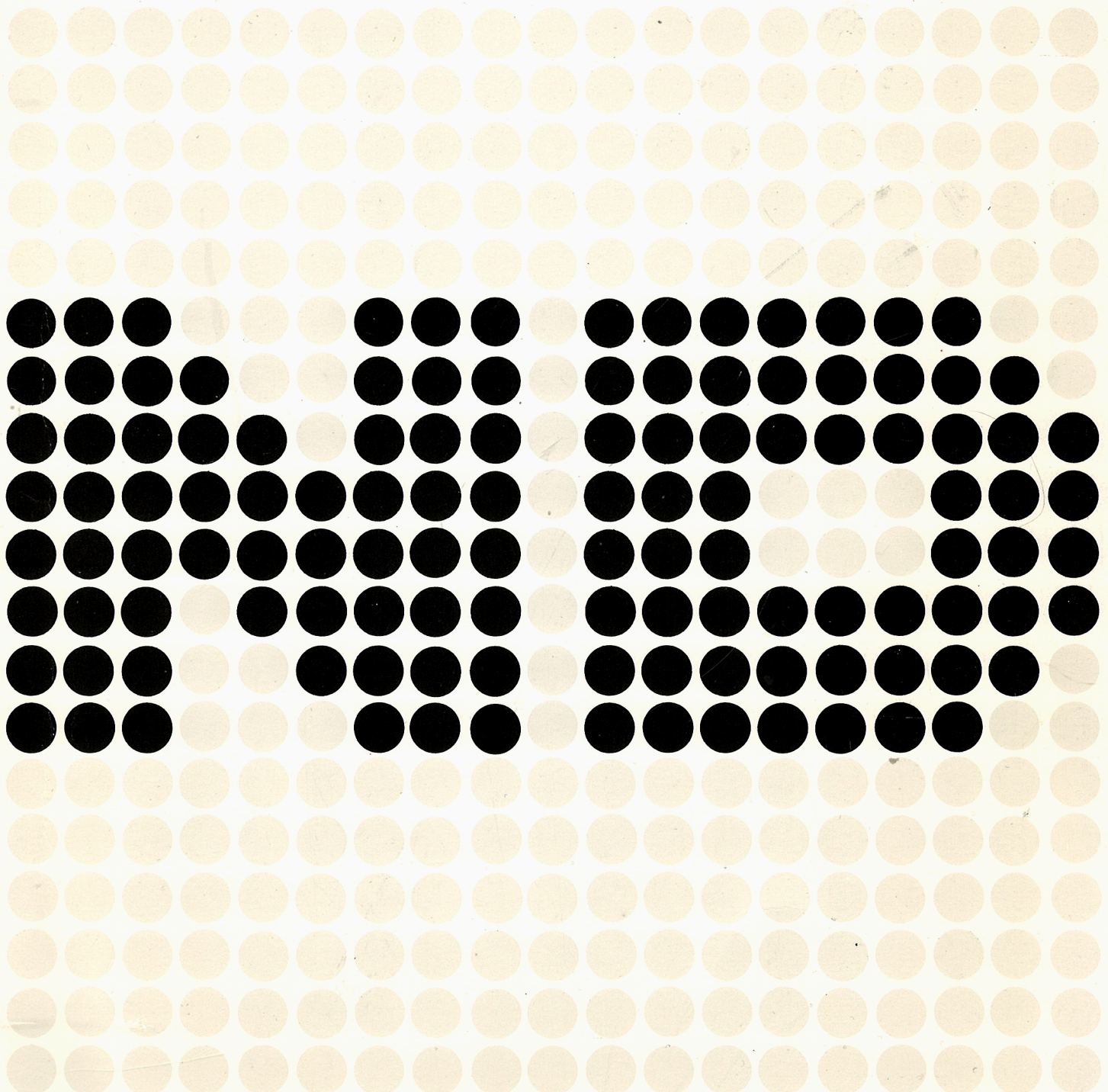


**P E D
USER'S GUIDE**

NORSK DATA A.S



P E D USER'S GUIDE

The purpose of this guide is to provide the user with the information necessary to operate the PED system. This guide should be read carefully and followed exactly as written. The user should be aware that the PED system is a complex device and should be used only by trained personnel. The user should be aware that the PED system is a complex device and should be used only by trained personnel. The user should be aware that the PED system is a complex device and should be used only by trained personnel.

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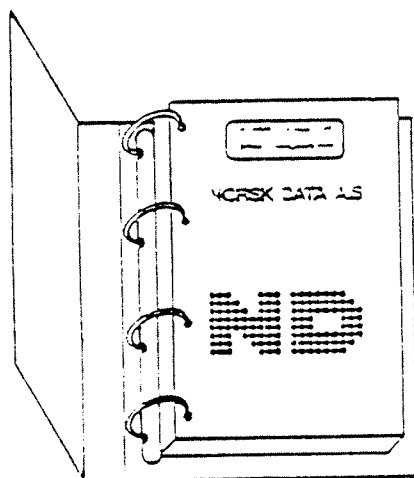
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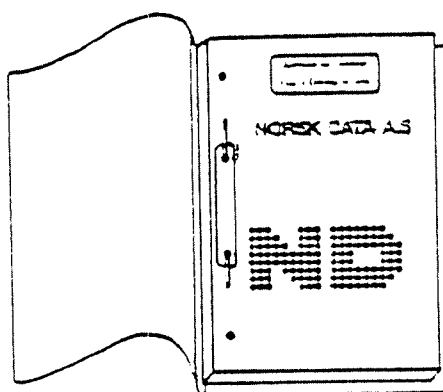
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PREFACE:THE PRODUCT

This manual describes the second version of the NORD Program Editor:

PED ND-SUT-2399E

The systems consists of the software products:

NORD PROGRAM EDITOR (English)	SUT-2399E
NORD PROGRAM EDITOR (Norwegian)	SUT-203072E

The program editor is used to create a program or data file, which can then be copied to an output device. The program file may be compiled by passing control to the program PERFORM, to activate the appropriate compiler.

