



## Systems Reference Library

### DOS Messages

This reference publication provides quick access information for operators and programmers who encounter DOS messages and use DOS commands and job control language.

This publication does not include:

- Any message issued by IBM Program Products
- Any language message issued during compilation or assembly
- RPG messages
- OLTEP messages
- System/370 Emulator messages.

Note: Although titles of some DOS publications have been simplified, the change does not affect the contents of the publications.

For detailed DOS operating information, see the companion publication, DOS Operating Guide, GC24-5022. For a list of associated publications, refer to the IBM System/360 and System/370 Bibliography, GA22-6822.



Fifth Edition (October 1971)

This publication was formerly titled IBM System/360 Disk Operating System, Operator Communications and Messages. Although titles of some DOS publications (including this one) have been simplified, the change does not affect the contents of the publications.

This edition applies to Release 26 of the IBM Disk Operating System and to all subsequent releases until otherwise indicated in new editions or Technical Newsletters. Changes are continually made to the specifications herein; before using this publication in connection with the operation of IBM systems, consult the latest System/360 and System/370 SRL Newsletter, GN20-0360, for the editions that are applicable and current.

This edition is a major revision of, and obsoletes GC24-5074-3.

#### Summary of Amendments

This edition provides the documentation changes for problem determination enhancements. An interface has been provided for the 2596 Card Read Punch which will be released at a future date. Maintenance changes and technical corrections are also included.

Changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

This is a companion publication to the DOS Operating Guide, GC24-5022.

Requests for copies of IBM publications should be made to your IBM representative or to the IBM branch office serving your locality.

Comments concerning the contents of this publication may be addressed to IBM Laboratory, Publications Department, P.O. Box 24, Uithoorn, Netherlands. Comments become the property of IBM.

## Preface

This publication is about system-to-operator communication (informative messages) and condenses operator-to-system communication (operator commands and job control statements). Sections on error diagnosis and correction are also included.

You should be familiar with the detailed operator-to-system communication and operating procedures in the DOS Operating Guide, GC24-5022. You may also need detailed information from publications such as those listed on the following pages.

The messages in this publication are indexed and organized by number and letter (numbers first, then alphabetic characters).

This publication does not include:

- Any messages issued by IBM Program Products
- Any language message issued during compilation or assembly
- RPG messages
- OLTEP messages
- System/370 Emulator messages.

If you need these messages at the computer console, remove the message section from the applicable publication and insert it in this manual. Tabs have been provided to help you organize your insertions.

As a system operator, you should investigate each message that appears on your console-typewriter and either act on the message, pass the information to the appropriate person, or ask for assistance. You can act on most messages that end with an A or D suffix.

As a system programmer or operations manager, you can correct the conditions that cause most messages that end with an I suffix.

All sections of an error should be reviewed by both the operator and the programmer. Actions have been divided into logical sections for an average installation, but procedures at your location may require an operator to complete his action and part of the programmer's action, or vice versa. Most messages also contain a problem determination action. The material gathered in this procedure will help reduce service time when an error occurs that cannot be corrected by installation personnel.

## Related Programming Publications

Note: Although titles of some DOS publications have been simplified, the change does not affect the contents of the publications.

### CONCEPTS

Concepts and Facilities for DOS and TOS, GC24-5030

### LANGUAGES

IBM System/360 Disk and Tape Operating Systems, Assembler Language, GC24-3414

IBM System/360 Disk and Tape Operating Systems, COBOL Programmer's Guide, GC24-5025

IBM System/360 COBOL Differences American National Standard COBOL Conversion, GC28-6395

IBM System/360 Disk Operating System, American National Standard COBOL, GC28-6394

IBM System/360 Disk and Tape Operating Systems, Basic FORTRAN IV Programmer's Guide, GC24-5038

IBM System/360 Disk Operating System, FORTRAN IV Programmer's Guide, GC28-6397

IBM System/360 Disk and Tape Operating Systems, PL/I Programmer's Guide, GC24-9005

IBM System/360 Disk and Tape Operating Systems, Report Program Generator, GC26-3570

### EMULATOR

IBM System/360 Disk Operating System, 1401/1440/1460 Emulator Programs: Compatibility Support/30, Compatibility Support/40, GC27-6940

### CONTROL

DOS System Control and Service, GC24-5036.

### TECHNIQUES

IBM System/360 Model 30 Operator's Guide, GA24-3373 (or a corresponding publication)

DOS Operating Guide, GC24-5022

IBM System/360 Operator's Reference Guide, SR20-1078

IBM System/360 Disk Operating System, User's Guide: Control Statement Technique, GC20-1685

### UTILITIES

DOS and TOS Utility Programs, GC24-3465

IBM System/360 Disk and Tape Operating Systems, Tape Sort/Merge Program Specifications, GC24-3438

IBM System/360 Disk Operating System, Vocabulary File Utility Program, GC27-6924

### AIDS

IBM System/360 Disk Operating System, Autotest Specifications, GC24-5062

DOS OLTEP, GC24-5086

## Representative Related Product Publications

### PROCESSING UNITS

IBM System/360 Model 30 Operator's Guide, GA24-3373 (or a corresponding publication)

IBM System/370 Model 145 Operating Procedures, GC28-0015 (or a corresponding publication)

### PRINTERS

IBM 1403 Printer, GA24-3073

IBM 1404 Printer, GA24-1446

IBM 1443 Printer, Models 1, 2, N1, and IBM 1445 Printer, Models 1, N1, GA24-3120

IBM 2821 Control Unit, GA24-3312

IBM 3211/3216/3811 Component Description and Operating Procedures, GA24-3543

### CONSOLE TYPEWRITER

IBM 1050 Operator's Guide, GA24-3125

### OPTICAL READERS

IBM 1285 Optical Reader, GA24-3256

IBM 1287 Optical Reader, GA21-9064

IBM 1288 Optical Page Reader Model 1, GA21-9081

IBM 1270 Optical Reader/Sorter Component Description, GA19-0035

IBM 1275 Optical Reader/Sorter Component Description, GA19-0034

### DISK STORAGE AND DATA CELL DRIVES

IBM System/360 Component Description--2841 Storage Control Unit: 2302 Disk Storage, Models 3 and 4; 2311 Disk Storage Drive; 2321 Data Cell Drive, Model 1; 7320 Drum Storage, GA26-5988

IBM System/360 2314 Component Description, GA26-3599

### CARD READERS AND CARD PUNCHES

IBM 2540 Component Description and Operating Procedures, GA21-9033

IBM 2520 Card Read Punch, Model B1 and Card Punch, Models B2 and B3, GA21-9027

IBM 2501 Card Reader, Models B1 and B2, GA21-9026

IBM 1442 N1 and N2 Card Read Punch, GA21-9025

IBM 2821 Control Unit, GA24-3312

### PAPER TAPE READERS

IBM 2671 Paper Tape Reader, GA24-3388

IBM System/360 Component Descriptions 2826 Paper Tape Control Unit - 1017 Paper Tape Reader - 1018 Paper Tape Punch, GA33-4500

### MAGNETIC CHARACTER READERS

IBM 1219 Reader Sorter; IBM 1419 Magnetic Character Reader, GA24-1499

IBM 1259 Magnetic Character Reader Component Descriptions, GA24-3500

### MAGNETIC TAPE UNITS

IBM 2400 Magnetic Tape Units 2816 Switching Units--Principles of Operation, GA22-6866

## DOS Components and Program Numbers

System Control and Basic IOCS .....	360N-CL-453
Supervisor (6K) 2311 .....	360N-SV-474
Supervisor (8K) 2314/2319 .....	360N-SV-486
Direct Access Method (DAM) Macros .....	360N-IO-454
Consecutive Disk IOCS .....	360N-IO-455
Consecutive Tape IOCS .....	360N-IO-456
Indexed Sequential File Management	
System (ISFMS) Macros .....	360N-IO-457
Consecutive Paper Tape IOCS .....	360N-IO-458
Compiler I/O Modules .....	360N-IO-476
Magnetic Character Reader IOCS .....	360N-IO-477
Optical Character Reader IOCS .....	360N-IO-478
Group 1 Utilities (Disk and Unit	
Record) .....	360N-UT-461
Group 2 Utilities (Magnetic Tape) .....	360N-UT-462
Group 3 Utilities (Data Cell) .....	360N-UT-463
Multiprogramming Support	
Utility Macros.....	360N-UT-471
Vocabulary File Utility Program .....	360N-UT-472
Tape Sort/Merge .....	360N-SM-400
Disk Sort/Merge .....	360N-SM-450
Tape and Disk Sort/Merge .....	360N-SM-483
Assembler .....	360N-AS-465
Assembler F .....	360N-AS-466
Report Program Generator .....	360N-RG-460
COBOL .....	360N-CB-452
American National Standard COBOL .....	360N-CB-482
COBOL LCP .....	360N-CV-489
COBOL and PL/I DASD Macros .....	360N-CB-468
Basic FORTRAN IV .....	360N-FO-451
FORTRAN IV .....	360N-FO-479
FORTRAN IV Library .....	360N-LM-480
Autotest .....	360N-PT-459
PL/I .....	360N-PL-464
Basic Telecommunications (BTAM) .....	360N-CQ-469
Queued Telecommunications (QTAM) .....	360N-CQ-470
1401/1440/1460 Emulator Program	
for Model 30 .....	360N-EU-484
for Model 40 .....	360N-EU-485
1401/1440/1460 Emulator Program for	
the IBM System/370 Models 145 and 155 ...	360N-EU-490
1410/7010 Emulator Program for the	
IBM System/370 Models 145 and 155 .....	360N-EU-490
On-Line Test Executive Program (OLTEP) ....	360N-DN-481

# Contents

<b>Communications</b> . . . . .	9	Reference 7: Parameters Passed by Supervisor Calls -- Message 0P77I . . . . .	58
Operational Differences: System/360 and System/370 . . . . .	9	Reference 8: Locating the Label Information Cylinder . . . . .	59
Messages from the System . . . . .	9	Reference 9: Finding the Failing Device Type . . . . .	60
Message Examples . . . . .	9	Reference 10: Special Purpose Dump . . . . .	62
Explanation of Message Codes . . . . .	10	Stop on Main Storage Address . . . . .	62
<b>System-to-Operator Messages</b> . . . . .	11	System/360 . . . . .	62
Magnetic Tape Errors . . . . .	11	System/370 . . . . .	62
Job Cancelation . . . . .	11	<b>0-Prefix Messages</b> . . . . .	65
Job Accounting Interface Cancelation . . . . .	11	<b>1-Prefix Messages</b> . . . . .	105
<b>Operator-to-System Information</b> . . . . .	13	<b>2-Prefix Messages</b> . . . . .	125
Communication to the System . . . . .	13	<b>3-Prefix Messages</b> . . . . .	145
When the Operator Can Enter Commands . . . . .	13	<b>4-Prefix Messages</b> . . . . .	161
Using the Request Key . . . . .	13	<b>5-Prefix Messages</b> . . . . .	227
The Operator Command . . . . .	13	<b>6-Prefix Messages</b> . . . . .	229
What Operator Commands Can Do . . . . .	14	<b>7-Prefix Messages</b> . . . . .	231
System Communication Words . . . . .	16	<b>8-Prefix Messages</b> . . . . .	279
Job Control Statements . . . . .	19	<b>9-Prefix Messages</b> . . . . .	325
Operator to System Commands . . . . .	23	<b>A-Prefix Messages</b> . . . . .	331
<b>Wait States, Loops, and Incorrect Output</b> . . . . .	33	<b>B-Prefix Messages</b> . . . . .	335
Output . . . . .	33	<b>C-Prefix Messages</b> . . . . .	337
Wait States . . . . .	34	<b>E-Prefix Messages</b> . . . . .	345
Loops . . . . .	36	<b>Program Product Messages</b> . . . . .	369
Incorrect Output . . . . .	37	<b>Indexes</b> . . . . .	371
<b>General Reference</b> . . . . .	49	Text Index . . . . .	371
Reference 1: VTOC Listings . . . . .	50	Message Index . . . . .	375
Reference 2: SEREP . . . . .	51		
How to Use SEREP . . . . .	51		
Reference 3: Default Operation without a Console Printer-Keyboard . . . . .	52		
IPL Error Messages . . . . .	52		
Hard Wait Errors . . . . .	52		
System/370 Low-Core Error Messages . . . . .	52		
Device Error Recovery Messages . . . . .	52		
Reference 4: Causes for Message 0S04I . . . . .	55		
Reference 5: DOS Component Error Messages . . . . .	56		
Reference 6: Emulator Reference . . . . .	57		

# Figures

Figure 1. System Communications (Part 1 of 3) . . . . .	16	Figure 8. Incorrect Output: User Programs II (Part 7 of 10) . . . . .	44
Figure 2. Job Control Statements (Part 1 of 4) . . . . .	19	Figure 8. Incorrect Output: User Programs III (Part 8 of 10) . . . . .	45
Figure 3. IPL Commands (Initial Program Load) (Part 1 of 2) . . . . .	23	Figure 8. Incorrect Output: Hardware Failure Isolation (Part 9 of 10) . . . . .	46
Figure 4. Job Control Commands (Issued only between Jobs or Job Steps) (Part 1 of 3) . . . . .	25	Figure 8. Incorrect Output: Data Collection (Part 10 of 10) . . . . .	47
Figure 5. ATTN Commands (Issued at any Time) . . . . .	28	Figure 9. VTOC Listings . . . . .	50
Figure 6. Single Program Initiation Command (Issued only after START Command) (Part 1 of 4) . . . . .	29	Figure 10. S/360 and S/370 Low-Core Error Bytes . . . . .	53
Figure 7. Wait States and Loops . . . . .	33	Figure 11. System/370 Low-Core Error Bytes . . . . .	54
Figure 8. Incorrect Output (Part 1 of 10) . . . . .	38	Figure 12. CS30/CS40 Operator Service Functions . . . . .	57
Figure 8. Incorrect Output: Utilities (Part 2 of 10) . . . . .	39	Figure 13. Dissimilar Graphics: 1407/1447 versus 1052 . . . . .	57
Figure 8. Incorrect Output: Sorts (Part 3 of 10) . . . . .	40	Figure 14. Label Information Cylinder . . . . .	59
Figure 8. Incorrect Output: Compilers and System Service Programs (Part 4 of 10) . . . . .	41	Figure 15. PUB Table Entry . . . . .	60
Figure 8. Incorrect Output: Other IBM Programs (Part 5 of 10) . . . . .	42	Figure 16. Device Type Codes . . . . .	61
Figure 8. Incorrect Output: User Programs I (Part 6 of 10) . . . . .	43	Figure 17. Operator Response to System Messages OP08-OP40 when Communications Device Is a Console Printer-Keyboard . . . . .	75
		Figure 18. Obtaining the Starting and Ending Addresses of an I/O Area . . . . .	75
		Figure 19. Linkage Editor Control Statement Format . . . . .	127
		Figure 20. Placement of PHASE and INCLUDE Statements . . . . .	127



## Operational Differences: System/360 and System/370

Variations exist in the hardware implementation of console functions and console device types between System/360 and System/370. These differences are:

- The 1052 printer-keyboard is used only on System/360. If you are operating a System/370, your primary console communication device is either a 3210 or 3215 console printer-keyboard. Because the device type depends on your system type and configuration, this publication will merely refer to the "printer-keyboard."
- The EOB response (pressing the alternate code button and the 5 key on the 1052) on System/360 is equivalent to the END key on the 3210 or 3215. This publication will refer to "EOB/END key" when you should indicate that communication is finished.
- The C (ignore the line just typed) response (pressing the alternate code button and the 0 key on the 1052) on System/360 is equivalent to the CANCEL key on the 3210 or 3215. This publication will refer to "C/CANCEL key" to indicate this function.

Other hardware differences between System/360 and System/370 are described in the appropriate hardware operating guide or component description publication.

## Messages from the System

The system communicates with the operator by issuing messages on SYSLOG, normally assigned to the console printer-keyboard. If no operator-to-system communication is required, an I (for information) is appended to the message number. If the operator must communicate with the system by taking a specific action or making a decision, an A or D is appended to the message number. Whenever operator action or a decision is necessary, the program responsible for issuing the message usually waits until the operator enters an acceptable reply via the console printer-keyboard. An exception would be a message indicating intervention-required action for a specific device (e.g., reader

cut of cards), where the operator need only satisfy the condition.

The message itself contains all information pertaining to the operator's decision and/or action.

When a Supervisor routine such as OPEN or device-error-recovery is operating on behalf of a program, any messages issued contain the identifier for the partition in which the program resides.

### MESSAGE EXAMPLES

The system-to-operator messages have two basic forms. The first form (illustrated here) consists of a two-character partition identifier (prefix), followed by a four-character message code, an action indicator, and comments. The comments can extend to more than one line but the partition identifier and message code are not repeated on succeeding lines.

```
BG xxxxc [...Comments...]  
[...Comments...]
```

For example:

```
BG 0C00I CHKPT NO. 0004  
WAS TAKEN ON SYS001=180
```

The second form of system-to-operator message consists of two lines. The first line contains the program identifier and is followed by any comments. The second line consists of the message code and message.

```
BG [...Comments...]  
BG xxxxc [...Message...]
```

For example:

```
BG ADD X'00A',2501  
BG 1S01D INVALID STATEMENT
```

Where the ADD is attempted after IPL is complete.

A typical system-to-operator message in multiprogramming format is:

```
BG 1C10A PLEASE ASSIGN SYSRDR
```

The characters, BG, indicate that this message was issued for a background program. The character, 1, indicates that Job Control issued the message. The

characters, C10, are the message number. The character, A, indicates that operator action is required. (For example, the operator would respond by typing the assignment for SYSRDR on the printer-keyboard.) PLEASE ASSIGN SYSRDR is the content of the message.

The action indicators are:

<u>Action Indicator</u>	<u>Meaning</u>
A-Action:	The operator must perform a specific manual action before continuing; for example, mounting a magnetic tape, or readying an I/O device.
D-Decision:	The operator must make a choice between alternate courses of action.
I-Information:	The message does not require communication with the system. For example, this type of message can be used to indicate the successful termination of a problem program.
W-Wait:	Used when an error condition (such as an error on SYSRES) occurs that makes it impossible to continue processing. This indicator is not printed on the printer-keyboard. Instead, a two-digit message is placed in byte 0 of main storage. The indicator W is placed in byte 1 of main storage (see Reference 2). The Wait state is entered, and all interruptions are disabled. The only way that the system can be restarted is to perform an IPL procedure.
S-SEREP:	Used when a machine condition occurs that makes it impossible to continue processing. This indicator is not printed on the printer-keyboard. Instead, a two-digit message is placed in byte 0 of main storage. The indicator S is stored in byte 1 of main storage. A special diagnostic storage-display program (SEREP) supplied to customer engineers should be used when an S-condition occurs (see Reference 2).

#### EXPLANATION OF MESSAGE CODES

##### Partition Identifiers

The following partition identifiers are used in multiprogramming.

<u>Identifier</u>	<u>Program</u>
BG	Background partition
F1	Foreground-one partition
F2	Foreground-two partition
AR	Attention routine
SP	Supervisor

##### Component and Message Identifiers

The message code is further divided as follows. The first character of the message code indicates the message origin, which can be one of the following.

0xxx	Supervisor or IPL
1xxx	Job Control
2xxx	Linkage Editor
3xxx	Librarian and EREP
4xxx	Logical IOCS, BTAM, QTAM, PDAIDS, and ESTV
5xxx	PL/I
6xxx	RPG
7xxx	Tape and Disk Sort/Merge
7Dxx	Disk Sort/Merge
7Txx	Tape Sort/Merge
8xxx	Utilities
9xxx	Autotest
Axxx	Assembler
Bxxx	FORTRAN
Cxxx	COBOL
Exxx	Emulator and OLTEP

The second, third, and fourth characters of the message code are the message number.

##### Action Indicators

The action indicator (I, A, or D) following the message number specifies the type of action required.

# System-to-Operator Messages

When SYSLOG is the console printer-keyboard, all messages, except those that are informational, require an operator response.

When SYSLOG is assigned to the console printer-keyboard, the operator responds to messages by typing one of the following instructions: BYPASS, DELETE DSPLYV, CANCEL, CANCELV, EOF, EOV, IGNORE, NEWTAP, NEWPAC, and RETRY, or by typing in a corrected statement or by performing some action on an input/output device (for example, making a device ready). These responses, entered on the printer-keyboard, may be typed in either upper or lower case letters. If an error is made in typing a response to a job control message, the operator should press C (alter code 0) or the CANCEL key, and then the correct response.

When SYSLOG is assigned to a printer (for example, if the console-typewriter is inoperable), the system either waits for the operator to store a reply (see Reference 3) in main storage byte 4 for messages OP08-OP60, or takes the action specified by the default entry for each message.

Each librarian message (message code 3) is preceded by the last control statement read.

## MAGNETIC TAPE ERRORS

If any data checks occur on a 2400 series or 3420 magnetic tape unit or on a 2495 tape cartridge reader during the execution of a job (and if TEB=YES was specified during system generation), tape error statistics are printed on SYSLOG following the end-of-job statement. These statistics are printed for foreground and background areas and have the following form.

```
1180I MAGNETIC TAPE ERRORS
CH. UNIT PRE RDE WTE ERG NRC
c    uu nnn nnn nnn nnn
PRE= Permanent Redundant Read
```

RDE= Read Error Entry

WTE= Write Error Entry

ERG= Erase Gaps (record erased after write errors)

NRC= Noise Record Count.

## JOB CANCELTATION

To cancel a job, the operator usually should enter the command CANCEL. The message prefix determines which area will be canceled (e.g., background, foreground-one, or foreground-two). If a message is issued with the prefix AR (ATTN Routine), the cancel command may specify the area to be canceled [BG, F1, or F2]. The default area is BG.

When a batch job is canceled after sensing a preceding // JOB card, the system ignores all subsequent records (if any) for the job being terminated, and resumes processing with the control statement following the next /& (end-of-job) statement.\*

## JOB ACCOUNTING INTERFACE CANCELTATION

If the DOS Job Accounting Interface routine (\$JOBACCT) is canceled, both Job Accounting Interface and the currently associated batched-job are canceled.

The name in the cancel message is that of Job Accounting Interface (JOB ACCT), while the name in the end-of-job message is that of the associated batched job. After cancellation, normal batched-job processing continues, but Job Accounting Interface can only be reinitiated with IPL. The canceled batched job may be rerun.

-----  
\*See the CANCEL command in the DOS Operating Guide, GC24-5022, for jobs that do not start with a // JOB card.



# Operator to System Information

## Communication to the System

There are two means of communicating with the system: job-control statements and operator commands (see System Communication Words). Job-control statements are distinguished by the double slash (//), in columns 1 and 2. Operator commands do not have this characteristic. The following table shows the differences between these two forms of communication.

//	<u>Job-Control Statement</u> Operation Code	Operand(s)
	<u>Operator Command</u> Operation Code	Operand(s)

Operator commands apply to either background (where applicable) or foreground programs. They may be entered through either SYSRDR or SYSLOG. Job-control statements are issued for batched job processing programs only and are normally entered through SYSRDR. Because operator commands are acceptable at any time operator-to-system responses are enabled, it is preferable to use the command whenever possible. If an operator forms this habit, it is not necessary for him to remember when job-control statements are acceptable. Operator commands, if entered in accordance with their prescribed format, always produce the desired system action.

### WHEN THE OPERATOR CAN ENTER COMMANDS

The operator communicates with the system by entering certain commands into the system. Commands are usually entered by using the console printer-keyboard (SYSLOG). Communication is possible in any of the following instances.

- The operator has pressed the REQUEST key (see Using the Request Key).
- The programmer or operator has requested operator response by inserting a PAUSE statement in the input stream for a problem program running in a batch job environment. (A PAUSE statement in the input job stream is not valid for SPI programs.)

- The operator is responding to Job Control action or decision type messages.

Once a command has been processed, the printer-keyboard is unlocked to permit the operator to issue additional commands. Most operator-to-system Job Control commands are recognized on SYSRDR as well as on SYSLOG.

### USING THE REQUEST KEY

While processing in either the background or foreground problem areas, the console printer-keyboard is locked. If the operator presses the request key, message 1I60A READY FOR COMMUNICATIONS is printed. The keyboard is then unlocked and any valid ATTN command can be entered.

The attention request is ignored if:

1. The system is executing a condense function and is now processing the condense of the core image library.
2. The system is executing a re-allocation function.

If the logical transient area in the Supervisor is active when the request is made, the request is held until the logical transient area is released by the problem program. There are some program failures that will never release the logical transient area. For example, the logical transient area will not be released if there is a loop in a user-label routine while opening a file. In such a case, the attention key may be pressed again. The following message will be issued:

1I40D REQUEST CANCEL

The operator may either ignore the message (respond by pressing the EOB/END key ) or respond with the CANCEL operation command. If the message is ignored, the original request remains pending.

### THE OPERATOR COMMAND

Each operator-to-system command consists of an operation code and one or more operands. The operation code describes the pending

action and consists of from one to eight alphabetic characters. The operation code must be separated from the first operand by at least one blank. Any operands that follow are separated by commas.

There are four types of operator-to-system commands. A listing of all operator-to-system commands is shown in Operator to System Commands (Figures 3 through 6).

1. Job Control--issued between jobs or job steps for batch processing in a multiprogramming environment.
2. Attention (ATTN)--issued at any time by pressing the request key on the console printer-keyboard. Some of these commands can be issued only in a multiprogramming environment.
3. Single Program Initiation--may be issued only in a multiprogramming environment following the ATTN command: START [F1 or F2].
4. IPL--Initial Program Loading

#### WHAT OPERATOR COMMANDS CAN DO

By using the appropriate operator-to-system command, the operator can perform the following operations.

- EOB/END key. The EOB response (S/360) or END key (S/370) indicates the end of each printer-keyboard entry. The EOB response is entered by holding the alter code key down and typing a 5.
- C/CANCEL key. The C response (S/360) or CANCEL key (S/370) indicates that the line currently being entered should be ignored by the system. It is used when an error is made in typing an entry. The C response is entered by holding the alter code key down and typing a 0.
- Temporarily suspend processing. The PAUSE statement or command causes the system to pause between jobs (or job steps), while operating in a batch mode. A programmer may use a // PAUSE statement to request operator action.
- Resume processing. A response of only EOB/END key signifies the end of all operator commands, and causes system processing to continue.
- Initiate jobs. The EXECUTE command can be used any time a partition is waiting for work. The EXEC command must specify a program of a size and type capable of being run in the inactive partition.
- Cancel jobs. The CANCEL command, which can be issued at any time during the execution of a background, foreground-one, or foreground-two program, terminates the execution of that job after all outstanding interruptions have been handled.
- Change input/output device assignments. The ASSGN (ASSIGN) command assigns a symbolic name to a physical input/output device. The DVCDN (DeViCe Down) command informs the system that a device is inoperative. The DVCUP (DeViCe UP) command informs the system that a formerly inoperative device is now operational. The RESET command resets temporary input/output assignments to the standard established at system generation time. Any temporary modifications made by the operator are also reset by this command.
- Load the Universal Character Buffer. The UCS command causes the UCB of a printer to be loaded. The universal character set to be loaded must be cataloged in the core image library.
- Perform magnetic tape operations. The MTC (Magnetic Tape Control) command performs magnetic tape operations such as rewinding tapes, rewinding and unloading tapes, etc.
- Closing files. The CLOSE command closes any magnetic tape unit assigned to SYSLSST, SYSPCH, SYSOUT, SYSnnn, or to any disk file assigned to SYSRDR, SYSIPT, SYSIN, SYSPCH, or SYSLSST, and allows a new device assignment to be made.
- Get information from the system. The LISTIO command prints a listing of input/output device assignments. The LOG command prints all job-control statements and/or SPI commands as they occur on SYSLOG. (The NOLOG command suppresses the logging of most job-control statements or SPI commands.)
- Control error recording. The ROD command causes error recording information, currently being held in main storage, to be written on SYSREC. The MODE command sets the recording mode or inquires into the status of S/370 RMS (Recovery Management System).

- Set system values.

During IPL:

SET--Sets the value for date and time

ADD--Adds device to PUB table

DEL--Deletes device from PUB table

Before first job:

SET--RF=[CREATE, YES, NO]

(RF=NO is not valid if RMS is present.)

Between job steps:

SET--Sets the values for line count, UPSI bytes, time, date, record count for SYSLST=disk, RF=NO, and SYSPCH=disk.

(RF=NO is not valid if RMS is present.)

- Multiprogramming. The following commands are valid only in a multiprogramming system.

ALLOC--Allows the operator to allocate main storage partitions to the desired sizes.

BATCH--Initiates batch job processing in BG, F2, or F1, or continues batch processing in BG, F2, or F1 after a STOP command.

HOLD--Holds the current I/O assignments for the foreground area(s) until released by RELSE command.

MAP--Prints the current main storage allocations on SYSLOG.

MSG--Gives control to a foreground program operator communication routine.

READ--Causes additional SPI commands to be read from the specified device.

RELSE--Sets the current I/O assignments for the specified foreground area(s) to unassigned at the completion of the active program for that area.

START--Starts SPI in F2 or F1 or continues processing after a STOP command.

STOP--Halts batch job operation temporarily. Job Control does not issue a read command to SYSLOG. Batch job operation can be resumed following a STOP command by issuing either a BATCH or START command.

TIMER--Interval timer support.

UNA--Causes physical units currently assigned to a foreground area(s) under the HOLD command to be unassigned. The specified foreground area must be inactive.

UNBATCH--Terminates batch job operation and releases partitions. All logical I/O units are unassigned.

These commands are described in greater detail in Operator Command Formats. Although the normal communication device is SYSLOG (console printer-keyboard), most operator-tc-system commands (except multiprogramming commands) are also recognized on SYSRDR.

## System Communication Words

Figure 1 contains information about the words that are used to communicate with the DOS control programs.

Operator Commands <sup>1</sup>				System Communication	Job Control Statement <sup>2</sup>	Meaning
IPL <sup>3</sup>	JC <sup>4</sup>	AR <sup>5</sup>	SPI <sup>6</sup>			
X				ADD		Add a device to the PUB table.
	X	X		ALLOC <sup>a</sup>		Allocate core storage.
		X		ALTER		Alter main storage.
	X		X	ASSGN	X	Assign a logical name. (See Note)
		X <sup>7</sup>		BATCH <sup>a</sup>		Initiate batch processing.
X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	EOB/END key		End of communication (end-of-block).
X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	X <sup>7</sup>	C/CANCEL key		Cancel printer-keyboard input.
	X	X	X	CANCEL		Cancel execution of current job.
	X			CLOSE		Close output magnetic tape or system logical disk unit.
				CLOSE	X	Close temporarily assigned magnetic tape unit.
				DATE	X	Set the date for current job.
X				DEL		Delete a device from the PUB table.
			X	DLAB	X	Disk label information.
			X	DLBL	X	Disk label information.
		X		DSPLY		Display main storage.
		X		DUMP		Print on SYSLST a specified area of main storage.
	X			DVCDN		Device down (not available to system).
	X			DVCUP		Device up (now available to system).
			X	EXEC	X	Initiate single program execution.
			X	EXTENT	X	Disk extent information.
	X		X	HOLD <sup>a</sup>		Hold current foreground assignments.

Note: SYSOUT can only be assigned from SYSLOG.

Figure 1. System Communications (Part 1 of 3)



Operator Commands <sup>1</sup>				System Communication	Job Control Statement <sup>2</sup>	Meaning
IPL <sup>3</sup>	JC <sup>4</sup>	AR <sup>5</sup>	SPI <sup>6</sup>			
				JOB	X	Begin control information for a task (job).
			X	LBLTYP	X	Reserve main storage for label processing.
	X		X	LISTIO	X	List current I/O assignments.
	X	X	X	LOG		Log (print) Job Control statements.
	X	X	X	MAP <sup>a</sup>		List main storage allocations.
		X <sup>7</sup>		MODE		Initiate or suppress RMS error recording on System/370.
		X <sup>7</sup>	X <sup>7</sup>	MSG <sup>a</sup>		Give control to foreground communication routine.
	X			MTC	X	Magnetic tape control.
	X	X	X	NOLOG		Suppress logging control statements.
				OPTION	X	Specify Job Control options.
	X	X		PAUSE	X	Suppress processing (enter wait state).
	X			ROD		Record on demand.
			X <sup>7</sup>	READ <sup>a</sup>		Specify card reader to read further SPI commands.
	X		X	RELSE <sup>a</sup>		Release current foreground assignments and unassign them at any EOJ for that area.
	X			RESET	X	Reset temporary device assignments to system standard.
				RSTRT	X	Restart check pointed program.
X	X			SET		Set values in the communication region.
		X		START <sup>a</sup>		Initiate a foreground program or resume batch processing.
	X			STOP <sup>a</sup>		Stop execution of background job.
		X	X	TIMER		Transfer timer support to indicated program.
			X	TLBI	X	Tape label information.

Figure 1. System Communications (Part 2 of 3)

Operator Commands <sup>1</sup>				System Communication	Job Control Statement <sup>2</sup>	Meaning
IPL <sup>3</sup>	JC <sup>4</sup>	AR <sup>5</sup>	SPI <sup>6</sup>			
			X	TPLAB	X	Tape label information.
	X			UCS		Load universal character set buffer.
	X		X	UNA <sup>8</sup>		Unassign all units for an <u>inactive</u> foreground area.
	X <sup>7</sup>			UNBATCH <sup>8</sup>		Terminate batch processing.
				UPSI	X	Set UPSI in communication region.
			X	VOL	X	Disk volume information.
			X	XTENT	X	Disk extent information.
				/*	X	End of step.
				/&	X	End of job.
				*	X	Comment (column 1 only).

<sup>1</sup>Entered through SYSRDR or SYSLOG (never preceded by a //)

<sup>2</sup>Entered through SYSRDR (always preceded by a // except where noted)

<sup>3</sup>Initial Program Loader

<sup>4</sup>JC Job Control (batch job processing)

<sup>5</sup>Attention routine

<sup>6</sup>Single program initiation

<sup>7</sup>Entered through SYSLOG only

<sup>8</sup> Valid only in a multiprogramming environment.

Figure 1. System Communications (Part 3 of 3)

# Job Control Statements

Figure 2 condenses information about Job Control statements.

Name	Operation	Operand	72	Remarks																																																																																																				
//	ASSGN	SYSxxx, address [ , X'ss' ] [ , ALT ]	⌘	<p>SYSxxx: can be            SYSRDR            SYSIPT            SYSIN            SYSPCH            SYSLST            SYSLOG            SYSLNK            SYSOUT ( can only be assigned from SYSLOG )            SYSSLB            SYSRLB            SYS000-SYSmax</p> <p>address: can be X'cuu', UA, or IGN            X'cuu': c = 0-6                      uu = 00-FE (0-254) in hex</p> <p>UA: unassign            IGN: unassign and ignore (Not valid for SYSCLB)</p> <p>X'ss': used for magnetic tape only</p> <table border="1"> <thead> <tr> <th>ss</th> <th>Bytes per Inch</th> <th>Parity</th> <th>Translate Feature</th> <th>Convert Feature</th> </tr> </thead> <tbody> <tr><td>10</td><td>200</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>20</td><td>200</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>28</td><td>200</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>30</td><td>200</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>38</td><td>200</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>50</td><td>556</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>60</td><td>556</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>68</td><td>556</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>70</td><td>556</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>78</td><td>556</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>90</td><td>800</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>A0</td><td>800</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>A8</td><td>800</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>B0</td><td>800</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>B8</td><td>800</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>C0</td><td>800</td><td colspan="3">single density 9-track tape</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">single density 9-track tape</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">dual density 9-track tape</td></tr> <tr><td>C8</td><td>800</td><td colspan="3">dual density 9-track tape</td></tr> </tbody> </table> <p>ALT: specifies alternate magnetic tape unit.</p>	ss	Bytes per Inch	Parity	Translate Feature	Convert Feature	10	200	odd	off	on	20	200	even	off	off	28	200	even	on	off	30	200	odd	off	off	38	200	odd	on	off	50	556	odd	off	on	60	556	even	off	off	68	556	even	on	off	70	556	odd	off	off	78	556	odd	on	off	90	800	odd	off	on	A0	800	even	off	off	A8	800	even	on	off	B0	800	odd	off	off	B8	800	odd	on	off	C0	800	single density 9-track tape			C0	1600	single density 9-track tape			C0	1600	dual density 9-track tape			C8	800	dual density 9-track tape		
ss	Bytes per Inch	Parity	Translate Feature	Convert Feature																																																																																																				
10	200	odd	off	on																																																																																																				
20	200	even	off	off																																																																																																				
28	200	even	on	off																																																																																																				
30	200	odd	off	off																																																																																																				
38	200	odd	on	off																																																																																																				
50	556	odd	off	on																																																																																																				
60	556	even	off	off																																																																																																				
68	556	even	on	off																																																																																																				
70	556	odd	off	off																																																																																																				
78	556	odd	on	off																																																																																																				
90	800	odd	off	on																																																																																																				
A0	800	even	off	off																																																																																																				
A8	800	even	on	off																																																																																																				
B0	800	odd	off	off																																																																																																				
B8	800	odd	on	off																																																																																																				
C0	800	single density 9-track tape																																																																																																						
C0	1600	single density 9-track tape																																																																																																						
C0	1600	dual density 9-track tape																																																																																																						
C8	800	dual density 9-track tape																																																																																																						
//	CLOSE	SYSxxx [ , X'cuu' , X'ss' ] [ , UA ] [ , IGN ] [ , ALT ]		<p>SYSxxx: for magnetic tape -            SYSPCH            SYSLST            SYSOUT            SYS000-SYSmax</p> <p>X'cuu', X'ss', UA, IGN, ALT: values as described in ASSGN command</p>																																																																																																				
//	DATE	mm/dd/yy or dd/mm/yy	⌘	<p>mm: month (01-12)            dd: day (01-31)            yy: year (00-99)</p>																																																																																																				
//	DLAB	'label fields 1-3', xxxx, yyddd, yyddd, 'system code' [ , type ]	C	<p>'label fields 1-3': first three fields of Format 1 DASD file label. Is a 51-byte character string, contained within apostrophes and followed by a comma. Entire 51-byte field must be contained in the first of the two statements. Field 1 is the file name (44-byte alphanumeric); field 2 is the format identifier (1-byte numeric); field 3 is the file serial number (6-byte alphanumeric).</p> <p>C: any non-blank character in column 72.</p> <p>xxxx: volume sequence number (4-digit numeric). Must begin in column 16 of the continuation statement. Columns 1-15 are blank.</p> <p>yyddd,yyddd: file creation date followed by file expiration date. Each is 5-digit numeric.</p> <p>'system code': This operand is not used by DOS. A string of 13 characters or blanks must be enclosed within apostrophes as shown.</p> <p>type: SD, DA, ISC, or ISE. If omitted, SD is assumed.</p>																																																																																																				

Figure 2. Job Control Statements (Part 1 of 4)

Name	Operation	Operand	72	Remarks
//	DLBL	filename, ['data file ID'], [date information], [codes], [data security]	∅	filename: 1 to 7 characters. The filename corresponding to the DTF table name.  data file ID: 1 to 44 characters, within apostrophes. The name associated with the data set.  date information: 1 to 6 characters. The retention period of the file or the absolute expiration date.  codes: 2 or 3 characters indicating the file type [SD, DA, ISC, ISE].  data security: 3-character code to create secured output file [DSF].
//	EXEC	[progname]	∅	progname: 1 to 8 alphameric characters. Used only if the program is in the core image library.
//	EXTENT	[symbolic unit], [serial number], [type], [sequence number], [relative track], [number of tracks], [split cylinder tracks], [bins],		symbolic unit: symbolic unit of the volume in form SYSxxx.  Note: ASSGN SYSCLB must follow its DLBL and EXTENT statements.  serial number: 1 to 6 characters. If omitted, the volume serial number of the preceding extent is used.  type: one character indicating file type [1, 2, 4, 8].  sequence number: 1 to 3 characters. Not required for SD, DAM, or ISFMS.  relative track: 1 to 5 characters. Not required for DA, SD or ISFMS files.  number of tracks: 1 to 5 characters. Not required for SD, DAM or ISFMS files.  split cylinder tracks: 1 or 2 numeric characters from 0-19. If omitted, extent type 8 is assumed.  bins: 1 or 2 characters. Not required for SD or ISFMS files. If omitted, bin zero is assumed for both parts.
//	JOB	jobname	∅	jobname: 1 to 8 alphameric characters.
//	LBLTYP	{ TAPE [(nn)] NSD (nn) }	∅	TAPE: used when tape files requiring label information are to be processed and no nonsequential disk files are to be processed.  nn: optional and is present only for future expansion (it is ignored by Job Control).  NSD: nonsequential disk files are to be processed.  nn: largest number of extents per single file.
//	LISTIO	{ SYS PROG F1 F2 ALL SYSxxx UNITS DOWN UA X'cuu' }	∅	Causes listing of I/O assignments on SYSLST.
//	LOG	blank	∅	Causes logging of job control statements on SYSLST.
//	MTC	opcode, SYSxxx [,nn]	∅	opcode: BSF, BSR, ERG, FSF, FSR, REW, RUN, or WTM  SYSxxx: any logical unit nn: decimal number (01-99) indicating the number of times the operation is to be performed. If nn is omitted, the operation is performed once.
//	NOLOG	blank	∅	Suppresses logging of job control statements on SYSLST.

Figure 2. Job Control Statements (Part 2 of 4)

Name	Operation	Operand	72	Remarks
//	OPTION	option1 [,option2,...]	∅	<p>option: can be any of the following</p> <p>LOG        Log control statements on SYSLST</p> <p>NOLOG     Suppress LOG option</p> <p>DUMP      Dump registers and main storage on SYSLST in the case of abnormal program end</p> <p>NODUMP    Suppress DUMP option</p> <p>LINK      Write output of language translator on SYSLNK for linkage editing</p> <p>NOLINK    Suppress LINK option</p> <p>DECK      Output object module on SYSPCH</p> <p>NODECK    Suppress DECK option</p> <p>LIST      Output listing of source module on SYSLST</p> <p>NOLIST    Suppress LIST option</p> <p>LISTX     Output listing of object module on SYSLST</p> <p>NOLISTX   Suppress LISTX option</p> <p>SYM       Punch symbol deck on SYSPCH</p> <p>NOSYM     Suppress SYM option</p> <p>XREF      Output symbolic cross-reference list on SYSLST</p> <p>NOXREF    Suppress XREF option</p> <p>ERRS      Output listing of all errors in source program on SYSLST</p> <p>NOERRS    Suppress ERRS option</p> <p>CATAL     Catalog program or phase in core image library after completion of Linkage Editor run</p> <p>STDLABEL  Causes all sequential disk or tape labels to be written on the standard label track</p> <p>USRLABEL  Causes all sequential disk or tape labels to be written on the user label track</p> <p>PARSTD    Causes all sequential disk on tape labels to be written on the partition label track</p> <p>48C       48-character set</p> <p>60C       60-character set</p>
//	PAUSE	[comments]	∅	PAUSE statement is always printed on 1052 (SYSLOG). If no 1052 is available, the statement is ignored.
//	RESET	<pre> {   SYS   PROG   ALL   SYSxxx } </pre>	∅	Resets I/O device assignments
//	RSTRT	SYSxxx, nnnn, filename	∅	<p>SYSxxx: symbolic unit name of the device on which the checkpoint records are stored. Can be SYS000- SYSmax</p> <p>nnnn: four character identification of the checkpoint record to be used for restarting</p> <p>filename: the file named in the //VOL, //DLBL or //TLBL card containing the checkpoint</p>
//	TLBL	filename, ['file-ID'], [date], [file serial number], [volume sequence number], [file sequence number], [generation number], [version number]		<p>filename: 1 to 7 characters identical to the DTF symbolic name for the file.</p> <p>NOTE: The following operands are all optional. If any is omitted on input files, no checking is done. If omitted on output files, the default option is assumed.</p> <p>file-ID: 1 to 17 alphanumeric characters (within apostrophes) indicating the name associated with the file.</p> <p>Default: The DTF filename is used.</p> <p>date: 4 to 6 numeric characters in the format: yy/dd. Indicates expiration date for output files and creation date for input files. For output files, a 1- to 4-character retention period (d-dddd) may be specified.</p> <p>Default: A 0-day retention period is assumed.</p> <p>file serial number: 1 to 6 numeric characters indicating the volume serial number of the first or only reel. This field is right-aligned and padded with zeros.</p> <p>Default: The volume serial number of the first file is assumed.</p>

Figure 2. Job Control Statements (Part 3 of 4)

Name	Operation	Operand	72	Remarks
//	TLBL	.(Cont'd.)		<p>volume sequence number: 1 to 4 numeric characters in ascending order for each volume of a multiple volume file.  <u>Default:</u>  BCD 0001 is assumed.</p> <p>file sequence number: 1 to 4 numeric characters in ascending order for each file of a multiple file volume.  <u>Default:</u>  BCD 0001 is assumed.</p> <p>generation number: 1 to 4 numeric characters used to modify the file-ID.  <u>Default:</u>  BCD 0001 is assumed.</p> <p>version number: 1 or 2 numeric characters modifying the generation number.  <u>Default:</u>  BCD 01 is assumed.</p>
//	TPLAB	'label fields 3-10'	Ø	'label fields 3-10': indicated fields of the standard tape file label. A 49-byte character string, contained within apostrophes.
//	TPLAB	'label fields 3-10 label fields 11-13'	C	<p>'label fields 3-10: same as above</p> <p>C: any nonblank character in column 72</p> <p>label fields 11-13': 20-character direct continuation of the same character string begun with fields 3-10 (no blanks, apostrophes, or commas separating)</p>
//	UPSI	nnnnnnnn	Ø	n: 0, 1, or X
//	VOL	SYSxxx, filename	Ø	<p>SYSxxx: Symbolic unit of the volume.  Note: ASSGN SYSCLB must follow its VOL, DLAB, and XTENT statements.</p> <p>filename: 1 to 7 alphabetic characters.</p>
//	XTENT	type, sequence, lower, upper, 'serial no.', SYSxxx [, B2]	Ø	<p>type: 1 for data area (no split cylinder)  2 for overflow area (for indexed sequential file)  4 for index area (for indexed sequential file)  128 for data area (split cylinder)</p> <p>sequence: sequence number of extent within multi-extent file. Can be 0 to 255.</p> <p>lower: lower limit of extent in the form B<sub>1</sub>C<sub>1</sub>C<sub>1</sub>C<sub>2</sub>C<sub>2</sub>H<sub>1</sub>H<sub>2</sub>H<sub>2</sub> where:  B<sub>1</sub> = 0 for 2311/2314/2319; 0-9 for 2321  C<sub>1</sub>C<sub>1</sub> = 00 for 2311/2314/2319; 00-19 for 2321  C<sub>2</sub>C<sub>2</sub>C<sub>2</sub> = 000-199 for 2311/2314/2319; 000-009 for 2321  H<sub>1</sub> = 0 for 2311/2314/2319; 0-4 for 2321  H<sub>2</sub>H<sub>2</sub> = 00-09 for 2311; 00-19 for 2321/2314/2319</p> <p>All zeros are invalid.  upper: upper limit of extent in the same form as for lower limit.</p> <p>Note: The last 4 strips of subcell 19 are reserved for alternate tracks on 2321 Data Cell.</p> <p>'serial no.': 6-alphanumeric-character volume serial number contained within apostrophes.</p> <p>SYSxxx: can be SYS000-SYSmax</p> <p>B<sub>2</sub>: 0 for 2311/2314/2319; 0-9 for 2321</p>
/*	ignored	ignored	Ø	Columns 1 and 2 are the only columns checked by the supervisor
/&	ignored	[comments]	Ø	Column 3 must be blank
*		comments	Ø	Column 2 must be blank

Figure 2. Job Control Statements (Part 4 of 4)

## Operator to System Commands

Figures 3 through 6 briefly outline, for quick reference, operator commands and implementation information.

Operation	Operand	Remarks																																																																																						
ADD	X'cuu' [(k)] , device type [,X'ss']	<p>X'cuu' = channel and unit numbers</p> <p>k = S, if the device can be switched (physically attached to two adjacent channels). The designated channel (X'cuu') is the lower of the two channels.</p> <p>k = 0- 255 indicates the priority of a device that cannot be switched. If k is not given, a priority of 255 is assumed. In a multi-programming environment all devices have equal priority.</p> <p>devicetype = (see table below)</p> <table border="1"> <thead> <tr> <th>Card Code</th> <th>Actual Device</th> </tr> </thead> <tbody> <tr><td>2400T9</td><td>9-track 2400 series and 3420 magnetic tapes</td></tr> <tr><td>2400T7</td><td>7-track 2400 series and 3420 magnetic tapes</td></tr> <tr><td>2495TC</td><td>Tape Cartridge Reader</td></tr> <tr><td>1442N1</td><td>1442N1 and 2596 Card Read Punch</td></tr> <tr><td>2520B1</td><td>2520B1 Card Reader Punch</td></tr> <tr><td>2501</td><td>2501 Card Reader</td></tr> <tr><td>2540R</td><td>2540 Card Reader</td></tr> <tr><td>2540P</td><td>2540 Card Punch</td></tr> <tr><td>2520B2</td><td>2520B2 Card Punch</td></tr> <tr><td>1442N2</td><td>1442N2 Card Punch</td></tr> <tr><td>2520B3</td><td>2520B1 Card Punch</td></tr> <tr><td>1403</td><td>1403 Printer</td></tr> <tr><td>1403U</td><td>1403 Printer with UCS</td></tr> <tr><td>1404</td><td>1404 Printer</td></tr> <tr><td>1443</td><td>1443 Printer</td></tr> <tr><td>1445</td><td>1445 Printer</td></tr> <tr><td>3211</td><td>3211 Printer</td></tr> <tr><td>1050A</td><td>1052, 3210, or 3215 Printer-Keyboard</td></tr> <tr><td>UNSP</td><td>Unsupported device if attached to Channel 0, not overrunable, and not operated in burst mode.</td></tr> <tr><td>UNSPB</td><td>Unsupported device attached to Channel 0, which is either overrunable or operates in burst mode.</td></tr> <tr><td>2311</td><td>2311 Disk Drive</td></tr> <tr><td>2314</td><td>2314 or 2319 Disk Storage Facility</td></tr> <tr><td>2321</td><td>2321 Data Cell Drive</td></tr> <tr><td>2701</td><td>2701 Data Adapter Unit</td></tr> <tr><td>2702</td><td>2702 Trans. Control Unit</td></tr> <tr><td>2703</td><td>1. 2703 Trans. Control Unit or Model 25 with ICA 2. IBM System/360 model 25 with the integrated communications attachment and its Synchronous Data Adapter</td></tr> <tr><td>2955</td><td>RETAIN/370 Communications device</td></tr> <tr><td>7770</td><td>7770 Audio Response Unit</td></tr> <tr><td>7772</td><td>7772 Audio Response Unit</td></tr> <tr><td>2260</td><td>1. 2260 or 2265 local display station (without X'ss') 2. 1053 attached to 2848 (with X'ss')</td></tr> <tr><td>2671</td><td>2671 Paper Tape Reader</td></tr> <tr><td>1285</td><td>1285 Optical Reader</td></tr> <tr><td>1287</td><td>1287 Optical Reader</td></tr> <tr><td>1288</td><td>1288 Optical Reader</td></tr> <tr><td>1412</td><td>1412 Magnetic Ink Character Reader</td></tr> <tr><td>1419</td><td>1419, 1259, 1255 Magnetic Character Reader or 1270*, 1275*Optical Reader/Sorter</td></tr> <tr><td>1419P</td><td>1419, 1275* Primary Control Unit on Dual Address Adapter</td></tr> <tr><td>1419S</td><td>1419, 1275* Secondary Control Unit on Dual Address Adapter</td></tr> <tr><td>1017</td><td>1017 Paper Tape Reader with 2826 Control Unit Model 1</td></tr> <tr><td>1017TP</td><td>1017 Paper Tape Reader with 2826 Control Unit Model 2</td></tr> <tr><td>1018</td><td>1018 Paper Tape Punch with 2826 Control Unit Model 1</td></tr> <tr><td>1018TP</td><td>1018 Paper Tape Punch with 2826 Control Unit Model 2</td></tr> </tbody> </table>	Card Code	Actual Device	2400T9	9-track 2400 series and 3420 magnetic tapes	2400T7	7-track 2400 series and 3420 magnetic tapes	2495TC	Tape Cartridge Reader	1442N1	1442N1 and 2596 Card Read Punch	2520B1	2520B1 Card Reader Punch	2501	2501 Card Reader	2540R	2540 Card Reader	2540P	2540 Card Punch	2520B2	2520B2 Card Punch	1442N2	1442N2 Card Punch	2520B3	2520B1 Card Punch	1403	1403 Printer	1403U	1403 Printer with UCS	1404	1404 Printer	1443	1443 Printer	1445	1445 Printer	3211	3211 Printer	1050A	1052, 3210, or 3215 Printer-Keyboard	UNSP	Unsupported device if attached to Channel 0, not overrunable, and not operated in burst mode.	UNSPB	Unsupported device attached to Channel 0, which is either overrunable or operates in burst mode.	2311	2311 Disk Drive	2314	2314 or 2319 Disk Storage Facility	2321	2321 Data Cell Drive	2701	2701 Data Adapter Unit	2702	2702 Trans. Control Unit	2703	1. 2703 Trans. Control Unit or Model 25 with ICA 2. IBM System/360 model 25 with the integrated communications attachment and its Synchronous Data Adapter	2955	RETAIN/370 Communications device	7770	7770 Audio Response Unit	7772	7772 Audio Response Unit	2260	1. 2260 or 2265 local display station (without X'ss') 2. 1053 attached to 2848 (with X'ss')	2671	2671 Paper Tape Reader	1285	1285 Optical Reader	1287	1287 Optical Reader	1288	1288 Optical Reader	1412	1412 Magnetic Ink Character Reader	1419	1419, 1259, 1255 Magnetic Character Reader or 1270*, 1275*Optical Reader/Sorter	1419P	1419, 1275* Primary Control Unit on Dual Address Adapter	1419S	1419, 1275* Secondary Control Unit on Dual Address Adapter	1017	1017 Paper Tape Reader with 2826 Control Unit Model 1	1017TP	1017 Paper Tape Reader with 2826 Control Unit Model 2	1018	1018 Paper Tape Punch with 2826 Control Unit Model 1	1018TP	1018 Paper Tape Punch with 2826 Control Unit Model 2
Card Code	Actual Device																																																																																							
2400T9	9-track 2400 series and 3420 magnetic tapes																																																																																							
2400T7	7-track 2400 series and 3420 magnetic tapes																																																																																							
2495TC	Tape Cartridge Reader																																																																																							
1442N1	1442N1 and 2596 Card Read Punch																																																																																							
2520B1	2520B1 Card Reader Punch																																																																																							
2501	2501 Card Reader																																																																																							
2540R	2540 Card Reader																																																																																							
2540P	2540 Card Punch																																																																																							
2520B2	2520B2 Card Punch																																																																																							
1442N2	1442N2 Card Punch																																																																																							
2520B3	2520B1 Card Punch																																																																																							
1403	1403 Printer																																																																																							
1403U	1403 Printer with UCS																																																																																							
1404	1404 Printer																																																																																							
1443	1443 Printer																																																																																							
1445	1445 Printer																																																																																							
3211	3211 Printer																																																																																							
1050A	1052, 3210, or 3215 Printer-Keyboard																																																																																							
UNSP	Unsupported device if attached to Channel 0, not overrunable, and not operated in burst mode.																																																																																							
UNSPB	Unsupported device attached to Channel 0, which is either overrunable or operates in burst mode.																																																																																							
2311	2311 Disk Drive																																																																																							
2314	2314 or 2319 Disk Storage Facility																																																																																							
2321	2321 Data Cell Drive																																																																																							
2701	2701 Data Adapter Unit																																																																																							
2702	2702 Trans. Control Unit																																																																																							
2703	1. 2703 Trans. Control Unit or Model 25 with ICA 2. IBM System/360 model 25 with the integrated communications attachment and its Synchronous Data Adapter																																																																																							
2955	RETAIN/370 Communications device																																																																																							
7770	7770 Audio Response Unit																																																																																							
7772	7772 Audio Response Unit																																																																																							
2260	1. 2260 or 2265 local display station (without X'ss') 2. 1053 attached to 2848 (with X'ss')																																																																																							
2671	2671 Paper Tape Reader																																																																																							
1285	1285 Optical Reader																																																																																							
1287	1287 Optical Reader																																																																																							
1288	1288 Optical Reader																																																																																							
1412	1412 Magnetic Ink Character Reader																																																																																							
1419	1419, 1259, 1255 Magnetic Character Reader or 1270*, 1275*Optical Reader/Sorter																																																																																							
1419P	1419, 1275* Primary Control Unit on Dual Address Adapter																																																																																							
1419S	1419, 1275* Secondary Control Unit on Dual Address Adapter																																																																																							
1017	1017 Paper Tape Reader with 2826 Control Unit Model 1																																																																																							
1017TP	1017 Paper Tape Reader with 2826 Control Unit Model 2																																																																																							
1018	1018 Paper Tape Punch with 2826 Control Unit Model 1																																																																																							
1018TP	1018 Paper Tape Punch with 2826 Control Unit Model 2																																																																																							

\*This device is not available in the United States of America.

Figure 3. IPL Commands (Initial Program Load) (Part 1 of 2)

Operation	Operand	Remarks																																																																																																				
		<p>X'ss' device specifications  X'01' must be coded when the device type is a 2260 for 1053 attached to 2848 Local.  If absent the following values are assumed:  X'00' for 9-track tapes  X'90' for 7-track tapes  X'00' for non-tapes</p> <p>2702 - MODE designates the SADxxx command  X'00' SAD0  X'01' SAD1  X'02' SAD2  X'03' SAD3</p> <p>The tape specifications are:</p> <table border="1"> <thead> <tr> <th>Density (Bytes per Inch)</th> <th>Parity</th> <th>Convert Feature</th> <th>Translate</th> <th>ss</th> </tr> </thead> <tbody> <tr><td>200</td><td>odd</td><td>on</td><td>off</td><td>10</td></tr> <tr><td>200</td><td>odd</td><td>off</td><td>off</td><td>30</td></tr> <tr><td>200</td><td>odd</td><td>off</td><td>on</td><td>38</td></tr> <tr><td>200</td><td>even</td><td>off</td><td>off</td><td>20</td></tr> <tr><td>200</td><td>even</td><td>off</td><td>on</td><td>28</td></tr> <tr><td>556</td><td>odd</td><td>on</td><td>off</td><td>50</td></tr> <tr><td>556</td><td>odd</td><td>off</td><td>off</td><td>70</td></tr> <tr><td>556</td><td>odd</td><td>off</td><td>on</td><td>78</td></tr> <tr><td>556</td><td>even</td><td>off</td><td>off</td><td>60</td></tr> <tr><td>556</td><td>even</td><td>off</td><td>on</td><td>68</td></tr> <tr><td>800</td><td>odd</td><td>on</td><td>off</td><td>90</td></tr> <tr><td>800</td><td>odd</td><td>off</td><td>off</td><td>80</td></tr> <tr><td>800</td><td>odd</td><td>off</td><td>on</td><td>88</td></tr> <tr><td>800</td><td>even</td><td>off</td><td>off</td><td>A0</td></tr> <tr><td>800</td><td>even</td><td>off</td><td>on</td><td>A8</td></tr> <tr><td>800</td><td colspan="3">single-density 9-track tapes only</td><td>C0</td></tr> <tr><td>1600</td><td colspan="3">single-density 9-track tapes only</td><td>C0</td></tr> <tr><td>1600</td><td colspan="3">dual-density 9-track tapes only</td><td>C0</td></tr> <tr><td>800</td><td colspan="3">dual-density 9-track tapes only</td><td>C8</td></tr> </tbody> </table> <p>1412/1419/1255/1259/1270/1275: X'ss' designates the external line to which the device is attached.</p> <p>X'01' external line 7  X'02' external line 6  X'04' external line 5  X'08' external line 4  X'10' external line 3  X'20' external line 2</p> <p>1018: X'ss' specifies whether the Error Correction feature is present or not.  X'00' for a 1018 without this feature.  X'01' for a 1018 with this feature.</p>	Density (Bytes per Inch)	Parity	Convert Feature	Translate	ss	200	odd	on	off	10	200	odd	off	off	30	200	odd	off	on	38	200	even	off	off	20	200	even	off	on	28	556	odd	on	off	50	556	odd	off	off	70	556	odd	off	on	78	556	even	off	off	60	556	even	off	on	68	800	odd	on	off	90	800	odd	off	off	80	800	odd	off	on	88	800	even	off	off	A0	800	even	off	on	A8	800	single-density 9-track tapes only			C0	1600	single-density 9-track tapes only			C0	1600	dual-density 9-track tapes only			C0	800	dual-density 9-track tapes only			C8
Density (Bytes per Inch)	Parity	Convert Feature	Translate	ss																																																																																																		
200	odd	on	off	10																																																																																																		
200	odd	off	off	30																																																																																																		
200	odd	off	on	38																																																																																																		
200	even	off	off	20																																																																																																		
200	even	off	on	28																																																																																																		
556	odd	on	off	50																																																																																																		
556	odd	off	off	70																																																																																																		
556	odd	off	on	78																																																																																																		
556	even	off	off	60																																																																																																		
556	even	off	on	68																																																																																																		
800	odd	on	off	90																																																																																																		
800	odd	off	off	80																																																																																																		
800	odd	off	on	88																																																																																																		
800	even	off	off	A0																																																																																																		
800	even	off	on	A8																																																																																																		
800	single-density 9-track tapes only			C0																																																																																																		
1600	single-density 9-track tapes only			C0																																																																																																		
1600	dual-density 9-track tapes only			C0																																																																																																		
800	dual-density 9-track tapes only			C8																																																																																																		
EOB/END	blank	End of communications.																																																																																																				
C/CANCEL	blank	Cancel console printer-keyboard entry.																																																																																																				
DEL	X'cuu'	cuu = unit number of device to be deleted.																																																																																																				
SET	[ DATE = value ] [, CLOCK = value 2 ]	<p>value 1: in one of the following formats</p> <p>mm/dd/yy/ or dd/mm/yy</p> <p>mm: month (01 - 12)  dd: day (01 - 31)  yy: year (00 - 99)</p> <p>value 2: in the following format</p> <p>hh/mm/ss</p> <p>hh: hours (00 - 23)  mm: minutes (00 - 59)  ss: seconds (00 - 59)</p>																																																																																																				

Figure 3. IPL Commands (Initial Program Load) (Part 2 of 2)



Operation	Operand	Remarks																																																																																																																		
ALLOC	{F1 = nK [,F2 =nK]} {F2 = nK [,F1 =nK]}	Allocates foreground program areas. Value of n must be even.																																																																																																																		
ASSGN	SYSxxx, address [X'ss'] [,TEMP] [,ALT]	<p>SYSxxx: can be</p> <table border="0"> <tr><td>SYSREC</td><td>SYSLOG</td></tr> <tr><td>SYSRDR</td><td>SYSLNK</td></tr> <tr><td>SYSIPT</td><td>SYSCLB</td></tr> <tr><td>SYSIN</td><td>SYSsLB</td></tr> <tr><td>SYSLST</td><td>SYSRLB</td></tr> <tr><td>SYSPCH</td><td>SYS000-SYSmax</td></tr> <tr><td>SYSOUT</td><td></td></tr> </table> <p>address: can be X'cuu', UA, or IGN</p> <p>X'cuu': c = 0-6 uu = 00-FE (0-254) in hex</p> <p>UA: unassign</p> <p>IGN: unassign and ignore (Not valid for SYSCLB)</p> <p>X'ss': Device specifications (used to specify mode settings for 7-track and 9-track tapes). If X'ss' is not specified, the mode settings remain unchanged. The LISTIO command may be used to determine the current mode settings for all magnetic tape units.</p> <table border="1"> <thead> <tr> <th>ss</th> <th>Bytes per Inch</th> <th>Parity</th> <th>Translate Feature</th> <th>Convert Feature</th> </tr> </thead> <tbody> <tr><td>10</td><td>200</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>20</td><td>200</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>28</td><td>200</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>30</td><td>200</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>38</td><td>200</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>50</td><td>556</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>60</td><td>556</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>68</td><td>556</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>70</td><td>556</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>78</td><td>556</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>90</td><td>800</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>A0</td><td>800</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>A8</td><td>800</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>B0</td><td>800</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>B8</td><td>800</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>C0</td><td>800</td><td colspan="3">single-density 9-track tapes only</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">single-density 9-track tapes only</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">dual-density 9-track tapes only</td></tr> <tr><td>C8</td><td>800</td><td colspan="3">dual-density 9-track tapes only</td></tr> </tbody> </table> <p>1255/1259/1412/1419/1270/1275: X'ss' designates the external line to which the device is attached.</p> <p>X'01' external line 7 X'02' external line 6 X'04' external line 5 X'08' external line 4 X'10' external line 3 X'20' external line 2</p> <p>ALT: specifies alternate magnetic tape unit.</p> <p>TEMP: specifies a temporary assignment for batched programs only (Not valid for SYSCLB).</p>	SYSREC	SYSLOG	SYSRDR	SYSLNK	SYSIPT	SYSCLB	SYSIN	SYSsLB	SYSLST	SYSRLB	SYSPCH	SYS000-SYSmax	SYSOUT		ss	Bytes per Inch	Parity	Translate Feature	Convert Feature	10	200	odd	off	on	20	200	even	off	off	28	200	even	on	off	30	200	odd	off	off	38	200	odd	on	off	50	556	odd	off	on	60	556	even	off	off	68	556	even	on	off	70	556	odd	off	off	78	556	odd	on	off	90	800	odd	off	on	A0	800	even	off	off	A8	800	even	on	off	B0	800	odd	off	off	B8	800	odd	on	off	C0	800	single-density 9-track tapes only			C0	1600	single-density 9-track tapes only			C0	1600	dual-density 9-track tapes only			C8	800	dual-density 9-track tapes only		
SYSREC	SYSLOG																																																																																																																			
SYSRDR	SYSLNK																																																																																																																			
SYSIPT	SYSCLB																																																																																																																			
SYSIN	SYSsLB																																																																																																																			
SYSLST	SYSRLB																																																																																																																			
SYSPCH	SYS000-SYSmax																																																																																																																			
SYSOUT																																																																																																																				
ss	Bytes per Inch	Parity	Translate Feature	Convert Feature																																																																																																																
10	200	odd	off	on																																																																																																																
20	200	even	off	off																																																																																																																
28	200	even	on	off																																																																																																																
30	200	odd	off	off																																																																																																																
38	200	odd	on	off																																																																																																																
50	556	odd	off	on																																																																																																																
60	556	even	off	off																																																																																																																
68	556	even	on	off																																																																																																																
70	556	odd	off	off																																																																																																																
78	556	odd	on	off																																																																																																																
90	800	odd	off	on																																																																																																																
A0	800	even	off	off																																																																																																																
A8	800	even	on	off																																																																																																																
B0	800	odd	off	off																																																																																																																
B8	800	odd	on	off																																																																																																																
C0	800	single-density 9-track tapes only																																																																																																																		
C0	1600	single-density 9-track tapes only																																																																																																																		
C0	1600	dual-density 9-track tapes only																																																																																																																		
C8	800	dual-density 9-track tapes only																																																																																																																		
EOB		End-of-block. EOB is alter code 5 on 1052 printer-keyboard.																																																																																																																		
END key		End of communications on 3210 or 3215 printer-keyboard.																																																																																																																		
Ⓒ		Cancel current entry. Ⓒ is alter code 0 on 1052.																																																																																																																		
CANCEL key		Cancel current entry on 3210 or 3215 printer-keyboard.																																																																																																																		

Figure 4. Job Control Commands (Issued only between Jobs or Job Steps) (Part 1 of 3)

Operation	Operand	Remarks
CANCEL	blank	blank If issued for a batched job, blank operand cancels the partition issuing the message.
CLOSE	$\text{SYSxxx} \left[ \begin{array}{l} \text{,X'cuu' [,X'ss']} \\ \text{,UA} \\ \text{,IGN} \\ \text{,ALT} \end{array} \right]$	SYSxxx: for 2311, 2314, or 2319 - SYSIN SYSRDR SYSIPT SYSPCH SYSLST  for magnetic tape - SYSPCH SYSLST SYSOUT SYS000 - SYSmax  X'cuu', X'ss', UA, IGN, ALT: values as described in ASSIGN command
DVCDN	X'cuu'	X'cuu': c = 0 - 6 uu = 00 - FE (0 - 254) in hex
DVCUP	X'cuu'	X'cuu': c = 0 - 6 uu = 00 - FE (0 - 254) in hex
HOLD	$\left\{ \begin{array}{l} \text{F1 [,F2]} \\ \text{F2 [,F1]} \end{array} \right\}$	Holds all I/O assignments for the specified foreground area(s) from one job to the next (SPI mode only)
LISTIO	$\left\{ \begin{array}{l} \text{SYS} \\ \text{PROG} \\ \text{F1} \\ \text{F2} \\ \text{ALL} \\ \text{SYSxxx} \\ \text{UNITS} \\ \text{DOWN} \\ \text{UA} \\ \text{X'cuu'} \end{array} \right\}$	Causes listing of specified I/O assignments on console printer-keyboard.
LOG	blank	Causes logging of job control statements on console.
MAP	blank	Causes a map of areas in main storage to be printed on SYSLOG.
MTC	$\text{opcode, } \left\{ \begin{array}{l} \text{X'cuu'} \\ \text{SYSxxx} \end{array} \right\} \text{ [,nn]}$	opcode: BSF, BSR, ERG, FSF, FSR, RUN, REW, or WTM  X'cuu': c = 0 - 6 uu = 00 - FE (0 - 254) in hex  SYSxxx: any logical unit assigned to tape  nn: decimal number (01-99) indicating the number of times the operation is to be performed. If nn is omitted, the operation is performed once.
NOLOG	blank	Suppresses logging of job control statements and single program initiation commands.
PAUSE	[any operator comments]	Causes pause at end of current job step
RELSE	$\left\{ \begin{array}{l} \text{F1 [,F2]} \\ \text{F2 [,F1]} \end{array} \right\}$	Release all I/O assignments for the specified foreground area(s) SPI mode and set them to unassigned at the completion of any job specified for that area.

Figure 4. Job Control Commands (Issued only between Jobs or Job Steps) (Part 2 of 3)

Operation	Operand	Remarks
RESET	<pre> SYS PROG ALL SYSxxx </pre>	Resets I/O assignments to system standard
ROD	blank	Updates SDR counters and writes the RDE end-of-day record.
SET	<pre> [DATE = value 1] [,CLOCK = value2] [,UPSI = value 3] [,LINECT = value4] [,RCLST = value5][,RCPCH = value6] [RF = YES, NO, CREATE] </pre>	<p>value1: in one of the following formats</p> <p>mm/dd/yy or dd/mm/yy</p> <p>mm: month (01 - 12)  dd: day (01 - 31)  yy: year (00 - 99)</p> <p>value2: in the following format</p> <p>hh/mm/ss</p> <p>hh: hours (00 - 23)  mm: minutes (00 - 59)  ss: seconds (00 - 59)</p> <p>value3: 0, 1, or X</p> <p>value4: standard number of lines for output on each page of SYSLST</p> <p>value5: decimal number indicating minimum number of SYSLST disk records remaining to be written before operator warning</p> <p>value6: decimal number indicating minimum number of SYSPCH disk records remaining to be written before operator warning</p> <p>RF = Recorder File for ERRLOG/MCRR options or RMS. (RF=NO is not valid if RMS is present.)</p>
STOP	blank	Stops batched job program processing.
UCS	<pre> SYSxxx,phasename [,FOLD] [,BLOCK] [,NULMSG] </pre>	<p>SYSxxx: The name of the logical unit assigned to a 1403 UCS Printer</p> <p>phasename: The symbolic name of the core image library containing the 240 EBCDIC characters to be loaded followed by an 80-character verification message.</p> <p>FOLD: Signifies that the buffer is to be loaded with the folding operation code in the CCW.</p> <p>BLOCK: Signifies that the 2821 latch is to be set to inhibit data checks generated by the 1403 UCS Printer.</p> <p>NULMSG: Signifies that the 80-character verification message is not to be printed on the 1403 after the buffer is loaded.</p>
UNA	<pre> {F1 [,F2]} {F2 [,F1]} </pre>	Unassigns the specified foreground area (s) I/O assignments.
UNBATCH	blank	Terminate batch processing

Figure 4. Job Control Commands (Issued only between Jobs or Job Steps) (Part 3 of 3)

Operation	Operand	Remarks
ALLOC	$\left\{ \begin{array}{l} F1 = nK [, F2 = nK] \\ F2 = nK [, F1 = nK] \end{array} \right\}$	Allocates foreground program areas. Value of n is an even number.
ALTER	xxxxxx	Alter 1 to 16 bytes of main storage beginning at the hexadecimal address specified.
BATCH	$\left\{ \text{blank}, [BG], [F1], [F2] \right\}$	Initiate batch processing in indicated partition.
EOB/END	blank	End of communications.
C/CANCEL	blank	Cancel console printer - keyboard entry.
CANCEL	$\left\{ \begin{array}{l} \text{blank} \\ BG \\ F1 \\ F2 \end{array} \right\}$	Cancels execution of current job in specified area.
DSPLY	xxxxxx	Display 16 bytes of main storage beginning at the hexadecimal address specified.
DUMP	$\left\{ \begin{array}{l} \text{blank} \\ S \\ BG \\ F1 \\ F2 \\ BGS \\ F1S \\ F2S \\ CEAREA \\ \text{xxxxxxxx,xxxxxxxx} \end{array} \right\} \left[ \begin{array}{l} (BG) \\ (F1) \\ (F2) \end{array} \right]$	Dump the area specified in the first operand on a SYSLST printer that is assigned to the partition indicated in the second operand. If the second operand is not specified, BG is assumed.
LOG	blank	Causes logging of job control statements on SYSLOG.
MAP	blank	Causes a map of areas in main storage to be printed on SYSLOG.
MODE	$\left\{ \begin{array}{l} R \\ \text{STATUS} \\ \text{HIR} \\ \text{ECC} \left[ \begin{array}{l} \{M\} \\ \{C\} \end{array} \right] \left[ \begin{array}{l} \{R\} \\ \{Q\} \\ \{TH\} \end{array} \right] [E=eeee][T=tttt] \end{array} \right\}^*$	Changes the mode of operation, changes the EFL threshold values, and gives status information. Available only for IBM System/370. *Note: When HIR or ECC is specified, at least one (1) of the optional operands within these braces must be selected. TH is only valid for the Model 145 when ECC,C is specified with the MODE command.
MSG	$\left\{ \begin{array}{l} F1 \\ F2 \end{array} \right\}$	Transfers control to foreground program message routine.
NOLOG	blank	Suppresses logging of job control statements on SYSLOG.
PAUSE	$\left\{ BG, F1, F2 \right\}, [EOJ] \text{any comment}$	Causes pause at end of current job step, or at EOJ.
START	$\left\{ \begin{array}{l} BG \\ F1 \\ F2 \end{array} \right\}$	Initiates a SPI program or restart a batched job previously stopped.
TIMER	$\left\{ \begin{array}{l} BG \\ F1 \\ F2 \end{array} \right\}$	Causes interval timer support to be given to the specified partition.

Figure 5. ATTN Commands (Issued at any Time)

Operation	Operand	Remarks																																																																																																				
ASSGN	SYSnnn,address [ { ,X'ss' } ] [ ,ALT ] [ ,TEMP ]	<p>SYSnnn: can be SYS000, SYS001, ... or system logical units</p> <p>address: can be X'cuu', IGN, or UA</p> <p>X'cuu': c = 0-6 uu = 00-FE (0-254) in hex</p> <p>IGN: unassign and ignore UA: unassign</p> <p>X'ss': used for magnetic tape only</p> <table border="1"> <thead> <tr> <th>ss</th> <th>Bytes per Inch</th> <th>Parity</th> <th>Translate Feature</th> <th>Convert Feature</th> </tr> </thead> <tbody> <tr><td>10</td><td>200</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>20</td><td>200</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>28</td><td>200</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>30</td><td>200</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>38</td><td>200</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>50</td><td>556</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>60</td><td>556</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>68</td><td>556</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>70</td><td>556</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>78</td><td>556</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>90</td><td>800</td><td>odd</td><td>off</td><td>on</td></tr> <tr><td>A0</td><td>800</td><td>even</td><td>off</td><td>off</td></tr> <tr><td>A8</td><td>800</td><td>even</td><td>on</td><td>off</td></tr> <tr><td>B0</td><td>800</td><td>odd</td><td>off</td><td>off</td></tr> <tr><td>B8</td><td>800</td><td>odd</td><td>on</td><td>off</td></tr> <tr><td>C0</td><td>800</td><td colspan="3">single-density 9-track tapes only</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">single-density 9-track tapes only</td></tr> <tr><td>C0</td><td>1600</td><td colspan="3">dual-density 9-track tapes only</td></tr> <tr><td>C8</td><td>800</td><td colspan="3">dual-density 9-track tapes only</td></tr> </tbody> </table> <p>ALT: specifies alternate unit</p> <p>TEMP: temporary assignment</p>	ss	Bytes per Inch	Parity	Translate Feature	Convert Feature	10	200	odd	off	on	20	200	even	off	off	28	200	even	on	off	30	200	odd	off	off	38	200	odd	on	off	50	556	odd	off	on	60	556	even	off	off	68	556	even	on	off	70	556	odd	off	off	78	556	odd	on	off	90	800	odd	off	on	A0	800	even	off	off	A8	800	even	on	off	B0	800	odd	off	off	B8	800	odd	on	off	C0	800	single-density 9-track tapes only			C0	1600	single-density 9-track tapes only			C0	1600	dual-density 9-track tapes only			C8	800	dual-density 9-track tapes only		
ss	Bytes per Inch	Parity	Translate Feature	Convert Feature																																																																																																		
10	200	odd	off	on																																																																																																		
20	200	even	off	off																																																																																																		
28	200	even	on	off																																																																																																		
30	200	odd	off	off																																																																																																		
38	200	odd	on	off																																																																																																		
50	556	odd	off	on																																																																																																		
60	556	even	off	off																																																																																																		
68	556	even	on	off																																																																																																		
70	556	odd	off	off																																																																																																		
78	556	odd	on	off																																																																																																		
90	800	odd	off	on																																																																																																		
A0	800	even	off	off																																																																																																		
A8	800	even	on	off																																																																																																		
B0	800	odd	off	off																																																																																																		
B8	800	odd	on	off																																																																																																		
C0	800	single-density 9-track tapes only																																																																																																				
C0	1600	single-density 9-track tapes only																																																																																																				
C0	1600	dual-density 9-track tapes only																																																																																																				
C8	800	dual-density 9-track tapes only																																																																																																				
EOB/END	blank	End of communications																																																																																																				
C/CANCEL	blank	Cancel console printer-keyboard entry																																																																																																				
CANCEL	blank	blank cancels initiation of foreground program																																																																																																				
DLAB	'label fields 1-3' xxxx,yyddd,yyddd,'system code' [ ,type ]	<p>'label fields 1-3': first three fields of Format 1 DASD file label. Is a 51-byte character string, contained within apostrophes and followed by a comma. Entire 51-byte field must be contained in the first of the two commands. A continuation character is in column 72. Field 1 is the file name (44-byte alphameric); field 2 is the format identifier (1-byte numeric); field 3 is the file serial number (6-byte alphameric).</p> <p>xxxx: volume sequence number (4-digit numeric). Must begin in column 16 of the continuation command. Columns 1-15 are blank.</p> <p>yyddd,yyddd: file creation date followed by file expiration date. Each is 5-digit numeric.</p>																																																																																																				

Figure 6. Single Program Initiation Command (Issued only after START Command)  
(Part 1 of 4)

Operation	Operand	Remarks
DLAB		'system code': This operand is not used by DOS. A string of 13 characters or blanks must be enclosed within apostrophes as shown.  type: SD, DA, ISC, or ISE. If omitted, SD is assumed.
DLBL	filename, ['data file ID'], [date information], [codes], data security	filename: 1 to 7 characters. The filename corresponding to the DEF table name. data file ID: 1 to 44 characters, within apostrophes. The name associated with the data set. date information: 1 to 6 characters. The retention period of the file or the absolute expiration date. codes: 2 or 3 characters indicating the file type [SD, DA, ISC, ISE].  data security: 3-character code to create secured outputfile [DSF].
EXTENT	symbolic unit ,  serial number ,  type , sequence number , relative track , number of tracks ,  split cylinder tracks ,  bins ,	symbolic unit: symbolic unit of the volume in form SYSxx.  serial number: 1 to 6 characters. If omitted the volume serial number of the preceding extent is used.  type: one character indicating file type 1,2,4,8 sequence number: 1 to 3 characters. Not required for SD, DAM, or ISFMS. relative track: 1 to 5 characters. Not required for SD or ISFMS input files. number of tracks: 1 to 5 characters. Not required for SD, DAM or ISFMS files. split cylinder tracks: 1 or 2 numeric characters from 0-19. If omitted, extent type 8 is assumed. bins: 1 or 2 characters. Not required for SD or ISFMS files. If omitted, bin zero is assumed for both parts.
EXEC	progname	progname: one to eight alphabetic characters.
HOLD	{ F1 [,F2] } { F2 [,F1] }	Holds all I/O assignments for the specified foreground area(s) from one job to the next (SPI mode only).
LISTIO	{ BG } { F1 } { F2 } { UA } { ALL }	Causes listing of specified I/O assignments.
LOG	blank	Causes logging of foreground initiation commands on SYSLOG.
MAP	blank	Causes a map of areas in main storage to be printed on SYSLOG.
MSG	{ F1 } { F2 }	Transfers control to foreground program message routine.
NOLOG	blank	Suppresses logging of foreground initiation commands on SYSLOG.
PAUSE	[any operator comments]	Causes pause at end of current job step.
READ	X'cuu'	X'cuu': c = 0-6 uu = 00-FE (0-254) in hex  Note: Device must be a card reader
RELSE	{ F1 [,F2] } { F2 [,F1] }	Release all I/O assignments for the specified foreground area(s), SPI mode only, and set them to unassigned at the completion of any job specified for that area.
TIMER	{ BG } { F1 } { F2 }	Causes interval timer support to be given to the specified partition.

Figure 6. Single Program Initiation Command (Issued only after START Command)  
(Part 2 of 4)

Operation	Operand	Remarks
TPLAB	'label fields 3-10' 'label fields 3-10'	'label fields-10': indicated fields of the standard tape file label. A 59-byte character string, contained with apostrophes.  'label fields 3-13': 20-character direct continuation of the same character string begun with fields 3-10 (no blanks, apostrophes, or commas separating). A continuation character must be present in column 72.
TLBL	filename, ['file-ID'], [date], [file serial number], [volume sequence number], [file sequence number], [generation number], [version number]	filename: 1 to 7 characters identical to the DTF symbolic name for the file.  NOTE: The following operands are all optional. If any is omitted on input files, no checking is done. If omitted on output files, the default option is assumed.  file-ID: 1 to 17 alphameric characters (within apostrophes) indicating the name associated with the file. <u>Default:</u> The DTF filename is used.  date: 4 to 6 numeric characters in the format: yy/dd. Indicates expiration date for output files and creation date for input files. For output files, a 1- to 4-character retention period (d-dddd) may be specified. <u>Default:</u> A0-day retention period is assumed.  file serial number: 1 to 6 numeric characters indicating the volume serial number of the first or only reel. This field is right-aligned and padded with zeros. <u>Default:</u> The volume serial number of the first file is assumed.  volume sequence number: 1 to 4 numeric characters in ascending order for each volume of a multiple volume file. <u>Default:</u> BCD 0001 is assumed.  file sequence number: 1 to 4 numeric characters in ascending order for each file of a multiple file volume. <u>Default:</u> BCD 0001 is assumed.  generation number: 1 to 4 numeric characters used to modify the file-ID. <u>Default:</u> BCD 0001 is assumed.  version number: 1 or 2 numeric characters modifying the generation number. <u>Default:</u> BCD 01 is assumed.
UCS	SYSxxx, phasename [, FOLD] [, BLOCK] [, NULMSG]	SYSxxx: The name of the logical unit assigned to a 1403 Printer.  phasename: The symbolic name of the core image library containing the 240 EBCDIC characters to be loaded followed by an 80-character verification message.  FOLD: Signifies that the buffer is to be loaded with the folding operation code in the CCW.

Figure 6. Single Program Initiation Command (Issued only after START Command)  
(Part 3 of 4)

Operation	Operand	Remarks
UCS	(Cont'd.)	BLOCK: Signifies that the 2821 latch is to be set to inhibit data checks generated by the 1403 UCS Printer.  NULMSG: Signifies that the 80-character verification message is not to be printed on the 1403 after the buffer is loaded.
UNA	{ F1 [,F2] { } F2 [,F1] }	Unassigns the specified foreground area(s) I/O assignments (SPI mode only).
VOL	SYSnnn, filename	SYSnnn: symbolic unit of the volume.  filename: one to seven alphabetic characters
XTENT	type, sequence, lower, upper 'serial no.', SYSxxx [, B2]	type: 1 for data area (no split cylinder) 2 for overflow area (for indexed sequential file) 4 for index area (for indexed sequential file) 128 for data area (split cylinder)  sequence: sequence number of extent within multi-extent file. Can be 0-255.  lower: lower limit of extent in the form B <sub>1</sub> C <sub>1</sub> C <sub>1</sub> C <sub>2</sub> C <sub>2</sub> H <sub>1</sub> H <sub>2</sub> H <sub>2</sub> where:  B <sub>1</sub> = 0 for 2311/2314/2319; 0 - 9 for 2321 C <sub>1</sub> C <sub>1</sub> = 00 for 2311/2314/2319; 00 - 19 for 2321 C <sub>2</sub> C <sub>2</sub> C <sub>2</sub> = 000 - 199 for 2311/2314/2319 000 - 009 for 2321 H <sub>1</sub> = 0 for 2311/2314/2319; 0-4 for 2321 H <sub>2</sub> H <sub>2</sub> = 00 - 09 for 2311; 00 - 19 for 2321/2314/2319  upper: upper limit of extent in the same form as for lower limit. Note: The last 4 strips of sub cell 19 are reserved for alternate tracks on 2311 Data Cell.  'serial no.': 6-alphanumeric-character volume serial number contained within apostrophes  SYSxxx: can be SYS000 - SYSmax  B <sub>2</sub> : 0 for 2311/2314/2319; 0 - 9 for 2321

Figure 6. Single Program Initiation Command (Issued only after START Command)  
(Part 4 of 4)



# Wait States, Loops, and Incorrect Output

Use Figures 7 and 8 and the accompanying text to establish your problem determination action.

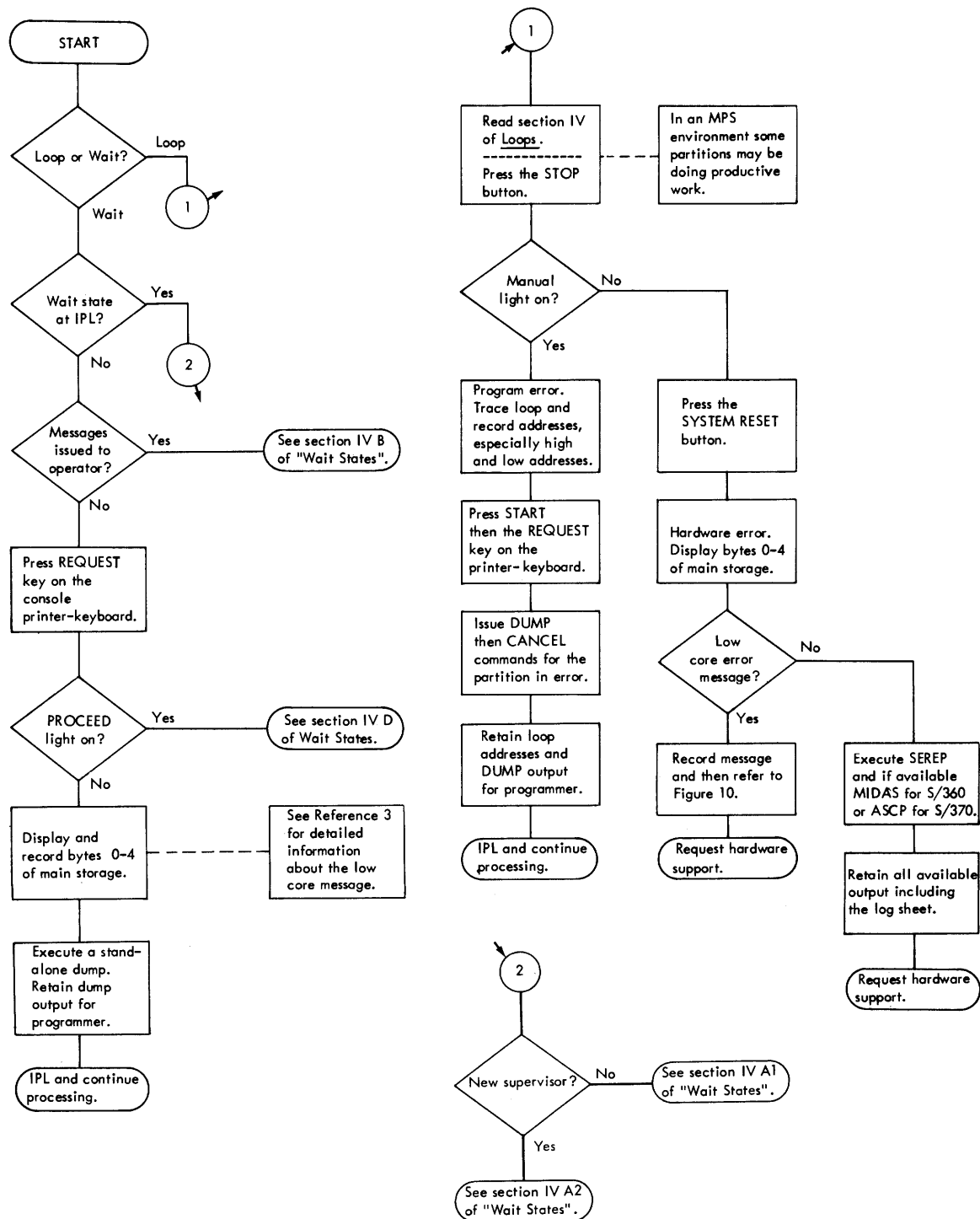


Figure 7. Wait States and Loops

## Wait States

- I. Definition: A system wait state indicates that instructions are not being executed. You can usually recognize this state if the WAIT light on the CPU console comes on. A system wait state is entered when bit 14 of the current PSW is set to 1. To exit from this state, an interrupt or IPL must occur to change the current PSW.

