IBM System/3

IBM System/3
Models 8 and 10
Halt Guide

	0	1	2	3	4	5	6	7	8	9	A	C	E	F	H	J	L	P	U	Y	⌀	–	,	
0	11	18	25	36	59	65	76	90	103	108	115		135	148	161	172	181		200	210	219	236	245	0
1		19	25	38	60	65	76	90	103	108	115	124	136	150	161	172	181	189	200	211	219	237	252	1
2		19	25	38	60	65	76	90		108	116	125	136	151	161	173	181	191	201	211	220	237	252	2
3		19	25	40	60	65	77	90	104	108	117	126	137	151	162	173	182	192	202	212	226	238	252	3
4		19		40	60	65	78	90	104	108	117	127		152	162	173	182		202	212	226	238	253	4
5		20	26	41	61	66	78	91	104	109		128	137	152	162	174	182	193	203	212		239	254	5
6		20		43	61	67	79	91	104	109	118	128	138	153	162	174	183	193	204	213	227	239	254	6
7		20	26	43	61	67	80	91		109	119	129	139		162	174	183	193	204	214	227	240	254	7
8		20	26	44	61		80	91	105	110	120	129	140	153	162	175	183	194	205	214	233	240	256	8
9		21	26		62		81	91	105	110	120	130	141	153	162	175	184	195	206	214	233	241	256	9
A	11	21	26	46	62	68	82	91	105	110	120	130	143	154	163	175	184		206	215	233	241		A
C	12	21	26	47	63	69	86	92	105	110	120	131		154	163	176	184	196	207	215	234	241	281	C
E	12	22	26	47	63		87	92	105	112	121	131	143	154	163	176	185	196	207	215	234	242	281	E
F	14	22	27	47	63	69	87	92	105	112	121		143	155	167	177		196	207	215	234	242		F
H	14	22	27	48	63	70	87	92	106	112	121		145	155	167	177	185	197	207	216	234	243		H
J	15	22		49	63		88	92	107	112	122		145	156	168	177	185	197	208	216	235	243	281	J
L	15	23	27		63	70	88	93	107	113	123	132	145	157	168	177	185		208	216	235	243	281	L
P	16	23	31	52	64	71		95	107	113	123		146	157	168	177	186		208	216	235	244	282	P
U	16	23	34		64	71		96	107	114	123	134	146	157	169	177	186	197	209	217	236	245	288	U
Y	17	24	35	58	64	72	88	96	107	114		134	147	158	169	178	187	198	209	217	236		288	Y
⌀	18	24		58	64	73	89	99		114	123	134	147	158	170	179	188	198	209	217		245		⌀
–	18		35	59	64	75	90	99	107	114	124	135	147	161	171	179	188	199	209	217	236		293	–
,					64	75	90	99		115	124	135	148	161	172	179	188	199	210	218	236	245	294	,
	0	1	2	3	4	5	6	7	8	9	A	C	E	F	H	J	L	P	U	Y	⌀	–	,	

Note: It is possible for one of the positions of the halt display to be blank. A ⌀ in the matrix indicates the blank position.

IBM System/3
Models 8 and 10
Halt Guide

This manual provides the information needed to recover from program halts issued by the System/3 Disk System, Program Number 5702-SC1. Halts are also included for Program Products 5702-AS1, 5702-RG1, 5702-SM1, 5702-SM2, 5702-UT1, 5702-UT2, 5702-CB1, and 5702-FO1. Information on how to use the manual and a description of the halts is provided.

The System/3 Model 8 is supported by System/3 Model 10 Disk System control programming and program products. The facilities described in this publication for the Model 10 are also applicable to the Model 8, although the Model 8 is not referenced. It should be noted that not all devices and features which are available on the Model 10 are available on the Model 8. Therefore, Model 8 users should be familiar with the contents of *IBM System/3 Model 8 Introduction,* GC21-5114.

In this publication there are some references to support of 64K bytes of main storage. A System/3 Model 10 with a 64K processing unit is available only as an RPQ. Your IBM Marketing Representative can provide information about this.

For additional information, the *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508, is recommended.

Contents

System/3 uses a message display unit on the console to display primary halts and subhalts. These halts indicate incorrect program operation, machine errors, or in some cases, information or instructions. All primary halts and subhalts require operator action.

The programmer should be notified if halts occur during the running of his job. You can list the halts in the comments section of the Program Run Sheet.

Explanation of Subhalts

Subhalts appear in the message display unit when log is off and when the user responds to the primary halt by pressing the START or appropriate HALT/RESET key. When the subhalt appears, the user selects one of its recovery options.

Note: If the user selects option 4, the primary halt (the halt that first appeared) reappears in the message display unit. The user presses START or HALT/RESET to return to the subhalt.

Figure 1 shows primary halt HU with subhalts 01 and 02. If halt HU appears when log is off, press START or the HALT/RESET key to display the last two digits of the subhalt. Either 01 or 02 appears in the message display unit. If 01 appears, select option 3. If 02 appears, select option 1 or 3.

When log is on, subhalts are not displayed. For primary halt HU, either CIHU01 or CIHU02 is logged to specify the reason for the halt.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
HU			**Reason:** Requested source program not found on disk specified by the COMPILE statement.
01	CIHU01	3	**Reason:** Source program not found on the fixed disk specified by the COMPILE statement. **Recovery 3:** Immediate cancel.
02	CIHU02	13	**Reason:** Source not found on the removable disk specified by the COMPILE statement. **Recovery 1:** Retry after mounting the correct pack. **3:** Immediate cancel.

Figure 1. Example of a Primary Halt with Subhalts

Explanation of the Halt List

The following is a description of the columns in the halt list:

HALT/SUBHALT – Lists the displays that can appear in the message display unit.

LOG – Lists the error codes that can be printed on the log device if log is on. Some primary halts have more than one error code that can be logged. The one logged depends on the program that initiates the halt. You may have to use the logged error code to determine the exact reason for the halt.

The error code, in addition to other error information such as the file name or volume label, will not be logged if the log device (any log device except the 5471 Printer-Keyboard) is allocated to either program level or if the log device is off.

The format of the logged error code is:

xxyyzz

where: xx—is a two character representation of the program initiating the primary halt. Figure 2 lists the possible first two characters of an error code and identifies the programs they represent.

yy—is the primary halt displayed in the message display unit.

zz—is used for additional information and may or may not be used. Any information you need to know about the last two characters of the error code is indicated in the reason for the halt.

Note 1: If the log device is the 5471 Printer-Keyboard, the logged error code is preceded by a blank, 1, or 2. These characters provide the following information:

Blank   Dedicated system
1   DPF. Program level one has initiated the halt.
2   DPF. Program level two has initiated the halt.

Note 2: If OCL statements are being logged and an OCL statement that can only occur between the LOAD and RUN statements is invalid, a halt does not occur. Instead, the error is logged and the rest of the OCL statements are read. Then a halt occurs.

Characters	Program the Characters Represent
AS	Basic Assembler Program
CC	System Control Program Scheduler

Figure 2 (Part 1 of 4). Two-character Representations of the Programs

Characters	Program the Characters Represent
CI	System Control Program Initiator
·CR	System Control Program Reader/Interpreter
CS	System Control Program Scheduler
CT	System Control Program Terminator
DC	System Control Program Close
DD	System Control Program Data Management
DO	System Control Program Open
DT	System Control Program Tape Data Management
DU	System Control Program Disk Data Management
EB	
EG	
EJ	System Control Program RPG II Linkage Editor
EK	
EL	
EN	
EO	System Control Program Overlay Linkage Editor
GF	Field Engineering Maintenance Program
GG	System Generation Program
GM	System Generation Program Macro Processor
GP	System Generation Program

Figure 2 (Part 2 of 4). Two-character Representations of the Programs

Characters	Program the Characters Represent
GS	System Generation Program Macro Processor
IB	System Control Program Binary Synchronous Communications Adapter
ID	System Control Program Disk IOS
IF	System Control Program 1442 IOS
IK	System Control Program 3741 IOS
IM	System Control Program MFCU IOS
IP	System Control Program Printer IOS
IT	System Control Program Tape IOS
JE	Remote Job Entry Support
LA	System Control Program LOAD * Support
LM	Library Maintenance Program
MG	Gangpunch
ML	Card List Program
MR	96-96 Reproduce and Interpret Program
MS	MFCU Sort/Collate Program
MV	Data Verifying Program
MW	MULTI-LEAVING Remote Job Entry Work Station Program
RC	COBOL Compiler and/or COBOL Object Program
RF	FORTRAN Compiler Program/Object Program
RP	RPG II Compiler

Figure 2 (Part 3 of 4). Two-character Representations of the Programs

Characters	Program the Characters Represent
RQ	RPQ Program
SD	Disk Sort Program
ST	Tape Sort Program
UA	Alternate Track Assignment Program
UB	Disk Pack Backup/Restore Program
UC	Copy/Dump Program
UD	5445 Data Interchange Program
UF	File Delete or File and Volume Label Display Program
UI	Disk Initialization Program
UM	1255 Magnetic Character Reader Program
UP	Dump/Restore Program
UR	Alternate Track Rebuild Program
UT	Tape Initialization Program
VF	System Control Program Supervisor Find

Figure 2 (Part 4 of 4). Two-character Representations of the Programs

Note: The functions of $COPY and $KCOPY have been combined into one system utility, $COPY. However, if your procedures use the name $KCOPY for the Copy/Dump system utility, you need not change the procedures to $COPY because the system utility can be called by either $COPY or $KCOPY.

OPTION—This column indicates the options you have when a primary halt or subhalt occurs. The options you have are indicated by a 0, 1, 2, and/or 3. You dial one of these numbers on the rightmost address/data switch, perform any action indicated in the REASON AND RECOVERY column, and press console START or appropriate HALT/RESET key if you have DPF.

Figure 3 explains the general meaning of each option and provides information that may help determine the option to select.

REASON AND RECOVERY—This column gives the reason for the halt and the recovery actions that can be taken. When subhalts can appear for a primary halt, a reason and recovery option(s) are listed for each subhalt.

When more than one error code can be logged for a primary halt, a reason is given for each. Figure 4 shows how recovery options are listed when all error codes have the same option.

