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Retooling Enterprise Systems

RM/COBOL®

Syntax Summary

Version 7.5

This document provides complete syntax for all RM/COBOL commands, divisions, entries, statements, and other general formats. Use this pamphlet in conjunction with the *RM/COBOL Language Reference Manual* and the *RM/COBOL User's Guide*.

The *RM/COBOL Syntax Summary* has been prepared for all implementations of RM/COBOL. Consult the *RM/COBOL User's Guide* for all appropriate operating system rules and conventions (such as command line invocation).

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Compile Command

The format of the Compile Command is as follows:

```
rmcobol filename [[ ( ) [[ ~ ] option ] ... ( ) comment ]]
```

filename is the name of the source file to be compiled.

option specifies a compiler option, described below. A tilde (~) preceding the option character negates the option. Options may be specified in either uppercase or lowercase letters. If an option is repeated in a command, the last occurrence of the option is used. Each option may be preceded by a hyphen. If any option is preceded by a hyphen, then a leading hyphen must precede all options. When assigning a value to an option, the equal sign is optional if leading hyphens are used.

comment is used to annotate the command.

Option	Description
A	Direct the compiler to generate the allocation map in the listing.
B	Define as binary sequential those sequential files not explicitly declared to be line sequential in their file control entries.
C	Suppress the inclusion of copied text in the listing.
D	Direct RM/COBOL to compile all source programs as if the WITH DEBUGGING MODE clause appeared in each compiled program.
E	Suppress the inclusion of the source program component in the listing except for lines associated with diagnostic messages.
F ={(<i>keyword-list</i>) <i>keyword</i> }	Direct the compiler to flag occurrences of these language elements: COM1 INTERMEDIATE COM2 OBSOLETE EXTENSION SEG1 HIGH SEG2

If leading hyphens are used, the parentheses are optional.

Option	Description
G = <i>path</i>	Designate a file to be used as the compiler configuration.
H = <i>path</i>	Designate a file as a supplement to the compiler configuration.
K	Suppress the banner message and the terminal error listing.
L [= <i>path</i>]	Direct the compiler to produce a listing file and optionally specify the directory in which to place the listing file.
M	Direct the compiler to suppress automatic input conversion for Format 1 and 3 ACCEPT statements with numeric operands and to suppress right justification of justified operands. Direct the compiler to suppress automatic output conversion for numeric fields of Format 3 DISPLAY statements.
N	Suppress the generation of an object program.
O = <i>path</i>	Specify the directory pathname where the object file will be placed.
P	Direct the compiler to write a copy of the listing to the printer.
Q	Direct the compiler to eliminate debugging information from generated object programs.
R	Direct the compiler to generate a sequential number in the first six columns of source records as they appear on the listing.
S	Direct the compiler to assume a separate sign when the SIGN clause is not specified for a DISPLAY usage, signed numeric data item (that is, for a data item whose character-string within a PICTURE clause begins with S).
T	Direct the compiler to write a copy of the listing to the standard output device.

Option	Description
U [={ B D P }]	<p>Direct the compiler to assume an alternative usage for data items described as COMP or COMPUTATIONAL.</p> <p>The U Option specified alone or as U=B directs the compiler to assume BINARY usage for data items described as COMP or COMPUTATIONAL.</p> <p>The U=D Option directs the compiler to assume DISPLAY usage for items described as COMP or COMPUTATIONAL.</p> <p>The U=P Option directs the compiler to assume PACKED-DECIMAL usage for items described as COMP or COMPUTATIONAL.</p>
V	<p>Define as line sequential those sequential files not explicitly declared to be binary sequential in their file control entries.</p>
W = <i>n</i>	<p>Specify the amount of memory (in kilobytes) that the compiler should use for its internal table storage. <i>n</i> can be a decimal number from 32 to 16384.</p>
X	<p>Direct the compiler to generate a cross reference map in the listing.</p>
Y = <i>n</i>	<p>Direct the compiler to output the symbol table and debug line table to the object program file. <i>n</i> can be 0 to 3.</p>
Z = <i>version</i>	<p>Indicate the version of the RM/COBOL runtime you want to use. <i>version</i> can be 7 through 9.</p>
2	<p>Direct the compiler to accept source programs created for the RM/COBOL 2.<i>n</i> compiler.</p>
7	<p>Specify the semantic rules under which the program is to be compiled as conforming to the American National Standard COBOL 1974.</p>

Runtime Command

The format of the Runtime Command is as follows:

```
runcobol filename [option] ...
```

filename is the name of the main program of the run unit.

option specifies a runtime system option, described below. Options may be specified in either uppercase or lowercase letters. Each option may be preceded by a hyphen. If any option is preceded by a hyphen, then a leading hyphen must precede all options. When assigning a value to an option, the equal sign is optional if leading hyphens are used.

Option	Description
A =[<i>delim</i>] [<i>string</i>] [<i>delim</i>]	Pass an argument to the main program. The delimiter characters are optional if <i>string</i> does not contain spaces.
B = <i>n</i>	Specify a maximum buffer size for use with the ACCEPT and DISPLAY statements.
C = <i>pathname</i>	Designate a file to be used as the runtime configuration file.
D	Invoke the RM/COBOL Interactive Debugger.
I	Collect RM/COBOL program instrumentation data.
K	Suppress the banner message and the STOP RUN message.
L = <i>pathname</i>	Designate RM/COBOL non-COBOL subprogram libraries.
M	Direct that level 2 ANSI semantics are to be used for Format 1 ACCEPT and DISPLAY statements.
S = <i>n . . . n</i>	Set (or reset) the initial value of switches in the RM/COBOL program.
T = <i>n</i>	Specify the amount of memory (<i>n</i> bytes) to be used for a sort operation.
V	Direct that a trace of support modules loaded by the RM/COBOL runtime system be displayed.
X = <i>pathname</i>	Designate a file as a supplement to the runtime configuration.

Debug Commands

The Debug commands are as follows.

Command	Description
A	Set breakpoints and resume program execution from the current location. A [<i>line</i> [+ <i>intra</i> line] [, [<i>prog-name</i>] [, [<i>count</i>]]]]
B	Display all currently set breakpoints or set breakpoints at specific procedural statements. B [<i>line</i> [+ <i>intra</i> line] [, [<i>prog-name</i>] [, [<i>count</i>]]]]
C	Clear any breakpoints that have been set with the A or B Command. C [<i>line</i> [+ <i>intra</i> line] [, [<i>prog-name</i>]]]
D	Display on the screen the value of a specified data item. Identifier Format D <i>name-1</i> [{ IN OF } <i>name-2</i>] ... [<i>script</i>] [<i>refmod</i>] [, { <i>type</i> { * & } [<i>type</i>]] [# <i>alias</i>] Address-Size Format D [<i>base</i> :] <i>address</i> [+ <i>occur-size</i> * <i>occur-num</i>] ... , <i>size</i> , [<i>type</i>] [# <i>alias</i>] Alias Format D # <i>alias</i>
E	End Debug; the currently executing program runs until completion. E
L	Specify a line on the monitor screen at which command input echoes and Debug responses are to be displayed. L [<i>line-display</i>]

Command	Description
M	<p>Change the value of a specified data item.</p> <p>Identifier Format M <i>name-1</i> [{ IN OF } <i>name-2</i>] ... [<i>script</i>] [<i>refmod</i>] [, { <i>type</i> { * & } [<i>type</i>] }] [# <i>alias</i>] , <i>value</i></p> <p>Address-Size Format M [<i>base</i> :] <i>address</i> [+ <i>occur-size</i> * <i>occur-num</i>] ... , <i>size</i> , [<i>type</i>] [# <i>alias</i>] , <i>value</i></p> <p>Alias Format M # <i>alias</i> , <i>value</i></p>
Q	<p>Stop program execution.</p> <p>Q</p>
R	<p>Specify that program execution resume at the current location, or at another location specified in the command.</p> <p>R [<i>statement-address</i>]</p>
S	<p>Specify that program execution occur one step at a time.</p> <p>S [P S] [<i>count</i>]</p>
T	<p>Monitor the value of a specified data item, and suspend execution whenever a change in that value occurs. That is, a data trap.</p> <p>Identifier Format T <i>name-1</i> [{ IN OF } <i>name-2</i>] ... [<i>script</i>] [<i>refmod</i>] [, { <i>type</i> { * & } [<i>type</i>] }] [# <i>alias</i>]</p> <p>Address-Size Format T [<i>base</i> :] <i>address</i> [+ <i>occur-size</i> * <i>occur-num</i>] ... , <i>size</i> , [<i>type</i>] [# <i>alias</i>]</p> <p>Alias Format T # <i>alias</i></p>
U	<p>Clear some or all currently active data traps.</p> <p>Identifier Format U <i>name-1</i> [{ IN OF } <i>name-2</i>] ... [<i>script</i>] [<i>refmod</i>] [, { <i>type</i> { * & } [<i>type</i>] }]</p> <p>Address-Size Format U [<i>base</i> :] <i>address</i> [+ <i>occur-size</i> * <i>occur-num</i>] ... , <i>size</i> , [<i>type</i>]</p> <p>Alias Format U # <i>alias</i></p>

Note In the Address-Size formats for the D, M, T, and U commands, *base* is one of the following:

- **U** *arg-num*, for a formal argument and *arg-num* is the formal argument number.
- **B** *item-num*, for a based linkage item and *item-num* is the based linkage item number.
- **G** for the GIVING formal argument.
- **X** *ext-num*, for an external data item and *ext-num* is the external item number.

Source Program General Format

identification-division
[*environment-division*]
[*data-division*]
[*procedure-division*]
[*nested-source-program*]...
[*end-program-header*]

Identification Division General Format

$\left\{ \begin{array}{l} \text{IDENTIFICATION} \\ \text{ID} \end{array} \right\} \text{ DIVISION.}$
 $\text{PROGRAM-ID.} \left\{ \begin{array}{l} \textit{program-name-1} \\ \textit{literal-1} \end{array} \right\} \left[\text{ IS } \left\{ \left\{ \begin{array}{l} \text{COMMON} \\ \text{INITIAL} \end{array} \right\} \right\} \text{ PROGRAM} \right].$
[AUTHOR. [*comment-entry-1*]...]
[INSTALLATION. [*comment-entry-2*]...]
[DATE - WRITTEN. [*comment-entry-3*]...]
[DATE - COMPILED. [*comment-entry-4*]...]
[SECURITY. [*comment-entry-5*]...]
[REMARKS. [*comment-entry-6*]...]