Occasionally, an error occurs and no message is issued on the console printer-keyboard. If the WAIT light is on, or a red error indicator, there is a message code in bytes 0-5 of main storage. However, if an I/O operation is being attempted when the error occurs, the only indication of the error is a lack of system activity.

- II. Explanation: Wait states are commonly separated into so-called "hard" waits and "soft" waits. When the system enters a "hard" wait, the system mask of the current PSW, bits 0-7 is set to zeros; that is, all interrupts are disabled. The only exit from a "hard" wait is for the operator to re-IPL. In a "soft" wait, the system mask of the current PSW is set to ones; that is, interrupts are enabled. In this state, you can communicate with the system (for example, the printer-keyboard PROCEED light turns on after you press REQUEST). A "soft" wait may be the result of a normal operation; the system may be waiting for some operator action. It can also be a symptom of abnormal operation, such as a lost I/O interrupt due to hardware malfunction.

- III. System Action: While the system is in a wait state, it updates the timer. If no interrupts occur, or if interrupts are disabled, you must IPL the system to resume processing.

### IV. Types of Wait States:

- A. Waits at IPL- When you IPL the system, set the address dials on the console to the channel and unit of SYSRES and press the LOAD button. When the system is ready to accept IPL commands, it enters a wait state. But, if the LCAD light is still on, check that the address dials are set correctly and that the correct pack is mounted. If both are correct,

the IPL records may have been destroyed. If IPL has been successful, load and ready the card reader, or press the REQUEST key on the printer-keyboard. Enter the IPL commands with the SET command last; DOS IPL COMPLETE will then be printed by the system. If communication with the system cannot be established during IPL, do the following:

1. Set The address dials on the console to the channel and unit of SYSRES. If you suspect a problem with the drive, mount the pack on another drive and attempt to IPL. If the failure recurs, check bytes 0 -4 of low core for the presence of a message. Low core messages are explained in Reference 3. It is also possible that the IPL records on cylinder 0, track 0, of SYSRES have been destroyed. In this case, rebuild the pack from the backup tape and retry IPL. If the problem recurs, record any low core message and execute a stand-alone core dump.
  2. If you are trying to IPL a new supervisor, another type of problem may exist. Check the supervisor listing for flagged statements; check the CONFIG macro in the supervisor for the storage protection feature (SP=YES) and the floating-point feature (FP=YES). If the supervisor has been generated with either of these features and hardware is not present to support them, a wait state results during IPL. If the supervisor size is greater than the one previously used, \$IPLRT2, or other system programs, may not have been recataloged. If there are no errors in the supervisor listing and no violations of the storage protection or floating point features, record any low-core message, execute a stand-alone core dump, and have the supervisor listing available.
- B. Normal Waits - Many times during program execution, operator action is required. In these cases, you should check the

SYSLOG listing and perform the requested action. The system should then resume processing. If the system stays in the wait state after you have done all the requested actions, you must re-IPL. Rerun the failing job and, if the problem recurs, execute a stand-alone core dump, and have the program listing available.

- C. Low-Core Messages - Whenever a wait state occurs, check bytes 0 through 4 of low core for a message, record it, and take the action indicated in Reference 3 for that message. After the system is IPL-ed, rerun the failing job and, if the problem recurs, record the message, execute a stand-alone core dump, and have listings of the supervisor and failing job available. See Reference 3 for more detailed information.
- D. Lost Interrupt - If an I/O operation is performed on a malfunctioning device, the channel-end interrupt is sometimes lost. This places the system in a "soft" wait (request key still active).
1. Execute a stand-alone core dump after recording bytes X'16' and X'17', then perform the IPL procedure.
  2. The address of the system communications region is in bytes X'16' and X'17'. By adding 64 (40 hex) to the address of the communications region, you can locate the halfword address of the physical unit block (PUB) table. Each PUB entry is eight bytes long. Bytes 0 and 1 indicate the channel and unit of the device. A hex FF in byte 0 indicates the end of the table.
  3. Byte 2 indicates successful completion if it contains a X'FF'. Byte 6 of each entry contains channel scheduler flags. A hex 80 or higher in byte 6 of any entry (byte 6, bit 0, is a 1) indicates the device is busy. This is probably the device that caused the missing interrupt.
  4. Verify that this is the failing device by executing

the program with the applicable PDAID program, I/O trace or QTAM trace.

The failing job should be executed using another device if possible. If the same problem recurs, have the stand-alone core dump and the program and supervisor listings available.

- E. Supervisor Errors - A wait state can occur as the result of a program check while in the supervisor state. A PSW with the wait bit on could be incorrectly loaded, or a program check could occur in the supervisor routine that moves a message to low core. Make certain that user routines have not altered the supervisor, and that the supervisor assembly is free of errors. Before calling for programming support, execute the program with PDAID Fetch/Load trace, then execute a stand-alone core dump and have available listings of the supervisor and the program that was running at the time of failure (if the failure occurred while a QTAM program was executing, the PDAID QTAM trace should be used).
- F. Logic Errors - When user programs are incorrectly coded, an improper sequence of macros can result. WAIT, WAITM, WAITF, and CHECK macros, when incorrectly used, can result in a wait state. When you suspect a problem of this type, obtain a listing taken at the time the system went into a wait state. The programmer should analyze this listing to determine if he has caused the problem. If the problem program has caused the wait state, the PSW in the partition (or subtask) save area will have an interruption code of 7, and the instruction address will point to an address eight bytes ahead of an SVC 7. To find the partition save area, displace 90 bytes (hex 5A) into the communications region to find the halfword address of the Program Information Block (PIB) Table. Entries in this table are 16 bytes long. For a non-MPS system, the first entry is the problem program PIB, and bytes 5-7 of this entry are the save area address. For an MPS system, the problem programs PIBs for BG, F2, and F1 are the second, third, and fourth entries respectively.

Again, bytes 5-7 of each PIB are the save area addresses. The address of a subtask save area is specified as a parameter on the ATTACH macro in the program listing. The PSW for the partition or subtask is in the second doubleword of the save area. If the SVC 7 is in user code and no interrupts have been lost, a user error has probably occurred. Similarly, if the SVC is in a LIOCS module that was entered by a WAITF or CHECK macro, a user error is probable. If a careful check does not reveal an error in the user program, have available the listing of the problem program and a core dump taken at the time of failure, before seeking programming support.

- G. System is Seized - Use of SVC 22 (seize the system), by a user transient routine, should be made with extreme caution. When the system is seized, no interrupts can occur until a second SVC 22 is issued to release the system. If an error in the use of this SVC is suspected, execute a stand-alone core dump and locate the logical transient area (LTA). The address of the LTA can be found at the label LTADD on the supervisor listing. The first eight bytes of the LTA contain the name of the currently active phase. If a user phase containing SVC 22 is in core, a user error is probable. If it is a system phase that uses SVC 22, seek programming support and have the problem program and supervisor listings and the core dump available.

## Loops

- I. Definition: A loop in a system is the repetitive execution of a sequence of central processing unit instructions. Several ways a loop can be recognized are:

1. A steady glow in the lights of the system control panel, with the SYSTEM light on.
2. A rhythmic pattern in the lights of the system control panel.
3. A pointless recurrence of input/output activity.

4. A job that does not change status for a long period of time.

- II. Explanation: Several causes of loops are:

1. Deliberate coding by a programmer as a debugging aid.
2. A coding error by a programmer.
3. Incorrect setup by the operator.
4. A hardware malfunction.

- III. System Action: The system continues to loop until the operator intervenes and cancels the job.

- IV. Operator Action: Usually, the cause of a loop cannot be determined by the system operator. Your main function in case of a loop should be to gather pertinent information for the programmer. Your first action should be to determine that the job has been set up exactly as requested. If a mistake has been made in job setup, rerun the job. Also, try using different devices; for example, different tape drives and scratch tapes. When you are certain that you have made no errors, press the STOP button on the control panel. Then:

- If the MANUAL light does not come on, the system is in a microprogram loop. Check for a low core message, and if one exists, follow the procedure in Reference 3. Re-IPL and attempt to execute the job again. If the error recurs and there is a LOGOUT button on the console, press STOP, press the LOGOUT button, and run SEREP. If SEREP was executed, have it and the programs executing at the time of the failure available, then seek hardware support.
- If the MANUAL light does come on when you press the STOP button, set the RATE switch to instruction step, set STORAGE SELECT to IC, and press START. Record the instruction address and press START again. Repeat this process until the addresses repeat, then execute a stand-alone core dump and return the dump, trace of the loop, log sheet, and program listing to the programmer. If the loop is a very long one, try to get some instructions near the high and low ends. You can do this by setting the RATE switch to process, by pressing START, then STOP, and then instruction stepping again. By

repeating this process several times, you should be able to obtain a reasonable approximation of the range of the loop. Again, return the instruction addresses, log sheet, and stand-alone core dump to the programmer. Then, re-IPL and continue with the next job.

- V. Programmer Action: As the programmer, you have the primary responsibility for determining the cause of a program loop. By using the core dump and the trace of the loop, you can immediately determine whether the loop is in the supervisor, a problem program partition, or both.

Using the link edit map of the failing program, isolate the CSECT where the loop occurs. If the loop is in the supervisor, or between the supervisor and the problem program, it is possible that an invalid sequence of events within the your program has caused the problem. Check the logic of the program for any errors in interfaces with the supervisor (use of SVC instructions). If your program appears to be coded correctly, have the information, supplied by the operator, available and seek programming support.

For a loop entirely within the problem program, use the link-edit map to isolate the failing CSECT or CSECTs. If the loop is contained within a user CSECT, locate the failing code and correct it. If the loop is in a system CSECT, verify that your interfaces with it are correct. If your code appears free of logic errors, have available all applicable listings, the loop trace, core dump, and log sheet, and seek programming support.

## Incorrect Output

If the output is incorrect after a job has apparently been completed successfully, the incorrect data can be categorized as:

- Missing records.
- Duplicate records.
- Invalid data that has:
  - Sequence errors, or
  - Incorrect values, or
  - Format errors, or
  - Meaningless information.

To perform problem determination for errors of this type:

1. Isolate the failing program from the job stream.
2. Define a possible hardware error.
3. Perform the data collection indicated by the appropriate section in Figure 8.

If a series of programs is involved in the failure, locate the individual program that is known to have correct input, but incorrect output. The fastest method of analyzing a series is to check the output of the middle program. This eliminates half the programs as the source of the problem. The process is then repeated with the remaining programs until one has been isolated.

After isolation, use Figure 8 to complete problem determination. Note that some blocks say to check something (a control card, changes, logic, etc.); these are suggestions or examples, and are not meant to be all-inclusive.

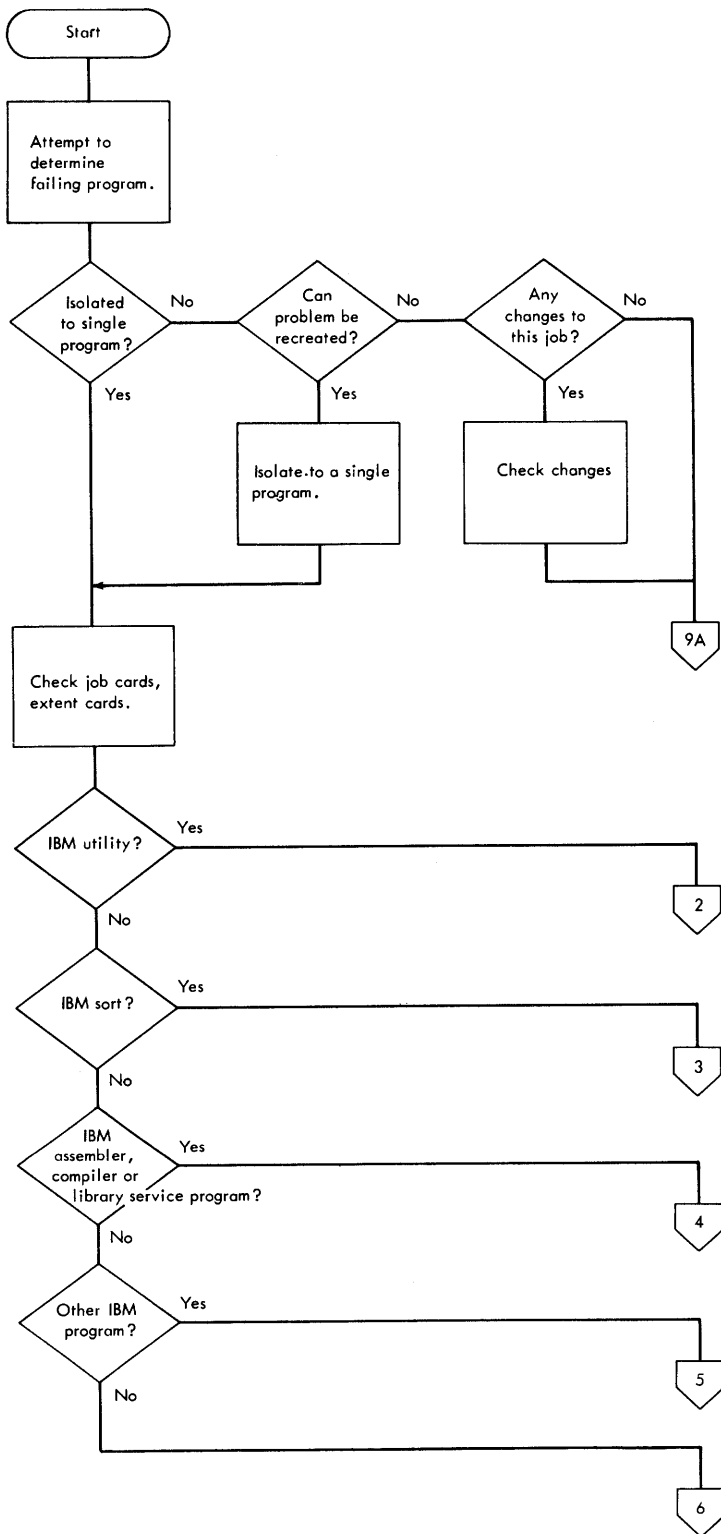


Figure 8. Incorrect Output (Part 1 of 10)

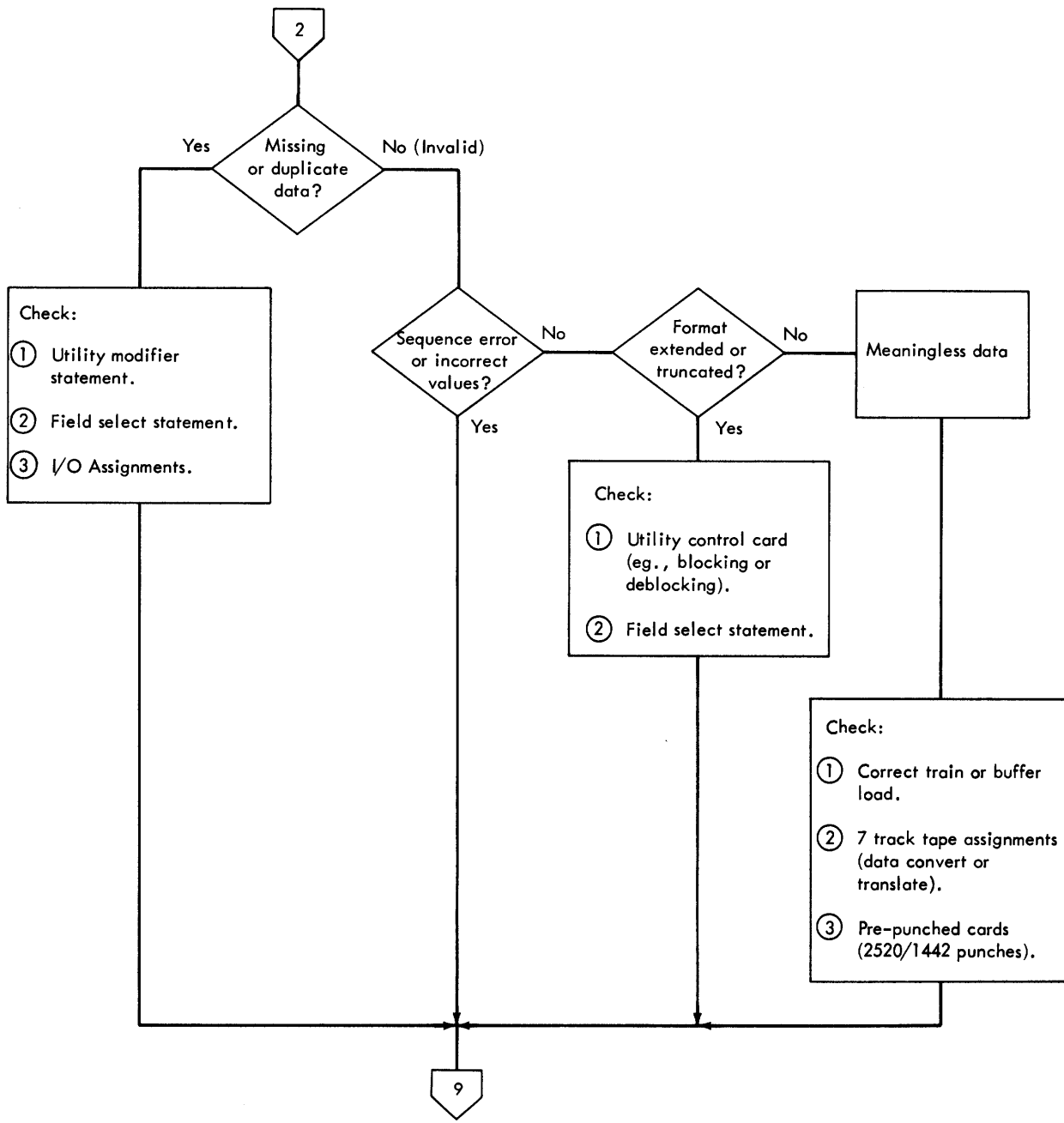


Figure 8. Incorrect Output: Utilities (Part 2 of 10)

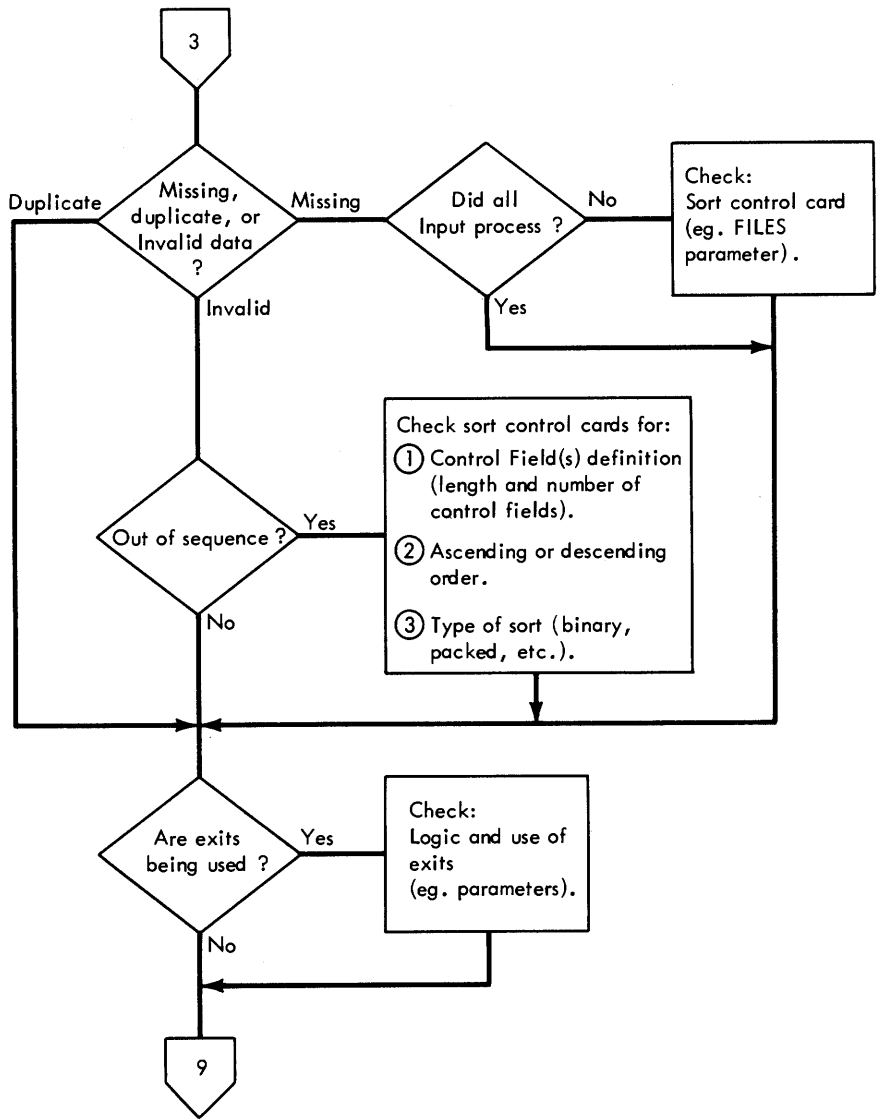


Figure 8. Incorrect Output: Sorts (Part 3 of 10)



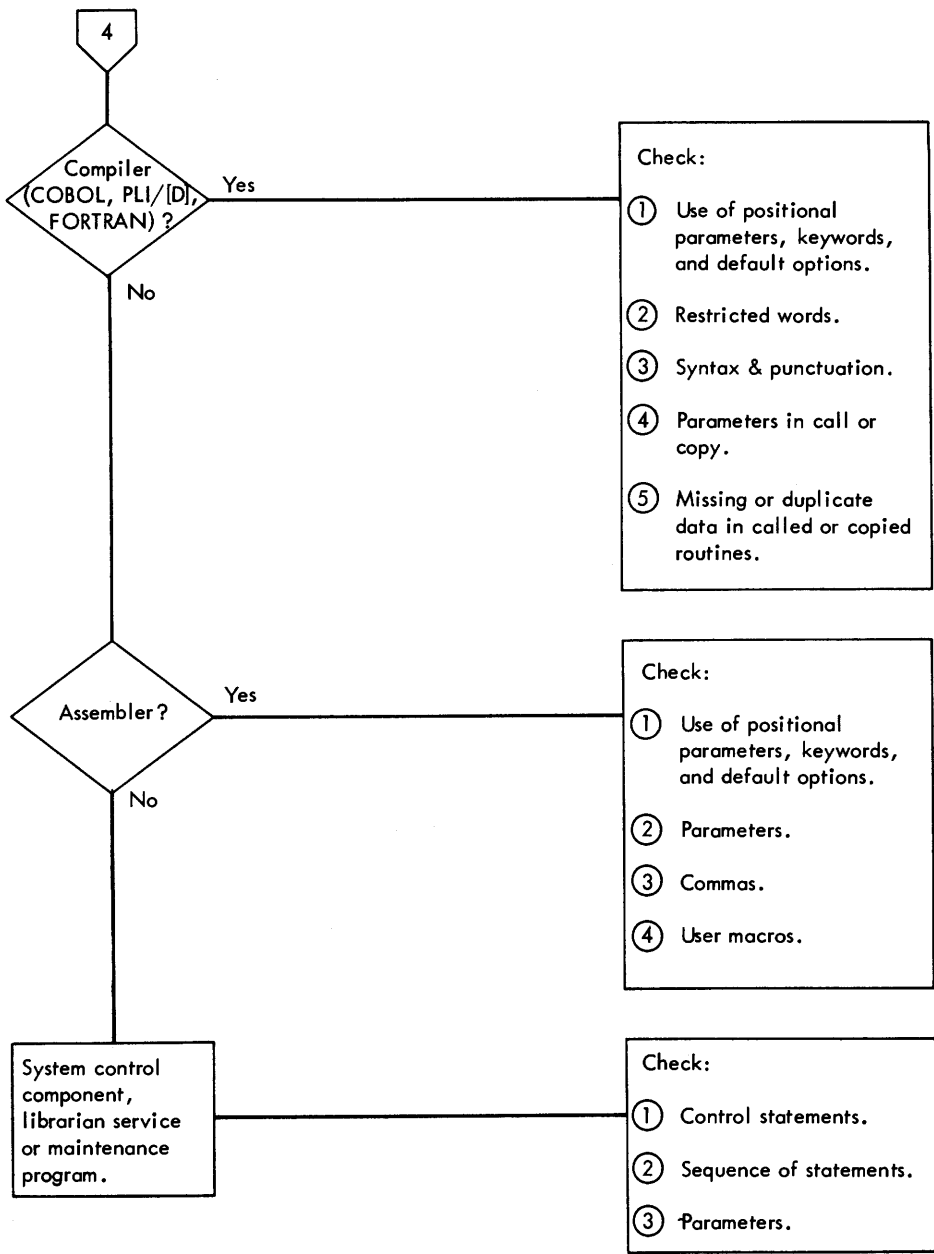


Figure 8. Incorrect Output: Compilers and System Service Programs (Part 4 of 10)

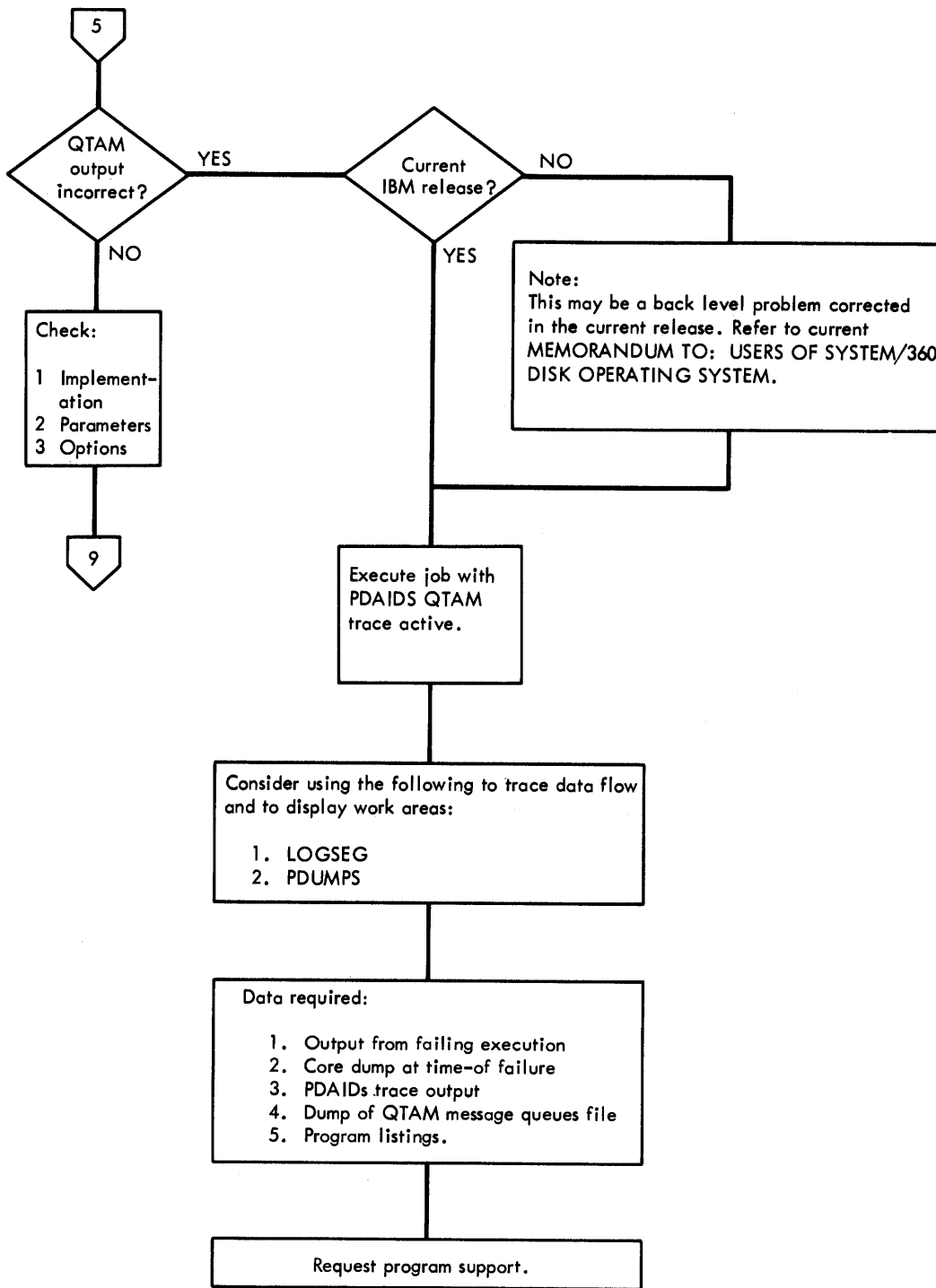
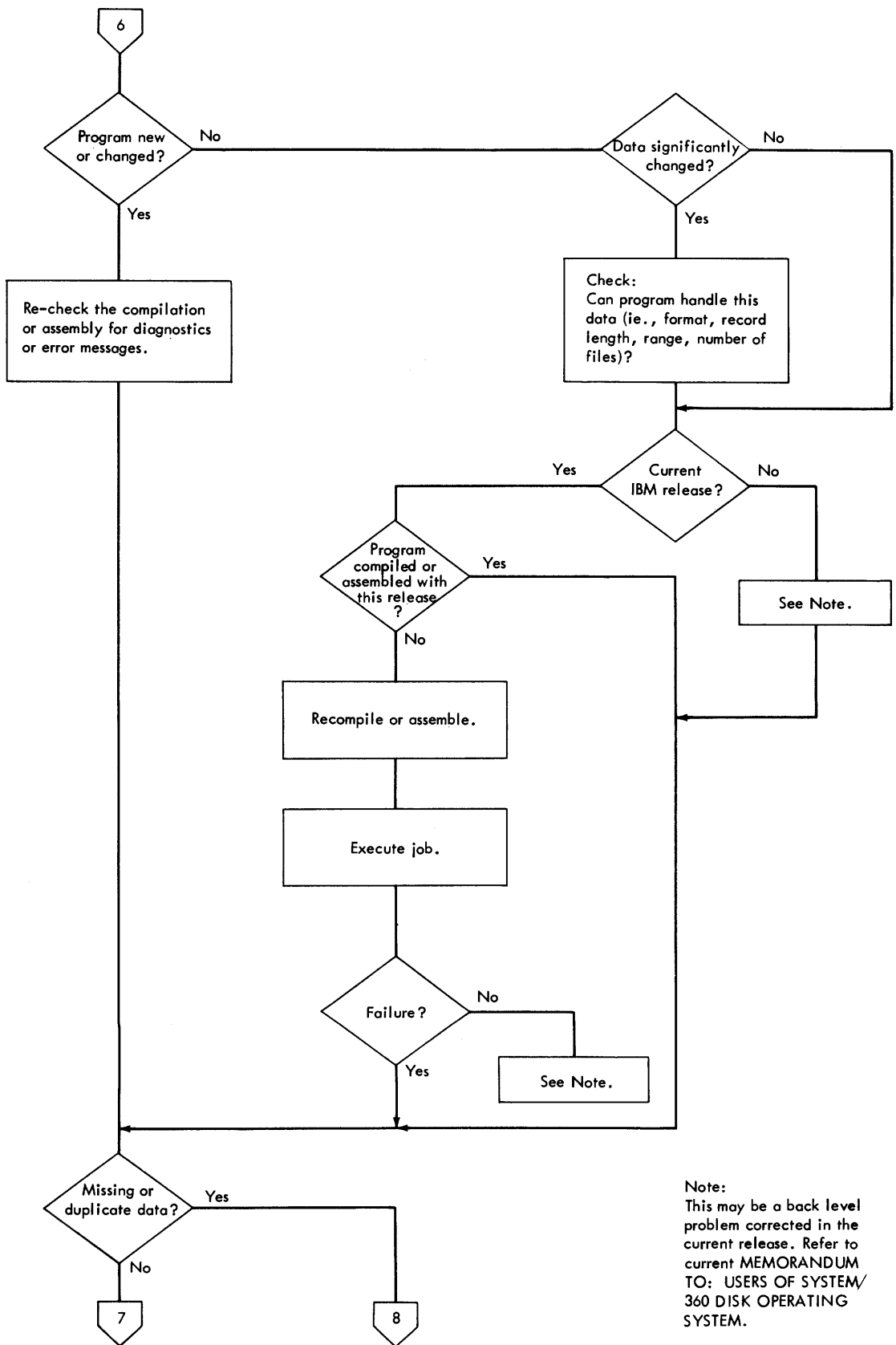


Figure 8. Incorrect Output: Other IBM Programs (Part 5 of 10)



Note:  
 This may be a back level problem corrected in the current release. Refer to current MEMORANDUM TO: USERS OF SYSTEM/ 360 DISK OPERATING SYSTEM.

Figure 8. Incorrect Output: User Programs I (Part 6 of 10)

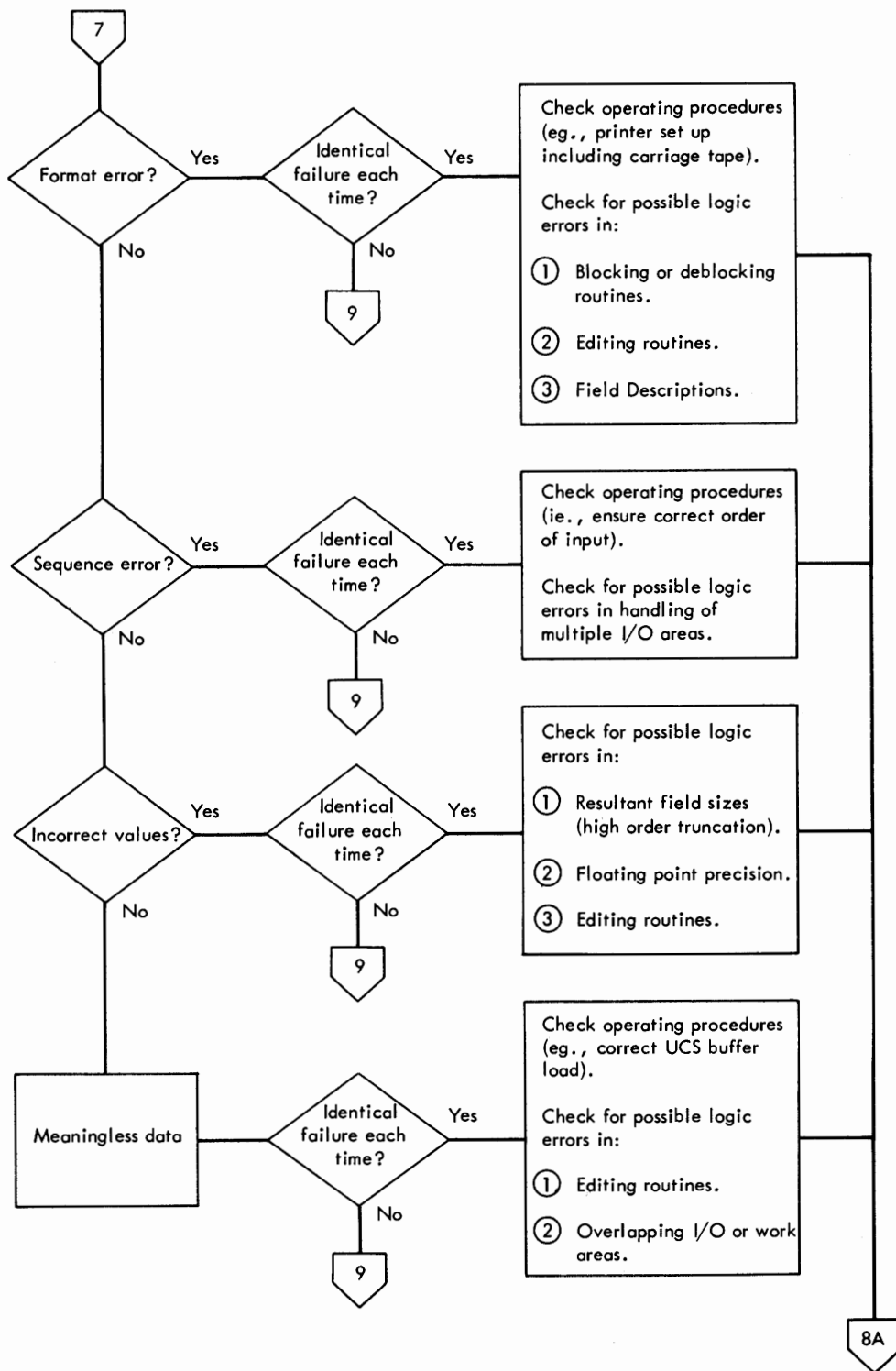


Figure 8. Incorrect Output: User Programs II (Part 7 of 10)

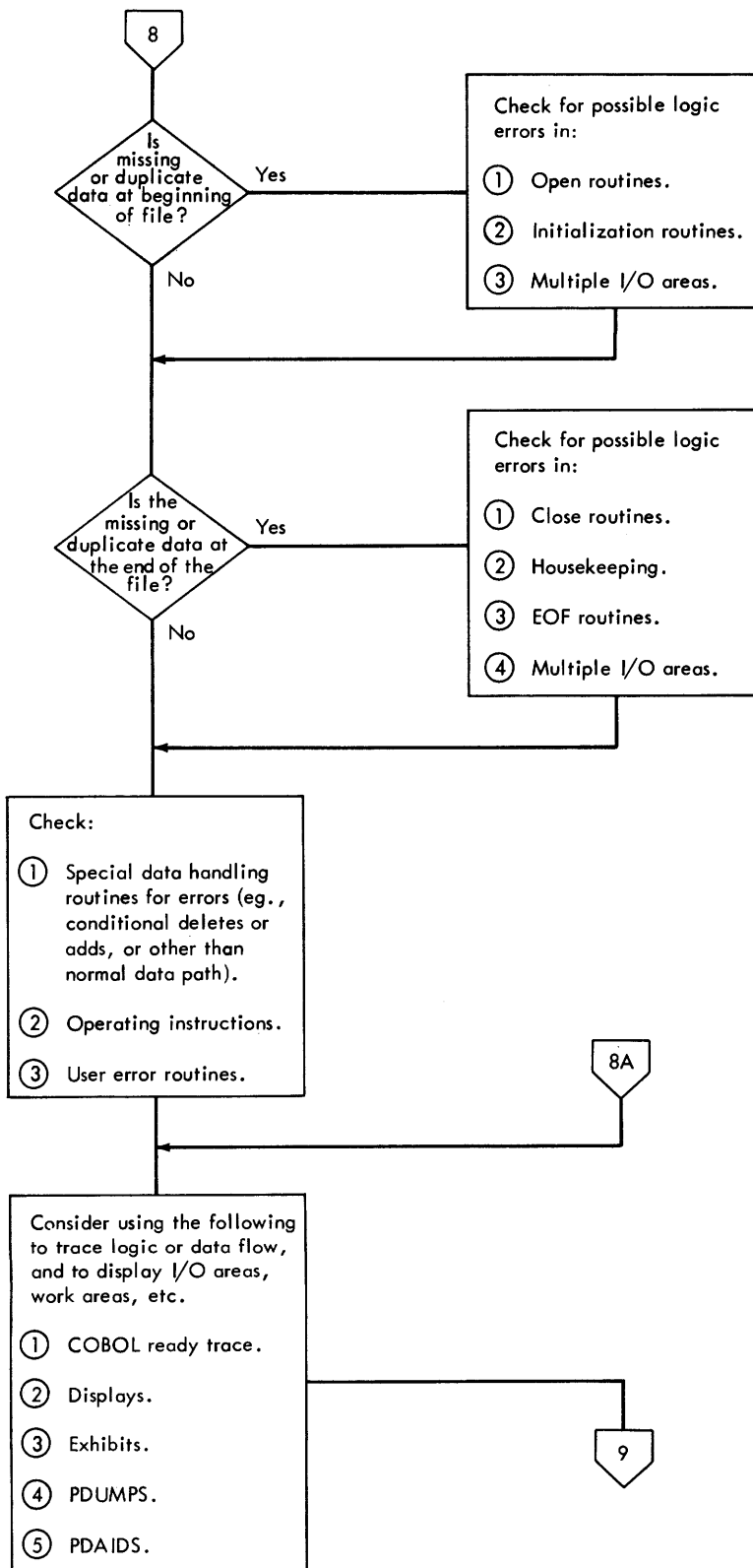


Figure 8. Incorrect Output: User Programs III (Part 8 of 10)

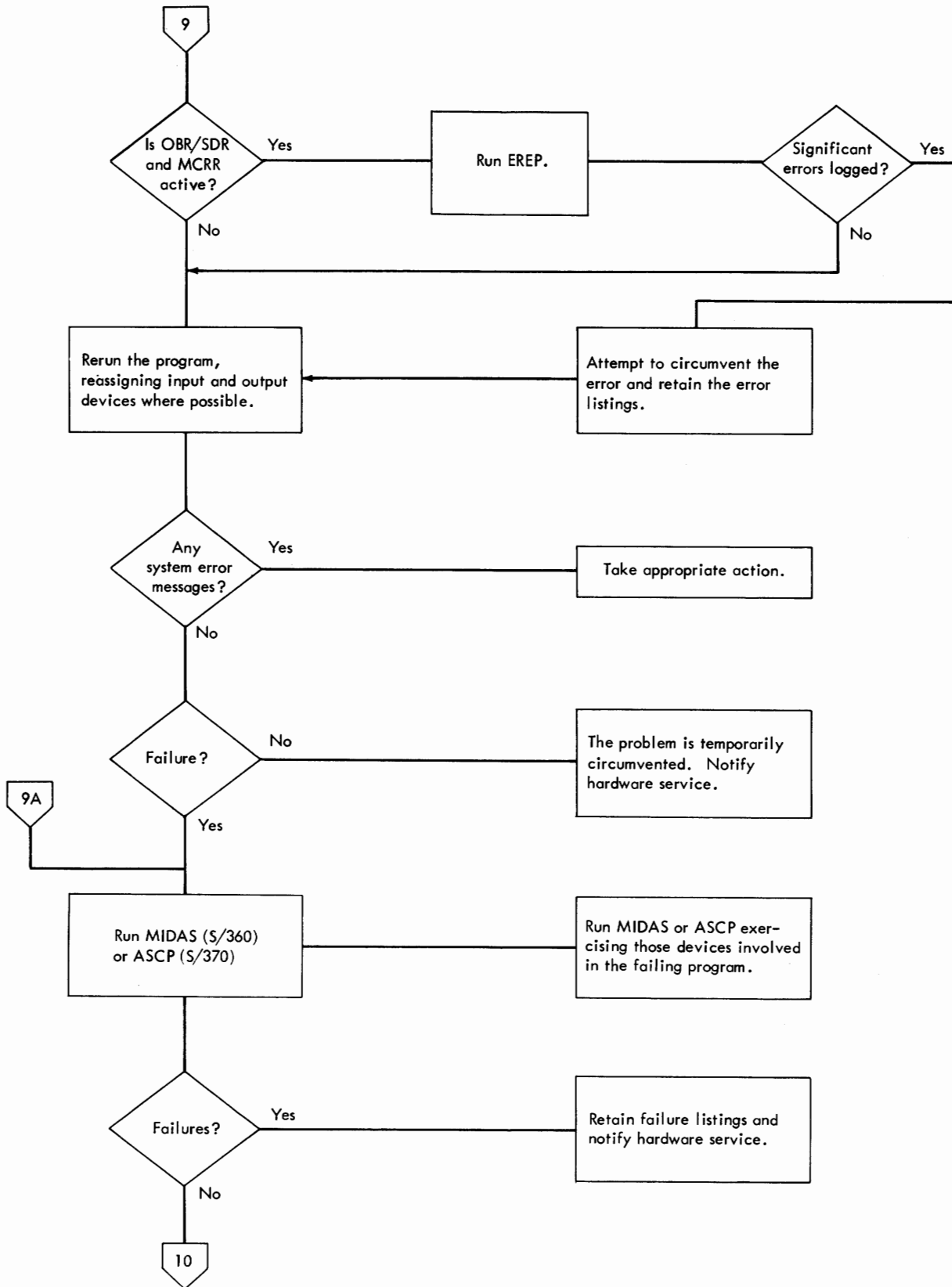


Figure 8. Incorrect Output: Hardware Failure Isolation (Part 9 of 10)

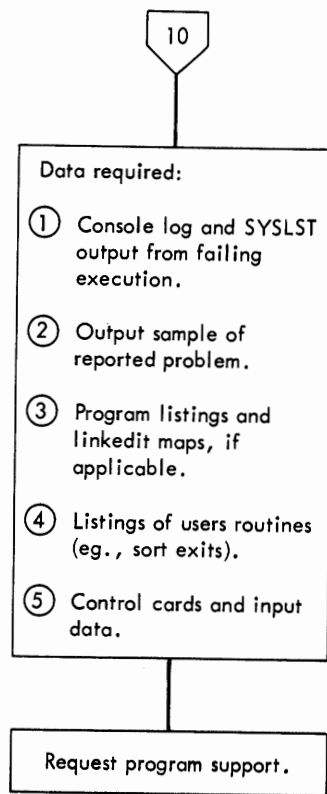


Figure 8. Incorrect Output: Data Collection (Part 10 of 10)





## General Reference

This section contains message-support information that explains or elaborates material found in the messages. The References are numbered sequentially, and, when you are directed to a Reference, the following form of cross-reference is used.

Example: "See Reference 1."

The References are:

- Reference 1: VTOC Listings
- Reference 2: SEREP
- Reference 3: Default Operation without a Console Printer-Keyboard
- Reference 4: Causes for Message 0S04I
- Reference 5: DOS Component Error Messages
- Reference 6: Emulator Reference
- Reference 7: Parameters Passed by Supervisor Calls -- Message 0P77I
- Reference 8: Locating the Label Information Cylinder
- Reference 9: Finding the Failing Device Type
- Reference 10: Special Purpose Dump

## Reference 1: VTOC Listings

For a complete description of the various label formats, refer to DOS Data Management Concepts, GC24-3427. These displays can be obtained by replying CANCELV or DSPLYV to certain LIOCS messages. (Refer to the text that precedes message 4n001.)

```

CANCELV DISPLAY
VOLUME SERIAL NUMBER IS 111111                                     11/04/66

00C7000001    FORMAT 4 LABEL
04040404  04040404  04040404  04040404  04040404  04040404  04040404  04040404  04040404  04040404  F4000000
0000009E  00000000  001E9001  000000CB  000A0E29  51141401  0219130A  00000000  00000000  00000000  00003000
00000000  00000000  00010000  C7000000  C7000400  00000000  00000000  00000000  00000000  00000000  00000000

00C7000002    FORMAT 5 LABEL
05050505  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  F5000000
00000000  00000000  00000000  00000000  00000000  00000000  00003300  00000000  00000000  00000000  00000000
000C0000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

00C7000003    FORMAT 1 LABEL
FILEA                                SERIAL NO. 111111 VOL NO. 0001 420043-420043 010000 SYS. CODE IS 16 K DISK 80S
000C000000 0000400000 0000000000 0000000000 0000000000 0000000000
0100 00330000-006E0009 0000 00000000-00000000 0000 00000000-00000000                                POINTER IS 0000000000

00C7000004    FORMAT 1 LABEL
SYSTEM WORK FILE NO. 1                                SERIAL NO. 111111 VOL NO. 0001 42006E-63016D 010000 SYS. CODE IS DOS
0000000000 0000400000 0000000000 0000008000 0000000000 0000000000
010C 00970000-009D0009 0000 00000000-00000000 0000 00000000-00000000                                POINTER IS 0000000000

00C7000005    FORMAT 1 LABEL
2311 DTFPH-SEQUENTIAL OPEN *NO* USER LABELS. SERIAL NO. 111111 VOL NO. 0001 41014D-42012C 030000 SYS. CODE IS ** SIMONIK **
0000000000 0000400000 0000000000 0000000000 0000000000 0000000000
0100 00AF0000-00AF0002 0101 00AF0003-00AF0003 0102 00AF0004-00AF0004                                POINTER IS 0000000000

VTOC LISTING COMPLETED
  
```

DSPLYV option provides identification information and XTENT boundaries for Format 1 and/or 3 labels. This information is extracted from the VTOC and appears in the following format.

```

DSPLYV DISPLAY
VOLUME SERIAL NO. IS 111111                                     Serial No.  Volume No.  11/04/66
FILEA                                11111111  0001  420043-420043  Creation & Expiration Dates
0100 00330000-006E0009  Xtent Information

SYSTEM WORK FILE NO. 1                                11111111  0001  42006E-63016D

2311 DTFPH-SEQUENTIAL OPEN *NO* USER LABELS.11111111  0001  41014D-42012C
0100 00AF0000-00AF0002  0101 00AF0003-00AF0003  0102 00AF0004-00AF0004

VTOC LISTING COMPLETED
  
```

Figure 9. VTOC Listings

## Reference 2: SEREP

SEREP (System Environment Recording, Editing, and Printing) is a program distributed as part of the diagnostic package for each System/360 or System/370 installation. The program, with its operating procedures, is available to the installation's IBM Customer Engineer. (Each model has a different version of the SEREP program. Operating procedures, however, are the same for all versions.)

SEREP provides a means of printing the system status information stored in main storage at the time of a machine malfunction. When a condition occurs requiring the use of SEREP, the wait state is entered, and main storage byte 1 contains an S. The WAIT light on the CPU is not necessarily ON when such a condition occurs. Also, if a channel has outstanding status when all interrupts are masked off, the SYSTEM light on the CPU will be ON.

The SEREP program must be loaded via the standard IPL procedure. Malfunction information is produced as output on an online printing device. The SEREP printout indicates the environment of the error and the device involved.

The address of the I/O device printed on the SEREP report is compared with the valid device addresses available to the system. The printing of a valid address indicates that a machine malfunction has occurred. The printing of an invalid device address indicates that a programming error has occurred. After SEREP is completed, the system is restarted via the IPL procedure.

MCRR (machine check recording and recovery) support reduces the number of SEREP conditions to the following:

- If MCRR is handling an error and another error occurs before the first error is processed.
- A permanent I/O error on SYSRES.
- A CPU or channel error occurs in the Supervisor area of core.
- SYSRES active on a damaged channel.
- Recorder File (SYSREC) not active.

S/370 RMS (Recovery Management System) support reduces the number of SEREP conditions to the following:

- Unrecoverable machine check.
- Certain types of channel failures (see Figure 11).

### HOW TO USE SEREP

When a message or PSW code indicates that you should run the SEREP program to print out malfunction information:

- Load the SEREP deck in the card reader.
- Ready the printer.
- Set the LOAD UNIT switches to the address of the card reader.
- Press the LOAD button on the system control panel.
- Save the SEREP printout for later use by your customer engineer.
- After SEREP is completed, the system is restarted via the IPL procedure.

### Reference 3: Default Operation without a Console Printer-Keybaord

If the console printer-keyboard is inoperable, limited operations may continue, under some circumstances, by displaying messages in low core and entering the proper reply directly in core. In this appendix, IPL messages and device error recovery messages are described.

#### IPL\_ERROR\_MESSAGES

If the machine enters the wait state during an IPL procedure, the operator should display the first five bytes of low core. The IPL error message number and action code are displayed in hexadecimal in these bytes (see Figure 10). For example:

Message 0I11A appears in low core bytes 0-4 as

FOC9F1F1C1

The operator should look up this message (refer to IPL Messages) and perform the indicated action.

#### HARD\_WAIT\_ERRORS

A number of hardware errors cause the system to enter an uninterruptible wait state. The wait state is entered because a recovery and recording system is not present, or because the type of error does not permit recovery and recording to function.

This type of error can be identified by the WAIT light on the CPU console and an "S" or "W" in byte 1 of main storage.

In all cases, the contents of bytes 0-3 should be recorded, then the SEREP program should be executed if byte 1 contains an "S".

Even if IPL is successful, the ability of the system to continue operation is questionable, and a request for hardware support should be made.

Figures 10 and 11 contain System/360 and System/370 low core error bytes.

#### SYSTEM/370 LOW-CORE ERROR MESSAGES

System/370 low-core error messages indicate hardware failures that could not be corrected by the recovery management system (RMS). Byte 0 contains a code that indicates the error type, and byte 2 contains a code that indicates the success of error recording (see Figure 11).

In all cases, these errors place the system in a unrecoverable wait state. After recording the contents of bytes 0-2, you should execute SEREP. If the code in byte 2 indicates that recording has been completed, you should also attempt to IPL and execute EREP.

Even if IPL is successful, the ability of the system to continue operation is questionable, and a request for hardware support should be made.

#### DEVICE\_ERROR\_RECOVERY\_MESSAGES

Figure 10 shows the information that might be found in the low core error bytes. If byte 0 contains a binary number 08-40, it indicates a (OP) device error recovery message. If the printer-keyboard is inoperable when an error recovery message is issued, the system immediately enters the wait state until the operator replies. The operator should display the contents of byte 1 to obtain the action code, in BCD.

If code is A (C1): The operator should refer to System-to-Operator Messages. If the operator decides to try to continue operations, it will be necessary to display the next two bytes (2 and 3) of low core to obtain the channel and unit number of the device. The operator should then:

1. Perform any manual recovery procedures implied by the error condition. (Refer to component description and operating procedures manual for the device.)
2. Ready the device. No response is necessary. If the operator wishes to cancel, he should insert X'03' in byte 4 and press INTERRUPT.

If code is D (C4): A trial-and-error procedure must be performed. The

operator should first store X'01' (RETRY) in byte 4, then press INTERRUPT on the console. If the system accepts this reply, the machine exits from the wait state. If not, store one of the following replies in byte 4:

- X'02' (IGNORE)
- X'03' (CANCEL)

Then press INTERRUPT. When the reply is accepted by the system, the machine will exit from the wait state.

Byte 0	Byte 1	Byte 2	Byte 3	Action
X'F0'	X'C9'	X'F0'- X'F2'	X'F0'- X'F8'	IPL error. Refer to messages 0I00A-0I28A.
X'00'	X'E2'(S)	Not used	Not used	Machine Check. Execute SEREP. System must be re-IPL'ed.
X'01'	X'E2'(S)	Reserved	Reserved	Channel Failure: Interface Control Check or Channel Control Check. Execute SEREP. System must be re-IPL'ed.
X'02'				Reserved
X'03'	X'E6'(W)	Channel	Unit	DOS - Unrecoverable disk error during program fetch. Record the six sense bytes (placed in main storage bytes 5-A). Execute a stand-alone dump, then IPL.
X'04'	X'E6'(W)	Not used	Not used	Cancel condition has occurred while performing a supervisor function, or an attempt was made to FETCH a \$\$A, \$\$B, or \$\$R transient that was not in the system core image library <sup>1</sup> . (Not a supervisor detected problem-program error.) Normally a program check while in supervisor state. Execute a stand-alone dump, then IPL.
X'05'	X'E6'(W)	Channel	Unit	I/O Error Queue has overflowed as the result of an I/O error on a program fetch channel program. Execute a stand-alone dump, then IPL.
X'06'				Reserved
X'07'	X'E6'(W)	Channel	Unit	IPL I/O error. Channel and unit indicate whether SYSRES or communication device. Execute a stand-alone dump, then IPL.
X'08'- X'40'	X'C1'(A) X'C4'(D)	Channel	Unit	Error recovery messages. Refer to messages 0P08-0P40 in the message section and to the preceding page.

<sup>1</sup> IBM supplied transients cannot be loaded from a private core image library. To obtain the name of the missing transient, execute a stand-alone dump: the name is in the first eight bytes of the applicable transient area.

Figure 10. S/360 and S/370 Low-Core Error Bytes

Byte 0	Byte 1	Byte 2	Explanation
X'C1'	X'E2'*	A,I,S*	Unrecoverable machine check.
X'C2'	X'E2'*	Not used	Unrecoverable channel failure during RMS fetch.
X'C3'	X'E2'*	A,I,S*	Channel failure on SYSLOG when RMS message scheduled.
X'C4'	X'E2'*	A,I,S*	ECSW not stored.
X'C5'	X'E2'*	A,I,S*	Channel failure; ERPIBS exhausted.
X'C6'	X'E2'*	A,I,S*	Channel failure; two channels damaged or a damaged channel situation occurred while RMS was executing an I/O operation.
X'C7'	X'E2'*	A,I,S*	Channel failure; system reset was presented by a channel.
X'C8'	X'E2'*	A,I,S*	Channel failure; reset/retry codes in ECSW are invalid.
X'C9'	X'E2'*	A,I,S*	Channel failure; channel address invalid.
<p>*Notes: A (X'C1') - The system was unable to record any error information on SYSREC.  I (X'C9') - Error recording on SYSREC was partially successful.  S (X'E2') - This error was successfully recorded on SYSREC.</p> <p>SEREP should be executed if any of these messages appear.</p>			

Figure 11. System/370 Low-Core Error Bytes

## Reference 4: Causes for Message OS04I

The complete text for message OS04I is:

```
ILLEGAL SVC - HEX LOCATION nnnnnn -SVC  
CODE nn
```

where nn is in hexadecimal notation.

This message can result from the following causes.

1. When nn is 02: The phase name given does not start with \$\$B, or

For LIOCS, macros called in invalid sequence. As a result, an SVC 8 is issued after an SVC 2 before an SVC 9 has been issued to free the transient area, or

For other conditions, the user specified a temporary exit (SVC 8) for a logical transient. In the temporary exit routine, another routine is called (by an SVC 2) before an SVC 9 is issued to free the transient area.

2. When nn is 05: The "to" range specified in the MVCOM macro is invalid, or

MVCOM macro was issued by a foreground program, operating under single program initiation.

3. When nn is 0A, 12, 13, or 18: The interval timer was not allocated to this partition, or

The supervisor was generated without the timer option.

4. When nn is 0B: The call was not given by a logical transient routine.

5. When nn is 16, 17, or 1A: The caller did not have a PSW key of zero. This is applicable only in a multiprogramming system.

6. When nn is 23: More than 16 holds have been issued for the same track.

7. When nn is 24: A FREE was issued for a non-DASD device or for a track that was not previously held.

8. When nn is 26: A subtask issued attach, or the save area is not on a double-word boundary.

9. When nn is 27: A main task issued detach without SAVE=PARAMETER, or

A main task issued detach, but the ID of the subtask in the save area passed is not valid, or

If a main task attempts to detach an already terminating subtask.

10. When nn is 29: A DEQ is issued by a task that did not ENQ the resource. (This is valid in an AB routine.)

11. When nn is 2A: A subtask (without an ECB=PARAMETER) has issued an ENQ macro, or

A subtask has issued an ENQ macro to a resource that has not been dequeued by another task that has been terminated, or

A task has issued two ENQ macros to the same resource without an intervening DEQ.

12. When nn is 2D: Emulator execution was attempted, but the EU parameter of the SUPVR macro was omitted or incorrectly specified during system generation.

13. When nn is 32: For LIOCS:

- a. An imperative macro (such as WRITE or PUT) was issued to a module that does not contain the requested function, or

- b. A PUT was issued for an ISAM retrieve module without a preceding GET, or

- c. An invalid ASA first character for the printer was used, or

- d. A wrong-length record indication occurred while processing 1287 documents when RECFORM=UNDEF, or

- e. The 1287 program erroneously contained a CCW(s) with the SLI flag bit "OFF", or

For COBOL, a wrong-length record was detected in the object program.

14. When nn is any other value: The supervisor function requested by the operand of the SVC is not defined for the supervisor being used.

## Reference 5: DOS Component Error

### Messages

An error message that begins with a 3-letter code originates in a component that is identified by a prefix of the same three letters. You must obtain error message reference information from the applicable component publications.

This is a list of the possible DOS prefixes. Applicable publications are listed in the IBM System/360 and System/370 Bibliography, GA22-6822.

<u>Prefix</u>	<u>IBM-Program Number</u>	<u>Component</u>
IHD	360N-CB-452	COBOL Library Subroutines
IIQ	360N-EU-490	1401/1440/1460 Emulator for IBM System/370 Model 155/145
IIR		1410/7010 Emulator for IBM System/370 Model 155/145
IJB	360N-CL-453	System Control and Basic IOCS (disk supervisor)
IJC		I/O Card
IJD		I/O Printer
IJE	360N-IO-458	I/O Paper Tape
IJF	360N-IO-456	I/O Magnetic Tape
IJG	360N-IO-476	Consecutive Disk IOCS
IJH	360N-IO-457	Indexed Sequential File Management System
IJI	360N-IO-454	Direct Access Method
IJJ		Device Independent Access Method
IJK	360N-PL-464	PL/I Library Subroutines
IJL		Teleprocessing IOCS
	360N-CQ-469	BTAM
	360N-CQ-470	QTAM
IJM	360N-IO-478	OCR Devices
IJN	360N-UT-472	Vocabulary File Utility (7772)
IJO	360N-SM-450	Disk Sort/Merge
IJP	360N-SM-400	Tape Sort/Merge
IJQ	360N-AS-465	Assembler D
IJR	360N-RG-460	RPG
IJS	360N-CB-452	COBOL Compiler
IJT	360N-FO-451	Basic FORTRAN Compiler Library Subroutines
IJU	360N-IO-477	MICR Devices
IJV	360N-PT-459	Autotest
IJW		Utilities
	360N-UT-461	Group 1
	360N-UT-462	Group 2
	360N-UT-463	Group 3
	360N-UT-471	MPS Utilities
IJX	360N-PL-464	PL/I Compiler
IJY	360N-AS-466	Assembler F
IJZ	360N-DN-481	On-Line Test Executive Program
IKL	360N-CV-489	COBOL ICP
ILA	360N-CB-482	American National Standard COBOL
ILB	-	American National Standard COBOL Subroutines
ILC	360N-99-999	CE Serviceability Programs
ILF		FORTRAN
	360N-FO-451	D Compiler
	360N-FO-479	F Compiler
	360N-LM-480*	Library Subroutines
ILH	360N-SM-483	Tape and Disk Sort/Merge

\* Only FORTRAN library subroutines are identified separately by an IBM-program number.



## Reference 6: Emulator Reference

FUNCTION	AVAILABILITY	USE AS A REPLY
CANCEL	Always.	To any message requesting a reply.
END	Always.	
RESET	Always.	
START or EOB/END	Always.	Only after a 1400 halt.
STATUS	Always.	As specified by the text of the message requesting a reply.
ADDRESS	Only if OSADDR=YES.	
ALTER	Only if OSALTER=YES.	
DELETE	Only if DVOL=YES.	
DISK (DISK n)	Only if OSDISK=YES.	Only after DSPLYV was the reply to EC75I when EC40D is issued
DISPLAY	Only if OSDSPPLY=YES or OSDSPPLY=nn.	
DSPLYV	Only if DVOL=YES.	As specified by the text of the message requesting a reply.
DUMP	Only if OSDUMP=YES.	Only to message EC75I when EC40D is issued.
DVOL DISK <sub>n</sub>	Only if DVOL=YES.	
DVOL DISK <sub>n</sub> =xxxxxx		
ENTER	Only if OSEENTER=YES.	
INQUIRY	Only if OSINQUERY=1400.	
INQUIRY INQUIRY phasename	Only if OSINQUERY=YES.	
NEWPAC	Only if DVOL=YES.	
RETRY	Always.	As specified by the text of the message requesting a reply.
SWITCH	Only if HALTS=YES.	Only after a 1400 halt.
TAPE (TAPE n)	Only if OSTAPE=YES.	

Note: OSxxxx or OSxxxxx parameters are specified during Emulator program generation.

Figure 12. CS30/CS40 Operator Service Functions

1407/1447 Character	:	✓	>	Ⓝ	*	π	Δ	[	*	<	\	]	?	!	b	™	*
Corresponding 1052 Character	'	"	=	:	?	<	γ	(		+	>	)	g	p	space	w	x

Figure 13. Dissimilar Graphics: 1407/1447 versus 1052

## Reference 7: Parameters Passed by Supervisor Calls--Message OP77I

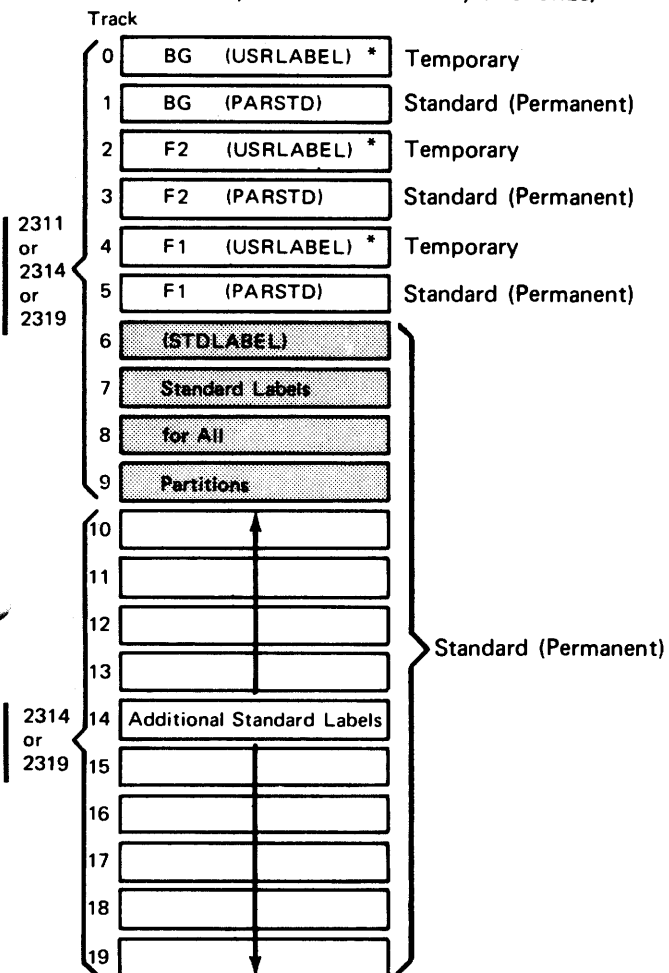
<u>SVC_CODE</u>	<u>MACRO</u>	<u>ACTION</u>
0,15	EXCP	Check register 1 (location of CCB).
1,4	FETCH/LOAD	Check register 1 (location of phase name) and register 0 (entry or load address - this may be zero if the link addresses are not overridden).
2	DUMP, OPEN, ETC.	Check register 1 (location of B-transient phase name).
16,18,20	STXIT (PC, IT, OC)	Check register 1 (address of 72-byte save area). Check end address also.
24	SETIME	Check register 1 (address of timer event clock).
37	STXIT (AB)	Check register 1 (address of save area). Also check the end address of this 72-byte save area and register 0 (routine entry address).
38	ATTACH	Check register 0 (address of the 72-byte save area) and its end address (R0+72), register 1 (entry point), register 2 (address of event control block), and register 3 (address of 72-byte AB save area) and its end address (R3+72). Registers 2 and 3 may be zero if these options are not used.
39	DETACH	Check register 1 (72-byte save area). Check end address also.
40	POST	Check register 1 (event control block).
41	DEQ	Check register 1 (resource control block).
42	ENQ	Check register 1 (resource control block).

## Reference 8: Locating the Label Information Cylinder

To display the label information cylinder, execute LSERV using the procedure in the DOS Operating Guide.

### LABEL INFORMATION CYLINDER

(First Full Cylinder after Last Library on SYSRES)



\* Label sets submitted in a job stream without a //OPTION PARSTD,STDLABEL are written to the temporary area for the partition being used.

Figure 14. Label Information Cylinder

## Reference 9: Finding the Failing Device Type

Use a dump to determine the failing device type as follows:

1. Display and record the address of the communications region, bytes X'16' and X'17' of main storage, before the dump is executed (see Figure 5).
2. Add X'40' to the address obtained in step 1. This location contains the address of the PUB table.
3. Search the table until the PUB device address matches the device address in the error message. Each PUB entry is eight bytes long, and the first two bytes contain the channel and unit (X'0cuu') of a device (see Figure 15).
4. When a match is made, obtain the device type from byte 4 of the entry and compare it to Figure 16.

Byte	0	1	2	3	4	5	6	7	
Channel	Unit	Flags	Flags	Device Type	F	L	A	G	S
0c	uu	ff	ff	nn	ff	ff	ff	ff	ff

Figure 15. PUB Table Entry

Card Code	Actual Device	Dev. Type X'nn'	Device Type								
2400T9	9-track 2400 Series Magnetic Tape Units	50	Magnetic Tape Units								
	9-track 3420 Magnetic Tape Units										
2400T7	7-track 2400 Series Magnetic Tape Units	50	Magnetic Tape Units								
	7-track 3420 Magnetic Tape Units										
2495TC	2495 Tape Cartridge Reader	51	Tape Cartridge Reader								
1442N1	1442N1 Card Read Punch	30	Card Readers - Punches								
	2596 Card Read Punch										
2520B1	2520B1 Card Read Punch	31									
2501	2501 Card Reader	10	Card Readers								
2540R	2540 Card Reader	11									
2540P	2540 Card Punch	21	Card Punches								
2520B2	2520B2 Card Punch	20									
1442N2	1442N2 Card Punch	22									
2520B3	2520B3 Card Punch	20									
1403	1403 Printer	40	Printers								
1403U	1403 Printer with UCS Feature	42									
3211	3211 Printer	43									
1404	1404 Printer	40									
1443	1443 Printer	41									
1445	1445 Printer	41									
1050A	1052, 3210, or 3215 Printer - Keyboard	00									
UNSP	Unsupported Device	FF		Unsupported. No burst mode on multiplexor channel							
UNSPB	Unsupported Device	FF	Unsupported with burst mode on multiplexor channel								
2311	2311 Disk Storage Drive	60	DASD								
2314	2314 Direct Access Storage Facility	62									
	2319 Disk Storage										
2321	2321 Data Cell Drive	61									
1412**	1412 Magnetic Character Reader	75	MICR - Magnetic Ink Character Recognition Devices and Optical Reader/Sorters								
1419**	1419 Magnetic Character Reader	72									
	1255 Magnetic Character Reader										
	1259 Magnetic Character Reader										
1419P**	1419 Dual Address Adapter Primary Control Unit	73									
1419S**	1419 Dual Address Adapter Secondary Control Unit	74									
2701*	2701 Data Adapter Unit	D0	Teleprocessing lines								
2702	<table style="border: none;"> <tr><td style="font-size: 2em; vertical-align: middle;">}</td><td>A</td></tr> <tr><td></td><td>B</td></tr> <tr><td></td><td>C</td></tr> <tr><td></td><td>D</td></tr> </table>	}	A		B		C		D	D1	A = SAD0 command when enabling the line
}		A									
		B									
		C									
	D										
	B = SAD1 command when enabling the line										
	C = SAD2 command when enabling the line										
	D = SAD3 command when enabling the line										
2703	2703 Transmission Control	D2									
2955	2955 Data Adapter Unit	D7	Data link for RETAIN/370								
2671	2671 Paper Tape Reader	70	Paper Tape Reader								
1285	1285 Optical Reader	76	Optical Readers								
1287	1287 Optical Reader	77									
1288	1288 Optical Page Reader										
1017	1017 Paper Tape Reader with 2826 Control Unit Model 1	78	Paper Tape Reader								
1018	1018 Paper Tape Punch with 2826 Control Unit Model 1	79	Paper Tape Punch								
2260	2260 or 2265 Display Station	C0	Display Station								
7770	7770 Audio Response Unit	D3	Audio Response Units								
7772	7772 Audio Response Unit	D4									
1017TP	1017 Paper Tape Reader with 2826 Control Unit Model 2	D5	Paper Tape Reader								
1018TP	1018 Paper Tape Punch with 2826 Control Unit Model 2	D6	Paper Tape Punch								

Note: The codes used in the DVCGEN macros are the same codes used in IPL statements.  
\* For other teleprocessing devices, see IBM System/360, DOS BTAM and QTAM PLMs, GY30-5001 and GY30-5002.  
\*\* This device type code is also used for the 1270/1275 optical reader/sorters.

Figure 16. Device Type Codes

## Reference 10: Special Purpose Dump

Follow these procedures when an error message references this section. Information is lost if any other procedures are followed.

1. Locate the address of the label CNLSVE in an assembly listing of the supervisor being used.
2. Set the CPU to stop on that main storage address (this is model dependent, and the procedures for the different models are listed here).
3. Rerun the failing job, and execute the stand-alone dump when the system stops.

### STOP ON MAIN STORAGE ADDRESS

SYSTEM/360

#### Model 25

- Press STOP on the console.
- Set switches A, B, C, and D to the stop address.
- Set the MODE switch to the MS ADR STOP position.
- Press START.
- When the desired address is reached, the machine stops with the ADR MATCH light on under CPU STATUS.

#### Model 30

- Press STOP on the console.
- Set switches A, B, C, and D to the stop address.
- Set ADDRESS COMPARE switch to SAR DELAYED STOP.
- Press START.
- When the desired address is reached, the machine stops with the MATCH light on under CPU STATUS.

#### Model 40

- Press STOP on the console.
- Put the stop address in the storage address keys.
- Set ADDRESS COMPARE to MS STOP.
- Press START.

#### Model 50

- Press STOP on the console.
- Put the stop address in the storage address keys.
- Set the IAR switch to STOP.
- Press START.

#### Model 65

- Press STOP on the console.
- Put the stop address in the storage address keys.
- Flip down the ADDRESS COMPARE STOP switch.
- Press START.

SYSTEM/370

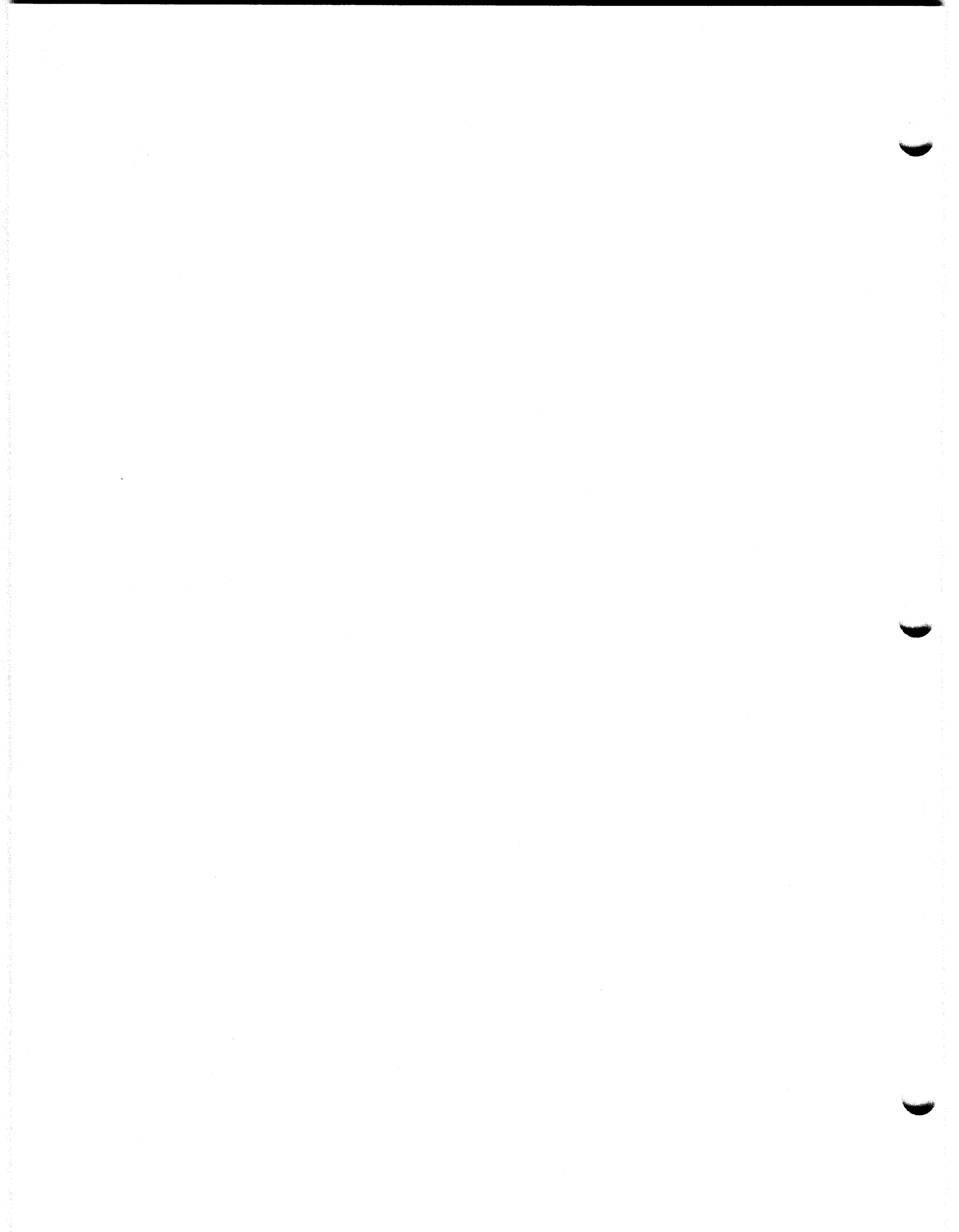
#### Model 145

- Press STOP on the console.
- Set switches CDEFGH to the stop address.
- Set the STORAGE SELECT switch to MAIN STORAGE.
- Set the ADDRESS COMPARE rotary switch to I-COUNTER.
- Set the ADDRESS COMPARE CONTROL toggle switch to STOP.
- Press START.

Model 155

- Press STOP on the console.
- Set switches CDEFGH to the stop address.
- Set the STORAGE SELECT switch to MAIN.

- Set the ADDRESS COMPARE rotary switch to IAR.
- Set the ADDRESS COMPARE (SAR) toggle switch to STOP.
- Press START.





## O-Prefix Messages

0C00I CHKPT NO. xxxx WAS TAKEN ON  
SYSxxx=cuu

Cause: Indicated checkpoint is complete. xxxx is the checkpoint number, which is increased by one as each checkpoint is passed. SYSxxx=cuu refers to the logical and physical unit on which the checkpoint information has been stored.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

0C01I CHKPT FROM IMPROPER  
ENVIRONMENT-CHKPT IGNORED

Cause: An SPI job in foreground area is attempting a checkpoint.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Not applicable.

Operator Action: Execute the job in a batched-job partition.

If the problem recurs, have the log sheet and program listing available to complete your problem determination action.

0C02I CHKPT UNIT SYSxxx NOT A  
TAPE-CHKPT IGNORED

Cause: The checkpoint specified a tape, but SYSxxx is not a tape.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: The job must be canceled to reassign SYSxxx. If you do cancel this job, execute LISTIO for SYSxxx. If the device is not a magnetic tape, assign a tape to SYSxxx.

If the problem recurs, complete your problem determination action as follows:

1. Have the program listing, printer output, and log sheet available.
2. Have the LISTIO output available.

0C03I I/O REQUEST PENDING ON TP  
DEVICE-CHKPT IGNORED

Cause: A teleprocessing program, running as a batch job, has an I/O request pending on a T/P device. The checkpoint routine cannot wait for the teleprocessing I/O to complete.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Change the problem program so that the checkpoint is issued between I/O operations.

If the problem recurs, have the program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

0C04I END ADDR PARA GT END PROB  
PROG-CHKPT IGNORED

Cause: The end address parameter, specified by the user in the CHKPT macro, has a value greater than the allotted problem program area.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Decrease the end address parameter on the CHKPT macro or allocate more space to the problem program area.

If the problem recurs, have the log sheet and problem program listing available to complete your problem determination action.

Operator Action: Allocate more space to the problem program area and rerun the job.

0C05I CHKPT DTFPH FILE NOT OPEN-CHKPT  
IGNORED

Cause: The user did not open the DTFPH file defined for the disk unit specified in the checkpoint macro.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Open the DTFPH file before issuing the first CHKPT macro.

If the problem recurs, have the log sheet and problem program listing available to complete your problem determination action.

Operator Action: Not applicable.

0C06I DTFPH FILE DEFINED  
MOUNTED=ALL-CHKPT IGNORED

Cause: The user did not specify MOUNTED=SINGLE as a parameter in the DTFPH macro for the disk unit specified in the checkpoint macro.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Correct the DTFPH macro to specify MOUNTED=SINGLE.

If the problem recurs, have the log sheet and problem program listing available to complete your problem determination action.

Operator Action: Not applicable.

0C07I DTFPH FILE NOT DEFINED FOR  
OUTPUT CHKPT IGNORED

Cause: The user did not specify TYPEFLE=OUTPUT as a parameter in the DTFPH macro for the disk unit specified in the checkpoint macro.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Correct the DTFPH macro to specify TYPEFLE=OUTPUT.

If the problem recurs, have the log sheet and problem program listing available to complete your problem determination action.

Operator Action: Not applicable.

0C08I CHKPT UNIT SYSxxx NOT A  
DISK-CHKPT IGNORED

Cause: The checkpoint specified a disk, but SYSxxx is not a disk.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Correct the assignment for SYSxxx or correct the parameters on the checkpoint macro before resubmitting the job.

If the problem recurs, have the following available to complete your problem determination action:

- LISTIO output
- Program listing
- Log sheet
- Job stream.

Operator Action: When the job ends, issue the LISTIO command and use the output to check that SYSxxx is assigned to a disk. If necessary, enter the correct assignment and rerun the job.

0C09I INSUFFICIENT SPACE ON CHKPT  
FILE, CHECKPOINT IGNORED  
filename SYSxxx=cuu

Cause: Insufficient space allotted on disk to complete checkpoint, or

End of tape reached before checkpoint is complete.

The filename is printed for disk only. SYSxxx=cuu specifies the physical and logical units assigned as the checkpoint file.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: If the file is on a disk, increase the extents, or

If the file is on a tape, use a full reel of tape or specify 1600 BPI (if possible), or

Decrease the number of checkpoints or reduce the end address on the checkpoint macro.

Operator Action: Not applicable.

0C10I SUBTASK ISSUED CHKPT - CHKPT  
IGNORED

Cause: The checkpoint macro was specified in a subtask.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Remove the checkpoint from the subtask.

If the problem recurs, have the log sheet and problem program listing available to complete your problem determination action.

Operator Action: Not applicable.

0C11I SUBTASKS ATTACHED - CHKPT  
IGNORED

Cause: A main task issued the checkpoint macro while subtasks were attached in the partition.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Verify that there are no subtasks attached before issuing the checkpoint macro.

If the problem recurs, complete your problem determination action as follows:

1. Rerun the job with the PDAID program, GSVC trace, and check the output to see that a DETACH (SVC 39)

was issued for every ATTACH (SVC 38). Have the output available.

2. Have the program listing and log sheet available.

Operator Action: Not applicable.

0C12I TRACKS HELD - CHKPT IGNORED

Cause: A checkpoint was attempted within a partition while tracks were being held.

This is probably a user error.

System Action: The checkpoint is ignored and processing continues.

Programmer Action: Check that tracks are not being held before issuing the checkpoint macro. If necessary, rerun the job with the PDAID program, GSVC trace, and check the output for a FREE (SVC 36) issued for every HOLD (SVC 35). Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute GSVC trace and have the output available.
2. Have the program listing and log sheet available.

Operator Action: Not applicable.

Messages 0I00 and 0I01 are not printed on the printer-keyboard, but always appear in bytes 0-3 of main storage. If the IPL device is a card reader and an IPL error (0I11-0I28) occurs, the operator must display the message number in main storage bytes 0-3. The action for some of these messages states that the operator must restart the IPL procedure. This is only true if the IPL device is SYSRDR. If the IPL device is a printer-keyboard, the operator replies as instructed in the following messages.

0I00A None. 0I00 is stored in bytes 0-3 of main storage.

Cause: The machine's main storage is not large enough to contain the supervisor plus the minimum background partition of 10K.

This is probably a user error.

System Action: The system enters the wait state.

Programmer Action: Check the address at SUPEND, in the supervisor listing, for the supervisor size. If the supervisor is the correct size for this machine, re-IPL. If not, generate a supervisor that is small enough to execute in this machine by eliminating options or table space.

If the problem recurs, complete your problem determination action as follows:

1. Have the dump output available.

2. Have the supervisor listing and SYSRES pack available.

Operator Action: Check that the correct pack has been used for IPL. If the correct pack was used, execute a stand-alone dump and give the output to your programmer.

0I01A None. 0I01 is stored in bytes 0-3 of main storage.

Cause: Occurs during the IPL procedure when the operator presses the external interrupt key, and no assignment exists for SYSRDR.

This is probably a user error.

System Action: The system enters a wait state.

Programmer Action: Not applicable.

Operator Action: Place the IPL deck in the card reader and perform the IPL procedure. Instead of pressing INTERRUPT on the console, press START on the card reader.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump.
2. Have the IPL deck available.

#### 0I10A GIVE IPL CONTROL COMMANDS

Cause: IPL awaiting control commands (ADD, DEL, and SET).

System Action: The system waits for the operator's control commands from the console-typewriter.

Programmer Action: Not applicable.

Operator Action: Enter IPL control commands on the printer-keyboard.

#### 0I11A PREVIOUS COMMAND INVALID

Cause: Control command printed on previous line is invalid, or

The SET command is missing, or 7-track tape, MICR, or TP is not supported.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If necessary, reassemble the supervisor with 7-track tape support.

Operator Action: Type the corrected command if a printer-keyboard is available; otherwise, re-IPL with correctly punched cards.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump before the subject command is given.
2. Have the console log sheet and the IPL control cards available.

#### 0I12A DEL COMMAND IS FOR NON-EXISTENT DEVICE

Cause: Device referred to in DEL command printed on previous line was not provided for when system was generated.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check the supervisor assembly listing to determine whether a DVCGEN card was submitted for the device. Also, use the dump and steps 1-3 of Reference 9 to check that the entry actually exists.

If the problem recurs, complete your problem determination action as follows:

1. Have the dump output available.
2. Have the supervisor listing, log sheet, and IPL deck available.

Operator Action: Check the DEL card for correct punching or the DEL command for correct typing, and then type the corrected command if a printer-keyboard is available; otherwise, re-IPL. If the command or statement is correct, execute a stand-alone dump and give the output to your programmer.

#### 0I13I CANNOT ADD PUB--INSUFFICIENT TABLE SPACE

Cause: No room in tables to add PUB for device specified in preceding ADD command.

This is probably a user error.

System Action: The command is ignored and processing continues.

Programmer Action: Use the supervisor listing to check that sufficient PUB space was allocated during system generation. The number of PUB entries is indicated in the DC following the label PUBTAB.

Operator Action: Use the DEL command to release unnecessary PUB entries. Then, ADD the necessary entry.

If the problem recurs, complete your problem determination action as follows:

1. Stop the system while the message is being printed, then execute a stand-alone dump and have the output available.
2. Have the log sheet and IPL deck available.

0I14I CANNOT ADD TEB or TEBV--INSUFFICIENT TABLE SPACE

Cause: No room in tables to add TEB (tape error block) or TEBV (tape error block by volume) for device specified in preceding ADD command.

This is probably a user error.

System Action: If IPL is from the console, the system waits for operator response, or

If IPL is from a card reader, IPL is completed, but the system must be re-IPLed if the device is required.

Programmer Action: Reassemble the supervisor with more TEB table space. To do this, increase the number in the TEB option.

Operator Action: Give DEL commands for devices to be deleted before giving ADD commands, or

Delete all tape devices not required and reissue the ADD command.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and retain the listing.

2. Have a supervisor listing and the console log or IPL deck available.

0I15I PUB ALREADY EXISTS

Cause: The preceding ADD command specifies a device already provided for in the PUB table.

This is probably a user error.

System Action: If IPL is from the printer-keyboard, the ADD command is ignored and processing continues. If IPL is from the card reader, the system enters a wait state.

Programmer Action: If no PUB exists and the message appears when the job is rerun, have the log sheet, IPL card deck (if IPL is from a card reader), and supervisor listing available to complete your problem determination action.

Operator Action: If the IPL is from the console printer-keyboard, type the corrected command, or

If IPL is from the card reader, correct the card in error and re-IPL.

0I16A NO PUB GIVEN FOR SYSRES

Cause: A SET command is encountered, indicating no more ADD or DEL commands, but no PUB exists for SYSRES.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the ADD command or statement for SYSRES is correct.

Operator Action: Give an ADD command for SYSRES device, and then reissue the SET command. If using a card reader for IPL, include an ADD card for the SYSRES device and restart IPL.

If the problem persists, complete your problem determination action as follows:

1. Execute a stand-alone dump.
2. Have the supervisor listing, log sheet, and IPL deck available.

1. Press STOP on the console and execute a stand-alone dump.
2. Have the log sheet available.

0I17A NO PUB GIVEN FOR SYSLOG

Cause: A SET command is encountered, indicating no more ADD or DEL commands. If using SYSLOG for IPL, no PUB exists for SYSLOG. If using SYSRDR for IPL no PUB exists for SYSRDR.

This is probably a user error.

System Action: The system waits for additional commands.

Programmer Action: Check that the ADD command or statement for SYSLOG is correct.

Operator Action: Give an ADD command for SYSLOG and then reissue the SET command, or

Give an ADD command for SYSRDR and restart the IPL procedure.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and save the output.
2. Have the supervisor listing, log sheet, and IPL deck available.

0I18A SET COMMAND NOT GIVEN

Cause: An end-of-communication (EOB/END key) response was given, but the SET command did not precede it.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type in the SET command.

If the problem recurs, complete your problem determination action as follows:

0I20I DOS IPL COMPLETE

Cause: IPL procedure is complete.

System Action: Control is returned to job control.

Programmer Action: Not applicable.

Operator Action: Initiate processing.

0I22I ALLOCATION ERROR INSUFFICIENT CORE

Cause: Insufficient main storage exists for the allocation specified at SYSGEN.

This is probably a user error.

System Action: The system enters a wait state.

Programmer Action: Check the communication region (the address was recorded by the operator) + X'30' for the core size. Obtain the partition sizes from the PIB table (pointed to by COMREG+X'5A').

Each partition size is indicated by one byte containing the number of blocks (1K per block for BG, 2K per block for F1 or F2) in the partition. BG is at PIB+X'18'; F2 is at PIB+X'28'; F1 is at PIB+X'38'. The supervisor size is given in the two bytes starting at COMREG+X'0A'.

The total of the supervisor and all partitions must be equal to or less than the core size, and each batched partition must contain at least five 2K blocks of storage. Reassemble the supervisor with the correct allocations for your system.

Operator Action: Verify that you have the correct SYSRES pack for your CPU. If you do, the foreground allocation may be set to zero so that a new

supervisor may be cataloged or assembled. The procedure is:

1. Press LOAD.
2. Do not ready the IPL device (printer-keyboard or card reader), but press STOP.
3. Display and record the 2-byte address at main storage location X'16'.
4. Add X'5A' to this address to find the 2-byte address pointing to the PIB table.
5. Store a 1-byte zero at PIB table + X'28' and a 1-byte zero at PIB table + X'38'.
6. Press START and continue with IPL.

If the problem recurs, complete your problem determination action as follows:

1. Take a stand-alone dump and save the listing.
2. Have a supervisor listing and your console log or IPL deck available.

