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Systems

**OS/VS Message Library:
Linkage Editor and
Loader Messages**

**VS1 Release 6
VS2 Release 3.7**

IBM

| Sixth Edition (August 1978)

| This edition replaces the previous edition (numbered GC38-1007-4) and its technical newsletter (numbered GN26-0824) and makes them obsolete.

| This edition applies both to Release 6 of OS/VS1 and to Release 3.7 of OS/VS2, and to any subsequent releases of either system unless otherwise indicated in new editions or technical newsletters.

| The changes for this edition are summarized under "Summary of Amendments" following the table of contents. Specific changes made as of this publishing date are indicated by a vertical bar to the left of the change. These bars will be deleted at any subsequent republication of the page affected. Editorial changes that have no technical significance are not noted.

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PREFACE

This publication lists the messages produced by the OS/VS Linkage Editor and Loader programs. The causes of the messages are explained, the accompanying actions by the system are described, and appropriate responses are suggested. The messages are presented in alphameric order.

This manual is intended for use by application and system programmers.

Those publications that introduce concepts and terminology relevant to the OS/VS linkage editor and loader messages are:

Operator's Library: OS/VS1 Reference, GC38-0110

Operator's Library: OS/VS2 Reference (JES2), GC38-0210

OS/VS Linkage Editor and Loader, GC26-3813

OS/VS Linkage Editor Logic, SY26-3815

OS/VS Loader Logic, SY26-3814

OS/VS1 Debugging Guide, GC24-5093

OS/VS1 JCL Reference, GC24-5099

OS/VS2 JCL, GC28-0692

OS/VS2 System Programming Library: Handbook for Debugging, GC28-0632

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SUMMARY OF AMENDMENTS

August, 1978

Explanation of message IEW0234 has been expanded.

Corrections have been made to the suggested programmer response to messages IEW0532, IEW0694, and IEW0984.

LINKAGE EDITOR AND LOADER MESSAGES (IEW)

Program Producing Message: Loader program and linkage editor F program.

Audience and Where Produced: For programmer; diagnostic output listing in SYSPRINT data set.

Message Format: IEWnnns xxx—text

where:

nnn

Message serial number, which is coded to indicate the program:

0 *nn* Linkage editor program

1 *nn* Loader program

s

Severity code (linkage editor program):

- 0 Informational message: appears when control statement is printed as result of LIST option.
- 1 Warning message; condition may cause error during execution of output module; output module is marked executable.
- 2 Error message; condition may make execution of output module impossible; output module is marked not executable, unless LET option was specified; module processing is continued.
- 3 Error message; condition will make execution of output module impossible; output module is marked not executable; module processing is continued.
- 4 Error message; no recovery from error condition is possible; output module is not produced; module processing is terminated; only output is diagnostic messages.

Code (loader program severity code):

- 0 Condition that will not cause an error during execution of the loaded module.
 - 1 Condition that may cause an error during execution of the loaded module.
 - 2 Error that could make execution of the loaded module impossible. Processing continues.
 - 3 Error that will make execution of the loaded module impossible. Processing continues.
 - 4 Error condition from which no recovery is possible. Processing continues.
- I Information: No operator action is required.

xxx

WARNING or ERROR to indicate nature of message.

text

Message text.

Associated Publications: *OS/VS Linkage Editor and Loader*, GC26-3813.

Problem Determination: This is the activity required to identify a failing hardware unit or program and to determine who is responsible for maintenance.

Problem determination is accomplished by using procedures specified by IBM. In some cases, these procedures may be initiated by a message or code which requires operator or programmer response. The response may include the requirement for additional problem-related data to be collected and will attempt, where possible, to indicate "probable" failure responsibility.

Problem determination information is included for applicable messages and codes under the heading "Problem Determination." Standard problem determination actions are identified as items of Tables I and II, which follow. Unique actions are identified following the list of standard actions to be taken. In any case, it is intended that the specified actions be taken before calling IBM for support.

Problem Determination Table I

Note: If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support.

1. Make sure that MSGLEVEL=(1,1) was specified in the JOB statement.
2. Save the console sheet from the primary console. In systems with remote consoles, save the remote console sheet. In systems with Multiple Console Support (MCS), save a copy of the hardcopy log.
3. Save the job stream associated with the job.
4. Save the system output (SYSOUT) associated with the job.
5. Make sure that the failing job step includes a:
 - a. SYSABEND DD statement
 - b. SYSUDUMP DD statement
 - c. PL1DUMP DD statement
 - d. SYSMDUMP DD statement
6. Make sure that the PARM parameter of the EXEC statement specifies the following:
 - a. MAP
 - b. LIST
 - c. DIAG
 - d. MSG=AP
 - e. CORE, if applicable
 - f. XREF
 - g. DUMP
7. If SMP is used to make all changes to the system, execute the LIST CDS and LIST PTFBY functions of SMP to obtain a list of the current maintenance from the SMP control data set (CDS).

If any changes are made to the system without using SMP, execute the LISTIDR function of the service aid program HMBLIST for VS1 or AMBLIST for VS2, to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the:

 - a. SYS1.LINKLIB data set
 - b. SYS1.SVCLIB data set
 - c. library containing the program that issued the message
8. Execute the service aid program IMCJOBQD for VS1 or IMCOSJQD for VS2, to obtain a formatted copy of the contents of the SYS1.SYSJOBQE or SYS1.SYSWADS data sets, SWADS, or the resident job list.
9. Execute the service aid program HMBLIST for VS1 or AMBLIST for VS2, to obtain:
 - a. an object module listing, specifying the LISTOBJ function.
 - b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function.
10. Have a copy of the Message Control Program (MCP) available.
11. Execute the service aid program HMDSADMP for VS1 or AMDSADMP for VS2, to dump the contents of real storage and page data sets on magnetic tape.

After restarting the system, execute the GO function of the service aid program HMBPRDMP for VS1 or AMBPRDMP for VS2, to print the real storage portion of the dump tape produced by HMDSADMP for VS1 or AMDSADMP for VS2.

Save both the tape from HMDSADMP for VS1 or AMDSADMP for VS2, (should further information from the tape be required) and the listing from HMBPRDMP for VS1 or AMBPRDMP for VS2.
12. Execute the SEREP program, and save the resulting output.
13. Save all the associated output.
14. The normal response to this message requests the programmer/operator to execute a specific program. Save all output from that program.
15. Save the program listing associated with the job.
16. Save the dump.
17. Have the system generation (SYSGEN) output available from:
 - a. Stage I
 - b. Stage II
18. Execute the IFCEREP1 service aid program, specifying PARM=(N), to dump the SYS1.LOGREC data set. Save the resulting output.

For MSS, execute the following program to dump the SYS1.LOGREC data set:

 - a. Service aid IFCISDA0.
 - b. Program ISDASDA0 with the DETAIL(ALL) parameter.
19. Save the assembly listing associated with the job.
20. Save the control cards associated with the job.
21. Save the compiler output associated with the job.
22. Save the source input associated with the job.
23. Save the source program listing associated with the job.
24. Run OLTEP diagnostics for the problem device and save the output.
25. Execute the IEHLIST system utility program to obtain a list of the:
 - a. volume table of contents of the associated volume, specifying the FORMAT option.
 - b. volume table of contents of the associated volume, specifying the DUMP option.
 - c. directory of the associated data set.
 - d. system catalog.

26. Execute the IEBTPCH data set utility to print the:
 - a. directory of the applicable data set.
 - b. applicable data set.
 - c. applicable member.
 - d. applicable procedure.
27. Have the linkage editor/loader map available.
28. Save the associated volume.
29. Contact IBM for programming support.

Problem Determination Table II

GTF for Problem Determination

Format 1: Tracing without prompting for event keywords.

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message HHL100A for VS1 or AHL100A for VS2, he should type TRACE=opt, where opt is the trace option keyword indicated for the particular message or code, within the text of his reply.