Figure 3 (Part 1 of 2), Recovery Options

Option	General Meaning	Results if Selected During OCL Processing	Results if Selected During Object Program Execution	Affect on Files/Libraries
0	Select this option to continue the job.	If log is on, no halts will occur for errors found on OCL statements. Error codes will be logged for each OCL statement error encountered. When the processing of the OCL statements for the job is complete and errors have been found, an AP halt will be displayed and CRMN is logged. This halt indicates that OCL statement errors were found, and that the job cannot be run. Option 0 should be selected for the halt if there are no data cards for this job (the next statement in the input device is an OCL statement for the next job).		
1	Select this option to retry an operation or reread a card and continue the job.		During the execution of an object program, option 1 is invalid if either of the following are true: ● Option 2 has already been taken for any other halt that has occurred for this job. ● The object program being executed is in end-of-job processing.	
2	Select this option to give control to the user's program to cancel the job.	If log is off, a halt will occur for each OCL statement error as it is found. Option 2 should be selected if the remaining OCL statements are to be read and checked for errors with the job not executed. If log is on, the remaining OCL statements are read and checked for errors. When the RUN statement is read, halt AP occurs. The job for which this halt occurs will not be executed. Any data or OCL statements preceding the next /&, LOAD, or CALL statement following the RUN statement will be read but not checked. The system stops reading cards and is ready to process the next job when: ● A /&, LOAD, or CALL statement is read. Any of these statements indicate the beginning of the next job. ● There are no more cards to read (the I/O ATTENTION light is on). The input device should then be readied for the next job.	A 2 option will cause an EJ halt. The OCL and data statements preceding the next /&, CALL, or LOAD statement are read but not processed. During execution of an object program, option 2 should not be taken if either of the following are true: ● Option 2 has already been taken for any other halt that has occurred for this job. ● The object program being executed is in end-of-job processing. If option 2 is selected following either of the above two conditions, LR calculations and LR output will not be done, and the tables will not be stored. The files will be closed after option 2 is selected. Option 2 should also not be taken for any halt that occurs during the execution of the RPG II CLOSE routine.	If you select option 2 for a halt that occurs while a disk file is being created or updated, the contents of the last record in the file may be changed. Therefore, it is advisable that the file be displayed using a COPYFILE OUTPUT-PRINT statement to see if the last record is correct. If the 2 option is selected for a halt which occurs during a $MAINT run, the library or library entries involved in the function might be destroyed.

Figure 3 (Part 2 of 2). Recovery Options

Option	General Meaning	Results if Selected During OCL Processing	Results if Selected During Object Program Execution	Affect on Files/Libraries
3	Select this option to give control to the system to cancel the job.	If log is on, no halts will occur for errors found on OCL statements. Error codes will be logged for each OCL statement error encountered. When the processing of the OCL statements for the job is complete and errors have been found, an AP halt will be displayed and CRMN is logged. This halt indicates that OCL statement errors were found, and that the job cannot be run. Option 3 should be selected for the halt if there are data cards present for the job in the input device. If log is off, a halt will occur for each OCL statement error as it is found. Option 3 should be selected if the remaining OCL statements are to be read but not checked for errors and the job not executed. In either of the previous two cases, halt EJ is displayed after option 3 is selected. The OCL and data statements preceding the next /&, CALL, or LOAD statement are read but not checked for errors. Any nested procedures being executed are cancelled. The system stops reading cards when (1) a /&, LOAD, or CALL statement is read. Any of these statements indicates the beginning of a new job. or (2) All cards have been read. I/O ATTENTION occurs. The necessary devices should be readied for the next job.	A 3 option will cause an EJ halt. The OCL and data statements preceding the next /&, CALL, or LOAD statement are read but not processed. Any nested procedures running in this level are also cancelled.	When a halt occurs during the execution of a job and option 3 is selected, the status of the disk files depends on the operation being performed. The possible dispositions of the files, depending on the functions being performed are: ● New files being created will not be retained. ● Old files being deleted will be retained. ● Old files being added to will not reflect additions. ● Old files being updated will reflect the updates to the point at which the halt occurred. If the 3 option is selected for a halt which occurs during a $MAINT run, the library or library entries involved in the function might be destroyed.

Figure 5 shows how recovery options are listed when error codes have different options.

```
HALT/SUBHALT   LOG     OPTIONS     REASON AND RECOVERY

                          3        Reason: Space not available on disk or disk is not initialized.

    30                             Probable user error.

               FG30               Space not available on R1 or F1 disk.  Delete unnecessary files.

               UC30AF             Active files or system exists on output disk.

               UC30BD             The volume label cannot be read.  The pack must be initialized.

               UC30SP             If WORK-YES has been specified for COPYFILE from R1 to R1, there is not
                                  enough space on F1 for the work file.  F1 must contain 20 consecutive
                                  tracks of storage.  Delete unnecessary files.  If WORK-YES has been specified
                                  for COPYFILE from D1 to D1, R1 contains files or libraries.  R1 must con-
                                  tain 198 consecutive tracks of storage.  Mount a pack on R1 that does not
                                  contain files or libraries.
               UP30AF             Active files or system exists on output disk.
                                  Recovery 3: Immediate cancel.  Delete unnecessary files or mount a pack
                                  that does not contain files or libraries.
```

Figure 4. Example of a Halt with the Same Recovery Options for the Error Codes

```
HALT/SUBHALT   LOG     OPTIONS     REASON AND RECOVERY

                                  Reason: Pack specified that is not initialized.

    65                             Probable user error.

               EO65UN     03      Reason: Overlay Linkage Editor detected an attempt to catalog a module on
                                  a pack that was not initialized.

                                  Recovery 0:  Catalog attempt is ignored.  Module is punched.

                                            3: Immediate cancel.

               LM65UN     13      Reason: Library Maintenance Program detected an attempt to use an
                                  uninitialized pack.

                                  Recovery 1:  Correct the statement and retry.

                                            3: Immediate cancel.
```

Figure 5. Example of a Halt with Different Recovery Options for the Error Codes

Using the Halt List

Figure 6 shows a matrix that allows you to locate halts in the halt list. Two rows, one on the top and one on the bottom of the matrix, show the possible left characters of the halt display. Two columns, one on the left and one on the right of the matrix, show the possible right characters of the halt display. You will use these columns and rows to find the sheet number where the halt is located in the halt list. The halts are organized by numeric, alphabetic, and special characters, in that order.

Locate a halt in the halt list as follows:

1. Locate the left character of the halt by looking at the top row of possible characters.

2. Locate the right character of the halt by looking at the left column of possible characters.

3. Follow the numbers directly across from the right character of the halt until you are below the left character of the halt.

4. This gives you a sheet number where the halt is located within the halt list.

5. Locate the halt in the halt list.

6. If the halt has more than one error code, look at the error code logged for the halt and then locate the error code for the halt in the halt list. The end of the description of a particular halt is indicated by a dashed line.

For example, suppose halt 25 is displayed. Figure 7 shows the portion of the matrix and the 3 steps you follow to locate the halt in the manual.

Unrecognizable Displays

If an unrecognizable display is shown at a halt, press the LAMP TEST key on the console display unit. Two eights (88) should appear in the message display unit. If the lamp test shows that the display unit is working properly, see *Using the Console Log Sheet* in the *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. If the lamp test shows that part of the message display unit is not working, take that into account when reading the halt. Also, make a note of the malfunction in your console log sheet so the unit can be repaired when the machine is serviced.

If you have DPF, each message display unit on the DPF panel should display two eights when the LAMP TEST key is pressed.

Bypassed Halts

The halts LM63NF for the Library Maintenance DELETE function and UF5LNF for the File Delete and File and Volume Label Display programs can be bypassed.

To bypass a halt, you must turn on, or leave on, external indicator U8 with a // SWITCH statement between your // LOAD and // RUN statements for the program. The halts will not be bypassed if a // SWITCH is not supplied for the program, U8 is off, the log device is off, or the log device (except the 5471 Printer-Keyboard) is allocated to either program level. It should be noted that a subsequent program might require external indicator U8 be set off.

When a halt is bypassed, it is logged without any options and the 0 option is assumed for its response.

Stand-alone Halts

Stand-alone halts are halts that have no options (0, 1, 2, or 3) and no logged error codes. These halts do not occur very often. When they do, however, a serious error condition exists, and the job cannot be completed or cancelled.

The following is a recommended practice when stand-alone halts occur:

1. Perform any action indicated under the recovery.

2. Take a core storage dump. See *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508 for procedures on how to take a core storage dump.

3. IPL the system. You can now attempt to run other jobs. If the stand-alone halt continues to occur, contact your IBM representative.

Halts JL and JP are exceptions to these procedures. Specific instructions are provided in the halt list for recovering from these halts.

	0	1	2	3	4	5	6	7	8	9	A	C	E	F	H	J	L	P	U	Y	ƀ	-	,	
0	11	18	25	36	59	65	76	90	103	108	115		135	148	161	172	181		200	210	219	236	245	**0**
1		19	25	38	60	65	76	90	103	108	115	124	136	150	161	172	181	189	200	211	219	237	252	**1**
2		19	25	38	60	65	76	90		108	116	125	136	151	161	173	181	191	201	211	220	237	252	**2**
3		19	25	40	60	65	77	90	104	108	117	126	137	151	162	173	182	192	202	212	226	238	252	**3**
4		19		40	60	65	78	90	104	108	117	127		152	162	173	182		202	212	226	238	253	**4**
5		20	26	41	61	66	78	91	104	109		128	137	152	162	174	182	193	203	212		239	254	**5**
6		20		43	61	67	79	91	104	109	118	128	138	153	162	174	183	193	204	213	227	239	254	**6**
7		20	26	43	61	67	80	91		109	119	129	139		162	174	183	193	204	214	227	240	254	**7**
8		20	26	44	61		80	91	105	110	120	129	140	153	162	175	183	194	205	214	233	240	256	**8**
9		21	26		62		81	91	105	110	120	130	141	153	162	175	184	195	206	214	233	241	256	**9**
A	11	21	26	46	62	68	82	91	105	110	120	130	143	154	163	175	184		206	215	233	241		**A**
C	12	21	26	47	63	69	86	92	105	110	120	131		154	163	176	184	196	207	215	234	241	281	**C**
E	12	22	26	47	63		87	92	105	112	121	131	143	154	163	176	185	196	207	215	234	242	281	**E**
F	14	22	27	47	63	69	87	92	105	112	121		143	155	167	177		196	207	215	234	242		**F**
H	14	22	27	48	63	70	87	92	106	112	121		145	155	167	177	185	197	207	216	234	243		**H**
J	15	22		49	63		88	92	107	112	122		145	156	168	177	185	197	208	216	235	243	281	**J**
L	15	23	27		63	70	88	93	107	113	123	132	145	157	168	177	185		208	216	235	243	281	**L**
P	16	23	31	52	64	71		95	107	113	123		146	157	168	177	186		208	216	235	244	282	**P**
U	16	23	34		64	71		96	107	114	123	134	146	157	169	177	186	197	209	217	236	245	288	**U**
Y	17	24	35	58	64	72	88	96	107	114		134	147	158	169	178	187	198	209	217	236		288	**Y**
ƀ	18	24		58	64	73	89	99		114	123	134	147	158	170	179	188	198	209	217		245		**ƀ**
-	18		35	59	64	75	90	99	107	114	124	135	147	161	171	179	188	199	209	217	236		293	**-**
,					64	75	90	99		115	124	135	148	161	172	179	188	199	210	218	236	245	294	**,**
	0	1	2	3	4	5	6	7	8	9	A	C	E	F	H	J	L	P	U	Y	ƀ	-	,	

Note: It is possible for one of the positions of the halt display to be blank. A ƀ in the matrix indicates the blank position.