OI23I DASD ON NON-FILE PROTECTED CHANNEL

Cause: DASD device specified on a channel where file protect coverage was not generated, or

DASD device not specified in DASD file protect option, or

If no device was added, the SYSRES pack is on an unprotected channel. SYSRES must be on a DASD file protected channel.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Reassemble the supervisor and specify in the DASDFP parameter in the FOPT macro all DASD device types and all channels that interface with DASD devices, or

Reassemble the supervisor without DASD file protection (specify DASDFP=NO).

Operator Action: If a previous ADD command was issued, delete the device specified in it and reissue the SET command, or

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and retain the listing.
2. Have a supervisor listing and the console log or IPL deck available.

OI24A CANNOT ADD, INSUFFICIENT SAB TABLE SPACE

Cause: No room exists in the tables to add the seek address block for this DASD device.

This is probably a user error.

System Action: If the IPL is from the console printer-keyboard, the system waits for an operator response. If IPL is from the reader, IPL is completed, but you must re-IPL if this device is required.

Programmer Action: Reassemble the supervisor with more SAB table space. Accomplish this by specifying a greater number on the SKSEP option.

Operator Action: Enter a DEL command to release a DASD device that is not required, then re-enter the ADD command if a printer-keyboard is available; otherwise, remove an ADD statement or DEL a DASD device and re-IPL.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and save the output.
2. Have the supervisor listing and log sheet available.



0I25I NO RMS SUPPORT FOR THIS MODEL CPU

Cause: This supervisor was created for a System/370 CPU, but is not being used on that model CPU. Machine check interrupts, channel control checks, and interface control checks will cause the system to enter the wait state.

System Action: MCAR/CCH is disabled, and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

System Action: No additional attempt is made to load this buffer, but \$\$BUFLDR continues processing the remaining buffers on this system.

Programmer Action: If this was an FCB failure, check that an error-free FCB load is cataloged under \$\$BFCB.

Operator Action: After IPL is complete, attempt to load the referenced buffer using SYSBUFLD. If this attempt is also unsuccessful and the FCB load is correct, issue the ROD command, execute EREP and call for hardware support.

0I26I \$\$BUCB AND \$\$BFCB LOADED X'cuu'

Cause: The IPL load of the FCB and UCSB on the printer at address X'xxx' has been completed successfully. If one buffer has failed to load, dashes have been substituted for the applicable buffer load name and this message has been preceded by message 0I27I.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

0I28D DEVICE NOT OPERATIONAL X'cuu' INVALID RESPONSE

Cause: \$\$BUFLDR attempted to access the device at address cuu, but the device was either off line or not powered up. If an invalid response is entered, 0I28D INVALID RESPONSE is issued.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Make the device operational and respond RETRY, or

Respond IGNORE or EOB/END key if the device is not to be used.

If the device cannot be made operational, call for hardware support.

0I27I (UCB,FCB) LOAD FAILURE X'cuu'

Cause: The buffer referenced in the message failed to load properly due to a hardware failure or the FCB load cataloged under \$\$BFCB did not contain a stop character. This error occurred during IPL on the printer at address cuu.

The following information pertains to messages 0P08 through 0P40. The complete format for these messages is:

```
OPxxy z mmm...mmm SYSxxx=cuu CCSW=ccwwwwwwwwwwwwwwww SNS=ssssssssss CCB=aaaaaa
SK=bbbbccccchhh
```

```
Example: BG OP13D R ADDR MRKER SYS000=1A0
          CCSW=31100044380E000000 SNS=000200C80000 CCB=004418 SK0000009F0000
```

The message is broken down as follows.

Format	Identification
OP	Identifies the message as being generated by physical IOCS.
xx	Message number (which also appears in byte 0 of main storage when the printer-keyboard is inoperable).
y	Action code (which also appears in byte 1 of main storage when the printer-keyboard is inoperable).
z	Operator code.
m...m	Message indicating the specific I/O error condition.
SYSxxx	Specific logical unit on which the I/O error occurred. Appears as SYSxxx if CCB address is not available at the time the error occurred. Appears as SYSCTL whenever the logical program needs a logical unit to perform an I/O command (e.g., READ).
cuu	Channel and unit on which the I/O error occurred (appears in bytes 2 and 3 of main storage when the printer-keyboard is inoperable).
cc <sup>1</sup>	Command code of last CCW executed. This will appear as 00 if the CCW address is outside the user's core.
w...w <sup>1</sup>	Channel status word.
s...s <sup>1</sup>	Sense bytes obtained from device in error.
a...a <sup>1</sup>	Address of user's CCB (will appear as zeros if unavailable at the time of the error). For unavailable or meaningless fields, the following is printed:  CCSW 'NOT AVAILABLE' SNS=000000000000,CCB=000000
SK	The hexadecimal seek address appears only when the error occurred on a DASD device. It is the address of the track on which the error occurred. (bbbb will appear as BBBB if no CCB is available).

Note 1: For message 0P08, this information is not given if SYSLOG is assigned to the console printer-keyboard.

Six combinations are possible for action codes y and z if the systems communications device is a printer-keyboard. (Refer to Figure 17.) If the communications device is other than a printer-keyboard, refer to Reference 3 for related information. The messages 0P08-0P60 result in different combinations of action codes, depending upon the particular device responsible for issuing the message. For this reason, no (y) or (z) entry appears for these messages in the manual. However, when these messages are issued by the system, they always contain one of the six combinations for action code, listed in Figure 17. The operator action in each case is determined in accordance with this action code.

Use Figure 18 to obtain the starting and ending addresses of an I/O area. It is currently associated with message 0P25.

Action Codes		Operator Action				Other/Remarks
Y	Z	CANCEL	IGNORE	RETRY	EOB/END key	
A		X <sup>1</sup>	--	--	-	To continue: 1. Perform any manual recovery procedures implied by the error condition. (Refer to component description and operating procedures manual for the device.) 2. Ready the device. No response is necessary
I	I	--	--	--	-	Message is printed and error is ignored. The data is posted to the program and processing continues.
I	C	--	--	--	-	Message is printed and job is canceled.
D	I	X	X	--	-	If reply is IGNORE, the error is ignored and the data posted to the program and processing continues.
D	IR	X <sup>2</sup>	X	X	X	If reply is IGNORE, the error is ignored and the data posted to the program and processing continues. If reply is RETRY or EOB/END key, the channel program is retried.
D	R	X	--	X	X	If reply is RETRY or EOB/END key, the channel program is retried.

<sup>1</sup>Press REQUEST, and enter CANCEL [BG,F1,F2].

<sup>2</sup>If an equipment check message (OP10D) occurs on SYSLOG and the message prefix is AR, a response of CANCEL is not valid.

Figure 17. Operator Response to System Messages OP08-OP40 when Communications Device Is a Console Printer-Keyboard

CCW Byte	0	1	2	3	4	5	6	7
	CC Command Code	aa	aa	aa	ss	uu	ct	ct
		I/O Area Start Address			Flags	Unused	Count	

- To get the CCW address, subtract 8 from the address located in bytes 2-4 of CCSW, or from the address located in bytes X'41'-X'43' of the core dump.
- To get the starting and ending addresses of the I/O area, refer to the address obtained in step 1. Bytes 1-3 of this 8-byte CCW contain the starting address of the I/O area. Obtain the I/O ending address by adding the count (bytes 6-7) of the CCW to the starting address.

Figure 18. Obtaining the Starting and Ending Addresses of an I/O Area

0PnnA INVALID RESPONSE

Cause: Operator response was invalid. nn designates the message to which the invalid response was made.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter a valid response using either Figure 17 or Reference 3, whichever is applicable.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and save the output.
2. Have the log sheet available.

0P08 INTERV REQ

Cause: Intervention required on unit check. Device not ready.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem persists, this is probably a hardware error and you should do the following to complete your problem determination action:

1. Execute a stand-alone dump and save the output.
2. Have the log sheet available.

0P09 BUSOUT CHK

Cause: A unit check, caused by a parity error, occurred.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem persists, complete the problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP.
3. Have EREP listing and the console log available.

0P10 EQUIP\_CHK

Cause: Unit check (equipment check for a tape unit).

This is probably a hardware error.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet available.

0P11 DATA\_CHECK

Cause: Unit check (data check), or

Tape inoperative with mode setting.

This is probably a hardware error.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. Then, issue the LISTIO command and check that the mode set agrees with the mode used to create the tape. If correction is necessary, rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet and the listings and job streams of the programs that created and read the tape available.

OP12 VERIFY\_CHK

Cause: A unit check was caused by a data check while executing a verify command.

This is probably a hardware error.

System Action: The system action is included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem persists, do the following to complete your problem determination action:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP13 ADDR\_MRKER

Cause: A unit check was caused by a missing address marker. The storage control unit has received two index points without an intervening address marker.

This is probably a hardware error.

System Action: The system action is included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If possible, use another disk pack or disk drive. If another disk drive is used and the failure recurs, the pack must be initialized and the file rebuilt.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP14 OVERRUN

Cause: A unit check caused by a channel overrun (channel chaining check bit on in CSW) occurred.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem persists, complete your problem

determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP15 SEEK CHECK

Cause: Unit check (seek check). Access mechanism has failed to reposition properly, or

Home address compare fails after automatic head switching on a multitrack operation.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If possible, use another drive if the job must be rerun.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP16 DTA CHK CT

Cause: Unit check (data check in count field).

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If possible, use another device.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP17 FILE PROT

Cause: Unit check (command reject-file protect). A command that resulted in a command reject was issued to a tape that is file-protected and positioned at its load point. For a DASD file, this message indicates a set file mask notation. It can be caused by an illegal seek operation. On a system with DASD file protection, it can also indicate an attempt to write on SYSRES.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: The probable errors are:

- A channel operation, such as a write or seek, was attempted after the file mask was set.
- A second long seek attempted when the supervisor supports seek separation.
- An invalid CCW command or command sequence was detected.

Check these conditions by obtaining a system dump at the time of the failure and by inspecting the channel operations requested by the program. The CCW chain is pointed to by bytes 8-11 of the CCB addressed in the message.

Operator Action: Check that the proper tape has been mounted and that the file protect ring has been inserted. Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.
2. Issue the ROD command, execute EREP, and have the output available.
3. Have the log sheet and program listing available.

OP18 COMM REJCT

Cause: Unit check (command reject). Invalid CCW command or command sequence was detected.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Check the command sequence in your source program. If it is correct, obtain a system dump and check the operation codes in the CCW string pointed to by bytes 8-11 of the CCB addressed in the message. Some probable errors are write commands issued to a file protected tape that is not at load point, a write to a DASD device without a preceding search, or two successive reads without an intervening feed for a 2540.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. Check, by issuing the LISTIO command, that all assignments have been correctly made. If the device in error is a 2540, run out the cards, reload, and ready the device.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.

2. Have the job stream, log sheet, and program listing available.

OP19 UNDETR ERR

Cause: Unit check (no valid sense byte).

This is probably a hardware error.

System Action: Included in the applicable operator action.

Programmer Action: In addition to the hardware errors that can cause this message, a data check or UCS parity error in a UCS 1403 will cause this message if the PUB for this device does not specify UCS. Use Reference 9 to find the device type. In this case, instruct the operator to re-IPL and ADD the printer as type 1403U (if a DVCGEN macro was assembled for this printer, a DEL must be given before the ADD).

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If the job is canceled, mount the file on another device and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.
2. Issue the ROD command, execute EREP, and have the output available.
3. Have the log sheet available.

OP20 ERR\_ON\_REC

Cause: Unit check (sense operation or attempting to reposition a tape). Error occurs during device error recovery. If this message occurs during tape error recovery, the status and sense reflect the error that caused the tape error recovery procedure to be invoked, not the error that caused the program to cancel.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If possible, use another device if the job is rerun.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP21 NRF-MADDMK

Cause: Unit check (no record found or missing address markers), or

Home address or Record 0 cannot be found on the track.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If possible, use a different disk

pack or disk drive if the job must be rerun. If a different disk drive is used and the failure recurs, the disk pack must be initialized and the file rebuilt.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command.
2. Execute EREP and save the output.
3. Have the log sheet available.

OP22 BALST\_CELL

Cause: Unit check (seek check or missing address marker), or

The 2321 ballast cell has been accessed, or

A 2321 strip was missed.

System Action: Included in the applicable operator action.

Programmer Action: Check that all DLBL and EXTENT cards are correct. Check that the seek address is within the disk extents.

If the problem recurs, complete your problem determination action as follows:

1. Execute a label cylinder display and have the output available.
2. Have the job stream, log sheet, and program listing available.
3. Obtain a system dump and have the output available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. Check that any cells used in this job are correctly mounted.



0P23 BLNK\_STRIP

Cause: Unit check (no record found or missing address marker on three adjacent tracks). The 2321 has accessed an uninitialized strip.

This is probably a user error.

System Action: Included in the applicable operator action:

Programmer Action: Display the label cylinder or check the EXTENT cards for correct parameters. If the seek address is outside these parameters, correct the seek. If this strip, or strips, should be accessed, initialize the strip(s) using the initialize data cell program.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream, program listing, log sheet, and printer output available.
3. If the standard (permanent) labels were used, execute LSERV and have the output available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

0P24 PROG\_CHECK

Cause: Channel Status Word program check. Programming error detected by channel. Sense data printed with this message is meaningless.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Bytes 8-11 of the CCB addressed in this message point to the failing CCW chain. Obtain a system dump at the time of the error, locate the CCW chain, and look

for one of the following errors:

- The first CCW is not on a double word boundary.
- The CCW addressed in a TIC (transfer-in-channel) is not on a double word boundary.
- The first CCW address, or the CCW addressed by a TIC, is outside main storage.
- The failing CCW command code is X'n0' (where n is any number).
- The data count of a CCW, other than a TIC, is zero.
- The data address, or the data address plus the count, is outside main storage.
- Bits 37-39 of a CCW, other than a TIC, are not zeros.
- The first CCW in a chain is a TIC, or one TIC points to a second TIC.

Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the dump output, job stream, program listing, and log sheet available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

0P25 PROT\_CHECK

Cause: Channel Status Word protection check. A user read command attempted to read into a main storage area outside the problem area. All problem program I/O requests are executed with protection key (BG=1, F2=2, and F1=3). Sense data printed with this message is meaningless.

This is probably a user error.

OP26 INVAL SEEK

System Action: Included in the appropriate operator action.

Cause: The specified seek address is invalid for this device type, or

Programmer Action:

1. Resubmit the job with a  
// OPTION DUMP statement.
2. Obtain the CCW address and determine the starting and ending addresses of the I/O area (Refer to Figure 18).
3. Compare the starting and ending addresses against the core allocations listed in the main storage map.

A file has been opened and closed, and an attempt has been made to execute an I/O operation, or

The problem program has been canceled in response to message 4440A, the AB routine entered, and an attempt has been made to write on an unexpired file. This write operation is normally a file mark generated by the close routine. To protect the unexpired file, this is not written and, therefore, the file is not closed.

This is probably a user error.

If you are in MPS mode and these addresses are outside the partition boundaries, either reallocate main storage or reprogram to fit the existing boundaries. If in non-MPS mode, reprogram.

System Action: Included in the applicable operator action.

If the problem recurs, retain the preceding data and have a program listing available to complete your problem determination action.

Programmer Action: Check the LISTIO output to ensure that the proper device was assigned. If the device assignment is correct, obtain a system dump at the time of the failure and check the device type accessed. Also, check the access routines for overlay in core, invalid upper and lower limits on the DASD seek routine, or invalid seek address generation, or

Operator Action:

1. Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.
2. Execute the MAP command if you are operating in multiprogramming mode, or have the supervisor listing available if you are in non-MPS mode.

Check the close routine for additional I/O operations after CLOSE is issued, or

Use the LISTVTOC output to check that the correct extents were given. The file opened by your program has not been closed. The file has no EOF mark and should be rebuilt with larger extents.

Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, program listing, system dump, and printer output available to complete your problem determination action.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

Then, execute LISTIO and check that the proper device type has been assigned (for example, if a 2314 is called for, that a 2314 was assigned and not a 2311). If this is not the problem, execute LISTVTOC for indicated file, and return the LISTVTOC and LISTIO output to your programmer.

OP27 UNKNOWN\_DEVICE

Cause: Unit check. Error recovery attempted on unsupported device. This message may also appear after a BTAM job is canceled.

This is probably a user error.

System Action: The system action is included in the appropriate operator action.

Programmer Action: Use the user exit options in LIOCS and PIOCS to accept errors on unsupported devices.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and save the output.
2. Have the job stream, log sheet, and program listing available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP28 CHAN\_DTCHK

Cause: Channel Data check.

This is probably a hardware error.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

If the problem recurs, execute SEREP and have the output

available to complete your problem determination action.

OP29 BK\_INTD\_LP

Cause: Backward command, other than read backward, into load point on tape drive.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Check for a command sequence that would cause backward motion while the tape is at load point. Make the necessary corrections and resubmit the job.

If the problem recurs, have the source listing, EREP output, log sheet, and printer output available to complete your problem determination action.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. Check that the tape is actually at load point when the error occurs. If so, perform your normal installation procedure.

If the tape is not at load point, a hardware error is probably occurring. In this case, issue the ROD command, execute EREP, and give the output to your programmer.

OP30 CONVRT\_CHK

Cause: Data converter check on tape. This error may occur when a tape is read with the data conversion feature on, but was not created with the data conversion feature on.

This is probably a user error.

System Action: Included in the appropriate operator action.

Programmer Action: Correct the mode set command and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the job stream that created the tape and the failing tape available.
3. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP31 DVC NOT OP

Cause: I/O device is not operational.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action:

1. If console printer-keyboard is available, refer to Figure 17; otherwise, see Reference 3.
2. Check the failing device to ensure that it is online, that the meter switches at the unit and control unit are on, and that the device is powered-up and ready. If you perform corrective action, press the STCP and START keys on the CPU console.
3. If you are unable to clear the condition, issue the ROD command, execute EREP, and keep the output to complete your problem determination action.

OP32 NON COMPAT

Cause: The magnetic tape is written in a density (200, 556, 800, or 1600 BPI) that the drive cannot read.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Check the mode setting used when the tape was created, then:

- Recreate the tape in a density or mode compatible with the input drive, or
- Set the mode of the input drive to match the one used to create the tape, or
- Use a drive compatible with the one on which the tape was created.

If the problem recurs, have the log sheet, printer output, job stream, and failing tape available to complete your problem determination action.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. Then, check that the tape was mounted on the correct drive and that the proper mode setting was used.

OP33 BUF PARITY

Cause: A parity error has been encountered in one of the buffers on SYSxxx. If the device is a 1403, the UCB buffer is in error. If the device is a 3211, the UCSB buffer is in error if byte 1 (the second byte) of SNS= is X'80'; the FCB is in error if byte 1 (the second byte) of SNS= is X'10'; both buffers are in error if byte 1 of SNS=X'90'. In all these cases, the buffer must be reloaded before the device is used again.

If the device is a 3211 and SNS does not equal X'10', X'80', or X'90', the UCSB is in error, but operations may be continued with printer speed degraded.

This is probably a hardware error.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. The applicable buffer must be reloaded.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

OP34 BCH NM OFF

Cause: A batch numbering update command was issued, and the batch numbering device is switched off. This message is issued only for the 1419 equipped with the dual address adapter.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP35 NON RECOV

Cause: Optical reader must be reloaded with an input tape if 1285 or 1287 is reading tape. In document mode, the 1287 must be reloaded and restarted.

System Action: Included in the appropriate operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP36 NO REC FND

Cause: A no-record-found condition has occurred.

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Use the LSERV output to check the extent information or check the DLBL and EXTENT cards supplied with the program. The seek address in the message should fall within the extents for the file.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump at the time of the failure and have the output available.
2. Have the job stream, program listing, and log sheet available.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

OP37 DISEN FAIL

Cause: The disengage command was not executed because the photo cell at detection station number 2 (station B for 1259) is inoperative. This message applies only to 1412/1419 or 1259.

This is probably a hardware error.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3. If recovery is possible, clean photo cell 2 (station B in 1259), reload the reader, press single cycle, then press start.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.

2. Have the log sheet and printer output available.

System Action: Included in the appropriate operator action.

OP38 INVAL FONT

Cause: Unsupported bit configuration for bits 2-5 in byte 4 of format control word specifies an invalid font (1287 document mode or 1288).

This is probably a user error.

System Action: Included in the applicable operator action.

Programmer Action: Check bits 2-5, in byte 4 of the format control word, for a valid font specification. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Source listing
- Job stream
- Log sheet
- Printer output.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP41 LOAD CHECK

Cause: An error was encountered while an attempt was being made to load the 3211 FCB or UCSB.

This is either a hardware error or the load used is incorrect.

System Action: The job is canceled.

Programmer Action: If this is not a hardware error, check the applicable buffer load for errors.

Operator Action: If possible, attempt to load the buffer again using another load of the applicable type. If the second attempt is unsuccessful this is probably a hardware error and you should issue the DVCDN command for the 3211 printer, to continue operations, and request hardware support.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

OP39 POSN CHECK

Cause: A 2495 tape cartridge reader has read or backspaced beyond the usable record area on the tape.

System Action: Included in the applicable operator action.

Programmer Action: Not applicable.

Operator Action: Refer to Figure 17 if console printer-keyboard is available; otherwise, see Reference 3.

OP60D INTERV REQ [BG, F1, F2] cuu=xyy

Cause: Issued by Attention routine when a device has an operator intervention condition outstanding and the console printer-keyboard request key has been pressed. The message is issued on a program basis.

x - channel number of device.

yy - physical address of device. This message issued for end of job in subtask requiring intervention. The channel and unit number identify the device requiring service. When the

OP40 BROKN TAPE

Cause: Unit check (broken tape). An end-of-tape condition was detected on a 1017 paper tape reader.

operator takes the appropriate action, this message may again appear, but will always be for a different device.

BG, F1, or F2 - the partition attempting to use the device.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reply IGNORE to continue with the attention routine. The intervention required condition for the specified partition remains pending, or

If the operator cannot correct the I/O error condition(s), he must reply CANCEL to this message. The partition specified in the message cannot be canceled by issuing a CANCEL command following the READY FOR COMMUNICATIONS or REQUEST CANCEL messages.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

OP70I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO UNDEFINED LOGICAL UNIT

Cause: Program issued an I/O request for a logical unit for which there is no Logical Unit Block (LUB), or

A CCB or DTF table was not initialized with the proper logical unit. SUB refers to a subtask\*, or

A null ISAM file with the cylinder index in main storage has been accessed. See DCS Supervisor and I/O Macros, GC24-5037 for additional information about this subject.

This is probably a user error.

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.

System Action: The job or subtask is canceled.

Programmer Action: Obtain a system dump and the supervisor listing. Locate the IOTAB macro in the supervisor listing and determine the values of BGPGR, F1PGR, and F2PGR. Locate the CCB in the dump (pointed to by register 1), and check the value of byte 6. If byte 6 is X'00', byte 7 should be less than X'0C'. If byte 6 is X'01', byte 7 should be less than the PGR value for the failing partition. If more logical units are needed, reassemble the supervisor with larger PGR values, or

Check to see that the CCB or DTF table is initialized with the proper logical unit and not overlaid during execution.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Program listing
- Stand-alone dump
- Supervisor listing.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OP71I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO SYSxxx NOT ASSIGNED

Cause: Program issued an I/O request for a logical unit (SYSxxx) which is not assigned to a physical device. If the CCB is unavailable, the logical unit will be printed as SYSXXX. General register 1 contains the address of the CCB in question. SUB refers to a subtask.\*

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: If the indicated logical unit should not have been required, check the program listing for possible modification or

overlay of the CCB, or for errors during assembly. Make the necessary corrections and resubmit the job.

If the problem recurs, do the following to complete your problem determination action:

1. Have the stand-alone dump, supervisor listing, program listing, job stream, log sheet, and printer output available.

Operator Action: Check that all assignments were made prior to the execution of the job. If correction is necessary, rerun the job. To obtain a meaningful main storage dump, use the procedure in Reference 10.

OP72I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO READING PAST /% STATEMENT

Cause: A read command has been issued to SYSIPT or SYSRDR after a /% was read.

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: Check for the following probable errors:

- No /\* card after the data.
- No end-of-file routine in the problem program.
- An additional read command issued after the EOF routine is entered.

If the problem recurs, have the following available to complete your problem determination action:

- Stand-alone dump
- Program listing
- Job stream
- System dump
- Log sheet.

Operator Action: To obtain a more meaningful main storage dump, use the procedure in

Reference 10.

OP73I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO I/O ERROR

Cause: An unrecoverable I/O error occurred during job processing. SUB refers to subtask.\*

This is probably a hardware error.

System Action: The job or subtask is canceled.

Programmer Action: Not applicable

Operator Action: The printer-keyboard log sheet will contain a device error recovery message that preceded this message. Perform the recovery or problem determination action indicated in that message.

OP74I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO I/O OPERATOR OPTION

Cause: Operator typed CANCEL on the console printer-keyboard in response to an I/O error message. SUB refers to a subtask.\*

System Action: The job or subtask is canceled.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OP75I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO I/O ERROR QUEUE OVERFLOW

Cause: Number of I/O errors pending simultaneously has exceeded Supervisor capacity for a job or subtask.\*

This is probably a hardware error.

System Action: The job or subtask is canceled.

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.



Programmer Action: Not applicable.

Operator Action: To obtain a more meaningful main storage dump, use the procedure in Reference 10. Rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet and stand-alone dump available.

OP76I [JOB or SUB] xxxxxxxx CANCELED DUE TO INVALID DASD ADDR

Cause: DASD file protect limits exceeded, or

The problem program has requested a record that is not the next sequential record on a system logical unit (SYSIN, SYSLNK, SYSPCH, and SYSLST), or

An I/O operation has been issued to a previously closed SD file. SUB refers to subtask.

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: For a DASD with file protection; check that the file has been opened and that the extents are correct for the range of seeks in the program.

For a failure to process sequential records on a system logical unit, check for errors in the source coding.

Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, including extent information, and the program listing available.

2. Have the log sheet, stand-alone dump, and printer output available.

Operator Action: To obtain a more meaningful main storage dump, use the procedure in Reference 10.

OP77I [JOB or SUB] xxxxxxxx CANCELED DUE TO INVALID ADDRESS

Cause: The address parameter given by a problem program refers to an address outside main storage or outside the requester's area (background or foreground). This message can also be issued if the problem program requires more core than is currently allotted to the partition in which the program is run. SUB refers to a subtask.\*

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: Refer to message OS07I, printed with this message, for the SVC that caused the cancelation (byte 3 of the PSW). Use the dump with the output of the MAP command, and check that the parameters passed by the SVC are within the partition. Use the DSERV tc determine the core requirements of the called program. Reference 7 contains the information passed by various SVCs. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the MAP output and stand-alone dump available.
2. Have the job stream, log sheet, printer output, and program listing available.

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancelation.

Operator Action: Issue the MAP command and execute DSERV to display the core image directory. To obtain a meaningful main storage dump, use the procedure in Reference 10.

OP78I [JOB or SUB] xxxxxxxx CANCELED DUE TO UNRECOGNIZED CANCEL-CODE

Cause: A system control component failed to post a valid CANCEL code. SUB refers to a subtask.\*

System Action: The job or subtask is canceled.

Programmer Action: Check any non-IBM supplied coding changes or additions to the system control modules.

If the problem recurs, have the following available to complete your problem determination action:

- Stand-alone dump
- Log sheet
- Job stream
- Program listing
- Supervisor listing.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OP79I [JOB or SUB] xxxxxxxx CANCELED DUE TO NO LONG SEEK

Cause: A DASD command chain in file protected environment does not start with a command code X'07'. SUB refers to a subtask.\*

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: Correct the problem program coding so that the CCW chain for the file begins with a long seek (op code X'07'). The actual CCW chain can be checked by using the stand-alone dump and locating the CCB addressed in

register 1. Bytes 8-11 of the CCB address the first CCW in the chain that failed.

If the problem recurs, have the following available to complete your problem determination action:

- Program listing
- Stand-alone dump
- Job stream
- Log sheet
- Supervisor listing.

Operator Action: Check the assignments to see that a DASD device was not assigned to a logical unit that should be assigned to some other device. To obtain a meaningful main storage dump, use the procedure in Reference 10.

OP81I JOB xxxxxxxx CANCELED DUE TO CPU FAILURE

Cause: An unrecoverable machine check interrupt has occurred. xxxxxxxx is the job name.\*

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet available.

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.

0P82I JOB XXXXXXXX CANCELED DUE TO CHANNEL FAILURE

Cause: A machine check has occurred as the result of a channel failure, or an I/O interrupt that caused a log-out has occurred. xxxxxxxx is the job or subtask name.\*

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet available.

0P83A [JOB or SUB] xxxxxxxx CANCELED DUE TO SUPERVISOR CATALOG FAILURE

Cause: The job that was to catalog a supervisor has been canceled. Either the control cards are incorrect, or the core image library or core image directory is too small. SUB refers to subtask, or

An attempt was made to catalog a supervisor on a system whose main storage configuration is not large enough to contain the supervisor to be cataloged plus the minimum background partition of 10K.

This is probably a user error.

System Action: The system enters wait state.

Programmer Action: Correct the control cards in error, or reallocate the core image library or core image directory.

If the problem recurs, complete your problem determination action as follows:

1. Execute a DSERV to obtain a system directory.
2. Have the console log and the job stream available.

Operator Action: Perform IPL.

0P84I JOB xxxxxxxx CANCELED DUE TO I/O ERROR DURING FETCH

Cause: An I/O error occurred during a FETCH of a non-\$ phase.\*

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job. If the failure recurs, the SYSRES pack should be initialized and rebuilt.

Complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream, log sheet, and printer output available.

0P85I JOB xxxxxxxx CANCELED DUE TO JOB CONTROL OPEN FAILURE

Cause: An ASSGN statement assigning SYSPCH or SYSLST to a disk was read, and the operator requested cancel before the system could open the logical unit.

System Action: The job is canceled and SYSLST or SYSPCH becomes unassigned. Any other permanent I/O assignments, made prior to job cancellation, remain in effect.

Programmer Action: Not applicable.

-----  
\* If xxxxxxxx is JOB ACCT, see Jcb Accounting Interface Cancellation.

Operator Action: I/O assignments can be verified by using the LISTIO operator command. The unassigned SYSPCH or SYSLST should be given your standard system assignment by using the ASSGN operator command.

OP86I FORCE\_DEQUE\_ON\_cuu

Cause: A forced dequeuing of a channel queue entry has occurred on the device specified by cuu.

This is probably due to a hardware error.

System Action: The system continues to process. However, if SYSLOG is in error or unassigned, the system enters a hard wait with a low core error message.

Programmer Action: Not applicable.

Operator Action: If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.
2. Have the log sheet available.

OR00I RSTRT\_UNIT\_INVALID\_SYSxxx

Cause: The symbolic unit specified on // RSTRT card is not assigned to the proper device type.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Use the LISTIO output to verify that the symbolic unit was properly assigned. Check the // RSTRT card for correct parameters. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.

2. Have the log sheet, job stream, and LISTIO output available.

Operator Action: Issue the LISTIO command and check that SYSxxx is properly assigned. If correction is necessary, rerun the job; otherwise, return the LISTIO output to your programmer.

OR01I INSUFFICIENT\_CORE\_SPACE\_FOR\_PROGRAM-CANNOT\_RESTART

Cause: When the checkpoint was taken, the program indicated a need for more main storage space than that available at restart time.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Resubmit the job with a request for sufficient main storage.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet, MAP output, and restart job stream available.
2. Obtain a system dump and have the output available.

Operator Action: Issue the MAP command to check the partition sizes. Allocate as much or more space to the checkpoint partition as was allocated to the original problem partition. If this allocation is not possible, return the MAP output to your programmer.

OR02I PROB\_PROG\_START\_CHANGED - CANNOT\_RESTART

Cause: The starting address of the partition being restarted is not the same as when the checkpoint was taken.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Display the first record of a disk checkpoint and obtain the partition start address from bytes 125-127, or

Display the second record of a tape checkpoint and obtain the partition start address from bytes 113-115.

Resubmit the job with instructions for partition allocation.

If the problem recurs, have the checkpoint record display, log sheet, MAP output, and job stream available to complete your problem determination action.

Operator Action: Issue the MAP command and give the output to the programmer.

OR03I CHKPT NO. xxx NOT FOUND ON  
SYSxxx=cuu

Cause: The checkpoint number specified on the // RSTRT card was not found before two consecutive tapemarks were found, or before the extents were exceeded on the disk, or

The current job name does not match the job name in the checkpoint record.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the following:

1. SYSxxx is properly assigned.
2. The job name is correct.
3. Checkpoint number on the restart card is correct.
4. The correct volume is mounted on the device assigned to SYSxxx.
5. If the device is a disk, that the extents are correct.
6. If the device is a tape, that the tape is properly positioned.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, including the extent cards if the checkpoint records are on disk, available.
2. Obtain a system dump and save the output.
3. Display the checkpoint records and save the output.
4. Have the log sheet available.

Operator Action: Check items 1, 4, and 6 of the programmer action.

OR04I EXTENTS FOR SYSxxx NOT EQUAL  
DEVICE TYPE

Cause: When the file-protect DASD extents were saved, the device type specified was different from the device type now assigned to SYSxxx.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the same device type was assigned that was assigned when the checkpoint was taken.

If the problem recurs, have the program listing, check points, log sheet, LISTIO output, and printer output available to complete your problem determination action.

Operator Action: Issue the LISTIO SYSxxx command and check that the assignments have been made correctly. If correction is necessary, rerun the job. If correction is not necessary, return the LISTIO output to your programmer.

OR05I NO MORE AVAILABLE JIBS

Cause: No more available JIBS could be found while restart was restoring file protect extents.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Use the LISTIO output to check the temporary assignments, then reduce the number of active JIBs by reducing the number of temporary assigns or wait until jobs that have many disk extents finish. Additional JIBs can be created by assembling and cataloging a new supervisor that has more JIBs specified.

If the problem recurs, have the supervisor listing, job stream, and log sheet available to complete your problem determination action.

Operator Action: Execute LISTIO and give the output to the programmer.

OR06I TAPE MARK IN DATA SYSxxx=cuu

Cause: While repositioning SYSxxx, a tapemark was found in the data portion of the tape.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Check that the correct tape is mounted and that it is properly positioned.

If the problem recurs, have the job input, program listing, log sheet, and printer output available to complete your problem determination action.

OR10I UNIT NOT DASD SYSxxx

Cause: The device assigned to SYSxxx, which is specified in the table of DASD devices with volume serial number to be written on SYSLOG, is not a DASD.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the LISTIO output to see that SYSxxx was properly assigned and that it should have been a DASD. Make the necessary corrections and resubmit the job.

If the problem recurs, have the program listing, input necessary to recreate the problem, log sheet, and printer output available to complete your problem determination action.

Operator Action: Issue the LISTIO SYSxxx command and check the assignment. If correction is necessary, rerun the job. If correction is not necessary, return the LISTIO output to your programmer.

OR11I INVALID BB FOR VERIFY SYSxxx

Cause: The cell (bin) number specified in the DASD operator verification table is invalid for the device assigned to SYSxxx.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the LISTIO output for the correct assignment. Examine the source listing to check that the fifth operand of the CHKPT macro (d pointer) is desired, correct, and not being altered during execution. Check the operator verification table to see that the entries consist of two hex bytes for the symbolic unit and two hex bytes for the bin number (valid bin numbers are 0 for 2311, 2314, and 2319, and 0-9 for 2321).

If the problem recurs, have the program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Issue the LISTIO SYSxxx command and check that the assignment has been made correctly. If correction is necessary, rerun the job. If correction is not necessary, return the LISTIO output to your programmer.

OR13I DEVICE NOT A TAPE SYSxxx

Cause: SYSxxx specified for repositioning is not a tape.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the LISTIO output for the correct SYSxxx assignment. Examine the source listing to check that the fourth operand of the CHKPT macro (t pointer) is desired, correct, and not being altered during execution. Check the tape repositioning table for entries of six bytes each, the first two of which are the symbolic unit number and must match the associated CCB (bytes 6 and 7). Make any corrections and resubmit the job.

If the problem recurs, have the program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Issue the LISTIO SYSxxx command and check that the assignment is correct. If correction is necessary, rerun the job; otherwise, return the LISTIO output to your programmer.

OR14A SER xxxxxx SEQxxxx SYSxxx=cuu

Cause: The standard label of the magnetic tape on SYSxxx, the serial number, and the sequence number of the label found are provided for operator verification.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press the EOB/END key to cancel job, or

Mount a new tape and type NEWTAP to continue, or

Type IGNORE to continue with mounted reel.

Default System Action: Job continues with mounted reel.

OR16A SERIAL NO. xxxxxx SYSxxx=cuu

Cause: Volume serial number of DASD device assigned to SYSxxx for operator verification.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or EOB/END key to cancel the job, or

Mount a new pack and type NEWPAC to continue processing, or

Type IGNORE to continue with the mounted pack.

Default System Action: Job continues with mounted pack.

OS00I [JOB or SUB] xxxxxxxx CANCELED

Cause: Error in problem program caused job or subtask termination. This message follows a message explaining the cause of termination.\*

This is probably a user error.

System Action: The system cancels the job.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OS01I [JOB or SUB] xxxxxxxx CANCELED DUE TO OPERATOR INTERVENTION

Cause: Operator typed CANCEL on the console printer-keyboard to cancel a job.

Note: a separate subtask cannot be canceled by the operator. When the operator types CANCEL on the console-typewriter, the job is canceled due to operator intervention, and the subtasks

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.

are canceled due to maintask termination.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OS02I [JOB or SUB] xxxxxxxx CANCELED  
DUE TO PROGRAM REQUEST

Cause: A CANCEL SVC was issued by a problem program, or by a logical transient requested by the problem program.

This is probably a user error.

System Action: The indicated job or subtask is canceled.

Programmer Action: If the CANCEL SVC was not issued by a user written program, a preceding message or a SYSLST message should indicate which problem caused the CANCEL SVC to be issued.

If the origin of the CANCEL SVC cannot be determined, rerun the job with PDAID 'GSVC TRACE.' The output from this job indicates the location from which the CANCEL SVC was issued.

If the problem recurs, have the following available to complete your problem determination action:

- Stand-alone dump
- Program listing
- Log sheet
- Printer output
- GSVC trace.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS03I PROGRAM CHECK INTERRUPTION -  
HEX LOCATION nnnnnn - CONDITION  
CODE m - interruption cause

Cause: Program check interruption caused job termination.

The specific hexadecimal location of the interrupt and the last condition code set, as well as the type of program check, are indicated in the message. The condition codes and interruption causes are summarized on the IBM System/360 Reference Data Card, GX20-1703. (The indicated hex location might be invalid if a program check occurs in the stacker select routine of a MICR program.)

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the program in error and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Program listing
- Linkage editor output
- Stand-alone dump.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS04I ILLEGAL SVC - HEX LOCATION  
nnnnnn - SVC CODE nn

Cause: Refer to Reference 4.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: If the error was caused because a supervisor function was not present, either assemble a new supervisor with that function or delete the function from the problem program. If the error was caused by one of the conditions listed in Reference



4, correct the condition and rerun the job. Also, note that some SVCs may not be issued by a subtask (for example, SVC 03, 20, and 21).

If the problem recurs, complete your problem determination action as follows:

1. Rerun the job with the PDAID program, GSVC Trace, and save the output.
2. Have the stand-alone dump, problem program listing, and supervisor listing available.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS05I PHASE xxxxxxxx NOT FOUND

Cause: Phase named in a FETCH (SVC 1) or LOAD (SVC 4) macro instruction or referred to by an SVC 2 cannot be found.

This is probably a user error.

System Action: The system cancels the job or subtask.

Programmer Action: Verify the phase name on the FETCH or LOAD macro. If necessary, correct the phase name, recompile, and rerun the job, or

Execute a DSERV of the core image library and verify that the phase is cataloged. If necessary, catalog the phase and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a DSERV of the core image library and save the output.
2. Have the program listing, stand-alone dump, and the job stream used to catalog the phase available.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS06I [JOB or SUB] xxxxxxxx CANCELED DUE TO PHASE NOT FOUND

Cause: This message is issued instead of message OS05I when a logical transient is canceled. SUB refers to a subtask.\*

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Rerun the job with the PDAID program, Fetch/Load trace, to determine the name of the missing phase. Execute a DSERV of the core image library directory and check that the phase is missing. If it is missing, catalog the phase in the core image library and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the DSERV of the core image library and the output of Fetch/Load trace available.
2. Have the stand-alone dump, job stream, program listing, log sheet, and printer output available.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS07I PROBLEM PROGRAM PSW nnnnnnnnnnnnnnnnn

Cause: Gives the condition of the problem program immediately before its cancellation. Message OS07I is printed on SYSLST in conjunction with a descriptive cancellation message printed on SYSLOG.

System Action: None, as a result of this message.

Programmer Action: Use this message as an aid when determining the cancellation

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.

cause.

Operator Action: Not applicable.

OS08I LOG. TRANS. AREA CANCELED

Cause: Indicates that the cancelation described by an associated message occurred while a logical transient was executing. Logical transients are less frequently used routines (such as OPEN, CLOSE, EOJ) that are loaded as needed into a reserved area of the supervisor. If one of these routines is active at the time of a problem program cancelation or other abnormal end of job, further details such as Phase name, hex location, SVC code, condition code, and interruption cause are not available. This message is always followed by another CANCEL message.

System Action: The job or subtask referred to in the associated cancel message is canceled.

Programmer Action: Rerun the job with the PDAID program, Fetch/Load trace, to determine which logical transient has been canceled.

If the problem recurs, have the trace output, printer output, and log sheet available to complete your problem determination action.

Operator Action: Not applicable.

OS09I [JOB or SUB] xxxxxxxx CANCELED DUE TO ILLEGAL SVC.

Cause: This message is issued instead of OS04I when a logical transient is canceled and is preceded by message OS08I. SUB refers to a subtask.\*

This is probably a user error.

-----  
\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancelation.

System Action: The job or subtask is canceled.

Programmer Action: Execute the PDAID program, Fetch/Load trace, to determine the failing transient, then execute GSVC trace to determine the illegal SVC. If the transient is non-IBM or user modified, make the necessary corrections.

If the problem recurs, or is caused by an unmodified IBM transient, have the following available to complete your problem determination action:

- Stand-alone dump
- PDAID output
- Log sheet
- Printer output.

Operator Action: To obtain a meaningful main storage dump, use the procedure in Reference 10.

OS10I PROGRAM xxxxxxxx COMPLETED

Cause: Message issued at the normal completion of a foreground program running under single program initiation.

System Action: Processing ends in this partition.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OS11I [JOB or SUB] xxxxxxxx CANCELED DUE TO PROGRAM CHECK

Cause: This message is issued instead of OS03I when a routine in the transient area is canceled. This message is preceded by OS08I. SUB refers to a subtask.\*

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Execute the PDAID program, Fetch/Load trace, to determine the

transient in error. Check for non-IBM or user modified transients that may be in error.

If the problem recurs, complete your problem determination action as follows:

1. Have the Fetch/Load trace output, log sheet, and printer output available.
2. Manually store X'02' in byte X'69' of main storage. Rerun the job and execute a stand-alone dump when a wait state occurs. Have the dump output available.

Operator Action: Not applicable.

OS12I SUB xxxxxxxx CANCELED DUE TO MAIN TASK TERMINATION

Cause: A main task has been terminated with subtasks still attached.\*

This is probably a user error.

System Action: The subtask is canceled.

Programmer Action: Correct the error in the main task or detach the subtasks before the main task goes to ECJ.

If the problem recurs, have a partition dump and the problem program listing available to complete your problem determination action.

Operator Action: Not applicable.

OS13I [JOB or SUB] xxxxxxxx CANCELED DUE TO UNKNOWN ENQ REQUESTOR

Cause: A dequeue has been issued for a resource but a task previously requesting the resource cannot be found because register 0 in the save area has been modified.\*

This is probably a user error.

System Action: The job or subtask is canceled.

Programmer Action: Determine the last task using the resource by executing your program with the PDAID program, GSVC trace. Check for SVC 41 (ENQ) and SVC 42 (DEQ). Correct the coding of the task causing the failure and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.
2. Have the GSVC trace output, log sheet, supervisor listing, and program listing available.

Operator Action: Not applicable.

OS14I [JOB or SUB] xxxxxxxx CANCELED DUE TO CANCEL ALL MACRO

Cause: A subtask issued the CANCEL ALL macro.\*

System Action: The indicated job or subtask is canceled.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT00I LAST TRACK ON RECORDER FILE

Cause: The first record on the last track of the chronological section of the recorder file has been reached.

System Action: For S/360: the recorder file is recycled to permit further recording. For S/370: environmental recording

---

\* If xxxxxxxx is JOB ACCT, see Job Accounting Interface Cancellation.

ends when the file fills. In both cases, processing continues.

Programmer Action: Not applicable.

Operator Action: Schedule the EREP program with the HIST or CLEAR options, as soon as possible to ensure that lost information is kept to a minimum. Issue the ROD command just prior to EREP execution.

OT01I cuu SDR RECORD OVERFLOWED

Cause: The SDR record identified (cuu = channel and unit) has filled at least one of its error counters.

System Action: SDR recording is not done for this device.

Programmer Action: Not applicable.

Operator Action: The operator should schedule the EREP program to display the information on the file and reset all SDR counters.

OT02I SDR AREA FULL cuu

Cause: A request (SVC 43) was issued to add an SDR record (cuu = channel and unit) to the recorder file, but there was no room left to add the record. This message indicates that enough room has not been reserved in the recorder file for all the required SDR records.

System Action: The request to add the record is ignored and processing continues.

Programmer Action: Generate a new supervisor with the correct number specified in the ERRLOG operand of the SUPVR macro.

Operator Action: Not applicable.

OT03I ERROR ON RECORDER FILE AT cchhr

Cause: An unrecoverable I/O error has occurred on the recorder file while accessing the indicated record (cchhr = cylinder, head, record).

This is probably a hardware error.

System Action: The I/O request for this record is ignored and processing continues.

Programmer Action: Not applicable.

Operator Action: If this error message persists, the operator should schedule the EREP program to retrieve the information from the file. It may be necessary to initialize and recreate the file.

OT04I CHANNEL QUE FULL NO RECORD

Cause: When an I/O request for SYSREC was issued, the channel queue was full.

System Action: The record is not written on the SYSREC file, and processing continues.

Programmer Action: If the error message persists, generate a new supervisor with more entries in the channel queue. (Specify a greater number in the CHANQ operand of the IOTAB macro.)

Operator Action: Not applicable.

OT05I RECORDER FILE FULL-RUN EREP

Cause: The chronological section of SYSREC is full.

System Action: Environmental recording is terminated until EREP is executed to purge the recorder file. Other system processing continues.

Programmer Action: Not applicable.

Operator Action: Execute EREP to create a history tape and edited output.

OT06I ECC MAIN STORAGE MCI DISABLED

Cause: The error frequency limit for ECC has been exceeded, and the supervisor has placed the ECC function in the quiet mode. Corrected main storage errors will no longer cause a machine check interrupt; therefore, corrected ECC errors will no longer be recorded on SYSREC.

System Action: ECC is put in the quiet mode, then processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT07I ALL SOFT MACHINE CHECKS DISABLED

Cause: The error frequency limit was exceeded for both HIR and ECC, and the supervisor placed these functions in the quiet mode. Errors corrected by HIR or ECC no longer cause a machine check interrupt; thus, corrected errors are no longer be recorded on SYSREC.

System Action: HIR and ECC are placed in the quiet mode, then processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT08I C40 BUFFER PAGES DELETED = xxx

Cause: A number (xxx) of Model 155 buffer storage pages are unusable. The Model 155 is operating with the rest of the available 256 pages.

System Action: Processing continues. Minor performance degradation can occur because buffer pages have been deleted.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT09I SOFT MACHINE CHECK

Cause: A machine check interrupt has occurred due to a corrected failure.

System Action: The error is recorded on SYSREC, and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT10I CHANNEL ERROR RECOVERY ON cuu

Cause: An I/O operation failure, due to a channel control check or interface control check, was successfully retried.

System Action: The error is recorded on SYSREC, and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

OT11I HARD WAIT CODE = x  
RUN EREP RECORDING SUCCESSFUL  
RUN SEREP RECORDING INCOMPLETE  
RUN SEREP RECORDING UNSUCCESSFUL

Cause: A system failure, indicated by the letter replacing the x in the text, has resulted in an uninterruptable wait state. The system failures are:

- x=A A machine check was unrecoverable.
- B An RMS fetch error occurred.
- C Channel failure on SYSLOG when RMS message, other than OT11I, is issued.
- D A channel check occurred, but the ECSW was not stored.
- E The ERPIB queue is exhausted.
- F Two channels are damaged, or a channel error occurred while RMS was

performing an I/O operation.

G System reset was presented by a channel.

H The reset codes in the ECSW are invalid.

I The channel address of a channel error is invalid.

The second part of the message indicates the success of error recording, and the error editing program that should be executed.

This is probably a hardware error.

System Action: The system enters an unrecoverable wait state.

Programmer Action: Not applicable.

Operator Action: Execute the program indicated by the console error message. SEREP should be executed immediately. If EREP is indicated, you must IPL and then execute EREP. In both cases, hardware maintenance should be called to correct the malfunction.

#### 0T12I UNRECOVERABLE CHANNEL ERROR ON cuu

Cause: A channel control check or interface control check occurred during an I/O operation on the device at address cuu (channel and unit). CCH retry was not successful or the operation could not be retried.

This is probably a hardware error.

System Action: If the "accept unrecoverable I/O error" bit is not on in the user CCB, the job or subtask is canceled. All unrecoverable DASD errors cause job or subtask cancellation. The error is recorded on SYSREC, and system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

#### 0T13A CHANNEL ERROR ON cuu

Cause: A channel control check or interface control check occurred during an I/O operation on the device at address cuu (channel and unit). Manual intervention is required before CCH can retry the operation.

This is probably a hardware error.

System Action: The error is recorded on SYSREC, then the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The card reader or punch must be reloaded and readied. Refer to the applicable hardware operating guide listed in the Preface.

After one of these operations has been performed, press the END key on the printer-keyboard to continue processing, or

Type CANCEL and press the END key on the printer-keyboard to cancel the job or subtask. Normal system processing will continue.

#### 0T14I CLOCK DAMAGED. ALL MODES QUIET.

Cause: The TOD (time of day) clock is damaged. Damage to the TOD clock requires that error recording due to corrected hardware failures be disabled.

This is probably a hardware error.

System Action: HIR and ECC are placed in the quiet mode, then processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

0T151 MCAR REPAIR FAILED

Cause: MCAR has attempted to make a damaged partition usable, and failed. The damaged partition is indicated by the prefix (BG, F1, or F2). Continued processing in this partition may result in sudden system termination.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

0T171 CONTROL STORAGE ECC IN QUIET MODE

Cause: A soft machine check interrupt occurred while control storage was in threshold mode. To prevent system degradation, control storage errors will no longer result in a soft machine check interrupt.

Hardware errors have occurred.

System Action: ECC is set to the quiet mode; then processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

0T181 TIMER DAMAGE

Cause: The interval timer has been incorrectly altered by a machine check. The times logged will be invalid. If time dependent programs are executing, the results will be unpredictable.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Place the console timer switch in the off position. At the end of the next job step, attempt to correct the timer by using the SET CLOCK command.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

0T191 [UPPER|LOWER] BOUNDARY OF xx IS dddddd LENGTH IS lllk

Cause: The supervisor has reallocated partition xx. The referenced boundary is now located at the decimal address indicated by dddddd; the new size is a decimal lll thousand bytes.

Probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Check future jobs for this partition to ensure that they will fit in the new partition size. If the lower boundary was changed, check that future programs are either self-relocating or link edited at the new lower boundary address. Call for hardware support.

0T201 xx NOT USABLE

Cause: Permanent storage failures, in partition xx, have left too little room for continued operation of this partition.

This is probably a hardware error.

System Action: Processing continues in other partitions.

Programmer Action: Not applicable.

Operator Action: Do not attempt to use this partition until the hardware problem has been corrected or the partition reallocated or moved. Call for hardware support.





## 1-Prefix Messages

These messages are issued by Job Control for background and foreground programs run under the batch processing option. Where n is the third digit of the message number, n specifies the field being processed in a Job Control command/statement when the error was detected. It does not necessarily indicate the field in error. The command/statement being processed when the error is detected will always be the last command/statement printed immediately before the error message. For example, if the ASSGN statement

```
// ASSGN SYSRDR,IGN
```

is processed, message number 1A04D is issued. The number 4, corresponding to n, indicates that the fourth field in the ASSGN statement is being processed when this error is detected. In this case, the fourth field is in error. The IGN parameter can never be assigned to SYSRDR (refer to ASSGN command). If the ASSGN command

```
ASSGN SYSRDR,IGN
```

is processed in the same situation, message 1A03D is issued. In this case, the IGN parameter is the third operand.

Responding with the EOB/END key informs Job Control that it should stop reading input from SYSLOG. Responding to a control card error by pressing the EOB/END key causes the error to be ignored and processing to continue.

### 1A0nD INVALID I/O ASSIGNMENT

Cause: Previous ASSGN specified invalid logical or physical unit, or

Previous ASSGN attempted to assign the ignore parameter to SYSRDR or SYSIPT, or

Previous ASSGN attempted to make a temporary assignment to SYSPCH or SYSLST when the system was in the SYSOUT mode, or

Previous ASSGN attempted to make an alternate assignment to

a logical unit currently unassigned, or

Previous ASSGN attempted to make an alternate assignment to SYSOUT when the system was not in SYSOUT mode, or

Previous ASSGN attempted to make a temporary alternate assignment to a logical unit in standard mode, or

Previous ASSGN attempted to make a standard alternate assignment to a logical unit in standard mode, or

Previous // ASSGN attempted to unassign SYSCLB, or

Previous ASSGN attempted to make a temporary assignment for SYSCLB, or

Previous ASSGN attempted to assign SYSCLB to ignore, or

Previous ASSGN attempted to assign SYSCLB to a private core image library currently being condensed in another partition, or

Previous ASSGN attempted to assign SYSCLB to a private core image library already assigned to a partition where a compile, link edit, and go is taking place, or

No SYSFIL support by supervisor.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid assignment is ignored.

Programmer Action: Not applicable.

Operator Action: Issue the LISTIO command for both the physical and logical unit referenced by the assignment that caused the error. Check for any of the following errors:

- An invalid physical or logical unit.
- The IGNORE parameter in an assignment for SYSRDR or SYSIPT.
- A temporary assignment for SYSPCH or SYSLST when SYSOUT is assigned to a disk or magnetic tape.
- An alternate assignment for SYSOUT when SYSPCH and SYSLST are not assigned to the same disk or magnetic tape.
- A temporary alternate to a logical unit in standard mode.

- A standard alternate to a logical unit in standard mode.

Enter a new ASSGN command, or

Wait until the condense is finished, re-enter the ASSGN and resubmit the job (if a condense was in progress in another partition SYSCLB is unassigned), or

Enter CANCEL command to cancel job, or

Type IGNORE or press EOB/END key to ignore the assignment.

#### 1A1nD CONFLICTING I/O ASSIGNMENT

Cause: Previous ASSGN attempted to assign a logical unit to a physical device already assigned to a conflicting function. For example, no physical device can be assigned to both SYSOUT and SYSIN, or

Previous ASSGN attempted to assign a logical unit to a physical device assigned to another program.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid assignment is ignored.

Programmer Action: Use the LISTIO output to correct the assignments.

Operator Action: Enter a new assignment, or

Use the LISTIO command to obtain the current assignments, check the assignment in question, and make the necessary correction, or

Issue the LISTIO command, then type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to ignore the assignment and continue processing.

If the problem recurs, have the log sheet and LISTIO output available to complete your problem determination action.

1A2nD INVALID DEVICE TYPE

Cause: Logical function inconsistent with physical device type. For example, SYSRDR assigned to a printer. This message may occur if CLOSE is issued to a file that is not assigned, or

Previous ASSGN attempted to assign SYSLNK to a device other than a 2311, 2314, or equivalent, or

Previous ASSGN attempted to assign SYSCLB to a device type other than that of SYSRES.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid assignment is ignored.

Programmer Action: Not applicable.

Operator Action: Execute LISTIO to check the assignments, then enter the new assignment, or

Type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to ignore the assignment and continue processing.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump at the time of the failure.
2. Have the job stream, log sheet, and printer output available.

1A3nD NO FREE JIBS

Cause: Too many alternate units or temporary assignments have been made. In SPI mode, refer to HOLD command.

Note: If DASD file protect was specified at system generation, OPEN utilizes JIB space for DASD extent information.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Use the LISTIO command to determine the number of temporary assignments made (the assignment prior to one with the letters "STD" in the "CMNT" column is temporary). To reduce the JIB usage, move the temporary assignments to the physical devices listed as "STD".

If the problem recurs, have the LISTIO output, log sheet, and supervisor listing available to complete your problem determination action.

Operator Action: Use LISTIO command to get listing of assignments, and then

Make permanent assignments for temporary assignments, or

Type in a new ASSGN command, or

Type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to ignore the statement and continue processing.

1A4nD INVALID LOGICAL UNIT SPECIFICATION

Cause: The previous statement contained a logical unit that was invalid. This could result from:

- Format error, or
- The order of the unit is greater than the number of LUB's contained in the class. For example, SYS020 is specified when space has been allocated for 15 logical units, or
- The previous ASSGN attempted to assign SYSLNK, in a foreground partition, with a supervisor lacking private core image library support.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Change the logical unit specification in your program, or

Reassemble the supervisor with additional LUB entries, or

Provide PCIL support in your supervisor.

Operator Action: Issue the LISTIO command and use the output to check if the logical unit specified is valid and then type in the correct logical unit, or

Type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to ignore the statement and continue processing.

If the problem recurs, have the following available to complete your problem determination action:

- Supervisor listing
- Program listing
- System log
- LISTIO output.

#### 1A5nD DEVICE NOT-DEFINED

Cause: The physical unit X'cuu' specified in the previous statement was not added at IPL or system generation.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Check the supervisor listing for the device in question. If the device was included at system generation time, then it was deleted at IPL time. If the device was not included at system generation time, then it must be added at IPL time.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump and save the output.
2. Have the supervisor listing available.

Operator Action: Enter the command with a different physical unit, or

Perform a new IPL and add the physical unit, or

Type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to ignore the statement and continue processing.

#### 1A6nD UNIT CURRENTLY UNASSIGNABLE

Cause: The previous ASSGN attempted to assign SYSLOG while a foreground program was active in the system, or

A UNA command was issued to an active foreground program.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Not applicable.

Operator Action: Issue the MAP command to determine what program is active and which foreground partition is active, then type IGNORE or press EOB/END key to ignore the assignment, and continue processing, or

Type CANCEL to cancel job, or

Wait until foreground job is complete and resubmit assignment.

If the problem recurs, complete your problem determination action as follows:

1. Issue the LISTIO command and have the output available.

2. Have the log sheet and MAP output available.

complete your problem determination action.

#### 1A7nD, INVALID DEVICE STATUS

Cause: The previous ASSGN attempted to assign a physical unit that is in a "down" status resulting from a DVCDN command, or

The previous ASSGN attempted to assign SYSLST or SYSPCH to a file-protected tape, or

The previous ASSGN attempted to assign SYSLNK or SYSCLB to a physical unit that is in a 'down' status resulting from a DVCDN command, or

The device specified in the DVCUP command was never previously placed in a down status by a DVCDN command, or

The previous MTC command specified a physical device assigned to a foreground program.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid command or statement is ignored.

Programmer Action: Not applicable.

Operator Action: Issue a LISTIO command and use the output to determine which cause applies in this case. If you attempted to assign SYSPCH or SYSLST to a file protected tape, either mount a new tape or insert a file protect ring in the mounted tape, and reissue the ASSGN command, or

Type in a new assignment, or

Type IGNORE or press EOB/END key to ignore the statement or command, and continue processing, or

Type CANCEL to cancel job.

If the problem recurs, have the LISTIO output, log sheet, and job stream available to

#### 1A80D, SYSTEM FILE OPEN FAILURE

Cause: The previous assignment failed to open. The label information for the failing system assignment that was supplied with the job does not agree with the VTOC.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid assignment is ignored.

Programmer Action: Use LISTVTOC output and check that the file information supplied with the program matches the VTOC entry. If label information was supplied by OPTION STDLABEL or PARSTD, check the label cylinder entry against the VTOC label information. Submit new label information to correct the failure. Resubmit the assignment and job.

If the problem recurs, complete your problem determination action as follows:

1. Have the LISTVTOC and label cylinder display output available.
2. Have the job stream, log sheet, and printer output available.

Operator Action: The logical unit has been unassigned by the supervisor. Check that the correct volume is mounted and the correct assignment has been made, then type a new assignment, or

Type IGNORE or press EOB/END key to continue processing, or

Type CANCEL to cancel job.

Execute LISTVTOC AND LSERV and return the output to your programmer.

1A9nD SYSTEM FILE NOT CLOSED OR NOT UNASSIGNED

Cause: The previous ASSGN attempted to re-assign a system unit before closing the unit, or

An UNBATCH command was issued while a disk or tape system file was assigned.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Not applicable.

Operator Action: Use the CLOSE command with its optional operand to close and assign the logical unit, or

Unassign the system input tape, or

Type IGNORE or press EOB/END key to ignore the assignment, and continue processing, or

Type CANCEL to cancel job.

1B01A INVALID TYPE SPECIFICATION

Cause: Neither FCB nor UCB were specified in the operation field of the SYSBUFLD control card.

This is probably a user error.

System Action: If SYSLOG is assigned to the console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Enter the correct operation (FCB or UCB), or

Type CANCEL or press EOB/END to cancel the job.

1B02A INVALID SYS-UNIT SPECIFIED

Cause: The SYSxxx parameter was omitted on the SYSBUFLD control card, or specified a unit other than SYSLOG, SYSLST, or SYS000 - SYS221.

This is probably a user error.

System Action: If SYSLOG is assigned to the console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Enter the correct logical unit (SYSxxx), or

Type CANCEL or press EOB to cancel the job.

1B03I PHASE INVALID

Cause: The phase name was more than 8 bytes, or the phase loaded was less than 512 bytes.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the proper buffer load was cataloged under the referenced name.

Operator Action: Check that the proper name was specified on the control card. If the name was correct, execute CSERV and return the output and the job stream to your programmer.

1B0nI INVALID OPTIONAL OPERAND

Cause: One of the optional operands (FOLD, NOCHK, or NULMSG) is incorrectly specified. The number substituted for n indicates the position of the invalid operand (third, fourth, or fifth).

This is probably a user error.

System Action: The invalid operand is ignored and processing continues.

Programmer Action: Not applicable.

Operator Action: Check that the optional operands are spelled correctly and that the operands are valid for the type of load specified (refer to the DOS Operating Guide, GC24-5022).

If the problem recurs, have the job stream available to complete your problem determination action.

1C00A AITN. cuu

Cause: A unit exception has been detected on the specified channel and unit.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the condition is ignored.

Programmer Action: Not applicable.

Operator Action: If unit is a card reader: Refill the reader and type IGNORE or press EOB/END key to continue processing, or

Unassign the logical unit, or

Reassign unit to a tape or disk or another card reader, or

If unit is a tape or disk, type IGNORE or press EOB/END key to read the next record (see Note), or

Mount a new tape or disk and reassign the same unit or assign another unit, or

Type CLOSE SYSxxx (where xxx is the system logical unit). Either mount a new tape or disk and reassign the same unit, or assign another unit. (See Note.)

Note: If operating in a multiprogramming environment, the operator should issue the STOP command, otherwise the console printer-keyboard will be locked and other partitions will be unable to access SYSLOG.

1C10A PLEASE ASSIGN [SYSRDR, SYSIPT, SYSLNK]

Cause:

1. A statement or command was to be read from SYSRDR, which is not assigned, or
2. An INCLUDE statement with no operand was found and SYSIPT is not assigned, or
3. A // OPTION CATAL or LINK was detected and SYSLNK is not assigned.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Not applicable.

Operator Action: Assign [SYSRDR, SYSIPT] and press EOB/END key, or

Assign SYSLNK, resubmit the OPTION statement, and reply EOB/END, or

Type CANCEL to cancel job, or

Type IGNORE or press EOB/END key to continue processing.

If the problem recurs, complete your problem determination action as follows:

1. Execute a LISTIO and save the output.
2. Have the job stream and system log available.

1C20D READ COMMAND NOT GIVEN

Cause: During single program initiation, a response of EOB/END key was given on the console printer-keyboard before issuing a READ command.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Submit READ command and press EOB/END key, or

Continue with initiation statement on SYSLOG.

1C32A PROGRAM NOT FOUND

Cause: The phase name specified on the EXEC command is not in the core image library.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: If the phase name entered by the operator is correct, use the DSERV to determine whether the program is in the core image library. If not, catalog the program or check that the correct SYSRES has been mounted.

If the problem recurs, have the job stream, system dump, DSERV output, and log sheet available to complete your problem determination action.

Operator Action: Correct phase name in EXEC command, or

Check that the correct SYSRES is mounted, or

Reply CANCEL to terminate the job. Execute a DSERV of the core image library, obtain a system dump, and return the output to your programmer, or

Press EOB/END key to continue processing.

Note: If a new SYSRES is mounted, perform IPL.

1C33A PROGRAM NOT FOUND

Cause: The phase name specified on the // EXEC statement is not in the core image library.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check the phase name in the // EXEC statement. If it is correct, use the DSERV output to check that the program is in the core image library. If it is not, catalog the program or ensure that the correct SYSRES has been mounted.

If the problem recurs, have the job stream, DSERV output, system dump, and log sheet available to complete your problem determination action.

Operator Action: Check that the correct SYSRES is mounted or check the name in the // EXEC statement. If correction is possible, reenter the // EXEC statement, or

Reply CANCEL to cancel the job, then execute DSERV for the core image library and obtain a system dump, or

Press EOB/END key to continue processing.

Note: If a new SYSRES is mounted, perform IPL.

1C33I PROGRAM NOT FOUND

Cause: The phase name specified in the // EXEC statement is not in the core image library.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the phase name on the // EXEC card. If necessary, correct the phase name and resubmit the job, or

Execute a DSERV of the core image library to ensure that the phase is cataloged. If necessary, catalog the phase.

If the problem recurs, complete your problem determination action as follows:

1. Execute a DSERV of the core image library and retain the output.



2. Have the job stream, used to catalog the phase, available.
3. Have the job stream, used to execute the phase, available.

Operator Action: Not applicable.

1C4nI NO ROUTINE LINKAGE

Cause: An external interrupt was given and no STXIT was supplied by the problem program for batch processing job, or

The MSG command was given, and no STXIT was supplied by the problem program for the referenced foreground area.

This is probably a user error.

System Action: Processing continues.

Programmer Action: The STXIT macro must be issued before the external interrupt or MSG command. Rerun the job with the PDAID program, GSVC trace, and confirm the presence of the STXIT macro by locating a SVC 20, or

Supply the STXIT macro to handle the interrupt.

If the problem recurs, have the following available to complete your problem determination action:

- GSVC trace output
- Problem program listing
- Log sheet.

Operator Action: Not applicable.

1C5nI PROCESSING ROUTINE ACTIVE

Cause: External interrupt given, and external interrupt routine is currently active, or

MSG command given, and foreground area external interrupt routine is active.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Check that an EXIT has been included for each STXIT.

Operator Action: Check that the MSG command has been issued to the correct foreground partition or that the external interrupt key was used to communicate with the background partition.

1C6nD TIMER NOT AVAILABLE

Cause: The TIMER command was issued and the timer feature is not present, or

The timer feature is now in use by another program area.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid command is ignored.

Programmer Action: Not applicable.

Operator Action: Press EOB/END key to ignore the TIMER command and continue processing, or

Type CANCEL if the timer is required.

1C70D nnnnn RECORDS REMAINING ON [SYSPCH, SYSLST]

Cause: The minimum number of remaining records on the DASD device has been reached or exceeded during the previous job. The DASD device was assigned to the logical unit specified at system generation with SYSFIL or specified at SET time with RCLST or RCPCH. nnnnn tells how many record spaces now remain.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the condition is ignored until the next entry.

Programmer Action: Not applicable.

Operator Action: Submit new EXTENT 's, CLOSE file, and reassign file to the device containing the new extents, or

CLOSE and reassign to non-DASD device, or

Type IGNORE or press EOB/END key to continue processing.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, used to create the extents, available.
2. Have the job stream, associated with the problem, available.
3. Have the SYSLOG and SYSLST output available.

1C8nD END of EXTENT ON [SYSRDR, SYSIPT, SYSPCH, SYSLST, SYSLNK]

Cause: End of extent or filemark has been reached on the specified logical unit.

This is probably a user error.

Note: End of extent on SYSLNK requires that all preceding linkage editor control statements, (including // OPTION CATAL or LINK), be resubmitted.

System Action: The system waits for an operator response.

Programmer Action: Submit new EXTENTS, CLOSE the logical unit, and reassign the file to the device containing the new extents.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a partition dump.
2. Have the job stream that created the extents available.
3. Have the LSERV and LISTIO output, the job stream associated with the problem, and the log sheet available.

Note: If SYSRDR or SYSIPT is assigned to SYSIN, CLOSE must be given for SYSIN.

Operator Action: To temporarily recover, CLOSE the logical unit and reassign the file to a non-DASD device unless the logical unit is SYSLNK. Then, execute LISTVTOC for the volume containing the referenced file and execute LSERV if standard (permanent) labels were used. The output should be returned to your programmer.

1C90D NEW SUPERVISOR CATALOGED. RESPONSE REQUIRED.

Cause: Self-explanatory.

System Action: The system waits for the operator to respond or to IPL the new supervisor.

Programmer Action: Not applicable.

Operator Action: If the supervisor was cataloged to a private core image library (if SYSCLB was assigned to that partition during execution) and the new supervisor is not required for succeeding jobs, reply IGNORE. If the new supervisor is required, unassign SYSCLB and rerun the catalog, or

If a supervisor of the same size was cataloged to SYSRES (SYSCLB not assigned) and is not required for succeeding jobs, reply IGNORE. If the supervisor is of a different size, or if a new supervisor is required, IPL.

Note: If IGNORE is specified and any linkage editing is done, except at +0, the linkage editor uses the supervisor end address of the new supervisor and not that of the one currently executing.

1I00A READY FOR COMMUNICATIONS

Cause: Either PAUSE command was issued, or SYSLOG was in use as the communications device when the last // EXEC was given.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter any valid command or statement.

1I10I ASSIGNMENTS RELEASED

Cause: All assignments to the physical device X'cuu', specified in the DVCDN command, have been released and reset to an unassigned status.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

1I20I JOB xxxxxxxx CANCELED DUE TO OPERATOR INTERVENTION

Cause: The CANCEL command was given to Job Control.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Not applicable.

1I32D AREA NOT ACTIVE

Cause: The attention routine CANCEL command was given, and specifies an inactive area.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Submit CANCEL command for proper area, or

Reply EOB/END key to continue processing if single program initiation is not in progress, or

If single program initiation is in progress, type CANCEL or continue with initiation.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet available.
2. Issue the MAP command and have the output available.

Default System Action: Invalid command is ignored.

1I40D REQUEST CANCEL

Cause: Operator made a second attention request before the first request could be honored.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Respond with CANCEL command for the proper area (BG, F1, F2), or

Press EOB/END key to ignore message. The original request remains pending.

Default System Action: The job is canceled.

1I41D INVALID ADDRESS

Cause: The hexadecimal address specified for the ALTER or DSPLY commands contains invalid characters, is too short or long, or references an area outside main storage.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reenter the entire command including the corrected address, or

Press EOB/END key to terminate the ALTER or DSPLY function.

1I42D ADDRESS WITHIN SUPERVISOR or  
INVALID RESPONSE

Cause: The hexadecimal address specified, for the ALTER command, is within the supervisor area of main storage. If the text of this message is INVALID RESPONSE, something other than IGNORE or EOB/END key was entered in response to the first occurrence of this message (1I42D).

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Press EOB/END key to terminate the ALTER function, or

Type IGNORE to allow the alteration of the supervisor.

1I43D INVALID OPERAND

Cause: An operand of the DUMP command is spelled incorrectly, references an invalid address, or has been omitted.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reenter the entire corrected command, or

Press EOB/END key to terminate the DUMP function.

1I44I [F1 F2] NOT AVAILABLE

Cause: The DUMP command was issued with either foreground 1 (F1) or foreground 2 (F2), but the partition specified has not been allocated or is not active.

System Action: The DUMP command is ignored and processing continues.

Programmer Action: Not applicable.

Operator Action: Check that the operand of the DUMP command is correct.

1I45D INVALID ENTRY

Cause: At least one of the characters, entered after the ALTER command was given, is not 0-9 or a-f. Each pair of characters entered must represent a byte of hexadecimal information.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reenter the correct information, or

Press EOB/END key to terminate the ALTER function.

1I46D INVALID SYSLST

Cause: SYSLST is not assigned to a printer in the specified partition, or the partition does not exist.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reenter the command with a valid SYSLST assignment, or

Press EOB/END key to terminate the DUMP function.

1I50I JOB xxxxxxxx CANCELED DUE TO  
END OF EXTENT ON SYSLNK

Cause: Self-explanatory.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Provide a larger extent for SYSLNK and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump.

2. Have the job stream that created the extents available.
3. Have the job stream associated with the error available.
4. Have the log sheet available.
5. Have the LISTVTOC and LSERV output available.

Operator Action: Execute LISTVTOC for the device assigned to SYSLNK, and execute LSERV. Return the output to your programmer.

1I60A READY FOR COMMUNICATIONS

Cause: The operator pressed the REQUEST key or the DUMP command has finished processing.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter any valid command.

1I70I JOB jobname CANCELED DUE TO CONTROL STATEMENT ERROR

Cause: Control statement error.

System Action: The job is canceled.

Programmer Action: Correct the error described by the preceding SYSLST message.

Operator Action: Not applicable.

1I80I MAGNETIC TAPE ERRORS

Cause: This message identifies the following tape errors:

CH. UNIT PRE RDE WTE ERG NRC  
C uu nnn nnn nnn nnn

where: PRE=Permanent Redundant Read  
RDE=Read Error Entry  
WTE=Write Error Entry  
ERG=Erase Gaps (Record erased after write errors)  
NRC=Noise Record Count

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

1I82A RECORDING COMPLETED

Cause: The operator issued the ROD command and ROD processing is complete.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The system can now be shut down, or the EOB/END key pressed to continue processing.

1I83A RECORDER FILE TOO SMALL

Cause: A request has been given to create the recorder file, but the supplied extents are not large enough for the file.

This is probably a user error.

System Action: The given extent is filled from the SDR partition, and the system enters the wait state.

Programmer Action: Not applicable.

Operator Action: Re-IPL the system and provide sufficient room for the recorder file, or

Re-IPL the system and suppress recording (specify RF=NO in SET command if RMS is not present).

#### 1184A RECORDER FILE OPEN FAILURE

Cause: Label information is not available or SYSREC is not assigned.

This is probably a user error.

System Action: The system enters the wait state.

Programmer Action: Use the LISTVTOC output to check the label information on SYSREC. Use the LISTIO output to check the SYSREC assignment. Check the recorder pack to see that the correct one has been used. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- LISTIO output
- LSERV output
- LISTVTOC output
- Job stream
- Log sheet.

Operator Action: Re-IPL the system and provide the label information or assign SYSREC, or

Re-IPL the system and suppress recording (specify RF=NO in SET command if RMS is not present). Issue the LISTIO command, execute LISTVTOC for SYSREC, execute LSERV, and give the output to your programmer.

#### 1185A CONFLICTING DEVICE TYPES FOR cuu

Cause: The device type in the PUB table does not match the device type in SDR record. The recorder file may be on the wrong system, or the 2314/2319 drive that contains the SDR record is being used as a 2311.

This is probably a user error.

System Action: The system enters the wait state.

Programmer Action: Not applicable.

Operator Action: Re-IPL the system and supply the correct recording file or suppress recording (specify RF=NO in SET command if RMS is not present), or add the proper device type.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump at the time of the failure and have the output available.
2. Have the job stream, log sheet, and printer output available.

#### 1186A ERROR ON RECORDER FILE AT cchhr

Cause: An unrecoverable I/O error has occurred on the Recorder file while accessing the indicated record (cchhr = cylinder, head, record). When processing SDR records (RF=YES specified in SET command), the address specified (cchhr) is the actual disk address, or

An end-of-file was encountered before the extents were exhausted.

This is probably a hardware error.

System Action: The system enters the wait state.

Programmer Action: Not applicable.

Operator Action: If RF=CREATE was specified in the SET command, the operator must re-IPL the system and create the file at a different location or suppress recording (specify RF=NO in SET command if RMS is not present).

If RF=YES was specified in the SET command, the operator must re-IPL the system and schedule the EREP program to retrieve the information from the file and then recreate the file at a different location.

1I87A SDR AREA FULL cuu

Cause: RF=YES was specified in the SET command and during the processing of the SDR file an entry for the SDR file could not be found in the PUB table, or

An attempt was made to add the SDR record to the recording file but there is not enough room.

The probable cause for this message is that the recording file is on the wrong system.

This is probably a user error.

Note: If the recording file is on the wrong system, other PUB table entries (records which could not be found) may have been added to the PUB table before the system issued this message.

System Action: The system enters the wait state.

Programmer Action: Not applicable.

Operator Action: The operator must re-IPL the system and supply the correct Recording File, or suppress recording (specify RF=NO in SET command) if RMS is not present.

1I88I RF=NO IGNORED, YES ASSUMED

Cause: A SET RF=NO command was issued, but the environmental recording function cannot be suppressed if RMS is present.

System Action: The recording function is enabled, and system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

1I89I INVALID CODE

Cause: An invalid IPL response code, sub-system ID, or end-of-day was entered.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

1I90D IPL REASON CODE =

Cause: The Reliability Data Extractor (RDE) function was specified when the DOS supervisor was generated for the System/370 CPU. The operator must specify the reason why IPL has been performed.

System Action: If SYSLOG is a consol printer-keyboard, the system waits for an operator response. Otherwise, the default code (DF) is used.

Programmer Action: Not applicable.

Operator Action: Enter one of the following IPL reason codes:

IPL Reason Code:

CE - IBM CE/SE has control of the system and is not doing user work.

DF - Default

EN - Environmental problem (such as: power, overheating, etc.) caused failure.

IE - IBM hardware or an IBM-supplied program error that did not require an IBM CE/SE.

IM - IBM hardware or an IBM-supplied program error that required an IBM CE/SE.

ME - Media - hardware error caused by a faulty disk pack, reel of tape, cards, etc.

NM - Normal IPL.

OP - Operational problem - operator error or procedural problem.

UN - Unknown - undetermined error.

UP - A user (non-IBM-supplied) program caused the failure.

If a reason code is not entered (only the END key is pressed), then the default, DF, is assumed. However, if an invalid code is entered, message 1I89I is issued and message 1I90D is reissued until a valid response is made.

#### 1I91D SUB-SYSTEM ID =

Cause: The RDE function was specified during the System/370 system generation and an IPL reason code has been entered. The operator must enter a sub-system ID code that best identifies the failing sub-system (if any) that caused IPL.

System Action: If SYSLOG is a consol printer-keyboard, the system waits for an operator response. Otherwise, the default (00) is taken.

Programmer Action: Not applicable.

Operator Action: Enter one of the following sub-system ID codes:

#### ID Codes

00 - Unknown. Must be used with reason codes DF, EN, NM, OP, UN and UP. 00 is the default.

10 - Processor failure (CPU, channel [integrated], storage unit, etc.).

20 - DASD failure in a DASD unit or its associated control unit (2311, 2314, 2841, etc.).

30 - A device without an ID code (such as a paper tape unit) caused the failure.

40 - Magnetic tape failure in a magnetic tape unit or its associated control unit (2401, 2803, 3420, etc.).

50 - Failure in a card reader/punch, a printer, or the associated control unit (2540, 1403, 2821, etc.).

60 - Failure in a magnetic ink character reader (1412, 1419, etc.) or an optical character reader (1285, 1287, etc.).

70 - Teleprocessing failure in a teleprocessing control unit (2701, 2702, etc.).

80 - Video display unit (2260, etc.) or its associated control unit failure.

90 - IBM-supplied Type 1 or Type 2 program (such as the DOS system or one of its components) failure.

91 - IBM Programming Product failure.

If the ID code is not entered (only the END key is pressed), then the default, 00, is assumed. However, if an invalid ID code is specified, message 1I89I is issued and message 1I91D is repeated until a valid response is made.

#### Notes:

1. Always use ID code 00 with reason codes DF, EN, NM, OP, UN and UP.
2. ID codes 10, 20, 30, 40, 50, 60, 70, 80, 90, and 91 should be used with reason codes CE, IE, IM and ME.

#### 1I92D END OF DAY =

Cause: The RDE function was specified during the System/370 system generation and a ROD command has been issued. The operator must respond with Y or N followed by END to indicate if the end of the days processing has been reached.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the default (N) is taken.

Programmer Action: Not applicable.



Operator Action: Enter:

Y if the system is to be shut down, or

N if the system is not being shutdown.

If Y or N is not entered and only the END key is pressed, the default (N) is assumed. However, if an invalid response is made, message 1I89I is issued and message 1I92D is repeated until a valid response is made.

1I93I RECORDER FILE IS nnn% FULL (RUN EREP)

Cause: The recorder file (SYSREC) is nnn percent full. If the recorder file fills, pertinent error information will be lost. (If the file is over 90% full, the RUN EREP comment is also printed.)

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Execute EREP if the file is more than 90% full.

1L04A INVALID LABEL SET ON cuu

Cause: Tape label on the channel and unit specified (cuu) is neither an IBM-standard label nor a tape mark.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator action or response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Mount a new tape and type RETRY to continue processing, or

Type IGNORE to generate a label and continue processing. The label generated is a tape mark, if the first record was not VOL1. It is an HDR1 record

with 72 binary zeros followed by a tapemark, if the first record following the volume record was not HDR1, or

Press EOB/END key to cancel the job.

1L0nD/I INVALID LABEL SYNTAX

Cause: Expiration date less than creation date in DLBL statement, or

In EXTENT statement:

- Type operand in extent and disk label conflict, or
- Type and sequence number operands in EXTENT conflict.

Or

Lower and upper BIN numbers are not equal, or

The upper limit exceeds the maximum allowable amount, or

Lower limit is greater than upper limit, or

For split extents (type 128) lower head number is greater than upper head number, or

Sequence number exceeds 255, or

Lower or upper EXTENT is zero.

Message 1L0nI is issued if the input is from SYSRDR, NOLOG was specified, and a job is in progress.

This is probably a user error.

System Action: If message 1L0nD is issued and SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid command is ignored. If message 1L0nI was issued, the job is canceled.

Programmer Action: Correct the invalid statement and resubmit the job.

Operator Action: Correct invalid statement, or

Type CANCEL to cancel initiation or job, or

Type IGNORE or press EOB/END key to continue processing and ignore the invalid statement.

1L1nD LABEL AREA EXHAUSTED

Cause: The disk label space is not large enough to contain all label sets submitted, or

An SPI foreground program is too large for the allocated partition size, or

Job control has been altered and is now too large to execute in a 10K partition.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Use the LSERV output to help redistribute the label types (STDLABEL, PARSTD, and temporary), or decrease the number of label sets, and resubmit the job.

Note: Secured data sets will not appear in the LSERV output.

If the problem recurs, have the following available to complete your problem determination action:

- LSERV output
- Job stream
- Log sheet
- Printer output.

Operator Action: Type CANCEL to cancel initiation or job, then execute LSERV.

1P0nD INVALID ALLOCATION

Cause: An allocation was attempted that:

- Would cause an active background or foreground area to be reduced or result in less than 10K for batch processing in any partition, or
- Would take core from the background area currently in use for label storage, or
- Would cause the relocation of an active program, or
- ATTN routine allocation was attempted that would decrease the background area.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid command is ignored.

Programmer Action: Not applicable.

Operator Action: Type valid allocation command.

1P1nD AREA NOT AVAILABLE

Cause: A START or BATCH command was given that specified an active partition, or

No foreground area has been allocated, or

The foreground area allocated for a batched job is too small.

This is probably a user error.

System Action: The system waits for the operator to respond.

Programmer Action: Not applicable.

Operator Action: Execute a MAP command and determine if the foreground area is large enough. If a BATCH command is given, this area must be at

least 10K to accommodate job control.

If the foreground area is too small, reallocate main storage, or

Specify another area, or

Type CANCEL to cancel initiation.

If the problem recurs, retain the MAP display to complete your problem determination action.

#### 1S0nD INVALID STATEMENT

Cause: The ROD command was issued and the ERRLOG option was not specified or the Recorder File (SYSREC) has not been opened. The referenced field (n) is invalid (i.e., misspelled, wrong size, non-numeric character in numeric field). This message can also appear if a command is given at the wrong time (e.g., ASSGN issued in ATTN routine) or RF = YES specified in SET command after the first JCB card was processed, or the BATCH command is issued when BJT is not supported.

This message can also appear if the supervisor does not have private core image library support and one of the following occurred:

A // OPTION CATAL or LINK statement was detected from the foreground, or

An assignment for SYSCLB was made for a partition.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Not applicable.

Operator Action: Correct statement or command in error (through console printer keyboard or SYSRDR), or

Type CANCEL to cancel the job, or

Type IGNORE or press EOE/END key to continue processing. (The invalid statement is ignored.)

#### 1S0nI INVALID STATEMENT

Cause: An invalid V.M. (version modification) operand on the CATALR statement was read by job control.

This is probably a user error.

System Action: The job is canceled after the message is issued to SYSLOG.

Programmer Action: Correct the CATALR statement in the job input and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream used to catalog the module.
- Log sheet.

Operator Action: Not applicable.

#### 1S1nD STATEMENT OUT OF SEQUENCE

Cause: Label statement submitted in wrong order, or

Extent sequence number out of order, or

PHASE, ACTION, ENTRY, or INCLUDE encountered without a preceding LINK or CATAL option, or

// EXEC LNKEDT encountered and no // OPTION LINK or CATAL, or

Incomplete label set when a /& was encountered while in STDLBL mode, or

Label set for a DA or IS file is incomplete when a // EXEC statement is encountered, or

// EXEC encountered while in either STDLBL or USRLBL mode, or

// OPTION LINK encountered when the CATAL option was previously specified, or

Label type not DASD, SD, or TAPE while operating in STDLBL mode, or

More than one extent submitted for a file with filename=IJSYSxy, where x is numeric, or

// EXEC encountered after an Autotest ./ ATEOF card. In this case, n = 3, or

A CATALR preceded a // EXEC RPG, or

During FORTRAN, COBOL, or PL/I compilation, serious errors were detected and the system does not allow linkage editing, or

An OPTION LINK or OPTION CATAL immediately preceded a CATALR statement during a compilation. This is invalid and results in cancelation of the job.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the invalid statement is ignored.

Programmer Action: Check the statement(s) in error, check for proper sequencing, and resubmit the job.

Operator Action: Correct statement in error, or

Type CANCEL to cancel the job, or

Type IGNORE or press EOB/END key to ignore the invalid statement and continue processing.

## 2-Prefix Messages

### Card Format 1: Linkage Editor Input Cards

- Each card must have a 12-2-9 code in column 1.
- The valid linkage editor input card types are:

ESD, SYM, TXT, RLD, REP, and END (columns 2-4)

The format of the linkage editor input card as it appears on SYSLST in an error message is:

<u>Print Positions</u>	<u>Contains Card Image Columns</u>
8-15	73-80 (identification) in EBCDIC
17-19	2-4 (card type - ESD, SYM, TXT, RLD, REP, END) in EBCDIC
21-26	6-8 (assembled origin) in hexadecimal
28-31	11-12 (number of bytes in card image) in hexadecimal*
33-36	15-16 (ESID number) in hexadecimal

\* For an ESD card, the number of bytes remaining to be processed.

The remainder of the line depends on the type of card image.

If the card type is not ESD, print positions 38-117 contain information from card columns 17-52. These positions are printed in hexadecimal in nine blocks of four bytes each (eight characters) separated by one blank.

If the card type is ESD, print positions 38-111 contain three fields of ESD information from card columns 17-64. Each field is 24 print positions that contain 16 card columns of information.

Print Positions			Card Image Columns		
field 1	field 2	field 3	field 1	field 2	field 3
38-45	63-70	88-95	17-24 ESD item name in EBCDIC	33-40	49-56
47	72	97	25 ESD type in EBCDIC	41	57
49-54	74-79	99-104	26-28 assembled origin in hexadecimal	42-44	58-60
56-61	81-86	106-111	30-32 length/ESID number in hexadecimal	46-48	62-64

Card Format 2: REP (User Replace) Card Format

Card Columns

- 1 Multiple punch (12-2-9). Identifies this as a loader card.
- 2-4 REP -- Replace text card.
- 5-6 Blank.
- 7-12 Assembled address of the first byte to be replaced (hexadecimal). Must be right justified with leading zeros if needed to fill the field.
- 13 Blank.
- 14-16 External symbol identification (ESID) number of the control section (SD) containing the text (in hexadecimal). Must be right justified with leading zeros if needed to fill the card.
- 17-70 From 1 to 11 4-digit hexadecimal fields separated by commas, each field replacing two bytes. A blank indicates the end of information in this card.
- 71-72 Blank.
- 73-80 May be used for program identification.

Card Format 3: Linkage Editor Control Statements

- Each card must have a blank in column 1.
- The valid linkage editor control statements are:

PHASE, INCLUDE, ENTRY, and ACTION

The format of the linkage editor control statement as it appears on SYSLSST in an error message is:

Print positions 8-87 contain the card image columns 1-80 in EBCDIC.

Note: If the linkage editor input is from the relocatable library:

- ESD input has a maximum of eight fields of information. Only the first three fields appear on SYSLSST.

- TXT input has a maximum of 34 fields of information. Only the first nine fields appear on SYSLST.

Therefore, the fields in error may not appear on SYSLST. An RSERV of the module in error may be necessary to determine the problem.

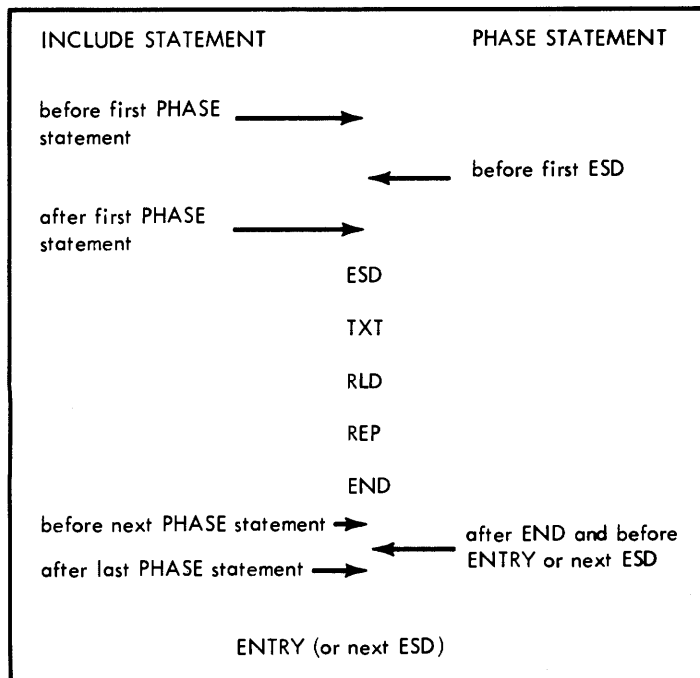
The linkage editor control statement format is shown in Figure 19.