When data for the problem has been recorded, run the service aid program HMDPRDMP for VS1 or AMDPRDMP for VS2, using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).

Format 2: Tracing with prompting for event keywords.

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to the message HHL100A for VS1 or AHL100A for VS2, he should specify the trace option keywords indicated for the associated message or code within the text of his reply. Then, in response to the message HHL101A for VS1 or AHL101A for VS2, he should specify the event keywords also indicated with the associated message or code.

When data for the problem has been recorded, run the service aid program HMDPRDMP for VS1 or AMDPRDMP for VS2, using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).

Format 3: Specialized tracing action.

Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message HHL100A for VS1 or AHL100A for VS2, he should type 'TRACE=SYS,USR'. The DD statement for a data set in error should specify DCB=DIAGNS=TRACE.

When data for the problem has been recorded, execute the EDIT function of HMDPRDMP for VS1 or AMDPRDMP for VS2, specifying the options SYS and USR=DMA.

Note: The external trace option of GTF requires 160K bytes of real storage if used with OS/VS1.

Linkage Editor Program Messages

IEW0000 (control statement)

Explanation: The control statement is printed as a result of the LIST option.

IEW0012 ERROR—INPUT CONTAINS INVALID TWO-BYTE RELOCATABLE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: A relocatable A-type or V-type address constant of less than three bytes has been found in the input.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Check assembler language input for V-type address constants, which cannot be relocated. Delete or correct the invalid address constant.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0022 ERROR—INPUT CONTAINS INVALID V-TYPE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: A V-type address constant of less than four bytes has been found in the overlay structure.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Either, (1) specify a length of four bytes for all V-type address constants; or (2) if a 3-byte V-type address constant refers to a symbol within its overlay segment, you can assemble it as an A-type address constant with an EXTRN statement. One method of isolating an invalid address constant is (1) linkage edit with OVLY and XREF options specified; (2) link edit again without the OVLY option; (3) compare the external reference lists. Any reference appearing in the second run and not the first is invalid in an overlay structure.

Problem Determination: Table I, items 6b, 6f, 22, 23, 29. Have the output used to isolate the address constant available.

IEW0033 ERROR—INVALID ENTRY POINT FROM END CARD, NO ENTRY POINT ASSIGNED.

Explanation: The entry point for the program was specified as a relative address in an END card. The entry point that was specified appeared to be valid when the END card was processed, however, the entry point was found to be invalid when the entry point of the load module was being determined.

System Action: No entry point is assigned.

Programmer Response: Check object module input for completeness. Then either specify an entry point name on the ENTRY control statement, or, if entry points were specified at compilation or assembly, make sure the object module containing the desired entry point precedes all other object modules with assembled or compiled entry points.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0043 ERROR—INPUT CONTAINS INVALID EXTERNAL SYMBOL ID.

Explanation: ESD card is probably mispunched.

System Action: The invalid item is ignored.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic IEW0043 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 6b, 6f, 9a, 9b, 29. Have available the output used to isolate the module as described above.

IEW0053 ERROR—ENTRY STATEMENT SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an ENTRY statement is not a control section or entry name.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Correct the ENTRY control statement, or make sure that the control section containing the entry point is included in the input and has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0063 ERROR—END CARD SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an END statement is not a control section or entry name.

System Action: No entry point is assigned.

Programmer Response: Check that the entry point control section or entry name has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement. Check the module containing the entry point for completeness.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0073 ERROR—ENTRY STATEMENT SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point specified by the programmer is in a segment other than the root segment. Either, (1) the module containing the entry point was placed in a segment other than the root segment by means of the INSERT statement, or (2) the entry point is incorrectly specified on the ENTRY statement.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Either correct the ENTRY control statement, or move the module containing the entry point to the root segment.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0083 ERROR—END CARD SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either, (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the symbol specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0093 ERROR—END CARD ENTRY POINT ADDRESS PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either, (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the address specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6b, 6f, 9a, 13, 29. Save the object module input.

IEW0102 ERROR—INVALID ENTRY POINT ON END CARD, ENTRY, POINT IGNORED.

Explanation: A possible entry point for the program was specified as a relative address in an END card. When the END card was processed, the control section identification of the specified entry point was found to be invalid.

System Action: The entry point is ignored. The first valid entry point encountered is used; if there is none, no entry point is assigned.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0102 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 3, 6b, 6f, 9a, 13, 29. Have available the output used to isolate the module.

IEW0113 ERROR—OUTPUT MODULE CONTAINS NO CONTROL SECTIONS IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: There are no control sections in the root segment. Either, (1) all control sections originally in the root segment have been deleted, or (2) there were no control sections originally in the root segment, or (3) an OVERLAY statement preceded the input.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Place at least one control section in the root segment.

Problem Determination: Table I, items 6b, 6f, 9b, 29. Save a root segment module and its associated listings.

IEW0123 ERROR—NO ESD ENTRIES, EXECUTION IMPOSSIBLE.

Explanation: There are no external symbol dictionary entries. There are no control sections in the output.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check other messages issued for cause of error (i.e., invalid input from object module). Insure that at least one control section appears in the input and is not deleted by the REPLACE control statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9a, 13, 22, 23, 29.

IEW0132 ERROR—SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE.

Explanation: An external reference is unresolved at the end of input processing. None of the following is specified: restricted no-call, never-call, or NCAL.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Check that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the needed module or alias to one of the input data sets. Make sure the SYSLIB data set DD statement has been specified, if needed. If resolution is not desired, specify NCAL, never-call, or restricted no-call. If the reference was found in a control section replaced by another control section not containing that same reference, delete the reference, or specify NCAL, never-call, or restricted no-call.

Problem Determination: Table I, items 1, 6b, 6f, 9b, 13, 22, 23, 25c, 29.

IEW0143 ERROR—NO TEXT.

Explanation: No text remains in the output module. Either, (1) all the control sections originally in the input are deleted, or (2) there are no control sections that originally contained text.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check other messages issued for cause of error (i.e., invalid input from object module). Insure that at least one control section contains text and is not deleted by the REPLACE control statement or by automatic replacement.

Problem Determination: Table I, items 1, 6b, 6f, 9a, 9b, 13, 29. Save a module containing text.

IEW0152 ERROR—INVALID OVERLAY STRUCTURE, NO CALLS OR BRANCHES MADE FROM ROOT SEGMENT.

Explanation: There are no calls or branches from the root segment to a segment lower in the tree structure. Other segments cannot be loaded.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Make sure the root segment contains a control section that refers to at least one other segment in the overlay structure by means of a V-type address constant.

Problem Determination: Table I, items 1, 6b, 6f, 9b, 13, 29. Have a root segment module which calls another segment available with its associated listing.

IEW0161 WARNING—EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED—XCAL WAS SPECIFIED.

Explanation: There is a valid exclusive branch-type reference; the XCAL option is specified for this job step.

System Action: Processing continues.

Programmer Response: No response is necessary normally. You can check that the printed branch-type references between exclusive segments are correct according to your overlay structure.

Problem Determination: If you suspect that the message fails to appear when it should or appears incorrectly, see Table I, items 6b, 6f, 9b, 29. Have modules that contain the calls and symbol available with associated source listings.

IEW0172 ERROR—EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: A valid branch-type reference is made from a segment to an exclusive segment; the XCAL option is not specified.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either, (1) rearrange the overlay structure to place both segments in the same path, or (2) specify the XCAL option.

Problem Determination: Table I, items 6b, 6f, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0182 ERROR—INVALID EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: There is an invalid exclusive branch-type reference from a segment to a symbol in an exclusive segment.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either, (1) place the segments in the same path, or (2) place a V-type address constant in a common segment.