Figure 6. Halt List Matrix

① The first character of the halt (2) designates the proper column in the matrix.

② The second character of the halt (5) designates the proper row in the matrix.

	0	1	2	3
0	11	18	25	36
1		19	25	38
2		19	25	38
3		19	25	40
4		19		40
5		20	26	41

③ Find the matrix entry where row 5 and column 2 intersect. Halt 25 is on page 26.

Figure 7. Locating a Halt

Informational Error Codes

The system prints out informational error codes to inform you of action taken when certain errors or invalid conditions are encountered. These informational error codes do not have related halts. Figure 8 identifies the informational error codes and the reason they were logged.

Informational Error Code	Reason logged
CRIC	Invalid comment following //. A comment following // cannot be more than eight characters.
CRMB	// NOHALT statement was found in OCL for this job in program 2 (DPF).
CRMD	// HALT statement was found in OCL for this job in program 2 (DPF).
CRMN	Errors were found in OCL for this job. Logged when halt AP occurs.
CRNH	// NOHALT statement is ignored because errors were found in previous OCL statements for this job.

Figure 8. Information Error Codes

Reason: A halt previously occurred and the rightmost ADDRESS/DATA switch was set to a value which did not select a valid recovery action.

Probable user error.

Recovery: Continue. Press console START, appropriate HALT/RESET key if you have DPF. The original halt will be displayed, then a valid option may be selected. See the introductory information at the beginning of this manual for recovery options that may not be valid for the halt.

Reason: A 5448 disk operation was called for but the referenced unit is not ready.

Recovery: If you have DPF, press console START or HALT/RESET to display a subhalt:

Meaning the condition is on D1.

Meaning the condition is on D2.

Wait 15 seconds. If you have DPF, press console START or HALT/RESET to resume processing.

If the halt returns, do the following:

1.   Turn the appropriate file start switch off.
2.   Wait one minute.
3.   Turn the appropriate file start switch on.
4.   Wait 15 seconds.
5.   Reset the halt to resume processing.

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

Reason: Equipment check. The 5444, 5445, or 5448 disk drive hardware has detected a condition that could cause transfer of invalid data if the operation is allowed to continue. For the 5448, the not ready condition will cause this halt.

Recovery: Continue.

1. For the 5448, make sure the POWER ON and DRIVE READY switches are on.
2. Press console START or appropriate HALT/RESET key.

Note: For the 5444 or the 5448, if the halt recurs immediately, take a core storage dump. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Save the dump and contact IBM for hardware support.

Reason: A permanent disk error occurred during an attempt to read or write the system information during an error logging operation. This can be caused by one of the following:

1. Disk has not been initialized properly.
2. Permanent hardware error on the disk drive.
3. Permanent disk pack failure.

Recovery: If the disk is not initialized, run the Disk Initialization program.

If the pack is initialized, record the contents of XR2 and ARR. This is sense information which may be useful if the condition persists and the system requires service.

To read XR2:

1. Press console STOP.
   Note: If you have DPF, disable the program level in which the halt did not occur by setting the appropriate P1 or P2 switch located on the CE panel to OFF. The PROCESS light for the level in which the halt occurred must be on before reading XR2.
2. Set LSR display selector on CE panel to XR2.
3. Set register display unit to LSR HI LSR LO.
4. Record status.

Note: XR2 contains the disk attachment status information, IOBSNS.

To read XR1:

1. Press console STOP.
2. Set LSR display selector on CE panel to XR1.
3. Set register display unit to LSR HI LSR LO.
4. Record status.

Note: XR1 points to the failing IOB.

HALT/SUBHALT   LOG   OPTIONS

(continued)

REASON AND RECOVERY

To read ARR:

1.   Press console STOP.
2.   Set LSR display selector on CE panel to ARR.
3.   Record status.
4.   Set LSR display selector to NORMAL.
5.   For a DPF system, set P1 or P2 switch back to ON.

Note: The ARR contains the cylinder/sector where the disk error occurred. However, if the error occurred on the first sector of the I/O operation, the cylinder sector information may be incorrect; examine the IOB.

After reading XR2 and ARR, press console START, or appropriate HALT/RESET key to display secondary halt. The left character of the display indicates the unit on which the error occurred. The right character of the display is a 3. The possible left characters of the display and the unit they represent are:

Meaning the disk error occurred on R1.

Meaning the disk error occurred on F1.

Meaning the disk error occurred on R2.
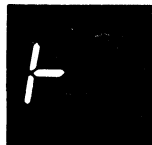
Meaning the disk error occurred on F2.

Meaning the disk error occurred on 5448 unit D1-upper.

Meaning the disk error occurred on 5448 unit D1-lower.

Halt 0E   13

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

[display: OE]

(continued)

[display: ⁻ with ⁻ below]   Meaning the disk error occurred on 5448 unit D2-upper.

[display: L with ⁻ below]   Meaning the disk error occurred on 5448 unit D2-lower.

Record the unit on which the disk error occurred.

After reading XR1, XR2, and ARR, take a core storage dump. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Save the dump and contact IBM for hardware support.

[display: OF]   **23**   **Reason:** For the 5444 or 5448 disk drive, the halt occurred for one of these reasons:

1. A disk operation was called for, but the cylinder number was invalid.

2. A full-capacity disk is being used on a system that has only half-capacity disks.

3. A disk operation began, but a permanent seek check occurred.

For the 5445, an invalid cylinder number caused the halt to occur.

IDOFXX   **Recovery 2:** Controlled cancel.

3: Immediate cancel.

Note: If you are using IBM-supplied programs, a program or hardware error has occurred. You can try running other jobs or rerunning the same job. If the same halt occurs, contact IBM for programming or hardware support.

[display: OH]   **23**   **Reason:** A disk operation was called for but the sector number was invalid for a 5444 or a 5448, or a disk address was invalid for a 5445. If log is on, the last two characters of the printed message designate the unit number.

IDOHXX   **Recovery 2:** Controlled cancel.

3: Immediate cancel.

Note: If you are using IBM-supplied programs, a program trouble is indicated. You can try running other jobs or rerunning the same job. If the same halt occurs, contact IBM for programming support.

If you are using CCP with shared files supported and two writes are issued without an intervening read, this message always occurs. For a description of file sharing considerations, see *IBM System/3 Communications Control Program Programmer's Reference Manual,* GC21-7579.

```
 ___  ___
|   ||   |
|__|  |__|
```

23   **Reason:** For the 5444, 5445, or 5448, a disk operation was called for but the address mark is missing from the disk. For the 5445, either a disk operation was called for and the address mark is missing or a no-record-found error has occurred.

For the 5444, 5445, or 5448, the disk, may not be properly initialized, or an attempt is being made to write past the end of the disk. If log is on, the last two characters of the printed message designate the unit number.

ID0JXX   **Recovery   2:** Controlled cancel.

3: Immediate cancel.

Note: If you are using IBM-supplied programs, a program trouble is indicated. You can try running other jobs or rerunning the same job. If the same halt occurs, contact IBM for programming support.

Note: It may be necessary to assign an alternate track to the track on which the problem occurred.

Warning: If this halt occurs during a library maintenance run, option 2 should be taken. The system will then proceed to halt 69 — see halt 69 for exposures if option 3 is taken.

```
 ___  ___
|   ||
|__| |__
```

23   **Reason:** 5444, 5445, or 5448 disk drive read data check. An attempt has been made to read from disk and invalid characters were encountered. If log is on, the last two characters of the printed message designate the unit number.

ID0LXX   **Recovery   2:** Controlled cancel.

3: Immediate cancel.

Note: It may be necessary to assign an alternate track to the track on which the problem occurred. The Alternate Track Assignment Program can be used for the track assignment.

Warning: If this halt occurs during a library maintenance run, the 2 option should be taken. The system will then proceed to halt 69 — see halt 69 for exposures if the 3 option is taken.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

OP

23 — **Reason:** 5444, 5445, or 5448 disk drive write data check. An attempt has been made to write on disk, but valid data cannot be put onto disk at the specified location. If log is on, the last two characters of the printed message designate the unit number.

ID0PXX — **Recovery 2:** Controlled cancel. A permanent error is indicated to the current program.

3: Immediate cancel.

Note: It may be necessary to assign an alternate track to the track on which the problem occurred. The Alternate Track Assignment Program can be used for the track assignment.

Warning: If this halt occurs during a library maintenance run, the 2 option should be taken. The system will then proceed to halt 69 — see halt 69 for exposures if the 3 option is taken.

OU

23 — **Reason:** Disk hardware malfunction. For the 5444 or 5448 disk drive, a cycle steal overrun condition has occurred. For the 5445 disk drive, a data overrun conditon has occurred. If log is on, the last two characters of the printed message designate the unit number.

ID0UXX — **Recovery 2:** Controlled cancel.

3: Immediate cancel.

Note: It may be necessary to assign an alternate track to the track on which the problem occurred.

Warning: If this halt occurs during a library maintenance run, the 2 option should be taken. The system will then proceed to halt 69 — see halt 69 for exposures if the 3 option is taken.

04

01 IK0Y01   123   **Reason:** Directly attached 3741 is not ready.

Recovery 1: Ready the 3741 and place it in the correct mode; then retry. For information on how to ready the 3741, see the *IBM System/3 3741 Reference Manual,* GC21-5113.

        2: Controlled cancel.

        3: Immediate cancel.