Name	Operation	Operand
blank	PHASE	name,origin[,NOAUTO]
blank	INCLUDE	[modulename] [(namelist)]
blank	ENTRY	[entrypoint]
blank	ACTION (Note)	{CLEAR,MAP,NOMAP, NOAUTC,CANCEL,F1,F2}

Note: If multiple operands are required for ACTION, they may be placed on separate statements or on one statement separated by commas.

Figure 19. Linkage Editor Control Statement Format

PHASE and INCLUDE statements may be present on SYSRDR, SYSIPT, or in the relocatable library. Figure 20 shows the possible placement of the PHASE and INCLUDE statements.



Note: INCLUDE statements within modules in the relocatable library must precede the ESD statement for the module.

Figure 20. Placement of PHASE and INCLUDE Statements

2100I Content of statement in error.

Cause: Invalid input card type. Valid input cards can be identified by an ESD, SYM, TXT, RLD, REP, or END in columns 2-4.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. If the invalid input card is not one of these cards, remove the card, recompile, and linkedit the program. If the invalid input card is a replace card, verify the letters REP in columns 2-4 and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2101I Content of statement in error.

Cause: Invalid operation in control statement. Valid control statements are PHASE, INCLUDE, ENTRY, and ACTION. A CATALR statement will not cause an error, but will be ignored by the linkage editor.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Verify the card format.

Some probable errors are:

- Misspelled operation.
- Operation field beginning in column 1.
- Cards out of order in the job stream.

Correct the statement in error and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2102I Content of statement in error.

Cause: Non-decimal or ncn-hexadecimal character in decimal or hexadecimal field.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to the applicable card format and compare this with the output on SYSLST. Some probable errors are:

- Non-hexadecimal characters in the assembled address, the ESID, or data fields of the REP card.
- Non-hexadecimal characters in the origin field of the PHASE card when hexadecimal format is used.
- Non-decimal characters in the origin field of the PHASE card when decimal format is used.

Correct the statement in error and resubmit the job.



If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2110I Content of statement in error.

Cause: Invalid or missing field limiter on control statement.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Some probable errors are:

- Embedded blanks.
- Extraneous commas.
- A missing apostrophe when using the hexadecimal format on a PHASE card.
- Missing commas.
- Missing parenthesis on the INCLUDE cards.

Refer to Figure 19 to verify card formats, correct the statement in error, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2111I Content of statement in error.

Cause: An operand field is greater than the maximum length of 8 on a user prepared control statement.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Correct the operands that exceed the maximum length of 8 and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2112I Content of statement in error.

Cause: An operand field is missing in a control statement.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Some probable errors are:

- An operand missing in a control statement.
- An extraneous comma after the last operand in a control statement.

Refer to Figure 19 for control statement formats, correct the statement in error, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2113I Content of statement in error.

Cause: Control statement extends beyond column 71, or a REP card, excluding identification information, extends beyond column 70.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST if a control statement is in error, or refer to Card Format 2 for the REP card format, correct the statement in error, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2114I Content of statement in error.

Cause: Submodular namelist is too long. The total number of control sections in a namelist cannot exceed 5 on one INCLUDE card.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Correct the statement in error and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2115I Content of statement in error.

Cause: The third operand on the PHASE card is invalid. NOAUTO is the only valid operand.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Some probable errors are:

- A missing third operand or missing comma after the second operand.
- A misspelled operand.

Correct the statement in error and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2116I Content of statement in error.

Cause: Control statement present between first ESD and END statements of a module.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. Some probable errors are:

- The job stream is out of order.
- A section of the object deck is missing (that is, no END card).

Correct the job stream and resubmit the job, or recompile the problem program.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2120I Content of statement in error.

Cause: Phase name duplicated.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Also, refer to the Linkage Editor Map listing of PHASE cards and rename one of the duplicate phase names.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2121I Content of statement in error.

Cause: Phase name lower in sequence than \$\$A, or phase name begins with an \*.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. One probable error is that invalid characters were used in the phase name. Correct the statement in error and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job

control cards, and object modules available.

2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2122I Content of statement in error.

Cause: Symbol or phase name designated in origin field of the phase card was not previously defined.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. The probable errors are a misspelled phase origin or no previous definition of the phase origin. If the phase origin was not previously defined, check whether the job stream is out of order (the phase origin must be defined before the PHASE card is encountered). Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2123I Content of statement in error.

Cause: Previous phase processed contained no valid storage assignment. This may be because the phase card is out of order or TXT cards were missing.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. Refer to Figure 20 for the proper placement of control cards. Some probable errors are:

- The PHASE card placed after the associated INCLUDE card.
- The PHASE card after the associated object deck.
- A missing or incomplete object deck.
- A missing INCLUDE card.

Reorganize the job stream and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable

2124I Content of statement in error.

Cause: Phase origin is negative.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless

ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. The probable errors are: the symbolic origin address is too low, or the negative relocation factor is too large, causing the phase origin to be less than zero. Correct the second operand in the PHASE card or change the address of the symbolic origin.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2125I Content of statement in error.

Cause: The linkage editor will not accept a PHASE statement in an auto-linked relocatable module.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Use RSERV to punch the module that precedes the auto link statement that caused the error message. Remove the PHASE card(s) and recatalog to the relocatable library. Resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Linkage editor map
- Log sheet

- Job control cards
- Object modules.

Operator Action: Not applicable.

2130I Content of statement in error.

Cause: Relocatable library not present.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Specify that the correct system pack be used when the job is resubmitted. If a private relocatable library is used, check the assignments by using the LISTIO output.

If the problem recurs, have the following available to complete your problem determination action:

- Linkage editor map
- Log sheet
- Job control cards
- Object modules.

Operator Action: Execute LISTIO for the canceled partition to see that SYSRLB is assigned, if it is required.

2131I Content of statement in error.

Cause: Module requested by INCLUDE statement not present in relocatable library.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Use the DSERV output to confirm that the module is missing. Catalog the requested module in the relocatable library and resubmit the job. If a private

library was used, check the assignments by using the LISTIO output.

Operator Action: Execute LISTIO for the canceled partition and a DSERV of the relocatable library directory, then give the output to the programmer.

2132I Content of statement in error.

Cause: More than five levels of nested INCLUDEs were attempted.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSIST. Reorganize the program to eliminate nested INCLUDEs in excess of five and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2133I Content of statement in error.

Cause: The linkage editor is processing an INCLUDE statement with a namelist (second operand) and has encountered a second INCLUDE statement with a namelist operand. The linkage editor cannot handle the second submodular INCLUDE.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless

ACTION CANCEL is specified to cancel the job.

Programmer Action: Restructure the job stream to eliminate the nested submodular INCLUDE.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2135I Content of statement in error.

Cause: ACTION statement has invalid operand.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSIST. Only one operand is valid on an ACTION statement. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2136I Content of statement in error.

Cause: ACTION MAP specified, but SYSIST was not assigned.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: If the job is canceled and SYSIST cannot be assigned, remove the ACTION statement or the CANCEL parameter and resubmit the job. This will allow the job to go to completion without a linkage editor map, but will permit diagnosis using the console printer-keyboard output.

NOTE: ACTION NOMAP is the default parameter if SYSLST is unassigned.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: If possible, assign SYSLST and rerun the job.

#### 2140I Content of statement in error.

Cause: The ESD type is other than section definition (0), label definition (1), external reference (2), private code (4), or common (5), or

The name field of the private code is not blank.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Recompile and link edit the program, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. Have the source deck and program listing available.

Operator Action: Not applicable.

#### 2141I Content of statement in error.

Cause: Duplicated ESID number:

- No END statement in last module, or
- Duplicate ESD cards, or
- Extraneous ESD card.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Recompile and link edit the program, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. Have the source deck and program listing available.

Operator Action: Not applicable.

#### 2142I Content of statement in error.

Cause: An entry point is within an unnamed control section or unnamed COMMON.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST.

Correct the source coding by naming the CSECT or COMMON that has the entry point, then recompile the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. Have the source deck and program listing available.

Operator Action: Not applicable.

2143I Content of statement in error.

Cause: At least one of the entry point labels specified in the indicated statement is duplicated.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 3 and compare this with the output on SYSLST. The probable errors are:

- An actual duplication of the entry point. From the link edit map, determine the duplicate entry point label or labels. Refer to the Note in Card Format 3. Eliminate the duplication and reassemble and link edit the job. The same error message will recur if all duplications are not resolved.
- A // EXEC card missing between INCLUDEs.

Correct the job stream and link edit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.

2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2144I Content of statement in error.

Cause: An ESID number is invalid or the linkage table and control dictionary have overlapped due to insufficient main storage.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Either request a larger partition or reduce the number of phases to be link edited. When the necessary corrections have been made, resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Issue the MAP command and see if a larger partition can be allocated.

2145I Content of statement in error.

Cause: Origin of control section not on a doubleword boundary.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Recompile and link edit the program, and resubmit the job.



If the problem recurs, have the following available to complete your problem determination action:

- Linkage editor map
- Log sheet
- Job control cards
- Object modules
- Source deck
- Program listing.

Operator Action: Not applicable.

2146I Content of statement in error.

Cause: COMMON has the same label as a named control section or an entry point label.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Rename the COMMON, control section, or entry point and recompile and link edit the program.

If the problem recurs, have the following available to complete your problem determination action:

- Linkage editor map
- Log sheet
- Job control cards
- Object modules
- Source deck
- Program listing.

Operator Action: Not applicable.

2147I Content of statement in error.

Cause: ESD entry point label does not belong to a defined control section.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. The probable error is a missing ESD card. Recompile and link edit the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2150I Content of statement in error.

Cause: The load address in the TXT or REP card is outside the assembled CSECT.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: The object deck is probably bad. The program should be recompiled and link edited.

If the problem recurs, have the following available to complete your problem determination action:

- Linkage editor map
- Log sheet
- Job control cards
- Object modules
- Source deck

- Program listing.

Operator Action: Not applicable.

2151I Content of statement in error.

Cause: A delimiter, other than a blank, is on a REP card.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 2 and compare this with the output on SYSLST. The probable errors are:

- Missing commas between the data fields on the REP card.
- A character, other than a comma, used to separate the REP card data fields.
- A data field longer than four digits.
- A blank has not been used to delimit data fields on the REP card.

Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2155I Content of statement in error.

Cause: The ESID number does not belong to a defined control section.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. Refer to Card Format 2 for the REP card format. If the REP card is in error, correct the ESID field. If any other card is in error, recompile and link edit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2156I Content of statement in error.

Cause: Invalid format of RLD card.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. Correct the error, recompile and link edit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the Linkage Editor Map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2158I Content of statement in error.

Cause: END statement should contain the length of the control section, but does not.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: This error may possibly be ignored and the job should be allowed to execute. If the execution fails, recompile and link edit the program. If the execution is successful, ignore the message.

If recompilation and link editing do not correct the problem, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. Have the source deck and program listing available.

Operator Action: Not applicable.

2170I Content of statement in error.

Cause: ESID number not previously processed. This error could be the result of previous errors.

This is probably a user error.

System Action: The invalid statement is ignored and processing continues, unless ACTION CANCEL is specified to cancel the job.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. The probable errors are:

- An incorrect ESID number of a REP card.

Refer to Card Format 2 for the REP card format. Determine the ESID number from the external symbol dictionary, correct the REP card, and resubmit the job.

- Previous errors such as duplicate entry point labels or invalid input statements.

Perform the corrective action for the previous errors and resubmit the job.

Operator Action: Not applicable.

2181I LINKAGE EDITOR CANNOT CONTINUE

Cause: No valid storage assignment in the final phase of the object module. This may be due to a PHASE card out of order or to missing TXT card(s).

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Refer to Card Format 1 and compare this with the output on SYSLST. Refer to Figure 20 for the proper placement of control cards. The probable errors are:

- The PHASE card after the associated INCLUDE, rather than before it.
- The PHASE card after the associated object deck, rather than before it.
- The entire, or portions of, the object deck missing.
- The INCLUDE card is missing.
- Reorganize the job stream and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.

2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Check SYSLST output for additional information.

2182I LINKAGE EDITOR CANNOT CONTINUE

Cause: No END statement encountered before ENTRY statement.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Refer to Figure 20 for the placement of control statements. The probable errors are:

- A missing portion of the object deck.
- The ENTRY statement out of order.

Correct the placement of the ENTRY statement or recompile the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

2183I LINKAGE EDITOR CANNOT CONTINUE

Cause: The linkage editor root phase is executing in a partition that was allocated less than 10K. Partition size is determined by subtracting the beginning partition address from the ending partition address (both addresses are contained in the communications region for the partition).

System Action: The job is canceled without further processing.

Programmer Action: Not applicable.

Operator Action: Issue the MAP command to check current allocations, then allocate a minimum of 10K to the applicable partition and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump of all partitions.
2. Have available the job stream during which the error occurred.
3. Have available the console log sheet.
4. Have available the printer output.
5. Have available the current supervisor assembly listing.

2184I LINKAGE EDITOR CANNOT CONTINUE

Cause:

1. If executing in the foreground, SYSCLB is not assigned or
2. A private core image library has been assigned during a link edit run; however, the same private core image library is currently assigned to another partition. In both partitions the private core image library assigned is on the same device with the same starting cylinder.

System Action: The job is canceled without further processing.

Programmer Action: Not applicable.

Operator Action: Cause 1 - assign SYSCLB to the partition. Cause 2 - If the same private core image library is required

as that being used in the other partition, wait until the other job is finished, unassign SYSCLB in the other partition, and resubmit the job. Otherwise, assign a different private core image library and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand-alone dump of all partitions.
2. Re-IPL and list the VTOC of any device, currently mounted, on which a private core image library resides.
3. Have available the job streams for all partitions currently operating.
4. Have available the console log sheet.
5. Have available the printer output.
6. Have available the current supervisor assembly listing.

#### 2185I LINKAGE EDITOR CANNOT CONTINUE

Cause: An error occurred during the linkage editing of a \$ phase.

System Action: The job is canceled.

Programmer Action: Review the error output on SYSLST. Correct the errors and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. If the program was compiled again, have the source deck and program listing available.

Operator Action: Not applicable.

#### 2191I LINKAGE EDITOR CANNOT CONTINUE

Cause: End of file (tape) or extents exceeded (disk) on SYS001, or

SYS001 not assigned to disk or tape.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: If the extents were exceeded when SYS001 was assigned to a disk, increase the extents and resubmit the job.

Operator Action: Assign SYS001 to a disk or magnetic tape and rerun the job, or

Mount a full reel of tape and rerun the job.

#### 2192I LINKAGE EDITOR CANNOT CONTINUE

Cause: End of librarian work area. Too many phases to process or the phase being processed exceeds the maximum number of bytes allowed.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Divide the program into less than 120 phases or decrease the phase size, and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the linkage editor map, log sheet, job control cards, and object modules available.
2. Have the source deck and program listing available if the program was compiled again.

Operator Action: Not applicable.

#### 2193I LINKAGE EDITOR CANNOT CONTINUE

Cause: Core image library space exceeded.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check for unnecessary phases, delete them, condense the library, and resubmit the job, or

Allocate a larger library and resubmit the job.

If the problem recurs, have the DSERV output, job control cards, and object modules available to complete your problem determination action.

Operator Action: Execute DSERV to determine the status of the core image library blocks deleted. If, in the directory, Library Blocks Deleted is not at 00, condense the library and retry the catalog.

#### 2194I LINKAGE EDITOR CANNOT CONTINUE

Cause: Disk error - an invalid no-record-found condition occurred on SYSRES, SYSLNK, or a private library.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: If possible, use another disk drive or disk pack and rerun the job.

#### 2195I LINKAGE EDITOR CANNOT CONTINUE

Cause: Multiprogramming in process while attempting to linkage edit and catalog a new Supervisor.

This is probably a user error.

System Action: The BG catalog is canceled, then normal system processing continues under the current supervisor.

Programmer Action: Not applicable.

Operator Action: If the foreground partitions are operating in SPI mode, wait for them to finish and rerun the job. If the foreground partitions are operating in batched job mode:

1. Issue a PAUSE at EOJ command for F1 or F2.
2. Issue the UNBATCH command for each operating partition.
3. Rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the MAP command and have the output available.

#### 2197I LINKAGE EDITOR CANNOT CONTINUE

Cause: An end-of-file record was found while reading or writing on SYSRES, SYSRLB, SYSLNK, SYS001, or SYS003.

Possible causes for the error are: changing the SYSRES packs and not performing an IPL from the new pack; or a missing (expired or deleted) Format 1 label for SYSRES, which allows data files to be written on SYSRES.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: The probable errors are:

- The relocatable module specified in an INCLUDE card had an end of file record in the library area.
- The core image library contained an end of file record between the last phase cataloged and the end of the library.

Restore the affected pack from the backup storage medium and update to the current level (it

is possible that the backup is also bad).

After taking corrective action, resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Extents for the library in error.

Operator Action: Not applicable.

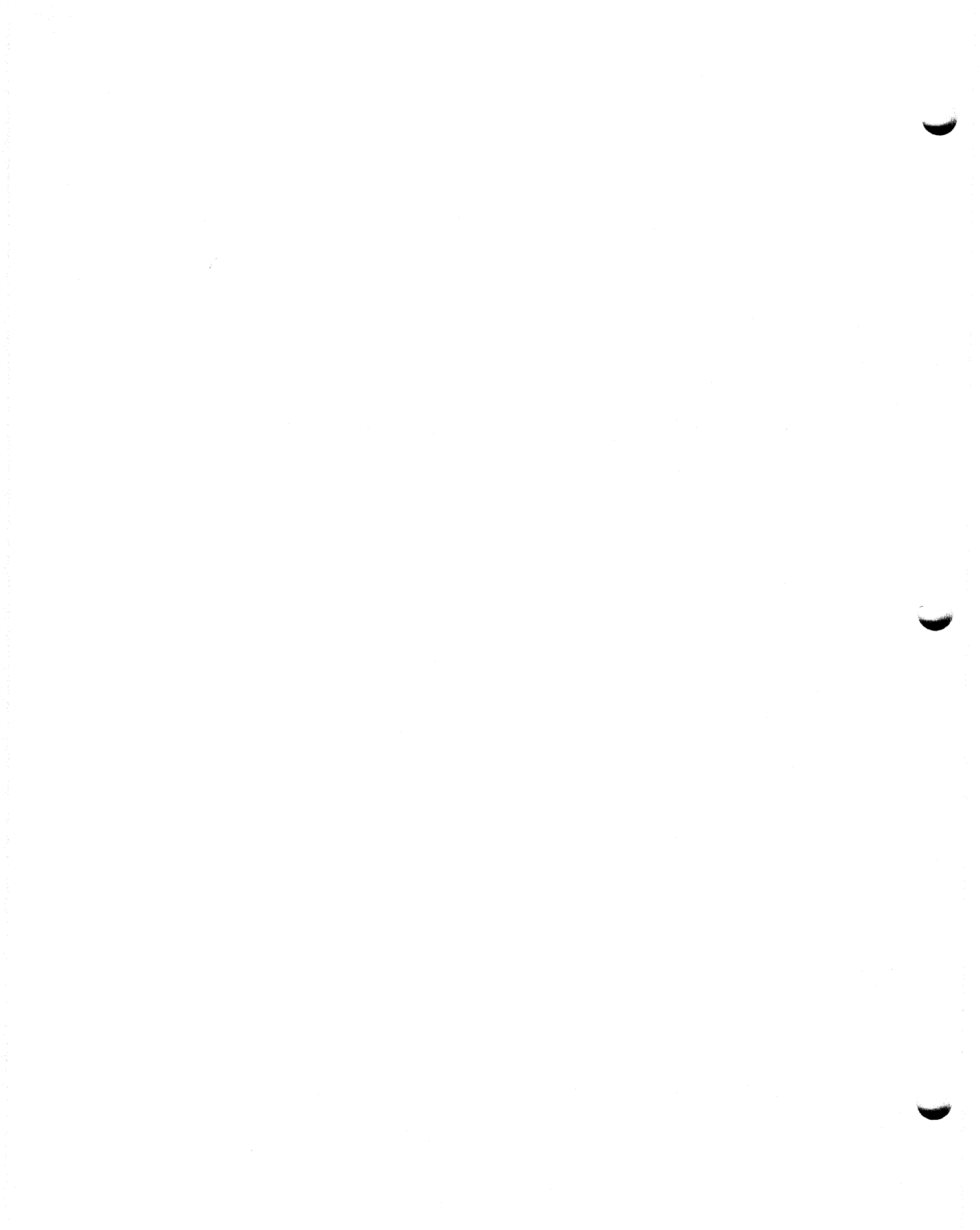
2199I ERROR HAS OCCURRED DURING LINKAGE EDITING

Cause: Printed on SYSLOG if any errors 2100I through 2170I have occurred.

System Action: These messages appear on SYSLST and processing continues. If CANCEL is specified, the job is canceled.

Programmer Action: Review the errors printed on SYSLST.

Operator Action: Not applicable.





## 3-Prefix Messages

### 3C30I STATEMENT OUT OF ORDER

Cause: While processing a private library, a wrong type of COPY statement was encountered. For example, a NEWVOL statement followed by a COPYC statement, or two ALLOC or NEWVOL statements were separated by any other control card, or two MERGE cards were not separated by a COPY card.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream and log sheet available to complete your problem determination action.

Operator Action: Not applicable.

### 3C66I FILE [IJSYSRS,ISYSSPR,IJSYSPS IJSYSPC] NOT DEFINED ON [SYS003,SYS002,SYS001,SYS000]

Cause: The specified file has not been defined on the proper logical unit. (For example, the file IJSYSRS has been defined, but not on SYS002.)

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the file definition card and resubmit the job.

If the problem recurs, have the job stream and log sheet available to complete your problem determination action.

Operator Action: Issue the LISTIO command and retain the output.

### 3C67I [SYS000,SYS001,SYS002,SYS003, SYSSLB,SYSRLB,SYSCLB] UNASSIGNED OR ASSIGNED TO WRONG PHYSICAL UNIT

Cause: SYS002 is assigned to same pack as SYSRES, or

[SYS000,SYS001,SYS002,SYS003, SYSSLB,SYSRLB,SYSCLB] are unassigned or assigned to a different device type than SYSRES.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the assignment and rerun the job.

If the problem recurs, have the following available to complete your problem determination action:

- LISTIO output
- Printer output

- Log sheet
- Job stream.

Operator Action: Execute LISTIO to determine the device assignments. Then, correct the assignment and rerun the job.

3E10I I/O ERROR ON RECORDER FILE AT cchhr

Cause: An unrecoverable I/O error occurred on the recorder file while executing EREP, or the record read was not in the correct format. The error record is skipped. If the EREP program is subsequently canceled for any reason, the status of the recorder file will be:

SDR records -- Each SDR record printed is reset to zero. SDR records that have not been printed can be printed by executing EREP again.

Chronological records -- OBR, MCRR, or MCAR/CCH 2715, BTAM, and QTAM records are not set to zero until all records in this section have been printed and CLEAR has been specified. If all records have not been printed, executing EREP again will print all records.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: When EREP is completed, IPL with RF=CREATE. If this message persists, the SYSREC file should be moved or the pack initialized and the files rebuilt.

3E11D ENTER OPTION SOURCE, C=CARD, S=CONSOLE, N=NONE

Cause: The EREP program is requesting that the operator indicate the device to be used for EREP option entry.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The responses that indicate input sources are:

- C - SYSIPT
- S - SYSLOG, or

A response of N, or EOB or the END key will make EREP edit and print SYSREC, or

A response of CANCEL will cancel the EREP program.

3E12D INVALID OPTION

Cause: An invalid EREP option statement has been read from either SYSLOG or SYSIPT. Some common errors are misspelled words, invalid syntax, duplicate option cards, more than four parameters, and unsupported options.

This is probably a user error.

System Action: If input was from SYSIPT, the first 40 bytes of the card in error are printed preceding this message. In either case, the invalid statement is ignored, and the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Remove, correct, and replace the card in error, or reenter the option in error, and press EOB/END key, or

Press EOB/END key to ignore the invalid statement and continue reading from SYSIPT, or to indicate that there are no more options to be entered on SYSLOG, or

Respond CANCEL, then press EOB/END key, to cancel the EREP program.

3E13I INVALID RECORD ON RECORDER FILE  
AT cchhr

Cause: The EREP history function has been requested, but System/360 and System/370 records both appear on the recorder file. This message appears on SYSLST each time a System/360 record is encountered.

System Action: The System/360 record is not recorded on the history tape, and processing continues.

Programmer Action: An effort should be made to avoid this situation because printing this message slows the EREP program.

Operator Action: Not applicable.

3E14A ENTER OPTION

Cause: The EREP program is requesting that the operator enter EREP execution options.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter the word OPTION, a space, and one or more options and parameters. The options and parameters are separated by commas and do not contain imbedded blanks. The options and parameters are:

- CLEAR - Edits, prints, and clears SYSREC.
- EDIT - Edits and prints SYSREC.
- HIST - \*Updates the System/370 history tape, then edits, prints, and clears SYSREC.
- HIST,NEW - \*Creates the System/370 history tape, then edits, prints, and clears SYSREC.
- HIST,2 - \*Updates the System/370 history and RDE tapes, then edits, prints, and clears SYSREC.

- HIST,NEW,2 - \*Creates the System/370 history and RDE tapes, then edits, prints, and clears SYSREC.
- HIST,UPNEW - Updates the history or RDE tape, then creates a history or RDE tape, then edits, prints and clears SYSREC. Both EREPNEW and EREPUP TLBL cards are required for this operation.

\*An ASSGN and TLBL card or command must precede the EXEC EREP card or command if these options are to be used. The magnetic tape unit for the history or RDE tapes must be assigned to SYS009. The TLBL filenames are EREPNEW for creating and EREPUP for updating the tape.

When the last option or parameter is given, press EOB/END key.

You can respond CANCEL, to this message, to terminate EREP.

3E15A TAPE FULL, MOUNT NEW TAPE, TYPE  
GO

Cause: End of reel has been detected on the history or RDE tape.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount a new tape and respond GO to continue the history file creation, or

Press EOB/END key to terminate the history option.

3E16A MOUNT SECOND TAPE, TYPE GO

Cause: The first history or RDE tape, in a multiple update or creation, has been processed and EREP is ready to process the second tape.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount the next tape to be processed and type GO and press EOB/END key, or merely press EOB/END key, to continue processing, or

Type CANCEL and press EOB/END key to terminate EREP.

3E18I INVALID RECORDS, HISTORY FILE NOT WRITTEN

Cause: The SYSREC file did not contain any System/370 records.

System Action: The history option is terminated, and processing continues.

Programmer Action: Not applicable.

Operator Action: Check that the correct SYSREC file was used with this option.

3E20I MORE THAN FOUR DEVICE ADDRESSES. ONLY FIRST FOUR SUMMARIZED

Cause: More than four 2715 device addresses (cuu) have been encountered during error logging. EREP summarizes only the first four device addresses to request error logging.

Note: If you wish to summarize other than the first four device addresses encountered by EREP, you must do the summarization manually, using the information on the error listing for all 2715 device addresses.

System Action: The message is issued on SYSLST only, and processing continues. EREP error summarization is done on the first four device addresses encountered. Error information from all 2715 device addresses was previously printed in the order in which it was received.

Operator/Programmer Action: Not applicable.

3E22I INCOMPLETE DATA RECORDING AT TIME OF ERROR

Cause: The error just edited and printed was incomplete. The applicable recording function failed to write a complete set of error records on SYSREC.

System Action: Printed on SYSLST only and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3E25I INVALID RESPONSE

Cause: An invalid response was made to the error message previously issued.

System Action: The invalid response is ignored and the applicable error message is reissued.

Programmer Action: Not applicable.

Operator Action: Enter the correct reply to the applicable error message.

3E26I INVALID SYSREC FILE HEADER RECORD

Cause: The SYSREC header label is either invalid or missing, or an I/O error occurred while the label was being read.

System Action: EREP is terminated.

Programmer Action: Not applicable.

Operator Action: Retry the EREP program. If the problem recurs, IPL and SET RE=CREATE to clear and rewrite SYSREC. If the problem persists after the recorder file has been recreated, it will be necessary to move the file or initialize and rebuild the pack.

3E27I EDITING IN PROGRESS

Cause: The recorder file is being edited and printed.

System Action: The message is printed on SYSLST only, and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3E28I HISTORY IN PROGRESS

Cause: The System/370 history tape is being created.

System Action: This message is printed on SYSLST only, and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3E29I CLEAR IN PROGRESS

Cause: The recorder file is being cleared.

System Action: This message is printed on SYSLST only and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3E30I ONLY 60 DISTINCT ENTRIES SUMMARIZED DUE TO 10K PARTITION SIZE

Cause: The 10K partition has restricted EREP error summarization to 60 area stations.

Note: If you wish to summarize other than the first 60 area stations encountered by EREP, you must do it manually.

System Action: The message is issued on SYSLST only, and processing continues. EREP does not summarize more than 60 area station entries.

Programmer Action: If 12K is allocated for EREPASSM, 100 area stations may be summarized.

Operator Action: Not applicable.

3E31A WRONG TAPE, MOUNT CORRECT TAPE, TYPE GO

Cause: The HIST option was specified, but the tape mounted is not an EREP history tape.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Check that the correct tape is mounted, and the tape drive is assigned to SYS009. Make the necessary corrections, then type GO and press EOB/END key, or

Press EOB/END key to cancel the history option.

3M10I INVALID OPERATION

Cause: The operation field of the control statement starts in column 1 or contains something other than CATALR, CATALS, DELETC, DELETR, DELETS, RENAMC, RENAMR, RENAMS, CONDS, ALLOC, DSPLY, UPDATE, PUNCH, CONDL, RDRCTRL, COPY, COPYC, COPYR, COPYS, NEWVOL, or MERGE, or

ALLOC is attempted to an assigned private library, or

Reallocation of the system core image library was attempted and private libraries are assigned, or

A request was made for library maintenance, for other than a private core image library, from a foreground partition.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the control statement and rerun the job, or rerun the job in the background partition, or

Unassign private libraries before reallocation of the system core image library.

If the problem recurs, have the job stream, printer output, and log sheet available to complete your problem determination action.

Operator Action: Not applicable.

### 3M11I INVALID CARD IN MODULE

Cause: This message indicates that the module to be cataloged into the relocatable library contains an invalid statement. Valid statements have one of the following formats:

- 12-2-9 code in column 1 of an 80-byte record, or in column 2 of an 81 byte record. These records may be types: ESD, RLD, TXT, REP, END, or SYM. Or,
- A record with a blank in column 1 of an 80-byte record, or in column 2 of an 81-byte record. Any combination of valid characters may follow.

This is probably a user error.

System Action: This message is printed on SYSLST only, and the catalog is not completed.

Programmer Action: Correct the statement in error and resubmit the module to be cataloged. Statement correction may require recompilation.

If the problem recurs, have the job stream, program listing, and object module available to complete your problem determination action.

Operator Action: Not applicable.

### 3M21I INVALID OPERAND

Cause: A librarian control statement contains an invalid or blank operand, or a CONDS RL or SL is asked for from a foreground partition.

This is probably a user error.

System Action: The message is printed on SYSLST. If the invalid operand:

1. Is on a COPY card, the copy of the invalid operand is ignored, but all other valid operands are processed.
2. Is on an ALLOC card, the allocations are ignored and the allocations of the SYSRES pack are used.
3. Is on the NEWVOL or MERGE card, the job is canceled.
4. Is on the COPYI statement for a MERGE and does not specify RES,NRS or NRS,RES, or the operand is not \$\$A\$IPL2, the job is canceled.

Programmer Action: Correct the statement in error and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a DSERV of any libraries being used.
2. Have the job stream and printer output available.

Operator Action: Not applicable.

### 3M22I PHASE \*\*\* INVALID PHASE NAME -PROGRAM NOT CATALOGED

Cause: OPTION CATAL was specified, and the phase card is missing.

This is probably a user error.

System Action: This message is printed on SYSLST only. The linkage editor creates a dummy phase card to allow the user to test his program. This program, with the dummy phase card, will not be cataloged into the core image library.

Programmer Action: Insert a phase card at the beginning of the object deck and resubmit the job.

If the problem recurs, have the job stream and object module available to complete your problem determination action.

Operator Action: Not applicable.

3M23I MISSING OR INVALID HEADER, BKEND, OR MACRO CARD. XXXXXX FIELD IS INVALID

Cause: The BKEND or MACRO statement is missing or contains invalid label, operation, or operand. XXXXXX states invalid condition or operand, or header BKEND/MACRO card is missing, or if XXXXXX states 'CMPRSD', input is not in compressed form.

This is probably a user error.

System Action: This message is printed on SYSLST only, and the book is not cataloged.

Programmer Action: Insert BKEND/MACRO card (a BKEND statement must precede and follow the book to be cataloged) or correct the BKEND statement and resubmit the job.

If the problem recurs, have the job stream, system log, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

3M24I MISSING OR INVALID OPERAND ON CATALS CONTROL CARD

Cause: The BKNAME on the CATALS control card is missing, extends beyond column 71, too long or has no sublibrary prefix, an invalid character in the prefix or name, or the first character is not alphabetic.

This is probably a user error.

System Action: No cataloging is done.

Programmer Action: Correct the operand and resubmit the job.

If the problem recurs, have the job stream and printer output available to complete your problem determination action.

Operator Action: Not applicable.

3M25I ERROR IN CARD SEQUENCE NO. -- CARD NO. xxxxx

Cause: A card is out of sequence in the book to be cataloged into the source statement library.

This is probably a user error.

System Action: The message is printed on SYSLST only, and no cataloging is done.

Programmer Action: Sequence the book correctly and rerun the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Card deck to be cataloged
- Printer output
- Log sheet.

Operator Action: Not applicable.

3M26I ERROR IN CARD COUNT -- ACTUAL COUNT xxxx

Cause: The card count in the BKEND statement does not correspond to the actual card count (including the BKEND card). xxxx is the actual card count.

This is probably a user error.

System Action: This message is printed on SYSLST only, and processing continues. The book, specified on the CATAL card that preceded this diagnostic message, is not cataloged.

Programmer Action: Correct the count operand on the BKEND statement (the count equals the book plus both BKEND

statements) or insert the missing cards in the book. Resubmit the job.

If the problem recurs, have the job stream, printer output, and log sheet available to complete your problem determination action.

Operator Action: Not applicable.

3M27I INVALID V.M, O.O ASSUMED, CATALOG ATTEMPTED

Cause: The V.M. operand extends past column 71, there are invalid digits in V.M., missing 'V' or 'M', or the 'V' or 'M' value is too large.

This is probably a user error.

System Action: The message is printed on SYSLST only, and the catalog is attempted with V.M. of 0.0.

Programmer Action: Correct the invalid V.M. operand and resubmit the job.

If the problem recurs, have the job control cards and program listing available to complete your problem determination action.

Operator Action: Not applicable.

3M28I ALL BLANKS/NO CARDS IN BOOK

Cause: There are no cards between BKEND statements or all cards are blank.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Insert source cards and resubmit the job.

If the problem recurs, have the job stream, printer output, and deck being cataloged available to complete your problem determination action.

Operator Action: Not applicable.

3M33I xxxxxxx NOT IN LIBRARY

Cause: Message output is on SYSLST only. The phase, module, or book requested was not found in the system or private library.

System Action: Processing continues.

Programmer Action: Catalog or copy the missing phase, module, or book into the appropriate library.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream and program listing available.
2. Obtain a DSERV of the library.

Operator Action: Not applicable.

3M34I EOF ON SYSIPT -- END STATEMENT MISSING

Cause: The END card is missing from the module to be cataloged.

This is probably a user error.

System Action: The message is printed on SYSLST only, and the job is canceled.

Programmer Action: Add the END card to the object module and resubmit the job, or compile and resubmit the job.

If the problem recurs, have the job stream available to complete your problem determination action.

Operator Action: Not applicable.

3M35I (phase name) NOT IN LIBRARY

Cause: The phase or component name specified on the DSPLY or DSPLYS card is not in the core image library that was searched.

System Action: The operand is ignored and processing continues.



Programmer Action: Check that the phase name is correct, or that the correct core image library was displayed.

Note: If a private core image library is assigned, the system core image library will not be searched.

Operator Action: Not applicable.

3M43I NO [RELOCATABLE, SOURCE STATEMENT, PRIVATE RELOCATABLE, PRIVATE SOURCE STATEMENT PRIVATE CORE IMAGE] LIBRARY

Cause: If the program is:

- Library maintenance, the library does not exist on SYSRES or the device assigned to the private library, or a private core image library function was attempted in a foreground partition, but SYSCLB was not assigned.
- Library service, the library does not exist or has no active entries.
- Disk copy (CORGZ), the library does not exist on SYSRES or SYS002 and can be either the "copied from" or "copied to" file.
- Disk merge (CORGZ), the library does not exist on SYSRES, SYS002, or the private library and can be either the "copied from" or "copied to" file.

This is probably a user error.

System Action: This message is printed on SYSLSST only and the job is canceled, unless a DSERV is being executed and other library directory displays are requested. These other directories will be displayed.

Programmer Action: Use the LISTVTOC and LISTIO output to check for the missing library. If CORGZ is being executed, correct the control cards or mount the needed library. If private core image library maintenance was attempted from a foreground partition, but SYSCLB was not assigned,

resubmit the job with the SYSCLB assignment. Correct the control cards to coincide with the existing libraries if other programs are being executed.

If the problem recurs, have the following available to complete your problem determination action:

- LISTVTOC output
- LISTIO output
- Job stream
- Log sheet
- Printer output.

Operator Action: Issue the LISTIO command, then execute LISTVTOC for SYSRES. Return the output of both to your programmer.

3M44I PRIVATE CORE IMAGE LIBRARY ASSIGNED ELSEWHERE

Cause: A private core image library has been assigned during MAINT or CORZG; however, the same private core image library is currently assigned to another partition. In both partitions the private core image library assigned is on the same device with the same starting cylinder.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: If the same private core image library is required as that being used in the other partition, wait until the other job is finished, unassign SYSCLB and resubmit the job. Otherwise, assign a different private core image library and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a stand alone dump.
2. IPL and execute LISTVTOC for each private core image library.

3. Have available the job streams for all partitions currently operating.
4. Have the console log sheet, printer output, and current supervisor assembly listing available.

3M45I NO PRIVATE TRANSIENT DIRECTORY ENTRIES

Cause: TD or ALL was specified on the DSERV statement and SYSCLB was assigned, but there were no transient directory entries on the private core image library.

System Action: The request to display the transient directory is ignored and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3M52I [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT, PRIVATE RELOCATABLE, PRIVATE SOURCE STATEMENT, PRIVATE CORE IMAGE] DIRECTORY IS FULL

Cause: The library directory does not have enough space to catalog or update.

This is probably a user error.

System Action: The message is printed on SYSLST only, and the job is canceled.

Programmer Action: Condense the specified library or, reallocate the directory and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Program listing
- DSERV of the subject library.

Operator Action: Condense the specified library and retry the job.

3M53I [CORE IMAGE RELOCATABLE, SOURCE STATEMENT, PRIVATE RELOCATABLE, PRIVATE SOURCE STATEMENT, PRIVATE CORE IMAGE] LIBRARY IS FULL

Cause: The specified library does not have enough space to catalog or update.

This is probably a user error.

System Action:

- With EXEC MAINT, the job is canceled. All CATAL statements are cataloged, except the one last printed on SYSLST.
- With EXEC CORGZ, the CATAL statements are read until a valid statement is encountered; then normal processing continues.
- With EXEC LNKEDT, no cataloging is done.

Programmer Action: If, in the directory listing, Library Blocks Deleted is at 00, reallocate a larger library and retry the catalog. If Library Blocks Deleted is not at 00, condense the library and retry the catalog.

If the problem recurs, have the following available to complete your problem determination action:

- Program listing
- Job control listing
- DSERV of the subject library.

Operator Action: Condense the library and retry the job.

3M54I XXXXXXXX ALREADY IN LIBRARY

Cause: The phase, module, or book to be renamed is already in the library.

This is probably a user error.

System Action: The message is printed on SYSLST only and the rename function is not performed.

Programmer Action: Change the "new name" parameter in the rename statement and resubmit the job.

If the rename cannot be done, have the following available to complete your problem determination action:

- Program listing
- Job control listing
- DSERV of the subject library.

Operator Action: Not applicable.

3M55I xxxxxxxx MODULE MISSING

Cause: Contiguous CATALR statements were found on SYSIPT during a maintenance run. There was no module between these records to catalog. xxxxxxxx indicates the missing module's name as found on the CATALR card.

There was a failure in a compilation or assembly before it produced any object records on SYSPCH.

This is probably a user error.

System Action: The maintenance run continues and each valid module is cataloged.

Programmer Action: Check for missing or additional cards in the job stream. Resubmit the compilation or assembly to produce valid output on SYSPCH. The source coding may have to be examined for errors.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

3M62I TRACK EXCEED CYLINDERS IN [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT, PRV CORE IMAGE, PRV RELOCATABLE, PRV SOURCE STATEMENT] LIBRARY

Cause: The number of tracks allocated for the directory exceeds the total number of cylinders allocated for the directory/library, or

The allocation does not provide for at least five tracks to be used by the referenced library.

This is probably a user error.

System Action: The message is printed on SYSLST only, and the job is canceled.

Programmer Action: Correct the ALLOC statement and resubmit the job.

If the problem cannot be corrected, have the following available to complete your problem determination action:

- Job control listing
- DSERV of the subject library.

Operator Action: Not applicable.

3M63I [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT, PRV CORE IMAGE, PRV RELOCATABLE, PRV SOURCE STATEMENT] DIRECTORY ALLOCATION IS TOO SMALL

Cause: An insufficient number of tracks are allocated for this directory, or

The allocation is insufficient when creating and copying a library (NEWVOL followed by COPY).

This is probably a user error.

System Action: The message is printed on SYSLST only, and the job is canceled.

Programmer Action: Increase the specified directory allocation and resubmit the job.

If the problem recurs, do the following to complete your problem determination action:

1. Have the job stream available.
2. Execute a DSERV of the subject library, except when the message was caused by copying into a newly created library.

Operator Action: Not applicable.

3M64I [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT, PRV CORE IMAGE PRV RELOCATABLE, PRV SOURCE STATEMENT] LIBRARY ALLOCATION IS TOO SMALL

Cause: An insufficient number of cylinders are allocated for this library, or

The allocation is insufficient when creating and copying a library (NEWVOL followed by COPY).

This is probably a user error.

System Action: This message is printed on SYSLST only, and the job is canceled.

Programmer Action: Increase the specified library allocation and resubmit the job.

If the problem recurs, have the job stream available and execute a DSERV of the subject library (except when the message was caused by copying into a newly created library) to complete your problem determination action.

Operator Action: Not applicable.

3M65I INVALID EXTENTS DEFINED FOR [SYS002, SYS003, SYSRIB, SYSSLB, SYSRES]

Cause: The extents defined for the file IJSYSRS do not cover track 1, cylinder 0 or are not large enough to contain the file, or

The parameter on ALLOC or NEWVOL statement requires

larger extents than those defined for IJSYSRS, IJSYSRL, IJSYSSL, or IJSYSPC.

This is probably a user error.

System Action: The message is printed on SYSLST and the job is canceled.

Programmer Action: Use the LSERV output or EXTENT statements to check for errors. Then, correct the extents defined for the file, or

Correct the ALLOC or NEWVOL card and resubmit the job.

If the problem recurs, have the job stream, LSERV, and printer output available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and give the output to your programmer.

3M66I ZERO ALLOCATION SPECIFIED FOR [CORE IMAGE, PRIVATE CORE IMAGE, PRIVATE RELOCATABLE, PRIVATE SOURCE STATEMENT] LIBRARY

Cause: An allocation of zero was received for:

The core image library, on the ALLOC statement, or

The private core image, private relocatable, or the private source statement library, on the NEWVOL statement.

This is probably a user error.

System Action: The message is printed on SYSLST only, and the job is canceled.

Programmer Action: Correct the library allocation and resubmit the job.

If the problem recurs, have the job control listing and a DSERV of the subject library available to complete your problem determination action.

Operator Action: Not applicable.

3M68I [STATEMENT, CONDENSE OF CL, RL, OR SL ] IGNORED DUE TO MULTIPROGRAMMING IN PROCESS

Cause: STATEMENT - User asked for an allocation when multiprogramming was in process in F1 or F2, or

CONDENSE of CL, RL, or SL - An auto condense of CL, RL, or SL has been requested by the end-of-job routine in the background partition while multiprogramming is in progress, or

User asked for a condense of CL, RL, or SL via MAINT in the background partition while multiprogramming is in progress and SYSCLB is assigned to a F1 or F2 partition.

This is probably a user error.

System Action: Message output is on SYSLST only. The requested allocation, auto condense, or condense is not performed.

Programmer Action: If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet and printer output available.
2. Retain the job stream.

Operator Action: Not applicable.

3M69I CL PARAMETER IGNORED DUE TO CONTROL PROGRAM BEING CATALOGED

Cause: User asked for condense of the core image library after cataloging the Supervisor in the same job.

This is probably a user error.

System Action: The message is printed on SYSLST only. The Core Image Library is not condensed, but other requested libraries are condensed.

Programmer Action: Resubmit the condense attempt as a separate job.

If the problem recurs, have the job stream and printer output

available to complete your problem determination action.

Operator Action: Not applicable.

3M70I UNRECOVERABLE DISK ERROR. REBUILD SYSTEM

Cause: An unrecoverable error has occurred on SYSRES, SYSCLB, SYSRLB, or SYSSLB.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize and rebuild the pack.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

Operator Action: Not applicable.

3M75I CONDENSE CANNOT CONTINUE. REBUILD PACK

Cause: The library being condensed was previously destroyed. This could result from pressing the LOAD or SYSTEM RESET keys on the console during a previous condense.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Rebuild the pack.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

Operator Action: Not applicable.

3M80I REORGANIZATION OF SYST AND PRV  
[CORE IMAGE, RELOCATABLE,  
SOURCE STATEMENT] LIBRARY IN  
PROGRESS

Cause: This message indicates that a condense is being performed and refers to a private library (SYSCLB, SYSSLB, or SYSRLB), if one is assigned.

System Action: The system does not allow other partitions to execute while a condense function is executing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

3M81I NO RECORD FOUND ON [SYSRES,  
SYSCLB, SYSRLB, SYSSLB] AT  
CCHHR

Cause: Message output is on SYSLST only. A no-record-found condition occurred while reading or writing.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Initialize and rebuild the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the system pack specified in the message available.

Operator Action: Not applicable.

3U10I STATEMENT OUT OF SEQUENCE

Cause: Control statement missing or out of sequence, or

Operand on ADD statement is not greater than or equal to the last operand on the preceding REP or DEL statement, or

Operand on ADD statement is not greater than the operand on an immediately preceding ADD statement, or

An ADD statement does not match a statement within the source library book, or

The operand of an ADD, DEL, or REP statement exceeds the last sequence number of the book to be updated.

This is probably a user error.

System Action: The message is issued to SYSLST only. The book is not updated, and the remaining control cards are checked for validity only.

Programmer Action: Check the card sequence in the job stream and check the parameters on the control cards. Correct the error and resubmit the job.

If the problem recurs, have the job stream and printer output available to complete your problem determination action.

Operator Action: Not applicable.

3U11I WRONG CHANGE LEVEL

Cause: The change level specification in the directory does not agree with that in the UPDATE statement.

The UPDATE card contains either the wrong change level or the wrong book name.

This is probably a user error.

System Action: This message is issued to SYSLST only. The book is not updated. The remaining control cards are checked for validity only.

Programmer Action: Check that the book is the correct one by using SSERV to display it from the Source Statement Library. Then, correct the change level or book name specification on the UPDATE card and resubmit the job.

If the problem recurs, have the SSERV listing, the job stream, and the printer output

available to complete your problem determination action.

Operator Action: Not applicable.

### 3U20I INVALID OPERATION

Cause: The operation field of the control statement contains something other than ADD, REP, DEL, or END.

This is probably a user error.

System Action: This message is issued to SYSLSY only. The book is not updated, and the remaining control cards are checked for validity only.

Programmer Action: Correct the card in error or remove it from the job stream and resubmit the job.

If the problem recurs, have the job stream and the printer output available to complete your problem determination action.

Operator Action: Not applicable.

### 3U21I INVALID OPERAND

Cause: The librarian control statement contains an invalid or blank control statement, or

There are two operands on an ADD card.

This is probably a user error.

System Action: Remaining control cards checked for validity. Update is performed with default options if error was caused by operands in the END card or by the resequencing operand in the UPDATE card. Otherwise, update is suppressed, or

If two operands are on an ADD card, the second operand is ignored and the update is performed.

Programmer Action: If the default options are not satisfactory or the job is suppressed, correct the control cards and resubmit the job.

If the problem recurs, have the job stream and system log available to complete your problem determination action.

Operator Action: Not applicable.

### 3U30I INVALID SEQUENCE

Cause: The source statements to be added to a book are not in sequence or do not contain sequence numbers, and the update card resequencing option is specified as NO.

System Action: The update is performed, but the book will not be in sequence and subsequent updates may not be possible.

Programmer Action: If a properly sequenced book is necessary, a copy of the original book should be recataloged to the source statement library. If the update to the newly cataloged book is performed, the NO resequencing option must be removed from the update control card.

Operator Action: Not applicable.

### 3U31I INVALID SEQUENCE-BOOK RESEQUENCED

Cause: This message is issued for information only. The source statements added to a book are not in sequence or do not have sequence numbers.

System Action: The message is issued to SYSLSY only. The book is updated and resequenced using the resequencing value specified on the UPDATE card, or in increments of 1 if the option is not specified. Subsequent updating is possible.

Programmer Action: Not applicable.

Operator Action: Not applicable.





## 4-Prefix Messages

### 4000I RETRY

Cause: This message always follows message 0P10 EQUIP CHECK if CRDERR=RETRY was specified in the DTF parameter. This message indicates that a retry was made to the punch errors on the device experiencing an equipment check.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action:

If the problem persists, complete your problem determination action as follows:

1. Execute the job while PDAID Input/Output Trace is executing.
2. Execute EREP.

### 4110A NO VOL1 LBL FOUND TLBL=xxxxxx filename SYSxxx=CUU

Cause: A standard label output was specified but no volume label was found.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled. This message is

preceded by the last tape record read.

Programmer Action: Verify that the correct tape was mounted. If it was, reinitialize the tape and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- System log
- Printer output
- Job stream
- Program listing.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Mount a tape with a standard label and type NEWTAP to continue processing, or

Type a volume serial number (6 alphanumeric characters) to cause a VOL1 label to be written. Processing continues.

### 4111A NO VOL1 LBL FOUND filename SYSxxx=CUU

Cause: A standard label input was specified but no volume label was found.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check that the correct tape was submitted. Check that both the program that created the tape and the program in error specify labeled tapes, or

Check SYSxxx assignment for correct device.

Correct the error and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- System log and printer output.
- Job stream and program listing for the program in error.
- Program listing of the program that created the tape.

Operator Action: Check that the correct tape was mounted. Type CANCEL or press EOB/END key to cancel, or

Type IGNORE to continue processing.

4112A VOL SERIAL NO. ERROR  
TLBL=xxxxxx filename SYSxxx=cuu

Cause: The volume serial number on the tape does not agree with the serial number in the tape label statement.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled. The volume serial number precedes this message.

Programmer Action: Check the TLBL statement or LSERV output for errors and check the mounting instruction given to the operator. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the LSERV output job stream, and log sheet available.
2. Obtain a system dump at the time of the failure.
3. Execute a tape to printer utility to print the label area of the tape and have the output available.

Operator Action:

1. Check that the correct tape is mounted and that SYSxxx is assigned to the correct drive.
2. Type CANCEL or press EOB/END key to cancel job, or

Mount a new tape and reply NEWTAP to continue processing, or

Type IGNORE to continue processing with the mounted reel. (File serial number on TLBL is overridden by volume serial number.) or,

Type BYPASS to continue processing a multi-reel input file. File serial number on TLBL is not overridden by volume serial number.

3. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4113D NO HDR1 LBL FOUND filename  
SYSxxx=cuu

Cause: Standard label input was specified, but no standard header label was found.

This is probably a user error.

System Action: This message is always preceded by the last tape record read. If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check that the correct tape was submitted and that it was properly positioned. Check the program that created the tape to ensure that standard labels were specified. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Display the label portion of the tape and have the output available.
2. Have the job stream, program listing, and log sheet available.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Type IGNORE to continue processing.

4114A FILE SEQ NO. ERROR filename  
SYSxxx=CUU

Cause: The file sequence number in the header label does not agree with the tape label statement. The tape is positioned beyond the correct file, or the TLBL contains an incorrect file sequence number.

This is probably a user error.

System Action: This message is preceded by the header label file sequence number of the last tape record read. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check the positioning instructions for the file and check the file sequence number in the TLBL card or standard (permanent) label. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Display the label portion of the tape and have the output available.

2. Have the LSERV output, job stream, log sheet, and program listing available.

Operator Action:

1. Type CANCEL or press EOB/END key to cancel job, or  
Remount or reposition the file and type RETRY to continue processing.
2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4115A FILE SER. NO. ERROR  
TLBL=xxxxxxx filename SYSxxx=cuu

Cause: The tape header label serial number does not agree with the serial number in the tape label statement. The wrong file or file set is mounted or the serial number in the TLBL card is incorrect.

This is probably a user error.

System Action: The file serial number of the last tape record read precedes this message. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check the TLBL statement for errors and check that the correct tape file or file set was submitted. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Display the label portion of the tape and have the output available.
2. Have the job stream, program listing, and log sheet available.

Operator Action:

1. Check that the correct tape file or file set is mounted and respond with one of the following:

Type CANCEL or press  
EOB/END key to cancel job,  
or

Type IGNORE to continue  
processing, or

Mount correct reel and  
type NEWTAP to continue  
processing.

2. If standard (permanent)  
labels were used, execute  
LSERV and return the  
output to your programmer.

4116A VOLUME SEQ. NO. ERROR  
filename SYSxxx=CUU

Cause: The wrong volume of the  
set is mounted. The volume  
sequence number in the header  
label does not agree with the  
tape label statement.

This is probably a user error.

System Action: This message is  
preceded by the header label  
volume sequence number of the  
last tape file read. If SYSLOG  
is a console printer-keyboard,  
the system waits for an  
operator response; otherwise,  
the job is canceled.

Programmer Action: Not  
applicable.

Operator Action:

1. Type CANCEL or press  
EOB/END key to cancel job,  
or

Mount correct reel and  
type NEWTAP to continue  
processing.

2. If standard (permanent)  
labels were used, execute  
LSERV and return the  
output to your programmer.

If the problem recurs, complete  
your problem determination  
action as follows:

1. Have the tape label set  
used to create the file  
available.
2. Display the header label  
of the tape causing the  
message and have the  
output available.

3. Have the LSERV output job  
stream, log sheet, and  
printer output available.

4117D NO TM FOUND ON READBK filename  
SYSxxx=CUU

Cause: Read backward was  
specified and no tapemark was  
found as the first record.  
IOCS cannot correctly position  
the file.

This is probably a user error.

System Action: This message is  
preceded by the last tape  
record read. If SYSLOG is a  
console printer-keyboard, the  
system waits for an operator  
response; otherwise, the job is  
canceled.

Programmer Action: Examine the  
program output for a CLOSE.  
Verify that the tape was not  
repositioned between the output  
CLOSE and the readback OPEN.  
If no CLOSE is found, insert  
one in the output portion of  
the job, or

Correct the repositioning and  
resubmit the job.

If the problem recurs, complete  
your problem determination  
action as follows:

1. Dump the trailer label  
portion of the tape and  
retain the output.
2. Have the program listing,  
the job stream, and the  
system log available.

Operator Action: Type CANCEL  
or press EOB/END key to cancel  
job, or

Type IGNORE to continue  
processing. (File is  
considered OPEN but no further  
checking or positioning is  
done.)

4118D FILE ID ERROR, READBK filename  
SYSxxx=cuu

cause: Read backward was specified and an error was detected in checking the trailer label. File ID field does not agree with the information in the tape label statement.

This is probably a user error.

System Action: This message is preceded by the trailer label file identification of the last tape record read. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check the TLBL statement for errors in the file ID and check that the tape was not repositioned before the read backward OPEN was issued. Check that the program that built the file or processed it in a forward read did not request a rewind during close. Check that the failing program OPEN statement has the correct filename. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump at the time of the failure and have the output available.
2. Have the job stream, program listing, log sheet, and printer output available.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Type IGNORE to continue processing.

4119A FILE UNEXPIRED filename  
SYSxxx=cuu

Cause: This message is preceded by the header label of the last tape record read. The expiration date on mounted scratch tape has not been reached, and the tape is still active. The filename is not given for a workfile.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Mount a new tape and type NEWTAP to continue processing, or

Type IGNORE to continue processing with the mounted reel. This response destroys the existing header label.

If the problem recurs, have the log sheet available to complete your problem determination action.

4120I TAPE POSITIONED WRONG filename  
SYSxxx=cuu

Cause: Both standard labels and the REWIND=NORWD options were specified on this output tape, or

An input tape having READ=BACKWARD is incorrectly positioned at load point, or

The tape is not positioned at load point and no preceding trailer label was found for creating the new file label set.

This is probably a user error.

System Action: The system cancels the job.

Programmer Action: Recalculate the positioning for the tape to ensure that the tape will be positioned at load point, or after the tape mark following

the trailer label of the last file to be saved.

Resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Retain the tape.
2. Obtain a system dump and retain the listing.
3. Have the log sheet, printer output, and job stream available.

Operator Action: Check that the correct tape is mounted and that SYSxxx is assigned to the correct physical unit.

If they are, reposition the tape past the tape mark after the trailer label for the last file.

Rerun the job.

4121A NO ALTERN DRIVE ASSGN  
SYSxxx=cuu

Cause: The indicated logical unit (SYSPCH, SYSLST, or SYSOUT) is assigned to a magnetic tape on which end of reel has been reached. No alternate has been assigned.

System Action: This message is preceded by 4122I, then the tape file is closed (a tape mark written, rewound, and unloaded), and the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount a new tape and type NEWTAP to continue processing.

Note: NEWTAP is the only valid response to this message.

4122I EOV ENCOUNTERED SYSxxx=cuu

Cause: The end-of-volume was reached while writing on SYSLST, SYSPCH, or SYSOUT assigned to an output tape.

System Action: The system waits for another volume to be mounted and readied, then processing continues.

Programmer Action: Not applicable.

Operator Action: Mount another volume. (Note: If this tape is being created for use as SYSIPT, multivolume tape input from SYSIPT is not allowed.)

4123D WRONG POSITN, READBK filename  
SYSxxx=cuu

Cause: Read backward was specified and no tapemark or label was found as the second record. IOCS cannot position the tape correctly.

The tape is not correctly assigned, or

The tape file was not properly closed after output, or

The read backward DTF contains an incorrect logical unit specification, or

The tape has been physically repositioned since completion of an output function.

System Action: This message is preceded by the last tape record read. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check that the correct logical unit was specified, and that the output portion of the problem program issues a CLOSE.

Check that no reference to that logical unit is made after the CLOSE for the output portion of the program is issued, or before the OPEN for the readback is issued.

If the problem recurs, have the following available to complete your problem determination action:

- Log sheet
- Program listing

- Job stream
- Printer output.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Type IGNORE to continue processing. (File is considered OPEN but no further checking or positioning is done.)

4124I TOO MANY UHL's filename  
SYSxxx=cuu

Cause: Standard label output and LABADDR=name were specified in the DTF specified by the 'filename' parameter of this message, and the user tried to process more than eight user header labels.

This is probably a user error.

System Action: The system cancels the job.

Programmer Action: Check that LBRET2 is not issued more than seven times in the user label routine. LBRET1 must be used to write the UHL8 label.

Correct the user label routine in the problem program and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and retain the listing.
2. Have the system log and problem program listing available (plus the user label routine listing if it was separately compiled).

Operator Action: Not applicable.

4125D VOL1 LBL FOUND filename  
SYSxxx=cuu

Cause: An unlabeled output file was specified and a volume label was found on the tape.

This is probably a user error.

System Action: The last tape record read precedes this message. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Check that the correct tape is mounted, and respond with one of the following:

Type CANCEL or press EOB/END key to cancel job, or

Mount a new tape and type NEWTAP to continue processing, or

Type IGNORE to continue processing. The volume label and all other labels and files on the reel are destroyed.

4126I EOV ENCOUNTERED filename  
SYSxxx=cuu

Cause: The DTF parameter HDRINFO=YES was specified, and this message is printed each time the EOV routine is called.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4130A EOF OR EOV INQUIRY filename  
SYSxxx=cuu

Cause: A tapemark was sensed on an input file, and standard or nonstandard labels are specified. The system cannot determine whether the condition is EOF or EOV.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Type EOF if end of file or EOV if end of volume.

4131D BLOCK COUNT ERROR filename  
SYSxxx=cuu DTF=xxxxxx  
LEL=xxxxxx

Cause: A discrepancy was detected while checking the block count for an input file.

This is probably a user error.

The DTF=xxxxxx indicates the number of records read, and is taken from the DTF. The LEL=xxxxxx indicates the block count in the trailer label.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: If the tape was created using DTFPH, check the program that created the tape to verify that the block count was properly maintained, or

If the tape was created using DTFMT, verify that the DTF was not altered between the program that created it and the program that processes it, or

Check the system log for a BYPASS response to an I/O message. If one is found, rebuild the tape containing the record in error and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and retain the listing.
2. Have the system log, program listing, and MTMOD listing available.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Type IGNORE to continue processing.

4132D ERROR IN FILE ID filename  
SYSxxx=cuu

Cause: The 17-byte file ID in the HDR1 label does not agree with the one supplied in the TPLAB or TLBL card.

This is probably a user error.

System Action: This message is preceded by the header label file ID from the last tape record read. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Verify that the correct characters appear in the file ID field of the TPLAB/TLBL card or standard (permanent) label. Also verify that the correct tape was specified and the positioning information was correct. Correct the error(s) and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and retain the output.
2. Have the LSERV output, job stream, printer output, program listing, and system log available.

Operator Action:

1. Verify that the correct tape is mounted and correctly positioned.
2. Type CANCEL or press EOB/END key to cancel job, or

Type IGNORE to continue processing with mounted reel, or

Mount a new tape and type NEWTAP to continue processing.

3. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.



4133D ERROR IN HDR LBL filename  
SYSxxx=cuu

Cause: An error was detected in one of the following fields in the header label: generation number, version number, or creation date.

This is probably a user error.

System Action: This message is preceded by the header label file identification for the last tape record read. If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check the parameters on the file label cards. If label information was submitted by the STDLABEL or PARSTD options, check the LSERV output. Check that the correct tape was mounted. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, tape file, and the program listings for the tape creation program and failing program available.
2. Have the log sheet, printer output, and LSERV output cylinder display available.

Operator Action:

1. Type CANCEL or press EOB/END key to cancel job, or  
  
Type IGNORE to continue processing with the mounted reel, or  
  
Mount a new tape and type NEWTAP to continue processing.
2. If standard (permanant) labels were used, execute LSERV and return the output to your programmer.

4140A NO ALTERN DRIVE ASSGN filename  
SYSxxx=cuu

Cause: An end-of-volume condition occurred for an input or output file and no alternate drive is specified.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or

Mount a new reel on specified drive and type NEWTAP to continue processing.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and save the output.
2. Have the log sheet, problem program listing, and job stream available.

4151I HDR1 LBL INFORMATION filename  
SYSxxx=cuu

Cause: This message is preceded by the file header label of the last tape record read. HDRINFO=YES was specified in the DTF parameter. This message is printed each time the OPEN forward routine is called. The information included is: file ID, file serial number, volume sequence number, file sequence number, generation number, version number, creation date, and expiration date.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4170A FILE PROTECTED TAPE filename  
SYSxxx=cuu

Cause: The tape on the channel and unit specified for use as an output file (cuu) is file protected.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Insert a file protect ring or mount a non-file protected tape, and type NEWTAP to continue processing.

If the problem recurs on a tape with the file protect ring in, do the following to complete your problem determination action:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream, log sheet, and printer output available.

4171A UNEXPIRED FILE SYSxxx=cuu

Cause: This message is preceded by the header label file ID. The HDR1 label on the specified tape file has an unexpired date.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the expiration date printed with this message is correct.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check that the correct tape is mounted or mount a new tape and type NEWTAP to continue processing, or

Type IGNORE to continue processing with the mounted reel. The HDR1 label will be replaced with a HDR1 record containing 76 binary zeros followed by a tapemark.

4172A INVALID LABEL SET SYSxxx=cuu

Cause: The label on the specified tape is neither an IBM-standard label nor a tapemark.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the validity of this error is in doubt, display the label portion of the tape and confirm the presence of a tape mark (no label) or a HDR1 (standard tape label).

If this message should not have been issued, do the following to complete your problem determination action:

1. Obtain a system dump and have the output available.
2. Have the tape label display available.

Operator Action: Mount a new tape and type NEWTAP to continue processing, or

Type IGNORE to generate a tapemark and continue processing with the mounted reel. The tape is considered OPEN and no further checking is done.

4183I INVALID LOGICAL UNIT filename  
SYSxxx=cuu

Cause: The specified logical unit is ignored or unassigned, or it is assigned to a unit other than a tape. If the logical unit is ignored or unassigned, the physical unit (cuu) will not be printed in the message.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Resubmit the job with the correct logical unit or assignment specified.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Program listing
- Log sheet
- LISTIO output.

Operator Action: Issue the LISTIO SYSxxx command and check the assignment. If correction is necessary, rerun the job. If correction is not necessary, return the LISTIO output to your programmer.

4184D NEED FILE PROTECT RNG filename  
SYSxxx=cuu

Cause: An output file requires a file protect ring.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Check that the correct tape is mounted, then place a file protect ring in the reel and type IGNORE to continue processing. If the action fails, mount the tape on another drive and reassign the logical unit to the new device.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the system log and printer output available.

Messages 4n00 through 4n91 appear as shown in the following example:

BG FILEA

4444A OVERLAP ON UNEXPRD FILE IJSYSLN SYSLNK=135 11111

where

\*IJSYSLN=filename  
\*SYSLNK=cuu (symbolic unit and address)  
111111 (volume serial number where applicable)

\*This information, if not available, may not appear in the messages.

The second digit of the message number indicates the type of disk file for which the message was issued. These types are:

n=2 -- Indexed sequential file  
n=3 -- Sequential input disk OPEN  
n=4 -- Sequential output disk OPEN  
n=5 -- Sequential disk CLOSE  
n=6 -- Direct access input file  
n=7 -- Direct access output file  
n=8 -- Common OPEN/CLOSE routines  
n=9 -- Sequential disk work file

When Job Control opens a system file (e.g., SYSIPT, SYSRDR, SYSPCH, SYSLST, or SYSIN) and an open error occurs, message 1A80D is issued under the following two conditions:

1. If the OPEN message issued has a suffix -I (information), or
2. If the operator replies by pressing EOB/END key or typing CANCEL or CANCELV to an OPEN message with a suffix A or D.

For those messages that accept a reply of CANCEL, the response can be CANCELV or DSPLYV instead.

CANCELV -- Instead of typing CANCEL to terminate the job, the operator can type CANCELV to get a VTOC dump on SYSLST, if SYSLST is a printer. (See Reference 1, Figure 9 for sample output listing.)

DSPLYV -- The operator can display the VTOC by typing DSPLYV, provided the proper assignments have been made. This reply does not terminate the job, but reissues the same message issued prior to the VTOC display request. (See Reference 1, Figure 9, for sample output listing.)

### Label Explanation

Each volume has a Volume Table of Contents (VTOC). This table contains all format labels. Each format label points to an area of DASD storage on the volume and indicates what the area is currently being used for.

A Format 1 label describes one to three physical areas (extents) on the volume. It is the first format label used to describe each file.

A Format 2 label describes a file as being index sequential. If a Format 2 label is used, there is always a Format 1 label describing the same file.

A Format 3 label describes from one to thirteen physical areas (extents) on the volume. It is used when a file is made up of four to sixteen physical areas (extents) because the Format 3 label is always associated with a Format 1 label.

A Format 4 label describes the Volume Table of Contents (VTOC).

#### 4n00I NO LABEL SPACE IN VTOC or NO RECORD FOUND

Cause: No space is available in the VTOC to write a new label for an output file, or

A no-record-found condition occurred while searching for a new label space.

This message only occurs when a file is created.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check whether the VTOC was assigned a full cylinder. If less than a full cylinder was assigned, initialize another disk pack with a full cylinder for the VTOC area and use the disk to disk utility to copy the data

files on the new pack. If a full cylinder has been used, the number of files on the pack must be reduced or a different pack used.

Note: If less than a full cylinder was assigned, the copy/restore utility cannot be used because the old VTOC extents are transferred to the new pack.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- VTOC display output.

Operator Action: Assign the output to another disk pack or execute LISTVTOC and return the output to your programmer.

4n01I NO FORMAT 1 LABEL or NO RECORD FOUND

Cause: The Format 1 label for this file was not found while searching key, or a no-record-found condition occurred while searching for the label.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Use the LISTVTOC output to check for all file labels used in OPEN macros. If the file has been destroyed, it was probably due to deletion of overlapping extents on an unexpired file, and the file must be rebuilt.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LISTVTOC output.

Operator Action: Execute LISTVTOC and return the output to your programmer.

4n02I NO RECORD FOUND

Cause: A no-record-found condition occurred while searching for a Format 2 label, or

A no-record-found condition occurred while searching for an EOF record in the independent overflow area.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the file and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check for the file's Format 2 label. If the label is present, display the independent overflow area and check for an end of file. Have the output available.
2. Have the job stream, program listing, and log sheet available.

Operator Action: Rerun the job using a different disk drive.

4n03I NO FORMAT 3 LABEL FOUND

Cause: A no-record-found condition occurred while searching for a Format 3 label.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Rebuild the disk pack, then resubmit the job.

Operator Action: Rerun the job using a different drive.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC for the pack in error and have the output available.
2. Have the job stream, log sheet, printer output, and disk pack available.
3. Issue the ROD command, execute EREP, and have the output available.

4n04I NO FORMAT 4 LBL IN VTOC or NO RECORD FOUND

Cause: The VTOC pointer address in the volume label does not point to a Format 4 label, or

A no-record-found condition occurred while searching for a Format 4 label.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize and rebuild the pack, then resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Rerun the job using a different drive.

4n06I NO STANDARD VOL 1 LABEL or NO RECORD FOUND

Cause: The record on cylinder 0, track 0, record 3 is not a standard VOL1 label, or

A no-record-found condition occurred while searching for this label.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize and rebuild the pack, then resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Use a disk to printer utility to display cylinder 0 of the failing pack.
2. Have the EREP output, failing job stream, disk pack, log sheet, and printer output available.

Operator Action: Issue the ROD command, execute EREP, and return the output to your programmer.

4n07I NO RECORD FOUND

Cause: A no-record-found condition occurred while searching the SYSRES label cylinder for an extent record.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job or mount the SYSRES pack on another drive, IPL, and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream and log sheet available.
3. If standard (permanent) labels were used, execute LSERV and have the output available.

4n08D NO UTLO FILE MARK FOUND or NO RECORD FOUND

Cause: A no-record-found condition occurred while searching for a user header label or trailer label or while searching key for UTLO file mark to obtain an address for writing the first trailer label.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Use the VTOC display to determine the extents of the file, then display the first track of the data area for the file (the user header and trailer labels). Compare the display with the expected output of the user header and trailer label routines.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing
- Label area display.

Operator Action: Type CANCEL, CANCELV, or press EOB/END key cancel job, or

Type DSPLYV to obtain VTOC dump, and then type IGNORE to continue processing. Any other response causes an INVALID RESPONSE message.

#### 4n09I NO RECORD FOUND

Cause: A no-record-found condition occurred while searching the VTOC for file labels.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job or mount the pack on another drive and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream and log sheet available.

#### 4n30D FMT1-DLAB UNEQUAL

Cause: The file serial number, creation date, or expiration date on the DLBL or DLAB card does not agree with the respective field in the Format 1 label. This message is for an SD input file.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check that this is the correct file and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Program listing
- LISTVTOC output
- LSERV output
- System dump.

Operator Action:

1. Type CANCEL or press EOB/END key to cancel the job, or

CANCELV to display the VTOC and cancel the job, or

or Type DSPLYV to obtain a VTOC dump and then type IGNORE to continue processing.

Any other reply causes an INVALID RESPONSE MESSAGE.

2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n31D VOLUME SEQUENCE ERROR

Cause: The volume sequence number on the current pack is not equal to that supplied in the DLBL (or DLAB) information, or

Pack is not being processed sequentially.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for a response from the operator; otherwise, the job is canceled.

Programmer Action: Check that the EXTENT cards are in ascending sequence.

Compare the volume sequence number field (see Reference 1, Figure 9) with the sequence number in the LSERV output, DLAB card, or the extent sequence number in the EXTENT cards if using DLBL cards.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Printer output
- VTOC display
- Program listing
- LSERV output.

Operator Action:

1. Check that packs are mounted sequentially.
2. Type CANCEL or CANCELV or press EOB/END key to cancel the job or subtask, or  
  
Type DSPLYV to obtain a VTOC display, then type IGNORE to continue processing. Any other response causes an INVALID RESPONSE message.
3. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n33A EQUAL FILE ID IN VTOC

Cause: The 44-byte filename already exists as an unexpired Format 1 label in the VTOC. Another job may have created a file with the same identifier or this job may have created the file and been canceled before completion.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Obtain a display of the VTOC and check whether the unexpired file may be deleted. Either delete the unexpired file, specify a different disk pack, or change the filename.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing
- VTOC display
- LSERV output.

Operator Action:

1. Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type DELETE to delete the unexpired file with the identical 44-byte filename, and continue processing. Any other response causes an INVALID RESPONSE message.

2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n34I CURRENT FILE LBL DELETED

Cause: An output or workfile extent for another job or file previously overlapped the current file limits and a response was given to delete the current file.

This is probably a user error.

System Action: The job is canceled.



Programmer Action: From the VTOC dump, obtain the extents that overlap the file limits of your deleted file. Get the standard label workfile extents that overlap the file limits of your deleted file from the LSERV output, or temporary extents from the EXTENT statements.

If the overlapping extents are for another file created in your own job, supply new extents for one of the files to eliminate the overlap, or

If the overlapping extents are for a file created by another job, supply new extents for your file to eliminate the overlap.

If necessary, rebuild the deleted file. Resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- System log
- Program listing
- LISTVTOC output
- LSERV output.

Operator Action: Execute LISTVTOC and LSERV, and give the output to your programmer.

#### 4n35I DELETED WORKFILE LABEL

Cause: An extent for another previously opened file overlaps the work file limits and a response was given to delete the work file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Use the VTOC listing and the LSERV output or extent information to determine what files are overlapping. Then, rebuild the workfile with correct extents.

If the problem recurs, have the job stream, LISTVTOC output, and LSERV output available to complete your problem determination action.

Operator Action: Execute LISTVTOC for the file in error. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

#### 4n36I NO MORE AVAIL/MATCH XTNT

Cause: All available extents are exhausted through consecutive OPEN's or an extent cannot be found to match those extents from a previous POINT macro.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: If the file is a user workfile, check that a POINT macro does not point outside all submitted extents. Check that enough disk space has been allocated for the file.

If the problem occurs with a system workfile (SYS001, SYS002, SYS003, SYS004, or SYSLNK), increase the extents for that workfile, run the standard label build, and rerun the job, or

Rerun the job with temporary label sets.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- System log
- System dump
- Program listing
- LISTVTOC output
- LSERV output.

Operator Action: Execute LISTVTOC and LSERV. Return the output to the programmer with his job.

4n38D USER HDR LBL IS NOT STD.

Cause: The first three characters of the user's header label do not contain "UHI".

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Correct the user header label routine.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump.
2. Have the user header routine program listing available.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type IGNORE to continue processing. DSPLYV can also be entered before IGNORE to obtain a VTOC dump.

4n39D USER TRL LBL IS NOT STD

Cause: The first three characters of the user's trailer label do not contain "UTL".

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response, otherwise, job is canceled.

Programmer Action: Correct the UHL routine in the problem program.

If the problem recurs, have a system dump and the problem program available to complete your problem determination action.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type IGNORE to

continue processing. Any other response causes an INVALID RESPONSE message.

4n40A EXTENT OVERLAP ON ANOTHER

Cause: Overlapping extents were specified for the file.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: If DLBL and EXTENT cards are included in the program, determine the conflicting extents and correct them. If a standard label set is being used, use the LSERV output to locate and correct the conflicting file extents, and rebuild the standard label tracks.

If the problem recurs, retain the LSERV and VTOC display output, and have the job stream and system log available to complete your problem determination action.

Operator Action:

1. Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type BYPASS to bypass the extent that overlaps the previously opened extents. Any other response to this message causes an INVALID RESPONSE message.

2. Execute LISTVTOC for the file in error. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

4n40I EXTENT OVERLAP ON ANOTHER

Cause: Overlapping extents were specified for the file.

This is probably a user error.

System Action: The system cancels the job.

Programmer Action: If DLBL and EXTENT cards are included in the program, determine the conflicting extents and correct them. If a standard label set is being used, use the LSERV output to locate and correct the conflicting file extents and rebuild the standard label tracks.

If the problem recurs, retain the LSERV output, and have the job stream and system log available to complete your problem determination action.

Operator Action: Execute LISTVTOC for the file in question. If standard labels were used, execute LSERV and return the output of both to your programmer.

#### 4n41A EXTENT OVERLAP ON VTOC

Cause: An extent limit overlaps the limits of the VTOC.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: The format 4 label (the first label in the VTOC display) contains the extents for the VTOC. If the program being executed is using a temporary label set, correct the extent cards that overlap the VTOC. If the job uses standard or partition standard labels, use the LSERV output to correct extents for the file in error, and rebuild the appropriate label tracks.

If the problem recurs, retain the VTOC listing, LSERV output, the job stream, and the system log to complete your problem determination action.

Operator Action:

1. Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type BYPASS to bypass the extent that overlaps the VTOC. Any other response causes an INVALID RESPONSE message.

2. Execute LISTVTOC for the file in question. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

#### 4n41I EXTENT OVERLAP ON VTOC

Cause: An extent limit overlaps the limits of the VTOC.

This is probably a user error.

System Action: The system cancels the job.

Programmer Action: Execute LISTVTOC. The format 4 label (the first label in the VTOC display) contains the extent limits for the VTOC. If the program being executed uses a temporary label set, and overlaps the VTOC, correct the extent cards that overlap, or

If the job uses standard or partition standard labels, use the LSERV output to correct the extents for the overlapping file, and rebuild the appropriate label tracks.

If the problem recurs, have the VTOC listing, LSERV output, job stream, and system log available to complete your problem determination action.

Operator Action: Execute LISTVTOC for the file in question. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

#### 4n42A NO MATCHING EXTENT

Cause: The incoming extent did not match the extents within the labels for the file.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: If temporary labels were used, match the extents on the incoming extent card to the extents in the LISTVTOC output, or

If standard (permanent) labels were used, match the extents in the LSERV output to those in the LISTVTOC output.

If the problem recurs, have the VTOC display, the job stream, LSERV output, the system log, and printer output available to complete your problem determination action.

Operator Action:

1. Type CANCEL or CANCELV or press EOB/END to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type BYPASS to bypass the present extent and continue processing. Any other response causes an INVALID RESPONSE message.

2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n43I INV EXTENT HI/LO LIMITS

Cause: For an ISAM ADD file or an ISAM ADD-RETRIEVE of a LOAD EXTENSION file, the lower limit of the incoming extents do not match the extents within the levels for that file, or

For a RETRVE file, the device specified in the DTFIS does not agree with the device on which the file is loaded, or

For an ISAM RETRIEVE file, the incoming extents do not match the extents that already exist in the Format 1 label for the file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the physical device type against that specified in the DTFIS. If they do not agree (for example, one is a 2311 and the other a 2314), change the DTFIS or rebuild the file on the correct device, or

Determine the extent starting address from the LSERV output if standard (permanent) labels were used, or from the // EXTENT card starting address if temporary labels were used. Correct the file limits specified on the card to conform to the file.

If the problem recurs, retain the VTOC listing, LSERV output, LISTIO output the job stream, and the system log to complete your problem determination action.

Operator Action: Execute LISTVTOC to determine the current extents of the file. If standard (permanent) labels were used, match the extents in the LSERV output to those in the LISTVTOC output. If this is not the problem, execute LISTIO and return the output to your programmer.

#### 4n44A OVERLAP ON UNEXPRD FILE

Cause: The extent card limits overlap the extent limits of an unexpired file.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Compare the high and low extent limits on the EXTENT card or LSERV output with the file limits on the VTOC listing. If the extents overlap, correct the extent card in error and resubmit the job.

If there is no extent overlap or if the problem recurs after the corrections are made, have the EXTENT cards or LSERV

output, and the VTOC listing available to complete your problem determination action.

Operator Action:

1. Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then BYPASS to bypass processing of that extent and any remaining extents for that file. The job is canceled. Or,

Type DSPLYV to obtain a VTOC dump, then type DELETE to delete the overlapped file. (The operator should never take this action unless specified by the user. Under normal operating conditions, the SYSRES label file should never be deleted. Also, in a multiprogramming system, extents should never be deleted across partition boundaries.)

2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n45I TOO MANY EXTENTS

Cause: More than 3 extent types are specified for an indexed sequential file, or

More than 1 extent has been entered for an IBM-supplied program, or

For DA files, more than 15 extents are specified for a volume with user labels, or

For DA files, more than 16 extents are specified for a volume without user labels, or

For SD files, more than 256 extents are specified, or the extent sequence number exceeds 255.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Remove the extraneous extent type, or

Eliminate excessive extents by increasing the area defined by a single extent.

If the problem recurs, do the following:

1. Have the LSERV output available if standard labels are used, or DLBL and EXTENT cards if label information is supplied with the program.
2. Have the console log and program listing available.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n46I DISCONT INDEX EXTENTS

Cause: The master and cylinder index limits are not continuous, or

A master index extent is not provided when DTFIS indicates a master index.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the extents for the indexes. Correct the extents and resubmit the job.

If the problem recurs, have the LSERV output, job stream, and the system log available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n47A EXTENTS NOT ON SAME UNIT

Cause: All the extents for a unit must be on the same disk pack.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: All extent cards, submitted for this file, that specify the same system logical unit must contain the same volume serial number. If the extent information was submitted via the STD label option, use the LSERV output to check the extent information for the failing file. Correct the extents and resubmit the job.

If the problem recurs, have the label cylinder dump, the system log, and the job stream available to complete your problem determination action.

Operator Action:

1. Verify that all assignments have been correctly made and that the correct pack has been mounted.
2. Type CANCEL or CANCELV or press EOB/END key to cancel job, or  
  
Type DSPLYV to obtain a VTOC dump, then type BYPASS to continue processing.
3. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n48I [SYSIN, SYSOUT] UNSUPPORTED

Cause: An unsupported I/O file on a disk unit was requested.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Reassemble the supervisor to specify SYSIN/SYSOUT on some device other than a disk unit, or

Reassemble the Supervisor with the SYSFIL parameter of the FOP1 macro specifying the required disk unit.

If the problem recurs, have a system dump, Supervisor listing, and job stream available to complete your problem determination action.

4n49I DATA TRACK LIMIT INVALID

Cause: The indexed sequential prime data area lower limit does not start on track 0, or

The upper limit does not end on track 9 for a 2311 or track 19 for a 2321, 2319, or 2314, or

The label set is for an indexed sequential load file (ISC), but the DTF specifies IOROUT=ADDRTRVE.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Verify that the indexed sequential prime data area begins on track 0 and ends on track 9 for a 2311 or 19 for a 2314, 2319, or 2321. If the extent information was submitted using standard (permanent) labels, use the LSERV output to check the extent information for the file in this dump. Correct the extent cards or rebuild the label cylinder, and resubmit the job.

If the problem recurs, have the LSERV output, the system log, and the job stream available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n50A NO MORE AVAILABLE EXTENTS

Cause: All available extents have been opened and the program requires additional extents.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check all extent cards for the file in error for sufficient size allocation. If the extent information was submitted using standard (permanent) labels, use the LSERV output to check the extents obtained. Resubmit the extent information with sufficient disk space allocated.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, printer output, and LSERV output available.
2. Have the source listing of the program that created the file available.

Operator Action:

1. Type CANCEL or CANCEIV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type a new extent in the form: nnnnnnn where (n...n) equals the track address relative to track zero. This entry can have leading zeros and be from 1 to 7 characters in length. The OPEN creates a two track extent using this relative address and the information from the last EXTENT opened.

2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n51I SYSUNITS NOT IN SEQUENCE

Cause: Programmer symbolic units on the extent card must be in ascending sequence.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the extent cards and resubmit the job.

If the problem recurs, have the job stream, including the

EXTENT cards, and program listing available to complete your problem determination action.

Operator Action: Not applicable.

#### 4n52I DISCONT TYPE 1 EXTENTS

Cause: The prime data extents for a multivolume file do not start on cylinder 1, track 0, or end on cylinder 199, track 9 for a 2311; cylinder 199, track 19 for a 2314/2319; or subcell 19, strip 5, cylinder 4, track 19 for 2321.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the extent cards of the file in error for ending extents other than the proper ones for that device type, or starting extents on the second and subsequent volumes other than cylinder 2, track 0. If the extent information for the file in error was submitted using standard (permanent) labels, use the LSERV output to check that extent information. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LSERV output.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n54I DSK XTN ENTRY TABLE FULL

Cause: The disk extent table in the DTF has no more room for entries. An OPEN found that there were more extents submitted than there was space saved.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Resubmit the job with fewer extents, or

Recompile the program with the DTF parameter DSKXTNT specifying enough save area.

If the problem recurs, have the LSERV output, job stream, and program listing available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n55A WRONG PACK, MOUNT nnnnnn

Cause: The wrong pack is mounted. nnnnnn is the serial number of the correct pack (cylinder 0, head 0, record 3 contains the six digit pack serial number).

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Mount the correct pack and respond NEWPAC to continue processing.

If the problem recurs, have the job stream, system log, and printer output available to complete your problem determination action.

4n58I NO EXTENT FOR OUTPUT FILE

Cause: A direct access or sequential output or work file requires an extent.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that all extent card parameters, both specified and assumed, are valid. If standard (permanent) labels were used, use the LSERV output to check the extent information for this file.

If the problem recurs, have the LSERV output, the system log, the job stream, and the printer output available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n59A INVALID EXTENT

Cause: The extent does not fall within the valid limits for the specified device while processing direct access or sequential disk files.

This message is issued if the file is assigned to a 2311, and the extents are submitted during a STDLABEL or PARSTD run for a 2314/2319.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Check that the relative track address is correct for the device specified.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- System log
- Printer output
- VTOC listing
- LSERV output.



Operator Action:

1. Type CANCEL or CANCELV or press EOB/END key to cancel job, or  
  
Type DSPLYV to obtain a VTOC dump, then type BYPASS to ignore the extent and continue processing, or
2. If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

Note: The invalid extent is bypassed permanently and can only be reactivated by a program with new DLBL and EXTENT information or by rebuilding the standard label cylinder.

4n59I INVALID EXTENT

Cause: Extent does not fall within the specified limits for the specified device while processing an indexed sequential file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Verify that the relative track address is correct for the device specified.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LISTVTOC output
- LSERV output.

Operator Action: Execute LISTVTOC for the device assigned to file in error. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

4n60I NO EXTENTS, ALL BYPASSED

Cause: No extents were opened because they were eliminated by previous BYPASS option, or

The FEOVD macro was issued but no extents are available for a new volume.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Provide the necessary extents and resubmit the job.

Operator Action: Not applicable.

4n61I INVALID DLBL FUNCTION

Cause: The disk label does not agree with the DTF file type. For example, an ISC was specified in the disk label statement for a non-load function.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the file type and file description on the DLBL card or in the standard (permanent) label are correct. Resubmit the job with the correct DLBL information.

If the problem recurs, have the LSERV output stream, the system log, and the printer output available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

4n62I NO PRIME DATA EXTENT

Cause: No type 1 extent exists for an indexed sequential file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: The EXTENT cards do not include a TYPE 1 prime data area extent, required for indexed sequential file processing. Add the proper EXTENT cards and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LSERV output.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n63I LOAD FILE NOT CLOSED

Cause: The programmer did not close the load file when the file was created.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: The programmer must add a close instruction and reassemble his program. The load file must also be rebuilt.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Load file program listing.

Operator Action: Not applicable.

#### 4n66A 1 TRACK USER LBL EXTENT

Cause: The first extent for a file is only one track, and user labels have been specified. User labels require more than one track for the first extent.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Correct the extent in error and resubmit the job.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Type DSPLYV to obtain a VTOC dump, then type BYPASS to bypass the extent in error and continue processing. Any other response causes an INVALID RESPONSE message.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LISTVTOC output.

#### 4n69I FILE IS OPEN FOR ADD

Cause: An ADD or ADDRTR DTF specifying track hold is being opened, and the format 2 label indicates the file is already open for this function.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Verify that a load-extend or another add-type DTF was not already open when the failure occurred. If one is open, it must be closed before an ADD or ADDRTR DTF specifying HOLD=YES can be opened. Correct the program and run it again. If the

program is correctly coded, or if the failure recurs on the corrected program, have available the following information:

- List of program which loads the file
- Dump of file, if possible
- Listing of failing job step and dump at time of failure
- Job stream necessary to recreate failure.

Operator Action: Return program, listing, and dump of the failing job to the programmer.

#### 4n70I 1ST XTNT CD NOT INDX VOL

Cause: On a retrieval function for an indexed sequential file, SYSxxx did not contain the indexes. SYSxxx was on the first disk extent card submitted for this data set; this card must reference the file that has the indexes.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the extent information for the file in error. If the extent information was submitted using the STDLABEL or PARSTD options, use the LSERV output to examine the extent information for the file in error. If the file is correct, use the LISTVTOC output to verify the existence of the indexes. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing
- LISTVTOC output

- LSERV output.

Operator Action: Check that the correct pack is mounted and that the assignment is correct. If they are, execute LISTVTOC for the device assigned to the file in error. If standard (permanent) labels were used, execute LSERV and return the output of both to your programmer.