Environment Division General Format

```

[
  ENVIRONMENT DIVISION.

  CONFIGURATION SECTION.

  SOURCE - COMPUTER . [ computer-name-1

    [ WITH DEBUGGING MODE ]. ] ]

  OBJECT - COMPUTER . [ computer-name-2

    [ MEMORY SIZE integer-1 { WORDS
                              CHARACTERS
                              MODULES } ]
    [ PROGRAM COLLATING SEQUENCE IS alphabet-name-1 ]
    [ SEGMENT -LIMIT IS segment-number-1 ] . ] ]

  SPECIAL - NAMES . [

    [ switch-name-1 { IS mnemonic-name-1 [ { ON STATUS IS condition-name-1 }
    [ OFF STATUS IS condition-name-2 } ] ] ]
    [ feature-name-1 IS mnemonic-name-2 ]
    [ low-volume-I-O-name-1 IS mnemonic-name-3 ]
    ... ] ] ]

```

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$$\left[\text{ALPHABET } \textit{alphabet-name-1} \text{ IS } \left\{ \begin{array}{l} \text{STANDARD-1} \\ \text{STANDARD-2} \\ \text{NATIVE} \\ \textit{code-name-1} \\ \left\{ \textit{literal-1} \left[\left\{ \frac{\text{THROUGH}}{\text{THRU}} \right\} \textit{literal-2} \right] \right\} \dots \\ \left[\text{ALSO } \textit{literal-3} \left[\left\{ \frac{\text{THROUGH}}{\text{THRU}} \right\} \textit{literal-4} \right] \right] \dots \left\{ \dots \right\} \dots \end{array} \right. \right]$$

$$\left[\text{SYMBOLIC} \left[\text{CHARACTER CHARACTERS} \right] \left\{ \left\{ \textit{symbolic-character-1} \right\} \dots \left[\text{IS ARE} \right] \right. \right. \\ \left. \left. \left\{ \textit{integer-1} \right\} \dots \right\} \dots \left[\text{IN } \textit{alphabet-name-2} \right] \dots \right]$$

$$\left[\text{CLASS } \textit{class-name-1} \text{ IS } \left\{ \textit{literal-5} \left[\left\{ \frac{\text{THROUGH}}{\text{THRU}} \right\} \textit{literal-6} \right] \right\} \dots \right] \dots$$

$$\left[\text{CURRENCY SIGN IS } \textit{literal-7} \right]$$

$$\left[\text{DECIMAL-POINT IS COMMA} \right] \cdot \left. \right] \left. \right] \left. \right]$$

File Control Entry General Formats

File Control Entry

SELECT [[NOT] OPTIONAL] *file-name-1*

ASSIGN TO { [DISPLAY
INPUT
OUTPUT
INPUT - OUTPUT] *literal-1*
RANDOM
TAPE
device-name-1 }
[DISPLAY
INPUT
OUTPUT
INPUT - OUTPUT] [*data-name-1*]
RANDOM
TAPE
device-name-1 }

[RESERVE { *integer-1*
NO } [ALTERNATE] [AREA
AREAS]]

[ORGANIZATION IS] { [BINARY
LINE] SEQUENTIAL
RELATIVE
INDEXED }

[PADDING CHARACTER IS { *data-name-2*
literal-2 }]

[RECORD DELIMITER IS { STANDARD-1
delimiter-name-1 }]

[ACCESS MODE IS { [SEQUENTIAL
RANDOM
DYNAMIC] [RELATIVE KEY IS *data-name-3*] }]

(continued on next page)

Data Division General Format

[
 DATA DIVISION.
[
 FILE SECTION.
 [*file-description-entry-1* { *record-description-entry-1* }...
 [*sort-merge-file-description-entry-1* { *record-description-entry-2* }...]...]
[
 WORKING-STORAGE SECTION.
 [*77-level-description-entry-1*]...
 [*record-description-entry-3*]]
[
 LINKAGE SECTION.
 [*77-level-description-entry-2*]...
 [*record-description-entry-4*]]
[
 COMMUNICATION SECTION.
 [*communication-description-entry-1* { *record-description-entry-5* }...]...]
[
 SCREEN SECTION.
 [*screen-description-entry-1*]...]]]

record-description-entry

{ *data-description-entry-1* } ...

77-level-description-entry

data-description-entry-2

data-description-entry

Format 1: Data-Name Full Declaration

level-number-1 [*data-name-1*]
 FILLER]
 [REDEFINES *data-name-2*]
 [IS EXTERNAL]
 [IS GLOBAL]
 [{ PICTURE } IS *character-string-1*]
 [{ PIC }]
 [[USAGE IS] { BINARY [(*integer-3*)]
 COMPUTATIONAL
 COMP
 COMPUTATIONAL - 1
 COMP - 1
 COMPUTATIONAL - 3
 COMP - 3
 COMPUTATIONAL - 4 [(*integer-3*)]
 COMP - 4 [(*integer-3*)]
 COMPUTATIONAL - 6
 COMP - 6
 DISPLAY
 INDEX
 PACKED - DECIMAL
 POINTER }]
 [[SIGN IS] { LEADING
 TRAILING } [SEPARATE CHARACTER]]

(continued on next page)

Format 1: Data-Name Full Declaration (*continued from previous page*)

$$\left[\begin{array}{l} \text{OCCURS } \left\{ \begin{array}{l} \textit{integer-2} \text{ TIMES} \\ \left[\textit{integer-1} \text{ TO } \right] \textit{integer-2} \text{ TIMES } \underline{\text{DEPENDING}} \text{ ON } \textit{data-name-3} \end{array} \right\} \\ \\ \left[\left\{ \begin{array}{l} \underline{\text{ASCENDING}} \\ \underline{\text{DESCENDING}} \end{array} \right\} \text{ KEY IS } \left\{ \textit{data-name-4} \right\} \dots \right] \dots \\ \\ \left[\underline{\text{INDEXED}} \text{ BY } \left\{ \textit{index-name-1} \right\} \dots \right] \\ \\ \left[\left\{ \begin{array}{l} \underline{\text{SYNCHRONIZED}} \\ \underline{\text{SYNC}} \end{array} \right\} \left[\left\{ \begin{array}{l} \underline{\text{LEFT}} \\ \underline{\text{RIGHT}} \end{array} \right\} \right] \right] \\ \\ \left[\left\{ \begin{array}{l} \underline{\text{JUSTIFIED}} \\ \underline{\text{JUST}} \end{array} \right\} \text{ RIGHT} \right] \\ \\ \left[\underline{\text{BLANK}} \text{ WHEN } \underline{\text{ZERO}} \right] \\ \\ \left[\underline{\text{VALUE}} \text{ IS } \textit{literal-1} \right] . \end{array} \right]$$

Format 2: Data-Name Renames

66 *data-name-1*

$$\underline{\text{RENAMES}} \textit{data-name-2} \left[\left\{ \begin{array}{l} \underline{\text{THROUGH}} \\ \underline{\text{THRU}} \end{array} \right\} \textit{data-name-3} \right] .$$

Format 3: Condition-Name Declaration

88 *condition-name-1*

$$\left\{ \begin{array}{l} \underline{\text{VALUE}} \text{ IS} \\ \underline{\text{VALUES}} \text{ ARE} \end{array} \right\} \left\{ \begin{array}{l} \textit{literal-1} \left[\left\{ \begin{array}{l} \underline{\text{THROUGH}} \\ \underline{\text{THRU}} \end{array} \right\} \textit{literal-2} \right] \\ \\ \textit{relational-operator} \textit{literal-1} \end{array} \right\} \dots$$
$$\left[\text{WHEN SET TO } \underline{\text{FALSE}} \text{ IS } \textit{literal-3} \right] .$$

Format 4: Constant-Name Declaration

78 *constant-name-1*

VALUE IS { *literal-1*
constant-expression-1 } .

communication-description-entry

Format 1: Input CD

CD *cd-name-1* FOR [INITIAL] INPUT

{
 {
 SYMBOLIC QUEUE IS *data-name-1*
 SYMBOLIC SUB-QUEUE-1 IS *data-name-2*
 SYMBOLIC SUB-QUEUE-2 IS *data-name-3*
 SYMBOLIC SUB-QUEUE-3 IS *data-name-4*
 MESSAGE DATE IS *data-name-5*
 MESSAGE TIME IS *data-name-6*
 SYMBOLIC SOURCE IS *data-name-7*
 TEXT LENGTH IS *data-name-8*
 END KEY IS *data-name-9*
 STATUS KEY IS *data-name-10*
 MESSAGE COUNT IS *data-name-11*
 }
 {
 data-name-1 *data-name-2* *data-name-3* *data-name-4*
 data-name-5 *data-name-6* *data-name-7* *data-name-8*
 data-name-9 *data-name-10* *data-name-11*
 }
}

Format 2: Output CD

CD *cd-name-1* FOR OUTPUT
 [DESTINATION COUNT IS *data-name-1*]
 [TEXT LENGTH IS *data-name-2*]
 [STATUS KEY IS *data-name-3*]
 [DESTINATION TABLE OCCURS *integer-1* TIMES]
 [INDEXED BY { *index-name-1* }...]
 [ERROR KEY IS *data-name-4*]
 [SYMBOLIC DESTINATION IS *data-name-5*] .

Format 3: Input-Output CD

CD *cd-name-1* FOR [INITIAL] I-O

}	<u>MESSAGE DATE</u> IS <i>data-name-1</i>	}
	<u>MESSAGE TIME</u> IS <i>data-name-2</i>	
	<u>SYMBOLIC TERMINAL</u> IS <i>data-name-3</i>	
	<u>TEXT LENGTH</u> IS <i>data-name-4</i>	
	<u>END KEY</u> IS <i>data-name-5</i>	
	<u>STATUS KEY</u> IS <i>data-name-6</i>	

{ *data-name-1 data-name-2 data-name-3 data-name-4* }

{ *data-name-5 data-name-6* }

screen-description-entry

Format 1: Screen Group

level-number-1 [*screen-name-1*]
FILLER

<u>BACKGROUND</u> IS <i>color-name-1</i>
<u>BACKGROUND-COLOR</u> IS <i>integer-1</i>

<u>FOREGROUND</u> IS <i>color-name-2</i>
<u>FOREGROUND-COLOR</u> IS <i>integer-2</i>

[[USAGE IS] DISPLAY]

[<u>SIGN</u> IS] { <u>LEADING</u> }	[<u>SEPARATE CHARACTER</u>]]
{ <u>TRAILING</u> }	

[AUTO]
[SECURE]
[REQUIRED]
[FULL] .
{ *screen-description-entry-1* }...

Format 2: Screen Literal

$level-number-1$ [$screen-name-1$ FILLER]

[BELL
BEEP]

[BLANK { SCREEN
LINE
REMAINDER }]

[BLINK]

[ERASE { EOS
EOL
SCREEN }]

[[NO] HIGHLIGHT
LOWLIGHT]

[REVERSE
REVERSED
REVERSE - VIDEO]

[UNDERLINE]

[BACKGROUND IS $color-name-1$
BACKGROUND - COLOR IS $integer-1$]

[FOREGROUND IS $color-name-2$
FOREGROUND - COLOR IS $integer-2$]

[LINE [NUMBER IS { [PLUS
+] $integer-3$ }]]]

[{ COLUMN
COL } [NUMBER IS { [PLUS
+] $integer-4$ }]]]

[[VALUE IS] $literal-1$] .

Format 3: Screen Field

$level-number-1 \left[\begin{array}{l} screen-name-1 \\ FILLER \end{array} \right]$

$\left[\begin{array}{l} \underline{BELL} \\ \underline{BEEP} \end{array} \right]$

$\left[\begin{array}{l} \underline{BLANK} \left\{ \begin{array}{l} \underline{SCREEN} \\ \underline{LINE} \\ \underline{REMAINDER} \end{array} \right\} \end{array} \right]$

$\left[\underline{BLINK} \right]$

$\left[\underline{ERASE} \left\{ \begin{array}{l} \underline{EOS} \\ \underline{EOL} \\ \underline{SCREEN} \end{array} \right\} \right]$

$\left[\begin{array}{l} \left[\underline{NO} \right] \underline{HIGHLIGHT} \\ \underline{LOWLIGHT} \end{array} \right]$

$\left[\begin{array}{l} \underline{REVERSE} \\ \underline{REVERSED} \\ \underline{REVERSE - VIDEO} \end{array} \right]$

$\left[\underline{UNDERLINE} \right]$

$\left[\begin{array}{l} \underline{BACKGROUND} \text{ IS } color-name-1 \\ \underline{BACKGROUND - COLOR} \text{ IS } integer-1 \end{array} \right]$

$\left[\begin{array}{l} \underline{FOREGROUND} \text{ IS } color-name-2 \\ \underline{FOREGROUND - COLOR} \text{ IS } integer-2 \end{array} \right]$

$\left[\underline{LINE} \left[\text{NUMBER IS } \left\{ \begin{array}{l} \left[\underline{PLUS} \right] \\ + \end{array} \right\} integer-3 \right\} identifier-1 \right] \right]$

$\left[\left\{ \begin{array}{l} \underline{COLUMN} \\ \underline{COL} \end{array} \right\} \left[\text{NUMBER IS } \left\{ \begin{array}{l} \left[\underline{PLUS} \right] \\ + \end{array} \right\} integer-4 \right\} identifier-2 \right] \right]$

(continued on next page)

Format 3: Screen Field *(continued from previous page)*

{ PICTURE } IS *character-string-1* { { FROM { *identifier-7* } } }
{ PIC } { { TO *identifier-8* } }
{ USING *identifier-9* } }

[[USAGE IS] DISPLAY]
[BLANK WHEN ZERO]
[{ JUSTIFIED } RIGHT]
{ JUST }

[[SIGN IS] { LEADING } [SEPARATE CHARACTER]]
{ TRAILING }

[AUTO]
[SECURE]
[REQUIRED]
[FULL] .