02 IK0Y02   123   **Reason:** Directly attached 3741 is in the wrong mode.

Recovery 1: Select the correct mode and retry.

        2: Controlled cancel.

        3: Immediate cancel.

03 IK0Y03   123   **Reason:** Directly attached 3741 has a parity error.

Recovery 1: Take the 3741 offline and position it back to the record which was in error. Select the correct mode.

        2: Controlled cancel.

        3: Immediate cancel. If the error persists, contack IBM for hardware support.

05 IK0Y05   123   **Reason:** The record length in the directly attached 3741 data set does not match the record length specified in the program.

Recovery 1: Position the diskette to a data set with the correct record length.

        2: Controlled cancel.

        3: Immediate cancel.

0 blank

23

Reason: For the 5444 or 5448 disk drive, a data check or no record found error occurred. The sector ID field may be unreadable. For the 5445 disk drive, the record count field is unreadable and a data check has occurred. If log is on, the last two characters of the printed message designate the unit number.

Note: It may be necessary to assign an alternate track to the track on which the problem occurred.

ID0 XX

Recovery 2: Controlled cancel.

   3: Immediate cancel.

Warning: If this halt occurs during a library maintenance run, the 2 option should be taken. The system will then proceed to halt 69 — see halt 69 for exposures if the 3 option is taken.
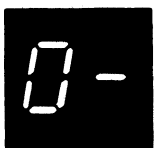
Reason: The halt occurred for one of the following reasons:

1. Invalid Q byte in the 5445 IOB.
2. Invalid Q byte in the 5448 IOB.
3. A 5445 operation is specified that is not supported on the 5448.
4. A 5445 cylinder 00 operation is specified on a head greater than head 01.
5. A 5445 IOB specifies an operation beyond the data area on 5448.

Note: If possible, take a core storage dump. Register 1 contains the IOB address. Examine the IOB to determine the cause of the problem.

If you are using CCP with shared files that are supported and two writes are issued without an intervening read, this message always occurs. For a description of file sharing considerations, see *IBM System/3 Communications Control Program Programmer's Reference Manual*, GC21-7579.

Recovery: Press console START or the appropriate HALT/RESET key if you have DPF to cause an immediate cancel of the program level and come to end of job.

3

Reason: No input file allocate. Object program.

Probable user error.

Recovery 3: Immediate cancel. Check SWITCH card and resubmit job.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

11

023   **Reason:** Object program called for square root of a negative field.

Probable user error.

Recovery 0: Set result field to zero and continue.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

12

023   **Reason:** Divide overflow in object program. Result field cannot contain result of divide operation.

Probable user error.

Recovery 0: Continue. The result and remainder are set to zero.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.


13
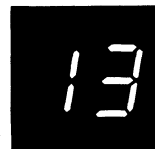
023   **Reason:** Divide by zero in object program.

Probable user error.

Recovery 0: Continue. Result and remainder are set to zero.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

14
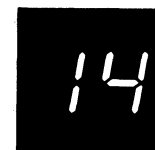
023   **Reason:** Variable index for an array is either zero, negative, or greater than number of elements in the array.

Probable user error.

Recovery 0: Continue. The index will be set to 1.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

15

023 — **Reason:** A sequenced table is out of sequence.

Probable user error.

Recovery 0: Continue with element out of sequence.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

16

023 — **Reason:** Object tables expected. End-of-file (/* statement) read.

Probable user error.

Recovery 0: Supply table data and retry.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

17
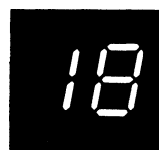
023 — **Reason:** Object table exceeded specified length.

Probable user error.

Recovery 0: Continue. Read to end of file. Ignore surplus entries.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

18

3 — **Reason:** Compile time terminal errors found in source program.

Probable user error.

Note: This halt will be bypassed if NOHALT was specified for program level 1.

Recovery 3: Immediate cancel.

20

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

19

03
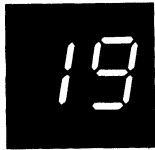
Reason: This halt occurs when compiling an RPG II job and can occur twice during the same job. If column 10 of the RPG II header is non-blank, the halt will occur immediately after the diagnostics if there were any warning errors. It will occur a second time if the object program exceeds core size to execute as specified in columns 12-14 of the RPG II header or exceeds system size if no core size was specified. The second halt will occur after the storage map is printed. If column 10 of the header line is blank, the halt occurs only if the object program exceeds core size to execute.

Probable user error.

Note: On warning errors this halt is bypassed if NOHALT was specified for program level 1, or if column 10 of the RPG II control card is blank. However, if your program exceeds the specified core size or the system size, this halt is never bypassed.

Recovery 0: Continue. The RPG II compiler will assign default values as indicated in the error message text. If the halt occurred because of core size, the object program will still be produced. However, the program will require more core storage to execute than was indicated on the RPG II header.

           3: Immediate cancel.

1A
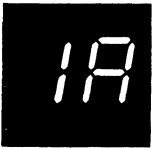
3

Reason: The halt can occur for one of the following reasons:

1. RPG II compiler requires more core to compile this program.

2. Exceeded 64K bytes of object core.

Probable user error.

Recovery 3: Immediate cancel. Check file description sheets to determine if any I/O areas can be reduced by:

1. Reducing the blocking factor.

2. Removing dual I/O specifications.

3. Increasing core size to execute.

Note: If the core map was printed, the halt occurred because of reason 1. If the core map was not printed, the halt occurred because of reason 2.

1C

23

Reason: RPG II. An unidentifiable halt or subhalt request has been issued. One of the following may have occurred:

1. System program error.

2. Programming error in a basic assembler program.

If the cause of the halt cannot be determined, obtain a core storage dump and contact IBM for programming support. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.

Recovery 2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

           3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

1E

023

Reason: Demand file is at end-of-file.

Recovery 0: Continue without reading from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

1F

23

Reason: End-of-file or end-of-extent. The halt occurred for one of the following reasons:

1. Allocated disk space for the file is too small to contain additions to the file. Reallocate space for this file. If the halt occurred during an RPG II compilation, either $WORK or $SOURCE must be larger.

2. Attempting to add or retrieve a key higher than the highest key physically on an indexed multivolume file using sequential add. HIKEY is probably missing from volume. HIKEY can be loaded using random add.

3. End-of-file has been reached on a multivolume indexed file using sequential add.

Probable user error.

Recovery 2: Controlled cancel. Store tables and execute LR calculations and LR output if available. This option should not be taken if the halt occurs during an RPG II compilation.

3: Immediate cancel.

Note: When you are adding to an indexed file, at least three unused sectors must be available for the index.

1H

023

Reason: Duplicate keys found during a load or add to an indexed ordered file. Packed keys may have been specified without packing the output key field.

Probable user error.

Recovery 0: Continue without adding this record.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

1J

023

Reason: Out of sequence key found during a load or add to an indexed ordered file.

Probable user error.

Recovery 0: Continue without adding this record.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

22

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

IL

023

Reason: The halt occurred for one of the following reasons:

1. Key of updated record to be written does not match key of retrieved record.

2. No record has been retrieved.

3. A record that has not been retrieved is being updated, or a record has been retrieved and an intervening record has been added to the same file.

Probable user error.

Recovery 0: Continue without updating record.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

IP

01

**Reason:** Forms in printer need positioning.

Recovery 0: Continue with program.

1: Align forms as follows:

1. Press printer STOP.
2. Press CARRIAGE SPACE until you can see printed line.
3. If printed line is in proper location, press CARRIAGE RESTORE and go to step 15. Otherwise, continue.
4. Press CARRIAGE RESTORE.
5. Open printer top cover.
6. Disengage carriage clutch.
7. Position forms by using the adjusting knobs.
8. Engage carriage clutch.
9. Close printer cover.
10. Press printer START.
11. Select recovery 1.
12. Press console START.
13. The same line is printed on the next form.
14. Return to step 1.
15. Press printer START. If printed line is in proper location, go to step 17.
16. Select recovery 1 and press console START.
17. Select recovery 0 and press console START.

IU

123

Reason: Halt occurred for one of the following reasons:

A. No record found for direct or indexed random files, or for a file processed by ADDROUT.

If indexed:

1. Key too high.
2. Key too low or negative.
3. Key is within extent but record cannot be found.

| | | | If direct: |

1\|_| (continued)

If direct:

1. Relative record number is negative or zero.
2. Relative record number exceeds number of records allowed in the file.

If ADDROUT:

1. Using a sort output file from a different file.

B. Trying to update record that was not found.

Probable user error.

Recovery 1: Bypass to beginning of RPG cycle and read again from this file. For chain files, the program logic may not be set up to read from the same file.

> **2:** Controlled cancel. Store tables and execute LR calculations and LR output if available.

> **3:** Immediate cancel.

023

Reason: RPG II. In modifying numeric data via the DSPLY operand, an error occurred for one of the following reasons:

1. If only one character of the numeric field was entered, the character was not a digit from 0 to 9.
2. If more than one character but not all of the characters of the numeric field were modified, the last character entered was not a blank, − (minus sign), or digit from 0 to 9.
3. If the entire numeric field was modified, the last character entered was not a blank or − (minus sign).

Recovery 0: Retry. Re-enter the modification.

> **2:** Controlled cancel.
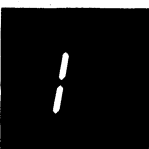
> **3:** Immediate Cancel.

03

Reason: Object program is ready to punch tables.

Recovery 0: Clear card device with a non-process runout. Place blank cards in hopper and continue.

Recovery 3: Immediate cancel.

1 blank

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
20		13	**Reason:** Disk Sort. The first statement read was not a header or SOURCE statement, or there is a format or punctuation error in the source statement. Probable user error. **Recovery 1:** Retry after correcting the header or SOURCE statement. **3:** Immediate cancel. The first statement read by Disk Sort must be a header statement, containing an H in column 6, or a SOURCE statement of the form // SOURCE NAME,UNIT-xx. Check to see that the statement is correct and resubmit the job.
21		013	**Reason:** The source member name on the SOURCE statement cannot be found on the specified pack. Probable user error. **Recovery 0:** Select this option if the unit specified is R1 or R2 and the wrong pack is mounted. Mount the correct pack and continue. **1:** Select this option if the SOURCE statement is incorrect and a correct SOURCE statement can be obtained. Place correct SOURCE statement in front of cards in hopper. **3:** Immediate cancel.
22		02	**Reason:** Disk Sort. During the generation phase of this job, no severe or terminal errors were found. However, a number of warning errors were found. The operator must decide whether to continue or cancel the job. Probable user error. **Recovery 0:** Continue job. The warning messages have been printed if log is on and the print option in the header statement is 0. If the warnings were expected and tolerable, select this option. It is best to eliminate all error conditions. If not, warning messages should be printed by setting the print option on header statement to 0. The operator should know what messages to expect or, at least, the total number of errors to expect. **2:** Controlled cancel.
23		3	**Reason:** Disk Sort. A permanent I/O error occurred during the reading of the sequence specification statements. **Recovery 3:** Immediate cancel. Resubmit job.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

25

OPTIONS: 3

Reason: Disk Sort. Severe or terminal errors were found during the generation phase of this job.