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1. Introduction

1.1. THE READER

The manual is written for all users of PED, i.e. anyone who needs a program editor to carry out editing of program or data files.

1.2. PREREQUISITE KNOWLEDGE

In order to use the information in this manual, the reader should have a general knowledge of the timesharing facilities of the SINTRAN III Operating System.

1.3. THE MANUAL

This manual is mainly a reference manual that describes the commands to the program editor PED. In addition, it contains some introductory information and instructions for starting the PED programs.

2. The Program Editor (PED)

2.1. General Information.

PED (Nord Program Editor) is a VDU page mode text editor for asynchronous terminals, connected to NORD computers running the SINTRAN-III operating system.

The text may be read from and written to any mass storage file or I/O device.

Text may be added, modified, inserted, replaced and deleted by using the cursor movement controls and a few self-explanatory, easy to learn commands.

PED currently operates on a number of terminal types. The operator need not specify terminal type at program initiation, as PED performs a GET-TERMINAL-TYPE monitor call before editing may begin. The SINTRAN-III terminal type definitions must be preset prior to the installation of PED. The standard release of PED can handle the following terminals (SINTRAN-III terminal type is given in parentheses after the corresponding terminal name):

- Tandberg 2000 (7)
- Tandberg 2115 (3)
- Tandberg 2215 (3)
- Infoton 200 (4)

2.2. How to Start the Program.

PED is written to run under the NORD SINTRAN-III operating system. After logging in as a timesharing user, it is started by writing PED in response to the herald character @ indicating command level of the operating system.

PED will answer with an asterisk in the upper, left corner of the screen, and PED in blown up characters in the middle of the screen:

```
****  ****  ****
*    *  *    *    *
****  ***   *    *
*      *    *    *
*      ****  ****
```

NORD PROGRAM EDITOR ND-2399E

PED is now ready to accept a command from the user.

One usually starts with R to read the text file to be edited, but if text is to be input directly, simply type CR. Text entry may now begin. If in doubt, type H for HELP when in the screen home position, i.e. immediately after the asterisk.

2.3. The PED Work Area.

PED has a work area containing the text being edited during the current run of the program (the current text). This work area can be filled with text both from files and directly from the terminal. The current text is edited from the terminal by giving commands and data to PED.

Note that editing is only done in the PED work area and not on files! At any time, the current text can be saved on a file by giving the write command. If the file name in the write command is the same as a file previously read from, the old contents of the file will be replaced by the current text. The current text may also be saved on a different file, thus preserving the old version of the text.

3. Editor Commands.

3.1. Command types.

Three different kinds of commands are available in PED: the DIRECT commands, the FULL commands and the CONTROL-KEY commands.

The direct commands are given as an answer to the asterisk (*) in the screen home position (the upper, left corner of the screen). Only a single character without CR should be used, since extra characters may be taken as new commands.

If the command needs extra information, questions will appear in the top line of the screen.

The cursor can be placed in the screen home position at any time simply by pressing the HOME-key (or the slanted arrow on terminals that do not have a Home-key). Pressing the key once more will return the cursor to its previous position on the screen.

The full commands are also given when the cursor is in the screen home position, in reply to a greater than (>).

To go from direct mode to full mode and back again, press the dot (.) while the cursor is in the screen home position.

The control key commands are given while inputting or updating the text itself, by pressing the Ctrl key and the desired key simultaneously. They can be given at any time during text editing, both in direct and in full command modes.

3.2. The HELP/? (H/?) command.

Pressing the character H or ? will cause the lists of all available commands to be displayed on the screen, along with a few words explaining each command. Use the up- and down-arrows to go from one list to another.

The command may be given both in direct and in full command mode.

3.3. Commands in Direct Command Mode

*** DIRECT COMMANDS ***

- * R..... READ FROM FILE
- * W..... WRITE TO FILE
- * A/C..... ACTIVATE SUBSYSTEM
- * +..... ADVANCE 5 LINES
- * -..... REWIND 5 LINES
- * M..... MOVE TO LINE
- * D..... DELETE LINES
- * T..... SET TABULATORS
- * B..... SET BORDERS
- * X..... LIST DEFAULT FILE
- * I..... INSERT LINES
- * G..... GET (find) STRING
- * E..... EXIT
- * F/l..... FIRST WINDOW 20 LINES
- * N/DOWN.... NEXT WINDOW
- * P/UP..... PREVIOUS WINDOW
- * L/\$..... LAST WINDOW
- * H/?..... HELP
- * 0-9..... DISPLAY WINDOW 0-9
(0 = CURRENT)
- *LEFT/RIGHT. MOVE WINDOW LEFT/RIGHT
- * '.'..... SET/RESET FULL COMMAND MODE
- * V..... CURSOR TRACE ON/OFF
- * Ctrl Q.... RECALL LAST COMMAND
- * @..... SINTRAN COMMAND FOLLOWS
- * S..... SUBSTITUTE STRING
- * Y..... DISPLAY MAIN FILE

3.4. Commands in Full Command Mode

*** FULL COMMANDS ***

- >LIST-FULL-COMMANDS
- >LIST-DIRECT-COMMANDS
- >LIST-CONTROL-FUNCTIONS
- >SET-TABULATORS
- >EXIT/END
- >READ-FILE
- >INCLUDE-FILE
- >WRITE-FILE
- >APPEND-TO-FILE
- >DELETE-LINES
- >INSERT-LINE
- >MOVE-TO-LINE
- >GET-STRING
- >SUBSTITUTE
- >SET-HOR-STEP
- >SET-BORDERS
- >SET-DEFAULT-FILE
- >SET-MAIN-FILE
- >SET-BLOCK-SIZE
- >TIME-USED
- >HELP
- >FIRST-WINDOW
- >NEXT-WINDOW
- >PREVIOUS-WINDOW
- >LAST-WINDOW
- >TRACE-CURSOR
- >MATCH-ALL
- >EXACT-MATCH

NOTE! '.', '@', '+', '-', 0-9, Up-, Down-, Left- and Right-arrows
can be used as in direct command mode.

