

# System Messages



**System/23**

# System Messages



**System/23**

## **Fourth Edition (April 1982)**

This is a major revision of, and obsoletes SA34-0141-2. Because significant changes have been made throughout this manual, it should be reviewed in its entirety.

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# About this book

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This publication explains the action code messages and error code messages for the IBM System/23.

The information for action codes is intended for operators. The error code information is intended for operators with programming experience, and for programmers who are writing and correcting BASIC programs. Additional information about the status line and the system commands is contained in the *Operator Reference* manual.

Detailed information about the IBM System/23 language is contained in the *BASIC Language Reference* manual.

All references to the *computer* apply to either the 5322 or 5324 computer.

This publication contains:

Chapter 1, "Introduction"

Chapter 2, "Action codes"

Chapter 3, "Error codes"

Appendix A. System trap

Appendix B. Error codes/action codes

## **Related publications**

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*BASIC Language Reference*, SA34-0109

*Customer Support Functions*, Volume I, SA34-0175, and Volume II, SA34-0176

*Keyboard Aid*, SX34-0051

*Learning to Use System/23*, SA34-0134

*Operator Reference*, SA34-0108

*Quick Reference*, SA34-0110

*Using Your 5217 Printer*, SA34-1593

*Using Your 5247 Disk*, SA34-0188



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# Chapter 1. Introduction

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## System messages

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While you are using your IBM System/23, the computer checks its internal operations to ensure that the work it is doing for you is going along okay. If something goes wrong, the computer stops operation, and uses the status line (bottom line) of the screen to give you information about the problem. Two different numbers on the status line are useful for determining what to do. One number is the *action code*; the other number is the *error code*.

**Action code.** This code is a two-digit number that identifies what action to take to correct a problem. This code is easy to find on the status line because the number is blinking and is highlighted. A keyboard aid card above the keyboard on your IBM System/23 lists each action code and a brief explanation. Chapter 2, "Action codes," in this book further explains what each action code means.

**Error code.** This code is a four-digit number that tells you what went wrong in your operation or program. In Chapter 3, "Error codes," you will find an explanation of each error as well as the appropriate recovery action. Many error codes require that either a program statement or the program logic itself be corrected. Therefore, a person with programming experience may be needed.

**Disk-related errors.** This book includes messages which apply to the IBM 5247 Disk Unit. In cases where an error condition may be either diskette-related (drives 1-4) or disk-related (drive 5), you will notice a reference to "diskette or disk" or (where appropriate) to "disk volume or diskette." You can find detailed information about disk volumes in *Using Your 5247 Disk*.

# Introduction

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## **Other messages**

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The IBM-licensed application programs and program products provide messages specifically for these programs. If you are using these kinds of programs, you should insert the additional message books (or sections) into the binder that is provided with the system messages. Each message book will include a tab page that will help you find the section quickly.

## **How to correct a problem**

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When a problem occurs, an action code is displayed on the status line (see "Status line fields"). This is what you should do:

1. Look up the message for the action code in Chapter 2, "Action codes," of this manual.

(You will find the "Operator Action Codes" listed on the *Keyboard Aid* for handy reference.)

2. Do what the action code message requires you to do.
3. If you have fixed the problem, continue with the work you were doing.
4. If the action code message does not help you fix the problem, locate the error code number on the status line. Look up the message for the error code in Chapter 3, "Error codes," of this manual.
5. If you are still unable to correct the problem, seek help from someone with programming experience, or contact IBM for technical support.

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## Operator action

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There are three ways to clear, reset or cancel an error. The keys used are as follows:

- Error Reset key
- Cmd key and Error Reset key
- Cmd key and Attn key

For a detailed explanation of the functions of these keys, refer to Chapter 3, "The Keyboard," of the *Operator Reference* manual.

**Note:** If you have two computers connected to an IBM 5246 Diskette Unit, or up to four computers attached to a 5247 Disk Unit, keep in mind the following error key procedures:

**Error Reset key.** If your disk volume or diskette is being used by another operator, a check with that operator may indicate there is

only a short time to wait until it is available. At this time, you may wish to return your computer to a waiting condition. This can be done by pressing the Error Reset key.

**Cmd and Error Reset keys.** You may decide to cancel your job instead of waiting for the other operator to finish. This can be done by pressing and holding the Cmd key and then pressing the Error Reset key.

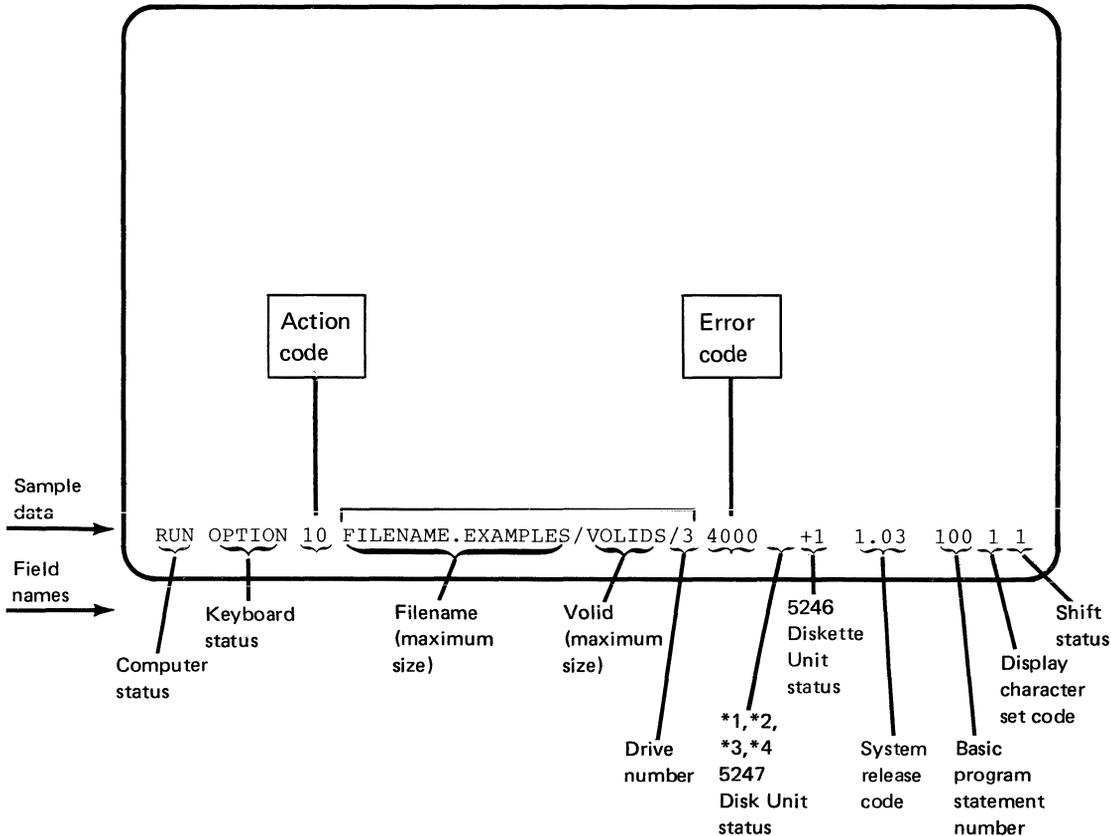
**Cmd and Attn keys.** You may decide it would be better to do other useful work than to wait for the disk volume or the diskette to become available. This can be done by pressing and holding the Cmd key, then pressing the Attn key.

# Introduction

## Status line fields

The following illustration shows where the action and error codes appear on the status line. The status line is the bottom line on the screen.

If you need additional information about the status line, refer to Chapter 2, "The screen," of the *Operator Reference* manual, SA34-0108.



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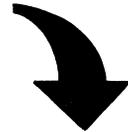
## Keyboard Aid (Operator Action Codes)

The *Keyboard Aid*, SX34-0051, explains the action codes that you may see on the status line of the screen. A more detailed explanation of the action codes is in Chapter 2, "Action codes," of this manual.

Below is a representation of the Keyboard Aid which comes with your System/23 manuals.

### Operator Action Codes

- |  |                                     |                               |
|--|-------------------------------------|-------------------------------|
| A. Read the blinking action code from the screen and locate it in the list to the right.   | 10. Insert diskette.                | 15. Fix command or procedure. |
| B. Follow instructions next to action code.  | 11. Put forms in printer.           | 16. Use correct type of file. |
| C. If unsure about what to do, refer to the Messages manual. If still in doubt, seek help. | 12. Give VOLID and/or drive number. | 17. Provide space for file.   |
|  | 13. Fix file name or VOLID.         | 18. Switch on printer.        |
|  | 14. Use a different file name.      | 19. Check file usage.         |



- |  |   |                                       |
|--|---|---------------------------------------|
| 20. Check 5246 usage.                  | 26. Check write-protection.                         | 96. Recover file(s).                  |
| 21. Switch on 5246.                    | 27. Check access-protection.                        | 97. Call your service representative. |
| 22. Press Field Exit key or Enter key. | 28. Continue or cancel.                             | 98. Fix printer.                      |
| 23. Enter numeric data.                | 94. Fix program.                                    | 99. Look up error code.               |
| 24. Enter corrected data.              | 95. Use correct level of Customer Support Function. |                                       |
| 25. SAVE then LOAD.                    |   |                                       |



# Chapter 2. Action codes

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This chapter explains the action codes that can appear on your IBM System/23 screen. The action codes are two digits long and appear on the status line when an error occurs.

The message for each action code tells you what you must do to continue after an error occurs.

Some of the action code messages in this chapter will refer you to a specific error code and message. The error code and message can be found in Chapter 3, "Error codes," of this manual.

# Action codes

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## 10 Insert diskette

Action code 10 on the status line (bottom line of the screen) means that the system has not yet found a file or VOLID. This condition may occur for one or more of the following reasons:

- The diskette is improperly inserted or is inserted in the wrong drive. If so, go to OPTION A on the next page.
- The wrong diskette has been inserted. If so, go to OPTION A on the next page.
- The drive door handle has not been closed. If so, go to OPTION A on the next page.
- The filename or VOLID has been misspelled or is otherwise incorrect. If so, go to OPTION B on the next page.

Read the status line, which indicates the filename, the VOLID, or drive number being requested by the system. For example, one of the following items may appear on the status line:

- Filename/VOLID/drive number
- Filename//drive number

- Filename/VOLID
- Filename
- /VOLID

### CAUTION

**If error code 4001 appears on the status line, OPTION B may cause a loss of data because the system cannot find a file it has already used.**

You should use OPTION A, "Correct and continue," if you *can* insert the diskette requested on the status line.

- Insert the diskette required and go to OPTION A.

You should use OPTION B, "Cancel the operation," if you *do not* know which diskette to insert, or if the file is expected on the 5247 Disk Unit.

- If you have tried *all* possible diskettes without any success, or if the correct diskette has been damaged, then record the status line information and go to OPTION B.

### Option A: Correct and continue

**Step A1.** Insert the correct diskette in the drive shown on the status line. If no drive number appears on the status line, use any drive. Be sure to insert the diskette correctly.

**Step A2.** Press the Error Reset key in order to continue your operation.

### Option B: Cancel the operation

**Step B1.** To cancel:

- Press and hold the CMD key; then press the Error Reset key.
- If you see error code 4152 or 4159, press the Error Reset key. If you see any other error code, look up the explanation for it in Chapter 3, "Error codes." Go to **Step B2**.

**Step B2.** To retry the operation:

- Identify the correct diskette by using the DIR (directory) command to see the filename on each diskette. Then restart the operation with the correct diskette and use the right spelling.
- If you think the file or volume is on the 5247 Disk Unit, you may have misspelled the filename or VOLID, or both. To check the spelling of the filename, use the DIR command. To check the spelling of the VOLID, use the VOLID command. Then restart the operation.

# Action codes

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## 11 Put forms in printer

Put the required forms into the printer. To continue, press Error Reset. If the forms cannot be put into the printer, press the Cmd key, hold it, and press the Error Reset key. This will cancel the printer operation. This action may generate an error code 6241. If this error appears on the status line, refer to error code 6241 in Chapter 3, "Error codes."

## 12 Give VOLID and/or drive number

Supply a volume identification (VOLID) or a drive number, or both. If this action code occurs while you are entering information from the keyboard, correct the information and continue. Otherwise, record all information on the status line; then contact your programmer or IBM for technical support.

## 13 Fix filename or VOLID

Correct the filename or volume identification (VOLID) using the following rules:

- The VOLID has from one through six English letters or numbers. No VOLID can start with a blank or contain any blanks.
- A filename starts with a letter and does not contain blanks.

- A filename for an exchange file (BX or HX) has from one through eight letters or numbers, starting with a letter.
- A filename for an IBM System/23 file has from 1 through 17 characters (letters, numbers, or periods). The first character must be a letter (A-Z). Names longer than eight characters are divided into two or more names, each beginning with a letter (A-Z) and joined by periods.

If this action code occurs while you are entering information from the keyboard, correct the information and continue. Otherwise, record all information on the status line; then contact your programmer or IBM for technical support.

## 14 Use a different filename

Give the file a different name.

If this action code occurs while you are entering information from the keyboard, correct the information and continue. Additional recovery actions are: use the FREE command to free the filename if it is no longer needed, or use REPLACE instead of SAVE to an existing file. Otherwise, record all information from

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the status line; then contact your programmer or IBM for technical support.

**15 Fix command or procedure**

Correct the command, or make sure it is used in the proper sequence.

If this action code occurs while you are entering information on the keyboard, correct the information and continue. Otherwise, record all information on the status line; then contact your programmer or IBM for technical support.

**16 Use correct type of file**

Check your operating instructions and make sure you are using the correct type of file with the command or program.

If you cannot determine the type of file to use, record all information from the status line; then contact your programmer or IBM for technical support.

**17 Provide space for file**

Create space on the diskette or disk by using the FREE command to permanently erase files *no longer needed*. Use another diskette, if necessary. On the 5247 disk, you can create space by freeing files which are no longer needed from *any* volume. If you cannot create the space you need, contact your programmer or IBM for technical support.

**Note:** The DIR command can be used to check for available space and the status of all volumes and files.

**18 Switch on printer**

Switch on all attached printers. (On the 5217 printer, press the Start Button after switching on power.) Press the Error Reset key; then enter the GO command.

# Action codes

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## 19 Check file usage

Read the filename from the status line and find out if the file is being used. If it is, wait until it is available. If the file is not being used, it was left in an open state by mistake. Use the DIR command to check the status of the file. If the file is open, use the PROTECT command to close or release it.

*Do not use the PROTECT command if the file is currently open and in use.*

## 20 Check 5246 Diskette Unit usage

If the 5246 Diskette Unit is not switched on, switch it on and press the Error Reset key.

If the 5246 Diskette Unit is being used by the other system, find out how long it will be unavailable. To wait, press the Error Reset key. To cancel this operation, press and hold the Cmd key; then press the Error Reset key.

**Note:** If you do not wait until the diskette unit is available, you may get another error message from your program or command.

## 21 Switch on 5246 Diskette Unit

If you want to use your 5246 Diskette Unit, switch it on and press the Error Reset key.

If you do not want to use your 5246 Diskette Unit, press and hold the Cmd key, and then press the Error Reset key. This action makes the 5246 Diskette Unit unavailable to your computer. Using the 5246 Diskette Unit later will require switching off your computer and then switching it back on.

## 22 Press Field Exit key or Enter key

Press Error Reset and check the status line. If this action code appears with error code 0001, refer to error code 0001 in Chapter 3, "Error codes," of this manual for the recommended action.

If the error code is not 0001, do one of the following:

- If the keyboard status shows INPUT mode, correct the data; then press the Enter key.
- If the keyboard status shows FIELDS mode, use one of the following options:
  - If you need to change data in the field, press the backspace key to move the cursor to the position you want to change;

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then enter your change. To change only the last position in the field, you must backspace once; the cursor will not move, but it is okay to enter your change.

- If all the data in this field is correct, and you want to enter data in the next field, press the Field Exit key. This will move the cursor to the beginning of the next field and allow you to enter your next data.
- If all the data in this field is correct, and you do not need to enter data in any other fields, then press the Enter key.

**23 Enter numeric data**

The input must be numbers and/or the plus sign, minus sign, decimal point, and the letter E. Remove all other letters and symbols.

**24 Enter corrected data**

Enter data that conforms to the restrictions. If you are unsure about what to enter, look up the error code explanation in Chapter 3, "Error codes."

**25 SAVE then LOAD**

Use the SAVE or REPLACE command with the SOURCE option to store the program or data file in source form. Then use the LOAD command to bring it back in one piece. If you still cannot enter more data, record all the information on the status line; then contact your programmer or IBM for technical support.

**26 Check write protection**

Check your operating instructions to see if you should change data in a write-protected file. If you are instructed to change this file, use the PROTECT command to remove the write-protection.

**27 Check access-protection**

Check your operating instructions to see if you should use an access-protected disk volume or diskette. If you are so instructed, use the VOLID command to remove the access-protection.

**28 Continue or cancel**

If you wish to continue the function, press the Error Reset key. If you wish to cancel the function, press and hold the Cmd key; then press the Error Reset key.

This action code is also presented with error code 0900 (not enough storage for

# Action codes

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work space). If you press the Error Reset key, the keyboard will open for operator input. If you press and hold the Cmd key, and then press either the Error Reset or Attn key, the system will erase your program and data.

## 94 Fix program

Correct the content of the statement or logic of the BASIC program.

