : U CD30 TECHNICAL PROBLEM CALL E.D.P. DEPT. (CODE DO-UTI-CD30) *ACC !
! . 240 : U CURS INVALID SELECTED LINE            *ACC !
!
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! :
! *** END ***
! O: C1 CH: Odo G
-----

```



### 2.3. THE 'DO0030' SCREEN

```
-----  
!                BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!  
! ON-LINE SCREEN DEFINITION.....: DO0030                !  
!                !                !                !                !  
! SCREEN NAME.....: *** ORDER INPUT SCREEN ***                !  
!                !                !                !                !  
! SCREEN SIZE (LINES, COLUMNS) .....: 24          080                !  
! LABEL TYPE, TABS, INITIALIZATION...: L           01          * -                !  
! HELP CHARACTER SCREEN, DATA ELEMENT: =           $                !  
!                !                !                !                !  
!                LABELS  DISPLAY  INPUT  ER.MESS.  ER.FL!  
! INTENSITY ATTRIBUTE .....: * B          N          N          B          B !  
! PRESENTATION ATTRIBUTE .....: N          N          N          N          N !  
! COLOR ATTRIBUTE .....: W          W          W          W          W !  
!                !                !                !                !  
! TYPE OF COBOL AND MAP TO GENERATE..: 4 * C      HB DPS7 (MULTI-SCREENS)                !  
! CONTROL CARD OPTIONS FRONT & BACK..:                (PROGRAM)                (MAP)!  
! EXTERNAL NAMES .....: DO0030P  (PROGRAM)                DO0030M  (MAP)!  
! TRANSACTION CODE.....:                !  
!                !                !                !                !  
! EXPLICIT KEYWORDS..:                !  
! SESSION NUMBER.....: 0169          LIBRARY.....: AD7          LOCK.....:                !  
!                !                !                !                !  
! O: C1 CH: Odo0030                ACTION:                !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

PAGE

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2  
3

```
-----  
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!  
! ON-LINE SCREEN GENERAL DOC.      DO0030 ***  ORDER INPUT SCREEN  ***      !  
!                               !                               !                               !  
! A LIN : T COMMENT                                     LIB !  
! . 020 : C      THIS SCREEN ALLOWS TO ENTER AN ORDER OF PACBASE           *ACC !  
! . 030 : C      DOCUMENTATION PLACED BY A REFERENCED CLIENT.             *ACC !  
! . 050 : C      FROM THIS SCREEN, YOU MAY ACCESS ANY OTHER SCREEN OF     *ACC !  
! . 055 : C      THE DIALOG BY ENTERING THE CORRESPONDING CHOICE FIELD     *ACC !  
! . 060 : C      VALUE. THE DIFFERENT VALUES ARE DISPLAYED IN THE        *ACC !  
! . 070 : C      BOTTOM PART OF ALL THE DIALOG'S SCREENS.                 *ACC !  
! . 120 : S CD05                                         *ACC !  
! . 122 : U F 8  TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-CD05 F8)   *ACC !  
! . 124 : U F 9  TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-CD05 F9)   *ACC !  
! . 130 : U G 9  TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-CD05 G9)   *ACC !  
! . 150 : S CD10 R                                       *ACC !  
! . 152 : U F 8  INCORRECT UPDATE REQUEST.                               *ACC !  
! . 154 : U F 9  INCORRECT REQUEST FOR CREATION.                         *ACC !  
! . 160 : U G 9  END OF DISPLAY FOR THIS ORDER.                         *ACC !  
! . 180 : S ME00 Z                                       *ACC !  
! . 190 : U G 9  TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-ME00 G9)   *ACC !  
! . 200 : S FO10 R                                       *ACC !  
! . 210 : U F 9  MANUAL DOES NOT BELONG TO PACBASE DOCUMENTATION.       *ACC !  
!                               !                               !                               !  
! O: C1 CH: Odo0030 G                                               !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

PAGE

19

2  
3

```
-----  
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!  
! ON-LINE SCREEN GENERAL DOC.      DO0030 ***  ORDER INPUT SCREEN  ***      !  
!                               !  
! A LIN : T COMMENT                                     LIB !  
! . 350 : F CODMVT                                     *ACC !  
! . 360 : C      AN ACTION CODE MUST BE ENTERED.      *ACC !  
! . 400 : F FOURNI                                     *ACC !  
! . 402 : C      THE FIELD 'ITEM' IS ENTERED WITH THE 3-CHARACTER CODE *ACC !  
! . 403 : C      OF THE MANUAL. IT IS NOT POSSIBLE TO ENTER *ACC !  
! . 404 : C      REQUESTS CONCERNING THE BINDERS.      *ACC !  
! . 430 : U      A THIS PROCEDURE DOES NOT PERMIT TO ORDER BINDERS. *ACC !  
! . 450 : F MATE                                       *ACC !  
! . 451 : T      0 DOCUM DD                             *ACC !  
! . 453 : U      5 THIS TYPE OF HARDWARE IS NOT SUPPORTED BY PACBASE. *ACC !  
! . 500 : F QTMAC                                       *ACC !  
! . 510 : C      THE 'QUANTITY ORDERED' FIELD MUST BE ENTERED WITH THE *ACC !  
! . 520 : C      NUMBER OF COPIES NEEDED FOR THE SPECIFIED MANUAL. *ACC !  
! . 530 : C      ACCORDING TO STOCK AVAILABILITY, THE SYSTEM FILLS IN *ACC !  
! . 540 : C      THE 'QUANTITY DELIVERED' AND, IF NEEDED, THE 'QUANTITY *ACC !  
! . 541 : C      OUTSTANDING'. *ACC !  
! . 600 : F INFOR                                       *ACC !  
! . 610 : C      THE 'REMARKS' COLUMN ALLOWS TO ENTER SPECIFICS *ACC !  
! . 625 : C      CONCERNING THE LEAD TIMES OF OUTSTANDING ORDERS. *ACC !  
! O: C1 CH:                                           !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

2  
3

```
-----
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!
! SCREEN CALL OF ELEM... DO0030 *** ORDER INPUT SCREEN ***                               !
!
! A LIN : D.ELEM . PHYSICAL ATTRIBUTES . VALIDATION UPDATE . DISPLAY                               !
!       :       . P LN COL N L C HR VR . P V U UPD TARGET . S SOURCE LV!                               !
!-----
!   050 : DOAC30 . A 01 001 S . . . . .                               !
!   . 080 : DOAP04 . A 01 001 S . . . . .                               !
!   . 100 : DO0030 . A 01 025 T . . . . .                               !
!   . 110 : NUCOM . A 03 004 P U . . . . .                               !
!   . 120 : MATE . . . . 003 V U . . R . CD05 . . CA00 .                               !
!   . 122 : . . . . . . . . V SPECIAL . . . . .                               !
!   . 125 : RELEA . . . . 012 V U . . R . CD05 . . CD05 .                               !
!   . 130 : NUCLIE . . 01 004 O U . . . . .                               !
!   . 140 : RAISOC . . . . 003 P F . . . . .                               !
!   . 145 : RUE . . . . 01 009 V F . . . . .                               !
!   . 150 : COPOS . . . . 003 V F N . . R P 93CP . . WP30 .                               !
!   . 155 : . . . . . . . . CD05COPOS . . CD05COPOS .                               !
!   . 160 : VILLE . . . . 003 F F . . . . .                               !
!   . 200 : REFCLI . 01 004 V U N . . . . CD05 . . CD05 .                               !
!   . 210 : DATE . . . . 003 V U N . . R . CD05 . . CD05 .                               !
!   . 220 : CORRES . 01 005 V U N . . P . CD05 . . CD05 .                               !
!
! O: C1 CH: Odo0030 CE
!-----
```

PRESENTATION OF THE EXAMPLE  
 THE 'DO0030' SCREEN

```

-----
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!
! SCREEN CALL OF ELEM... DO0030 *** ORDER INPUT SCREEN ***                               !
!                                                                                               !
! A LIN : D.ELEM . PHYSICAL ATTRIBUTES . VALIDATION UPDATE . DISPLAY                               !
!       :      . P LN COL N L C HR VR . P V U UPD TARGET . S SOURCE LV!                               !
!-----
! . 230 : REMIS .          003 V U N .          CD05 .          CD05                               !
! . 300 : LINE . A 10 001 R 1 01 09 .          .          .          !
! . 305 : CODMVT .        003 V Y .          I .          .          !
! . 310 : FOURNI .        003 V . R T CD00 .          CD00                               !
! . 320 : QTMAC .        003 V . R X CD10 .          CD10                               !
! . 325 : .          .          .          + FO10QTMAM .          !
! . 330 : QTMAL .        002 F .          .          CD10                               !
! . 335 : QTMAR .        002 F .          .          .          !
! . 340 : INFOR .        001 V . P X CD10 .          CD10                               !
! . 350 : END .          004 Z .          .          .          !
! . 400 : . A 20 002 L .          .          .          !
! . 405 : EDIT .        001 V F .          I CD20 .          !
! . 415 : DOAC31 . A 20 001 S .          .          .          !
! . 500 : DOAP05 . A 22 001 S .          .          .          !
!       : .          .          .          .          !
!       : .          .          .          .          !
! O: C1 CH:
-----

```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN2  
3

```
-----
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!
! SCREEN CALL OF ELEM... DO0030 *** ORDER INPUT SCREEN ***                          !
!                                                                                   !
! A LIN : D.ELEM . PHYSICAL ATTRIBUTES . LABEL                                  !
!       : . P LN COL N L HR VR IN PR CO . T LITERALS                          !
! .....
!   050 : DOAC30 . A 01 001 S . . . . . !
!   . 080 : DOAP04 . A 01 001 S . . . . . !
!   . 100 : DO0030 . A 01 025 T . . . . . !
!   . 110 : NUCOM . A 03 004 P U . . . . . !
!   . 120 : MATE . . . . . 003 V U . . . . . !
!   . 122 : . . . . . . . . . . . . . . . !
!   . 125 : RELEA . . . . . 012 V U . . . . . !
!   . 130 : NUCLIE . . 01 004 O U . . . . . !
!   . 140 : RAISOC . . . . . 003 P F . . . . . !
!   . 145 : RUE . . . . . 01 009 V F . . . . . P 84, OLD TOWNLINE ROAD !
!   . 150 : COPOS . . . . . 003 V F . . . . . !
!   . 155 : . . . . . . . . . . . . . . . !
!   . 160 : VILLE . . . . . 003 F F . . . . . !
!   . 200 : REFCLI . . 01 004 V U . . . . . !
!   . 210 : DATE . . . . . 003 V U . . . . . I .._... !
!   . 220 : CORRES . . 01 005 V U . . . . . !
!                                                                                   !
! O: C2 CH:                                                                                   !
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

```
-----  
!                                     BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!  
! SCREEN CALL OF ELEM... DO0030 *** ORDER INPUT SCREEN ***                !  
!                                     !  
! A LIN : D.ELEM . PHYSICAL ATTRIBUTES . LABEL                          !  
!      :      . P LN COL N L HR VR IN PR CO . T LITERALS                 !  
! .....                               !  
! . 230 : REMIS .      003 V U .                                         !  
! . 300 : LINE . A 10 001 R 1 01 09 .                                     !  
! . 305 : CODMVT .      003 V .                                         !  
! . 310 : FOURNI .      003 V .                                         !  
! . 320 : QTMAC .      003 V .                                         !  
! . 325 : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . !  
! . 330 : QTMAL .      002 F . B . . . . . . . . . . . . . . . . . . . !  
! . 335 : QTMAR .      002 F . . . . . . . . . . . . . . . . . . . . . !  
! . 340 : INFOR .      001 V . . . . . . . . . . . . . . . . . . . . . !  
! . 350 : END .      004 Z . . . . . . . . . . . . . . . . . . . . . . !  
! . 400 : . . A 20 002 L . . . . . . . . . . . . . . . . . . . . . . !  
! . 405 : EDIT .      001 V F . . . . . . . . . . . . . . . . . . . . . !  
! 415 : DOAC31 . A 20 001 S . . . . . . . . . . . . . . . . . . . . . !  
! 500 : DOAP05 . A 22 001 S . . . . . . . . . . . . . . . . . . . . . !  
! : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . !  
! : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . !  
! : . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . !  
! O: C2 CH:                                                                !  
-----
```

PRESENTATION OF THE EXAMPLE  
 THE 'DO0030' SCREEN

```

-----
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!
! ON-LINE SCREEN CALL OF SEGM. DO0030 *** ORDER INPUT SCREEN ***                               !
! ...CA00...CD05...WP30...*CD00...*CD10...*FO10...fCD20.....!
! A SEGM      :   USE PREC ACCESS KEY      ACCESS      D EXTERNAL LIB. S      :LIBR!
! C CODE C LN : G R D SEGM SOURCE          KEY   B O T NAME      SEGM N LV :   !
! CD05  00 :   M A      SPACES            CLECD   V   CDTEST    CD05   12 :0005!
! CD05  02 :           "B"                COCARA                               :0049!
! CD05  04 :           CA00-NUCOM          NUCOM                               :0021!
! CD10 R 00 :   T           "C"            CLECD   V   CDTEST    CD10   :0005!
! CD10 R 02 :           CA00-NUCOM          NUCOM                               :0021!
! CD10 R 04 :           0030-FOURNI        FOURNI                               :0021!
! CD10 R 06 :   A           SPACES            KEYCD                               :0021!
! CD10 R 08 :           "C"                COCARA C                               :0021!
! CD10 R 10 :           CA00-NUCOM          NUCOM C                               :0021!
! FO10 R 00 :   M N CD10 0030-FOURNI        CLEFO   V 1 FOTEST    FO10   :0005!
! FO10 R 02 :           CA00-LANGU          LANGU                               :0021!
! FO10 R 04 :           0030-RELEA        RELEA                               :0021!
! FO10 R 06 :           0030-MATE          MATE                               :0021!
! CD20 Z 00 :   X N      SPACES            CLECD   V   CDTEST    CD20   :0005!
! CD20 Z 02 :           "E"                COCARA                               :0021!
! CD20 Z 04 :           CA00-NUCOM          NUCOM                               :0021!
! ME00 Z 00 :   N A      CA00-CLEME        CLEME   V   METEST    ME00   :0005!
!
! O: C1 CH: Odo0030 CS
-----

```



PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

2  
3

```

-----
!                                     BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!
! ON-LINE SCREEN CALL OF P.M.S.....:      DO0030 *** ORDER INPUT SCREEN *** !
!
! A  MACRO  LN C : COMMENTS OR PARAMETER VALUES                        D E !
! .  AADOCF      : WP/                                                !
! .  BBDEBR      :                                                    !
! .  BBINIT      :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
!               :                                                    !
! O: C1 CH: Odo0030 CP
-----

```



PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

```
-----  
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!  
! WORK AREAS.....ENTITY TYPE O DO0030 *** ORDER INPUT SCREEN ***                               !  
!                                                                                               !  
! CODE FOR PLACEMENT..:      WP                                                                                               !  
! A LIN T LEVEL OR SECTION WORK AREA DESCRIPTION OCCU!                               !  
! * 000 01      WP00.                                                                                               !  
! * 010 02      WP10.                                                                                               !  
! * 020 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 030      "23400BRISBANE" .                                                                                               !  
! * 040 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 050      "56400VICTORIA" .                                                                                               !  
! * 060 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 070      "76500ALICE SPRINGS" .                                                                                               !  
! * 080 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 090      "55300MELBOURNE" .                                                                                               !  
! * 100 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 110      "11000CANBERRA" .                                                                                               !  
! * 120 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 130      "34500PERTH" .                                                                                               !  
! * 140 05      FILLER PIC X(25) VALUE                                                                                               !  
! * 150      "85270DARWIN" .                                                                                               !  
! * 160 05      FILLER PIC X(25) VALUE                                                                                               !  
!                                                                                               !  
! O: C1 CH:                                                                                               !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN2  
3

```
-----  
!                               BULL DPS7 APPLICATION                               *PDLB.NDOC.AD7.247!  
! WORK AREAS.....ENTITY TYPE O DO0030 *** ORDER INPUT SCREEN ***                               !  
!                                                                                               !  
! CODE FOR PLACEMENT..:      WP                                                                                               !  
! A LIN T LEVEL OR SECTION WORK AREA DESCRIPTION                                         OCCU!  
! * 170                               "94000HOBART                               " .                               !  
! * 180      05                       FILLER PIC X(25) VALUE                               !  
! * 190                               "89300SYDNEY                               " .                               !  
! * 300      02                       WP20 REDEFINES WP10 OCCURS 9.                               9!  
! * 320 E    05                       WP20-COPOS .                               !  
! * 340 E    05                       WP20-VILLE .                               !  
! * 400      02                       WP30.                               !  
! * 410 I    05                       WP30-COPOS .                               !  
! * 500      02                       WP40.                               !  
! * 510 E    05                       WP40-VILLE.                               !  
! * 520 E    05                       WP40-VILLEL.                               !  
!                                                                                               !  
!                                                                                               !  
!                                                                                               !  
!                                                                                               !  
!                                                                                               !  
! O: C1 CH:                                                                                               !  
-----
```

```
-----  
!   XXXXXXXX - 0808      *** ORDER INPUT SCREEN ***      XXXXXXXXXXXX 14:45:36!  
!  
! ORDER NUMBER: 02345   SYSTEM: DPS7                       RELEASE:           !  
! CUST.      BEST      D.P. MANAGEMENT                     !  
!      84, OLD TOWNLINE ROAD                               48016 CINCINNATI  !  
! CUST. REF.: LP-KCP  ORDER NUMBER: 05179   ORDER DATE: .._..  !  
! COORDINATOR: MR. GUY DANCE                   DISCOUNT RATE:  12.25  !  
!  
! A  ITEM      ORDERED  DELIV.  OUTST.  REMARKS           !  
! C  DLG       3        1        2        REST TO BE DELIVERED : 05/03/91  !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
! .  ...      ..       ..       ..       .....           !  
!  
! PRINTING OF FORM : 0 CHOICE: _ UPD : '7', ORDERS (NEXT) : '8',  !  
! MENU : '1', CUSTOMER LIST : '2', CUST. HIST : '3', ORDER LIST : '4',  !  
! SCREEN DOC : '=' , DATA EL. DOC : '$'  !  
! PLEASE CHECK YOUR MAILBOX, THANK YOU.  !  
! XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  !  
-----
```

PRESENTATION OF THE EXAMPLE  
THE 'DO0030' SCREEN

2  
3

FUSFLIN OPE OPERANDS		LVTY CONDITION	
02CP	N	INIT. NUMBER OF LOADED ITEMS	10BL
02CP100	M	IWP20M IWP20L	
08BB	N	NO UPDATE ==> END OF RECEIVE	10IT OPER NOT = "M"
08BB100	GFT		
15AA	N	INITIALIZATION CATM (HEADING)	10IT CATX = SPACE
15AA100	M	"M" CATM	AN OPER = "M"
20BB	N	ITEM NOT AVAILABLE	10*A FOURNI
20BB100	ERR	A FOURNI	99IT I-0030-FOURNI = "CLA"
20BB110	GF		AN CATM NOT = SPACE
25BB	N	ACCESS TO FO10	12*P CD10
25BB100	M	"1" CD10-CF	
28BH	N	STOCK UPD.: ORDER DELETION/UPD	10IT (CATM = "A" OR "M")
28BH100	A	CD10-QTMAL FO10-QTMAS	AN CATX = "R"
28BH120			AN CAT-ER = SPACES
30BD	N	QUANTITY PROCESSING	10*P R
30BF	N	CALC. DELIV. QUANT. STOCK UPD.	12IT CATM = "C" OR "M"
30BF100	M	I-0030-QTMAL CD10-QTMAL	99IT FO10-QTMAS NOT <
30BF110			I-0030-QTMAL
30BF120	M	FO10-QTMAS CD10-QTMAL	99EL
30BF130	S	CD10-QTMAL FO10-QTMAS	99BL
30BF140	M	CD10-QTMAL O-0030-QTMAL	
64DA	N	PREPARATION DISPLAY DATE/HOUR	10IT CATX = " "
64DA 40	AD6		
64DA 80	AD	IM DATOR DAT8C	
64DA120	TIM		99BL
64DA160	TIF	TIMCOG TIMDAY	
65BB	N	REMAINS TO BE DELIVERED	10*P R
65BB100	C	WW10-QTMAR =	99IT CD10-QTMAL NOT = ZERO
65BB110		CD10-QTMAL - CD10-QTMAL	
65BB120	M	WW10-QTMAR O-0030-QTMAR	
93CP	N	ZIP CODE VALIDATION	10BL
93CP100	SCH	WP20-COPOS WP30-COPOS	
93CP200	M	"5" DEL-ER	99IT IWP20R > IWP20L
93CP220	GT	10	

### **3. GENERATED PROGRAM / MULTI-SCREEN**

### *3.1. BEGINNING OF PROGRAM*

#### BEGINNING OF PROGRAM

The user cannot modify the IDENTIFICATION DIVISION of the generated program.

The ENVIRONMENT DIVISION is automatically adapted to the variant requested for the program.

The clause 'DECIMAL POINT IS COMMA' is generated if, on the Library Definition screen, the value in the DECIMAL POINT PRESENTATION CHARACTER field is a comma (,).

All other clauses that may be necessary in this part of the program are the user's responsibility.

All modifications to this part of the program must be done on the Beginning Insertions (-B) screen. (See the STRUCTURED CODE Reference Manual).



GENERATED PROGRAM / MULTI-SCREEN  
BEGINNING OF PROGRAM

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3  
1

IDENTIFICATION DIVISION.	
PROGRAM-ID. DO0030P.	DO0030
AUTHOR. *** ORDER INPUT SCREEN ***.	DO0030
DATE-COMPILED. 07/27/94.	DO0030
ENVIRONMENT DIVISION.	DO0030
CONFIGURATION SECTION.	DO0030
SOURCE-COMPUTER. LEVEL-64.	DO0030
OBJECT-COMPUTER. LEVEL-64.	DO0030
SPECIAL-NAMES.	DO0030
DECIMAL-POINT IS COMMA	DO0030
OBJECT IS COMMA.	DO0030
INPUT-OUTPUT SECTION.	DO0030
FILE-CONTROL.	DO0030
COPY    SELECT-CD-FILE.	DO0030
COPY    SELECT-EM-FILE.	DO0030
COPY    SELECT-FO-FILE.	DO0030
COPY    SELECT-HE-FILE.	DO0030
COPY    SELECT-ME-FILE.	DO0030

### 3.2. SEGMENT DESCRIPTION

#### SEGMENT DESCRIPTION

This part of the program is generated when at least one segment is used on the screen in 'V' organization.

The segment DESCRIPTION TYPE is defined by the user on the Screen Call of Segments (-CS) screen. The types of calls are:

- . Complete segment (Common part and specific part in redefinition);
- . Specific part only;
- . Complete segment with variable length (common part and specific part in redefinition without FILLER).

A table description (segment ORGANIZATION = 'G') is preceded by the description of the Communication Area (G-ddss-PARAM) with the PACTABLE function.

PACBASE generates one Communication Area per table, i.e. per segment whose ORGANIZATION = 'G'.

#### Backup screen for documentation call

This file is used to save variable fields before the branching to the documentation screen. '1,932' must be the length of the file, because the size of the biggest screen is '1,920'. It is built as follows:

```
01          HE00 .  
          05      HE00-XTERM      PICTURE X(12) .  
          05      HE00-SCREEN     PICTURE X(1920) .
```

'HE' is the external name used by default in the SELECT clause of the FILE SECTION. The user may change this name using On-line screen General Documentation (-G) lines in the 'O:C2' Option:

```
      G  05          XX
```

In this example, the backup file name becomes XX.

The user must also declare it in the TDS Library.

GENERATED PROGRAM / MULTI-SCREEN  
SEGMENT DESCRIPTION

3  
2

DATA DIVISION.				DO0030
FILE SECTION.				DO0030
FD	CD-FILE			DO0030
	BLOCK	00001 RECORDS		DO0030
	DATA RECORD			DO0030
	CD00			DO0030
	CD05			DO0030
	CD10			DO0030
	CD20			DO0030
	LABEL RECORD STANDARD.			DO0030
01	CD00.			DO0030
10	CD00-KEYCD.			DO0030
15	CD00-COCARA	PICTURE X.		DO0030
15	CD00-NUCOM	PICTURE 9(5).		DO0030
15	CD00-FOURNI	PICTURE X(3).		DO0030
10	CD00-SUITE.			DO0030
15	FILLER	PICTURE X(00157).		DO0030
01	CD05.			DO0030
10	FILLER	PICTURE X(00009).		DO0030
10	CD05-NUCLIE	PICTURE 9(8).		DO0030
10	CD05-DATE	PICTURE X(6).		DO0030
10	CD05-RELEA	PICTURE X(3).		DO0030
10	CD05-REFCLI	PICTURE X(30).		DO0030
10	CD05-RUE	PICTURE X(40).		DO0030
10	CD05-COPOS	PICTURE X(5).		DO0030
10	CD05-VILLE	PICTURE X(20).		DO0030
10	CD05-CORRES	PICTURE X(25).		DO0030
10	CD05-REMIS	PICTURE S9(4)V99.		DO0030
10	CD05-MATE	PICTURE X(8).		DO0030
10	CD05-LANGU	PICTURE X.		DO0030
10	CD05-FILLER	PICTURE X(5).		DO0030
01	CD10.			DO0030
10	FILLER	PICTURE X(00009).		DO0030
10	CD10-QTMAC	PICTURE 99.		DO0030
10	CD10-QTMAL	PICTURE 99.		DO0030
10	CD10-INFOR	PICTURE X(35).		DO0030
10	CD10-ADFOU	PICTURE X(100).		DO0030
10	FILLER	PICTURE X(00018).		DO0030
01	CD20.			DO0030
10	FILLER	PICTURE X(00009).		DO0030
10	CD20-EDIT	PICTURE X.		DO0030
10	FILLER	PICTURE X(00156).		DO0030
FD	EM-FILE			DO0030
	BLOCK	00001 RECORDS		DO0030
	DATA RECORD			DO0030
	EM00			DO0030
	LABEL RECORD STANDARD.			DO0030
01	EM00.			DO0030
05	EM00-EMKEY.			DO0030
10	EM00-LIBRA	PICTURE X(3).		DO0030
10	EM00-ENTYP	PICTURE X.		DO0030
10	EM00-XEMKY.			DO0030
15	EM00-PROGR	PICTURE X(6).		DO0030
15	EM00-ERCOD.			DO0030
20	EM00-ERCOD9	PICTURE 9(3).		DO0030
15	EM00-ERTYP	PICTURE X.		DO0030
10	EM00-LINUM	PICTURE 9(3).		DO0030
05	EM00-ERLVL	PICTURE X.		DO0030
05	EM00-ERMSG	PICTURE X(66).		DO0030
05	FILLER	PICTURE X(6).		DO0030
FD	FO-FILE			DO0030
	BLOCK	00001 RECORDS		DO0030
	DATA RECORD			DO0030
	FO00			DO0030
	LABEL RECORD STANDARD.			DO0030
01	FO10.			DO0030
10	FO10-CLEFO.			DO0030
15	FO10-FOURNI	PICTURE X(3).		DO0030
15	FO10-MATE	PICTURE X(8).		DO0030
15	FO10-RELEA	PICTURE X(3).		DO0030
15	FO10-LANGU	PICTURE X.		DO0030
10	FO10-QTMAS	COMPUTATIONAL-1.		DO0030
10	FO10-QTMAM	PICTURE 9(4).		DO0030
10	FO10-LIBFO	PICTURE X(20).		DO0030
10	FO10-DATE	PICTURE X(6).		DO0030
10	FO10-HEURE	PICTURE X(8).		DO0030
10	FO10-FILLER	PICTURE XX.		DO0030

GENERATED PROGRAM / MULTI-SCREEN  
SEGMENT DESCRIPTION

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FD	HE-FILE		DO0030
	BLOCK	00001 RECORDS	DO0030
	DATA RECORD		DO0030
	HE00		DO0030
	LABEL RECORD STANDARD.		DO0030
01	HE00.		DO0030
05	HE00-XTERM	PICTURE X(12).	DO0030
05	HE00-SCREEN	PICTURE X(1920).	DO0030
FD	ME-FILE		DO0030
	BLOCK	00001 RECORDS	DO0030
	DATA RECORD		DO0030
	ME00		DO0030
	LABEL RECORD STANDARD.		DO0030
01	ME00.		DO0030
10	ME00-CLEME.		DO0030
15	ME00-COPERS	PICTURE X(5).	DO0030
15	ME00-NUMORD	PICTURE XX.	DO0030
10	ME00-MESSA	PICTURE X(75).	DO0030

### 3.3. BEGINNING OF WORKING STORAGE

#### BEGINNING OF WORKING-STORAGE

The 'WSS-BEGIN' level is generated at the beginning of the WORKING-STORAGE SECTION for all programs.

It contains all the variables and keys necessary for automatic processing.

IK Error indicator for file accesses.

'0' No error.  
'1' Error.

OPER Operation code.

'A' Display.  
'M' Update.  
'S' Screen continuation.  
'E' End.  
'P' Previous display.  
'O' Transfer to another screen.

OPERD Operation code for deferred branching.

Transferred to OPER in F40.

'O' Deferred call of another screen.

OPER and OPERD: If they correspond to a Data Element defined as an Operation Code on the Screen Call of Elements (-CE) screen (value 'O' in the VALIDATION CONDITIONS/SET VARIABLES field), they are processed in the F0520 function. If not, they are processed in the F20 function.

CATX Code of the category being executed.

'0' Beginning of reception or display.  
' ' Screen-top.  
'R' Repetitive.  
'Z' Screen-bottom.

CATM Transaction code.

'C' Creation.  
'M' Modification.

GENERATED PROGRAM / MULTI-SCREEN  
BEGINNING OF WORKING STORAGE

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3

'A' Deletion.  
'X' Implicit update.

ICATR Indicator for current category being processed.

(Repetitive category only)

SCR-ER Screen error indicator.

'1' no error.  
'4' error.

FT End of repetitive category indicator.

'0' Lines to display.  
'1' No more lines to display.

ICF Input Configuration.

'1' Screen in input.  
'0' No screen in input.

OCF Output Configuration.

'1' Screen in output.  
'0' No screen in output.

CAT-ER Ongoing error indicator for current category.

' ' No error.  
'E' Error.

I-PFKEY Stores the function key.

INA Number of Data Elements in the screen-top category.

INR INA + Number of Data Elements in the repetitive category.

INZ INR + Number of Data Elements in the screen-bottom category.

IRR Number of repetitions in the repetitive category.

INT Number of input fields.

IER Number of error messages on the screen.

DEL-ER Memorizes Data Element error (work variable).

The following fields are used to initialize the CMES-YCRE area which is transferred to the ZAR980 sub-program in order to indicate the type of processing to be executed.

The user can also use the CMES-YCRE field on the Procedural code (-P) screen to condition the SEND of the fixed labels in the F8105 function: the SEND is not executed when the value of CMES-YCRE is set to 'G' on the '-P' screen.

7-YCREE

Value 'E' for display.

7-YCRER

Value 'R' for message reception.

7-YCREF

Value 'F' for display of transaction end message.

7-YCREX

Value 'X' for display in case of error.

7-YCREP

Value 'P' for use of a function key.



The 'CONSTANTS' level is also generated for all programs. It contains:

- . The compilation date of the on-line generator (PACE30 and PACE80), as well as the date of the related skeleton (these appear as comment lines),
- . Information on the program and work areas generated according to the procedures executed in the program:

SESSI Session number of the generated program.  
LIBRA Code of the library.  
DATGN Generated program date.  
PROGR System program code.  
PROGE COBOL program-id.  
TIMGN Generated program time.  
USERCO User code.  
COBASE Database code.

PRCGI Name of the sub-program called for screen formatting. The default value may be overridden using the screen General Documentation screen (-G) (see Chapter "DESCRIPTION OF A TRANSACTION", Subchapter "SCREEN GENERAL DOCUMENTATION" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual).

If a request for HELP documentation is entered on the Screen Definition screen, the following fields are generated:

PRDOC: External name of the 'HELP SCREEN' program.

5-scrn-PROGE: Field containing the name of called program.  
This field is filled during a screen branching operation ('scrn' = the last four characters of the screen code).

DATCE This field includes the CENTUR field (containing the value of the current century) and a blank date area (DATOR) in which the user can store the processing date in a year-month-day format (DATOA-DATOM-DATOJ).

Note: if the year is less than '61', the CENTUR field is automatically set to '20'.

DAT6 Fields for date formatting (MMDDYY or DDMMYY) and

DAT7 printing (for example DD/MM/YY).

DAT8 These fields are generated if a date processing operator is used in the '-P' lines of the program or if a variable data element ('V') has a date format.

DATSEP This field contains the separator used for dates. The default value ('/') can be modified by via Procedural Code (-P) lines.

DATSET This field contains the separator used for the Gregorian date.

The default value ('-') can be modified via Procedural Code (-P) lines.

DATCTY Field for century loading.

DAT6C Field for non-formatted date with century.

DAT7C Field for non-formatted date with century.

DAT8C Field for formatted date with century (DD/MM/CCYY).

DAT8G Field for the Gregorian type of date -- with century also -- (CCYY-MM-DD).

TIMCO Field for time loading.

TIMDAY Field for time formatting (HH:MM:SS).

The 'CONFIGURATIONS' level contains one variable 'ddss-CF' ('ddss' = segment code in the generated program) for each segment accessed in the program, which allows for conditioned access for each segment in the procedure.

```

WORKING-STORAGE SECTION.                                DO0030
01      WSS-BEGIN.                                       DO0030
   05      FILLER          PICTURE X(7) VALUE "WORKING".  DO0030
   05      IK              PICTURE X.                    DO0030
   05      BLANC          PICTURE X VALUE SPACE.         DO0030
   05      OPER          PICTURE X.                      DO0030
   05      OPERD        PICTURE X VALUE SPACE.         DO0030
   05      CATX          PICTURE X.                      DO0030
   05      CATM          PICTURE X.                      DO0030
   05      ICATR         PICTURE 99.                    DO0030
   05      MCR-ER        PICTURE X.                      DO0030
   05      FT            PICTURE X.                      DO0030
   05      ICF           PICTURE X.                      DO0030
   05      OCF           PICTURE X.                      DO0030
   05      CAT-ER        PICTURE X.                      DO0030
   05      I-PFKEY       PICTURE XX.                     DO0030
   05      7-YCREE       PICTURE X VALUE "E".           DO0030
   05      7-YCREF       PICTURE X VALUE "F".           DO0030
   05      7-YCREP       PICTURE X VALUE "P".           DO0030
   05      7-YCRES       PICTURE X VALUE "R".           DO0030
   05      7-YCREX       PICTURE X VALUE "X".           DO0030
   05      INA           PICTURE 999 VALUE 009.         DO0030
   05      INR           PICTURE 999 VALUE 013.         DO0030
   05      INZ           PICTURE 999 VALUE 014.         DO0030
   05      IRR           PICTURE 99 VALUE 09.            DO0030
   05      INT           PICTURE 999 VALUE 046.         DO0030
   05      IER           PICTURE 99 VALUE 01.            DO0030
   05      DEL-ER        PICTURE X.                      DO0030
01      PACBASE-CONSTANTS.                               DO0030
* OLSD DATES PACE30 : 10/03/94                          DO0030
*           PACE80 : 10/03/94      PAC7SG : 940503      DO0030
   05      SESSI         PICTURE X(5) VALUE "0412 ".    DO0030
   05      LIBRA         PICTURE X(3) VALUE "AD7".       DO0030
   05      DATGN         PICTURE X(8) VALUE "07/27/94".  DO0030
   05      PROGR         PICTURE X(6) VALUE "D00030".    DO0030
   05      PROGE         PICTURE X(8) VALUE "D00030P ".  DO0030
   05      TIMGN         PICTURE X(8) VALUE "17:28:02".  DO0030
   05      USERCO       PICTURE X(8) VALUE "PDMM ".     DO0030
   05      PRDOC         PICTURE X(8) VALUE "DOP050".    DO0030
   05      PRCGI         PICTURE X(8) VALUE "ZAR980".    DO0030
   05      5-0030-PROGE PICTURE X(8).                   DO0030
01      DATCE.                                                DO0030
   05      CENTUR        PICTURE XX VALUE "19".         DO0030
   05      DATOR.                                               DO0030
   10      DATOA         PICTURE XX.                     DO0030
   10      DATOM         PICTURE XX.                     DO0030
   10      DATOJ         PICTURE XX.                     DO0030
01      DAT6.                                                  DO0030
   10      DAT61.                                               DO0030
   15      DAT619        PICTURE 99.                     DO0030
   10      DAT62.                                               DO0030
   15      DAT629        PICTURE 99.                     DO0030
   10      DAT63         PICTURE XX.                     DO0030
01      DAT7.                                                  DO0030
   10      DAT71         PICTURE XX.                     DO0030
   10      DAT72         PICTURE XX.                     DO0030
   10      DAT73         PICTURE XX.                     DO0030
01      DAT8.                                                  DO0030
   10      DAT81         PICTURE XX.                     DO0030
   10      DAT8S1        PICTURE X.                      DO0030
   10      DAT82         PICTURE XX.                     DO0030
   10      DAT8S2        PICTURE X.                      DO0030
   10      DAT83         PICTURE XX.                     DO0030
01      DATSEP          PICTURE X VALUE "/" .           DO0030
01      DATSET          PICTURE X VALUE "-" .           DO0030
01      DATCTY.                                               DO0030
   05      DATCTY9       PICTURE 99.                     DO0030
01      DAT6C.                                               DO0030
   10      DAT61C        PICTURE XX.                     DO0030
   10      DAT62C        PICTURE XX.                     DO0030
   10      DAT63C        PICTURE XX.                     DO0030
   10      DAT64C        PICTURE XX.                     DO0030
01      DAT7C.                                               DO0030
   10      DAT71C        PICTURE XX.                     DO0030
   10      DAT72C        PICTURE XX.                     DO0030
   10      DAT73C        PICTURE XX.                     DO0030
   10      DAT74C        PICTURE XX.                     DO0030

```

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01	DAT8C.		DO0030
10	DAT81C	PICTURE XX.	DO0030
10	DAT8S1C	PICTURE X VALUE "/".	DO0030
10	DAT82C	PICTURE XX.	DO0030
10	DAT8S2C	PICTURE X VALUE "/".	DO0030
10	DAT83C	PICTURE XX.	DO0030
10	DAT84C	PICTURE XX.	DO0030
01	DAT8G.		DO0030
10	DAT81G	PICTURE XX.	DO0030
10	DAT82G	PICTURE XX.	DO0030
10	DAT8S1G	PICTURE X VALUE "-".	DO0030
10	DAT83G	PICTURE XX.	DO0030
10	DAT8S2G	PICTURE X VALUE "-".	DO0030
10	DAT84G	PICTURE XX.	DO0030
01	TIMCO.		DO0030
02	TIMCOG.		DO0030
05	TIMCOH	PICTURE XX.	DO0030
05	TIMCOM	PICTURE XX.	DO0030
05	TIMCOS	PICTURE XX.	DO0030
02	TIMCOC	PICTURE XX.	DO0030
01	TIMDAY.		DO0030
05	TIMHOU	PICTURE XX.	DO0030
05	TIMS1	PICTURE X VALUE ":".	DO0030
05	TIMMIN	PICTURE XX.	DO0030
05	TIMS2	PICTURE X VALUE ":".	DO0030
05	TIMSEC	PICTURE XX.	DO0030
01	CONFIGURATIONS.		DO0030
05	CD05-CF	PICTURE X.	DO0030
05	CD10-CF	PICTURE X.	DO0030
05	CD20-CF	PICTURE X.	DO0030
05	FO10-CF	PICTURE X.	DO0030
05	ME00-CF	PICTURE X.	DO0030

### 3.4. SCREEN MAP DESCRIPTION

#### SCREEN MAP DESCRIPTION

The WORKING-STORAGE SECTION includes the AT-0030 table which is a logical description of the screen and contains, for each field:

- . its line-column position (YPCUR);
- . its length (LENGTH);
- . its attributes:

(ATTRN: nature; ATTRI: intensity; ATTRP: presentation; and ATTRC: color).

The screen fields are coded according to the following rules:

.I-0030           Screen in reception.  
.O-0030           Screen in display.  
.I-0030-MATE     Alphanumeric reception field.  
.E-0030-REMIS   Alphanumeric definition of an I-0030-REMIS  
                  field which is numeric in reception.  
.F-0030-QTMAC   Alphanumeric definition of an O-0030-QTMAC  
                  field which is numeric in display.

The data element defining the repetitive category is coded in the screen map description as follows:

.J-0030-LINE OCCURS 10     in reception,  
.P-0030-LINE OCCURS 10     in display,

and contains a FILLER.

The description of the fields of the data element which defines the repetitive category is generated outside the screen description.

This description is made up of a 'FILLER' field which is filled in with each occurrence of the category. It is used to execute the procedures for each of the elementary data elements.

This description is generated according to the same rules as above, for example:

```
.I-0030-LINE Used for procedures in reception,
```

containing,

```
.I-0030-FOURNI  
.E-0030-QTMAL  
etc.
```

```
.O-0030-LINE Used for procedures in display,
```

containing,

```
.O-0030-FOURNI  
.O-0030-QTMAC.
```

An ordinary repetitive data element (which does not define a repetitive category) is described directly in the screen description as follows:

```
.05 FILLER Occurs 2.  
.10 I-0030-LREF1 in reception  
  
.05 FILLER Occurs 2.  
.10 O-0030-LREF1 in display
```

In this case, the procedures for each occurrence of the data element are not generated and are to be inserted by the user via Structured Code (validations, transfers, etc.).

The formats used in the generated programs correspond to the following rules:

DATA ELEMENT WITH NATURE 'P'

Reception screen or display screen:

- . The format is the internal format of the data element.

DATA ELEMENT WITH NATURE 'V'

Reception screen:

- . The format is the internal format of the data element.

Display screen:

- . For alphanumeric data elements, it is the internal format of the data element,
- . For numeric data elements, it is a print format built from the internal format, with replacement of non-significant leading zeros by spaces.

DATA ELEMENT WITH A CONVERSATIONAL FORMAT

(See the SPECIFICATIONS DICTIONARY Reference Manual, Chapter "DATA ELEMENTS", Subchapter "DESCRIPTION SCREEN (-D)").

Reception screen:

- . The internal format is constructed from the conversational format entered on the Data Element Description screen.

EXAMPLE:            -conversational format:            ZZZ99.99  
                      -constructed internal format: 9(5)V9(2)

Display screen:

- . The format is the conversational format of the element entered on the Data Element Description screen.

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01	0030-MESSO.		*AA040
02	0030-MESSI.		*AA040
05	S01004	PICTURE X(008).	*AA040
05	S01013	PICTURE X(001).	*AA040
05	S01015	PICTURE X(005).	*AA040
05	S01025	PICTURE X(030).	*AA040
05	S01060	PICTURE X(010).	*AA040
05	S01071	PICTURE X(008).	*AA040
05	S03004	PICTURE X(013).	*AA040
05	S03018	PICTURE X(005).	*AA040
05	S03026	PICTURE X(007).	*AA040
05	S03034	PICTURE X(008).	*AA040
05	S03054	PICTURE X(008).	*AA040
05	S03063	PICTURE X(003).	*AA040
05	S04004	PICTURE X(005).	*AA040
05	S04013	PICTURE X(050).	*AA040
05	S05009	PICTURE X(040).	*AA040
05	S05052	PICTURE X(020).	*AA040
05	S05074	PICTURE X(005).	*AA040
05	S06004	PICTURE X(011).	*AA040
05	S06016	PICTURE X(030).	*AA040
05	S06049	PICTURE X(011).	*AA040
05	S06061	PICTURE X(006).	*AA040
05	S07005	PICTURE X(012).	*AA040
05	S07018	PICTURE X(025).	*AA040
05	S07046	PICTURE X(014).	*AA040
05	S07061	PICTURE X(008).	*AA040
05	S09003	PICTURE X(001).	*AA040
05	S09007	PICTURE X(006).	*AA040
05	S09016	PICTURE X(008).	*AA040
05	S09026	PICTURE X(007).	*AA040
05	S09035	PICTURE X(006).	*AA040
05	S09042	PICTURE X(035).	*AA040
05	S10003	PICTURE X(001).	*AA040
05	S10007	PICTURE X(003).	*AA040
05	S10016	PICTURE X(002).	*AA040
05	S10026	PICTURE X(002).	*AA040
05	S10035	PICTURE X(002).	*AA040
05	S10042	PICTURE X(035).	*AA040
05	S11003	PICTURE X(001).	*AA040
05	S11007	PICTURE X(003).	*AA040
05	S11016	PICTURE X(002).	*AA040
05	S11026	PICTURE X(002).	*AA040
05	S11035	PICTURE X(002).	*AA040
05	S11042	PICTURE X(035).	*AA040
05	S12003	PICTURE X(001).	*AA040
05	S12007	PICTURE X(003).	*AA040
05	S12016	PICTURE X(002).	*AA040
05	S12026	PICTURE X(002).	*AA040
05	S12035	PICTURE X(002).	*AA040
05	S12042	PICTURE X(035).	*AA040
05	S13003	PICTURE X(001).	*AA040
05	S13007	PICTURE X(003).	*AA040
05	S13016	PICTURE X(002).	*AA040
05	S13026	PICTURE X(002).	*AA040
05	S13035	PICTURE X(002).	*AA040
05	S13042	PICTURE X(035).	*AA040
05	S14003	PICTURE X(001).	*AA040
05	S14007	PICTURE X(003).	*AA040
05	S14016	PICTURE X(002).	*AA040
05	S14026	PICTURE X(002).	*AA040
05	S14035	PICTURE X(002).	*AA040
05	S14042	PICTURE X(035).	*AA040
05	S15003	PICTURE X(001).	*AA040
05	S15007	PICTURE X(003).	*AA040
05	S15016	PICTURE X(002).	*AA040
05	S15026	PICTURE X(002).	*AA040
05	S15035	PICTURE X(002).	*AA040
05	S15042	PICTURE X(035).	*AA040
05	S16003	PICTURE X(001).	*AA040
05	S16007	PICTURE X(003).	*AA040
05	S16016	PICTURE X(002).	*AA040
05	S16026	PICTURE X(002).	*AA040
05	S16035	PICTURE X(002).	*AA040
05	S16042	PICTURE X(035).	*AA040
05	S17003	PICTURE X(001).	*AA040
05	S17007	PICTURE X(003).	*AA040



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05	S17016	PICTURE X(002).	*AA040
05	S17026	PICTURE X(002).	*AA040
05	S17035	PICTURE X(002).	*AA040
05	S17042	PICTURE X(035).	*AA040
05	S18003	PICTURE X(001).	*AA040
05	S18007	PICTURE X(003).	*AA040
05	S18016	PICTURE X(002).	*AA040
05	S18026	PICTURE X(002).	*AA040
05	S18035	PICTURE X(002).	*AA040
05	S18042	PICTURE X(035).	*AA040
05	S20002	PICTURE X(019).	*AA040
05	S20022	PICTURE X(001).	*AA040
05	S20025	PICTURE X(007).	*AA040
05	S20033	PICTURE X(001).	*AA040
05	S20035	PICTURE X(010).	*AA040
05	S20046	PICTURE X(020).	*AA040
05	S21002	PICTURE X(027).	*AA040
05	S21030	PICTURE X(022).	*AA040
05	S21053	PICTURE X(017).	*AA040
05	S22002	PICTURE X(017).	*AA040
05	S22020	PICTURE X(018).	*AA040
05	S23002	PICTURE X(075).	*AA040
05	S24002	PICTURE X(072).	*AA040
01	AT-0030-MESSO.		*AA041
05	AT-S01004	PICTURE X(12) VALUE "01003008FNNW".	*AA041 *AA041
05	AT-R000101-PROGE REDEFINES AT-S01004	PICTURE X(12).	*AA041 *AA041
05	AT-S01013	PICTURE X(12) VALUE "01012001LNNW".	*AA041 *AA041
05	AT-S01015	PICTURE X(12) VALUE "01014005FNNW".	*AA041 *AA041
05	AT-R000101-SESSI REDEFINES AT-S01015	PICTURE X(12).	*AA041 *AA041
05	AT-S01025	PICTURE X(12) VALUE "01024030LBNW".	*AA041 *AA041
05	AT-S01060	PICTURE X(12) VALUE "01059010FNNW".	*AA041 *AA041
05	AT-R000101-DATEM REDEFINES AT-S01060	PICTURE X(12).	*AA041 *AA041
05	AT-S01071	PICTURE X(12) VALUE "01070008FNNW".	*AA041 *AA041
05	AT-R000101-HEURE REDEFINES AT-S01071	PICTURE X(12).	*AA041 *AA041
05	AT-S03004	PICTURE X(12) VALUE "03003013LBNW".	*AA041 *AA041
05	AT-L000101-NUCOM REDEFINES AT-S03004	PICTURE X(12).	*AA041 *AA041
05	AT-S03018	PICTURE X(12) VALUE "03017005FNNW".	*AA041 *AA041
05	AT-R000101-NUCOM REDEFINES AT-S03018	PICTURE X(12).	*AA041 *AA041
05	AT-S03026	PICTURE X(12) VALUE "03025007LBNW".	*AA041 *AA041
05	AT-L000101-MATE REDEFINES AT-S03026	PICTURE X(12).	*AA041 *AA041
05	AT-S03034	PICTURE X(12) VALUE "03033008 NNW".	*AA041 *AA041
05	AT-R000101-MATE REDEFINES AT-S03034	PICTURE X(12).	*AA041 *AA041
05	AT-S03054	PICTURE X(12) VALUE "03053008LBNW".	*AA041 *AA041
05	AT-L000101-RELEA REDEFINES AT-S03054	PICTURE X(12).	*AA041 *AA041
05	AT-S03063	PICTURE X(12) VALUE "03062003 NNW".	*AA041 *AA041
05	AT-R000101-RELEA REDEFINES AT-S03063	PICTURE X(12).	*AA041 *AA041
05	AT-S04004	PICTURE X(12) VALUE "04003005LBNW".	*AA041 *AA041
05	AT-L000101-NUCLIE REDEFINES AT-S04004	PICTURE X(12).	*AA041 *AA041
05	AT-S04013	PICTURE X(12) VALUE "04012050FNNW".	*AA041 *AA041
05	AT-R000101-RAISOC REDEFINES AT-S04013	PICTURE X(12).	*AA041 *AA041
05	AT-S05009	PICTURE X(12) VALUE	*AA041

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		"05008040 NNW".	*AA041
05	AT-R000101-RUE REDEFINES AT-S05009 PICTURE	X(12).	*AA041
		AT-S05052 PICTURE X(12) VALUE	*AA041
05		"05051020PNNW".	*AA041
		AT-R000101-VILLE REDEFINES AT-S05052 PICTURE	*AA041
05		X(12).	*AA041
		AT-S05074 PICTURE X(12) VALUE	*AA041
05		"05073005 NNW".	*AA041
		AT-R000101-COPOS REDEFINES AT-S05074 PICTURE	*AA041
05		X(12).	*AA041
		AT-S06004 PICTURE X(12) VALUE	*AA041
05		"06003011LBNW".	*AA041
		AT-L000101-REFCLI REDEFINES AT-S06004 PICTURE	*AA041
05		X(12).	*AA041
		AT-S06016 PICTURE X(12) VALUE	*AA041
05		"06015030 NNW".	*AA041
		AT-R000101-REFCLI REDEFINES AT-S06016 PICTURE	*AA041
05		X(12).	*AA041
		AT-S06049 PICTURE X(12) VALUE	*AA041
05		"06048011LBNW".	*AA041
		AT-L000101-DATE REDEFINES AT-S06049 PICTURE	*AA041
05		X(12).	*AA041
		AT-S06061 PICTURE X(12) VALUE	*AA041
05		"06060006 NNW".	*AA041
		AT-R000101-DATE REDEFINES AT-S06061 PICTURE	*AA041
05		X(12).	*AA041
		AT-S07005 PICTURE X(12) VALUE	*AA041
05		"07004012LBNW".	*AA041
		AT-L000101-CORRES REDEFINES AT-S07005 PICTURE	*AA041
05		X(12).	*AA041
		AT-S07018 PICTURE X(12) VALUE	*AA041
05		"07017025 NNW".	*AA041
		AT-R000101-CORRES REDEFINES AT-S07018 PICTURE	*AA041
05		X(12).	*AA041
		AT-S07046 PICTURE X(12) VALUE	*AA041
05		"07045014LBNW".	*AA041
		AT-L000101-REMIS REDEFINES AT-S07046 PICTURE	*AA041
05		X(12).	*AA041
		AT-S07061 PICTURE X(12) VALUE	*AA041
05		"07060008 NNW".	*AA041
		AT-R000101-REMIS REDEFINES AT-S07061 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09003 PICTURE X(12) VALUE	*AA041
05		"09002001LBNW".	*AA041
		AT-L010101-CODMVT REDEFINES AT-S09003 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09007 PICTURE X(12) VALUE	*AA041
05		"09006006LBNW".	*AA041
		AT-L010101-FOURNI REDEFINES AT-S09007 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09016 PICTURE X(12) VALUE	*AA041
05		"09015008LBNW".	*AA041
		AT-L010101-QTMAC REDEFINES AT-S09016 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09026 PICTURE X(12) VALUE	*AA041
05		"09025007LBNW".	*AA041
		AT-L010101-QTMAL REDEFINES AT-S09026 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09035 PICTURE X(12) VALUE	*AA041
05		"09034006LBNW".	*AA041
		AT-L010101-QTMAR REDEFINES AT-S09035 PICTURE	*AA041
05		X(12).	*AA041
		AT-S09042 PICTURE X(12) VALUE	*AA041
05		"09041035LBNW".	*AA041
		AT-L010101-INFOR REDEFINES AT-S09042 PICTURE	*AA041
05		X(12).	*AA041
		AT-S10003 PICTURE X(12) VALUE	*AA041
05		"10002001 NNW".	*AA041
		AT-R010101-CODMVT REDEFINES AT-S10003 PICTURE	*AA041
05		X(12).	*AA041
		AT-S10007 PICTURE X(12) VALUE	*AA041
05		"10006003 NNW".	*AA041
		AT-R010101-FOURNI REDEFINES AT-S10007 PICTURE	*AA041
05		X(12).	*AA041
		AT-S10016 PICTURE X(12) VALUE	*AA041
05		"10015002 NNW".	*AA041

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05	AT-R010101-QTMAC REDEFINES AT-S10016 PICTURE X(12).	*AA041 *AA041
05	AT-S10026 PICTURE X(12) VALUE "10025002PBNW".	*AA041 *AA041
05	AT-R010101-QTMAL REDEFINES AT-S10026 PICTURE X(12).	*AA041 *AA041
05	AT-S10035 PICTURE X(12) VALUE "10034002PNNW".	*AA041 *AA041
05	AT-R010101-QTMAR REDEFINES AT-S10035 PICTURE X(12).	*AA041 *AA041
05	AT-S10042 PICTURE X(12) VALUE "10041035 NNW".	*AA041 *AA041
05	AT-R010101-INFOR REDEFINES AT-S10042 PICTURE X(12).	*AA041 *AA041
05	AT-S11003 PICTURE X(12) VALUE "11002001 NNW".	*AA041 *AA041
05	AT-R020101-CODMVT REDEFINES AT-S11003 PICTURE X(12).	*AA041 *AA041
05	AT-S11007 PICTURE X(12) VALUE "11006003 NNW".	*AA041 *AA041
05	AT-R020101-FOURNI REDEFINES AT-S11007 PICTURE X(12).	*AA041 *AA041
05	AT-S11016 PICTURE X(12) VALUE "11015002 NNW".	*AA041 *AA041
05	AT-R020101-QTMAC REDEFINES AT-S11016 PICTURE X(12).	*AA041 *AA041
05	AT-S11026 PICTURE X(12) VALUE "11025002PBNW".	*AA041 *AA041
05	AT-R020101-QTMAL REDEFINES AT-S11026 PICTURE X(12).	*AA041 *AA041
05	AT-S11035 PICTURE X(12) VALUE "11034002PNNW".	*AA041 *AA041
05	AT-R020101-QTMAR REDEFINES AT-S11035 PICTURE X(12).	*AA041 *AA041
05	AT-S11042 PICTURE X(12) VALUE "11041035 NNW".	*AA041 *AA041
05	AT-R020101-INFOR REDEFINES AT-S11042 PICTURE X(12).	*AA041 *AA041
05	AT-S12003 PICTURE X(12) VALUE "12002001 NNW".	*AA041 *AA041
05	AT-R030101-CODMVT REDEFINES AT-S12003 PICTURE X(12).	*AA041 *AA041
05	AT-S12007 PICTURE X(12) VALUE "12006003 NNW".	*AA041 *AA041
05	AT-R030101-FOURNI REDEFINES AT-S12007 PICTURE X(12).	*AA041 *AA041
05	AT-S12016 PICTURE X(12) VALUE "12015002 NNW".	*AA041 *AA041
05	AT-R030101-QTMAC REDEFINES AT-S12016 PICTURE X(12).	*AA041 *AA041
05	AT-S12026 PICTURE X(12) VALUE "12025002PBNW".	*AA041 *AA041
05	AT-R030101-QTMAL REDEFINES AT-S12026 PICTURE X(12).	*AA041 *AA041
05	AT-S12035 PICTURE X(12) VALUE "12034002PNNW".	*AA041 *AA041
05	AT-R030101-QTMAR REDEFINES AT-S12035 PICTURE X(12).	*AA041 *AA041
05	AT-S12042 PICTURE X(12) VALUE "12041035 NNW".	*AA041 *AA041
05	AT-R030101-INFOR REDEFINES AT-S12042 PICTURE X(12).	*AA041 *AA041
05	AT-S13003 PICTURE X(12) VALUE "13002001 NNW".	*AA041 *AA041
05	AT-R040101-CODMVT REDEFINES AT-S13003 PICTURE X(12).	*AA041 *AA041
05	AT-S13007 PICTURE X(12) VALUE "13006003 NNW".	*AA041 *AA041
05	AT-R040101-FOURNI REDEFINES AT-S13007 PICTURE X(12).	*AA041 *AA041
05	AT-S13016 PICTURE X(12) VALUE "13015002 NNW".	*AA041 *AA041
05	AT-R040101-QTMAC REDEFINES AT-S13016 PICTURE X(12).	*AA041 *AA041
05	AT-S13026 PICTURE X(12) VALUE "13025002PBNW".	*AA041 *AA041
05	AT-R040101-QTMAL REDEFINES AT-S13026 PICTURE	*AA041

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		X(12).	*AA041
05	AT-S13035	PICTURE X(12) VALUE	*AA041
		"13034002PNNW".	*AA041
05	AT-R040101-QTMAR REDEFINES AT-S13035	PICTURE	*AA041
		X(12).	*AA041
05	AT-S13042	PICTURE X(12) VALUE	*AA041
		"13041035 NNW".	*AA041
05	AT-R040101-INFOR REDEFINES AT-S13042	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14003	PICTURE X(12) VALUE	*AA041
		"14002001 NNW".	*AA041
05	AT-R050101-CODMVT REDEFINES AT-S14003	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14007	PICTURE X(12) VALUE	*AA041
		"14006003 NNW".	*AA041
05	AT-R050101-FOURNI REDEFINES AT-S14007	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14016	PICTURE X(12) VALUE	*AA041
		"14015002 NNW".	*AA041
05	AT-R050101-QTMAC REDEFINES AT-S14016	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14026	PICTURE X(12) VALUE	*AA041
		"14025002PBNW".	*AA041
05	AT-R050101-QTMAL REDEFINES AT-S14026	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14035	PICTURE X(12) VALUE	*AA041
		"14034002PNNW".	*AA041
05	AT-R050101-QTMAR REDEFINES AT-S14035	PICTURE	*AA041
		X(12).	*AA041
05	AT-S14042	PICTURE X(12) VALUE	*AA041
		"14041035 NNW".	*AA041
05	AT-R050101-INFOR REDEFINES AT-S14042	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15003	PICTURE X(12) VALUE	*AA041
		"15002001 NNW".	*AA041
05	AT-R060101-CODMVT REDEFINES AT-S15003	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15007	PICTURE X(12) VALUE	*AA041
		"15006003 NNW".	*AA041
05	AT-R060101-FOURNI REDEFINES AT-S15007	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15016	PICTURE X(12) VALUE	*AA041
		"15015002 NNW".	*AA041
05	AT-R060101-QTMAC REDEFINES AT-S15016	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15026	PICTURE X(12) VALUE	*AA041
		"15025002PBNW".	*AA041
05	AT-R060101-QTMAL REDEFINES AT-S15026	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15035	PICTURE X(12) VALUE	*AA041
		"15034002PNNW".	*AA041
05	AT-R060101-QTMAR REDEFINES AT-S15035	PICTURE	*AA041
		X(12).	*AA041
05	AT-S15042	PICTURE X(12) VALUE	*AA041
		"15041035 NNW".	*AA041
05	AT-R060101-INFOR REDEFINES AT-S15042	PICTURE	*AA041
		X(12).	*AA041
05	AT-S16003	PICTURE X(12) VALUE	*AA041
		"16002001 NNW".	*AA041
05	AT-R070101-CODMVT REDEFINES AT-S16003	PICTURE	*AA041
		X(12).	*AA041
05	AT-S16007	PICTURE X(12) VALUE	*AA041
		"16006003 NNW".	*AA041
05	AT-R070101-FOURNI REDEFINES AT-S16007	PICTURE	*AA041
		X(12).	*AA041
05	AT-S16016	PICTURE X(12) VALUE	*AA041
		"16015002 NNW".	*AA041
05	AT-R070101-QTMAC REDEFINES AT-S16016	PICTURE	*AA041
		X(12).	*AA041
05	AT-S16026	PICTURE X(12) VALUE	*AA041
		"16025002PBNW".	*AA041
05	AT-R070101-QTMAL REDEFINES AT-S16026	PICTURE	*AA041
		X(12).	*AA041
05	AT-S16035	PICTURE X(12) VALUE	*AA041
		"16034002PNNW".	*AA041
05	AT-R070101-QTMAR REDEFINES AT-S16035	PICTURE	*AA041
		X(12).	*AA041