3.5. The Control Key Command List

*** CONTROL KEYS (ex: <X> means Ctrl + X) ***

** 'x' = ANY CHARACTER OR CONTROL KEY **

<F>+'x'..... MOVE CURSOR RIGHT TO FIRST 'x'
 <R>+'x'..... MOVE CURSOR LEFT TO FIRST 'x'
 <T>/<I>..... MOVE CURSOR TO NEXT TAB STOP
 <Y>/<U>..... MOVE CURSOR TO PREVIOUS TAB STOP
 <P>+'x'.....COPY FROM PREVIOUS LINE UP TO 'x' (INCL.)
 <C>.....COPY ONE CHARACTER FROM PREVIOUS LINE
 <N>.....COPY ONE CHARACTER FROM NEXT LINE
 FLI+<P>+'x'..COPY FROM NEXT LINE UP TO 'x' (INCL.)
 <L>.....INSERT BLANK LINE BEFORE CURRENT LINE
 <D>+'x'.....DELETE CHARACTERS UP TO 'x' (INCL.)
 <Q>.....RESTORE LAST DELETED LINE
 <S>.....SPLIT LINE AT CURSOR POSITION
 <G>.....CONTINUE SEARCHING
SET/RESET INSERT MODE
 <E>.....SET/RESET EXPAND MODE
 <V>.....SET MARKER/GIVE CURSOR POSITION
 DEL/<A>.....DELETE CHARACTER
 <O>.....ACCEPT CONTROL CHARACTER

FLI is Function-Lead-In character (octal 37)
 (usually Ctrl + shift + underline)

4. The DIRECT Commands

4.1. The READ (R) command

The READ command will cause text to be read into the PED work area from a file. Pressing the character R will activate the read command. The following text will appear in the screen home position:

- READ-FILE

The format of the answer is:

- READ-FILE:<File-name>,<From>,<To>,<Line>CR

where:

- <File-name> is the name of the file to be read from.
NOTE! -default file type is :SYMB .
- <From> is the first line to be read (default is line 1).
- <To> is the last line to be read (default is the last line in the file).
- <Line> is the line in the current text before which the file is to be inserted (default is to append the file after the last line).

The user's attention is drawn to one very important point: If there is already text in the work area, it is the text INCLUDE-FILE which will appear in the screen home position when the R command is given. This prevents the user from accidentally reading the same file into PED's work area twice. On the other hand, the command enables the user to merge a new file in the current file. See FULL Commands.

In the upper, right corner the word READING will appear, followed by a position arrow indicating how far the READ has progressed. When the required number of lines has been read into the PED work area, the reply <n> LINES READ will appear in the screen home position.

Files containing the tabulator control Ctrl I or Ctrl T (depending on the terminal used) will be expanded and the control command will move the cursor up to the next tabulator position. In other words, files may contain tabulator positions which will be correctly expanded at READ time. PED does not actually write tabulator positions in the files, but reads those files which contain tabulator signs (Ctrl I or Ctrl T). The tabulator setting must be the same when the file is read as it was when the file was previously written.

Current border setting does not have any effect on a read.

The READ command (but not the INCLUDE-FILE command) sets the default file, which can be listed with the direct X command. The R command may thus cause the default file to be changed.

Here are some examples of how the READ command can be used:

- READ-FILE:MYFILE

Read all lines from the file MYFILE:SYMB (default file type is :SYMB) into the PED work area starting with line 1.

- READ-FILE:MYFILE,10,140

Read lines 10 through 140 from the file MYFILE:SYMB

- INCLUDE-FILE:NEWFILE,20,,15

This third example shows PED's prompt when the R command is given at a time when there is current text in the work area. The command then causes all lines after line 20 from the file NEWFILE to be placed before line 15 of the current text.

4.2. The WRITE (W) command

The WRITE command will cause text to be written from the PED work area into a file. Pressing the character W will activate this command, and the following text will appear in the screen home position.

- WRITE-FILE:

The format of the answer is:

- WRITE-FILE : <File-name>,<From>,<To>CR

where:

- <File-name> is the name of the file to be written (a new file-name is given in quotes).
NOTE! - default file type is :SYMB.

- <From> is the first line to be written.

- <To> is the last line to be written.

In the upper, right corner of the screen the word WRITING will appear, followed by a position arrow indicating how far the WRITE has progressed. Once the required number of lines have been written into the file the reply: <n> LINES WRITTEN will appear in the upper, left corner.

The command causes the default file-name to be set.

Here are some examples of how the WRITE command can be used:

1) WRITE-FILE:MYFILE

or

2) WRITE-FILE:MYFILE,1,\$

Write all lines from the PED work area into the file MYFILE:SYMB

3) WRITE-FILE:"MYFILE",10,140

A file with the name MYFILE:SYMB is created, and then lines 10 through 140 from the PED work area are written into this file.

4) WRITE-FILE:MYFILE,20

or

5) WRITE-FILE:MYFILE,20,\$

Write all lines after line 20 from the PED work area into the file MYFILE:SYMB

6) WRITE-FILE:*

or

7) WRITE-FILE:CR

Write all the lines from the PED work area into the default file (i.e. either the last file read into an empty work area, or the last file written, unless the default file has been explicitly set - see SET-DEFAULT-FILE).

Before any WRITE to the default file is performed, the default file-name is displayed and must be confirmed by pressing CR.

4.3. The FIRST WINDOW (F/1) command

Pressing F or 1 (numeric one) will display the first window of 20 lines in the PED work area, and will enable you either to check already existing text or to start editing a new file.

4.4. The NEXT WINDOW (N/DOWN-ARROW) command

Pressing the letter N will display the next 20 lines of the work area.

Example: If the window containing lines 45 through 64 is currently displayed on the screen, the N will display lines 65 through 84.

4.5. The PREVIOUS WINDOW (P/UP-ARROW) command

Pressing the letter P or the UP-ARROW will display the previous window of 20 lines.

Example: If lines 65 through 84 are currently displayed, the P will display lines 45 through 64.

4.6. The LAST WINDOW (L/\$) command

Pressing the L or the DOLLAR-SIGN will display the last window of the PED work area.