If this action code occurs while you are entering information from the keyboard, correct the information and continue. Keep in mind that this action code appears if you press Enter without entering anything on the input line.

Look up the error code in Chapter 3, "Error codes." If you can correct the problem without further help, do so, and continue. Otherwise, record all the information on the status line; then contact your programmer or IBM for technical support.

**Note:** This action code will also occur when entering a system command (RUN, SAVE) prior to exiting the AUTO mode. To enter a system command after editing, you may scroll up one or more lines, or backspace to position 1;

then key in the instruction over the statement number.

## 95 Use correct level of Customer Support Function

Find the latest level of Customer Support Function diskette that you have, and use it instead of the one you tried to use.

## 96 Recover file(s)

Create a good copy of this file by using the Recover Diskette Customer Support Function for a diskette file or the Recover Disk Customer Support Function for a disk file. Then restart the operation with the good copy.

## 97 Call your service representative

Check the error message and look up the explanation for the error. If you can correct the problem without further help, do so, and continue. If you are unable to correct the problem, record all information on the status line and call your service representative.

You should refer to Chapter 8, "Help," in *Operator Reference* for further information before calling your service representative.

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**98 Fix printer**

Switch the printer off and then switch it on. Press the Error Reset key. If you are running a BASIC program, you may need to enter the GO command. If this error occurs again, call your service representative.

You should refer to Chapter 5, "Printer," and Chapter 8, "Help," in the *Operator Reference* manual before calling your service representative. For information on the 5217 Printer, see Chapter 8, "Help," in *Using Your 5217 Printer*.

**99 Look up error code**

Read the error code from the status line and look up the explanation in Chapter 3, "Error codes." If you can correct the problem without further help, do so, and continue. Otherwise, record all

information on the status line; then contact your programmer or IBM for technical support.

**Note:** Check the error key at the beginning of Chapter 3 in this manual. If the error code which appears along with action code 99 is not in Chapter 3, look for it in a manual relevant to the operation you are running.



# Chapter 3. Error codes

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This chapter explains the error codes that can appear on your IBM System/23. The error code is a four-digit number which appears on the status line when an error occurs.

## Key to error codes

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Each error is associated with a system operation as shown in the following chart:

<i>Error code</i>	<i>Error type</i>
0000–0999	BASIC execution
1000–1999	BASIC statement syntax
2000–2999	System command
4000–4999	File accessing
6000–6999	Device accessing
7000–7999	Customer Support Functions

# Error codes

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## 0000 No error

This code will not be displayed on the status line. The number 0000 can be used for checking the ERR variable for successful execution. The ERR can be reset by a PROCERR.

## 0001 Inquiry key is pressed

You interrupted the program by pressing the Inquiry key. To continue, press the Error Reset key, then type GO and press Enter.

**Note:** For information concerning split screens, refer to Chapter 2, "The Screen," in the *Operator Reference* manual.

## 0002 Conversion error

The program could not convert a character string to a number. Correct the string or the program statement that caused the error. Refer to "Arithmetic data" in the *BASIC Language Reference* manual.

## 0003 Number too large

A number equal to or greater than  $1E+127$  was entered. Correct the program statement that caused the error.

## 0004 String too large

The program tried to assign a character string to a variable. The string is larger than the maximum length of the variable. Correct the program statement that caused the error.

## 0005 Number too small

A number less than  $1E-128$  was entered. Correct the program statement that caused the error.

## 0006 Cannot divide by zero

The program tried to divide a number by zero. Correct the program statement that caused the error.

## 0053 Cannot write to existing record

A write operation used the keyword REC for an existing record. For a WRITE statement, use the keyword REC only for a deleted record. Correct the program statement that caused the error.

## 0054 Not enough items in DATA

A READ statement was issued and there are not enough items in the corresponding DATA statement. Correct the program statement that caused the error.

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**0057 Record not found**

The program tried to access a record in a relative data set but could not find the record. It is also possible that an index file points to a record that does not exist in the master file. Correct the program statement.

**Note:** The system function REC can be used to help find the record number last processed in a relative file.

**0058 String overflow during I/O operation**

An I/O statement tried to read data into a character variable that was too small. Correct the program statement that caused the error.

**0059 Key field changed by REWRITE**

REWRITE has tried to change the key field of a record to be rewritten. The rewrite did not occur. Correct the program statement that caused the error.

**Note:** The system functions KPS and KLN can be used to check the changed key field.

**0100 Array exceeds maximum size**

During program execution, an array has been dimensioned so that it occupies more than 65,534 bytes. Correct the program to reduce the size of the array, or split the array into two or more

separate arrays. For additional information, refer to "Storage use" in the *BASIC Language Reference* manual.

**0101 Duplicate DIM of an array or character variable**

A DIM statement specified an array or character variable that has already been dimensioned. Correct the statement that caused the error.

**0102 Array redimensioning exceeds limits**

The number of elements for a redimensioned array exceeds the original number of elements. Correct the program statement that caused the error.

**0103 Variable following MAT keyword is not an array**

A MAT keyword specified a variable as an array name, but the variable has not been defined as an array. Correct the program statement that caused the error.

**0104 Missing keyword for I/O statement**

An I/O statement referred to an array, but the required keyword MAT did not precede the array name. Correct the program statement that caused the error.

# Error codes

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**0105 Variable is not a matrix**

A variable specified in a MAT statement was not a matrix. Change the MAT statement to use a different variable.

**0106 Arrays do not match**

The dimensions of the second array in a MAT statement did not match those of the first array. The dimensions specified must be the same. Correct the dimensions.

**0107 MAT array not dimensioned**

An array used in a MAT statement was not dimensioned. Include the appropriate DIM statement.

**0120 Value out of range**

A value was outside the range of 0 through 65535. The values that must be in this range are subscripts, substrings, file reference numbers, and parameters to some system functions. Correct the program statement that caused the error.

**0121 Invalid reference to an array**

The program tried to use a two-dimensional array as a one-dimensional array, or a one-dimensional array as a two-dimensional array. Correct the statement that refers to or defines the array.

**0122 Invalid reference to an array element**

The program referred to an array and specified a row and/or column value that is not in the range of the array size. For example, the value is too large, the value is negative, or the value is not valid for the BASE you are operating in. Correct the program statement that caused the error.

**0123 Array indexing error**

The program tried to index a matrix (two-dimensional array), or the number of elements is not the same between the target array and source array. The AIDX and DIDX functions can be used only with a vector (one-dimensional array), and the number of the elements in each array must be equal. Correct the program statement that caused the error.

**0124 Character variable too large**

A character variable with a length parameter greater than 255 was requested. Correct the DIM statement to specify 255 or less.

**0200 Nested subroutines exceed limit**

The program contains more than 200 nested subroutines. Correct the program logic so the number does not exceed 200.

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**0201 Missing GOSUB statement**

A RETURN statement was encountered, but there is no corresponding GOSUB statement. Correct the program logic.

**0204 Missing line reference**

Either the line reference following a GOSUB statement is missing, or the GOSUB is the last line in the program. A return from a GOSUB executes the line following the GOSUB. Correct the program.

**0210 Missing NONE clause**

The computed index number exceeded the total number of line references listed, and a NONE clause was not included. Include a NONE clause or ensure that there are enough line references listed.

**0211 Invalid RETRY or CONTINUE**

The program encountered a RETRY or CONTINUE statement. No prior error was detected. The RETRY or CONTINUE statement cannot be executed. Correct the program logic.

**0212 Cannot CONTINUE**

CONTINUE was issued after an error occurred on the last line of the program. There is no "next line" to go to. Correct the program logic.

**0213 Line not found**

A line in the program was referred to by its number or label, but the line does not exist. Correct the program.

**0220 Invalid branch to FOR/NEXT loop**

During program execution, a NEXT statement was issued and the corresponding FOR statement was not active. The program branched into a FOR/NEXT loop. Correct the program logic.

**0221 Missing FOR statement**

A NEXT statement was issued and a FOR statement was not active. Check FOR/NEXT pairings in your program and correct the program logic.

**0222. Missing NEXT statement**

The program contained a FOR statement that was not followed by a NEXT statement. Check FOR/NEXT pairings in the program and correct the program logic.

**0223 FOR/NEXT variable mismatch**

The loop control variable in a NEXT statement did not match the loop control variable in the corresponding FOR statement. Correct the FOR or NEXT statement that caused the error.

# Error codes

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**0224 FOR/NEXT variable is not a scalar**

The variable in a FOR/NEXT statement was an array. Change the variable to a scalar. Correct the program statement that caused the error.

**0230 Invalid line reference for EXIT**

The keyword EXIT was specified on an I/O statement, but the EXIT line reference did not point to an EXIT statement. Correct the program so that the line reference points to an EXIT statement.

**0250 CHAIN-USE variable dimensions do not match**

The variables (length and dimension of array) specified for a USE statement do not exactly match those for the associated CHAIN statement. Correct the statement in error.

**0251 CHAIN-USE variable lists do not match**

The variables (number, sequence, and name) specified for a USE statement do not exactly match those for the associated CHAIN statement. Correct the statement in error.

**0252 Options across chain are different**

An option specified in a program being chained to is different than the one existing in the chaining program. Ensure that the options across the chain are the same.

**0300 DEF length exceeds 255**

The length of a character variable in a DEF statement exceeded 255. The length may range from 1 through 255. Correct the program statement that caused the error.

**0301 Variables in the parameter list do not match**

The passed parameters do not match the parameter list in the DEF statement. Variables specified in the parameter list of a defined function may be numeric or character. Correct parameter types so they match.

**0302 Reference to an undefined function**

A program statement referred to a user function that has not been defined. Either correct the program statement that caused the error, or define the desired function.

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**0304 Function parameters do not match**

The program referred to a user function, but the number of specified parameters do not match the number for the function. Correct the program statement that caused the error.

**0306 FNEND used without DEF**

Either FNEND was called in a FOR/NEXT loop that did not include DEF, or FNEND was called in a GOSUB that did not include DEF. Include the entire defined function within either the FOR/NEXT loop or the GOSUB, or remove it.

**0307 Function not active**

Your program tried to assign a value to a function name while the function represented by the name was not active. Correct the program so you do not branch into the middle of a function.

**0308 Recursive DEF call**

A DEF function either called itself or another function which called it. A DEF function cannot contain references to itself or to other functions that refer to it in their definitions. Remove the recursive DEF call.

**0309 Nested DEF statements**

You cannot contain a user-defined function within another user-defined function. Remove the defined function from the other defined function.

**0310 Missing FNEND statement**

The program contained a multiline DEF statement that is not ended with an FNEND statement. Correct the program by inserting an FNEND statement at the end of the multiline function.

**0311 User-defined function error**

When an error occurs, error code and line number are reported. Pressing Error Reset, Cmd/Attn, or Cmd/Error Reset returns the program to the line with defined function. Error 0311 is reported, indicating this action. The failed line with user-defined function must be corrected. You cannot fix the error in function while function is invoked (1st error). The error can be corrected when 0311 is indicated.

**0312 User function reference not allowed**

The system was in calculator mode, and you entered a statement that refers to a user-defined function. Correct the statement by removing the function reference.

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## **0313 Missing GOSUB in user function**

The program issued a GOSUB and a return is issued within a defined function that has no corresponding GOSUB. Correct the program so that defined function returns have a corresponding GOSUB within the defined function.

## **0314 FNEND statement error**

An FNEND statement has been encountered without a defined function in effect. Make sure that you have a logical DEF/FNEND match.

## **0390 User function execution error**

A Cmd/Attn was detected during the execution of a multiline function. The Cmd/Attn will not be honored at this time. You may choose to continue execution of the function by pressing Error Reset. If you elect to terminate processing, pressing Cmd/Attn or Cmd/Error Reset will cause the current defined function to be exited. The ATTN will be honored once all the nested defined functions are exited.

## **0400 Concatenation error**

Two or more character strings were joined and the resulting string exceeds 255 characters. Correct the program statement that caused the error.

## **0402 LOG or EXPONENT error**

The program tried to use the LOG function or exponent on a negative number or 0. This error occurs due to a log or exponent error. Correct the program statement so that the argument of LOG or exponent is positive.

## **0403 Square root function error**

The program tried to use the square root (SQR) function on a negative number. Correct the program statement so that the argument of SQR is either zero or positive.

## **0404 Power function error**

The program tried to raise a negative number to a noninteger power. Correct the program statement that caused the error.

## **0405 Invalid argument for a string function**

The character string argument for a system function is not from 0 through 255. Correct the program statement that caused the error.

## **0406 Sine/cosine/tangent error**

The argument to the sine, cosine, or tangent system functions is greater than or equal to 1E10. Correct the program so that the argument will be less than 1E10.

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**0407 Invalid argument for DISPLY**

For the system function DISPLY, the argument (used to select a new set of graphics on the display) must be a number from 0 through 5. Correct the program statement that caused the error.

**0408 Invalid argument for SHIFT**

For the system function SHIFT, the argument (when used) must be either 0 or 1. Correct the program statement that caused the error.

**0410 Invalid parameter for HEX\$**

For the system function HEX\$, the hexadecimal character string contained either an odd number of characters or an invalid character (valid characters are numerals 0 through 9 or uppercase letters A through F). Correct the program statement that caused the error.

**0411 Invalid argument for PIC\$**

For the system function PIC\$, the argument must be only one character. Correct the program statement that caused the error.

**0412 Invalid argument for DISPLY**

For your IBM System/23, the program cannot use the argument for the system function DISPLY. Correct the program statement that caused the error.

**0413 Invalid parameter for RND**

For the system function RND, you used a parameter that was not greater than zero and less than one. Correct the program statement that caused the error.

**0414 Invalid parameter for a system function**

The parameter for a system function was an array rather than a scalar variable, or the parameter referenced a null value. Correct the program statement that caused the error.

**0415 Invalid parameter for SRCH**

For the system function SRCH, the parameter was not a one-dimensional array. Correct the program statement that caused the error.

**0416 ROUND parameter error**

The second parameter of the ROUND function is not in the range of -127 to +126. Correct the program.

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**0501 Not enough data for INPUT**

The INPUT statement could not find enough data. Provide the correct amount of data as specified by the I/O data list, or change the I/O data list for the INPUT statement.

**0502 No data for INPUT**

The INPUT statement could not find any data. Either no data was entered or all blanks were entered. Provide input data as specified by the I/O data list for the INPUT statement.

**0503 Missing quote for INPUT data**

The INPUT statement found a data item that contained a leading quote, but no trailing quote. Enter the data item again and provide the trailing quote.

**0504 Too much data for INPUT**

The INPUT statement could not run because the program contained too much data. Provide the correct amount of data as specified by the I/O data list, or change the I/O data list for the INPUT statement.

**0601 File type not 04 for OPEN INTERNAL**

An OPEN INTERNAL statement was directed to an existing file that is not type 04. The file being opened should have been created originally by an OPEN INTERNAL. Correct the OPEN statement that caused the error.

**0602 File type not 05 for OPEN DISPLAY**

An OPEN DISPLAY statement was directed to an existing file that is not type 05. The file being opened should have been created originally by an OPEN DISPLAY. Correct the OPEN statement that caused the error.

**0603 File type not 07 or 08 for OPEN INDEX file**

An OPEN statement for an index file was directed to an existing file that is not type 07 or 08. The file being opened should have been created originally by the Create Index File function. Correct the OPEN statement that caused the error.

**0610 Duplicate OPEN for same file reference number**

An OPEN statement specified a file reference number for a file that was already open. Correct the program statement that caused the error.

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**0611 Invalid device address for OPEN**

An OPEN statement specified a device address that is not valid. Correct the program statement that caused the error.

**0612 Invalid OPEN for BX or HX format**

An OPEN statement specified RECOVER=YES and FORMAT=BX or HX. Delete RECOVER=YES or change to FORMAT=Z.

**0613 Invalid OPEN for old file**

For an old file (SIZE is not specified), do not specify RECL or FORMAT in an OPEN INTERNAL statement or RECOVER in either an OPEN DISPLAY or OPEN INTERNAL statement. Correct the program statement that caused the error.

**0614 Invalid keyword for OPEN DISPLAY**

The keywords FORMAT and/or KFNAME were specified in an OPEN DISPLAY statement. These two keywords are invalid for this statement. Correct the program statement that caused the error.

**0615 Invalid device for OPEN INTERNAL**

An OPEN INTERNAL statement was directed to a printer. Correct the program statement that caused the error.

**0616 Invalid keyword for OPEN DISPLAY**

An OPEN DISPLAY statement contained a keyword that is not valid for a particular device. For example, FORMAT, SIZE, RECOVER, and KFNAME are all invalid for a printer. Correct the program statement that caused the error.

**0618 Invalid OPEN for printer**

INPUT was specified in an OPEN statement for the printer. Correct the OPEN statement to specify OUTPUT.

**0619 Conflicting keywords for OPEN**

An OPEN statement specified both KEYED and SIZE. KEYED may only be specified for old files. SIZE may only be specified for new files. Correct the program statement that caused the error.

**0620 Duplicate OPEN for printer**

A second OPEN statement was directed to a printer that is already assigned. Correct the program logic by taking out an OPEN statement.

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**Note:** Printers are assigned (opened) by either an OPEN statement or a PRINT #255 statement. LISTP, RUN TRACEP, or a DIR command (directed to the printer) also assign the printer.

## 0621 Missing keyword for OPEN

An OPEN statement specified either KEYED or KFNAM but not both. If one is specified, the other must also be specified. Correct the program statement that caused the error.