Procedure Division General Formats

Format 1: Declaratives or Sections

$$\left[\left[\text{PROCEDURE DIVISION} \left[\left[\text{USING } \{ \textit{data-name-1} \} \cdots \right] \left[\left\{ \begin{array}{l} \text{GIVING} \\ \text{RETURNING} \end{array} \right\} \textit{data-name-2} \right] \right] \right] \right] .$$

DECLARATIVES.
 { *section-name-1* SECTION [*segment-number-1*].
 USE-statement-1.
 [*paragraph-name-1.*
 [*sentence-1*]...]... }...
 END DECLARATIVES.]
 { *section-name-2* SECTION [*segment-number-2*].
 [*paragraph-name-2.*
 [*sentence-2*]...]... }...]

Format 2: Paragraphs

$$\left[\left[\text{PROCEDURE DIVISION} \left[\left[\text{USING } \{ \textit{data-name-1} \} \cdots \right] \left[\left\{ \begin{array}{l} \text{GIVING} \\ \text{RETURNING} \end{array} \right\} \textit{data-name-2} \right] \right] \right] \right] .$$

{ *paragraph-name-3.*
 [*sentence-3*]... }...]

General Formats for COBOL Statements

The following sections describe the formats for COBOL statements.

ACCEPT Statement

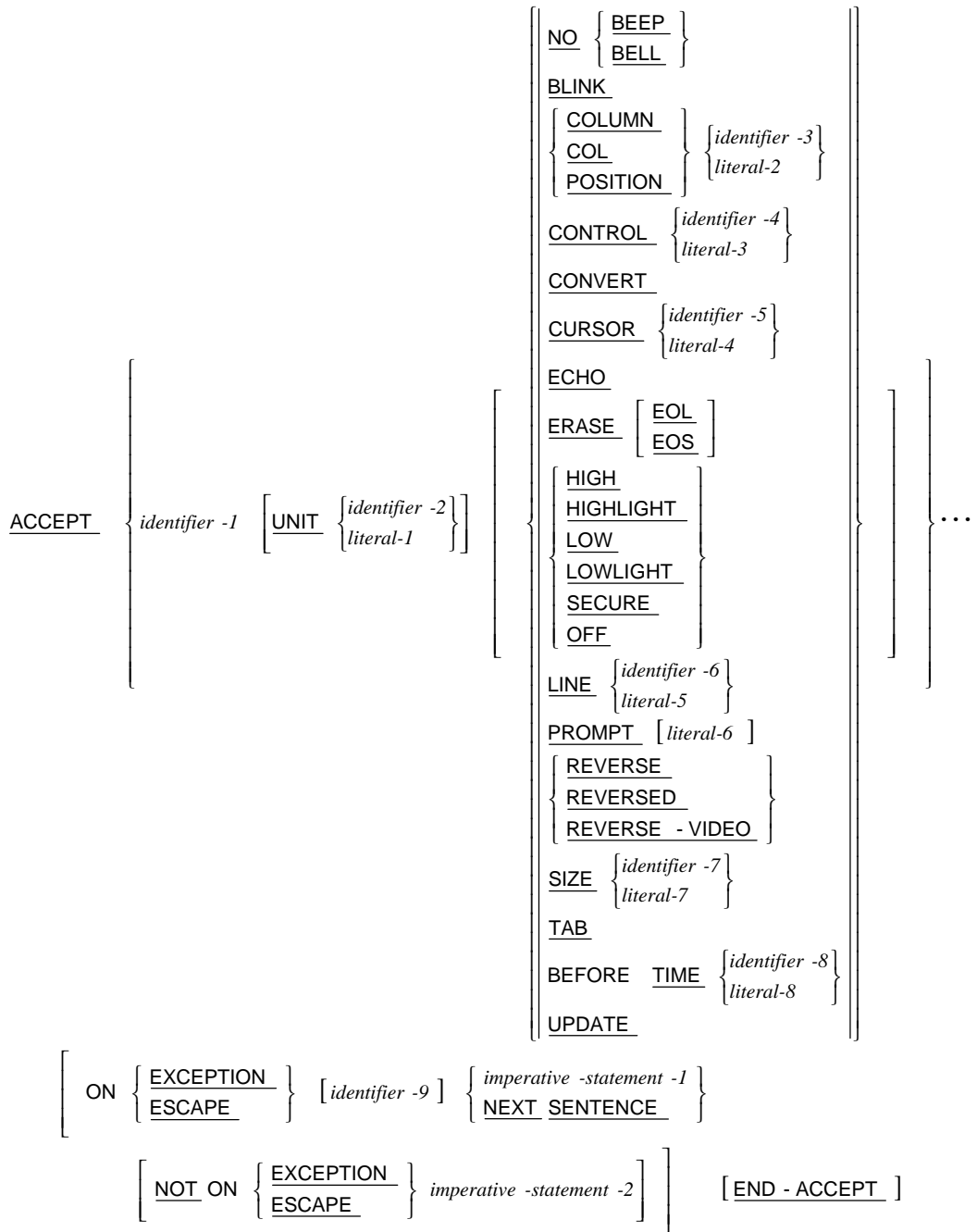
Format 1: Accept From System-Name

ACCEPT *identifier-1* [FROM { *mnemonic-name-3*
low-volume-I-O-name-1 }] [END - ACCEPT]

Format 2: Accept From Implicit Definition

ACCEPT *identifier-2* FROM { CENTURY - DATE
CENTURY - DAY
DATE [YYYYMMDD]
DATE - AND - TIME
DATE - COMPILED
DAY [YYYYDDD]
DAY - AND - TIME
DAY - OF - WEEK
ESCAPE KEY
EXCEPTION STATUS
TIME } [END - ACCEPT]

Format 3: Accept Terminal I-O



Format 4: Accept Input CD Message Count

ACCEPT *cd-name-1* MESSAGE COUNT [END-ACCEPT]

Format 5: Accept Screen-Name

$$\begin{aligned} & \left[\text{ACCEPT } \textit{screen-name-1} \left[\text{AT} \left\{ \begin{array}{l} \text{LINE NUMBER } \left\{ \begin{array}{l} \textit{identifier-1} \\ \textit{integer-1} \end{array} \right\} \\ \left\{ \begin{array}{l} \text{COLUMN} \\ \text{COL} \end{array} \right\} \text{NUMBER } \left\{ \begin{array}{l} \textit{identifier-2} \\ \textit{integer-2} \end{array} \right\} \end{array} \right\} \right] \right] \\ & \left[\text{ON } \left\{ \begin{array}{l} \text{EXCEPTION} \\ \text{ESCAPE} \end{array} \right\} \textit{imperative-statement-1} \right] \\ & \left[\text{NOT ON } \left\{ \begin{array}{l} \text{EXCEPTION} \\ \text{ESCAPE} \end{array} \right\} \textit{imperative-statement-2} \right] \\ & [\text{END-ACCEPT}] \end{aligned}$$

ADD Statement

Format 1: Add...To

ADD { *identifier-1* } ... TO { *identifier-2* [ROUNDED] } ...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - ADD]

Format 2: Add...Giving

ADD { *identifier-1* } ... TO { *identifier-2* } ...
GIVING { *identifier-3* [ROUNDED] } ...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - ADD]

Format 3: Add Corresponding

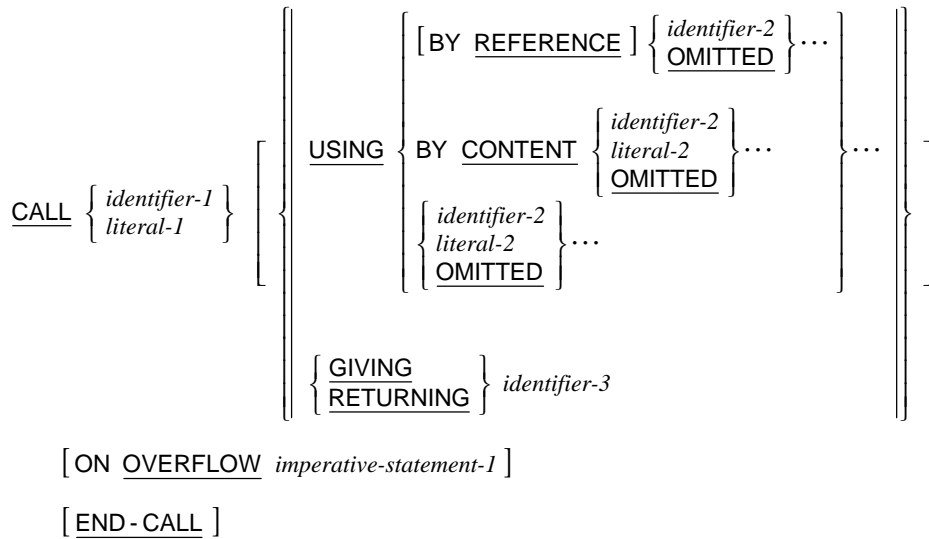
ADD { CORRESPONDING } *identifier-1* TO *identifier-2* [ROUNDED]
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - ADD]

ALTER Statement

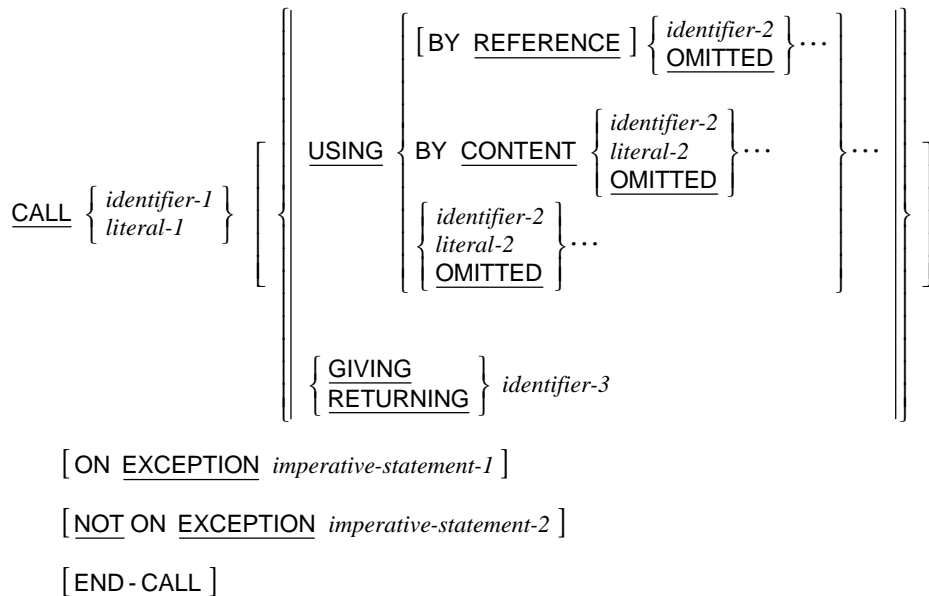
ALTER { *procedure-name-1* TO [PROCEED TO] *procedure-name-2* } ...