Example: If the work area contains 35 lines, the window containing lines 16 through 35 will appear on the screen.

4.7. The DISPLAY WINDOWS (0-9) command

In the same way as you use the 1 (or F) to view the first window of the work area, you can use the digits from 1 through 9 to go back and forth between text area windows 1 through 9. Pressing the 0 will redisplay the current window.

Example: If you press 7, the window containing lines 121 through 140 will be displayed on the screen.

4.8. The MOVE WINDOW RIGHT OR LEFT command

The text in the window can be shifted to the right or to the left with the corresponding arrows. The number of character positions that the screen text will be moved can be set with the Full command SET-HORIZONTAL-STEP. Default is 40 positions.

4.9. The PLUS (+) command

Pressing the sign + will cause the window to be advanced by 5 lines of text.

4.10. The MINUS (-) command

Pressing the sign - will cause the window to be rewound 5 lines.

4.11. The MOVE-TO-LINE (M) command

The MOVE command will move the window to start at a given line (relative or absolute). Pressing the character M will give the following text in the screen home position:

- MOVE-TO-LINE:

and the format of the answer is either

- MOVE-TO-LINE:<+> or <-> <number of lines> CR

where + or - <number of lines> will move the screen window as many lines forwards or backwards in the PED work area as you wish.

Example: If the answer you give to MOVE-TO-LINE: is +15 and you are working on a screen window containing lines 255 to 274, your command will move you 15 lines forwards in the text work area relative to the current window position. You will thus be viewing the window starting with line 270.

The command may also be used in this manner:

- MOVE-TO-LINE:<line number> CR

where <line number> is the number of the line in the PED work area you want to appear at the top of the screen.

Example: If <line number> is 300, lines 300 through 319 will be listed.

Finally, if the <line number> has been set by the Control command Ctrl V (see Control Key Commands), the MOVE-TO-LINE command may be given in this manner:

- MOVE-TO-LINE: CR

The value set by the Ctrl V command is displayed and must be confirmed by pressing CR again.

4.12. The DELETE LINES (D) command

Lines can be deleted from the PED work area with the DELETE LINES command. Pressing the character D will give the following text in the screen home position:

- DELETE LINES (FROM,TO):

The format of the answer is:

- DELETE LINES (FROM,TO):<from>,<to>CR

where:

- <from> is the first line to be deleted

- <to> is the last line to be deleted

or

- DELETE LINES (FROM,TO) : CR

if the line numbers <from><to> have been indicated by the Control command Ctrl V (see Control Commands).

This is how the command is carried out if Ctrl V is used:

The cursor is placed at the first and at the last line to be deleted and Ctrl V is given at the beginning of each of the two lines.

The home key is pressed, and then D to activate the delete command.

CR is then given as a response to the DELETE command causing these two line numbers to be listed out (and maybe edited).

Another CR will execute the command.

Examples:

1) DELETE LINES (FROM,TO) :5,25
Delete lines 5 through 25.

2) DELETE LINES (FROM,TO) :12,12

or

3) DELETE LINES (FROM,TO) :12
Delete line 12.

or

4) DELETE LINES (FROM,TO) :20,\$
Delete line 20 and everything that comes after.

5) DELETE LINES (FROM,TO) :1,\$

or

6) DELETE LINES (FROM,TO) :All
Delete the whole file from the PED work area.

7) DELETE LINES (FROM,TO) :CR 5,10 CR
Lines 5 through 10 have been marked by Ctrl V and will be deleted.

4.13. The INSERT LINES (I) command

The insert command is made for easy copying or moving of one or more lines.

Pressing the character I will give the following text in the screen home position:

- INSERT-LINE <FROM,TO,INSERT>:

The format of the answer is:

- INSERT-LINE <FROM,TO,INSERT>: <from> <to> <insert> CR

where:

- <from> is the first line in the work area to be moved or copied
- <to> is the last line in the work area to be moved or copied
- <insert> is the number of the line where you want text inserted. The text is inserted before the line specified in <insert> (or appended to the end of the file if <insert> is specified as \$).

or

- INSERT-LINES <FROM,TO,INSERT>: CR

if the line numbers <from> <to> have been indicated by a Ctrl V (see explanation under DELETE, and use the same procedure).

The line where the text is to be inserted, <insert>, is selected by placing the cursor at the first character position of the line, and then pressing the Home key or slanted arrow. Now the I command may be given, and CR as a response will list out the three line numbers selected (which may be edited). Another CR will execute the command.

When the command is executed, the following question will appear:

- DELETE (Y/N)?

Yes (Y) or No (N) are the answers:

Y means that the work area <from><to> will be deleted from its old location and only appear in the new <INSERT> location.

N means that nothing happens to the work area <from><to>.

Anything other than Yes or No will be taken as No.

Examples:

- 1) INSERT-LINE <FROM,TO,INSERT>:12,15,47
DELETE (Y/N)? N

Lines 12 through 15 will be copied in between lines 46 and 47 (i.e. they will now appear in two locations).

- 2) INSERT-LINE <FROM,TO,INSERT>:65,112,15

DELETE (Y/N)? Y

Lines 65 through 112 will be moved in between lines 14 and 15 and deleted from their old location.

- 3) INSERT-LINE <FROM,TO,INSERT>:23,40,\$
DELETE (Y/N)? Y

Lines 23 through 40 will be moved in after the last line of the work area text and deleted in their old location.

- 4) INSERT-LINE <FROM,TO,INSERT>CR 15,23,10 CR
DELETE (Y/N)? Y

Lines 15 through 23 had been selected with a Ctrl V. The cursor had been placed on line 10 and the Home key or Slanted Arrow pressed. Lines 15 through 23 will be moved in before line 10, and deleted in their previous location.

4.14. The SET-TABULATORS (T) command

This command is used to set tabulator positions at the user's choice. A maximum of 20 tabulator positions are allowed, within a border range of 1 - 255.