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05	AT-S16042	PICTURE X(12) VALUE "16041035 NNW".	*AA041 *AA041
05	AT-R070101	-INFOR REDEFINES AT-S16042 PICTURE X(12).	*AA041 *AA041
05	AT-S17003	PICTURE X(12) VALUE "17002001 NNW".	*AA041 *AA041
05	AT-R080101	-CODMVT REDEFINES AT-S17003 PICTURE X(12).	*AA041 *AA041
05	AT-S17007	PICTURE X(12) VALUE "17006003 NNW".	*AA041 *AA041
05	AT-R080101	-FOURNI REDEFINES AT-S17007 PICTURE X(12).	*AA041 *AA041
05	AT-S17016	PICTURE X(12) VALUE "17015002 NNW".	*AA041 *AA041
05	AT-R080101	-QTMAC REDEFINES AT-S17016 PICTURE X(12).	*AA041 *AA041
05	AT-S17026	PICTURE X(12) VALUE "17025002PBNW".	*AA041 *AA041
05	AT-R080101	-QTMAL REDEFINES AT-S17026 PICTURE X(12).	*AA041 *AA041
05	AT-S17035	PICTURE X(12) VALUE "17034002PNNW".	*AA041 *AA041
05	AT-R080101	-QTMAR REDEFINES AT-S17035 PICTURE X(12).	*AA041 *AA041
05	AT-S17042	PICTURE X(12) VALUE "17041035 NNW".	*AA041 *AA041
05	AT-R080101	-INFOR REDEFINES AT-S17042 PICTURE X(12).	*AA041 *AA041
05	AT-S18003	PICTURE X(12) VALUE "18002001 NNW".	*AA041 *AA041
05	AT-R090101	-CODMVT REDEFINES AT-S18003 PICTURE X(12).	*AA041 *AA041
05	AT-S18007	PICTURE X(12) VALUE "18006003 NNW".	*AA041 *AA041
05	AT-R090101	-FOURNI REDEFINES AT-S18007 PICTURE X(12).	*AA041 *AA041
05	AT-S18016	PICTURE X(12) VALUE "18015002 NNW".	*AA041 *AA041
05	AT-R090101	-QTMAC REDEFINES AT-S18016 PICTURE X(12).	*AA041 *AA041
05	AT-S18026	PICTURE X(12) VALUE "18025002PBNW".	*AA041 *AA041
05	AT-R090101	-QTMAL REDEFINES AT-S18026 PICTURE X(12).	*AA041 *AA041
05	AT-S18035	PICTURE X(12) VALUE "18034002PNNW".	*AA041 *AA041
05	AT-R090101	-QTMAR REDEFINES AT-S18035 PICTURE X(12).	*AA041 *AA041
05	AT-S18042	PICTURE X(12) VALUE "18041035 NNW".	*AA041 *AA041
05	AT-R090101	-INFOR REDEFINES AT-S18042 PICTURE X(12).	*AA041 *AA041
05	AT-S20002	PICTURE X(12) VALUE "20001019LBNW".	*AA041 *AA041
05	AT-S20022	PICTURE X(12) VALUE "20021001 NNW".	*AA041 *AA041
05	AT-R000101	-EDIT REDEFINES AT-S20022 PICTURE X(12).	*AA041 *AA041
05	AT-S20025	PICTURE X(12) VALUE "20024007LNNW".	*AA041 *AA041
05	AT-L000101	-CHOIX REDEFINES AT-S20025 PICTURE X(12).	*AA041 *AA041
05	AT-S20033	PICTURE X(12) VALUE "20032001 NNW".	*AA041 *AA041
05	AT-R000101	-CHOIX REDEFINES AT-S20033 PICTURE X(12).	*AA041 *AA041
05	AT-S20035	PICTURE X(12) VALUE "20034010LNNW".	*AA041 *AA041
05	AT-S20046	PICTURE X(12) VALUE "20045020LNNW".	*AA041 *AA041
05	AT-S21002	PICTURE X(12) VALUE "21001027LNNW".	*AA041 *AA041
05	AT-S21030	PICTURE X(12) VALUE "21029022LNNW".	*AA041 *AA041
05	AT-S21053	PICTURE X(12) VALUE "21052017LNNW".	*AA041 *AA041
05	AT-S22002	PICTURE X(12) VALUE	*AA041

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		"22001017LNNW".	*AA041
05	AT-S22020	PICTURE X(12) VALUE	*AA041
		"22019018LNNW".	*AA041
05	AT-S23002	PICTURE X(12) VALUE	*AA041
		"23001075FBNW".	*AA041
05	AT-R000101-MESSA	REDEFINES AT-S23002 PICTURE	*AA041
		X(12).	*AA041
05	AT-S24002	PICTURE X(12) VALUE	*AA041
		"24001072FBNW".	*AA041
05	AT-R000101-ERMSG	REDEFINES AT-S24002 PICTURE	*AA041
		X(12).	*AA041
01	AT-0030-MESSA	REDEFINES AT-0030-MESSO.	*AA041
05	AT-0030-LIGNE	OCCURS 098.	*AA041
10	AT-0030-YPCUR	PICTURE 9(5).	*AA041
10	AT-0030-LENGTH	PICTURE 999.	*AA041
10	AT-0030-ATTRN	PICTURE X.	*AA041
10	AT-0030-ATTRI	PICTURE X.	*AA041
10	AT-0030-ATTRP	PICTURE X.	*AA041
10	AT-0030-ATTRC	PICTURE X.	*AA041
01	INPUT-0030.		*AA042
05	R20033	PICTURE X(1).	*AA042
05	R03034	PICTURE X(8).	*AA042
05	R03063	PICTURE X(3).	*AA042
05	R05009	PICTURE X(40).	*AA042
05	R05052	PICTURE X(20).	*AA042
05	R05074	PICTURE X(5).	*AA042
05	R06016	PICTURE X(30).	*AA042
05	R06061	PICTURE X(6).	*AA042
05	R07018	PICTURE X(25).	*AA042
05	R07061	PICTURE X(8).	*AA042
05	R10003	PICTURE X(1).	*AA042
05	R10007	PICTURE X(3).	*AA042
05	R10016	PICTURE X(2).	*AA042
05	R10026	PICTURE X(2).	*AA042
05	R10035	PICTURE X(2).	*AA042
05	R10042	PICTURE X(35).	*AA042
05	R11003	PICTURE X(1).	*AA042
05	R11007	PICTURE X(3).	*AA042
05	R11016	PICTURE X(2).	*AA042
05	R11026	PICTURE X(2).	*AA042
05	R11035	PICTURE X(2).	*AA042
05	R11042	PICTURE X(35).	*AA042
05	R12003	PICTURE X(1).	*AA042
05	R12007	PICTURE X(3).	*AA042
05	R12016	PICTURE X(2).	*AA042
05	R12026	PICTURE X(2).	*AA042
05	R12035	PICTURE X(2).	*AA042
05	R12042	PICTURE X(35).	*AA042
05	R13003	PICTURE X(1).	*AA042
05	R13007	PICTURE X(3).	*AA042
05	R13016	PICTURE X(2).	*AA042
05	R13026	PICTURE X(2).	*AA042
05	R13035	PICTURE X(2).	*AA042
05	R13042	PICTURE X(35).	*AA042
05	R14003	PICTURE X(1).	*AA042
05	R14007	PICTURE X(3).	*AA042
05	R14016	PICTURE X(2).	*AA042
05	R14026	PICTURE X(2).	*AA042
05	R14035	PICTURE X(2).	*AA042
05	R14042	PICTURE X(35).	*AA042
05	R15003	PICTURE X(1).	*AA042
05	R15007	PICTURE X(3).	*AA042
05	R15016	PICTURE X(2).	*AA042
05	R15026	PICTURE X(2).	*AA042
05	R15035	PICTURE X(2).	*AA042
05	R15042	PICTURE X(35).	*AA042
05	R16003	PICTURE X(1).	*AA042
05	R16007	PICTURE X(3).	*AA042
05	R16016	PICTURE X(2).	*AA042
05	R16026	PICTURE X(2).	*AA042
05	R16035	PICTURE X(2).	*AA042
05	R16042	PICTURE X(35).	*AA042
05	R17003	PICTURE X(1).	*AA042
05	R17007	PICTURE X(3).	*AA042
05	R17016	PICTURE X(2).	*AA042
05	R17026	PICTURE X(2).	*AA042
05	R17035	PICTURE X(2).	*AA042

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05	R17042	PICTURE X(35).	*AA042
05	R18003	PICTURE X(1).	*AA042
05	R18007	PICTURE X(3).	*AA042
05	R18016	PICTURE X(2).	*AA042
05	R18026	PICTURE X(2).	*AA042
05	R18035	PICTURE X(2).	*AA042
05	R18042	PICTURE X(35).	*AA042
05	R20022	PICTURE X(1).	*AA042
01	INPUT-SCREEN-FIELDS REDEFINES INPUT-0030.		*AA045
02	I-0030.		*AA045
03	I-0030-BEGIN.		*AA045
05	I-0030-CHOIX	PICTURE X.	*AA045
05	I-0030-MATE	PICTURE X(8).	*AA045
05	I-0030-RELEA	PICTURE X(3).	*AA045
05	I-0030-RUE	PICTURE X(40).	*AA045
05	I-0030-VILLE	PICTURE X(20).	*AA045
05	I-0030-COPOS	PICTURE X(5).	*AA045
05	I-0030-REFCLI	PICTURE X(30).	*AA045
05	I-0030-DATE	PICTURE X(6).	*AA045
05	I-0030-CORRES	PICTURE X(25).	*AA045
05	E-0030-REMIS.		*AA045
10	I-0030-REMIS	PICTURE S9(4)V99.	*AA045
10	FILLER		*AA045
03	J-0030-LINE	OCCURS 9.	*AA045
10	FILLER		*AA045
03	I-0030-END.		*AA045
05	I-0030-EDIT	PICTURE X.	*AA045
01	OUTPUT-0030.		*AA049
05	T20033	PICTURE X(1).	*AA049
05	T01004	PICTURE X(8).	*AA049
05	T01015	PICTURE X(5).	*AA049
05	T01060	PICTURE X(10).	*AA049
05	T01071	PICTURE X(8).	*AA049
05	T03018	PICTURE X(5).	*AA049
05	T03034	PICTURE X(8).	*AA049
05	T03063	PICTURE X(3).	*AA049
05	T04013	PICTURE X(50).	*AA049
05	T05009	PICTURE X(40).	*AA049
05	T05052	PICTURE X(20).	*AA049
05	T05074	PICTURE X(5).	*AA049
05	T06016	PICTURE X(30).	*AA049
05	T06061	PICTURE X(6).	*AA049
05	T07018	PICTURE X(25).	*AA049
05	T07061	PICTURE X(8).	*AA049
05	T10003	PICTURE X(1).	*AA049
05	T10007	PICTURE X(3).	*AA049
05	T10016	PICTURE X(2).	*AA049
05	T10026	PICTURE X(2).	*AA049
05	T10035	PICTURE X(2).	*AA049
05	T10042	PICTURE X(35).	*AA049
05	T11003	PICTURE X(1).	*AA049
05	T11007	PICTURE X(3).	*AA049
05	T11016	PICTURE X(2).	*AA049
05	T11026	PICTURE X(2).	*AA049
05	T11035	PICTURE X(2).	*AA049
05	T11042	PICTURE X(35).	*AA049
05	T12003	PICTURE X(1).	*AA049
05	T12007	PICTURE X(3).	*AA049
05	T12016	PICTURE X(2).	*AA049
05	T12026	PICTURE X(2).	*AA049
05	T12035	PICTURE X(2).	*AA049
05	T12042	PICTURE X(35).	*AA049
05	T13003	PICTURE X(1).	*AA049
05	T13007	PICTURE X(3).	*AA049
05	T13016	PICTURE X(2).	*AA049
05	T13026	PICTURE X(2).	*AA049
05	T13035	PICTURE X(2).	*AA049
05	T13042	PICTURE X(35).	*AA049
05	T14003	PICTURE X(1).	*AA049
05	T14007	PICTURE X(3).	*AA049
05	T14016	PICTURE X(2).	*AA049
05	T14026	PICTURE X(2).	*AA049
05	T14035	PICTURE X(2).	*AA049
05	T14042	PICTURE X(35).	*AA049
05	T15003	PICTURE X(1).	*AA049
05	T15007	PICTURE X(3).	*AA049
05	T15016	PICTURE X(2).	*AA049

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05          T15026          PICTURE X(2).          *AA049
05          T15035          PICTURE X(2).          *AA049
05          T15042          PICTURE X(35).         *AA049
05          T16003          PICTURE X(1).          *AA049
05          T16007          PICTURE X(3).          *AA049
05          T16016          PICTURE X(2).          *AA049
05          T16026          PICTURE X(2).          *AA049
05          T16035          PICTURE X(2).          *AA049
05          T16042          PICTURE X(35).         *AA049
05          T17003          PICTURE X(1).          *AA049
05          T17007          PICTURE X(3).          *AA049
05          T17016          PICTURE X(2).          *AA049
05          T17026          PICTURE X(2).          *AA049
05          T17035          PICTURE X(2).          *AA049
05          T17042          PICTURE X(35).         *AA049
05          T18003          PICTURE X(1).          *AA049
05          T18007          PICTURE X(3).          *AA049
05          T18016          PICTURE X(2).          *AA049
05          T18026          PICTURE X(2).          *AA049
05          T18035          PICTURE X(2).          *AA049
05          T18042          PICTURE X(35).         *AA049
05          T20022          PICTURE X(1).          *AA049
05          T23002          PICTURE X(75).         *AA049
05          T24002          PICTURE X(72).         *AA049
01          OUTPUT-SCREEN-FIELDS REDEFINES OUTPUT-0030. *AA050
02          O-0030.          *AA050
03          O-0030-BEGIN.   *AA050
05          O-0030-CHOIX   PICTURE X.             *AA050
05          O-0030-PROGE   PICTURE X(8).          *AA050
05          O-0030-SESSI   PICTURE X(5).          *AA050
05          O-0030-DATEM   PICTURE X(10).         *AA050
05          O-0030-HEURE   PICTURE X(8).          *AA050
05          O-0030-NUCOM   PICTURE 9(5).          *AA050
05          O-0030-MATE    PICTURE X(8).          *AA050
05          O-0030-RELEA   PICTURE X(3).          *AA050
05          O-0030-RAISOC  PICTURE X(50).         *AA050
05          O-0030-RUE     PICTURE X(40).         *AA050
05          O-0030-VILLE   PICTURE X(20).         *AA050
05          O-0030-COPOS   PICTURE X(5).          *AA050
05          O-0030-REFCLI  PICTURE X(30).         *AA050
05          O-0030-DATE    PICTURE X(6).          *AA050
05          O-0030-CORRES  PICTURE X(25).         *AA050
05          F-0030-REMIS.   *AA050
10          O-0030-REMIS   PICTURE -(04)9,9(02). *AA050
03          P-0030-LINE    OCCURS 9.              *AA050
10          FILLER         PICTURE X(45).         *AA050
03          O-0030-END.    *AA050
05          O-0030-EDIT   PICTURE X.             *AA050
05          O-0030-MESSA   PICTURE X(75).         *AA050
05          O-0030-ERMS.   *AA050
10          FILLER         OCCURS 1.              *AA050
15          O-0030-ERMSG   PICTURE X(72).         *AA050
01          REPEAT-LINE.   *AA050
02          I-0030-LINE.   *AA050
05          I-0030-CODMVT  PICTURE X.             *AA050
05          I-0030-FOURNI  PICTURE X(3).          *AA050
05          E-0030-QTMAC.   *AA050
10          I-0030-QTMAC   PICTURE 99.            *AA050
05          I-0030-QTMAL   PICTURE 99.            *AA050
05          I-0030-QTMAR   PICTURE 99.            *AA050
05          I-0030-INFOR   PICTURE X(35).         *AA050
02          O-0030-LINE.   *AA050
05          O-0030-CODMVT  PICTURE X.             *AA050
05          O-0030-FOURNI  PICTURE X(3).          *AA050
05          F-0030-QTMAC.   *AA050
10          O-0030-QTMAC   PICTURE Z(01)9.       *AA050
05          O-0030-QTMAL   PICTURE 99.            *AA050
05          O-0030-QTMAR   PICTURE 99.            *AA050
05          O-0030-INFOR   PICTURE X(35).         *AA050
01          VARIABLES-GROUPE.
02          T-0030-LINE.   *AA050
05          T-0030-CODMVT  PICTURE X(1).          *AA050
05          T-0030-FOURNI  PICTURE X(3).          *AA050
05          T-0030-QTMAC   PICTURE X(2).          *AA050
05          T-0030-INFOR   PICTURE X(35).         *AA050
02          L-0030-LINE.   *AA050
05          L-0030-CODMVT  PICTURE X.             *AA050

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05 L-0030-FOURNI PICTURE X.  
05 L-0030-QTMAC PICTURE X.  
05 L-0030-INFOR PICTURE X.

### 3.5. DESCRIPTION OF VALIDATION AREAS

#### DESCRIPTION OF VALIDATION AREAS

The "validation processing" part of the program, which is always generated in the WORKING-STORAGE SECTION, includes all the work areas necessary for the generated validation processing, and an area for communication with the sub-program, 'CMES-COMMUNICATION'.

#### NUMERIC FIELDS OF THE SCREEN

The 'NUMERIC-FIELDS' level is generated when the screen includes at least one variable Data Element.

Field '9-scrn-delco' (scrn = last 4 characters of the screen code) is generated for each numeric Data Element. It contains the breakdown of the Data Element's VALUE in 'seedd' where:

s = '' non-signed Data Element.

'+' signed Data Element.

ee = number of digits in the integer part of the Data Element.

dd = number of digits in the decimal part of the Data Element.

CMES-COMMUNICATION

The 'CMES-COMMUNICATION' level is filled in via a MOVE within the program. It contains:

YR00 Message.

YO00 Table of logical fields, containing their descriptions (line-column position, length, attributes).

PFKEY When PFKEYs can be used on a terminal, the ZAR980 sub-program loads this field.

IND1 Length of the message after a RECEIVE and before a SEND.

IND2 Length of the message: this field is used when the message is longer than 2,000 characters (DPS8 only).

YMAT Type of terminal: this field is initialized to zero in function F0110. Using Procedural Code (-P) lines, the user must code the type of terminal in use for the initial screen of the dialogue (if it is defined):

```
'0' (default value) : QUESTAR,  
'1'                 : VIP7700,  
'2'                 : IBM3270,  
'3'                 : VIP7800,
```

This value is transferred to the other screens of the dialogue through the COMMUNICATION SECTION.

YCRE Type of operation (Receive, Send, Display in case of error, etc.).

YPCUR Cursor position (line-column).

END-CONVERSATION

This field is used for conversation end, and includes:

END-MESSAGE Message displayed at the conversation end (length: 30 characters; initial value: blank),

END-ATTR Used to position the cursor at the top left-hand corner of the screen.

0030-MPRIOR

This field contains the first transaction message.

### VALIDATION VARIABLES

The 'VALIDATION-TABLE-FIELDS' level is generated if there is at least one variable data element (NATURE = 'V') used on the screen.

DE-ERR : memorizes the presence and/or status of each Data Element of the screen.

A position in this table (coded ER-scrn-delco) is associated with each Data Element of the screen. This is generated at the '05' level ('scrn' = last four characters of the screen code).

Depending on the stages of validation, this position can be set to the following values:

- .0 Data Element absent.
- .1 Data Element present.
- .2 Invalid absence of data element.
- .4 Erroneous class.
- .5 Invalid content.

This table of error positions is structured according to the categories defined on the screen and the group data element in the following manner:

A group level for the Data Elements from the beginning of the screen is systematically generated in the form of:

ER-nn-BEGIN.

For a repetitive Data Element defining a repetitive area of the screen (data element on the screen with NATURE = 'R'), the generation of the error positions is as follows:

- .03 ES-scrn-LINE OCCURS 9.
- .05 FILLER PICTURE X(0004).

In this example:

LINE is the code of the Data Element with NATURE = 'R' (see above),  
9 is the number of repetitions,  
0004 is the number of Data Elements in the repetitive category.

After the table of errors, there is an area which will contain the error positions of the Data Elements from the repetitive category. This area is used to position the errors for each of these data elements, with each occurrence.

.02 ER-nn-LINE.

.05 ER-nn-CODMVT PICTURE X.

.05 ER-nn-FOURNI PICTURE X.

etc.

For a repetitive Data Element whose NATURE is other than 'R', the generation in the table of error positions does not provide the description of the sample item, but does provide the following:

.05 FILLER OCCURS 2.

.10 ER-nn-LREF1 PICTURE X.

A group level for the Data Elements from the screen-bottom category is generated using a Data Element whose NATURE = 'Z', which contains the error positions of Data Elements belonging to that category:

.03 ER-nn-END.

.05 ER-nn-EDIT PICTURE X.

etc.

### TT-DAT

The 'TT-DAT' level is generated if a variable Data Element (NATURE = 'V') contains a 'date' format. It is used in sub-function F8120-M for date formatting purposes.

### LEAP-YEAR

The 'LEAP-YEAR' level is generated if a variable Data Element (NATURE = 'V') contains a 'date' format (always generated with CICS). It is used in F81-ER to determine whether or not the year is a leap year.

### USERS-ERROR

The 'USERS-ERROR' level is always generated, and it contains:

XEMKY: Table position used to build the key, including:

'XPROGR' Name of the program or dialogue,  
'XERCD' Error number and type of error,

T-XEMKY: Table of errors, corresponding to the number of error messages on the screen (default value = 1).

## INDEXES

The 'INDEXES' level is always generated. It includes:

K01, K02, K03, K04

Indexes for automatic numeric class.

K50R, K50L, K50M

Indexes associated with the table of user errors (the value assigned to K50M directly relates to the number of vertical repetitions of Data Element 'ERMSG' in the screen description).

5-dd00-LTH

Length of longest Segment of the Data Structure (common part + specific part; 'dd' = code of the Data Structure).

5-ddss-LTH

Length of the Segment without the common part (not generated for the common part, 'dd00'; 'ddss' = code of the Segment).

5-ddss-LTHV

Length of the Data Structure Segment including the common part (not generated for the common part, 'dd00'; 'ddss' = code of the Segment).

LTH Calculation area used during access to files with a Table or VSAM ORGANIZATION.

KEYLTH

Calculation area of the key used during access to files with a VSAM ORGANIZATION.

5-scrn-LENGTH

Area containing the length of the communication area (scrn = last four char. of screen code).



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### NUMERIC-VALIDATION-FIELDS

The 'NUMERIC-VALIDATION-FIELDS' level is generated if there is at least one variable numeric field on the screen. It contains the work areas necessary for analyzing and formatting numeric Data Elements on the screen (refer to subchapter "F81 : CALLED VALIDATION FUNCTIONS").

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01		NUMERIC-FIELDS.	*AA050
05		9-0030-REMIS PICTURE X(5) VALUE "+0402".	*AA050
05		9-0030-QTMAC PICTURE X(5) VALUE " 0200".	*AA050
01		CMES-COMMUNICATION.	*AA060
05		CMES-YR00 PICTURE X(4000).	*AA060
05		CMES-Y000 PICTURE X(3798).	*AA060
05		CMES-PFKEY PICTURE XX.	*AA060
05		CMES-IND1 COMP-1.	*AA060
05		CMES-IND2 COMP-1.	*AA060
05		CMES-YMAT PICTURE X.	*AA060
05		CMES-YCRE PICTURE X.	*AA060
05		CMES-YPCUR PICTURE X(5) VALUE SPACE.	*AA060
01		END-CONVERSATION.	*AA070
05		END-MESSAGE PICTURE X(30) VALUE SPACE.	*AA070
05		END-ATTR PICTURE X(12) VALUE	*AA070
		"01001030FNNW".	*AA070
01		0030-MPRIOR PICTURE X(80).	*AA076
01		VALIDATION-TABLE-FIELDS.	*AA150
02		DE-ERR.	*AA150
05		DE-ER PICTURE X OCCURS 046.	*AA150
02		DE-E REDEFINES DE-ERR.	*AA150
03		ER-0030-BEGIN.	*AA150
05		ER-0030-CHOIX PICTURE X.	*AA150
05		ER-0030-MATE PICTURE X.	*AA150
05		ER-0030-RELEA PICTURE X.	*AA150
05		ER-0030-RUE PICTURE X.	*AA150
05		ER-0030-COPOS PICTURE X.	*AA150
05		ER-0030-REFCLI PICTURE X.	*AA150
05		ER-0030-DATE PICTURE X.	*AA150
05		ER-0030-CORRES PICTURE X.	*AA150
05		ER-0030-REMIS PICTURE X.	*AA150
03		PS-30-LINE OCCURS 9.	*AA150
05		FILLER PICTURE X(0004).	*AA150
03		ER-0030-END.	*AA150
05		ER-0030-EDIT PICTURE X.	*AA150
02		ER-0030-LINE.	*AA150
05		ER-0030-CODMVT PICTURE X.	*AA150
05		ER-0030-FOURNI PICTURE X.	*AA150
05		ER-0030-QTMAC PICTURE X.	*AA150
05		ER-0030-INFOR PICTURE X.	*AA150
01		TT-DAT.	*AA200
05		T-DAT PICTURE X OCCURS 5.	*AA200
01		LEAP-YEAR.	*AA200
05		LEAP-FLAG PICTURE X.	*AA200
05		LEAP-REM PICTURE 99.	*AA200
01		USERS-ERROR.	*AA200
05		XEMKY.	*AA200
10		XPROGR PICTURE X(6).	*AA200
10		XERCD PICTURE X(4).	*AA200
05		T-XEMKY OCCURS 01.	*AA200
10		T-XPROGR PICTURE X(6).	*AA200
10		T-XERCD PICTURE X(4).	*AA200
01		PACBASE-INDEXES COMPUTATIONAL-1.	*AA200
05		K01 PICTURE S9(4).	*AA200
05		K02 PICTURE S9(4).	*AA200
05		K03 PICTURE S9(4).	*AA200
05		K04 PICTURE S9(4).	*AA200
05		K50R PICTURE S9(4) VALUE ZERO.	*AA200
05		K50L PICTURE S9(4) VALUE ZERO.	*AA200
05		K50M PICTURE S9(4) VALUE +01.	*AA200
05		IWP20L PICTURE S9(4) VALUE ZERO.	*AA200
05		IWP20R PICTURE S9(4) VALUE ZERO.	*AA200
05		IWP20M PICTURE S9(4) VALUE +0009.	*AA200
05		5-CD00-LTH PICTURE S9(4) VALUE +0166.	*AA200
05		5-CD05-LTH PICTURE S9(4) VALUE +0157.	*AA200
05		5-CD10-LTH PICTURE S9(4) VALUE +0139.	*AA200
05		5-CD20-LTH PICTURE S9(4) VALUE +0001.	*AA200
05		5-FO00-LTH PICTURE S9(4) VALUE +0057.	*AA200
05		5-FO10-LTH PICTURE S9(4) VALUE +0057.	*AA200
05		5-ME00-LTH PICTURE S9(4) VALUE +0082.	*AA200
05		5-CA00-LTH PICTURE S9(4) VALUE +0147.	*AA200
05		5-CD05-LTHV PICTURE S9(4) VALUE +0166.	*AA200
05		5-CD10-LTHV PICTURE S9(4) VALUE +0148.	*AA200
05		5-CD20-LTHV PICTURE S9(4) VALUE +0010.	*AA200
05		5-FO10-LTHV PICTURE S9(4) VALUE +0057.	*AA200
05		LTH PICTURE S9(4) VALUE ZERO.	*AA200
05		5-0030-LENGTH PICTURE S9(4) VALUE +0895.	*AA200

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01		NUMERIC-VALIDATION-FIELDS.	*AA200
05		ZONUM1.	*AA200
10		C1 PICTURE X OCCURS 27.	*AA200
05		ZONUM2.	*AA200
10		C2 OCCURS 18.	*AA200
15		C29 PICTURE S9.	*AA200
05		ZONUM9 REDEFINES ZONUM2 PICTURE 9(18).	*AA200
05		NUMPIC.	*AA200
10		SIGNE PICTURE X.	*AA200
10		NBCHA PICTURE 99.	*AA200
10		NBCHP PICTURE 99.	*AA200
05		C9 PICTURE S9.	*AA200
05		C91 PICTURE X.	*AA200
05		TPOINT PICTURE X.	*AA200
05		ZONUM3.	*AA200
10		C3 PICTURE X OCCURS 18.	*AA200
05		ZONUM4 REDEFINES ZONUM3 PICTURE 9(18).	*AA200
05		ZONUM5 PICTURE S99 VALUE -10.	*AA200
05		ZONUM6 REDEFINES ZONUM5.	*AA200
10		FILLER PICTURE X.	*AA200
10		C4 PICTURE X.	*AA200

### 3.6. ATTRIBUTE TABLE-SEGMENT VARIABLES

#### TABLE-OF-ATTRIBUTES AND SEGMENT VARIABLES

The 'TABLE-OF-ATTRIBUTES' level is generated if the screen includes at least one variable Data Element (NATURE = 'V').

The DE-ATT table is the image of DE-ERR repeated four times. It is used to store the attributes of the Data Elements on the screen.

It is used to set the error attributes (which have been defined at the screen level) for a Data Element in error (for the management of this table refer to Subchapter "ERROR PROCESSING (F70)", Chapter "GENERATED PROGRAM: PROCEDURE DIVISION").

The coding for each Data Element is formatted as follows:

```
.A-scrn-MATE (A) for non-repetitive Data Elements  
.B-scrn-LINE (B) for the Data Elements defining a  
repetitive category (Nature 'R').
```

NOTE: 'scrn' = the last four characters of the screen code.

The table positions correspond to the attributes:

```
A = 1 Intensity attribute.  
A = 2 Presentation attribute.  
A = 3 Color attribute.  
A = 4 Cursor positioned on the Data Element.
```

After the Table-of-Attributes, there is an area detailing the attributes of the Data Elements of the repetitive category. This area is used to position the attributes of each occurrence of these Data Elements.

```
.02 A-0030-LINE OCCURS 4.  
.05 A-0030-CODMVT PICTURE X.  
.05 A-0030-FOURNI PICTURE X.  
etc.
```

The 'STOP-FIELDS' level is generated if a display control break has been defined for at least one Data Element of the repetitive category (display control break 'C' for a Data Element of a Segment used on the screen):

```
.02 C-0030  
.05 C-0030-COCARA PICTURE X.  
.05 C-0030-NUCOM PICTURE 9(5).
```

These areas are used to store the value of a Data Element which must remain constant in the display.

The 'FIRST-ON-SEGMENT' level is generated when at least one Segment that is not preceded by an access to another Segment, is used on display in the repetitive category.

In this case, a variable is generated for each Segment, indicating the first access to the Segment (key to be loaded in order to read the Segment on display).

Example:

```
05 CD10-FST PICTURE X.  
  
. '1' First on the Segment,  
. '0' Next read of the Segment.
```

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01		TABLE-OF-ATTRIBUTES.		*AA250
02		DE-ATT.		*AA250
03		DE-ATT1	OCCURS 4.	*AA250
05		DE-AT	PICTURE X OCCURS 046.	*AA250
02		DE-A	REDEFINES DE-ATT.	*AA250
03		DE-ATT2	OCCURS 4.	*AA250
04		A-0030-BEGIN.		*AA250
05		A-0030-CHOIX	PICTURE X.	*AA250
05		A-0030-MATE	PICTURE X.	*AA250
05		A-0030-RELEA	PICTURE X.	*AA250
05		A-0030-RUE	PICTURE X.	*AA250
05		A-0030-COPOS	PICTURE X.	*AA250
05		A-0030-REFCLI	PICTURE X.	*AA250
05		A-0030-DATE	PICTURE X.	*AA250
05		A-0030-CORRES	PICTURE X.	*AA250
05		A-0030-REMIS	PICTURE X.	*AA250
04		B-0030-LINE	OCCURS 9.	*AA250
05		FILLER	PICTURE X(0004).	*AA250
04		A-0030-END.		*AA250
05		A-0030-EDIT	PICTURE X.	*AA250
02		A-0030-LINE	OCCURS 4.	*AA250
05		A-0030-CODMVT	PICTURE X.	*AA250
05		A-0030-FOURNI	PICTURE X.	*AA250
05		A-0030-QTMAC	PICTURE X.	*AA250
05		A-0030-INFOR	PICTURE X.	*AA250
01		AT-SV.		*AA260
10		FILLER	PICTURE X(6) VALUE "089NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "010NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "012NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "015NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "017NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "019NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "021NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "023NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "025NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "032NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "033NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "034NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "037NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "038NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "039NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "040NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "043NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "044NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "045NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "046NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "049NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "050NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "051NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "052NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "055NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "056NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "057NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "058NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "061NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "062NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "063NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "064NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "067NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "068NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "069NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "070NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "073NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "074NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "075NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "076NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "079NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "080NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "081NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "082NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "085NNW".	*AA260
10		FILLER	PICTURE X(6) VALUE "087NNW".	*AA260
01		TABLE-SV-AT	REDEFINES AT-SV.	*AA265
02		LIGNE-SV-AT	OCCURS 046.	*AA265
05		SV-AT	PICTURE 999.	*AA265
05		SV-ATTRI	PICTURE X.	*AA265
05		SV-ATTRP	PICTURE X.	*AA265

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01	05	SV-ATTRC	PICTURE X.	*AA265
		STOP-FIELDS.		*AA300
	02	C-0030.		*AA300
	05	C-0030-COCARA	PICTURE X.	*AA300
	05	C-0030-NUCOM	PICTURE 9(5).	*AA300
01		FIRST-ON-SEGMENT.		*AA301
	05	CD10-FST	PICTURE X.	*AA301

### 3.7. EXAMPLE OF SCREEN WORK AREAS (-W)

01	WW10-QTMAR	PICTURE 99 VALUE ZERO.	*BB200
01	WP00.		*WP000
02	WP10.		*WP010
05	FILLER	PIC X(25) VALUE	*WP020
		"23400BRISBANE	*WP030
05	FILLER	PIC X(25) VALUE	*WP040
		"56400VICTORIA	*WP050
05	FILLER	PIC X(25) VALUE	*WP060
		"76500ALICE SPRINGS	*WP070
05	FILLER	PIC X(25) VALUE	*WP080
		"55300MELBOURNE	*WP090
05	FILLER	PIC X(25) VALUE	*WP100
		"11000CANBERRA	*WP110
05	FILLER	PIC X(25) VALUE	*WP120
		"34500PERTH	*WP130
05	FILLER	PIC X(25) VALUE	*WP140
		"85270DARWIN	*WP150
05	FILLER	PIC X(25) VALUE	*WP160
		"94000HOBART	*WP170
05	FILLER	PIC X(25) VALUE	*WP180
		"89300SYDNEY	*WP190
02	WP20	REDEFINES WP10 OCCURS 9.	*WP300
05	WP20-COPOS	PICTURE X(5).	*WP320
05	WP20-VILLE	PICTURE X(20).	*WP340
02	WP30.		*WP400
05	WP30-COPOS	PICTURE X(5).	*WP410
02	WP40.		*WP500
05	WP40-VILLE	PICTURE X(20).	*WP510
05	WP40-VILLEL	PICTURE X(20).	*WP520



### 3.8. LINKAGE SECTION

#### LINKAGE SECTION

The 'TRANSACTION-STORAGE' level is generated according to the values entered on the Dialogue Complement (-O) screen and the access keys of the segments used in display.

This level is the common area used by every screen of the dialogue.

. K-S0030-YMAT (except DPS7 FORMS)

Always generated; used to store the type of screen used.

. K-S0030-PROGR

Always generated; used to store the screen code.

. K-S0030-XTERM

Always generated; used to store the terminal code.

If a documentation help character has been entered on the Screen Definition screen, the following fields are generated:

. K-S0030-DOC

HELP function indicator:

'0' No backup created for the screen,  
'1' Backup created for the screen,  
'2' Request for screen-level documentation,  
'3' Request for field-level documentation.

. K-S0030-PROGE

Used to store the external name of the calling program.

. K-S0030-LIBRA

Used to store the library code.

. K-S0030-PROHE

. K-S0030-ERCOD

. K-S0030-ERTYP

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. K-S0030-LINUM

Technological fields reserved for the 'HELP' Function program.

CA00 Data Structure describing the user Common Area (if the data structure contains several segments, they are described in 'redefines' clauses).

K-0030 Complementary field for memorization of the dialogue (see Subchapter "DIALOGUE COMPLEMENT", Chapter "DESCRIPTION OF A TRANSACTION" in the OLSD Reference Manual).

The following fields are used to store the access keys of segments used in display (without a preceding segment):

K-A0030-BEGIN

Automatic generation of screen-top category.

K-AC005-CLECD

Key of the screen-top category.

K-R0030-LINE OCCURS 2

Generated according to the data element defining the repetitive category (the 1st occurrence stores the beginning of display key; the 2nd stores the display key of the next screen (i.e. page)).

K-RCD10-CLECD

Key for repetitive category.

K-Z0030-END

Key of the screen-bottom category (generated according to the data element defining the screen-bottom category).

K-ZME00-CLEME

Key of the screen-bottom category.

ZONES-VARIABLES

Generated if the chosen generation option is 'MDT OFF' or "Dynamic protection of variable fields". This level retrieves the description of the variable fields of the screen. The description of the fields belonging to the data element defining the repetitive category is generated after the screen description. This level retrieves also a table of attributes for each variable field of the screen. This table will be used in case of a field protection.

A FILLER aligns the K-0030 and 'ZONES-VARIABLES' fields on 100 positions (by default), unless the user has specified a greater length on the Dialogue Complement (-O) screen.



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### COMMUNICATION SECTION

The COMMUNICATION SECTION is a communication area which is specific to the system, and is not managed by the user. It is generated after the LINKAGE SECTION.

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COMMUNICATION SECTION.			*90010
CD 7-CD01	INPUT		*90020
SYMBOLIC QUEUE		7-CD01-CTAN	*90030
MESSAGE DATE		7-CD01-XDATE	*90040
MESSAGE TIME		7-CD01-XTIME	*90050
SYMBOLIC SOURCE		7-CD01-XTERM	*90060
TEXT LENGTH		7-CD01-XLOMES	*90070
END KEY		7-CD01-XFINME	*90080
STATUS KEY		7-CD01-XMSTA.	*90090
CD 7-CD02	OUTPUT		*90100
DESTINATION COUNT		7-CD02-XNDEST	*90110
TEXT LENGTH		7-CD02-XLOMES	*90120
STATUS KEY		7-CD02-XMSTA	*90130
ERROR KEY		7-CD02-XMERR	*90140
SYMBOLIC DESTINATION		7-CD02-XTERM.	*90150
PROCEDURE DIVISION USING TDS-STORAGE	CONSTANT-STORAGE		*99999
TRANSACTION-STORAGE.			*99999

## **4. GENERATED PROGRAM: PROCEDURE DIVISION**

#### *4.1. F01 : INITIALIZATIONS*

##### F01 : INITIALIZATIONS

The INITIALIZATIONS (F01) function is always generated.

It contains the initializations of work areas, of the input field attributes, and of the screen description table AT-0030-MESSO.

It ensures (in the first screen of the dialogue PRIOR-TPR) the first RECEIVE in a FILLER (length = 80).

It triggers the procedure to be executed in case of error.

It ensures the branching to the physical display function after consultation of HELP documentation (if a documentation call character is entered on the Screen Definition screen).





## 4.2. F05 : RECEPTION AND OPERATION CODE

### F05 : RECEPTION

The F05 paragraph contains the conditions for all the procedures which have to do with the 'RECEPTION' part of the program: from F05 to END-OF-RECEPTION (F45-FN).

In general, all the automatic functions in this part of the program are generated if at least one variable data element (NATURE = 'V') is defined on the screen.

Sub-function F0510 contains the reception of the screen in the area used for communication with the sub-program which is called by a 'CALL'.

If an initialization character has been specified on the Screen Definition screen, it will be replaced by blanks (except when a branch to a "HELP" screen is executed).

The F0512 sub-function is generated if a documentation call has been entered on the Screen Definition screen. It initializes the fields that are necessary for branching to the "HELP" screen.

The F0520 sub-function is generated if a variable data element from the screen, or a special PFKEY data element, is defined as an Operation Code on the Screen Call of Elements.

The internal Operation Code 'OPER' is set according to the:

- Value of the screen data element defined as an Operation Code (values specified with TYPE OF LINE = 'O' on the Data Element Description (-D) screen;
- Value of the PFKEY data element (entered on the Screen Call of Elements (-CE)).

If an error is found in the value of the Operation Code, subsequent 'reception' procedures are not executed.

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 F05 : RECEPTION AND OPERATION CODE

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```

*          *****
*          *
*          * RECEPTION
*          *
*          *****
F05.
  IF      ICF = ZERO
    GO TO END-OF-RECEPTION.
F0510.
  PERFORM F81RE THRU F81RE-FN.
  IF      ICF = ZERO
    GO TO END-OF-RECEPTION.
  PERFORM F81ES THRU F81ES-FN.
  MOVE 7-CD01-XTERM TO K-S0030-XTERM.
  MOVE 7-CD01-XLOMES TO CMES-IND1.
  MOVE AT-0030-MESSA TO CMES-Y000.
  MOVE K-S0030-YMAT TO CMES-YMAT.
  MOVE K-S0030-PFKEY TO CMES-PFKEY.
  MOVE 7-YCRER TO CMES-YCRE.
  CALL PRCGI USING CMES-COMMUNICATION
  IF      CMES-YR00 = ALL "*"
    MOVE ZERO TO ICF
    GO TO END-OF-RECEPTION.
  MOVE CMES-PFKEY TO I-PFKEY K-S0030-PFKEY.
  IF      CMES-YCRE = 7-YCREP
    MOVE CMES-IND1 TO 7-CD02-XLOMES
    MOVE 1 TO 7-CD02-XNDEST
    MOVE K-S0030-XTERM TO 7-CD02-XTERM
    SEND 7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0
  LINES
    PERFORM F81ES THRU F81ES-FN
    GO TO F8Z10-G.
  MOVE CMES-YR00 TO 0030-MESSO.
  PERFORM F8155 THRU F8155-FN.
  MOVE "A" TO OPER
  MOVE SPACE TO OPERD.
  PERFORM F8150 THRU F8150-FN.
  IF      K-S0030-ERCOD = ZERO
    EXAMINE I-0030 REPLACING ALL "-" BY SPACE.
F0510-FN.
  EXIT.
F0512.
  IF      K-S0030-ERCOD NOT = ZERO
    NEXT SENTENCE
  ELSE
    GO TO F0512-FN.
  MOVE "2" TO K-S0030-DOC
  MOVE PROGE TO K-S0030-PROGE
  MOVE LIBRA TO K-S0030-LIBRA.
  IF      K-S0030-ERCOD NOT = SPACE
    MOVE "3" TO K-S0030-DOC.
  MOVE K-S0030-XTERM TO HE00-XTERM
  PERFORM F80-HELP-R THRU F80-FN
  MOVE HE00-SCREEN TO O-0030
  PERFORM F8130 THRU F8130-FN
  MOVE O-0030 TO HE00-SCREEN
  PERFORM F80-HELP-RW THRU F80-FN
  MOVE PRDOC TO 5-0030-PROGE K-S0030-PROHE
  MOVE "O" TO OPER
  GO TO F4040.
F0512-FN.
  EXIT.
*          *****
*          *
*          * VALIDATION OF OPERATION CODE
*          *
*          *****
F0520.
  IF      I-0030-CHOIX = "1"
    MOVE "DO0000 " TO 5-0030-PROGE
    MOVE "O" TO OPER
    GO TO F40-A.
  IF      I-0030-CHOIX = "2"
    MOVE "DO0010 " TO 5-0030-PROGE
    MOVE "O" TO OPER
    GO TO F40-A.
  IF      I-0030-CHOIX = "3"

```

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 F05 : RECEPTION AND OPERATION CODE

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MOVE "DO0020 " TO 5-0030-PROGE	DO0030
MOVE "O" TO OPER	DO0030
GO TO F40-A.	DO0030
IF I-0030-CHOIX = "4"	DO0030
MOVE "DO0040 " TO 5-0030-PROGE	DO0030
MOVE "O" TO OPER	DO0030
GO TO F40-A.	DO0030
IF I-0030-CHOIX = "5"	DO0030
MOVE "DO0050 " TO 5-0030-PROGE	DO0030
MOVE "O" TO OPER	DO0030
GO TO F40-A.	DO0030
IF I-0030-CHOIX = "0"	DO0030
MOVE "DO0070 " TO 5-0030-PROGE	DO0030
MOVE "O" TO OPER	DO0030
GO TO F40-A.	DO0030
IF I-0030-CHOIX = "7"	DO0030
MOVE "M" TO OPER	DO0030
GO TO F0520-900.	DO0030
IF I-0030-CHOIX = "8"	DO0030
MOVE "S" TO OPER	DO0030
GO TO F0520-900.	DO0030
MOVE "5" TO ER-0030-CHOIX	DO0030
MOVE "4" TO SCR-ER	DO0030
GO TO F3999-ITER-FT.	DO0030
F0520-900.	DO0030
IF OPER NOT = "A"	DO0030
AND OPER NOT = "M"	DO0030
AND OPER NOT = "O"	DO0030
GO TO F3999-ITER-FT.	DO0030
F0520-FN.	DO0030
EXIT.	DO0030
F05-FN.	DO0030
EXIT.	DO0030
* +-----+ * LEVEL 10 I NO UPDATE ==> END OF RECEIVE I * +-----+	P000
F08BB.	P000
IF OPER NOT = "M"	P000
NEXT SENTENCE	P000
ELSE	P000
GO TO F08BB-FN.	P000
GO TO F3999-ITER-FT.	P100
F08BB-FN.	P000
EXIT.	P000

### 4.3. F10 : CATEGORY PROCESSING LOOP

#### F10 : CATEGORY POSITIONING

The CATEGORY POSITIONING function positions the category to be processed in 'RECEPTION' using the CATX indicator which may be set to one of the following values:

'0' Beginning of RECEPTION  
' ' Screen-top category  
'R' Repetitive category  
'Z' Screen-bottom category

Procedures are generated according to the categories defined on the Screen Call of Elements ('-CE') screen.

If no category has been defined, the screen is considered to be a screen-top category.

For the repetitive category, this function includes the interaction between the line of the category to be processed and the input screen description field used to access each of the data elements on the line.

This function also includes the initialization and incrementation of the ICATR index, which manages the repetitive category.

If an error is detected (CAT-ER = 'E') once the processing of a category is complete (F15 to F3999-ITER-FI), SCR-ER is set and validation processing on the subsequent categories is not executed.



#### *4.4. F15 : VALIDATION OF TRANSACTION CODE*

##### F15 : TRANSACTION CODE POSITIONING

The VALIDATION OF TRANSACTION CODE (F15) function is generated if at least one Data Element is defined as a Transaction Code in a category on the Screen Call of Elements ('-CE') screen.

The internal transaction code (CATM) is set according to the Data Element's value that is defined as a Transaction Code for the category. The value can be given to the Data Element on:

- . the Data Element Description (-D) screen with TYPE OF LINE = 'I',
- . the Screen Call of Elements (-CE) screen in the Transaction Code Data Element call line.

Depending on the categories defined on the screen (and for which a transaction code is indicated) the F15 function includes the following:

- .F15A for the screen-top category,
- .F15R for the repetitive category,
- .F15Z for the screen-bottom category.

If the transaction code is wrong, the subsequent 'RECEPTION' procedures are not executed.





#### 4.5. F20 : DATA ELEMENT VALIDATION

##### F20 : DATA ELEMENT VALIDATION

The DATA ELEMENT VALIDATION (F20) function is generated when one variable Data Element has been specified on the screen.

Depending on which category or categories defined on the screen contain at least one Data Element to be validated, the F20 function includes the following:

- . F20A for the screen-top category.
- . F20R for the repetitive category.
- . F20Z for the screen-bottom category.

The procedure for each category contains one sub-function per Data Element to be validated. The validation procedures are the following:

- . Presence validation.
- . Numeric class validation.
- . Value validation according to the values or value ranges defined on the Data Element Description ('-D') screen, or on the Screen Call of Elements ('-CE') screen.
- . Validation of date (via PERFORM) for Data Elements defined with a 'DATE' format.
- . Validation of a sub-function (via PERFORM) defined by the user.

The conditioning of each sub-function is generated based on the procedure option of the Data Element.

The validation result for each Data Element is stored in a field coded ER-scrn-delcod (scrn: last four characters of the screen code; delcod: Data Element code), which takes the following values:

- '0' : Data Element absent
- '1' : Data Element present
- '2' : invalid absence
- '4' : invalid class
- '5' : invalid value

'CAT-ER' is set when any Data Element (or user) error is detected.

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NOTE: Sub-functions are numbered based on the number of Data Elements, their position on the screen, etc.

As a result, direct references should never be made to a label generated in specific procedures.

Use the Relative Positioning types \*A, \*P, and \*R (see chapter "USE OF STRUCTURED CODE" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual).





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 F20 : DATA ELEMENT VALIDATION

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```

IF      I-0030-FOURNI NOT = SPACE          DO0030
  MOVE "1" TO ER-0030-FOURNI              DO0030
ELSE                                        DO0030
  MOVE "2" TO ER-0030-FOURNI              DO0030
  MOVE "E" TO CAT-ER                      DO0030
  GO TO F20C4-FN.                          DO0030
IF      I-0030-FOURNI = "DIC"              DO0030
  OR I-0030-FOURNI = "MER"                DO0030
  OR I-0030-FOURNI = "TAB"                DO0030
  OR I-0030-FOURNI = "DBD"                DO0030
  OR I-0030-FOURNI = "DSO"                DO0030
  OR I-0030-FOURNI = "LGS"                DO0030
  OR I-0030-FOURNI = "LGB"                DO0030
  OR I-0030-FOURNI = "DLG"                DO0030
  NEXT SENTENCE                            DO0030
ELSE                                        DO0030
  MOVE "5" TO ER-0030-FOURNI.              DO0030
IF      ER-0030-FOURNI > "1"              DO0030
  MOVE "E" TO CAT-ER                      DO0030
  GO TO F20C4-FN.                          DO0030
F20C4-FN.                                  DO0030
  EXIT.                                    DO0030
F20C5.                                      DO0030
IF      CATM = "A"                          DO0030
  OR CATM = SPACE                          DO0030
  GO TO F20C5-FN.                          DO0030
IF      E-0030-QTMAC NOT = SPACE           DO0030
  MOVE "1" TO ER-0030-QTMAC                DO0030
ELSE                                        DO0030
  MOVE "2" TO ER-0030-QTMAC                DO0030
  MOVE "E" TO CAT-ER                      DO0030
  GO TO F20C5-FN.                          DO0030
MOVE E-0030-QTMAC TO ZONUM1                DO0030
MOVE 9-0030-QTMAC TO NUMPIC                DO0030
MOVE ER-0030-QTMAC TO DEL-ER               DO0030
PERFORM F8110 THRU F8110-FN                DO0030
MOVE DEL-ER TO ER-0030-QTMAC              DO0030
IF      DEL-ER > 1                          DO0030
  MOVE "E" TO CAT-ER                      DO0030
  GO TO F20C5-FN.                          DO0030
MOVE ZONUM2 TO E-0030-QTMAC.               DO0030
IF      DEL-ER = "1"                        DO0030
  MOVE I-0030-QTMAC TO O-0030-QTMAC.       DO0030
IF      I-0030-QTMAC NOT < 01              DO0030
  AND I-0030-QTMAC NOT > 50                DO0030
  NEXT SENTENCE                            DO0030
ELSE                                        DO0030
  MOVE "5" TO ER-0030-QTMAC.               DO0030
IF      ER-0030-QTMAC > "1"                DO0030
  MOVE "E" TO CAT-ER                      DO0030
  GO TO F20C5-FN.                          DO0030
F20C5-FN.                                  DO0030
  EXIT.                                    DO0030
F20C8.                                      DO0030
IF      CATM = "A"                          DO0030
  OR CATM = SPACE                          DO0030
  GO TO F20C8-FN.                          DO0030
IF      I-0030-INFOR NOT = SPACE           DO0030
  MOVE "1" TO ER-0030-INFOR.               DO0030
IF      ER-0030-INFOR NOT = 1              DO0030
  GO TO F20C8-FN.                          DO0030
F20C8-FN.                                  DO0030
  EXIT.                                    DO0030
F20R-FN.                                    DO0030
  EXIT.                                    DO0030
F20Z.                                       DO0030
IF      CATX NOT = "Z"                      DO0030
  GO TO F20Z-FN.                            DO0030
F20D0.                                       DO0030
IF      I-0030-EDIT NOT = SPACE            DO0030
  MOVE "1" TO ER-0030-EDIT.                DO0030
F20D0-FN.                                    DO0030
  EXIT.                                    DO0030
F20Z-FN.                                    DO0030
  EXIT.                                    DO0030
F20-FN.                                       DO0030
  EXIT.                                    DO0030

```

#### 4.6. F25 : SEGMENT ACCESS FOR VALIDATION

##### F25 : SEGMENT ACCESS FOR VALIDATION

The SEGMENT ACCESS FOR VALIDATION (F25) function is generated when there is at least one segment to be accessed in RECEPTION.

Depending on which categories defined on the screen contain a segment to be accessed in RECEPTION, the F25 function includes the following:

- . F25A for the screen-top category.
- . F25R for the repetitive category.
- . F25Z for the screen-bottom category.

In the processing for each category there is one sub-function per segment to be accessed, including:

- . The initialization of the key (if indicated on the -CS)
- . Read or Read with Segment Update depending on its use in the screen (by a PERFORM of F80-ddss-R or RU)
- . Positioning of the segment ddss-CF variable (1 if OK)
- . Error processing, if any.

Within a category, accesses are generated in the alphabetical order of the segment codes, except for segments which contain a 'preceding' segment.

If a segment is to be updated, its access depends on the CATM value. It is not performed if CATM = SPACE.

If a segment has a preceding segment, its access is performed if the ddss-CF variable of the preceding segment is equal to '1'.

Other types of reads are not conditioned.

Sub-function F2599 is generated if at least one of the Read segments can be updated.

It contains the PERFORM of functions F80-ddss-UN, according to the segments used, as well as cursor positioning on the first variable data element of the category, in the case of segment error.

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F25 : SEGMENT ACCESS FOR VALIDATION

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NOTE: Sub-functions are numbered based on the number of segments, their positions on the '-CS' screen, etc. As a result, a direct reference should never be made to a generated label in the specific procedures.

Use the Relative Positioning types '\*A', '\*P' and '\*R' (see chapter "USE OF STRUCTURED CODE" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual).





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 F25 : SEGMENT ACCESS FOR VALIDATION

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MOVE I-0030-MATE TO FO10-MATE	DO0030
PERFORM F80-FO10-RU THRU F80-FN.	DO0030
IF IK = "0"	DO0030
MOVE "1" TO FO10-CF.	DO0030
IF IK = "1"	DO0030
MOVE "F039" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2503-FN.	DO0030
F2503-FN.	DO0030
EXIT.	DO0030
F25R-FN.	DO0030
EXIT.	DO0030
F25Z.	DO0030
IF CATX NOT = "Z"	DO0030
GO TO F25Z-FN.	DO0030
F2505.	DO0030
MOVE "0" TO CD20-CF.	DO0030
IF CATM = SPACE	DO0030
GO TO F2505-FN.	DO0030
MOVE SPACES TO CD00-CLECD	DO0030
MOVE "E" TO CD00-COCARA	DO0030
MOVE CA00-NUCOM TO CD00-NUCOM	DO0030
PERFORM F80-CD20-RU THRU F80-FN.	DO0030
IF IK = "0"	DO0030
MOVE "1" TO CD20-CF.	DO0030
IF CATM = "X"	DO0030
AND IK = "1"	DO0030
MOVE "C" TO CATM.	DO0030
IF CATM = "X"	DO0030
AND IK = "0"	DO0030
MOVE "M" TO CATM.	DO0030
IF CATM = "C"	DO0030
AND IK = "0"	DO0030
MOVE "F058" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2505-FN.	DO0030
IF CATM NOT = "C"	DO0030
AND IK = "1"	DO0030
MOVE "F059" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2505-FN.	DO0030
F2505-FN.	DO0030
EXIT.	DO0030
F25Z-FN.	DO0030
EXIT.	DO0030
F2599.	DO0030
IF CAT-ER = SPACE	DO0030
GO TO F2599-FN.	DO0030
IF CD05-CF = "1"	DO0030
PERFORM F80-CD05-UN THRU F80-FN.	DO0030
IF CD10-CF = "1"	DO0030
PERFORM F80-CD10-UN THRU F80-FN.	DO0030
IF FO10-CF = "1"	DO0030
PERFORM F80-FO10-UN THRU F80-FN.	DO0030
IF CD20-CF = "1"	DO0030
PERFORM F80-CD20-UN THRU F80-FN.	DO0030
IF CATX = " "	DO0030
AND DE-AT (4, 010) = "X"	DO0030
MOVE " " TO DE-AT (4, 010).	DO0030
IF CATX = " "	DO0030
MOVE "X" TO A-0030-CHOIX (4).	DO0030
IF CATX = "R"	DO0030
AND DE-AT (4, 010) = "X"	DO0030
MOVE " " TO DE-AT (4, 010).	DO0030
IF CATX = "R"	DO0030
MOVE "X" TO A-0030-CODMVT (4).	DO0030
IF CATX = "Z"	DO0030
AND DE-AT (4, 010) = "X"	DO0030
MOVE " " TO DE-AT (4, 010).	DO0030
IF CATX = "Z"	DO0030
MOVE "X" TO A-0030-EDIT (4).	DO0030
F2599-FN.	DO0030
EXIT.	DO0030
F25-FN.	DO0030
EXIT.	DO0030
* +-----+	P000
* LEVEL 10 I STOCK UPD.: ORDER DELETION/UPD I	P000

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```
*          +-----+
F28BH.
  IF      (CATM = "A"
           OR  "M")
           AND CATX = "R"
           AND CAT-ER = SPACES
           NEXT SENTENCE
  ELSE
           GO TO F28BH-FN.
           ADD CD10-QTMAL TO FO10-QTMAS.
F28BH-FN.
  EXIT.
```

P000  
P000  
P000  
P000  
P100  
P120  
P120  
P120  
P120  
P120  
P100  
P000  
P000

#### *4.7. F30 : DATA ELEMENT TRANSFER*

##### F30: DATA ELEMENT TRANSFER

The DATA ELEMENT TRANSFER (F30) function ensures the transfer of Data Elements on the screen to the corresponding Data Elements in the Segments.

Depending on which categories defined on the screen contain at least one Data Element transfer on reception, the F30 function includes the following:

- . F30A for the screen-top category.
- . F30R for the repetitive category.
- . F30Z for the screen-bottom category.

The condition of the transfer is generated based on the use of the Segment on reception, or the value of the PRESENCE VALIDATION OF DATA ELEMENT field on the Screen Call of Elements ('-CE') screen.

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F30 : DATA ELEMENT TRANSFER

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```

*          *****
*          *
*          * DATA ELEMENT TRANSFER
*          *
*          *****
F30.
  IF      CAT-ER NOT = SPACE
  GO TO F30-FN.
F30A.
  IF      CATX NOT = " "
  GO TO F30A-FN.
  MOVE I-0030-RELEA TO CD05-RELEA.
  MOVE I-0030-COPOS TO CD05-COPOS.
  MOVE I-0030-REFCLI TO CD05-REFCLI.
  MOVE I-0030-DATE TO CD05-DATE.
  MOVE I-0030-REMIS TO CD05-REMIS.
  IF      ER-0030-MATE = "1"
  MOVE I-0030-MATE TO CD05-MATE.
  IF      ER-0030-CORRES = "1"
  MOVE I-0030-CORRES TO CD05-CORRES.
F30A-FN.
  EXIT.
F30R.
  IF      CATX NOT = "R"
  GO TO F30R-FN.
  IF      ER-0030-INFOR = "1"
  MOVE I-0030-INFOR TO CD10-INFOR.
  IF      CATM NOT = SPACE
  MOVE I-0030-FOURNI TO CD00-FOURNI.
  IF      CATM NOT = SPACE
  AND CATM NOT = "A"
  MOVE I-0030-QTMAC TO CD10-QTMAC
  ADD I-0030-QTMAC TO FO10-QTMAM.
*          +-----+
* LEVEL 10  I QUANTITY PROCESSING I
*          +-----+
F30BD.
*          +-----+
* LEVEL 12  I CALC. DELIV. QUANT. STOCK UPD. I
*          +-----+
F30BF.
  IF      CATM = "C"
  OR      "M"
  NEXT SENTENCE
  ELSE
  GO TO F30BF-FN.
  IF      FO10-QTMAS NOT < I-0030-QTMAC
  MOVE I-0030-QTMAC TO CD10-QTMAL
  ELSE
  MOVE FO10-QTMAS TO CD10-QTMAL.
  SUBTRACT CD10-QTMAL FROM FO10-QTMAS
  MOVE CD10-QTMAL TO O-0030-QTMAL.
F30BF-FN.
  EXIT.
F30BD-FN.
  EXIT.
F30R-FN.
  EXIT.
F30Z.
  IF      CATX NOT = "Z"
  GO TO F30Z-FN.
  MOVE I-0030-EDIT TO CD20-EDIT.
F30Z-FN.
  EXIT.
F30-FN.
  EXIT.

```

#### 4.8. F35 : SEGMENT ACCESS FOR UPDATE

##### F35: SEGMENT ACCESS FOR UPDATE

This function ensures Segment updates. If an error has been detected by the error checks (CAT-ER), this function is not executed.

Depending on which categories contain a Segment to be updated, the SEGMENT ACCESS FOR UPDATE (F35) function includes the following:

- . F35A for the screen-top category.
- . F35R for the repetitive category.
- . F35Z for the screen-bottom category.

In the processing for each category there is one sub-function per Segment to be updated, possibly including several types of access.

The function is accessed by executing a PERFORM of the appropriate subfunction in F80.

For a Segment that does not follow an access to another Segment (i.e. the PRECEDING SEGMENT field in the Screen Call of Segments ('-CS') screen is left blank), access is conditioned by the value of the internal Transaction Code (CATM) found in the category, which corresponds to one of the following operations:

- . Creation: writing (F80-ddss-R).
- . Deletion: suppression (F80-ddss-D).
- . Other cases: rewriting (F80-ddss-RW)

The user must manage the access to other transactions if the rewrite option does not correspond to user needs.

For a Segment that follows an access to another Segment (i.e. a Segment is listed in the PRECEDING SEGMENT field on the Screen Call of Segments ('-CS') screen), access is conditioned by the Segment configuration, which is either:

- . ddss-CF = 0, writing, or
- . ddss-CF = 1, rewriting.

If a Data Element was defined as a Transaction Code on the Screen Call of Elements ('-CE') screen (in the VALIDATION CONDITIONS/SET VARIABLES field), it is set to blanks.

Paragraph F3999-ITER-FI returns to the beginning of the 'RECEPTION' iteration.

NOTE: Sub-functions are numbered based on the number of segments, their positions on the '-CS' screen, etc. As a result, a direct reference should never be made to a generated label in the specific procedures.

Use the Relative Positioning types '\*A', '\*P' and '\*R' (see chapter "USE OF STRUCTURED CODE" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual.)

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 F35 : SEGMENT ACCESS FOR UPDATE

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*	*****	DO0030
*	*	DO0030
*	* SEGMENT ACCESS FOR UPDATE	DO0030
*	*	DO0030
*	*****	DO0030
F35.		DO0030
IF	CAT-ER NOT = SPACE	DO0030
OR	CATM = SPACE	DO0030
	GO TO F35-FN.	DO0030
F35A.		DO0030
IF	CATX NOT = " "	DO0030
	GO TO F35A-FN.	DO0030
F3501.		DO0030
IF	CATM NOT = "C"	DO0030
AND	CATM NOT = "A"	DO0030
	PERFORM F80-CD05-RW THRU F80-FN.	DO0030
F3501-FN.		DO0030
EXIT.		DO0030
F35A-FN.		DO0030
EXIT.		DO0030
F35R.		DO0030
IF	CATX NOT = "R"	DO0030
	GO TO F35R-FN.	DO0030
F3502.		DO0030
IF	CATM = "C"	DO0030
	PERFORM F80-CD10-W THRU F80-FN.	DO0030
IF	CATM = "A"	DO0030
	PERFORM F80-CD10-D THRU F80-FN.	DO0030
IF	CATM NOT = "C"	DO0030
AND	CATM NOT = "A"	DO0030
	PERFORM F80-CD10-RW THRU F80-FN.	DO0030
F3502-FN.		DO0030
EXIT.		DO0030
F3503.		DO0030
IF	F010-CF = "1"	DO0030
	PERFORM F80-F010-RW THRU F80-FN.	DO0030
F3503-FN.		DO0030
EXIT.		DO0030
F35R-C3.		DO0030
	MOVE SPACE TO O-0030-CODMVT.	DO0030
F35R-FN.		DO0030
EXIT.		DO0030
F35Z.		DO0030
IF	CATX NOT = "Z"	DO0030
	GO TO F35Z-FN.	DO0030
F3505.		DO0030
IF	CATM = "C"	DO0030
	PERFORM F80-CD20-W THRU F80-FN.	DO0030
IF	CATM NOT = "C"	DO0030
AND	CATM NOT = "A"	DO0030
	PERFORM F80-CD20-RW THRU F80-FN.	DO0030
F3505-FN.		DO0030
EXIT.		DO0030
F35Z-D0.		DO0030
	MOVE SPACE TO O-0030-EDIT.	DO0030
F35Z-FN.		DO0030
EXIT.		DO0030
F35-FN.		DO0030
EXIT.		DO0030
F3999-ITER-FI.		DO0030
	GO TO F10.	DO0030
F3999-ITER-FT.		DO0030
EXIT.		DO0030
F3999-FN.		DO0030
EXIT.		DO0030

#### *4.9. F40 : END-OF-RECEPTION PROCESSING*

##### F40: END-OF-RECEPTION PROCESSING

This function contains the procedures for the end-of-reception processing of the program. It is executed as long as no errors have been found.