CALL Statement

Format 1: Call...On Overflow



Format 2: Call...On Exception



CALL PROGRAM Statement

CALL PROGRAM { *identifier-1* } [USING { *identifier-2* } { *literal-2* } { OMITTED } ...]
[ON EXCEPTION *imperative-statement-1*]
[END-CALL]

CANCEL Statement

CANCEL { *identifier-1* } ...
{ *literal-1* }

CLOSE Statement

CLOSE { *file-name-1* [{ REEL } { UNIT } [{ WITH NO REWIND } [{ FOR REMOVAL }]]]]
[WITH { NO REWIND } { LOCK }] } ...

COMPUTE Statement

COMPUTE { *identifier-1* [ROUNDED] } ... = *arithmetic-expression-1*
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-COMPUTE]

CONTINUE Statement

CONTINUE

DELETE Statement

DELETE *file-name-1* RECORD

[INVALID KEY *imperative-statement-1*]

[NOT INVALID KEY *imperative-statement-2*]

[END-DELETE]

DELETE FILE Statement

DELETE FILE { *file-name-2* }... [END-DELETE]

DISABLE Statement

DISABLE $\left[\begin{array}{l} \text{INPUT } [\text{TERMINAL}] \\ \text{I-O TERMINAL} \\ \text{OUTPUT} \\ \text{TERMINAL} \end{array} \right] cd\text{-name-1} \left[\text{WITH KEY } \left\{ \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \end{array} \right\} \right]$

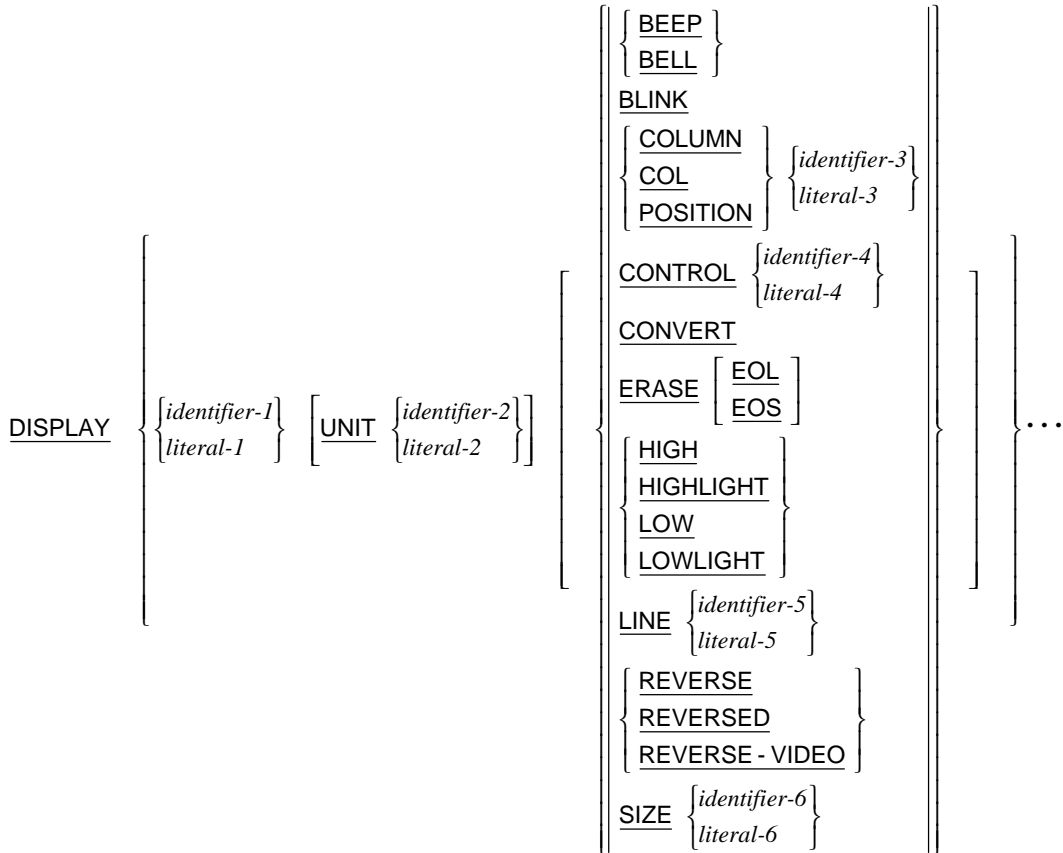
DISPLAY Statement

Format 1: Display Upon System-Name

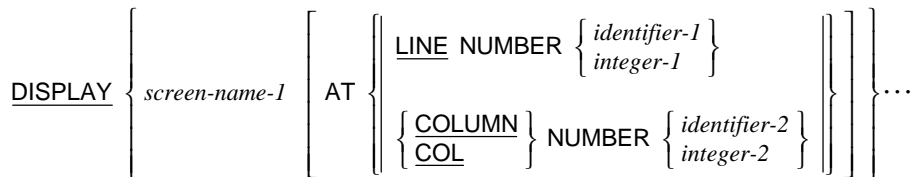
DISPLAY $\left\{ \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \end{array} \right\} \dots \left[\text{UPON } \left\{ \begin{array}{l} \text{mnemonic-name-3} \\ \text{low-volume-I-O-name-1} \end{array} \right\} \right]$

[WITH NO ADVANCING]

Format 2: Display Terminal I-O



Format 3: Display Screen-Name



DIVIDE Statement

Format 1: Divide...Into

DIVIDE { *identifier-1* } { *literal-1* } INTO { *identifier-2* [ROUNDED] }...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-DIVIDE]

Format 2: Divide...Into...Giving

DIVIDE { *identifier-1* } { *literal-1* } INTO { *identifier-2* } { *literal-2* }
GIVING { *identifier-3* [ROUNDED] }...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-DIVIDE]

Format 3: Divide...By...Giving

DIVIDE { *identifier-2* } { *literal-2* } BY { *identifier-1* } { *literal-1* }
GIVING { *identifier-3* [ROUNDED] }...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-DIVIDE]

Format 4: Divide...Into...Giving...Remainder

DIVIDE { *identifier-1* }
 { *literal-1* } } INTO { *identifier-2* }
 { *literal-2* } }

 GIVING *identifier-3* [ROUNDED] REMAINDER *identifier-4*

 [ON SIZE ERROR *imperative-statement-1*]

 [NOT ON SIZE ERROR *imperative-statement-2*]

 [END-DIVIDE]

Format 5: Divide...By...Giving...Remainder

DIVIDE { *identifier-2* }
 { *literal-2* } } BY { *identifier-1* }
 { *literal-1* } }

 GIVING *identifier-3* [ROUNDED] REMAINDER *identifier-4*

 [ON SIZE ERROR *imperative-statement-1*]

 [NOT ON SIZE ERROR *imperative-statement-2*]

 [END-DIVIDE]

ENABLE Statement

ENABLE [INPUT [TERMINAL]]
 [I-O TERMINAL]
 [OUTPUT]
 [TERMINAL]] *cd-name-1* [WITH KEY { *identifier-1* }
 { *literal-1* } }]

ENTER Statement

ENTER *language-name-1* [*routine-name-1*]

EVALUATE Statement

EVALUATE { *identifier-1*
literal-1
expression-1
TRUE
FALSE } [ALSO { *identifier-2*
literal-2
expression-2
TRUE
FALSE }] ...

{ { WHEN { ANY
condition-1
TRUE
FALSE
[NOT] { { *identifier-3*
literal-3
arithmetic-expression-1 } [{ THROUGH
THRU } { *identifier-4*
literal-4
arithmetic-expression-2 }]] } } }

[ALSO { ANY
condition-2
TRUE
FALSE
[NOT] { { *identifier-5*
literal-5
arithmetic-expression-3 } [{ THROUGH
THRU } { *identifier-6*
literal-6
arithmetic-expression-4 }]] } }] ... }

imperative-statement-1 } ...

[WHEN OTHER *imperative-statement-2*]

[END-EVALUATE]

EXIT Statement

Format 1: Exit Paragraph

EXIT

Format 2: Exit Program

EXIT PROGRAM

Format 3: Exit In-Line Perform

EXIT PERFORM [CYCLE]

Format 4: Exit Paragraph or Section

EXIT { PARAGRAPH }
 { SECTION }

GOBACK Statement

GOBACK

GO TO Statement

Format 1: Go To (Alterable)

GO TO [*procedure-name-1*]

Format 2: Go To (Non-Alterable)

GO TO *procedure-name-1*

Format 3: Go To...Depending On

GO TO { *procedure-name-1* }... DEPENDING ON *identifier-1*

IF Statement

IF *condition-1* THEN { *statement-1*
NEXT SENTENCE }

[ELSE { *statement-2*
NEXT SENTENCE }]

[END-IF]

INITIALIZE Statement

INITIALIZE { *identifier-1* }... [WITH FILLER]

[{ ALL
category-name } TO VALUE]

[THEN REPLACING { *category-name* DATA BY { *identifier-2*
literal-1 } }...]

[THEN TO DEFAULT]

where *category name* is:

{
ALPHABETIC
ALPHANUMERIC
ALPHANUMERIC - EDITED
DATA - POINTER
NUMERIC
NUMERIC - EDITED
}

INSPECT Statement

Format 1: Inspect...Tallying

INSPECT *identifier-1* TALLYING

$$\left\{ \begin{array}{l} \text{identifier-2} \text{ FOR} \end{array} \left\{ \begin{array}{l} \text{CHARACTERS} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \\ \left\{ \begin{array}{l} \text{ALL} \\ \text{LEADING} \end{array} \right\} \left\{ \begin{array}{l} \text{identifier-3} \\ \text{literal-1} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \dots \end{array} \right\} \dots \dots \left. \right\} \dots \dots$$

Format 2: Inspect...Replacing

INSPECT *identifier-1* REPLACING

$$\left\{ \begin{array}{l} \text{CHARACTERS} \text{ BY} \left\{ \begin{array}{l} \text{identifier-5} \\ \text{literal-3} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \\ \left\{ \begin{array}{l} \text{ALL} \\ \text{LEADING} \\ \text{FIRST} \end{array} \right\} \left\{ \begin{array}{l} \text{identifier-3} \\ \text{literal-1} \end{array} \right\} \text{ BY} \left\{ \begin{array}{l} \text{identifier-5} \\ \text{literal-3} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \dots \end{array} \right\} \dots \dots \left. \right\} \dots \dots$$

Format 3: Inspect...Tallying...Replacing

INSPECT *identifier-1* TALLYING

$$\left\{ \begin{array}{l} \text{identifier-2} \text{ FOR} \end{array} \left\{ \begin{array}{l} \text{CHARACTERS} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \\ \left\{ \begin{array}{l} \text{ALL} \\ \text{LEADING} \end{array} \right\} \left\{ \begin{array}{l} \text{identifier-3} \\ \text{literal-1} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \dots \end{array} \right\} \dots \dots \left. \right\} \dots \dots$$

REPLACING

$$\left\{ \begin{array}{l} \text{CHARACTERS} \text{ BY} \left\{ \begin{array}{l} \text{identifier-5} \\ \text{literal-3} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \\ \left\{ \begin{array}{l} \text{ALL} \\ \text{LEADING} \\ \text{FIRST} \end{array} \right\} \left\{ \begin{array}{l} \text{identifier-3} \\ \text{literal-1} \end{array} \right\} \text{ BY} \left\{ \begin{array}{l} \text{identifier-5} \\ \text{literal-3} \end{array} \right\} \left[\begin{array}{l} \text{BEFORE} \\ \text{AFTER} \end{array} \right] \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \dots \dots \end{array} \right\} \dots \dots \left. \right\} \dots \dots$$