## 0622 Invalid value for RECL in OPEN

An OPEN statement specified RECL, but the record-length value is not valid. For OPEN DISPLAY, the value must be from 1 through 255. For OPEN INTERNAL, the value must be from 1 through 4096. Correct the program statement that caused the error.

## 0623 Invalid value for KW in OPEN

An OPEN statement specified KW, but the value for the number of bytes is not valid. This number must be from 0 through 65535. Correct the program statement that caused the error.

## 0624 Invalid keyword for OPEN INTERNAL

An OPEN INTERNAL statement specified PAGEOFLOW. This keyword must be taken out. Correct the program statement that caused the error.

## 0625 Invalid PAGEOFLOW value in OPEN

An OPEN statement specified PAGEOFLOW, but the page overflow value is invalid. This number must be from 1–255. Correct the program statement that caused the error.

## 0626 Invalid INTERNAL or device ID

An OPEN # 255 statement either specified INTERNAL or specified a device address not equal to 10. The OPEN # 255 statement must specify both device address 10, (the system printer) and DISPLAY. Correct the program statement that caused the error.

## 0627 Index file and master file error

This error occurred during the execution of an OPEN statement for keyed access. Two error conditions are covered by this code. First, after opening the master file successfully, an error occurred opening the index file. Then another error occurred which closed the master file. Make sure the correct diskettes are inserted or the correct disk volumes have been specified. Make sure that the drives are ready and that the file

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specifications in the OPEN statement are correct. If the specific errors cannot be determined, recover the files by using the Recover Diskette or the Recover Disk Customer Support Function.

**0700 Record number too large**

An I/O statement specified the keyword REC, or an OPEN statement had a size parameter, but the value was too large. The highest number that can be specified is 16,777,215 or 2 -1. Correct the program statement that caused the error.

**0701 Page overflow**

A PAGEOFLOW (page overflow) error occurred, and a PAGEOFLOW exit was taken. The number of printed lines equaled or exceeded the PAGEOFLOW value specified in the OPEN DISPLAY statement. The page overflow default is 60.

**0702 Invalid KEY or SEARCH parameter**

The KEY or SEARCH parameter was specified to access a record. The record is in a file that is not key-indexed. Correct the program statement that caused the error.

**0703 Invalid REC parameter**

The REC parameter was specified to access a record. The file is not open for relative access. Correct the program statement that caused the error, or correct/add the required OPEN statement.

**0704 File not open**

The program tried to use a file that is not open. Correct the program statement that caused the error, or add the required OPEN statement.

**0705 Invalid function for I/O statement**

An I/O statement referred to a function that is also trying to perform an I/O operation. Either remove any I/O statement from the function, or remove the function.

**0706 Invalid file reference**

An I/O statement specified an invalid file reference. Valid file reference numbers are from 0 through 127 and 255. Correct the program statement that caused the error.

**Note:** For an INPUT FIELDS statement or a PRINT FIELDS statement, 0 is the only valid file reference number.

# Error codes

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**0707 Invalid USING clause in I/O statement**

The USING clause in an I/O statement did not point to a FORM statement in the program. Correct the program statement that caused the error.

**0708 Error during CLOSE ALL**

Errors were detected during the process of closing all open files to the diskette, disk, printer, and display. Error code 708 was preceded by a specific error code for each error encountered. (If PROCERR RETURN is active, no specific error codes were presented.) In response to error code 708, you should press Error Reset to continue system processing.

**0709 Index file CLOSE error**

During the execution of a CLOSE statement for a file reference opened for keyed access, the master file was closed successfully. However, an error occurred closing the index file. Make sure that the correct diskette is inserted, and the drive is ready. If the specific error cannot be determined, the diskette may be defective. Recover the file from the defective diskette by using the Recover Diskette Customer Support Function. On the 5247 disk, use the Recover Disk Customer Support Function.

**0710 Cannot RESTORE shared file**

A RESTORE statement was issued for an output file that was opened as a shared file. RESTORE is not valid for this file. Correct the program statement that caused the error.

**0711 Cannot RESTORE key-indexed file open for output**

A RESTORE statement was issued for a key-indexed or relative file that is open for output. RESTORE is not valid for this file. Correct the program statement that caused the error.

**0712 Index and master file CLOSE errors**

During the execution of a CLOSE statement for a file reference opened for keyed access, errors occurred which closed both the master and index files. Verify that the correct diskettes are inserted and the drives are ready. If the specific error cannot be determined, the diskettes may be defective. Recover the files from the defective diskettes by using the Recover Diskette Customer Support Function. On the 5247 disk, use the Recover Disk Customer Support Function.

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**0713 Invalid I/O statement for device**

An I/O statement is directed to the wrong device; for example, input from the printer. Correct the program statement that caused the error.

**0714 Tried to read beyond end of record**

A READ statement tried to read more data than is contained in the record. Correct the program logic so the required data does not exceed the record length.

**0715 Invalid program sequence for REREAD/REWRITE/DELETE**

A REREAD, REWRITE, or DELETE (without position specification) was executed out of sequence. A successful READ or REREAD of the file is required prior to the current REREAD, REWRITE, or DELETE. Correct the program.

**0716 Missing keyword for WRITE**

A WRITE statement was issued for a relative-record file. The keyword REC was not specified, but is required. Correct the program statement that caused the error.

**Note:** The record specified must be a deleted record or one past the last record in the file.

**0717-0718 Invalid key length**

An I/O statement (using the KEY or SEARCH parameter) specified a key length that is not valid. Correct the program statement that caused the error.

**Note:** The system function KLN can be used to determine the actual key length for the file.

Specific errors are:

0717 Key length is too long; the maximum length allowed is 28.

0718 Key length does not match. For the KEY parameter, the key length must equal the key field length of the file. For the SEARCH parameter, the key length must be equal to or less than the key field length.

**0720 Tried to write beyond end of record**

A WRITE statement tried to write more data than a record can hold. Correct the program logic so the data does not exceed the record length.

**0721 I/O statement conflicts with OPEN statement**

An I/O statement was executed but was not compatible with the way the file was opened; for example, READ an output file. Correct the program

# Error codes

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statement that caused the error.

## 0726 Error during data mapping

This error can be caused by any one of the following:

- Incorrect syntax for a numeric field
- Number cannot be represented in the indicated field; field is too small.
- Incorrect character in PD or ZD field.
- Field size parameters are too large; they exceed system limits.
- In the parameter, the number of digits after the decimal point is too large.

Correct the program error. If errors have been caused by the operator keying in incorrect data, have the operator correct the input.

## 0801 Invalid FORM statement for I/O operation

An I/O statement (PRINT, READ, REREAD, WRITE, or REWRITE) used a FORM statement that does not contain a data mapping specification. Correct the FORM statement.

## 0802 Syntax error for PIC

A PIC specification contains an invalid combination of symbols. This message is also issued when PIC is specified on an INPUT FIELDS statement. Correct the PIC specification.

## 0816 Invalid FORM specification for I/O statement

An I/O statement used a FORM specification that was not valid. For example, PIC is specified for READ or REREAD. Correct the FORM statement that caused the error.

## 0817 Character data set used with L format

The system is expecting numeric data; you entered characters instead. Make sure that the data you enter is numeric.

## 0818 Numeric value too large for PIC

A numeric value cannot be output in a field defined by a PIC specification. The value is too large for a PIC specification without exponent specifiers. Correct the PIC specification.

## 0820 Invalid character for PIC

The PIC specification can contain only the following characters; \*, #, Z., ,, B, /, CR, DR, DB, , and -. All others will cause an error. Correct the PIC specification.

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**0850 Invalid number of I/O list items for INPUT FIELDS**

The number of I/O list items in an INPUT FIELDS statement was greater than 128. Reduce the number of items to less than or equal to 128.

**0851 Fields array not one-dimensional**

The fields array that defines full-screen processing fields was not one-dimensional. Specify the fields array as one-dimensional.

**0852 Number of I/O list items exceeds number of fields**

The number of I/O list items exceeded the number of fields. Either decrease the number of I/O list items or increase the number of fields.

**0854 Invalid row value**

The value for the row in a field definition was not valid; specify a value from 1 through 23.

**0855 Invalid field length value**

You used a field length of zero in a data conversion specification. Zero is not valid. Use a value greater than zero.

**0856 Invalid comma delimiter**

A comma delimiter was specified after the trailing attributes in a field definition parameter. Take out the comma delimiter. Note that combinations of leading or trailing attributes do not need delimiters.

**0857 Invalid column number or field width**

For INPUT FIELDS or PRINT FIELDS, the beginning or ending of a field was out of range. The leading attribute byte, the data field, and the trailing attribute byte must be within columns 1 through 80. Correct the field definition that caused the error.

**0858 Comma delimiter missing**

A comma delimiter was missing after the row or column number in a field definition. A comma delimiter is required after both the row and the column numbers. Correct the field definition.

**0859 Row or column number missing**

A row or column number was missing in a field definition parameter. Specify the missing row or column number.

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## **0860 Invalid delimiter**

A delimiter other than a comma was used in a field definition parameter. Commas are the only valid delimiters. Correct the field definition.

## **0861 Invalid or missing data conversion specification**

The data conversion specification in a field definition parameter was either not valid or missing. Check the data conversion specification for any of the following errors:

- The data conversion specification is missing.
- The data conversion specification is invalid. Valid specifications are C, N, V, or G for input and C, N, V, G, or PIC for print.
- A blank between the data conversion specification (C, N, V, or G,) and the field length is missing.

Correct the field definition.

## **0862 Field length is missing**

The field length in a data conversion specification is missing. Specify field length when the data conversion specification is either G (with corresponding numeric I/O list item) or

N. Correct the field definition in error.

## **0863 Invalid value for fraction length**

A fraction length does not follow a period in an N or G data conversion specification. Correct the data conversion specification.

## **0864 Missing parenthesis for PIC**

The leading or trailing parenthesis of a PIC data conversion specification (in full-screen processing) is missing. Correct the PIC data conversion specification.

## **0865 Input fields overlap**

Two or more input fields (defined in an INPUT FIELDS MAT statement) overlap. Correct the field definitions in error. Note that although input fields cannot overlap, the leading attribute byte of one field can overlap the trailing attribute byte of a preceding field.

## **0866 Invalid field parameter**

The value specified for either row, column, field length, or fraction length in a field definition parameter was too large. Correct the field definition in error.

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**0867 Fields array not dimensioned or initialized**

The fields array specified in an INPUT or PRINT statement was either not dimensioned or not initialized. Correct the program.

**0900 Not enough storage for work space**

There was not enough storage to carry out this command or the program at the specified line number. Press Error Reset to open the keyboard for operator input. You can also press and hold the Cmd key and press Error Reset or Attn to execute CLEAR ALL. Refer to the *BASIC Language Reference* manual for CLEAR ALL details. A permanent solution is to break the program into two or more sections and use the CHAIN statement to chain from one section to another.

**Note:** If this error code was preceded by error code 4002, the out-of-storage condition was caused by failure to write one or more records to a file. Use or Cmd/Error Reset to execute a CLEAR ALL. Use the Recover Diskette or the Recover Disk Customer Support Function to recover the file. Lost data will have to be recreated. For additional information, refer to "Storage use" in the *BASIC Language Reference* manual.

**0901 Input line too long**

The input line exceeded 255 characters. Correct this error either by taking out unnecessary blanks or by breaking the line into two separate lines.

**0902 Expression too complex**

An expression contained too many levels of parentheses. Simplify the expression or break it into two or more statements. This error may occur when listing the line that contains the complex expression.

**0910 RD value exceeds 15**

The value of RD in an OPTION statement exceeded 15. Change the RD value to be less than or equal to 15.

**0911 Option specified more than once**

An option was specified more than once within the same program. Correct the program to allow only one specification.

**0950 Invalid END statement**

The program had an END statement that did not have the highest line number in the program. The END statement must be the last statement in the program, and must have the highest line number. You can get this error if you are entering a program and have not used the CLEAR command. Correct the program.

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## 1000 Check syntax of statement

The statement has valid syntax up to the position of the cursor. In spite of this, the data appearing to the left of the cursor may be incorrect. Check the *entire* statement for common errors like misspelled optional parameters, extra right parentheses, missing exclamation points before comments, and missing periods in a complex filename. Correct the program statement or command.

## 1001 Invalid use of reserved word

You used a reserved word incorrectly. These system-defined words cannot be used as variables or labels. Correct the program statement.

## 1002 Invalid label or variable

A program line contained either a label that was defined on another line as a variable, or a variable that was defined on another line as a label. Correct the program statement that caused the error.

**Note:** If this error occurs during the process of chaining from one program to another, you must do a CLEAR ALL before continuing.

## 1003 End quote not found

In a quoted string, the end of the line was reached before the ending quote was found. Add the ending quote.

## 1004 Invalid variable or label

A variable or label beginning with the letters FN was detected. The letters FN are reserved by the system as a reference to your defined function. Use a different variable or label.

## 1005 Duplicate label or function

A program line defined a label or a function that is defined on another line. Change the label or function that caused the error.

## 1006 Syntax error

A required keyword or parameter (at the position of the cursor) is missing or incorrect. Check the syntax of the statement or command for required punctuation and keywords, and correct the error.

**Note:** In run mode, the cursor does not move to the error. You must list and review the entire line.

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**1007 Mixed program type**

While the CLEAR DATA command was in effect, you tried to enter a BASIC statement.

- Save the data file
- Enter CLEAR

This step does not correct the error, but indicates what you can do after correcting the error.

**1008 SYSTEM command keyword or implied LET not recognized**

A SYSTEM command keyword or an implied LET statement was expected. Either the SYSTEM command keyword was not recognized or the implied LET statement is in error. Check the spelling of the keyword and the syntax of the LET statement. The SYSTEM command may be attempting to initiate a feature function not loaded.

**1009 BASIC statement keyword or implied LET not recognized**

A BASIC statement keyword or implied LET statement was expected. Either the BASIC statement keyword was not recognized, or the syntax of the implied LET is in error. Check the spelling of the keyword and the syntax of the LET statement.

**1010 Characters exceed maximum allowed**

You exceeded a system-defined length; for example, a variable name exceeds 8 characters or a function name exceeds 10 characters. Change the length to conform to system-defined lengths.

**1011 Invalid OPTION, DIM, FOR or NEXT statement**

When correcting an error which occurred during run mode (split screen processing), an OPTION, DIM, FOR or NEXT statement was entered. These statements cannot be used after the program has started. To correct the error, 1) issue a GO END command to end the program, 2) enter the OPTION or DIM statement, and 3) issue a RUN command to rerun the program.

**1012 Invalid line number entered**

Either a line number did not begin in column 1, or a blank line was entered.

**1013 No blank after line number**

A program line contained a line number that is not followed by a blank. Correct the program statement by inserting a blank between the line number and the BASIC statement.

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**1014 Invalid program line number**

A program line with line number 0 was attempted. Change the line number to a value greater than zero.

**1015 Expression too complex**

A program statement contained an expression that has too many levels of parentheses or a print statement that has too many items. Simplify the expression or break it into two or more statements.

**1016 Hex character**

“00” found in BASIC statement The source line contains hex “00” This could occur if you use PRINT #X: HEX\$(“00”) to a display file and then attempt to load this program. This procedure should be avoided.

**2000 Editing not possible**

Extensive editing of the program was performed. No more editing is possible. Use the SAVE command to store the program in SOURCE format and reload it. Then continue editing.

**2001 Invalid DEL command**

The operator or procedure tried to execute a DEL command and the work space is empty. Load the correct program or data into the work space, then issue the DEL command again.

**2002 Invalid line number for DEL command**

The operator or procedure tried to execute a DEL command, but the specified line number does not exist. Correct the line number; then issue the DEL command again.

**2003 Invalid line number sequence**

A system command specified a range of line numbers, but the first line number is greater than the second line number. This sequence is not valid. Correct the command that caused the error.

**2004 Invalid range for lines**

A DEL or LIST command was issued for a range of lines, but the range contains no lines; or a LIST command with a label was specified, but the label does not exist. Reissue the command for a correct range of lines, or an existing label.

**2005 Invalid line number for LIST or LISTP command**

A LIST or LISTP command was issued but nothing exists to be listed. Correct the command or issue the command at the proper time.

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**2008 Line number will exceed 99999**

During automatic line numbering (using the AUTO command), the number 99999 will be exceeded. This number is the upper limit for line numbers. Issue the AUTO command again and use different parameters.

**2009 Renumbering will exceed 99999**

A RENUM command determined that a line number greater than 99999 will be generated. Change the parameters for the RENUM command to be exact.

**2010 Invalid RENUM command**

The program issued a RENUM command and the work area does not contain any data. Load the program or data that you intend to renumber; then issue the RENUM command again.

**2011 Missing parameter for MERGE command**

You tried to merge data files, but did not specify the required "new-line-number." Issue the MERGE command again and supply the "new-line-number."

**2012 Program in lock mode**

The work area is in lock mode and cannot perform the request. The program is saved as locked. It cannot be listed or saved in source format. Obtain an unlocked version of the

program and perform requests on that version.

**2013 Invalid RENUM command**

You tried to renumber a program that has not ended. Do not use the RENUM command during program execution. Allow the program to finish; then renumber the work space.

**2014 Invalid parameters for RENUM**

You have issued a RENUM with one of the parameters equal to zero. Reissue the command, making sure the parameters are nonzero.