Within this function, there are four sub-functions which correspond to four automatically generated procedures that are conditioned by the value of the Operation Code (OPER).

##### SET-UP KEYS FOR NEW DISPLAY (F4010)

This function is executed for a 'display' or an 'update' operation. The keys to the segments with no preceding segment, or those used in display, are given a value here.

Depending on the categories defined on the screen, the memorization of the access key for the display segment is found in:

- . F40A for the screen-top category.
- . F40R for the repetitive category.
- . F40Z for the screen-bottom category.

##### SET-UP KEYS FOR SCREEN PAGING (F4020)

This function is executed for a 'screen continuation' operation. It contains the memorization of the first key for the display of the screen continuation, if the segment is used in the repetitive category.



END OF TRANSACTION (F4030)

This function is executed for an end-of-transaction operation. It sends the END-MESSAGE and calls the ZAR980 sub-program which formats the message before the SEND, which is executed by the program.

TRANSFER TO ANOTHER SCREEN (F4040)

This function is executed for a transfer to another screen operation.

NOTE: Functions F4010 and F4020 are to be written by the user for segments with ORGANIZATION = 'U'.

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 F40 : END-OF-RECEPTION PROCESSING

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```

F40.                                DO0030
  IF      SCR-ER > "1"                DO0030
    MOVE  "A" TO OPER                  DO0030
    GO TO F40-FN.                      DO0030
F40-A.                                DO0030
  IF      OPERD NOT = SPACE            DO0030
    MOVE  OPERD TO OPER.               DO0030
*      *****                       DO0030
*      *                               * DO0030
*      *   SET-UP KEYS FOR NEW DISPLAY * DO0030
*      *                               * DO0030
*      *****                       DO0030
F4010.                                DO0030
  IF      OPER NOT = "A"              DO0030
    AND NOT = "M"                     DO0030
    GO TO F4010-FN.                   DO0030
F40A.                                  DO0030
  MOVE  SPACES TO CD00-CLECD           DO0030
  MOVE  "B" TO CD00-COCARA             DO0030
  MOVE  CA00-NUCOM TO CD00-NUCOM       DO0030
  MOVE  CD00-CLECD TO K-ACD05-CLECD.   DO0030
F40A-FN.                                DO0030
  EXIT.                                DO0030
F40R.                                  DO0030
  MOVE  J-0030-LINE (1) TO I-0030-LINE. DO0030
  MOVE  SPACES TO CD00-KEYCD           DO0030
  MOVE  "C" TO CD00-COCARA             DO0030
  MOVE  CA00-NUCOM TO CD00-NUCOM       DO0030
  MOVE  CD00-CLECD TO K-RCD10-CLECD (1). DO0030
F40R-FN.                                DO0030
  EXIT.                                DO0030
F40Z.                                  DO0030
  MOVE  CA00-CLEME TO ME00-CLEME       DO0030
  MOVE  ME00-CLEME TO K-ZME00-CLEME.   DO0030
F40Z-FN.                                DO0030
  EXIT.                                DO0030
F4010-FN.                               DO0030
  EXIT.                                DO0030
*      *****                       DO0030
*      *                               * DO0030
*      *   SET-UP KEYS FOR SCREEN PAGING * DO0030
*      *                               * DO0030
*      *****                       DO0030
F4020.                                DO0030
  IF      OPER NOT = "S"              DO0030
    GO TO F4020-FN.                   DO0030
  MOVE  K-RCD10-CLECD (2) TO K-RCD10-CLECD (1). DO0030
F4020-FN.                                DO0030
  EXIT.                                DO0030
*      *****                       DO0030
*      *                               * DO0030
*      *   END OF TRANSACTION           * DO0030
*      *                               * DO0030
*      *****                       DO0030
F4030.                                DO0030
  IF      OPER NOT = "E"              DO0030
    GO TO F4030-FN.                   DO0030
  MOVE  K-S0030-XTERM TO HE00-XTERM     DO0030
  PERFORM F80-HELP-D THRU F80-FN.       DO0030
  MOVE  SPACE TO NEXT-TPR               DO0030
  MOVE  1 TO 7-CD02-XNDEST              DO0030
  MOVE  K-S0030-XTERM TO 7-CD02-XTERM   DO0030
  MOVE  END-MESSAGE TO CMES-YR00.       DO0030
  MOVE  END-ATTR TO CMES-YO00.          DO0030
  MOVE  K-S0030-YMAT TO CMES-YMAT.      DO0030
  MOVE  7-YCREF TO CMES-YCRE.           DO0030
  CALL  PRCGI USING CMES-COMMUNICATION DO0030
  MOVE  CMES-IND1 TO 7-CD02-XLOMES      DO0030
  SEND  7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0 LINES. DO0030
F4030-A.                                DO0030
  EXIT PROGRAM.                         DO0030
F4030-FN.                                DO0030
  EXIT.                                DO0030
*      *****                       DO0030
*      *                               * DO0030
*      *   TRANSFER TO ANOTHER SCREEN   * DO0030
*      *                               * DO0030

```

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F40 : END-OF-RECEPTION PROCESSING

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```
*          *****  
F4040.  
  IF      OPER NOT = "O"  
    GO TO F4040-FN.  
  MOVE 5-0030-PROGE TO NEXT-TPR.  
F4040-A.  
  EXIT PROGRAM.  
F4040-FN.  
  EXIT.  
F40-FN.  
  EXIT.  
END-OF-RECEPTION.  
  EXIT.  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030
```

#### *4.10. F50 : DISPLAY PREPARATION*

##### F50: DISPLAY PREPARATION

The DISPLAY PREPARATION (F50) function contains the conditions for the set of procedures used in the 'DISPLAY' part of the program, F50 to F78-FN (END-OF-DISPLAY).

Sub-function F5010 is always generated. It ensures the initialization of work areas, and of the display screen description.

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F50 : DISPLAY PREPARATION

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```
*          *****  
*          *                               *  
*          *   DISPLAY PREPARATION       *  
*          *                               *  
*          *****  
F50.      DO0030  
          IF      OCF = "0"                DO0030  
            GO TO END-OF-DISPLAY.          DO0030  
F5010.    DO0030  
          MOVE ZERO TO CATX.                DO0030  
          MOVE ZERO TO CONFIGURATIONS.      DO0030  
          MOVE ALL "1" TO FIRST-ON-SEGMENT. DO0030  
          IF      SCR-ER > "1"              DO0030  
            MOVE LOW-VALUE TO 0030-MESSO.  DO0030  
          IF      SCR-ER > "1"              DO0030  
            GO TO F6999-ITER-FT.           DO0030  
          MOVE SPACE TO O-0030.             DO0030  
          PERFORM F8115 THRU F8115-FN.      DO0030  
          MOVE K-R0030-LINE (1) TO K-R0030-LINE (2). DO0030  
F5010-FN. DO0030  
          EXIT.                             DO0030  
F50-FN.   DO0030  
          EXIT.                             DO0030
```

#### *4.11. F55 : CATEGORY PROCESSING LOOP*

##### F55: CATEGORY PROCESSING LOOP

The CATEGORY PROCESSING LOOP (F55) function positions the category to be processed in 'DISPLAY' based on the CATX indicator, which can have the following values:

- . '0' Beginning of display.
- . ' ' Screen-top category.
- . 'R' Repetitive category.
- . 'Z' Screen-bottom category.

The procedures are generated based on the categories defined on the Call of Elements ('-CE') screen.

If no category is defined, the screen is considered a screen-top category.

For the repetitive category this function includes:

- . The interaction between the line of the category to be processed, and the output screen description field used to access each of the data elements of the line,
- . The initialization and incrementation of the ICATR indicator which manages the repetitive category.



#### 4.12. F60 : SEGMENT ACCESS FOR DISPLAY

##### F60: SEGMENT ACCESS FOR DISPLAY

The SEGMENT ACCESS FOR DISPLAY (F60) function is generated when there is a segment to be accessed for display.

Depending on which categories defined on the screen contain a segment to be accessed for display, the F60 function includes the following:

- . F60A for the screen-top category,
- . F60R for the repetitive category,
- . F60Z for the screen-bottom category.

To process each category, there is one sub-function per access to a segment, including:

- . Loading of the key from the 'K-cddss-KEY' field stored in function F40. For the first display (OCF = '1'), the user must ensure that the 'K-' field is loaded.
- . Access by a PERFORM to the appropriate F80 sub-function depending on the category:
  - Direct read (F80-ddss-R),
  - Sequential Read after positioning (repetitive) (F80-ddss-P and F80-ddss-RN) based on the use of the segment (indicated on the '-CS').
- . The positioning of the Segment 'ddss-CF' variable.
- . Error processing, if necessary.

If a segment has a preceding segment, its Read will always be a Direct Read, even in the Repetitive category.

NOTE: Sub-functions are numbered based on the number of segments, their positions on the '-CS' screen, etc. As a result, a direct reference should never be made to a generated label in the specific procedures.

Use the Relative Positioning types '\*A', '\*P' and '\*R' (see chapter "USE OF STRUCTURED CODE" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual.)





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F60 : SEGMENT ACCESS FOR DISPLAY

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GO TO F64DA-FN.	P000
ACCEPT DATOR FROM DATE	P040
MOVE DATOR TO DAT6 DAT8	P040
MOVE DAT63 TO DAT61	P040
MOVE DAT81 TO DAT63	P040
MOVE DATOR TO DAT6	P080
PERFORM F8120-I THRU F8120-Z	P080
MOVE DAT8C TO DAT8C.	P080
ACCEPT TIMCO FROM TIME	P120
MOVE TIMCOG TO TIMCOG	P160
MOVE TIMCOH TO TIMHOU	P160
MOVE TIMCOM TO TIMMIN	P160
MOVE TIMCOS TO TIMSEC	P160
MOVE ":" TO TIMS1 TIMS2	P160
MOVE TIMDAY TO TIMDAY.	P160
F64DA-FN.	P000
EXIT.	P000

#### *4.13. F65 : DATA ELEMENT TRANSFER TO DISPLAY*

##### F65: DATA ELEMENT TRANSFER

The DATA ELEMENT TRANSFER (F65) function ensures the transfer of the segment data elements to the corresponding data elements on the screen.

Depending on which categories defined on the screen contain at least one transfer of a data element for display, the F65 function includes:

- . F65A for the screen-top category,
- . F65R for the repetitive category,
- . F65Z for the screen-bottom category.

If the data element is filled from a segment, the transfer is conditioned by the segment configuration variable (ddss-CF=1).

Paragraph 'F6999-ITER-FI' contains the return to the beginning of the display iteration.



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 F65 : DATA ELEMENT TRANSFER TO DISPLAY

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MOVE CD10-INFOR TO O-0030-INFOR.	DO0030
F65R-A7-FN.	DO0030
EXIT.	DO0030
F65R-CD10-FN.	DO0030
EXIT.	DO0030
* +-----+ * LEVEL 10 I REMAINS TO BE DELIVERED I * +-----+	P000
F65BB.	P000
IF CD10-QTMAL NOT = ZERO	P100
COMPUTE WW10-QTMAR = CD10-QTMAL - CD10-QTMAL	P100
MOVE WW10-QTMAR TO O-0030-QTMAR.	P120
F65BB-FN.	P000
EXIT.	P000
F65R-FN.	DO0030
EXIT.	DO0030
F65Z.	DO0030
IF CATX NOT = "Z"	DO0030
GO TO F65Z-FN.	DO0030
F65Z-ME00.	DO0030
IF ME00-CF NOT = "1"	DO0030
GO TO F65Z-ME00-FN.	DO0030
MOVE ME00-MESSA TO O-0030-MESSA.	DO0030
F65Z-ME00-FN.	DO0030
EXIT.	DO0030
F65Z-FN.	DO0030
EXIT.	DO0030
F65-FN.	DO0030
EXIT.	DO0030
F6999-ITER-FI.	DO0030
GO TO F55.	DO0030
F6999-ITER-FT.	DO0030
EXIT.	DO0030
F6999-FN.	DO0030
EXIT.	DO0030

#### *4.14. F70 : ERROR PROCESSING*

##### F70: ERROR PROCESSING

The ERROR PROCESSING (F70) function is always generated.

Sub-function F7010 contains:

- . in F7010-A, testing of DE-ERR, positioning of the error attributes, access to the error message file, and coding of the error message on the screen.
- . in F7010-B, testing of T-XEMKY, access to the error message file, and coding of the error message on the screen.

Sub-function F7020 is generated if at least one variable field exists on the Screen Call of Elements (-CE).

This sub-function positions the attributes of the fields on the screen in display.

An 'invisible' field ('DARK' attribute) retains this attribute, even if it is erroneous (for ex., with passwords).

```
F70. DO0030
  EXIT. DO0030
*      ***** DO0030
*      * DO0030
*      * ERROR PROCESSING * DO0030
*      * * DO0030
*      ***** DO0030
F7010. DO0030
  MOVE ZERO TO K01 K02 K04 DO0030
  MOVE 1 TO K03. DO0030
  MOVE LIBRA TO EM00-LIBRA DO0030
  MOVE PROGR TO EM00-PROGR DO0030
  MOVE ZERO TO EM00-LINUM DO0030
  MOVE "H" TO EM00-ENTYP. DO0030
F7010-A. DO0030
  IF K02 = INR DO0030
  AND K03 < IRR DO0030
  MOVE INA TO K02 DO0030
  ADD 1 TO K03. DO0030
  ADD 1 TO K01 K02. DO0030
  IF DE-ER (K01) > "1" DO0030
  OR < "0" DO0030
  MOVE "Y" TO DE-AT (4, K01) DO0030
  MOVE "B" TO DE-AT (1, K01) DO0030
  MOVE "N" TO DE-AT (2, K01) DO0030
  MOVE "W" TO DE-AT (3, K01) DO0030
  IF K04 < IER DO0030
  MOVE DE-ER (K01) TO EM00-ERTYP DO0030
  MOVE K02 TO EM00-ERCOD9 DO0030
  MOVE EM00-XEMKY TO EM00-ERMSG DO0030
  PERFORM F80-EM00-R THRU F80-FN DO0030
  ADD 1 TO K04 DO0030
  MOVE EM00-ERMSG TO O-0030-ERMSG (K04). DO0030
  IF K01 < INT DO0030
  GO TO F7010-A. DO0030
  MOVE ZERO TO K50R. DO0030
F7010-B. DO0030
  ADD 1 TO K50R DO0030
  IF K50R > K50L DO0030
  OR K04 NOT < IER DO0030
  GO TO F7010-FN. DO0030
  MOVE T-XEMKY (K50R) TO EM00-XEMKY EM00-ERMSG DO0030
  PERFORM F80-EM00-R THRU F80-FN. DO0030
  ADD 1 TO K04 DO0030
  MOVE EM00-ERMSG TO O-0030-ERMSG (K04) DO0030
  GO TO F7010-B. DO0030
F7010-FN. DO0030
  EXIT. DO0030
*      ***** DO0030
*      * DO0030
*      * POSITIONING OF ATTRIBUTES * DO0030
*      * * DO0030
*      ***** DO0030
F7020. DO0030
  MOVE ZERO TO TALLY DO0030
  EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Y". DO0030
  IF TALLY NOT < 0046 DO0030
  MOVE ZERO TO TALLY DO0030
  EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Z". DO0030
  IF TALLY NOT < 0046 DO0030
  MOVE ZERO TO TALLY DO0030
  EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "X". DO0030
  IF TALLY NOT < 0046 DO0030
  MOVE ZERO TO TALLY. DO0030
  ADD 1 TO TALLY. DO0030
  MOVE SV-AT (TALLY) TO K01 DO0030
  MOVE AT-0030-YPCUR (K01) TO CMES-YPCUR. DO0030
  MOVE ZERO TO K01. DO0030
F7020-A. DO0030
  ADD 1 TO K01. DO0030
  IF K01 > INT DO0030
  GO TO F7020-FN. DO0030
  MOVE SV-AT (K01) TO K02. DO0030
  IF SV-ATTRI (K01) = "D" DO0030
  AND DE-AT (1, K01) NOT = "D" DO0030
  MOVE "D" TO DE-AT (1, K01). DO0030
  IF DE-AT (1, K01) NOT = SPACE DO0030
```

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F70 : ERROR PROCESSING

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MOVE DE-AT (1, K01) TO AT-0030-ATTRI (K02).	DO0030
IF DE-AT (2, K01) NOT = SPACE	DO0030
MOVE DE-AT (2, K01) TO AT-0030-ATTRP (K02).	DO0030
IF DE-AT (3, K01) NOT = SPACE	DO0030
MOVE DE-AT (3, K01) TO AT-0030-ATTRC (K02).	DO0030
GO TO F7020-A.	DO0030
F7020-FN.	DO0030
EXIT.	DO0030
F70-FN.	DO0030
EXIT.	DO0030
END-OF-DISPLAY.	DO0030
EXIT.	DO0030



#### *4.15. F8Z : DISPLAY AND END OF PROGRAM*

##### F8Z : DISPLAY AND END-OF-PROGRAM

The DISPLAY AND END-OF-PROGRAM (F8Z) function is always generated.

Sub-function F8Z05 is generated if a call for help documentation is entered on the Screen Definition screen. It ensures the memorization of screen fields in the 'HE' file.

Sub-function F8Z10 calls the PRCGI sub-program which formats the message, and transfers the screen through SENDs.

Sub-function F8Z20 contains the end-of-program operations.

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F8Z : DISPLAY AND END OF PROGRAM

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```
F8Z. DO0030
  EXIT. DO0030
F8Z05. DO0030
  IF SCR-ER = "1" DO0030
    NEXT SENTENCE DO0030
  ELSE DO0030
    GO TO F8Z05-FN. DO0030
  IF K-S0030-DOC NOT = "1" DO0030
    GO TO F8Z05-A. DO0030
  MOVE K-S0030-ERCOD9 TO K01 K02. DO0030
  IF K02 > INR DO0030
    COMPUTE K02 = K01 + (INR - INA) * (IRR - 1). DO0030
  IF K02 < 1 DO0030
    OR K02 > INT DO0030
    MOVE 1 TO K02. DO0030
  MOVE "X" TO DE-AT (4, K02) DO0030
  PERFORM F7020 THRU F7020-FN. DO0030
F8Z05-A. DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM. DO0030
  IF K-S0030-DOC = "1" DO0030
    PERFORM F80-HELP-R THRU F80-FN DO0030
    MOVE HE00-SCREEN TO O-0030 DO0030
    MOVE "0" TO K-S0030-DOC DO0030
    GO TO F8Z05-FN. DO0030
  IF K-S0030-DOC NOT = ZERO DO0030
    GO TO F8Z05-FN. DO0030
  PERFORM F80-HELP-R THRU F80-FN. DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM DO0030
  MOVE O-0030 TO HE00-SCREEN. DO0030
  IF IK = "1" DO0030
    PERFORM F80-HELP-W THRU F80-FN DO0030
  ELSE DO0030
    PERFORM F80-HELP-RW THRU F80-FN. DO0030
F8Z05-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * * DO0030
* * DISPLAY * DO0030
* * * DO0030
* ***** DO0030
F8Z10. DO0030
  IF SCR-ER NOT > "1" DO0030
    AND DE-AT (4, 010) = "X" DO0030
    PERFORM F7020 THRU F7020-FN. DO0030
  PERFORM F8145 THRU F8145-FN. DO0030
  MOVE 1 TO 7-CD02-XNDEST DO0030
  MOVE K-S0030-XTERM TO 7-CD02-XTERM. DO0030
  MOVE 7-YCREX TO CMES-YCRE. DO0030
  MOVE SPACE TO K-S0030-PPKEY. DO0030
  IF SCR-ER NOT > "1" DO0030
    MOVE PROGR TO K-S0030-PROGR DO0030
    MOVE 7-YCREE TO CMES-YCRE DO0030
    PERFORM F8105 THRU F8105-FN. DO0030
  MOVE 0030-MESSO TO CMES-YR00 DO0030
  MOVE AT-0030-MESSA TO CMES-YO00 DO0030
  MOVE K-S0030-YMAT TO CMES-YMAT DO0030
  CALL PRCGI USING CMES-COMMUNICATION. DO0030
  PERFORM F81SE THRU F81SE-FN. DO0030
F8Z10-G. DO0030
  EXIT. DO0030
F8Z10-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * * DO0030
* * END OF PROGRAM * DO0030
* * * DO0030
* ***** DO0030
F8Z20. DO0030
  MOVE PROGE TO NEXT-TPR. DO0030
F8Z20-A. DO0030
  EXIT PROGRAM. DO0030
F8Z20-FN. DO0030
  EXIT. DO0030
F8Z-FN. DO0030
  EXIT. DO0030
```

#### 4.16. F80 : PHYSICAL ACCESS TO SEGMENTS

##### F80: PHYSICAL SEGMENT ACCESS ROUTINES

The PHYSICAL SEGMENT ACCESS ROUTINES (F80) function, which is generated when at least one segment is called in the screen, includes physical access to the segments.

The coding for these access sub-functions is illustrated in the following example. (The segment code from the program in this example is CD10.)

```
F80-CD10-R   Direct read.
F80-CD10-RU  Direct read with update.
F80-CD10-P   Positioning of a sequential read.
F80-CD10-RN  Sequential read.
F80-CD10-W   Write.
F80-CD10-RW  Rewrite.
F80-CD10-D   Deletion.
F80-CD10-UN  Unlock of record.
```

If a call for HELP documentation has been entered on the Screen Definition screen, the physical access(es) to the back-up file is (are) generated. The coding of the access sub-functions is illustrated as follows:

```
F80-HELP-W   Write.
F80-HELP-RW  Rewrite.
F80-HELP-R   Direct read.
F80-HELP-D   Deletion.
```

If the access methods are user-programmed, refer to Chapter "USE OF STRUCTURED CODE" in the OLSD Reference Manual.

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F80 : PHYSICAL ACCESS TO SEGMENTS

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```
*          *****
*          *                                     *          DO0030
*          *   PHYSICAL SEGMENT ACCESS ROUTINES *          DO0030
*          *                                     *          DO0030
*          *****          DO0030
F80.          DO0030
  EXIT.          DO0030
F80-CD05-R.          DO0030
  READ CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD05-RU.          DO0030
  READ CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD05-RW.          DO0030
  REWRITE CD05 INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD05-UN.          DO0030
  GO TO F80-OK.          DO0030
F8001-FN.          DO0030
  EXIT.          DO0030
F80-CD10-R.          DO0030
  READ CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-RU.          DO0030
  READ CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-P.          DO0030
  START CD-FILE KEY NOT < CD00-CLECD INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
F80-CD10-RN.          DO0030
  READ CD-FILE          DO0030
  NEXT AT END          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-W.          DO0030
  WRITE CD10 INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-RW.          DO0030
  REWRITE CD10 INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-D.          DO0030
  DELETE CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD10-UN.          DO0030
  GO TO F80-OK.          DO0030
F8002-FN.          DO0030
  EXIT.          DO0030
F80-CD20-RU.          DO0030
  READ CD-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD20-W.          DO0030
  WRITE CD20 INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD20-RW.          DO0030
  REWRITE CD20 INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-CD20-UN.          DO0030
  GO TO F80-OK.          DO0030
F8003-FN.          DO0030
  EXIT.          DO0030
F80-FO10-RU.          DO0030
  READ FO-FILE INVALID KEY          DO0030
  GO TO F80-KO.          DO0030
  GO TO F80-OK.          DO0030
F80-FO10-RW.          DO0030
  REWRITE FO10 INVALID KEY          DO0030
```

GENERATED PROGRAM: PROCEDURE DIVISION  
F80 : PHYSICAL ACCESS TO SEGMENTS

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GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-F010-UN.	DO0030
GO TO F80-OK.	DO0030
F8004-FN.	DO0030
EXIT.	DO0030
F80-ME00-R.	DO0030
READ ME-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-ME00-RU.	DO0030
READ ME-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8005-FN.	DO0030
EXIT.	DO0030
F80-HELP-R.	DO0030
READ HE-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-W.	DO0030
WRITE HE00 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-RW.	DO0030
REWRITE HE00 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-D.	DO0030
DELETE HE-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8095-FN.	DO0030
EXIT.	DO0030
F80-EM00-R.	DO0030
READ EM-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8098-FN.	DO0030
EXIT.	DO0030
F80-OK.	DO0030
MOVE "0" TO IK	DO0030
MOVE PROGR TO XPROGR	DO0030
GO TO F80-FN.	DO0030
F80-KO.	DO0030
MOVE "1" TO IK	DO0030
MOVE PROGR TO XPROGR.	DO0030
F8099-FN.	DO0030
EXIT.	DO0030
F80-FN.	DO0030
EXIT.	DO0030

#### *4.17. F81 : PERFORMED VALIDATION FUNCTIONS*

##### F81 : PERFORMED VALIDATIONS FUNCTIONS

The PERFORMED VALIDATIONS FUNCTIONS (F81) are always generated.

F81ER contains the abnormal end routine.

F81ES is called by a 'PERFORM' in order to check the return code after each 'SEND' or 'RECEIVE'.

F81RE is called by a PERFORM at the beginning of the program. It ensures the reception of the message.

F81SE is called by 'PERFORM' in the Screen Display procedure: it sends the message if no error was found.

F81UT stores the user's errors.

F8105 sends fixed labels for display; it is conditioned by the value of the CMES-YCRE field: F8105 is not executed when CMES-YCRE is set to 'G' through user written procedural code ('-P').

F8110 is generated when there is a numeric field on the screen. It contains the procedures which format the field to be validated in the work area, the numeric class validation, and the positioning of error messages, if required.

F8115 ensures the initialization of the output variable fields. It is performed in Function F0510 if the ICF indicator is equal to '0'.

F8120 is generated if at least one variable data element ('V') has a date format, or if an 'AD'-type operator is specified on the Procedural Code (-P) lines of the program (in this case, the F8120-ER and F8120-KO functions are not generated).

It also contains date formatting and validations.

F8125 is generated if the DYNPRT option is selected.

Allows the backup of the screen variable fields.

F8130 is generated if a call for HELP documentation is entered on the Screen Definition screen. It prepares the field to be saved in the backup file.

F8135 is generated if the DYNPRT option is selected.

Allows the loading of the message received with the protected field which have been backed up before the sending out of the message.

F8145 transfers the message which has been formatted in the work areas (OUTPUT-SCREEN-FIELDS) to the fields used for display.

F8150 checks the first character of each input field to detect either of the two documentation Help characters (screen-level or field-level documentation).

F8155 transfers the message received into the work areas (INPUT-SCREEN-FIELDS).

```
F81. DO0030
  EXIT. DO0030
* ***** DO0030
* * DO0030
* * ABNORMAL END PROCEDURE * DO0030
* * * DO0030
* ***** DO0030
F81ER. DO0030
  CALL "ABORT". DO0030
F81ER-FN. DO0030
  EXIT. DO0030
F81ES. DO0030
  IF 7-CD01-XMSTA NOT = ZERO DO0030
    OR 7-CD02-XMSTA NOT = ZERO DO0030
    CALL "ABORT". DO0030
F81ES-FN. DO0030
  EXIT. DO0030
F81RE. DO0030
  MOVE SPACE TO CMES-YR00 DO0030
  RECEIVE 7-CD01 MESSAGE INTO CMES-YR00 NO DATA DO0030
  MOVE SPACE TO 0030-MESSI DO0030
  MOVE 7-CD01-XTERM TO K-S0030-XTERM DO0030
  MOVE ZERO TO ICF. DO0030
F81RE-FN. DO0030
  EXIT. DO0030
F81SE. DO0030
  MOVE CMES-IND1 TO 7-CD02-XLOMES DO0030
  SEND 7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0 LINES DO0030
  PERFORM F81ES THRU F81ES-FN. DO0030
F81SE-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * * DO0030
* * MEMORIZATION OF USER'S ERRORS * DO0030
* * * DO0030
* ***** DO0030
F81UT. DO0030
  IF K50L < K50M DO0030
    ADD 1 TO K50L DO0030
    MOVE XEMKY TO T-XEMKY (K50L). DO0030
    MOVE "E" TO CAT-ER. DO0030
F81UT-FN. DO0030
  EXIT. DO0030
F8105. DO0030
  IF CMES-YCRE = "G" DO0030
    GO TO F8105-FN. DO0030
  MOVE "-" TO S01013. DO0030
  MOVE "*** ORDER INPUT SCREEN *** " TO S01025. DO0030
  MOVE "ORDER NUMBER:" TO S03004. DO0030
  MOVE "SYSTEM:" TO S03026. DO0030
  MOVE "RELEASE:" TO S03054. DO0030
  MOVE "CUST." TO S04004. DO0030
  MOVE "CUST. REF.:" TO S06004. DO0030
  MOVE "ORDER DATE:" TO S06049. DO0030
  MOVE "COORDINATOR:" TO S07005. DO0030
  MOVE "DISCOUNT RATE:" TO S07046. DO0030
  MOVE "A" TO S09003. DO0030
  MOVE "ITEM " TO S09007. DO0030
  MOVE "ORDERED " TO S09016. DO0030
  MOVE "DELIV. " TO S09026. DO0030
  MOVE "OUTST." TO S09035. DO0030
  MOVE "REMARKS " TO S09042. DO0030
  MOVE "PRINTING OF FORM :" TO S20002. DO0030
  MOVE "CHOICE:" TO S20025. DO0030
  MOVE "UPD : '7'," TO S20035. DO0030
  MOVE "ORDERS (NEXT) : '8'," TO S20046. DO0030
  MOVE "MENU : '1', CUSTOMER LIST :" TO S21002. DO0030
  MOVE "'2', CUST. HIST : '3'," TO S21030. DO0030
  MOVE "ORDER LIST : '4'," TO S21053. DO0030
  MOVE "SCREEN DOC : '='," TO S22002. DO0030
  MOVE "DATA EL. DOC : '$'" TO S22020. DO0030
F8105-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * * DO0030
* * NUMERIC VALIDATION * DO0030
* * * DO0030
```



GENERATED PROGRAM: PROCEDURE DIVISION  
F81 : PERFORMED VALIDATION FUNCTIONS

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```
*          *****
F8110.                                          DO0030
MOVE ZERO TO TPOINT K01 K02 K03 ZONUM3 ZONUM2 C9 C91. DO0030
F8110-1.                                       DO0030
IF      K01 > 26                               DO0030
  OR    K02 > 17                               DO0030
  GO TO F8110-5.                              DO0030
ADD 1 TO K01.                                  DO0030
IF      C1 (K01) = SPACE                       DO0030
  OR    C1 (K01) = "."                         DO0030
  GO TO F8110-1.                              DO0030
IF      C1 (K01) NOT = "-"                     DO0030
  AND  C1 (K01) NOT = "+"                     DO0030
  GO TO F8110-2.                              DO0030
IF      C9 NOT = ZERO                          DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
IF      K02 = ZERO                             DO0030
  MOVE "1" TO C91.                             DO0030
IF      C1 (K01) = "+"                         DO0030
  MOVE 1 TO C9                                  DO0030
  GO TO F8110-1.                              DO0030
IF      SIGNE = " "                           DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
MOVE -1 TO C9                                  DO0030
GO TO F8110-1.                              DO0030
F8110-2.                                       DO0030
IF      C1 (K01) NOT = ", "                   DO0030
  GO TO F8110-4.                              DO0030
IF      TPOINT = "1"                          DO0030
  OR    NBCHP = 0                              DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
F8110-3.                                       DO0030
IF      K02 > NBCHA                            DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
COMPUTE K04 = 18 - NBCHA + K02                 DO0030
MOVE 1 TO C3 (K04)                             DO0030
DIVIDE ZONUM4 INTO ZONUM9                     DO0030
MOVE NBCHA TO K02                             DO0030
MOVE "1" TO TPOINT                            DO0030
GO TO F8110-1.                              DO0030
F8110-4.                                       DO0030
IF      C1 (K01) NOT NUMERIC                   DO0030
  MOVE "4" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
IF      C9 NOT = ZERO                          DO0030
  AND  C91 = ZERO                              DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
IF      C1 (K01) = "0"                         DO0030
  AND  K02 = ZERO                              DO0030
  AND  TPOINT = "0"                           DO0030
  GO TO F8110-1.                              DO0030
ADD 1 TO K02                                  DO0030
MOVE C1 (K01) TO C2 (K02).                     DO0030
IF      TPOINT = "1"                           DO0030
  ADD 1 TO K03.                                DO0030
IF      K03 > NBCHP                             DO0030
  MOVE "5" TO DEL-ER                           DO0030
  GO TO F8110-FN.                              DO0030
GO TO F8110-1.                              DO0030
F8110-5.                                       DO0030
IF      TPOINT = "0"                           DO0030
  AND  K02 > ZERO                              DO0030
  GO TO F8110-3.                              DO0030
IF      SIGNE NOT = "+"                       DO0030
  GO TO F8110-FN.                              DO0030
IF      C9 = ZERO                              DO0030
  MOVE 1 TO C9.                                DO0030
ADD NBCHA NBCHP GIVING K01                     DO0030
MULTIPLY C9 BY C29 (K01).                      DO0030
IF      C29 (K01) = ZERO                       DO0030
  AND  C9 = -1                                 DO0030
  MOVE C4 TO C2 (K01).                         DO0030
```

GENERATED PROGRAM: PROCEDURE DIVISION  
F81 : PERFORMED VALIDATION FUNCTIONS

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```
F8110-FN.                                DO0030
EXIT.                                    DO0030
F8115.                                    DO0030
MOVE ALL "-" TO O-0030-CHOIX.            DO0030
MOVE ALL "-" TO O-0030-MATE.            DO0030
MOVE ALL "-" TO O-0030-RELEA.          DO0030
MOVE ALL "-" TO O-0030-RUE.            DO0030
MOVE ALL "-" TO O-0030-COPOS.          DO0030
MOVE ALL "-" TO O-0030-REFCLI.         DO0030
MOVE ". . . ." TO O-0030-DATE.         DO0030
MOVE ALL "-" TO O-0030-CORRES.         DO0030
MOVE ALL "-" TO F-0030-REMIS.          DO0030
MOVE ZERO TO ICATR.                    DO0030
F8115-GRP.                               DO0030
ADD 1 TO ICATR                          DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE DO0030
MOVE ALL "-" TO O-0030-CODMVT.         DO0030
MOVE ALL "-" TO O-0030-FOURNI.        DO0030
MOVE ALL "-" TO F-0030-QTMAC.         DO0030
MOVE ALL "-" TO O-0030-INFOR.         DO0030
MOVE O-0030-LINE TO P-0030-LINE (ICATR). DO0030
IF ICATR < IRR                         DO0030
GO TO F8115-GRP.                       DO0030
MOVE ALL "-" TO O-0030-EDIT.          DO0030
F8115-FN.                                DO0030
EXIT.                                    DO0030
*          *****                      DO0030
*          *                               DO0030
*          * VALIDATION AND SETTING OF DATE * DO0030
*          *                               DO0030
*          *****                      DO0030
F8120.                                    DO0030
EXIT.                                    DO0030
F8120-C.                                  DO0030
MOVE DAT73C TO DATCTY.                 DO0030
MOVE DAT71C TO DAT71.                  DO0030
MOVE DAT72C TO DAT72.                  DO0030
MOVE DAT74C TO DAT73.                  DO0030
MOVE "00111" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
F8120-D.                                  DO0030
MOVE CENTUR TO DATCTY DAT73C.          DO0030
MOVE DAT71 TO DAT71C.                  DO0030
MOVE DAT72 TO DAT72C.                  DO0030
MOVE DAT73 TO DAT74C.                  DO0030
MOVE "00111" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
F8120-E.                                  DO0030
MOVE CENTUR TO DATCTY DAT83C.          DO0030
MOVE DAT81 TO DAT81C.                  DO0030
MOVE DAT82 TO DAT82C.                  DO0030
MOVE DAT83 TO DAT84C.                  DO0030
MOVE DATSEP TO DAT8S1C DAT8S2C.       DO0030
MOVE "01011" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
F8120-G.                                  DO0030
MOVE DAT81G TO DATCTY.                 DO0030
MOVE DAT82G TO DAT61.                  DO0030
MOVE DAT83G TO DAT62.                  DO0030
MOVE DAT84G TO DAT63.                  DO0030
MOVE "10110" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
F8120-I.                                  DO0030
MOVE CENTUR TO DATCTY DAT61C.          DO0030
MOVE DAT61 TO DAT62C.                  DO0030
MOVE DAT62 TO DAT63C.                  DO0030
MOVE DAT63 TO DAT64C.                  DO0030
MOVE "10101" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
F8120-M.                                  DO0030
MOVE DAT83C TO DATCTY.                 DO0030
MOVE DAT81C TO DAT81.                  DO0030
MOVE DAT82C TO DAT82.                  DO0030
MOVE DAT84C TO DAT83.                  DO0030
MOVE DATSEP TO DAT8S1 DAT8S2.         DO0030
MOVE "01011" TO TT-DAT                 DO0030
GO TO F8120-T.                         DO0030
```

GENERATED PROGRAM: PROCEDURE DIVISION  
 F81 : PERFORMED VALIDATION FUNCTIONS

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```

F8120-S.                                DO0030
  MOVE DAT61C TO DATCTY.                 DO0030
  MOVE DAT62C TO DAT61.                   DO0030
  MOVE DAT63C TO DAT62.                   DO0030
  MOVE DAT64C TO DAT63.                   DO0030
  MOVE "10101" TO TT-DAT.                 DO0030
F8120-T.                                DO0030
  IF      T-DAT (1) = "1"                 DO0030
    MOVE DAT61 TO DAT73 DAT74C           DO0030
    MOVE DAT62 TO DAT72 DAT72C           DO0030
    MOVE DAT63 TO DAT71 DAT71C           DO0030
    MOVE DATCTY TO DAT73C.               DO0030
  IF      T-DAT (2) = "1"                 DO0030
    MOVE DAT81 TO DAT71 DAT71C           DO0030
    MOVE DAT82 TO DAT72 DAT72C           DO0030
    MOVE DAT83 TO DAT73 DAT74C           DO0030
    MOVE DATCTY TO DAT73C.               DO0030
  IF      T-DAT (3) = "1"                 DO0030
    MOVE DAT71 TO DAT81 DAT81C           DO0030
    MOVE DAT72 TO DAT82 DAT82C           DO0030
    MOVE DAT73 TO DAT83 DAT84C           DO0030
    MOVE DATSEP TO DAT8S1 DAT8S2 DAT8S1C DAT8S2C DO0030
    MOVE DATCTY TO DAT83C.               DO0030
  IF      T-DAT (4) = "1"                 DO0030
    MOVE DAT71 TO DAT63 DAT64C           DO0030
    MOVE DAT72 TO DAT62 DAT63C           DO0030
    MOVE DAT73 TO DAT61 DAT62C           DO0030
    MOVE DATCTY TO DAT61C.               DO0030
  IF      T-DAT (5) = "1"                 DO0030
    MOVE DAT61 TO DAT82G                   DO0030
    MOVE DAT62 TO DAT83G                   DO0030
    MOVE DAT63 TO DAT84G                   DO0030
    MOVE DATSET TO DAT8S1G DAT8S2G        DO0030
    MOVE DATCTY TO DAT81G.                 DO0030
F8120-Z.                                DO0030
  EXIT.                                    DO0030
F8120-ER.                                DO0030
  MOVE "1" TO DEL-ER.                     DO0030
  IF      DAT6 NOT NUMERIC                 DO0030
    GO TO F8120-KO.                       DO0030
  IF      DATCTY NOT NUMERIC              DO0030
    GO TO F8120-KO.                       DO0030
  IF      DAT62 > "12"                     DO0030
    OR     DAT62 = "00"                     DO0030
    OR     DAT63 > "31"                     DO0030
    OR     DAT63 = "00"                     DO0030
    GO TO F8120-KO.                       DO0030
  IF      DAT63 > "30"                     DO0030
    AND   (DAT62 = "04"                     DO0030
    OR     DAT62 = "06"                     DO0030
    OR     DAT62 = "09"                     DO0030
    OR     DAT62 = "11") GO TO F8120-KO.   DO0030
  IF      DAT62 NOT = "02"                 DO0030
    GO TO F8120-FN.                       DO0030
  IF      DAT63 > "29"                     DO0030
    GO TO F8120-KO.                       DO0030
  IF      DAT619 = ZERO                     DO0030
    DIVIDE DATCTY9 BY 4 GIVING LEAP-REM    DO0030
    COMPUTE LEAP-REM = DATCTY9 - 4 * LEAP-REM DO0030
  ELSE                                       DO0030
    DIVIDE DAT619 BY 4 GIVING LEAP-REM    DO0030
    COMPUTE LEAP-REM = DAT619 - 4 * LEAP-REM. DO0030
  IF      DAT63 < "29"                     DO0030
    OR     LEAP-REM = ZERO                 DO0030
    GO TO F8120-FN.                       DO0030
F8120-KO.                                DO0030
  MOVE "5" TO DEL-ER.                     DO0030
F8120-FN.                                DO0030
  EXIT.                                    DO0030
*      *****                          DO0030
*      *                                  * DO0030
*      *      HELP SUB-FUNCTION          * DO0030
*      *                                  * DO0030
*      *****                          DO0030
F8130.                                    DO0030
  IF      I-0030-CHOIX NOT = HIGH-VALUE   DO0030
    MOVE I-0030-CHOIX TO O-0030-CHOIX.   DO0030

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## GENERATED PROGRAM: PROCEDURE DIVISION

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## F81 : PERFORMED VALIDATION FUNCTIONS

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IF      I-0030-MATE NOT = HIGH-VALUE          DO0030
MOVE I-0030-MATE TO O-0030-MATE.             DO0030
IF      I-0030-RELEA NOT = HIGH-VALUE         DO0030
MOVE I-0030-RELEA TO O-0030-RELEA.          DO0030
IF      I-0030-RUE NOT = HIGH-VALUE           DO0030
MOVE I-0030-RUE TO O-0030-RUE.               DO0030
IF      I-0030-COPOS NOT = HIGH-VALUE         DO0030
MOVE I-0030-COPOS TO O-0030-COPOS.           DO0030
IF      I-0030-REFCLI NOT = HIGH-VALUE        DO0030
MOVE I-0030-REFCLI TO O-0030-REFCLI.         DO0030
IF      I-0030-DATE NOT = HIGH-VALUE          DO0030
MOVE I-0030-DATE TO O-0030-DATE.             DO0030
IF      I-0030-CORRES NOT = HIGH-VALUE        DO0030
MOVE I-0030-CORRES TO O-0030-CORRES.         DO0030
IF      E-0030-REMIS NOT = HIGH-VALUE         DO0030
MOVE E-0030-REMIS TO F-0030-REMIS.           DO0030
MOVE ZERO TO ICATR.                           DO0030
F8130-GRP.                                     DO0030
ADD 1 TO ICATR                                 DO0030
MOVE J-0030-LINE (ICATR) TO I-0030-LINE       DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE       DO0030
IF      I-0030-CODMVT NOT = HIGH-VALUE        DO0030
MOVE I-0030-CODMVT TO O-0030-CODMVT.         DO0030
IF      I-0030-FOURNI NOT = HIGH-VALUE        DO0030
MOVE I-0030-FOURNI TO O-0030-FOURNI.         DO0030
IF      E-0030-QTMAC NOT = HIGH-VALUE         DO0030
MOVE E-0030-QTMAC TO F-0030-QTMAC.           DO0030
IF      I-0030-INFOR NOT = HIGH-VALUE         DO0030
MOVE I-0030-INFOR TO O-0030-INFOR.           DO0030
MOVE O-0030-LINE TO P-0030-LINE (ICATR).      DO0030
IF      ICATR < IRR                           DO0030
GO TO F8130-GRP.                              DO0030
IF      I-0030-EDIT NOT = HIGH-VALUE          DO0030
MOVE I-0030-EDIT TO O-0030-EDIT.             DO0030
F8130-FN.                                     DO0030
EXIT.                                          DO0030
F8145.                                        DO0030
MOVE T01004 TO S01004.                        DO0030
MOVE T01015 TO S01015.                        DO0030
MOVE T01060 TO S01060.                        DO0030
MOVE T01071 TO S01071.                        DO0030
MOVE T03018 TO S03018.                        DO0030
MOVE T03034 TO S03034.                        DO0030
MOVE T03063 TO S03063.                        DO0030
MOVE T04013 TO S04013.                        DO0030
MOVE T05009 TO S05009.                        DO0030
MOVE T05052 TO S05052.                        DO0030
MOVE T05074 TO S05074.                        DO0030
MOVE T06016 TO S06016.                        DO0030
MOVE T06061 TO S06061.                        DO0030
MOVE T07018 TO S07018.                        DO0030
MOVE T07061 TO S07061.                        DO0030
MOVE T10003 TO S10003.                        DO0030
MOVE T10007 TO S10007.                        DO0030
MOVE T10016 TO S10016.                        DO0030
MOVE T10026 TO S10026.                        DO0030
MOVE T10035 TO S10035.                        DO0030
MOVE T10042 TO S10042.                        DO0030
MOVE T11003 TO S11003.                        DO0030
MOVE T11007 TO S11007.                        DO0030
MOVE T11016 TO S11016.                        DO0030
MOVE T11026 TO S11026.                        DO0030
MOVE T11035 TO S11035.                        DO0030
MOVE T11042 TO S11042.                        DO0030
MOVE T12003 TO S12003.                        DO0030
MOVE T12007 TO S12007.                        DO0030
MOVE T12016 TO S12016.                        DO0030
MOVE T12026 TO S12026.                        DO0030
MOVE T12035 TO S12035.                        DO0030
MOVE T12042 TO S12042.                        DO0030
MOVE T13003 TO S13003.                        DO0030
MOVE T13007 TO S13007.                        DO0030
MOVE T13016 TO S13016.                        DO0030
MOVE T13026 TO S13026.                        DO0030
MOVE T13035 TO S13035.                        DO0030
MOVE T13042 TO S13042.                        DO0030
MOVE T14003 TO S14003.                        DO0030

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GENERATED PROGRAM: PROCEDURE DIVISION  
 F81 : PERFORMED VALIDATION FUNCTIONS

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MOVE T14007 TO S14007.	DO0030
MOVE T14016 TO S14016.	DO0030
MOVE T14026 TO S14026.	DO0030
MOVE T14035 TO S14035.	DO0030
MOVE T14042 TO S14042.	DO0030
MOVE T15003 TO S15003.	DO0030
MOVE T15007 TO S15007.	DO0030
MOVE T15016 TO S15016.	DO0030
MOVE T15026 TO S15026.	DO0030
MOVE T15035 TO S15035.	DO0030
MOVE T15042 TO S15042.	DO0030
MOVE T16003 TO S16003.	DO0030
MOVE T16007 TO S16007.	DO0030
MOVE T16016 TO S16016.	DO0030
MOVE T16026 TO S16026.	DO0030
MOVE T16035 TO S16035.	DO0030
MOVE T16042 TO S16042.	DO0030
MOVE T17003 TO S17003.	DO0030
MOVE T17007 TO S17007.	DO0030
MOVE T17016 TO S17016.	DO0030
MOVE T17026 TO S17026.	DO0030
MOVE T17035 TO S17035.	DO0030
MOVE T17042 TO S17042.	DO0030
MOVE T18003 TO S18003.	DO0030
MOVE T18007 TO S18007.	DO0030
MOVE T18016 TO S18016.	DO0030
MOVE T18026 TO S18026.	DO0030
MOVE T18035 TO S18035.	DO0030
MOVE T18042 TO S18042.	DO0030
MOVE T20022 TO S20022.	DO0030
MOVE T20033 TO S20033.	DO0030
MOVE T23002 TO S23002.	DO0030
MOVE T24002 TO S24002.	DO0030
F8145-FN.	DO0030
EXIT.	DO0030
*	*****
*	*
*	* SEARCH FOR DOCUMENTATION REQUEST *
*	*
*	*****
F8150.	DO0030
MOVE ZERO TO K-S0030-ERCOD.	DO0030
IF I-0030-CHOIX = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-CHOIX	DO0030
MOVE 001 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-CHOIX = "="	DO0030
MOVE HIGH-VALUE TO I-0030-CHOIX	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-MATE = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-MATE	DO0030
MOVE 002 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-MATE = "="	DO0030
MOVE HIGH-VALUE TO I-0030-MATE	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-RELEA = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-RELEA	DO0030
MOVE 003 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-RELEA = "="	DO0030
MOVE HIGH-VALUE TO I-0030-RELEA	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-RUE = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-RUE	DO0030
MOVE 004 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-RUE = "="	DO0030
MOVE HIGH-VALUE TO I-0030-RUE	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-COPOS = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-COPOS	DO0030
MOVE 005 TO K-S0030-ERCOD	DO0030

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GO TO F8150-FN.	DO0030
IF I-0030-COPOS = "="	DO0030
MOVE HIGH-VALUE TO I-0030-COPOS	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-REFCLI = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-REFCLI	DO0030
MOVE 006 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-REFCLI = "="	DO0030
MOVE HIGH-VALUE TO I-0030-REFCLI	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-DATE = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-DATE	DO0030
MOVE 007 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-DATE = "="	DO0030
MOVE HIGH-VALUE TO I-0030-DATE	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-CORRES = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-CORRES	DO0030
MOVE 008 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-CORRES = "="	DO0030
MOVE HIGH-VALUE TO I-0030-CORRES	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF E-0030-REMIS = "\$"	DO0030
MOVE HIGH-VALUE TO E-0030-REMIS	DO0030
MOVE 009 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF E-0030-REMIS = "="	DO0030
MOVE HIGH-VALUE TO E-0030-REMIS	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
MOVE ZERO TO ICATR.	DO0030
F8150-GRP.	DO0030
ADD 1 TO ICATR	DO0030
MOVE J-0030-LINE (ICATR) TO I-0030-LINE	DO0030
IF I-0030-CODMVT = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-CODMVT	DO0030
MOVE 010 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-CODMVT = "="	DO0030
MOVE HIGH-VALUE TO I-0030-CODMVT	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-FOURNI = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-FOURNI	DO0030
MOVE 011 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-FOURNI = "="	DO0030
MOVE HIGH-VALUE TO I-0030-FOURNI	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF E-0030-QTMAC = "\$"	DO0030
MOVE HIGH-VALUE TO E-0030-QTMAC	DO0030
MOVE 012 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF E-0030-QTMAC = "="	DO0030
MOVE HIGH-VALUE TO E-0030-QTMAC	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-INFOR = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-INFOR	DO0030
MOVE 013 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-INFOR = "="	DO0030
MOVE HIGH-VALUE TO I-0030-INFOR	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).	DO0030
IF ICATR < IRR	DO0030
GO TO F8150-GRP.	DO0030
IF I-0030-EDIT = "\$"	DO0030

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MOVE HIGH-VALUE TO I-0030-EDIT	DO0030
MOVE 014 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-EDIT = "="	DO0030
MOVE HIGH-VALUE TO I-0030-EDIT	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
GO TO F8150-B.	DO0030
F8150-A.	DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).	DO0030
F8150-B.	DO0030
EXIT.	DO0030
F8150-FN.	DO0030
EXIT.	DO0030
F8155.	DO0030
MOVE S03034 TO R03034.	DO0030
MOVE S03063 TO R03063.	DO0030
MOVE S05009 TO R05009.	DO0030
MOVE S05052 TO R05052.	DO0030
MOVE S05074 TO R05074.	DO0030
MOVE S06016 TO R06016.	DO0030
MOVE S06061 TO R06061.	DO0030
MOVE S07018 TO R07018.	DO0030
MOVE S07061 TO R07061.	DO0030
MOVE S10003 TO R10003.	DO0030
MOVE S10007 TO R10007.	DO0030
MOVE S10016 TO R10016.	DO0030
MOVE S10026 TO R10026.	DO0030
MOVE S10035 TO R10035.	DO0030
MOVE S10042 TO R10042.	DO0030
MOVE S11003 TO R11003.	DO0030
MOVE S11007 TO R11007.	DO0030
MOVE S11016 TO R11016.	DO0030
MOVE S11026 TO R11026.	DO0030
MOVE S11035 TO R11035.	DO0030
MOVE S11042 TO R11042.	DO0030
MOVE S12003 TO R12003.	DO0030
MOVE S12007 TO R12007.	DO0030
MOVE S12016 TO R12016.	DO0030
MOVE S12026 TO R12026.	DO0030
MOVE S12035 TO R12035.	DO0030
MOVE S12042 TO R12042.	DO0030
MOVE S13003 TO R13003.	DO0030
MOVE S13007 TO R13007.	DO0030
MOVE S13016 TO R13016.	DO0030
MOVE S13026 TO R13026.	DO0030
MOVE S13035 TO R13035.	DO0030
MOVE S13042 TO R13042.	DO0030
MOVE S14003 TO R14003.	DO0030
MOVE S14007 TO R14007.	DO0030
MOVE S14016 TO R14016.	DO0030
MOVE S14026 TO R14026.	DO0030
MOVE S14035 TO R14035.	DO0030
MOVE S14042 TO R14042.	DO0030
MOVE S15003 TO R15003.	DO0030
MOVE S15007 TO R15007.	DO0030
MOVE S15016 TO R15016.	DO0030
MOVE S15026 TO R15026.	DO0030
MOVE S15035 TO R15035.	DO0030
MOVE S15042 TO R15042.	DO0030
MOVE S16003 TO R16003.	DO0030
MOVE S16007 TO R16007.	DO0030
MOVE S16016 TO R16016.	DO0030
MOVE S16026 TO R16026.	DO0030
MOVE S16035 TO R16035.	DO0030
MOVE S16042 TO R16042.	DO0030
MOVE S17003 TO R17003.	DO0030
MOVE S17007 TO R17007.	DO0030
MOVE S17016 TO R17016.	DO0030
MOVE S17026 TO R17026.	DO0030
MOVE S17035 TO R17035.	DO0030
MOVE S17042 TO R17042.	DO0030
MOVE S18003 TO R18003.	DO0030
MOVE S18007 TO R18007.	DO0030
MOVE S18016 TO R18016.	DO0030
MOVE S18026 TO R18026.	DO0030
MOVE S18035 TO R18035.	DO0030

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MOVE S18042 TO R18042.  
MOVE S20022 TO R20022.  
MOVE S20033 TO R20033.  
F8155-FN.  
EXIT.  
F81-FN.  
EXIT.

DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030



#### 4.18. CALLED USER FUNCTIONS

```
*          +-----+
* LEVEL 10  I ZIP CODE VALIDATION          I
*          +-----+
F93CP.
  MOVE 1 TO IWP20R.
F93CP-100.
  IF      IWP20R NOT > IWP20L
    AND WP20-COPOS (IWP20R) NOT = WP30-COPOS
    ADD 1 TO IWP20R
    GO TO F93CP-100.
  IF      IWP20R > IWP20L
    MOVE "5" TO DEL-ER
    GO TO F93CP-FN.
F93CP-FN.
  EXIT.
```

## **5. QUESTAR-TERMINAL TYPE PROGRAM**

## *5.1. INTRODUCTION*

### INTRODUCTION

This chapter presents a program generated with the QUESTAR variant.

The differences which might be found in comparison with the VIP-type program are:

\* In the validation areas:

The table of variable field attributes in the ERROR-MESS level,

\* In F7020 function:

The positioning of attributes for erroneous fields.

## 5.2. GENERATED PROGRAM