Format 4: Inspect...Converting

INSPECT *identifier-1* CONVERTING

$\left\{ \begin{array}{l} \text{identifier-6} \\ \text{literal-4} \end{array} \right\} \underline{\text{TO}} \left\{ \begin{array}{l} \text{identifier-7} \\ \text{literal-5} \end{array} \right\} \left[\left\{ \begin{array}{l} \underline{\text{BEFORE}} \\ \underline{\text{AFTER}} \end{array} \right\} \text{INITIAL} \left\{ \begin{array}{l} \text{identifier-4} \\ \text{literal-2} \end{array} \right\} \right] \dots$

MERGE Statement

MERGE *file-name-1* $\left\{ \text{ON} \left\{ \begin{array}{l} \underline{\text{ASCENDING}} \\ \underline{\text{DESCENDING}} \end{array} \right\} \text{KEY} \left\{ \text{data-name-1} \right\} \dots \right\} \dots$

$\left[\text{COLLATING} \underline{\text{SEQUENCE IS}} \text{ } \textit{alphabet-name-1} \right]$

USING *file-name-2* $\left\{ \textit{file-name-3} \right\} \dots$

$\left\{ \begin{array}{l} \underline{\text{OUTPUT PROCEDURE IS}} \textit{procedure-name-1} \left[\left\{ \begin{array}{l} \underline{\text{THROUGH}} \\ \underline{\text{THRU}} \end{array} \right\} \textit{procedure-name-2} \right] \\ \underline{\text{GIVING}} \left\{ \textit{file-name-4} \right\} \dots \end{array} \right\}$

MOVE Statement

Format 1: Move...To

MOVE $\left\{ \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \end{array} \right\} \underline{\text{TO}} \left\{ \text{identifier-2} \right\} \dots$

Format 2: Move Corresponding

MOVE $\left\{ \begin{array}{l} \underline{\text{CORRESPONDING}} \\ \underline{\text{CORR}} \end{array} \right\} \text{identifier-1} \underline{\text{TO}} \left\{ \text{identifier-2} \right\} \dots$

MULTIPLY Statement

Format 1: Multiply...By

MULTIPLY { *identifier-1* / *literal-1* } BY { *identifier-2* [ROUNDED] }...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-MULTIPLY]

Format 2: Multiply...Giving

MULTIPLY { *identifier-1* / *literal-1* } BY { *identifier-2* / *literal-2* }
GIVING { *identifier-3* [ROUNDED] }...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END-MULTIPLY]

OPEN Statement

OPEN [EXCLUSIVE]

{
 INPUT { *file-name-1* [WITH LOCK] [REVERSED / WITH NO REWIND] }...
 OUTPUT { *file-name-2* [WITH LOCK] [WITH NO REWIND] }...
 I-O { *file-name-3* [WITH LOCK] }...
 EXTEND { *file-name-4* [WITH LOCK] }...
}

PERFORM Statement

Format 1: Perform (Once)

PERFORM [*procedure-name-1* [{ THROUGH } THRU] *procedure-name-2*]]
[*imperative-statement-1* END-PERFORM]

Format 2: Perform...Times

PERFORM [*procedure-name-1* [{ THROUGH } THRU] *procedure-name-2*]]
{ *identifier-1* } TIMES
integer-1
[*imperative-statement-1* END-PERFORM]

Format 3: Perform...Until

PERFORM [*procedure-name-1* [{ THROUGH } THRU] *procedure-name-2*]]
[WITH TEST { BEFORE } AFTER] UNTIL *condition-1*
[*imperative-statement-1* END-PERFORM]

Format 4: Perform...Varying

PERFORM [*procedure-name-1* [{ THROUGH } { THRU } *procedure-name-2*]]

[WITH TEST { BEFORE } { AFTER }]

VARYING { *identifier-2* } { *index-name-1* } FROM { *identifier-3* } { *index-name-2* } { *literal-1* } BY { *identifier-4* } { *literal-2* }

UNTIL *condition-1*

[AFTER { *identifier-5* } { *index-name-3* } FROM { *identifier-6* } { *index-name-4* } { *literal-3* } BY { *identifier-7* } { *literal-4* }

UNTIL *condition-2*] ...

[*imperative-statement-1* END-PERFORM]

PURGE Statement

PURGE *cd-name-1*

READ Statement

Format 1: Read Sequential Access

READ *file-name-1* [NEXT
PREVIOUS] RECORD [{ [WITH [NO] LOCK] |
[INTO *identifier-1*] }]

[AT END *imperative-statement-1*]

[NOT AT END *imperative-statement-2*]

[END-READ]

Format 2: Read Random Access

READ *file-name-1* RECORD [{ [WITH [NO] LOCK] |
[INTO *identifier-1*] }]

[KEY IS { *data-name-1*
split-key-name-1 }]

[INVALID KEY *imperative-statement-1*]

[NOT INVALID KEY *imperative-statement-2*]

[END-READ]

RECEIVE Statement

RECEIVE *cd-name-1* { MESSAGE
SEGMENT } INTO *identifier-1*

[NO DATA *imperative-statement-1*]

[WITH DATA *imperative-statement-2*]

[END-RECEIVE]

RELEASE Statement

RELEASE *record-name-1* [FROM { *identifier-1*
literal-1 }]

RETURN Statement

RETURN *file-name-1* RECORD [INTO *identifier-1*]
[AT END *imperative-statement-1*]
[NOT AT END *imperative-statement-2*]
[END-RETURN]

REWRITE Statement

REWRITE *record-name-1* [FROM { *identifier-1*
literal-1 }]
[INVALID KEY *imperative-statement-1*]
[NOT INVALID KEY *imperative-statement-2*]
[END-REWRITE]

SEARCH Statement

Format 1: Search (Serial)

SEARCH *identifier-1* [VARYING { *identifier-2*
index-name-1 }]
[AT END *imperative-statement-1*]
{ WHEN *condition-1* { *imperative-statement-2*
NEXT SENTENCE } } ...
[END - SEARCH]

Format 2: Search All (Binary)

SEARCH ALL *identifier-1*
[AT END *imperative-statement-1*]
WHEN { *data-name-1* { IS EQUAL TO
IS = } { *identifier-3*
literal-1
arithmetic-expression-1 } }
condition-name-1
[AND { *data-name-2* { IS EQUAL TO
IS = } { *identifier-4*
literal-2
arithmetic-expression-2 } }] ...
{ *imperative-statement-2*
NEXT SENTENCE }
[END - SEARCH]

Format 4: Set Condition-Name True/False

SET { { *condition-name-1* } ... TO { TRUE
FALSE } } ...

Format 5: Set Pointer

SET { { ADDRESS [IN
OF] *data-name-1* } ... TO { ADDRESS [IN
OF] *identifier-5* }
identifier-6
NULL
NULLS } } ...

Format 6: Set Pointer Up/Down

SET { { ADDRESS [IN
OF] *data-name-1* } ... { UP
DOWN } BY { *identifier-7*
integer-3
LENGTH [IN
OF] *identifier-8* } } ...

SORT Statement

SORT *file-name-1* { ON { ASCENDING
DESCENDING } KEY { *data-name-1* } ... } ...

[WITH DUPLICATES IN ORDER]

[COLLATING SEQUENCE IS *alphabet-name-1*]

{ INPUT PROCEDURE IS *procedure-name-1* [{ THROUGH
THRU } *procedure-name-2*] }
USING { *file-name-2* } ...

{ OUTPUT PROCEDURE IS *procedure-name-3* [{ THROUGH
THRU } *procedure-name-4*] }
GIVING { *file-name-3* } ...

START Statement

START *file-name-1* KEY { IS [NOT] LESS THAN
IS [NOT] <
IS EQUAL TO
IS =
IS [NOT] GREATER THAN
IS [NOT] >
IS GREATER THAN OR EQUAL TO
IS >=
IS LESS THAN OR EQUAL TO
IS <=
IS FIRST
IS LAST } { *data-name-1*
split-key-name-1 }

[WITH SIZE { *identifier-1* }
{ *integer-1* }]

[INVALID KEY *imperative-statement-1*]

[NOT INVALID KEY *imperative-statement-2*]

[END-START]

STOP Statement

$$\text{STOP} \left\{ \begin{array}{l} \text{RUN} \left[\begin{array}{l} \textit{identifier-1} \\ \textit{integer-1} \end{array} \right] \\ \left\{ \begin{array}{l} \textit{identifier-2} \\ \textit{literal-1} \end{array} \right\} \end{array} \right\}$$

STRING Statement

$$\text{STRING} \left\{ \left\{ \begin{array}{l} \textit{identifier-1} \\ \textit{literal-1} \end{array} \right\} \cdots \text{DELIMITED BY} \left\{ \begin{array}{l} \textit{identifier-2} \\ \textit{literal-2} \\ \text{SIZE} \end{array} \right\} \cdots \right\}$$

INTO *identifier-3*

[WITH POINTER *identifier-4*]

[ON OVERFLOW *imperative-statement-1*]

[NOT ON OVERFLOW *imperative-statement-2*]

[END-STRING]

SUBTRACT Statement

Format 1: Subtract...From

SUBTRACT { *identifier-1* } ... FROM { *identifier-3* [ROUNDED] } ...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - SUBTRACT]

Format 2: Subtract...Giving

SUBTRACT { *identifier-1* } ... FROM { *identifier-2* }
GIVING { *identifier-3* [ROUNDED] } ...
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - SUBTRACT]

Format 3: Subtract Corresponding

SUBTRACT { CORRESPONDING } *identifier-1* FROM *identifier-2* [ROUNDED]
[ON SIZE ERROR *imperative-statement-1*]
[NOT ON SIZE ERROR *imperative-statement-2*]
[END - SUBTRACT]

UNLOCK Statement

UNLOCK *file-name-1* [RECORD
RECORDS]

UNSTRING Statement

UNSTRING *identifier-1*

[DELIMITED BY [ALL] { *identifier-2* } [OR [ALL] { *identifier-3* }] ...]
[literal-1] [literal-2]] ...]
INTO { *identifier-4* [DELIMITER IN *identifier-5*] [COUNT IN *identifier-6*] } ...]
[WITH POINTER *identifier-7*]
[TALLYING IN *identifier-8*]
[ON OVERFLOW *imperative-statement-1*]
[NOT ON OVERFLOW *imperative-statement-2*]
[END-UNSTRING]

USE Statement

USE [GLOBAL] AFTER STANDARD { EXCEPTION
ERROR }

PROCEDURE ON { { *file-name-1* } ... }
INPUT
OUTPUT
I-O
EXTEND }

General Format for END PROGRAM Header

END PROGRAM [*program-name-1*
literal-1] .

General Formats for COPY and REPLACE Statements

COPY { *text-name-1*
literal-1 } [[{ IN } { *library-name-1* }]
[{ OF } { *literal-2* }]]

[REPLACING { [== *pseudo-text-1* ==]
identifier-1
literal-3
word-1 } } BY { [== *pseudo-text-2* ==]
identifier-2
literal-4
word-2 } } ...]

Format 1: Begin or Change Replacement

REPLACE { == *pseudo-text-1* == } BY { == *pseudo-text-2* == } ...