Probable user error.

Recovery 3: Immediate cancel. Correct errors and resubmit job.

27

OPTIONS: 0

Reason: Disk Sort is in the debug mode. Disk Sort has either completed an internal generation phase or has completed a pass.

Recovery 0: Continue with the sort.

28

OPTIONS: 3

Reason: Disk Sort. A permanent I/O error has occurred during the reading of records from an input file.

Recovery 3: Immediate cancel. Resubmit job.

29

OPTIONS: 3

Reason: Disk Sort. Disk I/O error. A permanent error has occurred during reading or writing of records on the work file.

Recovery 3: Immediate cancel. To rerun, change the track location of the work file or run Alternate Track Assignment Program.

2A

OPTIONS: 23

Reason: Disk Sort. A permanent I/O error has occurred while writing the sorted records on the output file.

Recovery 2: Controlled cancel.

3: Immediate cancel.
Note: Sort cannot continue. To rerun for disk output, change the track location of the output file or run Alternate Track Assignment Program. To rerun for tape output, use a different tape reel.

2C

OPTIONS: 03

Reason: Disk Sort. Either no input records were found or none of the input records specified in message SD602 met the INCLUDE requirements of your sort sequence specifications.

Probable user error.

Recovery 0: Continue with the sort and create an output file that contains no records.

3: Immediate cancel. Dump the input file and compare your sort sequence specifications with the records actually in your input file.

2E

OPTIONS: 3

Reason: The work file for Disk Sort is too small. The space assigned to the work file by the FILE NAME-WORK statement or by automatic work file allocation is too small to contain all the work records to be sorted.

Probable user error.
Recovery 3: Immediate cancel.
Allocate more tracks for the work file and resubmit the job. If automatic work file allocation is being used, you can make more work area available by deleting unnecessary files or by mounting a pack having adequate work area available.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

2F   23

Reason: Disk Sort. Output file too small. For disk output, the space assigned to the output file by the FILE NAME-OUTPUT statement is too small to contain the sorted output file. For tape output, a larger tape reel or more than one reel must be used.

Probable user error.

Recovery 2: Controlled cancel. If the 2F halt has occurred before the intermediate Disk Sort passes, another 2F halt may occur during later passes. The 2 option allows the sort to continue until all of the output file space is used.

          3: Immediate cancel.

Note: The number of input records included to be sorted was printed in message SD603. For disk output, use this number and recompute the disk space required for your output file. Rerun the job.

2H   3

Reason: A Disk Sort program error has been encountered.

Recovery 3: Immediate cancel.

Note: If possible, take a core storage dump rather than selecting option 3. For information on how to take a core storage dump see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Contact IBM for programming support.

2L

Reason: An error has occurred while processing a tape file.

To determine the reason for the 2L halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the tape error occurred. The right character indicates the specific reason for the halt.

Additional 2L and/or 2P primary halts may occur if an option other than the 3 option is selected for the subhalt.

If log is on, the last two characters of the logged error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error code can be any one of the possible right characters of the subhalt) —

1   DT2L1X   **Reason:** The tape error occurred on T1.

2   DT2L2X   **Reason:** The tape error occurred on T2.

3   DT2L3X   **Reason:** The tape error occurred on T3.

2L

(continued)

4	DT2L4X		**Reason:** The tape error occurred on T4.

Note: Unit T1 is indicated when a halt for an unopened tape file occurs.

The possible right characters of the subhalt and corresponding error codes are (note that the Y in the error codes can be any one of the possible left characters of the subhalt) —

1	DT2LY1	3	**Reason:** An attempt is being made to get a record, but the DTF contains no GET operation code.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

2	DT2LY2	23	**Reason:** A variable length record has been read that is longer than the program can process. Either the file contains records that are longer than expected, or the program specifies the maximum record length incorrectly.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.

3	DT2LY3	3	**Reason:** An attempt is being made to put a record, but the DTF contains no PUT operation code.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

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4	DT2LY4	3	**Reason:** An attempt is being made to put a variable length record that is longer than the maximum length specified.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

5	DT2LY5	3	**Reason:** A permanent write error has occurred while attempting to close the tape file.

This subhalt can occur after the 2 option has been selected for the 2P primary halt. The data on the tape is probably correct. However, a 2L halt with a 16, 26, 36, or 46 subhalt can be expected when the tape is read.

Recovery 3: Immediate cancel.

6	DT2LY6	0123	**Reason:** A permanent read error has occurred while attempting to read a tape's trailer label.

This subhalt can occur after the 0 or 2 option has been selected for the 2P primary halt.

Recovery 0: Ignore the error and assume that the label is end-of-volume.

    1: Ignore the error and assume that the label is end-of-file.

    2: Controlled cancel.

    3: Immediate cancel.

7	DT2LY7	3	**Reason:** An attempt is being made to open a tape file, but no file statement with the file name can be found in the OCL.

If log is on, the file name is logged before the error code.

The left character of this subhalt (or fifth character of the error code) has no significance for this error.

Recovery 3: Immediate cancel.

2L

(continued)

8	DT2LY8	3	**Reason:** An attempt is being made to open a tape file, but Allocate has not been called for the file.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

If log is on, the file name is logged before the error code.

The left character of this subhalt (or fifth character of the error code) has no significance for this error.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

9	DT2LY9	3	**Reason:** Insufficient storage has been specified for tape buffers in the DTF. At least 102 bytes must be specified.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

A	DT2LYA	3	**Reason:** A Basic Access Method operation has been attempted, but there are no valid Basic Access Method operation codes in the DTF.

Either your Basic Assembler Program attempted a tape file operation with an incorrect specification, or a system error occurred when a tape file operation was attempted with an incorrect specification.

Recovery 3: Immediate cancel. If your Basic Assembler Program was being run, tell the programmer that the halt occurred and that his program may be incorrect. If your Basic Assembler Program was not being run or was not incorrect, contact IBM for programming support.

C	DT2LYC	03	**Reason:** Either the block count in the tape's trailer label does not equal the number of blocks read, or processing has stopped and all tape records have not been processed.

This subhalt can occur after a 0 option has been selected for the 2P primary halt, or after a 1 option has been selected for the 1F, 2F, 3F, or 4F subhalt of the 2L primary halt.

2L

(continued)

This subhalt may also occur if a tape was created using BTAM or a FORTRAN program and was read using consecutive data management (such as with $COPY). These conditions do not indicate an error. Select the 0 option and continue processing.

Recovery 0: Ignore the error and continue.

3: Immediate cancel.

7	DT2LYD	3	**Reason:** The keyword, DEFER-YES, on a tape file statement is not allowed when using the Basic Access Method or a Fortran tape file.

Recovery 3: Immediate cancel. Remove the keyword DEFER from the file statement and run the program again.

F	DT2LYF	123	**Reason:** An incorrect length block of information has been read from the tape.

Recovery 1: Skip the incorrect block and continue. Subhalt 1C, 2C, 3C, or 4C of the 2L primary halt may occur if this option is chosen.

2: Controlled cancel.

3: Immediate cancel.

P	DT2LP	3	**Reason:** A block length greater than 256 bytes has been found by the pseudo tape access method.

Recovery 3: Immediate cancel. Contact IBM for programming support.

2P

Reason: A permanent tape error has occurred.

To determine the reason for the 2P halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the tape error occurred. The right character indicates the specific reason for the halt.

If the 0 or 2 option is selected for a subhalt, the 2P halt may re-occur, or the 2L halt may occur.

If log is on, the last two characters of the logged error code indicate the unit on which the error occurred and the reason for the halt.

This halt may indicate a hardware problem. Try rerunning this job with different tapes or running other jobs, preferably with different tapes. Contact IBM for hardware support if this halt reoccurs.

If this halt occurs while running the Tape Initialization Program and a 2 option is selected for a subhalt, the next control statement is processed. Controlled cancel will not occur under these circumstances, unless no additional control statements are present.

The possible left characters of the subhalt and corresponding error codes are as follows. (Note that the X in the error codes can be any one of the possible right characters of the subhalt.)

2P

(continued)

1   IT2P1X   **Reason:** The tape error occurred on T1.

2   IT2P2X   **Reason:** The tape error occurred on T2.

3   IT2P3X   **Reason:** The tape error occurred on T3.

4   IT2P4X   **Reason:** The tape error occurred on T4.

The possible right characters of the subhalt and corresponding error codes are
(note that the Y in the error codes can be any one of the possible left charac-
ters of the subhalt) —

1   IT2PY1   023   **Reason:** A permanent data check error on read has occurred.

Recovery 0: Ignore this error and read the next block.

2: Controlled cancel.

3: Immediate cancel.

2   IT2PY2   23   **Reason:** A permanent data check error on write has occurred.

Recovery 2: Controlled cancel.

3: Immediate cancel.

3   IT2PY3   23   **Reason:** PE mode has been specified, and data could not be written at the
load point of the tape. The tape should be wound slightly forward to move
the load point marker.

Recovery 2: Controlled cancel.

3: Immediate cancel.

4   IT2PY4   023   **Reason:** A write data check has occurred because the tape has not been com-
pletely erased during error recovery. If you proceed with the job using this
tape, it may not be possible to read the tape because of the noise. It is
recommended that you restart the job. If the condition persists use a differ-
ent tape. If this does not correct the problem, a hardware error may have
occurred.

Recovery 0: Ignore the condition and continue.

2: Controlled cancel.

3: Immediate cancel.

2P

(continued)

5   IT2PY5   023

Reason: A permanent noise error has occurred.

Recovery 0: Ignore this error and read the next record.

         2: Controlled cancel.

         3: Immediate cancel.

6   IT2PY6   23

Reason: An equipment check has occurred.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

7   IT2PY7   23

Reason: An adapter error has occurred.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

> After end-of-job, you must reset this error before trying to run another tape job. To reset error, press CHECK RESET. If I/O CHECK light is on, perform IPL procedures to reset error.