```
IDENTIFICATION DIVISION.  
PROGRAM-ID. DO0030P. DO0030  
AUTHOR. *** ORDER INPUT SCREEN ***. DO0030  
DATE-COMPILED. 07/28/94. DO0030  
ENVIRONMENT DIVISION. DO0030  
CONFIGURATION SECTION. DO0030  
SOURCE-COMPUTER. LEVEL-64. DO0030  
OBJECT-COMPUTER. LEVEL-64. DO0030  
SPECIAL-NAMES. DO0030  
    DECIMAL-POINT IS COMMA. DO0030  
    OBJECT IS COMMA. DO0030  
INPUT-OUTPUT SECTION. DO0030  
FILE-CONTROL. DO0030  
    COPY SELECT-CD-FILE. DO0030  
    COPY SELECT-EM-FILE. DO0030  
    COPY SELECT-FO-FILE. DO0030  
    COPY SELECT-HE-FILE. DO0030  
    COPY SELECT-ME-FILE. DO0030  
DATA DIVISION. DO0030  
FILE SECTION. DO0030  
FD CD-FILE DO0030  
    BLOCK 00001 RECORDS DO0030  
    DATA RECORD DO0030  
        CD00 DO0030  
        CD05 DO0030  
        CD10 DO0030  
        CD20 DO0030  
    LABEL RECORD STANDARD. DO0030  
01 CD00. DO0030  
    10 CD00-KEYCD. DO0030  
        15 CD00-COCARA PICTURE X. DO0030  
        15 CD00-NUCOM PICTURE 9(5). DO0030  
        15 CD00-FOURNI PICTURE X(3). DO0030  
    10 CD00-SUITE. DO0030  
        15 FILLER PICTURE X(00157). DO0030  
01 CD05. DO0030  
    10 FILLER PICTURE X(00009). DO0030  
    10 CD05-NUCLIE PICTURE 9(8). DO0030  
    10 CD05-DATE PICTURE X(6). DO0030  
    10 CD05-RELEA PICTURE X(3). DO0030  
    10 CD05-REFCLI PICTURE X(30). DO0030  
    10 CD05-RUE PICTURE X(40). DO0030  
    10 CD05-COPOS PICTURE X(5). DO0030  
    10 CD05-VILLE PICTURE X(20). DO0030  
    10 CD05-CORRES PICTURE X(25). DO0030  
    10 CD05-REMIS PICTURE S9(4)V99. DO0030  
    10 CD05-MATE PICTURE X(8). DO0030  
    10 CD05-LANGU PICTURE X. DO0030  
    10 CD05-FILLER PICTURE X(5). DO0030  
01 CD10. DO0030  
    10 FILLER PICTURE X(00009). DO0030  
    10 CD10-QTMAC PICTURE 99. DO0030  
    10 CD10-QTMAL PICTURE 99. DO0030  
    10 CD10-INFOR PICTURE X(35). DO0030  
    10 CD10-ADFOU PICTURE X(100). DO0030  
    10 FILLER PICTURE X(00018). DO0030  
01 CD20. DO0030  
    10 FILLER PICTURE X(00009). DO0030  
    10 CD20-EDIT PICTURE X. DO0030  
    10 FILLER PICTURE X(00156). DO0030  
FD EM-FILE DO0030  
    BLOCK 00001 RECORDS DO0030  
    DATA RECORD DO0030  
        EM00 DO0030  
    LABEL RECORD STANDARD. DO0030  
01 EM00. DO0030  
    05 EM00-EMKEY. DO0030  
        10 EM00-LIBRA PICTURE X(3). DO0030  
        10 EM00-ENTYP PICTURE X. DO0030  
        10 EM00-XEMKY. DO0030  
            15 EM00-PROGR PICTURE X(6). DO0030  
            15 EM00-ERCOD. DO0030
```

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	20	EM00-ERCOD9	PICTURE 9(3).	DO0030
	15	EM00-ERTYP	PICTURE X.	DO0030
	10	EM00-LINUM	PICTURE 9(3).	DO0030
	05	EM00-ERLVL	PICTURE X.	DO0030
	05	EM00-ERMSG	PICTURE X(66).	DO0030
	05	FILLER	PICTURE X(6).	DO0030
FD		FO-FILE		DO0030
		BLOCK	00001 RECORDS	DO0030
		DATA RECORD		DO0030
		FO00		DO0030
		FO10		DO0030
		LABEL RECORD STANDARD.		DO0030
01		FO00.		DO0030
	10	FO00-SUITE.		DO0030
	15	FILLER	PICTURE X(00057).	DO0030
01		FO10.		DO0030
	10	FO10-CLEFO.		DO0030
	15	FO10-FOURNI	PICTURE X(3).	DO0030
	15	FO10-MATE	PICTURE X(8).	DO0030
	15	FO10-RELEA	PICTURE X(3).	DO0030
	15	FO10-LANGU	PICTURE X.	DO0030
	10	FO10-QTMAS	COMPUTATIONAL-1.	DO0030
	10	FO10-QTMAM	PICTURE 9(4).	DO0030
	10	FO10-LIBFO	PICTURE X(20).	DO0030
	10	FO10-DATE	PICTURE X(6).	DO0030
	10	FO10-HEURE	PICTURE X(8).	DO0030
	10	FO10-FILLER	PICTURE XX.	DO0030
FD		HE-FILE		DO0030
		BLOCK	00001 RECORDS	DO0030
		DATA RECORD		DO0030
		HE00		DO0030
		LABEL RECORD STANDARD.		DO0030
01		HE00.		DO0030
	05	HE00-XTERM	PICTURE X(12).	DO0030
	05	HE00-SCREEN	PICTURE X(1920).	DO0030
FD		ME-FILE		DO0030
		BLOCK	00001 RECORDS	DO0030
		DATA RECORD		DO0030
		ME00		DO0030
		LABEL RECORD STANDARD.		DO0030
01		ME00.		DO0030
	10	ME00-CLEME.		DO0030
	15	ME00-COPERS	PICTURE X(5).	DO0030
	15	ME00-NUMORD	PICTURE XX.	DO0030
	10	ME00-MESSA	PICTURE X(75).	DO0030
		WORKING-STORAGE SECTION.		DO0030
01		WSS-BEGIN.		DO0030
	05	FILLER	PICTURE X(7) VALUE "WORKING".	DO0030
	05	IK	PICTURE X.	DO0030
	05	BLANC	PICTURE X VALUE SPACE.	DO0030
	05	OPER	PICTURE X.	DO0030
	05	OPERD	PICTURE X VALUE SPACE.	DO0030
	05	CATX	PICTURE X.	DO0030
	05	CATM	PICTURE X.	DO0030
	05	ICATR	PICTURE 99.	DO0030
	05	SCR-ER	PICTURE X.	DO0030
	05	FT	PICTURE X.	DO0030
	05	ICF	PICTURE X.	DO0030
	05	OCF	PICTURE X.	DO0030
	05	CAT-ER	PICTURE X.	DO0030
	05	7-HT	PICTURE X VALUE "06".	DO0030
	05	I-PFKEY	PICTURE XX.	DO0030
	05	7-SENDVAR	PICTURE X VALUE "1".	DO0030
	05	INA	PICTURE 999 VALUE 010.	DO0030
	05	INR	PICTURE 999 VALUE 016.	DO0030
	05	INZ	PICTURE 999 VALUE 017.	DO0030
	05	IRR	PICTURE 99 VALUE 09.	DO0030
	05	INT	PICTURE 999 VALUE 065.	DO0030
	05	IER	PICTURE 99 VALUE 01.	DO0030
	05	DEL-ER	PICTURE X.	DO0030
01		PACBASE-CONSTANTS.		DO0030
*		OLSD DATES	PACE30 : 10/03/94	DO0030
*			PACE80 : 10/03/94	DO0030
			PAC7SG : 940503	DO0030
	05	SESSI	PICTURE X(5) VALUE "0413".	DO0030
	05	LIBRA	PICTURE X(3) VALUE "AD7".	DO0030
	05	DATGN	PICTURE X(8) VALUE "07/28/94".	DO0030
	05	PROGR	PICTURE X(6) VALUE "DO0030".	DO0030

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05	PROGE	PICTURE X(8) VALUE "D00030P " .	D00030
05	TIMGN	PICTURE X(8) VALUE "11:14:05" .	D00030
05	USERCO	PICTURE X(8) VALUE "PDMM " .	D00030
05	PRDOC	PICTURE X(8) VALUE "DOP050" .	D00030
05	5-0030-PROGE	PICTURE X(8) .	D00030
01	DATCE.		D00030
05	CENTUR	PICTURE XX VALUE "19" .	D00030
05	DATOR.		D00030
10	DATOA	PICTURE XX.	D00030
10	DATOM	PICTURE XX.	D00030
10	DATOJ	PICTURE XX.	D00030
01	DAT6.		D00030
10	DAT61.		D00030
15	DAT619	PICTURE 99.	D00030
10	DAT62.		D00030
15	DAT629	PICTURE 99.	D00030
10	DAT63	PICTURE XX.	D00030
01	DAT7.		D00030
10	DAT71	PICTURE XX.	D00030
10	DAT72	PICTURE XX.	D00030
10	DAT73	PICTURE XX.	D00030
01	DAT8.		D00030
10	DAT81	PICTURE XX.	D00030
10	DAT8S1	PICTURE X.	D00030
10	DAT82	PICTURE XX.	D00030
10	DAT8S2	PICTURE X.	D00030
10	DAT83	PICTURE XX.	D00030
01	DATSEP	PICTURE X VALUE "/" .	D00030
01	DATSET	PICTURE X VALUE "-" .	D00030
01	DATCTY.		D00030
05	DATCTY9	PICTURE 99.	D00030
01	DAT6C.		D00030
10	DAT61C	PICTURE XX.	D00030
10	DAT62C	PICTURE XX.	D00030
10	DAT63C	PICTURE XX.	D00030
10	DAT64C	PICTURE XX.	D00030
01	DAT7C.		D00030
10	DAT71C	PICTURE XX.	D00030
10	DAT72C	PICTURE XX.	D00030
10	DAT73C	PICTURE XX.	D00030
10	DAT74C	PICTURE XX.	D00030
01	DAT8C.		D00030
10	DAT81C	PICTURE XX.	D00030
10	DAT8S1C	PICTURE X VALUE "/" .	D00030
10	DAT82C	PICTURE XX.	D00030
10	DAT8S2C	PICTURE X VALUE "/" .	D00030
10	DAT83C	PICTURE XX.	D00030
10	DAT84C	PICTURE XX.	D00030
01	DAT8G.		D00030
10	DAT81G	PICTURE XX.	D00030
10	DAT82G	PICTURE XX.	D00030
10	DAT8S1G	PICTURE X VALUE "-" .	D00030
10	DAT83G	PICTURE XX.	D00030
10	DAT8S2G	PICTURE X VALUE "-" .	D00030
10	DAT84G	PICTURE XX.	D00030
01	TIMCO.		D00030
02	TIMCOG.		D00030
05	TIMCOH	PICTURE XX.	D00030
05	TIMCOM	PICTURE XX.	D00030
05	TIMCOS	PICTURE XX.	D00030
02	TIMCOC	PICTURE XX.	D00030
01	TIMDAY.		D00030
05	TIMHOU	PICTURE XX.	D00030
05	TIMS1	PICTURE X VALUE ":" .	D00030
05	TIMMIN	PICTURE XX.	D00030
05	TIMS2	PICTURE X VALUE ":" .	D00030
05	TIMSEC	PICTURE XX.	D00030
01	CONFIGURATIONS.		D00030
05	CD05-CF	PICTURE X.	D00030
05	CD10-CF	PICTURE X.	D00030
05	CD20-CF	PICTURE X.	D00030
05	FO10-CF	PICTURE X.	D00030
05	ME00-CF	PICTURE X.	D00030
01	0030-MESSO.		*AA040
02	0030-MESSO1.		*AA040
05	FILLER	PICTURE XXX VALUE ""40,214,13"" .	*AA040
05	FILLER	PICTURE XXX VALUE ""20,065,128"" .	*AA040

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05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S01004	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,108".	*AA040
05	FILLER	PICTURE X(001) VALUE "-".	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,076".	*AA040
05	S01015	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,248".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(030) VALUE	*AA040
		*** ORDER INPUT SCREEN *** .	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,234".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S01060	PICTURE X(010) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,135".	*AA040
05	S01071	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,128".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(013) VALUE	*AA040
		ORDER NUMBER: .	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,241".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S03018	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,249".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(007) VALUE "SYSTEM: .	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,125".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,202".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,228".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(008) VALUE "RELEASE: .	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,091".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,130".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,124,128".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(005) VALUE "CUST. .	*AA040
05	FILLER	PICTURE XXX VALUE "20,124,079".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S04013	PICTURE X(050) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,126".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,216".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,218".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,136".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,137".	*AA040

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05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XX VALUE "30,241"	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,150"	*AA040
05	FILLER	PICTURE X VALUE "29"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,128"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149"	*AA040
05	FILLER	PICTURE X(011) VALUE	*AA040
		"CUST. REF.:"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,076"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XX VALUE "30,241"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,213"	*AA040
05	FILLER	PICTURE X VALUE "29"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,215"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149"	*AA040
05	FILLER	PICTURE X(011) VALUE	*AA040
		"ORDER DATE:"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,075"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XX VALUE "30,241"	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,131"	*AA040
05	FILLER	PICTURE X VALUE "29"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,124"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149"	*AA040
05	FILLER	PICTURE X(012) VALUE	*AA040
		"COORDINATOR:"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,241"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XX VALUE "30,241"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,210"	*AA040
05	FILLER	PICTURE X VALUE "29"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,212"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149"	*AA040
05	FILLER	PICTURE X(014) VALUE	*AA040
		"DISCOUNT RATE:"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,075"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XX VALUE "30,241"	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,133"	*AA040
05	FILLER	PICTURE X VALUE "29"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,080"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149"	*AA040
05	FILLER	PICTURE X(001) VALUE "A"	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,081"	*AA040
05	FILLER	PICTURE X(006) VALUE "ITEM "	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,098"	*AA040
05	FILLER	PICTURE X(008) VALUE "ORDERED "	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,250"	*AA040
05	FILLER	PICTURE X(007) VALUE "DELIV. "	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,195"	*AA040
05	FILLER	PICTURE X(006) VALUE "OUTST. "	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,202"	*AA040
05	FILLER	PICTURE X(035) VALUE	*AA040
	"REMARKS	"	*AA040
05	FILLER	PICTURE XXX VALUE "20,094,080"	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149"	*AA040













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05	FILLER	PICTURE XXX VALUE "20,242,124".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,109".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,094".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,076".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,242".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,249".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,095".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,194".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,197".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,201".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,148".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(019) VALUE	*AA040
		"PRINTING OF FORM :".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,245".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,247".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,248".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(007) VALUE "CHOICE:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,112".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,194".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(010) VALUE "UPD : '7',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,213".	*AA040
05	FILLER	PICTURE X(020) VALUE	*AA040
		"ORDERS (NEXT) : '8',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,245,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(027) VALUE	*AA040

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		"MENU : '1', CUSTOMER LIST :".	*AA040
05	FILLER	PICTURE XXX VALUE ""20,245,127"".	*AA040
05	FILLER	PICTURE X(022) VALUE	*AA040
		"'2', CUST. HIST : '3',".	*AA040
05	FILLER	PICTURE XXX VALUE ""20,245,228"".	*AA040
05	FILLER	PICTURE X(017) VALUE	*AA040
		"ORDER LIST : '4',".	*AA040
05	FILLER	PICTURE XXX VALUE ""20,246,065"".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		""040,075,243";"243,149"".	*AA040
05	FILLER	PICTURE X(017) VALUE	*AA040
		"SCREEN DOC : '=',".	*AA040
05	FILLER	PICTURE XXX VALUE ""20,246,244"".	*AA040
05	FILLER	PICTURE X(018) VALUE	*AA040
		"DATA EL. DOC : '\$'".	*AA040
05	FILLER	PICTURE XXX VALUE ""20,247,065"".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		""040,075,241";"241,149"".	*AA040
05	S23002	PICTURE X(075) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE ""20,248,065"".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		""040,075,241";"241,149"".	*AA040
05	S24002	PICTURE X(072) VALUE SPACE.	*AA040
02	0030-MESSO4	REDEFINES 0030-MESS01.	*AA040
03	0030-CX	PICTURE X OCCURS 2150.	*AA040
02	0030-MESSV.		*AA040
03	FILLER	PICTURE XXX VALUE ""40,213,13"".	*AA040
03	0030-MESSO2.		*AA040
05	S03034	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S03063	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S05009	PICTURE X(040) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S05052	PICTURE X(020) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S05074	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S06016	PICTURE X(030) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S06061	PICTURE X(006) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S07018	PICTURE X(025) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S07061	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10007	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10016	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10026	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10035	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S10042	PICTURE X(035) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11007	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11016	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11026	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11035	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S11042	PICTURE X(035) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S12003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S12007	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S12016	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE ""06"".	*AA040
05	S12026	PICTURE X(002) VALUE SPACE.	*AA040





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05	S20022	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06" .	*AA040
05	S20033	PICTURE X(001) VALUE SPACE.	*AA040
03	0030-MESSO3	REDEFINES 0030-MESSO2.	*AA040
05	0030-CP	PICTURE X OCCURS 0616.	*AA040
02	0030-MESSF.		*AA040
05	FILLER	PICTURE XX VALUE "40,214" .	*AA040
05	FILLER	PICTURE XXX VALUE "20,094,128" .	*AA040
05	FILLER	PICTURE XX VALUE "40,213" .	*AA040
01	INPUT-0030.		*AA042
05	FILLER	PICTURE X(065) .	*AA042
05	R20033	PICTURE X(1) .	*AA042
05	R03034	PICTURE X(8) .	*AA042
05	R03063	PICTURE X(3) .	*AA042
05	R05009	PICTURE X(40) .	*AA042
05	R05052	PICTURE X(20) .	*AA042
05	R05074	PICTURE X(5) .	*AA042
05	R06016	PICTURE X(30) .	*AA042
05	R06061	PICTURE X(6) .	*AA042
05	R07018	PICTURE X(25) .	*AA042
05	R07061	PICTURE X(8) .	*AA042
05	R10003	PICTURE X(1) .	*AA042
05	R10007	PICTURE X(3) .	*AA042
05	R10016	PICTURE X(2) .	*AA042
05	R10026	PICTURE X(2) .	*AA042
05	R10035	PICTURE X(2) .	*AA042
05	R10042	PICTURE X(35) .	*AA042
05	R11003	PICTURE X(1) .	*AA042
05	R11007	PICTURE X(3) .	*AA042
05	R11016	PICTURE X(2) .	*AA042
05	R11026	PICTURE X(2) .	*AA042
05	R11035	PICTURE X(2) .	*AA042
05	R11042	PICTURE X(35) .	*AA042
05	R12003	PICTURE X(1) .	*AA042
05	R12007	PICTURE X(3) .	*AA042
05	R12016	PICTURE X(2) .	*AA042
05	R12026	PICTURE X(2) .	*AA042
05	R12035	PICTURE X(2) .	*AA042
05	R12042	PICTURE X(35) .	*AA042
05	R13003	PICTURE X(1) .	*AA042
05	R13007	PICTURE X(3) .	*AA042
05	R13016	PICTURE X(2) .	*AA042
05	R13026	PICTURE X(2) .	*AA042
05	R13035	PICTURE X(2) .	*AA042
05	R13042	PICTURE X(35) .	*AA042
05	R14003	PICTURE X(1) .	*AA042
05	R14007	PICTURE X(3) .	*AA042
05	R14016	PICTURE X(2) .	*AA042
05	R14026	PICTURE X(2) .	*AA042
05	R14035	PICTURE X(2) .	*AA042
05	R14042	PICTURE X(35) .	*AA042
05	R15003	PICTURE X(1) .	*AA042
05	R15007	PICTURE X(3) .	*AA042
05	R15016	PICTURE X(2) .	*AA042
05	R15026	PICTURE X(2) .	*AA042
05	R15035	PICTURE X(2) .	*AA042
05	R15042	PICTURE X(35) .	*AA042
05	R16003	PICTURE X(1) .	*AA042
05	R16007	PICTURE X(3) .	*AA042
05	R16016	PICTURE X(2) .	*AA042
05	R16026	PICTURE X(2) .	*AA042
05	R16035	PICTURE X(2) .	*AA042
05	R16042	PICTURE X(35) .	*AA042
05	R17003	PICTURE X(1) .	*AA042
05	R17007	PICTURE X(3) .	*AA042
05	R17016	PICTURE X(2) .	*AA042
05	R17026	PICTURE X(2) .	*AA042
05	R17035	PICTURE X(2) .	*AA042
05	R17042	PICTURE X(35) .	*AA042
05	R18003	PICTURE X(1) .	*AA042
05	R18007	PICTURE X(3) .	*AA042
05	R18016	PICTURE X(2) .	*AA042
05	R18026	PICTURE X(2) .	*AA042
05	R18035	PICTURE X(2) .	*AA042
05	R18042	PICTURE X(35) .	*AA042
05	R20022	PICTURE X(1) .	*AA042
05	FILLER	PICTURE X(70) .	*AA042

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01	0030-MESSI	REDEFINES INPUT-0030.	*AA042
05	0030-CA	PICTURE X OCCURS 0687.	*AA042
01	INPUT-SCREEN-FIELDS	REDEFINES INPUT-0030.	*AA045
02	I-0030.		*AA045
05	FILLER	PICTURE X(065).	*AA045
05	I-0030-CHOIX	PICTURE X.	*AA045
05	I-0030-MATE	PICTURE X(8).	*AA045
05	I-0030-RELEA	PICTURE X(3).	*AA045
05	I-0030-RUE	PICTURE X(40).	*AA045
05	I-0030-VILLE	PICTURE X(20).	*AA045
05	I-0030-COPOS	PICTURE X(5).	*AA045
05	I-0030-REFCLI	PICTURE X(30).	*AA045
05	I-0030-DATE	PICTURE X(6).	*AA045
05	I-0030-CORRES	PICTURE X(25).	*AA045
05	E-0030-REMIS.		*AA045
10	I-0030-REMIS	PICTURE S9(4)V99.	*AA045
10	FILLER	PICTURE X(2).	*AA045
05	J-0030-LINE	OCCURS 9.	*AA045
10	FILLER	PICTURE X(45).	*AA045
05	I-0030-EDIT	PICTURE X.	*AA045
05	FILLER	PICTURE X(70).	*AA045
01	OUTPUT-0030.		*AA049
05	T20033	PICTURE X(1).	*AA049
05	T01004	PICTURE X(8).	*AA049
05	T01015	PICTURE X(5).	*AA049
05	T01060	PICTURE X(10).	*AA049
05	T01071	PICTURE X(8).	*AA049
05	T03018	PICTURE X(5).	*AA049
05	T03034	PICTURE X(8).	*AA049
05	T03063	PICTURE X(3).	*AA049
05	T04013	PICTURE X(50).	*AA049
05	T05009	PICTURE X(40).	*AA049
05	T05052	PICTURE X(20).	*AA049
05	T05074	PICTURE X(5).	*AA049
05	T06016	PICTURE X(30).	*AA049
05	T06061	PICTURE X(6).	*AA049
05	T07018	PICTURE X(25).	*AA049
05	T07061	PICTURE X(8).	*AA049
05	T10003	PICTURE X(1).	*AA049
05	T10007	PICTURE X(3).	*AA049
05	T10016	PICTURE X(2).	*AA049
05	T10026	PICTURE X(2).	*AA049
05	T10035	PICTURE X(2).	*AA049
05	T10042	PICTURE X(35).	*AA049
05	T11003	PICTURE X(1).	*AA049
05	T11007	PICTURE X(3).	*AA049
05	T11016	PICTURE X(2).	*AA049
05	T11026	PICTURE X(2).	*AA049
05	T11035	PICTURE X(2).	*AA049
05	T11042	PICTURE X(35).	*AA049
05	T12003	PICTURE X(1).	*AA049
05	T12007	PICTURE X(3).	*AA049
05	T12016	PICTURE X(2).	*AA049
05	T12026	PICTURE X(2).	*AA049
05	T12035	PICTURE X(2).	*AA049
05	T12042	PICTURE X(35).	*AA049
05	T13003	PICTURE X(1).	*AA049
05	T13007	PICTURE X(3).	*AA049
05	T13016	PICTURE X(2).	*AA049
05	T13026	PICTURE X(2).	*AA049
05	T13035	PICTURE X(2).	*AA049
05	T13042	PICTURE X(35).	*AA049
05	T14003	PICTURE X(1).	*AA049
05	T14007	PICTURE X(3).	*AA049
05	T14016	PICTURE X(2).	*AA049
05	T14026	PICTURE X(2).	*AA049
05	T14035	PICTURE X(2).	*AA049
05	T14042	PICTURE X(35).	*AA049
05	T15003	PICTURE X(1).	*AA049
05	T15007	PICTURE X(3).	*AA049
05	T15016	PICTURE X(2).	*AA049
05	T15026	PICTURE X(2).	*AA049
05	T15035	PICTURE X(2).	*AA049
05	T15042	PICTURE X(35).	*AA049
05	T16003	PICTURE X(1).	*AA049
05	T16007	PICTURE X(3).	*AA049
05	T16016	PICTURE X(2).	*AA049

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05	T16026	PICTURE X(2).	*AA049
05	T16035	PICTURE X(2).	*AA049
05	T16042	PICTURE X(35).	*AA049
05	T17003	PICTURE X(1).	*AA049
05	T17007	PICTURE X(3).	*AA049
05	T17016	PICTURE X(2).	*AA049
05	T17026	PICTURE X(2).	*AA049
05	T17035	PICTURE X(2).	*AA049
05	T17042	PICTURE X(35).	*AA049
05	T18003	PICTURE X(1).	*AA049
05	T18007	PICTURE X(3).	*AA049
05	T18016	PICTURE X(2).	*AA049
05	T18026	PICTURE X(2).	*AA049
05	T18035	PICTURE X(2).	*AA049
05	T18042	PICTURE X(35).	*AA049
05	T20022	PICTURE X(1).	*AA049
05	T23002	PICTURE X(75).	*AA049
05	T24002	PICTURE X(72).	*AA049
01	OUTPUT-SCREEN-FIELDS	REDEFINES OUTPUT-0030.	*AA050
02	O-0030.		*AA050
05	O-0030-CHOIX	PICTURE X.	*AA050
05	O-0030-PROGE	PICTURE X(8).	*AA050
05	O-0030-SESSI	PICTURE X(5).	*AA050
05	O-0030-DATEM	PICTURE X(10).	*AA050
05	O-0030-HEURE	PICTURE X(8).	*AA050
05	O-0030-NUCOM	PICTURE 9(5).	*AA050
05	O-0030-MATE	PICTURE X(8).	*AA050
05	O-0030-RELEA	PICTURE X(3).	*AA050
05	O-0030-RAISOC	PICTURE X(50).	*AA050
05	O-0030-RUE	PICTURE X(40).	*AA050
05	O-0030-VILLE	PICTURE X(20).	*AA050
05	O-0030-COPOS	PICTURE X(5).	*AA050
05	O-0030-REFCLI	PICTURE X(30).	*AA050
05	O-0030-DATE	PICTURE X(6).	*AA050
05	O-0030-CORRES	PICTURE X(25).	*AA050
05	F-0030-REMIS.		*AA050
10	O-0030-REMIS	PICTURE -(04)9,9(02).	*AA050
05	P-0030-LINE	OCCURS 9.	*AA050
10	FILLER	PICTURE X(45).	*AA050
05	O-0030-EDIT	PICTURE X.	*AA050
05	O-0030-MESSA	PICTURE X(75).	*AA050
05	O-0030-ERMS.		*AA050
10	FILLER	OCCURS 1.	*AA050
15	O-0030-ERMSG1	PICTURE X(72).	*AA050
01	REPEAT-LINE.		*AA050
02	I-0030-LINE.		*AA050
05	I-0030-CODMVT	PICTURE X.	*AA050
05	I-0030-FOURNI	PICTURE X(3).	*AA050
05	E-0030-QTMAC.		*AA050
10	I-0030-QTMAC	PICTURE 99.	*AA050
05	E-0030-QTMAL.		*AA050
10	I-0030-QTMAL	PICTURE 99.	*AA050
05	E-0030-QTMAR.		*AA050
10	I-0030-QTMAR	PICTURE 99.	*AA050
05	I-0030-INFOR	PICTURE X(35).	*AA050
02	O-0030-LINE.		*AA050
05	O-0030-CODMVT	PICTURE X.	*AA050
05	O-0030-FOURNI	PICTURE X(3).	*AA050
05	F-0030-QTMAC.		*AA050
10	O-0030-QTMAC	PICTURE Z(01)9.	*AA050
05	F-0030-QTMAL.		*AA050
10	O-0030-QTMAL	PICTURE Z(01)9.	*AA050
05	F-0030-QTMAR.		*AA050
10	O-0030-QTMAR	PICTURE Z(01)9.	*AA050
05	O-0030-INFOR	PICTURE X(35).	*AA050
01	NUMERIC-FIELDS.		*AA050
05	9-0030-REMIS	PICTURE X(5) VALUE "+0402".	*AA050
05	9-0030-QTMAC	PICTURE X(5) VALUE " 0200".	*AA050
05	9-0030-QTMAL	PICTURE X(5) VALUE " 0200".	*AA050
05	9-0030-QTMAR	PICTURE X(5) VALUE " 0200".	*AA050
01	ERROR-MESS.		*AA060
02	ERROR-MESS01.		*AA060
05	FILLER	PICTURE XX VALUE ""40,214"".	*AA060
05	X-ATT1.		*AA060
10	FILLER	PICTURE XXX VALUE ""20,244,112"".	*AA060
10	FILLER	PICTURE X(6) VALUE ""040,075,243";"243,149"".	*AA060





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10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,109".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,076".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,249".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,241";"241,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,194".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,201".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,080".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,109".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,076".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,249".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,241";"241,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,194".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,201".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,244,245".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
05	X-ATT2	REDEFINES X-ATT1.	*AA060
10	X-ATT3	OCCURS 065.	*AA060
15	X-ATPC	PICTURE XXX.	*AA060
15	X-ATTR.		*AA060
20	FILLER	PICTURE XX.	*AA060
20	X-ATTRI	PICTURE X.	*AA060
20	FILLER	PICTURE X.	*AA060
20	X-ATTP	PICTURE X.	*AA060
20	FILLER	PICTURE X.	*AA060
05	X-ERMSBLANC.		*AA060
10	FILLER	PICTURE XXX VALUE "20,248,080".	*AA060
10	FILLER	PICTURE X(072) VALUE SPACE.	*AA060
05	X-ERMS.		*AA060
10	FILLER	PICTURE XXX VALUE "20,248,080".	*AA060
10	FILLER	PICTURE X(072).	*AA060
05	X-ERMS1	REDEFINES X-ERMS.	*AA060
10	X-ERMS2	OCCURS 01.	*AA060
15	FILLER	PICTURE XXX.	*AA060
15	O-0030-ERMSG	PICTURE X(072).	*AA060
02	ERROR-MESSF.		*AA060
05	FILLER	PICTURE XX VALUE "40,214".	*AA060
05	X-ATPC1	PICTURE XXX.	*AA060
05	FILLER	PICTURE X VALUE "19".	*AA060
05	FILLER	PICTURE XX VALUE "40,213".	*AA060
01	0030-MPRIOR	PICTURE X(80).	*AA076
01	MESSAGE-LENGTH.		*AA100
05	0030-LENGTH	PICTURE 9(4) VALUE 2776.	*AA100
05	MESS-LENGF	PICTURE 9(4) VALUE 2150.	*AA100
05	0030-XLOMES	PICTURE 9(4) VALUE 0616.	*AA100
05	MESS-LENGV	PICTURE 9(4) VALUE 0619.	*AA100
05	0030-LMESSF	PICTURE 9(4) VALUE 0007.	*AA100
05	0030-XLOUT	PICTURE 9(4) VALUE 0008.	*AA100
05	ERROR-LENGTH	PICTURE 9(4) VALUE 0668.	*AA100
05	ERROR-LENGF	PICTURE 9(4) VALUE 0737.	*AA100
01	VALIDATION-TABLE-FIELDS.		*AA150
02	DE-ERR.		*AA150
05	DE-ER	PICTURE X OCCURS 065.	*AA150
02	DE-E	REDEFINES DE-ERR.	*AA150
03	ER-0030-BEGIN.		*AA150

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05	ER-0030-CHOIX	PICTURE X.	*AA150
05	ER-0030-MATE	PICTURE X.	*AA150
05	ER-0030-RELEA	PICTURE X.	*AA150
05	ER-0030-RUE	PICTURE X.	*AA150
05	ER-0030-VILLE	PICTURE X.	*AA150
05	ER-0030-COPOS	PICTURE X.	*AA150
05	ER-0030-REFCLI	PICTURE X.	*AA150
05	ER-0030-DATE	PICTURE X.	*AA150
05	ER-0030-CORRES	PICTURE X.	*AA150
05	ER-0030-REMIS	PICTURE X.	*AA150
03	PS-30-LINE	OCCURS 9.	*AA150
05	FILLER	PICTURE X(0006).	*AA150
03	ER-0030-END.		*AA150
05	ER-0030-EDIT	PICTURE X.	*AA150
02	ER-0030-LINE.		*AA150
05	ER-0030-CODMVT	PICTURE X.	*AA150
05	ER-0030-FOURNI	PICTURE X.	*AA150
05	ER-0030-QTMAC	PICTURE X.	*AA150
05	ER-0030-QTMAL	PICTURE X.	*AA150
05	ER-0030-QTMAR	PICTURE X.	*AA150
05	ER-0030-INFOR	PICTURE X.	*AA150
01	TT-DAT.		*AA200
05	T-DAT	PICTURE X OCCURS 5.	*AA200
01	LEAP-YEAR.		*AA200
05	LEAP-FLAG	PICTURE X.	*AA200
05	LEAP-REM	PICTURE 99.	*AA200
01	USERS-ERROR.		*AA200
05	XEMKY.		*AA200
10	XPROGR	PICTURE X(6).	*AA200
10	XERCD	PICTURE X(4).	*AA200
05	T-XEMKY	OCCURS 01.	*AA200
10	T-XPROGR	PICTURE X(6).	*AA200
10	T-XERCD	PICTURE X(4).	*AA200
01	PACBASE-INDEXES	COMPUTATIONAL-1.	*AA200
05	K01	PICTURE S9(4).	*AA200
05	K02	PICTURE S9(4).	*AA200
05	K03	PICTURE S9(4).	*AA200
05	K04	PICTURE S9(4).	*AA200
05	K50R	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50L	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50M	PICTURE S9(4) VALUE +01.	*AA200
05	IWP20L	PICTURE S9(4) VALUE ZERO.	*AA200
05	IWP20R	PICTURE S9(4) VALUE ZERO.	*AA200
05	IWP20M	PICTURE S9(4) VALUE +0009.	*AA200
05	5-CD00-LTH	PICTURE S9(4) VALUE +0166.	*AA200
05	5-CD05-LTH	PICTURE S9(4) VALUE +0157.	*AA200
05	5-CD10-LTH	PICTURE S9(4) VALUE +0139.	*AA200
05	5-CD20-LTH	PICTURE S9(4) VALUE +0001.	*AA200
05	5-FO00-LTH	PICTURE S9(4) VALUE +0057.	*AA200
05	5-FO10-LTH	PICTURE S9(4) VALUE +0057.	*AA200
05	5-ME00-LTH	PICTURE S9(4) VALUE +0082.	*AA200
05	5-CA00-LTH	PICTURE S9(4) VALUE +0147.	*AA200
05	5-CD05-LTHV	PICTURE S9(4) VALUE +0166.	*AA200
05	5-CD10-LTHV	PICTURE S9(4) VALUE +0148.	*AA200
05	5-CD20-LTHV	PICTURE S9(4) VALUE +0010.	*AA200
05	5-FO10-LTHV	PICTURE S9(4) VALUE +0057.	*AA200
05	LTH	PICTURE S9(4) VALUE ZERO.	*AA200
05	5-0030-LENGTH	PICTURE S9(4) VALUE +0892.	*AA200
01	NUMERIC-VALIDATION-FIELDS.		*AA200
05	ZONUM1.		*AA200
10	C1	PICTURE X OCCURS 27.	*AA200
05	ZONUM2.		*AA200
10	C2	OCCURS 18.	*AA200
15	C29	PICTURE S9.	*AA200
05	ZONUM9	REDEFINES ZONUM2 PICTURE 9(18).	*AA200
05	NUMPIC.		*AA200
10	SIGNE	PICTURE X.	*AA200
10	NBCHA	PICTURE 99.	*AA200
10	NBCHP	PICTURE 99.	*AA200
05	C9	PICTURE S9.	*AA200
05	C91	PICTURE X.	*AA200
05	TPOINT	PICTURE X.	*AA200
05	ZONUM3.		*AA200
10	C3	PICTURE X OCCURS 18.	*AA200
05	ZONUM4	REDEFINES ZONUM3 PICTURE 9(18).	*AA200
05	ZONUM5	PICTURE S99 VALUE -10.	*AA200
05	ZONUM6	REDEFINES ZONUM5.	*AA200

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10	FILLER	PICTURE X.	*AA200	
10	C4	PICTURE X.	*AA200	
01	TABLE-OF-ATTRIBUTES.		*AA250	
02	DE-ATT.		*AA250	
03	DE-ATT1	OCCURS 4.	*AA250	
05	DE-AT	PICTURE X OCCURS 065.	*AA250	
02	DE-A	REDEFINES DE-ATT.	*AA250	
03	DE-ATT2	OCCURS 4.	*AA250	
04	A-0030-BEGIN.		*AA250	
05	A-0030-CHOIX	PICTURE X.	*AA250	
05	A-0030-MATE	PICTURE X.	*AA250	
05	A-0030-RELEA	PICTURE X.	*AA250	
05	A-0030-RUE	PICTURE X.	*AA250	
05	A-0030-VILLE	PICTURE X.	*AA250	
05	A-0030-COPOS	PICTURE X.	*AA250	
05	A-0030-REFCLI	PICTURE X.	*AA250	
05	A-0030-DATE	PICTURE X.	*AA250	
05	A-0030-CORRES	PICTURE X.	*AA250	
05	A-0030-REMIS	PICTURE X.	*AA250	
04	B-0030-LINE	OCCURS 9.	*AA250	
05	FILLER	PICTURE X(0006).	*AA250	
04	A-0030-END.		*AA250	
05	A-0030-EDIT	PICTURE X.	*AA250	
02	A-0030-LINE	OCCURS 4.	*AA250	
05	A-0030-CODMVT	PICTURE X.	*AA250	
05	A-0030-FOURNI	PICTURE X.	*AA250	
05	A-0030-QTMAC	PICTURE X.	*AA250	
05	A-0030-QTMAL	PICTURE X.	*AA250	
05	A-0030-QTMAR	PICTURE X.	*AA250	
05	A-0030-INFOR	PICTURE X.	*AA250	
01	STOP-FIELDS.		*AA300	
02	C-0030.		*AA300	
05	C-0030-COCARA	PICTURE X.	*AA300	
05	C-0030-NUCOM	PICTURE 9(5).	*AA300	
01	FIRST-ON-SEGMENT.		*AA301	
05	CD10-FST	PICTURE X.	*AA301	
01	WW10-QTMAR	PICTURE 99 VALUE ZERO.	*BB200	
01	WP00.		*WP000	
02	WP10.		*WP010	
05	FILLER	PIC X(25) VALUE	*WP020	
		"23400BRISBANE	"	*WP030
05	FILLER	PIC X(25) VALUE	*WP040	
		"56400VICTORIA	"	*WP050
05	FILLER	PIC X(25) VALUE	*WP060	
		"76500ALICE SPRINGS	"	*WP070
05	FILLER	PIC X(25) VALUE	*WP080	
		"55300MELBOURNE	"	*WP090
05	FILLER	PIC X(25) VALUE	*WP100	
		"11000CANBERRA	"	*WP110
05	FILLER	PIC X(25) VALUE	*WP120	
		"34500PERTH	"	*WP130
05	FILLER	PIC X(25) VALUE	*WP140	
		"85270DARWIN	"	*WP150
05	FILLER	PIC X(25) VALUE	*WP160	
		"94000HOBART	"	*WP170
05	FILLER	PIC X(25) VALUE	*WP180	
		"89300SYDNEY	"	*WP190
02	WP20	REDEFINES WP10 OCCURS 9.	*WP300	
05	WP20-COPOS	PICTURE X(5).	*WP320	
05	WP20-VILLE	PICTURE X(20).	*WP340	
02	WP30.		*WP400	
05	WP30-COPOS	PICTURE X(5).	*WP410	
02	WP40.		*WP500	
05	WP40-VILLE	PICTURE X(20).	*WP510	
05	WP40-VILLEL	PICTURE X(20).	*WP520	
	LINKAGE SECTION.		DO0030	
	COPY TDS-STORAGE.		*0Z010	
	COPY CONSTANT-STORAGE.		*0Z015	
01	TRANSACTION-STORAGE.		*0Z020	
02	K-S0030-PROGR	PICTURE X(6).	*00000	
02	K-S0030-XTERM	PICTURE X(12).	*00000	
02	CA00.		*00001	
10	CA00-CLECD.		*00001	
15	CA00-NUCOM	PICTURE 9(5).	*00001	
10	CA00-CLECL1.		*00001	
15	CA00-NUCLIE	PICTURE 9(8).	*00001	
10	CA00-ME00.		*00001	



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15          CA00-CLEME.                *00001
20          CA00-COPERS PICTURE X(5).  *00001
20          CA00-NUMORD PICTURE XX.    *00001
15          CA00-MESSA PICTURE X(75).  *00001
10          CA00-PREM PICTURE X.       *00001
10          CA00-LANGU PICTURE X.      *00001
10          CA00-RAISOC PICTURE X(50). *00001
02          K-S0030-DOC PICTURE X.     *00002
02          K-S0030-PROGE PICTURE X(8). *00002
02          K-S0030-LIBRA PICTURE XXX. *00002
02          K-S0030-PROHE PICTURE X(8). *00002
02          K-S0030-ERCOD.             *00002
05          K-S0030-ERCOD9 PICTURE 999. *00002
02          K-S0030-ERTYP PICTURE X.   *00002
02          K-S0030-LINUM PICTURE 999. *00002
02          K-0030.                    *00002
03          K-A0030-DEBUT.             *00002
05          K-ACD05-CLECD PICTURE X(9). *00002
03          K-R0030-LINE OCCURS 2.     *00002
05          K-RCD10-CLECD PICTURE X(9). *00002
03          K-Z0030-END.               *00002
05          K-ZME00-CLEME PICTURE X(7). *00002
02          FILLER PICTURE X(0666).    *00002
COMMUNICATION SECTION.                *90010
CD 7-CD01 INPUT                       *90020
SYMBOLIC QUEUE 7-CD01-CTRAN           *90030
MESSAGE DATE 7-CD01-XDATE             *90040
MESSAGE TIME 7-CD01-XTIME             *90050
SYMBOLIC SOURCE 7-CD01-XTERM          *90060
TEXT LENGTH 7-CD01-XLOMES             *90070
END KEY 7-CD01-XFINME                 *90080
STATUS KEY 7-CD01-XMSTA.              *90090
CD 7-CD02 OUTPUT                       *90100
DESTINATION COUNT 7-CD02-XNDEST       *90110
TEXT LENGTH 7-CD02-XLOMES             *90120
STATUS KEY 7-CD02-XMSTA               *90130
ERROR KEY 7-CD02-XMERR               *90140
SYMBOLIC DESTINATION 7-CD02-XTERM.    *90150
PROCEDURE DIVISION USING TDS-STORAGE CONSTANT-STORAGE *99999
TRANSACTION-STORAGE.                 *99999
* *****
* * * * *
* * INITIALIZATIONS * *
* * * * *
* *****
F01.
EXIT.
F0110.
ACCEPT TIMCO FROM TIME.
ACCEPT DATOR FROM DATE.
MOVE ZERO TO CATX FT K50L.
MOVE "1" TO ICF OCF SCR-ER.
MOVE ZERO TO VALIDATION-TABLE-FIELDS.
MOVE ZERO TO 7-CD01-XMSTA 7-CD02-XMSTA.
MOVE SPACE TO CATM OPER OPERD CAT-ER.
MOVE SPACE TO TABLE-OF-ATTRIBUTES.
MOVE ZERO TO CONFIGURATIONS.
MOVE SYMBOLIC-QUEUE TO 7-CD01-CTRAN.
IF PROGR NOT = K-S0030-PROGR
MOVE ZERO TO ICF.
IF PRIOR-TPR = SPACE
MOVE ZERO TO ICF K-S0030-DOC
RECEIVE 7-CD01 MESSAGE INTO 0030-MPRIOR NO DATA
MOVE "1" TO IK.
IF PRIOR-TPR = SPACE
PERFORM F81ES THRU F81ES-FN
MOVE 7-CD01-XTERM TO K-S0030-XTERM.
MOVE SPACE TO O-0030.
IF ICF = ZERO
PERFORM F8115 THRU F8115-FN.
MOVE K-S0030-XTERM TO HE00-XTERM.
IF K-S0030-DOC = "2"
OR K-S0030-DOC = "3"
MOVE "1" TO K-S0030-DOC
GO TO F8Z05.
MOVE "X" TO DE-AT (4, 011).
MOVE SPACE TO O-0030-ERMSG (01).

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MOVE SPACE TO O-0030-ERMSG1 (01).	DO0030
F0110-FN.	DO0030
EXIT.	DO0030
F0160.	DO0030
IF ICF = ZERO	DO0030
MOVE "A" TO OPER	DO0030
GO TO F3999-ITER-FT.	DO0030
F0160-FN.	DO0030
EXIT.	DO0030
F01-FN.	DO0030
EXIT.	DO0030
* +-----+ * LEVEL 10 I INIT. NUMBER OF LOADED ITEMS I * +-----+ F02CP.	P000
MOVE IWP20M TO IWP20L.	P000
F02CP-FN.	P000
EXIT.	P000
* ***** * * * * * RECEPTION * * * * * *****	DO0030
F05.	DO0030
IF ICF = ZERO	DO0030
GO TO END-OF-RECEPTION.	DO0030
F0510.	DO0030
PERFORM F81RE THRU F81RE-FN.	DO0030
IF ICF = ZERO	DO0030
GO TO END-OF-RECEPTION.	DO0030
PERFORM F81ES THRU F81ES-FN.	DO0030
MOVE 7-CD01-XTERM TO K-S0030-XTERM.	DO0030
ADD 1 TO 7-CD01-XLOMES.	DO0030
MOVE 7-HT TO 0030-CA (7-CD01-XLOMES).	DO0030
MOVE ZERO TO K01 K02.	DO0030
F0510-A.	DO0030
ADD 1 TO K01.	DO0030
IF K01 > 7-CD01-XLOMES	DO0030
GO TO F0510-C.	DO0030
F0510-B.	DO0030
ADD 1 TO K02.	DO0030
IF K02 > 0030-XLOMES	DO0030
GO TO F0510-C.	DO0030
IF 0030-CA (K01) = 7-HT	DO0030
AND 0030-CP (K02) NOT = 7-HT	DO0030
MOVE SPACE TO 0030-CP (K02)	DO0030
GO TO F0510-B.	DO0030
IF 0030-CA (K01) = 7-HT	DO0030
GO TO F0510-A.	DO0030
IF 0030-CP (K02) = 7-HT	DO0030
MOVE ZERO TO ICF	DO0030
GO TO END-OF-RECEPTION.	DO0030
MOVE 0030-CA (K01) TO 0030-CP (K02)	DO0030
GO TO F0510-A.	DO0030
F0510-C.	DO0030
PERFORM F8155 THRU F8155-FN.	DO0030
MOVE "A" TO OPER	DO0030
MOVE SPACE TO OPERD.	DO0030
PERFORM F8150 THRU F8150-FN.	DO0030
IF K-S0030-ERCOD = ZERO	DO0030
EXAMINE I-0030 REPLACING ALL "-" BY SPACE.	DO0030
F0510-FN.	DO0030
EXIT.	DO0030
F0512.	DO0030
IF K-S0030-ERCOD NOT = ZERO	DO0030
NEXT SENTENCE	DO0030
ELSE	DO0030
GO TO F0512-FN.	DO0030
MOVE "2" TO K-S0030-DOC	DO0030
MOVE PROGE TO K-S0030-PROGE	DO0030
MOVE LIBRA TO K-S0030-LIBRA.	DO0030
IF K-S0030-ERCOD NOT = SPACE	DO0030
MOVE "3" TO K-S0030-DOC.	DO0030
MOVE K-S0030-XTERM TO HE00-XTERM	DO0030
PERFORM F80-HELP-R THRU F80-FN	DO0030
MOVE HE00-SCREEN TO O-0030	DO0030
PERFORM F8130 THRU F8130-FN	DO0030

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MOVE O-0030 TO HE00-SCREEN                                DO0030
PERFORM F80-HELP-RW THRU F80-FN                          DO0030
MOVE PRDOC TO 5-0030-PROGE K-S0030-PROHE                DO0030
MOVE "O" TO OPER                                         DO0030
GO TO F4040.                                             DO0030
F0512-FN.                                                DO0030
EXIT.                                                    DO0030
*                *****                                DO0030
*                *                                       DO0030
*                *   VALIDATION OF OPERATION CODE   *   DO0030
*                *                                       DO0030
*                *****                                DO0030
F0520.                                                    DO0030
IF      I-0030-CHOIX = "1"                                DO0030
  MOVE "DO0000 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "2"                                DO0030
  MOVE "DO0010 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "3"                                DO0030
  MOVE "DO0020 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "4"                                DO0030
  MOVE "DO0040 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "5"                                DO0030
  MOVE "DO0050 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "0"                                DO0030
  MOVE "DO0070 " TO 5-0030-PROGE                          DO0030
  MOVE "O" TO OPER                                         DO0030
  GO TO F40-A.                                             DO0030
IF      I-0030-CHOIX = "7"                                DO0030
  MOVE "M" TO OPER                                         DO0030
  GO TO F0520-900.                                         DO0030
IF      I-0030-CHOIX = "8"                                DO0030
  MOVE "S" TO OPER                                         DO0030
  GO TO F0520-900.                                         DO0030
MOVE "5" TO ER-0030-CHOIX                                DO0030
MOVE "4" TO SCR-ER                                       DO0030
GO TO F3999-ITER-FT.                                     DO0030
F0520-900.                                               DO0030
IF      OPER NOT = "A"                                    DO0030
  AND OPER NOT = "M"                                     DO0030
  AND OPER NOT = "O"                                     DO0030
  GO TO F3999-ITER-FT.                                     DO0030
F0520-FN.                                                DO0030
EXIT.                                                    DO0030
F05-FN.                                                  DO0030
EXIT.                                                    DO0030
*                +-----+                                P000
* LEVEL 10      I NO UPDATE ==> END OF RECEIVE          I   P000
*                +-----+                                P000
F08BB.                                                  P000
IF      OPER NOT = "M"                                    P000
  NEXT SENTENCE                                          P000
ELSE                                           P000
  GO TO F08BB-FN.                                        P000
  GO TO F3999-ITER-FT.                                  P100
F08BB-FN.                                               P000
EXIT.                                                    P000
*                *****                                DO0030
*                *                                       DO0030
*                *   CATEGORY PROCESSING LOOP   *   DO0030
*                *                                       DO0030
*                *****                                DO0030
F10.                                                    DO0030
EXIT.                                                    DO0030
F1010.                                                  DO0030
MOVE SPACE TO CATM.                                      DO0030
IF      CATX = "R"                                        DO0030
MOVE O-0030-LINE TO P-0030-LINE (ICATR)                 DO0030

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F20B5.		DO0030
IF	I-0030-RUE NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-RUE.	DO0030
F20B5-FN.		DO0030
EXIT.		DO0030
F20B6.		DO0030
IF	I-0030-VILLE NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-VILLE.	DO0030
F20B6-FN.		DO0030
EXIT.		DO0030
F20B7.		DO0030
IF	I-0030-COPOS NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-COPOS	DO0030
ELSE		DO0030
	MOVE "2" TO ER-0030-COPOS	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20B7-FN.	DO0030
	MOVE I-0030-COPOS TO WP30-COPOS	DO0030
	MOVE ER-0030-COPOS TO DEL-ER	DO0030
	PERFORM F93CP THRU F93CP-FN	DO0030
	MOVE WP30-COPOS TO I-0030-COPOS	DO0030
	MOVE DEL-ER TO ER-0030-COPOS.	DO0030
	IF ER-0030-COPOS > "1"	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20B7-FN.	DO0030
F20B7-FN.		DO0030
EXIT.		DO0030
F20B8.		DO0030
IF	I-0030-REFCLI NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-REFCLI.	DO0030
F20B8-FN.		DO0030
EXIT.		DO0030
F20B9.		DO0030
IF	I-0030-DATE NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-DATE	DO0030
ELSE		DO0030
	MOVE "2" TO ER-0030-DATE	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20B9-FN.	DO0030
	MOVE I-0030-DATE TO DAT7	DO0030
	PERFORM F8120-D THRU F8120-FN	DO0030
	MOVE DEL-ER TO ER-0030-DATE	DO0030
	IF DEL-ER > "1"	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20B9-FN.	DO0030
F20B9-FN.		DO0030
EXIT.		DO0030
F20C0.		DO0030
IF	I-0030-CORRES NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-CORRES.	DO0030
IF	ER-0030-CORRES NOT = 1	DO0030
	GO TO F20C0-FN.	DO0030
F20C0-FN.		DO0030
EXIT.		DO0030
F20C1.		DO0030
IF	E-0030-REMIS NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-REMIS.	DO0030
	MOVE E-0030-REMIS TO ZONUM1	DO0030
	MOVE 9-0030-REMIS TO NUNPIC	DO0030
	MOVE ER-0030-REMIS TO DEL-ER	DO0030
	PERFORM F8110 THRU F8110-FN	DO0030
	MOVE DEL-ER TO ER-0030-REMIS	DO0030
	IF DEL-ER > 1	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C1-FN.	DO0030
	MOVE ZONUM2 TO E-0030-REMIS.	DO0030
F20C1-FN.		DO0030
EXIT.		DO0030
F20A-FN.		DO0030
EXIT.		DO0030
F20R.		DO0030
IF	CATX NOT = "R"	DO0030
	GO TO F20R-FN.	DO0030
F20C3.		DO0030
IF	I-0030-CODMVT NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-CODMVT.	DO0030
F20C3-FN.		DO0030

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EXIT.		DO0030
* -----+		P000
* LEVEL 10	I ITEM NOT AVAILABLE	P000
* -----+		P000
F20BB.		P000
IF	I-0030-FOURNI = "CLA"	P100
AND	CATM NOT = SPACE	P110
	MOVE "A" TO ER-0030-FOURNI	P100
	MOVE "E" TO CAT-ER	P100
	GO TO F20C4-FN.	P110
F20BB-FN.		P000
EXIT.		P000
F20C4.		DO0030
IF	CATM = SPACE	DO0030
	GO TO F20C4-FN.	DO0030
IF	I-0030-FOURNI NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-FOURNI	DO0030
ELSE		DO0030
	MOVE "2" TO ER-0030-FOURNI	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C4-FN.	DO0030
IF	I-0030-FOURNI = "DIC"	DO0030
OR	I-0030-FOURNI = "MER"	DO0030
OR	I-0030-FOURNI = "TAB"	DO0030
OR	I-0030-FOURNI = "DBD"	DO0030
OR	I-0030-FOURNI = "DSO"	DO0030
OR	I-0030-FOURNI = "LGS"	DO0030
OR	I-0030-FOURNI = "LGB"	DO0030
OR	I-0030-FOURNI = "DLG"	DO0030
	NEXT SENTENCE	DO0030
ELSE		DO0030
	MOVE "5" TO ER-0030-FOURNI.	DO0030
IF	ER-0030-FOURNI > "1"	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C4-FN.	DO0030
F20C4-FN.		DO0030
EXIT.		DO0030
F20C5.		DO0030
IF	CATM = "A"	DO0030
OR	CATM = SPACE	DO0030
	GO TO F20C5-FN.	DO0030
IF	E-0030-QTMAC NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-QTMAC	DO0030
ELSE		DO0030
	MOVE "2" TO ER-0030-QTMAC	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C5-FN.	DO0030
	MOVE E-0030-QTMAC TO ZONUM1	DO0030
	MOVE 9-0030-QTMAC TO NUMPIC	DO0030
	MOVE ER-0030-QTMAC TO DEL-ER	DO0030
	PERFORM F8110 THRU F8110-FN	DO0030
	MOVE DEL-ER TO ER-0030-QTMAC	DO0030
IF	DEL-ER > 1	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C5-FN.	DO0030
	MOVE ZONUM2 TO E-0030-QTMAC.	DO0030
IF	I-0030-QTMAC NOT < 01	DO0030
AND	I-0030-QTMAC NOT > 50	DO0030
	NEXT SENTENCE	DO0030
ELSE		DO0030
	MOVE "5" TO ER-0030-QTMAC.	DO0030
IF	ER-0030-QTMAC > "1"	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C5-FN.	DO0030
F20C5-FN.		DO0030
EXIT.		DO0030
F20C6.		DO0030
IF	E-0030-QTMAL NOT = SPACE	DO0030
	MOVE "1" TO ER-0030-QTMAL.	DO0030
	MOVE E-0030-QTMAL TO ZONUM1	DO0030
	MOVE 9-0030-QTMAL TO NUMPIC	DO0030
	MOVE ER-0030-QTMAL TO DEL-ER	DO0030
	PERFORM F8110 THRU F8110-FN	DO0030
	MOVE DEL-ER TO ER-0030-QTMAL	DO0030
IF	DEL-ER > 1	DO0030
	MOVE "E" TO CAT-ER	DO0030
	GO TO F20C6-FN.	DO0030

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MOVE ZONUM2 TO E-0030-QTMAL. DO0030
F20C6-FN. DO0030
EXIT. DO0030
F20C7. DO0030
IF E-0030-QTMAR NOT = SPACE DO0030
MOVE "1" TO ER-0030-QTMAR. DO0030
MOVE E-0030-QTMAR TO ZONUM1 DO0030
MOVE 9-0030-QTMAR TO NUMPIC DO0030
MOVE ER-0030-QTMAR TO DEL-ER DO0030
PERFORM F8110 THRU F8110-FN DO0030
MOVE DEL-ER TO ER-0030-QTMAR DO0030
IF DEL-ER > 1 DO0030
MOVE "E" TO CAT-ER DO0030
GO TO F20C7-FN. DO0030
MOVE ZONUM2 TO E-0030-QTMAR. DO0030
F20C7-FN. DO0030
EXIT. DO0030
F20C8. DO0030
IF CATM = "A" DO0030
OR CATM = SPACE DO0030
GO TO F20C8-FN. DO0030
IF I-0030-INFOR NOT = SPACE DO0030
MOVE "1" TO ER-0030-INFOR. DO0030
IF ER-0030-INFOR NOT = 1 DO0030
GO TO F20C8-FN. DO0030
F20C8-FN. DO0030
EXIT. DO0030
F20R-FN. DO0030
EXIT. DO0030
F20Z. DO0030
IF CATX NOT = "Z" DO0030
GO TO F20Z-FN. DO0030
F20D0. DO0030
IF I-0030-EDIT NOT = SPACE DO0030
MOVE "1" TO ER-0030-EDIT. DO0030
F20D0-FN. DO0030
EXIT. DO0030
F20Z-FN. DO0030
EXIT. DO0030
F20-FN. DO0030
EXIT. DO0030
* ***** DO0030
* * DO0030
* * SEGMENT ACCESS FOR VALIDATION * DO0030
* * DO0030
* ***** DO0030
F25. DO0030
IF CAT-ER NOT = SPACE DO0030
GO TO F25-FN. DO0030
F25A. DO0030
IF CATX NOT = " " DO0030
GO TO F25A-FN. DO0030
F2501. DO0030
MOVE "0" TO CD05-CF. DO0030
IF CATM = SPACE DO0030
GO TO F2501-FN. DO0030
MOVE SPACES TO CD00-CLECD DO0030
MOVE "B" TO CD00-COCARA DO0030
MOVE CA00-NUCOM TO CD00-NUCOM DO0030
PERFORM F80-CD05-RU THRU F80-FN. DO0030
IF IK = "0" DO0030
MOVE "1" TO CD05-CF. DO0030
IF CATM NOT = "C" DO0030
AND IK = "1" DO0030
MOVE "F019" TO XERCD DO0030
PERFORM F81UT DO0030
GO TO F2501-FN. DO0030
F2501-FN. DO0030
EXIT. DO0030
F25A-FN. DO0030
EXIT. DO0030
F25R. DO0030
IF CATX NOT = "R" DO0030
GO TO F25R-FN. DO0030
F2502. DO0030
MOVE "0" TO CD10-CF. DO0030
IF CATM = SPACE DO0030
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GO TO F2502-FN.	DO0030
MOVE "C" TO CD00-CLECD	DO0030
MOVE CA00-NUCOM TO CD00-NUCOM	DO0030
MOVE I-0030-FOURNI TO CD00-FOURNI	DO0030
PERFORM F80-CD10-RU THRU F80-FN.	DO0030
IF IK = "0"	DO0030
MOVE "1" TO CD10-CF.	DO0030
IF CATM = "X"	DO0030
AND IK = "1"	DO0030
MOVE "C" TO CATM.	DO0030
IF CATM = "X"	DO0030
AND IK = "0"	DO0030
MOVE "M" TO CATM.	DO0030
IF CATM = "C"	DO0030
AND IK = "0"	DO0030
MOVE "F028" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2502-FN.	DO0030
IF CATM NOT = "C"	DO0030
AND IK = "1"	DO0030
MOVE "F029" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2502-FN.	DO0030
* I-----+ * LEVEL 12 I ACCESS TO FO10 I * I-----+ F25BB.	P000
MOVE "1" TO CD10-CF.	P100
F25BB-FN.	P000
EXIT.	P000
F2502-FN.	P000
EXIT.	P000
F2503.	DO0030
MOVE "0" TO FO10-CF.	DO0030
IF CD10-CF NOT = "1"	DO0030
GO TO F2503-FN.	DO0030
IF CATM = SPACE	DO0030
GO TO F2503-FN.	DO0030
MOVE I-0030-FOURNI TO FO00-CLEFO	DO0030
MOVE CA00-LANGU TO FO00-LANGU	DO0030
MOVE I-0030-RELEA TO FO00-RELEA	DO0030
MOVE I-0030-MATE TO FO00-MATE	DO0030
PERFORM F80-FO10-RU THRU F80-FN.	DO0030
IF IK = "0"	DO0030
MOVE "1" TO FO10-CF.	DO0030
IF IK = "1"	DO0030
MOVE "F039" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2503-FN.	DO0030
F2503-FN.	DO0030
EXIT.	DO0030
F25R-FN.	DO0030
EXIT.	DO0030
F25Z.	DO0030
IF CATX NOT = "Z"	DO0030
GO TO F25Z-FN.	DO0030
F2505.	DO0030
MOVE "0" TO CD20-CF.	DO0030
IF CATM = SPACE	DO0030
GO TO F2505-FN.	DO0030
MOVE SPACES TO CD00-CLECD	DO0030
MOVE "E" TO CD00-COCARA	DO0030
MOVE CA00-NUCOM TO CD00-NUCOM	DO0030
PERFORM F80-CD20-RU THRU F80-FN.	DO0030
IF IK = "0"	DO0030
MOVE "1" TO CD20-CF.	DO0030
IF CATM = "X"	DO0030
AND IK = "1"	DO0030
MOVE "C" TO CATM.	DO0030
IF CATM = "X"	DO0030
AND IK = "0"	DO0030
MOVE "M" TO CATM.	DO0030
IF CATM = "C"	DO0030
AND IK = "0"	DO0030
MOVE "F058" TO XERCD	DO0030
PERFORM F81UT	DO0030
GO TO F2505-FN.	DO0030

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IF      CATM NOT = "C"                                DO0030
AND    IK = "1"                                       DO0030
      MOVE "F059" TO XERCD                             DO0030
      PERFORM F81UT                                    DO0030
      GO TO F2505-FN.                                  DO0030
F2505-FN.                                             DO0030
EXIT.                                                DO0030
F25Z-FN.                                             DO0030
EXIT.                                                DO0030
F2599.                                             DO0030
IF      CAT-ER = SPACE                                DO0030
      GO TO F2599-FN.                                  DO0030
IF      CD05-CF = "1"                                DO0030
      PERFORM F80-CD05-UN THRU F80-FN.                DO0030
IF      CD10-CF = "1"                                DO0030
      PERFORM F80-CD10-UN THRU F80-FN.                DO0030
IF      FO10-CF = "1"                                DO0030
      PERFORM F80-FO10-UN THRU F80-FN.                DO0030
IF      CD20-CF = "1"                                DO0030
      PERFORM F80-CD20-UN THRU F80-FN.                DO0030
IF      CATX = " "                                    DO0030
AND    DE-AT (4, 011) = "X"                            DO0030
      MOVE " " TO DE-AT (4, 011).                    DO0030
IF      CATX = " "                                    DO0030
MOVE "X" TO A-0030-CHOIX (4).                          DO0030
IF      CATX = "R"                                    DO0030
AND    DE-AT (4, 011) = "X"                            DO0030
      MOVE " " TO DE-AT (4, 011).                    DO0030
IF      CATX = "R"                                    DO0030
MOVE "X" TO A-0030-CODMVT (4).                          DO0030
IF      CATX = "Z"                                    DO0030
AND    DE-AT (4, 011) = "X"                            DO0030
      MOVE " " TO DE-AT (4, 011).                    DO0030
IF      CATX = "Z"                                    DO0030
MOVE "X" TO A-0030-EDIT (4).                            DO0030
F2599-FN.                                             DO0030
EXIT.                                                DO0030
F25-FN.                                             DO0030
EXIT.                                                DO0030
*          +-----+                                P000
* LEVEL 10  I STOCK UPD.: ORDER DELETION/UPD      I  P000
*          +-----+                                P000
F28BH.                                             P000
IF      (CATM = "A"                                    P000
OR      "M")                                          P000
AND    CATX = "R"                                    P100
AND    CAT-ER = SPACES                               P120
      NEXT SENTENCE                                  P120
ELSE                                             P120
      GO TO F28BH-FN.                                  P120
      ADD CD10-QTMAL TO FO10-QTMAS.                  P100
F28BH-FN.                                             P000
EXIT.                                                P000
*          *****                                DO0030
*          *                                       DO0030
*          * DATA ELEMENT TRANSFER                * DO0030
*          *                                       * DO0030
*          *****                                DO0030
F30.                                             DO0030
IF      CAT-ER NOT = SPACE                            DO0030
      GO TO F30-FN.                                  DO0030
F30A.                                             DO0030
IF      CATX NOT = " "                                DO0030
      GO TO F30A-FN.                                  DO0030
MOVE I-0030-RELEA TO CD05-RELEA.                    DO0030
MOVE I-0030-COPOS TO CD05-COPOS.                    DO0030
MOVE I-0030-REFCLI TO CD05-REFCLI.                  DO0030
MOVE I-0030-DATE TO CD05-DATE.                      DO0030
MOVE I-0030-REMIS TO CD05-REMIS.                    DO0030
IF      ER-0030-MATE = "1"                            DO0030
      MOVE I-0030-MATE TO CD05-MATE.                  DO0030
IF      ER-0030-CORRES = "1"                          DO0030
      MOVE I-0030-CORRES TO CD05-CORRES.              DO0030
F30A-FN.                                             DO0030
EXIT.                                                DO0030
F30R.                                             DO0030
IF      CATX NOT = "R"                                DO0030

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      GO TO F30R-FN.                                DO0030
      IF      ER-0030-INFOR = "1"                    DO0030
      MOVE I-0030-INFOR TO CD10-INFOR.                DO0030
      IF      CATM NOT = SPACE                        DO0030
      MOVE I-0030-FOURNI TO CD00-FOURNI.              DO0030
      IF      CATM NOT = SPACE                        DO0030
      AND CATM NOT = "A"                              DO0030
      MOVE I-0030-QTMAC TO CD10-QTMAC                DO0030
      ADD I-0030-QTMAC TO FO10-QTMAM.                DO0030
      *      +-----+                               P000
      * LEVEL 10  I QUANTITY PROCESSING                I      P000
      *      +-----+                               P000
      F30BD.                                          P000
      *      +-----+                               P000
      * LEVEL 12  I CALC. DELIV. QUANT.  STOCK UPD.  I      P000
      *      +-----+                               P000
      F30BF.                                          P000
      IF      CATM = "C"                              P000
      OR      "M"                                      P000
      NEXT SENTENCE                                  P000
      ELSE                                          P000
      GO TO F30BF-FN.                                P000
      IF      FO10-QTMAS NOT < I-0030-QTMAC          P100
      MOVE I-0030-QTMAC TO CD10-QTMAL                P100
      ELSE                                          P120
      MOVE FO10-QTMAS TO CD10-QTMAL.                P120
      SUBTRACT CD10-QTMAL FROM FO10-QTMAS           P130
      MOVE CD10-QTMAL TO O-0030-QTMAL.              P140
      F30BF-FN.                                       P000
      EXIT.                                          P000
      F30BD-FN.                                       P000
      EXIT.                                          P000
      F30R-FN.                                         DO0030
      EXIT.                                         DO0030
      F30Z.                                           DO0030
      IF      CATX NOT = "Z"                          DO0030
      GO TO F30Z-FN.                                  DO0030
      MOVE I-0030-EDIT TO CD20-EDIT.                 DO0030
      F30Z-FN.                                         DO0030
      EXIT.                                         DO0030
      F30-FN.                                         DO0030
      EXIT.                                         DO0030
      *      *****                               DO0030
      *      *                                       DO0030
      *      *      SEGMENT ACCESS FOR UPDATE          *      DO0030
      *      *                                       DO0030
      *      *****                               DO0030
      F35.                                           DO0030
      IF      CAT-ER NOT = SPACE                      DO0030
      OR      CATM = SPACE                            DO0030
      GO TO F35-FN.                                  DO0030
      F35A.                                           DO0030
      IF      CATX NOT = " "                          DO0030
      GO TO F35A-FN.                                  DO0030
      F3501.                                          DO0030
      IF      CATM NOT = "C"                          DO0030
      AND CATM NOT = "A"                              DO0030
      PERFORM F80-CD05-RW THRU F80-FN.              DO0030
      F3501-FN.                                       DO0030
      EXIT.                                         DO0030
      F35A-FN.                                       DO0030
      EXIT.                                         DO0030
      F35R.                                           DO0030
      IF      CATX NOT = "R"                          DO0030
      GO TO F35R-FN.                                  DO0030
      F3502.                                          DO0030
      IF      CATM = "C"                              DO0030
      PERFORM F80-CD10-W THRU F80-FN.                DO0030
      IF      CATM = "A"                              DO0030
      PERFORM F80-CD10-D THRU F80-FN.                DO0030
      IF      CATM NOT = "C"                          DO0030
      AND CATM NOT = "A"                              DO0030
      PERFORM F80-CD10-RW THRU F80-FN.              DO0030
      F3502-FN.                                       DO0030
      EXIT.                                         DO0030
      F3503.                                          DO0030
      IF      FO10-CF = "1"                            DO0030
  