**2015 Invalid parameter for a MERGE command**

The "from-line-number" parameter is greater in value than the "through-line-number." When you use these parameters, the "from-line-number" must be smaller. Correct the parameters.

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- 2090 Out of storage while editing or loading**  
While loading the program, no more storage was available; or while adding or updating lines, no more storage was available. Saving the program in source form and reloading it will enable further editing. Otherwise, the program has to be broken into two or more programs.
- 2100 Too many procedure files active**  
The total number of procedure files that can be active (open) at one time is five. You tried to exceed this number. Correct the program logic regarding SUBPROC commands.
- 2101 Invalid line number for GO command**  
You tried to execute a GO command, but the line number does not exist. Correct the line number.
- 2102 Improper use of GO command**  
You issued a GO command at the wrong time. There is no interrupted program or procedure file that can be resumed. If you intend to execute a program, use the RUN command.
- 2103 Invalid parameter for RUN command**  
The PROC parameter was specified for a RUN command, but no procedure file is being executed. The PROC parameter is valid only for a RUN command within a procedure file. Correct the command.
- 2104 Invalid RUN command**  
You issued a RUN command and the work area does not contain a program. Load the program that you intend to run; then issue the RUN command again.
- 2105 Invalid ALERT command**  
You issued an ALERT command improperly. The ALERT command should be used only within procedure files.
- 2106 Invalid parameter for TIME command**  
The time specification parameter was outside one of these ranges: hours, 0-23; minutes, 0-59; seconds, 0-59. Issue the command again and use the correct specification.
- 2107 Invalid parameter for DATE command**  
The date was outside one of these ranges: year, 1-99; month, 1-12; day, 1-31. Issue the command again and use the correct specification. Use this form: YY/MM/DD.

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**2108 Invalid RUN command**

You issued a RUN command to restart an interrupted program or you tried to do a SAVE/REPLACE on a running program. You must first issue a GO END command; then issue the RUN command again.

**2109 Invalid SAVE/REPLACE command**

You issued a SAVE/REPLACE command and you do not have anything in the work area to save. Load the work area with the program or data that you intend to save. Then issue the SAVE/REPLACE command again.

**2110 Volume owner ID does not match**

You issued a VOLID command and specified the OWNERID and the keyword OFF. The OWNERID for the disk volume or diskette does not match the one specified. Issue the command again and supply the correct OWNERID.

**Note:** Use the VOLID command (with no parameters) to determine the correct OWNERID.

**2111 Missing lines for a locked program**

The program you tried to save has missing lines, and you have specified the keyword LOCK. Either resolve the missing lines before issuing the SAVE command, or use the SAVE command

and do not specify LOCK.

**2112 Invalid device**

A LOAD, SAVE, or PROC command specified a device that is not a valid device. Correct the command statement that caused the error.

**2113 Duplicate filename**

A RENAME was issued, but the new filename already exists on the disk volume or diskette. Use a different filename, a different disk volume or diskette, or free the existing filename if it is no longer needed.

**2114 Cannot link Customer Support Function**

You tried to link a Customer Support Function, but a control program for the communications feature is in storage. Wait until the control program is no longer needed and has been removed from storage; then link the function again.

**2115 Invalid SKIP command**

You issued a SKIP command, but a procedure was not active at the time. Issue a SKIP only if a PROC is active.

# Error codes

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## 2116 **SAVE error**

An error occurred when SAVE was attempted while MERGE or LOAD was in effect. A complete LOAD or MERGE may have to be done if you still have a problem; then restart the operation.

## 2150 **Invalid parameter for a REPLACE command**

You used REPLACE to save a program file (type 09), but the existing file is not type 09. If the existing file is a source file, specify the keyword SOURCE in the command. Otherwise, use the SAVE command.

This error can also occur if you have loaded a type 09 file and edited a RESERVE and/or RELEASE statement into the program and then attempted to replace the program. Please note that programs containing RESERVE/RELEASE statements are saved as type 81 files. You must free the existing file, using the FREE command, and save the program, using the SAVE command. The file type will become 81.

## 2151 **Invalid file type or drive number for a LINK command**

Either you tried to link to a file that is not valid for LINK, or you tried to use drive zero which you do not have. Reissue the command and use the correct file

specification (Customer Support Function or feature), and/or the correct drive number.

## 4000 **Filename or volume not found**

A diskette containing the specified filename or volume is not inserted. The program tried to open a file but could not find it after searching all active volumes. If the file is on a diskette, verify that the diskette type is compatible with the drive.

If you have a 1D on your drive handle, you should use a type 1 diskette. If you have a 2D on your drive you can use a type 1, type 2, or type 2D diskette.

If the file is on the 5247 disk, make sure the disk is switched on and the ready light is on. If the disk is not on, follow the procedures in *Operator Reference* to close files, switch off the system and then switch it back on.

Verify that the file specification used by the program to search for the diskette drives is correct. Correct any problems with the diskette placement and press Error Reset to continue. If the file specification must be changed, cancel the operation by pressing and holding the Cmd key and pressing Error Reset.

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Refer to "File searches" in the *BASIC Language Reference* manual for specific details about the search process.

**Note:** If this error recurs after the correct diskette is inserted, contact your service representative.

- 4001 Diskette with open files not inserted**  
The program could not locate a file that was opened, but not closed. Check the status line for more information, such as filename, VOLID, and diskette drive number. Locate the proper diskette, insert it into the diskette drive, and press the Error Reset key. If this error recurs after the correct diskette is inserted, you may have a hardware failure and should call your service representative.

If you cannot locate the correct diskette, cancel this request by pressing the Cmd key and the Error Reset key. Using Cmd/Error Reset can cause data to be lost, and the data cannot be recovered. The current operation will be ended.

**Note:** You must cancel this request if you used the VOLID command to change the volume identification for a diskette with open files.

- 4002 Write error during freeing process**  
A write error occurred while freeing dynamic buffers in response to the program's need for storage. The buffers are not freed and the storage they occupy is not available for use by the program or Customer Support Function. An out-of-storage condition may exist. Record the error and press the Error Reset key to continue.

**Note:** Error code 0900 may result when execution is continued.

- 4003 Request to insert diskette canceled**  
The request to insert a diskette (error code 4001) was canceled. Determine whether data has been lost and regenerate the data if it is needed. Use the PROTECT command or the Recover Disk or Recover Diskette Customer Support Function to return the file to usable form.

- 4004-4007 Media error in label space**  
An I/O error occurred in the directory label space. The diskette or disk is defective and should not be used. Recover the files from the defective disk volume or diskette by using the Recover Diskette or Recover Disk Customer Support Function. If this error recurs with the recovered diskette or disk, you may have a hardware failure and you should call your service representative.

# Error codes

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Specific errors are:

- 4004 Error during read or write of the directory block
- 4005 Error during read or write of file label
- 4006 Error during read or write of duplicate file label
- 4007 Error during read or write of cylinder-0 label
- 4054 Invalid I/O request**  
An I/O statement was issued, but the requested operation is not compatible with the specified file. Correct the program.
- 4055 Duplicate VOLID on 5247 disk**  
The specified VOLID already exists on the disk. Specify a different VOLID or change the existing VOLID.
- 4056 File is open during PROTECT RELEASE**  
You tried to use PROTECT RELEASE on an open file. The file must first be closed. To close the file, enter GO END; then rerun PROTECT RELEASE.
- 4057 Volume cannot be accessed**  
A system command or a Customer Support Function was not carried out because there are open files in the volume specified. Either close the open files or wait until they are closed by the operator who opened them.
- 4058 Volume cannot be accessed**  
You are trying to use a volume on the 5247 disk which has been reserved by a system command or a Customer Support Function. Either re-try the operation or wait until the volume is released.
- 4059 Directory cannot be created or extended**  
There is either insufficient space or not enough contiguous space on the disk for you to create or extend a directory.
- If your volume contains 9998 files, you will not be able to add another file. Delete unnecessary files from this volume, or use another volume.
  - If your 5247 disk has insufficient contiguous free space available, delete an unnecessary file or volume.

If this does not resolve your problem, call IBM for technical support.

---

**4060 No volumes exist on the 5247 disk**

You have either deleted all existing volumes, or you have just run the Prepare Disk Customer Support Function on a new disk. As a result, no volumes are present on the disk. Use the Add and Delete a Volume Customer Support Function to create the volumes you need.

**4108 Error while searching directory**

An I/O error occurred while searching the diskette directory. The diskette is defective and should not be used. Recover the files from the defective diskette by using the Recover Diskette Customer Support Function. If this error recurs after executing recovery, you may have a hardware failure and you should call your service representative.

**4109 Invalid file label**

A file label that is not valid was found in the label space of the diskette being accessed. This prevents any file on this diskette from being accessed. Use the Recover Diskette Customer Support Function to recover files.

**4110 I/O error during key file read**

An I/O error was encountered while reading the key file to build an in-storage index. Use your backup copy of the disk volume or diskette, or recover the key file by using the Recover

Diskette or Recover Disk Customer Support Function. If necessary, use the Create Index File Customer Support Function to make a new file.

**4114 Invalid drive number**

A system command or program tried to use a drive that does not exist in your system. Change the drive number in the program statement or system command to a valid number (from 1 through 5) for your system.

**4116 Invalid record length**

An I/O statement contained a record length that is not valid. Maximum record lengths are: 128 for BX (Basic Exchange) format, 256 for HX (H-Exchange) format, and 4096 for IBM System/23 format. Correct the program statement that caused the error.

**4118 Invalid access option for BX or HX format**

The specified access option was not allowed for a BX (Basic Exchange) or HX (H-Exchange) file. Use sequential access for these files. Either change the program to do sequential access, or use an IBM System/23 file.

# Error codes

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## **4120 File sharing status is incorrect**

A display file (type 5) cannot be opened for SHR/Output. A different file sharing status is required. Change the keyword to SHR/Output and re-try the operation.

## **4121 Invalid access for nonkey file**

An I/O statement specified keyed access for a nonkey file. Either correct the program statement that caused the error, or create the file as a keyed file.

## **4122 Invalid access for file type**

The specified access was not valid for the type of file. For example, an OPEN INTERNAL for a DISPLAY file. Change the program so that the type of access agrees with the type of file.

This error can also occur if you attempt to load a file type 81 on a computer without a 5247 Disk Unit attached. This happens because the program contains statements that are valid only for the 5247 disk.

## **4123 Invalid key length**

An I/O statement contained a key length that is not valid. Valid key lengths are from 1 through 28. Correct the program statement that caused the error.

## **4125 Invalid length for key work area**

A key work area was needed, but the specified length is too small for one entry. The minimum length you should use is key length +4. Correct the program statement that caused the error.

## **4126 Not enough storage for key work area**

There was not enough free storage to build the specified key work area. Either specify a smaller key work area or reduce the storage requirements for the program. For example, break the program into two or more sections and use the CHAIN statement to chain from one section to another.

## **4128-4134 Invalid filename**

An error occurred because a filename is not valid. Correct the filename.

Specific errors are:

4128 Filename is not a valid length. Maximum filename length is 17; for example, two 8-character simple names connected with a period.

4129 Filename is too long for BX (Basic Exchange) or HX (H-Exchange) format. Maximum length is 8 characters.

4130 A simple filename does not start with an alphabetic character.

---

Simple filenames can be from 1–8 characters in length. Also, a compound filename can have a maximum of 17 characters. Each element of a compound name is considered a simple name. Therefore, each element should begin with alpha characters. Refer to "File specification parameter" in the *BASIC Language Reference* manual for exact format.

4131 Invalid character in the filename. Valid characters are letters, numbers, and periods. Spaces in the middle of words are not allowed.

4132 Complex filename specified for BX or HX format. These formats require a simple filename.

4133 Period specified in wrong position. Periods connect simple filenames (maximum length of 8 characters) to make complex filenames.

4134 Simple filename is too long. Maximum length is 8 characters.

**4135 Invalid VOLID**

An invalid VOLID was specified. A valid VOLID consists of from 1 through 6 letters or numbers. Correct the VOLID.

**4137 Not enough space on volume**

There was not enough free space to create the file. The free space on your diskette may have been used during error recovery operations. Check DIR output for the number of bad sectors. Consider using a fresh diskette if there are bad sectors on this diskette. Free files you do not need, or use another diskette.

Bad sectors on the 5247 disk are *not* recoverable. You may run the Backup and Restore Customer Support Function to combine available file space. Free files which are not needed.

**4138 Not enough contiguous space on diskette or disk**

There was not enough contiguous free space to complete the allocation for the BX (Basic Exchange), HX (H-Exchange), key, or type Z file types. Free files you do not need or use another diskette.

**4141 Missing drive number and/or VOLID**

For a new file, the drive number and VOLID were missing. Specify either the DRIVE NUMBER or the VOLID or both, FILENAME/VOLID/DRIVE NUMBER. For additional information, see the *BASIC Language Reference* manual.

# Error codes

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## 4142 **Missing drive number and/or VOLID**

Certain system commands and Customer Support Functions require either a drive number or VOLID. This error occurs when neither is specified. Specify either drive number, VOLID, or both.

## 4144 **Volume is access-protected**

The disk volume or diskette could not be accessed because it is access-protected. No files on this volume can be read or written. If the volume does not need access protection and the correct volume is being accessed, then use the VOLID command to turn off access protection.

## 4146 **File is write-protected**

The file could not be written to because it is write-protected. If the file need not be write-protected and you are accessing the correct file, then use the PROTECT command to turn off write-protection.

## 4148 **File-sharing rule violated**

This file could not be opened because it violates the file-sharing rules. Check the file usage. If the file is not in use, use PROTECT (FILENAME), CLOSE or PROTECT (FILENAME), RELEASE to allow access to the file. If the file is in use, do not use PROTECT CLOSE or PROTECT RELEASE. See the *BASIC*

*Language Reference* manual for additional information.

## 4150 **Duplicate filename**

You used a filename that already exists on the diskette or disk volume. Use a different filename or a different disk volume or diskette, or free the existing file if it is no longer needed.

**Note:** This error could be the result of trying to SAVE to an existing file. Use REPLACE instead.

## 4152 **File not found**

The file could not be found. Make sure that the correct diskette is inserted, the drive is ready, and the filename is specified correctly. For the 5247 Disk, specify correct volume and filename. If you typed the filename incorrectly, press Error Reset and correct it.

**Note:** If necessary, use the DIR command to check for the correct disk volume or diskette.

## 4153 **Drive not attached**

The specified drive was not attached. This error could also occur when you are:

- Accessing drives 3 and 4, if the 5246 Diskette Unit was attached but not switched on

- 
- Accessing drive 5, if the 5247 Disk Unit was attached but not switched on

Do one of the following:

- Specify the correct drive number.
- If you are accessing a 5246 Diskette Unit or a 5247 Disk Unit, switch off the computer. Switch on the 5246 or the 5247 unit, then switch on the computer. Re-try the operation.

**4154 Maximum number of files open**

No more files can be opened on the 5247 disk at this time. The maximum number of unique files which can be opened on the system is 340. Wait until some files are closed, then rerun your application.

**4155 Maximum number of files exceeded**

The maximum number of files specified during PREPARE has been exceeded. As a result, no more files can be placed on the diskette. Either use a different diskette, or create room for the file by using FREE.

**4156 Maximum number of open files exceeded**

For a single computer, you exceeded the limit of 255 open files, or you do not have enough storage for another file control block. Correct the program to

open fewer files or reduce the number of open files for each computer.

**4157 BX file not allowed**

A BX (Basic Exchange) file was not allowed on the specified diskette. The diskette was not prepared on an IBM System/23. If the diskette contains data that you need, request another diskette that is correctly formatted. Otherwise, use a different diskette, or prepare the unusable diskette on an IBM System/23.

**4158 Wrong diskette format**

The diskette format did not match the format of the file you tried to write. For example, a BX (Basic Exchange) file cannot be written on an IBM System/23 format diskette. Use a diskette that is correctly formatted.

**4159 Volume not found**

The volume with the specified VOLID cannot be found. If an insert diskette message was cancelled, press the Error Reset key to continue. If the VOLID name was typed incorrectly, press Error Reset and correct it.

# Error codes

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## 4160 Diskette format not supported

You used a diskette with a format that is not supported by the IBM System/23. The diskette was not prepared on an IBM System/23. If the diskette contains data that you need, request another diskette that is correctly formatted. Otherwise, use a different diskette or prepare the unusable diskette on an IBM System/23, using the Prepare Diskette Customer Support Function.

## 4161 Diskette cannot be accessed

The diskette could not be accessed because the volume label, error map (ERMAP) sector, or diskettes of unsupported types could not be accessed. Use the Recover Diskette Customer Support Function to recover the files.

**Note:** This error also occurs if you try to use a diskette that has not been prepared. For this case, use the Prepare Diskette Customer Support Function to format the diskette.

## 4162 Extended label area on diskette

The file could not be created because there is an extended label area on the diskette. This applies only to type 2D diskettes with 256-byte sectors that were not prepared by the IBM

System/23. Use a diskette which has been prepared on the IBM System/23 with the Prepare Diskette Customer Support Function.

## 4163 Error due to OPEN failure

OPEN failed because a different file with the same file specification (name, VOLID, drive number) is already open. The sharing flags in the label of the file on which the OPEN failed indicate that it is not the same file. If the second OPEN were not prevented, the two files would become indistinguishable to data management and data could be destroyed. This error may be prevented by using different drives for each file, or by giving different VOLIDs to the diskettes or disk volumes. Misuse of PROTECT RELEASE or PROTECT CLOSE can cause this situation. *Do not* use PROTECT RELEASE or PROTECT CLOSE on a file that is in use.