Pressing the letter T will give the following text in the screen home

SET-TABULATORS:

The format of the answer is:

SET-TABULATORS:<position-1>,<position-2>,...<position-n>CR

where

<n> is a number between 1 and 255, in increasing order.

or

SET-TABULATORS:P

to establish the PED default tabulator setting, which is:

- 8, 14, 30, 40, 50, 60, 70, 80, 89, 99, 109, 119, 129 and 168.

This set of values is compatible with QED (see QED User's Manual ND-60.031.04).

or

SET-TABULATORS:T

to establish the default tabulator setting in TED, which is:

- 10, 20, 30, 40, 50, 60, 70, 80, 89, 99, 109, 119, 129 and 168.

or

SET-TABULATORS:CR

to cause the current tabulator settings to be printed. These may, if desired, be edited and resubmitted.

or

SET-TABULATORS:CR CR

to cause the current tabulator settings to be indicated by T s on the third screen line.

4.15. The SET-BORDERS (B) command

This command is used to set borders (or margins) for the text which is entered after the borders have been set.

The command is very useful for those who edit FORTRAN or COBOL programs where column 73 needs to be marked. By setting the border accordingly, it will be possible to ensure that statements are not longer than 72 characters.

Pressing the key B will give the following text in the upper left corner

- SET-BORDERS:

The format of the answer is:

- SET-BORDERS:<x>,<z> CR

where

- <x> is the column where the left border or margin is to be placed,
- <z> is the column where the right border is to be placed.

Default values are 1 and 79; border range is 1 - 255.

The border columns will be remembered by the editor, and brackets (....) will appear accordingly on line 3 of the screen.

4.16. The LIST DEFAULT FILE (X) command

This command is used to find the name of the default file. The default file-name is set when the READ command is given while the work area is empty. The WRITE command also sets the default file-name.

The format of the answer is

- DEFAULT FILE-NAME: (default file-name)

4.17. The DISPLAY MAIN FILE (Y) command

This command is given to find the name of the file which is ready to go to the subsystem, i.e. the file that PED will output in response to the ACTIVATE SUBSYSTEM (A) or (C) command.

The format of the answer is:

- MAIN-FILE-NAME: 'file-name'

4.18. The ACTIVATE SUBSYSTEM (A/C) command

The A or C command will activate a program called PERFORM. The PERFORM program takes the file name parameter from the command line and prompts for the macro file name and the macro name. PERFORM then creates and runs a MODE file.

A standard macro-file is supplied together with the PERFORM program. This file contains macros for compiling and/or loading of programs written in FORTRAN, COBOL, BASIC or PASCAL. See the description of the PERFORM subsystem in the SINTRAN III REFERENCE MANUAL ND-60.128.01, Appendix H1 through H9.

The subsystem PERFORM is found on the diskette ND-10022 - SINTRAN Utility Programs.

When the A or C command is given, the following text will appear in the upper left corner:

- ACTIVATE:PERFORM,|,| (main file-name)

The main file (see Y command), which is default, is the file that will be executed by the subsystem; therefore the text must be saved on this file before the A or the C command is given.

If the main file has not been specifically set, default file will be used instead.

4.19. The SINTRAN COMMAND FOLLOWS (@) command

This command is used, both in Direct and in Full Command mode, to give a SINTRAN command or to activate a specific SINTRAN subsystem while still in PED.

Place the name of the command or subsystem immediately after the @ which has appeared in the upper left corner, and then press CR. The requested subsystem will be placed at the user's disposal.

If a new program is activated with this SINTRAN command, it is necessary to give a WRITE command prior to the @ because the current memory image, and therefore PED's work area, will be lost. Therefore, if in any doubt, it is advisable to take the precaution of issuing a WRITE command first.

4.20. The GET (find) STRING (G) command

This command is used when the user wants to find a word or an expression (a 'string') used in the text, to check or modify it.

Note that a 'string' cannot be more than a maximum of 33 characters.

Pressing the character G will give the following text in the screen home position:

- GET-STRING:

The format of the answer is:

- GET-STRING:<string>CR

The searching starts on the current screen window and is carried out with Ctrl G (see Control Key Command) prompting from the user to find the next occurrence of the string, until the end of the text. PED then jumps to the first line of the first screen window and writes SEARCHING FROM LINE ONE, and continues the search starting with the first window.

Each time the string is found the cursor is positioned under the first character. The user can then decide whether to leave the string as it is, modify it or delete it. To continue the search for further occurrences, press Ctrl G.

The search can be continued in this manner until PED replies: NOT FOUND:(string), meaning that the string has been searched for round to the starting position in the text and can no longer be found.

The search can also be interrupted at any time by pressing the Home key (Slanted Arrow on some terminals).

The last string can be retrieved for re-editing by pressing Ctrl Q followed by Ctrl P.

NOTE! The GET command distinguishes between lower case and upper case versions of the string specified. In other words, GET will not find the string 'united nations' if it is called 'UNITED NATIONS', for example. If this distinction is not wanted, use the Full MATCH-ALL command prior to the G command. (See also description of the Control Key Command Ctrl G.)

4.21. The SUBSTITUTE STRING (S) command

This command allows the user to automatically replace one string within the text with another. The search will always be carried out on the current and subsequent windows first, and PED will go to the beginning of the first screen window after it has reached the last line of the text.

Full control of the substitutions can be maintained at all times.

Pressing the character S will activate the SUBSTITUTE command. The format of the command is:

- SUBSTITUTE: <old string> CR WITH:<new string> CR
MANUAL CHECK (Y/N):<answer>

where:

- <old string>: is the string to be replaced.
- <new string>: is the replacement string.
- <answer>: is yes (Y) or no (N).

Anything other than 'Y' or 'N' will be taken as 'Y'.

If the answer to manual check is YES, and if <old string> is found, the cursor will be placed under the first character in the string and PED will then wait for a decision as to whether or not the <old string> should be replaced with the <new string>.

The following decisions are possible:

- 'S': Substitute and search for next <old string>.
- 'C': Continue to next <old string> (i.e. do not substitute).
- <home>: Terminate substitute command.
The cursor is placed in the upper left corner of the screen, and the number of substitutions carried out is indicated.

NOTE! Anything other than 'S', 'C' or Home key (Slanted Arrow) will be taken as 'C'.