Problem Determination: Table I, items 6b, 6f, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0191 WARNING—MAIN STORAGE REQUIREMENTS FOR OUTPUT LOAD MODULE HAVE EXCEEDED 512K BYTES.

Explanation: With MFT, a request block (RB) will not accommodate an address greater than 524,287.

System Action: Processing continues. The output load module will run only under MVT, VS1, or VS2.

Programmer Response: Probable user error. If the program is to be run under MFT divide the load module into several load modules that are dynamically loaded by assembler language macro instruction.

Problem Determination: Table I, items 6b, 6f, 13, 29.

IEW0201 WARNING—OVERLAY STRUCTURE CONTAINS ONLY ONE SEGMENT—OVERLAY OPTION CANCELLED.

Explanation: There are no OVERLAY statements in the input.

System Action: The overlay option is canceled.

Programmer Response: Probable user error. Either place OVERLAY statements in the input, or remove the OVLY option from the EXEC statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9b, 13, 29.

IEW0212 ERROR—EXPECTED CONTINUATION CARD NOT FOUND.

Explanation: A linkage editor control statement specifying a continuation (nonblank in column 72) is not followed by a continuation card.

System Action: The card is not processed as a continuation, but as normal input.

Programmer Response: Probable user error. Either remove the nonblank character in column 72 or insert the necessary continuation record.

Problem Determination: Table I, items 6b, 6f, 13, 29.

IEW0222 ERROR—CARD PRINTED CONTAINS INVALID INPUT FROM OBJECT MODULE.

Explanation: One of the following occurred during the processing of an object module:

A record of invalid type was encountered.

A text (TXT) record was encountered in which the data length (columns 11-12) is invalid or mispunched.

An invalid, probably mispunched, RLD record was encountered in an object module.

System Action: The record in error is ignored and processing continues.

Programmer Response: (1) Remove all extraneous records from the input to the linkage editor. (2) Insure that linkage editor control statements are placed either before or after object modules. (3) Insure that all records in the object module have a 12-2-9 punch in column 1. (4) Insure that all records in the object module contain one of the following in

columns 2-4: ESD, SYM, TXT, RLD, or END. (5) Locate the TXT or RLD record having the invalid or mispunched data; regenerate the object module or investigate the punching device or generating processor for malfunctions.

Problem Determination: Table I, items 6b, 6f, 22, 29.

IEW0234 ERROR—INPUT FROM LOAD MODULE IS INVALID.

Explanation: In the order of probability, either (1) a text record was encountered in an input load module that is larger than the load module buffer; (2) a CSECT identification record (IDR) was encountered in an input load module (applicable only if a version of the linkage editor earlier than OS Release 21.0 is being used); (3) the member being read does not contain a valid load module; or (4) the region size specified was too small to contain the largest load module.

System Action: The erroneous record is ignored and processing continues. The output load module is marked not executable. In case (4), operation is terminated.

Programmer Response: In case (1), specify value₂ of the SIZE parameter as a number equal to or greater than the size of the largest text record in any input load module and rerun the job step. Value₂ must be equal to or greater than one-half the value₂ specified in the link-edit of any input load module. In case (2), obtain a later version of the linkage editor that supports IDRs and rerun the job step. In case (3), check that all input data sets are specified correctly on the DD statements. If load module input occurs in the primary input, rerun the job step with the NCAL option specified. If error message IEW0234 recurs, the incorrect load module is in primary input; otherwise, it is in SYSLIB input. Isolate the incorrect load module by executing the linkage editor with INCLUDE and NAME statements for each suspected load module. When the incorrect load module is isolated, recreate it and rerun the job step. In case (4), correct the region size, and resubmit the job.

If the problem recurs, do the following before calling IBM for programming support:

- If an incorrect load module was created, execute the service aid program HMBLIST for VS1 or AMBLIST for VS2, using the OUTPUT=MODLIST option of the LISTLOAD function, and save the resultant listing.
- Make sure that the XREF and LIST options were specified for the failing job step.

Problem Determination: Table I, items 6b, 6f, 13, 29.

IEW0241 WARNING—EXTERNAL SYMBOL PRINTED IS DOUBLY DEFINED—ESD TYPE DEFINITIONS CONFLICT.

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

System Action: References to the name are resolved with respect to the first occurrence of the name.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, execute the following functions of the service aid program HMBLIST for

VS1 or AMBLIST for VS2. Load module symbols can be printed using the LISTLOAD function, specifying the OUTPUT=XREF option. Object module symbols can be printed using the LISTOBJ function of the service aid program.

Problem Determination: Table I, items 6b, 6f, 14, 22, 29.

IEW0254 ERROR—TABLE OVERFLOW—TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: There are too many external symbols or control statement operands in the problem program.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check that no unnecessary modules or control statements are included in the input. Then, either (1) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter, making sure the region or partition size is also increased, if necessary; or (2) reduce the number of external symbols in the input (control sections, entry points, and named common areas).

Problem Determination: Table I, items 6b, 6f, 29.

IEW0264 ERROR—TABLE OVERFLOW—INPUT MODULE CONTAINS TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: Either, (1) an input module contains too many external symbols in the ESD, or (2) an ESD card is mispunched.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check that input object modules are complete and not mispunched. Then either (1) break down any large input module into a number of smaller modules, or (2) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter making sure the region or partition size is also increased, if necessary.

Problem Determination: Table I, items 6b, 6f, 9a, 29.

IEW0272 ERROR—LOAD MODULE FROM LIBRARY SPECIFIED UNACCEPTABLE.

Explanation: When the load module was created, it was marked not editable.

System Action: The load module was not accepted as input.

Programmer Response: Probable user error. If the module is unacceptable because it is marked not-editable, it must be recreated before it can be input to the linkage editor. Execute the IEHLIST utility program, using the LISTPDS function with the FORMAT option, to print out the module's directory entry and show the noneditable indicator.

Problem Determination: Table I, items 6b, 6f, 29.

IEW0284 ERROR—DDNAME PRINTED CANNOT BE OPENED.

Explanation: The specified data set cannot be opened. The DD statement defining the data set is missing.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) supply the missing DD statement, or (2) correct erroneous information on the DD statement. If the linkage editor was invoked by a macro instruction such as LINK rather than through the EXEC statement, make sure the ddname list, if passed, was correct.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, format 3.

IEW0294 ERROR—DDNAME PRINTED HAD SYNCHRONOUS ERROR.

Explanation: Either, (1) a physical uncorrectable I/O error occurred, or (2) an object module is missing an END card as the last card, or (3) if the data definition name that was printed is for a DD statement that defines a blocked input data set of fixed format, an input record larger than the specified blocksize or logical record length was found or (4) the data set may be too full for STOW to write an EOF mark.

System Action: Processing is terminated. The data definition name in the name field of the DD statement for the input data set was printed after the message code. If an input/output error occurred, the information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD EXIT, jobname, stepname, unit address, device type, ddname, operation attempted, error description, block count or BBCCHHR, access method.

Programmer Response: For any fixed format, specify the correct blocksize. If the blocksize was correct and the data set was an input data set, recreate or restore the data set. For condition (4) compass the data set and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEW0302 ERROR—INVALID STATEMENT—SCAN TERMINATED.

Explanation: Either, (1) there is an error on a linkage editor control statement, or (2) an OVERLAY control statement was encountered and the OVLY attribute was not specified on the EXEC statement.

System Action: A statement in error is accepted as input up to the point of the error; the OVERLAY statements are ignored and the module is not in overlay format.

Programmer Response: Probable user error. Either, (1) correct the error, if necessary, or (2) specify OVLY on the EXEC statement.

Problem Determination: Table I, items 1, 6b, 6f, 3, 13, 29.

IEW0314 ERROR—MAXIMUM NUMBER OF REGIONS (4) EXCEEDED.

Explanation: There are five or more regions specified in this overlay structure.

System Action: Processing is terminated.