8   IT2PY8   23

Reason: The hardware error or tape position cannot be determined.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

Note: It is recommended that the 3 option be taken for this subhalt. If the 2 option is taken, unpredictable results may occur when the tape is used for other jobs.

9   IT2PY9   23

Reason: The I/O request to the tape drive was not accepted for one of the following reasons:

1. An attempt has been made to read an 800-BPI tape on a 1600-BPI tape drive or on a subsystem with a 1600-BPI control unit. This is a user error.

2. An attempt has been made to read a tape with no data written at its load point on a 1600-BPI tape drive or on a subsystem with a 1600-BPI control unit. This is a user error.

3. A hardware or system program error has occurred.

4. An attempt has been made to read a new tape that has not been initialized.

If the halt has occurred for reason 3, retry the job. If the condition persists, contact your local IBM representative for programming support.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

Reason: The tape unit is file protected, or the ENABLE/DISABLE switch is set to DISABLE.

To determine the exact reason for the 2U halt when log is off, press console START or the appropriate HALT/RESET key. One of the following subhalts is displayed. If log is on when the halt occurs, one of the error codes appears. If the 2 option is selected for a subhalt, the 2U halt may re-occur, or the 2L halt may occur.

IT2U1P   12

Reason: T1 is file protected.

Recovery 1: Install ring and retry.

    2: Controlled cancel.

Note: If you were writing to a labeled tape when this halt occurred, the 2 option should be taken. If the 1 option is taken, the tape volume label will be destroyed and the tape must then be processed as a non-standard labeled tape in subsequent jobs.

IT2U2P   12

Reason: T2 is file protected.

Recovery 1: Install ring and retry.

    2: Controlled cancel.

Note: If you were writing to a labeled tape when this halt occurred, the 2 option should be taken. If the 1 option is taken, the tape volume label will be destroyed and the tape must then be processed as a non-standard labeled tape in subsequent jobs.

IT2U3P   12

Reason: T3 is file protected.

Recovery 1: Install ring and retry.

    2: Controlled cancel.

Note: If you were writing to a labeled tape when this halt occurred, the 2 option should be taken. If the 1 option is taken, the tape volume label will be destroyed and the tape must then be processed as a non-standard labeled tape in subsequent jobs.

2U

(continued)

	LOG	OPTIONS	
4P	IT2U4P	12	

Reason: T4 is file protected.

Recovery 1: Install ring and retry.

    2: Controlled cancel.

Note: If you were writing to a labeled tape when this halt occurred, the 2 option should be taken. If the 1 option is taken, the tape volume label will be destroyed and the tape must then be processed as a non-standard labeled tape in subsequent jobs.

	LOG	OPTIONS	
50	IT2U5O	12	

Reason: The ENABLE/DISABLE switch is set to DISABLE.

Recovery 1: Set the switch to ENABLE and retry.

    2: Controlled cancel.

24

OPTIONS 3

Reason: This halt occurred for one of the following reasons:

1. A basic assembler program coded at your installation is being run and it is attempting to reference a file that has an incorrect device specification or,

2. A system error has occurred because an attempt is being made to reference a file that has an incorrect device specification.

DC2Y

Recovery 3: Immediate cancel.

Note: If a basic assembler program is being run, inform the programmer that this halt occurred and that his program may be in error. If a basic assembler program is not being run or there is nothing wrong with the basic assembler program, contact IBM for programming support.

2-

OPTIONS 03

Reason: The first statement read was not a Tape Sort header statement.

Recovery 0: Continue. The next statement is read from the card reader.

    3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

30

Reason: The logged error code indicates the reason for the halt.

Probable user error.

EG30   3

Reason: Space not available on R1 or F1 disk. Delete unnecessary files

Recovery 3: Immediate cancel. Delete unnecessary files, or mount a pack that does not contain files or libraries.

UB30A1   03

Reason: Active files exist on the first 5444 removable output disk specified by the TO keyword.

Recovery 0: Continue. The next control statement is read.

   3: Immediate cancel.

UB30A2   03

Reason: Active files exist on the second 5444 removable output disk specified by the TO keyword.

Recovery 0: Continue. The next control statement will be read.

   3: Immediate cancel.

Note: If a remount has been performed and a 0 or 3 option is taken to the halt, the first 5444 removable pack used must be initialized or reset by a RESET control statement because the copypack is not complete and the pack is unusable.

UB30AF   03

Reason: Active files exist on the 5448 output unit. These files must be deleted.

Recovery 0: Continue. The next control statement will be read.

   3: Immediate cancel.

UB30H1   03

Reason: The first 5444 removable output pack specified is a half-capacity pack or it is not initialized.

Recovery 0: Continue. The next control statement is read.

   3: Immediate cancel.

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(continued)

UB30H2   03

Reason: The second 5444 removable output pack specified by the TO keyword is a half-capacity pack or it is not initialized.

Recovery 0: Continue. The next control statement is read.

3: Immediate cancel.

Note: If a pack remount has been performed and a 0 or a 3 option is taken to the halt, the first 5444 removable pack used must be initialized or reset by a RESET control statement because copypack is not complete and the pack is unusable.

UB30NS   3

Reason: An attempt has been made to execute $PCOPY on a system that does not have a 5448.

Recovery 3: Immediate cancel.

UB30TP   03

Reason: Pack change required. Mount the second output pack on the same unit that the first output pack was mounted on.

Recovery 0: Mount the correct pack and continue.

3: Immediate cancel.

Note: If the copypack is canceled before backup is complete, the first pack must be initialized or reset by a RESET control statement.

UC30AF   3

Reason: Active files or system exists on output disk.

Recovery 3: Immediate cancel. Delete unnecessary files or mount a pack that does not contain files or libraries.

UC30BD   3

Reason: The volume label cannot be read. The pack must be initialized.

Recovery 3: Immediate cancel. Delete unnecessary files or mount a pack that does not contain files or libraries.

Note: The input pack may be a $PCOPY backup pack.

UC30SP   3

Reason: If WORK-YES has been specified for COPYFILE or COPYPACK from R1 to R1, there is not enough space on F1 for the work file. F1 must contain 20 consecutive tracks of storage. Delete unnecessary files. If WORK-YES has been specified for COPYFILE from D1 to D1, R1 contains files or libraries. R1 must contain 198 consecutive tracks of storage. Mount a pack on R1 that does not contain files or libraries.

Recovery 3: Immediate cancel. Delete unnecessary files or mount a pack that does not contain files or libraries.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

30
UP30AF   3

Reason: Active files or system exists on output disk.

Recovery 3: Immediate cancel. Delete unnecessary files or mount a pack that does not contain files or libraries.

(continued)

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Reason: Active files or your system exists on the disk to be initialized, or the pack may be a $PCOPY backup pack.

Probable user error.

UI31AF   03

Recovery 0: Proceed to next unit to be initialized.

        3: Immediate cancel.

Note: Run File and Volume Label Display utility. Determine whether the files can be deleted.

UI31WP   013

Reason: The pack name does not match the OLDPACK parameter, the label on the pack is invalid, or the pack may be a $PCOPY backup pack. The unit and required pack name are displayed.

Recovery 0: Proceed to the next unit to be initialized.

        1: Mount correct pack and retry. This option is not available for the 5448.

        3: Immediate cancel.

32

Reason: The logged error code indicates the reason for the halt.

Probable user error.

UB32B1   013

Reason: The first 5444 removable input pack is not a $PCOPY backup pack.

Recovery 0: Continue. The next control statement is read.

        1: Mount the correct pack and retry.

        3: Immediate cancel.

UB32B2   013

Reason: The second 5444 removable input pack mounted is not a $PCOPY backup pack.

Recovery 0: Continue. The next control statement is read.

        1: Mount the correct pack and retry.

        3: Immediate cancel.

32

(continued)

LOG	OPTIONS	REASON AND RECOVERY
UB32BD	03	**Reason:** The 5448 input unit is a TO pack for an interrupted copypack run. This unit can be used as a TO unit or must be reinitialized. **Recovery 0:** Continue. The next control statement is read. **3:** Immediate cancel.
UB32NP	013	**Reason:** The unit specified by the UNIT keyword is not a $PCOPY backup pack. **Recovery 0:** If a sublist is given by the UNIT keyword, the next unit will be checked; otherwise, the next control statement is read. **1:** Mount the correct pack and retry. **3:** Immediate cancel.
UB32P1	03	**Reason:** The first 5444 removable output pack is already a $PCOPY backup pack. The pack must be reset or initialized if used for a backup pack of a 5448. **Recovery 0:** Continue. Read the next control statement. **3:** Immediate cancel.
UB32P2	03	**Reason:** The second 5444 removable output pack is already a $PCOPY backup pack. The pack must be initialized or reset by a RESET control statement if used for a backup pack of a 5448. **Recovery 0:** Continue. Read the next control statement. **3:** Immediate cancel.
UC32BD	3	**Reason:** FROM pack is a TO pack from an interrupted COPYPACK run. The pack may be a $PCOPY backup pack. This pack must be used as a TO pack or must be reinitialized. **Recovery 3:** Immediate cancel.
UC32BP	3	**Reason:** The output pack specified is a $PCOPY backup pack. The pack must be initialized or reset by a RESET control statement if it is to be used as a $COPY output pack. **Recovery 3:** Immediate cancel.
UC32DS	3	**Reason:** FROM and TO disks are initialized to different capacities, or the FROM or TO disk is not initialized. **Recovery 3:** Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

32 (continued)

| | UP32BD | 3 | **Reason:** The input pack specified by the FROM keyword is from an inter-rupted copypack run. |

Recovery 3: Immediate cancel.

| | UP32BP | 3 | **Reason:** The output pack specified is a $PCOPY backup pack. The pack must be initialized or reset by a RESET control statement if it is to be used as a $PCOPY output pack. |

Recovery 3: Immediate cancel.

| | UP32DS | 3 | **Reason:** An attempt has been made to restore a tape containing the contents of a full-capacity disk on a half-capacity disk. |

Recovery 3: Immediate cancel.

33

03 **Reason:** The pack cannot be initialized for one of the following reasons:

1. Cylinder 0 is defective.

2. More than 6 defective tracks on a 5444 or 5448 disk, or more than 60 defective tracks on the 5445 disk.

3. Possible disk hardware error during initialization.

4. An attempt has been made to initialize the pack 10 times without success.

UI33PU **Recovery 0:** Proceed to next unit to be initialized on UIN statement.