If the answer to manual check is NO, PED will carry out all the substitutions automatically throughout the text. In both cases, PED will indicate: 'n' SUBSTITUTIONS in the screen home position at the

end of the operation.

As in the G command, the S command distinguishes between upper and lower case characters. The MATCH-ALL command should therefore be given prior to the S command if this distinction is not wanted.

4.22. The TRACE CURSOR or VERIFY (V) command

This command is used to verify the cursor's exact position in the area text and on the current line.

Pressing the V will give the following text in the screen home position:

CURSOR TRACE ON.

In the upper right corner of the screen you will find the parameters:

- LINE - POS - LENGTH - CHAR
- <n> <x> <y> <z>

where

- <n>: is the number of the line on which the cursor is positioned
- <x>: is the column position of the character under which the cursor is positioned,
- <y>: is the number of positions used on the current line, and
- <z>: is the octal value of the character under which the cursor is positioned.

Also see Ctrl V under Control Commands.

The command is helpful for instance to calculate where to set tabulators (T) in a form or table containing several columns.

To turn OFF the VERIFY mode, press V again and PED will reply :

CURSOR TRACE OFF.

4.23. RECALL LAST COMMAND (Ctrl Q)

When in DIRECT command mode, it is possible to recall the last command given by pressing Ctrl Q while the cursor is in the upper left corner, after the *.

Certain command parameters can also be recalled for re-editing in this way, by using Ctrl P after Ctrl Q.

Ctrl Q and Ctrl P have other functions too, which are described under Control Commands.

4.24. The HOME KEY or SLANTED ARROW command

Pressing the Home Key or the Slanted Arrow (depending on the kind of terminal used) will cause the current command to be cancelled, or the cursor will be moved down to its previous position in the text.

4.25. The ENTER FULL COMMAND MODE (.) command

Pressing the '.' (dot) will put you in FULL-COMMAND mode, and the cursor will be positioned in the upper left corner of the screen after a '>'. This command mode gives you access to a further series of commands (see list of Full Commands).

Note that you can go back and forth between DIRECT and FULL command modes by simply pressing the '.' (dot).

4.26. The EXIT (E) command

The EXIT command is used to leave PED in order to return control to the operating system (SINTRAN III). If changes have been made to the work area text, the question:

WRITE FORGOTTEN?

will appear in the upper left corner of the screen, as a reminder. If you do not want to write, just press E again.

5. The FULL Commands

These commands are given in full command mode, i.e. when the cursor is in the screen home position after a '>'. The commands are terminated by CR.

Each part of the command between hyphens may be abbreviated (i.e. READ-FILE may be written R-F), provided that the abbreviation does not create ambiguity.

5.1. LIST-FULL-COMMANDS

This command will display the complete list of full commands. Pressing the Home key or slanted arrow will bring you back to current screen window, or another command may be given.

5.2. LIST-DIRECT-COMMANDS

This command will display the full list of direct commands. Home key or slanted arrow will bring you back to current screen window, or another command may be given.

5.3. LIST-CONTROL-FUNCTIONS

This command will display the full list of control key functions. Home key or slanted arrow will bring you back to current screen window, or another command may be given.

5.4. READ-FILE

The parameters in this command are identical to those of the direct R command. If the work area is empty, the command sets the default file. Remember the INCLUDE-FILE implied by a second READ-FILE command.

5.5. INCLUDE-FILE

The command is like the READ-FILE command, but is used to merge in a new file (or part of a file). The default file-name is NOT updated.

5.6. SET-BLOCK-SIZE

This command is used to set the block (line) size of a random file without CR and LF when it is read in PED. The file cannot be written.

5.7. WRITE-FILE

The parameters in this command are identical to the direct W command.
The WRITE-FILE command sets the default file-name.

5.8. APPEND-TO-FILE

The APPEND-TO-FILE command is a WRITE-APPEND order and is in fact an extension of the WRITE-FILE command.

Its function is to append a specific text from the PED work area to the file specified, instead of replacing it.

The APPEND-TO-FILE command sets the default file-name.

5.9. DELETE-LINES

The parameters are identical to those of the direct D command.

5.10. INSERT-LINE

The parameters are identical to those of the direct I command.

5.11. MOVE-TO-LINE

The parameters are identical to those of the direct M command.

5.12. GET-STRING

The parameters are identical to those of the direct G command.

5.13. SUBSTITUTE

The parameters are identical to those of the direct S command.

5.14. MATCH-ALL

This command may be used prior to the G or GET-STRING command and the S or SUBSTITUTE command, to tell PED not to distinguish between lower and upper case characters.

Example: The MATCH-ALL command given prior to the GET and SUBSTITUTE commands will cause these commands to find 'united nations', as well as 'United Nations' or 'UNITED NATIONS'.

When the MATCH-ALL command is in force, the word MATCH is written out on the second screen line, as a reminder.

5.15. EXACT-MATCH

The EXACT-MATCH command may be used prior to the G (GET) or S (SUBSTITUTE) commands to tell PED to regard lower and upper case characters as different. Then there will only be a match with an exact replica of the string, e.g. either 'united nations', or 'United Nations' or 'UNITED NATIONS', but not all three of them.

5.16. SET-HORIZONTAL-STEP

This command enables you to redefine the number of character positions that the screen text will be moved right/left with the right- and the left-arrow. (Default is 40 positions.)

The parameter of this command is as follows:

- SET-HORIZONTAL-STEP:<x>CR

where <x> is a number of character positions between 1 and 255.

If, after executing this command, the right/left-arrow is pressed, the screen text will be moved the requested number of positions right/left.

Home key or the slanted arrow will reset the screen image as it was before the screen text was scrolled left/right, i.e. shift it back again. Default is 40 positions.

5.17. SET-TABULATORS

The parameters are identical to those of the direct T command.

5.18. SET-BORDERS

The parameters are identical to those of the direct B command.

5.19. SET-DEFAULT-FILE

The command may be used to set the default file-name.

5.20. SET-MAIN-FILE

This command may be used to set the main file name for PERFORM, i.e. the file which PED will use as a parameter in response to the ACTIVATE SUBSYSTEM command ('A' or 'C').