#### 4n71I EXTENT INFO NEEDED

Cause: No extent information was given for an indexed sequential file on an Add or Add-Retrieve operation.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check all parameters of all EXTENT cards (including assumed values). If extent data was supplied via the STDLABEL option, use the LSERV output to check the extent information for the file. Correct the extent cards and resubmit the job.

If the problem recurs, have the job stream, LSERV output, printer output, and the system log available to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n72I MOD AND DTF INCOMPATIBLE

Cause: An ISAM module assembled with the CORDATA option cannot process any DTF table assembled without the IOSIZE option, or

The specified IOSIZE specified in the DTF is not large enough to contain at least one prime data record.

The logical unit specified in the message refers to the cylinder index.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the IOSIZE parameter in the DTF or remove the CORDATA option from the ISMOD. Reassemble the appropriate component and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the problem program, ISMOD assembly, and system dump available.
2. If the module was auto-linked, have the linkage editor map available.

Operator Action: Not applicable.

#### 4n77A EXTENT ENTRY ERROR-- RETRY

Cause: An error was detected in one or more extent fields entered by the operator in response to message 4n50A.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Check the extent field for one of the following errors:

- A letter or special symbol in the field.
- All zeros.
- A field larger than the physical limitation of the device specified for this file.
- A field that is only one track less than the physical limit of the device used for this file (the OPEN function uses two tracks in addition to the

ones you specify; the total would exceed the limit for that device).

Enter the corrected information.

If the problem recurs, complete your problem determination action as follows:

1. Respond with DPLYV to display the VTOC and have the output available.
2. Have the job stream, log sheet, and printer output available.

#### 4n80I INVALID FILE TYPE

Cause: DTF table for this file has an invalid type code.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the source listing for invalid parameters, either specified or assumed, for the failing file. Check that the file DTF is not being overlaid by other coding. Make the necessary corrections and resubmit the job with DUMP specified on the // OPTION card.

If the problem recurs, have the source listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

#### 4n81I NO LABEL INFORMATION

Cause: The label for this file cannot be found in SYSRES label storage area for this job type (i.e., BG, F1, or F2). The system cancels the job. Or,

The label for a system file cannot be found in SYSRES label storage area. Message 1A80D may follow.

This is probably a user error.

System Action: If message 1A80D follows this message, the system waits for an operator response. Otherwise, the job is canceled.

Programmer Action: Use the LSERV output to check for the file label. To write the labels in the label cylinder for repeated use, rerun the job using a // OPTION card with a STDLABEL or PARSTD operand followed by the correct label set. Remember that all labels residing in the label area must be resubmitted at this time. If the label set is to be used only once, rerun the job without the // OPTION card and with the correct label set.

If the problem recurs, retain the LSERV output, the job stream, the system log, and the printer output to complete your problem determination action.

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n83I INVALID LOGICAL UNIT

Cause: The device assigned to the logical unit is not the device specified in the DTF, or

The logical unit is not assigned, or

The logical unit is assigned the ignore parameter.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the program specifies the same logical unit as the assign card. Correct the assignment and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Check the LISTIO for correct assignments and retain the listing.
2. Have the program listing, the job stream, and a link edit map available.

3. Check supervisor assembly listing for correct device type specification in the DVCGEN macro.

Operator Action: Execute the LISTIO command and verify assignments. Correct assignments and rerun the job.

#### 4n84D NEED FILE PROTECT RING

Cause: An output file requires a file protect ring.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or CANCELV or press EOB/END key to cancel job, or

Place a file protect ring in the reel and type IGNORE to continue processing, or

Mount the tape on another tape drive and rerun the job.

If the problem persists, have the log sheet available to complete your problem determination action.

#### 4n85I SYSxxx AND SYSyyy ARE ASSIGNED TO THE SAME PHYSICAL UNIT

Cause: Two logical assignments are made for the same physical unit.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Execute a LISTIO and verify assignments. Reassign one of the logical units assigned to the same device.

If the problem recurs, have the console log, the LISTIO listing, and the job stream

available to complete your problem determination action.

- LISTVTOC output
- LSERV output.

#### 4n86D TAPE UNIT NOT READY

Cause: A sense command was issued to a not-ready tape drive. The sense is made to determine if a file protect ring is needed.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press EOB/END key to cancel job, or make a tape drive ready and type IGNORE to continue processing, or

Mount the tape on another tape drive and rerun the job.

If the problem persists, have the log sheet available to complete your problem determination action.

#### 4n87I SYS FILE EXTENT EXCEEDED

Cause: Extent exceeded on system output file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the EXTENT statements or standard (permanent) labels are correct and that the extents are large enough to contain the entire file. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output

Operator Action: If standard (permanent) labels were used, execute LSERV and return the output to your programmer.

#### 4n88I EOF ON SYSTEM FILE

Cause: End-of-file encountered on a system input file assigned to disk.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the input file and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a disk to printer utility for the file in question.
2. Have the log sheet and printer output available.
3. Have the job stream and program listing of the program that created the file available.

Operator Action: Not applicable.

#### 4n90I NO JIBS AVAILABLE

Cause: The JIB table is full.

This is probably a user error.

Note: In SPI mode, refer to the HOLD command.

System Action: The job is canceled.

Programmer Action: Use the LISTIO output to determine the number of temporary assignments made (the assignment prior to one with the letters "STD" in the "CMNT" column is temporary). To reduce the JIB usage, move the temporary assignments to the physical devices listed as "STD".

Note: If DASD file protect was specified at System Generation, OPEN will utilize JIB space for DASD extent information. If the problem recurs, have the LISTIO output, log sheet, and printer output available to complete your problem determination action.

Operator Action: Use LISTIO command to get listing of assignments, and then

allow temporary assignments to revert to permanent, if possible.

4n91I NO ASCII SUPPORTED SUPVR filename SYSxxx=cuu

Cause: An ASCII tape file was specified, but the supervisor was generated without the ASCII-EBCDIC and EBCDIC-ASCII translate tables.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: If ASCII is required, assemble a new supervisor with ASCII=YES in the SUPVR macro.

If the problem recurs, with ASCII support in the supervisor, complete your problem determination action as follows:

1. Have the supervisor listing, log sheet, printer output, and job stream available.
2. Obtain a system dump at the time of the failure and have the output available.

Operator Action: Check that the correct SYSRES has been mounted. If correction is necessary, mount the new SYSRES, IPL, and rerun the job.

4n97I OVLAP EXPIRED SECRD FILE

Cause: The extent limits for the file being opened overlap the extent limits of an expired data secured file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Examine the VTOC listing to determine where the overlap occurred. Correct the extent card causing the error to eliminate the overlap, and resubmit the job. If it is not necessary to save the expired secured file, open a DTF using the same file-ID as that of the secured file and instruct the operator to reply DELETE to message 4n33A when it is issued.

If the problem recurs after eliminating the overlap condition, have available the following information:

- Listing of VTOC
- Failing job stream and associated listings
- Dump at time of failure.

Operator Action: Display the VTOC and return the output, dump at the time of failure, and failing job to programmer.

4n98I OVLAP UNEXPRD SECRD FILE

Cause: The extent limits for the file being opened overlap the extent limits of an unexpired data secured file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Examine the VTOC listing to determine where the overlap occurred. Correct the extent card causing the error to eliminate the overlap, and resubmit the job. If necessary, use another pack. If it is not necessary to save the secured file, open a DTF using the same file-ID as that of the secured file and instruct the operator to reply DELETE to message 4n33A when it is issued.

If the problem recurs after eliminating the overlap condition, have available the following information:

- Listing of VTOC
- Failing job stream and associated listings
- Dump at time of failure.

Operator Action: Display the VTOC and return the output, dump at time of failure, and failing job to programmer.

4n99D DATA SECURED FILE ACCESSED

Cause: A file with the data security bit posted in the format 1 label is being opened.

System Action: The system waits for the operator to respond and then proceeds according to his response.

Programmer Action: The programmer must instruct the operator what to reply when this message is issued. If the message resulted because incorrect label information was submitted, correct it and resubmit the job.

If the failure recurs, or if the file being accessed is not

data secured, have available the following information:

- Failing job stream and associated listings
- Job stream that created the file
- Listing of VTOC
- Dump at time of failure.

Operator Action: Reply YES to allow the file to be opened, or

Reply NO, CANCEL, or press the EOB/END key to cancel the job, or

Reply CANCELV to obtain a dump of the VTOC and cancel the job, or

Reply DSPLYV to obtain a display of the VTOC. When the message is reissued after the display is complete, give one of the other replies cited.

Any other response results in an invalid response message.

In the following BTAM messages (prefix 4B),

```
DTFBT=aaaaaa
DECB=aaaaaa
SYSnnn=cuu
II=xxxx
DC=ddddddddd
```

where (aaaaaa) is the address, (nnn) specifies the symbolic unit, (cuu) specifies the line associated with the symbolic unit, (xxxx) the terminal identification, in hexadecimal, of the first two characters pointed to via the DECB entry field, and (d...d) are asterisks or the dial characters.

IF BTAM OBR/SDR is being used, the DECB entry is not provided in the message.

System Action: For messages 4B00-4B08 (inclusive) and 4B21, 4B24, 4B25, and 4B34, the action taken by the system is determined by the CANCEL operand in the BTMOD macro instruction.

If CANCEL=YES-- the current operation is discontinued and the job is canceled.

If CANCEL=NO -- the current operation is discontinued and control is returned to the user's program at the next sequential instruction.

For other BTAM error messages, the first character of the message text is normally a "P", which indicates that the error has been pceded (processing continues). A "C" in this position indicates a cancel condition has occurred and the job is terminated.



4B00I USER REFERRED TO CLOSED DTFBT  
DTFBT=aaaaaa DECB=aaaaaa

Cause: DTFBT was not opened.

This is probably a user error.

Programmer Action: Message indicates that program activity was attempted on this line group before an OPEN was issued, or after the CLOSE was issued. Check that the problem program logic avoids this situation.

If the problem recurs, do the following to complete your problem determination action:

1. Execute PDAIDS Fetch/Load Trace and save the output.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B01I DTFBT FIELD IMPROPERLY  
INITIALIZED  
DTFBT=aaaaaa DECB=aaaaaa

Cause: Error in the DTFBT.

This is probably a user error.

Programmer Action: Check that the parameters of the indicated DTFBT are consistent with the hardware configuration and features.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B02I DECB FIELD IMPROPERLY  
INITIALIZED  
DTFBT=aaaaaa DECB=aaaaaa

Cause: Error in the DECB.

This is probably a user error.

Programmer Action: Ensure that the coding of the READ, WRITE, and CONTROL macros, associated with the indicated DECB, is correct.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B03I MULTIPLE WAIT COUNT NEGATIVE  
DTFBT=aaaaaa DECB=aaaaaa

Cause: User specified negative WAIT count.

This is probably a user error.

Programmer Action: If the count was supplied in a register, ensure that the high order byte of that register was cleared before releasing control to BTAM. A negative count is indicated if bit 0 of the high-order byte is on.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B04I MULTIPLE WAIT COUNT EXCEEDS  
ECBLIST SIZE  
DTFBT=aaaaaa DECB=aaaaaa

Cause: More events than ECB's specified.

This is probably a user error.

Programmer Action: Ensure that the count parameter of the WAIT macro represents the number of entries in the ECBLIST. The last entry in the ECBLIST is represented by bit 0 of the high-order byte being on.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B05I ATTEMPT TO PROCESS NON-BTAM  
BUFFER  
DTFBT=aaaaaa DECB=aaaaaa

Cause: User referred to non-BTAM buffer.

This is probably a user error.

Programmer Action: BTAM buffer is identified by verifying that the byte at buffer + 8 contains a '08' (TIC command). Ensure that user code has not left this byte altered in any of the BTAM buffers.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B06I UNEXPECTED PROGRAM ERROR IN  
RELBUF  
DTFBT=aaaaaa DECB=aaaaaa

Cause: Buffer cannot be returned to pool.

This is probably a user error.

Programmer Action: If this message is preceded by a 4B00 or 4B05 message, it is probably a further indication of an earlier error. If this is not the case, review the BUFFER parameter in the BTMOD macro, the buffer defining parameters in the DTFBT, and the coding of the RELBUF macro for possible errors.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B07I REQBUF COUNT NEGATIVE  
DTFBT=aaaaaa DECB=aaaaaa

Cause: User requested negative number of buffers.

This is probably a user error.

Programmer Action: If the count was supplied in a register, ensure that the high order byte of that register was cleared before releasing control to BTAM. A negative count is indicated if bit 0 of the high-order byte is on.

If the problem recurs, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message has printed, that includes the problem program area.
2. Have the console sheet and a problem program listing, complete with in-line

macro expansions,  
available.

4B08I RESETPL DECB AND LCB DECB NOT  
SAME DTFBT=aaaaaa DECB=aaaaaa

Cause: User referred to wrong  
DECB for line.

This is probably a user error.

Programmer Action: When the  
problem program issues a  
RESETPL macro, BTAM compares  
the DECB address referenced by  
the macro to the DECB address  
located in the associated LCB.  
To accomplish this compare, the  
following fields are  
referenced: the DTFBT address  
and the relative line number in  
the DECB, the LCB size in the  
DTFBT, and the DECB address in  
the LCB. Ensure that user code  
has not altered these fields.

If the problem recurs, complete  
your problem determination  
action as follows:

1. Retain the system dump, if  
provided, or obtain a core  
dump, after the message is  
printed, that includes the  
problem program area.
2. Have available the console  
sheet and a problem  
program listing, complete  
with in-line macro  
expansions.

4B20I P ERR IN ERP SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Error occurred in error  
recovery procedure. While  
attempting to recover from an  
I/O error, another type of  
error occurred on the same  
device.

This is probably a hardware  
error.

Operator Action: Any further  
attempt at recovery would yield  
questionable results.

If the problem persists,  
complete your problem  
determination action as  
follows:

1. Execute PDAID I/O Trace  
and save the output.

2. Issue the ROD command,  
execute EREP, and save the  
output.

3. Have the console sheet  
available.

4B21I P CHAN DATCK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: A parity error,  
indicated by the Channel Status  
Word (CSW), was detected on the  
channel.

This is probably a hardware  
error.

Operator Action: If the  
problem persists, complete your  
problem determination action as  
follows:

1. Issue the ROD command,  
execute EREP, and save the  
output.
2. Have the console sheet  
available.
3. Retain system dump, if  
provided.

4B22I P SHOULD NOT SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Abnormal condition.  
This error is not recoverable.

This is probably a hardware  
error.

Operator Action: Certain  
combinations of status and/or  
sense bits should not occur, as  
the message indicates. One of  
these combinations has been  
detected by BTAM.

If the problem persists,  
complete your problem  
determination action as  
follows:

1. Execute PDAIDs I/O Trace  
and save the output.
2. Issue the ROD command,  
execute EREP, and save the  
output.
3. Have the console sheet  
available.

4B23I P CHAIN CHK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=ddddddd

Cause: A channel overrun happened during data chaining on an input operation. Data is lost because data service could not be obtained within the byte interval of the addressed unit.

This is probably a hardware error.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and save the output.
2. Have the console sheet available.

4E24I P PROGRAM CK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=ddddddd

Cause: Programming error detected by channel.

This is probably a user error.

Programmer Action: The command address portion of the channel status word contains, in most cases, the address+8 of the channel command in error. If this directs you to a user supplied channel program, examine it closely for possible errors.

If the problem persists, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B25I P PROTECT CK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=ddddddd

Cause: A user read command attempted to read into a main storage area outside the problem area.

This is probably a user error.

Programmer Action: The command address portion of the channel status word contains the address+8 of the channel command word in error. If this directs you to a user supplied channel program, examine it closely for errors.

If the problem persists, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B26I P UNIT EXCEPTION SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=ddddddd

Cause: Unit exception.

This is probably a hardware error.

Operator Action: The condition that caused this status is device and command dependent. If this message is issued frequently, a hardware problem may exist.

If the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O Trace and save the output.
2. Execute EREP and save the output.

4B27I P EQUIP CK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Unit check (equipment check).

This is probably a hardware error.

Operator Action: This error indicates a control unit failure.

If the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O Trace and save the output.
2. Attempt to run On-line Terminal test on a terminal on the affected line.
3. Issue the ROD command, execute EREP, and save the output.
4. Have the console sheet available.

4B28I P LOST DATA SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Unit check (lost data).

This is probably a user error.

Operator Action: This error indicates that the input message was larger than the input area or that a Dial command was issued to a line that was already "off-hook". Ensure that these operation difficulties are not at fault.

If the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O Trace and save the output.
2. Issue the ROD command, execute EREP, and save the output.
3. Have the console sheet available.

4B29I P TIME OUT SYSnnn=cuu  
DECB=aaaaaa FT=xxxx DC=dddddddd

Cause: The communication line has been idle for the time-out period specified by the transmission control unit or terminal control unit and the active command is Read.

This is probably a user error.

Operator Action: This message indicates that an expected event did not occur within the allotted time. The terminal operator may have waited too long between key depressions (normally 28 seconds), or the terminal may not be operational; that is, - power off, improper switch settings, etc. Polling or addressing a nonexistent terminal also results in a time out. Ensure that none of these conditions exist.

If the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O Trace and save the output.
2. Issue the ROD command, execute EREP, and save the output.
3. Have the console sheet available.

4B30I P INTERV REQ SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Intervention required on unit check. Device not ready.

This is probably a user error.

Operator Action: Some possible conditions that cause the issuance of this message are: power off on data set, data set "on-hook", data set not in data mode, etc. Ensure that all pertinent devices have power on and are ready, and that the terminal location checks all switch settings, paper supply etc., to ensure proper operational status.

If the problem persists, complete your problem

determination action as follows:

1. Execute PDAIDs I/O Trace and save the output.
2. Run On-Line Terminal test, if possible, on the device in question.
3. Issue the ROD command, execute EREP, and save the output.
4. Have console sheet available.

4B31I P BUS OUT CK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Unit check (parity error). This message indicates that the device or control unit has received a data byte or a command code that has invalid parity.

This is probably a hardware error.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and save the output.
2. Have the console sheet available.

4B32I P DATA CK SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: The control unit detected an out of parity character (VRC) and/or the check character (LRC), developed at the control unit, differs from that developed at the terminal. The result is a unit check, with a data check indicated in the sense byte.

This is probably a hardware error.

Operator Action: Noise, static, data interruption, or interference of any kind is usually indicated by a data check. If this message happens frequently, check the communication facility, the terminal, or the control unit.

Careful analysis of each error message and the use of On-line Terminal test and/or some locally developed procedure will help to establish the most probable trouble source. If symptoms indicate that a terminal is the source of trouble, the terminal location should seek local assistance in resolving the problem.

If the symptoms indicate that neither the terminal nor the communication facilities are the probable trouble source and the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O TRACE and save the output.
2. Issue the ROD command, execute EREP, and save the output.
3. Have the console sheet available.

4B33I P OVERRUN SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: Data lost because data service could not be obtained within the byte interval of the addressed unit.

This is probably a hardware error.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Execute PDAIDs I/O TRACE and save the output.
2. Issue the ROD command, execute EREP, and save the PDAIDS output.
3. Have the console sheet available.

4B34I P COMMAND RJ SYSnnn=cuu  
DECB=aaaaaa TI=xxxx DC=dddddddd

Cause: The command cannot be executed because it is not defined for the unit. This condition can also occur if:

- The problem program (using binary synchronous support) issues a non-transparent WRITE macro with the sequence DLE STX in the output message, or
- The problem program issues a WRITE command to a line that is not enabled.

This is probably a user error.

Programmer Action: The command address portion of the channel status word contains the address+8 of the channel command in error. Ensure that the device and feature dependent parameters of the associated DTFBT are correct.

If the problem persists, complete your problem determination action as follows:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B35I P STX ENQ SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=dddddddd

Cause: Start of text character followed by enquiry character. One of the following conditions occurred at the transmitting 2780 terminal: data check, equipment check, buffer overrun, buffer parity check, misfeed, or jam.

This is probably a user error.

Operator Action: This message indicates that the terminal location is experiencing some problem. The problem may be the result of the operator

pressing the STOP key on the printer or punch, a full chip box, a forms check, an empty hopper, a full stacker, or the like.

Check for these operational problems, and if the problem persists, and it has been determined that the terminal is being operated correctly, the terminal location should seek local hardware support.

4B36I P STX T ENQ SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=dddddddd

Cause: Start of text character followed by text and the enquiry character. When the 2780 is transmitting, either a buffer parity check or a buffer overrun in the line buffer has occurred.

This is probably a hardware error in the 2780.

Operator Action: If the problem persists, the terminal location should seek local hardware support.

4B37I P EOT RESPN SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=dddddddd

Cause: End of transmission response to a message. At the receiving 2780 terminal, one of the following occurs: equipment check, buffer overrun or parity error, synchronization check, misfeed, jam, or component selection error. This error message can also result from one of the following problem program errors:

- The 2780 receives a block of text in excess of 169 characters.
- The HT character is used in text beyond the last stop position for the printer.
- The problem program selects a component of the 2780 that is not ready.
- The 2780 receives a record, while in transparency, that does not equal the capacity

of the output; that is, 80,  
120, or 144.

This is probably a user error.

Operator Action: While it is possible that programming and/or hardware problems can cause this error, it is probably the result of an operation problem at the terminal. Depression of the STOP key on the printer or punch, a full chip box, a forms check, etc. will cause this message to be issued.

If the problem persists, and it has been determined that the terminal is being operated correctly and the problem program is not at fault, the terminal location should seek local hardware support.

4B38I P HDWBF0FL SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=ddddddddd

Cause: The capacity of the 2740-M2 hardware buffer has been exceeded.

This is probably a user error.

Programmer Action: Insure that the length of the transmitted message does not exceed the buffer capacity.

If the problem recurs, do the following to complete your problem determination action:

1. Retain the system dump, if provided, or obtain a core dump, after the message is printed, that includes the problem program area.
2. Have available the console sheet and a problem program listing, complete with in-line macro expansions.

4B39I P TRM EL ERR SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=ddddddddd

Cause: 2740 M2 electronic hardware failure for last message received.

This is probably a hardware error.

Operator Action: This message indicates that while data was in correct parity as received from the line, it has been detected in error (bad parity) in the 2740 M2 buffer.

If the problem persists, do the following to complete your problem determination action:

1. Have the console sheet available.

4B40I P TRM IO ERR SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=ddddddddd

Cause: 2740 M2 I/O hardware failure for last message received.

This is probably a hardware error.

Operator Action: This message indicates a 2740 M2 printer malfunction has occurred.

If the problem persists, have the console sheet available to complete your problem determination action.

4B41I P VRC ERROR SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=ddddddddd

Cause: 2740 M2 line VRC error for last message received.

This is probably a hardware error.

Operator Action: This message indicates that the data, as received from the line, is in the error (bad parity). The communication facility or the hardware at the central site is the probable source of trouble.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and save the output.
2. Have the console sheet available.



4B42I P PARITY ERR SYSnnn=cuu  
DECB=aaaaaa TI=xxxx  
DC=dddddddddd

Cause: 2740 M2 terminal line parity error induced by terminal on a transmitted message.

This is probably a hardware error.

Operator Action: If the problem persists, have the console sheet available to complete your problem determination action.

4B50I P L ERR THRD RCH, SYSnnn=cuu

Cause: The line error counters have reached their specified limit.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Perform your normal installation procedure. If this message appears frequently, obtain hardware support.

4B60I LINE DELAY

Cause: Time is needed to enable the line.

This message is only for information.

Operator Action: Not applicable.

4B70I ON-LINE TEST CUU=cuu XX=xx  
YY=yy TO=tt NK=nn TI=ii

Cause: Binary synchronous on-line test results for the transmitter. CUU specifies the channel and unit, XX the test type, YY the number of transmissions, TO the number of time outs, NK the number of negative acknowledgments received, and TI the terminal ID (multipoint lines only).

Operator Action: Not applicable.

4B71I ON-LINE TEST CUU=cuu XX=xx  
YY=yy TO=tt LD=dd DC=cc

Cause: Binary synchronous on-line test results for the receiver. CUU specifies the channel and unit, XX the test type, YY the number of transmissions, TO the number of time outs, LD the number of occurrences of last data, and DC specifies the number of data checks.

Operator Action: Not applicable.

4B72I

Cause: This message, in one of four formats, provides the results of a scan of the error file of an IBM 2715 Transmission Control Unit. The scan occurs when:

- eight errors (the threshold value) occur for one area station attached to the 2715, or
- a manual request is made at the 2715, the 2740 attached to the 2715, or the console printer-keyboard.

The following variables apply to all messages:

cuu

the address of the communications line (channel and unit in hexadecimal);

tttt

the time (decimal 0001 to 2400 in the 24-hour system) that the error scan occurred;

ww

the address of a particular adapter within the 2715 (in hexadecimal);

xx

the address of the area station for which the error scan is reported (in hexadecimal);

yy

the address of the device where the errors occurred (in hexadecimal).

zzzz

the time (decimal 0001 to 2400 in the 24-hour system) that one group of error data was recorded on the 2715 disk.

Each message text follows with an individual explanation.

----- cuu xx tttt yy ERS=n

Cause: This message is printed when five or more of the eight errors at an area station occur on one device. (n) is the number of errors (from 5 to 8) that occurred on device yy.

----- cuu xx tttt THRESH'D

Cause: This message is printed when eight errors (the threshold value) occur at area station xx, but no one device attached to the area station has accounted for as many as five of the errors.

----- cuu xx tttt yy eeee zzzz yy eeee zzzz yy eeee zzzz yy eeee zzzz

Cause: This message is printed when an error scan is manually requested for an area station. This message appears twice in succession and the two messages provide error information for the eight most recent errors at area station xx.

(eeee) is the error data (in hexadecimal) for device yy.

----- cuu ww tttt eeeee zzzz eeeee zzzz eeeee zzzz eeeee zzzz

Cause: This message is printed when an error scan is manually requested for a 2715 adapter. This message appears twice in succession and the two messages provide error information for the eight most recent errors at adapter ww.

(eeeeee) is the error data (in hexadecimal) for adapter ww.

System Action: The message is printed on the master console, the teleprocessing console, or the system maintenance console, depending on the routing code included in the error scan message sent by the 2715. Normal processing then resumes.

Operation Action: Not applicable.

Programmer Action: Not applicable.

4B98I TR=xxx/yyy, DC=zzz,yyy,IR=xxx/yyy, TO=xxx/yyy

Cause: This message is always preceded by 4B40I or 4B50I. The error count has reached specified limit.

Operator Action: Not applicable.

4B99I CSW\*\*=nnnnnnnnnnnnnnn CCW=nnnnnnnnnnnnnnnn SN=ffff

Cause: This message always follows messages 4B20I-4B34I (inclusive). The CSW is the last seven bytes of the Channel Status Word in hexadecimal and the CCW is the Channel Command Word in error.

SN=ffff where ffff is the contents of the sense byte.

4C10D PDAID=xx

Cause: PDAID issues this message to request the instruction to start one of its functions. xx is the 2-character operator response.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter one of the following responses:

- GT - start GSVc trace.
- FT - start Fetch/Load trace.
- IT - start I/O trace.
- TD - start transient dump.
- QT - start QTAM trace.
- XX - terminate the PDAID function currently executing.
- Press EOB/END key - Read input from SYSRDR.

4C11D OUTPUT DEVICE=cuu

Cause: PDAID issues this message to request the address (cuu) of the output device for the PDAID function. This device must be either a printer or a magnetic tape unit.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter the device address, cuu (channel and unit), of the desired output device. This device must be either a tape unit or printer, or

Press EOB/END key to default to the core-wrap mode.

Notes: A tape unit is the only valid output device for QTAM trace. A tape unit or a printer must be specified for transient dump.

4C12D TRACE PARTITION=xx

Cause: PDAID issues this message to request that the partition be traced during the execution of F/L trace or GSVc trace. This message only appears in an MPS system.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter one of the following responses:

- SP - trace the supervisor.
- BG - trace background.
- F2 - trace foreground 2.
- F1 - trace foreground 1.
- Press EOB/END key - trace all partitions
- GO - terminate requests and initiate the PDAID. GO is a valid response to console requests for card input correction.

4C13D IGNORE DEVICE=cuu

Cause: PDAID issues this message when I/O trace is selected.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter the device address, cuu (channel and unit), of the device to be ignored. If no devices are to be ignored:

- Press EOB/END key - terminate the ignore requests.
- Respond GO - terminate all requests and establish the module in the PD area.

4C14D TRACE DEVICE=cuu

Cause: PDAID issues this message when I/O trace is selected.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter the device address, cuu (channel and unit), of the device to be traced. If no devices are to be traced:

- Press EOB/END key - to terminate trace requests.
- Respond GC - to terminate all requests and establish the module in the PD area.

4C15D IGNORE SVC=nn

Cause: PDAID issues this message when GSVC trace has been selected. It requests the number of the SVC to be ignored.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Respond with the 2-digit hexadecimal number of the supervisor call (SVC) to be ignored. If all SVCs are to be traced:

- Press EOB/END key - to terminate ignore requests.
- Respond GC - to terminate all requests and establish the module in the PD area.

4C16D TRACE SVC=nn

Cause: PDAID issues this message when the GSVC trace is requested. It requests the number of the SVC to be traced.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Respond with the 2-digit hexadecimal number of the SVC to be traced. If no individual SVC is to be traced:

- Press EOB/END key - to terminate trace SVC requests.
- Respond GO - to terminate all requests and establish the module in the PD area.

4C17D INVALID PARAMETER SPECIFIED

Cause: PDAID issues this message when a response to the previous message is invalid. If input is from cards, the message with the invalid parameter is printed following this message.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Correct the response, if possible. If you cannot give the correct response, reply CANCEL and save the log sheet for your programmer.

4C18I KEYWORD MISSING

Cause: PDAID issues this message when the card input does not contain a necessary keyword (message).

This is probably a user error.

System Action: The system prints the missing keyword on SYSLOG.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4C19I NO CE AREA GENERATED - JOB CANCELLED

Cause: PDAID issues this message when there is no CE area. When the supervisor was generated, CE=NO was specified or the default was assumed in the FOPT macro.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Reassemble the supervisor with the CE= parameter specified (minimum 800) and resubmit the job.

If the problem recurs, save the system log and supervisor

assembly listing to complete your problem determination action.

Operator Action: Not applicable.

4C20D cuu NOT IN PUB TABLE

Cause: PDAID issues this message when the requested output device is not in the PUB table.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter another device address.

4C21A CONTROL CARD MISSING

Cause: PDAID issues this message when the operator pressed EOB/END key in response to the PDAID= message and no cards were in SYSIPT.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Place the control cards in SYSIPT and press EOB/END key or

Reply CANCEL to cancel the job.

4C22A INVALID CONTROL CARD - ENTER CORRECTED CARD VIA SYSIPT OR SYSLOG

Cause: An invalid control card has been encountered on SYSIPT. The invalid keyword/parameter is indicated by an X below the field in error.

This is probably a user error.

System Action: The invalid control card precedes this message, then the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Either repunch the invalid control card and enter it via SYSRDR or type in the corrected card on SYSLOG.

4C23D IGNORE AND TRACE SPECIFIED - WHICH ONE IS DESIRED

Cause: PDAID issues this message when the user has specified both TRACE and IGNORE, when using card input.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Specify the option desired by responding TRACE or IGNORE.

4C24A NO I/O TO OD

Cause: This message is issued by the active trace function. The output device for the trace function is inoperative.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Ready the device and press EOB/END key. If the device is not operational, respond X to stop the trace function.

Note: The X response does not cancel PDAID. To cancel PDAID, enter a // EXEC PDAID and respond XX to the PDAID= message.

4C25I INSUFFICIENT CE AREA GENERATED  
- JOB CANCELLED

Cause: PDAID issues this message to inform the user that the CE area generated is less than 800 bytes, the size required for the problem determination serviceability aids.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Generate the supervisor with CE=800 specified in the FOPT macro.

Operator Action: Not applicable.

4C26I UNRECOGNIZEABLE RECORD - DUMP  
FOLLOWS

Cause: PDLIST issues this message when the input tape contains a record that was not created by a PDAID trace function.

System Action: The first 321 bytes of the error record are printed, then processing continues.

Programmer Action: Check that the correct tape was mounted or that the tape was not used by your program while a PDAID trace was executing.

Operator Action: Not applicable.

4C27I AAA=

Cause: PDAID issues this message to request the starting and ending addresses of the alternate area to store trace events.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter two six byte hex addresses; first the lowest address of the save area, then the highest. Your entry must be in the form:

X'xxxxxx',X'xxxxxx'

Where the small x's represent the addresses. The area must be at least 512 (X'200') bytes, and exist outside the supervisor, but within main storage,  
or

Press EOB/END key to use the CE area.

4C28I OUTPUT DEVICE AND AAA  
PARAMETERS PRESENT - WHICH ONE  
SHOULD BE KEPT

Cause: Card input is being used and both OUTPUT DEVICE and AAA (Alternate Address Area) were specified. These parameters are mutually exclusive.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type in the desired output method (either OUTPUT DEVICE or AAA).

4C40A INVALID HEX LOADADR SPECIFIED

Cause: This message is caused by specifying a hex LOADADR that is less than X'80' or greater than X'FFFD90', or contains more than six characters, excluding leading zeros.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the invalid control card is ignored.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or press EOB/END key to ignore the card in error, or

Type CANCEL to cancel the job,  
or

Type in a valid LOADADR with the ending apostrophe.

4C41A INVALID DECIMAL LOADADR SPECIFIED

Cause: This message is caused by specifying a decimal LOADADR that is less than 128 or greater than 16,776,592, that contains non-numeric characters, or that contains more than eight characters, excluding leading zeros.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the invalid control card is ignored.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or press EOB/END key to ignore the card in error, or

Type CANCEL to cancel the job, or

Type a valid decimal LOADADR with the ending apostrophe.

4C42A INVALID CONTROL CARD

Cause: This message occurs whenever a control card is encountered that does not have blanks in the first nine columns.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the invalid control card is ignored.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or press EOB/END key to ignore the card, or

Type CANCEL to cancel the job, or

Type in a valid operation and operand.

4C43A INVALID OPERATION

Cause: This message is issued whenever an operation is encountered that is not an ASSGN, CONFG, or OPIN.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the invalid card is ignored.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or press EOB/END key to ignore the card, or

Type CANCEL to cancel the job, or

Type in the correct operation.

4C44A INVALID OPERAND

Cause: This message is issued whenever one of the operands is not followed by a blank, not spelled correctly, not a valid specification, or the LOADADR is not enclosed in apostrophes.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the invalid card is ignored.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or press EOB/END key to ignore the card, or

Type CANCEL to cancel the job, or

Type in the correct operand.

4C45A CORE OR LOADADR NOT SPECIFIED

Cause: This message is caused when ever all control cards have been processed and either a OPTN CORE or OPTN LOADADR card was not processed or was ignored due to an error.

This is probably a user error.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL to cancel the job, or

Type in a OPTN CORE= or OPTN LOADADR=card.

4C46A SYSPCH NOT ASSIGNED TO TAPE AND OPTN TAPEIPL=YES

Cause: TAPEIPL=YES was specified in the OPTN control statement, but SYSPCH is not assigned to a magnetic tape unit.

System Action: If SYSLOG is assigned to a console printer-keyboard, the system waits for an operator response. If not, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or OPTN TAPEIPL=NO to punch the object deck on the device assigned to SYSPCH, or

Type CANCEL to cancel the job, or

enter any DUMPGEN OPTN statement. This statement is processed, and message 4C46A is reissued.

Pressing EOB/END key causes message 4C46A to be reissued.

4E00I vvvvvv cuu TW=www TR=rrr NB=nnn PW=ppp PR=qqq SIO=sssss

Cause: A program has completed accessing a tape volume due to end of volume, end of job, abnormal end of job, etc. Tape error statistics have been collected with output specified to go to SYSLOG.

vvvvvv = serial number of standard label volume; blank when nonstandard or unlabeled volume is being used.

cuu = channel/unit address (physical unit).

www = number of temporary write errors.

rrr = number of temporary read errors.

nnn = number of noise blocks.

ppp = number of permanent write errors.

qqq = number of permanent read errors.

sssss = number of start I/Os issued to the volume.

System Action: The tape error statistics are printed and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4E01I ESTV FILE FULL

Cause: The ESTV data set cannot hold any more error statistics.

System Action: The system does not record additional tape error statistics until the ESTV data set is cleared.

Programmer Action: Not applicable.

Operator Action: Execute ESTVUT to dump the statistics from disk to printer or tape.

4E02I NO ESTV FILE LABEL

Cause: The label information for ESTVFLE is not in the VTOC for SYSREC.



This is probably a user error.

System Action: Volume error statistics are not collected.

Programmer Action: If the label is not in the VTOC, check that SYSREC is assigned a 2311, 2319, or 2314, then execute the ESTVFMT program to put the ESTVFLE label information in the VTOC of SYSREC.

If the problem recurs, complete your problem determination action as follows:

1. Have the LISTVTOC and LISTIO output available.
2. Have the log sheet of the events leading to the message and the results of the ESTVFMT execution available.

Operator Action: Execute LISTVTOC for SYSREC and issue the LISTIO command. Give the output to your programmer.

#### 4E03I NO ESTVFLE LABEL FND

Cause: The label information for ESTVFLE is not in the VTOC for SYSREC.

This is probably a user error.

System Action: Volume error statistics are not collected.

Programmer Action: If the label is not in the VTOC, assign SYSREC to a 2311, 2319, or 2314, then execute the ESTVFMT program to put the ESTVFLE label information in the VTOC of SYSREC.

If the problem recurs, do the following to complete your problem determination action:

1. Have the LISTVTOC and LISTIO output available.
2. Have the log sheet of the events leading to the message and the results of the ESTVFMT execution available.

Operator Action: Execute LISTVTOC for SYSREC and issue the LISTIO command. Give the output to your programmer.

#### 4E04I ESTV NOT IN EFFECT

Cause: The ESTV option has been specified for DASD, but SYSREC has not been assigned.

This is probably a user error.

System Action: Volume error statistics are not collected.

Programmer Action: Not applicable.

Operator Action: Re-IPL and assign SYSREC to the DASD on which the ESTVFLE resides.

If the problem recurs, complete your problem determination action as follows:

1. Issue the LISTIO SYSREC command and have the output available.
2. Obtain a system dump and have the output available.
3. Have the supervisor listing available.

#### 4E05I NO ESTVFLE STD LABEL INFO.

Cause: The label information for ESTVFLE is not in the standard label area of the label cylinder.

This is probably a user error.

System Action: Error statistics by tape volume are not collected, and the ESTVFLE cannot be cleared.

Programmer Action: Rewrite the standard label cylinder and include ESTVFLE label information. IPL or execute ESTVUT to dump and clear the file; either action will reactivate recording of error statistics.

If the problem recurs, complete your problem determination action as follows:

1. Display the label cylinder and have the output available.
2. Have the label set cards for the ESTVFLE, log sheet, and printer output available.

Operator Action: Not applicable.

4E06I NO TEBV, FILE NOT CLEARED

Cause: An attempt was made to clear the ESTV file, but TEBV=DASD was not specified for the supervisor at system generation.

This is probably a user error.

System Action: The ESTVLFE is not cleared and processing continues.

Programmer Action: If the file is to be cleared, ESTVUT must be executed with a supervisor that includes the TEBV=DASD option. No action is required if the file is only to be dumped.

If the problem recurs with TEBV=DASD in the supervisor, have the supervisor listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

4E10I vvvvvv cuu TR=rrr TW=www SIO=sssss

Cause: A pre-specified number of either temporary read or temporary write errors has occurred on a tape volume.

vvvvvv = serial number of standard label volume; blank when nonstandard or unlabeled volume is being used.

cuu = channel/unit address (physical unit).

rrr = number of temporary read errors.

www = number of temporary write errors.

sssss = number of start I/Os issued to the volume.

System Action: Processing of the problem program continues.

Programmer Action: Not applicable.

Operator Action: For nonstandard or unlabeled tapes, the operator should note the

tape volume identification of the volume currently in use to ensure meaningful error monitoring.

4MR1I EXTERNAL INTERRUPT I/O ERROR filename SYSxxx

Cause: An I/O error occurred while processing an external interrupt. (Note: CSW and sense information may be invalid.)

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

4MR2I SCU NOT OPERATIONAL filename SYSxxx

Cause: The secondary control unit for the 1419 or 1275 is not operational.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and save the output.
2. Have the system log available.

4P01I DATA CHECK SYSxxx=cuu

Cause: The current punch operation results in an unrecoverable data check for a DTFPT specifying shifted code, or an error occurred while Logical IOCS attempts to recover.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

4P02D DATA CHECK SYSxxx=cuu

Cause: The current punch operation results in an unrecoverable data check for a DTFPT not specifying shifted code.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press EOB/END key to cancel the job, or type IGNORE to continue processing.

If the problem recurs, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

Default System Action: The job is canceled.

4Q00I LINE ERROR THRESHOLD REACHED  
SYSnnn=cuu TR=xxx/yyy  
HU=xxx/yyy RDC=xxx/yyy  
WDC=xxx/yyy

Cause: The audio line error count has reached its specified limit for device SYSnnn at address cuu.

TR--transmissions  
HU--hang up  
RDC--read data check  
WDC--write data check  
xxx--specified limit  
yyy--number that have occurred.

System Action: Normal QTAM operation continues.

Operator Action: None (information-only message).

4Q01I INVALID OPEN SEQ  
DTFQT ADDR=aaaaaa  
DTFQT NAME=bbbbbbbb

Cause: DASD message file was not the first QTAM file opened.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: correct the OPEN macro sequence and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have the message control program listing available.
2. Obtain a system dump at time of failure.

4Q02I INVALID DTFQT TYPE  
DTFQT ADDR=aaaaaa  
DTFQT NAME=bbbbbbbbb

Cause: User has specified an invalid data file type.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the invalid DTFQT type and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have the applicable program listing available.
2. Obtain a system dump at the time of failure.

4Q03I INVALID CLOSE SEQ  
DTFQT ADDR=aaaaaa  
DTFQT NAME=bbbbbbbbb

Cause: DASD message file was not the last QTAM file closed.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the CLOSE macro sequence and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have the message control program listing available.
2. Obtain a system dump at the time of failure.

4Q04I SPECIFIED TERMTBL ENTRY NCT  
FOUND DTFQT ADDR=aaaaaa  
DTFQT NAME=bbbbbbbbb

Cause: User specified a PROCESS program entry that was not defined in the terminal table, or

A WTTA line has no terminal table entry.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the terminal table and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have applicable program listings available.
2. Obtain a system dump at the time of failure.

4Q16I CHECKPOINT EXTENT FORMATTED  
INCORRECTLY

Cause: The DASD extent specified for the Checkpoint Records file was incorrectly formatted.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Reformat the checkpoint extent by using the clear disk utility.

If the problem recurs, complete your problem determination action as follows:

1. Have a disk print of the checkpoint extent available.
2. Obtain a system dump at time of failure.

4Q17I INSUFFICIENT CHECKPOINT WORK  
AREA

Cause: The main storage work area is too small to contain a complete checkpoint record.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the SOWA parameter in the checkpoint file DTFQT and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have the message control and message processing program available.
2. Obtain a system dump at the time of failure.

4Q18I NO MORE AVAILABLE XTENTS

Cause: All extents allocated for the DASD message file have been used.

System Action: The job is canceled.

Operator Action: None. This message is not caused by an error; it is the result of continuing normal operations too long, that is, until the message queues file has been completely filled.

4Q19I QTAM MSG CTRL PROG. NOT IN SYSTEM

Cause: An attempt was made to open a QTAM message processing file while the QTAM message control program was not in the system.

This is probably a user error.

System Action: The job is canceled.

Operator Action: Start the message control program before attempting to start any QTAM message processing program.

If the problem recurs, have the console sheet and a system dump taken at the time of failure available to complete your problem determination action.

4Q20I INSUFFICIENT CHECKPOINT EXTENT

Cause: The DASD extent specified for the Checkpoint Records file is too small.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Allocate the proper number of tracks for the checkpoint file.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC utility and save the output.
2. Have the QTAM message control program listing available.

4Q21I INSUFFICIENT CHECKPOINT WORK AREA AND EXTENT AREA

Cause: The errors specified in 4Q17 and 4Q20 were both detected.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Allocate the proper number of tracks for the checkpoint file and correct the SOWA parameter in the checkpoint file DTFQT and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump at the time of the failure.
2. Execute LISTVTOC and save the output.
3. Have the QTAM message control and message processing program listing available.

4Q22I TOO MANY MESSAGE QUEUES FILE EXTENTS

Cause: More than 16 extents were specified for the DASD message file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the allocation for the QTAM message queues file. If problem persists, execute LISTVTOC utility and save the output to complete your problem determination action.

4Q23I MESSAGE QUEUES EXTENT FORMATTED INCORRECTLY

Cause: Message queues are formatted incorrectly.

System Action: The job is canceled.

This is probably a user error.

Programmer Action: Reformat the QTAM message queues file by using the clear disk utility.

If the problem recurs, complete your problem determination action as follows:

1. Have the QTAM message control program listing available.

2. Have a disk print of the first few records of the message queues file available.

4Q24I QTAM NOW BEGINNING TO USE LAST XTENT

Cause: The last extent allocated for the QTAM DASD message file is now being used.

System Action: Processing continues.

Operator Action: None. This is an information-only message. (If the QTAM program is not closed down before this last extent is completely filled, cancelation with a 4Q18I message results.)

The complete format of messages 4Q25 through 4Q39 and 4Q47 is:

(Line 1) 4QnnI text SYSxxx=cuu CCW=cccccccccccccc TI=pppp (or DC=dddddddddd)

(Line 2) CSW17=yyyyyyyyyyyyyy SN=ssrr LCB=aaaaaa

The second line is omitted if OBR/SDR is being used.

where:

4Q identifies the message (QTAM)  
 nn message number  
 I information to the operator  
 text message text  
 SYSxxx symbolic unit assignment of the device  
 cuu actual unit assignment of the device  
 aaaaaa address of the line control block for the line  
 pppp terminal ID (polling or addressing characters)  
 d...d dial digits for the terminal  
 y...y bytes 1 through 7 (that is, the last 7 bytes) of the channel status word  
 c...c failing channel command word  
 ssrr sense data obtained from the device in error

For messages 4Q25 through 4Q39:

ss is the sense byte of the failing command.  
 rr is the sense byte of the error recovery CCW (if any).

For message 4Q47:

ssrr is the 2-byte response to addressing received from a 2740 Model 2 terminal.

4Q25I ERPERR

Cause: An error occurred during execution of a channel command issued by QTAM's line error recovery procedures.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing the error message available.
2. Execute PDAIDS I/O trace to record the sequence of interrupts preceding the problem, and save the output.
3. Issue the ROD command, execute EREP, and save the output.

4Q26I CH-DC

Cause: Channel data check.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

4Q27I SHDNOT

Cause: A QTAM line I/O interrupt has occurred with CSW status or sense data invalid for the hardware involved. QTAM checks for error-free status and for all valid error conditions; if the actual ending conditions do not match any of these, this error message is written.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.

2. Execute PDAIDS I/O trace to record the sequence of interrupts preceding the problem, and save the output.
3. Issue the ROD command, execute EREP, and save the output.

4Q28I CHAING

Cause: Chaining check.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

4Q29I PRG-CK

Cause: A channel program check has occurred on a QTAM channel command other than a TIC. (A channel program check on a TIC command can occur because of a temporary out-of-buffers condition; this error message is not written out in that situation.)

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Have a system dump, taken at the time of the problem, available.
3. Execute PDAIDS I/O trace and save the output.

4. Issue the ROD command, execute EREP, and save the output.

problem and save the output.

3. Issue the ROD command, execute EREP, and save the output.

#### 4Q30I PRT-CK

Cause: A read command attempted to read into a main storage area outside a problem program area.

System Action: Normal QTAM operation continues.

Programmer Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error available.
2. Have a system dump, taken at the time of this error, available.
3. Execute PDAIDS I/O trace to record the sequence of interrupts preceding the problem and save the output.
4. Issue the ROD command, execute EREP, and save the output.

#### 4Q32I EQU-CK

Cause: Unit check with sense byte indicating equipment check.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

#### 4Q31I UN-EXC

Cause: Unit exception has occurred on a command for which this is not a normal status.

System Action: Normal QTAM operation continues.

Operator Action: Check for a user error. With some terminal types, unit exception status can occur during addressing because of out-of-paper, local-mode, or similar operational problems.

If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this message available.
2. Execute PDAIDS I/O trace to record the sequence of interrupts preceding the

#### 4Q33I LOST-D

Cause: Unit check with sense byte indicating lost data.

System Action: Normal QTAM operation continues.

Programmer Action: This condition usually occurs after QTAM intentionally causes a channel program check due to an invalid TIC command. This is done when QTAM needs another buffer to continue an I/O operation, but none is available. Investigate whether this out-of-buffers condition (indicated by a bit in the error halfword) is concurrent with the lost-data error message. If so, increase the number of buffers in the QTAM message control program to eliminate the problem.

If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.



2. Have a system dump, taken at the time of the error, available.
3. Execute PDAIDS I/O trace to record the sequence of interrupts preceding the problem and save the output.
4. Issue the ROD command, execute EREP, and save the output.

#### 4Q34I TIMOUT

Cause: Unit check with sense byte indicating time-out. The communication line has been idle for the time-out period specified by the transmission control unit or terminal control unit, and the active command is READ.

This is probably a user error.

System Action: Normal QTAM operation continues.

Programmer Action: If this terminal is never being contacted on sending and/or receiving, check the polling and addressing characters or the dial characters in the TERM entry in the message control program.

Operator Action: Contact the terminal operator to check for operational problems such as terminal turned off, in local mode, or out of paper, or operator stopping his keying of data in mid-message, or data set buttons set incorrectly on a dial terminal, etc.

If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

#### 4Q35I INTREQ

Cause: Unit check with sense byte indicating intervention required. Device not ready.

This is probably a user error.

System Action: Normal QTAM operation continues.

Operator Action: Contact the terminal operator to check for operational problems such as terminal turned off, in local mode, out of paper, etc.

If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

#### 4Q36I B/O CK

Cause: Unit check with status byte indicating bus-out check. Parity error in I/O channel.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

#### 4Q37I DATA CK

Cause: Unit check with sense byte indicating data check.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

4Q38I OVERUN

Cause: Unit check with sense byte indicating overrun. Data lost because data service could not be obtained within the byte interval of the addressed unit.

This is probably a hardware error.

System Action: Normal QTAM operation continues.

Operator Action: If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Issue the ROD command, execute EREP, and save the output.

4Q39I CMDREJ

Cause: Unit check with sense byte indicating command reject. The command cannot be executed because it is not defined for the unit.

System Action: Normal QTAM operation continues.

Programmer Action: Check the command code (the first byte of the CCW in the printed message) to see if it is a valid command for the hardware unit involved. If it is a valid command code, this is probably a hardware error.

If the problem recurs, complete your problem determination action as follows:

1. Have the console sheet showing this error message available.
2. Have a system dump, taken at the time of the error, available.
3. Issue the ROD command, execute EREP, and save the output.

4Q40I QTAM MSG CTL ACTIVATION COMPLETED

Cause: The MCP has opened files and transaction can begin.

Operator Action: None (information-only message).

4Q41I LINE ERRORS - CANCEL STATUS  
SYSnnn=cuu TR=xxxxxxxxxxx  
DC=xxxxx IR=xxxxx TO=xxxxx

Cause: QTAM has canceled the program. This message indicates the status of each line after an abnormal end-of-job termination.

TR--transmission  
DC--data check  
IR--intervention required  
TO--time out

Operator Action: None (information-only message).

4Q41I LINE ERRORS - CANCEL STATUS  
SYSnnn=cuu TR=xxxxxxxxxxx  
HU=xxxx WDC=xxxx RDC=xxxx

Cause: QTAM has canceled the program. This message indicates the status of each audio line after an abnormal end-of-job termination.

TR--Transmission  
HU--Hang Ups  
WDC--Write Data Checks  
RDC--Read Data Checks

Operator Action: None (information-only message).

4Q42I LINE ERRORS - CLOSEDOWN STATUS  
SYSnnn=cuu TR=xxxxxxxxxxx  
DC=xxxxx IR=xxxxx TO=xxxxx

Cause: QTAM closedown has been issued at the request of problem program. This message indicates the status of each line after a normal end-of-job termination.

TR--transmission  
DC--data check  
IR--intervention required  
TO--time out

Operator Action: None  
(information-only message).

4Q42I LINE ERRORS - CLOSEDOWN STATUS  
SYSnnn=cuu TR=xxxxxxxxxxx  
HU=xxxx WDC=xxxx RDC=xxxx

Cause: QTAM closedown has been issued at the request of a problem program. This message indicates the status of each audio line after a normal end-of-job termination.

TR--Transmission  
HU--Hang Ups  
WDC--Write Data Checks  
RDC--Read Data Checks

Operator Action: None  
(information-only message).

4Q47I 2740-2

Cause: One of the error-indicating leading graphics has been received in response to addressing from a 2740, Model 2. The specific response is shown in the message as the first byte of sense data. This message is in the same general format as messages 4Q25-4Q39.

System Action: Normal QTAM operation continues.

Operator Action: Check the error-indicating response that is shown as the first byte of sense data. The error was probably caused by the user if the response is one of the following:

10 - terminal in local mode  
13 - terminal out of paper  
20 - document device down

Contact the terminal operator to correct an apparent operating error.

If the response was anything but the preceding, this is probably a hardware error.

If the problem persists, complete your problem determination action as follows:

1. Have the console sheet showing this message available.
2. Issue the ROD command, execute EREP, and have the output available.

4Q50I LINE ENTRY NOT FOUND  
DTFQT ADDR=xxxxxx  
DTFQT NAME=xxxxxxxxx

Cause: An audio line specified in a DTFQT has no entry in the Line Table.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Add the required line table entry, and reassemble the message control program.

1. Have the message control program listing available.

4Q51I INVALID WORD ADDRESS  
WORD ADDRESS=xxxxxx  
WORD LENGTH=xxxx

Cause: The disk address of a 7772 DCV word specified in the word table is invalid.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the erroneous WORD macro in the message control program and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have the message control program listing available.

2. Have a disk print of the 7772 vocabulary file available.

Programmer Action: Correct the erroneous WORD macro in the message control program and reassemble.

4Q52I INVALID WORD LENGTH  
WORD ADDRESS=xxxxxx  
WORD LENGTH=xxxx

If the problem recurs, complete your problem determination action as follows:

Cause: The length of a 7772 DCV word specified in the word table is invalid.

This is probably a user error.

System Action: The job is canceled.

1. Have the message control program listing available.
2. Have a disk print of the 7772 vocabulary file available.

The complete format of messages 4Q53 through 4Q56 is:

```
4QnnI text SYSxxx=cuu LCB=aaaaaa WRDC=bbbbbb  
WRDL=1111 CSW17=yyyyyyyyyyyyyy  
CCW=cccccccccccccc SN=ssrr
```

WRDC and WRDL are not displayed for message 4Q56.

The variables in messages 4Q53 through 4Q57 are:

4Q identifies the message (QTAM)  
nn message number  
I information to the operator  
text message text  
SYSxxx symbolic unit assignment of the device  
cuu actual unit assignment of the device  
addr the channel command block address  
aaaaaa address of the line control block for the line  
bbbbbb core or disk address representation of a DCV word  
1111 length of the DCV word  
y...y bytes 1 through 7 (that is, the last 7 bytes) of the channel status word  
c...c failing channel command word  
ssrr sense data obtained from the device in error

ss is the sense byte of the failing command.  
rr is the sense byte of the error recovery CCW (if any).

4Q53I INV DRM AD

Cause: Invalid 7770 drum address.

This is probably a user error.

System Action: The reply being sent at the time of the error is truncated at the point of the bad drum address. Normal QTAM operation continues.

Programmer Action: Correct the message processing program that generated the reply with the bad drum address, and reassemble.

If the problem recurs, have a listing of the message processing program that generated the erroneous reply available to complete your problem determination action.

4Q54I INV WRD AD

Cause: Invalid 7772 DCV word disk or core address.

This is probably a user error.

System Action: The reply being sent at the time of the error is truncated at the point of the invalid address. Normal QTAM operation continues.

Programmer Action: Correct the message processing program that generated the reply with the bad address, and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have a listing of the message processing program that generated the erroneous reply available.
2. Have a system dump, taken at the time of the error, available.

4Q55I INV BFR LG

Cause: Too short buffer for DCV word.

This is probably a user error.

System Action: The reply being sent at the time of the error is truncated at the point of the too-long word. Normal QTAM operation continues.

Programmer Action: Correct the length parameter in the BUFARU macro in the message control program, and reassemble.

If the problem recurs, complete your problem determination action as follows:

1. Have a listing of the message control program available.
2. Have a listing of the 7772 vocabulary file available.

4Q56I NO BUFFER

Cause: No buffer for DCV words.

This is probably a user error.

System Action: The reply being sent at the time of the error is truncated. Normal QTAM operation continues.

Programmer Action: Correct the problem in one of the following ways, and then reassemble.

1. Provide DCV buffers by adding a BUFARU macro to the message control program, or
2. Provide a WORDIBL macro, plus all needed WORD macros in the message control program, and modify the message processing program to provide main storage addresses rather than disk word addresses.

If the problem recurs, have listings of the message control and message processing programs available to complete your problem determination action.

4Q57I DISK ERROR VOCAB FILE CCB=addr  
WRDC=bbbbbb CSW=y...y  
CCW2=c...c

Cause: A disk error occurred when the vocabulary file was accessed.

System Action: The system retries the disk operation.

Programmer Action: Not applicable.

Operator Action: If the error persists, determine whether the cause is disk pack or disk drive by mounting the pack on another drive, reassigning the file, and rerunning the job. If the error recurs, the pack must be initialized and the files rebuilt. If the error does not recur, the disk drive is malfunctioning and hardware maintenance should be called. If hardware maintenance is called, execute EREP and have the output available.

4R00I ESTV FILE INITIALIZED, ENTRY IN  
VTOC

Cause: The ESTVFMT program has completed execution, has caused ESTVFLE to be formatted, and has caused the ESTVFLE label to be entered in the VTOC.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4R01I \* ESTV DUMP UTILITY \*

Cause: The ESTV Dump File program has begun execution.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4R02A INPUT = (2311, 2314, TAPE)

Cause: The ESTV Dump File program is ready to accept the operator's input file designation.

System Action: ESTV processing waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter response on console keyboard: 2311 or 2314/2319 if input device is a DASD, or

TAPE if input device is a magnetic tape unit.

4R03I INCORRECT INPUT - OPTIONS ARE  
2311, 2314, TAPE

Cause: An invalid choice was entered in response to message 4R02A.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter a response on the console keyboard: 2311, 2314/2319 if input device is a DASD, or

TAPE if input device is a magnetic tape unit.

4R04A OUTPUT = (PRC, PRNC, TAPE)

Cause: The ESTV Dump File program requires an output device/method designation.

System Action: ESTV processing waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter desired method of transferring the error statistics collected by the ESTV program. The choices are:

PRC (print and clear the ESTV file);

PRNC (print and do not clear the ESTV file);

TAPE (write output on tape and clear the ESTV file).

4R05I INCORRECT OUTPUT - OPTIONS ARE  
PRC, PRNC, TAPE

Cause: An invalid choice was entered in response to message 4R04A.

System Action: ESTV processing waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter a response on the console keyboard:

PRC (print and clear the ESTV file);

PRNC (print and do not clear the ESTV file);

TAPE (write output on tape and clear ESTV file).

4R06I FILE DUMPED & CLEARED

Cause: The ESTV Dump File program has completed transferring error statistics from disk and has reset the disk data set to zeros.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4R07I FILE DUMPED

Cause: The ESTV Dump File program has completed transferring the error statistics from either tape or disk to the specified output file. The input file is not altered as a result of this dump.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

4R09D DUMP OUTPUT TAPE BACK TO INPUT TAPE? (YES, NO)

Cause: ESTV input tape and disk file have been dumped to an output tape. User is being prompted to either terminate the job, or dump the output tape back to the input tape.

System Action: ESTVUT processing waits for an operator response.

Programmer Action: Not applicable.

Operator Action: On the console typewriter, enter either:

NO to terminate the job, or

YES to dump the output tape to the input tape.

4R09I NO TEBV, ESTV FILE NOT INITIALIZED

Cause: This message is issued by the ESTVFMT program. The TEBV option was not specified during system generation.

This is probably a user error.

System Action: The message is printed on SYSLOG and ESTVFMT goes to normal EOJ without formatting the ESTV file.

Programmer Action: The supervisor must be reassembled, using the system generation procedure, with the TEBV option specified.

If the problem recurs, have the following available to complete your problem determination action:

- Log sheet
- Printer output
- Supervisor listing
- Supervisor generation macro cards.

Operator Action: Not applicable.

4V04I NO RECORD FOUND filename SYSxxx

Cause: A no-record-found condition occurred while searching for a Format 4 label. The VOL1 data field of the volume label is incorrect or has been destroyed.

System Action: The job is canceled.

Programmer Action: The file(s) should be created on another disk pack or data cell, or this disk pack or data cell should be initialized and the file(s) recreated.

If the problem recurs, do the following to complete your problem determination action:

1. Have the job stream, log sheet, printer output, and disk pack or data cell available.

Operator Action: If another disk drive is available, mount the pack on the new drive and rerun the job.

4V04I NO FORMAT 4 LBL IN VTOC filename SYSxxx

Cause: The VTOC pointer address in the volume label does not point to the VTOC, or

The format identifier of the first record in the VTOC is not Format 4.

System Action: The job is canceled.

Programmer Action: The file(s) should be created on another disk pack or data cell, or this disk pack or data cell should be initialized and the file(s) recreated.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: If another disk drive is available, mount the pack on the new drive and rerun the job.

4V06I NO RECORD FOUND filename SYSxxx

Cause: A no-record-found condition occurred while searching for the volume label.

System Action: The job is canceled.

Programmer Action: The VOL1 label has been destroyed. Initialize the DASD device and recreate the files.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Retry the job on another disk drive. If the job executes normally, the first drive is probably defective.

4V06I NO STANDARD VOL LABEL filename SYSxxx

Cause: The information at cylinder 0, track 0, record 3 does not begin with the standard VOL1 identifier.

System Action: The job is canceled.

Programmer Action: The VOL1 label data field has been destroyed. Initialize the device and recreate the file.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Rerun the job using another disk drive. If the job executes normally, the first drive is probably defective.

4V09I NO RECORD FOUND filename SYSxxx

Cause: A no-record-found condition occurred while searching the VTOC for file labels.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: The VTOC is not valid. Reinitialize the pack and recreate the file.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing.

Operator Action: Try another disk drive and rerun the job.

4V95A SYSLOG OR SYSLST

Cause: The response DSPLYV was entered for a VTOC display to a disk open message.



System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or press the EOB/END key to cancel the job, or

Type SYSLOG and press EOB/END key to have the VTOC displayed on the printer keyboard, cr

Type SYSLST and press EOB/END key to have the VTOC displayed on the printer.

Any other response causes an INVALID RESPONSE message.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL or EOB/END key to cancel the job, or

SYSLOG EOB/END key to have the VTOC displayed on the printer keyboard.

Any other response causes an INVALID RESPONSE message.

4V96A SYSLST NOT A PRINTER

Cause: The response DSPLYV was entered for a VTOC to be displayed on the printer and SYSLST is not assigned to a printer.



## 5-Prefix Messages

### 5E01I JOBSTEP PL/I TERMINATED. LINK OPTION RESET

Cause: The compiler is unable to continue because of at least one terminating error in the source program.

This is probably a user error.

System Action: When the next // EXEC LNKEDT or ENTRY statement is encountered, message 1S1ND is issued.

Programmer Action: Correct the error(s) diagnosed by the compiler.

Operator Action: Not applicable.

### 5E02I LINK OPTION RESET

Cause: The source program contains at least one severe error.

This is probably a user error.

System Action: When the next // EXEC LNKEDT or ENTRY statement is encountered, message 1S1ND is issued.

Programmer Action: Correct the error(s) diagnosed by the compiler.

Operator Action: Not applicable.

### 5E03I POSSIBLE ERRORS IN SOURCE PROGRAM

Cause: The compiler has ignored possible errors in the source program or has assumed default parameters which may lead to possible errors.

This is probably a user error.

System Action: Program execution continues.

Programmer Action: Check that the problem program has executed correctly. If not, correct the program and resubmit the job.

If the problem recurs, have the compile listing, the system log, and the printer output available to complete your problem determination action.

Operator Action: Not applicable.

### 5L00I Object time diagnostic (refer to the PL/I Programmer's Guide for individual messages).

Cause: ONSYSLOG was specified as option of an external procedure and an object time error occurred.

System Action: Processing continues or job is canceled depending upon diagnostic message issued by the PL/I control routine.

Programmer Action: Refer to  
DOS/TOS PL/1 Programmer's Guide  
GC24-9005, chapter 'Object Time  
Diagnostic Messages' for a  
detailed description of the  
error.

Operator Action: Not  
applicable.

5L02A AWAITING REPLY

Cause: DISPLAY statement with  
REPLY option issued.

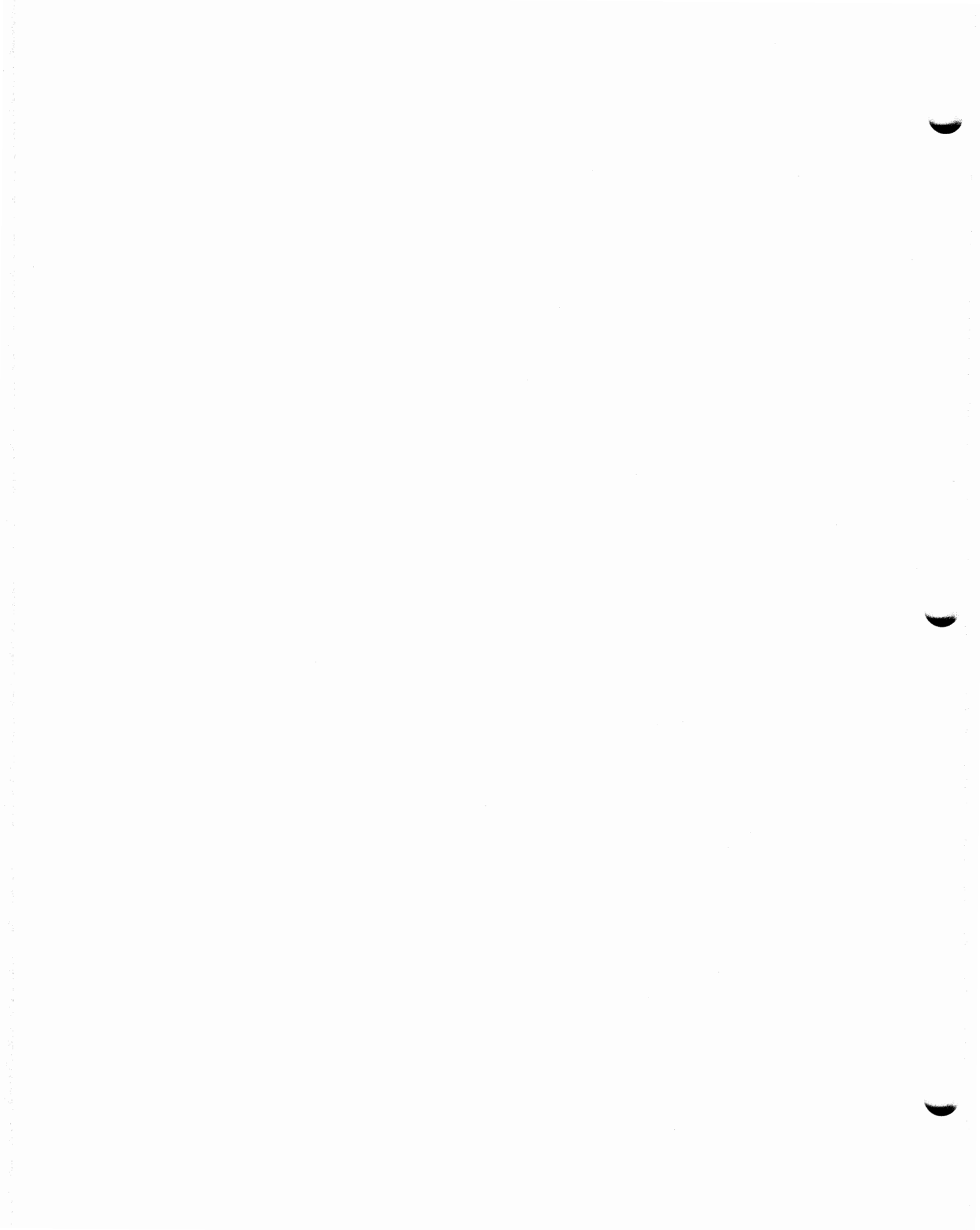
System Action: The system  
waits for an operator response.

Programmer Action: Not  
Applicable.

Operator Action: Give  
indicated reply.

## 6-Prefix Messages

To use this section for messages that have a 6 prefix (for example, RPG messages) remove the message section from the applicable component publication and insert it here.



## 7-Prefix Messages

To use this section for SM/1, remove the message section from the applicable component publication section and insert it here. If the Tape and Disk Sort/Merge messages, or all Sort/Merge messages, are not required, they may be removed without affecting the messages of other components.





The phase that issues each SORT/MERGE message is indicated by the second digit of the message number, where

- 0 = phase 0 (Assignment phase)
- 1 = phase 1 (Internal sort phase)
- 2 = phase 2 (External sort phase)
- 3 = phase 3 (Final merge phase)
- 9 = more than one phase

7000I 'control card image'

Cause: A series of these messages lists the control cards.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7001I PHASE 0 END. NO DETECTED ERRORS

Cause: Phase 0 has ended with no errors detected.

System Action: Control is passed directly to the next sort/merge phase or back to the calling routine (EXEC or LOAD and BALR routine) if CALCAREA specified.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7002D OPERATOR CORRECT ERRORS OR CANCEL

Cause: This message follows action/information messages in phase 0 when the console is used to write the messages. It requests the operator to correct the errors specified in preceding messages or else cancel the job.

System Action: Control is given to the operator to correct the errors detected in phase 0.

Programmer Action: Not applicable.

Operator Action: Operator has two options:

1. Correct storage and/or unit assignments as noted by preceding 'A' type (action) messages, place control statements back in input stream and reply 'RETRY'
2. Cancel the job by replying 'CANCEL'

7003I EXCESS CARDS

Cause: The maximum number of control cards that can be handled by the sort/merge program is 25.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check for more than 25 control cards and compress the information into an allowable number of cards.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7004I NO xxxxxx CARD

Cause: An essential control card has been omitted. Essential control cards are SORT or MERGE (not both), RECORD, and END. xxxxxx will be replaced by the statement definer.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Supply the indicated control card and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7005I SIMT\_DEFINER\_ERR

Cause: The first field of a non-continuation card must be a valid statement definer, that is, SORT, MERGE, RECORD, MODS, INPFIL, UTFIL, OPTION, or END.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Correct the misspelled or incorrect definer and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7006I DUPLICATE xxxxxx CONTROL CARD

Cause: A statement definer, represented by xxxxxx, must not be specified more than once.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Not applicable.

Operator Action: Remove the duplicate control card and rerun the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

7007I COL. 1 OR 1 TO 15 NOT BLANK

Cause: Column 1 of a control card must be blank, or a control card with a nonblank character in column 72 (indicating that a continuation card follows) must be followed by a card which has blanks in columns 1 - 15 (a valid continuation card).

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the control statements for punching in column 1 or columns 1-15 of the continuation card. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7008I NO CONTIN CARD

Cause: A continuation card did not appear where indicated or the END control card did not have a blank in column 72.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check for a keypunch error, an overflow of parameters into column 72, or a missing continuation card. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7009I xxxxxx OPTION\_INVALID.DEFAULT  
USED

Cause: Either

1. The xxxxxx parameter, which is not valid for this job, has been specified in the OPTION statement, or
2. NOTPMK has been specified for a direct access device on the OUTFIL statement.

The default values for the OPTION statement are:

STORAGE = (the value obtained by subtracting the sort/merge program origin from the end of partition address)

PRINT=ALL

All other options are nullified if invalid.

This is probably a user error.

System Action: The job continues with the default values.

Programmer Action: Check the job output to see if it is satisfactory with the default values. If not, make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7010I INVALID KEY LENGTH

Cause: The value assigned to KEYLEN in the OPTION statement must be a valid number less than 256 and greater than zero. This message is also printed if any of the following restrictions connected with the KEYLEN option are violated.

1. All input, output, and intermediate storage must be on direct access devices.

2. Every input record must have a key field.
3. All key fields must be the same length.
4. Input and output must be fixed-length and unblocked.
5. The output cannot contain a key field, and may be blocked and directed to any output device when a tag sort is being performed with OPTION ADDRROUT specified.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the KEYLEN value for violations of the KEYLEN restrictions. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7011I INVALID xxxxxx KEYWORD

Cause: A keyword not recognized by the sort/merge program or a duplicate keyword has been detected in the control statement represented by xxxxxx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the appropriate control statement for an invalid or duplicate keyword. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and

printer output available to complete your problem determination action.

Operator Action: Not applicable.

7012I INVALID FORMAT

Cause: The value assigned to f in the FIELDS parameters, or the value assigned to FORMAT, must be one of the following -- CH, ZD, PD, BI, FI, or FL.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the format values given in the FIELDS parameter or the FORMAT value of the SORT or MERGE control statement. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7013I CFxx DISPLACEMENT INVALID

Cause: The value assigned to p in the FIELDS parameter of a SORT or MERGE statement must be a numeral greater than zero. The control field number is represented by xx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the displacement value specified in the SORT or MERGE control statement for non-numeric characters. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7014I CFxx LENGTH INVALID

Cause: The value assigned to m in the FIELDS parameter of a SORT or MERGE statement must be a numeral greater than zero. The control field number is represented by xx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the length values specified in the SORT or MERGE control statement for a length of zero or an omitted length. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7015I CFxx BEYOND 4092

Cause: A control field must not extend beyond the first 4092 bytes of the record.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the length (m) and displacement (p) values specified in the SORT or MERGE control statement for a field extending beyond 4092 bytes. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7016I CFxx SEQUENCE INVALID

Cause: The value assigned to s in the FIELDS parameter of a SORT or MERGE statement must be either A or D. The control field number is represented by xx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the sequence value specified in the SORT or MERGE control statement for a keypunching error. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7017I BOTH SORT AND MERGE DEFINED

Cause: Both SORT and MERGE statements must not be specified for the same execution of the sort/merge program.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the application and eliminate either the SORT or MERGE control statement, then resubmit the job.

If the problem recurs, have the job stream, log sheet, and

printer output available to complete your problem determination action.

Operator Action: Not applicable.

7018I xxxxxx yyyyyy KEYWORD MISSING

Cause: A parameter which must be specified, and for which there is no default, has been omitted. The parameters which fall in this category are: FIELDS and WORK in the SORT statement, FIELDS and FILES in the MERGE statement, and TYPE and LENGTH in the RECORD statement. xxxxxx represents the statement, and yyyyyy the keyword.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the appropriate control statement for the missing keyword. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7019I MISSING FORMAT OR SEQUENCE CODE

Cause: The f (format) or s (sequence) value in the FIELDS parameter of a SORT or MERGE statement has been omitted, or all formats are the same and the format keyword was to be used, but was omitted.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the SORT or MERGE control statement for a missing f or s value, or

for a missing FORMAT keyword.  
Make the necessary corrections  
and resubmit the job.

If the problem recurs, have the  
job stream, log sheet, and  
printer output available to  
complete your problem  
determination action.

Operator Action: Not  
applicable.

7020I GIVEN FILE SIZE INVALID AND  
IGNORED

Cause: The value assigned to  
the SIZE parameter of a SORT  
statement must be a numeral,  
otherwise the maximum capacity  
is assumed by the sort/merge  
program. This may lead to an  
inefficient sort and capacity  
exceeded problems.

This is probably a user error.

System Action: The job  
continues with default value.

Programmer Action: Check the  
SORT control statement for an  
invalid SIZE operand if the  
output is undesirable, the  
efficiency unsatisfactory, or  
the sort capacity is exceeded  
and the job terminates. Make  
the necessary correction and  
resubmit the job.

If the problem recurs, have the  
job stream, log sheet, and  
printer output available to  
complete your problem  
determination action.

Operator Action: Not  
applicable.

7021I FILES VALUE INVALID

Cause: The value assigned to  
the FILES parameter of a SORT  
or MERGE statement must be in  
the permitted range.  
Permissible values are 1-9 for  
a sort and 1-8 for a  
merge-only.

This is probably a user error.

System Action: The job is  
terminated after phase 0 has  
completed its error checking of  
control statements and unit  
assignments.

Programmer Action: Check the  
SORT or MERGE statement for an  
invalid FILES operand. Make  
the necessary correction and  
resubmit the job.

If the problem recurs, have the  
job stream, log sheet, and  
printer output available to  
complete your problem  
determination action.

Operator Action: Not  
applicable.

7022I yyyyyy KEYWORD IGNORED BY MERGE

Cause: The CKPT, SIZE and WORK  
keywords are ignored when  
included in a MERGE statement.  
yyyyyy represents the ignored  
keyword.

This is probably a user error.

System Action: The job  
continues and ignores the  
specified option.

Programmer Action: Check the  
application to see if it was  
set up properly and make the  
necessary corrections before  
the next run.

If the problem recurs, have the  
job stream, log sheet, and  
printer output available to  
complete your problem  
determination action.

Operator Action: Not  
applicable.

7023I SORT WORK VALUE INVALID

Cause: The WORK parameter in a  
SORT statement has been  
assigned a value not recognized  
by the sort/merge program.  
Permissible values are 1-8 for  
direct access and 3-9 for tape  
devices.

This is probably a user error.

System Action: The job is  
terminated after phase 0 has  
completed its error checking of  
control statements and unit  
assignments.

Programmer Action: Check the  
SORT statement for an invalid  
WORK operand. Make the

necessary correction and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7024I PH 1/2 EXITS IGNORED BY MERGE

Cause: Phases 1 and 2 of the sort/merge program are not used for a merge-only operation. Therefore, any phase 1 or 2 exits specified in the MODS statement of a merge-only operation are ignored.

This is probably a user error.

System Action: The job continues and ignores the specified exits.

Programmer Action: Check the application to see if it was set up properly and make the necessary corrections before the next run.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7025I EXIT E32 or E38 IGNORED BY SORT

Cause: Exits E32 and E38 are available only for a merge-only operation. They are ignored when specified in the MODS statement of a sort operation.

This is probably a user error.

System Action: The job continues and ignores the specified exits.

Programmer Action: Check the application to see if it was set up properly and make the necessary corrections before the next run.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: Not applicable.

7026I INVALID PHx NAME

Cause: The phase name specified in a MODS statement must be a valid DOS name; that is, eight alphameric characters, with the first one alphabetic. The x represents the phase number.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the MODS statement for an invalid phase name. Make the necessary correction and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7027I INVALID MODS ADDRESS/LENGTH FIELD

Cause: The load address or byte length of a user exit routine must be a valid decimal number. The length value is preceded by the letter "l".

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the MODS statement for a valid address or length. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

This is probably a user error.

Operator Action: Not applicable.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

7028I INVALID PHx EXIT

Cause: An exit not recognized by the sort/merge program has been specified in a MODS statement. The valid exits are E11, E15, E17, E18, E21, E25, E27, E31, E32, E35, E37, E38, and E39. The x represents the phase number.

Programmer Action: Check the RECORD statement for an invalid length value, and the INPFIL and OUTFIL statements for an invalid blocksize for the device being supported. Make the necessary corrections and resubmit the job.

This is probably a user error.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Operator Action: Not applicable.

Programmer Action: Check the MODS statement for keypunching errors or other errors resulting in the specification of an invalid exit number. Also, check that the exit is issued in the proper phase. Make the necessary corrections and resubmit the job.

7030I Lx VALUE INVALID

Cause: A length specified in the RECORD statement must be a numeral. The x identifies the length.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Operator Action: Not applicable.

Programmer Action: Check the RECORD statement for an invalid length value. Make the necessary corrections and resubmit the job.

7029I ERR IN LENGTH VALUE

Cause: An inconsistency has been detected either among the length values specified in the RECORD statement, or in the blocksize of the INPFIL or OUTFIL statement. Physical and logical record lengths must be:

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

Device	Sort Length	Merge Length
Tape	18-32,000	
2311	1-3624	1-3625
2314*	1-7293	1-7294

\*Also applies to the 2319.

7031I RECORD TYPE INVALID

Cause: The TYPE parameter in the RECORD statement must be either F (fixed length records) or V (variable length records).

This is probably a user error.



System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the RECORD and MODS statements for inconsistency. Lengthening or shortening of records ( $L_1 \neq L_2 \neq L_3$ ) requires user exit E15 or E35. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7032I ALTERED RECORDS REQUIRE EXIT E15/E35

Cause: When phase 0 of the SORT program checks the LENGTH keyword and finds that the input, internal sort, and output record lengths are not equal, it assumes that user exit routines will alter the record lengths. Phase 0 searches for exits E15 or E35 and issues this message when the correct exit is not found.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the RECORD and MODS statements for inconsistency. Lengthening or shortening of statements requires user exits E15 or E35. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7033I xxxxxx BLOCK SIZE = RECORD LENGTH

Cause: Blocksize has not been specified for either the INPFIL or OUTFIL statement, so it is assumed to be equal to record length for fixed-length records, or record length plus four for variable-length records. xxxxxx will be replaced by INPFIL or OUTFIL.

This is probably a user error.

Note: If this assumption is not reasonably valid, performance reduction or job termination may result.

System Action: The job continues with the default value.

Programmer Action: If the efficiency or output is unsatisfactory or abnormal termination occurs, check the BLOCKSIZE parameter. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7034I RECORD CONFLICTS WITH xxxxxx BLKSIZE

Cause: The blocksize specified in the INPFIL or OUTFIL statement must be consistent with the record length specified in  $L_1$  or  $L_3$ . That is, for variable-length records, block size must be at least record length +4, and, for fixed-length records, blocksize must be an exact multiple of record length. xxxxxx will be replaced by INPFIL or OUTFIL. If ADDRROUT is specified with variable-length records, the rules for fixed-length records apply for  $L_3$ .

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of

control statements and unit assignments.

Operator Action: Not applicable.

Programmer Action: Check the RECORD statement and the INPFIL or OUTFIL statement for inconsistency in specifying lengths. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7035I VOLUME VALUE(S) INVALID

Cause: The VOLUME operand is not a decimal numeral; the only valid character.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the INPFIL statement for an invalid VOLUME operand. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7036I BYPASS IGNORED FOR OUTFIL

Cause: If the BYPASS parameter is specified in the OUTFIL statement, it is ignored by the sort/merge program.

This is probably a user error.

System Action: The job continues normal processing.

Programmer Action: Remove the BYPASS option from the OUTFIL statement for the next run.

7037I SYNTAX ERROR - xxxxxx

Cause: A SYNTAX error has been detected in the control statement represented by xxxxxx. Common syntax errors are:

- An odd number of parentheses
- Missing commas
- Embedded blanks
- Redundant operands
- Missing parameters

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the specified control statement for a syntax error. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7038I L3 INVALID FOR ADDR0UT

Cause: If ADDR0UT=A is specified in the OPTION statement, the value assigned to L<sub>3</sub> in the RECORD statement must be 10. If ADDR0UT=D is specified, then L<sub>3</sub> must be 10 plus length of control word (sum of m values in SORT statement) plus or minus any modification made to control word length at exit E35.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the RECORD statements for an invalid 1 in the ADDROUT option or the OPTION statement for an undesired ADDROUT option. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7039I INVALID xxxxxx DELIMITER

Cause: A punctuation error has been detected in the control statement represented by xxxxxx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check for operands that are incorrectly split between a control and continuation card. Also, check for missing or extra commas. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7040I FLD OR VALUE GT 8 CHAR -- xxxxxx

Cause: A field or value has been detected in the statement represented by xxxxxx which is greater than eight characters -- the longest valid length.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the specified statement for the field or value longer than eight characters. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7041I L4 GREATER THAN L1 OR L5

Cause: The minimum length specified for input records must not be greater than the specified maximum or modal lengths.

The length parameter symbols are L<sub>4</sub> for minimum, L<sub>1</sub> for maximum, and L<sub>5</sub> for the average (modal) length for the input file.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the RECORD statement for an invalid L<sub>1</sub>, L<sub>4</sub>, or L<sub>5</sub>. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7042I MULTIPLE DEFINED EXIT Enn

Cause: An exit number (represented by nn) must not be defined more than once in the MODS statement.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of

control statements and unit assignments.

Programmer Action: Check the MODS statement for multiply defined exits. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7043I INVALID INTERNAL LISTS

Cause: An error has been detected in the parameter list provided by the user when he dynamically invokes the sort/merge program.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check all control statements in the parameter list passed to sort by the user program. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7044I TOO MANY xxxxxx KEYWORDS

Cause: The maximum number of keywords that can be specified in the statement represented by xxxxxx has been exceeded.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the specified statement for too many keyword operands. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7045I CFxx BEYOND RECORD

Cause: A control field specified in the FIELDS parameter of SORT or MERGE statement must not extend beyond the end of the minimum record. Control field number is represented by xx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the SORT or MERGE statement for an incorrectly specified control field displacement or length. Check the RECORD statements for an incorrectly specified record length. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7046I CFxx TOO LONG FOR TYPE

Cause: A control field with packed or zoned decimal format exceeds 16 bytes. Any other control field must not exceed 256 bytes. Control field number is represented by xx.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of

control statements and unit assignments.

Programmer Action: Check the length and format of the specified control field on the SORT or MERGE statement for error. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7047I EXIT Enn NOT GIVEN FOR NONSTANDARD LABELS

Cause: If nonstandard labels are specified in the OPTION statement, exits E11, E17, E31, and/or E37 must be specified in the MODS statement. The n's represent an exit number.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the MODS statement for an omitted exit and the OPTICN statement for the required label handling. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7048I MINIMUM SORT WORK AREA nnn TRACKS

Cause: This message is generated if CALCAREA is specified in the OPTION statement.

System Action: The job terminates at the end of phase 0 due to the CALCAREA option.

Programmer Action: This value is used to determine application work space requirements. Files that have a sequence reversed from the one desired will require twice the minimum workarea. Presequenced files require less than the specified minimum.

Operator Action: Not applicable.

7049I nnn TRACKS FOR BEST PERFORMANCE

Cause: This message is generated if CALCAREA is specified in the OPTION statement.

System Action: The job is terminated at the end of phase 0 due to the CALCAREA option.

Programmer Action: The value indicates the optimum work space requirements for a given application. Any file that deviates from the assumed randomness will require additional work space.

Operator Action: Not applicable.

7050I NMAX = nnnn

Cause: This is an estimate of the maximum number of records that can be sorted within the specifications provided by the user. When CALCAREA is specified in the OPTION statement, the value from the SIZE parameter is used. NMAX calculations for tape are based on 9 track 800BPI.

System Action: The job continues normal processing.

Programmer Action: This is the value to be used as an estimate of the number of input records that can be handled in the given application.

Operator Action: Not applicable.

7051I B = nnnn

Cause: This is the blocking factor used by the sort/merge program for intermediate work files. It depends on the specifications provided by the user.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7052I G = nnnn

Cause: This is the number of records that can be contained in the record storage area of the internal sort phase. It depends on the specifications provided by the user.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7053A INCORRECT RESPONSE

Cause: The operator did not correct the error or cancel the job in response to message 7002D.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Correct the error and reply RETRY or CANCEL.

7054A INSUFFICIENT CORE

Cause: Insufficient main storage is available to contain the sort/merge program plus the minimum record storage area and user-routines, if present.

This is probably a user error.

System Action: The job is terminated after phase 0, or operator may correct 'A' (action) message errors if message 7002D is given.

Programmer Action: Sort has a minimum design point of 10K for 2400/2311 and 22K for 2314/2319. For any given application, minimum core requirements depend on the type of intermediate storage, the record and block sizes, the desired options, and the user exit sizes.

Check the STORAGE parameter, user options, and the presence of message 7020I on the log sheet (that message indicates that default values were assumed). Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Use the MAP command to obtain a listing of the current partition sizes. Assign a larger partition, if possible, and rerun the job.

7055I TOO MANY xxxxxx POSITIONAL PARAMETERS

Cause: The number of positional parameters in the statement represented by xxxxxx must not exceed the maximum allowed, as listed here.

<u>Parameter</u>	<u>Maximum Number of Positional Values</u>
FIELDS (SORT or MERGE statement)	36 if FORMAT keyword is used, 48 otherwise
LENGTH (RECORD statement)	5 if TYPE=V 3 if TYPE=F
VOLUME (INPFIL statement)	Value assigned to FILES keyword in SORT or MERGE statement
LABEL (OPTION statement)	Eleven

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: Check the specified keyword operand for too many parameters. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

#### 7056A MIXED UNIT ASSIGNMENT

Cause: All sort input units must be the same device type. Similarly, all work units must be the same device type. For example, input files could all be on 2400 9-track devices, and all work files on 2311 devices.

This is probably a user error.

System Action: The job is terminated after phase 0 or operator may correct 'A' (action) message errors if message 7002D is given.

Programmer Action: Check the ASSGN statements to ensure that all input units are of the same type and that all work files are of the same type. Input and work file types are 2311, 2314, 2319, 2400-9 trk, or 2400-7 trk. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Execute LISTIO to obtain the unit assignments for this utility program. Assign input so that all units are of the same type. Assign intermediate storage sc that all units are of the same type.

#### 7057I RECORD FORMAT NOT SUPPORTED ON 7-TRACK

Cause: Variable length records are not permitted if the intermediate work files are allocated to 7-track tape units.

This is probably a user error.

System Action: The job is terminated after phase 0 has completed its error checking of control statements and unit assignments.

Programmer Action: If this is a variable length sort application, check the intermediate storage assignments for a 7-track tape. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Execute LISTIO to determine the unit assignments. Assign the intermediate storage devices to 2400-9 track tape or DASD. Rerun the job.

#### 7058A INVALID xxxxxx AS WORK UNIT

Cause: The words INPUT/OUTPUT or ALTERNATE will replace xxxxxx. The pooling of input, output or alternate work type to an intermediate storage (work) device has been specified incorrectly. Files may share the same device extent if the following rules are followed:

1. Output may be assigned to the same device (same disk extent or magnetic tape) as the first work file. On disk, they must have identical starting track addresses.
2. The alternate work file (tape only) may not be pooled.
3. Tape input files may all be on the same physical device.

4. Pooling exists only when disk extents coincide or overlap. Pooling of the input extent is not permitted.

This is probably a user error.

System Action: The job is terminated after phase 0, or operator may correct 'A' (action) message errors if message 7002D is given.