## 4164 Maximum number of file extents exceeded

To complete the allocation of space to this file, the file exceeded the maximum number of extents allowed. Create the file on another diskette that has more available space or free files not needed to create more space on the diskette or disk. Then re-try the operation.

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**4166 File label not available**

RECOVER was specified on the OPEN statement for this file, or the Copy Diskette Customer Support Function was copying a file with a duplicate data set label. There was no empty data set label to use for the duplicate data set label. Either create empty data set labels by freeing files you no longer need, use a different diskette, or do not specify RECOVER in the OPEN statement.

**4168 Invalid or unsupported exchange type**

The non-IBM System/23 file being opened had an invalid or unsupported exchange type in the file label. The file cannot be accessed by the IBM System/23. Make sure the file is specified correctly. Only BX (Basic Exchange) and HX (H-Exchange) files can be exchanged between the IBM System/23 and other systems.

**4180 File is not usable**

Because of a system failure, a file which was previously reserved cannot be accessed. Each operator using the file must close it. Then run Protect Release on it.

This error indicates that the file was not properly closed by at least one operator. Data may have been lost. Examine the

file to ensure that the data is in a usable condition before continuing.

**4239 Data space not available**

An IBM System/23 format file opened for output could not be extended because all available data space has been allocated to files. Free files you do not need, or copy the file to a diskette that has more free space. On the 5247 disk, free files you do not need.

**4260 Duplicate Reserve or Block Lock**

You tried to reserve a file which had been reserved by this computer under a different file reference number. To cancel your program, press the Error Reset key and enter GO END or CLEAR PROC. Check the program logic for errors.

**4270 End of data or end of file**

For an input file, this is a status message telling you that all records have been read.

For an output file, no more records could be written. Create a larger file by either allocating a larger file for this operation, or by copying this file to one that has more space. Then try the operation again.

# Error codes

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## **4271 Maximum number of extents assigned**

An IBM System/23 format file opened for output could not be extended because the maximum number (100) of extents has been assigned. Either allocate a larger file for this operation, or, if it is a diskette file, run the Backup and Restore Customer Support Function. On the 5247 disk, run the Copy Customer Support Function to compress this file. Then re-try the operation.

## **4272 Key not found**

On a file opened for key access, the requested key could not be found. Make sure that the correct diskettes are inserted, and that the key file matches the master file. On the 5247 Disk, verify the volume(s) specified.

## **4311 I/O error writing buffered data**

While writing buffered data to close a file, an unrecoverable I/O error occurred. Data may be lost or wrong. Use the Recover Diskette or Recover Disk Customer Support Function to recover the file. If this error recurs on the recovered disk volume or diskette, you may have a hardware failure and you should call your service representative.

## **4373 DROP is invalid for a key file**

You tried to remove a key file by using the DROP command. Use the FREE command instead.

## **6001-6006 I/O error during read or write**

An I/O error was detected during a diskette read or write operation. Use the Recover Diskette Customer Support Function to recover the diskette in which an error occurred; then re-try the operation. If this error recurs after recovery, you may have a hardware failure and you should call your service representative.

Specific errors are:

- 6001 Cyclic Redundancy Check error in an identification or data field.
- 6002 Sector not found on diskette.
- 6003 Missing address mark on diskette.
- 6004 I/O error during read or write of diskette. This is a diskette error that results in a time-out condition in the system.
- 6005 Data read from diskette does not match original write data.
- 6006 Control record address mark encountered where one should not be.

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**6007 Drive not ready**

A diskette drive was not ready. Either the diskette is not inserted with the drive handle closed, it is inserted backwards, or you used a type 2 or 2D diskette in a drive that only accepts a type 1 diskette. Correct the relevant condition and press the Error Reset key. If the drive handle was opened during an I/O operation, this error will occur. Do not open the drive handle while the program is using a drive. You may have unusable data on the diskette. If this occurs, you must use the Recover Diskette Customer Support Function to recover your file(s).

**6009 5246 Diskette Unit not switched on**

The 5246 Diskette Unit is attached, but was not switched on during the power on sequence. Switch on the 5246 Diskette Unit and press the Error Reset key to gain access to it; or press the Cmd and the Error Reset keys together to make the 5246 Diskette Unit unavailable to the system.

**6010 Wait for 5246 Diskette Unit interrupted**

Wait for the 5246 Diskette Unit was interrupted by the operator. The 5246 Diskette Unit is either not switched on or is being used by the other system. If

not switched on, switch the 5246 Diskette Unit on and press the Error Reset key. If being used by the other system, either press the Error Reset key to allow the wait to continue, or press the Cmd key and the Error Reset key to end the 5246 Diskette Unit Input/Output operation. Ending the operation may cause data to be lost on the diskette if any of the files are currently open. This data cannot be recovered.

**6011 Wait canceled for 5246 Diskette Unit**

Wait for the 5246 Diskette Unit was canceled by the operator. Wait until the 5246 Diskette Unit is free (or available in contention mode) and restart the operation. If necessary, use the Recover Diskette Customer Support Function or backup files to recover file(s).

**6012 Diskette drive failure**

The diskette drive did not seek to the correct cylinder or the diskette may be defective. Use the Recover Diskette Customer Support Function to create a good copy of the diskette. Re-try the operation. If the error occurs again, call your service representative.

# Error codes

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## **6013-6016 Diskette drive failure**

An error was caused by a failure in the diskette drive or the diskette attachment. Re-try the operation. If the error occurs again, call your service representative.

Specific errors are:

- 6013** Write current detected during a nonwrite operation.
- 6014** Data overrun. No Direct Memory Access (DMA) response to diskette controller in the required amount of time during data transfer.
- 6015** Diskette controller failure.
- 6016** I/O operation timed out.

## **6113 Copy display already in use**

You tried to use the Copy Display (Copy D) function while Copy Display was already in use. Press Error Reset and re-try the function when the current Copy Display is completed. If this error code is repeated and the printer is not printing from the previous Copy Display function, do the following:

- Press Error Reset.
- Switch off the printer and correct the problem, if necessary.
- Switch on the printer; then press Error Reset on the computer. (On the 5217 Printer, press the Start

button; then press the Error Reset key on the computer.) Re-try the Copy Display function.

## **6114 Printer already in use**

An attempt was made to use the Copy Display function while the printer was being used by a BASIC program or Customer Support Function. Press the Error Reset key to continue. Re-try the Copy Display function when the printer has finished printing.

## **6116 Test key pressed while in command shift**

The test key was pressed while the keyboard was in command shift. If you wish to continue with the program or function, press the Error Reset key. If you wish to invoke the system diagnostics, press the Cmd key and either the Error Reset key or the Attn key.

**Note:** When you run the system diagnostics, your program and data in storage will be lost and any open files will be left open.

## **6123 Too many characters**

You tried to type too many characters while the keyboard was in the input mode. Press the Error Reset key to continue. Correct the input data and press the Enter key.

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**6124 Input too long**

You tried to insert a character into an input field in which the last character was not blank. Press the Error Reset key to continue. Shorten input and then press Enter key.

**6125 Too many characters for full-screen processing mode**

You tried to type too many characters into an input field while the keyboard was in full-screen processing mode. Press the Error Reset key to continue and backspace to any data in error and correct it. Use one of the field exit keys to change input fields.

**6126 Modifying data in error**

An error was caused when modifying data in a numeric field and pressing Enter before exiting the field. Press Error Reset, make necessary data corrections, leave this field, and press Enter.

**6201 Incorrect printer data**

Incorrect data was received at the printer due to a hardware error. **(On the 5217 Printer, press the Start button before re-trying the operation).**

Re-try the print operation. If this error occurs again, call your service representative.

**6202 Printer failure**

A hardware error or paper jam occurred in the printer. If there is a paper jam, correct the problem; also check the position of the paper insertion gate. **(On the 5217 Printer, 05 is in the display window. Press the Start button before re-trying the operation).**

Press the Error Reset key and re-try the print operation. If this error recurs, call your service representative.

**6204 Invalid printer command**

An invalid command was received by the printer. In a BASIC program, you may have a PRINT statement that contains invalid hexadecimal data for printer spacing or line control. **(On the 5217 Printer, press the Start button before re-trying the operation).**

Correct the program statement that caused the error.

**6208 End of forms**

The printer is out of paper. Insert more paper. The operator action is described below:

*Initial System Action:* Action code 11 is displayed on the status line along with the word OPTION.

# Error codes

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To continue, reload forms in the printer. **(On the 5217 Printer, press the Start button before you press the Error Reset key).** Then press the Error Reset key on the computer. System action—Printer resumes printing and program continues to execute.

You may wish to cancel because you are unable to reload forms. **(On the 5217 Printer, press the Start button before you press Cmd/Error Reset or Cmd/Attn).** Then press Cmd/Error Reset or Cmd/Attn. System action—Print statement (or CLOSE, STOP, END) fails with error 6241. (See error 6241.)

## 6210 Printer off during print

The printer was switched off during a print operation. Switch the printer on. Press the Error Reset key on the computer. **(On the 5217 Printer, this error may occur if the Print Test button has been pressed).** Re-try the operation.

## 6211 Printer not on

The printer is not on. Switch the printer on. Make sure that all attached printers are switched on. Press the Error Reset key on the computer. **(On the 5217 Printer, this error may occur if the**

## **Print Test button has been pressed).**

Re-try the operation.

**Note:** This code will be displayed if the 5217 Printer is not attached or is turned off under certain conditions.

## 6212 Printer not attached to the system

If you get this error and a printer is attached, you may have a bad connection to the printer; or your Printer Switch Feature (if you have one) may not be set correctly. (For information on Printer Switch Operation, see Chapter 5, "Printers," in *Operator Reference*.) To stop the operation, switch off the system, make sure the printer signal cable is installed properly, then switch on the system. Restart the operation. If this error recurs, call your service representative.

## 6218 Printer is not ready

The 5217 Printer was not ready during an OPEN or CLOSE operation.

To continue, press the Start button on the 5217 Printer; then press the Error Reset key on the computer. To continue a BASIC program, enter the GO command.

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**6230 Printer off during OPEN**

The printer was switched off during an OPEN or CLOSE operation. Switch on the printer. Press the Error Reset key on the computer. Re-try the operation.

If you have the Printer Switch Feature, it may not be set correctly. (For further information, see Chapter 5, "Printers," in *Operator Reference*.)

**6241 Printer intervention request canceled**

You pressed Cmd/Error Reset or Cmd/Attn in response to error code 6208 (End of forms), 6248 (Cancel button pressed), and 6268 (Change printer ribbon). You were unable to recover or wished to cancel. Press Error Reset to exit.

**6248 Cancel button has been pressed**

The Cancel button on the 5217 Printer has been pressed, and the printer will be reset. To continue, wait until the printer's READY light goes off, then press the Start button on the printer and the Error Reset key on the computer. To cancel a BASIC program, press the Start button on the printer and enter GO END on the computer.

**Note:** Pressing the 5217 Printer's Cancel button causes printing to end. Any characters stored in the printer will

be lost. To temporarily stop printing, use the Stop button, **not** the Cancel button.

**6258 Printer cannot perform requested operation**

Printing has stopped because the 5217 Printer cannot complete a task you requested. One or more characters on the line just printed were not in the character set for the print wheel in use. Blanks have been substituted for them. You will see 96 in the display window.

To continue in spite of the error, press the Start button on the printer; then press the Error Reset key on the computer. For further information, refer to Chapter 8, "Help," in the *Using Your 5217 Printer* manual.

**6268 Change printer ribbon**

Your 5217 Printer's ribbon has been used up. Change the ribbon. To continue your printing job, press the Start button on the printer; then press the Error Reset key on the computer.

**6278 Check paper supply**

The paper supply in the sheet feed has run out. Check the two-digit display on the 5217 Printer to locate the empty drawer. 01 refers to the lower drawer, 02 refers to the upper drawer. Add some paper.

# Error codes

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To continue, press the Start button on the printer; then press the Error Reset key on the computer.

## **6288 Check the print wheel**

This message reminds you to insert the correct print wheel into the 5217 Printer. The two-digit display on the printer may display a number describing the print wheel to be used.

To continue, press the Start button on the printer; then press the Error Reset key on the computer.

## **6298 Printer is not ready**

The 5217 Printer is not ready.

To continue, press the Start button on the printer; then press the Error Reset key on the computer.

**Note:** This error can also occur if you pressed the Error Reset key before pressing the Start button while correcting a previous 5217 Printer error.

## **6301—6305 Machine failure detected**

A machine circuit failure on the word processing feature card was detected by the internal diagnostics when the command, LINK WP, was entered.

Switch the system power off and back on. Re-try the operation. If the error recurs, call your service representative.

**Note:** This error can also occur if the command, LINK WP, is entered on a system without a word processing feature.

## **6306-07 Error in WP file**

An error was detected in a word processing system file after the command, LINK WP, was entered. It is caused by either a damaged or invalid word processing file. Record the information on the status line.

To continue, press the Error Reset key. Then use another word processing diskette, and re-try the LINK WP operation. If the error recurs, either contact someone with programming experience, or call IBM for technical support.

**Note:** If you get this error while the 5247 disk is in use, switch off your computer, then switch it back on. Use the correct level of the word processing program and re-try the operation.

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**6308 Incorrect WP diskette/program level**

You attempted to enter command, LINK WP, but you either failed to enter PROC START, or you used a word processing diskette that is not compatible with the computer's internal programs.

Switch the system power off and then back on again. Then enter PROC START, using a current level Customer Support Function diskette. Sign on to word processing again. If necessary, refer to "Sign on to word processing" in the *Word Processing Quick Reference* manual, SA34-0165.

If the same error recurs, either contact someone with programming experience, or call IBM for technical support.

**6310 Word processing ended**

You pressed Cmd/Error Reset after error code 0900 during your word processing operation. This erased your program and ended the operation. Instead, you should have pressed either Error Reset or Command/Cancel.

To recover from this error, press the Error Reset key. This will cause the system to bring itself up to a ready state and restore information. Then, if you wish to continue with word processing, issue the LINK WP command.

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## 6401-6481 System communication errors

In each of the following cases (6401-6481), an error has occurred while the system was communicating with the 5247 disk. This error is preventing completion of a requested function. In each case, do the following:

### Operator Action (6401-6481)

- Press the Error Reset key; then end your program or procedure, if one is running.
- After READY INPUT appears, switch off the computer; then switch off the 5247 Disk Unit. Check all cable connections to the computer and the 5247 Disk Unit.
- Switch on the 5247 Disk Unit. (If the READY light does not come on, call IBM for technical support.)
- Once the 5247 Disk Unit is ready, switch on the computer.
- Re-try the operation or rerun the program that caused the error.

If the error recurs, call IBM for technical support.

## 6401 Call parameter error

This error may have been caused by either an invalid parameter in the Request Control Block (RCB), a closed link, or a previous error code 6480.

To correct this error, see "Operator Action (6401-6481)."

## 6404 Incompatible RCB exchange types

The computer is trying to send data to the 5247 disk, but the disk is not expecting any data.

To correct this error, see "Operator Action (6401-6481)."

## 6405 Incompatible RCB exchange types

The 5247 disk is expecting data, but the computer did not send any.

To correct this error, see "Operator Action (6401-6481)."

## 6406 Incompatible RCB exchange types

The computer is expecting data from the disk, but did not receive any data.

To correct this error, see "Operator Action (6401-6481)."

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**6407 Incompatible RCB exchange types**

The computer is ready to send data, but is not expecting any data. However, the 5247 disk has sent some data.

To correct this error, see "Operator Action (6401-6481)."

**6410 Lost transmit interrupt**

No transmit complete interrupt was received when expected. This error may be due to a hardware failure in the SIA card.

To correct this error, see "Operator Action (6401-6481)."

**6411 Transmit status error**

A transmit status error was detected at the completion of a transmitted frame. This error may have been caused by a DMA underrun or by a hardware failure in the SIA card.

To correct this error, see "Operator Action (6401-6481)."

**6412 Input buffer full**

Command or data not accepted by the SIA card. This error may have been caused by a Lost Receive Interrupt, if the SIA card is in Auto Response mode or if the 5247 disk is not switched on.

To correct this error, see "Operator Action (6401-6481)."

**6413 I-frame not acknowledged**

An I-frame was sent to the 5247 disk, but no valid acknowledgement was received by the computer. This error may have been caused by excessive 5247 disk receive errors.

To correct this error, see "Operator Action (6401-6481)."

**6414 Protocol error**

An I-frame was incorrectly acknowledged; or an I-frame that was previously acknowledged is now not acknowledged.

To correct this error, see "Operator Action (6401-6481)."

**6415 Invalid command received**

An invalid or non-supported command was received.

To correct this error, see "Operator Action (6401-6481)."

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## **6416 I-field not allowed**

A command containing an information field was received when an I-field was not allowed.

To correct this error, see "Operator Action (6401-6481)."

## **6417 I-frame too long**

The I-frame received was longer than expected. This error may have been caused by an RCB/RQB mismatch.

To correct this error, see "Operator Action (6401-6481)."

## **6418 Frame reject not acknowledged**

A frame reject was not acknowledged by the 5247 disk by means of a DISC (Disconnect) command or an SNRM (Set Normal Response Mode). This error may have been caused by an excessive link error rate.

To correct this error, see "Operator Action (6401-6481)."