5.21. TIME-USED

This command is given to check on the CPU time used during the current editing session.

The format of the answer is

- CPU TIME USED IS: <x> SECS OUT OF: <y> SECS

where <x> is the CPU time used during the current editing session, and <y> is the CPU time used since you logged in as a user.

5.22. FIRST-WINDOW

The command is identical to the direct F/1 command.

5.23. NEXT-WINDOW

The command is identical to the direct N/DOWN-ARROW command.

5.24. PREVIOUS WINDOW

The command is identical to the direct P/UP-ARROW command.

5.25. LAST-WINDOW

The command is identical to the direct L/\$ command.

5.26. TRACE-CURSOR

The command is identical to the direct V command.

5.27. EXIT/END

The command is used to exit from PED, as in direct command mode. PED will not accept this command without ensuring that you have remembered to write your text into a file (Write Forgotten?).

6. The CONTROL KEY Commands

Note that in these commands 'x' represents any character or control key.

6.1. MOVE CURSOR RIGHT TO FIRST 'x' (Ctrl F + 'x')

Pressing the control key together with the character 'F', and then pressing 'x' will move the cursor forwards to the first occurrence of 'x'. The search is limited to one work area line only, and will stop at the first occurrence of 'x' unless the command is repeated. Twice Ctrl F or Ctrl F followed by CR will move the cursor to the end of the current line.

6.2. MOVE CURSOR LEFT TO FIRST 'x' (Ctrl R + 'x')

Pressing the control key together with the character 'R', and then pressing 'x' will move the cursor backwards to the first occurrence of 'x'. The search is limited to one work area line only, and will stop at the first occurrence of 'x' unless the command is repeated. Twice Ctrl R or Ctrl R followed by CR will move the cursor to the start of the current line.

6.3. MOVE CURSOR TO NEXT TAB STOP (Ctrl T or Ctrl I)

Pressing the control key together with the character 'T' or 'I' (depending on terminal type) will move the cursor to the next tabulator position. The tabulator positions are set with a Direct or with a Full command.

6.4. MOVE CURSOR TO PREVIOUS TAB STOP (Ctrl Y or Ctrl U)

Pressing the control key together with the character 'Y' or 'U' (depending on terminal type) will move the cursor back to the previous tabulator position.

6.5. COPY FROM PREVIOUS LINE UP TO AND INCL. 'x' (Ctrl P + 'x')

Pressing the control key together with the character 'P', and then pressing 'x', will have the following effects:

If 'x' is a character on the previous line positioned to the right of the cursor position, the contents of the previous line will be copied into the current line up to and including 'x'.

If 'x' is CR or 'Return', all of the previous line which is to the right of the cursor position will be copied into the current line, and the cursor positioned at the beginning of the next line.

If 'x' is another Ctrl 'P', the text in the previous line to the right of the cursor position will be copied into the current line, and the

cursor will be positioned after the last character on the line.

6.6. COPY ONE CHARACTER FROM PREVIOUS LINE (Ctrl C)

This command is used to copy one character from the previous line into the current line. Position the cursor on the current line, but directly under the letter to be copied. Then press the control key together with the letter C. The cursor will be moved one position to the right.

6.7. COPY ONE CHARACTER FROM NEXT LINE (Ctrl N)

This command is used to copy one character from the next line into the current line. The procedure is the same as for Ctrl C above, except that it is the character positioned directly under the cursor which will be copied into the current line.

6.8. COPY FROM NEXT LINE UP TO AND INCL. 'x' (FLI+ Ctrl P+'x')

In this command FLI is a function lead-in character which is input differently on different terminals. On INFOTON/200 and TANDBERG/2115 the command must be executed as follows:

- Hold CTRL and SHIFT down while pressing the UNDERLINE key, This is equivalent to the octal value 37 of the function lead-in character FLI.
- Then press Ctrl P.
- Finally, press 'x', which will be the last character in the string copied from the next line. The possible values of 'x' are as described under the Ctrl P + 'x' command.

6.9. INSERT BLANK LINE BEFORE CURRENT LINE (Ctrl L)

Pressing the control key together with the character L will give space for a new line between two already existing lines. Space is given before the line where the cursor is placed. After the command has been executed, the cursor is placed at the start of the blank line.

6.10. DELETE CHARACTERS UP TO AND INCL. 'x' (Ctrl D+'x')

This command is used to delete part of a line, or a whole line. Press the control key and the character D together, and then 'x' which determines what will actually be deleted.

If 'x' is a character between the current cursor position and the rest of the line, all characters between cursor position and 'x' inclusive will be deleted and the line contracted.

If 'x' is CR or Return, the whole line after cursor position will be

deleted. If cursor position is the beginning of the line, the whole line will be blanked.

If the command Ctrl D is repeated, the whole line is deleted and the lines below moved one line up.

To restore a deleted line, see Ctrl Q below.

6.11. RESTORE LAST DELETED LINE (Ctrl Q)

This command has two functions:

- a) It can restore the last line deleted with the Ctrl D command above, and reinsert it into its original location in the text.
- b) It can be used to move a single line to another location in the text, thus:

- Delete the line to be moved by giving the Ctrl D command twice. Position the cursor to the line before which the deleted line is to be reinserted, and give the Ctrl Q command. The deleted line will then reappear in its new location. The deleted line can be inserted in several locations in this manner, for as long as it remains the last line to have been deleted by Ctrl D.

6.12. SPLIT-LINE (Ctrl S)

Pressing the control key and the character S together will cause the line to be split in two at the current cursor position, and the right part of the line to be inserted as a new line under the current one.

6.13. CONTINUE SEARCHING (Ctrl G)

Pressing the control key together with the character G will cause a search initiated by a Direct G or a Full GET-STRING command to be continued.

6.14. SET/RESET INSERT MODE (Ctrl B)

This command is used to ensure that a blank line is obtained by CR, whenever text is to be inserted in an already full work area window.

When Ctrl B is pressed, the text /INSERT MODE/ will appear on the message line. Pressing Ctrl B a second time resets PED to normal mode.