Programmer Action: Check the input, alternate work, and output assignments for violation of the pooling rules. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Execute LISTIO and check assignment of specified file with given pooling rules. If a free drive of same type is available, assign file to free drive. Note problem on programmer report.

7059A UNITS ASGN ERROR-xxxxxxx

Cause: An error was detected in phase 0. The filename of the device assigned is indicated by xxxxxxxx. The only devices that may be allocated to an input, work, or output file are 2311, 2314, 2319, and 2400. Other devices can be used for input or output if the user reads all input at E15 and writes all output at E35. This message is also generated if an expected unit has not been assigned.

This is probably a user error.

System Action: The job is terminated after phase 0, or operator may correct 'A' (action) message errors if message 7002D is given.

Programmer Action: Check the device type of the assigned sort files or check for the omission of a file assignment. Only 2400, 2311, and 2314/2319 devices are supported. Make

the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Execute LISTIO to check device type of files assigned. Only 2400, 2311, 2314/2319 supported. If device available, assign to file. Note problem on programmer report.

7060I OPTION NOT CHARACTERISTIC OF DEVICE

Cause: A parameter has been specified in the OPTION statement which is not applicable to the I/O devices being used (for example; KEYLEN for card input, verify for tape output, ALTKW for DASD intermediate storage). For a merge application with mixed inputs, this message is issued as many times as there are input devices for which the option is not characteristic of the device.

This is probably a user error.

System Action: The job continues and ignores the specified option.

Programmer Action: Check the OPTION statement for invalid parameters. Make the necessary corrections before the next run.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7061I BLANK CARD ENCOUNTERED

Cause: A blank card was found in the control statements. The card is ignored, but is included in the program's count of control cards.

This is probably a user error.



System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Remove the blank card from the job stream.

7062A LABEL OPTION HAS INVALID PARAMETER

Cause: This message is generated if any character except U, N, or S is read between two successive commas in the label parameter of the OPTION card.

This is probably a user error.

System Action: The job is terminated after phase 0, or the operator may correct the error if message 7002D is issued.

Programmer Action: Check the OPTION card and correct the label parameter. Resubmit the job if it was terminated after phase 0.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check the OPTION card for the correct label parameters. There should be a U for unlabeled files, an N for nonstandard or user standard labels, and an S (or two consecutive commas) for standard labels. If message 7002D is issued, correct the OPTION card and type RETRY.

7101I END\_SORT PH

Cause: Phase 1 has ended.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7159A UNITS ASGN ERROR - xxxxxxxxx

Cause: This error was detected in phase 1. The filename of the device assigned in error is indicated by xxxxxxxx. The only devices that may be allocated to an input or output file are 2311, 2314, 2319, or 2400. Other devices can be used for input or output if the user reads all input at E15 and writes all output at E35. This message is also generated if an expected unit has not been assigned.

This is probably a user error.

System Action: The job is terminated after phase 0, or the operator may correct the error if message 7002D is issued.

Programmer Action: Check the device types assigned for valid types or check for the omission of an assignment. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Execute LISTIO to determine the actual assignments. Check for valid device types and reassign an omitted or invalid device, if possible.

7201I END\_MERGE PH

Cause: Phase 2 has ended.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7302I EOJ

Cause: End of job has been reached.

System Action: The system returns control to the calling routine.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7901A SORT CAPACITY EXCEEDED

Cause: This message is issued when all intermediate work space has been used and the input file has not been exhausted.

This is probably a user error.

System Action: The job terminates after message 7903I is printed.

Programmer Action: Examine the input file size, the actual record count, and the work space assignment. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: If intermediate storage is on 2400, be sure all reels contain full length tapes. If they do, rerun job with more intermediate storage when available. If direct access, intermediate storage, assign more tracks when available.

Note: Any additional assignments or altered extents must be reflected in the WORK parameter of the SORT card and by additional or changed EXTENT cards.

7902A RCD COUNT OFF

Cause: This message is issued if the number of records leaving a phase does not equal the number of records which entered, discounting any inserted or deleted by user exit routines.

This is probably a hardware error.

System Action: The job terminates.

Programmer Action: Check for I/O errors during execution and for the correction method (E18/E38 or BYPASS). Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check console sheet for possible I/O errors. Clean drives and rerun job. Issue the ROD command and execute EREP.

7903I APPROX RCD CNT nnnn

Cause: This message is issued after 7901A. It indicates the approximate number of records read in (represented by nnnn).

System Action: The job terminates.

Programmer Action: Resubmit the job with more working storage by assigning additional tape drives (and increasing the WORK parameter of the SORT card) or increasing the DASD work file extents.

Operator Action: Not applicable.

7904A I/O ERR - xxxxxx

Cause: This message is issued when a permanent I/O error occurs. xxxxxx is replaced by BYPASS if the bypass parameter was specified in the INPFIL statement, or if "skip" was specified at exits E18 or E38. Otherwise xxxxxx is replaced by 24 bytes of information, consisting of the Command Control Block.

This is probably a hardware error.

System Action: If no user options are specified, the job terminates.

Programmer Action: If the CCB is displayed, byte 7 contains the hexadecimal representation of the logical unit in error (for example; if byte 7

contains a hex 08, the logical unit is SYS008). Match the logical unit with a physical device to determine the source of the problem. Assign the logical unit to another device. If the problem recurs, suspect the recording medium (a magnetic tape or a disk pack) and, if the input file is failing, recreate it.

Operator Action: Examine unit specified and make sure the drive is clean. Rerun job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

7905I RCD IN nnnn, OUT nnnn,  
ESTIMATED nnnn

Cause: This message is issued at the end of each phase, and also after message 7902A. The first value is the number of records that entered the phase. The second value is the number of records that left the phase. The third value is the user's estimate of the number of records given in the SIZE parameter of the SORT statement.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7906I RCD INSERT nnnn, DELETE nnnn

Cause: This message is issued at the end of each phase, and also after message 7902A. The first value is the total number of records inserted at user exits in this and previous phases. The second value is the total number of records deleted at user exits in this and previous phases.

System Action: The job continues normal processing.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7907I Out of SEQ

Cause: This message is generated when a record written out by phase 2 or 3 is out of collating sequence with the previous record.

This is probably a user error.

System Action: The job terminates.

Programmer Action: If a user routine was modifying the records leaving a phase at the time this message was issued, check the routine thoroughly. If this is a merge only application, check that the records were properly collated when the input was created. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Make sure that the proper input files were mounted and that the tape drives were cleaned. Rerun the job if there was an error in mounting the files.

7908A WRONG LENGTH RECORD

Cause: This message is generated by sort (phase 1) or by merge-only read routines when a wrong-length record is discovered.

System Action: If no user options are specified, the job terminates. The user may exit to his own error routine to process read errors (via E18, E38) or use the BYPASS option to ignore incorrectly read input data blocks.

Programmer Action: Check that specified record length and block size are correct. Make the necessary corrections and resubmit the job.

Operator Action: Make sure that the proper input file was mounted.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and save the output.
2. Have the job stream, log sheet, and printer output available.

At the completion of the assignment phase, message 7D90A is issued if any assignment phase diagnostic messages have been issued. The operator is then given the opportunity to correct some of these errors. The Action clause associated with each message gives the correct procedure to follow in each case.

If problem recurs after performing the procedure specified under message action, do the following:

- Display VTOC (execute LISTVTOC) of input, output, and work disk packs.
- Have available the failing job stream and input/output files.
- Save system output and console log.
- Save any additional listings requested by the specific message.

7D01I COLUMN 1 NOT BLANK. CONTROL  
CARD NUMBER xx.

Cause: Column 1 of a sort/merge control card is not blank. xx represents the number of the control statement within the sequence of sort/merge control statements.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the control statement(s) in error and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

Programmer Action: Check the validity L3 value in the Record statement in connection with the ADDRROUT entry in the OPTION statement. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D03I STATEMENT DEFINER INVALID -  
xxxxxx

Cause: The statement definer is invalid or does not appear between columns 2 and 15 in the control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the indicated control statement definer and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D02I L3 INVALID FOR ADDRROUT OPTION

Cause: The output record length (L3) must:

- Equal 10 when ADDRROUT=A, or
- Be at least 11 if ADDRROUT=D, or
- Be no greater than 10 bytes plus the length of all control fields if ADDRROUT=D and Exit 32 is not specified.

This is probably a user error.

System Action: Processing continues.

7D04I NO END CARD FOUND AFTER READING  
25 CONTROL CARDS

Cause: More than 25 control statements were read without encountering an END statement. The maximum number of control statements permitted is 25.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Delete all erroneous control cards, or insert an END control statement as the last sort/merge control statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D05A CONTINUATION CONTROL CARD xx  
DOES NOT START IN COLUMN 16

Cause: A continuation card must begin in column 16. xx represents the number of the invalid control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the continuation control statement in error and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operation Action: See message 7D90A.

7D07I MANDATORY xxxxxx CARD OMITTED

Cause: A mandatory control statement was omitted. The statement definer of the missing card is identified by xxxxxx.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Include the missing control statement in the sort/merge control statements and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D08I TYPE RUN NOT KNOWN - SORT OR  
MERGE NOT SPECIFIED

Cause: Neither a SORT nor a MERGE control statement was included.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Include the missing SORT or MERGE statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D09I NO BLANK AFTER STATEMENT  
DEFINER - xxxxxxx

Cause: A blank does not separate the statement definer from the first field definer. The first six x's relate to statement definer while the last x identifies the illegally punched character.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the control statement in error and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: See message 7D90A.

7D10I FIELD\_DEFINER\_INVALID -  
XXXXXXXX

Cause: The field definer identified by xxxxxxxx was recognized as an invalid field definer.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the invalid field or operand definer and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D11I VALUES\_INVALID - xxxxxx

Cause: The value(s) following a field definer is invalid. xxxxxx identifies the invalid value(s).

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the control statement that contains the invalid value and resubmit the job. If the problem recurs, do the following to complete your problem determination action:

1. Have the job stream, log sheet, and printer output available.

Operator Action: See message 7D90A.

7D12I INVALID\_FORMAT\_CODE\_GIVEN - xx

Cause: The format code for the input data is punched incorrectly or is missing.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the Format value (code) in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D13I SORT\_AND\_MERGE\_CONTROL\_CARDS  
SPECIFIED\_IN\_SAME\_RUN

Cause: Both a SORT and a MERGE control statement were included. Only one is acceptable.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Delete the erroneous statement from the control statements and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D14I NO\_SEQUENCE\_VALUE\_GIVEN\_FOR\_CF  
XX.

Cause: No sequence (ascending or descending) was specified in the SORT or MERGE control statement for one or more control data fields.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Specify a collating sequence for the indicated control data field(s) in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D15I MORE THAN 12 CONTROL FIELDS SPECIFIED

Cause: The maximum number of control fields to be used in sorting or merging is 12.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the control data fields in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D16I DATA FORMAT ENTRY NOT SPECIFIED

Cause: The FORMAT field definer was not specified in either a SORT or MERGE control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the SORT or MERGE control statement by including the FORMAT entry and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D17I NO MAJOR CONTROL FIELD WAS GIVEN

Cause: Control field 1 specifications were not recognized by the program because the FIELDS field definer was not included in a SORT or MERGE control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the SORT or MERGE control statement by including a FIELDS entry (with all necessary control field specifications) and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D19I FIXED BLOCKING SPECIFIED FOR VARIABLE LENGTH RECORDS

Cause: Variable-length records on input must be specified as being in variable-length blocks.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the BLKSIZE entry in the INPFIL control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D20I CONTROL FIELD xx EXTENDS BEYOND END OF RECORD

Cause: A control data field identified by xx was specified beyond the last valid byte of the logical record.



This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the FIELDS entry in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D21I TOTAL LENGTH OF CONTROL FIELDS EXCEEDS 256

Cause: The maximum total length of all control data fields is 256 bytes.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the lengths of the control fields in the SORT or MERGE control statement.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D22I CONTROL FIELD xx GREATER THAN MAXIMUM ALLOWED

Cause: The control data field identified by xx exceeds: 16 bytes for a decimal field; 4 or 8 bytes for a normalized floating-point number.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the invalid length of the indicated control data field in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D23I L4 MUST BE LESS THAN [L1,L5]

Cause: During sort run for variable-length records, the minimum input record length must be less than the maximum or average input record length.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct either L4, L5, or L1 in the RECORD control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D24I STORAGE SPECIFIED GREATER THAN ACTUAL MACHINE SIZE

Cause: The value specified in the STORAGE entry is greater than the machine size specified at IPL time.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct or omit the STORAGE value in the OPTION control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D25I [L3, L1] MORE THAN xxxx BYTES

Cause: The input or output record length exceeds the maximum length acceptable to the sort/merge program.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the L1 or L3 entry in the RECORD control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D26I KEYLEN ENTRY INVALID

Cause: The KEYLEN field definer can only be specified for fixed-length, unblocked records (disk input only).

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the OPTION control statement by deleting the KEYLEN entry and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D28I RECORD TYPE NOT SPECIFIED

Cause: The type field definer used to indicate fixed or variable length records was not specified.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the RECORD control statement by including the TYPE field definer and associated value and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D29I FILES ENTRY NOT SPECIFIED FOR MERGE

Cause: The number of files to be merged was not specified. The FILES entry is mandatory for a merge only operation.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the MERGE control statement by including the FILES entry. A maximum of four files can be merged. Resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D30I SIZE ENTRY OMITTED IN SORT STATEMENT

Cause: The SIZE field definer is a mandatory entry that is used to reflect an exact size or an estimate of the number of records to be sorted.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the SORT control statement by including the SIZE field definer and associated value and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: See message 7D90A.

Operator Action: See message 7D90A.

7D34I [E32, E43] NOT SPECIFIED WHEN L3 [MORE, LESS] THAN L1

7D32I USER PROGRAM ORIGIN GREATER THAN STORAGE SIZE

Cause: The main storage load point or origin address for a user program was specified as being beyond the boundaries of the storage size. All user programs must be loaded below the storage size indicated either at IPL time or in the STORAGE entry.

Cause: If  $L3 > L1$ , either Exit 32 or Exit 43 must be included to lengthen records in phase 3 or 4. If  $L3$  is less than  $L1$  and variable-length records were specified, Exit 32 or Exit 43 must be used to update the record length field of each truncated record.

This is probably a user error.

This is probably a user error.

System Action: Processing continues.

System Action: Processing continues.

Programmer Action: Either correct the ADDRESS value in the MODS control statement or change the STORAGE entry (if specified) in the OPTION statement and resubmit the job.

Programmer Action: Either correct the  $L1$  or  $L3$  value in the RECORD control statement, or include the appropriate exit (E32 or E43) in the MODS statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

Operator Action: See message 7D90A.

7D33I L5 IS GREATER THAN L1

Cause: For a sort run for variable-length records,  $L5$  was specified greater than  $L1$ .  $L5$  must be specified as either the average logical record length or as a value between the average and the maximum ( $L1$ ).

7D35I EXIT [31, 44] NOT SPECIFIED FOR NONSTANDARD LABELS

Cause: When nonstandard output tape labels are specified to the sort/merge program, the user must use Exit 31 or 44 to create and write the labels.

This is probably a user error.

This is probably a user error.

System Action: Processing continues.

System Action: Processing continues.

Programmer Action: Correct either the  $L5$  value or the  $L1$  value in the RECORD control statement and resubmit the job.

Programmer Action: Either include the appropriate exit (E31 or E44) in the MODS statement, or correct the output label designation in the LABEL entry of the OPTION statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D36I USER GIVEN FILE SIZE EXCEEDS MAXIMUM

Cause: The specified sort work area allocated in the FILEW extent cards is not large enough to process the file size specified in the SIZE entry of the SORT control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Either increase the limits specified in the work area extents or reduce the value associated with the SIZE entry in the SORT control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D37I INPUT BLOCKSIZE NOT A MULTIPLE OF L1

Cause: The number of bytes in an input block for fixed-length records must be a multiple of the number of bytes in each input record.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct either the BLKSIZE entry in the INPFIL statement or the L1 value in the RECORD statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D38I OUTPUT BLOCKSIZE NOT A MULTIPLE OF L3

Cause: The number of bytes in an output block for fixed-length records must be a multiple of the number of bytes in each output record.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct either the BLKSIZE entry in the OUTFIL statement or the L3 value in the RECORD statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D39I A CF STARTS PRIOR TO BYTE 5 IN VARIABLE-LENGTH RECORDS

Cause: The first four bytes of a variable-length record are the record-length field and must not be used as a control data field.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the FIELDS definer complement in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D40I CONTROL FIELDS OVERLAP FOR OTHER THAN BI FORMAT

Cause: Overlapping control data fields are valid only with the unsigned binary data format.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the FIELDS definer complement in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D41I RECORD LENGTH NOT SPECIFIED

Cause: The field definer LENGTH or the value (L1) was not specified.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the error in the RECORD control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D42I BLOCKSIZE GREATER THAN xxxx

Cause: The input or output block length specified is greater than the maximum acceptable to the program.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the BLKSIZE entry in the INPFIL and/or OUTFIL control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D43I NOTPMK ENTRY SPECIFIED WITH STANDARD OUTPUT LABELS

Cause: The NOTPMK entry is valid for unlabeled tape output files only or tape output files with nonstandard labels.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the invalid entry and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D44I PHASE [1, 3, 4] MODIFICATION PROGRAM TOO LARGE

Cause: The size of the user program (determined by the ADDRESS value in the MODS statement) is such that it forces the sort block size below the required minimum.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Either correct the ADDRESS entry in the MODS control statement, or specify a higher main storage load point to the linkage editor and re-catalog the user program, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D45I NO MEDIUM SPECIFIED FOR [INPUT, OUTPUT]

Cause: The type of input or output medium (tape or disk) was omitted from the INPFIL or OUTFIL control statement.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the INPUT or OUTPUT operand entry in the appropriate control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D47I [TAPE, DISK] OPTIONS SPECIFIED FOR [DISK INPUT, TAPE OUTPUT]

Cause: Tape options such as OPEN, CLOSE can only be specified for tape files. Disk options such as KEYLEN and VERIFY pertain only to disk files.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the erroneous control statement(s) and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D49I NO BLOCKSIZE GIVEN FOR [INPUT, OUTPUT]

Cause: The operand definer BLKSIZE has been either incorrectly specified or omitted.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct or include the BLKSIZE entry in the INPFIL or OUTFIL control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D50I INSUFFICIENT TRACKS GIVEN FOR MERGE

Cause: A minimum of 2 contiguous disk tracks must be allocated for a work area for a merge-only operation.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the FILEW extent card by increasing the limit of the work area and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D51I ADDRROUT OPTION SPECIFIED FOR MERGE

Cause: The ADDRROUT option cannot be specified for a merge-only operation.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Delete the ADDRROUT entry from the OPTION statement or, if the operation is to be a sort run, delete the MERGE control statement and include a SORT control statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D53D INVALID RESTART

Cause: A restart sort run has been specified, but the original sort was interrupted prior to the end of phase 1.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type IGNORE to continue processing (re-run of the entire sort), or type CANCEL to terminate the job.

7D55A INVALID RESTART. CHECK DISK PACK PLACEMENT

Cause: The disk pack(s) that contains the sort work area was not placed on a drive assigned to the identical symbolic unit used in initial run, or

The sort data was destroyed after the original job.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Check and correct the disk pack placement(s) and type IGNORE to continue processing, or type CANCEL to terminate the job. If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC for the work packs and have the output available.
2. Have the job stream, log sheet, printer output, and work packs available.

7D64I DUPLICATE STATEMENT DETECTED-xxxxxx

Cause: Two control statements contain identical statement definers. The statement definer is indicated by xxxxxx.

Operator Action: Delete the invalid control statement from the sort merge control statement deck. See message 7D90A.

7D67I INVALID LABELS SPECIFIED FOR A DISK FILE

Cause: Disk input or output was specified, and the labels associated with the file(s) are not specified as standard. All disk files must contain standard file labels.

Operator Action: Correct the erroneous value associated with the LABEL entry in the OPTION statement, or

Correct the INPUT or OUTPUT entry in the INPFIL or OUTFIL control statement. See message 7D90A.

7D68I [INPUT, OUTPUT] BLOCKSIZE INVALID FOR VARIABLE LENGTH RECORDS

Cause: The input or output blocksize specified is less than the maximum input record length plus four bytes. The input or output blocksize must be equal to or greater than L1+4.

Operator Action: Correct the BLKSIZE entry in the INPFIL or OUTFIL statement, or

Correct the L1 value in the RECORD statement.

7D69I SORT BLOCKSIZE MUST BE AT LEAST 300 BYTES

Cause: The size (total number of bytes) of a user program in phase 1 or phase 3 has forced the assignment phase to compute a sort blocksize that is less than 300 bytes.

Operator Action: Correct the appropriate ADD value in the MODS control statement, or

Reduce the size of the user routine and recatalog it via the Linkage Editor. See message 7D90A.

7D70I INPUT OR OUTPUT BLOCKSIZE IS INVALID

Cause: The input or output blocksize specified for a merge-only run exceeds the maximum size allowed.

Operator Action: Correct the BLKSIZE entry in the INPFIL or OUTFIL control statement. See message 7D90A.

7D71I ASSUMING BLOCKSIZE IN IS xxxx, BLOCKSIZE OUT MAY NOT EXCEED xxxx

Cause: If the input blocksize is specified correctly, the output blocksize exceeds the maximum allowed for a merge-only operation.

Operator Action: If the input blocksize is accurate, correct the BLKSIZE definer in the OUTFIL statement; otherwise,

Correct the BLKSIZE entry in the INPFIL control statement. See message 7D90A.

7D72I EXIT [11, 31, 41, 44] SPECIFIED FOR UNLABELED FILES

Cause: Exits 11, 31, 41, and 44 cannot be specified for unlabeled tape files. However, for a merge-only run, Exit 41 is valid if mixed labels are specified (at least one input file must contain standard user labels or non-standard labels).

This is probably a user error.

Programmer Action: Correct the MODS statement by deleting parameters pertaining to the indicated exit, or correct the LABEL entry in the OPTION statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and

printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D73I L1 INVALID

Cause: The input record length exceeds the maximum acceptable to the program.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the L1 value in the RECORD control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D74I BLOCKSIZE INVALID

Cause: The input or output blocksize exceeds the maximum allowed for a merge-only operation.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the BLKSIZE entry in the INPFIL or OUTFIL control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D75I ONLY xx TRACKS SPECIFIED ON LAST EXTENT FOR SORT

Cause: The last extent pertaining to the sort work area contains less than four disk tracks.



This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the FILEW extent card with the highest sequence number by allocating at least four disk tracks and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D76I STORAGE LESS THAN 16,384

Cause: The STORAGE entry in the OPTION control statement contains a value less than 16,384.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the STORAGE entry in the OPTION control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D77I FILES VALUE GREATER THAN [4, 9]

Cause: A maximum of 9 files can be sorted and a maximum of 4 files can be merged.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the operand definer complement associated with the FILES entry in the SORT or MERGE control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: See message 7D90A.

7D78I MORE INPUT OR LABEL ENTRIES THAN FILES SPECIFIED

Cause: This diagnostic can only occur during a merge-only run when mixed input and/or mixed labels are specified. The input type and label entries must agree with the number of files to be merged. For example, if 3 files are to be merged, the INPUT operand definer must reflect 3 input media (if input is mixed).

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the INPUT definer complements in the INPFIL statement and/or the input label values associated with the LABEL entry in the OPTION statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D79I BLOCKSIZE FOR TAPE INPUT OR OUTPUT IS LESS THAN 12

Cause: The minimum input and output blocksize for tape operations is 12 bytes.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Either correct the BLKSIZE entry in the INPFIL or OUTFIL statement(s) or reblock the input file(s) and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: See message 7D90A.

7D80I END OF SORT ASSIGNMENT PHASE  
CALCAREA RUN

Cause: The CALCAREA option was requested in the OPTION control statement, and the assignment phase has successfully performed the function.

System Action: The results are listed on SYSLST.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7D81I EXIT 13 SPECIFIED FOR DISK  
INPUT

Cause: Exit 13 can be specified in a sort operation only when tape input is specified.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Either delete the E13 entry from the MODS statement, or correct the INPUT entry in the INPFIL statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D82I ADDROUT OPTION SPECIFIED WITH  
TAPE INPUT

Cause: The ADDROUT option can be specified for a sort run only when disk input is specified.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Either delete the ADDROUT entry from the OPTION statement, or correct the INPUT entry in the INPFIL statement, and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D83A INVALID RESPONSE

Cause: An invalid response to message 7D53D, 7D55A, or 7D90A was given by the operator.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Enter a valid response. Type either RETRY, IGNORE, or CANCEL.

7D84I TAPE DEVICE ADDRESSES MUST BE  
ASSIGNED TO [SYSxxx, SYSnnn]

Cause: For a sort operation, all tape input files must reside on SYS002-SYS010, depending upon the number of files to be sorted. For a merge-only operation, tape FILEA must be on SYS002, tape FILEB must be on SYS003, etc. For tape output, SYS001 must be the output unit. The listed symbolic units are not assigned tape drive addresses.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Assign tape devices to the listed units, or correct the INPUT or OUTPUT entry in the INPFIL or OUTFIL statement, and resubmit the job. If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing
- Input/output files.

Operator Action: See message 7D90A.

7D85I ALL TAPE FILES MUST HAVE UNIQUE DEVICE ADDRESSES

Cause: This message can occur only during a merge-only run. At least two tape files (input and output) reside on symbolic units with an identical device address. For tape input and/or output, all tape files must reside on different tape drives. For example, in a 2-way tape merge, FILEA must reside on SYS002, FILEB must reside on SYS003, and SYS002 and SYS003 must be assigned to different tape device addresses. If tape output is specified, SYS001 must be a tape device other than SYS002 and SYS003.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct all erroneous symbolic units pertaining to tape files, or correct the INPUT or OUTPUT entry in the INPFIL or OUTFIL statement, and resubmit the job. If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing
- Input/output files.

Operator Action: See message 7D90A.

7D86I INSUFFICIENT CORE/WORKAREA IS AVAILABLE FOR THE SPECIFIED FILE SIZE

Cause: A suitable order of merge cannot be found for specified conditions.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Specify a more accurate filesize, or increase the value in the STORAGE entry of the OPTION statement if possible. Correct the errors and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D87I NO RECORD HAS OCCURRED ON DASD

Cause: An end-of-data was encountered while reading a data record from the sort work area.

Operator Action: Re-initialize sort work area.

7D88I TRACK OVERRUN HAS OCCURRED ON DASD

Cause: An invalid track format has caused an overflow condition.

Operator Action: Correct the track format.

7D89I STORAGE SPECIFICATION LESS THAN 10,000 FOR SORT

Cause: Minimum core requirement is 10,000 bytes plus the size of the Supervisor.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Correct the STORAGE value in the OPTICN statement and resubmit the job.

If the problem recurs, execute LISTVTOC for the input, output, and work files and have the output available to complete your problem determination action.

Operator Action: See message 7D90A.

7D90A OPERATOR-ATTEMPT TO CORRECT ABOVE LISTED ERRORS

Cause: This message occurs at the end of the assignment phase when errors have been detected and both SYSRDR and SYSIPT are card readers. It applies to all assignment phase diagnostic messages except 7D05A, 7D53D, 7D55A, 7D80I, 7D83A, and 7D92I. This facility is provided to enable the sort/merge program to be executed when it is only a job step within a specific job application. If the errors can be corrected immediately the operator should do so.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Type CANCEL if the errors cannot be corrected at this time, or

Correct all control statement errors, and

Place all job control statements and sort/merge control statements pertaining to the sort/merge program in SYSRDR and SYSIPT, respectively. Ensure that the card reader(s) is ready, and type RETRY.

Assignment phase will issue the EOJ macro, thus informing Job Control to initiate the calling of the next job step. In this case, next job step will be the sort/merge run.

7D91I END OF ASSIGNMENT PHASE

Cause: Self explanatory.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7D92I END OF ASSIGNMENT PHASE-ERRORS DETECTED, CORRECT AND RERUN

Cause: Errors were detected and listed by assignment phase. SYSRDR and/or SYSIPT are not card readers or SYSLOG is not a console printer-keyboard.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Correct existing errors and rerun the job.

7DA1I WLR - FILEx

Cause: Phase 1 has detected a wrong-length record (block) during a read operation. x indicates the file from which the wrong length record was read. This message can occur either when the records in the input file are not the same length as those specified in L1 value of the RECORD statement or when the input BLKSIZE entry was specified incorrectly.

This is probably a user error.

System Action: The wrong-length record is bypassed and processing continues.

Programmer Action: Check the L1 value and/or the BLKSIZE value in the INPFIL statement. Correct the errors and resubmit the job. If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC for the input, output, and work files and have the output available.

2. Have the job stream, log sheet, and printer output available.

Operator Action: Rerun the job.

Operator Action: If this message continues to reappear, the job should be terminated.

7DA4I RECORDS PROCESSED xxxxxxxx

Cause: This message indicates the number of records processed (sorted internally) by phase 1. It is the actual number of records contained in the input file(s).

7DA2I PHASE 1 UNREADABLE BLOCKS BYPASSED xxxx

Cause: This message is printed at the end of phase 1 when tape input and either the BYPASS option or Exit 13 (E13) is specified. The message reflects the number of input blocks bypassed by the sort.

System Action: Processing continues unless message 7DA3I has preceded this message.

System Action: Processing continues.

Programmer Action: Not applicable.

Programmer Action: Not applicable.

Operator Action: Not applicable.

Operator Action: Not applicable.

7DA5I MERGE PASSES xx

Cause: xx represents the number of merge passes to be performed by phases 2 and 3.

Note: If the number of blocks bypassed is unacceptable (too many have been bypassed), the sort run should be terminated and rerun.

System Action: Processing continues.

Programmer Action: Not applicable.

7DA3I WORK AREA TOO SMALL FOR ACTUAL FILE

Cause: The work area specified in the FILEW extent card(s) is not large enough to process the number of records contained in the input file(s). The actual number of records in the input file(s) is enumerated in message 7DA4I.

Operator Action: Not applicable.

This is probably a user error.

7DA6I END PHASE 1

Cause: Self explanatory.

System Action: The job is terminated after message 7DA6I is printed.

System Action: Processing continues.

Programmer Action: Not applicable.

Programmer Action: Correct the FILEW extent card(s), expanding the limits so that they can contain the actual file size. Correct the errors and resubmit the job.

Operator Action: Not applicable.

Note: The sort can be interrupted and restarted anytime after the appearance of this message.

If the problem recurs, have the job stream, log sheet, printer output, and input file available to complete your problem determination action.

7DB1I PHASE 2, PASS xx

Cause: This message appears at the beginning of each phase 2 pass. xx represents the number of the pass phase 2 is entering.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7DC1I PHASE 3, PASS xx

Cause: This message indicates the pass number as phase 3 is entered.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7DC2D SEQ. ERROR

Cause: A sequence error has been detected during the merging process in phase 3.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: If the output area on disk overlaps the work area, the overlapped part may not exceed the first half of the work area and the value for the OUTPUT operand definer in the OUTFIL statement has to be a W. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC for the workfiles and have the output available.
2. Have the job stream, log sheet, printer output, and all files available.

Operator Action: Type IGNORE to allow processing to continue. When the end-of-job is reached, the output file should be specified as an input

file, and a new sort run should be initiated, or

Type CANCEL to terminate the job.

7DC2A INVALID RESPONSE

Cause: An invalid response was issued in reply to message 7DC2D.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or CANCEL, depending upon the original decision.

7DC4I RECORDS PROCESSED xxxxxxxx

Cause: This message indicates the number of records sorted and agrees with the number of records processed during phase 1. It does not reflect any user insertions or deletions.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7DC5I END OF SORT

Cause: Normal end-of-job.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7DD1I WLR FILEx

Cause: Phase 4 has read a wrong-length record. x represents the file from which the wrong-length record was read. (See message 7DA1I for further explanation.)

This is probably a user error.

System Action: Processing continues.

Programmer Action: Check the L1 value and/or the BLKSIZE entry in the INPFIL statement. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7DD2A INVALID RESPONSE

Cause: An invalid reply was issued to message 7DD2D.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type IGNORE or CANCEL, depending on the original message.

7DD2D SEQ. ERROR FILEx

Cause: A sequence error is detected in phase 4. x identifies the file with the sequence error. This message can occur either because the file was not presequenced or the control data information was incorrectly specified in the MERGE control statement.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, processing continues.

Programmer Action: Check the control data information in the MERGE control statement. Check the sequencing of the input files. Make the necessary corrections and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Type IGNORE to allow processing to continue, or

Type CANCEL to terminate the job.

7DD4I PHASE 4 UNREADABLE BLOCKS BYPASSED xxxxx

Cause: This message indicates number of input blocks bypassed during phase 4 when either the BYPASS option or Exit 45 (E45) has been specified.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Rerun the job if the number of blocks bypassed is unacceptable.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the job stream, log sheet, printer output, and all files available.

7DD5I RECORDS PROCESSED xxxxxxxx

Cause: This message reflects the number of records merged during phase 4. The count does not reflect any user insertions or deletions.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7DD6I END OF MERGE

Cause: Normal end-of-job.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T02I EXCESS NO CTL CARDS

Cause: More than 25 control cards were read.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Remove the excessive control cards and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7T03I NO END CARD

Cause: END card is missing.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Insert the END card as the last Sort/Merge control statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

7TOAD \*\*CORRECT CONTROL CARDS AND RESTART\*\* RESPOND-RETRY OR CANCEL

Cause: An error in control cards was detected. This message appears only when SYSIPT is assigned to a card reader.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the erroneous control cards and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Type RETRY to continue processing (all sort control cards must be reread), or,

Type CANCEL to terminate job.

7T10I WLR

Cause: Wrong-length records were encountered and bypassed by Phase 1 of the Sort program. If the last block of an input reel is a short block, this message is printed, but the records will be processed.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Check the L1 value in the RECORD control statement. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the input file available.

Operator Action: If this message continues to appear, the job should be terminated.



7T11I -REC PROC. xxxxxxx

Cause: xxxxxxx indicates the number of records processed during Phase 1 of the Sort program.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T12I -LEVELS P2 xxx

Cause: xxx indicates the number of levels that occurred in the program. A level is that point in the program where an input tape is depleted and becomes the output tape, and old output tape becomes one of the input tapes.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T13I -P1 IP BLOCKS BYPASSED xxx

Cause: xxx indicates number of unreadable blocks bypassed (one or more).

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: If the number of blocks bypassed is unacceptable, terminate and rerun the job.

7T14I -END OF INTERNAL SORT

Cause: Self explanatory.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T15D -N MAX EXCEEDED BY xxxxxxx

Cause: Maximum number of records to be sorted exceeded by xxxxxxx.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type 2 to continue the sort. If overflow occurs on the workfile, the job is terminated, or

Type any other character to terminate job.

7T16I EOF ON OUTPUT SYS00n

Cause: EOF occurred on a work drive in Phase 1 when output tapes were written. Maximum file size was exceeded, or work tapes are not full reels (2400') of tape.

This is probably a user error.

System Action: The job is automatically terminated.

Programmer Action: Divide the file into two or more files that do not exceed the maximum file size that can be sorted, and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Input file.

Operator Action: If a 2400 foot reel of tape was not mounted, mount a full reel and rerun the job.

7T17I -UNREADABLE BLOCK

Cause: Sort program was unable to read a block of records.

This is probably a user error.

System Action: Depending on the content of a sort control statement, the block is bypassed, or the job is terminated.

Programmer Action: Check the field definer complement of the BLKSIZE entry in the INPFIL statement. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the input and work files available.
3. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

7T18I -REC DELETED xxxxxxxx

Cause: xxxxxxxx indicates the number of records deleted by the user in Phase 1 of the sort.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T19I -VL BK

Cause: Last wrong-length record was a valid block.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T21I WLR

Cause: Wrong-length record was read.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the length specifications in the RECORD statement. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, printer output, input, and work files available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

7T22I EOF ON OUTPUT SYS00n

Cause: EOF occurred on a work drive in Phase 2 when output tapes were written. Maximum file size was exceeded, or work tapes not full reels (2400') of tape. Reflective marker was encountered while writing in Phase 2, not last level.

This is probably a user error.

System Action: Job automatically terminated.

Programmer Action: Split the file into 2 or more files that do not exceed the maximum file size. Sort as separate files.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Input files

- Work files.

Operator Action: Check that full 2400 foot reels were used for the work files. If not, supply full reels and rerun the job.

Operator Action: Not applicable.

7T26I SEQUENCE ERROR

Cause: Sequence error in last level.

7T23I EOF

Cause: A tapemark was sensed while reading backwards.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Mount different tapes on the work files and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Execute MIDAS for the failing drives and have the output available.

System Action: The job is canceled.

Programmer Action: If the work files overlap the input/output files, check the unit assignments. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- LISTIO output.

Operator Action: Issue the LISTIO command to check the assignments. If correction is necessary, rerun the job. If not, return the LISTIO output to your programmer.

7T24I LEVEL xxxx CHKPT ON SYS00n

Cause: Checkpoint record xxxx was written on SYS00n. xxxx begins with 0001 and is updated on each level.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T27I RECORDS IN PHASE 2 xxxxxxxx

Cause: xxxxxxxx indicates the number of records.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T25I LAST LEVEL CHKPT ON SYS00n

Cause: Last checkpoint record written on SYS00n.

System Action: Processing continues.

Programmer Action: Not applicable.

7T28I RECORD COUNT UNEQUAL

Cause: This message occurs if the record count is unequal or if the user inserts records using Exit 23.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

Programmer Action: Not applicable.

7T29I END OF SORT

Cause: Normal end-of-job.

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

Operator Action: Not applicable.

7T32A SEQUENCE ERROR

Cause: A sequence error was detected on the input tape. Registers 4 and 5 contain the beginning address of the records being sequence checked.

This is probably a user error.

7T30I None

Cause: A wrong-length record was encountered and bypassed by the merge program.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Check the length specification in the RECORD statement. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, printer output, and input file available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

System Action: The system waits for an operator response.

Programmer Action: Check the collating sequence specified in the MERGE control statement, or check the sequencing of the input files. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Input files.

Operator Action: Type 5 to continue merge job, or

Type any other character to terminate job.

7T31I NO RSTRT TO 7T24I

Cause: Checkpoint and alternate work tape options were specified and writing onto alternate work tape has begun. (At this point, input from alternate work tape for this level is no longer available.)

Checkpoint restart cannot be accomplished until next level message (7T24I) is printed.

System Action: Processing continues.

7T33I RECORDS PROCESSED xxxxxxxx  
UNREADABLE BLOCKS BYPASSED xxxx  
END OF MERGE

Cause: xxxxxxxx indicates the number of records. xxxx indicates the number of unreadable blocks bypassed (one or more).

System Action: The merge is completed.

Programmer Action: Not applicable.

Operator Action: Not applicable.

7T35I TRACK OVERRUN HAS OCCURRED ON  
DASD

Cause: An overflow condition has occurred because of an invalid format.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the format error.

Operator Action: Rerun the job.

7T36I INSUFFICIENT CORE/WORKAREA IS  
AVAILABLE FOR THE SPECIFIED  
FILE SIZE

Cause: Self-explanatory.

This is probably a user error.

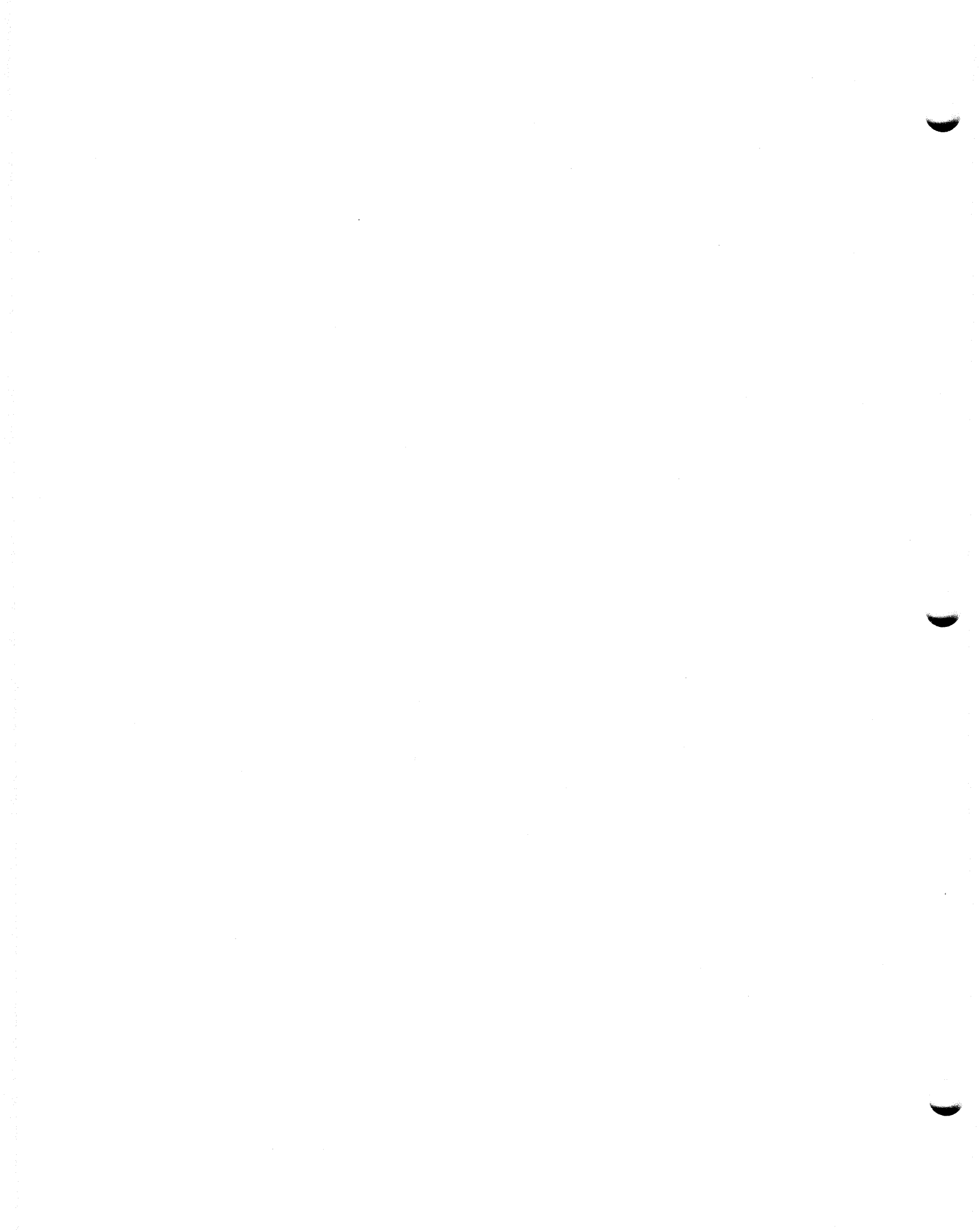
System Action: The job is canceled.

Programmer Action: Reduce the file size or increase the partition allocation.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Input files
- MAP output.

Operator Action: Issue the MAP command and check the partition allocation. If correction is necessary, rerun the job. If not, return the MAP output to your programmer.



## 8-Prefix Messages

### 8001D IS IT EOF

Cause: Tape input is specified as unlabeled. A tape mark was encountered when the data was transferred.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, EOF is assumed.

Programmer Action: Not applicable.

Operator Action: Type Y if end of file, or

Type N if end of volume.

### 8002A PUNCH CHECK

Cause: A punch check occurred on the card read punch (2520 or 2540).

This is probably a hardware error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response. If not, processing continues after the punch is restarted. The card in error and the following cards are repunched at the point where the punch check occurred.

Programmer Action: Not applicable.

Operator Action: Run out cards in punch, discard last three or four cards (for the 2520, 1 punched and two blank cards; for the 2540, 2 punched and 2 blank cards). Ready the punch and type any character to continue processing.

If the problem persists, issue the ROD command, execute EREP, and retain the listing to complete your problem determination action.

### 8003A ALTA OR ALTB PARAMETER SPECIFIED TWICE

Cause: The ALTA or ALTB parameter in the tape compare utility control statement has been specified twice.

This is probably a user error.

System Action: If SYSLOG is a console printer-keyboard, the system waits for an operator response; otherwise, the job is canceled.

Programmer Action: Not applicable.

Operator Action: Repunch the utility control statement (// TPCP...) specifying ALTA or ALTB only once, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing.

If there is one alternate tape unit for both file A and file

B, the utility control statement should include both ALTA and ALTB, or

Type any character other than 2 to terminate job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the system log, job stream, and printer output available.

8004I // TPCP RECSIZ=(nnnnnn)

Cause: The physical record size (in bytes) specified in the utility control statement is printed on the console typewriter.

This message is issued for information only.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8005A // TPCP RECSIZ=( FORMAT IS INCORRECT)

Cause: Control statement format is invalid.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Repunch the utility control statement (// TPCP...) using the correct format and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

Default System Action: The job is canceled.

8006A RECORD SIZE OR REEL COUNT PARAMETER MISSING

Cause: The value for the RECSIZ or REELS parameter on the utility control statement is missing.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Supply the correct parameter and resubmit the job.

Operator Action: Repunch the utility control statement (// TPCP...) with the correct record size or reel count and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, system log, and printer output available.

Default System Action: The job is canceled.

8007A INVALID RECORD SIZE OR REEL COUNT PARAMETER

Cause: Record size is greater than 5 digits, or reel count exceeds 255.

This is probably a user error.

System Action: The system waits for an operator response.



Programmer Action: Supply the correct value and resubmit the job.

Operator Action: Repunch the utility control statement (// TPCP...) supplying the correct record size or reel count, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 on the console typewriter to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the system log, printer output, and job stream available.

Default System Action: The job is canceled.

8008A LEADING ZERO IN RECORD SIZE OR REEL COUNT PARAMETER

Cause: A leading zero is invalid in a control statement parameter.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Repunch the utility control statement (// TPCP...), omitting the leading zero, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 on the console typewriter to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.

2. Have the job stream, system log, and printer output available.

Default System Action: The job is canceled.

8009A INVALID CHARACTER IN RECORD SIZE OR REEL COUNT PARAMETER

Cause: A non-numeric character is invalid in the record size or reel count parameter of the utility control statement.

System Action: The system waits for an operator response.

Programmer Action: Correct parameter value and resubmit the job.

Operator Action: Repunch the utility control statement (// TPCP...) with the correct record size or reel count parameter and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a dump of main storage and retain the listing.
2. Have the job stream, console log, and printer output available.

Default System Action: The job is canceled.

8010A PARAMETERS CONTAIN AN INVALID CHARACTER OR SEPARATORS ARE MISSING

Cause: An invalid character (or characters) is present on the optional parameter(s): LABELS, REELS=(n), ALTA, ALTB, or EXIP, or

Separators (commas) which are placed between these parameters are missing.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct parameters and separators and resubmit the job.

Operator Action: Repunch the utility control statement (// TPCP...) with the correct parameters and separators, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and save the listing.
2. Have the job stream, system log, and printer output available.

Default System Action: The job is canceled.

8011D NO I/O AREA AVAILABLE

Cause: The record size specified in the utility control statement exceeds the capacity of the I/O area.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Reduce the record size or increase the I/O area, if possible, and resubmit the job.

Operator Action: Repunch the utility control statement (// TPCP...), reducing the specified record size to the capacity of the I/O area, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and retain the listing.
2. Have the console log, printer output, and the job stream available.

Default System Action: The job is canceled.

8012A USER EXIT SPECIFIED BUT NONE SUPPLIED

Cause: The EXIT parameter has been specified in the utility control statement but no user exit routine has been supplied in the card deck.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Supply the user exit routine or remove the EXIT parameter from the utility control statement.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and retain the listing.
2. Have the job stream, printer output, and system log available.

Operator Action: Repunch the utility control statement (// TPCP...), omitting the EXIT parameter, and enter it on SYSIPT. Then type 2 on the console typewriter to continue processing.

Type any character other than 2 to terminate job.

Default System Action: The job is canceled.

8013A INVALID TPMK DETECTED ON FILE n

Cause: An unexpected tapemark encountered on File A or B:

- Labeled files were specified and a tapemark preceded the label, or
- Two tapemarks preceded either the first data record or the trailer label.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount the correct tapes, or

Correct the assignment of the logical unit, or

Repunch the utility control statement to reflect unlabeled tapes and enter the corrected statement on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 on the console typewriter to terminate the job.

Execute a tape to printer dump of the label area to check labels.

If the problem recurs, complete your problem determination action as follows:

1. Execute a dump of main storage and retain the listing.
2. Have the job stream, printer output, system log, and label area dump listing available.

Default System Action: The job is canceled.

8014A VOLUME LABEL MISSING ON FILE n

Cause: Standard labels are indicated in the utility control statement but no label was found on file A or B.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the tape should contain standard labels, use a tape to printer dump of the label area to check that a VOL1 label is the first label on the tape.

Operator Action: Mount the correct tape, or

Correct the assignment of the logical unit, or

If the tape is unlabeled, repunch the utility control statement omitting the labels parameter, and enter the corrected statement on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a tape to printer dump of the tape label area.
2. Obtain a system dump and retain the listing.
3. Have the system log, the printer output, and the job stream available.

Default System Action: The job is canceled.

8015A HEADER LABEL MISSING ON FILE n

Cause: Standard labels are indicated in the utility control statement but no header label was found on file A or B.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the tape should contain standard labels, use a tape to printer dump of the label area to check that a header label is on the tape.

Operator Action: Mount the correct tape, or

Correct the assignment of the logical unit, or

If the tape is unlabeled, repunch the utility control statement, omitting the labels parameter, and enter the corrected statement on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a tape to printer dump of the tape label area.
2. Obtain a dump of main storage and retain the listing.
3. Have the system log, the printer output, and the job stream available.

Default System Action: The job is canceled.

#### 8016A TRAILER LABEL MISSING ON FILE n

Cause: Standard labels are indicated in the utility control statement but no trailer label was found on file A or B.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the tape should contain standard labels, use a tape to printer dump of the label area to check that EOF or EOF appears on the tape.

Operator Action: Mount the correct tape, or

Correct the assignment of the logical unit, or

If the tape is unlabeled, repunch the utility control statement omitting the labels parameter, and enter the corrected statement on SYSIPT.

Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a tape to printer dump of the tape label area.
2. Obtain a system dump and retain the listing.
3. Have the system log, the printer output, and the job stream available.

Default System Action: The job is canceled.

#### 8017D EOF ON UNLABELED FILES

Cause: A tapemark was detected on unlabeled file and the reel count is depleted.

The job step is completed.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Supply control statement on SYSIPT and type 2 to continue processing, or

Type any character other than 2 to terminate job.

Default System Action: The job is canceled.

#### 8018D EOF ON FILE A AND NOT ON B

Cause: File A is shorter than File B.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount the correct tapes, reenter the utility control statement on

SYSIPT, and type a 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

If the problem recurs, complete your problem determination action as follows:

1. Have listings of the tape files or records in question available.
2. Have the job stream, printer output, and system log available.

Default System Action: The job is canceled.

8019D EOF ON FILE B AND NOT ON A

Cause: File B is shorter than File A.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the correct tapes were supplied with the job.

If the problem recurs, complete your problem determination action as follows:

1. Have listings of the tape files or records in question available.
2. Have the job stream, system log, and printer output available.

Operator Action: Mount the correct tapes, re-enter the utility control statement on SYSIPT, and type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

Default System Action: The job is canceled.

8020A CHANGE REEL ON PRIMARY A

Cause: An alternate reel was not assigned to primary A and EOJ was detected.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Change the reel and type any character to continue processing.

8021I SWITCHING TO ALTERNATE A

Cause: Primary reel is completed and processing continues with alternate reel.

This message is for information only.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8022A CHANGE REEL ON PRIMARY B

Cause: An alternate reel was not assigned to primary B and EOJ was detected.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Change the reel and type any character to continue processing.

8023I SWITCHING TO ALTERNATE B

Cause: Primary reel is completed and processing continues with alternate reel.

This message is for information only.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8024D REEL COUNT DEPLETED

Cause: The reel count is depleted on a labeled file and no EOF trailer label was sensed.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the problem recurs, have the job stream, program output, system log, and printer output available to complete your problem determination action.

Operator Action: Repunch the utility control statement (// TPCP..) supplying the correct REELS parameter, and enter the corrected card on SYSIPT. Type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

Default System Action: The job is canceled.

8025A RESTART WAS REQUESTED

Cause: The interrupt key was pressed during execution.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type a space to continue processing, or

Supply new control statement on SYSIPT and type 2 to restart, or

Type any character other than blank or 2 to terminate job.

Default System Action: The job is canceled.

8026D EOF ON LABELED FILES

Cause: An end of file trailer label has been detected on both files.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Mount new tapes, supply a new utility control statement to SYSIPT, and type 2 on the console typewriter to continue processing, or

Type any character other than 2 to terminate job.

Default System Action: The job is canceled.

8027A CONTROL CARD MISSING

Cause: TPCP control statement was omitted.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the problem recurs, have the job stream, printer output, and the system log available to complete your problem determination action.

Operator Action: Supply TPCP control statement on SYSIPT and type 2 to continue processing, or

Type any character other than 2 to terminate the job.

Default System Action: The job is canceled.

8050I NOT A STD R0 RECORD

Cause: A non-standard R0 record was encountered on disk input file, indicating that the disk is not properly initialized. A pack with a non-standard record 0 cannot be copied.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Instruct the operator to mount the correct disk pack and resubmit the job, or

Initialize the defective disk pack, recreate the file, and resubmit the job.

If the problem recurs, issue a DUMP command at the time of the failure and have the associated job stream, program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check that the proper disk pack is mounted and that the assignments are correct. If corrections are necessary, rerun the job.

#### 8051I NOT A STD R0 RECORD

Cause: A non-standard R0 record was encountered on disk output file, indicating that the disk is not properly initialized. A pack with a non-standard record 0 cannot be restored.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that the proper mounting and assignment instructions were given, or

Initialize the output disk pack. Resubmit the job.

If the problem recurs, issue a DUMP command at the time of the failure and have the associated job stream, program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check that the proper disk pack is mounted and that the assignments are correct. If corrections are necessary, rerun the job.

#### 8052D RECORD GREATER THAN I/O AREA

Cause: The size of the record read is greater than the size of the available I/O area.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: If the record can be truncated, resubmit the job and instruct the operator to reply 2 to this message, or

Resubmit the job with a request for a larger partition allocation.

If the problem recurs, issue a DUMP command at the time of the failure and have the associated job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Type 2 to truncate record and continue processing, or

Type any character other than 2 to cancel the job. Allocate a larger partition and rerun the job.

Default System Action: The job is canceled.

#### 8053I I/O AREA INSUFFICIENT

Cause: Insufficient I/O area available for the indicated average record size.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Resubmit the job with a request for a larger partition.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Allocate a larger partition and rerun the job.

#### 8054I NO VOL1 LABEL

Cause: No VOL1 label was found while searching for the VTOC address. The file has been destroyed or does not exist on that volume.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Assign the correct volume and resubmit the job.

If the problem recurs, execute LISTVTOC for the subject volume and have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Mount the correct pack and rerun the job.

8055I SYS005 NOT ASSIGNED

Cause: A tape was not assigned to SYS005 as an output unit.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Resubmit the job with the correct assignment for SYS005.

Operator Action: Assign SYS005 to the output tape and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the LISTIO command and have the output available.

8056I IPL SPECIFIED AND NOT FOUND

Cause: No IPL records were found when the option was requested for the copy file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Omit the IPL parameter in the utility modifier statement or assign the input to the correct copy file.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute the disk to printer utility to obtain a listing of cylinder 0, track 0.

Operator Action: Check that the correct copy file has been mounted. If correction is necessary, rerun the job.

8057I TAPE RECORD GREATER THAN MAX I/O AREA

Cause: The tape record being restored is greater than the maximum I/O area available. The program that created the tape was probably run in a larger partition.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Request a greater storage allocation for the problem program and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a tape to printer utility for the record in question and have the output available.

Operator Action: Allocate a larger partition and rerun the job.

8058A INPUT IS OUT OF SEQUENCE

Cause: The card input is out of sequence, or

The tape reel is out of sequence.

This is probably a user error.



System Action: The system waits for an operator response.

Type any character other than 2 to cancel job.

Programmer Action: Check the input card deck for correct sequence or the tape reels for proper mounting sequence.

Default System Action: The job is canceled.

If the problem recurs, complete your problem determination action as follows:

8060I SYS004 NOT ASSIGNED

1. Have the job stream, log sheet, and printer output available.
2. Execute a tape to printer utility for the record in question and have the output available.
3. Obtain a stand-alone dump at the time of the failure.

Cause: A tape was not assigned to SYS004 as an input unit, or

A card reader was not assigned to SYS004, or

A disk was not assigned to SYS004 for a copy volume function.

This is probably a user error.

Operator Action: Correct card sequence and type 2 to continue processing, or

System Action: The job is canceled.

Programmer Action: Not applicable.

Mount a new tape and type 2 to continue processing. If an alternate tape is assigned, the new tape must be placed on the next assigned tape drive, or

Operator Action: Issue the LISTIO command to check the assignments, assign SYS004 to the input unit, and rerun the job.

Type any character other than 2 to cancel job.

If the problem recurs, have the job stream, log sheet, printer output, and LISTIO output available to complete your problem determination action.

Default System Action: The job is canceled.

8059A READER OUT OF INPUT

8061I CONTROL RECORD NOT FOUND

Cause: The card reader is out of cards.

Cause: The first data record read was not a control record. The control record is written by the copy program and contains parameters unique to this file. This message can occur if a tape is mounted out of sequence, the wrong tape is mounted, or the wrong pack is mounted.

This is probably a user error.

This is probably a user error.

System Action: The system waits for an operator response.

System Action: The job is canceled.

Programmer Action: Check the card deck to ensure that all necessary cards were supplied. Make any necessary corrections and resubmit the job.

Programmer Action: Correct the assignments or correct the input and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

If the problem recurs, complete your problem determination action as follows:

Operator Action: Supply additional card input and type 2 to continue processing, or

1. Have the job stream, log sheet, and printer output available.
2. Execute a tape to printer utility for the record or file in question and have the output available.

Operator Action: Check that the correct pack or tape is mounted and that the assignments are correct. If correction is necessary, rerun the job.

8062I PARTITION TOO SMALL

Cause: The size of the restore partition is less than that required by the copy program.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Allocate sufficient main storage for this application and rerun the job.

8063I SYS006 NOT ASSIGNED

Cause: A card punch was not assigned to SYS006.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Execute LISTIO to check the assignments and then assign SYS006 to a card punch and rerun the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

8064I ERRORS IN CONTROL CARD

Cause: Errors were detected in the utility modifier card.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the errors in the utility modifier card and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8065I RESTORE EXTENTS NOT EQUAL TO COPY

Cause: The extent limits for the disk output file do not include the extent limits for the disk input file. Extents are all used for output file, but records still remain on input file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Execute LISTVTOC and check the extents allocated. Increase or correct the restore extents so that they are equal to or greater than the copy extents.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the LISTVTOC output available.

Operator Action: Not applicable.

8066I END OF COPY

Cause: Normal end-of-job indication.

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8067I END OF RESTORE

Cause: Normal end-of-job indication.

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8068I CHECK POINT BEING TAKEN FOLLOWING CARD NO. xxxxxx

Cause: A checkpoint record is being written on SYS003 following the processing of the referenced card.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8070I INCORRECT CONTROL IDENTIFIER

Cause: The control card is not properly identified.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Check the // EXEC card for the correct utility name and check for keypunch errors in the identifier parameter of the utility modifier statement.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

8071I INCORRECT [T, E, M, O] OPTION

Cause: An invalid entry was made for the indicated parameter.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Check for keypunch errors in the utility modifier card. If correction is necessary, rerun the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing.

8072I INCORRECT FORMAT

Cause: Incorrect parameter separation was used, or

The parameter was punched incorrectly.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check for the indicated errors in the utility modifier statement and resubmit the job.

If the problem recurs, have the job stream and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8073I INVALID LEADING ZERO IN SIZE PARAMETER

Cause: Leading zeros in A=(a) are invalid.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Omit the leading zeros in the A=(a) parameter and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

8074I INCORRECT CHARACTER IN SIZE PARAMETER

Cause: Only numeric values are acceptable in the A=(a) parameter.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check that only numeric values are used in the A=(a) parameter. Make the necessary corrections and resubmit the job.

If the problem recurs, have the associated job stream, program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8075I A PARAMETER TOO LARGE

Cause: The A=(a) entry exceeds the maximum value for the device.

Device	Rec size	Part. size
2311	to 3625	10K
2314*	to 6400	10K
2321	to 2000	10K
2311	to 3625	12K
2314*	to 7294	12K
2314*	to 7294	18K

\*Also applies to the 2319.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Reduce the A=(a) parameter to the maximum permitted and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to

complete your problem determination action.

Operator Action: Not applicable.

8076I INCORRECT PARAMETER

Cause: A character, other than the first, of a parameter in the utility modifier statement is in error.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the parameter in error and resubmit the job.

If the problem recurs, have the associated job stream, program listing, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8077I DUPLICATE [A, I, M, T, E, O] PARAMETER

Cause: A second entry in the card began with one of the letters of an entry already processed.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility modifier statement and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Program listing.

Operator Action: Not applicable.

8079I SIZE PARAMETER MISSING or [A,  
T] PARAMETER MISSING

Cause: The (a) within the required A=(a) was not specified, or

The required F or V was not specified with the Tt parameter.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility control statement by providing the size parameter [(a)], or the A or T parameter. Resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing.

Operator Action: Not applicable.

8081I IPL OPTION INVALID FOR COPY  
VOLUME FUNCTION

Cause: The IPL parameter was supplied for the copy volume function. The parameter is treated as invalid because it may only be used for a copy file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Omit the IPL option in the utility modifier card and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet

- Printer output
- Program listing.

Operator Action: Not applicable.

8082I UTILITY MODIFIER CARD MISSING

Cause: A utility modifier card was not supplied.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Supply a utility modifier statement and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Not applicable.

8083I DUPLICATE ENTRIES IN CELLS  
PARAMETER

Cause: The same cell number was specified more than once in the CELLS parameter. Duplicate entries are not permitted.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Supply the correct cell number and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Not applicable.

8084I EXCESSIVE NUMBER OF CELLS  
PARAMETER ENTRIES

Cause: More than five cell numbers were specified in the CELLS parameter.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the CELLS parameter so that it specifies five or fewer cells and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Not applicable.

8085I CELLS MUST BE PROCESSED IN THIS  
ORDER . . . . .

Cause: This message indicates the order in which cells were copied.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8086I EMULATOR PACK

Cause: Pack initialized for Model 30/40 emulator.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: The applicable 1400 utility program must be used to copy emulator packs. If a restore is being done, a pack initialized for System/360 must be used.

Operator Action: Check that the correct input and output files are mounted. If correction is necessary, rerun the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

The numeric values in the comments of these messages, represented by small x's, are in hexadecimal notation.

8101I SYS000 NOT ASSIGNED TO A 2311  
OR 2314

Cause: A 2311 or 2314/2319 is not assigned to SYS000.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Execute LISTIO to check the assignments and then assign SYS000 to a 2311 or 2314/2319 and rerun the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

8102I UTILITY MODIFIER CARD

Cause: This is an information only message.

System Action: The utility modifier control card parameters are listed following this message and processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8103I INVALID CARD

Cause: The utility modifier statement was improperly identified.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility modifier statement and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Not applicable.

8104I INVALID FORMAT

Cause: A required parameter on the utility modifier card is either missing or out of sequence.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility modifier statement and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Not applicable.

8105I INVALID PARAMETER

Cause: The parameter value in the utility modifier card is incorrect.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility modifier parameter in error and resubmit the job.

If the problem recurs, do the following to complete your problem determination action:

1. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

8106I INVALID USE OF S ENTRY IN INPUT OPTION

Cause: The S entry in the input option parameter (IS) indicates that surface analysis and R0 generation are to be skipped. The error was caused by either:

1. The Initialize Disk program could not find a VOL1 or Format 4 label and assumes that the pack has not been initialized, or
2. IS was specified while initializing an emulator pack.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Change the input option parameter or supply the correct disk pack and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute LISTVTOC for the subject volume and save the output.

Operator Action: Check that the correct disk pack has been mounted and that the assignment is correct. If correction is necessary, rerun the job.

8107I CYLxx, TRKxx, IS A DEFECTIVE ALTERNATE TRACK

Cause: The indicated alternate track is defective and will not be assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8108I CYLxx, TRKxx, IS DEFECTIVE AND AN ALTERNATE IS ASSIGNED

Cause: The main area of the indicated track is defective and an alternate is assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8109I CYLxx, TRKxx, IS DEFECTIVE AND NO ALTERNATE IS AVAILABLE

Cause: The indicated track is defective and no more alternates are available.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: If message 8128I has occurred several times prior to this message, and:

- The indicated track on all these messages is the same, the disk drive is probably defective. Move the disk pack to another drive and rerun the program.

- The indicated tracks are random, the pack could be defective. Try another drive.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8110I CYLxx, TRKxx, HA or RECO IS IN ERROR

Cause: The portion of the track where HA or Record 0 is written is defective.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Mount a new disk pack and rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8111A VTOC CARD MISSING

Cause: VTOC card is missing or incorrect.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Insert or correct the VTOC card and resubmit the job.

If the problem recurs, have the job stream, log sheet, and



printer output available to complete your problem determination action.

Operator Action: Correct the card, place in reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8112A VTOC ADDRESS INVALID

Cause: The VTOC start address is invalid, or

An extent parameter is invalid or missing.

System Action: The system waits for an operator response.

Programmer Action: Correct the VTOC control card, or correct or supply an EXTENT parameter and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8113A VTOC OVERFLOWS CYLINDER

Cause: Assigned VTOC area overflows the cylinder.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the job stream so that the VTOC area is one cylinder or less

and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8114A VOL CARD MISSING

Cause: VOL1 card is missing, incorrect, or out of sequence.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the placement, omission, or contents of the VOL1 card and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in card reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8115A VOL1 SERIAL FIELD

Cause: VOL1 card has all blanks in the volume serial field.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the VOL1 card by completing columns 5-10 and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in card reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8116A VTOC OR END CARD ERROR

Cause: A VTOC or END card is incorrect or an END card is missing.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the VTOC or END card, or insert the missing END card. Resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in card reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8117A PARAMETER DELIMITER

Cause: A comma is missing after a parameter.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Insert the missing comma and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output.

Operator Action: Correct the card, place in card reader, and ready the reader. Type 2 to continue processing, or

Type any character other than 2 to cancel job.

Default System Action: The job is canceled.

#### 8118D UNEXPIRED FILE

Cause: An unexpired file was detected on SYS000.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the information on the unexpired file is not to be retained or substitute different extents. Resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.

2. Execute LISTVTOC for the subject file and save the output.

Operator Action: Reply 2 to continue the job and to delete this or any other unexpired file, or

Reply any character other than 2 to cancel the job.

Default System Action: The job is canceled.

8120I END OF INIT. [DISK, DATA CELL]

Cause: Normal end of initialize disk or data cell program.

System Action: The job is finished.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8121I UNRECOVERABLE DISK ERROR

Cause: An unrecoverable disk error occurred while performing surface analysis.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Mount another disk pack and rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8122I LABEL CONTROL SET

Cause: The label control cards are printed after this message.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8123I EMULATOR PACK, STANDARD VTOC ASSUMED

Cause: A non-standard VTOC has been specified for an emulator pack, although it requires a standard VTOC.

System Action: Processing continues. Standard VTOC is built for emulator pack.

Programmer Action: Not applicable.

Operator Action: Not applicable.

The numeric values in the comments of these messages, represented by small x's, are in hexadecimal notation.

8201I SYS000 NOT A VALID DISK DRIVE

Cause: A disk was not assigned to SYS000.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Assign SYS000 to a disk drive and rerun the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

8203I INVALID CARD

Cause: The utility modifier statement is improperly identified.

This is probably a user error.

System Action: The job is canceled.

Operator Action: Not applicable.

Programmer Action: Correct the utility modifier statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check the // EXEC statement against the utility modifier card for the correct program. Correct the utility modifier statement and rerun the job.

#### 8205I INVALID FORMAT

Cause: A parameter is missing or out of sequence.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the utility modifier card and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

#### 8206I INVALID PARAMETER

Cause: A parameter in the utility modifier statement was incorrectly specified.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the parameter value in the utility modifier statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

#### 8207I UTILITY MODIFIER CARD

Cause: The control card parameters are listed following this message.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

#### 8210I FORMAT 4 LABEL MISSING

Cause: The VOL1 label contains the address of the VTOC, but no Format 4 label can be found at that address.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Recreate the file on another disk pack or data cell, or reinitialize this disk pack or data cell and recreate the file.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.
3. Execute LISTVTOC for the subject volume and save the output.

Operator Action: Check that the proper disk pack or data cell has been mounted. If not, mount the proper volume and rerun the job.

8211I VOLUME LABEL MISSING

Cause: The volume label is always record 3 of cylinder 0, track 0 for a disk, or record 3 of subcell 0, strip 0, cylinder 0, track 0 for a data cell. The volume label cannot be found at this location.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action:  
Reinitialize the disk pack and recreate the file.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.
3. Execute LISTVTOC for the subject volume and save the output.

Operator Action: Check that the proper disk pack or data cell has been mounted. If not, mount the proper volume and rerun the job.

8212I DATA CHECK IN LABEL

Cause: A data check occurred in the count field while reading a label.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: If the problem persists, recreate the file on another disk pack or data cell and reinitialize the subject volume.

Operator Action: Rerun the job.

If the problem persists, complete your problem

determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8213D FORMAT 4 LABEL ERROR

Cause: An error occurred while reading a Format 4 label.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: If the error persists, recreate the file on another disk pack or data cell and reinitialize the subject volume.

Operator Action: Type a 2 to continue processing, or

Type any character other than 2 to cancel job, or

Mount the pack on another disk drive and rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of failure and save the output.
3. Issue the ROD command, execute EREP, and save the output.
4. Execute LISTVTOC for the subject volume and save the output.

Default System Action: The job is canceled.

8214D VOLUME LABEL ERROR

Cause: An error occurred while reading a volume label.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: If the problem persists, recreate the file on another disk pack or data cell and reinitialize the subject volume.

Operator Action: Type a 2 to continue processing, or

Type any character other than 2 to cancel job, or

Mount the pack on another drive and rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of failure and save the output.
3. Issue the ROD command, execute EREP, and save the output.

Default System Action: The job is canceled.

8215I ALT CYLS FULL

Cause: No more alternate tracks are available for assignment.

System Action: The job is canceled.

Programmer Action: The file should be recreated on another disk pack, or

This pack should be initialized and a complete surface analysis performed before rebuilding the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.

2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

8216I CYLxx, TRKxx REC0 IN ERROR

Cause: The portion of the track on which record 0 is written is defective.

System Action: The job is canceled.

Programmer Action: Recreate the file on another disk, or

The subject pack should be reinitialized and the file should be rebuilt.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.
3. Execute the disk to printer utility for the record in question and save the output.

Operator Action: Not applicable.

8220I cccchhhrrkkddd

Cause: If there are no errors, the eight byte count field is printed in hexadecimal as each record is transferred.

Note: c=cylinder, h=head, r=record, k=key, and d=data.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8221I ALT TRK ASSIGNED NOT ACCESSIBLE

Cause: The HA and R0 area designated is defective. The alternate track is not accessible for the valid data.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Recreate the file on another disk pack or data cell, or

This disk pack or data cell should be initialized and the file recreated.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

Operator Action: Not applicable.

8222I HA AND R0 ARE DEFECTIVE

Cause: The HA and R0 areas are defective. An alternate track was not previously assigned, and therefore all the records will be printed on SYSLST regardless of print option.

System Action: Processing continues.

Programmer Action: Recreate the file on another disk pack or data cell, or initialize this disk pack or data cell.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

Operator Action: Not applicable.

8223I ALT TRK PREVIOUSLY ASSIGNED

Cause: The HA and R0 areas designated are not defective. The alternate track was previously assigned; therefore, data will be transferred to a new alternate track.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8224I HA AND R0 OF ALT TRK IS DEFECTIVE

Cause: The HA and R0 area of the previously assigned alternate track is defective. The data portion of R0 will not be transferred, but other records may be recovered.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: Recreate the file on another disk pack or data cell, or initialize this disk pack or data cell and recreate the file.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

Operator Action: Not applicable.

8225I DATA CHECK IN COUNT FIELD

Cause: A data check has occurred in the count field. The record is not transferred to the alternate track.

This is probably a hardware error.

System Action: Processing continues.

Programmer Action: If this error affects the use of this file, recreate the file on another disk pack or data cell, or initialize this disk pack or data cell and recreate the file.

Operator Action: If the problem persists, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

#### 8226I NO ADDRESS MARKER

Cause: An address marker is missing. The record is not transferred to the alternate track. The pack was not properly initialized before the file was built.

System Action: Processing continues.

Programmer Action: Recreate the file on another disk pack or data cell, or initialize this disk pack or data cell and recreate the file.

Operator Action: If the problem persists, issue the ROD command, execute EREP, and save the output to complete your problem determination action.

#### 8227I KEY AND DATA ERROR RECOVERED

Cause: The key and data portion of this record was recovered, but is possibly in error. The record is formatted as read.

System Action: Processing continues.

Programmer Action: Check the key and data portion of the records transferred for validity of data.

If the problem persists, the file should be recreated on another disk pack or data cell, or this disk pack or data cell

should be initialized and the file recreated.

Note: The value in register 1, plus 9 and 10, is the failing cylinder and head.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.
3. Use the address supplied by your installation programmer in the disk or data cell to printer utilities to display the failing track and have the output available.

#### 8228I KEY AND DATA ERROR

Cause: The key and data portion of this record cannot be recovered. The record is formatted with EBCDIC [A] fill characters.

System Action: Processing continues.

Programmer Action: Create the file on another disk pack or data cell, or

Initialize this disk pack or data cell and recreate the file.

If the problem recurs, have the log sheet and printer output available to complete your problem determination action.

Operator Action: Not applicable.

#### 8229I KEY MAY BE IN ERROR

Cause: There is a possible error in recovered key. The data field was not recovered. The record is formatted as read with the data field filled with EBCDIC [A] characters.



System Action: Processing continues.

Programmer Action: Check the key for validity. Create the file on another disk pack or data cell, or

Initialize this disk pack or data cell and recreate the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet and printer output available.
2. Execute a stand-alone dump at the time of the failure and have the output available.
3. Use the disk or data cell to printer utilities to display the failing track.

Note: The value in register 1, plus 9 and 10, is the failing cylinder and head.

Operator Action: Not applicable.

#### 8230I UNRECOVERABLE ERROR

Cause: An unrecoverable error has occurred, other than missing address marker, data check, or record overflow.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

#### 8231I CYLxx, TRKxx, IS DEFECTIVE, AN ALTERNATE IS ASSIGNED

Cause: The track is permanently defective and an alternate is assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

#### 8232I CYLxx, TRKxx, IS NOT DEFECTIVE

Cause: The track is acceptable.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

#### 8233I CYLxx, TRKxx, HA AND R0 ARE DEFECTIVE, NO ALTERNATE ASSIGNED

Cause: The HA and R0 portion of the track is defective. An alternate track cannot be assigned.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: If the problem persists, the file should be recreated on another disk pack or data cell, or this disk pack or data cell should be initialized and the file recreated.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.

2. Issue the ROD command, execute EREP, and save the output.
3. Execute a disk or data cell to printer utility for the record in question and save the output.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8234I UNRECOVERABLE DISK ERROR

Cause: An unrecoverable disk error occurred while performing surface analysis.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Recreate the file on another disk pack or data cell, or initialize this disk pack or data cell and recreate the file.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8240I END OF ALT. TRK. ASSGN

Cause: Normal end-of-job indication.

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8250I END OF ALT. TRK. AND UPDATE

Cause: Normal end of job

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8235I DATA TRANSFERRED TO ORIGINAL DEFECTIVE TRACK

Cause: The track was found acceptable, and the data was returned to the original track.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8251I TRACK PARAMETER MISSING

Cause: UY was specified on the utility modifier card, but TRACK= was not in the first six columns of the track statement.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Insert the track statement or specify UN. Resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8236I DATA TRANSFERRED TO ORIGINAL ALTERNATE TRACK

Cause: The alternate track is acceptable, and data was transferred.

8252I INVALID TRACK STATEMENT

Cause: The characters in the track statement are not valid hexadecimal characters or the track statement and data are missing entirely (with UY specified), or the quantity of data supplied is less than the amount specified on the track statement.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the invalid TRACK statement and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8253I UPDATE RECORD CAUSES TRACK OVERFLOW

Cause: Track capacity was exceeded when attempting to write update record. The last record on the track may now be invalid.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the validity of the record that caused the overflow. If subsequent use of the file will be affected, the invalid record will have to be removed or the file recreated.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a file to printer utility for the record in question and save the output.

Operator Action: Not applicable.

8256I NOT AN EMULATOR PACK

Cause: An UPSI 00000001 card was present, and the pack to be cleared was not initialized for emulator use.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Remove or correct the UPSI card if the pack is not to be used for an emulator, or

Initialize the pack correctly for emulator use.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Check that the correct disk pack is mounted. If correction is necessary, rerun the job.

8301I SYS000 NOT ASSIGNED TO A 2321

Cause: A data cell was not assigned to SYS000.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream so that SYS000 is assigned to a data cell and resubmit the job.

If the problem recurs, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Assign SYS000 to a data cell and rerun the job.

8302I UNRECOVERABLE DATA CELL ERROR

Cause: An unrecoverable data cell error occurred while performing a surface analysis.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8303I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS A DEFECTIVE ALTERNATE TRACK

Cause: The alternate track is defective and will not be assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8304I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE AND AN ALTERNATE IS ASSIGNED

Cause: The main area of the track is defective and an alternate is assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8305I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE AND NO ALTERNATE IS AVAILABLE

Cause: The track is defective and no more alternate tracks are available.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8306I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx HA OR RO IS IN ERROR

Cause: The home address or record zero portion of the track is defective.

This is possibly a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and save the output.

8307I END OF INIT DATA CELL

Cause: Normal end of initialize data cell program.

System Action: Normal system processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8308I SYS000 NOT A VALID DATA CELL

Cause: The device assigned to SYS000 is not a data cell.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Execute LISTIO to get the current assignments, assign SYS000 to a data cell, and rerun the job.

If the problem recurs, have the LISTIO output and job stream available to complete your problem determination action.

8309I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx REC0 IS IN ERROR

Cause: The portion of the track where record 0 data field is written is defective.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: If the problem persists, the file should be recreated on another disk pack or data cell, or this disk pack or data cell should be initialized and the file recreated.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.
2. Have the log sheet and printer output available.

8310I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE, ALTERNATE IS ASSIGNED

Cause: The track is permanently defective and an alternate is assigned.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8311I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS NOT DEFECTIVE

Cause: The track is acceptable.

System Action: Processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

8312I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx HA AND RO ARE DEFECTIVE, NO ALT. ASSIGNED

Cause: The home address and record 0 portion of the track is defective and an alternate track cannot be assigned.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: If the problem persists, the file should be recreated on another disk pack or data cell, or this disk pack or data cell should be initialized and the file recreated.

Operator Action: Rerun the job.

If the problem persists, complete your problem determination action as follows:

1. Issue the ROD command, execute EREP, and have the output available.

2. Have the log sheet and printer output available.

8502D BLOCK LENGTH EXCEEDS BUFFER SIZE - INTAPE

Cause: Record exceeds I/O area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Enlarge the buffer size and reassemble the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8503D BLOCK LENGTH EXCEEDS BUFFER SIZE - INDISK

Cause: Record exceeds I/C area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Increase the buffer size (BUFSIZ) and reassemble the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.

2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8506D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTAPE

Cause: Record exceeds I/O area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Increase the buffer size (BUFSIZ) and reassemble the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8507D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTDISK

Cause: Record exceeds I/O area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Increase the buffer size (BUFSIZ) and reassemble the program.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8512D INCOMPLETE LOGICAL RECORD IN BLOCK - INTAPE

Cause: The block residue is less than the logical record length.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the correct tape was used and check or supply the optional user routine for errors. Resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute the tape to printer utility to print the record in question.
3. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Check that correct tape was used and type IGNORE to accept the residual data, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8513D INCOMPLETE LOGICAL RECORD IN BLOCK - INDISK

Cause: The block residue is less than the logical record length.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the correct pack was used and check or supply the optional error record user routine. Resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute the tape to printer utility to print the record in question.
3. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Check that correct pack was used and type IGNORE to accept the residual data, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8515D RECORD LENGTH OVER 80 - OUTCARD

Cause: Record exceeds I/O area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the input record size was specified correctly or that the input record was truncated to 80 characters before output.

If the records have first character control (stacker control) the parameter STCTL=YES is required to strip the control character.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8516D RECORD LENGTH EXCEEDS BUFFER RESIDUE - OUTAPE

Cause: Buffer residue is less than the logical record length.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the correct record length and buffer size were specified. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to place logical record in next output block, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8517D RECORD LENGTH EXCEEDS BUFFER RESIDUE - OUTDISK

Cause: Buffer residue is less than the logical record length.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Check that the correct record length and buffer size were specified. Make the necessary corrections and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to place logical record in next output block, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8518D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTPRT

Cause: Record exceeds I/O area capacity.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the buffer size (BUFSIZ) specification and reassemble the program or truncate the record.

If the problem recurs, complete your problem determination action as follows:

1. Have the associated job stream, program listing, log sheet, and printer output available.



2. Execute a stand-alone dump at the time of the failure and save the output.

Operator Action: Type IGNORE to accept truncated record, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8522A TAPE MARK ON UNLABELED FILE - INTAPE

Cause: A tape mark was encountered while reading an unlabeled file.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type EOF to rewind and unload the tape. This message is always followed by message 0P08. Mount another reel to continue processing, or

Type EOF. This implies no further input from this drive, or

Press EOB/END key to ignore the tapemark and continue processing.

Default System Action: The job is canceled.

8525D IMPROPER STACKER SELECT CHARACTER - OUTCARD

Cause: The first character in the output buffer is not a V or a W.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type IGNORE to accept as W (stacker 2) and continue processing, or

Type CANCEL or press EOB/END key to cancel the job.

Default System Action: The job is canceled.

8526I END OF REEL ON UNLABELED FILE - OUTAPE

Cause: The end of reel reflector spot was encountered on an unlabeled output tape.

System Action: A tape mark is written and the tape is rewound and unloaded. Message 0P08 follows.

Programmer Action: Not applicable.

Operator Action: Mount another reel and ready the drive to continue processing.

8535A 2540 PUNCH CHECK - OUTCARD

Cause: A punch check occurred on 2540 card read punch.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL to terminate processing, or

Press EOB/END key or RETRY to repunch and continue. For RETRY, run out the cards in the punch and discard the last five cards in stacker 1. Ready the punch.

If the problem recurs, issue the ROD command, execute EREP, and save the output to complete your problem determination action.

Default System Action: The job is canceled.

8545A 2520 PUNCH CHECK - OUTCARD

Cause: A punch check occurred on 2520 card read punch.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL to terminate processing, or

Press EOB/END key or RETRY to repunch and continue. For RETRY, run out the cards in the punch and discard the last four cards in stacker 1. Ready the punch.

If the problem recurs, issue the ROD command, execute EREP, and save the output to complete your problem determination action.

Default System Action: The job is canceled.

8555A 2520 PUNCH CHECK - OUTCARD

Cause: A punch check occurred on 2520 card read punch.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type CANCEL to terminate processing, or

Press EOB/END key or RETRY to repunch and continue. For RETRY, run out cards in the punch and discard the last three cards in stacker 1 and one card in stacker 2. Ready punch.

If the problem persists, issue the ROD command, execute EREP, and save the output to complete your problem determination action.

Default System Action: The job is canceled.

8590A INVALID RESPONSE

Cause: Operator response to previous utility-macro message (85xxx) invalid.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Type a valid response.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure.

8601A MORE PASSES -- INTTP

Cause: If the CARD and REWIND parameters are omitted, the program waits for a reply to initialize another tape.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reply YES if another tape must be initialized. Reply NO or (B) to terminate the job.

8V00A INVALID STATEMENT

Cause: Unrecognizable statement read from card reader assigned to SYSIPT.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Supply correct control statement on SYSIPT and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

8V00I INVALID STATEMENT

Cause: Unrecognizable statement read from tape unit assigned to SYSIPT.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a dump of main storage and retain the listing.
2. Have the job stream, printer output, and system log available.

Operator Action: Not applicable.

8V01I INVALID PARAMETER xxxxxx

Cause: An expected numeric field is non-numeric in either a VOC72UT control statement or an Input Vocabulary File record.

System Action: The record and the invalid field are printed and the job is canceled.

Programmer Action: If there is a control statement error, correct the statement in error and resubmit the job, or

If an Input Vocabulary File record caused the error condition, contact IBM to obtain an error-free file.

If the problem recurs, have a listing of the Input Vocabulary File and the system log available to complete your problem determination action.

8V02A INVALID TABLE NAME

Cause: Table name in statement read from card reader assigned to SYSIPT has incorrect format.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Supply correct control statement on SYSIPT and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

8V02I INVALID TABLE NAME

Cause: Table name in statement read from tape unit assigned to SYSIPT has incorrect format.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V03A INVALID SPARE TRACK PARAMETER

Cause: Number of spare tracks allocated to a table in a SELECT statement read from card reader (SYSIPT) exceeds 255.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Supply correct control statement on SYSIPT and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

8V03I INVALID SPARE TRACK PARAMETER

Cause: Number of spare tracks allocated to a table in a SELECT statement (read from tape unit assigned to SYSIPT) exceeds 255.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a dump of main storage and retain the listing.
2. Have the job stream, printer output, and system log available.

Operator Action: Not applicable.

8V04I INVALID SEPARATOR

Cause: Incorrect separator used.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V05I INVALID INPUT VOCABULARY PARAMETER

Cause: Input vocabulary

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V06I INVALID WORD IDENTIFIER xxxxxx

Cause: Invalid word identifier used.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V07I INVALID WORD IDENTIFIER SEQUENCE xxxxxx

Cause: Invalid word identifier sequence used.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V08A INVALID CONTINUATION CARD

Cause: First 15 columns of a continuation card read from card reader assigned to SYSIPT are not blank.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Provide correct continuation card and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

8V08I INVALID CONTINUATION CARD

Cause: First 15 columns of a continuation card (read from tape unit assigned to SYSIPT) are not blank.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V09A TABLE NOT FOUND

Cause: Table specified in statement read from card reader, assigned to SYSIPT, is not in Operative Vocabulary File.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Provide correct statement and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

8V09I TABLE NOT FOUND

Cause: Table specified in statement read from tape unit assigned to SYSIPT is not in Operative Vocabulary File.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V10A INVALID UPDATE OPERATION

Cause: Attempt to insert a word in the residuum has been made by means of the card reader assigned to SYSIPT.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Provide valid statement and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

#### 8V10I INVALID UPDATE OPERATION

Cause: Attempt to insert a word in the residuum has been made by means of a tape unit assigned to SYSIPT.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

#### 8V11A INVALID WORD LOCATION

Cause: Word location in MODIFY statement (read from card reader assigned to SYSIPT) is incorrect.

This is probably a user error.

Programmer Action: Not applicable.

Operator Action: Provide correct statement and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.

2. Have the job stream, printer output, and system log available.

#### 8V11I INVALID WORD LOCATION

Cause: Word location in MODIFY statement (read from tape unit assigned to SYSIPT) is incorrect.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

#### 8V12A WORD xxxxxx NOT FOUND

Cause: Word in MODIFY statement (read from card reader assigned to SYSIPT) is not in Input Vocabulary File (SYS004).

This is probably a user error.

Operator Action: Mount correct Input Vocabulary File and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a main storage dump and retain the listing.
2. Have the job stream, printer output, and system log available.

#### 8V13A INPUT VOCABULARY MISSING ON SYSxxx

Cause: Input vocabulary is not present on card reader assigned to SYSIPT or on tape unit assigned to SYS004.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Provide vocabulary deck or tape and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a dump of main storage and retain the listing.
2. Have the system log and the Input Vocabulary File deck or tape available.

8V13I INPUT VOCABULARY MISSING ON SYSIPT

Cause: Input vocabulary is not present on tape unit assigned to SYSIPT.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job with the Input Vocabulary File tape on the proper unit.

If the problem recurs, have a listing of the vocabulary file tape and the system log available to complete your problem determination action.

8V14A INVALID VOCABULARY SEQUENCE

Cause: Vocabulary deck has incorrect sequence.

This is probably a user error.

Programmer Action: Sequence the vocabulary deck properly and resubmit the job.

Operator Action: Put vocabulary records in proper sequence and type Y to continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a dump of main storage and retain the listing.
2. Have the vocabulary deck, or listing, and the system log available.

8V14I INVALID VOCABULARY SEQUENCE

Cause: Vocabulary on tape unit assigned to SYSIPT has incorrect sequence.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: If the problem recurs, have a listing of the vocabulary tape and the system log available to complete your problem determination action.

8V15D EXCESSIVE WORD LENGTH xxxxxx

Cause: If the word length is less than the capacity of one DASD track, the partition size, and therefore the buffer size, is too small. If the word length is greater than the capacity of one DASD track, the word is too long to be used with this type of DASD device.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: If the partition is too small, increase the partition size and rerun the job. If the track is too small, either use a DASD device with a larger track capacity or shorten the word.

Type Y to skip word and continue processing, or

Type any character except Y to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute a dump of main storage and retain the listing.
2. Have a listing of the Input Vocabulary File and the system log available.

#### 8V16D WORD xxxxxx NOT FOUND

Cause: Word specified by word identifier xxxxxx is not in Input Vocabulary File.

System Action: The system waits for an operator response.

Programmer Action: Verify the word identifier specified by the message. If it is incorrect, correct and resubmit the job.

If the problem recurs, have the system log and a listing of the Input Vocabulary File available to complete your problem determination action.

Operator Action: Type Y continue processing, or

Type any character except Y to terminate the job.

#### 8V17I OVERFLOW ON VOCRES

Cause: Insufficient space on disk containing Operative Vocabulary File.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Provide larger disk extents and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and retain the listing.
2. Have the system log available.

#### 8V18I OVERFLOW ON VOCUT

Cause: Insufficient space on disk allocated to utility work file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Provide a larger disk extent and rerun the job.

If the problem continues, complete your problem determination action as follows:

1. Execute LISTVTOC and retain the listing.
2. Have the system log available.

#### 8V19I TAPE READ ERROR

Cause: Unrecoverable read error.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job with the tape mounted on another drive. If the job fails again, the tape is probably bad. If the job completes normally, the first drive may be bad.

If the problem recurs, have the system log and the tape causing the message available to complete your problem determination action.