3: Immediate cancel.

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13 **Reason:** Control statement error — invalid statement identifier for this pro-gram, columns 1, 2, 3 not // blank, or control statement missing.

Probable user error.

UA34 'Last statement read is invalid for this program or a statement is missing.

UB34 Last statement read is invalid for this program or a statement is missing.

UC34 Last statement read is invalid for this program or a statement is missing.

UF34 Last statement read is invalid for this program or a statement is missing. If running File Delete and a 3 option is taken, any files that have been specified on previous control statements for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
34 (continued)	UI34		Last statement read is invalid for this program or a statement is missing.
	UP34		Last statement read is invalid for this program or a statement is missing.
	UR34		Last statement read is invalid for this program or a statement is missing.
			Recovery 1: Retry. Correct and reread.
			3: Immediate cancel.
35		13	**Reason:** Error in a control statement for $COPY or $KCOPY.
	UC35CE		To many control statements.
	UC35CX		Continuation is indicated on the control statement, but a continuation is not valid.
	UC35DF		Error in COPYFILE statement. Parameter for INPUT or OUTPUT keyword is not supported.
	UC35DK		FROM or TO keyword appeared more than once in statement.
	UC35DL		Error in COPYFILE statement. DELETE or OMIT keyword error, or the parameter is missing or invalid.
	UC35F2		Error in SELECT statement. FROM keyword parameter is invalid.
	UC35FE		Error in COPYFILE statement. Parameter for FILE keyword is invalid. It must be YES or NO.
	UC35FS		Error in SELECT statement. FROM/TO keyword error, or both keywords are missing.
	UC35FT		Error in COPYPACK statement. FROM/TO keyword error, or the parameter is missing or invalid. The keyword parameter must be R1, R2, F1, F2, D1, or D2.
	UC35IC		Error in COPYFILE statement. The combinations of functions requested is invalid.
	UC35IE		Error in COPYFILE statement. The INPUT parameter is missing or invalid.
	UC35IK		Invalid keyword specified in control statement.
	UC35IL		Error in COPYFILE statement. The LENGTH keyword parameter is missing or invalid.
	UC35IR		Error in SELECT statement. The statement was not SELECT RECORD, SELECT KEY, or SELECT PKY.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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(continued)

UC35LC
Error in KEY statement. The LOCATION keyword parameter is missing or invalid. LOCATION must not be greater than record length.

UC35LN
Error in KEY statement. The LENGTH keyword parameter is missing or invalid. LENGTH must not be greater than 29.

UC35NP
No keywords or parameters specified in control statement.

UC35NV
Error in COPYFILE or SELECT statement.

The possible errors are:

- The SELECT statement is not valid because the OUTPUT keyword parameter on the COPYFILE statement is not BOTH or PRINT.

- The SELECT statement is not valid because a COPYFILE statement was not found.

- The SELECT statement is not valid because neither select FILE-YES nor printer output was specified.

- REORG-YES specified but no file output.

- Select FILE-YES but no file output.

UC35OT
Error in COPYFILE statement. OUTPUT keyword or OUTPUT keyword parameter is missing.

UC35R1
Error in COPYPACK statement. COPYPACK and FROM keyword parameter was the same as the TO keyword parameter, and was not R1.

UC35RE
Error in COPYFILE statement. Parameter for REORG keyword is missing or invalid. Must be YES or NO.

UC35RS   13
R1 is a pack from which a program currently executing was loaded or it is the the system pack, and it cannot be used as a work pack for a COPYFILE intermediate request.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

35 (continued)

UC35SE — Format or punctuation error in a control statement.

Note: If a corrected SELECT statement is not found and an END statement is read, the entire file will be printed.

UC35T2 — Error in SELECT statement. TO keyword parameter invalid.

UC35TS — Error in COPYPACK statement. The unit specified in the TO parameter is the system pack or a pack from which a program currently in execution was loaded.

UC35US — 13 — Error in the COPYPACK statement. The system does not have the requested disk unit online.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

Note: If a corrected SELECT statement is not found and an END statement is read, the entire file will be printed.

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03 — **Reason:** An attempt has been made to initialize F1, and the CE track is defective.

UI36CE — **Recovery 0:** Initialize the rest of the pack. The CE track remains defective. Tape volume error statistics cannot be logged on F1.

3: Immediate cancel.

03 — **Reason:** Pack change required.

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03 — **Reason:** Pack change required.

UC37FP — For copy pack intermediate, mount input pack on R1.

UC37IP — For copy file intermediate, mount pack named on COPYIN FILE statement.

UC37OP — For copy file intermediate, mount pack named on COPYO FILE statement.

UC37TP — For copy pack intermediate, mount output pack on R1.

Recovery 0: Mount correct pack and continue.

3: Immediate cancel.

Note: If the COPYPACK job is canceled before completion, the TO pack cannot be used. The TO pack can be copied to or initialized.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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Reason: The logged error code indicates the reason for the halt.

Probable user error.

UA38XX	13		**Reason:** Wrong pack mounted. If log is on, the last two characters of the logged error code designate the unit number. The pack may be a $PCOPY backup pack. The serial number of the pack mounted is logged.

Note: Select option 3 if the unit is F1 or F2. Option 1 is not available for a 5448 unit.

Recovery 1: Mount the correct pack and retry.

3: Immediate cancel.

UB38DA	013		**Reason:** The date specified by the DATE keyword is not the same date of the $PCOPY backup.

Recovery 0: Continue. If a sublist is given for the UNIT keyword, the next unit will be checked. If the UNIT keyword is for the last unit in the sublist or if no sublist is given, the next control statement is read.

1: Mount the correct pack and retry.

3: Immediate cancel.

UB38DM	013		**Reason:** The second 5444 removable input pack is not from the same $PCOPY backup as the first.

Possible user error.

Recovery 0: Continue. Read the next control statement.

1: Mount the correct pack and retry.

3: Immediate cancel.

UB38IP	013		**Reason:** The input pack specified by the PACKIN keyword is not the same as the pack mounted. If the input pack is a 5448, no remount option is available.

Recovery 0: Continue. Read the next control statement.

1: Remount the pack and retry.

3: Immediate cancel.

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(continued)

	UB38OP	013

Reason: The output pack specified by the PACKO keyword is not the same as the pack mounted. If the output pack is a 5448, no remount option is available.

Recovery 0: Continue. Read the next control statement.

      1: Remount the pack and retry.

      3: Immediate cancel.

Note: If a remount is performed with a 5444 output pack and a 0 or 3 option is taken to the halt, the first 5444 removable pack used must be initialized or reset by a RESET control statement because the copypack is not complete and the pack is unusable.

UB38PA   013

Reason: The pack mounted does not have the same name as the pack requested by the OLDPACK keyword.

Recovery 0: Continue. If a sublist is given for the UNIT keyword, the next unit will be checked. If the UNIT keyword is for the last unit in the sublist or if no sublist is given, the next control statement is read.

      1: Mount the correct pack and retry.

      3: Immediate cancel.

UB38V1   013

Reason: The first 5444 removable input pack mounted is the second pack of a $PCOPY backup instead of the first pack.

Recovery 0: Continue. Read the next control statement.

      1: Mount the correct pack and retry.

      3: Immediate cancel.

UB38V2   013

Reason: The second 5444 removable input pack mounted is the first pack of a $PCOPY backup instead of the second pack.

Recovery 0: Continue. Read the next control statement.

      1: Mount the correct pack and retry.

      3: Immediate cancel.

UC38WP   13

Reason: Wrong input or output pack mounted.

Recovery 1: Mount the correct pack and retry. Option 1 is not available for a 5448 unit.

      3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

38 (continued)

LOG	OPTIONS	REASON AND RECOVERY
UP38N5	3	**Reason:** An attempt has been made to dump a 5448 dump/restore tape to a 5445 disk. **Recovery 3:** Immediate cancel.
UP38N8	3	**Reason:** An attempt has been made to dump a 5445 dump/restore tape to a 5448 unit. **Recovery 3:** Immediate cancel.
UP38WT	3	**Reason:** The tape mounted was not created by $DCOPY. **Recovery 3:** Immediate cancel.
UR38XX	13	**Reason:** Wrong pack mounted. If log is on, the last two characters of the logged error code designate the unit number. The serial number of the pack mounted is logged. **Note:** Select option 3 if the unit is F1 of F2. Option 1 is not available for a 5448 unit. **Recovery 1:** Mount the correct pack and retry. **3:** Immediate cancel.

3A

Reason: This halt has occurred because keys are out of sequence, an invalid high key is specified, or there is not enough space to copy the file or a permanent disk I/O error has occurred.

LOG	REASON AND RECOVERY
UC3ADE	A permanent disk I/O error occurred during a $COPY run.
UC3ADP	The input file contains duplicate keys, or a record is out of sequence. Probable user error.
UC3AHK	High key specified in the output FILE statement does not equal the high key of the input volume. Probable user error.
UC3AXE	File being copied is larger than the area allocated to hold the copy. An attempt may have been made to copy a single volume file to a multivolume file. If the file being copied is too big, increase the file size in the COPYO statement and rerun the job. Probable user error. **Recovery 3:** Immediate cancel.

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HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

UC3CCS   3

Reason: Functions requested on COPYFILE statement require more core storage than is available.

Recovery 3: Immediate cancel. To reduce storage required, consider the following:

    1.   If you have OUTPUT-BOTH, change it to OUTPUT-DISK.
    2.   If you have REORG-YES, change it to REORG-NO.
    3.   For DPF, define a larger PARTITION statement if possible.
    4.   If you have DELETE, change it to OMIT.

UC3CNF   3

Reason: The system cannot find the requested module or the disk.

Note: The module's name is logged in the following format:
R XXXXXX. R is relocatable. XXXXXX is the module's name.

Recovery 3: Immediate cancel.
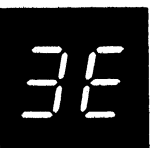
03

Reason: COPYFILE. Output file not as big as the actual data size of the input file, or either TRACKS or RECORDS parameter not specified in the COPYO FILE statement. This halt may occur if you attempt to copy a single volume file to a multivolume file.

Note: The number of tracks required for a file on a 5444 is not the same as the number of tracks required for the same file on a 5445 or a 5448.

Probable user error.

UC3EOX

Recovery 0: Continue if records are being deleted from a file. If the file being copied is single volume, copy will be single volume.

    3: Immediate cancel.