Programmer Response: Probable user error. Reduce the number of regions in the overlay structure to four.

Problem Determination: Table I, items 6b, 6f, 29.

IEW0324 ERROR—MAXIMUM NUMBER OF SEGMENTS EXCEEDED.

Explanation: The number of segments exceeded 256.

System Action: Processing is terminated.

Programmer Response: Reduce the number of segments in the overlay structure to 256, or less.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0332 ERROR—MAXIMUM NUMBER OF ALIASES (16) EXCEEDED, EXCESS IGNORED.

Explanation: More than sixteen aliases were specified for the output load module.

System Action: The excess aliases are ignored.

Programmer Response: Probable user error. Either, (1) reduce the number of aliases, or (2) create a second copy of the module under a different name with the additional aliases specified.

Problem Determination: Table I, items 6b, 25b, 29.

IEW0342 ERROR—LIBRARY SPECIFIED DOES NOT CONTAIN MODULE.

Explanation: The module or alias name specified on an INCLUDE or LIBRARY control statement was not found in the specified library.

System Action: Any references to the module are not resolved. The output load module is marked not-executable unless the LET option has been specified.

Programmer Response: Probable user error. Correct the library or module name on the DD, INCLUDE or LIBRARY control statement.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 25b, 29.

IEW0354 ERROR—TABLE OVERFLOW—TOO MANY CALLS BETWEEN CONTROL SECTIONS.

Explanation: There are too many V-type address constants referring to external symbols in a program that is being structured in overlay. The table recording these V-type address constants has overflowed.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) increase The linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter, making sure the region or partition size is also increased, if necessary; or, (2) reduce the number of V-type address constants by combining control sections; or (3) change V-type address constants that do not refer across segments to A-type address constants with EXTRN statements.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0364 ERROR—TABLE OVERFLOW—INPUT TEXT EXCEEDED MAXIMUM OR TOO MANY CHANGES OF ORIGIN IN INPUT.

Explanation: Either, (1) the text of a single CSECT exceeds 512 times the blocksize for the SYSUT1 or SYSLMOD data set, or (2) the internal tables used by the linkage editor to account for the text of a load module have overflowed due to discontinuities in the input text or the division of the text into pieces equal to the blocksize for the SYSLMOD data set.

System Action: Processing is terminated.

Programmer Response: Probable user error. In case (1), insure that the record length for the output load module is greater than the length of the longest input CSECT divided by 512. In case (2), (a) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter, making sure the region or partition size is also increased if necessary; or (b) increase the linkage editor's buffer space by increasing both value₁ and value₂ of the SIZE parameter, making sure the region or partition size is increased proportionally; or (c) reduce the number of ORG statements specified in assembler language routines; or (d) break down the step into a number of link-edits, performing only part of the necessary linkage function in each successive step; or (e) verify that all input object modules have ESD records.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0374 ERROR—TABLE OVERFLOW—INPUT CONTAINS TOO MANY RELOCATABLE ADDRESS CONSTANTS OR TOO MANY CONTROL SECTIONS CONTAINING SUCH CONSTANTS.

Explanation: Either, (1) there are too many control sections with relocation dictionaries, or (2) there are too many relocatable address constants.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter making sure the region or partition size is also increased, if necessary; or (2) reduce the number of relocatable address constants in the input. (One method is to assemble the coding of two or more control sections into one control section.)

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0382 ERROR—TEXT RECORD ID IS INVALID, CARD IGNORED.

Explanation: The ID of the text record refers to an invalid external symbol dictionary entry; i.e., it does not refer to a section definition entry or a private code entry. The input deck may be out of sequence or incomplete.

System Action: The record is ignored. Processing continues.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic

IEW0382 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 6b, 6f, 9a, 9b, 13, 29. Have available the output used to isolate the module as indicated above.

IEW0394 ERROR—MEMBER NOT STORED IN LIBRARY—PERMANENT DEVICE ERROR.

Explanation: This is either an input/output error or no space was allocated for the library directory.

System Action: Processing terminates.

Programmer Response: Check the SYSLMOD data set to make sure it is a partitioned data set with space allocated for a directory. If necessary, restore the library to a different volume, and rerun the job. Execute the IEHLIST utility program, using the LISTVTOC function to print out the Data Set Control Block for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 13, 29. Have the output from a run with the library on a different volume available.

IEW0404 ERROR—MEMBER NOT STORED IN LIBRARY—NO SPACE LEFT IN DIRECTORY.

Explanation: All the directory blocks allocated when the output data set was created have been used.

Programmer Response: Probable user error. Either, (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it; or (2) use a utility program to copy the library, allowing for more directory entries. Edit the member into the new library. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the Data Set Control Block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0412 ERROR—ALIAS NOT STORED IN LIBRARY—NO SPACE LEFT IN DIRECTORY.

Explanation: All directory blocks allocated when the output data set was created have been used.

System Action: The ALIAS is not stored in the specified library; however, the member can be referred to by the member name.

Programmer Response: Probable user error. Either, (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it, or (2) use a utility program to copy the entire library (except the member whose alias was not stored), and allow for more directory entries. Edit the member into the new library. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the Data Set Control Block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0421 WARNING—MEMBER NOT STORED IN LIBRARY—IDENTICAL NAME IN DIRECTORY, WILL TRY TO STORE UNDER 'TEMPNAME'.

Explanation: The output module name has been used previously in the library. The replace function is not specified.

System Action: An attempt is made to store the output module into the library under the name TEMPNAME.

Programmer Response: Probable user error. Either, (1) reprocess, using a different name in the SYSLMOD DD statement or NAME statement, or (2) reprocess, and specify the replacement function for the name originally specified in the SYSLMOD DD statement or the NAME statement. Execute the IEHLIST utility program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0432 ERROR—LIBRARY NAME PRINTED CANNOT BE OPENED, DD CARD MAY BE MISSING.

Explanation: The DD statement that defines the library is probably missing. This message also results when a sequential data set (encountered in the processing of an INCLUDE statement) cannot be opened.

System Action: Processing continues without input from the specified library.

Programmer Response: Probable user error. Either supply the missing DD statement, or correct erroneous information on the DD statement. Execute the IEHLIST utility program using the LISTVTOC statement to print out the Data Set Control Block for the data set that can't be opened.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Table II, format 3.

IEW0444 ERROR—TABLE OVERFLOW—TOO MANY DOWNWARD CALLS.

Explanation: There are too many V-type address constants that refer to segments lower in the tree structure.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter, making sure the region or partition size is also increased if necessary; or (2) use an overlay structure with fewer segments.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0454 ERROR—TABLE OVERFLOW—SEGMENT CONTAINS TOO MANY DOWNWARD CALLS.

Explanation: One segment in the overlay structure contains too many V-type address constants that refer to segments lower in the tree structure. The maximum is determined by the size of an output load module record.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) increase the size of an output load module record by specifying SYSLMOD as a library with a larger blocksize, or (2) incorporate some of the called control sections in the requesting segment, or (3) divide the requesting segment into two or more segments.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0461 WARNING—SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

Explanation: The NCAL option, restricted no-call, or never-call function was specified for the external reference.

System Action: The automatic library call mechanism does not attempt to resolve the external reference.

Programmer Response: No response is necessary normally. Check that the reference is valid and not the result of a keypunch or programming error. If you wish the reference resolved, either (1) add the needed module to the primary or included input data sets; (2) remove the NCAL option, if specified; (3) remove the LIBRARY statement specifying restricted no-call or never-call; or (4) if an input load module contained a never-call reference, recreate the load module without specifying never-call.

Problem Determination: Table I, items 1, 3, 6b, 6f, 9, 13, 29. Have available each object module that contains a call to the reference, and the associated source listing.

IEW0472 ERROR—INVALID ALIAS ENTRY POINT IN OVERLAY STRUCTURE.