8V20I READ ERROR ON VOCRES

Cause: Unrecoverable read error while reading Operative Vocabulary File.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job with the disk pack mounted on another device. If the job fails again, initialize the pack and rebuild the file. If the job completes normally, the first drive is probably bad.

If the problem recurs, have the disk pack causing the error condition and the system log available to complete your problem determination action.

8V21I READ ERROR ON VOCUT

Cause: Unrecoverable read error while reading utility work file.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Rerun the job with the disk pack mounted on another drive. If the job fails again, initialize the pack and rebuild the file. If the job completes normally, the first drive is probably bad.

If the problem recurs, have the disk pack causing the error condition and the system log available to complete your problem determination action.

8V22I INVALID VOCRES ASSIGNMENT

Cause: File described as VOCRES is not an Operative Vocabulary File.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V23I INVALID SYSLST ASSIGNMENT

Cause: SYSLST has been assigned to the wrong type of device.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Correct the invalid assignment and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTIO and retain the listing.
2. Have the system log available.

8V24I INVALID SYSIPT ASSIGNMENT

Cause: SYSIPT is assigned to the wrong device type.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Correct the invalid assignment and rerun the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTIO and retain the listing.
2. Have the system log available.

8V25I INVALID OR MISSING UPSI STATEMENT

Cause: Self explanatory.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V26I UPDATE OPERATION REJECTED

Cause: Vocabulary table or residuum cannot be modified because of insufficient space on disk.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Provide a larger disk extent for the Vocabulary File and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a dump of main storage and retain the listing.
2. Execute LISTVTOC and retain the listing.
3. Have the system log and the input stream available.

Operator Action: Not applicable.

8V27I TOO MANY EXTENTS FOR VOCRES

Cause: More than one XTENT or EXTENT statement provided for VOCRES.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V28I TOO MANY XTENTS FOR VOCUT

Cause: More than one XTENT or EXTENT statement provided for VOCUT.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Correct the job stream and resubmit the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

Operator Action: Not applicable.

8V29I MAXIMUM WORD LENGTH xxxx

Cause: This message indicates the maximum length of digital word representation that the program can process with the partition size being used.

This message is issued for information only.

System Action: Normal processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

complete your problem determination action.

8V30I xxxx WORDS NOT FOUND

Operator Action: Not applicable.

Cause: Number of words selected by the user but not contained in the Input Vocabulary File.

8V92I NO VOLUME 1 LABEL FOUND. JOB CANCELED.

This message is issued for information only.

Cause: The VOL1 label is cylinder 0, head 0, record 3 for a disk, or subcell 0, strip 0, cylinder 0, track 0, record 3 for a data cell, when the device has been initialized. A record has been found at this address, but it is not the VOL1 label.

System Action: Processing continues.

Programmer Action: Not applicable.

This is probably a user error.

Operator Action: Not applicable.

System Action: The job is canceled.

8V31I TABLE xxxxxxxx NOT CREATED

Programmer Action: Not applicable.

Cause: Words to be included in the table are not in the Input Vocabulary File.

Operator Action: Check the device assignment and that the correct disk pack or data cell has been mounted. If correction is necessary, rerun the job. If the assignment and device are correct, initialize the disk pack or data cell and rerun the job.

This message is issued for information only.

System Action: Normal processing continues.

Programmer Action: Not applicable.

If the problem persists, have the job stream, log sheet, and printer output available to complete your problem determination action.

Operator Action: Not applicable.

8V91I NO FORMAT 4 LABEL FOUND. JOB CANCELED.

8V93I INVALID VTOC ADDR FOUND. JOB CANCELED.

Cause: The VOL1 label (cylinder 0, head 0, record 3) contains the address (cylinder, track, and record) of the Format 4 label. A record has been found at this address, but it is not a Format 4 label.

Cause: The VTOC address in the VOL1 label is less than cylinder 0, head 0, record 4, or is equal to or greater than cylinder 200, head 0, record 0.

This is probably a user error.

This is probably a user error.

System Action: The job is canceled.

System Action: The job is canceled.

Programmer Action: Assign another disk pack or data cell, or initialize this disk pack or data cell and resubmit the job.

Programmer Action: Assign another disk pack or initialize this disk pack and rerun the job.

If the problem persists, have the job stream, log sheet, and printer output available to

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Program listing.

Programmer Action: Check byte 45 of all labels for one of the valid format identifiers.

Operator Action: Not applicable.

Operator Action: Not applicable.

8V96D FORMAT 1 LABEL OF DATA SECURED FILE

Cause: A format 1 label describing a data secured file has been read by the VTOC display utility program.

System Action: The system waits for an operator response.

Programmer Action: The programmer must instruct the operator what to reply when this message is issued.

If a failure occurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Execute a stand-alone dump at the time of the failure.

Operator Action: Reply YES to allow the label information of all data secured files to be listed along with the rest of the label information in the VTOC, or

Rely NO or press the EOB/END key to allow only the label information pertaining to unsecured files to be listed.

Any other response results in an invalid response message.

8V94I NO DISK RECORD FOUND. JOB CANCELED.

cause: A disk pack has been mounted that was not initialized, or a hardware error has occurred.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Check that the pack has been initialized. If not, initialize the pack and rerun the job. If the pack has been initialized, move the disk pack to another drive and rerun the job. If the job executes normally, the original drive is malfunctioning.

For a disk drive malfunction or persistent errors, issue the ROD command, execute EREP, and have the output available to complete your problem determination action.

8V95I NOT A VALID LABEL FORMAT

Cause: A label other than type 1, 2, 3, 5, or X'00' was encountered after the Format 4 label was processed.

System Action: Processing continues.

## 9-Prefix Messages

Messages 9100 through 9170 are printed in the following format:

1. If there is no 12-2-9 code in column 1 of the card image, columns 2-80 of the card image are printed in EBCDIC.
2. If there is a 12-2-9 code in column 1 of the card image:

<u>Print Positions</u>	<u>Contains Card Image Columns</u>
8-15	73-80 (identification) in EBCDIC
17-19	2-4 (card type) in EBCDIC
21-26	6-8 (assembled origin) in hexadecimal
28-31	11-12 (number of bytes in card image) in hexadecimal
33-36	15-16 (ESID number) in hexadecimal

The remainder of the line depends on the type of card image (ESD or non-ESD).

If non-ESD type card image, print positions 38-128 are printed from columns 17-52. These positions are printed in hexadecimal in blocks of 9 words (36 bytes) separated by one block.

If ESD type card image, print positions 28-128 contain 3 fields of ESD information. Each field is 16 columns, as follows:

<u>Columns</u>	<u>Contain</u>
17-24	ESD item name in EBCDIC
25	ESD type in EBCDIC
26-28	Assembled origin in hexadecimal
30-32	Length/ESD number in hexadecimal

The action taken by the system when these messages are issued depends upon the option specified in the Linkage Editor ACTION statement.

If CANCEL is specified as the operand of the ACTION statement, the job is canceled.

If CANCEL is not specified, processing continues.

9100I Content of statement in error.

Cause: Invalid input card type.

9101I Content of statement in error.

Cause: Invalid operation in control statement.

9102I Content of statement in error.

Cause: Non-decimal or non-hexadecimal character in decimal or hexadecimal field.

9110I Content of statement in error.

Cause: Invalid or missing field limiter on control statement.

9111I Content of statement in error.

Cause: An operand field on a user-prepared control statement or REP card is greater than the maximum length.

9112I Content of statement in error.

Cause: An operand field is missing.

9113I Content of statement in error.

Cause: Control statement extends beyond column 71.

9114I Content of statement in error.

Cause: Submodular namelist is too long.

9115I Content of statement in error.

Cause: NOAUTO expected but not found.

9116I Content of statement in error.

Cause: Control statement present between first ESD and END statements of a module.

9120I Content of statement in error.

Cause: Phase name duplicated.

9121I Content of statement in error.

Cause: Phase name lower in sequence than \$\$A or phase name begins with an \*.

9122I Content of statement in error.

Cause: Symbol or phase name designated in origin was not previously defined, or

An F parameter was detected in a phase card. (Autotest will not operate in a foreground environment.)

9123I Content of statement in error.

Cause: Previous phase processed contained no valid storage assignment.

9124I Content of statement in error.

Cause: Phase origin is negative.

9125I Content of statement in error.

Cause: PHASE statement encountered during AUTOLINK.

9130I Content of statement in error.

Cause: Relocatable library not present.

9131I Content of statement in error.

Cause: Module requested by INCLUDE statement not present in relocatable library.

9132I Content of statement in error.

Cause: Too many nesting levels of INCLUDE attempted.

9133I Content of statement in error.

Cause: Nested submodular INCLUDE.

9135I Content of statement in error.

Cause: ACTION statement has invalid operand.

9136I Content of statement in error.

Cause: ACTION MAP specified, but SYSLST was not assigned.

9140I Content of statement in error.

Cause: ESD item of invalid type.

9141I Content of statement in error.

Cause: Duplicated ESID number:

- No END statement in last module, or
- Duplicate or extraneous ESD cards.

9142I Content of statement in error.

Cause: ESD entry point label does not point to ESD named control section or COMMON.

9143I Content of statement in error.

Cause: Invalid duplication of entry point label.

9144I Content of statement in error.

Cause: Invalid ESID number, or Control dictionary and linkage table overlap.

9145I Content of statement in error.

Cause: Origin of control section not on a doubleword boundary.

9146I Content of statement in error.

Cause: COMMON has the same label as a named control section or an entry point label.

9147I Content of statement in error.

Cause: ESD entry point label does not belong to a defined control section.

9150I Content of statement in error.

Cause: Load address encountered outside phase.

9151I Content of statement in error.

Cause: Invalid delimiter on REP card.

9155I Content of statement in error.

Cause: The TXT or REP card or address constant in an RLD record does not have an ESID pointer to a defined control section.

9156I Content of statement in error.

Cause: Invalid format of RLD card.

9158I Content of statement in error.

Cause: END statement should contain the length of the control section, but does not.

9170I Content of statement in error.

Cause: ESID number not previously processed.

9200I LINKAGE EDITOR CANNOT CONTINUE

Cause: Highest byte of user program would overlay the area reserved for the Autotest control program at user program execution time, or

The user phase to be fetched would be located wholly or partially in the Supervisor area.

System Action: The job is canceled.

9201I LINKAGE EDITOR CANNOT CONTINUE

Cause: Required Autotest phase not found in core image library. This will result if SYSCLB is assigned.

System Action: The job is canceled.

9202I LINKAGE EDITOR CANNOT CONTINUE

Cause: All of user's core is not allocated to Autotest (the background area).

System Action: The job is canceled.

System Action: The job is canceled.

9293I LINKAGE EDITOR CANNOT CONTINUE

Cause: Core image library space exceeded.

9203I SYM OUT OF ORDER

Cause: Error in symbol processing. (SYM cards out of sequence.)

System Action: Processing continues. All symbols are ignored.

System Action: The job is canceled.

9294I LINKAGE EDITOR CANNOT CONTINUE

Cause: Disk error--an invalid no-record-found condition occurred.

9281I LINKAGE EDITOR CANNOT CONTINUE

Cause: No valid storage assignment in final phase.

System Action: The job is canceled.

System Action: The job is canceled.

9299I ERROR HAS OCCURRED DURING LINKAGE EDITING

9282I LINKAGE EDITOR CANNOT CONTINUE

Cause: No END record encountered before ENTRY statement.

System Action: The job is canceled.

Cause: Printed on SYSLOG if any errors 9100I through 9170I have occurred. These messages appear on SYSLST.

System Action: The job continues if ACTION CANCEL option is not specified. Otherwise, job is canceled.

9285I LINKAGE EDITOR CANNOT CONTINUE

Cause: An error occurred during the linkage editing of a \$ phase.

System Action: The job is canceled.

9900I DISK WORK AREA INVALID

Cause: Minimum work area size requirement not met. (In most cases, 30 tracks are required, allocate more if possible.) Or

Wcrk area not assigned to SYSLNK.

9291I LINKAGE EDITOR CANNOT CONTINUE

Cause: End of file or extents exceeded on SYS001, or

SYS001 not assigned to disk or tape.

System Action: The job is canceled.

System Action: The job is canceled.

9901I DISK WORK AREA TOO SMALL

Cause: Insufficient work area for SYM card input.

9292I LINKAGE EDITOR CANNOT CONTINUE

Cause: End of librarian work area. Too many phases to process.

System Action: Processing continues without symbolic capability.



9902I DISK WORK AREA TOO SMALL

Cause: Insufficient work area detected while writing Linkage Editor Control Dictionary onto disk, or

No work area remains for phase fetch/load records and test request output.

System Action: The job is canceled.

9903I DISK WORK AREA TOO SMALL

Cause: Test request control records or patch area records exceed capacity of work area.

System Action: The job is canceled.

9A01I AUTOTEST CANNOT CONTINUE

Cause: All user's main storage not allocated to Autotest. A change in core allocation has taken place by means of Jcb Control before the execution of a // EXEC card.

System Action: The job is canceled.

9A02I OPTION CATAL IGNORED

Cause: User supplied OPTION CATAL. Option ignored by Post-Linkage Editor.

System Action: Processing continues.

9F02I AUTOTEST COMMUNICATION RECORD NOT ON SYSLNK

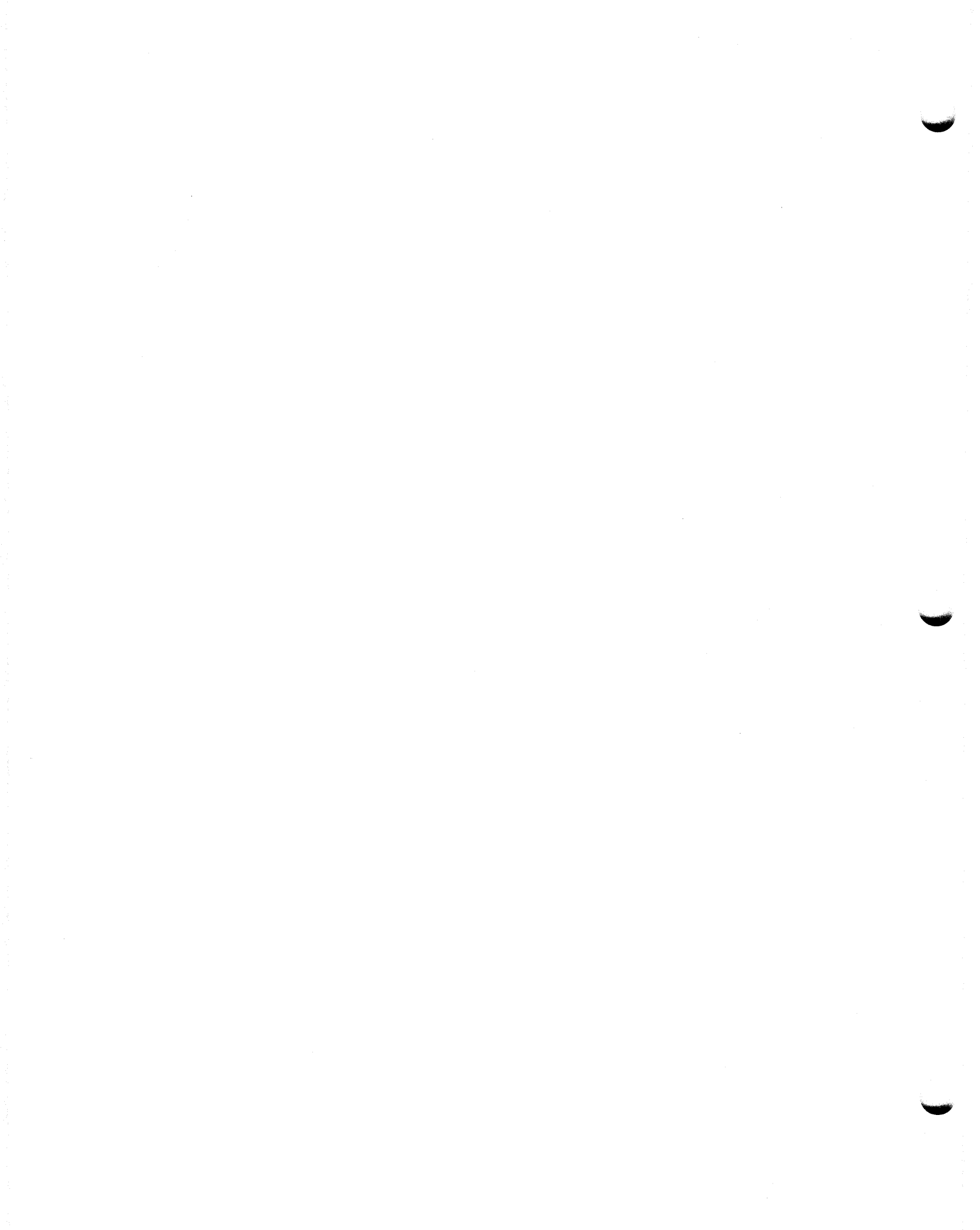
Cause: The Disaster Continue routine has detected a wrong-length record in the first Autotest record of the Autotest work file (SYSLNK). (The user program has written over Autotest information.)

System Action: The job is canceled.

9J01I EOF ON SYS005

Cause: End of volume on SYS005 (output tape) during Card to Tape variable program.

System Action: The job is canceled.



## A-Prefix Messages

Messages A110I through A115I are normally printed on both SYSLST AND SYSLOG for either assembler D or F. If SYSLST or an unidentifiable unit is defective, these messages appear on SYSLOG only. Messages A110I and A111I can appear at any point during the assembly, and the amount of assembly listings printed is not predictable. Messages A112I through A115I are detected immediately when an assembly is attempted, and no listing is produced. All of the assembler messages cause the job step to be terminated, and the source is bypassed to a /\* end-of-file condition. Control then returns to the supervisor via the end-of-job routine. Any following steps of a multiple step job are not bypassed unless they are also found to be defective.

A110I ABORT -PERM. I/O ERROR ON  
SYSxxx

Cause: An unrecoverable error on the named file prevents further processing. If the named file is SYSxxx, the unit code of the DTF that caused the error does not match any valid unit. This is usually the result of an accidental overlap that destroys the DTF.

This is probably a hardware error.

System Action: The job step is terminated.

Programmer Action: Rerun the job using another disk pack or tape reel, or use another unit for the disk pack or tape reel.

If the problem recurs, complete your problem determination action as follows:

1. Execute the ROD command and EREP, and retain the output.

2. Have the job stream and system log available.

Operator Action: Execute the LISTIO command for SYSxxx to determine the physical unit to which it is assigned. Move the disk pack or tape reel to another physical device and reassign SYSxxx to that unit,  
or

Mount another disk pack or tape reel and rerun the job.

A111I ABORT - UNEXPECTED EOF ON  
SYSxxx

Cause: EOF has occurred on an assembler work file that does not support multi-volume files. It usually results from a short tape, or

A tape-indicate reflective marker was read.

This is probably a user error.

System Action: The job step is terminated.

Programmer Action: If SYSXXX is assigned to a disk, submit larger extents and resubmit the job. If the problem recurs have the system log, printer output, and the job stream available to complete your problem determination action.

Operator Action: If SYSxxx is assigned to a disk, submit larger extents and rerun the job. If SYSxxx is assigned to a tape, mount a longer tape, or use a 1600 BPI tape drive instead of an 800 BPI drive, or

reassign the work files to disk and rerun the job.

A112I ABORT- INADEQUATE CORE FOR 32K [44K] ASSEMBLER

Cause: An attempt was made to execute the 32K D assembler in less than 14K, or the F assembler in less than 44K.

This is probably a user error.

System Action: The job step is terminated.

Programmer Action: If there is insufficient main storage available you must link edit a smaller Assembler.

If the problem recurs, complete your problem determination action as follows:

1. Have the MAP command output available.
2. Have the printer output available.

Operator Action: Execute the MAP command to determine the partition size. Then allocate a larger partition for the assembly.

A113I ABORT -INVALID PHYSICAL UNIT SYSxxx

Cause: The assignments for a work file(s) are not valid:

- The device type is not valid, or the assembler is link edited for different devices than those assigned.
- The UA (unassign) or IGN (ignore) option was specified for the D assembler workfiles.
- The specified mode setting is not valid.
- For the D Assembler, the work file device types are not consistent. (SYS003 is correct.)

Only the first invalid unit is named in the message.

This is probably a user error.

System Action: The job step is terminated.

Programmer Action: Use the LISTIO output to determine the cause of the message. Use CSERV to display the phase named "ASSEMBLY" and check byte X'1C', bits 5, 6, and 7 for the device type specified at link edit time as work files.

Bit 5: 1=2400  
Bit 6: 1=2314/2319  
Bit 7: 1=2311

Correct the assignments and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- LISTIO output
- CSERV output
- System output
- Job stream.

Operator Action: Issue the LISTIO command to check the assignments and enter the correct work file assignments if possible.

A114I ABORT -- NO UNIT ASSIGNED FOR SYSPCH

(For the D assembler)

Cause: For the D assembler, the OPTION [DECK] is in effect and SYSPCH is not assigned.

This is probably a user error.

System Action: The job step is terminated.

Programmer Action: Submit an assign for SYSPCH, or,

specify OPTION [NODECK] and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Retain the LISTIO listing.
2. Have the job stream, program listing, and system log available.

Operator Action: Execute the LISTIO command and verify assignments. Submit an assign for SYSPCH and rerun the job.

A114I ABORT -- NO UNIT ASSIGNED FOR SYSxxx (OPTION SYM)

(For the F assembler)

Cause: For the F assembler, a required unit (SYS001-SYS003 or a device required by an OPTION statement) is unassigned, or the IGN option is specified for the device. The IGN (ignore) option is valid for SYSPCH and SYSLST.

This is probably a user error.

System Action: The system terminates the job step.

Programmer Action: Submit an assignment for the indicated logical unit, or

Correct the OPTION statement to eliminate the requirement and resubmit the job.

If the problem recurs, have the LISTIO listing, the system log, the job stream, and the printer output available to complete your problem determination action.

Operator Action: Execute the LISTIO command and verify the assignments. Submit an assign for the indicated logical unit and rerun the job.

A115I ABORT-INVALID DUAL ASSGN SYSPCH- [SYSLST]

Cause: SYSPCH and SYSIPT are both assigned to the same unit, which is not a 1442M1 or 2520B1 card reader, or

SYSPCH and SYSLST are both assigned to the same unit, which is not a disk.

This is probably a user error.

System Action: The job step is terminated.

Programmer Action: Check the LISTIO listing to determine the dual assignments. Reassign the indicated logical units to separate devices, or the required device type.

If the problem recurs, retain the LISTIO output, the job stream, system log, and supervisor listing to complete your problem determination action.

Operator Action: Execute LISTIO to determine the current assignments. Reassign the two indicated logical units to separate devices or to the required device type.

A116I ABORT - INVALID MULTIPLE EXTENTS FOR WORKFILES

(For the D Assembler)

Cause: More than one extent is assigned for SYS001, SYS002, or SYS003. This is probably a user error.

System Action: The job step is terminated.

Programmer Action: Use the EXTENT cards or LSERV output to determine which file has multiple extents. Perform any actions necessary to define the file with only one extent.

If the problem recurs, have the following available to complete

your problem determination  
action:

- Job stream
- Program listing
- LSERV output
- EXTENT cards.

Operator Action: If the job  
was submitted using standard  
(permanent) labels, execute  
LSERV and return the output to  
your programmer.

## B-Prefix Messages

### B001A [PAUSE or PAUSE nnnnn] message

Cause: In an object program originally coded in the FORTRAN IV language, a PAUSE statement has been executed.

The nnnnn in the message can be:

1. An unsigned 1- to 5-digit integer constant specified in the PAUSE statement.
2. A literal constant specified in the PAUSE statement.
3. A zero, indicating that the PAUSE statement contains no constants.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: When the programmer submitted the program, he should have indicated the action to take for any constant printed in the message text or for a PAUSE statement without a constant. Follow his instructions.

To resume processing, reply EOB.

Default System Action: Pause will not occur.

### B002I STOP nnnnn

Cause: In an object program originally coded for the FORTRAN IV (G) or (H) compiler, a STOP statement has been executed. The nnnnn can be an unsigned 1- to 5-digit integer constant, not zero, specified in the STOP statement, or

In an object program originally coded for the FORTRAN (E) compiler, a STOP statement has been executed. The nnnnn can be:

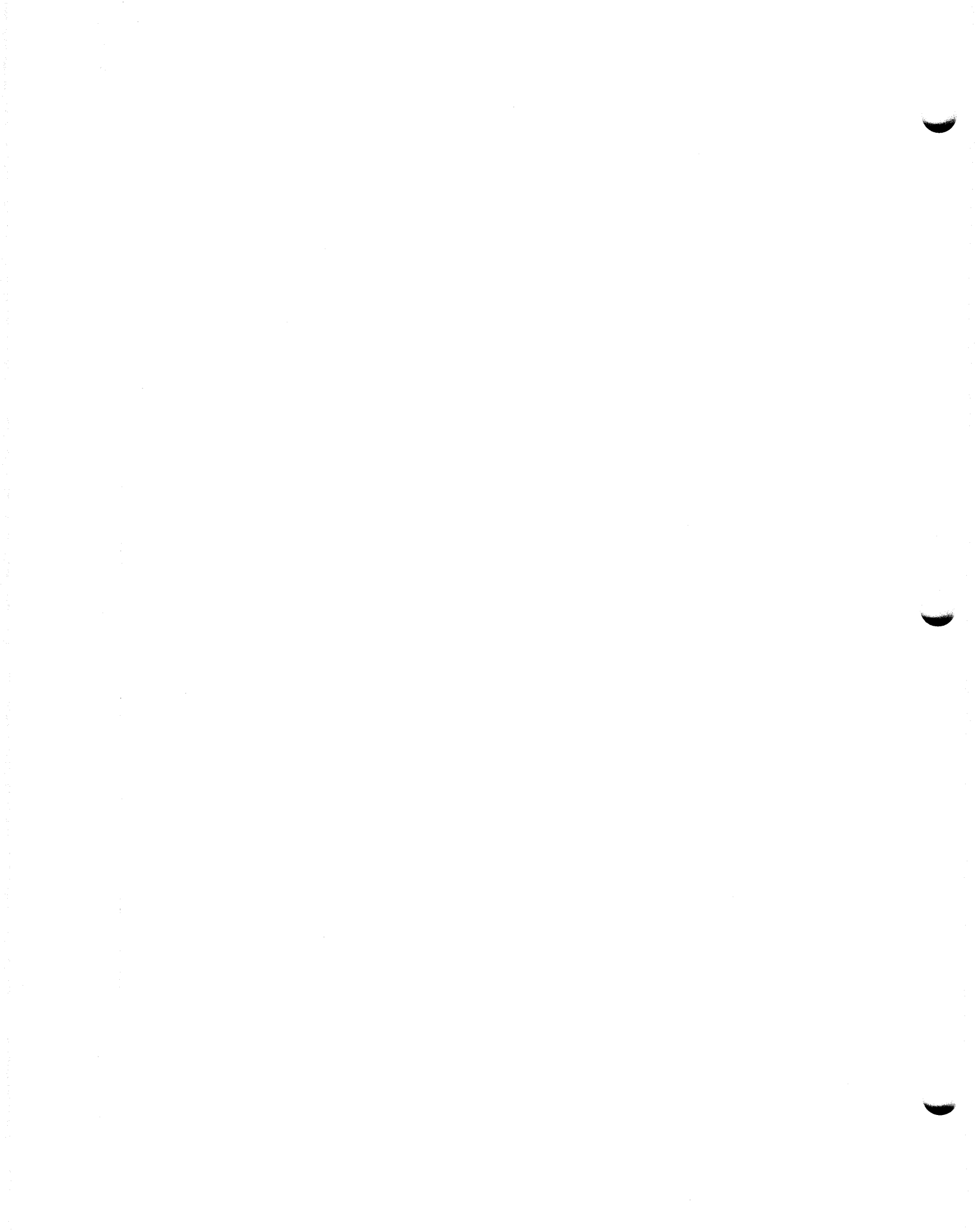
1. An unsigned 1- to 5-digit integer constant specified in the STOP statement.
2. A zero, indicating that the STOP statement contains no constant.

This message is issued for information only.

System Action: The execution of the object program is terminated. This is a normal EOJ.

Programmer Action: Not applicable.

Operator Action: Not applicable.





## C-Prefix Messages

### C001I CONFLICTING I/O ASSIGNMENTS

Cause: SYS001, SYS002, SYS003 must be assigned to the same type of device--either tape or disk.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Execute the LISTIO command to determine the current assignments, correct the assignments for SYS001, SYS002, SYS003 and rerun the job.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

### C002I STORAGE ALLOCATED TO THE COMPILER IS LESS THAN 14K. COMPILATION CANCELED

Cause: COBOL cannot be executed if the storage allocated to the background area is less than 14K bytes.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Not applicable.

Operator Action: Use the ALLOC command to allocate at least 14K bytes to the background partition and rerun the job.

If the problem recurs, do the following to complete your problem determination action:

1. Execute the MAP command to verify main storage allocations.
2. Have the job stream, printer output, and system log available.

The following messages are issued for American National Standard COBOL by the library subroutines. All the messages are issued on SYSLOG. All the messages except C110A, C111A, and C126D are also issued on SYSLST.

### C100I BACKGROUND AREA IS LESS THAN 54K

Cause: At least 54K is required to compile using American National Standard COBOL, or

While executing FCOBOL in a 54K partition:

1. More than 15 DTFs have been specified in the source deck to be compiled, or
2. A CBL (COBOL option) card specified more than 256 bytes in the BUF parameter.

This is probably a user error.

System Action: The compilation is terminated.

Programmer Action: Not applicable.

Operator Action: Use the ALLOC command to allocate at least 54K to the background partition.

If the problem recurs, complete your problem determination action as follows:

1. Execute the MAP command to check allocations.
2. Have the job stream, printer output, and system log available.

C101I DEVICE NOT ASSIGNED - SYSnnn

Cause: The specified logical unit is unassigned and must be assigned. (nnn is 001, 002, 003, or 004).

This is probably a user error.

System Action: The compilation is terminated.

Programmer Action: Not applicable.

Operator Action: Use the ASSGN command to assign a physical unit (magnetic tape or disk) to the file indicated.

If the problem recurs, complete your problem determination action as follows:

1. Execute the LISTIO command to verify assignments.
2. Have the job stream, printer output, and system log available.

C102I UNSUPPORTED DEVICE TYPE - SYSnnn

Cause: The specified file must be a disk file if SYS001 or a tape or disk file if SYS002 - SYS004. (nnn is 001, 002, 003, or 004).

This is probably a user error.

System Action: The compilation is terminated.

Programmer Action: Not applicable.

Operator Action: Use the ASSGN command to assign the appropriate physical unit to the file indicated: SYS001 should be assigned to a disk unit, SYS002- SYS004 should be assigned to magnetic tape or disk units.

If the problem recurs, complete your problem determination action as follows:

1. Execute the LISTIO command and verify assignments.
2. Have the job stream, printer output, and system log available.

C103I END OF FILE ON SYSIPT

Cause: End of file was encountered when in the initialization phase. No source language was found.

This is probably a user error.

System Action: The compilation is terminated.

Programmer Action: Not applicable, or the same as the operator action.

Operator Action: Ensure that a /\* card does not precede the source deck, or add the source deck to the job stream.

If the problem recurs, have the job stream, printer output, and system log available to complete your problem determination action.

C104I WARNING. SYS001 FILE IS TAPE

Cause: SYS001 should be assigned to a disk file, but in small, simple programs that do not require dictionary spill, assigning SYS001 to tape may not prevent compilation. If any spill does occur, an I/O error may result.

Dictionary spill is the overflow of the dictionary in main storage onto SYS001.

This is probably a user error.

System Action: Processing continues.

Programmer Action: Not applicable, or the same as the operator action.

Operator Action: Use the ASSGN command to assign SYS001 to a disk unit if compilation ends with an I/O error on SYS001.

If the problem recurs, complete your problem determination action as follows:

1. Execute the LISTIO command to verify assignments.
2. Have the job stream, printer output, and system log available.

#### C110A STOP literal

Cause: The programmer has issued a STOP literal statement in the American National Standard COBOL source program.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Respond with end-of-block or with any character in order to proceed with the program.

#### C111A AWAITING REPLY

Cause: The programmer has issued an accept statement in the American National Standards COBOL source program.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reply as specified by the programmer.

If the COBOL programmer has not elected to provide USE AFTER STANDARD ERROR routines, messages C112I through C125I are issued on SYSLOG and SYSLST prior to cancellation of the job. If the DUMP option is in effect, a partial dump is taken from the problem program origin to the highest core location of the last phase loaded. When this occurs, the eight bytes immediately preceding the DTF are destroyed. The messages have the form:

CmmmI SYSnnn filename DTfaddress text

Where nnn = 001 to 255,

filename = a standard American National Standard COBOL name of 7 characters or less,

address = a core location in hexadecimal notation,

and where mmm and text are as follows:

#### C112I DATA CHECK

Cause: A data check has occurred on SYSnnn while reading a sequential access file.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Use the Assign Alternate Track utility program to attempt recovery or replacement of this and other records on the track, or

Initialize this disk pack or data cell and recreate the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet and printer output available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

C113I WRONG LENGTH RECORD

Cause: A wrong length record has been detected.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Check the COBOL source listing for the correct record and block length specifications.

If the problem recurs, complete your problem determination action as follows:

1. Obtain a system dump and have the output available.
2. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

C114I PRIME DATA AREA FULL

Cause: This message is for index sequential files and indicates that the prime data area has been filled and an independent overflow area has not been specified.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the file with a larger prime data area or rewrite the source program to include an independent overflow area.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the compile listing of the program available.
3. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

C115I CYLINDER INDEX FULL

Cause: This message is for index sequential files and indicates that the extents for the cylinder index have been exhausted.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the file with a larger cylinder index area.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the compile listing of the program available.
3. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

C116I MASTER INDEX FULL

Cause: This message is for index sequential files and indicates that the extents for the master index have been exhausted.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the file with a larger master index area.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the compile listing of the program available.
3. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

#### C117I OVERFLOW AREA FULL

Cause: This message is for an index sequential file and indicates that the independent overflow area has been exhausted during an addition to the file.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Sequentially retrieve and then reload a file with larger prime data extents. Resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the compile listing of the program available.
3. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

#### C118I DATA CHECK IN COUNT

Cause: A data check has been detected in the count area of the record being read or written.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: If the file is an input file, use the Assign Alternate Track utility program to attempt recovery of the track in error, or

Initialize this disk pack or data cell and recreate the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

#### C119I DATA CHECK IN KEY OR DATA

Cause: This message is for direct access files and indicates that a data check has occurred while reading a key or data field. This is an unrecoverable error.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize this disk pack or data cell and recreate the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.

2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

C120I NO ROOM FOUND

Cause: This message is for direct access files and indicates the IOCS has determined that there is not enough room left on the track to write this record. The record is not written.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Recreate the file with larger data area extents and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the job stream, log sheet, and printer output available.

Operator Action: Not applicable.

C121I DASD ERROR

Cause: This message is for index sequential files and indicates that an unrecoverable error has occurred.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize this disk pack or data cell and recreate the file.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet and printer output available.

2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

C122I DASD ERROR WHILE ATTEMPTING TO WRITE RECORD ZERO

Cause: A DASD error has occurred in record 0 while formatting a disk pack or data cell for use as a direct access file.

This is probably a hardware error.

System Action: The job is canceled.

Programmer Action: Initialize this disk pack or data cell, or supply another disk pack or data cell and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet and printer output available.
2. Issue the ROD command, execute EREP, and have the output available.

Operator Action: Not applicable.

C123I FILE CANNOT BE OPENED AFTER CLOSE WITH LOCK

Cause: The programmer has specified "close with lock" in the American National Standards COBOL source program. This ensures that the file cannot be reopened during the execution of the program.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Change the source coding to a normal close to allow reopening of this file during one job execution.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Compiler listing.

Operator Action: Not applicable.

C124I CYLINDER AND MASTER INDEX TOO SMALL

Cause: This message is for an index sequential file and indicates that the cylinder and master index extents for a load operation are too small.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Specify greater extents for the cylinder and master index and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the job stream, log sheet, and printer output available.
3. Have the compile listing of the program available.

Operator Action: Not applicable.

C125I NO EXTENTS

Cause: The programmer used a close unit statement in his source program for a multi-volume file. The extents for the next volume were not submitted in the job stream.

This is probably a user error.

System Action: The job is canceled.

Programmer Action: Supply the additional extents and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Execute LISTVTOC and check the extents.
2. Have the compile listing, job stream, log sheet, and printer output available.

Operator Action: Check that extent cards have not been left out of the job stream. If correction is possible, rerun the job.

C126D IS IT EOF?

Cause: A tapemark was just read on an unlabeled tape file described when the program was compiled as having more than one reel.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

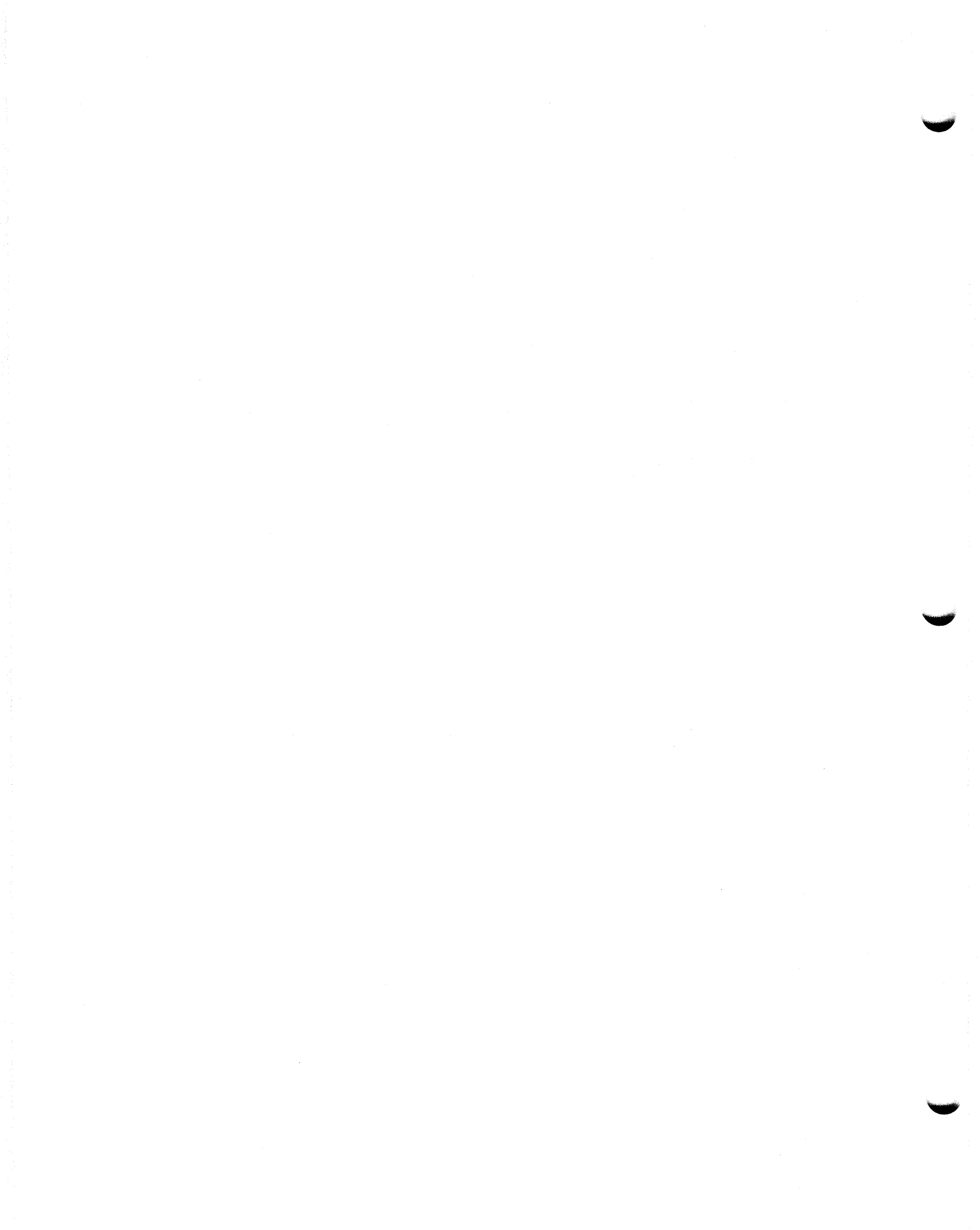
Operator Action: Type Y if end of file (the last reel of a multi-volume file) or N if end of volume (not the last reel of a multi-volume file).





## E-Prefix Messages

To use this section for messages that have an E prefix, remove the message section from the applicable component section and insert it here. If the CS/30, CS/40 messages are not required, they may be removed without affecting the messages of other components.



Prerequisite to the use of this section is a thorough and working knowledge of the operator service functions described in the 1401/1440/1460 Emulator Programs manual listed in the Preface. That manual should be used as reference for the messages in this section when detailed operating procedures are required. Available Operator Service functions and 1407/1447 to 1052/3210/3215 special symbol conversions are listed in Reference 6.

The following group of messages, prefixed by the message code EC0nx, pertains to user-initiated procedures.

EC01D ENTER DATA

Cause: The user has patched the invalid 1400 operation code wordmark R into the 1400 program being executed, and it has just been encountered. This may be used as a branch indicator for 1400 programs.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The operator types a one-character, user-supplied code on the console. This response is placed into 1400 storage location 96. (Lower-case letters g, p, x and w are invalid responses). If there is a wordmark associated with the character, it must be preceded by an underscore ("\_").

EC02I INTERIM STORAGE DUMP

Cause: A 1400 operation code of G with a wordmark has been encountered in the 1400 program and the user has specified ERROPNG=YES to request a 1400-style storage dump. If the user has specified an "S" for the test-mode option in the // 1400 control card, a System/360 main storage dump is also provided.

System Action: Storage is automatically dumped on SYSLST. At the completion of the dump, processing continues.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC03D MOUNT 51 COL READ FEED

Cause: The program has encountered a // 51 control card, which conditions it to read 51-column cards.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action:

1. Clear the reader.
2. Mount the 51-column Interchangeable Read Feed device on the 2540 Card Read Punch.
3. Load 51-column cards and ready the reader.
4. Reply START or EOB.

The following messages, prefixed by the message code EC1nx, pertain to errors in operator responses:

EC10I INVALID RESPONSE

Cause: The format or content of the operator's reply to the previous message issued by the Emulator program is invalid.

This is probably a user error.

Probable errors are:

- Misspelled or miskeyed response, or
- Incorrect sequence of responses, or

- An invalid response.

System Action: Reissues previous message.

Programmer Action: Not applicable.

Operator Action: The operator must reply with a valid response to the reissued message. (See Reference 6, Figure 12.)

If the problem recurs, have the emulator assembly listing, the linkage editor output, the system log, and the job stream available to complete your problem determination action.

#### EC11I INVALID ADDRESS

Cause: An invalid address was entered for the ADDRESS, ALTER, DISPLAY, or ENTER operator service function.

Probable errors are:

- A non-decimal address, or
- The address exceeds the value specified in the SIZ1400 parameter of the emulator program, or
- The address exceeds five characters in length, or
- The operator reply is too long - the address field must begin before position 30 of the reply.

This is probably a user error.

System Action: Message EC40D is reissued.

Programmer Action: The programmer should supply the operator with a valid 1400 address within the range specified by the SIZ1400 parameter of the emulator program.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet

- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The operator must reply with a valid 1400 decimal address.

#### EC12I INVALID DEVICE TYPE

Cause: If the previous message issued by the emulator program is:

1. EC43D - the operator attempted to assign a 1400 device to a programmer logical unit that is not a System/360 tape device.
2. EC44D - the operator attempted to assign a 1400 device to a programmer logical unit that is not a System/360 disk device.

This is probably a user error.

Probable errors are:

- The programmer logical unit previously entered was the wrong unit (keying error on console printer-keyboard), or
- Missing, misplaced, or incorrect ASSGN statements or cards in the jobstream.

System Action: Previous message is reissued.

Programmer Action: The programmer must be certain that the operator has the correct ASSGNs in the job stream and has the correct 1400 device-to-System/360 device assignments.

If the problem recurs, complete your problem determination action as follows:

1. Have the supervisor and emulator assembly listings and the linkage editor output available.
2. Have the system log, printer output, and job stream available.

3. Obtain a system dump when this message occurs.

Operator Action: The operator must reply with a programmer logical unit that is assigned to a compatible device type. After a valid response, an information message (type I) will be issued to confirm the assignment, followed by the message EC40D.

#### EC13I INVALID LOGICAL UNIT NUMBER

Cause: The operator's reply, assigning a programmer logical unit in response to the previous message issued by the Emulator program, is invalid. The assignment of programmer logical units must be within the range of the programmer logical units specified during system generation of the Disk Operating System.

This is probably a user error.

System Action: Previous message is reissued.

Programmer Action: Resubmit the job with correct device assignments. or

If the problem recurs, complete your problem determination action as follows:

1. Have the supervisor and emulator assembly listings and the linkage editor output available.
2. Have the system log, printer output, and job stream available.
3. Obtain a system dump when this message occurs.

Operator Action: The operator must reply with a valid programmer logical unit assignment. After a valid response, an information message (type I) is issued to confirm the assignment, followed by the message EC40D.

#### EC14I CONFLICTING LOGICAL UNIT ASSIGNMENT

Cause: The operator's reply, assigning a 1400 device to a programmer logical unit in response to the previous message issued by the Emulator program, conflicts with a previous assignment. For example, an assignment of TAPE 2 to SYS011 cannot be made if TAPE 1 is currently assigned to SYS011. In the case of disk assignments, two 1400 disk drives cannot be assigned to the same quadrant of a System/360 direct access storage device. For example, SYS011, PART 1 cannot be specified for DISK 0 if SYS011, PART 1 is already specified for DISK 2.

This is probably a user error.

System Action: Previous message is reissued.

Programmer Action: Correct assignments and resubmit the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the emulator assembly listing, and the linkage editor output available.
2. Have the system log, printer output, and job stream available.
3. Obtain a system dump when this message occurs.

Operator Action: The operator must reply with a non-conflicting assignment, or unassign the conflicting 1400 device using the "TAPE n" or "DISK n" operator service function. After a valid response, an information message (type I) is issued to confirm the assignment, followed by message EC40D.

EC15I LOGICAL UNIT NOT ASSIGNED

Cause: The operator's reply, to assign a 1400 device to a programmer logical unit in response to the previous message issued by the Emulator program, is invalid. The reply attempted to assign a 1400 device to a programmer logical unit that is not assigned to a System/360 device or DVOL checking was attempted on a system unit not assigned to a System/360 device.

This is probably a user error.

System Action: If the message is not the result of DVOL checking, the previous message is reissued, or

If the message is the result of DVOL checking, message EC40D is issued.

Programmer Action: Resubmit the job with the correct assignments, or

Check that the assignments are correct before checking DVOL.

If the problem recurs, complete your problem determination action as follows:

1. Have the emulator assembly listing, and the linkage editor output available.
2. Have the system log, printer output, and job stream available.
3. Obtain a system dump when this message occurs.

Operator Action: If this message is not the result of DVOL checking, respond to the associated reissued message, or

If the message is the result of DVOL checking, respond to the associated EC40D message.

EC19I DVOL SERIAL NUMBER NEEDED

Cause: The operator used the DVOL DISKn operator service function to verify the volume serial number of a disk drive for which no volume serial number has been supplied, either on a // DVOL control card or by the DVOL DISKn=xxxxxx operator service function.

This is probably a user error.

System Action: Message EC40D is issued.

Programmer Action: Not applicable.

Operator Action: Supply the DVOL DISKn=xxxxxx operator service function to initiate serial number checking when the volume serial number has not been previously supplied.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

The following group of messages, prefixed by the message code EC2nx, pertains to errors detected during Emulator program initialization.

EC20I PARAMETER ERROR

Cause: The sum of the values specified for tape I/O buffers on all // TAPE control cards (parameter "nnnnn") exceeds the amount allocated by the BUFSIZE parameter at Emulator program generation.

This is probably a user error.

System Action: The value specified at program generation by the BLKSIZu parameter for each drive is assumed as a default and message EC29D is issued.

Programmer Action: Analyze the // TAPE control card(s) and the standard values (from the emulator program listing) and perform one of the following actions:

1. Provide a new // TAPE control card. The sum of this card's block size ('nnnnn') operand(s) plus the block size value(s) (either the standard value or a new value supplied by a previous // TAPE control card) of any 1400 tape drive not altered by this card must not exceed the amount allocated by the BUFSIZE parameter.
2. If multiple // TAPE control cards are used, place those cards decreasing tape buffer sizes before those increasing tape buffer sizes. The Emulator program compares the total block size value against the BUFSIZE parameter as it completes each // TAPE control card, making it possible to exceed the BUFSIZE value if the cards are out of order.
3. Reassemble the Emulator program with the proper size parameters for BLKSIZu and BUFSIZE if they are not correct.

If the problem recurs, complete your problem determination action as follows:

1. Have the emulator assembly listing, and the linkage editor output available.
2. Have the system log, printer output, and job stream available.
3. Obtain a system dump when this message occurs.

Operator Action: Not applicable.

### EC21I INITIALIZATION ERROR

Cause: This error has been caused by one of the following:

- An attempt to execute the Emulator program in a SPI environment has been initiated. SPI operation is not supported, or
- Parameter "a" of the // 1400 card has been specified as a D and the // FETCH card did not immediately follow the // 1400 control card, or the // TAPE, // DVOL, // CCTL control cards if included, or
- A /\* card (END OF DATA) has been encountered before the // 1400 card.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: If the first cause applies, reassemble the DOS supervisor to support batched job processing (MPS=BJF) and use the BATCH command to initialize the partition, or

If the second cause applies, arrange the control cards so that the //FETCH card immediately follows the emulator control cards, or

If the third cause applies, place the /\* card after the //1400 card.

Resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: If the supervisor supports BJF, use the BATCH rather than START command.

EC29D CONTROL CARD ERROR

Cause: The last control card read is incorrectly formatted.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the card in error and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The operator may respond with a corrected control card or with RETRY, START, END, or CANCEL. RETRY or START will cause the next card on SYSIPT to be read. When correcting a CCTL error, two control cards can be typed in via the console if the first is a valid CCTL1 control card.

The following group of messages, prefixed by the message code EC3nx, pertains to the interval timer:

EC30I BEGIN name AT hh.mm.ss

Cause: This message is issued just before 1400 program loading. "name" is the program name from the // 1400 control card. If the user has specified TIMER=YES at Emulator system generation, and the timer has been turned on by the operator at IPL time, the time of day ("hh" is the hour, "mm" is the minute, and "ss" is the second) is printed as the second half of this message.

System Action: Processing begins.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC31I EOJ name AT hh.mm.ss

Cause: A normal 1400 end-of-job halt has been recognized (the user specified at Emulator system generation "EOJAADR=nnnnn" and/or "EOJBADR=nnnnn" or specified an EOJ I-address in the // 1400 control card). "name" is the program name from the // 1400 control card. If TIMER=YES is specified at Emulator program generation, and the timer has been turned on at IPL time, the time of day ("hh" is the hour, "mm" is the minute, and "ss" is the second) is printed as the second half of this message.

System Action: Control is released automatically to DOS job control.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC32I CANCEL name AT hh.mm.ss

Cause: An abnormal 1400 end of job has been recognized. "name" is the program name from the // 1400 control card. If TIMER=YES is specified at Emulator Program generation, and the timer has been turned on at IPL time, the time of day ("hh" is the hour, "mm" is the minute, and "ss" is the second) is printed as the second half of the message. If OSDUMP=YES is specified at Emulator program generation, a 1400-style storage dump is provided on SYSIST unless a nodump option (a "1") is specified in parameter "b" of the // 1400 control card. When a 1400-style dump is provided, a main storage dump is also provided if the testmode option in the // 1400 control card is specified as "S".

System Action: Following the storage dump, control is released to DOS job control. (When message EC32I follows EC93I the dump is not performed.)



Programmer Action: If this message is preceded by message EC81I, analyze the console log and the dump of 1400 storage (if provided) to determine if the 1400 halt address is valid. If the address is valid, either provide a new // 1400 card with the corrected I-Star address or reassemble the emulator with the corrected values provided for EOJAADR or EOJBADR.

Operator Action: Not applicable.

EC33I END name AT hh.mm.ss

Cause: The operator has entered END to request an end-of-job termination of the 1400 program. "name" is the program name from the // 1400 control card. If the user specified TIMER=YES at Emulator program generation and the timer has been turned on by the operator, the time of day ("hh" is the hour, "mm" is the minute, and "ss" is the second) is printed as the second half of the message.

System Action: Job is terminated as if the job had gone to a normal end of job (no main storage dump); control is released automatically to DOS job control.

Programmer Action: Not applicable.

Operator Action: Not applicable.

The following group of messages, prefixed by the message code EC4nx, pertains to the Operator Service Functions:

EC40D TYPE IN FUNCTION

Cause: This message is issued when Operator Service Functions have been requested. If this message immediately follows another emulator message, respond as indicated by the preceding message.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The operator responds with an available Operator Service function (see Reference 6, Figure 12), or as indicated by the preceding message.

EC41I HEX ADDRESS = xxxx

Cause: This message is displayed when the operator enters address "ADDRESS dddd" (decimal) in response to message EC40D, where "dddd" is a valid 1400 address for the generated system in the range of 1 to 15999. The "xxxx" is the hexadecimal equivalent of the entered decimal address.

System Action: Message EC40D is issued.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC42D TYPE DATA

Cause: This message is displayed if the operator types the response ENTER to message EC40D. This allows the operator to change the contents of 1400 storage beginning at the 1400 address specified in the ENTER response.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The data is entered, using the special character "\_" to indicate that a wordmark is associated with the next character typed. The data must be typed as upper- or lower-case characters as required. Special characters must be entered as indicated by Figure 13, Reference 6. For example, if the operator replies \_NNNN, four characters in upper case are entered at the address specified in the ENTER reply, with a wordmark associated with the first character, or

Press EOB to terminate function.

EC43D/I TAPE n ON SYSnnn, MAX  
BLK=xxxxx DR cuu, n TR, yyy BPI

EC43D/I TAPE n ON SYSnnn, MAX  
BLK=xxxxx SYSnnn NOT ASSIGNED

EC43D/I TAPE n UNASSIGNED, MAX  
BLK=xxxxx

Cause: This message is displayed if the operator types the response "TAPE" or "TAPE n" to message EC40D. The response "TAPE" produces a display of all 1400 tape assignments and associated buffer block sizes for each 1400 drive. The response "TAPE n" indicates that the operator wishes to display or alter a 1400 tape assignment as specified by "n" (where "n" is digit from 1 to 6) on a programmer logical unit identified by SYSnnn. Message EC43D is issued to display the present status of the 1400 tape drive and allow the operator to retain or change the current assignment. Tape density (yyy BPI) is displayed only for 7-track tapes. If the tape drive is unassigned, the device address (DR cuu), the designation for 7- or 9-track tapes (n TR) and tape density (yyy BPI) are not displayed.

System Action: Message EC40D is issued following message EC43I. If message EC43D is issued, the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Message EC43I requires no response. Message EC43D requires one of the following responses:

- START (or EOB) to retain the present assignment.
- "SYSnnn" to change an assignment, where "SYSnnn" is the programmer logical unit (SYS000-SYS221) to which the simulated 1400 tape drive is to be assigned.

Note: A programmer logical unit currently assigned to a 1400 tape drive must first be unassigned from

that device before reassignment can be made, or message EC14I is issued.

- "UA" to unassign the simulated 1400 tape drive from a programmer logical unit.

EC44D/I DISK n ON SYSnnn, PART n DR  
cuu

EC44D/I DISK n ON SYSnnn, SYSnnn NOT  
ASSIGNED

EC44D/I DISK n UNASSIGNED

Cause: This message is displayed if the operator types the response "DISK" or "DISK n" to message EC40D. The response "DISK" to message EC40D indicates that the operator wishes a display of all 1400 disk assignments and associated disk part for each 1400 drive. The response "DISK n" to message EC40D indicates that the operator wishes to display or alter a specific 1400 disk assignment as indicated by the digit 0, 2, 4, 6, or 8 typed after DISK. Message EC44D is issued to display the present status of the 1400 disk drive and allows the operator to retain or change the current assignment.

System Action: Message EC40D is issued following message EC44I. For message EC44D the system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Message EC44I requires no response. Message EC44D requires that the operator reply with one of the following responses:

- "START (or EOB)" to retain the present assignment.
- "SYSnnn,x" to change an assignment, where "SYSnnn" is the programmer logical unit (SYS000 - SYS221) to which the simulated 1400 disk drive is to be assigned, and "x" is a 0 or 1 to indicate which half of

the new 2311 disk unit, or a 0, 1, 2, or 3 to indicate which quadrant of the new 2314/2319 disk unit is to be used.

Note: A programmer logical unit currently assigned to a 1400 disk drive must first be unassigned from that device before reassignment can be made, or message EC14I is issued.

- "UA" to unassign the simulated 1400 disk drive from a programmer logical unit.

#### EC45D TYPE S-SW

Cause: The operator requested the SWITCH operator service function and HALTS=YES was specified at Emulator program generation. A display of the current sense switches, message EC46I, will precede this message. Note that sense switch A is not displayed or altered by this function.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The operator replies by typing in the desired switch or switches. If all sense switches are to be turned off, enter a blank (space bar) and press the EOB/END key. To retain present status of sense switches, the operator replies "START" (or EOB). Message EC46I is typed out following the user's response to confirm the sense-switch settings.

#### EC46I S-SW ON = xxxxxx

Cause: This message displays the current sense-switch status. The message text is followed by a listing ("xxxxxx") of the sense switches that are on. This message follows the reply SWITCH to message EC40D to inform the operator of the current sense-switch status, and then, is issued again to confirm the operator response to EC45D.

System Action: Message EC40D or EC45D is issued.

Programmer Action: Not applicable.

Operator Action: Not applicable.

#### EC47I 1400 ADDRESS LIMIT, FUNCTION ENDED

Cause: This message is displayed only following the use of the ENTER or DISPLAY operator service function. The message indicates that the maximum generated 1400 storage address has been exceeded during execution of the requested function.

System Action: The system will respond with the appropriate action as follows:

- If the message is in response to the ENTER function, the entered data is ignored and message EC40D is displayed.
- If the message is in response to the DISPLAY function, only those positions up to the maximum 1400 storage address are displayed, followed by message EC40D.

Programmer Action: The programmer must ensure that the ENTER or DISPLAY requests do not exceed the maximum 1400 address.

Operator Action: The operator should first check the previous ENTER or DISPLAY request. If the response was incorrect, the correct command should be

entered in response to message EC40D, or

The job can be terminated by replying CANCEL or END to message EC40D, or

The operator can respond START to message EC40D to resume emulator processing.

#### EC48I FUNCTION NOT GENERATED

Cause: This message indicates that the operator requested an operator service function which was not specified for this Emulator program generation.

This is probably a user error.

System Action: Message EC40D is issued.

Programmer Action: If the desired operator service function is not present in the Emulator program, reassemble the Emulator program to generate the desired function and catalog to the core image library, or

Correct any assembly errors, and reassemble and recatalog the Emulator program, or

If any new operator services do not function on a recently cataloged Emulator program, check the linkage editor diagnostics for errors that would have prevented the new program from being cataloged. The old Emulator program may have been used. Correct the diagnostics, reassemble and recatalog the Emulator program.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The operator must reply with one of the supported operator service

functions. (See Reference 6, Figure 12.)

#### EC49D INVALID 1400 CHARACTER DETECTED ON xxxxxxxx

Explanation: This message is displayed when the Emulator program for the Model 40 encounters an invalid 1400 character. "xxxxxxx" identifies the source of the error condition (DISK, TAPE, READER, or ENTERING).

If the error occurred while the operator was using the ENTER operator service function or during the execution of a Read Console Printer instruction, messages EC46I and EC42D are issued.

If the source of the error is disk, tape, or card reader, message EC49D is issued.

If the error occurred on the reader, the card in error is typed.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: The operator may respond with CANCEL or END and terminate the job regardless of the source of the error. In addition, the following are valid operator responses:

- For disk -- Enter PROCESS to continue with the record that contains the invalid character.
- For tape -- Enter BYPASS to skip the record with the invalid character.

Enter PROCESS to continue with the record that contains the invalid character.

Enter DISPLAY to display the record in error (if TAPERRS is not equal to NO).

- For Reader -- Enter PROCESS to continue with the record that contains the invalid character, or

Perform the RETRY operator service function.

- For ENTERING -- reenter data following message EC42D.

The following group of messages, prefixed by the message code EC5nx, pertains to unit-record equipment and are displayed only during 2540 punch operations, or when stacker selection, or when simulating 1442 read punch updating on either a 2520 or 2540. The most common causes for these messages are:

- Card jams
- Double punching
- Multiple punches in rows 2 through 7

#### EC50D PUNCH ERROR

Cause: This message indicates that a 2540 or 2520 equipment check has occurred. The last card in the stacker is the card in error. This message is always preceded by a standard DOS operator intervention message.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: If error occurred on a 2520:

1. Remove last card from stacker one:
  - If performing punch-only operation, discard card.
  - If performing combined read and punch operation, reconstruct prepunching.
2. Remove cards from hopper.
3. Press NPRO key -- two cards enter stacker one.
4. Place the reconstructed card in the hopper (if

performing combined read and punch operation), the two cards that were run out, and then the cards removed from the hopper.

5. Ready the 2520.
6. Reply with START or EOB/END.

If error occurred on a 2540:

1. Remove cards from hopper.
2. Press and hold start key to clear punch feed.
3. Remove last four cards from stacker P1. Last two cards are blank; first two should be discarded.
4. Replace the blank cards in the hopper.
5. Ready the punch.
6. Reply with START or EOB/END.

If the problem persists, issue the ROD command, execute EREP, and retain the listing to complete your problem determination action.

#### EC51D PFR PUNCH ERROR

Cause: A punching error was detected during a PFR operation. The card in error is in stacker P1. The punch-check station may also contain an incorrectly punched card.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action:

1. Remove cards from punch hopper.
2. If the end-of-file light is on, press the stop key to reset the end-of-file circuits.

3. Press and hold the punch start key to clear the punch feed.
4. Remove the last four cards from stacker P1. The last two cards are correct; prepunching in the first two must be reconstructed.
5. Place the two reconstructed cards, the two correct cards, and the cards removed from the hopper, in that sequence, in the hopper.
6. Ready the punch.
7. Reply with START or EOB/END.
6. The second card caused the validity check. Correct it as necessary.
7. Place these three cards, after any necessary corrections, in front of the cards removed from the hopper. Place this deck in the hopper.
8. Ready the punch.
9. Reply with START or EOB/END.

If the problem persists, execute EREP and retain the listing to complete your problem determination action:

If the problem persists, execute EREP and retain the listing to complete your problem determination action.

EC58D 1404\_aaaaaaaaaa CCSW=yyxxxx  
SNS=xx

Cause: This message indicates that a 1404 printer error occurred. The type of error is identified by "aaaaaaaa", where "aaaaaaaa" is one of the following:

EC52D PFR\_READ\_ERROR

Cause: A reading error was detected during PFR operation. The card in error is at the punch station. The punch-check station may also contain an incorrectly punched card.

EQUIP CHK (equipment check)  
INTERV REQ (intervention required)  
BUSOUT CHK (busout check)  
COMM REJCT (command reject)  
DATA CHECK (data check)

This is probably a hardware error.

The hexadecimal representation of the channel command word (CCW) command code is displayed by "yy" in the CCSW while the hexadecimal representation of the status bytes from the CCB is given by "xxxx". The sense bytes are displayed by SNS=xx.

System Action: The system waits for an operator response.

This is probably a hardware error.

Programmer Action: Not applicable.

System Action: The system waits for an operator response.

Operator Action:

1. Remove cards from punch hopper.
2. If end-of-file light is on, press stop key to reset end-of-file circuits.
3. Press and hold punch start key to clear punch feed.
4. Remove last three cards from stacker P1.
5. The first of these three cards may have to be reconstructed because it has been read and punched but not punch checked.

Programmer Action: The programmer must supply the operator with guidelines to handle each of the five types of error conditions.

If the problem persists, execute EREP and retain the listing, and have the system log and printer output available to complete your problem determination action.

Operator Action: The operator must type in one of the following replies:

- SKIP 1 -- which causes the printer to skip 1 and retry the operation.
- IGNORE -- the printer command causing the error is ignored and processing continues.
- RETRY -- the printer command is retried.
- SERVICE -- full operator services are made available, and message EC40D is issued.

EC59D REPLY AGAIN TO 1404 MESSAGE

Cause: This message is displayed after the operator replied SERVICE or with an invalid response to message EC58D and additional corrective action is required.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: Reply SKIP 1, RETRY, IGNORE, or SERVICE.

If the problem recurs, execute EREP and retain the listing, and have the system log and printer output available to complete your problem determination action.

The following group of messages, prefixed by the message code EC6nx, pertains to magnetic-tape devices:

EC60I MESSAGE RESPONSES ARE B=BYPASS, P=PROCESS

Cause: This message is displayed to indicate that a tape error has occurred and that the Tape Error Recovery routine has been entered.

This message is displayed only if TAPERRS=LSTCHAR or LOGCHAR is specified during Emulator program generation.

System Action: Message EC62D is displayed.

Programmer Action: Specify an operator procedure to handle this error, such as mounting the tape on another drive or copying the tape, then rerunning the job.

Operator Action: One of the options (B=BYPASS or P=PROCESS) indicated in this message must be given in response to message EC62D.

EC61I MESSAGE RESPONSES ARE B=BYPASS, P=PROCESS, H=HEX-DISPLAY

Cause: This message is displayed to indicate that a tape error has occurred and that the 1400 Tape Error Recovery routine, as specified at Emulator Program generation, has been entered.

This message is displayed only if TAPERRS=LSTCHAR or LOGCHAR is specified during Emulator program generation.

System Action: Message EC62D is displayed.

Programmer Action: Not applicable.

Operator Action: One of the options (B=BYPASS, H=HEX-DISPLAY, or P=PROCESS) indicated in this message must be given in response to message EC62D.

EC62D TAPE BLOCK IN ERROR

Cause: This message is displayed to indicate that a tape error has occurred, the operator has responded to the standard DOS-issued error message with IGNORE, and the Tape Error Recovery routine has been entered.

System Action: The tape block in error is printed on SYSLOG or SYSLSL as specified by the TAPERRS parameter. Non-BCD characters appear as asterisks (\*). If an invalid response is made, either message EC60I or EC61I is issued, followed by a reissued message EC62D. The system then waits for an operator response.

Programmer Action: Specify an operator procedure to handle this error, such as mounting the tape on another drive or copying the tape, then rerunning the job.

Operator Action: The available operator responses to this message are one-letter options (B, P, or H) indicated in messages EC60I and EC61I, one of which is issued just prior to the display of this message. The functions of the one-letter options are:

B  
The tape block in error is bypassed and is not given to the 1400 program. Processing continues with the next block. The 1400 program is not informed that a block has been bypassed.

P  
The tape block in error is passed to the 1400 program as is.

H  
The tape block in error is displayed in hexadecimal format exactly as it was read into System/ 360 main storage, except that parity has been corrected by the channel. After this response, the operator again has the option of bypassing or processing (B or P).

EC63I TAPE n BLOCK SIZE EXCEEDED

Cause: A record block, either read or written on 1400 tape unit "n" exceeds the maximum block size specified by the user during Emulator program generation ("BLKSIZEu=nnnnn"), as modified by the // TAPE control card. This message is always preceded by message EC80I (status of 1400 registers and current instruction). A 1400-style storage dump is provided on SYSLST unless a no-dump option (a "1") was specified in parameter "b" in the // 1400 control card. If the user has specified an "S" for the test-mode option in the // 1400 control card, a System/360 main storage dump also is provided.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: Check the 1400 program for the maximum block size required for execution. If the total buffer size exceeds that specified in the BUFSIZE parameter, reassemble the Emulator program, increasing the size of the BUFSIZE parameter, or

If the total buffer size does not exceed the size indicated by BUFSIZE, use a // TAPE card to redistribute the individual buffer space.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC67I MOUNT NEW TAPE ON SYSIPT

Cause: An end-of-volume indication (tape mark) has been detected by the tape device assigned to SYSIPT before end of file (/\*) was reached.

System Action: A standard DOS operator intervention message is issued.

Programmer Action: Not applicable.

Operator Action: Mount the next tape volume on SYSIPT.

EC68I MOUNT NEW TAPE ON SYSPCH

Cause: An end-of-volume indication has been detected by the tape drive assigned to SYSPCH.



System Action: A standard DOS operator intervention message is issued.

Programmer Action: Not applicable.

Operator Action: Mount a new tape volume on SYSPCH.

EC69I MOUNT NEW TAPE ON SYSLST

Cause: An end-of-volume indication has been detected by the tape drive assigned to SYSLST.

System Action: A standard DOS operator intervention message is issued.

Programmer Action: Not Applicable.

Operator Action: Mount a new tape volume on SYSLST.

The following group of messages, prefixed by the message code EC7nx, pertains to disk devices:

EC70I DISK PACK NOT FORMATTED

Cause: This message indicates that the disk pack is not initialized to the proper 1400 format.

This is probably a user error.

Programmer Action: Initialize the disk pack by using the DOS Initialize Disk utility program, then run the Clear Disk utility to format the tracks. The parameters of the clear disk utility depend on the device type being emulated.

If the problem recurs, complete your problem determination action as follows:

1. Have the job stream, log sheet, and printer output available.
2. Have the control cards for the Initialize Disk and Clear Disk utility programs available.

System Action: The job is canceled.

Operator Action: Check that the correct pack is mounted.

EC71D DISK ERROR DETECTED. SECTOR ADDRESS = dxxxxx. VALID DATA FOLLOWS:

Cause: This message indicates that an error has been detected during disk verification (optionally specified). The beginning sector address is indicated. This is followed by one or more lines of 100 characters that represent the data that should have been recorded on disk. This data may be used in a subsequent operation to rebuild the record affected. The 1400 program is not informed of the disk error.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Reinitialize the disk pack or execute the clear disk utility and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The operator may type the response START to indicate that the record in error is to be accepted as is and that processing is to continue. The operator may also type the response END or CANCEL to cause the job to be terminated.

EC73I SYSLST EXTENT EXHAUSTED

Cause: The extent limit assigned to SYSLST (disk extent) has been exhausted.

This is probably a user error.

System Action: Message EC32I is issued and The job is canceled.

Programmer Action: Increase the extent for the required system unit and resubmit the job.

Operator Action: Not applicable.

EC74I SYSPCH EXTENT EXHAUSTED

Cause: The extent limit assigned to SYSPCH (disk extent) has been exhausted.

This is probably a user error.

System Action: Message EC32I is issued and the job is canceled.

Programmer Action: Increase the extent for the required system unit and resubmit the job.

Operator Action: Not applicable.

EC75I WRONG PACK, MOUNT xxxxxx DISK n ON DR cuu

Cause: This message is displayed if the Emulator program is accessing the wrong disk pack, where "xxxxxx" is the volume serial number (EBCDIC characters) of the correct disk pack, "n" is the 1400 disk drive number (0, 2, 4, 6, or 8), and "cuu" is the hexadecimal channel and device address of the disk drive on which the disk pack is mounted. The volume serial number displayed is initially established by a // DVOL control card or by the operator using the DVOL DISKn=xxxxxx operator service function.

This is probably a user error.

System Action: Message EC40D is issued.

Programmer Action: Check that the assignments are correct and that the correct packs have been mounted.

Operator Action: This message indicates that the operator must either take corrective action or terminate the 1400 program. The operator can use the DSPLYV operator service function to display the volume serial number of the pack currently mounted on this device to assist in the evaluation of the corrective action. However, before further processing can be continued, the operator must perform one of the following corrective actions:

- Mount the correct disk pack on the specified drive and reply with the NEWPAC function, or
- Change the disk drive configuration using the DISK n function, or
- Change the volume serial number against which the pack is to be verified, with the DVOL DISKn= xxxxxx function, where "xxxxxx" is the volume serial number of the proper pack, or
- Discontinue volume serial number checking for this 1400 drive using the DELETE function. This function must be used with caution when performing write operations.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

EC76I DISK n ON cuu SERIAL NO.=xxxxxx

Cause: This message is displayed in response to the operator's selection of the DSPLYV operator service function following the display of message EC75I. "n" is the 1400 disk drive number (0, 2, 4, 6, or 8), "cuu" is the hexadecimal channel and device address of disk drive "n", and "xxxxxx" is the volume serial number (EBCDIC characters) of the disk pack.

System Action: Message EC40D is issued.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC77D SCAN ERROR DETECTED

Cause: A 1400 disk scan was not successfully completed. An end of cylinder condition has not yet been detected.

This is probably a hardware error.

System Action: The system waits for an operator response.

Programmer Action: Not applicable.

Operator Action: If the user wishes to retry the scan operation, he types in the word START. If the user does not wish to retry the operation, he may enter END or CANCEL to terminate the job.

If the problem recurs, complete your problem determination action as follows:

1. Have the log sheet, printer output, and job stream available.
2. Obtain a 1400 dump and a 360 system dump before the job is canceled.
3. Issue the ROD command, execute EREP, and have the output available.

EC78D WRONG PACK, MOUNT xxxxxx DISK n ON DR cuu

EC78I 1301/1405 DRIVE xxx SERIAL NO.=xxxxxx

Cause: These messages are displayed if the Emulator program is accessing the wrong 1301 or 1405 disk pack, where message EC78I displays the volume serial number of the physical pack which is being accessed. Message EC78D always follows and identifies the volume serial number (MOUNT xxxxxx) which was requested on the // DVOL control card for this drive. DISK n indicates which part of the 1301 or 1405 drive is being simulated, while DR cuu indicates the hexadecimal channel and device address of the System/360 device being accessed.

This is probably a user error.

System Action: The system waits for an operator response.

Programmer Action: Correct the // DVOL card or supply the correct volumes and resubmit the job.

Operator Action: The operator must perform one of the following corrective actions:

- Mount the correct disk pack on the specified drive and reply with the NEWPAC function.
- Abnormally terminate the job using the END or CANCEL operator service functions. The job can be resubmitted after correcting the volume serial number entries for the simulated 1301 or 1405 disk pack on the // DVOL control card.

Note: The job may be immediately resubmitted if a non-process runout of the card reader transport is performed before performing the END or CANCEL function. After correcting the // DVOL control card, resubmit the job to the card reader beginning with the DOS // JOB control card.

The following group of messages, prefixed by the message code EC8nx, pertains to program messages:

EC80I 1400 STATUS I=nnnnn A=nnnnn  
B=nnnnn INSTN BLOCK=xxxxxxxx

Cause: A 1400 halt or error has been encountered or the operator has requested the STATUS or ALTER operator service functions. This is a display of the 1400 storage address registers and eight characters from 1400 storage within an eight-byte range of where the I-STAR is pointing. Certain 1400 special characters (such as the record mark) are not printed on the model 30. When message EC80I is displayed after a 1400 program error, the A-STAR and B-STAR values may be invalid because of storage wraparound.

System Action: Variable, depending on program status as indicated in associated message.

Programmer Action: Not applicable.

Operator Action: Reply to the associated emulator message.

EC81I HALT

Cause: A 1400 halt other than end of job (as specified in "EQJADR= nnnnn" and/or "EOJBADR=nnnnn" at Emulator program generation or as specified for an EOJ I-address in the // 1400 control card) has occurred and the user has not specified operator restart (a "1") in parameter "e" in the // 1400 control card. This message is preceded by the typing out of message EC80I (status of 1400 registers and current instruction). A 1400-style storage dump is provided on SYSLST unless a no/dump option (a "1") was specified in parameter "b" in the // 1400 control card. If the user has specified an "S" for the test-mode option in the // 1400 control card, a System/360 main storage dump is also provided.

System Action: Storage dump is provided and job is terminated unless operating in test mode. In test mode, message EC40D is issued.

Programmer Action: Resubmit the job with the // 1400 parameter 'e' set to 1 to permit operator restart, or

Correct the problem causing the halt and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: If message EC40D is issued in conjunction with this message, respond as indicated in the EC40D text.

EC82I HALT

Cause: A 1400 halt other than end of job (see message EC81I) has occurred, and the user has specified operator restart (a "1") in parameter "e" of the // 1400 control card. This message is preceded by the typing out of message EC80I.

System Action: Message EC40D is issued.

Programmer Action: Correct the problem causing the halt or give correct operating instructions to the operator and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing

- Linkage editor output.

Operator Action: Refer to the operating instructions provided by the programmer and perform the action required by the 4C40D message.

EC83I 1400 PROGRAM ERROR

Cause: A 1400 program error has been detected. This message is always followed by message EC80I (status of 1400 registers and instruction block).

A 1400-style storage dump is provided on SYSLST if OSDUMP=YES was specified at Emulator program generation, and unless a no-dump option (a"1") was specified in parameter "b" in the // 1400 control card. If the user has specified an "s" for the test mode option (parameter "g") in the // 1400 control card, a main storage dump is also provided, followed by message EC40D. This message is also issued when the 1400 operation is valid, but emulator support for the function was not generated.

System Action: The job is terminated unless parameter "G" was specified on the // 1400 control card.

Programmer Action: Determine the operation being attempted from the 1400 program listing, the console log, and dumps. Verify that support for the operation was generated by checking the 1400 program listing. Reassemble the Emulator program with the required support.

Check the failing 1400 parameter for assembly errors and missing or incorrect object cards. If CS/30, examine MNOTES to determine if the Emulator program is overlaying simulated 1400 storage.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream

- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC84I TOO MANY PHASES TO CATALOG

Cause: The 1400 program or overlay section being cataloged consists of more than 27 internal phases.

System Action: The job is terminated.

Programmer Action: If the program does not have overlays, method 1 cataloging may be used. The "b" parameter on the // 1400 control card must be a "1". Method 1 cataloging will conserve space and improve retrieval time, or

If method 1 cannot be used, reorganize the program so that there are no more than 27 internal phases.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC90I INVALID OPERATION ON READER

Cause: (1) a 1400 read instruction has been incorrectly specified; or (2) a 1400 read instruction which is not supported by the Emulator program (e.g., column binary) has been specified.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: If the failing program specifies any of these reader instructions:

- Column binary.
- 51-column interchangeable read feed.
- Read stacker selection.

Then, ensure that the parameters to support the feature are specified in the Emulator assembly.

If the read instruction is for a feature not supported by the Emulator, a user-written simulation routine is required. Correct the error and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

#### EC91I INVALID OPERATION ON PUNCH

Cause: (1) a punch instruction for an unsupported operation has been specified in the 1400 program (e.g., punch-feed-read, column-binary); or (2) a punch-feed-read or column-binary instruction has been specified in the 1400 program when a magnetic device is being used to simulate the unit-record device.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: If the failing program specifies any of the following punch instructions:

- Column binary
- Punch-feed-read
- Punch stacker selection

Then, ensure that the parameter to support the feature is specified in the Emulator assembly. If the instruction is for a feature not supported by the 1400 Emulator program, a user-written simulation routine is required. Correct the parameters and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

#### EC92I INVALID OPERATION ON PRINTER

Cause: A 1404 print instruction has been specified but is not supported by this particular Emulator program generation.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: Check all printer parameters specified in the emulator assembly and the print instructions issued by the failing program. If the 1400 program is issuing print instructions not supported by the emulator, a user simulation routine is required. Make the necessary corrections and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream

- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC93I CONTROL CARD NOT SUPPORTED //  
YYYY

Cause: The Emulator program has encountered a control card that is not supported. The first four characters of the unsupported control card are identified by "yyyy".

This is probably a user error.

System Action: The job is terminated.

Programmer Action: Check that System/360 control cards do not follow the // 1400 card or that the flagged control card is supported by this assembly of the emulator program. If the 1400 control card is not supported, reassemble the emulator to provide support.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC94I NO // LC DATA DELIMITER CARD

Cause: A // LC data delimiter card is required before the last data card, but is not present.

This is probably a user error.

System Action: Last card indicator (sense switch A) is turned on, and message EC40D is

issued.

Programmer Action: Before the job is resubmitted, correct the control cards or give the operator instructions so that he can enter the address of your EOJ routine.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The operator must either enter the address of the user's end-of-job routine using the ALTER operator service function, or terminate the job.

EC95I STACKER 8/2 IGNORED

Cause: A 1402 stacker command has been specified for stacker 8/2 on either a magnetic device when punching, or a unit-record device other than a 2540. This message is displayed only for the first 8/2 stacker command issued.

System Action: 8/2 cards are stacked to normal stacker.

Programmer Action: Not applicable.

Operator Action: Not applicable.

EC96I CARRIAGE CONTROL CARD ERROR

Cause: The 1400 program specified a carriage-control channel punch which is not included in the carriage control card.

This is probably a user error.

System Action: The job is terminated.

Programmer Action: Correct the carriage control card and resubmit the job.

If the problem recurs, have the following available to complete your problem determination action:

- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: Not applicable.

EC97I 1400 CONSOLE PRINTER NOT SUPPORTED

Cause: This message is issued if the OSINQRY parameter is not specified as "1400" or "YES", and a 1400 read or write console printer instruction has been encountered.

This is probably a user error.

System Action: Message EC80I is issued, followed by message EC40D.

Programmer Action: Check the emulator assembly listing for OSINQRY=1400 or YES. If these parameters are not present, and the function is desired, reassemble the emulator with one of these parameters specified.

If the problem recurs, have the following available to complete your problem determination action:

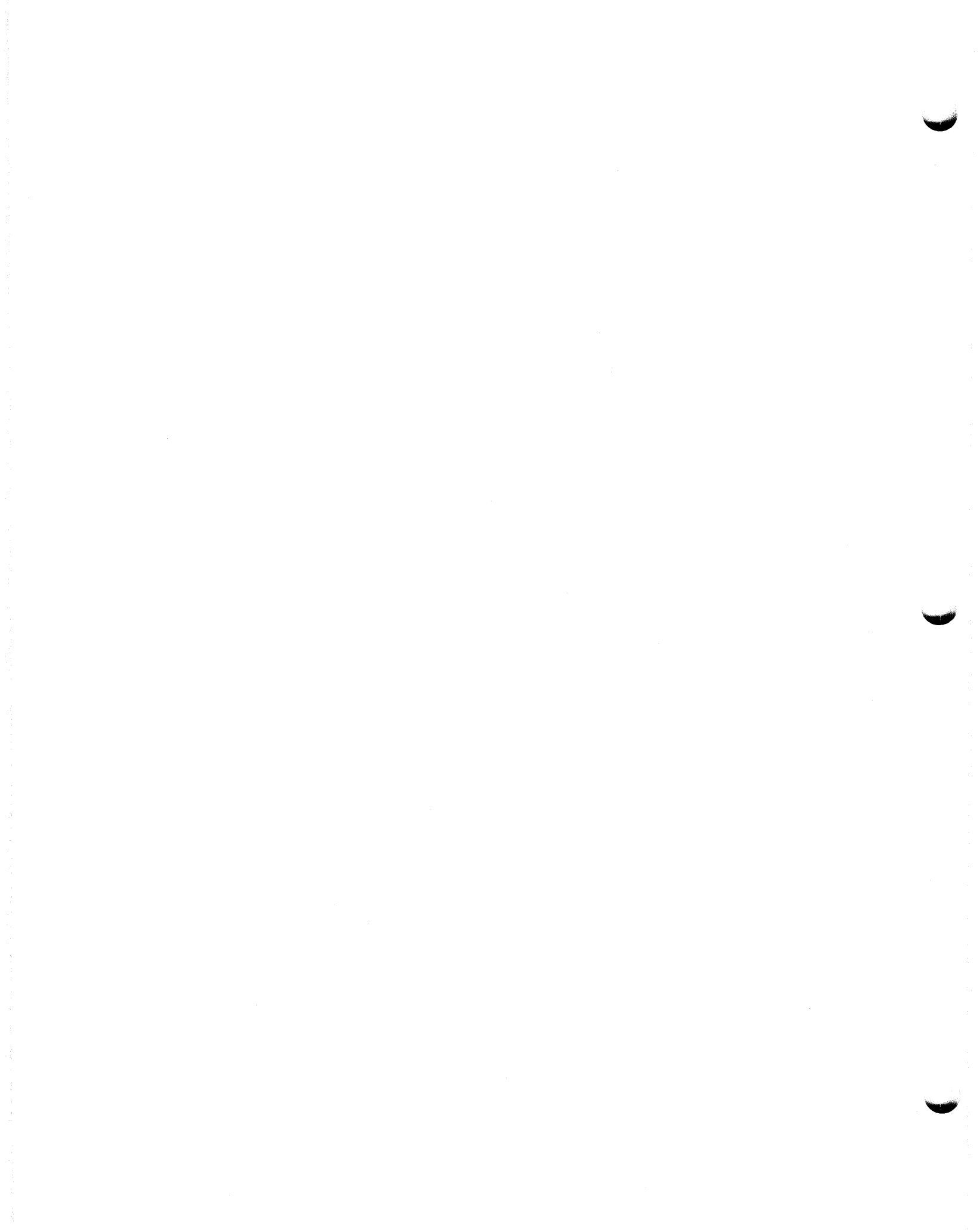
- Job stream
- Log sheet
- Printer output
- Emulator assembly listing
- Linkage editor output.

Operator Action: The parameter "B= nnnnn" in message EC80I is the address of the first storage position of the 1400 message area. The operator can use the DISPLAY operator service function to display the message. To continue processing, enter START or EOB/END.



## Program Product Messages

To use this section for messages that do not have prefixes listed in other sections of this publication (for example, program product or compile time messages), remove the message sections of the applicable component publications and insert them after this tab. (Keeping the prefixes in alphabetic order will aid in retrievability.)



## Text Index

Indexes to systems reference library manuals are consolidated in the publication DOS Master Index, GC24-5063. For additional information about any subject listed below, refer to other publications for the same subject in the Master Index.

A prefix messages 331-333  
 action indicators, A,D 10  
 action indicators, I,W,S 10  
 American National Standard COBOL messages 337  
 assembler messages 331  
 attention routine commands, see ATTN commands  
 ATTN commands  
 ATTN commands  
 ALLOC 28  
 ALTER 28  
 BATCH 28  
 C/CANCEL 28  
 CANCEL 28  
 DSPLY 28  
 DUMP 28  
 EOB/END key 28  
 LOG 28  
 MAP 28  
 MODE 28  
 MSG 28  
 NOLOG 28  
 PAUSE 28  
 START 28  
 TIMER 28  
   when ignored 13  
   when issued 13  
 autotest messages 326

B prefix messages 335

C prefix messages 337-343  
 C/CANCEL key 9  
 CANCEL key 9  
 cancelation  
   job 11  
   JOB ACCT 11  
 CANCELV 172  
 card format 1, linkage editor input cards 125  
 card format 2, REP card format 126  
 card format 3, linkage editor control statements 126  
 card placement, PHASE and INCLUDE 127  
 causes for message OS04I 55  
 checkpoint/restart messages 68  
 COBOL D messages 337  
 codes, device type 61  
 commands  
   ATTN routine, definition 14

IPL, definition 14  
 job control, definition 14  
 multiprogramming, description of 15  
 single program initiation 14  
 communication to the system 13  
 component and message identifiers 10  
 control statements, linkage editor 126  
 control statements, linkage editor format 127  
 CS30/CS40 operator service functions 57

default operation without a 1052 keyboard 52  
 default, definition 11  
 device type codes 61  
 device, finding the failing type 60  
 disk label explanation 172  
 dissimilar graphics, 1407/1447 vs. 1052 57

DOS component error messages  
 IHDnnn 56  
 IIQnnn 56  
 IIRnnn 56  
 IJBnnn 56  
 IJCnnn 56  
 IJDnnn 56  
 IJEnnn 56  
 IJFnnn 56  
 IJGnnn 56  
 IJHnnn 56  
 IJInnn 56  
 IJJnnn 56  
 IJKnnn 56  
 IJLnnn 56  
 IJMnnn 56  
 IJNnnn 56  
 IJOnnn 56  
 IJPnnn 56  
 IJQnnn 56  
 IJRnnn 56  
 IJSnnn 56  
 IJTnnn 56  
 IJUnnn 56  
 IJVnnn 56  
 IJWnnn 56  
 IJXnnn 56  
 IJYnnn 56  
 IJZnnn 56  
 IKLnnn 56  
 ILAnnn 56  
 ILBnnn 56  
 ILCnnn 56  
 ILFnnn 56  
 ILHnnn 56

DOS components and program numbers 6  
 DSPLYV 172  
 dump, special purpose 62

E prefix messages 347-368  
 emulator  
   control messages 347  
   dissimilar graphics, 1407/1447 vs. 1052 57  
   operator service functions 57  
 END format when printed 126

END key 9  
 end of communication character, definition 14  
 EOB 9  
 EOB/END key 9  
 EREP messages 145  
 errors, magnetic tape 11  
 ESTV messages 208,222

failing device, finding the type 60  
 figure list 8  
 finding the failing device type 60  
 FORTRAN messages 335

general reference explanation 49  
 general reference information 49-62

hard wait errors 52

I/O address, starting and ending address 75  
 identifiers  
   component and message 10  
   partition 10  
 incorrect output  
   definition 37  
   determining the problem 37  
   flowcharts 38-47  
   isolation of failure 37-47  
 index, messages 375  
 indicators, action, A, I, D, W, S 10  
 IPL commands, definition 14  
 IPL commands  
   ADD 23  
   C/CANCEL 24  
   DEL 24  
   EOB 24  
   SET 24  
 IPL error messages 52  
 IPL messages 65

job accounting interface cancelation 11  
 JOB ACCT cancelation 11  
 job cancelation 11  
 job control commands  
   ALLOC 25  
   ASSGN 25  
   © 25  
   CANCEL 26  
   CANCEL key 25  
   CLOSE 26  
   definition 14  
   DVCDN 26  
   DVCUP 26  
   END key 25  
   EOB 25  
   HOLD 26  
   LISTIO 26  
   LOG 26  
   MAP 26  
   MTC 26  
   NOLOG 26

job control commands (CONT.)  
   PAUSE 26  
   RELSE 26  
   RESET 27  
   ROD 27  
   SET 27  
   STOP 27  
   UCS 27  
   UNA 27  
   UNBATCH 27  
   when issued 14  
 job control statements  
   \* 22  
   /& 22  
   /\* 22  
   ASSGN 19  
   CLOSE 19  
   DATE 19  
   DLAB 19  
   DLBL 20  
   EXEC 20  
   EXTENT 20  
   JOB 20  
   LBLTYP 20  
   LISTIO 20  
   LOG 20  
   MTC 20  
   NOLOG 20  
   OPTION 21  
   PAUSE 21  
   RESET 21  
   RSTRT 21  
   TLBL 21  
   TPLAB 22  
   UPSI 22  
   VOL 22  
   XTENT 22  
 job control  
   messages 105  
   statements vs operator commands 13  
   statements, device entered through 13

label information cylinder 59  
 librarian messages 145,149  
 linkage editor control statement format 127  
 linkage editor control statements 126  
 linkage editor input cards 128  
 linkage editor messages 128  
 LIOCS messages 161  
 locating the label information cylinder 59  
 loops and wait states, flowchart 33  
 loops  
   causes 36  
   definition 36  
   operator action 36  
   programmer action 36

magnetic tape errors 11  
 message examples 9  
 message format explanation  
   A110-A115 331  
   BTAM 192

message format explanation (CONT.)  
 C112-C125 339  
 disk sort/merge 253  
 IPL 52,68  
 job control 105  
 OP08-OP40 74  
 2100-2170 125  
 4n00-4n90 171  
 4Q25-4Q39 and 4Q47 214  
 4Q53-4Q56 220  
 9100-9170 325

message  
 codes, list of 10  
 identification 10  
 identifier 10  
 index 375  
 operator action indicator and  
 description 10  
 operator action list 10  
 operator response, OP08-OP40 75

messages  
 A prefix 331-333  
 American National Standard COBOL 337  
 assembler 331  
 autotest 326  
 B prefix 335  
 C prefix 337-343  
 COBOL D 337  
 device error recovery 76  
 disk sort/merge 253  
 DOS component (see same) 56  
 E prefix 347-368  
 emulator control, 1401, 1440, 1460  
 347  
 EREP 146  
 ESTV 208,222  
 format of 9  
 FORTRAN 335  
 from the system 9  
 index of 375  
 IPL 66  
 job control 105  
 librarian 145,149  
 linkage editor 125  
 LIOCS 161  
 PL/I 227  
 program product divider 369  
 replies to 11  
 supervisor 76  
 system-to-operator 11  
 tape and disk sort/merge 233  
 utility 273  
 0 prefix 65-103  
 1 prefix 105-123  
 2 prefix 128-143  
 3 prefix 145-159  
 4 prefix 161-225  
 5 prefix 227-228  
 6 prefix divider 229  
 7 prefix 233-277  
 8 prefix 279-324  
 9 prefix 326-329

multiprogramming commands, description of  
 15

obtaining starting and ending address of  
 I/O area 75

OLTEP messages 347  
 operational differences, System/360 and  
 System/370 9  
 operator command formats  
 device entered through 13  
 type of 13  
 vs job control statements 13  
 operator communication to the system 13  
 operator messages, format of 9  
 operator responses 11  
 operator service functions, emulator 57  
 operator to system commands 13  
 output, incorrect 37-47

parameters passed by supervisor calls 58  
 partition identifiers 9  
 PHASE and INCLUDE cards 127  
 PL/I messages 227  
 placement of PHASE and INCLUDE cards 127  
 printer-keyboard responses 9  
 program product message divider 369

QTAM messages 211

Reference 1, VTOC Listings 50  
 Reference 2, SEREP 51  
 Reference 3, default operation without a  
 1052/3210/3215 52-54  
 Reference 4, causes for message 0S04I 55  
 Reference 5, DOS component error messages  
 56  
 Reference 6, emulator reference 57  
 Reference 7, parameters passed by  
 supervisor calls 58  
 Reference 8, locating the label information  
 cylinder 59  
 Reference 9, finding the failing device  
 type 60,61  
 Reference 10, special purpose dump 62  
 related product publications 5  
 related programming publications 4  
 REP card format 126  
 REP format when printed 125  
 request cancel, example of when used 14  
 request key, using 13  
 response by operator to messages 11  
 RLD format when printed 125

SEREP 51  
 single program initiation commands, when  
 issued 14  
 single program initiation  
 see also SPI  
 special purpose dump 62  
 SPI commands  
 ASSGN 29  
 C/CANCEL key 29  
 DLAB 29  
 DLBL 30  
 EOB/END key 29  
 EXEC 30  
 EXTENT 30  
 HOLD 30  
 LISTIO 30  
 LOG 30  
 MAP 30

SPI commands (CONT.)