## **6420 Lost Receive Interrupt**

A receive command was accepted by the SIA card, but receive complete interrupt was not presented. This error may have occurred if interrupts are masked on the computer or if the disk is not switched on and ready.

To correct this error, see "Operator Action (6401-6481)."

## **6421 Invalid SIA command**

The last command written to the SIA card was rejected as invalid. This error may occur if a transmit command is issued while in auto response mode.

To correct this error, see "Operator Action (6401-6481)."

## **6422 Error in receive status**

Following a receive complete interrupt, the receive status indicates that the frame was invalid. The receive is attempted many times. This error may have been caused by an excessive link error rate.

To correct this error, see "Operator Action (6401-6481)."

## **6430 Switch on test failed**

Following an SIA card reset, valid switch on status was not presented by the SIA card. This error may have been caused by a failure in the SIA card.

To correct this error, see "Operator Action (6401-6481)."

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**6440 Disconnect (DISC) received**

A disconnect command was received while the link was open. This error may be due to an excessive link error rate.

To correct this error, see -- Heading id 'Opact' unknown --.

**6441 Excessive TEST commands**

Excessive TEST commands were received by the computer. This error may have been caused by a failure in the disk receiver or by an excessive link error rate.

To correct this error, see "Operator Action (6401-6481)."

**6442 Link cannot be opened**

After repeated attempts, a valid SNRM was not received. This error may have occurred because:

- The link error rate was excessive.
- The 5247 disk was locked by another computer.
- The 5247 disk was recovering from a "disk unsafe" error.

To correct this error, see "Operator Action (6401-6481)."

**6480 SNRM received**

The link was open and a Set Normal Response Mode message was received. This error may have occurred because:

- There were excessive link errors.
- The 5247 disk has been restarted.
- The 5247 disk is switched off.

To correct this error, see "Operator Action (6401-6481)."

**6481 No DISC command received**

After repeated attempts, a Disconnect command was not received after a Request Disconnect (RD) was sent. This error may have been caused by an excessive link error rate.

To correct this error, see "Operator Action (6401-6481)."

**6500 System error on 5247 disk**

The operation you tried did not succeed due to a system programming error. Refer to "Computer problems" in Chapter 8, "Help," of *Operator Reference*. Follow the steps suggested there for recovering from Trap 0 or 4.

Re-try the operation. If the error recurs, call IBM for technical support.

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## **6501-6520 Recoverable media errors on disk**

In each of the following cases (6501-6520), an error has occurred in the volume directory which prevents you from accessing data in a 5247 disk volume. In each case, follow these steps:

### **Operator Action (6501-6520)**

1. Write down the name of the volume where the error occurred. (You can find it on the status line.)

### **CAUTION**

**Be sure to keep a backup of this volume.**

2. Run the Recover Volume Directory option of the Recover Disk Customer Support Function on the volume in error.
3. Re-try the operation.

If the error recurs, call IBM for technical support.

## **6501 Read/write error**

A read/write error has occurred in the file label of the 5247 disk. This may mean a loss of program data.

To correct this error, see "Operator Action (6501-6520)."

## **6513 Error in file label or directory index**

To correct this error, see "Operator Action (6501-6520)."

## **6514 I/O error in directory index**

To correct this error, see "Operator Action (6501-6520)."

## **6515 I/O error in directory index**

An attempt to mark the index bad on the disk did not succeed.

To correct this error, see "Operator Action (6501-6520)."

## **6516 Index levels exceeded**

You tried to extend the volume directory index beyond the maximum number of index levels supported.

To correct this error, see "Operator Action (6501-6520)."

## **6517 Directory index marked bad**

To correct this error, see "Operator Action (6501-6520)."

## **6518 Directory index format error**

To correct this error, see "Operator Action (6501-6520)."

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**6519 Index levels exceeded**

The volume directory index exceeds the maximum number of index levels supported.

To correct this error, see "Operator Action (6501-6520)."

**6520 Key length/data length error**

The sum of the key length plus user data length of the volume directory index exceeds the maximum supported.

To correct this error, see "Operator Action (6501-6520)."

**6531 Locked condition has occurred**

The 5247 disk is now affected by a device lock, a file lock, or a block lock. This message appears only if the operator has pressed Cmd/Attn when \*2 or \*4 is displayed on the status line.

To continue, press the Error Reset key.  
To cancel, press Cmd/Error Reset.

**6540 Cmd/Error Reset was pressed**

You pressed Cmd/Error Reset after seeing error code 6531. At this point, find out why the device lock, file lock, or block lock occurred. Reduce or eliminate the contention, or ask your programmer for help.

**6541 System lock has occurred**

A system lock (or deadlock) has been detected. One computer has locked file A and is trying to read file B. A second computer has locked file B and is trying to read file A.

To cancel, press the Error Reset key; then enter GO END. You may re-try the operation when the second computer is finished, or you may change the program. Check the the shared file usage and the program logic.

**6551-6570 Disk request errors**

In each of the following cases (6551-6570), a data request error has been detected by the 5247 disk. This error prevents completion of a request sent by the computer. To correct the error in all cases *except error code 6556*, follow these steps:

**Operator Action (6551-6570)**

- Press the Error Reset key; then end your program or procedure, if one is running.
- After READY INPUT appears, switch off the computer; then switch off the 5247 Disk Unit. Check all cable connections to computer and the 5247 Disk Unit.

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- Switch on the 5247 Disk Unit. (If the READY light does not come on, call IBM for technical support.)
- Once the 5247 Disk Unit is ready, switch on the computer.
- Re-try the operation or rerun the program that caused the error.

If the error recurs, call IBM for technical support.

## **6551 Invalid echo pattern**

To correct this error, see "Operator Action (6551-6570)."

## **6552 Invalid disk drive address**

To correct this error, see "Operator Action (6551-6570)."

## **6553 Status field not zero**

To correct this error, see "Operator Action (6551-6570)."

## **6556 Command reject**

Switch off the computer and the 5247 disk; then switch both on again. If the 5247 disk does not show the READY light, call your service representative. If the READY light is on, re-try the operation. If the error recurs, call your service representative.

**6557 Tried to read/write too much data**  
To correct this error, see "Operator Action (6551-6570)."

**6558 Tried to write protected block**  
To correct this error, see "Operator Action (6551-6570)."

**6559 Disk not in diagnostic mode for write storage**  
To correct this error, see "Operator Action (6551-6570)."

**6560 Tried to read/write too many blocks**  
To correct this error, see "Operator Action (6551-6570)."

**6561 Tried to scan too many blocks**  
To correct this error, see "Operator Action (6551-6570)."

**6562 Not in diagnostic mode for vector operation**  
To correct this error, see "Operator Action (6551-6570)."

**6563 Not in diagnostic mode for reading storage**  
To correct this error, see "Operator Action (6551-6570)."

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**6564 Invalid work station ID**

To correct this error, see "Operator Action (6551-6570)."

**6570 Command reject**

To correct this error, see "Operator Action (6551-6570)."

**6572 5247 disk is unsafe**

A disk error has been detected. Call your service representative.

**6573 Media error on 5247 disk**

Data on the disk cannot be read.

If this error occurred while you were using a DIR system command, run the Label Recovery option of the Recover Disk Customer Support Function. For all other occurrences, run the File Recovery option of the Recover Disk Customer Support Function.

**6574 Device error on the 5247 disk**

A disk error has been detected. Call your service representative.

**6584-6585 General errors**

**6584 I/O error reading index**

While the volume directory was being deleted, an I/O error was detected reading the index. The volume directory was deleted successfully; however, space was lost on the 5247 disk.

Call IBM for technical support.

**6585 Invalid system request**

Refer to "Computer problems" in Chapter 8, "Help," of *Operator Reference*. Follow the steps suggested there for recovering from Trap 0 or 4.

Re-try the operation. If the error recurs, call IBM for technical support.

**6586-6591 System area media errors**

In each of the following cases (6586-91), an error has occurred in the portion of the 5247 disk reserved for use by the system.

**6586 Unrecoverable I/O error**

**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

**6587 Write error in system area**

**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

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**6588 Read error in system area**  
**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

**6589 Error writing volume control table to system area**  
**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

**6590 Error writing sharing table in system area**  
**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

**6591 Error during Read/Write in system area**  
**Do not switch off the 5247 Disk Unit.**  
Call IBM for technical support.

**7000 Invalid response to a prompt**  
You entered an invalid response to one of the Customer Support Function menu screens. Check the screen for valid choices. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7001 Invalid response for diskette drive number**  
Check your system and determine the correct diskette drive number. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7002 Invalid response for information and messages**  
Enter a 1, 2, or 3. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7003 Invalid response for drive number and VOLID**  
Enter a drive number or a VOLID (or both) for all input and output files. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

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**7004 Invalid response for file specification**  
You specified the same parameters (drive number, VOLID, and filename) for both an input file and an output file. For this operation, at least one of the parameters must be different. If you are using two drives, use both drive numbers. If you are using only one drive, make sure the filenames or VOLIDs are different. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7005 Invalid response for printer number**  
Enter either 10 or 11. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7006 Incorrect diskette type**  
You used an input diskette and an output diskette that are not the same type. Check your input diskette and use an output diskette of the same type (1, 2, or 2D). If you are using the Copy Customer Support Function, restart the function. If you are using the Recover

Diskette Customer Support Function, press the Error Reset key to continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7007 Incorrect diskette format**  
You used an input diskette and an output diskette that have different formats. Check your input diskette and use an output diskette that has the same format (IBM System/23, Basic Exchange or H-Exchange). If you are using the Copy Customer Support Function, run the Prepare Diskette Customer Support Function, then restart the function that caused the error. If you are using the Recover Diskette Customer Support Function, press the Error Reset key to continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7008 Write-protected files on output volume**  
You tried to use an output volume that contains write-protected files. Either restart the function and use a different output diskette or use the PROTECT

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command to remove the write protection. Link the Customer Support Function again.

## **7009 Invalid number for hexadecimal**

You entered a number that is not a numeral from zero through nine or a letter from A through F. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## **7010 Customer Support Function level warning**

You did not use the most current Customer Support Function diskette for your system. Either the machine updates were not loaded, or the Customer Support Function is not current. If the Customer Support Function is not current, use the Replace Customer Support Function to replace the old Customer Support Function. If the updates were not loaded, then use the Load Machine Update Customer Support Function to load them. You can continue by pressing the Error Reset key.

## **7011 Help not allowed**

You asked for help at a point where the system does not allow it. Correct your response and continue.

## **7012 Open files on output volume**

Make sure that you have the correct output volume and that the files can be closed. Use the DIR command to see which files are open; then use the PROTECT command to close each open file. After all files are closed, you can restart the Customer Support Function.

## **7013 Customer Support Function stopped**

You stopped a function by pressing the Cmd key and the Attn key. If you wish to continue this function, press the Error Reset key. If you wish to end the function, press the Cmd key and the Error Reset key.

## **7014 Cannot run this Customer Support Function**

You tried to invoke a Customer Support Function from a procedure file. This particular function cannot be run from a procedure file.

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**7015 Data exists on output file**

You specified an output file that already exists and contains data. If you no longer need the data, use the DROP or FREE command to release the file. You can then restart the Customer Support Function. Otherwise, specify another output file and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7016 Invalid response for drive number or VOLID**

On a one-drive system, you must specify different VOLIDs. On a 32K system, a one-diskette drive system, and on certain Customer Support Functions (COPY, PREPARE, PRESORT, SELECT or COLSEQ), VOLID must be specified if this error occurs.

**7017 No data on input file**

You specified an input file that does not contain any data. Make sure the correct volume is being used for input. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7018 Volume is access-protected**

The input or output volume you tried to use is access-protected. Make sure you have the correct volume. If you do, use the VOLID command to turn off the access protection; then link the Customer Support Function again. Otherwise, use a different volume.

**7020 Customer Support Function ended**

You ended a Customer Support Function by pressing the Cmd key and the 9 key while displaying a procedure error screen.

**7021 Customer Support Function procedure error screen is displayed**

While running a function from a procedure file, you asked for a display of the procedure error screen. At this point, you can change the keyword parameters that are shown on the screen. After making all changes, press the Enter key to continue.

**Note:** If you get this error code and the procedure error screen is not displayed, unattended mode was specified in the procedure file. The Customer Support Function is ended. In addition, if a screen error is detected, but the specific field in error is not singled out, the cursor is positioned at the first entry on the screen. That entry appears in reverse image and is not necessarily in error.

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## **7022-7025 Invalid keyword or parameter in procedure file**

The Customer Support Function procedure file contained an invalid keyword or parameter. If the procedure error screen is displayed, enter the correct information and continue. If the procedure error screen is not displayed, the function was ended. In either case, the procedure file still contains the error and needs to be corrected.

Specific errors are:

- 7022 Invalid number for CHOICE. Both 1 and 9 are invalid when running a Customer Support Function from a procedure file.
- 7023 At least one parameter is too long.
- 7024 At least one keyword is misspelled or is missing a required equal sign.
- 7025 At least one record in the procedure file is longer than 80 characters.

**Note:** If a procedure error is detected, but the specific field in error is not singled out, the cursor is positioned at the first entry on the screen. That entry appears in reverse image and is not necessarily in error.

## **7026 Customer Support Function overlay cannot be loaded**

An overlay section of the function you are trying to use could not be loaded. Try once more to link the function. If you get the same error code, obtain another Customer Support Function diskette. If the error recurs, you may need to call your service representative or IBM for technical support.

## **7027 Incorrect Customer Support Function**

This Customer Support Function or option will not work on the 5247 disk. Specify drives 1 through 4, or use a VOLID which is not on drive 5.

## **7028 VOLID required when drive 5 specified**

You specified drive 5, but did not specify a VOLID. Specify a VOLID that is valid.

## **7100 Label not found**

You tried to display a file label and specified a filename. The label cannot be found. Make sure you have the correct filename and diskette; then continue.

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**7102 Read errors on one or more file labels**

This error occurred while running the Display Diskette Labels Customer Support Function. Use the Recover Diskette Customer Support Function to recover the labels.

**7150 Input file is not a Customer Support Function**

You tried to run the Replace Customer Support Function and the input file is invalid. Correct the input file specification and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7155 Incorrect format for REPLACE**

You tried to run the Replace Customer Support Function using a Basic Exchange or H-Exchange format diskette. Use an IBM System/23 format diskette or a 5247 disk and continue.

**7200 Incorrect entry for volume label**

You entered incorrect information for a volume label. Because it cannot be determined which field is in error, the first field will always be highlighted. You should compare the data on the screen with your Label listing. The data must be entered exactly as it appears on the listing. CAPITAL letters must be

entered in CAPITALS. Correct any fields which are in error and continue.

**7201 Incorrect entry for file label**

You entered incorrect information for a file label (Basic Exchange or H-Exchange format). Because it cannot be determined which field is in error, the first field will always be highlighted. You should compare the data on the screen with your label listing. The data must be entered exactly as it appears on the listing. CAPITAL letters must be entered in CAPITALS. Correct any fields that are in error and continue.

**7202 Cannot recover diskette**

The Recover Diskette Customer Support Function could not read required information from the diskette that you are trying to recover. Sectors 8 and 9 on cylinder zero and the directory block are bad. The diskette cannot be recovered.

**7203 Incorrect entry for file label**

You entered incorrect information for a file label (IBM System/23 format). Because it cannot be determined which field is in error, the first field will always be highlighted. You should compare the data on the screen with your label listing. The data must be entered exactly as it appears on the listing. CAPITAL letters must be entered in

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CAPITALS. Correct any fields which are in error and continue.

## **7204 Incorrect entry for error map label**

You entered incorrect information for an error map label. Because it cannot be determined which field is in error, the first field will always be highlighted. You should compare the data on the screen with your Label listing. The data must be entered exactly as it appears on the listing. CAPITAL letters must be entered in CAPITALS. Correct any fields which are in error and continue.

## **7205 File label not found**

You tried to recover a freed file and have specified a filename. The label cannot be found. Make sure you have specified the correct filename and VOLID. Then continue.

## **7206 Enter drive number**

Due to an error, the system could not read the VOLID. Enter the drive number and continue.

## **7207 File label not missing**

You tried to recover a missing file label and have specified a filename. A label for this file has been found. Correct your input for the filename and continue.

## **7208 Incorrect label for diskette**

The file label information you entered shows a space allocation conflict with other files on the diskette. Supply current information that is provided by the Display Diskette Labels Customer Support Function. If you have no other information at this time, you cannot continue this function; otherwise, correct your input and continue.

## **7209 Invalid response for numeric data**

You entered nonnumeric data where only numeric data is allowed. Correct your input and continue.

## **7210 Value out of range**

You entered a value that is outside the valid range. Correct your response and continue.

## **7211 Invalid response for filename**

You entered a group name instead of a filename. A group name is not allowed. Correct your response and continue.

## **7212 Invalid response for filename**

You left the filename field blank. Enter a filename for this operation. Correct your response and continue.

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**7213 Recovering file label**

You are trying to recover a System/23 file label. \* \* \* \* \* The data you entered for the DUPFLL entry indicates a duplicate file label and where it is located. However, the location indicated by your DUPFLL entry is occupied by another file.

This error could happen if:

- You used a label listing that was not current
- You used a label listing for a diskette other than the one you are recovering

Press Error Reset and enter the correct data or exit the function in the prescribed manner.

**7214 Cannot recover this file type**

You have attempted to recover a nonrecoverable file type. Refer to "File types" in the *BASIC Language Reference* manual.