Explanation: The specified alias entry point is not in the root segment.

System Action: The entry point for the member name is used.

Programmer Response: Probable user error. Respecify the alias, entry point, or overlay structure.

Problem Determination: Table I, items 6b, 6f, 9, 29. Have the module containing the alias entry point and its associated listing available.

IEW0484 ERROR—TABLE OVERFLOW—TOO MANY EXTERNAL SYMBOLS AFFECTED BY RELOCATION.

Explanation: There are too many symbols being relocated.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either, (1) increase the linkage editor's table space by increasing value₁ (or decreasing value₂) of the SIZE parameter making sure the region or partition size is also increased if necessary; or (2) break down the step into a number of link edits, performing only part of the necessary editing function in each successive step.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0492 ERROR—NAME CARD FOUND IN LIBRARY, CARD IGNORED.

Explanation: A NAME statement has been encountered in an included data set or an automatic call library. NAME statements may be placed only in the primary input.

System Action: The record is ignored. Processing continues.

Programmer Response: Remove the NAME statement from the library or sequential data set. Reprocess if the load module is incorrect. Execute the IEBPTPCH utility program or print out all included and automatic call library modules.

Problem Determination: Table I, items 1, 3, 6b, 6f, 13, 29.

IEW0502 ERROR—ALIAS NOT STORED IN LIBRARY—PERMANENT DEVICE ERROR.

Explanation: The alias could not be stored in the library directory because of an input/output error.

System Action: The load module has already been stored.

Programmer Response: Execution of the module is possible using the member name or aliases already stored. The module can be link edited again with the new alias specified. If message IEW0502 appears again, restore the library to a different volume and rerun. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the Data Set Control Block and directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Have the output from a run with the library on a different volume available.

IEW0512 ERROR—INCLUDE STATEMENT SYNTAX CONFLICTS WITH RECORD FORMAT OF SPECIFIED DATA SET—DD NAME PRINTED.

Explanation: The INCLUDE statement syntax conflicts with the characteristics of the data set specified on the DD statement.

System Action: The specified module is ignored.

Programmer Response: Probable user error. Either, (1) specify a member name on the INCLUDE or DD statement if the data set is partitioned; or (2) remove all member names from the INCLUDE statement if the data set is not partitioned. Execute the IEHLIST utility program using the LISTVTOC statement to print out the Data Set Control Block for the specified data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0522 ERROR—SPECIFIED DATA SET HAS UNACCEPTABLE RECORD FORMAT—DDNAME PRINTED.

Explanation: The record format of the specified data set is not type U or F and cannot be processed by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Correct the data set specification. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the Data Set Control Block for the rejected data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0532 ERROR—BLOCKSIZE OF LIBRARY DATA SET EXCEEDED MAXIMUM—DDNAME PRINTED.

Explanation: The blocksize of the specified library data set cannot be handled by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Either, (1) decrease the blocksize of the data set, (2) rerun in a larger region or partition, (3) increase value₂ of the SIZE parameter to allow for larger buffers, and increase value₁ and region size accordingly, if necessary. Execute the IEHLIST utility

program, using the LISTVTOC statement to print out the Data Set Control Block for the specified data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0543 ERROR—IDENTICAL NAME IN DIRECTORY.

Explanation: The member name already exists in the directory. In the case of a member, an attempt was made to store under TEMPNAME; however, TEMPNAME was also found in the directory.

System Action: The output module is not stored under this member name.

Programmer Response: Probable user error. Either, (1) specify a unique member name for the module on the NAME control statement or the SYSLMOD DD statement, or (2) specify the replace function on the NAME statement. Execute the IEHLIST utility program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

Problem Determination: Table I, items 1, 3, 6b, 13, 29.

IEW0552 ERROR—COMMON PRINTED EXCEEDED SIZE OF CONTROL SECTION WITH IDENTICAL NAME.

Explanation: A named common area has been encountered which is larger than a control section with the same name.

System Action: The linkage editor uses the length specified for the control section. Processing continues.

Programmer Response: Ensure that no named common area is larger than the control section initializing it. FORTRAN programmers should make sure that any named COMMON in a BLOCK DATA subprogram is at least as large as any named COMMON with the same name in any other FORTRAN program or subprogram with which the BLOCK DATA subprogram is to be link edited. To isolate the problem, you can run the step with the NCAL option specified. If the error recurs, the long common occurs in the primary data set or an included data set. Otherwise it occurs in a module from the automatic call library. In either case, execute the following functions of the service aid program HMBLIST for VS1 or AMBLIST for VS2. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XREF option to list all load module symbols in the appropriate input data sets. Check the listings for all modules which contain the named common in question and correct the lengths.

Problem Determination: Table I, items 6b, 6f, 14, 29.

IEW0564 ERROR—INVALID TEXT ORIGIN—LINKAGE EDITOR PROCESSING TERMINATED

Explanation: Text has been found that has an origin address outside the limits of the control section to which it belongs.

System Action: Processing is terminated.

Programmer Response: A text record in an object module input to the link-edit has an invalid text origin address, probably mispunched. Using the LISTOBJ function of the service aid HMBLIST (for VS1) or AMBLIST (for VS2), list the object module. Examine the ADDR= field of the TXT records to locate the invalid address. Recreate the object module, then re-attempt the link-edit.

Problem Determination: Table I, items 3, 4, 9a, 27, 29.

**IEW0572 ERROR—COMMON PRINTED AND
SUBROUTINE HAVE IDENTICAL NAME.**

Explanation: This message appears only when the linkage editor is processing an object program originally written in FORTRAN. It is issued when a common defined in the program has the same name as a subprogram.

System Action: Processing continues. The output module is marked not executable unless the LET option is specified.

User Response: Change the name of either the common or the subprogram so that the names are no longer the same. Compile and link edit the program again.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29. Save the linkage editor output listing.

**IEW0581 WARNING—INVALID MEMBER NAME—WILL
TRY TO STORE UNDER 'TEMPNAME'.**

Explanation: The member name to be assigned to the output load module was taken from the SYSLMOD DD statement, but the name was found to be invalid.

System Action: An attempt is made to store the output module into the library under the name TEMPNAME.

Programmer Response: Correct the member name on the SYSLMOD DD statement to conform to the rules for a name on the NAME control statement.

Problem Determination: Table I, items 1, 3, 4, 6b, 27, 29.

**IEW0594 ERROR—INPUT DATA SET BLOCKSIZE IS
INVALID.**

Explanation: The blocksize for the primary input data (SYSLIN) is not an even multiple of the logical record length, or exceeds the allowable maximum.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Determine whether the values specified in the SIZE parameter are sufficient to accommodate the blocking factor of the primary input data set (SYSLIN). Blocking factors are discussed in the "SIZE Option" section of *OS/VS Linkage Editor and Loader*. If the SIZE values are not large enough, increase them and execute the linkage editor step again. The region for the job step must be large enough to allow the size values specified, as described in "EXEC Statement—REGION Parameter," in the linkage editor manual. If the region is not large enough, increase the REGION parameter before executing the linkage editor step again.

If the blocking factor is greater than 40 to 1 or is not a multiple of the logical record length, correct the BLKSIZE field, or recreate the data set, or both. Execute the linkage editor step again. If possible, execute the IEHLIST utility program, using the LISTVTOC statement to print out the Data Set Control Block for the specified data set.

Problem Determination: Table I, items 1, 3, 13, 29.

**IEW0602 ERROR—INPUT FROM OBJECT MODULE IS
INVALID—END CARD MISSING.**

Explanation: The END card of an object module being processed by the linkage editor is missing.

System Action: Linkage editor processing continues. The load module produced is marked not executable unless the LET option has been specified.

Programmer Response: If input to the linkage editor was in the form of an object deck, verify that the last card is an END card (END in columns 2, 3, and 4). If the card is not an END card, recompile or reassemble the source program. If input to the linkage editor was not in the form of an object deck, recompile or reassemble the source program with the DECK option specified.