Format 2: End Replacement

REPLACE OFF

General Formats for Conditions

Relation Condition

$$\left. \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \\ \text{arithmetic-expression-1} \\ \text{index-name-1} \end{array} \right\} \text{relational-operator} \left. \begin{array}{l} \text{identifier-2} \\ \text{literal-2} \\ \text{arithmetic-expression-2} \\ \text{index-name-2} \end{array} \right\}$$

where the general format for the *relational-operator* is:

$$\left. \begin{array}{l} \text{IS } \underline{\text{NOT}} \text{ } \underline{\text{GREATER THAN}} \\ \text{IS } \underline{\text{NOT}} \text{ } > \\ \text{IS } \underline{\text{NOT}} \text{ } \underline{\text{LESS THAN}} \\ \text{IS } \underline{\text{NOT}} \text{ } < \\ \text{IS } \underline{\text{NOT}} \text{ } \underline{\text{EQUAL TO}} \\ \text{IS } \underline{\text{NOT}} \text{ } = \\ \text{IS } \underline{\text{GREATER THAN OR EQUAL TO}} \\ \text{IS } >= \\ \text{IS } \underline{\text{LESS THAN OR EQUAL TO}} \\ \text{IS } <= \\ \text{IS } \underline{\text{NOT}} \text{ } \underline{\text{LIKE}} \left[\left[\left[\left\{ \underline{\text{TRIMMED}} \left[\begin{array}{l} \underline{\text{RIGHT}} \\ \underline{\text{LEFT}} \end{array} \right] \right\} \right] \right] \right] \\ \left[\left[\left\{ \underline{\text{CASE - INSENSITIVE}} \right\} \right] \right] \\ \left[\left[\left\{ \underline{\text{CASE - SENSITIVE}} \right\} \right] \right] \right] \end{array} \right\}$$

LIKE Condition (Special Case of a Relation Condition)

$$\left. \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \end{array} \right\} \text{IS } \underline{\text{NOT}} \text{ } \underline{\text{LIKE}} \left[\left[\left[\left\{ \underline{\text{TRIMMED}} \left[\begin{array}{l} \underline{\text{RIGHT}} \\ \underline{\text{LEFT}} \end{array} \right] \right\} \right] \right] \right] \left. \begin{array}{l} \text{identifier-2} \\ \text{literal-2} \end{array} \right\}$$

Class Condition

$$\text{identifier-1 IS } \underline{\text{NOT}} \left\{ \begin{array}{l} \underline{\text{NUMERIC}} \\ \underline{\text{ALPHABETIC}} \\ \underline{\text{ALPHABETIC-LOWER}} \\ \underline{\text{ALPHABETIC-UPPER}} \\ \underline{\text{class-name-1}} \end{array} \right\}$$

Sign Condition

$$\text{arithmetic-expression-1 IS } \underline{\text{NOT}} \left\{ \begin{array}{l} \underline{\text{POSITIVE}} \\ \underline{\text{NEGATIVE}} \\ \underline{\text{ZERO}} \end{array} \right\}$$

Condition-Name Condition

condition-name-1

Switch-Status Condition

condition-name-2

Negated Condition

NOT *condition-1*

Combined Condition

$$\text{condition-2 } \left\{ \left\{ \begin{array}{l} \underline{\text{AND}} \\ \underline{\text{OR}} \end{array} \right\} \text{condition-3} \right\} \dots$$

Abbreviated Combined Relation Condition

$$\text{relation-condition-1 } \left\{ \left\{ \begin{array}{l} \underline{\text{AND}} \\ \underline{\text{OR}} \end{array} \right\} \underline{\text{NOT}} \left[\text{relational-operator} \right] \text{object-1} \right\} \dots$$

General Formats for Qualification

Format 1: Qualification for Data-Names and Condition-Names

$$\left. \begin{array}{l} \{ data-name-1 \\ condition-name-1 \} \end{array} \right\} \left\{ \left\{ \frac{IN}{OF} \right\} data-name-2 \right\} \cdots \left[\left\{ \frac{IN}{OF} \right\} \left\{ \begin{array}{l} file-name-1 \\ cd-name-1 \end{array} \right\} \right] \left. \vphantom{\left\{ \frac{IN}{OF} \right\} data-name-2} \right\} \left\{ \frac{IN}{OF} \right\} \left\{ \begin{array}{l} file-name-1 \\ cd-name-1 \end{array} \right\} \right\}$$

Format 2: Qualification for LINAGE-COUNTER

$$\underline{LINAGE - COUNTER} \left\{ \frac{IN}{OF} \right\} file-name-2$$

Format 3: Qualification for Screen-Names

$$screen-name-1 \left\{ \left\{ \frac{IN}{OF} \right\} screen-name-2 \right\} \cdots$$

Format 4: Qualification for Split-Key-Names

$$split-key-name-1 \left\{ \frac{IN}{OF} \right\} file-name-3$$

Format 5: Qualification for Paragraph Names

$$paragraph-name-1 \left\{ \frac{IN}{OF} \right\} section-name-1$$

Format 6: Qualification for Text-Names (COPY Statement)

$$text-name-1 \left\{ \frac{IN}{OF} \right\} library-name-1$$

Miscellaneous Formats

Sentence

statement-sequence-1 .

Statement Sequence

$\{ \textit{imperative-statement-1} \text{ THEN} \} \cdots \left\{ \begin{array}{l} \textit{imperative-statement-2} \\ \textit{conditional-statement-1} \end{array} \right\}$

Subscripting

$\left\{ \begin{array}{l} \textit{data-name-1} \\ \textit{condition-name-1} \end{array} \right\} \left(\left\{ \begin{array}{l} \textit{integer-1} \\ \left\{ \begin{array}{l} \textit{data-name-2} \\ \textit{index-name-1} \end{array} \right\} \left[\begin{array}{l} \{ + \} \\ \{ - \} \end{array} \right] \textit{integer-2} \end{array} \right\} \cdots \right)$

Reference Modification

data-name-1 (*leftmost-character-position-1* : [*length-1*])

Identifier

data-name-1 $\left[\left\{ \begin{array}{l} \underline{\text{IN}} \\ \underline{\text{OF}} \end{array} \right\} \textit{data-name-2} \right] \cdots \left[\left\{ \begin{array}{l} \underline{\text{IN}} \\ \underline{\text{OF}} \end{array} \right\} \left\{ \begin{array}{l} \textit{file-name-1} \\ \textit{cd-name-1} \end{array} \right\} \right]$
 $\left[(\{ \textit{subscript-1} \} \cdots) \right] \left[(\textit{leftmost-character-position-1} : [\textit{length-1}]) \right]$

Special Registers

ADDRESS $\left[\begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right] \text{identifier-1}$

COUNT $\left[\begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right] \text{data-name-1}$

COUNT - MAX $\left[\begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right] \text{data-name-1}$

COUNT - MIN $\left[\begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right] \text{data-name-1}$

LENGTH $\left[\begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right] \left\{ \begin{array}{l} \text{identifier-1} \\ \text{literal-1} \end{array} \right\}$

LINAGE - COUNTER $\left[\left\{ \begin{array}{c} \text{IN} \\ \text{OF} \end{array} \right\} \text{file-name-1} \right]$

PROGRAM - ID

RETURN - CODE

Figurative-Constants

$\left[\text{ALL} \right] \text{HIGH - VALUE}$

$\left[\text{ALL} \right] \text{HIGH - VALUES}$

$\left[\text{ALL} \right] \text{LOW - VALUE}$

$\left[\text{ALL} \right] \text{LOW - VALUES}$

$\left[\text{ALL} \right] \text{NULL}$

$\left[\text{ALL} \right] \text{NULLS}$

$\left[\text{ALL} \right] \text{QUOTE}$

$\left[\text{ALL} \right] \text{QUOTES}$

$\left[\text{ALL} \right] \text{SPACE}$

$\left[\text{ALL} \right] \text{SPACES}$

$\left[\text{ALL} \right] \text{ZERO}$

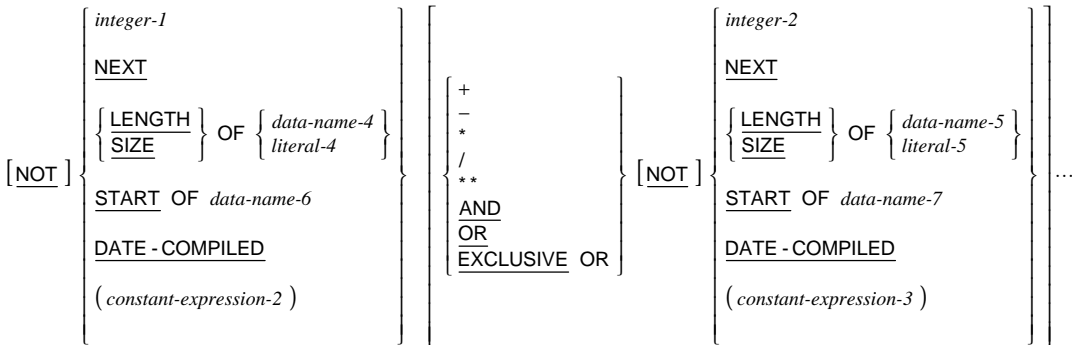
$\left[\text{ALL} \right] \text{ZEROES}$

$\left[\text{ALL} \right] \text{ZEROS}$

ALL *literal-1*

$\left[\text{ALL} \right] \text{symbolic-character-1}$

Constant-Expression



PICTURE Character-String

The five categories of data that can be described with a PICTURE clause¹ are defined as follows:

1. **Alphabetic.** Its PICTURE character-string can contain only the symbol **A**. The contents of an alphabetic data item when represented in standard data format must be one or more alphabetic characters (“a” through “z”, “A” through “Z”, and space).
2. **Alphanumeric.** Its PICTURE character-string is restricted to certain combinations of the symbols **A**, **X** and **9**, and the item is treated as if the character-string contained all symbols **X**. The PICTURE character-string must contain at least one symbol **X** or a combination of the symbols **A** and **9**. A PICTURE character-string that contains all symbols **A** or all symbols **9** does not define an alphanumeric data item, since such character-strings define an alphabetic or numeric data item, respectively. The contents of an alphanumeric data item when represented in standard data format must be one or more characters in the character set of the computer.
3. **Alphanumeric edited.** Its PICTURE character-string is restricted to certain combinations of the following symbols: **A**, **X**, **9**, **B**, **0**, and slash (/). The PICTURE character-string must contain at least one symbol **A** or **X** and at least one symbol **B**, **0**, or slash (/). The contents of an alphanumeric edited data item when represented in standard data format must be two or more characters in the character set of the computer.

¹ The additional data categories, index data and data pointer, also exist but do not use a PICTURE clause in their data description entry. An index data item is described with the USAGE IS INDEX clause. A data pointer data item is described with the USAGE IS POINTER clause.

4. **Numeric.** Its PICTURE character-string can contain only the symbols **9**, **P**, **S**, and **V**. Its PICTURE character-string must contain at least one symbol **9** and not more than thirty symbols **9**. Each symbol **9** specifies a digit position. If unsigned, the contents of a numeric data item when represented in standard data format must be one or more numeric characters. If signed, a numeric data item may also contain a “+”, “-”, or other representation of an operational sign. The actual in-memory contents of a numeric data item are not standard data format when the usage is other than DISPLAY as specified by a USAGE clause applicable to the data description entry or when the data item is signed and the SEPARATE CHARACTER phrase is not specified in a SIGN clause applicable to the data description entry.
5. **Numeric edited.** Its PICTURE character-string is restricted to certain combinations of the following symbols: **B**, slash (/), **P**, **V**, **Z**, **0**, **9**, comma (,), period (.), asterisk (*), minus (-), plus (+), **CR**, **DB**, and the currency symbol (the symbol \$ or the symbol specified in the CURRENCY SIGN clause of the SPECIAL-NAMES paragraph). The allowable combinations are determined from the order of precedence of symbols (see Table 1 on page 62) and the editing rules. The number of digit positions that can be represented in the PICTURE character-string must range from one to thirty, inclusive. The character-string must contain at least one symbol **0**, **B**, slash, **Z**, asterisk, plus, minus, comma, period, **CR**, **DB**, or the currency symbol. The contents of each of the character positions in a numeric edited data item must be consistent with the corresponding PICTURE symbol.