**7252 VOLID is invalid You**

either entered an invalid VOLID or neglected to enter a VOLID. Specify a VOLID that is valid.

**7253 Drive number or VOLID is invalid**

When recovering a freed disk file, the output must go to a diskette. Instead, you specified a volume on the 5247 disk.

Enter the correct drive number or VOLID (of diskette) to be used for the recovery of a freed file.

**7254 VOLID is invalid**

When recovering freed files, the first three characters of the output diskette's VOLID cannot be the same as those in a disk VOLID, if the last three characters of the disk VOLID are numeric.

Change the VOLID of the diskette or insert different diskettes.

**7255 Specified file is open**

You attempted to recover a dropped file that is open. The file must be closed for this function.

Use the PROTECT command to close the file; then restart the Customer Support Function.

**7300 Open files on input diskette**

You tried to make an image copy, but the input diskette contains open files. Use the DIR command to find the open files, then use the PROTECT command to close each file. The PROTECT

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command should not be used while the files are being used by an operator. After the files are closed, start the Copy Customer Support Function again.

## 7302 File group not found

You specified a group of files that cannot be found on the input volume. Make sure the group name you entered was spelled correctly. If your group name was spelled correctly, then the group does not exist on the volume you specified. Correct the error and restart the Customer Support Function.

## 7303 Input files not found

The input volume contains no files. You specified all (\*) files for the input volume. Make sure the correct volume is being used. Then restart the Customer Support Function.

## 7304 Filename, group name, or \* required

You did not enter an input filename, group name, or \*. Enter one of the three. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## 7305 File is not a display file

You tried to copy a file on the printer and the file is not a display file. Make sure that you entered the correct filename and that the correct volume is being used; then restart the Copy Diskette Customer Support Function.

## 7307 Incompatible diskette formats

The logical record length of the input file was too large for the output diskette format. Change the output diskette to one that is compatible in format with input logical record length. Restart the Copy Diskette Customer Support Function.

## 7308 Drive number required

You specified an input VOLID that is the same as the output VOLID. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## 7310 Files exist on the output volume

You used an output diskette or disk volume that contains files. You specified that you did not want to erase these files. Do one of the following:

- Restart the function, using a

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different output diskette or disk volume.

- Restart the function, using the same output diskette or disk volume, and specify that existing files be erased.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7350 Incorrect diskette used**

The diskette you tried to use during the Backup and Restore Customer Support Function is not an IBM System/23 diskette. Remove the incorrect diskette and insert a System/23 diskette.

**7351 Beginning of file not found**

The wrong diskette was used during a Backup and Restore Customer Support Function. As a result, the input file opened was not the first portion of the file.

Insert the diskettes in their proper order and re-try the operation.

**7353 Input file type is incorrect**

You did not use the correct input file type for a Backup and Restore Customer Support Function. (All backed up files are assigned type 14 by the system.)

Insert the correct diskette and re-try the operation.

**7354 Matching record information missing**

You used the wrong diskette during a Backup and Restore Customer Function. Two different backup operations produced diskettes having the same filename but different record types. These diskettes may have been mixed together.

Insert the correct diskette and re-try the operation.

**7355 Matching record length missing**

Diskettes with the same filename but with different record lengths may have been mixed together.

Insert the correct diskette and re-try the operation.

**7356 Matching key length not found**

Diskettes with the same file name but with different key lengths may have been mixed together. You used the wrong diskette during a Backup and Restore Customer Support Function.

Insert the correct diskette and re-try the operation.

# Error codes

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## **7357 Matching key offsets missing**

Diskettes with the same filename but with different key offsets may have been mixed together. You used the wrong diskette during a Backup and Restore Customer Function.

Insert the correct diskette and re-try the operation.

## **7358 Incorrect diskette used**

The input file opened during a Backup and Restore Customer Support Function was the first portion of the file being restored, but should not have been. You used an incorrect diskette.

Insert the diskettes in their proper order.

## **7359 Duplicate VOLIDs for input and output files**

The VOLID of the volume being backed up is the same as the VOLID of the diskette used for the Backup and Restore Customer Support Function. These should not be the same.

Change the VOLIDs of the diskettes or the VOLID of the disk volume.

## **7360 Error in input/output VOLIDs**

The first three characters in the VOLID of the volume to be backed up were the same as the first three characters in the VOLID of the diskette used for output, when the last three characters in the disk volume VOLID were numeric.

Change the VOLIDs of the diskettes or the VOLID of the disk volume.

## **7361 Diskette VOLID not correct**

The VOLID of the diskettes used by the Backup and Restore Customer Support Function or the freed file recovery option of the Recover Disk Customer Support Function must be named as shown below:

### **Naming convention:**

The diskettes used must be named with the same 3 letters followed by 3 numbers in sequence. For example: BAK001, BAK002, BAK003,...

Be sure to use the naming convention; then re-try the operation.

## **7363 Input VOLID not specified**

You did not specify an input VOLID during the Backup and Restore Customer Support Function. Specify a VOLID that is valid.

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**7364 Output VOLID not specified**

The output VOLID was not specified during the Backup and Restore Customer Support Function. Specify a VOLID that is valid.

**7365 Input file is already backed up**

You tried to back up a type 14 file which had been previously copied to the disk. The system assigns type 14 to a file which has been backed up. Free the type 14 file on the 5247 disk and restart the Backup and Restore Customer Support Function.

**7366 Input drive incorrectly specified**

You incorrectly specified drive 5 for input during the Backup and Restore Customer Support Function. Specify drives 1 through 4.

**7367 Calculate for volume with no files**

The calculate option of the Backup and Restore Customer Support Function was selected for a volume containing no files. Make sure you specified the correct volume. Then re-try the operation.

**7377 Output drive incorrectly specified**

You incorrectly specified drive 5 for output during the backup option of the Backup and Restore Customer Support Function. Specify drives 1 through 4.

**7399 System area is invalid**

During Backup, the system area was found to be invalid. The disk will be locked until you exit from the Backup and Restore Customer Support Function. Do one of the following:

- Press Error Reset and continue with the Backup and Restore Customer Support Function, or
- Press the Cmd/Error Reset keys to return to the Primary Option Menu. This will stop the Backup operation.

**CAUTION**

**Be sure to prepare a set of fresh diskettes for the Backup operation. Be sure to save your latest backup diskettes of this volume. Do not use them for this operation.**

**7400 Invalid response for OWNERID**

Enter (from 1 through 14) letters or numbers, with no embedded blanks. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

# Error codes

---

## 7401 Invalid response for diskette format

Enter a 1, 2, or 3 as shown on the screen. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## 7402 More than two cylinders are defective

The diskette that you tried to prepare has at least three defective cylinders. Only two are allowed. Try once more by restarting the Prepare Diskette Customer Support Function. If you get the same error code, discard the defective diskette.

## 7403 Cylinder 0 is defective

The diskette that you tried to prepare has a defective cylinder 0. The system cannot use a diskette in this condition. Try once more by restarting the Prepare Diskette Customer Support Function. If you get the same error code, discard the defective diskette.

**Note:** If the error occurs repeatedly after using several different diskettes, there may be a hardware problem involved and you may need to call your service representative.

## 7404 Incorrect format — type 1 diskette

You specified format 3 while preparing a type 1 diskette. Choose format 1 or format 2 for a type 1 diskette. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## 7405 Invalid number of file labels — type 2D diskette

Enter a number from 1 through 1478 for a type 2D diskette. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

## 7406 Invalid response for density

Enter either a 1 for single density or a 2 for double density. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

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**7407 Invalid number of file labels — type 2 diskette**

Enter a number from 1 through 788 for a type 2 diskette. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7410 Write-protected files or data files may be on the diskette**

You tried to prepare a diskette that might contain write-protected files or data files. You specified that you do not want to erase any of these files. Either restart the function and use a different diskette, or restart the function with this diskette and specify that write-protected files and data files can be erased.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7411 Invalid density for a type 1 diskette**

You tried to prepare a type 1 diskette and you specified double density. Specify single density for a type 1 diskette. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7412 Invalid number of file labels — type 1 diskette**

Enter a number from 1 through 393 for a type 1 diskette. Correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7414 Diskette contains system programs**

You tried to prepare either the Word Processing, Communications, or Customer Support Functions diskette. Restart the Prepare Diskette Customer Support Function and use a different diskette.

**7415 Diskette has open files**

Determine if you have the correct diskette and if the files can be closed. Use the DIR command to determine which files are open. Then use the PROTECT command to close each open file. The PROTECT command should not be used while the files are in use. After all files are closed, link the Customer Support Function again or restart the function with this diskette

# Error codes

---

and specify that open files may be erased.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7451 VOLID to be deleted not found**

You tried to delete a volume that is not on the 5247 disk. Enter the correct VOLID and re-try the operation.

**7452 Files exist on volume to be deleted**

You tried to delete a volume containing files. Enter the correct VOLID or use the FREE command to free all files under the specified VOLID before deleting the volume.

**7453 Volume already exists on 5247 disk**

You tried to add an already existing volume to the 5247 disk. Enter a different VOLID and re-try the operation.

**7454 VOLID is invalid**

The VOLID you specified is invalid either because it has more than six characters or because it contains one or more spaces. Specify the VOLID correctly and re-try the operation.

**7456 5247 disk not prepared**

You tried to add a volume to the 5247 disk before running the Prepare Disk Customer Support Function.

Run the Prepare Disk Customer Support Function to establish a valid system area on the disk.

**7457 Maximum number of volumes on disk**

You tried to add another volume to the 5247 disk, beyond the maximum of 25 volumes allowed.

Contact your programmer for help in moving or deleting files to create space for another volume.

**7458 No volumes exist on the 5247 disk**

You tried to delete a volume when no volumes exist on the 5247 disk. Press the Error Reset key to return to the primary option menu.

**7459 Write-protected files exist on disk volume**

You attempted to delete a volume on the 5247 disk that contained write-protected files.

Use the DIR command to find the write-protected files; then use the PROTECT command to remove the write protection. Restart the Add or

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Delete a Volume Customer Support Function.

**7501 Machine update failed**

This update could not be added to the update file because the diskette or disk did not have enough space. Contact IBM for technical support.

If action code 99 appears on the status line, it means that error 7501 occurred because you are running PROC SETUP1 after having loaded updates into your computer. Switch off your computer; then switch it on again. Re-try the operation. If the error recurs, contact IBM for technical support.

**7502 Incorrect data entered**

During SELECT, you entered either an incorrect cyclic redundancy check value or did not have all of the data. For example, you may have left out a line of data.

**7503 Machine update failed**

This update was too large for the storage update area. Contact IBM for technical support.

**7551 Open files exist on disk volume**

You tried to run a Customer Support Function when open files were present on the 5247 disk. Use the DIR command to identify the open files; then use the PROTECT command to close all files. Restart the Customer Support Function.

**7552 Incorrect program module loaded**

You tried to load an IMPL module or a system area module from the 5247 disk. Make sure that the IMPL module or the system area module is kept on a diskette.

**7600 Invalid key start position parameter**

You specified an invalid key start position parameter. This parameter must be a number greater than zero. Also, the key start position plus the key length parameter minus one must not exceed the record length. Correct the parameter and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

# Error codes

---

- 7601 Invalid key length parameter**  
You specified an invalid key length parameter. This parameter must be a number greater than 0 and less than or equal to 28. Correct the response and continue.
- Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.
- 7603 Duplicate key encountered**  
You tried to run the Create Index File Customer Support Function and a duplicate key was encountered. If your program allows duplicate keys, rerun the function indicating that you want duplicate keys. Otherwise, change the master file to eliminate the duplication or change the key start position and/or key length.
- Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.
- 7605 Invalid menu selection**  
You have entered an invalid choice in response to the Create Index File menu. You must enter a 1, 2, or 9. Correct your response and continue.
- 7607 Cannot execute the Create Index File Customer SupportFunction**  
The Create Index File Customer Support Function could not be carried out due to insufficient storage availability. Use CLEAR ALL and try the function again. If this error recurs, contact IBM for technical support.
- 7608 Master file too large**  
For the Create Index File Customer Support Function, the specified master file contains more than 65535 records. Reduce the size of the master file to something less than or equal to 65535; then rerun the function.
- 7609 Master file not type 04**  
For the Create Index File Customer Support Function, the master file must be type 04 and not the output from an address-out sort. Restart the function and use the correct type of file.
- 7610 Master file not IBM System/23 format**  
For the Create Index File Customer Support Function, the master file must conform to the IBM System/23 format. Restart the function and use a file with the correct format.

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**7611 Invalid index filename**

You specified an index file that already exists and you indicated that data is not to be destroyed. Use a different filename so a new index file is created, or press the Cmd key and the 9 key to end the function.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7700 Invalid response to a prompt**

You entered a number that is not valid for this screen. Check the screen for valid choices; then correct your response and continue.

**Note:** If the Customer Support Function is invoked from a procedure file, correct the error in the procedure file.

**7701 Value is invalid**

For the value parameter, you entered a nonnumeric character or a number that is not from 0 through 255. Correct your response and continue.

**7702 Invalid character string**

You entered a character string that is too long or is not enclosed in quotes. The maximum length is 32, including the quotes. Correct your response and continue.

**7703 Invalid response for review**

You entered a character other than from one through four. Check the screen for choices; then correct your response and continue.

**7704 Missing value parameter**

You did not enter the required value parameter. Correct your response and continue.

**7705 Invalid response for SAVE/REPLACE collating sequence**

You entered a character other than Y or N, which are the only valid responses. Correct your response and continue.

**7706 Invalid input statement for procedure file**

The specified parameter for the keyword CHOICE was invalid. To run the Change Collating Sequence Customer Support Function from a procedure file, you must specify CHOICE = 4. Correct the procedure file by changing the input statement in error.

# Error codes

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- 7801 Invalid name in sort statement**  
The control file contained a sort statement name other than FILE, RECORD, MASK, ALTS, ! (COMMENT), or SUM. Use the Prepare Sort Customer Support Function to print the control file; then delete the sort file with an invalid statement.
- 7803 Invalid filename for sort input**  
You used SORT.WORK XX or SORT.ADDR XX to name a sort input file. These two names are reserved for use by the system. Correct the sort group in the control file by specifying a different filename; then restart the sort.
- 7804 Syntax error in FILE statement**  
The control file contained a FILE statement with syntax that is not valid. Run the Prepare Sort Customer Support Function using the option, "change sort group"; then restart the sort.
- 7805 Syntax error in RECORD statement**  
The control file contained a RECORD statement with syntax that is not valid. Run the Prepare Sort Customer Support Function and correct the error; then restart the sort.
- 7806 Syntax error in ALTS statement**  
The control file contained an ALTS statement with syntax that is not valid. Run the Prepare Sort Customer Support Function using the option "change sort group"; then restart the sort.
- 7807 Syntax error in MASK statement**  
The control file contained a MASK statement with syntax that is not valid. Run the Prepare Sort Customer Support Function using the option "change a sort group"; then restart the sort.
- 7808 Control file incorrect**  
You typed LINK SORT instead of SORT name. Refer to the syntax of the SORT command in Chapter 3, "SORT and PRESORT," in *Customer Support Functions*, Volume II. Sort control file is incorrect. The control file record length is not 128. Copy the status line; then press the Error Reset key.
- 7809 Syntax error in SUM statement**  
The control file contained a SUM statement with invalid specifications. Run the Prepare Sort Customer Support Function using the option "change sort group"; then restart the sort.

---

**7810 Invalid input file**

The input file is not a record I/O file of the IBM System/23 format. Change the input file to a type 04 IBM System/23 file.

**7811 Insufficient storage for sort**

For the specified input file, the amount of storage required for the sort operation was insufficient. In order to sort this input file, you can (1) change the MASK statements to reduce the length of key, or (2) change the RECORD statements to reduce the number of records in the sort. Run the Prepare Sort Customer Support Function and change the statements. Then restart the sort.

**7813 Total sort field is too long**

The total length of all sort fields, as specified by MASK statements, exceeded the limit of 240 characters. Run the Prepare Sort Customer Support Function using the option "change sort group"; then restart the sort.

**7819 Input file is too large**

The number of records in the input file exceeded the limit of 65535. Reduce the number of records in the input file; then restart the sort.

**7820 Invalid field length for internal data**

A MASK or RECORD statement specified data type L (internal data) and a field length other than nine. Run the Prepare Sort Customer Support Function using the option, "change a sort group"; then restart the sort.

**7821 Value too large in ALTS statement**

For an ALTS statement, the specified value for EQ, or the specified value plus the number of characters for RO, exceeded the limit of 255. Run the Prepare Sort Customer Support Function using the option, "change a sort group"; then restart the sort.

**7822 Invalid field length in RECORD statement**

For a RECORD statement, the specified field length exceeded the limit of 28. Run the Prepare Sort Customer Support Function using the option, "change a sort group"; then restart the sort.

**7823 Missing MASK statement**

A MASK statement was missing in the sort control file. Run the Prepare Sort Customer Support Function using the option, "change sort group"; then restart the sort.

# Error codes

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**7824 Missing FILE statement or more than one**

A FILE statement was missing in the sort control file, or the sort group had more than one FILE statement. Use PRESORT to print the control file first, then run Prepare Sort to delete the sort group. Using the printout, enter the sort group again.

**7825 Too many RECORD statements**

The sort control file contained a sort group with more than four RECORD statements. Delete at least one RECORD statement. Run the Prepare Sort Customer Support Function using the option, "change a sort group"; then restart the sort.