```

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```
PERFORM F80-FO10-RW THRU F80-FN. DO0030
F3503-FN. DO0030
EXIT. DO0030
F35R-C3. DO0030
MOVE SPACE TO O-0030-CODMVT. DO0030
F35R-FN. DO0030
EXIT. DO0030
F35Z. DO0030
IF CATX NOT = "Z" DO0030
GO TO F35Z-FN. DO0030
F3505. DO0030
IF CATM = "C" DO0030
PERFORM F80-CD20-W THRU F80-FN. DO0030
IF CATM NOT = "C" DO0030
AND CATM NOT = "A" DO0030
PERFORM F80-CD20-RW THRU F80-FN. DO0030
F3505-FN. DO0030
EXIT. DO0030
F35Z-D0. DO0030
MOVE SPACE TO O-0030-EDIT. DO0030
F35Z-FN. DO0030
EXIT. DO0030
F35-FN. DO0030
EXIT. DO0030
F3999-ITER-FI. DO0030
GO TO F10. DO0030
F3999-ITER-FT. DO0030
EXIT. DO0030
F3999-FN. DO0030
EXIT. DO0030
F40. DO0030
IF SCR-ER > "1" DO0030
MOVE "A" TO OPER DO0030
GO TO F40-FN. DO0030
F40-A. DO0030
IF OPERD NOT = SPACE DO0030
MOVE OPERD TO OPER. DO0030
* ***** DO0030
* * DO0030
* * SET-UP KEYS FOR NEW DISPLAY * DO0030
* * * DO0030
* ***** DO0030
F4010. DO0030
IF OPER NOT = "A" DO0030
AND NOT = "M" DO0030
GO TO F4010-FN. DO0030
F40A. DO0030
MOVE SPACES TO CD00-CLECD DO0030
MOVE "B" TO CD00-COCARA DO0030
MOVE CA00-NUCOM TO CD00-NUCOM DO0030
MOVE CD00-CLECD TO K-ACD05-CLECD. DO0030
F40A-FN. DO0030
EXIT. DO0030
F40R. DO0030
MOVE J-0030-LINE (1) TO I-0030-LINE. DO0030
MOVE SPACES TO CD00-KEYCD DO0030
MOVE "C" TO CD00-COCARA DO0030
MOVE CA00-NUCOM TO CD00-NUCOM DO0030
MOVE CD00-CLECD TO K-RCD10-CLECD (1). DO0030
F40R-FN. DO0030
EXIT. DO0030
F40Z. DO0030
MOVE CA00-CLEME TO ME00-CLEME DO0030
MOVE ME00-CLEME TO K-ZME00-CLEME. DO0030
F40Z-FN. DO0030
EXIT. DO0030
F4010-FN. DO0030
EXIT. DO0030
* ***** DO0030
* * DO0030
* * SET-UP KEYS FOR SCREEN PAGING * DO0030
* * * DO0030
* ***** DO0030
F4020. DO0030
IF OPER NOT = "S" DO0030
GO TO F4020-FN. DO0030
MOVE K-RCD10-CLECD (2) TO K-RCD10-CLECD (1). DO0030
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```
F4020-FN. DO0030
EXIT. DO0030
* *****
* * DO0030
* * END OF TRANSACTION * DO0030
* * * DO0030
* ***** DO0030
F4030. DO0030
IF OPER NOT = "E" DO0030
GO TO F4030-FN. DO0030
MOVE K-S0030-XTERM TO HE00-XTERM DO0030
PERFORM F80-HELP-D THRU F80-FN. DO0030
MOVE SPACE TO NEXT-TPR DO0030
MOVE 1 TO 7-CD02-XNDEST DO0030
MOVE K-S0030-XTERM TO 7-CD02-XTERM DO0030
MOVE 3 TO 7-CD02-XLOMES DO0030
SEND 7-CD02 FROM 0030-MESSO WITH EGI AFTER ADVANCING 0 LINES. DO0030
F4030-A. DO0030
EXIT PROGRAM. DO0030
F4030-FN. DO0030
EXIT. DO0030
* *****
* * DO0030
* * TRANSFER TO ANOTHER SCREEN * DO0030
* * * DO0030
* ***** DO0030
F4040. DO0030
IF OPER NOT = "O" DO0030
GO TO F4040-FN. DO0030
MOVE 5-0030-PROGE TO NEXT-TPR. DO0030
F4040-A. DO0030
EXIT PROGRAM. DO0030
F4040-FN. DO0030
EXIT. DO0030
F40-FN. DO0030
EXIT. DO0030
END-OF-RECEPTION. DO0030
EXIT. DO0030
* *****
* * DO0030
* * DISPLAY PREPARATION * DO0030
* * * DO0030
* ***** DO0030
F50. DO0030
IF OCF = "0" DO0030
GO TO END-OF-DISPLAY. DO0030
F5010. DO0030
MOVE ZERO TO CATX. DO0030
MOVE ZERO TO CONFIGURATIONS. DO0030
MOVE ALL "1" TO FIRST-ON-SEGMENT. DO0030
IF SCR-ER NOT > "1" DO0030
MOVE SPACE TO O-0030. DO0030
IF SCR-ER > "1" DO0030
GO TO F6999-ITER-FT. DO0030
PERFORM F8115 THRU F8115-FN. DO0030
MOVE K-R0030-LINE (1) TO K-R0030-LINE (2). DO0030
F5010-FN. DO0030
EXIT. DO0030
F50-FN. DO0030
EXIT. DO0030
* *****
* * DO0030
* * CATEGORY PROCESSING LOOP * DO0030
* * * DO0030
* ***** DO0030
F55. DO0030
EXIT. DO0030
F5510. DO0030
MOVE SPACE TO CAT-ER. DO0030
IF CATX = "0" DO0030
MOVE " " TO CATX DO0030
GO TO F5510-FN. DO0030
IF CATX = " " DO0030
MOVE "R" TO CATX DO0030
MOVE ZERO TO ICATR. DO0030
IF CATX NOT = "R" DO0030
OR ICATR > IRR DO0030
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                GO TO F5510-R.                                DO0030
    IF          ICATR > ZERO                                  DO0030
                MOVE O-0030-LINE TO P-0030-LINE (ICATR)     DO0030
                MOVE ER-0030-LINE TO PS-30-LINE (ICATR).    DO0030
    ADD 1 TO ICATR.                                         DO0030
    IF          ICATR NOT > IRR                              DO0030
                MOVE P-0030-LINE (ICATR) TO O-0030-LINE    DO0030
                MOVE PS-30-LINE (ICATR) TO ER-0030-LINE.   DO0030
    GO TO F5510-FN.                                         DO0030
F5510-R.                                                  DO0030
    EXIT.                                                  DO0030
F5510-Z.                                                  DO0030
    IF          CATX = "R"                                   DO0030
                MOVE "Z" TO CATX                            DO0030
                GO TO F5510-FN.                             DO0030
F5510-900.                                                DO0030
    GO TO F6999-ITER-FT.                                    DO0030
F5510-FN.                                                  DO0030
    EXIT.                                                  DO0030
F55-FN.                                                    DO0030
    EXIT.                                                  DO0030
*          *****                                       DO0030
*          *                                           *   DO0030
*          *   SEGMENT ACCESS FOR DISPLAY             *   DO0030
*          *                                           *   DO0030
*          *****                                       DO0030
F60.                                                       DO0030
    EXIT.                                                  DO0030
F60A.                                                      DO0030
    IF          CATX NOT = " "                               DO0030
                GO TO F60A-FN.                             DO0030
F6001.                                                     DO0030
    MOVE "0" TO CD05-CF.                                    DO0030
    MOVE K-ACD05-CLECD TO CD00-CLECD                      DO0030
    PERFORM F80-CD05-R THRU F80-FN.                       DO0030
    IF          IK = "1"                                    DO0030
                MOVE "G019" TO XERCD                      DO0030
                PERFORM F81UT THRU F81UT-FN                DO0030
                GO TO F6001-FN.                            DO0030
    MOVE "1" TO CD05-CF.                                    DO0030
F6001-FN.                                                  DO0030
    EXIT.                                                  DO0030
F60A-FN.                                                  DO0030
    EXIT.                                                  DO0030
F60R.                                                      DO0030
    IF          CATX NOT = "R"                               DO0030
                OR FT = "1"                                DO0030
                GO TO F60R-FN.                             DO0030
F6003.                                                     DO0030
    MOVE "0" TO CD10-CF.                                    DO0030
    IF          CD10-FST = "1"                              DO0030
                MOVE K-RCD10-CLECD (1) TO CD00-CLECD     DO0030
                MOVE CD00-COCARA TO C-0030-COCARA         DO0030
                MOVE CD00-NUCOM TO C-0030-NUCOM           DO0030
                PERFORM F80-CD10-P THRU F80-FN            DO0030
                MOVE ZERO TO CD10-FST                     DO0030
    ELSE                                                    DO0030
                PERFORM F80-CD10-RN THRU F80-FN.          DO0030
    IF          IK = "0"                                    DO0030
                IF CD00-COCARA NOT = C-0030-COCARA        DO0030
                    OR CD00-NUCOM NOT = C-0030-NUCOM     DO0030
                    MOVE "1" TO IK.                       DO0030
    IF          IK = "1"                                    DO0030
                MOVE "G039" TO XERCD                      DO0030
                MOVE "1" TO FT                             DO0030
                PERFORM F81UT THRU F81UT-FN                DO0030
                GO TO F6003-FN.                            DO0030
    MOVE "1" TO CD10-CF.                                    DO0030
    MOVE CD00-CLECD TO K-RCD10-CLECD (2).                 DO0030
F6003-FN.                                                  DO0030
    EXIT.                                                  DO0030
F60R-FN.                                                  DO0030
    EXIT.                                                  DO0030
F60Z.                                                      DO0030
    IF          CATX NOT = "Z"                               DO0030
                GO TO F60Z-FN.                             DO0030
F6006.                                                     DO0030

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MOVE "0" TO ME00-CF.	DO0030
MOVE K-ZME00-CLEME TO ME00-CLEME	DO0030
PERFORM F80-ME00-R THRU F80-FN.	DO0030
IF IK = "1"	DO0030
MOVE "G069" TO XERCD	DO0030
PERFORM F81UT THRU F81UT-FN	DO0030
GO TO F6006-FN.	DO0030
MOVE "1" TO ME00-CF.	DO0030
F6006-FN.	DO0030
EXIT.	DO0030
F60Z-FN.	DO0030
EXIT.	DO0030
F60-FN.	DO0030
EXIT.	DO0030
* +-----+	P000
* LEVEL 10 I PREPARATION DISPLAY DATE/HOUR I	P000
* +-----+	P000
F64DA.	P000
IF CATX = " "	P000
NEXT SENTENCE	P000
ELSE	P000
GO TO F64DA-FN.	P000
ACCEPT DATOR FROM DATE	P040
MOVE DATOR TO DAT6 DAT8	P040
MOVE DAT63 TO DAT61	P040
MOVE DAT81 TO DAT63	P040
MOVE DATOR TO DAT6	P080
PERFORM F8120-I THRU F8120-Z	P080
MOVE DAT8C TO DAT8C.	P080
ACCEPT TIMCO FROM TIME	P120
MOVE TIMCOG TO TIMCOG	P160
MOVE TIMCOH TO TIMHOU	P160
MOVE TIMCOM TO TIMMIN	P160
MOVE TIMCOS TO TIMSEC	P160
MOVE ":" TO TIMS1 TIMS2	P160
MOVE TIMDAY TO TIMDAY.	P160
F64DA-FN.	P000
EXIT.	P000
* *****	DO0030
* * * * *	DO0030
* * DATA ELEMENT TRANSFER * * *	DO0030
* * * * *	DO0030
* *****	DO0030
F65.	DO0030
EXIT.	DO0030
F65A.	DO0030
IF CATX NOT = " "	DO0030
GO TO F65A-FN.	DO0030
MOVE PROGE TO O-0030-PROGE.	DO0030
MOVE SESSI TO O-0030-SESSI.	DO0030
MOVE DAT8C TO O-0030-DATEM.	DO0030
MOVE TIMDAY TO O-0030-HEURE.	DO0030
F65A-A7.	DO0030
MOVE CA00-NUCOM TO O-0030-NUCOM.	DO0030
F65A-A7-FN.	DO0030
EXIT.	DO0030
F65A-A8.	DO0030
MOVE CA00-RAISOC TO O-0030-RAISOC.	DO0030
F65A-A8-FN.	DO0030
EXIT.	DO0030
F65A-CD05.	DO0030
IF CD05-CF NOT = "1"	DO0030
GO TO F65A-CD05-FN.	DO0030
MOVE CD05-MATE TO O-0030-MATE.	DO0030
F65A-B0.	DO0030
MOVE CD05-RELEA TO O-0030-RELEA.	DO0030
F65A-B0-FN.	DO0030
EXIT.	DO0030
F65A-B1.	DO0030
MOVE CD05-VILLE TO O-0030-VILLE.	DO0030
F65A-B1-FN.	DO0030
EXIT.	DO0030
F65A-B2.	DO0030
MOVE CD05-COPOS TO O-0030-COPOS.	DO0030
F65A-B2-FN.	DO0030
EXIT.	DO0030
F65A-B3.	DO0030

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      MOVE CD05-REFCLI TO O-0030-REFCLI.          DO0030
F65A-B3-FN.                                       DO0030
      EXIT.                                       DO0030
F65A-B4.                                          DO0030
      MOVE CD05-DATE TO O-0030-DATE.             DO0030
F65A-B4-FN.                                       DO0030
      EXIT.                                       DO0030
F65A-B5.                                          DO0030
      MOVE CD05-CORRES TO O-0030-CORRES.         DO0030
F65A-B5-FN.                                       DO0030
      EXIT.                                       DO0030
F65A-B6.                                          DO0030
      MOVE CD05-REMIS TO O-0030-REMIS.           DO0030
F65A-B6-FN.                                       DO0030
      EXIT.                                       DO0030
F65A-CD05-FN.                                    DO0030
      EXIT.                                       DO0030
F65A-FN.                                          DO0030
      EXIT.                                       DO0030
F65R.                                             DO0030
      IF      CATX NOT = "R"                      DO0030
      OR      FT = "1"                            DO0030
      GO TO F65R-FN.                              DO0030
      IF      ICATR > IRR                         DO0030
      GO TO F65R-FN.                              DO0030
F65R-A4.                                          DO0030
      MOVE CD00-FOURNI TO O-0030-FOURNI.         DO0030
F65R-A4-FN.                                       DO0030
      EXIT.                                       DO0030
F65R-CD10.                                       DO0030
      IF      CD10-CF NOT = "1"                  DO0030
      GO TO F65R-CD10-FN.                        DO0030
      MOVE CD10-QTMAC TO O-0030-QTMAC.           DO0030
F65R-A6.                                          DO0030
      MOVE CD10-QTMAL TO O-0030-QTMAL.           DO0030
F65R-A6-FN.                                       DO0030
      EXIT.                                       DO0030
F65R-A7.                                          DO0030
      MOVE CD10-INFOR TO O-0030-INFOR.           DO0030
F65R-A7-FN.                                       DO0030
      EXIT.                                       DO0030
F65R-CD10-FN.                                    DO0030
      EXIT.                                       DO0030
*          +-----+                               P000
* LEVEL 10  I REMAINS TO BE DELIVERED             I      P000
*          +-----+                               P000
F65BB.                                             P000
      IF      CD10-QTMAL NOT = ZERO               P100
      COMPUTE WW10-QTMAR = CD10-QTMAC - CD10-QTMAL P100
      MOVE WW10-QTMAR TO O-0030-QTMAR.           P120
F65BB-FN.                                         P000
      EXIT.                                       P000
F65R-FN.                                          DO0030
      EXIT.                                       DO0030
F65Z.                                             DO0030
      IF      CATX NOT = "Z"                      DO0030
      GO TO F65Z-FN.                              DO0030
F65Z-ME00.                                        DO0030
      IF      ME00-CF NOT = "1"                  DO0030
      GO TO F65Z-ME00-FN.                        DO0030
      MOVE ME00-MESSA TO O-0030-MESSA.           DO0030
F65Z-ME00-FN.                                    DO0030
      EXIT.                                       DO0030
F65Z-FN.                                          DO0030
      EXIT.                                       DO0030
F65-FN.                                          DO0030
      EXIT.                                       DO0030
F6999-ITER-FI.                                   DO0030
      GO TO F55.                                  DO0030
F6999-ITER-FT.                                   DO0030
      EXIT.                                       DO0030
F6999-FN.                                         DO0030
      EXIT.                                       DO0030
F70.                                              DO0030
      EXIT.                                       DO0030
*          *****                               DO0030
*          *                                     *           DO0030
*          *                                     *           DO0030

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```
*          *  ERROR PROCESSING          *          *          *          *          *          *
*          *          *          *          *          *          *          *          *          *
*          *          *          *          *          *          *          *          *          *
F7010.
MOVE ZERO TO K01 K02 K04
MOVE 1 TO K03.
MOVE LIBRA TO EM00-LIBRA
MOVE PROGR TO EM00-PROGR
MOVE ZERO TO EM00-LINUM
MOVE "H" TO EM00-ENTYP.
F7010-A.
IF      K02 = INR
AND    K03 < IRR
      MOVE INA TO K02
      ADD 1 TO K03.
ADD 1 TO K01 K02.
IF      DE-ER (K01) > "1"
OR      < "0"
      MOVE "Y" TO DE-AT (4, K01)
      MOVE "B" TO DE-AT (1, K01)
      MOVE "N" TO DE-AT (2, K01)
      MOVE "W" TO DE-AT (3, K01)
IF K04 < IER
      MOVE DE-ER (K01) TO EM00-ERTYP
      MOVE K02 TO EM00-ERCOD9
      MOVE EM00-XEMKY TO EM00-ERMSG
      PERFORM F80-EM00-R THRU F80-FN
      ADD 1 TO K04
      MOVE EM00-ERMSG TO O-0030-ERMSG1 (K04)
      MOVE EM00-ERMSG TO O-0030-ERMSG (K04).
IF      K01 < INT
      GO TO F7010-A.
MOVE ZERO TO K50R.
F7010-B.
ADD 1 TO K50R
IF      K50R > K50L
OR      K04 NOT < IER
      GO TO F7010-FN.
MOVE T-XEMKY (K50R) TO EM00-XEMKY EM00-ERMSG
PERFORM F80-EM00-R THRU F80-FN.
ADD 1 TO K04
MOVE EM00-ERMSG TO O-0030-ERMSG1 (K04)
MOVE EM00-ERMSG TO O-0030-ERMSG (K04)
GO TO F7010-B.
F7010-FN.
EXIT.
*          *          *          *          *          *          *          *          *          *
*          *          *          *          *          *          *          *          *          *
*          *  POSITIONING OF ATTRIBUTES  *          *          *          *          *          *
*          *          *          *          *          *          *          *          *          *
*          *          *          *          *          *          *          *          *          *
F7020.
MOVE ZERO TO TALLY
EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Y".
IF      TALLY NOT < 0065
      MOVE ZERO TO TALLY
      EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Z".
IF      TALLY NOT < 0065
      MOVE ZERO TO TALLY
      EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "X".
IF      TALLY NOT < 0065
      MOVE ZERO TO TALLY.
ADD 1 TO TALLY.
MOVE X-ATPC (TALLY) TO X-ATPC1.
MOVE ZERO TO K01.
EXAMINE DE-ATT1 (1) REPLACING ALL "N" BY ""243""
EXAMINE DE-ATT1 (1) REPLACING ALL "B" BY ""241""
EXAMINE DE-ATT1 (1) REPLACING ALL "D" BY ""249""
EXAMINE DE-ATT1 (2) REPLACING ALL "N" BY SPACE
EXAMINE DE-ATT1 (2) REPLACING ALL "U" BY ""245""
EXAMINE DE-ATT1 (2) REPLACING ALL "B" BY ""246""
EXAMINE DE-ATT1 (2) REPLACING ALL "R" BY ""248"".
F7020-A.
ADD 1 TO K01.
IF      K01 > INT
      GO TO F7020-FN.
IF      DE-AT (1, K01) NOT = SPACE
```

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      AND X-ATTRI (K01) NOT = "249"                DO0030
      MOVE DE-AT (1, K01) TO X-ATTRI (K01).        DO0030
IF     DE-AT (2, K01) NOT = SPACE                  DO0030
      MOVE DE-AT (2, K01) TO X-ATTRP (K01).        DO0030
IF     DE-AT (2, K01) = SPACE                      DO0030
      AND X-ATTRP (K01) NOT = "245"                DO0030
      AND X-ATTRP (K01) NOT = "246"                DO0030
      AND X-ATTRP (K01) NOT = "248"                DO0030
      MOVE X-ATTRI (K01) TO X-ATTRP (K01).        DO0030
GO TO F7020-A.                                     DO0030
F7020-FN.                                          DO0030
  EXIT.                                           DO0030
F70-FN.                                           DO0030
  EXIT.                                           DO0030
END-OF-DISPLAY.                                  DO0030
  EXIT.                                           DO0030
F8Z.                                             DO0030
  EXIT.                                           DO0030
F8Z05.                                           DO0030
  IF     SCR-ER = "1"                              DO0030
    NEXT SENTENCE                                DO0030
  ELSE                                           DO0030
    GO TO F8Z05-FN.                               DO0030
  IF     K-S0030-DOC NOT = "1"                    DO0030
    GO TO F8Z05-A.                                DO0030
  MOVE K-S0030-ERCOD9 TO K01 K02.                 DO0030
  IF     K02 > INR                                 DO0030
    COMPUTE K02 = K01 + (INR - INA) * (IRR - 1).  DO0030
  IF     K02 < 1                                  DO0030
    OR     K02 > INT                               DO0030
    MOVE 1 TO K02.                                 DO0030
  MOVE "X" TO DE-AT (4, K02)                       DO0030
  PERFORM F7020 THRU F7020-FN.                     DO0030
F8Z05-A.                                          DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM.                DO0030
  IF     K-S0030-DOC = "1"                         DO0030
    PERFORM F80-HELP-R THRU F80-FN                 DO0030
    MOVE HE00-SCREEN TO O-0030                     DO0030
    MOVE "0" TO K-S0030-DOC                         DO0030
    GO TO F8Z05-FN.                                 DO0030
  IF     K-S0030-DOC NOT = ZERO                     DO0030
    GO TO F8Z05-FN.                                 DO0030
  PERFORM F80-HELP-R THRU F80-FN.                 DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM                 DO0030
  MOVE O-0030 TO HE00-SCREEN.                       DO0030
  IF     IK = "1"                                   DO0030
    PERFORM F80-HELP-W THRU F80-FN                 DO0030
  ELSE                                           DO0030
    PERFORM F80-HELP-RW THRU F80-FN.               DO0030
F8Z05-FN.                                          DO0030
  EXIT.                                           DO0030
*          *****                               DO0030
*          *                                     *       DO0030
*          * DISPLAY                             *       DO0030
*          *                                     *       DO0030
*          *****                               DO0030
F8Z10.                                          DO0030
  IF     SCR-ER NOT > "1"                           DO0030
    AND DE-AT (4, 011) = "X"                       DO0030
    PERFORM F7020 THRU F7020-FN.                   DO0030
  PERFORM F8145 THRU F8145-FN.                     DO0030
  MOVE 1 TO 7-CD02-XNDEST                           DO0030
  MOVE K-S0030-XTERM TO 7-CD02-XTERM.              DO0030
  IF     SCR-ER NOT > "1"                           DO0030
    MOVE Progr TO K-S0030-PROGR                     DO0030
    PERFORM F8140 THRU F8140-FN                     DO0030
    PERFORM F81SE THRU F81SE-FN.                   DO0030
  IF     SCR-ER > "1"                               DO0030
    OR     K50L > ZERO                               DO0030
    PERFORM F81SM THRU F81SM-FN.                   DO0030
  IF     7-SENDVAR = "1"                           DO0030
    MOVE MESS-LENGV TO 7-CD02-XLONES                DO0030
    SEND 7-CD02 FROM 0030-MESSV WITH ESI AFTER ADVANCING 0 DO0030
  LINES                                           DO0030
    PERFORM F81ES THRU F81ES-FN.                   DO0030
  MOVE 0030-XLOUT TO 7-CD02-XLONES                 DO0030
  SEND 7-CD02 FROM ERROR-MESSF WITH EGI AFTER ADVANCING 0 LINESDO0030

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PERFORM F81ES THRU F81ES-FN.	DO0030
F8Z10-G.	DO0030
EXIT.	DO0030
F8Z10-FN.	DO0030
EXIT.	DO0030
* *****	DO0030
* *	DO0030
* * END OF PROGRAM *	DO0030
* *	DO0030
* *****	DO0030
F8Z20.	DO0030
MOVE PROGE TO NEXT-TPR.	DO0030
F8Z20-A.	DO0030
EXIT PROGRAM.	DO0030
F8Z20-FN.	DO0030
EXIT.	DO0030
F8Z-FN.	DO0030
EXIT.	DO0030
* *****	DO0030
* *	DO0030
* * PHYSICAL SEGMENT ACCESS ROUTINES *	DO0030
* *	DO0030
* *****	DO0030
F80.	DO0030
EXIT.	DO0030
F80-CD05-R.	DO0030
READ CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD05-RU.	DO0030
READ CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD05-RW.	DO0030
REWRITE CD05 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD05-UN.	DO0030
GO TO F80-OK.	DO0030
F8001-FN.	DO0030
EXIT.	DO0030
F80-CD10-R.	DO0030
READ CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-RU.	DO0030
READ CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-P.	DO0030
START CD-FILE KEY NOT < CD00-CLECD INVALID KEY	DO0030
GO TO F80-KO.	DO0030
F80-CD10-RN.	DO0030
READ CD-FILE	DO0030
NEXT AT END	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-W.	DO0030
WRITE CD10 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-RW.	DO0030
REWRITE CD10 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-D.	DO0030
DELETE CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD10-UN.	DO0030
GO TO F80-OK.	DO0030
F8002-FN.	DO0030
EXIT.	DO0030
F80-CD20-RU.	DO0030
READ CD-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030

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F80-CD20-W.	DO0030
WRITE CD20 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD20-RW.	DO0030
REWRITE CD20 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-CD20-UN.	DO0030
GO TO F80-OK.	DO0030
F8003-FN.	DO0030
EXIT.	DO0030
F80-FO10-RU.	DO0030
READ FO-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-FO10-RW.	DO0030
REWRITE FO10 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-FO10-UN.	DO0030
GO TO F80-OK.	DO0030
F8004-FN.	DO0030
EXIT.	DO0030
F80-ME00-R.	DO0030
READ ME-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-ME00-RU.	DO0030
READ ME-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8005-FN.	DO0030
EXIT.	DO0030
F80-HELP-R.	DO0030
READ HE-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-W.	DO0030
WRITE HE00 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-RW.	DO0030
REWRITE HE00 INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F80-HELP-D.	DO0030
DELETE HE-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8095-FN.	DO0030
EXIT.	DO0030
F80-EM00-R.	DO0030
READ EM-FILE INVALID KEY	DO0030
GO TO F80-KO.	DO0030
GO TO F80-OK.	DO0030
F8098-FN.	DO0030
EXIT.	DO0030
F80-OK.	DO0030
MOVE "0" TO IK	DO0030
MOVE PROGR TO XPROGR	DO0030
GO TO F80-FN.	DO0030
F80-KO.	DO0030
MOVE "1" TO IK	DO0030
MOVE PROGR TO XPROGR.	DO0030
F8099-FN.	DO0030
EXIT.	DO0030
F80-FN.	DO0030
EXIT.	DO0030
F81.	DO0030
EXIT.	DO0030
*	DO0030
*	DO0030
*	DO0030
*	DO0030
*	DO0030
*	DO0030
*	DO0030
F81ER.	DO0030

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CALL "ABORT".                                DO0030
F81ER-FN.                                    DO0030
EXIT.                                        DO0030
F81ES.                                       DO0030
IF      7-CD01-XMSTA NOT = ZERO              DO0030
OR      7-CD02-XMSTA NOT = ZERO              DO0030
CALL "ABORT".                                DO0030
F81ES-FN.                                    DO0030
EXIT.                                        DO0030
F81RE.                                       DO0030
RECEIVE 7-CD01 MESSAGE INTO 0030-MESSI NO DATA DO0030
MOVE SPACE TO 0030-MESSI                     DO0030
MOVE 7-CD01-XTERM TO K-S0030-XTERM           DO0030
MOVE ZERO TO ICF.                           DO0030
F81RE-FN.                                    DO0030
EXIT.                                        DO0030
F81SE.                                       DO0030
MOVE MESS-LENF TO 7-CD02-XLOMES              DO0030
SEND 7-CD02 FROM 0030-MESS01 WITH ESI AFTER ADVANCING 0 LINES DO0030
PERFORM F81ES THRU F81ES-FN.                 DO0030
F81SE-FN.                                    DO0030
EXIT.                                        DO0030
F81SM.                                       DO0030
EXAMINE 0-0030-ERMSG (01) REPLACING ALL SPACE BY "19". DO0030
MOVE ERROR-LENF TO 7-CD02-XLOMES            DO0030
SEND 7-CD02 FROM ERROR-MESS01 WITH ESI AFTER ADVANCING 0 DO0030
LINES                                         DO0030
PERFORM F81ES THRU F81ES-FN.                 DO0030
F81SM-FN.                                    DO0030
EXIT.                                        DO0030
*      *****                                DO0030
*      *                                       * DO0030
*      * MEMORIZATION OF USER'S ERRORS * DO0030
*      *                                       * DO0030
*      *****                                DO0030
F81UT.                                       DO0030
IF      K50L < K50M                          DO0030
ADD 1 TO K50L                                DO0030
MOVE XEMKY TO T-XEMKY (K50L).                DO0030
MOVE "E" TO CAT-ER.                          DO0030
F81UT-FN.                                    DO0030
EXIT.                                        DO0030
*      *****                                DO0030
*      *                                       * DO0030
*      * NUMERIC VALIDATION * DO0030
*      *                                       * DO0030
*      *****                                DO0030
F8110.                                       DO0030
MOVE ZERO TO TPOINT K01 K02 K03 ZONUM3 ZONUM2 C9 C91. DO0030
F8110-1.                                     DO0030
IF      K01 > 26                              DO0030
OR      K02 > 17                              DO0030
GO TO F8110-5.                                DO0030
ADD 1 TO K01.                                 DO0030
IF      C1 (K01) = SPACE                      DO0030
OR      C1 (K01) = "."                        DO0030
GO TO F8110-1.                                DO0030
IF      C1 (K01) NOT = "-"                    DO0030
AND C1 (K01) NOT = "+"                        DO0030
GO TO F8110-2.                                DO0030
IF      C9 NOT = ZERO                          DO0030
MOVE "5" TO DEL-ER                           DO0030
GO TO F8110-FN.                               DO0030
IF      K02 = ZERO                            DO0030
MOVE "1" TO C91.                              DO0030
IF      C1 (K01) = "+"                        DO0030
MOVE 1 TO C9                                  DO0030
GO TO F8110-1.                                DO0030
IF      SIGNE = " "                           DO0030
MOVE "5" TO DEL-ER                           DO0030
GO TO F8110-FN.                               DO0030
MOVE -1 TO C9                                 DO0030
GO TO F8110-1.                                DO0030
F8110-2.                                     DO0030
IF      C1 (K01) NOT = ", "                   DO0030
GO TO F8110-4.                                DO0030
IF      TPOINT = "1"                          DO0030

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```
OR NBCHP = 0 DO0030
MOVE "5" TO DEL-ER DO0030
GO TO F8110-FN. DO0030
F8110-3. DO0030
IF K02 > NBCHA DO0030
MOVE "5" TO DEL-ER DO0030
GO TO F8110-FN. DO0030
COMPUTE K04 = 18 - NBCHA + K02 DO0030
MOVE 1 TO C3 (K04) DO0030
DIVIDE ZONUM4 INTO ZONUM9 DO0030
MOVE NBCHA TO K02 DO0030
MOVE "1" TO TPOINT DO0030
GO TO F8110-1. DO0030
F8110-4. DO0030
IF C1 (K01) NOT NUMERIC DO0030
MOVE "4" TO DEL-ER DO0030
GO TO F8110-FN. DO0030
IF C9 NOT = ZERO DO0030
AND C91 = ZERO DO0030
MOVE "5" TO DEL-ER DO0030
GO TO F8110-FN. DO0030
IF C1 (K01) = "0" DO0030
AND K02 = ZERO DO0030
AND TPOINT = "0" DO0030
GO TO F8110-1. DO0030
ADD 1 TO K02 DO0030
MOVE C1 (K01) TO C2 (K02). DO0030
IF TPOINT = "1" DO0030
ADD 1 TO K03. DO0030
IF K03 > NBCHP DO0030
MOVE "5" TO DEL-ER DO0030
GO TO F8110-FN. DO0030
GO TO F8110-1. DO0030
F8110-5. DO0030
IF TPOINT = "0" DO0030
AND K02 > ZERO DO0030
GO TO F8110-3. DO0030
IF SIGNE NOT = "+" DO0030
GO TO F8110-FN. DO0030
IF C9 = ZERO DO0030
MOVE 1 TO C9. DO0030
ADD NBCHA NBCHP GIVING K01 DO0030
MULTIPLY C9 BY C29 (K01). DO0030
IF C29 (K01) = ZERO DO0030
AND C9 = -1 DO0030
MOVE C4 TO C2 (K01). DO0030
F8110-FN. DO0030
EXIT. DO0030
F8115. DO0030
MOVE ALL "-" TO O-0030-CHOIX. DO0030
MOVE ALL "-" TO O-0030-MATE. DO0030
MOVE ALL "-" TO O-0030-RELEA. DO0030
MOVE ALL "-" TO O-0030-RUE. DO0030
MOVE ALL "-" TO O-0030-VILLE. DO0030
MOVE ALL "-" TO O-0030-COPOS. DO0030
MOVE ALL "-" TO O-0030-REFCLI. DO0030
MOVE "..__.." TO O-0030-DATE. DO0030
MOVE ALL "-" TO O-0030-CORRES. DO0030
MOVE ALL "-" TO F-0030-REMIS. DO0030
MOVE ZERO TO ICATR. DO0030
F8115-GRP. DO0030
ADD 1 TO ICATR DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE DO0030
MOVE ALL "-" TO O-0030-CODMVT. DO0030
MOVE ALL "-" TO O-0030-FOURNI. DO0030
MOVE ALL "-" TO F-0030-QTMAC. DO0030
MOVE ALL "-" TO F-0030-QTMAL. DO0030
MOVE ALL "-" TO F-0030-QTMAR. DO0030
MOVE ALL "-" TO O-0030-INFOR. DO0030
MOVE O-0030-LINE TO P-0030-LINE (ICATR). DO0030
IF ICATR < IRR DO0030
GO TO F8115-GRP. DO0030
MOVE ALL "-" TO O-0030-EDIT. DO0030
F8115-FN. DO0030
EXIT. DO0030
* ***** DO0030
* * * * * DO0030
* * * * * DO0030
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```
*           *  VALIDATION AND SETTING OF DATE  *           DO0030
*           *           *           *           DO0030
*           *           *           *           DO0030
F8120.                                           DO0030
  EXIT.                                         DO0030
F8120-C.                                         DO0030
  MOVE DAT73C TO DATCTY.                       DO0030
  MOVE DAT71C TO DAT71.                       DO0030
  MOVE DAT72C TO DAT72.                       DO0030
  MOVE DAT74C TO DAT73.                       DO0030
  MOVE "00111" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-D.                                         DO0030
  MOVE CENTUR TO DATCTY DAT73C.               DO0030
  MOVE DAT71 TO DAT71C.                       DO0030
  MOVE DAT72 TO DAT72C                       DO0030
  MOVE DAT73 TO DAT74C.                       DO0030
  MOVE "00111" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-E.                                         DO0030
  MOVE CENTUR TO DATCTY DAT83C.               DO0030
  MOVE DAT81 TO DAT81C.                       DO0030
  MOVE DAT82 TO DAT82C.                       DO0030
  MOVE DAT83 TO DAT84C                       DO0030
  MOVE DATSEP TO DAT8S1C DAT8S2C.            DO0030
  MOVE "01011" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-G.                                         DO0030
  MOVE DAT81G TO DATCTY.                       DO0030
  MOVE DAT82G TO DAT61.                       DO0030
  MOVE DAT83G TO DAT62.                       DO0030
  MOVE DAT84G TO DAT63.                       DO0030
  MOVE "10110" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-I.                                         DO0030
  MOVE CENTUR TO DATCTY DAT61C.               DO0030
  MOVE DAT61 TO DAT62C.                       DO0030
  MOVE DAT62 TO DAT63C.                       DO0030
  MOVE DAT63 TO DAT64C.                       DO0030
  MOVE "10101" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-M.                                         DO0030
  MOVE DAT83C TO DATCTY.                       DO0030
  MOVE DAT81C TO DAT81.                       DO0030
  MOVE DAT82C TO DAT82.                       DO0030
  MOVE DAT84C TO DAT83                       DO0030
  MOVE DATSEP TO DAT8S1 DAT8S2.              DO0030
  MOVE "01011" TO TT-DAT                      DO0030
  GO TO F8120-T.                              DO0030
F8120-S.                                         DO0030
  MOVE DAT61C TO DATCTY.                       DO0030
  MOVE DAT62C TO DAT61.                       DO0030
  MOVE DAT63C TO DAT62.                       DO0030
  MOVE DAT64C TO DAT63.                       DO0030
  MOVE "10101" TO TT-DAT.                     DO0030
F8120-T.                                         DO0030
  IF      T-DAT (1) = "1"                     DO0030
    MOVE DAT61 TO DAT73 DAT74C                DO0030
    MOVE DAT62 TO DAT72 DAT72C                DO0030
    MOVE DAT63 TO DAT71 DAT71C                DO0030
    MOVE DATCTY TO DAT73C.                    DO0030
  IF      T-DAT (2) = "1"                     DO0030
    MOVE DAT81 TO DAT71 DAT71C                DO0030
    MOVE DAT82 TO DAT72 DAT72C                DO0030
    MOVE DAT83 TO DAT73 DAT74C                DO0030
    MOVE DATCTY TO DAT73C.                    DO0030
  IF      T-DAT (3) = "1"                     DO0030
    MOVE DAT71 TO DAT81 DAT81C                DO0030
    MOVE DAT72 TO DAT82 DAT82C                DO0030
    MOVE DAT73 TO DAT83 DAT84C                DO0030
    MOVE DATSEP TO DAT8S1 DAT8S2 DAT8S1C DAT8S2C DO0030
    MOVE DATCTY TO DAT83C.                    DO0030
  IF      T-DAT (4) = "1"                     DO0030
    MOVE DAT71 TO DAT63 DAT64C                DO0030
    MOVE DAT72 TO DAT62 DAT63C                DO0030
    MOVE DAT73 TO DAT61 DAT62C                DO0030
    MOVE DATCTY TO DAT61C.                    DO0030
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IF      T-DAT (5) = "1"                                DO0030
MOVE DAT61 TO DAT82G                                  DO0030
MOVE DAT62 TO DAT83G                                  DO0030
MOVE DAT63 TO DAT84G                                  DO0030
MOVE DATSET TO DAT8S1G DAT8S2G                       DO0030
MOVE DATCTY TO DAT81G.                                DO0030
F8120-Z.                                              DO0030
EXIT.                                                  DO0030
F8120-ER.                                             DO0030
MOVE "1" TO DEL-ER.                                  DO0030
IF      DAT6 NOT NUMERIC                              DO0030
GO TO F8120-KO.                                       DO0030
IF      DATCTY NOT NUMERIC                            DO0030
GO TO F8120-KO.                                       DO0030
IF      DAT62 > "12"                                  DO0030
OR      DAT62 = "00"                                  DO0030
OR      DAT63 > "31"                                  DO0030
OR      DAT63 = "00"                                  DO0030
GO TO F8120-KO.                                       DO0030
IF      DAT63 > "30"                                  DO0030
AND (DAT62 = "04"                                     DO0030
OR DAT62 = "06"                                       DO0030
OR DAT62 = "09"                                       DO0030
OR DAT62 = "11") GO TO F8120-KO.                    DO0030
IF      DAT62 NOT = "02"                              DO0030
GO TO F8120-FN.                                       DO0030
IF      DAT63 > "29"                                  DO0030
GO TO F8120-KO.                                       DO0030
IF      DAT619 = ZERO                                  DO0030
DIVIDE DATCTY9 BY 4 GIVING LEAP-REM                   DO0030
COMPUTE LEAP-REM = DATCTY9 - 4 * LEAP-REM             DO0030
ELSE                                                  DO0030
DIVIDE DAT619 BY 4 GIVING LEAP-REM                   DO0030
COMPUTE LEAP-REM = DAT619 - 4 * LEAP-REM.            DO0030
IF      DAT63 < "29"                                  DO0030
OR      LEAP-REM = ZERO                                DO0030
GO TO F8120-FN.                                       DO0030
F8120-KO.                                             DO0030
MOVE "5" TO DEL-ER.                                  DO0030
F8120-FN.                                             DO0030
EXIT.                                                 DO0030
*      *****                                       DO0030
*      *                                           *   DO0030
*      *   HELP SUB-FUNCTION                       *   DO0030
*      *                                           *   DO0030
*      *****                                       DO0030
F8130.                                              DO0030
IF      I-0030-CHOIX NOT = HIGH-VALUE                 DO0030
MOVE I-0030-CHOIX TO O-0030-CHOIX.                   DO0030
IF      I-0030-MATE NOT = HIGH-VALUE                 DO0030
MOVE I-0030-MATE TO O-0030-MATE.                     DO0030
IF      I-0030-RELEA NOT = HIGH-VALUE                 DO0030
MOVE I-0030-RELEA TO O-0030-RELEA.                   DO0030
IF      I-0030-RUE NOT = HIGH-VALUE                  DO0030
MOVE I-0030-RUE TO O-0030-RUE.                       DO0030
IF      I-0030-VILLE NOT = HIGH-VALUE                 DO0030
MOVE I-0030-VILLE TO O-0030-VILLE.                   DO0030
IF      I-0030-COPOS NOT = HIGH-VALUE                 DO0030
MOVE I-0030-COPOS TO O-0030-COPOS.                   DO0030
IF      I-0030-REFCLI NOT = HIGH-VALUE                DO0030
MOVE I-0030-REFCLI TO O-0030-REFCLI.                  DO0030
IF      I-0030-DATE NOT = HIGH-VALUE                  DO0030
MOVE I-0030-DATE TO O-0030-DATE.                     DO0030
IF      I-0030-CORRES NOT = HIGH-VALUE                DO0030
MOVE I-0030-CORRES TO O-0030-CORRES.                  DO0030
IF      E-0030-REMIS NOT = HIGH-VALUE                 DO0030
MOVE E-0030-REMIS TO F-0030-REMIS.                   DO0030
MOVE ZERO TO ICATR.                                  DO0030
F8130-GRP.                                           DO0030
ADD 1 TO ICATR                                        DO0030
MOVE J-0030-LINE (ICATR) TO I-0030-LINE               DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE               DO0030
IF      I-0030-CODMVT NOT = HIGH-VALUE                DO0030
MOVE I-0030-CODMVT TO O-0030-CODMVT.                 DO0030
IF      I-0030-FOURNI NOT = HIGH-VALUE                DO0030
MOVE I-0030-FOURNI TO O-0030-FOURNI.                 DO0030
IF      E-0030-QTMAC NOT = HIGH-VALUE                 DO0030

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      MOVE E-0030-QTMAL TO F-0030-QTMAL.          DO0030
      IF      E-0030-QTMAL NOT = HIGH-VALUE        DO0030
      MOVE E-0030-QTMAL TO F-0030-QTMAL.          DO0030
      IF      E-0030-QTMAR NOT = HIGH-VALUE        DO0030
      MOVE E-0030-QTMAR TO F-0030-QTMAR.          DO0030
      IF      I-0030-INFOR NOT = HIGH-VALUE        DO0030
      MOVE I-0030-INFOR TO O-0030-INFOR.          DO0030
      MOVE O-0030-LINE TO P-0030-LINE (ICATR).     DO0030
      IF      ICATR < IRR                          DO0030
      GO TO F8130-GRP.                             DO0030
      IF      I-0030-EDIT NOT = HIGH-VALUE        DO0030
      MOVE I-0030-EDIT TO O-0030-EDIT.            DO0030
F8130-FN.                                         DO0030
      EXIT.                                        DO0030
F8140.                                           DO0030
      MOVE 3 TO K01.                              DO0030
F8140-A.                                         DO0030
      ADD 1 TO K01.                               DO0030
      IF      K01 > MESS-LENGF                    DO0030
      GO TO F8140-FN.                             DO0030
      IF      0030-CX (K01) = "20"                DO0030
      ADD 2 TO K01                                DO0030
      GO TO F8140-A.                              DO0030
      IF      0030-CX (K01) = "040"               DO0030
      ADD 5 TO K01                                DO0030
      GO TO F8140-A.                              DO0030
      IF      0030-CX (K01) = SPACE                DO0030
      MOVE "19" TO 0030-CX (K01).                 DO0030
      GO TO F8140-A.                              DO0030
F8140-FN.                                         DO0030
      EXIT.                                        DO0030
F8145.                                           DO0030
      MOVE T01004 TO S01004.                      DO0030
      MOVE T01015 TO S01015.                      DO0030
      MOVE T01060 TO S01060.                      DO0030
      MOVE T01071 TO S01071.                      DO0030
      MOVE T03018 TO S03018.                      DO0030
      MOVE T03034 TO S03034.                      DO0030
      MOVE T03063 TO S03063.                      DO0030
      MOVE T04013 TO S04013.                      DO0030
      MOVE T05009 TO S05009.                      DO0030
      MOVE T05052 TO S05052.                      DO0030
      MOVE T05074 TO S05074.                      DO0030
      MOVE T06016 TO S06016.                      DO0030
      MOVE T06061 TO S06061.                      DO0030
      MOVE T07018 TO S07018.                      DO0030
      MOVE T07061 TO S07061.                      DO0030
      MOVE T10003 TO S10003.                      DO0030
      MOVE T10007 TO S10007.                      DO0030
      MOVE T10016 TO S10016.                      DO0030
      MOVE T10026 TO S10026.                      DO0030
      MOVE T10035 TO S10035.                      DO0030
      MOVE T10042 TO S10042.                      DO0030
      MOVE T11003 TO S11003.                      DO0030
      MOVE T11007 TO S11007.                      DO0030
      MOVE T11016 TO S11016.                      DO0030
      MOVE T11026 TO S11026.                      DO0030
      MOVE T11035 TO S11035.                      DO0030
      MOVE T11042 TO S11042.                      DO0030
      MOVE T12003 TO S12003.                      DO0030
      MOVE T12007 TO S12007.                      DO0030
      MOVE T12016 TO S12016.                      DO0030
      MOVE T12026 TO S12026.                      DO0030
      MOVE T12035 TO S12035.                      DO0030
      MOVE T12042 TO S12042.                      DO0030
      MOVE T13003 TO S13003.                      DO0030
      MOVE T13007 TO S13007.                      DO0030
      MOVE T13016 TO S13016.                      DO0030
      MOVE T13026 TO S13026.                      DO0030
      MOVE T13035 TO S13035.                      DO0030
      MOVE T13042 TO S13042.                      DO0030
      MOVE T14003 TO S14003.                      DO0030
      MOVE T14007 TO S14007.                      DO0030
      MOVE T14016 TO S14016.                      DO0030
      MOVE T14026 TO S14026.                      DO0030
      MOVE T14035 TO S14035.                      DO0030
      MOVE T14042 TO S14042.                      DO0030
```

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```
MOVE T15003 TO S15003. DO0030
MOVE T15007 TO S15007. DO0030
MOVE T15016 TO S15016. DO0030
MOVE T15026 TO S15026. DO0030
MOVE T15035 TO S15035. DO0030
MOVE T15042 TO S15042. DO0030
MOVE T16003 TO S16003. DO0030
MOVE T16007 TO S16007. DO0030
MOVE T16016 TO S16016. DO0030
MOVE T16026 TO S16026. DO0030
MOVE T16035 TO S16035. DO0030
MOVE T16042 TO S16042. DO0030
MOVE T17003 TO S17003. DO0030
MOVE T17007 TO S17007. DO0030
MOVE T17016 TO S17016. DO0030
MOVE T17026 TO S17026. DO0030
MOVE T17035 TO S17035. DO0030
MOVE T17042 TO S17042. DO0030
MOVE T18003 TO S18003. DO0030
MOVE T18007 TO S18007. DO0030
MOVE T18016 TO S18016. DO0030
MOVE T18026 TO S18026. DO0030
MOVE T18035 TO S18035. DO0030
MOVE T18042 TO S18042. DO0030
MOVE T20022 TO S20022. DO0030
MOVE T20033 TO S20033. DO0030
MOVE T23002 TO S23002. DO0030
MOVE T24002 TO S24002. DO0030
F8145-FN. DO0030
EXIT. DO0030
* ***** DO0030
* * DO0030
* * SEARCH FOR DOCUMENTATION REQUEST * DO0030
* * DO0030
* ***** DO0030
F8150. DO0030
MOVE ZERO TO K-S0030-ERCOD. DO0030
IF I-0030-CHOIX = "$" DO0030
MOVE HIGH-VALUE TO I-0030-CHOIX DO0030
MOVE 001 TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-CHOIX = "=" DO0030
MOVE HIGH-VALUE TO I-0030-CHOIX DO0030
MOVE SPACE TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-MATE = "$" DO0030
MOVE HIGH-VALUE TO I-0030-MATE DO0030
MOVE 002 TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-MATE = "=" DO0030
MOVE HIGH-VALUE TO I-0030-MATE DO0030
MOVE SPACE TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-RELEA = "$" DO0030
MOVE HIGH-VALUE TO I-0030-RELEA DO0030
MOVE 003 TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-RELEA = "=" DO0030
MOVE HIGH-VALUE TO I-0030-RELEA DO0030
MOVE SPACE TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-RUE = "$" DO0030
MOVE HIGH-VALUE TO I-0030-RUE DO0030
MOVE 004 TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-RUE = "=" DO0030
MOVE HIGH-VALUE TO I-0030-RUE DO0030
MOVE SPACE TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-VILLE = "$" DO0030
MOVE HIGH-VALUE TO I-0030-VILLE DO0030
MOVE 005 TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
IF I-0030-VILLE = "=" DO0030
MOVE HIGH-VALUE TO I-0030-VILLE DO0030
MOVE SPACE TO K-S0030-ERCOD DO0030
GO TO F8150-FN. DO0030
```

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```
IF      I-0030-COPOS = "$"                                DO0030
MOVE HIGH-VALUE TO I-0030-COPOS                          DO0030
MOVE 006 TO K-S0030-ERCOD                                DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-COPOS = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-COPOS                          DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-REFCLI = "$"                              DO0030
MOVE HIGH-VALUE TO I-0030-REFCLI                         DO0030
MOVE 007 TO K-S0030-ERCOD                                DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-REFCLI = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-REFCLI                         DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-DATE = "$"                                DO0030
MOVE HIGH-VALUE TO I-0030-DATE                          DO0030
MOVE 008 TO K-S0030-ERCOD                                DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-DATE = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-DATE                          DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-CORRES = "$"                              DO0030
MOVE HIGH-VALUE TO I-0030-CORRES                        DO0030
MOVE 009 TO K-S0030-ERCOD                                DO0030
GO TO F8150-FN.                                          DO0030
IF      I-0030-CORRES = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-CORRES                        DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-FN.                                          DO0030
IF      E-0030-REMIS = "$"                              DO0030
MOVE HIGH-VALUE TO E-0030-REMIS                         DO0030
MOVE 010 TO K-S0030-ERCOD                                DO0030
GO TO F8150-FN.                                          DO0030
IF      E-0030-REMIS = "="                                DO0030
MOVE HIGH-VALUE TO E-0030-REMIS                         DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-FN.                                          DO0030
MOVE ZERO TO ICATR.                                     DO0030
F8150-GRP.                                             DO0030
ADD 1 TO ICATR                                           DO0030
MOVE J-0030-LINE (ICATR) TO I-0030-LINE                 DO0030
IF      I-0030-CODMVT = "$"                              DO0030
MOVE HIGH-VALUE TO I-0030-CODMVT                       DO0030
MOVE 011 TO K-S0030-ERCOD                                DO0030
GO TO F8150-A.                                          DO0030
IF      I-0030-CODMVT = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-CODMVT                       DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-A.                                          DO0030
IF      I-0030-FOURNI = "$"                              DO0030
MOVE HIGH-VALUE TO I-0030-FOURNI                       DO0030
MOVE 012 TO K-S0030-ERCOD                                DO0030
GO TO F8150-A.                                          DO0030
IF      I-0030-FOURNI = "="                                DO0030
MOVE HIGH-VALUE TO I-0030-FOURNI                       DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-A.                                          DO0030
IF      E-0030-QTMAC = "$"                              DO0030
MOVE HIGH-VALUE TO E-0030-QTMAC                         DO0030
MOVE 013 TO K-S0030-ERCOD                                DO0030
GO TO F8150-A.                                          DO0030
IF      E-0030-QTMAC = "="                                DO0030
MOVE HIGH-VALUE TO E-0030-QTMAC                         DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-A.                                          DO0030
IF      E-0030-QTMAL = "$"                              DO0030
MOVE HIGH-VALUE TO E-0030-QTMAL                         DO0030
MOVE 014 TO K-S0030-ERCOD                                DO0030
GO TO F8150-A.                                          DO0030
IF      E-0030-QTMAL = "="                                DO0030
MOVE HIGH-VALUE TO E-0030-QTMAL                         DO0030
MOVE SPACE TO K-S0030-ERCOD                              DO0030
GO TO F8150-A.                                          DO0030
IF      E-0030-QTMAR = "$"                              DO0030
```