PICTURE Symbols

The functions of the symbols used in a PICTURE character-string to describe an elementary data item are as follows:

- A** Each symbol **A** in the character-string represents a character position that can contain only an alphabetic character (“a” through “z”, “A” through “Z”, and space). Each symbol **A** is counted in the size of the data item described by the PICTURE character-string.
- B** Each symbol **B** in the character-string represents a character position into which the character space will be inserted when the data item is the receiving item of an elementary MOVE statement. Each symbol **B** is counted in the size of the data item described by the PICTURE character-string.
- P** Each symbol **P** in the character-string indicates an assumed decimal scaling position and is used to specify the location of an assumed decimal point when the point is not within the number that appears in the data item. The scaling position symbol **P** is not counted in the size of the data item described by the PICTURE character-string, but each symbol **P** is counted in determining the maximum number (30) of digit positions in numeric and numeric edited data items. The symbol **P** may appear only as a

contiguous string in the leftmost or rightmost digit positions within a PICTURE character-string. Since the scaling position symbol **P** implies an assumed decimal point (to the left of the symbols **P** if they are the leftmost digit positions and to the right of the symbols **P** if they are the rightmost digit positions), the assumed decimal point symbol **V** is redundant either to the left or right of the symbols **P**, respectively, within such a PICTURE character-string. The symbol **P** and the insertion symbol period (.) cannot both occur in the same PICTURE character-string.

- S** The symbol **S** is used in the character-string to indicate the presence, but neither the representation nor, necessarily, the position of an operational sign. The symbol **S** must be written as the leftmost character in the PICTURE character-string. The symbol **S** is not counted in determining the size (in terms of standard data format characters) of the data item described by the PICTURE character-string unless the entry contains or is subject to a SIGN clause that specifies the SEPARATE CHARACTER phrase. The symbol **S** in the PICTURE character-string and the BLANK WHEN ZERO clause may not occur in the same data description entry.
- V** The symbol **V** is used in a character-string to indicate the location of the assumed decimal point and may appear only once in any single PICTURE character-string. The symbol **V** does not represent a character position and, therefore, is not counted in the size of the data item described by the PICTURE character-string. When the assumed decimal point is to the right of the rightmost symbol in the string representing a digit position or scaling position, or is to the left of scaling positions that represent the leftmost digit positions, the symbol **V** is redundant. The symbol **V** and the insertion symbol period (.) cannot both occur in the same PICTURE character-string.
- X** Each symbol **X** in the character-string is used to represent a character position that contains any allowable character from the character set of the computer. Each symbol **X** is counted in the size of the data item described by the PICTURE character-string.
- Z** Each symbol **Z** in a character-string may only be used to represent the leftmost leading numeric character positions that will be replaced by space characters when the contents of those character positions are leading zeroes and the data item is the receiving item of an elementary MOVE statement. Each symbol **Z** is counted in the size of the item described by the PICTURE character-string and in determining the maximum number (30) of digit positions allowed in a numeric edited data item. If the symbol **Z** is used to the right of the decimal point in a character-string, then all digit positions in that character-string must be described with the symbol **Z**. If the symbol **Z** represents all the digit-positions in the character-string, then the described data item is blank when zero, even if the BLANK WHEN ZERO clause is not specified.

- 9 Each symbol 9 in the character-string represents a character position that contains a numeric character. Each symbol 9 is counted in the size of the item described by the PICTURE character-string and in determining the maximum number (30) of digit positions in a numeric or numeric edited data item.
- 0 Each symbol 0 in the character-string represents a character position into which the character zero (“0”) will be inserted when the data item is the receiving item of an elementary MOVE statement and removed when a numeric edited data item is the sending item in an elementary MOVE statement with a numeric or numeric edited receiving data item. Each symbol 0 is counted in the size of the data item described by the PICTURE character-string. The symbol 0 does not represent a digit position in a numeric edited data item.
- / Each symbol slash (/) in the character-string represents a character position into which a character slash (“/”) will be inserted when the data item is the receiving item of an elementary MOVE statement. Each symbol slash (/) is counted in the size of the data item described by the PICTURE character-string.
- , Each symbol comma (,) in the character-string represents a character position into which a character comma (“,”) will be inserted when the data item is the receiving item of an elementary MOVE statement. Each symbol comma (,) is counted in the size of the data item described by the PICTURE character-string.
- . When the symbol period (.) appears in the character-string, it is an editing symbol that represents the decimal point for alignment purposes and, in addition, represents a character position into which the character period (“.”) will be inserted. The symbol period is counted in the size of the data item described by the PICTURE character-string. The symbols **P** and **V** cannot occur with a symbol period (.) in the same PICTURE character-string.

Note For a given program the functions of the period and comma are exchanged if the DECIMAL-POINT IS COMMA clause is stated in the SPECIAL-NAMES paragraph. In this exchange, the rules for the period apply to the comma and the rules for the comma apply to the period wherever they appear in a PICTURE character-string.

+, -, CR, DB

These symbols are used as editing sign control symbols. When used, they represent the character position into which the editing sign control symbol will be placed. The symbols are mutually exclusive in any one PICTURE character-string and each character used in the symbol is counted in determining the size of the data item described by the PICTURE character-string. If the symbols plus or minus occur more than once (a floating sign control symbol), then one less than the total number of these symbols is counted in determining the maximum number (30) of digit positions allowed in a numeric edited data item. If a floating symbol plus or minus is

used to the right of the decimal point in a character-string, then all digit positions in that character-string must be described with the symbol plus or minus, respectively. If a floating plus or minus symbol string represents all the digit-positions in the character-string, then the described data item is blank when zero, even if the BLANK WHEN ZERO clause is not specified.

- * Each symbol asterisk (*) in the character-string represents a leading numeric character position into which a character asterisk (“*”) will be placed when that position contains a leading zero and the data item is the receiving item of an elementary MOVE statement. Each symbol asterisk (*) is counted in the size of the data item described by the PICTURE character-string and in determining the maximum number (30) of digit positions allowed in a numeric edited data item. If the symbol asterisk (*) is used to the right of the decimal point in a character-string, then all digit positions in that character-string must be described with the symbol asterisk (*). The symbol asterisk in the PICTURE character-string and the BLANK WHEN ZERO clause may not occur in the same data description entry. If the symbol asterisk represents all the digit-positions in the character-string, then, when zero, the described data item is all asterisks (ALL “*”), except that, if the character-string contains the symbol period (.), a character period (“.”) will occur at the specified location in the data item.

- cs The currency symbol in a character-string is represented either by the currency sign (the symbol \$) or by the single character specified in the CURRENCY SIGN clause in the SPECIAL-NAMES paragraph. The currency symbol in the character-string represents a character position into which a currency symbol is to be placed when the data item is the receiving item of an elementary MOVE statement. Each currency symbol is counted in the size of the data item described by the PICTURE character-string. If the currency symbol occurs more than once (a floating currency symbol), then one less than the total number of currency symbols is counted in determining the maximum number (30) of digit positions allowed in a numeric edited data item. If the currency symbol is used to the right of the decimal point in a character-string, then all digit positions in that character-string must be described with the currency symbol. If a floating currency symbol string represents all the digit-positions in the character-string, then the described data item is blank when zero, even if the BLANK WHEN ZERO clause is not specified.

Table 1: PICTURE Symbol Precedence

Second Symbol	First Symbol	Non-floating Insertion Symbols								Floating Insertion Symbols						Other Symbols						
		B	0	/	,	.	{+}	{-}	{CR DB}	CS	{Z*}	{Z}	{+}	{-}	CS	CS	9	A X	S	V	P	P
Non-floating Insertion Symbols	B	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X	
	0	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X	
	/	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X	
	,	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X		X	
	.	X	X	X	X		X		X	X		X		X		X						
	{+}																					
	{-}																					
	{CR DB}	X	X	X	X	X			X	X	X				X	X	X			X	X	X
CS						X																
Floating Insertion Symbols	{Z*}	X	X	X	X		X		X	X												
	{Z}	X	X	X	X	X	X		X	X	X								X		X	
	{+}	X	X	X	X				X			X										
	{-}	X	X	X	X	X			X			X	X						X			
	CS	X	X	X	X		X								X							
	CS	X	X	X	X	X	X								X	X				X		
Other Symbols	9	X	X	X	X	X	X		X	X		X		X		X	X	X	X		X	
	A X	X	X	X												X	X					
	S																					
	V	X	X	X	X		X		X	X		X		X		X		X		X		
	P	X	X	X	X		X		X	X		X		X		X		X		X		
	P						X		X										X	X		X

General Format for Nested Source Programs

$\left. \begin{array}{l} \text{IDENTIFICATION} \\ \text{ID} \end{array} \right\} \text{DIVISION.}$

$\text{PROGRAM-ID.} \left\{ \begin{array}{l} \text{program-name-1} \\ \text{literal-1} \end{array} \right\} [\text{IS } \underline{\text{INITIAL}} \text{ PROGRAM }].$

$[\underline{\text{ENVIRONMENT}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{environment-division-content-1}]$

$[\underline{\text{DATA}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{data-division-content-1}]$

$[\underline{\text{PROCEDURE}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{procedure-division-content-1}]$

$[\textit{nested-source-program-1}] \cdots$

$\underline{\text{END}} \text{ } \underline{\text{PROGRAM}} \left[\begin{array}{l} \text{program-name-1} \\ \text{literal-1} \end{array} \right].$

General Format for *nested-source-program*

$\left. \begin{array}{l} \text{IDENTIFICATION} \\ \text{ID} \end{array} \right\} \text{DIVISION.}$

$\text{PROGRAM-ID.} \left\{ \begin{array}{l} \text{program-name-2} \\ \text{literal-2} \end{array} \right\} \left[\text{IS } \left\{ \begin{array}{l} \underline{\text{COMMON}} \\ \underline{\text{INITIAL}} \end{array} \right\} \text{PROGRAM} \right].$

$[\underline{\text{ENVIRONMENT}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{environment-division-content-2}]$

$[\underline{\text{DATA}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{data-division-content-2}]$

$[\underline{\text{PROCEDURE}} \text{ } \underline{\text{DIVISION}}. \text{ } \textit{procedure-division-content-2}]$

$[\textit{nested-source-program-2}] \cdots$

$\underline{\text{END}} \text{ } \underline{\text{PROGRAM}} \left[\begin{array}{l} \text{program-name-2} \\ \text{literal-2} \end{array} \right].$

General Format for a Sequence of Source Programs

$$\left\{ \left\{ \begin{array}{l} \text{IDENTIFICATION} \\ \text{ID} \end{array} \right\} \text{DIVISION.} \right.$$
$$\text{PROGRAM-ID.} \left\{ \begin{array}{l} \text{program-name-3} \\ \text{literal-3} \end{array} \right\} [\text{IS INITIAL PROGRAM}].$$
$$[\text{ENVIRONMENT DIVISION.} \textit{environment-division-content-3}]$$
$$[\text{DATA DIVISION.} \textit{data-division-content-3}]$$
$$[\text{PROCEDURE DIVISION.} \textit{procedure-division-content-3}]$$
$$[\textit{nested-source-program-3}] \dots$$
$$\text{END PROGRAM} \left\{ \begin{array}{l} \text{program-name-3} \\ \text{literal-3} \end{array} \right\} \cdot \left. \dots \right.$$
$$\left\{ \begin{array}{l} \text{IDENTIFICATION} \\ \text{ID} \end{array} \right\} \text{DIVISION.}$$
$$\text{PROGRAM-ID.} \left\{ \begin{array}{l} \text{program-name-4} \\ \text{literal-4} \end{array} \right\} [\text{IS INITIAL PROGRAM}].$$
$$[\text{ENVIRONMENT DIVISION.} \textit{environment-division-content-4}]$$
$$[\text{DATA DIVISION.} \textit{data-division-content-4}]$$
$$[\text{PROCEDURE DIVISION.} \textit{procedure-division-content-4}]$$
$$\left[[\textit{nested-source-program-4}] \dots \right.$$
$$\left. \left[\text{END PROGRAM} \left[\begin{array}{l} \text{program-name-4} \\ \text{literal-4} \end{array} \right] \right] \cdot \right]$$

Reserved Words

The DERESERVE keyword of the COMPILER-OPTIONS configuration record, which is described in the “Configuration” chapter of the *RM/COBOL User's Guide*, can be used to make a reserved word a user-defined word whenever it occurs in the source program, but then the language feature provided by the construct in which the word appears is not available for programs compiled with that particular configuration setting.