In either case, verify that the last card is an END card. Rerun the linkage editor step using the object deck. Execute the service aid program HMBLIST for VS1 or AMBLIST for VS2, using the LISTOBJ function and save the resulting listing of the questionable object module.

Problem Determination: Table I, items 1, 3, 13, 22, 23, 29.

**IEW0614 ERROR—LENGTH NOT SPECIFIED FOR
EXTERNAL SYMBOL PRINTED.**

Explanation: An object module contained a control section that had a length field containing zero in its external symbol dictionary (ESD) entry, and either (1) the control section was not last in the object module or (2) the length was not specified on the END card.

System Action: The module was not processed, and the linkage editor terminated processing.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0614 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 3, 6b, 6f, 9, 13, 22, 23, 29.

**IEW0622 ERROR—ADDRESS CONSTANT REFERENCES
NULL UNNAMED CONTROL SECTION**

Explanation: An address constant has been found that references a symbol defined in an unnamed control section having a length of zero.

System Action: The processing of the input RLD record is terminated at the invalid item. Processing resumes with the next record.

Programmer Response: Either recreate the input (referencing) module, eliminating or changing the reference, or recreate the referenced module, eliminating or redefining the symbol being referenced.

Problem Determination: Table I, items 1, 3, 4, 9, 23, 27, 29.

IEW0630 ERROR—DDNAME PRINTED HAD SYNCHRONOUS ERROR—XREF ABORTED.

Explanation: A permanent input/output error occurred while attempting to produce a cross-reference table. The output module was successfully edited.

System Action: The information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD EXIT, jobname, stepname, unit address, device type, ddname, operation attempted, error description, block count or BBCCHHR, access method.

Programmer Response: Rerun the linkage editor step. If possible, execute the IEHLIST utility program using the LISTVTOC function to print out the Data Set Control Block for the data set specified in the SYNAD output.

Problem Determination: Table I, items 1, 3, 13, 29. Save the output from the SYNADAF macro instruction.

IEW0642 ERROR—SYMBOL PRINTED APPEARED ON CONTROL STATEMENT BUT WAS NOT MATCHED.

Explanation: Either, (1) a control section name or common name appearing on an ORDER or PAGE control statement was not found in the primary or additional input sources; or (2) alignment or sequencing of a label reference (such as FORTRAN ENTRY statement) was specified.

System Action: The name is ignored. Processing continues.

Programmer Response: Probable user error. Either, (1) include the specified control section or common area in the input or delete the name from the control statement; or (2) verify that only control section or common area names are specified on the control statement.

Have available the job stream and associated output listings.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29.

IEW0652 ERROR—CONFLICT IN ORDER SPECIFIED FOR SYMBOL PRINTED.

Explanation: A control section or common area was named more than once on one or in a series of ORDER statements. After a name appears once, any subsequent use of the name is invalid unless the name appears as the last operand on one ORDER statement and the first operand on the next.

System Action: The first use of the name determines the order of the control section or common area in the output load module. Any subsequent use of the name is ignored, as is the balance of the control statement it appears on. Any control sections or common areas named on the balance of the statement are included in the output load module but are not sequenced. Linkage editor processing continues.

Programmer Response: Probable user error. Correct the ORDER statement so the name appears only once or appears as the last operand on one statement and the first operand on the next.

Problem Determination: Table I, items 3, 6b, 6f, 13, 29.

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

Explanation: The linkage editor has added the data specified on the IDENTIFY control statement to the IDR record for the control section indicated.

System Action: Processing continues.

Programmer Response: None. This message is for information only.

IEW0682 ERROR—CONTROL SECTION NAME ON AN IDENTIFY CONTROL STATEMENT IS INCORRECT OR THE STATEMENT IS MISPLACED—IDENTIFY DATA IGNORED.

Explanation: The control section named on the IDENTIFY control statement either (1) does not exist in the load module, or (2) had not been read in by the linkage editor by the time it encountered the IDENTIFY statement.

System Action: The data specified on the IDENTIFY statement is ignored. Linkage editor processing continues.

Programmer Response: Probable user error. Check the IDENTIFY statement to verify that the control section name has been specified correctly and that the IDENTIFY statement has been placed correctly in the input. Verify that the required control section has been included in the input to the linkage editor step. Correct the input and rerun the linkage editor step.

Problem Determination: Table I, items 1, 3, 6a, 6b, 6f, 13, 29.

IEW0694 ERROR—TABLE OVERFLOW—SIZE VALUE SPECIFIED NOT LARGE ENOUGH FOR CSECT IDR INPUT—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: The space available for CSECT identification records was insufficient for the actual input.

System Action: Linkage editor processing terminates.

Programmer Response: Rerun the link edit, increasing the space available to the linkage editor by increasing value₁ (or decreasing value₂, or both) of the SIZE option or the region or partition size. If this fails, divide the link edit into two or more smaller link edits.

Problem Determination: Table I, items 1, 6b, 6f, 29.

IEW0704 UNRECOVERABLE ERROR DETECTED IN CSECT IDR INPUT—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: An unrecoverable error was detected while processing an input module containing CSECT Identification (IDR) records. The cause of the error was a load module IDR record that contained an invalid code in its subtype field (the third byte of the record).

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Examine all data sets containing input load modules. Check all secondary input sources (either defined by the SYSLIB DD statement or specified on an INCLUDE statement). If any user modifications were made to any record other than text in any of these modules, recreate any affected modules from the source or object level and execute the linkage editor step.

again. Execute the LISTLOAD function of the service aid program HMBLIST for VS1 or AMBLIST for VS2, specifying the OUTPUT=BOTH option to list all load modules in the input to the linkage editor. Execute the service aid program HMBLIST for VS1 or AMBLIST for VS2, with the LISTIDR function to list CSECT IDR records for all members of the SYS1.LINKLIB data set which was cataloged on the system at the time of the error.

Problem Determination: Table I, items 1, 3, 6b, 13, 22, 29.

IEW0714 ERROR—MEMBER NOT STORED IN LIBRARY—STOW WORKSPACE UNAVAILABLE.

Explanation: The conditional GETMAIN macro instruction issued by the STOW routine to obtain work space in virtual storage was unsuccessful (that is, not enough contiguous virtual storage was available).

System Action: The member is not stored in the specified library; linkage editor processing is terminated.

Programmer Response: Rerun the linkage editor job step. The error may be a temporary one caused by fragmentation of virtual storage. If the problem persists, check for user-written programs or user-written SVC (supervisor call) routines that may be executing concurrently with the linkage editor and causing virtual storage fragmentation, as would occur when a GETMAIN macro is issued without a FREEMAIN in an uncontrolled loop.

Problem Determination: Table I, items 1, 2, 3, 13, 29. Table II, format 1, using TRACE=SVC.

IEW0722 ERROR—INVALID ALIAS NAME.

Explanation: An ALIAS name has been specified that either does not begin with an alphabetic character, \$, #, @, or 12-0 punch, or contains a character that is not alphanumeric, \$, #, @, or 12-0 punch.

System Action: The ALIAS name is ignored.

Programmer Response: Correct the invalid character(s) in the ALIAS name according to the rules above and rerun the link-edit job step.

Problem Determination: Table I, items 3, 4, 6b, 20, 27, and 29.

IEW0731 WARNING—ALIAS MATCHES MEMBER NAME—ALIAS IGNORED.

Explanation: An ALIAS name has been specified that duplicates the member name of the output load module.

System Action: The ALIAS name is ignored.

Programmer Response: Either (1) delete the ALIAS name, or (2) make the ALIAS name unique.

IEW0740 THE INDICATED ACTION WAS TAKEN FOR AN EXPAND REQUEST

Explanation: The linkage editor has increased the size of a control section or named common section by the number of bytes specified in an EXPAND control statement. Details of the expansion are provided in the message text that appears immediately following the EXPAND control statement.