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```
MOVE HIGH-VALUE TO E-0030-QTMAR          DO0030
MOVE 015 TO K-S0030-ERCOD                 DO0030
GO TO F8150-A.                            DO0030
IF      E-0030-QTMAR = "="                 DO0030
MOVE HIGH-VALUE TO E-0030-QTMAR          DO0030
MOVE SPACE TO K-S0030-ERCOD              DO0030
GO TO F8150-A.                            DO0030
IF      I-0030-INFOR = "$"                DO0030
MOVE HIGH-VALUE TO I-0030-INFOR          DO0030
MOVE 016 TO K-S0030-ERCOD                DO0030
GO TO F8150-A.                            DO0030
IF      I-0030-INFOR = "="                DO0030
MOVE HIGH-VALUE TO I-0030-INFOR          DO0030
MOVE SPACE TO K-S0030-ERCOD              DO0030
GO TO F8150-A.                            DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).  DO0030
IF      ICATR < IRR                       DO0030
GO TO F8150-GRP.                          DO0030
IF      I-0030-EDIT = "$"                DO0030
MOVE HIGH-VALUE TO I-0030-EDIT           DO0030
MOVE 017 TO K-S0030-ERCOD                DO0030
GO TO F8150-FN.                           DO0030
IF      I-0030-EDIT = "="                DO0030
MOVE HIGH-VALUE TO I-0030-EDIT           DO0030
MOVE SPACE TO K-S0030-ERCOD              DO0030
GO TO F8150-FN.                           DO0030
GO TO F8150-B.                            DO0030
F8150-A.                                   DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).  DO0030
F8150-B.                                   DO0030
EXIT.                                      DO0030
F8150-FN.                                  DO0030
EXIT.                                      DO0030
F8155.                                     DO0030
MOVE S03034 TO R03034 T03034.             DO0030
MOVE S03063 TO R03063 T03063.             DO0030
MOVE S05009 TO R05009 T05009.             DO0030
MOVE S05052 TO R05052 T05052.             DO0030
MOVE S05074 TO R05074 T05074.             DO0030
MOVE S06016 TO R06016 T06016.             DO0030
MOVE S06061 TO R06061 T06061.             DO0030
MOVE S07018 TO R07018 T07018.             DO0030
MOVE S07061 TO R07061 T07061.             DO0030
MOVE S10003 TO R10003 T10003.             DO0030
MOVE S10007 TO R10007 T10007.             DO0030
MOVE S10016 TO R10016 T10016.             DO0030
MOVE S10026 TO R10026 T10026.             DO0030
MOVE S10035 TO R10035 T10035.             DO0030
MOVE S10042 TO R10042 T10042.             DO0030
MOVE S11003 TO R11003 T11003.             DO0030
MOVE S11007 TO R11007 T11007.             DO0030
MOVE S11016 TO R11016 T11016.             DO0030
MOVE S11026 TO R11026 T11026.             DO0030
MOVE S11035 TO R11035 T11035.             DO0030
MOVE S11042 TO R11042 T11042.             DO0030
MOVE S12003 TO R12003 T12003.             DO0030
MOVE S12007 TO R12007 T12007.             DO0030
MOVE S12016 TO R12016 T12016.             DO0030
MOVE S12026 TO R12026 T12026.             DO0030
MOVE S12035 TO R12035 T12035.             DO0030
MOVE S12042 TO R12042 T12042.             DO0030
MOVE S13003 TO R13003 T13003.             DO0030
MOVE S13007 TO R13007 T13007.             DO0030
MOVE S13016 TO R13016 T13016.             DO0030
MOVE S13026 TO R13026 T13026.             DO0030
MOVE S13035 TO R13035 T13035.             DO0030
MOVE S13042 TO R13042 T13042.             DO0030
MOVE S14003 TO R14003 T14003.             DO0030
MOVE S14007 TO R14007 T14007.             DO0030
MOVE S14016 TO R14016 T14016.             DO0030
MOVE S14026 TO R14026 T14026.             DO0030
MOVE S14035 TO R14035 T14035.             DO0030
MOVE S14042 TO R14042 T14042.             DO0030
MOVE S15003 TO R15003 T15003.             DO0030
MOVE S15007 TO R15007 T15007.             DO0030
MOVE S15016 TO R15016 T15016.             DO0030
MOVE S15026 TO R15026 T15026.             DO0030
```

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MOVE S15035 TO R15035 T15035.	DO0030
MOVE S15042 TO R15042 T15042.	DO0030
MOVE S16003 TO R16003 T16003.	DO0030
MOVE S16007 TO R16007 T16007.	DO0030
MOVE S16016 TO R16016 T16016.	DO0030
MOVE S16026 TO R16026 T16026.	DO0030
MOVE S16035 TO R16035 T16035.	DO0030
MOVE S16042 TO R16042 T16042.	DO0030
MOVE S17003 TO R17003 T17003.	DO0030
MOVE S17007 TO R17007 T17007.	DO0030
MOVE S17016 TO R17016 T17016.	DO0030
MOVE S17026 TO R17026 T17026.	DO0030
MOVE S17035 TO R17035 T17035.	DO0030
MOVE S17042 TO R17042 T17042.	DO0030
MOVE S18003 TO R18003 T18003.	DO0030
MOVE S18007 TO R18007 T18007.	DO0030
MOVE S18016 TO R18016 T18016.	DO0030
MOVE S18026 TO R18026 T18026.	DO0030
MOVE S18035 TO R18035 T18035.	DO0030
MOVE S18042 TO R18042 T18042.	DO0030
MOVE S20022 TO R20022 T20022.	DO0030
MOVE S20033 TO R20033 T20033.	DO0030
F8155-FN.	DO0030
EXIT.	DO0030
F81-FN.	DO0030
EXIT.	DO0030
*	P000
* LEVEL 10 I ZIP CODE VALIDATION I	P000
*	P000
F93CP.	P000
MOVE 1 TO IWP20R.	P100
F93CP-100.	P100
IF IWP20R NOT > IWP20L	P100
AND WP20-COPOS (IWP20R) NOT = WP30-COPOS	P100
ADD 1 TO IWP20R	P100
GO TO F93CP-100.	P100
IF IWP20R > IWP20L	P200
MOVE "5" TO DEL-ER	P200
GO TO F93CP-FN.	P220
F93CP-FN.	DO0030
EXIT.	DO0030

## **6. VIP-TYPE PROGRAM**

## *6.1. INTRODUCTION*

### INTRODUCTION

The sample program uses the DPS7 variant with the DMIV access method and the TDS monitor.

This example is adapted to VIP7700 or compatible terminals.

Only the parts which differ from the MULTI-SCREEN variant are described in this chapter.

## 6.2. BEGINNING OF WORKING STORAGE

### BEGINNING OF WORKING-STORAGE

The 'WSS-BEGIN' level is generated at the beginning of the WORKING-STORAGE SECTION for all programs.

It contains all the variables and keys necessary for automatic processing.

IK Error indicator for file accesses.

'0' No error.  
'1' Error.

OPER Operation code.

'A' Display.  
'M' Update.  
'S' Screen continuation.  
'E' End.  
'P' Previous display.  
'O' Transfer to another screen.

OPERD Operation code for deferred branching.

Transferred to OPER in F40.

'O' Deferred call of another screen.

OPER and OPERD: If they correspond to a Data Element defined as an Operation Code on the Screen Call of Elements (-CE) screen (value 'O' in the VALIDATION CONDITIONS/SET VARIABLES field), they are processed in the F0520 function. If not, they are processed in the F20 function.

CATX Code of the category being executed.

'0' Beginning of reception or display.  
' ' Screen-top.  
'R' Repetitive.  
'Z' Screen-bottom.

CATM Transaction code.

'C' Creation.  
'M' Modification.



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BEGINNING OF WORKING STORAGE

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'A' Deletion.  
'X' Implicit update.

ICATR Indicator for current category being processed.

(Repetitive category only)

SCR-ER Screen error indicator.

'1' no error.

'4' error.

FT End of repetitive category indicator.

'0' Lines to display.

'1' No more lines to display.

ICF Input Configuration.

'1' Screen in input.

'0' No screen in input.

OCF Output Configuration.

'1' Screen in output.

'0' No screen in output.

CAT-ER Ongoing error indicator for current category.

' ' No error.

'E' Error.

7-HT Field separator (not generated for DPS7 FORMS).

7-SENDVAR Used to condition the sending of variable fields  
(not generated for DPS7 FORMS).

I-PFKEY Stores the function key.

INA Number of Data Elements in the screen-top category.

INR INA + Number of Data Elements in the repetitive category.

INZ INR + Number of Data Elements in the screen-bottom category.

IRR Number of repetitions in the repetitive category.

INT Number of input fields.

IER Number of error messages on the screen.

DEL-ER Memorizes Data Element error (work variable).

The 'CONSTANTS' level is also generated for all programs. It contains:

- . The compilation date of the on-line generator (PACE30 and PACE80), as well as the date of the related skeleton (these appear as comment lines),
- . Information on the program and work areas generated according to the procedures executed in the program:

SESSI Session number of the generated program.  
LIBRA Code of the library.  
DATGN Generated program date.  
PROGR System program code.  
PROGE COBOL program-id.  
TIMGN Generated program time.  
USERCO User code.  
COBASE Database code.

If a request for HELP documentation is entered on the Screen Definition screen, the following fields are generated:

PRDOC: External name of the 'HELP SCREEN' program.

5-scrn-PROGE: Field containing the name of called program.  
This field is filled during a screen branching operation ('scrn' = the last four characters of the screen code).

DATCE This field includes the CENTUR field (containing the value of the current century) and a blank date area (DATOR) in which the user can store the processing date in a year-month-day format (DATOA-DATOM-DATOJ).

Note: if the year is less than '61', the CENTUR field is automatically set to '20'.

DAT6 Fields for date formatting (MMDDYY or DDMMYY) and

DAT7 printing (for example DD/MM/YY).

DAT8 These fields are generated if a date processing operator is used in the '-P' lines of the program or if a variable data element ('V') has a date format.

DATSEP This field contains the separator used for dates. The default value ('/') can be modified by via Procedural Code (-P) lines.

DATSET This field contains the separator used for the Gregorian date.

The default value ('-') can be modified via Procedural Code (-P) lines.

DATCTY Field for century loading.

DAT6C Field for non-formatted date with century.

DAT7C Field for non-formatted date with century.

DAT8C Field for formatted date with century (DD/MM/CCYY).

DAT8G Field for the Gregorian type of date -- with century also -- (CCYY-MM-DD).

TIMCO Field for time loading.

TIMDAY Field for time formatting (HH:MM:SS).

The 'CONFIGURATIONS' level contains one variable 'ddss-CF' ('ddss' = segment code in the generated program) for each segment accessed in the program, which allows for conditioned access for each segment in the procedure.

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	WORKING-STORAGE SECTION.		DO0030
01	WSS-BEGIN.		DO0030
05	FILLER	PICTURE X(7) VALUE "WORKING".	DO0030
05	IK	PICTURE X.	DO0030
05	BLANC	PICTURE X VALUE SPACE.	DO0030
05	OPER	PICTURE X.	DO0030
05	OPERD	PICTURE X VALUE SPACE.	DO0030
05	CATX	PICTURE X.	DO0030
05	CATM	PICTURE X.	DO0030
05	ICATR	PICTURE 99.	DO0030
05	SCR-ER	PICTURE X.	DO0030
05	FT	PICTURE X.	DO0030
05	ICF	PICTURE X.	DO0030
05	OCF	PICTURE X.	DO0030
05	CAT-ER	PICTURE X.	DO0030
05	7-HT	PICTURE X VALUE "06".	DO0030
05	I-PFKEY	PICTURE XX.	DO0030
05	7-SENDVAR	PICTURE X VALUE "1".	DO0030
05	INA	PICTURE 999 VALUE 010.	DO0030
05	INR	PICTURE 999 VALUE 016.	DO0030
05	INZ	PICTURE 999 VALUE 017.	DO0030
05	IRR	PICTURE 99 VALUE 09.	DO0030
05	INT	PICTURE 999 VALUE 065.	DO0030
05	IER	PICTURE 99 VALUE 01.	DO0030
05	DEL-ER	PICTURE X.	DO0030
01	PACBASE-CONSTANTS.		DO0030
*	OLSD DATES PACE30 : 10/03/94		DO0030
*	PACE80 : 10/03/94	PAC7SG : 940503	DO0030
05	SESSI	PICTURE X(5) VALUE "0413".	DO0030
05	LIBRA	PICTURE X(3) VALUE "AD7".	DO0030
05	DATGN	PICTURE X(8) VALUE "07/28/94".	DO0030
05	PROGR	PICTURE X(6) VALUE "DO0030".	DO0030
05	PROGE	PICTURE X(8) VALUE "DO0030P".	DO0030
05	TIMGN	PICTURE X(8) VALUE "10:26:20".	DO0030
05	USERCO	PICTURE X(8) VALUE "PDMM".	DO0030
05	PRDOC	PICTURE X(8) VALUE "DOP050".	DO0030
05	5-0030-PROGE	PICTURE X(8).	DO0030
01	DATCE.		DO0030
05	CENTUR	PICTURE XX VALUE "19".	DO0030
05	DATOR.		DO0030
10	DATOA	PICTURE XX.	DO0030
10	DATOM	PICTURE XX.	DO0030
10	DATOJ	PICTURE XX.	DO0030
01	DAT6.		DO0030
10	DAT61.		DO0030
15	DAT619	PICTURE 99.	DO0030
10	DAT62.		DO0030
15	DAT629	PICTURE 99.	DO0030
10	DAT63	PICTURE XX.	DO0030
01	DAT7.		DO0030
10	DAT71	PICTURE XX.	DO0030
10	DAT72	PICTURE XX.	DO0030
10	DAT73	PICTURE XX.	DO0030
01	DAT8.		DO0030
10	DAT81	PICTURE XX.	DO0030
10	DAT8S1	PICTURE X.	DO0030
10	DAT82	PICTURE XX.	DO0030
10	DAT8S2	PICTURE X.	DO0030
10	DAT83	PICTURE XX.	DO0030
01	DATSEP	PICTURE X VALUE "/".	DO0030
01	DATSET	PICTURE X VALUE "-".	DO0030
01	DATCTY.		DO0030
05	DATCTY9	PICTURE 99.	DO0030
01	DAT6C.		DO0030
10	DAT61C	PICTURE XX.	DO0030
10	DAT62C	PICTURE XX.	DO0030
10	DAT63C	PICTURE XX.	DO0030
10	DAT64C	PICTURE XX.	DO0030
01	DAT7C.		DO0030
10	DAT71C	PICTURE XX.	DO0030
10	DAT72C	PICTURE XX.	DO0030
10	DAT73C	PICTURE XX.	DO0030
10	DAT74C	PICTURE XX.	DO0030
01	DAT8C.		DO0030
10	DAT81C	PICTURE XX.	DO0030
10	DAT8S1C	PICTURE X VALUE "/".	DO0030
10	DAT82C	PICTURE XX.	DO0030

## VIP-TYPE PROGRAM

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## BEGINNING OF WORKING STORAGE

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10	DAT8S2C	PICTURE X VALUE "/".	DO0030
10	DAT83C	PICTURE XX.	DO0030
10	DAT84C	PICTURE XX.	DO0030
01	DAT8G.		DO0030
10	DAT81G	PICTURE XX.	DO0030
10	DAT82G	PICTURE XX.	DO0030
10	DAT8S1G	PICTURE X VALUE "-".	DO0030
10	DAT83G	PICTURE XX.	DO0030
10	DAT8S2G	PICTURE X VALUE "-".	DO0030
10	DAT84G	PICTURE XX.	DO0030
01	TIMCO.		DO0030
02	TIMCOG.		DO0030
05	TIMCOH	PICTURE XX.	DO0030
05	TIMCOM	PICTURE XX.	DO0030
05	TIMCOS	PICTURE XX.	DO0030
02	TIMCOC	PICTURE XX.	DO0030
01	TIMDAY.		DO0030
05	TIMHOU	PICTURE XX.	DO0030
05	TIMS1	PICTURE X VALUE ":".	DO0030
05	TIMMIN	PICTURE XX.	DO0030
05	TIMS2	PICTURE X VALUE ":".	DO0030
05	TIMSEC	PICTURE XX.	DO0030
01	CONFIGURATIONS.		DO0030
05	CD05-CF	PICTURE X.	DO0030
05	CD10-CF	PICTURE X.	DO0030
05	CD20-CF	PICTURE X.	DO0030
05	FO10-CF	PICTURE X.	DO0030
05	ME00-CF	PICTURE X.	DO0030

### 6.3. SCREEN MAP DESCRIPTION

#### SCREEN MAP DESCRIPTION

The MAP is described after the 'CONFIGURATIONS' level in the WORKING-STORAGE SECTION. This part of the program includes the descriptions of labels and variable fields, which are separated by the tabulation.

The MAP is described in native language.

The screen fields are coded according to the following rules ('scrn' = last four characters of screen code):

.I-scrn	Screen in reception.
.O-scrn	Screen in display.
.I-scrn-MATE	Alphanumeric reception field.
.E-scrn-REMIS	Alphanumeric definition of an I-scrn-REMIS field, which is numeric in reception.
.F-0030-QTMAC	Alphanumeric definition of an O-0030-QTMAC field, which is numeric in display.

The data element defining the repetitive category is coded as follows in the screen map description:

.J-0030-LINE	OCCURS 9 in reception,
.P-0030-LINE	OCCURS 9 in display,

containing a FILLER.

The description of the fields of the data element which defines the repetitive category is generated outside the screen description.

This description is made up of a 'FILLER' field which is filled in with each occurrence of the category. It is used to execute the procedures for each of the elementary data elements.

It is generated according to the same rules as above. For example:

.I-0030-LINE used for procedures in reception,

containing,

.I-0030-FOURNI

.E-0030-QTMAC

etc.

.O-0030-LINE used for procedures in display,

containing,

.O-0030-FOURNI

.O-0030-QTMAC

An ordinary repetitive data element (which does not define a repetitive category) is described directly in the screen description in the following form:

.05 FILLER OCCURS 2.  
.10 I-scrn-LREF1 in reception

.05 FILLER OCCURS 2.  
.10 O-scrn-LREF1 in display

In this case, the procedures for each occurrence of the data element are not generated and are to be inserted by the user via Structured Code (validations, transfers, etc.).



The formats used in the generated programs correspond to the following rules:

DATA ELEMENT WITH NATURE 'P'

Reception screen or display screen:

- . The format is the internal format of the data element.

DATA ELEMENT WITH NATURE 'V'

Reception screen:

- . The format is the internal format of the data element.

Display screen:

- . For alphanumeric data elements, it is the internal format of the data element,
- . For numeric data elements, it is a print format built from the internal format, with replacement of non-significant leading zeros by spaces.

DATA ELEMENT WITH A CONVERSATIONAL FORMAT

(See the SPECIFICATIONS DICTIONARY Reference Manual, Chapter "DATA ELEMENTS", Subchapter "DESCRIPTION SCREEN (-D)").

Reception screen:

- . The internal format is constructed from the conversational format entered on the Data Element Description screen.

EXAMPLE:           -conversational format:           ZZZ99.99  
                      -constructed internal format: 9(5)V9(2)

Display screen:

- . The format is the conversational format of the element entered on the Data Element Description screen.

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01	0030-MESSO.		*AA040
02	0030-MESSO1.		*AA040
05	FILLER	PICTURE XXX VALUE "40,214,13".	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,128".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S01004	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,108".	*AA040
05	FILLER	PICTURE X(001) VALUE "-".	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,076".	*AA040
05	S01015	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,248".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(030) VALUE	*AA040
		*** ORDER INPUT SCREEN *** .	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,234".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S01060	PICTURE X(010) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,065,135".	*AA040
05	S01071	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,128".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(013) VALUE	*AA040
		ORDER NUMBER:.	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,241".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S03018	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,249".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(007) VALUE "SYSTEM:."	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,125".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,202".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,228".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(008) VALUE "RELEASE:."	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,091".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,128,130".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,124,128".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(005) VALUE "CUST:."	*AA040
05	FILLER	PICTURE XXX VALUE "20,124,079".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	S04013	PICTURE X(050) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,126".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,216".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,218".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,136".	*AA040

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05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,137".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,092,150".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,128".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(011) VALUE	*AA040
		"CUST. REF.:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,076".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,213".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,215".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(011) VALUE	*AA040
		"ORDER DATE:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,075".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,109,131".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,124".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(012) VALUE	*AA040
		"COORDINATOR:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,241".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,210".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,212".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(014) VALUE	*AA040
		"DISCOUNT RATE:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,075".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,081,133".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,080".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(001) VALUE "A".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,081".	*AA040
05	FILLER	PICTURE X(006) VALUE "ITEM".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,098".	*AA040
05	FILLER	PICTURE X(008) VALUE "ORDERED".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,250".	*AA040
05	FILLER	PICTURE X(007) VALUE "DELIV.".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,195".	*AA040
05	FILLER	PICTURE X(006) VALUE "OUTST.".	*AA040
05	FILLER	PICTURE XXX VALUE "20,078,202".	*AA040
05	FILLER	PICTURE X(035) VALUE	*AA040













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05	FILLER	PICTURE XXX VALUE "20,242,080".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,124".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,109".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,094".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,076".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,242".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,249".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,095".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,194".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,197".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,201".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,242,148".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	FILLER	PICTURE X(019) VALUE	*AA040
		"PRINTING OF FORM :".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,245".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,247".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,248".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(007) VALUE "CHOICE:".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,112".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE XX VALUE "30,241".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,194".	*AA040
05	FILLER	PICTURE X VALUE "29".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(010) VALUE "UPD : '7',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,244,213".	*AA040
05	FILLER	PICTURE X(020) VALUE	*AA040
		"ORDERS (NEXT) : '8',".	*AA040

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05	FILLER	PICTURE XXX VALUE "20,245,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(027) VALUE	*AA040
		"MENU : '1', CUSTOMER LIST :".	*AA040
05	FILLER	PICTURE XXX VALUE "20,245,127".	*AA040
05	FILLER	PICTURE X(022) VALUE	*AA040
		"'2', CUST. HIST : '3',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,245,228".	*AA040
05	FILLER	PICTURE X(017) VALUE	*AA040
		"ORDER LIST : '4',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,246,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,243";"243,149".	*AA040
05	FILLER	PICTURE X(017) VALUE	*AA040
		"SCREEN DOC : '=',".	*AA040
05	FILLER	PICTURE XXX VALUE "20,246,244".	*AA040
05	FILLER	PICTURE X(018) VALUE	*AA040
		"DATA EL. DOC : '\$'".	*AA040
05	FILLER	PICTURE XXX VALUE "20,247,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	S23002	PICTURE X(075) VALUE SPACE.	*AA040
05	FILLER	PICTURE XXX VALUE "20,248,065".	*AA040
05	FILLER	PICTURE X(6) VALUE	*AA040
		"040,075,241";"241,149".	*AA040
05	S24002	PICTURE X(072) VALUE SPACE.	*AA040
02	0030-MESSO4	REDEFINES 0030-MESS01.	*AA040
03	0030-CX	PICTURE X OCCURS 2150.	*AA040
02	0030-MESSV.		*AA040
03	FILLER	PICTURE XXX VALUE "40,213,13".	*AA040
03	0030-MESSO2.		*AA040
05	S03034	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S03063	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S05009	PICTURE X(040) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S05052	PICTURE X(020) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S05074	PICTURE X(005) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S06016	PICTURE X(030) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S06061	PICTURE X(006) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S07018	PICTURE X(025) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S07061	PICTURE X(008) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10007	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10016	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10026	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10035	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S10042	PICTURE X(035) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11007	PICTURE X(003) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11016	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11026	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11035	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S11042	PICTURE X(035) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S12003	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06".	*AA040
05	S12007	PICTURE X(003) VALUE SPACE.	*AA040



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05	S18035	PICTURE X(002) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06" .	*AA040
05	S18042	PICTURE X(035) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06" .	*AA040
05	S20022	PICTURE X(001) VALUE SPACE.	*AA040
05	FILLER	PICTURE X VALUE "06" .	*AA040
05	S20033	PICTURE X(001) VALUE SPACE.	*AA040
03	0030-MESSO3	REDEFINES 0030-MESSO2.	*AA040
05	0030-CP	PICTURE X OCCURS 0616.	*AA040
02	0030-MESSF.		*AA040
05	FILLER	PICTURE XX VALUE "40,214" .	*AA040
05	FILLER	PICTURE XXX VALUE "20,094,128" .	*AA040
05	FILLER	PICTURE XX VALUE "40,213" .	*AA040
01	INPUT-0030.		*AA042
05	FILLER	PICTURE X(065) .	*AA042
05	R20033	PICTURE X(1) .	*AA042
05	R03034	PICTURE X(8) .	*AA042
05	R03063	PICTURE X(3) .	*AA042
05	R05009	PICTURE X(40) .	*AA042
05	R05052	PICTURE X(20) .	*AA042
05	R05074	PICTURE X(5) .	*AA042
05	R06016	PICTURE X(30) .	*AA042
05	R06061	PICTURE X(6) .	*AA042
05	R07018	PICTURE X(25) .	*AA042
05	R07061	PICTURE X(8) .	*AA042
05	R10003	PICTURE X(1) .	*AA042
05	R10007	PICTURE X(3) .	*AA042
05	R10016	PICTURE X(2) .	*AA042
05	R10026	PICTURE X(2) .	*AA042
05	R10035	PICTURE X(2) .	*AA042
05	R10042	PICTURE X(35) .	*AA042
05	R11003	PICTURE X(1) .	*AA042
05	R11007	PICTURE X(3) .	*AA042
05	R11016	PICTURE X(2) .	*AA042
05	R11026	PICTURE X(2) .	*AA042
05	R11035	PICTURE X(2) .	*AA042
05	R11042	PICTURE X(35) .	*AA042
05	R12003	PICTURE X(1) .	*AA042
05	R12007	PICTURE X(3) .	*AA042
05	R12016	PICTURE X(2) .	*AA042
05	R12026	PICTURE X(2) .	*AA042
05	R12035	PICTURE X(2) .	*AA042
05	R12042	PICTURE X(35) .	*AA042
05	R13003	PICTURE X(1) .	*AA042
05	R13007	PICTURE X(3) .	*AA042
05	R13016	PICTURE X(2) .	*AA042
05	R13026	PICTURE X(2) .	*AA042
05	R13035	PICTURE X(2) .	*AA042
05	R13042	PICTURE X(35) .	*AA042
05	R14003	PICTURE X(1) .	*AA042
05	R14007	PICTURE X(3) .	*AA042
05	R14016	PICTURE X(2) .	*AA042
05	R14026	PICTURE X(2) .	*AA042
05	R14035	PICTURE X(2) .	*AA042
05	R14042	PICTURE X(35) .	*AA042
05	R15003	PICTURE X(1) .	*AA042
05	R15007	PICTURE X(3) .	*AA042
05	R15016	PICTURE X(2) .	*AA042
05	R15026	PICTURE X(2) .	*AA042
05	R15035	PICTURE X(2) .	*AA042
05	R15042	PICTURE X(35) .	*AA042
05	R16003	PICTURE X(1) .	*AA042
05	R16007	PICTURE X(3) .	*AA042
05	R16016	PICTURE X(2) .	*AA042
05	R16026	PICTURE X(2) .	*AA042
05	R16035	PICTURE X(2) .	*AA042
05	R16042	PICTURE X(35) .	*AA042
05	R17003	PICTURE X(1) .	*AA042
05	R17007	PICTURE X(3) .	*AA042
05	R17016	PICTURE X(2) .	*AA042
05	R17026	PICTURE X(2) .	*AA042
05	R17035	PICTURE X(2) .	*AA042
05	R17042	PICTURE X(35) .	*AA042
05	R18003	PICTURE X(1) .	*AA042
05	R18007	PICTURE X(3) .	*AA042
05	R18016	PICTURE X(2) .	*AA042
05	R18026	PICTURE X(2) .	*AA042

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05	R18035	PICTURE X(2).	*AA042
05	R18042	PICTURE X(35).	*AA042
05	R20022	PICTURE X(1).	*AA042
05	FILLER	PICTURE X(70).	*AA042
01	0030-MESSI	REDEFINES INPUT-0030.	*AA042
05	0030-CA	PICTURE X OCCURS 0687.	*AA042
01	INPUT-SCREEN-FIELDS	REDEFINES INPUT-0030.	*AA045
02	I-0030.		*AA045
05	FILLER	PICTURE X(065).	*AA045
05	I-0030-CHOIX	PICTURE X.	*AA045
05	I-0030-MATE	PICTURE X(8).	*AA045
05	I-0030-RELEA	PICTURE X(3).	*AA045
05	I-0030-RUE	PICTURE X(40).	*AA045
05	I-0030-VILLE	PICTURE X(20).	*AA045
05	I-0030-COPOS	PICTURE X(5).	*AA045
05	I-0030-REFCLI	PICTURE X(30).	*AA045
05	I-0030-DATE	PICTURE X(6).	*AA045
05	I-0030-CORRES	PICTURE X(25).	*AA045
05	E-0030-REMIS.		*AA045
10	I-0030-REMIS	PICTURE S9(4)V99.	*AA045
10	FILLER	PICTURE X(2).	*AA045
05	J-0030-LINE	OCCURS 9.	*AA045
10	FILLER	PICTURE X(45).	*AA045
05	I-0030-EDIT	PICTURE X.	*AA045
05	FILLER	PICTURE X(70).	*AA045
01	OUTPUT-0030.		*AA049
05	T20033	PICTURE X(1).	*AA049
05	T01004	PICTURE X(8).	*AA049
05	T01015	PICTURE X(5).	*AA049
05	T01060	PICTURE X(10).	*AA049
05	T01071	PICTURE X(8).	*AA049
05	T03018	PICTURE X(5).	*AA049
05	T03034	PICTURE X(8).	*AA049
05	T03063	PICTURE X(3).	*AA049
05	T04013	PICTURE X(50).	*AA049
05	T05009	PICTURE X(40).	*AA049
05	T05052	PICTURE X(20).	*AA049
05	T05074	PICTURE X(5).	*AA049
05	T06016	PICTURE X(30).	*AA049
05	T06061	PICTURE X(6).	*AA049
05	T07018	PICTURE X(25).	*AA049
05	T07061	PICTURE X(8).	*AA049
05	T10003	PICTURE X(1).	*AA049
05	T10007	PICTURE X(3).	*AA049
05	T10016	PICTURE X(2).	*AA049
05	T10026	PICTURE X(2).	*AA049
05	T10035	PICTURE X(2).	*AA049
05	T10042	PICTURE X(35).	*AA049
05	T11003	PICTURE X(1).	*AA049
05	T11007	PICTURE X(3).	*AA049
05	T11016	PICTURE X(2).	*AA049
05	T11026	PICTURE X(2).	*AA049
05	T11035	PICTURE X(2).	*AA049
05	T11042	PICTURE X(35).	*AA049
05	T12003	PICTURE X(1).	*AA049
05	T12007	PICTURE X(3).	*AA049
05	T12016	PICTURE X(2).	*AA049
05	T12026	PICTURE X(2).	*AA049
05	T12035	PICTURE X(2).	*AA049
05	T12042	PICTURE X(35).	*AA049
05	T13003	PICTURE X(1).	*AA049
05	T13007	PICTURE X(3).	*AA049
05	T13016	PICTURE X(2).	*AA049
05	T13026	PICTURE X(2).	*AA049
05	T13035	PICTURE X(2).	*AA049
05	T13042	PICTURE X(35).	*AA049
05	T14003	PICTURE X(1).	*AA049
05	T14007	PICTURE X(3).	*AA049
05	T14016	PICTURE X(2).	*AA049
05	T14026	PICTURE X(2).	*AA049
05	T14035	PICTURE X(2).	*AA049
05	T14042	PICTURE X(35).	*AA049
05	T15003	PICTURE X(1).	*AA049
05	T15007	PICTURE X(3).	*AA049
05	T15016	PICTURE X(2).	*AA049
05	T15026	PICTURE X(2).	*AA049
05	T15035	PICTURE X(2).	*AA049

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05	T15042	PICTURE X(35).	*AA049
05	T16003	PICTURE X(1).	*AA049
05	T16007	PICTURE X(3).	*AA049
05	T16016	PICTURE X(2).	*AA049
05	T16026	PICTURE X(2).	*AA049
05	T16035	PICTURE X(2).	*AA049
05	T16042	PICTURE X(35).	*AA049
05	T17003	PICTURE X(1).	*AA049
05	T17007	PICTURE X(3).	*AA049
05	T17016	PICTURE X(2).	*AA049
05	T17026	PICTURE X(2).	*AA049
05	T17035	PICTURE X(2).	*AA049
05	T17042	PICTURE X(35).	*AA049
05	T18003	PICTURE X(1).	*AA049
05	T18007	PICTURE X(3).	*AA049
05	T18016	PICTURE X(2).	*AA049
05	T18026	PICTURE X(2).	*AA049
05	T18035	PICTURE X(2).	*AA049
05	T18042	PICTURE X(35).	*AA049
05	T20022	PICTURE X(1).	*AA049
05	T23002	PICTURE X(75).	*AA049
05	T24002	PICTURE X(72).	*AA049
01	OUTPUT-SCREEN-FIELDS REDEFINES OUTPUT-0030.		*AA050
02	O-0030.		*AA050
05	O-0030-CHOIX	PICTURE X.	*AA050
05	O-0030-PROGE	PICTURE X(8).	*AA050
05	O-0030-SESSI	PICTURE X(5).	*AA050
05	O-0030-DATEM	PICTURE X(10).	*AA050
05	O-0030-HEURE	PICTURE X(8).	*AA050
05	O-0030-NUCOM	PICTURE 9(5).	*AA050
05	O-0030-MATE	PICTURE X(8).	*AA050
05	O-0030-RELEA	PICTURE X(3).	*AA050
05	O-0030-RAISOC	PICTURE X(50).	*AA050
05	O-0030-RUE	PICTURE X(40).	*AA050
05	O-0030-VILLE	PICTURE X(20).	*AA050
05	O-0030-COPOS	PICTURE X(5).	*AA050
05	O-0030-REFCLI	PICTURE X(30).	*AA050
05	O-0030-DATE	PICTURE X(6).	*AA050
05	O-0030-CORRES	PICTURE X(25).	*AA050
05	F-0030-REMIS.		*AA050
10	O-0030-REMIS	PICTURE -(04)9,9(02).	*AA050
05	P-0030-LINE	OCCURS 9.	*AA050
10	FILLER	PICTURE X(45).	*AA050
05	O-0030-EDIT	PICTURE X.	*AA050
05	O-0030-MESSA	PICTURE X(75).	*AA050
05	O-0030-ERMS.		*AA050
10	FILLER	OCCURS 1.	*AA050
15	O-0030-ERMSG1	PICTURE X(72).	*AA050
01	REPEAT-LINE.		*AA050
02	I-0030-LINE.		*AA050
05	I-0030-CODMVT	PICTURE X.	*AA050
05	I-0030-FOURNI	PICTURE X(3).	*AA050
05	E-0030-QTMAC.		*AA050
10	I-0030-QTMAC	PICTURE 99.	*AA050
05	E-0030-QTMAL.		*AA050
10	I-0030-QTMAL	PICTURE 99.	*AA050
05	E-0030-QTMAR.		*AA050
10	I-0030-QTMAR	PICTURE 99.	*AA050
05	I-0030-INFOR	PICTURE X(35).	*AA050
02	O-0030-LINE.		*AA050
05	O-0030-CODMVT	PICTURE X.	*AA050
05	O-0030-FOURNI	PICTURE X(3).	*AA050
05	F-0030-QTMAC.		*AA050
10	O-0030-QTMAC	PICTURE Z(01)9.	*AA050
05	F-0030-QTMAL.		*AA050
10	O-0030-QTMAL	PICTURE Z(01)9.	*AA050
05	F-0030-QTMAR.		*AA050
10	O-0030-QTMAR	PICTURE Z(01)9.	*AA050
05	O-0030-INFOR	PICTURE X(35).	*AA050

## 6.4. DESCRIPTION OF VALIDATION AREAS

### DESCRIPTION OF VALIDATION AREAS

The validation processing part of the program is always generated in the WORKING-STORAGE SECTION. It includes all the work areas necessary for the generated validation processing.

#### NUMERIC FIELDS OF THE SCREEN

The 'NUMERIC-FIELDS' level is generated when the screen includes at least one variable Data Element.

Field '9-scrn-delco' (scrn = last 4 characters of the screen code) is generated for each numeric Data Element. It contains the breakdown of the Data Element's VALUE in 'seedd' where:

s = '' non-signed Data Element.

'+' signed Data Element.

ee = number of digits in the integer part of the Data Element.

dd = number of digits in the decimal part of the Data Element.

### ERROR MESSAGE

The 'ERROR-MESS' level, which corresponds to the description of the error message, is always generated and contains:

- . A table with the attributes of the variable fields (for the dynamic modification),
- . The error message,
- . Cursor positioning on the erroneous field.

### T-POSIT and 0030-MESSF

T-POSIT is a table which correlates the PACBASE error array and the position of the fields.

0030-MESSF is used for the dynamic positioning of the cursor in case of error.

### 0030-MPRIOR

This field contains the first transaction message.

### MESSAGE-LENGTH

This field describes the message (total length, length of fixed and variable fields, logoff message length, etc.).



### VALIDATION VARIABLES

The 'VALIDATION-TABLE-FIELDS' level is generated if there is at least one variable data element (NATURE = 'V') used on the screen.

DE-ERR : memorizes the presence and/or status of each Data Element of the screen.

A position in this table (coded ER-scrn-delco) is associated with each Data Element of the screen. This is generated at the '05' level ('scrn' = last four characters of the screen code).

Depending on the stages of validation, this position can be set to the following values:

- .0 Data Element absent.
- .1 Data Element present.
- .2 Invalid absence of data element.
- .4 Erroneous class.
- .5 Invalid content.

This table of error positions is structured according to the categories defined on the screen and the group data element in the following manner:

A group level for the Data Elements from the beginning of the screen is systematically generated in the form of:

ER-nn-BEGIN.

For a repetitive Data Element defining a repetitive area of the screen (data element on the screen with NATURE = 'R'), the generation of the error positions is as follows:

- .03 ES-scrn-LINE OCCURS 9.
- .05 FILLER PICTURE X(0004).

In this example:

LINE is the code of the Data Element with NATURE = 'R' (see above),  
9 is the number of repetitions,  
0004 is the number of Data Elements in the repetitive category.

After the table of errors, there is an area which will contain the error positions of the Data Elements from the repetitive category. This area is used to position the errors for each of these data elements, with each occurrence.

.02 ER-nn-LINE.

.05 ER-nn-CODMVT PICTURE X.

.05 ER-nn-FOURNI PICTURE X.

etc.

For a repetitive Data Element whose NATURE is other than 'R', the generation in the table of error positions does not provide the description of the sample item, but does provide the following:

.05 FILLER OCCURS 2.

.10 ER-nn-LREF1 PICTURE X.

A group level for the Data Elements from the screen-bottom category is generated using a Data Element whose NATURE = 'Z', which contains the error positions of Data Elements belonging to that category:

.03 ER-nn-END.

.05 ER-nn-EDIT PICTURE X.

etc.

### TT-DAT

The 'TT-DAT' level is generated if a variable Data Element (NATURE = 'V') contains a 'date' format. It is used in sub-function F8120-M for date formatting purposes.

### LEAP-YEAR

The 'LEAP-YEAR' level is generated if a variable Data Element (NATURE = 'V') contains a 'date' format (always generated with CICS). It is used in F81-ER to determine whether or not the year is a leap year.

### USERS-ERROR

The 'USERS-ERROR' level is always generated, and it contains:

XEMKY: Table position used to build the key, including:

'XPROGR' Name of the program or dialogue,  
'XERCD' Error number and type of error,

T-XEMKY: Table of errors, corresponding to the number of error messages on the screen (default value = 1).

### INDEXES

The 'INDEXES' level is always generated. It includes:

K01, K02, K03, K04

Indexes for automatic numeric class.

K50R, K50L, K50M

Indexes associated with the table of user errors (the value assigned to K50M directly relates to the number of vertical repetitions of Data Element 'ERMSG' in the screen description).

5-dd00-LTH

Length of longest Segment of the Data Structure (common part + specific part; 'dd' = code of the Data Structure).

5-ddss-LTH

Length of the Segment without the common part (not generated for the common part, 'dd00'; 'ddss' = code of the Segment).

5-ddss-LTHV

Length of the Data Structure Segment including the common part (not generated for the common part, 'dd00'; 'ddss' = code of the Segment).

LTH Calculation area used during access to files with a Table or VSAM ORGANIZATION.

KEYLTH

Calculation area of the key used during access to files with a VSAM ORGANIZATION.

5-scrn-LENGTH

Area containing the length of the communication area (scrn = last four char. of screen code).

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NUMERIC-VALIDATION-FIELDS

The 'NUMERIC-VALIDATION-FIELDS' level is generated if there is at least one variable numeric field on the screen. It contains the work areas necessary for analyzing and formatting numeric Data Elements on the screen (refer to subchapter "F81 : CALLED VALIDATION FUNCTIONS").

DESCRIPTION OF THE ERROR MESSAGE FILE

The error message file is described in the FILE SECTION if its ORGANIZATION = 'V'. Otherwise, it is described in the WORKING-STORAGE SECTION.

The EM00 level, corresponding to the error message file description, is systematically generated.

You may replace this description if you generate a description containing fields which conform to the coding used in the PROCEDURE DIVISION (EM00-APPLI,EM00-PROGR, ..).

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## DESCRIPTION OF VALIDATION AREAS

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01	NUMERIC-FIELDS.		*AA050
05	9-0030-REMIS	PICTURE X(5) VALUE "+0402".	*AA050
05	9-0030-QTMAC	PICTURE X(5) VALUE " 0200".	*AA050
05	9-0030-QTMAL	PICTURE X(5) VALUE " 0200".	*AA050
05	9-0030-QTMAR	PICTURE X(5) VALUE " 0200".	*AA050
01	ERROR-MESS.		*AA060
02	ERROR-MESS01.		*AA060
05	FILLER	PICTURE XX VALUE " "40,214" ".	*AA060
05	X-ATT1.		*AA060
10	FILLER	PICTURE XXX VALUE " "20,244,112" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,128,125" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,128,091" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,092,126" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,092,218" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,092,137" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,109,076" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,109,075" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,081,241" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,081,075" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,080" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,109" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,076" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,249" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,241";"241,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,194" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,094,201" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,080" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,109" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,076" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,249" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,241";"241,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,194" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,093,201" ".	*AA060
10	FILLER	PICTURE X(6) VALUE " "040,075,243";"243,149" ".	*AA060
10	FILLER	PICTURE XXX VALUE " "20,079,080" ".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060





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10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,098,249".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,241";"241,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,098,194".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,098,201".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,080".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,109".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,076".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,249".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,241";"241,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,194".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,241,201".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,080".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,109".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,076".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,249".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,241";"241,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,194".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,242,201".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
10	FILLER	PICTURE XXX VALUE "20,244,245".	*AA060
10	FILLER	PICTURE X(6) VALUE	*AA060
		"040,075,243";"243,149".	*AA060
05	X-ATT2	REDEFINES X-ATT1.	*AA060
10	X-ATT3	OCCURS 065.	*AA060
15	X-ATPC	PICTURE XXX.	*AA060
15	X-ATTR.		*AA060
20	FILLER	PICTURE XX.	*AA060
20	X-ATTRI	PICTURE X.	*AA060
20	FILLER	PICTURE X.	*AA060
20	X-ATTRP	PICTURE X.	*AA060
20	FILLER	PICTURE X.	*AA060
05	X-ERMSBLANC.		*AA060
10	FILLER	PICTURE XXX VALUE "20,248,080".	*AA060
10	FILLER	PICTURE X(072) VALUE SPACE.	*AA060
05	X-ERMS.		*AA060
10	FILLER	PICTURE XXX VALUE "20,248,080".	*AA060
10	FILLER	PICTURE X(072).	*AA060
05	X-ERMS1	REDEFINES X-ERMS.	*AA060
10	X-ERMS2	OCCURS 01.	*AA060
15	FILLER	PICTURE XXX.	*AA060
15	O-0030-ERMSG	PICTURE X(072).	*AA060
02	ERROR-MESSF.		*AA060
05	FILLER	PICTURE XX VALUE "40,214".	*AA060
05	X-ATPC1	PICTURE XXX.	*AA060
05	FILLER	PICTURE X VALUE "19".	*AA060
05	FILLER	PICTURE XX VALUE "40,213".	*AA060
01	0030-MPRIOR	PICTURE X(80).	*AA076
01	MESSAGE-LENGTH.		*AA100
05	0030-LENGTH	PICTURE 9(4) VALUE 2776.	*AA100

## VIP-TYPE PROGRAM

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## DESCRIPTION OF VALIDATION AREAS

4

05	MESS-LENGF	PICTURE 9(4) VALUE 2150.	*AA100
05	0030-XLOMES	PICTURE 9(4) VALUE 0616.	*AA100
05	MESS-LENGV	PICTURE 9(4) VALUE 0619.	*AA100
05	0030-LMESSF	PICTURE 9(4) VALUE 0007.	*AA100
05	0030-XLOUT	PICTURE 9(4) VALUE 0008.	*AA100
05	ERROR-LENGTH	PICTURE 9(4) VALUE 0668.	*AA100
05	ERROR-LENGF	PICTURE 9(4) VALUE 0737.	*AA100
01	VALIDATION-TABLE-FIELDS.		*AA150
02	DE-ERR.		*AA150
05	DE-ER	PICTURE X OCCURS 065.	*AA150
02	DE-E	REDEFINES DE-ERR.	*AA150
03	ER-0030-BEGIN.		*AA150
05	ER-0030-CHOIX	PICTURE X.	*AA150
05	ER-0030-MATE	PICTURE X.	*AA150
05	ER-0030-RELEA	PICTURE X.	*AA150
05	ER-0030-RUE	PICTURE X.	*AA150
05	ER-0030-VILLE	PICTURE X.	*AA150
05	ER-0030-COPOS	PICTURE X.	*AA150
05	ER-0030-REFCLI	PICTURE X.	*AA150
05	ER-0030-DATE	PICTURE X.	*AA150
05	ER-0030-CORRES	PICTURE X.	*AA150
05	ER-0030-REMIS	PICTURE X.	*AA150
03	PS-30-LINE	OCCURS 9.	*AA150
05	FILLER	PICTURE X(0006).	*AA150
03	ER-0030-END.		*AA150
05	ER-0030-EDIT	PICTURE X.	*AA150
02	ER-0030-LINE.		*AA150
05	ER-0030-CODMVT	PICTURE X.	*AA150
05	ER-0030-FOURNI	PICTURE X.	*AA150
05	ER-0030-QTMAC	PICTURE X.	*AA150
05	ER-0030-QTMAL	PICTURE X.	*AA150
05	ER-0030-QTMAR	PICTURE X.	*AA150
05	ER-0030-INFOR	PICTURE X.	*AA150
01	TT-DAT.		*AA200
05	T-DAT	PICTURE X OCCURS 5.	*AA200
01	LEAP-YEAR.		*AA200
05	LEAP-FLAG	PICTURE X.	*AA200
05	LEAP-REM	PICTURE 99.	*AA200
01	USERS-ERROR.		*AA200
05	XEMKY.		*AA200
10	XPROGR	PICTURE X(6).	*AA200
10	XERCD	PICTURE X(4).	*AA200
05	T-XEMKY	OCCURS 01.	*AA200
10	T-XPROGR	PICTURE X(6).	*AA200
10	T-XERCD	PICTURE X(4).	*AA200
01	PACBASE-INDEXES COMPUTATIONAL-1.		*AA200
05	K01	PICTURE S9(4).	*AA200
05	K02	PICTURE S9(4).	*AA200
05	K03	PICTURE S9(4).	*AA200
05	K04	PICTURE S9(4).	*AA200
05	K50R	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50L	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50M	PICTURE S9(4) VALUE +01.	*AA200
05	IWP20L	PICTURE S9(4) VALUE ZERO.	*AA200
05	IWP20R	PICTURE S9(4) VALUE ZERO.	*AA200
05	IWP20M	PICTURE S9(4) VALUE +0009.	*AA200
05	5-CD00-LTH	PICTURE S9(4) VALUE +0166.	*AA200
05	5-CD05-LTH	PICTURE S9(4) VALUE +0157.	*AA200
05	5-CD10-LTH	PICTURE S9(4) VALUE +0139.	*AA200
05	5-CD20-LTH	PICTURE S9(4) VALUE +0001.	*AA200
05	5-FO00-LTH	PICTURE S9(4) VALUE +0057.	*AA200
05	5-FO10-LTH	PICTURE S9(4) VALUE +0057.	*AA200
05	5-ME00-LTH	PICTURE S9(4) VALUE +0082.	*AA200
05	5-CA00-LTH	PICTURE S9(4) VALUE +0147.	*AA200
05	5-CD05-LTHV	PICTURE S9(4) VALUE +0166.	*AA200
05	5-CD10-LTHV	PICTURE S9(4) VALUE +0148.	*AA200
05	5-CD20-LTHV	PICTURE S9(4) VALUE +0010.	*AA200
05	5-FO10-LTHV	PICTURE S9(4) VALUE +0057.	*AA200
05	LTH	PICTURE S9(4) VALUE ZERO.	*AA200
05	5-0030-LENGTH	PICTURE S9(4) VALUE +0892.	*AA200
01	NUMERIC-VALIDATION-FIELDS.		*AA200
05	ZONUM1.		*AA200
10	C1	PICTURE X OCCURS 27.	*AA200
05	ZONUM2.		*AA200
10	C2	OCCURS 18.	*AA200
15	C29	PICTURE S9.	*AA200
05	ZONUM9	REDEFINES ZONUM2 PICTURE 9(18).	*AA200

## VIP-TYPE PROGRAM

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## DESCRIPTION OF VALIDATION AREAS

4

05	NUMPIC.		*AA200
10	SIGNE	PICTURE X.	*AA200
10	NBCHA	PICTURE 99.	*AA200
10	NBCHP	PICTURE 99.	*AA200
05	C9	PICTURE S9.	*AA200
05	C91	PICTURE X.	*AA200
05	TPOINT	PICTURE X.	*AA200
05	ZONUM3.		*AA200
10	C3	PICTURE X OCCURS 18.	*AA200
05	ZONUM4	REDEFINES ZONUM3 PICTURE 9(18).	*AA200
05	ZONUM5	PICTURE S99 VALUE -10.	*AA200
05	ZONUM6	REDEFINES ZONUM5.	*AA200
10	FILLER	PICTURE X.	*AA200
10	C4	PICTURE X.	*AA200

## 6.5. *F01 : INITIALIZATIONS*

### F01 : INITIALIZATIONS

The INITIALIZATIONS (F01) function is always generated.

It initializes the work areas.

It ensures, in the first program of the dialogue (PRIOR-TPR), the first RECEIVE in an 80-position field.

This function triggers the procedure to be executed in case of error.

It ensures the branching to the physical display function after consultation of HELP documentation (if a documentation HELP character is entered on the Screen Definition screen).

## VIP-TYPE PROGRAM

6

## F01 : INITIALIZATIONS

5

*	*****	DO0030
*	*	DO0030
*	*   INITIALIZATIONS          *	DO0030
*	*	DO0030
*	*****	DO0030
F01.		DO0030
EXIT.		DO0030
F0110.		DO0030
ACCEPT TIMCO FROM TIME.		DO0030
ACCEPT DATOR FROM DATE.		DO0030
MOVE ZERO TO CATX FT K50L.		DO0030
MOVE "1" TO ICF OCF SCR-ER.		DO0030
MOVE ZERO TO VALIDATION-TABLE-FIELDS.		DO0030
MOVE ZERO TO 7-CD01-XMSTA 7-CD02-XMSTA.		DO0030
MOVE SPACE TO CATM OPER OPERD CAT-ER.		DO0030
MOVE SPACE TO TABLE-OF-ATTRIBUTES.		DO0030
MOVE ZERO TO CONFIGURATIONS.		DO0030
MOVE SYMBOLIC-QUEUE TO 7-CD01-CTHAN.		DO0030
IF      PROGR NOT = K-S0030-PROGR		DO0030
MOVE ZERO TO ICF.		DO0030
IF      PRIOR-TPR = SPACE		DO0030
MOVE ZERO TO ICF K-S0030-DOC		DO0030
RECEIVE 7-CD01 MESSAGE INTO 0030-MPRIOR NO DATA		DO0030
MOVE "1" TO IK.		DO0030
IF      PRIOR-TPR = SPACE		DO0030
PERFORM F81ES THRU F81ES-FN		DO0030
MOVE 7-CD01-XTERM TO K-S0030-XTERM.		DO0030
MOVE SPACE TO O-0030.		DO0030
IF      ICF = ZERO		DO0030
PERFORM F8115 THRU F8115-FN.		DO0030
MOVE K-S0030-XTERM TO HE00-XTERM.		DO0030
IF      K-S0030-DOC = "2"		DO0030
OR K-S0030-DOC = "3"		DO0030
MOVE "1" TO K-S0030-DOC		DO0030
GO TO F8Z05.		DO0030
MOVE "X" TO DE-AT (4, 011).		DO0030
MOVE SPACE TO O-0030-ERMSG (01).		DO0030
MOVE SPACE TO O-0030-ERMSG1 (01).		DO0030
F0110-FN.		DO0030
EXIT.		DO0030
F0160.		DO0030
IF      ICF = ZERO		DO0030
MOVE "A" TO OPER		DO0030
GO TO F3999-ITER-FT.		DO0030
F0160-FN.		DO0030
EXIT.		DO0030
F01-FN.		DO0030
EXIT.		DO0030
*	+-----+-----+-----+-----+-----+-----+	P000
* LEVEL 10	I INIT. NUMBER OF LOADED ITEMS          I	P000
*	+-----+-----+-----+-----+-----+-----+	P000
F02CP.		P000
MOVE IWP20M TO IWP20L.		P100
F02CP-FN.		P000
EXIT.		P000

## 6.6. F05 : RECEPTION AND OPERATION CODE

### F05 : RECEPTION

The RECEPTION (F05) function contains the conditions for all of the procedures which have to do with the 'RECEPTION' part of the program: from F05 to END-OF-RECEPTION (F45-FN).

The automatic functions in this part of the program are generated if there is at least one variable data element (NATURE = 'V') defined on the screen.

The F0510 sub-function contains the 'SCREEN RECEPTION' procedure, which is actually processed by the F81RE sub-function. The F81RE sub-function is called by a PERFORM, which facilitates any necessary modifications.

If an initialization character has been specified on the Screen Definition screen, it will be replaced by blanks (except when a branch to a "HELP" screen is executed).

The F0512 sub-function is generated if a documentation call has been entered on the Screen Definition screen. It initializes the fields that are necessary for branching to the "HELP" screen.

The F0520 sub-function is generated if a variable data element from the screen, or a special PFKEY data element, is defined as an Operation Code on the Screen Call of Elements.

The internal Operation Code 'OPER' is set according to the:

- Value of the screen data element defined as an Operation Code (values specified with TYPE OF LINE = 'O' on the Data Element Description (-D) screen;
- Value of the PFKEY data element (entered on the Screen Call of Elements (-CE)).

If an error is found in the value of the Operation Code, subsequent 'reception' procedures are not executed.

## VIP-TYPE PROGRAM

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## F05 : RECEPTION AND OPERATION CODE

6

```

*          *****
*          *
*          * RECEPTION
*          *
*          *****
F05.      DO0030
         IF ICF = ZERO DO0030
           GO TO END-OF-RECEPTION. DO0030
F0510.   DO0030
         PERFORM F81RE THRU F81RE-FN. DO0030
         IF ICF = ZERO DO0030
           GO TO END-OF-RECEPTION. DO0030
         PERFORM F81ES THRU F81ES-FN. DO0030
         MOVE 7-CD01-XTERM TO K-S0030-XTERM. DO0030
         ADD 1 TO 7-CD01-XLOMES. DO0030
         MOVE 7-HT TO 0030-CA (7-CD01-XLOMES). DO0030
         MOVE ZERO TO K01 K02. DO0030
F0510-A. DO0030
         ADD 1 TO K01. DO0030
         IF K01 > 7-CD01-XLOMES DO0030
           GO TO F0510-C. DO0030
F0510-B. DO0030
         ADD 1 TO K02. DO0030
         IF K02 > 0030-XLOMES DO0030
           GO TO F0510-C. DO0030
         IF 0030-CA (K01) = 7-HT DO0030
           AND 0030-CP (K02) NOT = 7-HT DO0030
             MOVE SPACE TO 0030-CP (K02) DO0030
             GO TO F0510-B. DO0030
         IF 0030-CA (K01) = 7-HT DO0030
           GO TO F0510-A. DO0030
         IF 0030-CP (K02) = 7-HT DO0030
           MOVE ZERO TO ICF DO0030
           GO TO END-OF-RECEPTION. DO0030
         MOVE 0030-CA (K01) TO 0030-CP (K02) DO0030
         GO TO F0510-A. DO0030
F0510-C. DO0030
         PERFORM F8155 THRU F8155-FN. DO0030
         MOVE "A" TO OPER DO0030
         MOVE SPACE TO OPERD. DO0030
         PERFORM F8150 THRU F8150-FN. DO0030
         IF K-S0030-ERCOD = ZERO DO0030
           EXAMINE I-0030 REPLACING ALL "-" BY SPACE. DO0030
F0510-FN. DO0030
         EXIT. DO0030
F0512.   DO0030
         IF K-S0030-ERCOD NOT = ZERO DO0030
           NEXT SENTENCE DO0030
         ELSE DO0030
           GO TO F0512-FN. DO0030
         MOVE "2" TO K-S0030-DOC DO0030
         MOVE PROGE TO K-S0030-PROGE DO0030
         MOVE LIBRA TO K-S0030-LIBRA. DO0030
         IF K-S0030-ERCOD NOT = SPACE DO0030
           MOVE "3" TO K-S0030-DOC. DO0030
         MOVE K-S0030-XTERM TO HE00-XTERM DO0030
         PERFORM F80-HELP-R THRU F80-FN DO0030
         MOVE HE00-SCREEN TO O-0030 DO0030
         PERFORM F8130 THRU F8130-FN DO0030
         MOVE O-0030 TO HE00-SCREEN DO0030
         PERFORM F80-HELP-RW THRU F80-FN DO0030
         MOVE PRDOC TO 5-0030-PROGE K-S0030-PROHE DO0030
         MOVE "O" TO OPER DO0030
         GO TO F4040. DO0030
F0512-FN. DO0030
         EXIT. DO0030
*          *****
*          *
*          * VALIDATION OF OPERATION CODE
*          *
*          *****
F0520.   DO0030
         IF I-0030-CHOIX = "1" DO0030
           MOVE "DO0000 " TO 5-0030-PROGE DO0030
           MOVE "O" TO OPER DO0030
           GO TO F40-A. DO0030
         IF I-0030-CHOIX = "2" DO0030

```

## VIP-TYPE PROGRAM

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## F05 : RECEPTION AND OPERATION CODE

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```

      MOVE "DO0010  " TO 5-0030-PROGE           DO0030
      MOVE "O" TO OPER                           DO0030
      GO TO F40-A.                               DO0030
IF     I-0030-CHOIX = "3"                       DO0030
      MOVE "DO0020  " TO 5-0030-PROGE           DO0030
      MOVE "O" TO OPER                           DO0030
      GO TO F40-A.                               DO0030
IF     I-0030-CHOIX = "4"                       DO0030
      MOVE "DO0040  " TO 5-0030-PROGE           DO0030
      MOVE "O" TO OPER                           DO0030
      GO TO F40-A.                               DO0030
IF     I-0030-CHOIX = "5"                       DO0030
      MOVE "DO0050  " TO 5-0030-PROGE           DO0030
      MOVE "O" TO OPER                           DO0030
      GO TO F40-A.                               DO0030
IF     I-0030-CHOIX = "0"                       DO0030
      MOVE "DO0070  " TO 5-0030-PROGE           DO0030
      MOVE "O" TO OPER                           DO0030
      GO TO F40-A.                               DO0030
IF     I-0030-CHOIX = "7"                       DO0030
      MOVE "M" TO OPER                           DO0030
      GO TO F0520-900.                           DO0030
IF     I-0030-CHOIX = "8"                       DO0030
      MOVE "S" TO OPER                           DO0030
      GO TO F0520-900.                           DO0030
      MOVE "5" TO ER-0030-CHOIX                 DO0030
      MOVE "4" TO SCR-ER                         DO0030
      GO TO F3999-ITER-FT.                       DO0030
F0520-900.                                       DO0030
IF     OPER NOT = "A"                           DO0030
      AND OPER NOT = "M"                         DO0030
      AND OPER NOT = "O"                         DO0030
      GO TO F3999-ITER-FT.                       DO0030
F0520-FN.                                       DO0030
      EXIT.                                       DO0030
F05-FN.                                         DO0030
      EXIT.                                       DO0030
*           +-----+
* LEVEL 10  I NO UPDATE ==> END OF RECEIVE      I  P000
*           +-----+
F08BB.                                          P000
IF     OPER NOT = "M"                           P000
      NEXT SENTENCE                               P000
ELSE                                         P000
      GO TO F08BB-FN.                             P000
      GO TO F3999-ITER-FT.                         P100
F08BB-FN.                                       P000
      EXIT.                                       P000

```



## 6.7. F40 : END OF RECEPTION

### F40: END-OF-RECEPTION PROCESSING

This function contains the procedures for the end-of-reception processing of the program. It is executed as long as no errors have been found.

Within this function, there are four sub-functions which correspond to four automatically generated procedures that are conditioned by the value of the Operation Code (OPER).

#### SET-UP KEYS FOR NEW DISPLAY (F4010)

This function is executed for a 'display' or an 'update' operation. The keys to the segments with no preceding segment, or those used in display, are given a value here.

Depending on the categories defined on the screen, the memorization of the access key for the display segment is found in:

- . F40A for the screen-top category.
- . F40R for the repetitive category.
- . F40Z for the screen-bottom category.

#### SET-UP KEYS FOR SCREEN PAGING (F4020)

This function is executed for a 'screen continuation' operation. It contains the memorization of the first key for the display of the screen continuation, if the segment is used in the repetitive category.

#### END OF TRANSACTION (F4030)

This function is executed for an end-of-transaction operation.

#### TRANSFER TO ANOTHER SCREEN (F4040)

This function is executed for a transfer to another screen operation.

## VIP-TYPE PROGRAM

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## F40 : END OF RECEPTION

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```

F40.                                DO0030
  IF      SCR-ER > "1"              DO0030
    MOVE "A" TO OPER                DO0030
    GO TO F40-FN.                   DO0030
F40-A.                                DO0030
  IF      OPERD NOT = SPACE         DO0030
    MOVE OPERD TO OPER.             DO0030
*      *****                    DO0030
*      *                            * DO0030
*      * SET-UP KEYS FOR NEW DISPLAY * DO0030
*      *                            * DO0030
*      *****                    DO0030
F4010.                                DO0030
  IF      OPER NOT = "A"           DO0030
    AND NOT = "M"                  DO0030
    GO TO F4010-FN.                DO0030
F40A.                                DO0030
  MOVE SPACES TO CD00-CLECD        DO0030
  MOVE "B" TO CD00-COCARA          DO0030
  MOVE CA00-NUCOM TO CD00-NUCOM    DO0030
  MOVE CD00-CLECD TO K-ACD05-CLECD. DO0030
F40A-FN.                              DO0030
  EXIT.                             DO0030
F40R.                                DO0030
  MOVE J-0030-LINE (1) TO I-0030-LINE. DO0030
  MOVE SPACES TO CD00-KEYCD        DO0030
  MOVE "C" TO CD00-COCARA          DO0030
  MOVE CA00-NUCOM TO CD00-NUCOM    DO0030
  MOVE CD00-CLECD TO K-RCD10-CLECD (1). DO0030
F40R-FN.                              DO0030
  EXIT.                             DO0030
F40Z.                                DO0030
  MOVE CA00-CLEME TO ME00-CLEME    DO0030
  MOVE ME00-CLEME TO K-ZME00-CLEME. DO0030
F40Z-FN.                              DO0030
  EXIT.                             DO0030
F4010-FN.                             DO0030
  EXIT.                             DO0030
*      *****                    DO0030
*      *                            * DO0030
*      * SET-UP KEYS FOR SCREEN PAGING * DO0030
*      *                            * DO0030
*      *****                    DO0030
F4020.                                DO0030
  IF      OPER NOT = "S"           DO0030
    GO TO F4020-FN.                DO0030
  MOVE K-RCD10-CLECD (2) TO K-RCD10-CLECD (1). DO0030
F4020-FN.                              DO0030
  EXIT.                             DO0030
*      *****                    DO0030
*      *                            * DO0030
*      * END OF TRANSACTION          * DO0030
*      *                            * DO0030
*      *****                    DO0030
F4030.                                DO0030
  IF      OPER NOT = "E"           DO0030
    GO TO F4030-FN.                DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM  DO0030
  PERFORM F80-HELP-D THRU F80-FN.   DO0030
  MOVE SPACE TO NEXT-TPR           DO0030
  MOVE 1 TO 7-CD02-XNDEST          DO0030
  MOVE K-S0030-XTERM TO 7-CD02-XTERM DO0030
  MOVE 3 TO 7-CD02-XLOMES          DO0030
  SEND 7-CD02 FROM 0030-MESSO WITH EGI AFTER ADVANCING 0 LINES. DO0030
F4030-A.                              DO0030
  EXIT PROGRAM.                    DO0030
F4030-FN.                              DO0030
  EXIT.                             DO0030
*      *****                    DO0030
*      *                            * DO0030
*      * TRANSFER TO ANOTHER SCREEN * DO0030
*      *                            * DO0030
*      *****                    DO0030
F4040.                                DO0030
  IF      OPER NOT = "O"           DO0030
    GO TO F4040-FN.                DO0030
  MOVE 5-0030-PROGE TO NEXT-TPR.   DO0030

```

VIP-TYPE PROGRAM  
F40 : END OF RECEPTION

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F4040-A.  
EXIT PROGRAM.  
F4040-FN.  
EXIT.  
F40-FN.  
EXIT.  
END-OF-RECEPTION.  
EXIT.

DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030  
DO0030

## 6.8. F70 : ERROR PROCESSING

### F70: ERROR PROCESSING - ATTRIBUTES POSITIONNING

The ERROR PROCESSING (F70) function is always generated.

Sub-function F7010 contains:

- . in F7010-A, testing of EN-PRR, positioning of the error attributes, access to the error message file, and coding of the error message on the screen.
- . in F7010-B, testing of T-XEMKY, access to the error message file, and coding of the error message on the screen.

Sub-function F7020 is generated if at least one variable field exists on the Screen Call of Elements (-CE).

This sub-function positions the attributes of the fields on the screen in display.

NOTE: The positioning that is generated with the QUESTAR variant is different from that generated with the MULTI-SCREEN variant.

An 'invisible' field ('DARK' attribute) retains this attribute, even if it is erroneous (for ex., with passwords).

VIP-TYPE PROGRAM  
 F70 : ERROR PROCESSING

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```

F70.                                                    DO0030
  EXIT.                                                  DO0030
*      * ***** *                                     DO0030
*      * *                                     *         DO0030
*      * * ERROR PROCESSING *                         *         DO0030
*      * * *                                     *         DO0030
*      * ***** *                                     DO0030
F7010.                                                  DO0030
  MOVE ZERO TO K01 K02 K04                             DO0030
  MOVE 1 TO K03.                                        DO0030
  MOVE LIBRA TO EM00-LIBRA                             DO0030
  MOVE PROGR TO EM00-PROGR                             DO0030
  MOVE ZERO TO EM00-LINUM                              DO0030
  MOVE "H" TO EM00-ENTYP.                              DO0030
F7010-A.                                                DO0030
  IF      K02 = INR                                     DO0030
    AND   K03 < IRR                                     DO0030
    MOVE INA TO K02                                    DO0030
    ADD 1 TO K03.                                       DO0030
  ADD 1 TO K01 K02.                                     DO0030
  IF      DE-ER (K01) > "1"                            DO0030
    OR    < "0"                                         DO0030
    MOVE "Y" TO DE-AT (4, K01)                         DO0030
    MOVE "B" TO DE-AT (1, K01)                         DO0030
    MOVE "N" TO DE-AT (2, K01)                         DO0030
    MOVE "W" TO DE-AT (3, K01)                         DO0030
  IF K04 < IER                                         DO0030
    MOVE DE-ER (K01) TO EM00-ERTYP                     DO0030
    MOVE K02 TO EM00-ERCOD9                             DO0030
    MOVE EM00-XEMKY TO EM00-ERMSG                       DO0030
    PERFORM F80-EM00-R THRU F80-FN                     DO0030
    ADD 1 TO K04                                        DO0030
    MOVE EM00-ERMSG TO O-0030-ERMSG1 (K04)             DO0030
    MOVE EM00-ERMSG TO O-0030-ERMSG (K04).            DO0030
  IF      K01 < INT                                     DO0030
    GO TO F7010-A.                                     DO0030
  MOVE ZERO TO K50R.                                    DO0030
F7010-B.                                                DO0030
  ADD 1 TO K50R                                         DO0030
  IF      K50R > K50L                                   DO0030
    OR    K04 NOT < IER                                 DO0030
    GO TO F7010-FN.                                    DO0030
  MOVE T-XEMKY (K50R) TO EM00-XEMKY EM00-ERMSG        DO0030
  PERFORM F80-EM00-R THRU F80-FN.                     DO0030
  ADD 1 TO K04                                        DO0030
  MOVE EM00-ERMSG TO O-0030-ERMSG1 (K04)             DO0030
  MOVE EM00-ERMSG TO O-0030-ERMSG (K04)             DO0030
  GO TO F7010-B.                                       DO0030
F7010-FN.                                              DO0030
  EXIT.                                                  DO0030
*      * ***** *                                     DO0030
*      * *                                     *         DO0030
*      * * POSITIONING OF ATTRIBUTES *                 *         DO0030
*      * * *                                     *         DO0030
*      * ***** *                                     DO0030
F7020.                                                  DO0030
  MOVE ZERO TO TALLY                                    DO0030
  EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Y".        DO0030
  IF      TALLY NOT < 0065                             DO0030
    MOVE ZERO TO TALLY                                  DO0030
    EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Z".      DO0030
  IF      TALLY NOT < 0065                             DO0030
    MOVE ZERO TO TALLY                                  DO0030
    EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "X".      DO0030
  IF      TALLY NOT < 0065                             DO0030
    MOVE ZERO TO TALLY.                                DO0030
  ADD 1 TO TALLY.                                       DO0030
  MOVE X-ATPC (TALLY) TO X-ATPC1.                     DO0030
  MOVE ZERO TO K01.                                     DO0030
  EXAMINE DE-ATT1 (1) REPLACING ALL "N" BY ""243""    DO0030
  EXAMINE DE-ATT1 (1) REPLACING ALL "B" BY ""241""    DO0030
  EXAMINE DE-ATT1 (1) REPLACING ALL "D" BY ""249""    DO0030
  EXAMINE DE-ATT1 (2) REPLACING ALL "N" BY SPACE      DO0030
  EXAMINE DE-ATT1 (2) REPLACING ALL "U" BY ""245""    DO0030
  EXAMINE DE-ATT1 (2) REPLACING ALL "B" BY ""246""    DO0030
  EXAMINE DE-ATT1 (2) REPLACING ALL "R" BY ""248"".    DO0030
F7020-A.                                                DO0030

```

VIP-TYPE PROGRAM  
F70 : ERROR PROCESSING

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ADD 1 TO K01.	DO0030
IF K01 > INT	DO0030
GO TO F7020-FN.	DO0030
IF DE-AT (1, K01) NOT = SPACE	DO0030
AND X-ATTRI (K01) NOT = "249"	DO0030
MOVE DE-AT (1, K01) TO X-ATTRI (K01).	DO0030
IF DE-AT (2, K01) NOT = SPACE	DO0030
MOVE DE-AT (2, K01) TO X-ATTRP (K01).	DO0030
IF DE-AT (2, K01) = SPACE	DO0030
AND X-ATTRP (K01) NOT = "245"	DO0030
AND X-ATTRP (K01) NOT = "246"	DO0030
AND X-ATTRP (K01) NOT = "248"	DO0030
MOVE X-ATTRI (K01) TO X-ATTRP (K01).	DO0030
GO TO F7020-A.	DO0030
F7020-FN.	DO0030
EXIT.	DO0030
F70-FN.	DO0030
EXIT.	DO0030
END-OF-DISPLAY.	DO0030
EXIT.	DO0030

## 6.9. F8Z : DISPLAY AND END OF PROGRAM

### DISPLAY AND END OF PROGRAM (F8Z)

The DISPLAY AND END-OF-PROGRAM (F8Z) function is always generated.

The F8Z05 sub-function is generated if a documentation Help character has been entered on the Screen Definition screen.

It ensures the memorization of screen fields in the backup file.

The F8Z10 sub-function only contains the 'PERFORM' of the F81SE and F81SM sub-functions, in order to facilitate possible modifications.

They send the screen through three 'SENDS':

- . Fixed content and display fields,
- . Variable fields,
- . Screen end.

The F8Z20 sub-function contains the end-of-program operations.