MSG	30
NOLOG	30
PAUSE	30
READ	30
RELSE	30
TIMER	30
TLBL	31
TPLAB	31
UCS	31
UNA	32
VOL	32
XTENT	32
supervisor messages	65
SVC parameters passed	58
SYM format when printed	125
system communication words	
*	18
/&	18
/*	18
ADD	16
ALLOC	16
ASSGN	16
BATCH	16
C/CANCEL key	16
CANCEL	16
CLOSE	16
DATE	16
DEL	16
DLAB	16
DLBL	16
DVCDN	16
DVCUP	16
EOB/END key	16
EXEC	16
EXTENT	16
HOLD	16
JOB	17
LBLTYP	17
LISTIO	17
LOG	17
MAP	17
MODE	16
MSG	17
MTC	17
NOLOG	17
OPTION	17
PAUSE	17
READ	17
RELSE	17
RESET	17
ROD	17
RSTRT	17
SET	17
START	17
STOP	17
TIMER	17
TLBL	17
TPLAB	18
UCS	18
UNA	18
UNBATCH	18
UPSI	18
VOL	18
XTENT	18
system messages	
at IPL time, W-S indicators	10

examples and explanation	9
in main storage	10,52-54
when no console message is issued	52-54
system operation without a 1052, operator responses	52
system-to-operator messages	11
System/360 and System/370 low core error bytes	53
System/370 low core error bytes	54
System/370 low core error messages	52
tape and disk sort/merge messages	233
tape error statistics format	11
TEB, tape error block	11
TXT format when printed	125
type of operator commands	14
using the request key	13
utility messages	273
VTOC listings	50
wait states	33-36
wait states and loops, flowchart	33
wait states without messages	52
wait states	
definition	34
logic errors	35
lost interrupts	35
low-core messages	35
normal waits	34
seize the system	36
supervisor errors	35
when to enter commands	13
0 prefix messages	65-103
1 prefix messages	105-123
1401, 1440, 1460 emulator control messages	347
2 prefix messages	128-143
3 prefix messages	145-159
3210 and 3215 responses	9
4 prefix messages	161-225
5 prefix messages	227,228
6 prefix message divider	229
7 prefix messages	233-277
8 prefix messages	279-324
9 prefix messages	326-329

# Message Index

## O-Prefix Messages

0C00I CHKPT NO. xxxx WAS TAKEN ON SYSxxx=cuu . . . . .	65	0P12 VERIFY CHK . . . . .	77
0C01I CHKPT FROM IMPROPER ENVIRONMENT-CHKPT IGNORED . . . . .	65	0P13 ADDR MRKER . . . . .	77
0C02I CHKPT UNIT SYSxxx NOT A TAPE-CHKPT IGNORED . . . . .	65	0P14 OVERRUN . . . . .	77
0C03I I/O REQUEST PENDING ON TP DEVICE-CHKPT IGNORED . . . . .	65	0P15 SEEK CHECK . . . . .	78
0C04I END ADDR PARA GT END PROB PROG-CHKPT IGNORED . . . . .	66	0P16 DTA CHK CT . . . . .	78
0C05I CHKPT DTFPH FILE NOT OPEN-CHKPT IGNORED . . . . .	66	0P17 FILE PROT . . . . .	78
0C06I DTFPH FILE DEFINED MOUNTED=ALL-CHKPT IGNORED . . . . .	66	0P18 COMM REJCT . . . . .	79
0C07I DTFPH FILE NOT DEFINED FOR OUTPUT CHKPT IGNORED . . . . .	66	0P19 UNDETR ERR . . . . .	79
0C08I CHKPT UNIT SYSxxx NOT A DISK-CHKPT IGNORED . . . . .	67	0P20 ERR ON REC . . . . .	80
0C09I INSUFFICIENT SPACE ON CHKPT FILE, CHECKPOINT IGNORED filename SYSxxx=cuu . . . . .	67	0P21 NRF-MADDMK . . . . .	80
0C10I SUBTASK ISSUED CHKPT - CHKPT IGNORED . . . . .	67	0P22 BALST CELL . . . . .	80
0C11I SUBTASKS ATTACHED - CHKPT IGNORED	67	0P23 BLNK STRIP . . . . .	81
0C12I TRACKS HELD - CHKPT IGNORED . . . . .	68	0P24 PROG CHECK . . . . .	81
0I00A None. 0I00 is stored in bytes 0-3 of main storage. . . . .	68	0P25 PROT CHECK . . . . .	81
0I01A None. 0I01 is stored in bytes 0-3 of main storage. . . . .	68	0P26 INVAL SEEK . . . . .	82
0I10A GIVE IPL CONTROL COMMANDS . . . . .	69	0P27 UNKNOWN DEVICE . . . . .	83
0I11A PREVIOUS COMMAND INVALID . . . . .	69	0P28 CHAN DTCHK . . . . .	83
0I12A DEL COMMAND IS FOR NON-EXISTENT DEVICE . . . . .	69	0P29 BK INTO LP . . . . .	83
0I13I CANNOT ADD PUB--INSUFFICIENT TABLE SPACE . . . . .	69	0P30 CONVRT CHK . . . . .	83
0I14I CANNOT ADD TEB or TEBV--INSUFFICIENT TABLE SPACE . . . . .	70	0P31 DVC NOT OP . . . . .	84
0I15I PUB ALREADY EXISTS . . . . .	70	0P32 NON COMPAT . . . . .	84
0I16A NO PUB GIVEN FOR SYSRES . . . . .	70	0P33 BUF PARITY . . . . .	84
0I17A NO PUB GIVEN FOR SYSLOG . . . . .	71	0P34 BCH NM OFF . . . . .	85
0I18A SET COMMAND NOT GIVEN . . . . .	71	0P35 NON RECOV . . . . .	85
0I20I DOS IPL COMPLETE . . . . .	71	0P36 NO REC FND . . . . .	85
0I22I ALLOCATION ERROR INSUFFICIENT CORE . . . . .	71	0P37 DISEN FAIL . . . . .	85
0I23I DASD ON NON-FILE PROTECTED CHANNEL . . . . .	72	0P38 INVAL FONT . . . . .	86
0I24A CANNOT ADD, INSUFFICIENT SAB TABLE SPACE . . . . .	72	0P39 POSN CHECK . . . . .	86
0I25I NO RMS SUPPORT FOR THIS MODEL CPU	73	0P40 BROKN TAPE . . . . .	86
0I26I \$\$BUCB AND \$\$BFCB LOADED X'cuu'	73	0P41 LOAD CHECK . . . . .	86
0I27I (UCB,FCB) LOAD FAILURE X'cuu'	73	0P60D INTERV REQ [BG, F1, F2] cuu=xyy	86
0I28D DEVICE NOT OPERATIONAL X'cuu'	73	0P70I [JOB or SUB] xxxxxxxx CANCELED DUE TO UNDEFINED LOGICAL UNIT . . . . .	87
INVALID RESPONSE . . . . .	73	0P71I [JOB or SUB] xxxxxxxx CANCELED DUE TO SYSxxx NOT ASSIGNED . . . . .	87
0PnnA INVALID RESPONSE . . . . .	76	0P72I [JOB or SUB] xxxxxxxx CANCELED DUE TO READING PAST /& STATEMENT . . . . .	88
0P08 INTERV REQ . . . . .	76	0P73I [JOB or SUB] xxxxxxxx CANCELED DUE TO I/O ERROR . . . . .	88
0P09 BUSOUT CHK . . . . .	76	0P74I [JOB or SUB] xxxxxxxx CANCELED DUE TO I/O OPERATOR OPTION . . . . .	88
0P10 EQUIP CHK . . . . .	76	0P75I [JOB or SUB] xxxxxxxx CANCELED DUE TO I/O ERROR QUEUE OVERFLOW . . . . .	88
0P11 DATA CHECK . . . . .	76	0P76I [JOB or SUB] xxxxxxxx CANCELED DUE TO INVALID DASD ADDR . . . . .	89
		0P77I [JOB or SUB] xxxxxxxx CANCELED DUE TO INVALID ADDRESS . . . . .	89
		0P78I [JOB or SUB] xxxxxxxx CANCELED DUE TO UNRECOGNIZED CANCEL-CODE . . . . .	90
		0P79I [JOB or SUB] xxxxxxxx CANCELED DUE TO NO LONG SEEK . . . . .	90
		0P81I JOB XXXXXXXX CANCELED DUE TO CPU FAILURE . . . . .	90
		0P82I JOB XXXXXXXX CANCELED DUE TO CHANNEL FAILURE . . . . .	91
		0P83A [JOB or SUB] xxxxxxxx CANCELED DUE TO SUPERVISOR CATALOG FAILURE . . . . .	91
		0P84I JOB xxxxxxxx CANCELED DUE TO I/O ERROR DURING FETCH . . . . .	91
		0P85I JOB xxxxxxxx CANCELED DUE TO JOB CONTROL OPEN FAILURE . . . . .	91
		0P86I FORCE DEQUE ON cuu . . . . .	92

OR00I RSTRT UNIT INVALID SYSxxx . . . . .	92
OR01I INSUFFICIENT CORE SPACE FOR PROGRAM-CANNOT RESTART . . . . .	92
OR02I PROB PROG START CHANGED - CANNOT RESTART . . . . .	92
OR03I CHKPT NO. xxx NOT FOUND ON SYSxxx=cuu . . . . .	93
OR04I EXTENTS FOR SYSxxx NOT EQUAL DEVICE TYPE . . . . .	93
OR05I NO MORE AVAILABLE JIBS . . . . .	93
OR06I TAPE MARK IN DATA SYSxxx=cuu . . . . .	94
OR10I UNIT NOT DASD SYSxxx . . . . .	94
OR11I INVALID BB FOR VERIFY SYSxxx . . . . .	94
OR13I DEVICE NOT A TAPE SYSxxx . . . . .	95
OR14A SER xxxxxx SEQxxxx SYSxxx=cuu . . . . .	95
OR16A SERIAL NO. xxxxxx SYSxxx=cuu . . . . .	95
OS00I [JOB or SUB] xxxxxxxx CANCELED . . . . .	95
OS01I [JOB or SUB] xxxxxxxx CANCELED DUE TO OPERATOR INTERVENTION . . . . .	95
OS02I [JOB or SUB] xxxxxxxx CANCELED DUE TO PROGRAM REQUEST . . . . .	96
OS03I PROGRAM CHECK INTERRUPTION - HEX LOCATION nnnnnn - CONDITION CODE m - interruption cause . . . . .	96
OS04I ILLEGAL SVC - HEX LOCATION nnnnnn - SVC CODE nn . . . . .	96
OS05I PHASE xxxxxxxx NOT FOUND . . . . .	97
OS06I [JOB or SUB] xxxxxxxx CANCELED DUE TO PHASE NOT FOUND . . . . .	97
OS07I PROBLEM PROGRAM PSW nnnnnnnnnnnnnnnnnn . . . . .	97
OS08I LOG. TRANS. AREA CANCELED . . . . .	98
OS09I [JOB or SUB] xxxxxxxx CANCELED DUE TO ILLEGAL SVC. . . . .	98
OS10I PROGRAM xxxxxxxx COMPLETED . . . . .	98
OS11I [JOB or SUB] xxxxxxxx CANCELED DUE TO PROGRAM CHECK . . . . .	98
OS12I SUB xxxxxxxx CANCELED DUE TO MAIN TASK TERMINATION . . . . .	99
OS13I [JOB or SUB] xxxxxxxx CANCELED DUE TO UNKNOWN ENQ REQUESTOR . . . . .	99
OS14I [JOB or SUB] xxxxxxxx CANCELED DUE TO CANCEL ALL MACRO . . . . .	99
OT00I LAST TRACK ON RECORDER FILE . . . . .	99
OT01I cuu SDR RECORD OVERFLOWED . . . . .	100
OT02I SDR AREA FULL cuu . . . . .	100
OT03I ERROR ON RECORDER FILE AT cchhr . . . . .	100
OT04I CHANNEL QUE FULL NO RECORD . . . . .	100
OT05I RECORDER FILE FULL-RUN EREP . . . . .	100
OT06I ECC MAIN STORAGE MCI DISABLED . . . . .	101
OT07I ALL SOFT MACHINE CHECKS DISABLED . . . . .	101
OT08I C40 BUFFER PAGES DELETED = xxx . . . . .	101
OT09I SOFT MACHINE CHECK . . . . .	101
OT10I CHANNEL ERROR RECOVERY ON cuu . . . . .	101
OT11I HARD WAIT CODE = x . . . . .	101
OT12I UNRECOVERABLE CHANNEL ERROR ON cuu . . . . .	102
OT13A CHANNEL ERROR ON cuu . . . . .	102
OT14I CLOCK DAMAGED. ALL MODES QUIET. . . . .	102
OT15I MCAR REPAIR FAILED . . . . .	103
OT17I CONTROL STORAGE ECC IN QUIET MODE . . . . .	103
OT18I TIMER DAMAGE . . . . .	103
OT19I [UPPER LOWER] BOUNDARY OF xx IS ddddddd LENGTH IS lllk . . . . .	103
OT20I xx NOT USABLE . . . . .	103

## 1-Prefix Messages

1A0nD INVALID I/O ASSIGNMENT . . . . .	105
1A1nD CONFLICTING I/O ASSIGNMENT . . . . .	106
1A2nD INVALID DEVICE TYPE . . . . .	107
1A3nD NO FREE JIBS . . . . .	107
1A4nD INVALID LOGICAL UNIT SPECIFICATION . . . . .	107
1A5nD DEVICE NOT-DEFINED . . . . .	108
1A6nD UNIT CURRENTLY UNASSIGNABLE . . . . .	108
1A7nD INVALID DEVICE STATUS . . . . .	109
1A80D SYSTEM FILE OPEN FAILURE . . . . .	109
1A9nD SYSTEM FILE NOT CLOSED OR NOT UNASSIGNED . . . . .	110
1B01A INVALID TYPE SPECIFICATION . . . . .	110
1B02A INVALID SYS-UNIT SPECIFIED . . . . .	110
1B03I PHASE INVALID . . . . .	110
1B0nI INVALID OPTIONAL OPERAND . . . . .	110
1C00A ATTN. cuu . . . . .	111
1C10A PLEASE ASSIGN [SYSRDR, SYSIPT, SYSLNK] . . . . .	111
1C20D READ COMMAND NOT GIVEN . . . . .	111
1C32A PROGRAM NOT FOUND . . . . .	112
1C33A PROGRAM NOT FOUND . . . . .	112
1C33I PROGRAM NOT FOUND . . . . .	112
1C4nI NO ROUTINE LINKAGE . . . . .	113
1C5nI PROCESSING ROUTINE ACTIVE . . . . .	113
1C6nD TIMER NOT AVAILABLE . . . . .	113
1C70D nnnnn RECORDS REMAINING ON [SYSPCH, SYSLST] . . . . .	113
1C8nD END of EXTENT ON [SYSRDR, SYSIPT, SYSPCH, SYSLST, SYSLNK] . . . . .	114
1C90D NEW SUPERVISOR CATALOGED. RESPONSE REQUIRED. . . . .	114
1I00A READY FOR COMMUNICATIONS . . . . .	114
1I10I ASSIGNMENTS RELEASED . . . . .	115
1I20I JOB xxxxxxxx CANCELED DUE TO OPERATOR INTERVENTION . . . . .	115
1I32D AREA NOT ACTIVE . . . . .	115
1I40D REQUEST CANCEL . . . . .	115
1I41D INVALID ADDRESS . . . . .	115
1I42D ADDRESS WITHIN SUPERVISOR or INVALID RESPONSE . . . . .	116
1I43D INVALID OPERAND . . . . .	116
1I44I [F1 F2] NOT AVAILABLE . . . . .	116
1I45D INVALID ENTRY . . . . .	116
1I46D INVALID SYSLST . . . . .	116
1I50I JOB xxxxxxxx CANCELED DUE TO END OF EXTENT ON SYSLNK . . . . .	116
1I60A READY FOR COMMUNICATIONS . . . . .	117
1I70I JOB jobname CANCELED DUE TO CONTROL STATEMENT ERROR . . . . .	117
1I80I MAGNETIC TAPE ERRORS . . . . .	117
1I82A RECORDING COMPLETED . . . . .	117
1I83A RECORDER FILE TOO SMALL . . . . .	117
1I84A RECORDER FILE OPEN FAILURE . . . . .	118
1I85A CONFLICTING DEVICE TYPES FOR cuu . . . . .	118
1I86A ERROR ON RECORDER FILE AT cchhr . . . . .	118
1I87A SDR AREA FULL cuu . . . . .	119
1I88I RF=NO IGNORED, YES ASSUMED . . . . .	119
1I89I INVALID CODE . . . . .	119
1I90D IPL REASON CODE = . . . . .	119
1I91D SUB-SYSTEM ID = . . . . .	120
1I92D END OF DAY = . . . . .	120
1I93I RECORDER FILE IS nnn% FULL (RUN EREP) . . . . .	121
1L04A INVALID LABEL SET ON cuu . . . . .	121
1L0nD/I INVALID LABEL SYNTAX . . . . .	121
1L1nD LABEL AREA EXHAUSTED . . . . .	122
1P0nD INVALID ALLOCATION . . . . .	122



1P1nD AREA NOT AVAILABLE . . . . .122  
 1S0nD INVALID STATEMENT . . . . .123  
 1S0nI INVALID STATEMENT . . . . .123  
 1S1nD STATEMENT OUT OF SEQUENCE . . . .123

**2-Prefix Messages**

2100I Content of statement in error. . .128  
 2101I Content of statement in error. . .128  
 2102I Content of statement in error. . .128  
 2110I Content of statement in error. . .129  
 2111I Content of statement in error. . .129  
 2112I Content of statement in error. . .129  
 2113I Content of statement in error. . .130  
 2114I Content of statement in error. . .130  
 2115I Content of statement in error. . .130  
 2116I Content of statement in error. . .131  
 2120I Content of statement in error. . .131  
 2121I Content of statement in error. . .131  
 2122I Content of statement in error. . .132  
 2123I Content of statement in error. . .132  
 2124I Content of statement in error. . .132  
 2125I Content of statement in error. . .133  
 2130I Content of statement in error. . .133  
 2131I Content of statement in error. . .133  
 2132I Content of statement in error. . .134  
 2133I Content of statement in error. . .134  
 2135I Content of statement in error. . .134  
 2136I Content of statement in error. . .134  
 2140I Content of statement in error. . .135  
 2141I Content of statement in error. . .135  
 2142I Content of statement in error. . .135  
 2143I Content of statement in error. . .136  
 2144I Content of statement in error. . .136  
 2145I Content of statement in error. . .136  
 2146I Content of statement in error. . .137  
 2147I Content of statement in error. . .137  
 2150I Content of statement in error. . .137  
 2151I Content of statement in error. . .138  
 2155I Content of statement in error. . .138  
 2156I Content of statement in error. . .138  
 2158I Content of statement in error. . .139  
 2170I Content of statement in error. . .139  
 2181I LINKAGE EDITOR CANNOT CONTINUE . .139  
 2182I LINKAGE EDITOR CANNOT CONTINUE . .140  
 2183I LINKAGE EDITOR CANNOT CONTINUE . .140  
 2184I LINKAGE EDITOR CANNOT CONTINUE . .140  
 2185I LINKAGE EDITOR CANNOT CONTINUE . .141  
 2191I LINKAGE EDITOR CANNOT CONTINUE . .141  
 2192I LINKAGE EDITOR CANNOT CONTINUE . .141  
 2193I LINKAGE EDITOR CANNOT CONTINUE . .141  
 2194I LINKAGE EDITOR CANNOT CONTINUE . .142  
 2195I LINKAGE EDITOR CANNOT CONTINUE . .142  
 2197I LINKAGE EDITOR CANNOT CONTINUE . .142  
 2199I ERROR HAS OCCURRED DURING  
 LINKAGE EDITING . . . . .143

**3-Prefix Messages**

3C30I STATEMENT OUT OF ORDER . . . . .145  
 3C66I FILE [IJSYSRS,ISYSSPR,IJSYSPS  
 IJSYSPC] NOT DEFINED ON  
 [SYS003,SYS002,SYS001,SYS000] . . . .145  
 3C67I [SYS000,SYS001,SYS002,SYS003,  
 SYSSLB,SYSRLB,SYSCLB] UNASSIGNED OR  
 ASSIGNED TO WRONG PHYSICAL UNIT . . .145  
 3E10I I/O ERROR ON RECORDER FILE AT  
 cchhr . . . . .146  
 3E11D ENTER OPTION SOURCE, C=CARD,

S=CCNSOLE, N=NONE . . . . .146  
 3E12D INVALID OPTION . . . . .146  
 3E13I INVALID RECORD ON RECORDER FILE  
 AT cchhr . . . . .147  
 3E14A ENTER OPTION . . . . .147  
 3E15A TAPE FULL, MOUNT NEW TAPE, TYPE  
 GO . . . . .147  
 3E16A MOUNT SECOND TAPE, TYPE GO . . .147  
 3E18I INVALID RECORDS, HISTORY FILE  
 NOT WRITTEN . . . . .148  
 3E20I MORE THAN FOUR DEVICE ADDRESSES.  
 ONLY FIRST FOUR SUMMARIZED . . . . .148  
 3E22I INCOMPLETE DATA RECORDING AT  
 TIME OF ERROR . . . . .148  
 3E25I INVALID RESPONSE . . . . .148  
 3E26I INVALID SYSREC FILE HEADER RECORD  
 148  
 3E27I EDITING IN PROGRESS . . . . .149  
 3E28I HISTORY IN PROGRESS . . . . .149  
 3E29I CLEAR IN PROGRESS . . . . .149  
 3E30I ONLY 60 DISTINCT ENTRIES  
 SUMMARIZED DUE TO 10K PARTITION SIZE .149  
 3E31A WRONG TAPE, MOUNT CORRECT TAPE,  
 TYPE GO . . . . .149  
 3M10I INVALID OPERATION . . . . .149  
 3M11I INVALID CARD IN MODULE . . . . .150  
 3M21I INVALID OPERAND . . . . .150  
 3M22I PHASE \*\*\* INVALID PHASE NAME  
 -PROGRAM NOT CATALOGED . . . . .150  
 3M23I MISSING OR INVALID HEADER,  
 BKEND, OR MACRO CARD. XXXXXX FIELD IS  
 INVALID . . . . .151  
 3M24I MISSING OR INVALID OPERAND ON  
 CATALS CONTROL CARD . . . . .151  
 3M25I ERROR IN CARD SEQUENCE NO. --  
 CARD NO. xxxxx . . . . .151  
 3M26I ERROR IN CARD COUNT -- ACTUAL  
 COUNT xxxx . . . . .151  
 3M27I INVALID V.M, O.O ASSUMED,  
 CATALOG ATTEMPTED . . . . .152  
 3M28I ALL BLANKS/NO CARDS IN BOOK . .152  
 3M33I xxxxxxxxx NOT IN LIBRARY . . .152  
 3M34I EOF ON SYSIPT -- END STATEMENT  
 MISSING . . . . .152  
 3M35I (phase name) NOT IN LIBRARY . .152  
 3M43I NO [RELOCATABLE, SOURCE  
 STATEMENT, PRIVATE RELOCATABLE,  
 PRIVATE SOURCE STATEMENT PRIVATE CORE  
 IMAGE] LIBRARY . . . . .153  
 3M44I PRIVATE CORE IMAGE LIBRARY  
 ASSIGNED ELSEWHERE . . . . .153  
 3M45I NO PRIVATE TRANSIENT DIRECTORY  
 ENTRIES . . . . .154  
 3M52I [CORE IMAGE, RELOCATABLE, SOURCE  
 STATEMENT, PRIVATE RELOCATABLE,  
 PRIVATE SOURCE STATEMENT, PRIVATE CORE  
 IMAGE] DIRECTORY IS FULL . . . . .154  
 3M53I [CORE IMAGE RELOCATABLE, SOURCE  
 STATEMENT, PRIVATE RELOCATABLE,  
 PRIVATE SOURCE STATEMENT, PRIVATE CORE  
 IMAGE] LIBRARY IS FULL . . . . .154  
 3M54I XXXXXXXXX ALREADY IN LIBRARY .154  
 3M55I xxxxxxxxx MODULE MISSING . . .155  
 3M62I TRACK EXCEED CYLINDERS IN [CORE  
 IMAGE, RELOCATABLE, SOURCE STATEMENT,  
 PRV CORE IMAGE, PRV RELOCATABLE, PRV  
 SOURCE STATEMENT] LIBRARY . . . . .155  
 3M63I [CORE IMAGE, RELOCATABLE, SOURCE  
 STATEMENT, PRV CORE IMAGE, PRV  
 RELOCATABLE, PRV SOURCE STATEMENT]  
 DIRECTORY ALLOCATION IS TOO SMALL . .155

3M64I [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT, PRV CORE IMAGE PRV RELOCATABLE, PRV SOURCE STATEMENT] LIBRARY ALLOCATION IS TOO SMALL . . . . .	156
3M65I INVALID EXTENTS DEFINED FOR [SYS002, SYS003, SYSRLB, SYSSLB, SYSRES] . . . . .	156
3M66I ZERO ALLOCATION SPECIFIED FOR [CORE IMAGE, PRIVATE CORE IMAGE, PRIVATE RELOCATABLE, PRIVATE SOURCE STATEMENT] LIBRARY . . . . .	156
3M68I [STATEMENT, CONDENSE OF CL, RL, OR SL ] IGNORED DUE TO MULTIPROGRAMMING IN PROCESS . . . . .	157
3M69I CL PARAMETER IGNORED DUE TO CONTROL PROGRAM BEING CATALOGED . . . . .	157
3M70I UNRECOVERABLE DISK ERROR. REBUILD SYSTEM . . . . .	157
3M75I CONDENSE CANNOT CONTINUE. REBUILD PACK . . . . .	157
3M80I REORGANIZATION OF SYST AND PRV [CORE IMAGE, RELOCATABLE, SOURCE STATEMENT] LIBRARY IN PROGRESS . . . . .	158
3M81I NO RECORD FOUND ON [SYSRES, SYSCLB, SYSRLB, SYSSLB] AT CCHHR . . . . .	158
3U10I STATEMENT OUT OF SEQUENCE . . . . .	158
3U11I WRONG CHANGE LEVEL . . . . .	158
3U20I INVALID OPERATION . . . . .	159
3U21I INVALID OPERAND . . . . .	159
3U30I INVALID SEQUENCE . . . . .	159
3U31I INVALID SEQUENCE-BOOK RESEQUENCED	159

**4-Prefix Messages**

4000I RETRY . . . . .	161
4110A NO VOL1 LBL FOUND TLBL=xxxxxx filename SYSxxx=cuu . . . . .	161
4111A NO VOL1 LBL FOUND filename SYSxxx=cuu . . . . .	161
4112A VOL SERIAL NO. ERROR TLBL=xxxxxx filename SYSxxx=cuu . . . . .	162
4113D NO HDR1 LBL FOUND filename SYSxxx=cuu . . . . .	162
4114A FILE SEQ NO. ERROR filename SYSxxx=cuu . . . . .	163
4115A FILE SER. NO. ERROR TLBL=xxxxxx filename SYSxxx=cuu . . . . .	163
4116A VOLUME SEQ. NO. ERROR filename SYSxxx=cuu . . . . .	164
4117D NO TM FOUND ON READBK filename SYSxxx=cuu . . . . .	164
4118D FILE ID ERROR, READBK filename SYSxxx=cuu . . . . .	165
4119A FILE UNEXPIRED filename SYSxxx=cuu . . . . .	165
4120I TAPE POSITIONED WRONG filename SYSxxx=cuu . . . . .	165
4121A NO ALTERN DRIVE ASSGN SYSxxx=cuu	166
4122I EOF ENCOUNTERED SYSxxx=cuu . . . . .	166
4123D WRONG POSITN, READBK filename SYSxxx=cuu . . . . .	166
4124I TOO MANY UHL's filename SYSxxx=cuu . . . . .	167
4125D VOL1 LBL FOUND filename SYSxxx=cuu . . . . .	167
4126I EOF ENCOUNTERED filename SYSxxx=cuu . . . . .	167

4130A EOF OR EOVS INQUIRY filename SYSxxx=cuu . . . . .	167
4131D BLOCK COUNT ERROR filename SYSxxx=cuu DTF=xxxxxx LBL=xxxxxx . . . . .	168
4132D ERROR IN FILE ID filename SYSxxx=cuu . . . . .	168
4133D ERROR IN HDR LBL filename SYSxxx=cuu . . . . .	169
4140A NO ALTERN DRIVE ASSGN filename SYSxxx=cuu . . . . .	169
4151I HDR1 LBL INFORMATION filename SYSxxx=cuu . . . . .	169
4170A FILE PROTECTED TAPE filename SYSxxx=cuu . . . . .	170
4171A UNEXPIRED FILE SYSxxx=cuu . . . . .	170
4172A INVALID LABEL SET SYSxxx=cuu . . . . .	170
4183I INVALID LOGICAL UNIT filename SYSxxx=cuu . . . . .	170
4184D NEED FILE PROTECT RNG filename SYSxxx=cuu . . . . .	171
4n00I NO LABEL SPACE IN VTOC or NO RECORD FOUND . . . . .	172
4n01I NO FORMAT 1 LABEL or NO RECORD FOUND . . . . .	173
4n02I NO RECORD FOUND . . . . .	173
4n03I NO FORMAT 3 LABEL FOUND . . . . .	173
4n04I NO FORMAT 4 LBL IN VTOC or NO RECORD FOUND . . . . .	173
4n06I NO STANDARD VOL 1 LABEL or NO RECORD FOUND . . . . .	174
4n07I NO RECORD FOUND . . . . .	174
4n08D NO UTLO FILE MARK FOUND or NO RECORD FOUND . . . . .	174
4n09I NO RECORD FOUND . . . . .	175
4n30D FMT1-DLAB UNEQUAL . . . . .	175
4n31D VOLUME SEQUENCE ERROR . . . . .	175
4n33A EQUAL FILE ID IN VTOC . . . . .	176
4n34I CURRENT FILE LBL DELETED . . . . .	176
4n35I DELETED WORKFILE LABEL . . . . .	177
4n36I NO MORE AVAIL/MATCH XTNT . . . . .	177
4n38D USER HDR LBL IS NOT STD. . . . .	178
4n39D USER TRL LBL IS NOT STD . . . . .	178
4n40A EXTENT OVERLAP ON ANOTHER . . . . .	178
4n40I EXTENT OVERLAP ON ANOTHER . . . . .	178
4n41A EXTENT OVERLAP ON VTOC . . . . .	179
4n41I EXTENT OVERLAP ON VTOC . . . . .	179
4n42A NO MATCHING EXTENT . . . . .	179
4n43I INV EXTENT HI/LO LIMITS . . . . .	180
4n44A OVERLAP ON UNEXPRD FILE . . . . .	180
4n45I TOO MANY EXTENTS . . . . .	181
4n46I DISCONT INDEX EXTENTS . . . . .	181
4n47A EXTENTS NOT ON SAME UNIT . . . . .	181
4n48I [SYSIN, SYSOUT] UNSUPPORTED . . . . .	182
4n49I DATA TRACK LIMIT INVALID . . . . .	182
4n50A NO MORE AVAILABLE EXTENTS . . . . .	182
4n51I SYSUNITS NOT IN SEQUENCE . . . . .	183
4n52I DISCONT TYPE 1 EXTENTS . . . . .	183
4n54I DSK XTN ENTRY TABLE FULL . . . . .	183
4n55A WRONG PACK, MOUNT nnnnnn . . . . .	184
4n58I NO EXTENT FOR OUTPUT FILE . . . . .	184
4n59A INVALID EXTENT . . . . .	184
4n59I INVALID EXTENT . . . . .	185
4n60I NO EXTENTS, ALL BYPASSED . . . . .	185
4n61I INVALID DLBL FUNCTION . . . . .	185
4n62I NO PRIME DATA EXTENT . . . . .	185
4n63I LOAD FILE NOT CLOSED . . . . .	186
4n66A 1 TRACK USER LBL EXTENT . . . . .	186
4n69I FILE IS OPEN FOR ADD . . . . .	186

4n70I 1ST XTNT CD NOT INDX VOL . . . . .	.187	4B35I P STX ENQ SYSnnn=cuu DECB=aaaaaa	
4n71I EXTENT INFO NEEDED . . . . .	.187	TI=xxxx DC=dddddddddd . . . . .	.199
4n72I MOD AND DTF INCOMPATIBLE . . . . .	.187	4B36I P STX T ENQ SYSnnn=cuu	
4n77A EXTENT ENTRY ERROR-- RETRY . . . . .	.188	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.199
4n80I INVALID FILE TYPE . . . . .	.188	4B37I P EOT RESPN SYSnnn=cuu	
4n81I NO LABEL INFORMATION . . . . .	.188	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.199
4n83I INVALID LOGICAL UNIT . . . . .	.189	4B38I P HDWBFOFL SYSnnn=cuu	
4n84D NEED FILE PROTECT RING . . . . .	.189	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.200
4n85I SYSxxx AND SYSyyy ARE ASSIGNED		4B39I P TRM EL ERR SYSnnn=cuu	
TO THE SAME PHYSICAL UNIT . . . . .	.189	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.200
4n86D TAPE UNIT NOT READY . . . . .	.190	4B40I P TRM IO ERR SYSnnn=cuu	
4n87I SYS FILE EXTENT EXCEEDED . . . . .	.190	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.200
4n88I EOF ON SYSTEM FILE . . . . .	.190	4B41I P VRC ERROR SYSnnn=cuu	
4n90I NO JIBS AVAILABLE . . . . .	.190	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.200
4n91I NO ASCII SUPPORTED SUPVR		4B42I P PARITY ERR SYSnnn=cuu	
filename SYSxxx=cuu . . . . .	.191	DECB=aaaaaa TI=xxxx DC=dddddddddd . . . . .	.201
4n97I OVLAP EXPIRED SECRD FILE . . . . .	.191	4B50I P L ERR THRD RCH, SYSnnn=cuu . . . . .	.201
4n98I OVLAP UNEXPRD SECRD FILE . . . . .	.191	4B60I LINE DELAY . . . . .	.201
4n99D DATA SECURED FILE ACCESSED . . . . .	.192	4B70I ON-LINE TEST CUU=cuu XX=xx YY=yy	
4B00I USER REFERRED TO CLOSED DTFBT		TO=tt NK=nn TI=ii . . . . .	.201
DTFBT=aaaaaa DECB=aaaaaa . . . . .	.193	4B71I ON-LINE TEST CUU=cuu XX=xx YY=yy	
4B01I DTFBT FIELD IMPROPERLY		TO=tt LD=dd DC=cc . . . . .	.201
INITIALIZED DTFBT=aaaaaa DECB=aaaaaa	.193	4B72I . . . . .	.201
4B02I DECB FIELD IMPROPERLY INITIALIZED		cuu xx tttt yy ERS=n . . . . .	.202
DTFBT=aaaaaa DECB=aaaaaa . . . . .	.193	cuu xx tttt THRESH'D . . . . .	.202
4B03I MULTIPLE WAIT COUNT NEGATIVE		cuu xx tttt yy eeee zzzz yy eeee	
DTFBT=aaaaaa DECB=aaaaaa . . . . .	.193	zzzz yy eeee zzzz yy eeee zzzz . . . . .	.202
4B04I MULTIPLE WAIT COUNT EXCEEDS		cuu ww tttt eeeee zzzz eeeee	
ECBLIST SIZE DTFBT=aaaaaa DECB=aaaaaa	.194	zzzz eeeee zzzz eeeee zzzz . . . . .	.202
4B05I ATTEMPT TO PROCESS NON-BTAM		4B98I TR=xxx/yyy,	
BUFFER DTFBT=aaaaaa DECB=aaaaaa . . . . .	.194	DC=zzz,yyy,IR=xxx/yyy, TO=xxx/yyy . . . . .	.202
4B06I UNEXPECTED PROGRAM ERROR IN		4B99I CSW**=nnnnnnnnnnnnnnnn	
RELBUF DTFBT=aaaaaa DECB=aaaaaa . . . . .	.194	CCW=nnnnnnnnnnnnnnnn SN=ffff . . . . .	.202
4B07I REQBUF COUNT NEGATIVE		4C10D PDAID=xx . . . . .	.202
DTFBT=aaaaaa DECB=aaaaaa . . . . .	.194	4C11D OUTPUT DEVICE=cuu . . . . .	.203
4B08I RESETPL DECB AND LCB DECB NOT		4C12D TRACE PARTITION=xx . . . . .	.203
SAME DTFBT=aaaaaa DECB=aaaaaa . . . . .	.195	4C13D IGNORE DEVICE=cuu . . . . .	.203
4B20I P ERR IN ERP SYSnnn=cuu		4C14D TRACE DEVICE=cuu . . . . .	.203
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.195	4C15D IGNORE SVC=nn . . . . .	.204
4B21I P CHAN DATCK SYSnnn=cuu		4C16D TRACE SVC=nn . . . . .	.204
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.195	4C17D INVALID PARAMETER SPECIFIED . . . . .	.204
4B22I P SHOULD NOT SYSnnn=cuu		4C18I KEYWORD MISSING . . . . .	.204
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.195	4C19I NO CE AREA GENERATED - JOB	
4B23I P CHAIN CHK SYSnnn=cuu		CANCELLED . . . . .	.204
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.196	4C20D cuu NOT IN PUB TABLE . . . . .	.205
4B24I P PROGRAM CK SYSnnn=cuu		4C21A CONTROL CARD MISSING . . . . .	.205
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.196	4C22A INVALID CONTROL CARD - ENTER	
4B25I P PROTECT CK SYSnnn=cuu		CORRECTED CARD VIA SYSIPT OR SYSLOG . . . . .	.205
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.196	4C23D IGNORE AND TRACE SPECIFIED -	
4B26I P UNIT EXCEPTION SYSnnn=cuu		WHICH ONE IS DESIRED . . . . .	.205
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.196	4C24A NO I/O TO OD . . . . .	.205
4B27I P EQUIP CK SYSnnn=cuu		4C25I INSUFFICIENT CE AREA GENERATED -	
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.197	JOB CANCELLED . . . . .	.206
4B28I P LOST DATA SYSnnn=cuu		4C26I UNRECOGNIZEABLE RECORD - DUMP	
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.197	FOLLOWS . . . . .	.206
4B29I P TIME OUT SYSnnn=cuu		4C27I AAA= . . . . .	.206
DECB=aaaaaa FT=xxxx DC=ddddddd . . . . .	.197	4C28I OUTPUT DEVICE AND AAA PARAMETERS	
4B30I P INTERV REQ SYSnnn=cuu		PRESENT - WHICH ONE SHOULD BE KEPT . . . . .	.206
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.197	4C40A INVALID HEX LOADADR SPECIFIED . . . . .	.206
4B31I P BUS OUT CK SYSnnn=cuu		4C41A INVALID DECIMAL LOADADR SPECIFIED	.207
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.198	4C42A INVALID CONTROL CARD . . . . .	.207
4B32I P DATA CK SYSnnn=cuu DECB=aaaaaa		4C43A INVALID OPERATION . . . . .	.207
TI=xxxx DC=ddddddd . . . . .	.198	4C44A INVALID OPERAND . . . . .	.207
4B33I P OVERRUN SYSnnn=cuu DECB=aaaaaa		4C45A CORE OR LOADADR NOT SPECIFIED . . . . .	.207
TI=xxxx DC=ddddddd . . . . .	.198	4C46A SYSPCH NOT ASSIGNED TO TAPE AND	
4B34I P COMMAND RJ SYSnnn=cuu		OPTN TAPEIPL=YES . . . . .	.208
DECB=aaaaaa TI=xxxx DC=ddddddd . . . . .	.199	4E00I vvvvvv cuu TW=www TR=rrr NB=nnn	
		PW=ppp PR=qqq SIO=sssss . . . . .	.208

4E01I ESTV FILE FULL . . . . .208  
4E02I NO ESTV FILE LABEL . . . . .208  
4E03I NO ESTVFLE LABEL FND . . . . .209  
4E04I ESTV NOT IN EFFECT . . . . .209  
4E05I NO ESTVFLE STD LABEL INFO. . . . .209  
4E06I NO TEBV, FILE NOT CLEARED . . . .210  
4E10I vvvvvv cuu TR=rrr TW=www  
SIO=sssss . . . . .210  
4MR1I EXTERNAL INTERRUPT I/O ERROR  
filename SYSxxx . . . . .210  
4MR2I SCU NOT OPERATIONAL filename  
SYSxxx . . . . .210  
4P01I DATA CHECK SYSxxx=cuu . . . . .211  
4P02I DATA CHECK SYSxxx=cuu . . . . .211  
4Q00I LINE ERROR THRESHOLD REACHED  
SYSnnn=cuu TR=xxx/yyy DC=xxx/yyy  
IR=xxx/yyy TO=xxx/yyy . . . . .211  
4Q00I LINE ERROR THRESHOLD REACHED  
SYSnnn=cuu TR=xxx/yyy HU=xxx/yyy  
RDC=xxx/yyy WDC=xxx/yyy . . . . .211  
4Q01I INVALID OPEN SEQ  
DTFQT ADDR=aaaaaa DTFQT NAME=bbbbbbbbb .211  
4Q02I INVALID DTFQT TYPE  
DTFQT ADDR=aaaaaa DTFQT NAME=bbbbbbbbb .212  
4Q03I INVALID CLOSE SEQ  
DTFQT ADDR=aaaaaa DTFQT NAME=bbbbbbbbb .212  
4Q04I SPECIFIED TERMTBL ENTRY NOT  
FOUND DTFQT ADDR=aaaaaa  
DTFQT NAME=bbbbbbbbb . . . . .212  
4Q16I CHECKPOINT EXTENT FORMATTED  
INCORRECTLY . . . . .212  
4Q17I INSUFFICIENT CHECKPOINT WORK AREA 212  
4Q18I NO MORE AVAILABLE XTENTS . . . . .213  
4Q19I QTAM MSG CTRL PROG NOT IN SYSTEM .213  
4Q20I INSUFFICIENT CHECKPOINT EXTENT . .213  
4Q21I INSUFFICIENT CHECKPOINT WORK  
AREA AND EXTENT AREA . . . . .213  
4Q22I TOO MANY MESSAGE QUEUES FILE  
EXTENTS . . . . .213  
4Q23I MESSAGE QUEUES EXTENT FORMATTED  
INCORRECTLY . . . . .214  
4Q24I QTAM NOW BEGINNING TO USE LAST  
XTENT . . . . .214  
4Q25I ERPERR . . . . .214  
4Q26I CH-DC . . . . .215  
4Q27I SHDNOT . . . . .215  
4Q28I CHAING . . . . .215  
4Q29I PRG-CK . . . . .215  
4Q30I PRT-CK . . . . .216  
4Q31I UN-EXC . . . . .216  
4Q32I EQU-CK . . . . .216  
4Q33I LOST-D . . . . .216  
4Q34I TIMEOUT . . . . .217  
4Q35I INTREQ . . . . .217  
4Q36I B/O CK . . . . .217  
4Q37I DATAK . . . . .217  
4Q38I OVERUN . . . . .218  
4Q39I CMDREJ . . . . .218  
4Q40I QTAM MSG CTL ACTIVATION COMPLETED 218  
4Q41I LINE ERRORS - CANCEL STATUS  
SYSnnn=cuu TR=xxxxxxxxxx  
DC=xxxxx IR=xxxxx TO=xxxxx . . . . .218  
4Q41I LINE ERRORS - CANCEL STATUS  
SYSnnn=cuu TR=xxxxxxxxxx  
HU=xxxx WDC=xxxx RDC=xxxx . . . . .218  
4Q42I LINE ERRORS - CLOSEDOWN STATUS  
SYSnnn=cuu TR=xxxxxxxxxx  
DC=xxxxx IR=xxxxx TO=xxxxx . . . . .219

4Q42I LINE ERRORS - CLOSEDOWN STATUS  
SYSnnn=cuu TR=xxxxxxxxxx  
HU=xxxx WDC=xxxx RDC=xxxx . . . . .219  
4Q47I 2740-2 . . . . .219  
4Q50I LINE ENTRY NOT FOUND  
DTFQT ADDR=xxxxxx DTFQT NAME=xxxxxxxx .219  
4Q51I INVALID WORD ADDRESS  
WORD ADDRESS=xxxxxx WORD LENGTH=xxxx . .219  
4Q52I INVALID WORD LENGTH  
WORD ADDRESS=xxxxxx WORD LENGTH=xxxx . .220  
4Q53I INV DRM AD . . . . .220  
4Q54I INV WRD AD . . . . .221  
4Q55I INV BFR LG . . . . .221  
4Q56I NO BUFFER . . . . .221  
4Q57I DISK ERROR VOCAB FILE CCB=addr  
WRDC=bbbbbb CSW=y...y CCW2=c...c . . . .221  
4R00I ESTV FILE INITIALIZED, ENTRY IN  
VTOC . . . . .222  
4R01I \* ESTV DUMP UTILITY \* . . . . .222  
4R02A INPUT = (2311, 2314, TAPE) . . . . .222  
4R03I INCORRECT INPUT - OPTIONS ARE  
2311, 2314, TAPE . . . . .222  
4R04A OUTPUT = (PRC, PRNC, TAPE) . . . . .222  
4R05I INCORRECT OUTPUT - OPTIONS ARE  
PRC, PRNC, TAPE . . . . .222  
4R06I FILE DUMPED & CLEARED . . . . .223  
4R07I FILE DUMPED . . . . .223  
4R09D DUMP OUTPUT TAPE BACK TO INPUT  
TAPE? (YES, NO) . . . . .223  
4R09I NO TEBV, ESTV FILE NOT  
INITIALIZED . . . . .223  
4V04I NO RECORD FOUND filename SYSxxx .223  
4V04I NO FORMAT 4 LBL IN VTOC filename  
SYSxxx . . . . .224  
4V06I NO RECORD FOUND filename SYSxxx .224  
4V06I NO STANDARD VOL LABEL filename  
SYSxxx . . . . .224  
4V09I NO RECORD FOUND filename SYSxxx .224  
4V95A SYSLOG OR SYSLST . . . . .224  
4V96A SYSLST NOT A PRINTER . . . . .225

**5-Prefix Messages**

5E01I JOBSTEP PL/I TERMINATED. LINK  
OPTION RESET . . . . .227  
5E02I LINK OPTION RESET . . . . .227  
5E03I POSSIBLE ERRORS IN SOURCE PROGRAM 227  
5L00I Object time diagnostic (refer to  
the PL/I Programmer's Guide for  
individual messages). . . . .227  
5L02A AWAITING REPLY . . . . .228

**7-Prefix Messages**

7000I 'control card image' . . . . .233  
7001I PHASE 0 END. NO DETECTED ERRORS .233  
7002D OPERATOR CORRECT ERRORS OR CANCEL 233  
7003I EXCESS CARDS . . . . .233  
7004I NO xxxxxx CARD . . . . .233  
7005I STMT DEFINER ERR . . . . .234  
7006I DUPLICATE xxxxxx CONTROL CARD . .234  
7007I COL. 1 OR 1 TO 15 NOT BLANK . . .234  
7008I NO CONTIN CARD . . . . .234  
7009I xxxxxx OPTION INVALID.DEFAULT  
USED . . . . .235  
7010I INVALID KEY LENGTH . . . . .235

7011I	INVALID xxxxxx KEYWORD . . . . .	.235	7905I	RCD IN nnnn, OUT nnnn, ESTIMATED	
7012I	INVALID FORMAT . . . . .	.236	nnnn . . . . .	.251	
7013I	CFxx DISPLACEMENT INVALID . . . . .	.236	7906I	RCD INSERT nnnn, DELETE nnnn . . . . .	.251
7014I	CFxx LENGTH INVALID . . . . .	.236	7907I	Out of SEQ . . . . .	.251
7015I	CFxx BEYOND 4092 . . . . .	.236	7908A	WRONG LENGTH RECORD . . . . .	.251
7016I	CFxx SEQUENCE INVALID . . . . .	.237	7D01I	COLUMN 1 NOT BLANK. CONTROL CARD	
7017I	BOTH SORT AND MERGE DEFINED . . . . .	.237	NUMBER xx. . . . .	.253	
7018I	xxxxxx yyyyyy KEYWORD MISSING . . . . .	.237	7D02I	L3 INVALID FOR ADDRROUT OPTION . . . . .	.253
7019I	MISSING FORMAT OR SEQUENCE CCDE . . . . .	.237	7D03I	STATEMENT DEFINER INVALID -	
7020I	GIVEN FILE SIZE INVALID AND		xxxxxx . . . . .	.253	
IGNORED . . . . .	.238		7D04I	NO END CARD FOUND AFTER READING	
7021I	FILES VALUE INVALID . . . . .	.238	25 CONTROL CARDS . . . . .	.254	
7022I	yyyyyy KEYWORD IGNORED BY MERGE . . . . .	.238	7D05A	CONTINUATION CONTROL CARD xx	
7023I	SORT WORK VALUE INVALID . . . . .	.238	DOES NOT START IN COLUMN 16 . . . . .	.254	
7024I	PH 1/2 EXITS IGNORED BY MERGE . . . . .	.239	7D07I	MANDATORY xxxxxx CARD OMITTED . . . . .	.254
7025I	EXIT E32 or E38 IGNORED BY SCRT . . . . .	.239	7D08I	TYPE RUN NOT KNOWN - SORT OR	
7026I	INVALID PHx NAME . . . . .	.239	MERGE NOT SPECIFIED . . . . .	.254	
7027I	INVALID MODS ADDRESS/LENGTH FIELD . . . . .	.239	7D09I	NO BLANK AFTER STATEMENT DEFINER	
7028I	INVALID PHx EXIT . . . . .	.240	- xxxxxxx . . . . .	.254	
7029I	ERR IN LENGTH VALUE . . . . .	.240	7D10I	FIELD DEFINER INVALID - xxxxxxxxx . . . . .	.255
7030I	Lx VALUE INVALID . . . . .	.240	7D11I	VALUES INVALID - xxxxxx . . . . .	.255
7031I	RECORD TYPE INVALID . . . . .	.240	7D12I	INVALID FORMAT CODE GIVEN - xx . . . . .	.255
7032I	ALTERED RECORDS REQUIRE EXIT		7D13I	SORT AND MERGE CONTROL CARDS	
E15/E35 . . . . .	.241		SPECIFIED IN SAME RUN . . . . .	.255	
7033I	xxxxxx BLOCK SIZE = RECORD LENGTH . . . . .	.241	7D14I	NO SEQUENCE VALUE GIVEN FOR CF	
7034I	RECORD CONFLICTS WITH xxxxxx		xx. . . . .	.255	
BLKSIZE . . . . .	.241		7D15I	MORE THAN 12 CONTROL FIELDS	
7035I	VOLUME VALUE(S) INVALID . . . . .	.242	SPECIFIED . . . . .	.256	
7036I	BYPASS IGNORED FOR OUTFIL . . . . .	.242	7D16I	DATA FORMAT ENTRY NOT SPECIFIED . . . . .	.256
7037I	SYNTAX ERROR - xxxxxx . . . . .	.242	7D17I	NO MAJOR CONTROL FIELD WAS GIVEN . . . . .	.256
7038I	L3 INVALID FOR ADDRROUT . . . . .	.242	7D19I	FIXED BLOCKING SPECIFIED FOR	
7039I	INVALID xxxxxx DELIMITER . . . . .	.243	VARIABLE LENGTH RECORDS . . . . .	.256	
7040I	FLD OR VALUE GT 8 CHAR -- xxxxxx . . . . .	.243	7D20I	CONTROL FIELD xx EXTENDS BEYOND	
7041I	L4 GREATER THAN L1 OR L5 . . . . .	.243	END OF RECORD . . . . .	.256	
7042I	MULTIPLE DEFINED EXIT Enn . . . . .	.243	7D21I	TOTAL LENGTH OF CONTROL FIELDS	
7043I	INVALID INTERNAL LISTS . . . . .	.244	EXCEEDS 256 . . . . .	.257	
7044I	TOO MANY xxxxxx KEYWORDS . . . . .	.244	7D22I	CONTROL FIELD xx GREATER THAN	
7045I	CFxx BEYOND RECORD . . . . .	.244	MAXIMUM ALLOWED . . . . .	.257	
7046I	CFxx TOO LONG FOR TYPE . . . . .	.244	7D23I	L4 MUST BE LESS THAN [L1,L5] . . . . .	.257
7047I	EXIT Enn NOT GIVEN FOR		7D24I	STORAGE SPECIFIED GREATER THAN	
NONSTANDARD LABELS . . . . .	.245		ACTUAL MACHINE SIZE . . . . .	.257	
7048I	MINIMUM SORT WORK AREA nnn TRACKS . . . . .	.245	7D25I	[L3, L1] MORE THAN xxxx BYTES . . . . .	.258
7049I	nnn TRACKS FOR BEST PERFORMANCE . . . . .	.245	7D26I	KEYLEN ENTRY INVALID . . . . .	.258
7050I	NMAX = nnnn . . . . .	.245	7D28I	RECORD TYPE NOT SPECIFIED . . . . .	.258
7051I	B = nnnn . . . . .	.246	7D29I	FILES ENTRY NOT SPECIFIED FOR	
7052I	G = nnnn . . . . .	.246	MERGE . . . . .	.258	
7053A	INCORRECT RESPONSE . . . . .	.246	7D30I	SIZE ENTRY OMITTED IN SORT	
7054A	INSUFFICIENT CORE . . . . .	.246	STATEMENT . . . . .	.258	
7055I	TOO MANY xxxxxx POSITIONAL		7D32I	USER PROGRAM ORIGIN GREATER THAN	
PARAMETERS . . . . .	.246		STORAGE SIZE . . . . .	.259	
7056A	MIXED UNIT ASSIGNMENT . . . . .	.247	7D33I	L5 IS GREATER THAN L1 . . . . .	.259
7057I	RECORD FORMAT NOT SUPPORTED ON		7D34I	[E32, E43] NOT SPECIFIED WHEN L3	
7-TRACK . . . . .	.247		[MORE, LESS] THAN L1 . . . . .	.259	
7058A	INVALID xxxxxx AS WORK UNIT . . . . .	.247	7D35I	EXIT [31, 44] NOT SPECIFIED FOR	
7059A	UNITS ASGN ERROR-xxxxxxx . . . . .	.248	NONSTANDARD LABELS . . . . .	.259	
7060I	OPTION NOT CHARACTERISTIC OF		7D36I	USER GIVEN FILE SIZE EXCEEDS	
DEVICE . . . . .	.248		MAXIMUM . . . . .	.260	
7061I	BLANK CARD ENCOUNTERED . . . . .	.248	7D37I	INPUT BLOCKSIZE NOT A MULTIPLE	
7062A	LABEL OPTION HAS INVALID		OF L1 . . . . .	.260	
PARAMETER . . . . .	.249		7D38I	OUTPUT BLOCKSIZE NOT A MULTIPLE	
7101I	END SORT PH . . . . .	.249	OF L3 . . . . .	.260	
7159A	UNITS ASGN ERROR - xxxxxxxxx . . . . .	.249	7D39I	A CF STARTS PRIOR TO BYTE 5 IN	
7201I	END MERGE PH . . . . .	.249	VARIABLE-LENGTH RECORDS . . . . .	.260	
7302I	EOJ . . . . .	.249	7D40I	CONTROL FIELDS OVERLAP FOR OTHER	
7901A	SORT CAPACITY EXCEEDED . . . . .	.250	THAN BI FORMAT . . . . .	.260	
7902A	RCD COUNT OFF . . . . .	.250	7D41I	RECORD LENGTH NOT SPECIFIED . . . . .	.261
7903I	APPROX RCD CNT nnnn . . . . .	.250	7D42I	BLOCKSIZE GREATER THAN xxxx . . . . .	.261
7904A	I/O ERR - xxxxxx . . . . .	.250			

7D43I NOTPMK ENTRY SPECIFIED WITH STANDARD OUTPUT LABELS . . . . .	261
7D44I PHASE [1, 3, 4] MODIFICATION PROGRAM TOO LARGE . . . . .	261
7D45I NO MEDIUM SPECIFIED FOR [INPUT, OUTPUT] . . . . .	262
7D47I [TAPE, DISK] OPTIONS SPECIFIED FOR [DISK INPUT, TAPE OUTPUT] . . . . .	262
7D49I NO BLOCKSIZE GIVEN FOR [INPUT, OUTPUT] . . . . .	262
7D50I INSUFFICIENT TRACKS GIVEN FOR MERGE . . . . .	262
7D51I ADDRROUT OPTION SPECIFIED FOR MERGE . . . . .	262
7D53D INVALID RESTART . . . . .	263
7D55A INVALID RESTART. CHECK DISK PACK PLACEMENT . . . . .	263
7D64I DUPLICATE STATEMENT DETECTED-xxxxxx . . . . .	263
7D67I INVALID LABELS SPECIFIED FOR A DISK FILE . . . . .	263
7D68I [INPUT, OUTPUT] BLOCKSIZE INVALID FOR VARIABLE LENGTH RECORDS . . . . .	263
7D69I SORT BLOCKSIZE MUST BE AT LEAST 300 BYTES . . . . .	263
7D70I INPUT OR OUTPUT BLOCKSIZE IS INVALID . . . . .	264
7D71I ASSUMING BLOCKSIZE IN IS xxxx, BLOCKSIZE OUT MAY NOT EXCEED xxxx . . . . .	264
7D72I EXIT [11, 31, 41, 44] SPECIFIED FOR UNLABELED FILES . . . . .	264
7D73I L1 INVALID . . . . .	264
7D74I BLOCKSIZE INVALID . . . . .	264
7D75I ONLY xx TRACKS SPECIFIED ON LAST XTENT FOR SORT . . . . .	264
7D76I STORAGE LESS THAN 16,384 . . . . .	265
7D77I FILES VALUE GREATER THAN [4, 9] . . . . .	265
7D78I MORE INPUT OR LABEL ENTRIES THAN FILES SPECIFIED . . . . .	265
7D79I BLOCKSIZE FOR TAPE INPUT OR OUTPUT IS LESS THAN 12 . . . . .	265
7D80I END OF SORT ASSIGNMENT PHASE CALCAREA RUN . . . . .	266
7D81I EXIT 13 SPECIFIED FOR DISK INPUT . . . . .	266
7D82I ADDRROUT OPTION SPECIFIED WITH TAPE INPUT . . . . .	266
7D83A INVALID RESPONSE . . . . .	266
7D84I TAPE DEVICE ADDRESSES MUST BE ASSIGNED TO [SYSxxx, SYSnnn] . . . . .	266
7D85I ALL TAPE FILES MUST HAVE UNIQUE DEVICE ADDRESSES . . . . .	267
7D86I INSUFFICIENT CORE/WORKAREA IS AVAILABLE FOR THE SPECIFIED FILE SIZE . . . . .	267
7D87I NO RECORD HAS OCCURRED ON DASD . . . . .	267
7D88I TRACK OVERRUN HAS OCCURRED ON DASD . . . . .	267
7D89I STORAGE SPECIFICATION LESS THAN 10,000 FOR SORT . . . . .	267
7D90A OPERATOR-ATTEMPT TO CORRECT ABOVE LISTED ERRORS . . . . .	268
7D91I END OF ASSIGNMENT PHASE . . . . .	268
7D92I END OF ASSIGNMENT PHASE-ERRORS DETECTED, CORRECT AND RERUN . . . . .	268
7DA1I WLR - FILEx . . . . .	268
7DA2I PHASE 1 UNREADABLE BLOCKS BYPASSED xxxx . . . . .	269
7DA3I WORK AREA TOO SMALL FOR ACTUAL FILE . . . . .	269
7DA4I RECORDS PROCESSED xxxxxxxx . . . . .	269
7DA5I MERGE PASSES xx . . . . .	269
7DA6I END PHASE 1 . . . . .	269
7DB1I PHASE 2, PASS xx . . . . .	269
7DC1I PHASE 3, PASS xx . . . . .	270
7DC2D SEQ. ERROR . . . . .	270
7DC2A INVALID RESPONSE . . . . .	270
7DC4I RECORDS PROCESSED xxxxxxxx . . . . .	270
7DC5I END OF SORT . . . . .	270
7DD1I WLR FILEx . . . . .	270
7DD2A INVALID RESPONSE . . . . .	271
7DD2D SEQ. ERROR FILEx . . . . .	271
7DD4I PHASE 4 UNREADABLE BLOCKS BYPASSED xxxx . . . . .	271
7DD5I RECORDS PROCESSED xxxxxxxxx . . . . .	271
7DD6I END OF MERGE . . . . .	272
7T02I EXCESS NO CTL CARDS . . . . .	272
7T03I NO END CARD . . . . .	272
7T0AD **CORRECT CONTROL CARDS AND RESTART** RESPOND-RETRY OR CANCEL . . . . .	272
7T10I WLR . . . . .	272
7T11I -REC PROC. xxxxxxxx . . . . .	273
7T12I -LEVELS P2 xxx . . . . .	273
7T13I -P1 IP BLOCKS BYPASSED xxx . . . . .	273
7T14I -END OF INTERNAL SORT . . . . .	273
7T15D -N MAX EXCEEDED BY xxxxxxx . . . . .	273
7T16I EOF ON OUTPUT SYS00n . . . . .	273
7T17I -UNREADABLE BLOCK . . . . .	273
7T18I -REC DELETED xxxxxxxxx . . . . .	274
7T19I -VL BK . . . . .	274
7T21I WLR . . . . .	274
7T22I EOF ON OUTPUT SYS00n . . . . .	274
7T23I EOF . . . . .	275
7T24I LEVEL xxxx CHKPT ON SYS00n . . . . .	275
7T25I LAST LEVEL CHKPT ON SYS00n . . . . .	275
7T26I SEQUENCE ERROR . . . . .	275
7T27I RECORDS IN PHASE 2 xxxxxxxx . . . . .	275
7T28I RECORD COUNT UNEQUAL . . . . .	275
7T29I END OF SORT . . . . .	276
7T30I None . . . . .	276
7T31I NO RSTR TO 7T24I . . . . .	276
7T32A SEQUENCE ERROR . . . . .	276
7T33I RECORDS PROCESSED xxxxxxxx UNREADABLE BLOCKS BYPASSED xxxx END OF MERGE . . . . .	276
7T35I TRACK OVERRUN HAS OCCURRED ON DASD . . . . .	277
7T36I INSUFFICIENT CORE/WORKAREA IS AVAILABLE FOR THE SPECIFIED FILE SIZE . . . . .	277

### 8-Prefix Messages

8001D IS IT EOF . . . . .	279
8002A PUNCH CHECK . . . . .	279
8003A ALTA OR ALTB PARAMETER SPECIFIED TWICE . . . . .	279
8004I // TPCP RECSIZ=(nnnnnn) . . . . .	280
8005A // TPCP RECSIZ=( FORMAT IS INCORRECT) . . . . .	280
8006A RECORD SIZE OR REEL COUNT PARAMETER MISSING . . . . .	280
8007A INVALID RECORD SIZE OR REEL COUNT PARAMETER . . . . .	280
8008A LEADING ZERO IN RECORD SIZE OR REEL COUNT PARAMETER . . . . .	281
8009A INVALID CHARACTER IN RECORD SIZE OR REEL COUNT PARAMETER . . . . .	281

8010A PARAMETERS CONTAIN AN INVALID CHARACTER OR SEPARATORS ARE MISSING . . .281  
8011D NO I/O AREA AVAILABLE . . . . .282  
8012A USER EXIT SPECIFIED BUT NONE SUPPLIED . . . . .282  
8013A INVALID TPMK DETECTED ON FILE n .283  
8014A VOLUME LABEL MISSING ON FILE n . .283  
8015A HEADER LABEL MISSING ON FILE n . .283  
8016A TRAILER LABEL MISSING ON FILE n .284  
8017D EOF ON UNLABELED FILES . . . . .284  
8018D EOF ON FILE A AND NOT ON B . . . .284  
8019D EOF ON FILE B AND NOT ON A . . . .285  
8020A CHANGE REEL ON PRIMARY A . . . . .285  
8021I SWITCHING TO ALTERNATE A . . . . .285  
8022A CHANGE REEL ON PRIMARY B . . . . .285  
8023I SWITCHING TO ALTERNATE B . . . . .285  
8024D REEL COUNT DEPLETED . . . . .286  
8025A RESTART WAS REQUESTED . . . . .286  
8026D EOF ON LABELED FILES . . . . .286  
8027A CONTROL CARD MISSING . . . . .286  
8050I NOT A STD R0 RECORD . . . . .286  
8051I NOT A STD R0 RECORD . . . . .287  
8052D RECORD GREATER THAN I/O AREA . . .287  
8053I I/O AREA INSUFFICIENT . . . . .287  
8054I NO VOL1 LABEL . . . . .287  
8055I SYS005 NOT ASSIGNED . . . . .288  
8056I IPL SPECIFIED AND NOT FOUND . . .288  
8057I TAPE RECORD GREATER THAN MAX I/O AREA . . . . .288  
8058A INPUT IS OUT OF SEQUENCE . . . . .288  
8059A READER OUT OF INPUT . . . . .289  
8060I SYS004 NOT ASSIGNED . . . . .289  
8061I CONTROL RECORD NOT FOUND . . . . .289  
8062I PARTITION TOO SMALL . . . . .290  
8063I SYS006 NOT ASSIGNED . . . . .290  
8064I ERRORS IN CONTROL CARD . . . . .290  
8065I RESTORE EXTENTS NOT EQUAL TO COPY 290  
8066I END OF COPY . . . . .290  
8067I END OF RESTORE . . . . .291  
8068I CHECK POINT BEING TAKEN FOLLOWING CARD NO. xxxxxx . . . . .291  
8070I INCORRECT CONTROL IDENTIFIER . . .291  
8071I INCORRECT [T, E, M, O] OPTION . . .291  
8072I INCORRECT FORMAT . . . . .291  
8073I INVALID LEADING ZERO IN SIZE PARAMETER . . . . .291  
8074I INCORRECT CHARACTER IN SIZE PARAMETER . . . . .292  
8075I A PARAMETER TOO LARGE . . . . .292  
8076I INCORRECT PARAMETER . . . . .292  
8077I DUPLICATE [A, I, M, T, E, O] PARAMETER . . . . .292  
8079I SIZE PARAMETER MISSING or [A, T] PARAMETER MISSING . . . . .293  
8081I IPL OPTION INVALID FOR COPY VOLUME FUNCTION . . . . .293  
8082I UTILITY MODIFIER CARD MISSING . .293  
8083I DUPLICATE ENTRIES IN CELLS PARAMETER . . . . .293  
8084I EXCESSIVE NUMBER OF CELLS PARAMETER ENTRIES . . . . .294  
8085I CELLS MUST BE PROCESSED IN THIS ORDER . . . . .294  
8086I EMULATOR PACK . . . . .294  
8101I SYS000 NOT ASSIGNED TO A 2311 OR 2314 . . . . .294  
8102I UTILITY MODIFIER CARD . . . . .294  
8103I INVALID CARD . . . . .295

8104I INVALID FORMAT . . . . .295  
8105I INVALID PARAMETER . . . . .295  
8106I INVALID USE OF S ENTRY IN INPUT OPTION . . . . .295  
8107I CYLxx, TRKxx, IS A DEFECTIVE ALTERNATE TRACK . . . . .296  
8108I CYLxx, TRKxx, IS DEFECTIVE AND AN ALTERNATE IS ASSIGNED . . . . .296  
8109I CYLxx, TRKxx, IS DEFECTIVE AND NO ALTERNATE IS AVAILABLE . . . . .296  
8110I CYLxx, TRKxx, HA or REC0 IS IN ERROR . . . . .296  
8111A VTOC CARD MISSING . . . . .296  
8112A VTOC ADDRESS INVALID . . . . .297  
8113A VTOC OVERFLOWS CYLINDER . . . . .297  
8114A VOL CARD MISSING . . . . .297  
8115A VOL1 SERIAL FIELD . . . . .297  
8116A VTOC OR END CARD ERROR . . . . .298  
8117A PARAMETER DELIMITER . . . . .298  
8118D UNEXPIRED FILE . . . . .298  
8120I END OF INIT. [DISK, DATA CELL] .299  
8121I UNRECOVERABLE DISK ERROR . . . .299  
8122I LABEL CONTROL SET . . . . .299  
8123I EMULATOR PACK, STANDARD VTOC ASSUMED . . . . .299  
8201I SYS000 NOT A VALID DISK DRIVE . .299  
8203I INVALID CARD . . . . .299  
8205I INVALID FORMAT . . . . .300  
8206I INVALID PARAMETER . . . . .300  
8207I UTILITY MODIFIER CARD . . . . .300  
8210I FORMAT 4 LABEL MISSING . . . . .300  
8211I VOLUME LABEL MISSING . . . . .301  
8212I DATA CHECK IN LABEL . . . . .301  
8213D FORMAT 4 LABEL ERROR . . . . .301  
8214D VOLUME LABEL ERROR . . . . .301  
8215I ALT CYLS FULL . . . . .302  
8216I CYLxx, TRKxx REC0 IN ERROR . . . .302  
8220I cccchhhrrkkdddd . . . . .302  
8221I ALT TRK ASSIGNED NOT ACCESSIBLE .303  
8222I HA AND R0 ARE DEFECTIVE . . . . .303  
8223I ALT TRK PREVIOUSLY ASSIGNED . . . .303  
8224I HA AND R0 OF ALT TRK IS DEFECTIVE 303  
8225I DATA CHECK IN COUNT FIELD . . . .303  
8226I NO ADDRESS MARKER . . . . .304  
8227I KEY AND DATA ERROR RECOVERED . . .304  
8228I KEY AND DATA ERROR . . . . .304  
8229I KEY MAY BE IN ERROR . . . . .304  
8230I UNRECOVERABLE ERROR . . . . .305  
8231I CYLxx, TRKxx, IS DEFECTIVE, AN ALTERNATE IS ASSIGNED . . . . .305  
8232I CYLxx, TRKxx, IS NOT DEFECTIVE . .305  
8233I CYLxx, TRKxx, HA AND R0 ARE DEFECTIVE, NO ALTERNATE ASSIGNED . . . .305  
8234I UNRECOVERABLE DISK ERROR . . . . .306  
8235I DATA TRANSFERRED TO ORIGINAL DEFECTIVE TRACK . . . . .306  
8236I DATA TRANSFERRED TO ORIGINAL ALTERNATE TRACK . . . . .306  
8240I END OF ALT. TRK. ASSGN . . . . .306  
8250I END OF ALT. TRK. AND UPDATE . . . .306  
8251I TRACK PARAMETER MISSING . . . . .306  
8252I INVALID TRACK STATEMENT . . . . .307  
8253I UPDATE RECORD CAUSES TRACK OVERFLOW . . . . .307  
8256I NOT AN EMULATOR PACK . . . . .307  
8301I SYS000 NOT ASSGND TO A 2321 . . . .307  
8302I UNRECOVERABLE DATA CELL ERROR . .307

8303I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS A DEFECTIVE ALTERNATE TRACK . . . . .	.308
8304I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE AND AN ALTERNATE IS ASSIGNED . . . . .	.308
8305I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE AND NO ALTERNATE IS AVAILABLE . . . . .	.308
8306I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx HA OR R0 IS IN ERROR . . . . .	.308
8307I END OF INIT DATA CELL . . . . .	.308
8308I SYS000 NOT A VALID DATA CELL . . . . .	.309
8309I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx REC0 IS IN ERROR . . . . .	.309
8310I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS DEFECTIVE, ALTERNATE IS ASSIGNED . . . . .	.309
8311I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx IS NOT DEFECTIVE . . . . .	.309
8312I CELLxx, SUBCELLxx, STRIPxx, CYLxx, TRKxx HA AND R0 ARE DEFECTIVE, NO ALT. ASSIGNED . . . . .	.309
8502D BLOCK LENGTH EXCEEDS BUFFER SIZE - INTAPE . . . . .	.310
8503D BLOCK LENGTH EXCEEDS BUFFER SIZE - INDISK . . . . .	.310
8506D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTAPE . . . . .	.310
8507D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTDISK . . . . .	.310
8512D INCOMPLETE LOGICAL RECORD IN BLOCK - INTAPE . . . . .	.311
8513D INCOMPLETE LOGICAL RECORD IN BLOCK - INDISK . . . . .	.311
8515D RECORD LENGTH OVER 80 - OUTCARD . . . . .	.311
8516D RECORD LENGTH EXCEEDS BUFFER RESIDUE - OUTAPE . . . . .	.312
8517D RECORD LENGTH EXCEEDS BUFFER RESIDUE - OUTDISK . . . . .	.312
8518D RECORD LENGTH EXCEEDS BUFFER SIZE - OUTPRT . . . . .	.312
8522A TAPE MARK ON UNLABELED FILE - INTAPE . . . . .	.313
8525D IMPROPER STACKER SELECT CHARACTER - OUTCARD . . . . .	.313
8526I END OF REEL ON UNLABELED FILE - OUTAPE . . . . .	.313
8535A 2540 PUNCH CHECK - OUTCARD . . . . .	.313
8545A 2520 PUNCH CHECK - OUTCARD . . . . .	.313
8555A 2520 PUNCH CHECK - OUTCARD . . . . .	.314
8590A INVALID RESPONSE . . . . .	.314
8601A MORE PASSES -- INTTP . . . . .	.314
8V00A INVALID STATEMENT . . . . .	.314
8V00I INVALID STATEMENT . . . . .	.315
8V01I INVALID PARAMETER xxxxxx . . . . .	.315
8V02A INVALID TABLE NAME . . . . .	.315
8V02I INVALID TABLE NAME . . . . .	.315
8V03A INVALID SPARE TRACK PARAMETER . . . . .	.315
8V03I INVALID SPARE TRACK PARAMETER . . . . .	.316
8V04I INVALID SEPARATOR . . . . .	.316
8V05I INVALID INPUT VOCABULARY PARAMETER . . . . .	.316
8V06I INVALID WORD IDENTIFIER xxxxxx . . . . .	.316
8V07I INVALID WORD IDENTIFIER SEQUENCE xxxxxx . . . . .	.316
8V08A INVALID CONTINUATION CARD . . . . .	.317
8V08I INVALID CONTINUATION CARD . . . . .	.317

8V09A TABLE NOT FOUND . . . . .	.317
8V09I TABLE NOT FOUND . . . . .	.317
8V10A INVALID UPDATE OPERATION . . . . .	.317
8V10I INVALID UPDATE OPERATION . . . . .	.318
8V11A INVALID WORD LOCATION . . . . .	.318
8V11I INVALID WORD LOCATION . . . . .	.318
8V12A WORD xxxxxx NOT FOUND . . . . .	.318
8V13A INPUT VOCABULARY MISSING ON SYSxxx . . . . .	.318
8V13I INPUT VOCABULARY MISSING ON SYSIPT . . . . .	.319
8V14A INVALID VOCABULARY SEQUENCE . . . . .	.319
8V14I INVALID VOCABULARY SEQUENCE . . . . .	.319
8V15D EXCESSIVE WORD LENGTH xxxxxx . . . . .	.319
8V16D WORD xxxxxx NOT FOUND . . . . .	.320
8V17I OVERFLOW ON VOCRES . . . . .	.320
8V18I OVERFLOW ON VOCUT . . . . .	.320
8V19I TAPE READ ERROR . . . . .	.320
8V20I READ ERROR ON VOCRES . . . . .	.321
8V21I READ ERROR ON VOCUT . . . . .	.321
8V22I INVALID VOCRES ASSIGNMENT . . . . .	.321
8V23I INVALID SYSLST ASSIGNMENT . . . . .	.321
8V24I INVALID SYSIPT ASSIGNMENT . . . . .	.321
8V25I INVALID OR MISSING UPSI STATEMENT . . . . .	.322
8V26I UPDATE OPERATION REJECTED . . . . .	.322
8V27I TOO MANY EXTENTS FOR VOCRES . . . . .	.322
8V28I TOO MANY XTENTS FOR VOCUT . . . . .	.322
8V29I MAXIMUM WORD LENGTH xxxx . . . . .	.322
8V30I xxxx WORDS NOT FOUND . . . . .	.323
8V31I TABLE xxxxxxxx NOT CREATED . . . . .	.323
8V91I NO FORMAT 4 LABEL FOUND. JOB CANCELED. . . . .	.323
8V92I NO VOLUME 1 LABEL FOUND. JOB CANCELED. . . . .	.323
8V93I INVALID VTOC ADDR FOUND. JOB CANCELED. . . . .	.323
8V94I NO DISK RECORD FOUND. JOB CANCELED. . . . .	.324
8V95I NOT A VALID LABEL FORMAT . . . . .	.324
8V96D FORMAT 1 LABEL OF DATA SECURED FILE . . . . .	.324

### 9-Prefix Messages

9100I Content of statement in error. . . . .	.326
9101I Content of statement in error. . . . .	.326
9102I Content of statement in error. . . . .	.326
9110I Content of statement in error. . . . .	.326
9111I Content of statement in error. . . . .	.326
9112I Content of statement in error. . . . .	.326
9113I Content of statement in error. . . . .	.326
9114I Content of statement in error. . . . .	.326
9115I Content of statement in error. . . . .	.326
9116I Content of statement in error. . . . .	.326
9120I Content of statement in error. . . . .	.326
9121I Content of statement in error. . . . .	.326
9122I Content of statement in error. . . . .	.326
9123I Content of statement in error. . . . .	.326
9124I Content of statement in error. . . . .	.326
9125I Content of statement in error. . . . .	.326
9130I Content of statement in error. . . . .	.326
9131I Content of statement in error. . . . .	.326
9132I Content of statement in error. . . . .	.326
9133I Content of statement in error. . . . .	.326
9135I Content of statement in error. . . . .	.326
9136I Content of statement in error. . . . .	.327
9140I Content of statement in error. . . . .	.327



9141I	Content of statement in error.	.327
9142I	Content of statement in error.	.327
9143I	Content of statement in error.	.327
9144I	Content of statement in error.	.327
9145I	Content of statement in error.	.327
9146I	Content of statement in error.	.327
9147I	Content of statement in error.	.327
9150I	Content of statement in error.	.327
9151I	Content of statement in error.	.327
9155I	Content of statement in error.	.327
9156I	Content of statement in error.	.327
9158I	Content of statement in error.	.327
9170I	Content of statement in error.	.327
9200I	LINKAGE EDITOR CANNOT CONTINUE	.327
9201I	LINKAGE EDITOR CANNOT CONTINUE	.327
9202I	LINKAGE EDITOR CANNOT CONTINUE	.328
9203I	SYM OUT OF ORDER	.328
9281I	LINKAGE EDITOR CANNOT CONTINUE	.328
9282I	LINKAGE EDITOR CANNOT CONTINUE	.328
9285I	LINKAGE EDITOR CANNOT CONTINUE	.328
9291I	LINKAGE EDITOR CANNOT CONTINUE	.328
9292I	LINKAGE EDITOR CANNOT CONTINUE	.328
9293I	LINKAGE EDITOR CANNOT CONTINUE	.328
9294I	LINKAGE EDITOR CANNOT CONTINUE	.328
9299I	ERROR HAS OCCURRED DURING LINKAGE EDITING	.328
9900I	DISK WORK AREA INVALID	.328
9901I	DISK WORK AREA TOO SMALL	.328
9902I	DISK WORK AREA TOO SMALL	.329
9903I	DISK WORK AREA TOO SMALL	.329
9A01I	AUTOTEST CANNOT CONTINUE	.329
9A02I	OPTION CATAL IGNORED	.329
9F02I	AUTOTEST COMMUNICATION RECORD NOT ON SYSLNK	.329
9J01I	EOV ON SYS005	.329

### A-Prefix Messages

A110I	ABORT -PERM. I/O ERROR ON SYSxxx	.331
A111I	ABORT - UNEXPECTED EOF ON SYSxxx	.331
A112I	ABORT- INADEQUATE CORE FOR 32K [44K] ASSEMBLER	.332
A113I	ABORT -INVALID PHYSICAL UNIT SYSxxx	.332
A114I	ABORT -- NO UNIT ASSIGNED FOR SYSPCH	.333
A114I	ABORT -- NO UNIT ASSIGNED FOR SYSxxx (OPTION SYM)	.333
A115I	ABORT-INVALID DUAL ASSGN SYSPCH-[SYSLST]	.333
A116I	ABORT - INVALID MULTIPLE EXTENTS FOR WORKFILES	.333

### B-Prefix Messages

B001A	[PAUSE or PAUSE nnnnn] message	.335
B002I	STOP nnnnn	.335

### C-Prefix Messages

C001I	CONFLICTING I/O ASSIGNMENTS	.337
C002I	STORAGE ALLOCATED TO THE COMPILER IS LESS THAN 14K. COMPILATION CANCELED	.337
C100I	BACKGROUND AREA IS LESS THAN 54K	.337

C101I	DEVICE NOT ASSIGNED - SYSnnn	.338
C102I	UNSUPPORTED DEVICE TYPE - SYSnnn	.338
C103I	END OF FILE ON SYSIPT	.338
C104I	WARNING. SYS001 FILE IS TAPE	.338
C110A	STOP literal	.339
C111A	AWAITING REPLY	.339
C112I	DATA CHECK	.339
C113I	WRONG LENGTH RECORD	.340
C114I	PRIME DATA AREA FULL	.340
C115I	CYLINDER INDEX FULL	.340
C116I	MASTER INDEX FULL	.340
C117I	OVERFLOW AREA FULL	.341
C118I	DATA CHECK IN COUNT	.341
C119I	DATA CHECK IN KEY OR DATA	.341
C120I	NO ROOM FOUND	.342
C121I	DASD ERROR	.342
C122I	DASD ERROR WHILE ATTEMPTING TO WRITE RECORD ZERO	.342
C123I	FILE CANNOT BE OPENED AFTER CLOSE WITH LOCK	.342
C124I	CYLINDER AND MASTER INDEX TOO SMALL	.343
C125I	NO EXTENTS	.343
C126D	IS IT EOF?	.343

### E-Prefix Messages

EC01D	ENTER DATA	.347
EC02I	INTERIM STORAGE DUMP	.347
EC03D	MOUNT 51 COL READ FEED	.347
EC10I	INVALID RESPONSE	.347
EC11I	INVALID ADDRESS	.348
EC12I	INVALID DEVICE TYPE	.348
EC13I	INVALID LOGICAL UNIT NUMBER	.349
EC14I	CONFLICTING LOGICAL UNIT ASSIGNMENT	.349
EC15I	LOGICAL UNIT NOT ASSIGNED	.350
EC19I	DVOL SERIAL NUMBER NEEDED	.350
EC20I	PARAMETER ERROR	.350
EC21I	INITIALIZATION ERROR	.351
EC29D	CONTROL CARD ERROR	.352
EC30I	BEGIN name AT hh.mm.ss	.352
EC31I	EOJ name AT hh.mm.ss	.352
EC32I	CANCEL name AT hh.mm.ss	.352
EC33I	END name AT hh.mm.ss	.353
EC40D	TYPE IN FUNCTION	.353
EC41I	HEX ADDRESS = xxxx	.353
EC42D	TYPE DATA	.353
EC43D/I	TAPE n ON SYSnnn, MAX BLK=xxxxx DR cuu, n TR, yyy BPI	.354
EC43D/I	TAPE n ON SYSnnn, MAX BLK=xxxxx SYSnnn NOT ASSIGNED	.354
EC43D/I	TAPE n UNASSIGNED, MAX BLK=xxxxx	.354
EC44D/I	DISK n ON SYSnnn, PART n DR cuu	.354
EC44D/I	DISK n ON SYSnnn, SYSnnn NOT ASSIGNED	.354
EC44D/I	DISK n UNASSIGNED	.354
EC45D	TYPE S-SW	.355
EC46I	S-SW ON = xxxxxx	.355
EC47I	1400 ADDRESS LIMIT, FUNCTION ENDED	.355
EC48I	FUNCTION NOT GENERATED	.356
EC49D	INVALID 1400 CHARACTER DETECTED ON xxxxxxxx	.356
EC50D	PUNCH ERROR	.357

EC51D PFR PUNCH ERROR . . . . .	.357	EC76I DISK n ON cuu SERIAL NO.=xxxxxx	.363
EC52D PFR READ ERROR . . . . .	.358	EC77D SCAN ERROR DETECTED . . . . .	.363
EC58D 1404 aaaaaaaaaa CCSW=yyxxxx		EC78D WRONG PACK, MOUNT xxxxxx DISK n	
SNS=xx . . . . .	.358	ON DR cuu . . . . .	.363
EC59D REPLY AGAIN TO 1404 MESSAGE . .	.359	EC78I 1301/1405 DRIVE xxx SERIAL	
EC60I MESSAGE RESPONSES ARE B=BYPASS,		NO.=xxxxxx . . . . .	.363
P=PROCESS . . . . .	.359	EC80I 1400 STATUS I=nnnnn A=nnnnn	
EC61I MESSAGE RESPONSES ARE B=BYPASS,		B=nnnnn INSTN BLOCK=xxxxxxxx . . . . .	.364
P=PROCESS, H=HEX-DISPLAY . . . . .	.359	EC81I HALT . . . . .	.364
EC62D TAPE BLOCK IN ERROR . . . . .	.359	EC82I HALT . . . . .	.364
EC63I TAPE n BLOCK SIZE EXCEEDED . . .	.360	EC83I 1400 PROGRAM ERROR . . . . .	.365
EC67I MOUNT NEW TAPE ON SYSIPT . . . .	.360	EC84I TOO MANY PHASES TO CATALOG . . . .	.365
EC68I MOUNT NEW TAPE ON SYSPCH . . . .	.360	EC90I INVALID OPERATION ON READER . . .	.365
EC69I MOUNT NEW TAPE ON SYSLST . . . .	.361	EC91I INVALID OPERATION ON PUNCH . . . .	.366
EC70I DISK PACK NOT FORMATTED . . . .	.361	EC92I INVALID OPERATION ON PRINTER . . .	.366
EC71D DISK ERROR DETECTED. SECTOR		EC93I CONTROL CARD NOT SUPPORTED //	
ADDRESS = dxxxxx. VALID DATA FOLLOWS:	.361	yyyy . . . . .	.367
EC73I SYSLST EXTENT EXHAUSTED . . . .	.361	EC94I NO // LC DATA DELIMITER CARD . .	.367
EC74I SYSPCH EXTENT EXHAUSTED . . . .	.362	EC95I STACKER 8/2 IGNORED . . . . .	.367
EC75I WRONG PACK, MOUNT xxxxxx DISK n		EC96I CARRIAGE CONTROL CARD ERROR . . .	.367
ON DR cuu . . . . .	.362	EC97I 1400 CONSOLE PRINTER NOT	
		SUPPORTED . . . . .	.368

1

2

3



**International Business Machines Corporation**  
**Data Processing Division**  
112 East Post Road, White Plains, N.Y. 10601  
[USA Only]

**IBM World Trade Corporation**  
821 United Nations Plaza, New York, New York 10017  
[International]