System Action: Processing continues.

Programmer Response: None. This message is for information only; no error has occurred and no response is required.

IEW0984 ERROR—SYSPRINT BLOCKSIZE EXCEEDS MAXIMUM—LINKEDIT PROCESSING TERMINATED.

Explanation: The blocksize specified for the SYSPRINT data set cannot be handled by the linkage editor.

System Action: The data set is not opened. Linkage editor processing terminates.

Programmer Response: Probable user error. Either, (1) decrease the blocksize of the data set, or (2) decrease value₂ of the SIZE option to allow for a larger SYSPRINT buffer, and increase value₁ accordingly, if necessary. Increase the region or partition size correspondingly, if necessary. Rerun the linkage editor step. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the Data Set Control Block for the SYSPRINT data set.

Problem Determination: Table I, items 1, 3, 13, 29.

IEW0994 ERROR—SYSPRINT DD CARD MISSING—LINKAGE EDITOR PROCESSING TERMINATED.

Explanation: The SYSPRINT data set cannot be opened.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. The SYSPRINT DD statement is probably missing. Supply the missing SYSPRINT DD statement, and execute the job step again.

Problem Determination: Table I, items 1, 3, 7a (SYS1.LINKLIB), 96, 13, 29. Table II, format 3.

Loader Program Messages

IEW1001 WARNING—UNRESOLVED EXTERNAL REFERENCE (NOCALL SPECIFIED).

Explanation: The NCAL, NOCALL, or NORES option or never-call function was specified for the external reference.

System Action: The SYSLIB data set is not searched if the NCAL or NOCALL option has been specified. The Link Pack Area queue is not searched if the NORES option has been specified. Neither the SYSLIB data set nor the Link Pack Area queue are searched if the ER is marked 'never-call' from a previous Linkage Editor run.

Programmer Response: No response is necessary normally. If you wish the reference resolved, either (1) add the needed module to the SYSLIN input data set; (2) remove the NOCALL, NCAL, or NORES option, if specified; or (3) if an input load module contained a never-call reference, recreate the load module without specifying never-call. Run the failing step using the linkage editor instead of loader and save the resulting output.

Problem Determination: Table I, items 6a, 9b, 13, 23, 29. Have available each object module that contains a call to the reference.

IEW1012 ERROR—UNRESOLVED EXTERNAL REFERENCE.

Explanation: The external reference was not found on the SYSLIB defined data set or in the Link Pack Area.

System Action: No attempt is made to execute the module unless the LET option is specified.

Programmer Response: Probable user error. Make sure that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the needed module or alias to either (1) the SYSLIB data set, (2) the link pack area, or (3) the SYSLIN input data set. Make sure the SYSLIB DD statement has been specified if needed. If the needed module is in a SYSLIB or SYSLIN partitioned data set, execute the IEHLIST utility program using the LISTPDS statement to print out the data set directory. Execute the failing job step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 1, 3, 6a, 9b, 13, 22, 23, 29.

IEW1024 ERROR—DDNAME CANNOT BE OPENED.

Explanation: The SYSLIN data set cannot be opened. The DD statement defining the data set is missing or incorrect.

System Action: Processing terminates. The Loader returns to the caller with a condition code of 16.

Programmer Response: Probable user error. Either, (1) supply a missing SYSLIN DD statement, (2) correct erroneous information on the SYSLIN DD statement, or (3) make sure the correct DDNAME has been specified for the SYSLIN data set. If the loader was invoked by a macro instruction such as LINK rather than through the EXEC statement, make sure that the SYSLIN ddname, if passed, is correct.

Problem Determination: Table I, items 1, 29. Either have the output of the SYSGEN of the loader available, or execute the HMASPZAP for VS1 or AMASPZAP for VS2, service aid program with the DUMPT IEWLOADR IEWLDFEF

statement and save the resulting dump of the loader default ddnames.

IEW1034 ERROR—DDNAME HAD SYNCHRONOUS ERROR.

Explanation: A physical uncorrectable input/output error occurred. If it occurred on a blocked data set, the blocksize may have been specified incorrectly.

System Action: The message supplied by the SYNADAF macro was printed. Processing was terminated.

Programmer Response: For any fixed format, specify the correct blocksize. If the blocksize was correct and the data set was an input data set, recreate or restore the data set. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 1, 29.

IEW1044 ERROR—UNACCEPTABLE RECORD FORMAT (VARIABLE ON INPUT).

Explanation: Only object module (FIXED record format) and load module (UNDEFINED record format) data sets are accepted by the loader.

System Action: Processing was terminated. The loader returns to caller with a condition code of 16.

Programmer Response: Probable user error. (1) Make sure that the record format specification is correct. The record format may have been misspelled. (2) Make sure that the correct data set has been specified. Execute the IEHLIST utility program using the LISTVTOC statement to print out the Data Set Control Block for the input data sets, and save the resulting output. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 1, 6a, 29.

IEW1053 ERROR—I/O ERROR WHILE SEARCHING LIBRARY DIRECTORY.

Explanation: A permanent I/O error occurred while attempting a BLDL.

System Action: Automatic library call processing is terminated.

Programmer Response: Ensure that the SYSLIB defined data set is partitioned. If it is, recreate or restore the data set and rerun the job step. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 1, 6a, 25c, 29.

IEW1072 ERROR—BLKSIZE IS INVALID.

Explanation: In the specified data set, the BLKSIZE was not an integral multiple of LRECL.

System Action: BLKSIZE was rounded up to the next higher multiple of LRECL and processing continued.

Programmer Response: Probable user error. Change BLKSIZE to be an integral multiple of LRECL. If the data set was an input data set, execute the IEHLIST utility program using the LISTVTOC statement to print out the Data Set Control Block, and save the resulting output.

Problem Determination: Table I, items 1, 29.

IEW1082 ERROR—INVALID LENGTH SPECIFIED.

Explanation: The length of a control section in an object module was not specified in either its FSD entry or on the END record, and text was received for the control section.

System Action: The total length of the text received was used.

Programmer Response: Check if an END record in any object module is missing or has been replaced. If so, recreate the object module and rerun. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 6a, 13, 22, 23, 29.

IEW1093 ERROR—NO TEXT RECEIVED.

Explanation: No valid text has been received for the loaded module.

System Action: The loader returns to the caller with a condition code of 12.

Programmer Response: Probable user error. (1) Make sure that the SYSLIN data was specified correctly. (2) Check other error messages issued for cause of error (e.g., invalid record). Correct the error and rerun the job step. Execute the service aid program HMBLIST for VS1 or AMBLIST for VS2, using the LISTOBJ function and save the resulting listing of the questionable input module. Have all SYSLIN input available. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 1, 6a, 29.

IEW1102 ERROR—DOUBLY DEFINED ESD.

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

System Action: References to the name are resolved with respect to the first occurrence of the name.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, execute the following functions of the service aid program HMBLIST for VS1 or AMBLIST for VS2. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XREF option to list all load module symbols. Object module symbols can be printed using the IEBPTPCH utility program with the PRINT statement. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 6a, 29. Have all object and load module input available.

IEW1112 ERROR—INVALID 2-BYTE ADCON.

Explanation: A relocatable A-type or V-type address constant of less than three bytes has been found in the input.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Check assembler language input for Y-type address constants, which can't be relocated. Delete or correct the invalid address constant. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 6a, 9a, 29. Have object module input and associated listings available.

IEW1123 ERROR—INVALID RECORD FROM LOAD MODULE.

Explanation: An unrecognizable type record was found while reading a load module.

System Action: The record was ignored and processing continued.