## VIP-TYPE PROGRAM

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## F8Z : DISPLAY AND END OF PROGRAM

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```

F8Z.                                DO0030
  EXIT.                              DO0030
F8Z05.                               DO0030
  IF SCR-ER = "1"                    DO0030
    NEXT SENTENCE                    DO0030
  ELSE                                DO0030
    GO TO F8Z05-FN.                  DO0030
  IF K-S0030-DOC NOT = "1"           DO0030
    GO TO F8Z05-A.                    DO0030
  MOVE K-S0030-ERCOD9 TO K01 K02.     DO0030
  IF K02 > INR                        DO0030
    COMPUTE K02 = K01 + (INR - INA) * (IRR - 1). DO0030
  IF K02 < 1                          DO0030
    OR K02 > INT                      DO0030
    MOVE 1 TO K02.                    DO0030
  MOVE "X" TO DE-AT (4, K02)          DO0030
  PERFORM F7020 THRU F7020-FN.        DO0030
F8Z05-A.                              DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM.   DO0030
  IF K-S0030-DOC = "1"                DO0030
    PERFORM F80-HELP-R THRU F80-FN    DO0030
    MOVE HE00-SCREEN TO O-0030        DO0030
    MOVE "0" TO K-S0030-DOC           DO0030
    GO TO F8Z05-FN.                    DO0030
  IF K-S0030-DOC NOT = ZERO           DO0030
    GO TO F8Z05-FN.                    DO0030
  PERFORM F80-HELP-R THRU F80-FN.     DO0030
  MOVE K-S0030-XTERM TO HE00-XTERM    DO0030
  MOVE O-0030 TO HE00-SCREEN.          DO0030
  IF IK = "1"                          DO0030
    PERFORM F80-HELP-W THRU F80-FN    DO0030
  ELSE                                  DO0030
    PERFORM F80-HELP-RW THRU F80-FN.  DO0030
F8Z05-FN.                              DO0030
  EXIT.                                DO0030
*          *****                    DO0030
*          *                            * DO0030
*          * DISPLAY                     * DO0030
*          *                              * DO0030
*          *****                    DO0030
F8Z10.                                  DO0030
  IF SCR-ER NOT > "1"                 DO0030
    AND DE-AT (4, 011) = "X"          DO0030
    PERFORM F7020 THRU F7020-FN.      DO0030
  PERFORM F8145 THRU F8145-FN.        DO0030
  MOVE 1 TO 7-CD02-XNDEST              DO0030
  MOVE K-S0030-XTERM TO 7-CD02-XTERM. DO0030
  IF SCR-ER NOT > "1"                 DO0030
    MOVE PROGR TO K-S0030-PROGR       DO0030
    PERFORM F8140 THRU F8140-FN        DO0030
    PERFORM F81SE THRU F81SE-FN.      DO0030
  IF SCR-ER > "1"                     DO0030
    OR K50L > ZERO                     DO0030
    PERFORM F81SM THRU F81SM-FN.      DO0030
  IF 7-SENDVAR = "1"                  DO0030
    MOVE MESS-LENGV TO 7-CD02-XLOMES  DO0030
    SEND 7-CD02 FROM 0030-MESSV WITH ESI AFTER ADVANCING 0 DO0030
  LINES                                DO0030
    PERFORM F81ES THRU F81ES-FN.      DO0030
  MOVE 0030-XLOUT TO 7-CD02-XLOMES    DO0030
  SEND 7-CD02 FROM ERROR-MESSF WITH EGI AFTER ADVANCING 0 LINES DO0030
  PERFORM F81ES THRU F81ES-FN.        DO0030
F8Z10-G.                              DO0030
  EXIT.                                DO0030
F8Z10-FN.                              DO0030
  EXIT.                                DO0030
*          *****                    DO0030
*          *                            * DO0030
*          * END OF PROGRAM              * DO0030
*          *                              * DO0030
*          *****                    DO0030
F8Z20.                                  DO0030
  MOVE PROGE TO NEXT-TPR.              DO0030
F8Z20-A.                              DO0030
  EXIT PROGRAM.                        DO0030
F8Z20-FN.                              DO0030
  EXIT.                                DO0030

```



VIP-TYPE PROGRAM  
F8Z : DISPLAY AND END OF PROGRAM

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F8Z-FN.  
EXIT.

DO0030  
DO0030

## 6.10. F81 : PERFORMED VALIDATION FUNCTIONS

### F81 : PERFORMED VALIDATIONS FUNCTIONS

The PERFORMED VALIDATIONS FUNCTIONS (F81) are always generated.

F81ER contains the abnormal end routine.

F81ES is called by a 'PERFORM' in order to check the return code after each 'SEND' or 'RECEIVE'.

F81RE is called by a PERFORM at the beginning of the program. It ensures the reception of the message.

F81SE and F81SM

are called by a 'PERFORM' in the Screen Display procedure:  
F81SE sends the message if no error was found.  
F81SM sends the message if there is an error.

F81UT stores the user's errors.

F8110 is generated when there is a numeric field on the screen. It contains the procedures which format the field to be validated in the work area, the numeric class validation, and the positioning of error messages, if required.

F8115 ensures the initialization of the output variable fields. It is performed in Function F0510 if the ICF indicator is equal to '0'.

F8120 is generated if at least one variable data element ('V') has a date format, or if an 'AD'-type operator is specified on the Procedural Code (-P) lines of the program (in this case, the F8120-ER and F8120-KO functions are not generated).

It also contains date formatting and validations.

F8130 is generated if a call for HELP documentation is entered on the Screen Definition screen. It prepares the field to be saved in the backup file.

F8145 transfers the message which has been formatted in the work areas (OUTPUT-SCREEN-FIELDS) to the fields used for display.

F8150 checks the first character of each input field to detect either of the two documentation Help characters (screen-level or field-level documentation).

F8155 transfers the message received into the work areas (INPUT-SCREEN-FIELDS).

## VIP-TYPE PROGRAM

6

## F81 : PERFORMED VALIDATION FUNCTIONS

10

```

F81. DO0030
  EXIT. DO0030
* ***** DO0030
* * DO0030
* * ABNORMAL END PROCEDURE * DO0030
* * * DO0030
* ***** DO0030
F81ER. DO0030
  CALL "ABORT". DO0030
F81ER-FN. DO0030
  EXIT. DO0030
F81ES. DO0030
  IF 7-CD01-XMSTA NOT = ZERO DO0030
    OR 7-CD02-XMSTA NOT = ZERO DO0030
    CALL "ABORT". DO0030
F81ES-FN. DO0030
  EXIT. DO0030
F81RE. DO0030
  RECEIVE 7-CD01 MESSAGE INTO 0030-MESSI NO DATA DO0030
  MOVE SPACE TO 0030-MESSI DO0030
  MOVE 7-CD01-XTERM TO K-S0030-XTERM DO0030
  MOVE ZERO TO ICF. DO0030
F81RE-FN. DO0030
  EXIT. DO0030
F81SE. DO0030
  MOVE MESS-LENGF TO 7-CD02-XLOMES DO0030
  SEND 7-CD02 FROM 0030-MESS01 WITH ESI AFTER ADVANCING 0 LINES DO0030
  PERFORM F81ES THRU F81ES-FN. DO0030
F81SE-FN. DO0030
  EXIT. DO0030
F81SM. DO0030
  EXAMINE O-0030-ERMSG (01) REPLACING ALL SPACE BY "19". DO0030
  MOVE ERROR-LENGF TO 7-CD02-XLOMES DO0030
  SEND 7-CD02 FROM ERROR-MESS01 WITH ESI AFTER ADVANCING 0 DO0030
  LINES DO0030
  PERFORM F81ES THRU F81ES-FN. DO0030
F81SM-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * DO0030
* * MEMORIZATION OF USER'S ERRORS * DO0030
* * * DO0030
* ***** DO0030
F81UT. DO0030
  IF K50L < K50M DO0030
    ADD 1 TO K50L DO0030
    MOVE XEMKY TO T-XEMKY (K50L). DO0030
    MOVE "E" TO CAT-ER. DO0030
F81UT-FN. DO0030
  EXIT. DO0030
* ***** DO0030
* * DO0030
* * NUMERIC VALIDATION * DO0030
* * * DO0030
* ***** DO0030
F8110. DO0030
  MOVE ZERO TO TPOINT K01 K02 K03 ZONUM3 ZONUM2 C9 C91. DO0030
F8110-1. DO0030
  IF K01 > 26 DO0030
    OR K02 > 17 DO0030
    GO TO F8110-5. DO0030
  ADD 1 TO K01. DO0030
  IF C1 (K01) = SPACE DO0030
    OR C1 (K01) = "." DO0030
    GO TO F8110-1. DO0030
  IF C1 (K01) NOT = "-" DO0030
    AND C1 (K01) NOT = "+" DO0030
    GO TO F8110-2. DO0030
  IF C9 NOT = ZERO DO0030
    MOVE "5" TO DEL-ER DO0030
    GO TO F8110-FN. DO0030
  IF K02 = ZERO DO0030
    MOVE "1" TO C91. DO0030
  IF C1 (K01) = "+" DO0030
    MOVE 1 TO C9 DO0030
    GO TO F8110-1. DO0030
  IF SIGNE = " " DO0030

```

## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

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MOVE "5" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
MOVE -1 TO C9	DO0030
GO TO F8110-1.	DO0030
F8110-2.	DO0030
IF C1 (K01) NOT = ", "	DO0030
GO TO F8110-4.	DO0030
IF TPOINT = "1"	DO0030
OR NBCHP = 0	DO0030
MOVE "5" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
F8110-3.	DO0030
IF K02 > NBCHA	DO0030
MOVE "5" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
COMPUTE K04 = 18 - NBCHA + K02	DO0030
MOVE 1 TO C3 (K04)	DO0030
DIVIDE ZONUM4 INTO ZONUM9	DO0030
MOVE NBCHA TO K02	DO0030
MOVE "1" TO TPOINT	DO0030
GO TO F8110-1.	DO0030
F8110-4.	DO0030
IF C1 (K01) NOT NUMERIC	DO0030
MOVE "4" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
IF C9 NOT = ZERO	DO0030
AND C91 = ZERO	DO0030
MOVE "5" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
IF C1 (K01) = "0"	DO0030
AND K02 = ZERO	DO0030
AND TPOINT = "0"	DO0030
GO TO F8110-1.	DO0030
ADD 1 TO K02	DO0030
MOVE C1 (K01) TO C2 (K02).	DO0030
IF TPOINT = "1"	DO0030
ADD 1 TO K03.	DO0030
IF K03 > NBCHP	DO0030
MOVE "5" TO DEL-ER	DO0030
GO TO F8110-FN.	DO0030
GO TO F8110-1.	DO0030
F8110-5.	DO0030
IF TPOINT = "0"	DO0030
AND K02 > ZERO	DO0030
GO TO F8110-3.	DO0030
IF SIGNE NOT = "+"	DO0030
GO TO F8110-FN.	DO0030
IF C9 = ZERO	DO0030
MOVE 1 TO C9.	DO0030
ADD NBCHA NBCHP GIVING K01	DO0030
MULTIPLY C9 BY C29 (K01).	DO0030
IF C29 (K01) = ZERO	DO0030
AND C9 = -1	DO0030
MOVE C4 TO C2 (K01).	DO0030
F8110-FN.	DO0030
EXIT.	DO0030
F8115.	DO0030
MOVE ALL "-" TO O-0030-CHOIX.	DO0030
MOVE ALL "-" TO O-0030-MATE.	DO0030
MOVE ALL "-" TO O-0030-RELEA.	DO0030
MOVE ALL "-" TO O-0030-RUE.	DO0030
MOVE ALL "-" TO O-0030-VILLE.	DO0030
MOVE ALL "-" TO O-0030-COPOS.	DO0030
MOVE ALL "-" TO O-0030-REFCLI.	DO0030
MOVE ". . . ." TO O-0030-DATE.	DO0030
MOVE ALL "-" TO O-0030-CORRES.	DO0030
MOVE ALL "-" TO F-0030-REMIS.	DO0030
MOVE ZERO TO ICATR.	DO0030
F8115-GRP.	DO0030
ADD 1 TO ICATR	DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE	DO0030
MOVE ALL "-" TO O-0030-CODMVT.	DO0030
MOVE ALL "-" TO O-0030-FOURNI.	DO0030
MOVE ALL "-" TO F-0030-QTMAC.	DO0030
MOVE ALL "-" TO F-0030-QTMAL.	DO0030
MOVE ALL "-" TO F-0030-QTMAR.	DO0030
MOVE ALL "-" TO O-0030-INFOR.	DO0030

## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

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```

MOVE O-0030-LINE TO P-0030-LINE (ICATR).          DO0030
IF      ICATR < IRR                                DO0030
      GO TO F8115-GRP.                              DO0030
MOVE ALL "-" TO O-0030-EDIT.                       DO0030
F8115-FN.                                          DO0030
EXIT.                                              DO0030
*          *****                                DO0030
*          *                                       *          DO0030
*          *   VALIDATION AND SETTING OF DATE   *          DO0030
*          *                                       *          DO0030
*          *****                                DO0030
F8120.                                           DO0030
EXIT.                                             DO0030
F8120-C.                                         DO0030
MOVE DAT73C TO DATCTY.                            DO0030
MOVE DAT71C TO DAT71.                              DO0030
MOVE DAT72C TO DAT72.                              DO0030
MOVE DAT74C TO DAT73.                              DO0030
MOVE "00111" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-D.                                         DO0030
MOVE CENTUR TO DATCTY DAT73C.                     DO0030
MOVE DAT71 TO DAT71C.                              DO0030
MOVE DAT72 TO DAT72C.                              DO0030
MOVE DAT73 TO DAT74C.                              DO0030
MOVE "00111" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-E.                                         DO0030
MOVE CENTUR TO DATCTY DAT83C.                     DO0030
MOVE DAT81 TO DAT81C.                              DO0030
MOVE DAT82 TO DAT82C.                              DO0030
MOVE DAT83 TO DAT84C.                              DO0030
MOVE DATSEP TO DAT8S1C DAT8S2C.                   DO0030
MOVE "01011" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-G.                                         DO0030
MOVE DAT81G TO DATCTY.                            DO0030
MOVE DAT82G TO DAT61.                              DO0030
MOVE DAT83G TO DAT62.                              DO0030
MOVE DAT84G TO DAT63.                              DO0030
MOVE "10110" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-I.                                         DO0030
MOVE CENTUR TO DATCTY DAT61C.                     DO0030
MOVE DAT61 TO DAT62C.                              DO0030
MOVE DAT62 TO DAT63C.                              DO0030
MOVE DAT63 TO DAT64C.                              DO0030
MOVE "10101" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-M.                                         DO0030
MOVE DAT83C TO DATCTY.                            DO0030
MOVE DAT81C TO DAT81.                              DO0030
MOVE DAT82C TO DAT82.                              DO0030
MOVE DAT84C TO DAT83.                              DO0030
MOVE DATSEP TO DAT8S1 DAT8S2.                     DO0030
MOVE "01011" TO TT-DAT                             DO0030
GO TO F8120-T.                                     DO0030
F8120-S.                                         DO0030
MOVE DAT61C TO DATCTY.                            DO0030
MOVE DAT62C TO DAT61.                              DO0030
MOVE DAT63C TO DAT62.                              DO0030
MOVE DAT64C TO DAT63.                              DO0030
MOVE "10101" TO TT-DAT                             DO0030
F8120-T.                                         DO0030
IF      T-DAT (1) = "1"                            DO0030
      MOVE DAT61 TO DAT73 DAT74C                   DO0030
      MOVE DAT62 TO DAT72 DAT72C                   DO0030
      MOVE DAT63 TO DAT71 DAT71C                   DO0030
      MOVE DATCTY TO DAT73C.                       DO0030
IF      T-DAT (2) = "1"                            DO0030
      MOVE DAT81 TO DAT71 DAT71C                   DO0030
      MOVE DAT82 TO DAT72 DAT72C                   DO0030
      MOVE DAT83 TO DAT73 DAT74C                   DO0030
      MOVE DATCTY TO DAT73C.                       DO0030
IF      T-DAT (3) = "1"                            DO0030
      MOVE DAT71 TO DAT81 DAT81C                   DO0030
      MOVE DAT72 TO DAT82 DAT82C                   DO0030

```



## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

10

ADD 1 TO ICATR	DO0030
MOVE J-0030-LINE (ICATR) TO I-0030-LINE	DO0030
MOVE P-0030-LINE (ICATR) TO O-0030-LINE	DO0030
IF I-0030-CODMVT NOT = HIGH-VALUE	DO0030
MOVE I-0030-CODMVT TO O-0030-CODMVT.	DO0030
IF I-0030-FOURNI NOT = HIGH-VALUE	DO0030
MOVE I-0030-FOURNI TO O-0030-FOURNI.	DO0030
IF E-0030-QTMAC NOT = HIGH-VALUE	DO0030
MOVE E-0030-QTMAC TO F-0030-QTMAC.	DO0030
IF E-0030-QTMAL NOT = HIGH-VALUE	DO0030
MOVE E-0030-QTMAL TO F-0030-QTMAL.	DO0030
IF E-0030-QTMAR NOT = HIGH-VALUE	DO0030
MOVE E-0030-QTMAR TO F-0030-QTMAR.	DO0030
IF I-0030-INFOR NOT = HIGH-VALUE	DO0030
MOVE I-0030-INFOR TO O-0030-INFOR.	DO0030
MOVE O-0030-LINE TO P-0030-LINE (ICATR).	DO0030
IF ICATR < IRR	DO0030
GO TO F8130-GRP.	DO0030
IF I-0030-EDIT NOT = HIGH-VALUE	DO0030
MOVE I-0030-EDIT TO O-0030-EDIT.	DO0030
F8130-FN.	DO0030
EXIT.	DO0030
F8140.	DO0030
MOVE 3 TO K01.	DO0030
F8140-A.	DO0030
ADD 1 TO K01.	DO0030
IF K01 > MESS-LENGF	DO0030
GO TO F8140-FN.	DO0030
IF 0030-CX (K01) = "20"	DO0030
ADD 2 TO K01	DO0030
GO TO F8140-A.	DO0030
IF 0030-CX (K01) = "040"	DO0030
ADD 5 TO K01	DO0030
GO TO F8140-A.	DO0030
IF 0030-CX (K01) = SPACE	DO0030
MOVE "19" TO 0030-CX (K01).	DO0030
GO TO F8140-A.	DO0030
F8140-FN.	DO0030
EXIT.	DO0030
F8145.	DO0030
MOVE T01004 TO S01004.	DO0030
MOVE T01015 TO S01015.	DO0030
MOVE T01060 TO S01060.	DO0030
MOVE T01071 TO S01071.	DO0030
MOVE T03018 TO S03018.	DO0030
MOVE T03034 TO S03034.	DO0030
MOVE T03063 TO S03063.	DO0030
MOVE T04013 TO S04013.	DO0030
MOVE T05009 TO S05009.	DO0030
MOVE T05052 TO S05052.	DO0030
MOVE T05074 TO S05074.	DO0030
MOVE T06016 TO S06016.	DO0030
MOVE T06061 TO S06061.	DO0030
MOVE T07018 TO S07018.	DO0030
MOVE T07061 TO S07061.	DO0030
MOVE T10003 TO S10003.	DO0030
MOVE T10007 TO S10007.	DO0030
MOVE T10016 TO S10016.	DO0030
MOVE T10026 TO S10026.	DO0030
MOVE T10035 TO S10035.	DO0030
MOVE T10042 TO S10042.	DO0030
MOVE T11003 TO S11003.	DO0030
MOVE T11007 TO S11007.	DO0030
MOVE T11016 TO S11016.	DO0030
MOVE T11026 TO S11026.	DO0030
MOVE T11035 TO S11035.	DO0030
MOVE T11042 TO S11042.	DO0030
MOVE T12003 TO S12003.	DO0030
MOVE T12007 TO S12007.	DO0030
MOVE T12016 TO S12016.	DO0030
MOVE T12026 TO S12026.	DO0030
MOVE T12035 TO S12035.	DO0030
MOVE T12042 TO S12042.	DO0030
MOVE T13003 TO S13003.	DO0030
MOVE T13007 TO S13007.	DO0030
MOVE T13016 TO S13016.	DO0030
MOVE T13026 TO S13026.	DO0030



## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

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```

MOVE T13035 TO S13035.          DO0030
MOVE T13042 TO S13042.          DO0030
MOVE T14003 TO S14003.          DO0030
MOVE T14007 TO S14007.          DO0030
MOVE T14016 TO S14016.          DO0030
MOVE T14026 TO S14026.          DO0030
MOVE T14035 TO S14035.          DO0030
MOVE T14042 TO S14042.          DO0030
MOVE T15003 TO S15003.          DO0030
MOVE T15007 TO S15007.          DO0030
MOVE T15016 TO S15016.          DO0030
MOVE T15026 TO S15026.          DO0030
MOVE T15035 TO S15035.          DO0030
MOVE T15042 TO S15042.          DO0030
MOVE T16003 TO S16003.          DO0030
MOVE T16007 TO S16007.          DO0030
MOVE T16016 TO S16016.          DO0030
MOVE T16026 TO S16026.          DO0030
MOVE T16035 TO S16035.          DO0030
MOVE T16042 TO S16042.          DO0030
MOVE T17003 TO S17003.          DO0030
MOVE T17007 TO S17007.          DO0030
MOVE T17016 TO S17016.          DO0030
MOVE T17026 TO S17026.          DO0030
MOVE T17035 TO S17035.          DO0030
MOVE T17042 TO S17042.          DO0030
MOVE T18003 TO S18003.          DO0030
MOVE T18007 TO S18007.          DO0030
MOVE T18016 TO S18016.          DO0030
MOVE T18026 TO S18026.          DO0030
MOVE T18035 TO S18035.          DO0030
MOVE T18042 TO S18042.          DO0030
MOVE T20022 TO S20022.          DO0030
MOVE T20033 TO S20033.          DO0030
MOVE T23002 TO S23002.          DO0030
MOVE T24002 TO S24002.          DO0030
F8145-FN.                        DO0030
EXIT.                             DO0030
*                               DO0030
*                               DO0030
* * SEARCH FOR DOCUMENTATION REQUEST * DO0030
*                               DO0030
*                               DO0030
F8150.                            DO0030
MOVE ZERO TO K-S0030-ERCOD.       DO0030
IF I-0030-CHOIX = "$"             DO0030
  MOVE HIGH-VALUE TO I-0030-CHOIX DO0030
  MOVE 001 TO K-S0030-ERCOD        DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-CHOIX = "="             DO0030
  MOVE HIGH-VALUE TO I-0030-CHOIX DO0030
  MOVE SPACE TO K-S0030-ERCOD      DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-MATE = "$"              DO0030
  MOVE HIGH-VALUE TO I-0030-MATE   DO0030
  MOVE 002 TO K-S0030-ERCOD        DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-MATE = "="              DO0030
  MOVE HIGH-VALUE TO I-0030-MATE   DO0030
  MOVE SPACE TO K-S0030-ERCOD      DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-RELEA = "$"             DO0030
  MOVE HIGH-VALUE TO I-0030-RELEA  DO0030
  MOVE 003 TO K-S0030-ERCOD        DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-RELEA = "="             DO0030
  MOVE HIGH-VALUE TO I-0030-RELEA  DO0030
  MOVE SPACE TO K-S0030-ERCOD      DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-RUE = "$"               DO0030
  MOVE HIGH-VALUE TO I-0030-RUE    DO0030
  MOVE 004 TO K-S0030-ERCOD        DO0030
  GO TO F8150-FN.                  DO0030
IF I-0030-RUE = "="               DO0030
  MOVE HIGH-VALUE TO I-0030-RUE    DO0030
  MOVE SPACE TO K-S0030-ERCOD      DO0030
  GO TO F8150-FN.                  DO0030

```

## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

10

IF	I-0030-VILLE = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-VILLE	DO0030
	MOVE 005 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-VILLE = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-VILLE	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-COPOS = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-COPOS	DO0030
	MOVE 006 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-COPOS = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-COPOS	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-REFCLI = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-REFCLI	DO0030
	MOVE 007 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-REFCLI = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-REFCLI	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-DATE = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-DATE	DO0030
	MOVE 008 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-DATE = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-DATE	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-CORRES = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-CORRES	DO0030
	MOVE 009 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	I-0030-CORRES = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-CORRES	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	E-0030-REMIS = "\$"	DO0030
	MOVE HIGH-VALUE TO E-0030-REMIS	DO0030
	MOVE 010 TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
IF	E-0030-REMIS = "="	DO0030
	MOVE HIGH-VALUE TO E-0030-REMIS	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-FN.	DO0030
	MOVE ZERO TO ICATR.	DO0030
F8150-GRP.		DO0030
	ADD 1 TO ICATR	DO0030
	MOVE J-0030-LINE (ICATR) TO I-0030-LINE	DO0030
IF	I-0030-CODMVT = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-CODMVT	DO0030
	MOVE 011 TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	I-0030-CODMVT = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-CODMVT	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	I-0030-FOURNI = "\$"	DO0030
	MOVE HIGH-VALUE TO I-0030-FOURNI	DO0030
	MOVE 012 TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	I-0030-FOURNI = "="	DO0030
	MOVE HIGH-VALUE TO I-0030-FOURNI	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	E-0030-QTMAC = "\$"	DO0030
	MOVE HIGH-VALUE TO E-0030-QTMAC	DO0030
	MOVE 013 TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	E-0030-QTMAC = "="	DO0030
	MOVE HIGH-VALUE TO E-0030-QTMAC	DO0030
	MOVE SPACE TO K-S0030-ERCOD	DO0030
	GO TO F8150-A.	DO0030
IF	E-0030-QTMAL = "\$"	DO0030

## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

10

MOVE HIGH-VALUE TO E-0030-QTMAL	DO0030
MOVE 014 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF E-0030-QTMAL = "="	DO0030
MOVE HIGH-VALUE TO E-0030-QTMAL	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF E-0030-QTMAR = "\$"	DO0030
MOVE HIGH-VALUE TO E-0030-QTMAR	DO0030
MOVE 015 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF E-0030-QTMAR = "="	DO0030
MOVE HIGH-VALUE TO E-0030-QTMAR	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-INFOR = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-INFOR	DO0030
MOVE 016 TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
IF I-0030-INFOR = "="	DO0030
MOVE HIGH-VALUE TO I-0030-INFOR	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-A.	DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).	DO0030
IF ICATR < IRR	DO0030
GO TO F8150-GRP.	DO0030
IF I-0030-EDIT = "\$"	DO0030
MOVE HIGH-VALUE TO I-0030-EDIT	DO0030
MOVE 017 TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
IF I-0030-EDIT = "="	DO0030
MOVE HIGH-VALUE TO I-0030-EDIT	DO0030
MOVE SPACE TO K-S0030-ERCOD	DO0030
GO TO F8150-FN.	DO0030
GO TO F8150-B.	DO0030
F8150-A.	DO0030
MOVE I-0030-LINE TO J-0030-LINE (ICATR).	DO0030
F8150-B.	DO0030
EXIT.	DO0030
F8150-FN.	DO0030
EXIT.	DO0030
F8155.	DO0030
MOVE S03034 TO R03034 T03034.	DO0030
MOVE S03063 TO R03063 T03063.	DO0030
MOVE S05009 TO R05009 T05009.	DO0030
MOVE S05052 TO R05052 T05052.	DO0030
MOVE S05074 TO R05074 T05074.	DO0030
MOVE S06016 TO R06016 T06016.	DO0030
MOVE S06061 TO R06061 T06061.	DO0030
MOVE S07018 TO R07018 T07018.	DO0030
MOVE S07061 TO R07061 T07061.	DO0030
MOVE S10003 TO R10003 T10003.	DO0030
MOVE S10007 TO R10007 T10007.	DO0030
MOVE S10016 TO R10016 T10016.	DO0030
MOVE S10026 TO R10026 T10026.	DO0030
MOVE S10035 TO R10035 T10035.	DO0030
MOVE S10042 TO R10042 T10042.	DO0030
MOVE S11003 TO R11003 T11003.	DO0030
MOVE S11007 TO R11007 T11007.	DO0030
MOVE S11016 TO R11016 T11016.	DO0030
MOVE S11026 TO R11026 T11026.	DO0030
MOVE S11035 TO R11035 T11035.	DO0030
MOVE S11042 TO R11042 T11042.	DO0030
MOVE S12003 TO R12003 T12003.	DO0030
MOVE S12007 TO R12007 T12007.	DO0030
MOVE S12016 TO R12016 T12016.	DO0030
MOVE S12026 TO R12026 T12026.	DO0030
MOVE S12035 TO R12035 T12035.	DO0030
MOVE S12042 TO R12042 T12042.	DO0030
MOVE S13003 TO R13003 T13003.	DO0030
MOVE S13007 TO R13007 T13007.	DO0030
MOVE S13016 TO R13016 T13016.	DO0030
MOVE S13026 TO R13026 T13026.	DO0030
MOVE S13035 TO R13035 T13035.	DO0030
MOVE S13042 TO R13042 T13042.	DO0030
MOVE S14003 TO R14003 T14003.	DO0030
MOVE S14007 TO R14007 T14007.	DO0030

## VIP-TYPE PROGRAM

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## F81 : PERFORMED VALIDATION FUNCTIONS

10

MOVE S14016 TO R14016 T14016.	DO0030
MOVE S14026 TO R14026 T14026.	DO0030
MOVE S14035 TO R14035 T14035.	DO0030
MOVE S14042 TO R14042 T14042.	DO0030
MOVE S15003 TO R15003 T15003.	DO0030
MOVE S15007 TO R15007 T15007.	DO0030
MOVE S15016 TO R15016 T15016.	DO0030
MOVE S15026 TO R15026 T15026.	DO0030
MOVE S15035 TO R15035 T15035.	DO0030
MOVE S15042 TO R15042 T15042.	DO0030
MOVE S16003 TO R16003 T16003.	DO0030
MOVE S16007 TO R16007 T16007.	DO0030
MOVE S16016 TO R16016 T16016.	DO0030
MOVE S16026 TO R16026 T16026.	DO0030
MOVE S16035 TO R16035 T16035.	DO0030
MOVE S16042 TO R16042 T16042.	DO0030
MOVE S17003 TO R17003 T17003.	DO0030
MOVE S17007 TO R17007 T17007.	DO0030
MOVE S17016 TO R17016 T17016.	DO0030
MOVE S17026 TO R17026 T17026.	DO0030
MOVE S17035 TO R17035 T17035.	DO0030
MOVE S17042 TO R17042 T17042.	DO0030
MOVE S18003 TO R18003 T18003.	DO0030
MOVE S18007 TO R18007 T18007.	DO0030
MOVE S18016 TO R18016 T18016.	DO0030
MOVE S18026 TO R18026 T18026.	DO0030
MOVE S18035 TO R18035 T18035.	DO0030
MOVE S18042 TO R18042 T18042.	DO0030
MOVE S20022 TO R20022 T20022.	DO0030
MOVE S20033 TO R20033 T20033.	DO0030
F8155-FN.	DO0030
EXIT.	DO0030
F81-FN.	DO0030
EXIT.	DO0030
* +-----+ * LEVEL 10 I ZIP CODE VALIDATION I * +-----+	P000 P000 P000
F93CP.	P000
MOVE 1 TO IWP20R.	P100
F93CP-100.	P100
IF IWP20R NOT > IWP20L	P100
AND WP20-COPOS (IWP20R) NOT = WP30-COPOS	P100
ADD 1 TO IWP20R	P100
GO TO F93CP-100.	P100
IF IWP20R > IWP20L	P200
MOVE "5" TO DEL-ER	P200
GO TO F93CP-FN.	P220
F93CP-FN.	DO0030
EXIT.	DO0030

## **7. HELP FUNCTION (MULTI-SCREEN)**

## 7.1. INTRODUCTION

### PRESENTATION

The user can access context-sensitive help for a screen or a data element on that screen through the activation of a program commonly known as the "HELP Function".

The purpose of the HELP function is to display the messages contained in the Error Message file.

For information on the character used to call the HELP documentation of a given screen or data element, refer to Subchapter, "DIALOGUE OR SCREEN DEFINITION" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual.

### USING THE "HELP" PROGRAM

To use the specifications of the "HELP" function in a dialogue, an additional screen has to be defined.

This screen belongs to the dialogue. Thus, the first two characters of its code must be the same as those of the corresponding dialogue, the last four being the code of the HELP screen. For Dialogue 'XX', the HELP screen would be coded: 'XXHELP'.

The 'XXHELP' screen must be defined but not described (i.e., only the Definition screen must be created). It must have the same variants as the dialogue. Coding the external names (MAP and PROGRAM) is not restricted and is up to the user.

The user must generate and compile the 'XXHELP' program (the generated COBOL program has the same structure as an on-line screen program).

The HELP program ensures the display of the documentation as follows:

- For the Screen documentation:
  - . Screen-related documentation (texts and comments),
  - . Segment access error messages.
- For the Data Element documentation:
  - . Standard error messages generated by the System,
  - . Explicit manual error messages,
  - . Description lines associated with the Data Element (CH: E.....D),
  - . Screen general documentation lines associated with the Data Element (CH: O.....G).

(For further details, refer to Subchapter "ERROR MESSAGES: CODING", Chapter "ERROR MESSAGES - HELP FUNCTION" in the ON-LINE SYSTEMS DEVELOPMENT Reference Manual).

NOTE: If the Error Message file is generated with the 'C1' option, only the error messages are generated. If it is generated with the 'C2' option, in addition to the error messages, comments and documentation associated with the Screen are also generated.

HELP FUNCTION (MULTI-SCREEN)
INTRODUCTION

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1

A "HELP" program generated from a dialogue can be used by 'n' dialogues. It is generated once, and the 'XXHELP' screens of the various dialogues must have the same external names (PROGRAM and MAP). User input on a screen is saved, before the "HELP" screen display, by the calling program in a file whose default name is 'HE' (see Chapter GENERATED PROGRAM, Sub-chapter SEGMENT DESCRIPTION).



HELP FUNCTION (MULTI-SCREEN)  
INTRODUCTION

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```
-----  
!                BULL DPS7 APPLICATION                *PDLB.NDOC.AD7.247!  
! ON-LINE SCREEN DEFINITION.....: DOHELP                !  
!                !  
! SCREEN NAME.....: HELP FUNCTION SCREEN                !  
!                !  
! SCREEN SIZE (LINES, COLUMNS) .....: 24      080      !  
! LABEL TYPE, TABS, INITIALIZATION...: L        01      -      !  
! HELP CHARACTER SCREEN, DATA ELEMENT: =        $                !  
!                !  
!                LABELS  DISPLAY  INPUT  ER.MESS.  ER.FL!  
! INTENSITY ATTRIBUTE .....: N        N        N        B        B  !  
! PRESENTATION ATTRIBUTE .....: N        N        N        N        N  !  
! COLOR ATTRIBUTE .....: W        W        W        W        W  !  
!                !  
! TYPE OF COBOL AND MAP TO GENERATE..: 4  C      HB DPS7 (MULTI-SCREENS)  !  
! CONTROL CARD OPTIONS FRONT & BACK..:                (PROGRAM)                (MAP)!  
! EXTERNAL NAMES .....: DOP050      (PROGRAM)      DOM050      (MAP)!  
! TRANSACTION CODE.....: * DO50                !  
!                !  
!                !  
! EXPLICIT KEYWORDS..: DO                !  
! SESSION NUMBER.....: 0002      LIBRARY.....: ACC      LOCK.....:  !  
! *** END ***                !  
! O: C1 CH: Odohelp                ACTION:                !  
-----
```

```
-----  
!  
!DOCUMENTATION OF THE SCREEN   ***  ORDER INPUT SCREEN  ***  
!  
!  
!           THIS SCREEN ALLOWS TO ENTER AN ORDER OF PACBASE  
! DOCUMENTATION PLACED BY ANY REFERENCED CLIENT.  
! FROM THIS SCREEN, YOU MAY ACCESS ANY OTHER SCREEN OF  
! THE DIALOG BY ENTERING THE CORRESPONDING CHOICE FIELD  
! VALUE. THE DIFFERENT VALUES ARE DISPLAYED IN THE  
! BOTTOM PART OF ALL THE DIALOG'S SCREENS.  
!  
! F018E TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-CD05 F8)  
!  
! F019E TECHNICAL PROBLEM  CALL E.D.P. DEPT.(CODE 030-CD05 F9)  
!  
! F028E INCORRECT UPDATE REQUEST.  
!  
! F029E INCORRECT CREATION REQUEST.  
!  
! F038E INVALID CREATION RECORD          MANUALS  
!  
!CHOICE.....: S      (E: END - T: TOP - S: NEXT)  
!  
-----
```

## HELP FUNCTION (MULTI-SCREEN)

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## INTRODUCTION

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```
-----  
!  
!DOCUMENTATION OF DATA ELEMENT: QUANTITY ORDERED  
!  
!  
! THE 'QUANTITY ORDERED' FIELD MUST BE ENTERED WITH THE  
! NUMBER OF COPIES NEEDED FOR THE SPECIFIED MANUAL.  
! ACCORDING TO STOCK AVAILABILITY, THE SYSTEM FILLS IN  
! THE 'QUANTITY DELIVERED' AND, IF NEEDED, THE 'QUANTITY  
! OUTSTANDING'.  
!  
! (01 50) ABOVE 50 SHIP VIA OTHER CHANNEL  
!  
! 0122 INVALID ABSENCE FOR THE FIELD QUANTITY ORDERED  
!  
! 0124 NON-NUMERICAL CLASS FIELD QUANTITY ORDERED  
!  
! 0125 INVALID VALUE FOR THE FIELD QUANTITY ORDERED  
!  
!  
!  
!  
!  
!CHOICE.....: S (E: END - T: TOP - S: NEXT)  
!  
-----
```

7.2. GENERATED HELP PROGRAM

```

IDENTIFICATION DIVISION.
PROGRAM-ID. DOP050.
AUTHOR. HELP FUNCTION SCREEN.
DATE-COMPILED. 07/28/94.
ENVIRONMENT DIVISION.
CONFIGURATION SECTION.
SOURCE-COMPUTER. LEVEL-64.
OBJECT-COMPUTER. LEVEL-64.
SPECIAL-NAMES.
    DECIMAL-POINT IS COMMA
    OBJECT IS COMMA.
INPUT-OUTPUT SECTION.
FILE-CONTROL.
    COPY SELECT-EM-FILE.
DATA DIVISION.
FILE SECTION.
FD
    EM-FILE
    BLOCK 00001 RECORDS
    DATA RECORD
        EM00
        LABEL RECORD STANDARD.
01
    05 EM00-EMKEY.
    10 EM00-LIBRA PICTURE X(3).
    10 EM00-ENTYP PICTURE X.
    10 EM00-XEMKY.
    15 EM00-PROGR PICTURE X(6).
    15 EM00-ERCOD.
    20 EM00-ERCOD9 PICTURE 9(3).
    15 EM00-ERTYP PICTURE X.
    10 EM00-LINUM PICTURE 9(3).
    05 EM00-ERLVL PICTURE X.
    05 EM00-ERMSG PICTURE X(66).
    05 FILLER PICTURE X(6).
WORKING-STORAGE SECTION.
01
    05 FILLER PICTURE X(7) VALUE "WORKING".
    05 IK PICTURE X.
    05 BLANC PICTURE X VALUE SPACE.
    05 OPER PICTURE X.
    05 OPERD PICTURE X VALUE SPACE.
    05 CATX PICTURE X.
    05 CATM PICTURE X.
    05 ICATR PICTURE 99.
    05 SCR-ER PICTURE X.
    05 FT PICTURE X.
    05 ICF PICTURE X.
    05 OCF PICTURE X.
    05 CAT-ER PICTURE X.
    05 I-PFKEY PICTURE XX.
    05 7-YCREE PICTURE X VALUE "E".
    05 7-YCREF PICTURE X VALUE "F".
    05 7-YCREP PICTURE X VALUE "P".
    05 7-YCRES PICTURE X VALUE "R".
    05 7-YCREX PICTURE X VALUE "X".
    05 INA PICTURE 999 VALUE 000.
    05 INR PICTURE 999 VALUE 000.
    05 INZ PICTURE 999 VALUE 001.
    05 IRR PICTURE 99 VALUE 17.
    05 INT PICTURE 999 VALUE 001.
    05 IER PICTURE 99 VALUE 01.
    05 DEL-ER PICTURE X.
01
    PACBASE-CONSTANTS.
* OLSD DATES PACE30 : 10/03/94
*
    PACE80 : 10/03/94 PAC7SG : 940503
    05 SESSI PICTURE X(5) VALUE "0413 ".
    05 LIBRA PICTURE X(3) VALUE "AD7".
    05 DATGN PICTURE X(8) VALUE "07/28/94".
    05 PROGR PICTURE X(6) VALUE "DOHELP".
    05 PROGE PICTURE X(8) VALUE "DOP050 ".
    05 TIMGN PICTURE X(8) VALUE "11:38:04".
    05 USERCO PICTURE X(8) VALUE "PDMM ".
    