ACCEPT	BLANK
ACCESS	BLINK
ADD	BLOCK
ADDRESS ²	BOTTOM ²
ADVANCING	BY
AFTER	
ALL	CALL
ALPHABET ²	CANCEL
ALPHABETIC	CD ²
ALPHABETIC-LOWER ²	CENTURY-DATE ²
ALPHABETIC-UPPER ²	CENTURY-DAY ²
ALPHANUMERIC ²	CF ²
ALPHANUMERIC-EDITED ²	CH ²
ALSO ²	CHARACTER
ALTER	CHARACTERS
ALTERNATE	CLASS ²
AND	CLOCK-UNITS ²
ANY ²	CLOSE
ARE	COBOL ²
AREA	CODE ²
AREAS	CODE-SET
ASCENDING ²	COL ²
ASSIGN	COLLATING
AT	COLUMN ²
AUTHOR	COMMA
	COMMON ²
BEEP	COMMUNICATION ²
BEFORE	COMP
BELL ²	COMP-1
BINARY	COMP-3

² This word is not considered reserved if the RM/COBOL (74) 2.0 compatibility option is present in the Compile Command (see the *RM/COBOL User's Guide* for details on this option). In such cases, this word is treated as a user-defined word whenever it occurs in the source program.

COMP-4²
 COMP-6
 COMPUTATIONAL
 COMPUTATIONAL-1
 COMPUTATIONAL-3
 COMPUTATIONAL-4²
 COMPUTATIONAL-6
 COMPUTE
 CONFIGURATION
 CONTAINS
 CONTENT²
 CONTINUE²
 CONTROL²
 CONTROLS²
 CONVERT
 CONVERTING²
 COPY
 CORR
 CORRESPONDING
 COUNT²
 COUNT-MAX²
 COUNT-MIN²
 CURRENCY
 CURSOR²

DATA
 DATA-POINTER²
 DATE
 DATE-AND-TIME²
 DATE-COMPILED²
 DATE-WRITTEN
 DAY
 DAY-AND-TIME²
 DAY-OF-WEEK²
 DE²
 DEBUG-CONTENTS²
 DEBUG-ITEM²
 DEBUG-LINE²
 DEBUG-NAME²
 DEBUG-SUB-1²

DEBUG-SUB-2²
 DEBUG-SUB-3²
 DEBUGGING²
 DECIMAL-POINT
 DECLARATIVES
 DEFAULT²
 DELETE
 DELIMITED²
 DELIMITER²
 DEPENDING
 DESCENDING²
 DESTINATION²
 DETAIL²
 DISABLE²
 DISPLAY
 DIVIDE
 DIVISION
 DOWN
 DUPLICATES
 DYNAMIC

ECHO
 EGI²
 ELSE
 EMI²
 ENABLE²
 END
 END-ACCEPT²
 END-ADD²
 END-CALL²
 END-COMPUTE²
 END-DELETE²
 END-DIVIDE²
 END-EVALUATE²
 END-IF²
 END-MULTIPLY²
 END-OF-PAGE²
 END-PERFORM²
 END-READ²
 END-RECEIVE²

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END-RETURN ²	GO
END-REWRITE ²	GOBACK ²
END-SEARCH ²	GREATER
END-START ²	GROUP ²
END-STRING ²	
END-SUBTRACT ²	HEADING ²
END-UNSTRING ²	HIGH
END-WRITE ²	HIGH-VALUE
ENTER ²	HIGH-VALUES
ENVIRONMENT	HIGHLIGHT
EOP ²	
EQUAL	I-O
ERASE	I-O-CONTROL
ERROR	ID ²
ESCAPE ²	IDENTIFICATION
ESI ²	IF
EVALUATE ²	IN
EVERY ²	INDEX
EXCEPTION	INDEXED
EXCLUSIVE ²	INDICATE ²
EXIT	INITIAL
EXTEND	INITIALIZE ²
EXTERNAL ²	INITIATE ²
	INPUT
FALSE ²	INPUT-OUTPUT
FD	INSPECT
FILE	INSTALLATION
FILE-CONTROL	INTO
FILLER	INVALID
FINAL ²	IS
FIRST	
FIXED ²	JUST
FOOTING ²	JUSTIFIED
FOR	
FROM	KEY
FUNCTION ²	
	LABEL
GENERATE ²	LAST ²
GIVING	LEADING
GLOBAL ²	LEFT

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LENGTH ²	OMITTED
LESS	ON
LIKE ²	OPEN
LIMIT ²	OPTIONAL ²
LIMITS ²	OR
LINAGE ²	ORDER ²
LINAGE-COUNTER ²	ORGANIZATION
LINE	OTHER ²
LINE-COUNTER ²	OUTPUT
LINES	OVERFLOW
LINKAGE	
LOCK	PACKED-DECIMAL ²
LOW	PADDING ²
LOWLIGHT ²	PAGE
LOW-VALUE	PAGE-COUNTER ²
LOW-VALUES	PERFORM
	PF ²
MEMORY	PH ²
MERGE ²	PIC
MESSAGE ²	PICTURE
MODE	PLUS ²
MODULES	POINTER ²
MOVE	POSITION
MULTIPLY	POSITIVE ²
	PRINTING ²
NATIVE	PROCEDURE
NEGATIVE ²	PROCEDURES ²
NEXT	PROCEED
NO	PROGRAM
NOT	PROGRAM-ID
NULL ²	PROMPT
NULLS ²	PURGE ²
NUMBER ²	
NUMERIC	QUEUE ²
NUMERIC-EDITED ²	QUOTE
	QUOTES
OBJECT-COMPUTER	
OCCURS	RANDOM
OF	RD ²
OFF	READ

² This word is not considered reserved if the RM/COBOL (74) 2.0 compatibility option is present in the Compile Command (see the *RM/COBOL User's Guide* for details on this option). In such cases, this word is treated as a user-defined word whenever it occurs in the source program.

RECEIVE ²	SECTION
RECORD	SECURE ²
RECORDING ²	SECURITY
RECORDS	SEGMENT ²
REDEFINES	SEGMENT-LIMIT ²
REEL	SELECT
REFERENCE ²	SEND ²
REFERENCES ²	SENTENCE
RELATIVE	SEPARATE
RELEASE ²	SEQUENCE
REMAINDER	SEQUENTIAL
REMARKS ²	SET
REMOVAL ²	SIGN
RENAMES	SIZE
REPLACE ²	SORT ²
REPLACING	SORT-MERGE ²
REPORT ²	SOURCE ²
REPORTING ²	SOURCE-COMPUTER
REPORTS ²	SPACE
RERUN ²	SPACES
RESERVE	SPECIAL-NAMES
RESET ²	STANDARD
RETURN ²	STANDARD-1
RETURN-CODE ²	STANDARD-2 ²
RETURNING ²	START
REVERSE	STATUS
REVERSE-VIDEO ²	STOP
REVERSED ²	STRING ²
REWIND	SUB-QUEUE-1 ²
REWRITE	SUB-QUEUE-2 ²
RF ²	SUB-QUEUE-3 ²
RH ²	SUBTRACT
RIGHT	SUM ²
ROUNDED	SUPPRESS ²
RUN	SYMBOLIC ²
	SYNC
SAME	SYNCHRONIZED
SCREEN ²	
SD ²	TAB
SEARCH ²	TABLE ²

² This word is not considered reserved if the RM/COBOL (74) 2.0 compatibility option is present in the Compile Command (see the *RM/COBOL User's Guide* for details on this option). In such cases, this word is treated as a user-defined word whenever it occurs in the source program.

TALLYING
TAPE²
TERMINAL²
TERMINATE²
TEST²
TEXT²
THAN
THEN²
THROUGH
THRU
TIME
TIMES
TO
TOP²
TRAILING
TRUE²
TYPE²

UNIT
UNLOCK
UNSTRING²
UNTIL

UP
UPDATE
UPON²
USAGE
USE
USING

VALUE
VALUES
VARIABLE²
VARYING

WHEN
WITH
WORDS
WORKING-STORAGE
WRITE

ZERO
ZEROES
ZEROS

² This word is not considered reserved if the RM/COBOL (74) 2.0 compatibility option is present in the Compile Command (see the *RM/COBOL User's Guide* for details on this option). In such cases, this word is treated as a user-defined word whenever it occurs in the source program.

Context-Sensitive Words

The words listed in Table 2 are context-sensitive words and are reserved in the specified language construct or context. If a context-sensitive word is used where the context-sensitive word is permitted in the general format, the word is treated as a keyword; otherwise it is treated as a user-defined word.

Table 2: Context-Sensitive Words

Context-Sensitive Word	Language Construct or Context
AUTO	screen description entry
AUTOMATIC	LOCK MODE clause
BACKGROUND	screen description entry
BACKGROUND-COLOR	screen description entry
CASE-INSENSITIVE	LIKE relational-operator
CASE-SENSITIVE	LIKE relational-operator
CYCLE	EXIT statement (Format 3)
EOL	ERASE clause in screen description entry and ERASE phrase in ACCEPT and DISPLAY statements
EOS	ERASE clause in screen description entry and ERASE phrase in ACCEPT and DISPLAY statements
BACKGROUND	screen description entry
BACKGROUND-COLOR	screen description entry
FULL	screen description entry
MANUAL	LOCK MODE clause
MULTIPLE	LOCK MODE clause and I-O-CONTROL paragraph
PARAGRAPH	EXIT statement (Format 4)
PREVIOUS	READ statement (Format 1)
REQUIRED	screen description entry
TRIMMED	LIKE relational-operator
UNDERLINE	screen description entry
YYYYDDD	FROM DAY phrase of ACCEPT statement (Format 2)
YYYYMMDD	FROM DATE phrase of ACCEPT statement (Format 2)

Except for EOL and EOS, the words in Table 2 are not considered to be context-sensitive words if the RM/COBOL (74) 2.0 compatibility option is present in the Compile Command (see the *RM/COBOL User's Guide* for details on this option). When that option is present, the words in this list, other than EOL and EOS, are treated as user-defined words whenever they occur in the source program.

The DERESERVE keyword of the COMPILER-OPTIONS configuration record, which is described in the “Configuration” chapter of the *RM/COBOL User's Guide*, can be used to make a context-sensitive word a user-defined word whenever it occurs in the source program, but then the language feature provided by the construct in which the word appears is not available for programs compiled with that particular configuration setting.

Nonreserved System-Names

Code-Name

EBCDIC

(Color-Integer) Color-Names

- (0) BLACK
- (1) BLUE
- (2) GREEN
- (3) CYAN
- (4) RED
- (5) MAGENTA
- (6) BROWN
- (7) WHITE

Computer-Names

user-defined-word-1

Delimiter-Names

BINARY-SEQUENTIAL
LINE-SEQUENTIAL

Device-Names

CARD-PUNCH
CARD-READER
CASSETTE
CONSOLE
DISC
DISK
KEYBOARD
LISTING
MAGNETIC-TAPE
PRINT
PRINTER
PRINTER-1
SORT-WORK

Feature-Names

C01
C02
C03
C04
C05
C06
C07
C08
C09
C10
C11
C12

Label-Names

FILE-ID
user-defined-word-2

Language-Names

user-defined-word-3

Low-Volume-I-O-Names

CONSOLE
SYSIN
SYSOUT

Rerun-Names

user-defined-word-4

Switch-Names

SWITCH-1	UPSI-0
SWITCH-2	UPSI-1
SWITCH-3	UPSI-2
SWITCH-4	UPSI-3
SWITCH-5	UPSI-4
SWITCH-6	UPSI-5
SWITCH-7	UPSI-6
SWITCH-8	UPSI-7