**7827 Data mismatch with input file**

The data type specified in the control file did not match the data in the input file. Run the Prepare Sort Customer Support Function using the option, "change a sort group"; then restart the sort.

**7828 Sort statements out of order**

The control file contained a sort group with the statements out of order. The correct order is: FILE, ALTS, RECORD, and MASK. Use the Prepare Sort Customer Support Function to prepare

the control file; then restart the sort.

**7829 Record length mismatch for sort statement**

For a RECORD or MASK statement, the specified record length was greater than the record length in the input file. Note that the specified record length is the sum of the field starting position and the field length. Run the Prepare Sort Customer Support Function and correct the statement in error; then restart the sort.

**7830 Invalid field starting position in sort statement**

For a RECORD or MASK statement, the specified field starting position was 0. This number must be 1 or greater, but less than the record length. Run the Prepare Sort Customer Support Function and correct the statement in error; then restart the sort.

**7831 Incorrect record length in output file**

You specified an output file that already exists, but the output record length does not match the input record length. Reformat the existing output file or specify a different file; then restart the sort.

---

**7850 Invalid sort statement**

The control file contained an invalid sort statement. You may have specified a file that is not a sort control file. The sort group in error must be deleted. Use the Prepare Sort Customer Support Function to print the control file.

**7851 Too many FILE statements**

A sort group contained more than one FILE statement. Use the Prepare Sort Customer Support Function to recreate the control file.

**7852 Too many RECORD statements**

A sort group contained more than four RECORD statements. Use Prepare Sort Customer Support Function to recreate the control file, or delete RECORD statements until you have only four.

**7853 Invalid control file**

You used a control file that is not an IBM System/23 internal file. Use the correct file and continue.

**7854 Invalid response for required information**

You did not enter required information. Correct your response and continue.

**7858 Invalid data entered**

You entered invalid data. For the correct response, refer to the sort statement you are entering. Correct your response and continue.

**7860 Sort statements out of order**

A sort group contained one or more ALTS statements or RECORD statements before the FILE statement. The correct order is: FILE, ALTS, RECORD, and MASK. Use Prepare Sort Customer Support Function to recreate the control file or to delete an ALTS or RECORD statement before the FILE statement.

**7861 Invalid field length**

You entered a field length that is larger than the record length. Correct your response and continue.

**7863 Invalid field length**

You entered a field length of zero. Enter a number from 1 through 29. Correct your response and continue.

**7864 No room for PRESORT**

The Prepare Sort Customer Support Function has run out of room and cannot proceed. You cannot continue with the function. Contact your programmer or IBM for technical support.

# Error codes

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**7865 Invalid sort group number**

You entered an invalid sort group number. Either the sort group does not exist or an invalid number was entered. If the number was valid, enter a smaller number. Correct your response and continue.

**7866 Invalid response for summary statement**

You entered something other than Y or N, which are the only valid replies. Correct your response and continue.

**7867 Sort statements out of order**

A sort group contained one or more RECORD statements before an ALTS statement. The correct order is: FILE, ALTS, RECORD, and MASK. Use the Prepare Sort Customer Support Function to recreate the control file or delete any RECORD statement before the ALTS statement.

**7868 Invalid control file**

You used a control file containing records of the wrong length. The record length must be 128. Either you are using the wrong file or the control file must be recreated using the Prepare Sort Customer Support Function.

**7869 Invalid field starting position**

You entered a field starting position of zero. One is the lowest number you can use for the starting position. The largest number must be less than the maximum record length, minus the field length. Correct your response and continue.

**7870 Work file already exists**

A work file (PRESORT.WORKXX) already exists on the volume that contains the control file. Use the FREE command to release the work file; then continue. If the file was open, it must be released by the PROTECT command prior to issuing the FREE command.

**7871 Total field length is too large**

The total length for sort fields exceeded the maximum of 240. To reduce the total length, change the field length in one or more MASK statements. Correct the MASK statements and continue.

**7872 Invalid field length**

You entered a field length that is not valid for internal data. When sorting internal data, the field length must be 9. Correct your response and continue.

---

**7873 Invalid number for value**

One of the following has occurred:

- Value is not from 0 to 255.
- If RO option is used, the number of characters causes the value to exceed 255; for example:

RO  
255  
"AB"

causes "A" to have a value of 255,  
but "B" will exceed 255.

**7874 Invalid field length**

You entered a field length that exceeds the maximum of 28. Correct your response and continue.

**7875 MASK statement exceeds 128 characters**

The total number of characters in a MASK statement exceeds 128 characters. Reduce the number of characters for the starting position, length, or type fields in the mask statement.

**7900 Invalid diskette format for list open file**

"List information for open files" (option 4) is not supported for a diskette that is not in the IBM System/23 format. To recover, press the Error Reset key, and

the Enter key. Insert a diskette with the IBM System/23 format, or select option 2, 3, or 6.

**7901 Invalid diskette format for list files**

"List information by file type" (option 7) is not supported for a diskette that is not in the IBM System/23 format. To recover, press the Error Reset key and the Enter key. Insert a diskette with the IBM System/23 format, or select option 2, 3, or 6.

**7902 Invalid diskette format for freed files**

"List information for freed files" (option 5) is not supported for a diskette that is not in the IBM System/23 format. To recover, press the Error Reset key and the Enter key. Insert a diskette with the IBM System/23 format, or select option 2, 3, or 6.

**7915 Delete key for valid record**

The deleted key requested was found on the index file, but the corresponding record in the list file was not deleted. To recover, either use the Create Index File Customer Support Function to recreate the index file or delete the corresponding record. The record should be deleted only if it is not needed.

# Error codes

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- 7916 Deleted record for valid key**  
A valid key was found on the index file, but the corresponding record was deleted. To recover, either use the Create Index File Customer Support Function to recreate the index file or rewrite the record.
- 7917 Nonexistent record for valid key**  
A valid key was found on the index file, but the corresponding record number does not exist. The record is past the end-of-data marker. To recover, use the Create Index File Customer Support Function to recreate the index file.
- 7918 Nonexistent key record**  
A deleted key was found on the index file; its corresponding record does not exist. The record is past the end of the data marker. To recover, use the Create Index File Customer Support Function to recreate the index file.
- 7919 Mismatch of key and key field**  
The key in the index file does not match the key field within the corresponding master record. To recover, use the Create Index File Customer Support Function to recreate the index file.
- 7920 Mismatch between input file and index file**  
This error is shown on the LISTFILE completion screen. It indicates that a mismatch has been found between the input file and the index file. Refer to your record listing for errors. To recover, determine which records/keys were in error and make the necessary corrections.
- 7921 Invalid list attempt for key access**  
You attempted to list a Basic Exchange or H-Exchange file using keyed access. These files cannot have IBM System/23 index files. To recover, enter a type 04 input file.
- 7922 Invalid record number entered**  
You entered an invalid record number. The number is not within the range of 1 to 65536. To recover, enter the correct record number.
- 7923 Starting record number too large**  
The starting record number is greater than the ending record number. To recover, make the starting record number smaller than the ending record number.

---

**7924 Starting key too large**

The starting key is greater than the ending key. To recover, make the starting key smaller than the ending key.

**7925 Key exceeds key length of index file**

You entered a key that is larger than the key length of the index file. To recover, decrease the number of characters entered.

**7926 Invalid filename for index file**

You entered the filename of a file that is not a valid index file. To recover, enter the correct index filename.

**7927 Invalid file type for an input file**

You entered a file with an invalid file type. The file is not type 04, Basic Exchange, or H-Exchange. To recover, enter a file with the valid file type.

**7930 STGDMP format not Basic Exchange**

The input file STGDMP was found, but was not a Basic Exchange file. To recover, insert the correct diskette with the STGDMP file.

**7931 Unable to interpret data**

The List Storage Information Customer Support Function was not able to interpret the data in the STGDMP file.

**7932 Starting address too large**

The starting address is greater than the ending address. To recover, make the starting address smaller than the ending address.

**7933 Out-of-range address parameters**

An address that was out of the range of permissible values for the current STGDMP file was entered. To recover, correct the address and enter it again.

**7934 Unable to list locked program**

The List Storage Information Customer Support Function was unable to list a program on the STGDMP file because the program was locked.

**7935 No program to list**

The List Storage Information Customer Support Function was unable to list a program because the STGDMP file does not contain a program to list.

**7936 Invalid block identification**

The List Storage Information Customer Support Function was unable to continue listing a BASIC program. Data on the STGDMP file was invalid. An invalid program block was encountered.



# Appendix A. System trap

---

A system trap is caused by an unrecoverable system error. When the trap occurs, the current operation is stopped and two lines of trap information are displayed on the screen. The top line of trap information begins with the word TRAP which tells you that a trap has occurred.

## Operator action for a system trap

If you get a trap, this is what you should do:

1. Record all trap information exactly as it appears on the screen. Fill out the Trap Information form on the following page. After that, continue with step 2 below.
2. Check the first digit following the word TRAP.
3. If this digit is either 1, 2, or 8:
  - a. Switch off the computer.
  - b. Switch on the computer.
  - c. Restart the operation.
  - d. If the trap recurs, call your service representative and have the recorded trap information available.
  - e. If the trap does not recur, continue the operation and save the trap information for future reference by your service representative.
4. If this digit is either 0 or 4:
  - a. Do not switch off the computer.
  - b. Refer to the section "Computer problems" in Chapter 8, "Help," of *Operator Reference* for the recovery procedure.



# Appendix B. Error codes/action codes

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Each error code has an associated action code. After determining the action code for a specific error message, refer to Chapter 2, "Action codes," for the specific action code text.

<i>Error code</i>	<i>Action code</i>
0000	NONE
0001	22
0002	94
0003	94
0004	94
0005	94
0006	94
0053	94
0054	94
0057	94
0058	94
0059	94
0100	94
0101	94
0102	94
0103	94
0104	94
0105	94
0106	94
0107	94
0120	94
0121	94
0122	94
0123	94
0124	94
0200	94

<i>Error code</i>	<i>Action code</i>
0201	94
0204	94
0210	94
0211	94
0212	94
0213	94
0220	94
0221	94
0222	94
0223	94
0224	94
0230	94
0250	94
0251	94
0252	94
0300	94
0301	94
0302	94
0304	94
0306	94
0307	94
0308	94
0309	94
0310	94
0311	94
0312	94
0313	94
0314	94
0390	28

# Error codes/action codes

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<i>Error code</i>	<i>Action code</i>
0400	94
0402	94
0403	94
0404	94
0405	94
0406	94
0407	94
0408	94
0410	94
0411	94
0412	94
0413	94
0414	94
0415	94
0416	94
0501	24
0502	24
0503	24
0504	24
0601	16
0602	16
0603	16
0610	94
0611	94
0612	94
0613	94
0614	94
0615	94
0616	94

<i>Error code</i>	<i>Action code</i>
0618	94
0619	94
0620	94
0621	94
0622	94
0623	94
0624	94
0625	94
0626	94
0627	94
0700	94
0701	94
0702	94
0703	94
0704	94
0705	94
0706	94
0707	94
0708	94
0709	94
0710	94
0711	94
0712	94
0713	94
0714	94
0715	94
0716	94
0717	94
0718	94

<i>Error code</i>	<i>Action code</i>
0720	94
0721	94
0726	94
0801	94
0802	94
0816	94
0818	94
0820	94
0850	94
0851	94
0852	94
0854	94
0855	94
0856	94
0857	94
0858	94
0859	94
0860	94
0861	94
0862	94
0863	94
0864	94
0865	94
0866	94
0867	94
0900	28
0901	94
0902	94
0910	94

<i>Error code</i>	<i>Action code</i>
0911	94
0950	94
1000	94
1001	94
1002	94
1003	94
1004	94
1005	94
1006	94
1007	94
1008	94
1009	94
1010	94
1011	94
1012	94
1013	94
1014	94
1015	94
1016	94
2000	25
2001	15
2002	15
2003	15
2004	15
2005	15
2008	15
2009	15
2010	15
2011	15

# Error codes/action codes

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<i>Error code</i>	<i>Action code</i>
2012	15
2013	15
2014	15
2015	15
2090	99
2100	15
2101	15
2102	15
2103	15
2104	15
2105	15
2106	15
2107	15
2108	15
2109	15
2110	15
2111	15
2112	15
2113	15
2114	15
2115	15
2116	15
2150	16
2151	16
4000	10
4001	10
4002	99
4003	96
4004	96

<i>Error code</i>	<i>Action code</i>
4005	96
4006	96
4007	96
4054	99
4055	99
4056	99
4057	99
4058	99
4059	99
4060	99
4108	96
4109	96
4110	96
4114	15
4116	94
4118	94
4120	94
4121	94
4122	94
4123	94
4125	94
4126	94
4128	13
4129	13
4130	13
4131	13
4132	13
4133	13
4134	13

<i>Error code</i>	<i>Action code</i>
4135	13
4137	17
4138	17
4141	12
4142	12
4144	27
4146	26
4148	19
4150	14
4152	99
4153	99
4154	99
4155	99
4156	99
4157	99
4158	99
4159	99
4160	99
4161	99
4162	99
4163	99
4164	99
4166	99
4168	99
4180	99
4239	17
4260	99
4270	99
4271	99

<i>Error code</i>	<i>Action code</i>
4272	99
4311	96
4373	99
6001	96
6002	96
6003	96
6004	96
6005	96
6006	99
6007	99
6009	21
6010	20
6011	99
6012	99
6013	97
6014	97
6015	97
6016	97
6113	99
6114	99
6116	99
6123	22
6124	22
6125	22
6126	22
6201	98
6202	98
6204	94
6208	11

# Error codes/action codes

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<i>Error code</i>	<i>Action code</i>
6210	18
6211	18
6212	99
6218	99
6230	18
6241	99
6248	99
6258	99
6268	99
6278	99
6288	99
6298	99
6301	99
6302	99
6303	99
6304	99
6305	99
6306	99
6307	99
6308	99
6310	99
6401	99
6404	99
6405	99
6406	99
6407	99
6410	99
6411	99
6412	99
6413	99
6414	99
6415	99

<i>Error code</i>	<i>Action code</i>
6416	99
6417	99
6418	99
6420	99
6421	99
6422	99
6430	99
6440	99
6441	99
6442	99
6480	99
6481	99
6500	99
6501	96
6513	96
6514	96
6515	96
6516	96
6517	96
6518	96
6519	96
6520	96
6531	28
6540	99
6541	99
6551	99
6552	99
6553	99
6556	99
6557	99
6558	99
6559	99

<i>Error code</i>	<i>Action code</i>
6560	99
6561	99
6562	99
6563	99
6564	99
6570	99
6572	99
6573	99
6574	99
6584	99
6585	99
6586	99
6587	99
6588	99
6589	99
6590	99
6591	99
7000	99
7001	99
7002	99
7003	99
7004	99
7005	24
7006	99
7007	99
7008	26
7009	24
7010	95
7011	24

<i>Error code</i>	<i>Action code</i>
7012	99
7013	28
7014	99
7015	99
7016	24
7017	99
7018	27
7020	99
7021	15/24
7022	15/24
7023	15/24
7024	15/24
7025	15/24
7026	97
7027	99
7028	99
7100	99
7102	96
7150	99
7155	99
7200	24
7201	24
7202	99
7203	24
7204	24
7205	99
7206	99
7207	99
7208	99

# Error codes/action codes

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<i>Error code</i>	<i>Action code</i>
7209	23
7210	24
7211	24
7212	24
7213	99
7214	99
7252	99
7253	99
7254	99
7255	19
7300	99
7302	24
7303	99
7304	24
7305	16
7307	99
7308	24
7310	99
7350	99
7351	99
7353	99
7354	99
7355	99
7356	99
7357	99
7358	99
7359	99
7360	99
7361	99

<i>Error code</i>	<i>Action code</i>
7363	24
7364	24
7365	99
7366	24
7367	99
7377	24
7399	99
7400	24
7401	24
7402	99
7403	99
7404	99
7405	24
7406	24
7407	24
7410	99
7411	24
7412	24
7414	99
7415	99
7451	99
7452	99
7453	99
7454	13
7456	99
7457	99
7458	99
7459	99
7501	99

<i>Error code</i>	<i>Action code</i>
7502	99
7503	99
7551	99
7552	99
7600	24
7601	24
7603	99
7605	24
7607	99
7608	99
7609	16
7610	16
7611	14
7700	24
7701	24
7702	24
7703	24
7704	24
7705	99
7706	99
7801	99
7803	99
7804	99
7805	99
7806	99
7807	99
7808	99

<i>Error code</i>	<i>Action code</i>
7809	99
7810	99
7811	99
7813	99
7819	99
7820	99
7821	99
7822	99
7823	99
7824	99
7825	99
7827	99
7828	99
7829	99
7830	99
7831	99
7850	99
7851	99
7852	99
7853	99
7854	24
7858	24
7860	99
7861	24
7863	24
7864	99
7865	24

# Error codes/action codes

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<i>Error code</i>	<i>Action code</i>
7866	24
7867	99
7868	99
7869	24
7870	99
7871	24
7872	24
7873	24
7874	99
7875	99
7900	99
7901	99
7902	99
7915	99
7916	99
7917	99
7918	99

<i>Error code</i>	<i>Action code</i>
7919	99
7920	99
7921	99
7922	99
7923	99
7924	99
7925	99
7926	99
7927	99
7930	16
7931	99
7932	24
7933	24
7934	99
7935	99
7936	99

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