```

HELP FUNCTION (MULTI-SCREEN)  
 GENERATED HELP PROGRAM

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05	PRCGI	PICTURE X(8) VALUE "ZAR980".	DOHELP
05	5-HELP-PROGE	PICTURE X(8).	DOHELP
01	DATCE.		DOHELP
05	CENTUR	PICTURE XX VALUE "19".	DOHELP
05	DATOR.		DOHELP
10	DATOA	PICTURE XX.	DOHELP
10	DATOM	PICTURE XX.	DOHELP
10	DATOJ	PICTURE XX.	DOHELP
01	DAT6.		DOHELP
10	DAT61.		DOHELP
15	DAT619	PICTURE 99.	DOHELP
10	DAT62.		DOHELP
15	DAT629	PICTURE 99.	DOHELP
10	DAT63	PICTURE XX.	DOHELP
01	DAT7.		DOHELP
10	DAT71	PICTURE XX.	DOHELP
10	DAT72	PICTURE XX.	DOHELP
10	DAT73	PICTURE XX.	DOHELP
01	DAT8.		DOHELP
10	DAT81	PICTURE XX.	DOHELP
10	DAT8S1	PICTURE X.	DOHELP
10	DAT82	PICTURE XX.	DOHELP
10	DAT8S2	PICTURE X.	DOHELP
10	DAT83	PICTURE XX.	DOHELP
01	DATSEP	PICTURE X VALUE "/".	DOHELP
01	DATSET	PICTURE X VALUE "-".	DOHELP
01	DATCTY.		DOHELP
05	DATCTY9	PICTURE 99.	DOHELP
01	DAT6C.		DOHELP
10	DAT61C	PICTURE XX.	DOHELP
10	DAT62C	PICTURE XX.	DOHELP
10	DAT63C	PICTURE XX.	DOHELP
10	DAT64C	PICTURE XX.	DOHELP
01	DAT7C.		DOHELP
10	DAT71C	PICTURE XX.	DOHELP
10	DAT72C	PICTURE XX.	DOHELP
10	DAT73C	PICTURE XX.	DOHELP
10	DAT74C	PICTURE XX.	DOHELP
01	DAT8C.		DOHELP
10	DAT81C	PICTURE XX.	DOHELP
10	DAT8S1C	PICTURE X VALUE "/".	DOHELP
10	DAT82C	PICTURE XX.	DOHELP
10	DAT8S2C	PICTURE X VALUE "/".	DOHELP
10	DAT83C	PICTURE XX.	DOHELP
10	DAT84C	PICTURE XX.	DOHELP
01	DAT8G.		DOHELP
10	DAT81G	PICTURE XX.	DOHELP
10	DAT82G	PICTURE XX.	DOHELP
10	DAT8S1G	PICTURE X VALUE "-".	DOHELP
10	DAT83G	PICTURE XX.	DOHELP
10	DAT8S2G	PICTURE X VALUE "-".	DOHELP
10	DAT84G	PICTURE XX.	DOHELP
01	TIMCO.		DOHELP
02	TIMCOG.		DOHELP
05	TIMCOH	PICTURE XX.	DOHELP
05	TIMCOM	PICTURE XX.	DOHELP
05	TIMCOS	PICTURE XX.	DOHELP
02	TIMCOC	PICTURE XX.	DOHELP
01	TIMDAY.		DOHELP
05	TIMHOU	PICTURE XX.	DOHELP
05	TIMS1	PICTURE X VALUE ":".	DOHELP
05	TIMMIN	PICTURE XX.	DOHELP
05	TIMS2	PICTURE X VALUE ":".	DOHELP
05	TIMSEC	PICTURE XX.	DOHELP
01	CONFIGURATIONS.		DOHELP
05	EM00-CF	PICTURE X.	DOHELP
01	K-HELP-CLE.		*AA010
03	K-RHELP-LIGNE	OCCURS 1.	*AA010
10	K-REM00-EMKEY	PICTURE X(17).	*AA010
01	HELP-MESSO.		*AA040
02	HELP-MESSI.		*AA040
05	S01002	PICTURE X(011).	*AA040
05	S03002	PICTURE X(030).	*AA040
05	S03033	PICTURE X(036).	*AA040
05	S05004	PICTURE X(074).	*AA040
05	S06004	PICTURE X(074).	*AA040
05	S07004	PICTURE X(074).	*AA040

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05	S08004	PICTURE X(074).	*AA040
05	S09004	PICTURE X(074).	*AA040
05	S10004	PICTURE X(074).	*AA040
05	S11004	PICTURE X(074).	*AA040
05	S12004	PICTURE X(074).	*AA040
05	S13004	PICTURE X(074).	*AA040
05	S14004	PICTURE X(074).	*AA040
05	S15004	PICTURE X(074).	*AA040
05	S16004	PICTURE X(074).	*AA040
05	S17004	PICTURE X(074).	*AA040
05	S18004	PICTURE X(074).	*AA040
05	S19004	PICTURE X(074).	*AA040
05	S20004	PICTURE X(074).	*AA040
05	S21004	PICTURE X(074).	*AA040
05	S23002	PICTURE X(019).	*AA040
05	S23022	PICTURE X(001).	*AA040
05	S23028	PICTURE X(030).	*AA040
05	S24002	PICTURE X(072).	*AA040
01	AT-HELP-MESSO.		*AA041
05	AT-S01002	PICTURE X(12) VALUE "01001011LNNW".	*AA041
05	AT-S03002	PICTURE X(12) VALUE "03001030FNNW".	*AA041
05	AT-R000101-LIBEC REDEFINES AT-S03002	PICTURE X(12).	*AA041
05	AT-S03033	PICTURE X(12) VALUE "03032036FNNW".	*AA041
05	AT-R000101-LIENT REDEFINES AT-S03033	PICTURE X(12).	*AA041
05	AT-S05004	PICTURE X(12) VALUE "05003074FNNW".	*AA041
05	AT-R010101-ERMSGD REDEFINES AT-S05004	PICTURE X(12).	*AA041
05	AT-S06004	PICTURE X(12) VALUE "06003074FNNW".	*AA041
05	AT-R020101-ERMSGD REDEFINES AT-S06004	PICTURE X(12).	*AA041
05	AT-S07004	PICTURE X(12) VALUE "07003074FNNW".	*AA041
05	AT-R030101-ERMSGD REDEFINES AT-S07004	PICTURE X(12).	*AA041
05	AT-S08004	PICTURE X(12) VALUE "08003074FNNW".	*AA041
05	AT-R040101-ERMSGD REDEFINES AT-S08004	PICTURE X(12).	*AA041
05	AT-S09004	PICTURE X(12) VALUE "09003074FNNW".	*AA041
05	AT-R050101-ERMSGD REDEFINES AT-S09004	PICTURE X(12).	*AA041
05	AT-S10004	PICTURE X(12) VALUE "10003074FNNW".	*AA041
05	AT-R060101-ERMSGD REDEFINES AT-S10004	PICTURE X(12).	*AA041
05	AT-S11004	PICTURE X(12) VALUE "11003074FNNW".	*AA041
05	AT-R070101-ERMSGD REDEFINES AT-S11004	PICTURE X(12).	*AA041
05	AT-S12004	PICTURE X(12) VALUE "12003074FNNW".	*AA041
05	AT-R080101-ERMSGD REDEFINES AT-S12004	PICTURE X(12).	*AA041
05	AT-S13004	PICTURE X(12) VALUE "13003074FNNW".	*AA041
05	AT-R090101-ERMSGD REDEFINES AT-S13004	PICTURE X(12).	*AA041
05	AT-S14004	PICTURE X(12) VALUE "14003074FNNW".	*AA041
05	AT-R100101-ERMSGD REDEFINES AT-S14004	PICTURE X(12).	*AA041
05	AT-S15004	PICTURE X(12) VALUE "15003074FNNW".	*AA041
05	AT-R110101-ERMSGD REDEFINES AT-S15004	PICTURE X(12).	*AA041
05	AT-S16004	PICTURE X(12) VALUE "16003074FNNW".	*AA041
05	AT-R120101-ERMSGD REDEFINES AT-S16004	PICTURE X(12).	*AA041

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05	AT-S17004	PICTURE X(12) VALUE "17003074FNNW".	*AA041 *AA041
05	AT-R130101-ERMSGD	REDEFINES AT-S17004 PICTURE X(12).	*AA041 *AA041
05	AT-S18004	PICTURE X(12) VALUE "18003074FNNW".	*AA041 *AA041
05	AT-R140101-ERMSGD	REDEFINES AT-S18004 PICTURE X(12).	*AA041 *AA041
05	AT-S19004	PICTURE X(12) VALUE "19003074FNNW".	*AA041 *AA041
05	AT-R150101-ERMSGD	REDEFINES AT-S19004 PICTURE X(12).	*AA041 *AA041
05	AT-S20004	PICTURE X(12) VALUE "20003074FNNW".	*AA041 *AA041
05	AT-R160101-ERMSGD	REDEFINES AT-S20004 PICTURE X(12).	*AA041 *AA041
05	AT-S21004	PICTURE X(12) VALUE "21003074FNNW".	*AA041 *AA041
05	AT-R170101-ERMSGD	REDEFINES AT-S21004 PICTURE X(12).	*AA041 *AA041
05	AT-S23002	PICTURE X(12) VALUE "23001019FNNW".	*AA041 *AA041
05	AT-R000101-LICHOI	REDEFINES AT-S23002 PICTURE X(12).	*AA041 *AA041
05	AT-S23022	PICTURE X(12) VALUE "23021001 NNW".	*AA041 *AA041
05	AT-R000101-OPDOC	REDEFINES AT-S23022 PICTURE X(12).	*AA041 *AA041
05	AT-S23028	PICTURE X(12) VALUE "23027030FNNW".	*AA041 *AA041
05	AT-R000101-LIOPT	REDEFINES AT-S23028 PICTURE X(12).	*AA041 *AA041
05	AT-S24002	PICTURE X(12) VALUE "24001072FBW".	*AA041 *AA041
05	AT-R000101-ERMSG	REDEFINES AT-S24002 PICTURE X(12).	*AA041 *AA041
01	AT-HELP-MESSA	REDEFINES AT-HELP-MESSO.	*AA041
05	AT-HELP-LIGNE	OCCURS 024.	*AA041
10	AT-HELP-YPUR	PICTURE 9(5).	*AA041
10	AT-HELP-LENGTH	PICTURE 999.	*AA041
10	AT-HELP-ATRN	PICTURE X.	*AA041
10	AT-HELP-ATTRI	PICTURE X.	*AA041
10	AT-HELP-ATTRP	PICTURE X.	*AA041
10	AT-HELP-ATTRC	PICTURE X.	*AA041
01	INPUT-HELP.		*AA042
05	R23022	PICTURE X(1).	*AA042
01	INPUT-SCREEN-FIELDS	REDEFINES INPUT-HELP.	*AA045
02	I-HELP.		*AA045
03	I-HELP-ENDRE.		*AA045
05	I-HELP-OPDOC	PICTURE X.	*AA045
01	OUTPUT-HELP.		*AA049
05	T03002	PICTURE X(30).	*AA049
05	T03033	PICTURE X(36).	*AA049
05	T05004	PICTURE X(74).	*AA049
05	T06004	PICTURE X(74).	*AA049
05	T07004	PICTURE X(74).	*AA049
05	T08004	PICTURE X(74).	*AA049
05	T09004	PICTURE X(74).	*AA049
05	T10004	PICTURE X(74).	*AA049
05	T11004	PICTURE X(74).	*AA049
05	T12004	PICTURE X(74).	*AA049
05	T13004	PICTURE X(74).	*AA049
05	T14004	PICTURE X(74).	*AA049
05	T15004	PICTURE X(74).	*AA049
05	T16004	PICTURE X(74).	*AA049
05	T17004	PICTURE X(74).	*AA049
05	T18004	PICTURE X(74).	*AA049
05	T19004	PICTURE X(74).	*AA049
05	T20004	PICTURE X(74).	*AA049
05	T21004	PICTURE X(74).	*AA049
05	T23002	PICTURE X(19).	*AA049
05	T23022	PICTURE X(1).	*AA049
05	T23028	PICTURE X(30).	*AA049
05	T24002	PICTURE X(72).	*AA049
01	OUTPUT-SCREEN-FIELDS	REDEFINES OUTPUT-HELP.	*AA050
02	O-HELP.		*AA050
03	O-HELP-BEGIN.		*AA050

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05	O-HELP-LIBEC	PICTURE X(30).	*AA050
05	O-HELP-LIENT	PICTURE X(36).	*AA050
03	P-HELP-LIGNE	OCCURS 17.	*AA050
10	FILLER	PICTURE X(74).	*AA050
03	O-HELP-ENDRE.		*AA050
05	O-HELP-LICHOI	PICTURE X(19).	*AA050
05	O-HELP-OPDOC	PICTURE X.	*AA050
05	O-HELP-LIOPT	PICTURE X(30).	*AA050
05	O-HELP-ERMS.		*AA050
10	FILLER	OCCURS 1.	*AA050
15	O-HELP-ERMSG	PICTURE X(72).	*AA050
01	REPEAT-LINE.		*AA050
02	O-HELP-LIGNE.		*AA050
05	O-HELP-ERMSGD	PICTURE X(74).	*AA050
01	CMES-COMMUNICATION.		*AA060
05	CMES-YR00	PICTURE X(4000).	*AA060
05	CMES-YO00	PICTURE X(3798).	*AA060
05	CMES-PFKEY	PICTURE XX.	*AA060
05	CMES-IND1	COMP-1.	*AA060
05	CMES-IND2	COMP-1.	*AA060
05	CMES-YMAT	PICTURE X.	*AA060
05	CMES-YCRE	PICTURE X.	*AA060
05	CMES-YPCUR	PICTURE X(5) VALUE SPACE.	*AA060
01	END-CONVERSATION.		*AA070
05	END-MESSAGE	PICTURE X(30) VALUE SPACE.	*AA070
05	END-ATTR	PICTURE X(12) VALUE "01001030FNNW".	*AA070
01	HELP-MPRIOR	PICTURE X(80).	*AA076
01	VALIDATION-TABLE-FIELDS.		*AA150
02	DE-ERR.		*AA150
05	DE-ER	PICTURE X OCCURS 001.	*AA150
02	DE-E	REDEFINES DE-ERR.	*AA150
03	ER-HELP-ENDRE.		*AA150
05	ER-HELP-OPDOC	PICTURE X.	*AA150
01	TT-DAT.		*AA200
05	T-DAT	PICTURE X OCCURS 5.	*AA200
01	USERS-ERROR.		*AA200
05	XEMKY.		*AA200
10	XPROGR	PICTURE X(6).	*AA200
10	XERCD	PICTURE X(4).	*AA200
05	T-XEMKY	OCCURS 01.	*AA200
10	T-XPROGR	PICTURE X(6).	*AA200
10	T-XERCD	PICTURE X(4).	*AA200
01	PACBASE-INDEXES	COMPUTATIONAL-1.	*AA200
05	K01	PICTURE S9(4).	*AA200
05	K02	PICTURE S9(4).	*AA200
05	K03	PICTURE S9(4).	*AA200
05	K04	PICTURE S9(4).	*AA200
05	K50R	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50L	PICTURE S9(4) VALUE ZERO.	*AA200
05	K50M	PICTURE S9(4) VALUE +01.	*AA200
05	5-CA00-LTH	PICTURE S9(4) VALUE +0147.	*AA200
05	5-EM00-LTH	PICTURE S9(4) VALUE +0090.	*AA200
05	LTH	PICTURE S9(4) VALUE ZERO.	*AA200
05	5-HELP-LENGTH	PICTURE S9(4) VALUE +0895.	*AA200
01	TABLE-OF-ATTRIBUTES.		*AA250
02	DE-ATT.		*AA250
03	DE-ATT1	OCCURS 4.	*AA250
05	DE-AT	PICTURE X OCCURS 001.	*AA250
02	DE-A	REDEFINES DE-ATT.	*AA250
03	DE-ATT2	OCCURS 4.	*AA250
04	A-HELP-ENDRE.		*AA250
05	A-HELP-OPDOC	PICTURE X.	*AA250
01	AT-SV.		*AA260
10	FILLER	PICTURE X(6) VALUE "022NNW".	*AA260
01	TABLE-SV-AT	REDEFINES AT-SV.	*AA265
02	LIGNE-SV-AT	OCCURS 001.	*AA265
05	SV-AT	PICTURE 999.	*AA265
05	SV-ATTRI	PICTURE X.	*AA265
05	SV-ATTRP	PICTURE X.	*AA265
05	SV-ATTRC	PICTURE X.	*AA265
01	FIRST-ON-SEGMENT.		*AA301
05	EM00-FST	PICTURE X.	*AA301
01	STOP-FIELDS-HELP.		*AA400
02	C-HELP-LE.		*AA400
05	C-HELP-LIBRA	PICTURE XXX.	*AA400
05	C-HELP-ERCOD	PICTURE XXX.	*AA400



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05	C-HELP-PROGR	PICTURE X(6).	*AA400
05	C-HELP-ENTYP	PICTURE X.	*AA400
02	HELP-LIENT	PICTURE X(36) VALUE SPACE.	*AA400
02	HELP-LIBEC	PICTURE X(30) VALUE SPACE.	*AA400
01	7-HELP-LIBEL.		*AA400
05	7-HELP-ERMS.		*AA400
10	7-HELP-ERMSG.		*AA400
15	7-HELP-ERMSG1	PICTURE X(12).	*AA400
15	7-HELP-ERMSG2	PICTURE X(18).	*AA400
10	7-HELP-ERMSC	PICTURE X(36).	*AA400
01	SCREEN-LIGNE.		*AA400
05	7-HELP-ERMSGD	PICTURE X(74).	*AA400
05	7-HELP-CODIF	REDEFINES 7-HELP-ERMSGD.	*AA400
10	7-HELP-VALRU	PICTURE X(12).	*AA400
10	FILLER	PICTURE X.	*AA400
10	7-HELP-SIGNI.		*AA400
15	FILLER	PICTURE X(18).	*AA400
15	7-HELP-ERMSC1	PICTURE X(43).	*AA400
05	7-HELP-DOCUM	REDEFINES 7-HELP-ERMSGD.	*AA400
10	7-HELP-XEMKY.		*AA400
15	FILLER	PICTURE XXX.	*AA400
15	7-HELP-ERTYP	PICTURE X.	*AA400
15	FILLER	PICTURE X.	*AA400
10	7-HELP-LITAC	PICTURE X(69).	*AA400
01	XZ00.		*AA400
10	XZ00-EMKEY	PICTURE X(17).	*AA400
10	XZ00-ERLVL	PICTURE X.	*AA400
10	XZ00-ERMSG	PICTURE X(66).	*AA400
10	FILLER	PICTURE X(6).	*AA400
	LINKAGE SECTION.		DOHELP
	COPY TDS-STORAGE.		*0Z010
	COPY CONSTANT-STORAGE.		*0Z015
01	TRANSACTION-STORAGE.		*0Z020
02	K-SHELP-YMAT	PICTURE X.	*00000
02	K-SHELP-PROGR	PICTURE X(6).	*00000
02	K-SHELP-XTERM	PICTURE X(12).	*00000
02	CA00.		*00001
10	CA00-CLECD.		*00001
15	CA00-NUCOM	PICTURE 9(5).	*00001
10	CA00-CLECL1.		*00001
15	CA00-NUCLIE	PICTURE 9(8).	*00001
10	CA00-ME00.		*00001
15	CA00-CLEME.		*00001
20	CA00-COPERS	PICTURE X(5).	*00001
20	CA00-NUMORD	PICTURE XX.	*00001
15	CA00-MESSA	PICTURE X(75).	*00001
10	CA00-PREM	PICTURE X.	*00001
10	CA00-LANGU	PICTURE X.	*00001
10	CA00-RAISOC	PICTURE X(50).	*00001
02	K-SHELP-CDOC	PICTURE X.	*00002
02	K-SHELP-PROGE	PICTURE X(8).	*00002
02	K-SHELP-LIBRA	PICTURE XXX.	*00002
02	K-SHELP-PROHE	PICTURE X(8).	*00002
02	K-SHELP-ERCOD.		*00002
05	K-SHELP-ERCOD9	PICTURE 999.	*00002
02	K-SHELP-ERTYP	PICTURE X.	*00002
02	K-SHELP-NULIX.		*00002
05	K-SHELP-LINUM	PICTURE 999.	*00002
02	K-SHELP-PFKEY	PICTURE XX.	*00002
02	FILLER	PICTURE X(0700).	*00002
	COMMUNICATION SECTION.		*90010
CD	7-CD01	INPUT	*90020
	SYMBOLIC QUEUE	7-CD01-CTRAN	*90030
	MESSAGE DATE	7-CD01-XDATE	*90040
	MESSAGE TIME	7-CD01-XTIME	*90050
	SYMBOLIC SOURCE	7-CD01-XTERM	*90060
	TEXT LENGTH	7-CD01-XLOMES	*90070
	END KEY	7-CD01-XFINME	*90080
	STATUS KEY	7-CD01-XMSTA.	*90090
CD	7-CD02	OUTPUT	*90100
	DESTINATION COUNT	7-CD02-XNDEST	*90110
	TEXT LENGTH	7-CD02-XLOMES	*90120
	STATUS KEY	7-CD02-XMSTA	*90130
	ERROR KEY	7-CD02-XMERR	*90140
	SYMBOLIC DESTINATION	7-CD02-XTERM.	*90150
	PROCEDURE DIVISION USING TDS-STORAGE CONSTANT-STORAGE		*99999
	TRANSACTION-STORAGE.		*99999

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```
*          *****  
*          *          *          *          *          *          *          *  
*          *  INITIALIZATIONS  *          *          *          *          *  
*          *          *          *          *          *          *          *  
*          *****  
F01.      EXIT.                                          DOHELP  
F0105.    MOVE ZERO TO K01.                               DOHELP  
F0105-B.  ADD 1 TO K01.                                   DOHELP  
          MOVE SV-AT (K01) TO K02.                       DOHELP  
          MOVE SV-ATTRI (K01) TO AT-HELP-ATTRI (K02)     DOHELP  
          MOVE SV-ATTRP (K01) TO AT-HELP-ATTRP (K02)     DOHELP  
          MOVE SV-ATTRC (K01) TO AT-HELP-ATTRC (K02).    DOHELP  
          IF      K01 < INT                               DOHELP  
            GO TO F0105-B.                                DOHELP  
F0105-FN. EXIT.                                          DOHELP  
F0110.    MOVE ZERO TO CATX FT K50L.                       DOHELP  
          MOVE "1" TO ICF OCF SCR-ER.                     DOHELP  
          MOVE ZERO TO VALIDATION-TABLE-FIELDS.          DOHELP  
          MOVE ZERO TO 7-CD01-XMSTA 7-CD02-XMSTA.        DOHELP  
          MOVE SPACE TO CATM OPER OPERD CAT-ER.          DOHELP  
          MOVE SPACE TO TABLE-OF-ATTRIBUTES.            DOHELP  
          MOVE ZERO TO CONFIGURATIONS.                   DOHELP  
          MOVE SPACE TO XEMKY.                             DOHELP  
          MOVE SYMBOLIC-QUEUE TO 7-CD01-CTRAN.            DOHELP  
          IF      PROGR NOT = K-SHELP-PROGR               DOHELP  
            MOVE ZERO TO ICF.                             DOHELP  
          IF      PRIOR-TPR = SPACE                       DOHELP  
            MOVE ZERO TO ICF                              DOHELP  
            RECEIVE 7-CD01 MESSAGE INTO HELP-MPRIOR NO DATA  
              MOVE "1" TO IK.                             DOHELP  
          IF      PRIOR-TPR = SPACE                       DOHELP  
            PERFORM F81ES THRU F81ES-FN                   DOHELP  
            MOVE 7-CD01-XTERM TO K-SHELP-XTERM.          DOHELP  
          MOVE LOW-VALUE TO O-HELP.                       DOHELP  
          IF      ICF = ZERO                               DOHELP  
            PERFORM F8115 THRU F8115-FN.                   DOHELP  
          MOVE "X" TO DE-AT (4, 001).                     DOHELP  
          MOVE SPACE TO O-HELP-ERMSG (01).                 DOHELP  
F0110-FN. EXIT.                                          DOHELP  
F0120.    MOVE "1" TO OCF.                                 DOHELP  
          IF      K-SHELP-CDOC = "D"                       DOHELP  
            OR      K-SHELP-CDOC = "R"                     DOHELP  
              MOVE "1" TO ICF                              DOHELP  
              GO TO F0120-FN.                              DOHELP  
          MOVE "A" TO OPER                                  DOHELP  
          MOVE SPACE TO K-SHELP-ERTYP                      DOHELP  
          MOVE ZERO TO K-SHELP-LINUM                       DOHELP  
          MOVE "D" TO K-SHELP-CDOC                         DOHELP  
          GO TO F3999-ITER-FT.                              DOHELP  
F0120-FN. EXIT.                                          DOHELP  
F01-FN.   EXIT.                                          DOHELP  
*          *****  
*          *          *          *          *          *          *          *  
*          *  RECEPTION  *          *          *          *          *  
*          *          *          *          *          *          *          *  
*          *****  
F05.      IF      ICF = ZERO                               DOHELP  
          GO TO END-OF-RECEPTION.                          DOHELP  
F0510.    PERFORM F81RE THRU F81RE-FN.                     DOHELP  
          IF      ICF = ZERO                               DOHELP  
            GO TO END-OF-RECEPTION.                          DOHELP  
          PERFORM F81ES THRU F81ES-FN.                     DOHELP  
          MOVE 7-CD01-XTERM TO K-SHELP-XTERM.              DOHELP  
          MOVE 7-CD01-XLOMES TO CMES-IND1.                 DOHELP  
          MOVE AT-HELP-MESSA TO CMES-YO00.                 DOHELP  
          MOVE K-SHELP-YMAT TO CMES-YMAT.                  DOHELP
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MOVE K-SHELP-PFKEY TO CMES-PFKEY. DOHELP
MOVE 7-YCRER TO CMES-YCRE. DOHELP
CALL PRCGI USING CMES-COMMUNICATION DOHELP
IF CMES-YR00 = ALL "*" DOHELP
  MOVE ZERO TO ICF DOHELP
  GO TO END-OF-RECEPTION. DOHELP
MOVE CMES-PFKEY TO I-PFKEY K-SHELP-PFKEY. DOHELP
IF CMES-YCRE = 7-YCREP DOHELP
  MOVE CMES-IND1 TO 7-CD02-XLOMES DOHELP
  MOVE 1 TO 7-CD02-XNDEST DOHELP
  MOVE K-SHELP-XTERM TO 7-CD02-XTERM DOHELP
  SEND 7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0 DOHELP
LINES DOHELP
  PERFORM F81ES THRU F81ES-FN DOHELP
  GO TO F8Z10-G. DOHELP
MOVE CMES-YR00 TO HELP-MESSO. DOHELP
PERFORM F8155 THRU F8155-FN. DOHELP
MOVE "A" TO OPER DOHELP
MOVE SPACE TO OPERD. DOHELP
F0510-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * VALIDATION OF OPERATION CODE * DOHELP
* * DOHELP
* ***** DOHELP
F0520. DOHELP
IF I-HELP-OPDOC = "E" DOHELP
  OR "F" DOHELP
  MOVE K-SHELP-PROGE TO 5-HELP-PROGE DOHELP
  MOVE "O" TO OPER OPERD DOHELP
  GO TO F0520-900. DOHELP
IF I-HELP-OPDOC = "T" DOHELP
  OR "D" DOHELP
  MOVE SPACE TO K-SHELP-ERCOD K-SHELP-ERTYP DOHELP
  MOVE ZERO TO K-SHELP-LINUM DOHELP
  MOVE "A" TO OPER DOHELP
  GO TO F0520-900. DOHELP
IF I-HELP-OPDOC = "S" DOHELP
  MOVE "A" TO OPER DOHELP
  GO TO F0520-900. DOHELP
MOVE "5" TO ER-HELP-OPDOC DOHELP
MOVE "4" TO SCR-ER DOHELP
GO TO F3999-ITER-FT. DOHELP
F0520-900. DOHELP
IF OPER NOT = "A" DOHELP
  AND OPER NOT = "O" DOHELP
  GO TO F3999-ITER-FT. DOHELP
F0520-FN. DOHELP
EXIT. DOHELP
F05-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * CATEGORY PROCESSING LOOP * DOHELP
* * DOHELP
* ***** DOHELP
F10. DOHELP
EXIT. DOHELP
F1010. DOHELP
MOVE SPACE TO CATM. DOHELP
IF CAT-ER = "E" DOHELP
  MOVE "4" TO SCR-ER DOHELP
  GO TO F3999-ITER-FT. DOHELP
MOVE SPACE TO CAT-ER. DOHELP
IF CATX = "0" DOHELP
  MOVE "Z" TO CATX DOHELP
  GO TO F1010-FN. DOHELP
F1010-A. DOHELP
GO TO F3999-ITER-FT. DOHELP
F1010-FN. DOHELP
EXIT. DOHELP
F10-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * DATA ELEMENT VALIDATION * DOHELP

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*                *                *                DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
F20.             DOHELP
EXIT.           DOHELP
F20Z.           DOHELP
IF CATX NOT = "Z" DOHELP
GO TO F20Z-FN. DOHELP
F20A7.         DOHELP
IF I-HELP-OPDOC NOT = SPACE DOHELP
MOVE "1" TO ER-HELP-OPDOC. DOHELP
F20A7-FN.     DOHELP
EXIT.         DOHELP
F20Z-FN.     DOHELP
EXIT.         DOHELP
F20-FN.       DOHELP
EXIT.         DOHELP
F3999-ITER-FI. DOHELP
GO TO F10.    DOHELP
F3999-ITER-FT. DOHELP
EXIT.         DOHELP
F3999-FN.     DOHELP
EXIT.         DOHELP
F40.          DOHELP
IF SCR-ER > "1" DOHELP
MOVE "A" TO OPER DOHELP
GO TO F40-FN. DOHELP
F40-A.        DOHELP
IF OPERD NOT = SPACE DOHELP
MOVE OPERD TO OPER. DOHELP
F4005.        DOHELP
IF OPER NOT = "O" DOHELP
GO TO F4005-FN. DOHELP
IF K-SHELP-CDOC = "D" DOHELP
MOVE "2" TO K-SHELP-CDOC. DOHELP
IF K-SHELP-CDOC = "R" DOHELP
MOVE "3" TO K-SHELP-CDOC. DOHELP
MOVE ZERO TO K-SHELP-LINUM. DOHELP
IF K-SHELP-ERCOD = SPACE DOHELP
OR K-SHELP-ERCOD NOT NUMERIC DOHELP
MOVE "001" TO K-SHELP-ERCOD. DOHELP
IF K-SHELP-ERCOD > "001" DOHELP
SUBTRACT 1 FROM K-SHELP-ERCOD9. DOHELP
F4005-FN.     DOHELP
EXIT.         DOHELP
F4010.        DOHELP
IF OPER NOT = "A" DOHELP
GO TO F4010-FN. DOHELP
MOVE SPACE TO EM00-EMKEY DOHELP
MOVE K-SHELP-LIBRA TO EM00-LIBRA DOHELP
MOVE "H" TO EM00-ENTYP DOHELP
MOVE K-SHELP-PROGR TO EM00-PROGR DOHELP
MOVE K-SHELP-ERCOD TO EM00-ERCOD DOHELP
MOVE K-SHELP-ERTYP TO EM00-ERTYP DOHELP
MOVE K-SHELP-LINUM TO EM00-LINUM DOHELP
MOVE EM00-EMKEY TO K-REM00-EMKEY (1). DOHELP
F4010-FN.     DOHELP
EXIT.         DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
*                *                *                DOHELP
F4030.        DOHELP
IF OPER NOT = "E" DOHELP
GO TO F4030-FN. DOHELP
MOVE SPACE TO NEXT-TPR DOHELP
MOVE 1 TO 7-CD02-XNDEST DOHELP
MOVE K-SHELP-XTERM TO 7-CD02-XTERM DOHELP
MOVE END-MESSAGE TO CMES-YR00. DOHELP
MOVE END-ATTR TO CMES-YO00. DOHELP
MOVE K-SHELP-YMAT TO CMES-YMAT. DOHELP
MOVE 7-YCREF TO CMES-YCRE. DOHELP
CALL PRCGI USING CMES-COMMUNICATION DOHELP
MOVE CMES-IND1 TO 7-CD02-XLOMES DOHELP
SEND 7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0 LINES. DOHELP
F4030-A.     DOHELP
EXIT PROGRAM. DOHELP

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F4030-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * TRANSFER TO ANOTHER SCREEN * DOHELP
* * * DOHELP
* ***** DOHELP
F4040. DOHELP
IF OPER NOT = "0" DOHELP
GO TO F4040-FN. DOHELP
MOVE 5-HELP-PROGE TO NEXT-TPR. DOHELP
F4040-A. DOHELP
EXIT PROGRAM. DOHELP
F4040-FN. DOHELP
EXIT. DOHELP
F40-FN. DOHELP
EXIT. DOHELP
END-OF-RECEPTION. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * DISPLAY PREPARATION * DOHELP
* * * DOHELP
* ***** DOHELP
F50. DOHELP
IF OCF = "0" DOHELP
GO TO END-OF-DISPLAY. DOHELP
F5010. DOHELP
MOVE ZERO TO CATX. DOHELP
MOVE ZERO TO CONFIGURATIONS. DOHELP
MOVE ALL "1" TO FIRST-ON-SEGMENT. DOHELP
IF SCR-ER > "1" DOHELP
MOVE LOW-VALUE TO HELP-MESSO. DOHELP
IF SCR-ER > "1" DOHELP
GO TO F6999-ITER-FT. DOHELP
MOVE SPACE TO O-HELP. DOHELP
PERFORM F8115 THRU F8115-FN. DOHELP
F5010-FN. DOHELP
EXIT. DOHELP
F5020. DOHELP
IF K-SHELP-ERTYP NOT = SPACE DOHELP
NEXT SENTENCE DOHELP
ELSE DOHELP
GO TO F5020-FN. DOHELP
MOVE SPACE TO EM00-ERTYP. DOHELP
IF K-SHELP-ERCOD < "001" DOHELP
MOVE SPACE TO EM00-ERCOD. DOHELP
MOVE ZERO TO EM00-LINUM DOHELP
PERFORM F80-EM00-P THRU F80-FN. DOHELP
IF IK = "1" DOHELP
GO TO F5020-FN. DOHELP
IF EM00-ERCOD NOT = SPACE DOHELP
MOVE EM00-ERMSG TO 7-HELP-ERMS DOHELP
MOVE 7-HELP-ERMSC TO HELP-LIENT DOHELP
MOVE "DOCUMENTATION OF DATA ELEMENT " TO HELP-LIBEC DOHELP
ELSE DOHELP
MOVE EM00-ERMSG TO HELP-LIENT DOHELP
MOVE "DOCUMENTATION OF THE SCREEN " TO HELP-LIBEC. DOHELP
F5020-FN. DOHELP
EXIT. DOHELP
F50-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * CATEGORY PROCESSING LOOP * DOHELP
* * * DOHELP
* ***** DOHELP
F55. DOHELP
EXIT. DOHELP
F5510. DOHELP
MOVE SPACE TO CAT-ER. DOHELP
IF CATX = "0" DOHELP
MOVE " " TO CATX DOHELP
GO TO F5510-FN. DOHELP
IF CATX = " " DOHELP
MOVE "R" TO CATX DOHELP
MOVE ZERO TO ICATR. DOHELP

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IF      CATX NOT = "R"                                DOHELP
  OR    ICATR > IRR                                DOHELP
      GO TO F5510-R.                                DOHELP
IF      ICATR > ZERO                                DOHELP
  MOVE O-HELP-LIGNE TO P-HELP-LIGNE (ICATR).        DOHELP
ADD 1 TO ICATR.                                    DOHELP
IF      ICATR NOT > IRR                             DOHELP
  MOVE P-HELP-LIGNE (ICATR) TO O-HELP-LIGNE.        DOHELP
GO TO F5510-FN.                                    DOHELP
F5510-R.                                          DOHELP
  EXIT.                                           DOHELP
F5510-Z.                                          DOHELP
  IF      CATX = "R"                                DOHELP
      MOVE "Z" TO CATX                            DOHELP
      GO TO F5510-FN.                              DOHELP
F5510-900.                                       DOHELP
  GO TO F6999-ITER-FT.                            DOHELP
F5510-FN.                                       DOHELP
  EXIT.                                           DOHELP
F55-FN.                                          DOHELP
  EXIT.                                           DOHELP
*          *****                                DOHELP
*          *                                     *    DOHELP
*          *   SEGMENT ACCESS FOR DISPLAY       *    DOHELP
*          *                                     *    DOHELP
*          *****                                DOHELP
F60.                                             DOHELP
  EXIT.                                           DOHELP
F60R.                                           DOHELP
  IF      CATX NOT = "R"                            DOHELP
      OR    FT = "1"                                DOHELP
      GO TO F60R-FN.                              DOHELP
F60R-FN.                                       DOHELP
  EXIT.                                           DOHELP
F6010.                                          DOHELP
  IF      CATX NOT = "R"                            DOHELP
      OR    FT = "1"                                DOHELP
      GO TO F6010-FN.                              DOHELP
  MOVE "0" TO EM00-CF.                            DOHELP
  IF      EM00-FST = "1"                            DOHELP
      MOVE K-REM00-EMKEY (1) TO EM00-EMKEY         DOHELP
      MOVE EM00-LIBRA TO C-HELP-LIBRA              DOHELP
      MOVE EM00-ENTYP TO C-HELP-ENTYP              DOHELP
      MOVE EM00-PROGR TO C-HELP-PROGR              DOHELP
      MOVE EM00-ERCOD TO C-HELP-ERCOD              DOHELP
      PERFORM F80-EM00-P THRU F80-FN                DOHELP
      MOVE ZERO TO EM00-FST                        DOHELP
  ELSE                                           DOHELP
      PERFORM F80-EM00-RN THRU F80-FN.              DOHELP
  IF      IK = "0"                                  DOHELP
      IF EM00-LIBRA NOT = C-HELP-LIBRA              DOHELP
          OR EM00-ENTYP NOT = C-HELP-ENTYP         DOHELP
          OR EM00-PROGR NOT = C-HELP-PROGR         DOHELP
          MOVE "1" TO IK.                          DOHELP
  IF      IK = "1"                                  DOHELP
      MOVE "G109" TO XERCD                          DOHELP
      MOVE "1" TO FT                                DOHELP
      PERFORM F81UT THRU F81UT-FN                    DOHELP
      GO TO F6010-FN.                              DOHELP
  MOVE "1" TO EM00-CF.                            DOHELP
  MOVE EM00-ERCOD TO K-SHELP-ERCOD                  DOHELP
  MOVE EM00-ERTYP TO K-SHELP-ERTYP                  DOHELP
  MOVE EM00-LINUM TO K-SHELP-LINUM.                  DOHELP
  IF      EM00-ERCOD NOT = C-HELP-ERCOD              DOHELP
      AND EM00-ERCOD > "000"                       DOHELP
      MOVE "1" TO FT                                DOHELP
      GO TO F6010-FN.                              DOHELP
  IF      EM00-ERTYP = SPACE                          DOHELP
      NEXT SENTENCE                                DOHELP
  ELSE                                           DOHELP
      GO TO F6010-FN.                              DOHELP
  IF      EM00-ERCOD > ZERO                          DOHELP
      MOVE EM00-ERMSG TO 7-HELP-ERMS                DOHELP
      MOVE 7-HELP-ERMSC TO HELP-LIENT               DOHELP
      MOVE "DOCUMENTATION OF DATA ELEMENT " TO HELP-LIBEC DOHELP
  ELSE                                           DOHELP
      MOVE EM00-ERMSG TO HELP-LIENT                 DOHELP
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      MOVE "DOCUMENTATION OF THE SCREEN  " TO HELP-LIBEC.      DOHELP
    GO TO F6010.      DOHELP
F6010-FN.      DOHELP
  EXIT.      DOHELP
F60-FN.      DOHELP
  EXIT.      DOHELP
*      *****      DOHELP
*      *      DOHELP
*      * DATA ELEMENT TRANSFER      *      DOHELP
*      *      *      DOHELP
*      *****      DOHELP
F65.      DOHELP
  EXIT.      DOHELP
F6520.      DOHELP
  IF      FT = "1"      DOHELP
    OR      EM00-ERTYP = " "      DOHELP
      GO TO F6520-FN.      DOHELP
  IF      ICATR > IRR      DOHELP
    GO TO F6520-FN.      DOHELP
  MOVE SPACE TO 7-HELP-ERMSGD.      DOHELP
  IF      EM00-ERTYP = "1"      DOHELP
    MOVE EM00-ERMSG TO 7-HELP-ERMS      DOHELP
    MOVE 7-HELP-ERMSG2 TO 7-HELP-SIGNI      DOHELP
    MOVE 7-HELP-ERMSC TO 7-HELP-ERMSC1      DOHELP
    MOVE 7-HELP-ERMSG1 TO 7-HELP-VALRU      DOHELP
    GO TO F6520-900.      DOHELP
  IF      EM00-ERTYP = "0"      DOHELP
    MOVE SPACE TO 7-HELP-XEMKY      DOHELP
    MOVE EM00-ERMSG TO 7-HELP-LITAC      DOHELP
    GO TO F6520-900.      DOHELP
  MOVE EM00-ERMSG TO 7-HELP-LITAC.      DOHELP
  IF      EM00-LINUM NOT = ZERO      DOHELP
    GO TO F6520-900.      DOHELP
  MOVE EM00-ERCOD TO 7-HELP-XEMKY      DOHELP
  MOVE EM00-ERTYP TO 7-HELP-ERTYP.      DOHELP
F6520-900.      DOHELP
  MOVE 7-HELP-ERMSGD TO O-HELP-ERMSGD.      DOHELP
F6520-FN.      DOHELP
  EXIT.      DOHELP
F6530.      DOHELP
  IF      CATX NOT = "Z"      DOHELP
    GO TO F6530-FN.      DOHELP
  MOVE HELP-LIENT TO O-HELP-LIENT      DOHELP
  MOVE HELP-LIBEC TO O-HELP-LIBEC.      DOHELP
  MOVE "CHOICE.....:" TO O-HELP-LICHOI      DOHELP
  MOVE "(E: END - T: TOP - S: NEXT)  " TO O-HELP-LIOPT.      DOHELP
  IF      XERCD NOT = "G109"      DOHELP
    MOVE "S" TO O-HELP-OPDOC      DOHELP
    GO TO F6530-FN.      DOHELP
  MOVE "E" TO O-HELP-OPDOC.      DOHELP
  IF      K-SHELP-ERCOD NUMERIC      DOHELP
    AND K-SHELP-ERCOD > ZERO      DOHELP
      ADD 1 TO K-SHELP-ERCOD9.      DOHELP
F6530-FN.      DOHELP
  EXIT.      DOHELP
F65-FN.      DOHELP
  EXIT.      DOHELP
F6999-ITER-FI.      DOHELP
  GO TO F55.      DOHELP
F6999-ITER-FT.      DOHELP
  EXIT.      DOHELP
F6999-FN.      DOHELP
  EXIT.      DOHELP
F70.      DOHELP
  GO TO F7020.      DOHELP
*      *****      DOHELP
*      *      DOHELP
*      * ERROR PROCESSING      *      DOHELP
*      *      *      DOHELP
*      *****      DOHELP
F7010.      DOHELP
  MOVE ZERO TO K01 K02 K04      DOHELP
  MOVE 1 TO K03.      DOHELP
  MOVE LIBRA TO EM00-LIBRA      DOHELP
  MOVE PROGR TO EM00-PROGR      DOHELP
  MOVE ZERO TO EM00-LINUM      DOHELP
  MOVE "H" TO EM00-ENTYP.      DOHELP

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F7010-A.                                DOHELP
  IF      K02 = INR                       DOHELP
    AND   K03 < IRR                       DOHELP
    MOVE  INA TO K02                      DOHELP
    ADD   1 TO K03.                        DOHELP
  ADD 1 TO K01 K02.                        DOHELP
  IF      DE-ER (K01) > "1"              DOHELP
    OR    < "0"                            DOHELP
    MOVE  "Y" TO DE-AT (4, K01)           DOHELP
    MOVE  "B" TO DE-AT (1, K01)           DOHELP
    MOVE  "N" TO DE-AT (2, K01)           DOHELP
    MOVE  "W" TO DE-AT (3, K01)           DOHELP
  IF K04 < IER                             DOHELP
    MOVE  DE-ER (K01) TO EM00-ERTYP        DOHELP
    MOVE  K02 TO EM00-ERCOD9              DOHELP
    MOVE  EM00-XEMKY TO EM00-ERMSG        DOHELP
    PERFORM F80-EM00-R THRU F80-FN        DOHELP
    ADD   1 TO K04                         DOHELP
    MOVE  EM00-ERMSG TO O-HELP-ERMSG (K04). DOHELP
  IF      K01 < INT                       DOHELP
    GO TO F7010-A.                        DOHELP
  MOVE  ZERO TO K50R.                      DOHELP
F7010-B.                                DOHELP
  ADD 1 TO K50R                             DOHELP
  IF      K50R > K50L                     DOHELP
    OR    K04 NOT < IER                   DOHELP
    GO TO F7010-FN.                       DOHELP
  MOVE  T-XEMKY (K50R) TO EM00-XEMKY EM00-ERMSG DOHELP
  PERFORM F80-EM00-R THRU F80-FN.         DOHELP
  ADD 1 TO K04                             DOHELP
  MOVE  EM00-ERMSG TO O-HELP-ERMSG (K04)  DOHELP
  GO TO F7010-B.                          DOHELP
F7010-FN.                                DOHELP
  EXIT.                                    DOHELP
*      *****                          DOHELP
*      *                                  DOHELP
*      * POSITIONING OF ATTRIBUTES         DOHELP
*      *                                  DOHELP
*      *****                          DOHELP
F7020.                                    DOHELP
  MOVE  ZERO TO TALLY                      DOHELP
  EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Y". DOHELP
  IF      TALLY NOT < 0001                 DOHELP
    MOVE  ZERO TO TALLY                    DOHELP
    EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "Z". DOHELP
  IF      TALLY NOT < 0001                 DOHELP
    MOVE  ZERO TO TALLY                    DOHELP
    EXAMINE DE-ATT1 (4) TALLYING UNTIL FIRST "X". DOHELP
  IF      TALLY NOT < 0001                 DOHELP
    MOVE  ZERO TO TALLY.                   DOHELP
  ADD 1 TO TALLY.                          DOHELP
  MOVE  SV-AT (TALLY) TO K01               DOHELP
  MOVE  AT-HELP-YPCUR (K01) TO CMES-YPCUR. DOHELP
  MOVE  ZERO TO K01.                       DOHELP
F7020-A.                                DOHELP
  ADD 1 TO K01.                             DOHELP
  IF      K01 > INT                       DOHELP
    GO TO F7020-FN.                       DOHELP
  MOVE  SV-AT (K01) TO K02.                DOHELP
  IF      SV-ATTRI (K01) = "D"             DOHELP
    AND   DE-AT (1, K01) NOT = "D"         DOHELP
    MOVE  "D" TO DE-AT (1, K01).           DOHELP
  IF      DE-AT (1, K01) NOT = SPACE       DOHELP
    MOVE  DE-AT (1, K01) TO AT-HELP-ATTRI (K02). DOHELP
  IF      DE-AT (2, K01) NOT = SPACE       DOHELP
    MOVE  DE-AT (2, K01) TO AT-HELP-ATTRP (K02). DOHELP
  IF      DE-AT (3, K01) NOT = SPACE       DOHELP
    MOVE  DE-AT (3, K01) TO AT-HELP-ATTRC (K02). DOHELP
  GO TO F7020-A.                          DOHELP
F7020-FN.                                DOHELP
  EXIT.                                    DOHELP
F7030.                                    DOHELP
  IF      ER-HELP-OPDOC = "5"              DOHELP
    MOVE  "INVALID CHOICE" TO O-HELP-ERMSG (1). DOHELP
  IF      XERCD = "G109"                   DOHELP
    MOVE  "**** END ***" TO O-HELP-ERMSG (1). DOHELP
F7030-FN.                                DOHELP

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EXIT. DOHELP
F70-FN. DOHELP
EXIT. DOHELP
END-OF-DISPLAY. DOHELP
EXIT. DOHELP
F8Z. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * DISPLAY * DOHELP
* * * DOHELP
* ***** DOHELP
F8Z10. DOHELP
IF SCR-ER NOT > "1" DOHELP
AND DE-AT (4, 001) = "X" DOHELP
PERFORM F7020 THRU F7020-FN. DOHELP
PERFORM F8145 THRU F8145-FN. DOHELP
MOVE 1 TO 7-CD02-XNDEST DOHELP
MOVE K-SHELP-XTERM TO 7-CD02-XTERM. DOHELP
MOVE 7-YCREX TO CMES-YCRE. DOHELP
MOVE SPACE TO K-SHELP-PFKEY. DOHELP
IF SCR-ER NOT > "1" DOHELP
MOVE 7-YCREE TO CMES-YCRE DOHELP
PERFORM F8105 THRU F8105-FN. DOHELP
MOVE HELP-MESSO TO CMES-YR00 DOHELP
MOVE AT-HELP-MESSA TO CMES-YO00 DOHELP
MOVE K-SHELP-YMAT TO CMES-YMAT DOHELP
CALL PRG1 USING CMES-COMMUNICATION. DOHELP
PERFORM F81SE THRU F81SE-FN. DOHELP
F8Z10-G. DOHELP
EXIT. DOHELP
F8Z10-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * END OF PROGRAM * DOHELP
* * * DOHELP
* ***** DOHELP
F8Z20. DOHELP
MOVE PROGE TO NEXT-TPR. DOHELP
F8Z20-A. DOHELP
EXIT PROGRAM. DOHELP
F8Z20-FN. DOHELP
EXIT. DOHELP
F8Z-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * PHYSICAL SEGMENT ACCESS ROUTINES * DOHELP
* * * DOHELP
* ***** DOHELP
F80. DOHELP
EXIT. DOHELP
F80-EM00-R. DOHELP
READ EM-FILE INVALID KEY DOHELP
GO TO F80-KO. DOHELP
GO TO F80-OK. DOHELP
F80-EM00-RU. DOHELP
READ EM-FILE INVALID KEY DOHELP
GO TO F80-KO. DOHELP
GO TO F80-OK. DOHELP
F80-EM00-P. DOHELP
START EM-FILE KEY NOT < EM00-EMKEY INVALID KEY DOHELP
GO TO F80-KO. DOHELP
F80-EM00-RN. DOHELP
READ EM-FILE DOHELP
NEXT AT END DOHELP
GO TO F80-KO. DOHELP
GO TO F80-OK. DOHELP
F8001-FN. DOHELP
EXIT. DOHELP
F80-OK. DOHELP
MOVE "0" TO IK DOHELP
MOVE PROGR TO XPROGR DOHELP
GO TO F80-FN. DOHELP
F80-KO. DOHELP
MOVE "1" TO IK DOHELP
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MOVE PROGR TO XPROGR. DOHELP
F8099-FN. DOHELP
EXIT. DOHELP
F80-FN. DOHELP
EXIT. DOHELP
F81. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * ABNORMAL END PROCEDURE * DOHELP
* * DOHELP
* ***** DOHELP
F81ER. DOHELP
CALL "ABORT". DOHELP
F81ER-FN. DOHELP
EXIT. DOHELP
F81ES. DOHELP
IF 7-CD01-XMSTA NOT = ZERO DOHELP
OR 7-CD02-XMSTA NOT = ZERO DOHELP
CALL "ABORT". DOHELP
F81ES-FN. DOHELP
EXIT. DOHELP
F81RE. DOHELP
MOVE SPACE TO CMES-YR00 DOHELP
RECEIVE 7-CD01 MESSAGE INTO CMES-YR00 NO DATA DOHELP
MOVE SPACE TO HELP-MESSI DOHELP
MOVE 7-CD01-XTERM TO K-SHELP-XTERM DOHELP
MOVE ZERO TO ICF. DOHELP
F81RE-FN. DOHELP
EXIT. DOHELP
F81SE. DOHELP
MOVE CMES-IND1 TO 7-CD02-XLOMES DOHELP
SEND 7-CD02 FROM CMES-YR00 WITH EGI AFTER ADVANCING 0 LINES DOHELP
PERFORM F81ES THRU F81ES-FN. DOHELP
F81SE-FN. DOHELP
EXIT. DOHELP
* ***** DOHELP
* * DOHELP
* * MEMORIZATION OF USER'S ERRORS * DOHELP
* * DOHELP
* ***** DOHELP
F81UT. DOHELP
IF K50L < K50M DOHELP
ADD 1 TO K50L DOHELP
MOVE XEMKY TO T-XEMKY (K50L). DOHELP
MOVE "E" TO CAT-ER. DOHELP
F81UT-FN. DOHELP
EXIT. DOHELP
F8105. DOHELP
IF CMES-YCRE = "G" DOHELP
GO TO F8105-FN. DOHELP
MOVE " " TO S01002. DOHELP
F8105-FN. DOHELP
EXIT. DOHELP
F8115. DOHELP
EXIT. DOHELP
F8115-FN. DOHELP
EXIT. DOHELP
F8145. DOHELP
MOVE T03002 TO S03002. DOHELP
MOVE T03033 TO S03033. DOHELP
MOVE T05004 TO S05004. DOHELP
MOVE T06004 TO S06004. DOHELP
MOVE T07004 TO S07004. DOHELP
MOVE T08004 TO S08004. DOHELP
MOVE T09004 TO S09004. DOHELP
MOVE T10004 TO S10004. DOHELP
MOVE T11004 TO S11004. DOHELP
MOVE T12004 TO S12004. DOHELP
MOVE T13004 TO S13004. DOHELP
MOVE T14004 TO S14004. DOHELP
MOVE T15004 TO S15004. DOHELP
MOVE T16004 TO S16004. DOHELP
MOVE T17004 TO S17004. DOHELP
MOVE T18004 TO S18004. DOHELP
MOVE T19004 TO S19004. DOHELP
MOVE T20004 TO S20004. DOHELP
```

HELP FUNCTION (MULTI-SCREEN)  
GENERATED HELP PROGRAM

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MOVE T21004 TO S21004.  
MOVE T23002 TO S23002.  
MOVE T23022 TO S23022.  
MOVE T23028 TO S23028.  
MOVE T24002 TO S24002.  
F8145-FN.  
EXIT.  
F8155.  
MOVE S23022 TO R23022.  
F8155-FN.  
EXIT.  
F81-FN.  
EXIT.

DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP  
DOHELP

## **8. SCREEN GENERATED USING ORACLE V6 SQL**

SCREEN GENERATED USING ORACLE V6 SQL  
EXAMPLE SCREEN

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## *8.1. EXAMPLE SCREEN*

### INTRODUCTION

This chapter presents the COBOL lines automatically generated when a screen accesses an ORACLE V6 relational database.

The PROCEDURE DIVISION is not shown in full since functionalities are similar to those presented in the general example. This chapter only presents the specific parts of the WORKING STORAGE SECTION and related functions.

### PROGRAM GENERATION

To generate On-line programs it may be necessary to use the complementary screens:

- . Work Areas (-W),
- . Call of Macro-structures (-CP).

On Work Areas (-W) screens, 'AA' is a reserved value for the code FOR COBOL PLACEMENT; It is used internally by the OLS D Function.

The automatically generated lines are identified in the COBOL code by the '\*AAnn' character string from columns 72 to 80. They can be overridden on the Work Areas (-W) screen on 'AAnn'-numbered lines.

The user can use the General Documentation (-G) lines of the screen or dialogue to override the value of some generated constants. For more details, refer to Chapter 'DESCRIPTION OF A TRANSACTION', Subchapter 'SCREEN GENERAL DOCUMENTATION (-G)' in the OLS D Reference Manual.



## 8.2. WORKING-STORAGE SECTION

### WORKING-STORAGE SECTION

The WORKING-STORAGE section includes:

- The description of input/output fields (Host variables).

The segment descriptions are located between the SQL orders: 'BEGIN DECLARE SECTION' and 'END DECLARE SECTION'.

In a Segment description, only the Data Elements of elementary level are present.

For the variable Data Elements (VARCHAR) called in a 'FFnn' code Segment (Data Elements with 'V', 'L' or 'W' in the key area of the segment description), the following lines are generated:

```
ffnn-DELCO PICTURE ...  
VARYING.
```

The LFFnn-delco field must be input with the real length of the field before updating.

- Presence validation keys: each field (delco) of a table or a SQL view (FFnn) is associated with a presence validation key (VFFnnDelco or V-FFnn-Delco if the SQLREF option is indicated in Dialogue complement (-O)).

The descriptions of the presence validation keys are generated in WORKING-STORAGE, just after the segments and before the command END DECLARE SECTION.

The SQLIND option, input by the user in Dialogue complement, allows for the management of those keys in update and display. The keys are initialized in function F30 and conditioned for transfer in DISPLAY by the column presence (for columns which can be null).

- The SQL command 'INCLUDE SQLCA' is systematically generated.



SCREEN GENERATED USING ORACLE V6 SQL  
WORKING-STORAGE SECTION

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```

EXEC SQL BEGIN DECLARE SECTION END-EXEC.          DOSQLP
01          USERID          PICTURE X(08).          DOSQLP
01          PASSWORD        PICTURE X(08).          DOSQLP
01          DZ05.           DOSQLP
05          DZ05-COCARA     PICTURE X.             DOSQLP
05          DZ05-NUCOD     COMPUTATIONAL-1.         DOSQLP
05          DZ05-FOURNI    PICTURE X(3).           DOSQLP
05          DZ05-NUCLIE    PICTURE 9(8).           DOSQLP
05          DZ05-DATE      PICTURE X(6).           DOSQLP
05          DZ05-RELEA     PICTURE X(3).           DOSQLP
05          VDZ05-REFCLI.   DOSQLP
49          LDZ05-REFCLI   COMP-1.                 DOSQLP
49          DZ05-REFCLI    PICTURE X(30).          DOSQLP
05          VDZ05-RUE.     DOSQLP
49          LDZ05-RUE      COMP-1.                 DOSQLP
49          DZ05-RUE       PICTURE X(40).          DOSQLP
05          DZ05-COPOS     PICTURE X(5).           DOSQLP
05          VDZ05-VILLE.   DOSQLP
49          LDZ05-VILLE    COMP-1.                 DOSQLP
49          DZ05-VILLE    PICTURE X(20).          DOSQLP
05          VDZ05-CORESP.  DOSQLP
49          LDZ05-CORESP   COMP-1.                 DOSQLP
49          DZ05-CORESP    PICTURE X(256).         DOSQLP
05          DZ05-REMISE    PICTURE S9(4)V99 COMPUTATIONAL. DOSQLP
05          VDZ05-MATE.    DOSQLP
49          LDZ05-MATE     COMP-1.                 DOSQLP
49          DZ05-MATE      PICTURE X(8).           DOSQLP
05          DZ05-PRIX1    COMPUTATIONAL-2.         DOSQLP
05          DZ05-HEURE     PICTURE X(8).           DOSQLP
05          DZ05-PRECIS    PICTURE X(26).          DOSQLP
01          DZ10.          DOSQLP
05          DZ10-COCARA     PICTURE X.             DOSQLP
05          DZ10-NUCOM     PICTURE 9(5).           DOSQLP
05          DZ10-FOURNP    PICTURE X(3).           DOSQLP
05          DZ10-QTMLI     COMPUTATIONAL-1.         DOSQLP
05          DZ10-QTMCO     COMPUTATIONAL-1.         DOSQLP
05          VDZ10-INFOR.   DOSQLP
49          LDZ10-INFOR    COMP-1.                 DOSQLP
49          DZ10-INFOR     PICTURE X(35).          DOSQLP
01          VDZ05.         DOSQLP
05          VDZ05COCARA    COMP-1.                 DOSQLP
05          VDZ05NUCOD     COMP-1.                 DOSQLP
05          VDZ05FOURNI    COMP-1.                 DOSQLP
05          VDZ05NUCLIE    COMP-1.                 DOSQLP
05          VDZ05DATE      COMP-1.                 DOSQLP
05          VDZ05RELEA     COMP-1.                 DOSQLP
05          VDZ05REFCLI    COMP-1.                 DOSQLP
05          VDZ05RUE       COMP-1.                 DOSQLP
05          VDZ05COPOS     COMP-1.                 DOSQLP
05          VDZ05VILLE    COMP-1.                 DOSQLP
05          VDZ05CORESP    COMP-1.                 DOSQLP
05          VDZ05REMISE    COMP-1.                 DOSQLP
05          VDZ05MATE      COMP-1.                 DOSQLP
05          VDZ05PRIX1     COMP-1.                 DOSQLP
05          VDZ05HEURE     COMP-1.                 DOSQLP
05          VDZ05PRECIS    COMP-1.                 DOSQLP
01          VDZ10.         DOSQLP
05          VDZ10COCARA    COMP-1.                 DOSQLP
05          VDZ10NUCOM     COMP-1.                 DOSQLP
05          VDZ10FOURNP    COMP-1.                 DOSQLP
05          VDZ10QTMLI     COMP-1.                 DOSQLP
05          VDZ10QTMCO     COMP-1.                 DOSQLP
05          VDZ10INFOR     COMP-1.                 DOSQLP
EXEC SQL END DECLARE SECTION END-EXEC.          DOSQLP
EXEC SQL INCLUDE SQLCA          END-EXEC.          DOSQLP

```

### 8.3. *COMMUNICATION AREA*

#### COMMUNICATION AREA

After the description of the common area (CA00), display keys are grouped by category under the K-eeee level.

All Data Elements declared as display Segment keys in the Screen Call of Segments (-CS) are present and independently located on level 05.

They are also independently input in the PROCEDURE DIVISION.

SCREEN GENERATED USING ORACLE V6 SQL  
 COMMUNICATION AREA

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LINKAGE SECTION.		DOSQLP
COPY TDS-STORAGE.		*0Z010
COPY CONSTANT-STORAGE.		*0Z015
01 TRANSACTION-STORAGE.		*0Z020
02 K-SSQLP-YMAT PICTURE X.		*00000
02 K-SSQLP-PROGR PICTURE X(6).		*00000
02 K-SSQLP-XTERM PICTURE X(12).		*00000
02 CA00.		*00001
10 CA00-CLECD.		*00001
15 CA00-NUCOM PICTURE 9(5).		*00001
10 CA00-CLECL1.		*00001
15 CA00-NUCLIE PICTURE 9(8).		*00001
10 CA00-ME00.		*00001
15 CA00-CLEME.		*00001
20 CA00-COPERS PICTURE X(5).		*00001
20 CA00-NUMORD PICTURE XX.		*00001
15 CA00-MESSA PICTURE X(75).		*00001
10 CA00-PREM PICTURE X.		*00001
10 CA00-LANGU PICTURE X.		*00001
10 CA00-RAISOC PICTURE X(50).		*00001
02 K-SSQLP-DOC PICTURE X.		*00002
02 K-SSQLP-PROGE PICTURE X(8).		*00002
02 K-SSQLP-LIBRA PICTURE XXX.		*00002
02 K-SSQLP-PROHE PICTURE X(8).		*00002
02 K-SSQLP-ERCOD.		*00002
05 K-SSQLP-ERCOD9 PICTURE 999.		*00002
02 K-SSQLP-ERTYP PICTURE X.		*00002
02 K-SSQLP-LINUM PICTURE 999.		*00002
02 K-SSQLP-PFKEY PICTURE XX.		*00002
02 K-SQLP.		*00002
05 K-RDZ05-COCARA PICTURE X.		*00002
05 K-RDZ05-NUCOD PICTURE S9(3) COMPUTATIONAL-1.		*00002
05 K-RDZ05-FOURNI PICTURE X(3).		*00002
05 K-RDZ10-COCARA PICTURE X.		*00002
05 K-RDZ10-NUCOM PICTURE 9(5).		*00002
02 FILLER PICTURE X(0676).		*00002

#### *8.4. PROCEDURE DIVISION*

##### CALLED SQL VALIDATION FUNCTIONS : FOB

##### PROCESSING OF THE ABNORMAL END

The FOB function processes SQL errors.

SCREEN GENERATED USING ORACLE V6 SQL  
PROCEDURE DIVISION

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FOB.  
EXEC SQL WHENEVER NOT FOUND GO TO F80-KO  
END-EXEC.  
EXEC SQL WHENEVER SQLWARNING CONTINUE  
END-EXEC.  
EXEC SQL WHENEVER SQLERROR GO TO F81EQ  
END-EXEC.  
FOB-FN.  
EXIT.

DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP

DECLARE CURSOR : F0C

This function contains the SQL statements corresponding to the cursor declaration when a table is used in display in the repetitive category.

- . The clause FROM "external table name" names the external table or view called in the description of the Database Block (-DR). By default this external name is found in the Segment definition screen. The Database Block code is indicated in the EXTERNAL NAME field of the Screen Call of Segments (-CS).
- . The clause WHERE ... ORDER lists the key Data Elements in the order found on the Screen Call of Segments (-CS).

```
F0CDZ.                                DOSQLP
EXEC SQL DECLARE DISPLAY_DZ05          DOSQLP
      CURSOR FOR SELECT ALL COCARA ,   DOSQLP
      NUCOD , FOURNI ,                 DOSQLP
      NUCLIE , TO_CHAR(DATE,'DDMMYY') , RELEA , REFERENCECLIENT , DOSQLP
      RUE , COPOS , VILLE , CORESP ,  REMISE , MATERIEL , PRIX1 ,   DOSQLP
      TO_CHAR(HEURE,'DD/MM/YY') ,     DOSQLP
      PRECIS                            DOSQLP
      FROM DODZ05 WHERE COCARA >      DOSQLP
      :DZ05-COCARA OR                  DOSQLP
      (COCARA = :DZ05-COCARA AND       DOSQLP
      NUCOD > :DZ05-NUCOD) OR          DOSQLP
      (COCARA = :DZ05-COCARA AND       DOSQLP
      NUCOD = :DZ05-NUCOD AND         DOSQLP
      FOURNI >= :DZ05-FOURNI) ORDER  DOSQLP
      BY COCARA , NUCOD , FOURNI      DOSQLP
      END-EXEC.                        DOSQLP
EXEC SQL DECLARE DISPLAY_DZ10          DOSQLP
      CURSOR FOR SELECT ALL COCARA ,   DOSQLP
      NUCOM , FOURNP ,                 DOSQLP
      LIVRABLE , QUANTITE-COMMANDEE ,  DOSQLP
      INFOR                            DOSQLP
      FROM DODZ10 WHERE COCARA >      DOSQLP
      :DZ10-COCARA OR                  DOSQLP
      (COCARA = :DZ10-COCARA AND       DOSQLP
      NUCOM >= :DZ10-NUCOM) ORDER BY DOSQLP
      COCARA , NUCOM                   DOSQLP
      END-EXEC.                        DOSQLP
F0CDZ-FN.                              DOSQLP
EXIT.                                  DOSQLP
```

CONNECTION : F0101

The F0101 function contains the order of connexion to the Database.



```
*          *****  
*          *                               *  
*          *   INITIALIZATIONS           *  
*          *                               *  
*          *****  
F01.      DOSQLP  
          EXIT.      DOSQLP  
F0101.    DOSQLP  
          EXEC SQL CONNECT :USERID IDENTIFIED BY :PASSWORD  
          END-EXEC   DOSQLP  
F0101-FN. DOSQLP  
          EXIT.      DOSQLP  
F0105.    DOSQLP  
          EXIT.      DOSQLP  
F0105-FN. DOSQLP  
          EXIT.      DOSQLP  
F0110.    DOSQLP  
          ACCEPT TIMCO FROM TIME.        DOSQLP  
          ACCEPT DATOR FROM DATE.        DOSQLP  
          MOVE ZERO TO CATX FT K50L.      DOSQLP  
          MOVE "1" TO ICF OCF SCR-ER.     DOSQLP  
          MOVE ZERO TO 7-CD01-XMSTA 7-CD02-XMSTA. DOSQLP  
          MOVE SPACE TO CATM OPER OPERD CAT-ER. DOSQLP  
          MOVE ZERO TO CONFIGURATIONS.    DOSQLP  
          MOVE SYMBOLIC-QUEUE TO 7-CD01-CTHAN. DOSQLP  
          IF      PROGR NOT = K-SSQLP-PROGR DOSQLP  
            MOVE ZERO TO ICF.             DOSQLP  
          IF      PRIOR-TPR = SPACE        DOSQLP  
            MOVE ZERO TO ICF K-SSQLP-DOC  DOSQLP  
            RECEIVE 7-CD01 MESSAGE INTO SQLP-MPRIOR NO DATA DOSQLP  
            MOVE "1" TO IK.               DOSQLP  
          IF      PRIOR-TPR = SPACE        DOSQLP  
            PERFORM F81ES THRU F81ES-FN   DOSQLP  
            MOVE 7-CD01-XTERM TO K-SSQLP-XTERM. DOSQLP  
          MOVE LOW-VALUE TO O-SQLP.       DOSQLP  
          MOVE K-SSQLP-XTERM TO HE00-XTERM. DOSQLP  
          IF      K-SSQLP-DOC = "2"        DOSQLP  
            OR      K-SSQLP-DOC = "3"      DOSQLP  
            MOVE "1" TO K-SSQLP-DOC      DOSQLP  
            GO TO F8Z05.                   DOSQLP  
F0110-FN. DOSQLP  
          EXIT.      DOSQLP  
F0160.    DOSQLP  
          IF      ICF = ZERO                DOSQLP  
            MOVE "A" TO OPER              DOSQLP  
            GO TO F3999-ITER-FT.          DOSQLP  
F0160-FN. DOSQLP  
          EXIT.      DOSQLP  
F01-FN.   DOSQLP  
          EXIT.      DOSQLP
```

PHYSICAL ACCESS TO SEGMENTS : F80

By default, all the 'SELECT' commands are generated with the ALL option.

The presence validation keys are shown with the commands:

SELECT (in the INTO clause),  
UPDATE (in the SET clause),  
INSERT (in the VALUES clause).

SCREEN GENERATED USING ORACLE V6 SQL  
PROCEDURE DIVISION

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```

*          *****
*          *
*          *   PHYSICAL SEGMENT ACCESS ROUTINES *
*          *
*          *****
F80.
  EXIT.
F80-DZ05-R.
  EXEC SQL SELECT ALL COCARA , NUCOD , FOURNI , NUCLIE ,
  TO_CHAR( DATE , 'DDMMYY' ) , RELEA , REFERENCECLIENT , RUE ,
  COPOS , VILLE , CORESP , REMISE , MATERIEL , PRIX1 ,
  TO_CHAR( HEURE , 'DD/MM/YY' ) , PRECIS
  INTO :DZ05-COCARA:VDZ05COCARA ,
  :DZ05-NUCOD:VDZ05NUCOD , :DZ05-FOURNI:VDZ05FOURNI ,
  :DZ05-NUCLIE:VDZ05NUCLIE , :DZ05-DATE:VDZ05DATE ,
  :DZ05-RELEA:VDZ05RELEA , :DZ05-REFCLI:VDZ05REFCLI ,
  :VDZ05-RUE:VDZ05RUE , :DZ05-COPOS:VDZ05COPOS ,
  :VDZ05-VILLE:VDZ05VILLE , :VDZ05-CORESP:VDZ05CORESP ,
  :DZ05-REMISE:VDZ05REMISE , :VDZ05-MATE:VDZ05MATE ,
  :DZ05-PRIX1:VDZ05PRIX1 , :DZ05-HEURE:VDZ05HEURE ,
  :DZ05-PRECIS:VDZ05PRECIS
  FROM DODZ05 WHERE COCARA = :DZ05-COCARA AND NUCODDOSQLP
= :DZ05-NUCOD AND FOURNI = :DZ05-FOURNI
  END-EXEC.
  GO TO F80-OK.
F80-DZ05-RU.
  EXEC SQL SELECT ALL COCARA , NUCOD , FOURNI , NUCLIE ,
  TO_CHAR( DATE , 'DDMMYY' ) , RELEA , REFERENCECLIENT , RUE ,
  COPOS , VILLE , CORESP , REMISE , MATERIEL , PRIX1 ,
  TO_CHAR( HEURE , 'DD/MM/YY' ) , PRECIS
  INTO :DZ05-COCARA:VDZ05COCARA ,
  :DZ05-NUCOD:VDZ05NUCOD , :DZ05-FOURNI:VDZ05FOURNI ,
  :DZ05-NUCLIE:VDZ05NUCLIE , :DZ05-DATE:VDZ05DATE ,
  :DZ05-RELEA:VDZ05RELEA , :VDZ05-REFCLI:VDZ05REFCLI ,
  :VDZ05-RUE:VDZ05RUE , :DZ05-COPOS:VDZ05COPOS ,
  :VDZ05-VILLE:VDZ05VILLE , :VDZ05-CORESP:VDZ05CORESP ,
  :DZ05-REMISE:VDZ05REMISE , :VDZ05-MATE:VDZ05MATE ,
  :DZ05-PRIX1:VDZ05PRIX1 , :DZ05-HEURE:VDZ05HEURE ,
  :DZ05-PRECIS:VDZ05PRECIS
  FROM DODZ05 WHERE COCARA = :DZ05-COCARA AND NUCODDOSQLP
= :DZ05-NUCOD AND FOURNI = :DZ05-FOURNI
  END-EXEC.
  GO TO F80-OK.
F80-DZ05-P.
  EXEC SQL OPEN DISPLAY_DZ05
  END-EXEC.
F80-DZ05-RN.
  EXEC SQL FETCH DISPLAY_DZ05
  INTO :DZ05-COCARA:VDZ05COCARA ,
  :DZ05-NUCOD:VDZ05NUCOD , :DZ05-FOURNI:VDZ05FOURNI ,
  :DZ05-NUCLIE:VDZ05NUCLIE , :DZ05-DATE:VDZ05DATE ,
  :DZ05-RELEA:VDZ05RELEA , :VDZ05-REFCLI:VDZ05REFCLI ,
  :VDZ05-RUE:VDZ05RUE , :DZ05-COPOS:VDZ05COPOS ,
  :VDZ05-VILLE:VDZ05VILLE , :VDZ05-CORESP:VDZ05CORESP ,
  :DZ05-REMISE:VDZ05REMISE , :VDZ05-MATE:VDZ05MATE ,
  :DZ05-PRIX1:VDZ05PRIX1 , :DZ05-HEURE:VDZ05HEURE ,
  :DZ05-PRECIS:VDZ05PRECIS
  END-EXEC.
  GO TO F80-OK.
F80-DZ05-W.
  EXEC SQL INSERT
  INTO DODZ05 ( COCARA , NUCOD , FOURNI , NUCLIE ,
  DATE , RELEA , REFERENCECLIENT , RUE , COPOS , VILLE , CORESPDOSQLP
  , REMISE , MATERIEL , PRIX1 , HEURE , PRECIS ) VALUES
  ( :DZ05-COCARA:VDZ05COCARA , :DZ05-NUCOD:VDZ05NUCOD ,
  :DZ05-FOURNI:VDZ05FOURNI , :DZ05-NUCLIE:VDZ05NUCLIE ,
  TO_DATE( :DZ05-DATE:VDZ05DATE , 'DDMMYY' ) ,
  :DZ05-RELEA:VDZ05RELEA , :VDZ05-REFCLI:VDZ05REFCLI ,
  :VDZ05-RUE:VDZ05RUE , :DZ05-COPOS:VDZ05COPOS ,
  :VDZ05-VILLE:VDZ05VILLE , :VDZ05-CORESP:VDZ05CORESP ,
  :DZ05-REMISE:VDZ05REMISE , :VDZ05-MATE:VDZ05MATE ,
  :DZ05-PRIX1:VDZ05PRIX1 ,
  TO_DATE( :DZ05-HEURE:VDZ05HEURE , 'DD/MM/YY' ) ,
  :DZ05-PRECIS:VDZ05PRECIS )
  END-EXEC.
  GO TO F80-OK.
F80-DZ05-RW.

```

SCREEN GENERATED USING ORACLE V6 SQL  
PROCEDURE DIVISION

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```

EXEC SQL UPDATE DODZ05 SET NUCLIE =           DOSQLP
      :DZ05-NUCLIE:VDZ05NUCLIE, DATE =       DOSQLP
TO_DATE(:DZ05-DATE:VDZ05DATE,'DDMMYY'), RELEA =   DOSQLP
:DZ05-RELEA:VDZ05RELEA, REFERENCECLIENT =       DOSQLP
:VDZ05-REFCLI:VDZ05REFCLI, RUE = :VDZ05-RUE:VDZ05RUE, COPOSDOSQLP
= :DZ05-COPOS:VDZ05COPOS, VILLE = :VDZ05-VILLE:VDZ05VILLE, DOSQLP
CORESP = :VDZ05-CORESP:VDZ05CORESP, REMISE =   DOSQLP
:DZ05-REMISE:VDZ05REMISE, MATERIEL = :VDZ05-MATE:VDZ05MATE, DOSQLP
PRIX1 = :DZ05-PRIX1:VDZ05PRIX1, HEURE =       DOSQLP
TO_DATE(:DZ05-HEURE:VDZ05HEURE,'DD/MM/YY'), PRECIS =   DOSQLP
:DZ05-PRECIS:VDZ05PRECIS WHERE COCARA = :DZ05-COCARA AND DOSQLP
NUCOD = :DZ05-NUCOD AND FOURNI = :DZ05-FOURNI   DOSQLP
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ05-UN.                                  DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ05-CL.                                  DOSQLP
EXEC SQL CLOSE DISPLAY_DZ05                  DOSQLP
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F8001-FN.                                     DOSQLP
EXIT.                                         DOSQLP
F80-DZ10-R.                                  DOSQLP
EXEC SQL SELECT ALL COCARA , NUCOM , FOURNP , LIVRABLE ,
QUANTITE-COMMANDEE , INFOR
      INTO :DZ10-COCARA:VDZ10COCARA,
      :DZ10-NUCOM:VDZ10NUCOM, :DZ10-FOURNP:VDZ10FOURNP,
      :DZ10-QTMLI:VDZ10QTMLI, :DZ10-QTMCO:VDZ10QTMCO,
      :VDZ10-INFOR:VDZ10INFOR
      FROM DODZ10 WHERE COCARA = :DZ10-COCARA AND NUCOMDOSQLP
= :DZ10-NUCOM                                DOSQLP
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-RU.                                  DOSQLP
EXEC SQL SELECT ALL COCARA , NUCOM , FOURNP , LIVRABLE ,
QUANTITE-COMMANDEE , INFOR
      INTO :DZ10-COCARA:VDZ10COCARA,
      :DZ10-NUCOM:VDZ10NUCOM, :DZ10-FOURNP:VDZ10FOURNP,
      :DZ10-QTMLI:VDZ10QTMLI, :DZ10-QTMCO:VDZ10QTMCO,
      :VDZ10-INFOR:VDZ10INFOR
      FROM DODZ10 WHERE COCARA = :DZ10-COCARA AND NUCOMDOSQLP
= :DZ10-NUCOM                                DOSQLP
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-P.                                  DOSQLP
EXEC SQL OPEN DISPLAY_DZ10                   DOSQLP
      END-EXEC.                               DOSQLP
F80-DZ10-RN.                                  DOSQLP
EXEC SQL FETCH DISPLAY_DZ10
      INTO :DZ10-COCARA:VDZ10COCARA,
      :DZ10-NUCOM:VDZ10NUCOM, :DZ10-FOURNP:VDZ10FOURNP,
      :DZ10-QTMLI:VDZ10QTMLI, :DZ10-QTMCO:VDZ10QTMCO,
      :VDZ10-INFOR:VDZ10INFOR
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-W.                                  DOSQLP
EXEC SQL INSERT
      INTO DODZ10 ( COCARA , NUCOM , FOURNP , LIVRABLE ,
QUANTITE-COMMANDEE , INFOR ) VALUES
      (:DZ10-COCARA:VDZ10COCARA, :DZ10-NUCOM:VDZ10NUCOM,
      :DZ10-FOURNP:VDZ10FOURNP, :DZ10-QTMLI:VDZ10QTMLI,
      :DZ10-QTMCO:VDZ10QTMCO, :VDZ10-INFOR:VDZ10INFOR)
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-RW.                                  DOSQLP
EXEC SQL
      UPDATE DODZ10 SET FOURNP =
      :DZ10-FOURNP:VDZ10FOURNP, LIVRABLE =
      :DZ10-QTMLI:VDZ10QTMLI, QUANTITE-COMMANDEE =
      :DZ10-QTMCO:VDZ10QTMCO, INFOR = :VDZ10-INFOR:VDZ10INFOR
      WHERE COCARA = :DZ10-COCARA AND NUCOM = :DZ10-NUCOM
      END-EXEC.                               DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-UN.                                  DOSQLP
GO TO F80-OK.                                DOSQLP
F80-DZ10-CL.                                  DOSQLP

```



SCREEN GENERATED USING ORACLE V6 SQL  
PROCEDURE DIVISION

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F81UT-FN.  
EXIT.  
F8145.  
EXIT.  
F8145-FN.  
EXIT.  
F8155.  
EXIT.  
F8155-FN.  
EXIT.  
F81-FN.  
EXIT.

DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP  
DOSQLP

## **9. CHART OF VARIABLES AND CONSTANTS**

```

+-----+
!           CHART OF ON-LINE CONSTANTS AND VARIABLES           !
+-----+
!           !
! CURPOS  ! CURSOR POSITIONING IN RECEPTION SCREEN WHERE           !
!           ! CPOSL = LINE NUMBER & CPOSC = COLUMN NUMBER   !
!           ! (except for DPS7 FORMS).                          !
!           !
! CPOSN   ! "ABSOLUTE" CURSOR POSITIONING WHERE CPOSL = 1         !
!           ! AND CPOSC = 1                                         !
!           ! (except for DPS7 FORMS).                          !
!           !
! INA     ! NUMBER OF DATA ELEMENTS IN SCREEN-TOP CATEGORY      !
!           !
! INR     ! INA + NUMBER OF DATA ELEMENTS IN REPETITIVE          !
!           ! CATEGORY                                              !
!           !
! INZ     ! INR + NUMBER OF DATA ELEMENTS IN SCREEN-BOTTOM     !
!           ! CATEGORY                                              !
!           !
! IRR     ! NUMBER OF REPETITIONS IN REPETITIVE CATEGORY          !
!           !
! INT     ! NUMBER OF INPUT FIELDS IN SCREEN                      !
!           !
! IER     ! NUMBER OF SCREEN-RELATED ERROR MESSAGES            !
!           !
! SESSI   ! SESSION NUMBER OF GENERATED PROGRAM                 !
!           !
! LIBRA   ! LIBRARY CODE                                       !
!           !
! USERCO ! USER CODE                                           !
!           !
! DATGN   ! DATE OF GENERATED PROGRAM                          !
!           !
! TIMGN   ! TIME OF GENERATED PROGRAM                          !
!           !
! PROGR   ! PROGRAM CODE                                       !
!           !
! PROGE   ! PROGRAM EXTERNAL NAME                             !
!           !
! PRDOC   ! HELP PROGRAM EXTERNAL NAME                       !
!           !
+-----+

```



```
+-----+
!      CHART OF ON-LINE CONSTANTS AND VARIABLES  (CONT'D)  !
+-----+
!      !                                                    !
! DATOR ! YEAR-MONTH-DAY FORMATTED MACHINE DATE                !
!      !                                                    !
! DATSEP ! SEPARATOR USED IN DATES                          !
!      ! DEFAULT VALUE: '/'                                !
!      !                                                    !
! DAT6   ! DATE FORMATTING: DDMYY OR YMMDD                 !
! DAT7   ! ALSO OUTPUT FORMATS (DD/MM/YY FOR INSTANCE) IF  !
! DAT8   ! A VARIABLE DATA ELEMENT (V) HAS A DATE FORMAT !
!      !                                                    !
! DATCTY ! FIELD FOR CENTURY LOAD                          !
!      !                                                    !
! DAT6C  ! NON-FORMATTED DATE WITH CENTURY                 !
! DAT7C  !                                                    !
!      !                                                    !
! DAT8C  ! FORMATTED DATE WITH CENTURY: MM/DD/CCYY        !
!      !                                                    !
! DAT8G  ! GREGORIAN FORMATTED DATE: CCYY/MM/DD           !
!      !                                                    !
! TIMCO  ! TIME                                             !
!      !                                                    !
! TIMDAY ! FORMATTED TIME: HH:MM:SS                       !
!      !                                                    !
! 5-scrn-! THIS FIELD CONTAINS THE NAME OF THE            !
! PROGE  ! PROGRAM TO BRANCH TO                           !
!      !                                                    !
+-----+
```

```

+-----+
!           CHART OF VALIDATION VARIABLES AND INDICATORS           !
+-----+
!           !
! ICF      ! CONFIGURATION VARIABLE           !
!           ! '1' = SCREEN IN INPUT       !
!           ! '0' = NO SCREEN IN INPUT       !
!           !
! OCF      ! CONFIGURATION VARIABLE           !
!           ! '1' = SCREEN IN OUTPUT       !
!           ! '0' = NO SCREEN IN OUTPUT       !
!           !
! OPER     ! OPERATION CODE                   !
!           ! 'A' = INQUIRY                   !
!           ! 'M' = UPDATE                     !
!           ! 'S' = SCREEN CONTINUATION       !
!           ! 'E' = CONVERSATION END         !
!           ! 'P' = PREVIOUS DISPLAY         !
!           ! 'O' = TRANSFER TO ANOTHER SCREEN !
!           !
! OPERD    ! OPERATION CODE FOR DEFERRED BRANCHING !
!           ! 'O' = DEFERRED CALL OF ANOTHER SCREEN !
!           ! INITIALIZED IN F0520 AND MOVED INTO OPER IN F40 !
!           !
! CATX     ! CATEGORY BEING PROCESSED         !
!           ! '0' = BEGINNING OF RECEPTION OR DISPLAY !
!           ! ' ' = SCREEN TOP           !
!           ! 'R' = REPETITIVE CATEGORY       !
!           ! 'Z' = SCREEN BOTTOM           !
!           !
! CATM     ! TRANSACTION CODE                 !
!           ! 'C' = CREATION                 !
!           ! 'M' = MODIFICATION             !
!           ! 'A' = DELETION                 !
!           ! 'X' = IMPLICIT UPDATE         !
!           !
! ICATR    ! INDICATOR OF CATEGORY BEING PROCESSED !
!           ! (REPETITIVE CATEGORY ONLY)   !
!           !
! FT       ! END OF REPETITIVE CATEGORY INDICATOR !
!           ! '0' LINES TO DISPLAY         !
!           ! '1' NO MORE LINES TO DISPLAY !
!           !
! ddss-CF ! SEGMENT CONFIGURATION INDICATOR (seg. ddss) !
!           ! '1' THE SEGMENT IS PROCESSED !
!           ! '0' THE SEGMENT IS NOT PROCESSED !
!           !
+-----+

```

```

+-----+
!   CHART OF VALIDATION VARIABLES AND INDICATORS (CONT'D) !
+-----+
! IK      ! PHYSICAL FILE ACCESS ERROR INDICATOR      !
!         ! '0' NO ERROR                               !
!         ! '1' ERROR                                   !
!         !                                           !
+-----+

+-----+
!                   ERROR VARIABLES           !
+-----+
!         !                                     !
! SCR-ER ! STORAGE OF SCREEN ERROR                 !
!         ! '1' NO ERROR                         !
!         ! '4' ERROR                             !
!         !                                     !
! CAT-ER ! STORAGE OF ERROR ON CURRENT CATEGORY  !
!         ! ' ' NO ERROR                       !
!         ! 'E' ERROR                           !
!         !                                     !
!ER-scrn-! MEMORIZATION OF DATA ELEMENT ERROR      !
! delcod ! '0' DATA ELEMENT ABSENT               !
!         ! '1' DATA ELEMENT PRESENT        !
!         ! '2' INVALID ABSENCE              !
!         ! '4' INVALID CLASS                 !
!         ! '5' INVALID VALUE                 !
!         !                                     !
+-----+

```