Programmer Response: (1) Check that all input data sets are specified correctly on DD statements. (2) If load module input occurs in the SYSLIN data set, rerun the step with the NOCALL option specified. If error message IEW1123 recurs, the incorrect load module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect load module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect load module. When the incorrect load module is isolated, recreate it and rerun the job step. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Problem Determination: Table I, items 9b, 29.

IEW1132 ERROR—INVALID ID RECEIVED.

Explanation: Input contains an invalid external symbol ID.

This error is the result of the following conditions:

1. The SD for an ID does not appear in the input module.
2. Text is received before the ESD defining it is received.
3. An RLD is received before the ESDs to which it pertains.
4. The ID defining the entry point on the END card is not a defined SD, PC, or LR ESD type.

System Action: The invalid item is ignored.

Programmer Response: (1) Check that input object modules are complete and that assembly or compilation errors did not occur when object modules were generated. (2) Rerun the step with the NOCALL option specified. If error message IEW1132 recurs, the incorrect module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect module. When the incorrect module is isolated, recreate it and rerun the step. Run the failing step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 9b, 29. If an incorrect object module was created, have the module and its associated listing available.

IEW1141 WARNING—CARD RECEIVED NOT AN OBJECT RECORD.

Explanation: The card read has a blank in column one.

System Action: The card is ignored.

Programmer Response: Probable user error. Check input for a blank card or linkage editor control card. If other errors occur, recreate all object modules which have been in card form. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 1, 3, 6a, 13, 29.

IEW1152 ERROR—INVALID RECORD FROM OBJECT MODULE.

Explanation: An unrecognizable record type was received while reading an object module.

System Action: The card is ignored.

Programmer Response: Probable user error. Check object module input for invalid records. Column 1 should contain a 12-2-9 punch. Columns 2-4 should contain a TXT, RLD, ESD, END, or SYM identifier. Remove incorrect records or recreate the module, and rerun. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 9a, 29. Have object module input available.

IEW1161 WARNING—NO ENTRY POINT RECEIVED.

Explanation: No entry point was specified in the parameter field or END card. The END card entry point specification could be incorrect (i.e., invalid ID, bad column alignment, etc.). The parameter field specification could also be incorrect.

System Action: The first assigned address is used as the entry point.

Programmer Response: Probable user error. (1) Specify the entry point name in the loader parameter list, EP=. If the entry point occurs in load module input, this parameter must be specified. (2) If you cannot use the EP= parameter and the entry point occurs in an object module, make sure that the module is included in the SYSLIN or SYSLIB input and that an entry point was specified during compilation or assembly. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 6a, 29. Have the module containing the entry point and its associated listing available.

IEW1173 ERROR—ENTRY POINT RECEIVED BUT NOT MATCHED.

Explanation: The entry point name specified in the parameter field or on an END card was not matched to an incoming LR, SD, or PC.

System Action: The first assigned address is used as the entry point address.

Programmer Response: Probable user error. (1) Check to see if the EP= parameter was specified correctly. (2) Check to see if the module containing the entry point is included in either the SYSLIN or SYSLIB input. (3) Check other messages issued for the cause of error (i.e., invalid record).

Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 6a, 9a, 9b, 29.

IEW1182 WARNING—NO END CARD RECEIVED.

Explanation: An END card is missing for an input object module.

System Action: Processing continues.

Programmer Response: Probable user error. Check input object modules. The last record of each should have a 12-2-9 punch in column 1 and the END identifier in columns 2-4. If an END record is missing, recreate the module and rerun. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 6a, 9a, 29. Have object module input available.

IEW1194 ERROR—AVAILABLE STORAGE EXCEEDED.

Explanation: The amount of virtual storage available to the loader is insufficient to allow construction of the required tables and loaded program.

System Action: The loader returns to caller with a completion code of 16.

Programmer Response: Probable user error. (1) Increase the SIZE parameter, or (2) make sure the REGION specification is sufficient, or (3) make sure that sufficient virtual storage is available to satisfy the SIZE specification. Either have the output of the SYSGEN of the loader available or execute the HMASPZAP for VS1 or AMASPZAP for VS2, service aid program with the DUMPT IEWLOADR IEWLDDEF statement, and save the resulting dump of the loader's default SIZE value.

Problem Determination: Table I, items 1, 6a, 13, 29.

IEW1204 ERROR—TOO MANY EXTERNAL NAMES IN INPUT MODULE.

Explanation: The external symbol ID is too large to fit in the translation table.

System Action: Processing is terminated. The loader returns to the caller with a completion code of 16.

Programmer Response: If the program is large and/or complex, either (1) run the step using the linkage editor, or (2) break down the large program module into a number of smaller routines. If the program is not particularly large or complex, check other messages issued for the cause of error. Object module input may be incomplete or mispunched. Recreate object modules and rerun.

Problem Determination: Table I, items 6a, 9a, 9b, 13, 29.

IEW1214 ERROR—IDENTIFICATION FAILED—DUPLICATE PROGRAM NAME FOUND.

Explanation: When trying to identify the loaded program to the system, the IDENTIFY routine found a duplicate program name in the user's region or partition or in the Link Pack Area.

System Action: Processing is terminated. The loader returns to the caller with a completion code of 16.

Programmer Response: Probable user error. Specify a unique program name using the NAME option or let the loader default the name to **GO. Rerun the job.

Problem Determination: Table 1, items 3, 13, 29. Execute the IEBTPCH utility program to obtain a listing of the SYS1.PARMLIB data set. Save the output.

IEW1224 ERROR—IDENTIFICATION FAILED.

Explanation: The IDENTIFY routine located an error in the parameter list passed to it by the loader. In a VS1 environment, the name HEWLOAD may have been used to invoke the loader. In a VS2 environment, the appropriate IDENTIFY macro instruction support may not be included in the operating system.

System Action: Processing is terminated. The loader returns to caller with a completion code of 16.

Programmer Response: If HEWLOAD was used to invoke the loader in a VS1 environment, specify HEWLOADR instead. Rerun the job.

In any VS2 environment, verify that the appropriate IDENTIFY macro instruction support is included in the system. The release level of the IDENTIFY macro instruction should be the same as the release level of the loader.

Problem Determination: Table 1, items 3, 13, 29.

IEW1232 ERROR—COMMON EXCEEDS SIZE OF CSECT WITH SAME NAME.

Explanation: A named common area has been encountered which is larger than the control section with same name.

System Action: The loader uses the length of the control section. Processing continues.

Programmer Response: Ensure that no named common area is larger than the control section initializing it. FORTRAN programmers should make sure that any named COMMON in a BLOCK DATA subprogram is at least as large as any named COMMON with the same name in any other FORTRAN program or subprogram with which the BLOCK DATA subprogram is to be link edited. To isolate the problem, you can run the step with the NCAL option specified. If the error recurs, the long common occurs in the primary data set. Otherwise it occurs in a module from the automatic call library. In either case, execute the following functions of the service aid program HMBLIST for VS1 or AMBLIST for VS2. Execute the LISTOBJ function to list all object module symbols, and execute the LISTLOAD function with the OUTPUT=XRFF option to list all load module symbols in the appropriate input data sets. Check the listings for all modules which contain the named common in question and correct the lengths.

Problem Determination: Table 1, item 9.

IEW1991 ERROR—USER PROGRAM HAS ABNORMALLY TERMINATED.

Explanation: This message is issued by the loader when it determines that the loaded program has terminated abnormally.

System Action: Loaded program execution is terminated abnormally, and control is returned to the loader. (Unless the user has included a SYSUDUMP DD statement for the loaded program, this message is the only indication that the program has terminated abnormally.)

Operator Response: None.

Programmer Response: To obtain a dump to aid in determining the cause of the abnormal termination, include a SYSUDUMP DD statement for the loaded program and rerun the job.

Problem Determination: Table 1, items 3, 13, 29.

OS/VS Message Library:
Linkage Editor and Loader Messages
GC38-1007-5

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