6.15. SET/RESET EXPAND MODE (Ctrl E)

This command is used to give room for extra characters in the text. The word '/EXPAND/' appears on the message line while the expand mode is active. Pressing Ctrl E once more resets PED to normal mode.

When text is to be inserted, the cursor must be positioned under the character in front of which the new text is to appear. The new text may then be typed in after the Ctrl E command has been given.

If the work area line is full, the error message: `TOO LONG LINE` is written out.

6.16. SET MARKER/GIVE CURSOR POSITION (Ctrl V)

This command has two functions:

1) The first is to determine an interval of lines which can be used by the Direct and Full DELETE and INSERT commands or a line that can be used in the MOVE command.

2) The second is to give information regarding the character under which the cursor is placed. In this latter function it plays the same role as when the Set Marker/Give Cursor Position command has been given with the Direct V command.

If the character `&` is printed in the text, it usually means that the character occupying that position is a control character (see Ctrl O below). The Ctrl V command may then be used to determine the actual octal value of this character.

The output resulting from the command is described under the direct V command.

NOTE! Each time the Ctrl V command is given, the words FROM or TO will precede the word LINE. This indicates that the line number is stored away and can later be used in the Direct or Full DELETE and INSERT commands, or in the MOVE command. If the Ctrl V command has been used to mark an area for deletion or insertion, no operation causing lines to be deleted or inserted must be carried out before that particular area has been deleted or inserted. Otherwise the line numbers stored away will no longer be the right ones.

6.17. DELETE CHARACTER (DEL-key or Ctrl A)

This command is used to delete a single character. The cursor is placed under the character to be deleted. When Ctrl A or the DELETE key is pressed the character is deleted and the line is shifted one position to the left. If the cursor is positioned after the last character on a line, that last character is deleted and the cursor is shifted one position to the left.

6.18. ACCEPT CONTROL CHARACTER (Ctrl O)

This command allows any edit or control character to be accepted as a normal character.

Pressing the control key and O simultaneously will cause PED to insert the next character typed (usually a control character) in the text at the current cursor position.

NOTE! If one wants to input the character ESC, the sequence may be either Ctrl O + DEL, or Ctrl O + ESC. This is translated to ESC internally.

Control characters will be written out on the screen as & . The value of the control character can be verified with Ctrl V while the cursor is positioned under the & .

7. PED and SYSTEM Error Messages

7.1. Error Types

Two different kinds of error messages exist: those from the file system and those from the Program Editor (PED).

7.2. File System Errors

These error messages are described in the SINTRAN III REFERENCE MANUAL ND-60.128.01, Appendix D.

7.3. Program Editor Errors

These error messages are given in the screen home position in connection with the editor commands.

7.3.1. WRITE FORGOTTEN?

This message is given when trying to exit from PED without having given a WRITE command to save the edited area on a file. If the EXIT command is repeated, it will be accepted.

7.3.2. NOT FOUND : (string)

Indicates that, during a Direct or Full GET command or a continued Ctrl G, all occurrences of the string concerned have been found, or that the string cannot be found at all.

7.3.3. NO SUCH COMMAND

Occurs when an unauthorized command is used.

7.3.4. INVALID PARAMETER :

Indicates that, during a command, unrecognized parameters occur.

7.3.5. NOT POSSIBLE.

Occurs when a situation arises that the Program Editor cannot handle.

7.3.6. AMBIGUOUS COMMAND.

Occurs when a command is not specific enough to be uniquely defined.

7.3.7. NO SUCH FILE-NAME.

Occurs when the file-name requested with the Direct or Full READ and WRITE commands is erroneous, or has not yet been created.

7.3.8. ERROR, BORDER RANGE IS: 1 - 255

Occurs, as a reminder, if an attempt is made to set borders outside accepted border range.

7.3.9. TOO LONG LINE.

Occurs if the work area line is full.

7.3.10. NOT ASCENDING ORDER.

Occurs if tabulator or border positions are input in descending, instead of ascending, order.

7.3.11. ILLEGAL <FROM TO INSERT-LINE>.

Occurs if the parameters of the I or INSERT-LINE command are erroneous.

7.3.12. INSERT-LINE IS GREATER THAN LAST LINE.

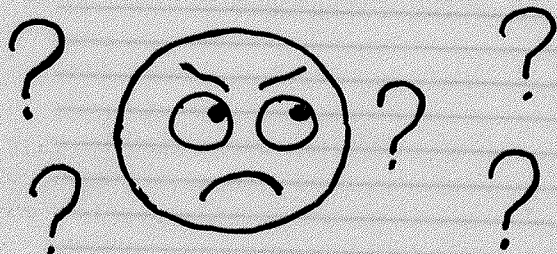
Occurs if the INSERT parameter in the I or INSERT-LINE command is a line number higher than the last line in the current file.

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***** **SEND US YOUR COMMENTS!!!** *****

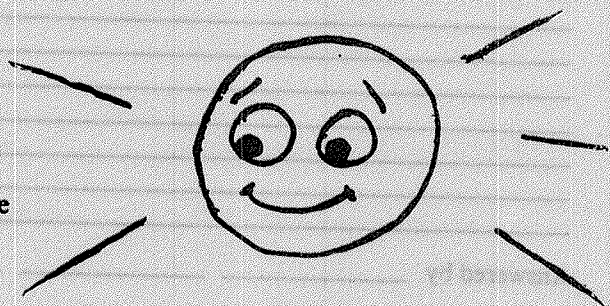


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Please let us know if you

- * find errors
- * cannot understand information
- * cannot find information
- * find needless information

Do you think we could improve the manual by rearranging the contents? You could also tell us if you like the manual!!



***** **HELP YOURSELF BY HELPING US!!** *****

Manual name: PED USER'S GUIDE

Manual number: ND-60.121.03

What problems do you have? (use extra pages if needed)

Do you have suggestions for improving this manual?

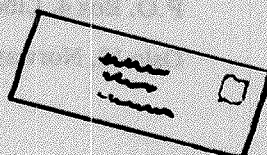
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