13

Reason: Error in COPYFILE statement.

Probable user error.

UC3FCE   Too many COPYFILE statement. Only one is allowed.

UC3FCX   Continuation is indicated on the control statement but a continuation is not valid.

UC3FD1   Parameter for DELETE or OMIT keyword missing.

UC3FD2   Parameter for DELETE or OMIT keyword invalid.

UC3FDK   Duplicate keywords.

UC3FIC   Combination of functions requested is invalid.

UC3FIK   Invalid keyword.

UC3FNP   No keywords or parameters in statement.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

3F

(continued)

LOG	REASON AND RECOVERY
UC3FO1	OUTPUT keyword missing, or parameter missing from OUTPUT keyword.
UC3FO2	Parameter for OUTPUT keyword invalid. Must be DISK, BOTH, or PRINT.
UC3FR1	Parameter for REORG keyword missing.
UC3FR2	Parameter for REORG keyword invalid. Must be YES or NO.
UC3FRS	Attempting an intermediate copy and R1 is the system pack or program pack.
UC3FSE	Format or punctuation error.
UC3FW1	Parameter for WORK keyword is missing.
UC3FW2	Parameter for WORK keyword invalid. Must be YES or NO.

Recovery 1: Correct statement and reread. Card input — NPRO card in error, correct, and place ahead of cards in hopper. Console input — re-enter statement.

Note: For UC3FCE, do not perform the action indicated in option 1 recovery. Dial 1 on the rightmost ADDRESS/DATA switch and press console START or appropriate HALT/RESET key if you have DPF. The last statement is ignored.

    3: Immediate cancel. If the error statement is in a procedure on disk, the procedure must be rebuilt.

3H

OPTIONS	LOG	REASON AND RECOVERY
13		**Reason:** Disk I/O error.
	UA3HDC	Disk error in reading volume label during alternate track assignment.
	UC3HFR	Error reading temporary space on F1 during an intermediate, R1 to R1, copy.
	UC3HFW	Error writing temporary space on F1 during an intermediate, R1 to R1, copy.
	UC3HRW	Error on R1 during the output of a copy function.

Recovery 1: Retry.

    3: Immediate cancel.

Reason: Invalid specification for Copy/Dump or Dump/Restore.

Probable user error.

| UC3JCR | 3 |

Reason: Attempting to reorganize a non-indexed file.

Recovery 3: Immediate cancel.

| UC3JDD | 3 |

Reason: Attempting to delete or omit records from a direct file.

Recovery 3: Immediate cancel.

| UC3JDP | 3 |

Reason: Deleting or omitting records and the delete or omit position specified is greater than the record length.

Recovery 3: Immediate cancel.

| UC3JDR | 3 |

Reason: Attempting to reorganize a direct file.

Recovery 3: Immediate cancel.

| UC3JFC | 3 |

Reason: No COPYIN statement.

Recovery 3: Immediate cancel.

| UC3JFS | 3 |

Reason: Attempting to copy one volume of an indexed multivolume file, but HIKEY is not specified on the COPYO file statement.

Recovery 3: Immediate cancel.

| UC3JIC | 3 |

Reason: Possible reasons:
1. INPUT keyword found with COPYIN FILE statement.
2. OUTPUT keyword and COPYO FILE statement found.
3. WORK-YES specified and the input unit is not equal to the output unit.
4. WORK-YES specified for unit other than R1 and D1.

Recovery: Immediate cancel.

| UC3JIF | 3 |

Reason: Possible reasons:

1. File type not indexed sequential for SELECT KEY or SELECT PKY operation.
2. File label in volume table of contents indicates an invalid file type.
3. The input file does not exist.
4. The file label may not exist.

Recovery 3: Immediate cancel.

UC3JIR   3

Reason: Invalid specification. Possible reasons:

(continued)

1. REORG-NO was given with OUTPUT-BOTH for an indexed file.
2. No REORG parameter was specified with OUTPUT-BOTH.
3. REORG-YES was not given when copying an entire multivolume indexed file.

Recovery 3: Immediate cancel.

UC3JIU   3

Reason: Invalid unit, COPYFILE. If a work pack is requested, unit must be R1 or D1. D1 is not valid for a 5448.

Recovery 3: Immediate cancel.

UC3JIW   3

Reason: R1 or D1 was specified as unit on COPYIN and COPYO statements, but the pack names are different and WORK-YES was not specified.

Recovery 3: Immediate cancel.

UC3JKD   3

Reason: The specified key location within the record on the // KEY statement is greater than the record length.

Recovery 3: Immediate cancel.

UC3JKL   3

Reason: The SELECT KEY length is greater than the file key, or the SELECT PKY length is not equal to the file key.

Recovery 3: Immediate cancel.

UC3JKR   3

Reason: Attempting to supply a SELECT KEY or SELECT PKY statement with no file or print output requested.

Recovery 3: Immediate cancel.

UC3JMV   3

Reason: Attempting to create multivolume output from a source other than tape or card input.

Recovery 3: Immediate cancel.

UC3JND   3

Reason: Attempting to copy one volume of a multivolume file with no disk output requested.

Recovery 3: Immediate cancel.

UC3JNK   3

Reason: Attempting to supply a // KEY statement with no disk file output requested.

Recovery 3: Immediate cancel.

UC3JOF   3

Reason: No COPYOFILE statement with disk or tape file output requested.

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

3J

(continued)

UC3JOK 3

Reason: Attempting to supply a // KEY statement when copying one volume of a multivolume file, or the input file is indexed.

Recovery 3: Immediate cancel.

UC3JRS 3

·**Reason:** Attempting to supply a SELECT RECORD rather than a SELECT KEY for an indexed sequential file while attempting to reorganize an indexed file with OUTPUT-BOTH.

Recovery 3: Immediate cancel.

UC3JSR 3

Reason: Attempting to supply a SELECT RECORD statement with no file or print output requested.

Recovery 3: Immediate cancel.

UC3JSX 3

Reason: Copy/Dump program error.

Recovery 3: Immediate cancel. Contact IBM for programming support.

UC3JWP 3

Reason: The file to be copied is not on the pack or tape, or the wrong pack or tape is mounted.

Recovery 3: Immediate cancel.

UP3JBL 03

Reason: Invalid block length on tape FILE card.

Recovery 0: Error is ignored. Utility assumes 3072 for IBM 5444 or 5120 for IBM 5445 or IBM 5448.

3: Immediate cancel.

UP3JFL 3

Reason: BACKUP FILE record is missing or the unit specified is not a tape unit.

Recovery 3: Immediate cancel.

UP3JWP 013

Reason: Pack ID of mounted pack does not agree with PACK parameter.

Recovery 0: Error ignored. Mount pack will be used.

1: Mount correct pack and retry. This option is not available for the 5448.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

3P

Reason: Error in COPYPACK, RESET, or LABELS statement.

Probable user error.

UB3PCX	13

Reason: Continuation is indicated on the control statement, but the continuation is not valid.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PDK	13

Reason: A keyword appeared more than once in the statement.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PDT	13

Reason: Invalid DATE parameter. The length of the DATE parameter given is greater than 6 characters, or a sublist was given for this keyword when only one unit is specified for the UNIT keyword on the RESET statement.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PFT	13

Reason: Missing FROM or TO keyword, or the FROM or TO units are the same device.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PF2	13

Reason: The FROM keyword parameter is missing or is not 'R1', 'R2', 'R1,R2', 'R2,R1', 'D1', or 'D2'.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PIK	13

Reason: Invalid keyword specified.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

3P

(continued)

UB3PNP   13

Reason: No keyword or parameter found for a statement.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

UB3PPI   13

Reason: Invalid PACKIN name. The length of the PACKIN name is greater than 6 characters, or a sublist for this keyword was given when only a backup from a 5448 unit is specified.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

UB3PPK   13

Reason: Invalid OLDPACK name. The length of the OLDPACK name given is greater than 6 characters, or a sublist was given for this keyword when only one unit was specified by the UNIT keyword on the RESET statement.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

UB3PPO   13

Reason: Invalid PACKO name. The length of the PACKO name is greater than 6 characters, or a sublist was given for this keyword when a restore to a 5448 unit is specified.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

UB3PSE   13

Reason: Format or punctuation error.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

UB3PTS   13

Reason: The unit specified in the TO parameter of the COPYPACK statement is the system pack or a pack from which a program currently in execution was loaded.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

     3: Immediate cancel.

3P

(continued)

UB3PT2 13

Reason: The TO keyword is missing or is not 'R1', 'R2', 'R1,R2', 'R2,R1', D1, or D2.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PUI 13

Reason: The UNIT keyword parameter is not 'R1', 'R2', 'R1,R2', 'R2,R1', or the UNIT keyword is missing.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UB3PUS 13

Reason: The system does not have the requested unit online.

Recovery 1: Retry. The statement should be reentered after it has been corrected and/or verified.

3: Immediate cancel.

UC3PCE 13

Reason: A second COPYPACK statement has been read.

Recovery 1: Retry. Correct and reread. Place an END statement in front of cards in the primary hopper. The second COPYPACK statement is ignored.

3: Immediate cancel.

UC3PCX 13

Reason: Continuation is indicated on the control statement but the continuation is not valid.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UC3PDK 13

Reason: Keyword FROM or TO appeared more than once in statement.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UC3PF1 13

Reason: FROM keyword, or FROM keyword parameter missing.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UC3PF2 13

Reason: FROM keyword parameter is not R1, R2, F1, F2, D1, or D2.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

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3P

(continued)

UC3PIK   13

Reason: Keyword found that was not FROM or TO.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PIP   3

Reason: Invalid combination of disk units used. When copying data from one pack to another, you can copy only from a 5444 disk to another 5444 disk from a 5445 disk to another 5445 disk, or from a 5448 disk to another 5448 disk.

Recovery 3: Immediate cancel.

UN3PNP   13

Reason: No keywords or parameters found.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PR1   13

Reason: FROM keyword parameter was the same as the TO keyword parameter, and was not R1.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PSE   13

Reason: Format or punctuation error.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PT1   13

Reason: TO keyword, or TO keyword parameter missing.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PT2   13

Reason: TO keyword parameter is not R1, R2, F1, F2, D1, or D2.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

UC3PTS   13

Reason: Unit specified in TO parameter of COPYPACK statement is the system pack or a pack from which a program currently in exeuction was loaded, or an intermediate copy from R1 is being attempted and the system was loaded from R1.

Recovery 1: Retry. Correct and reread.

      3: Immediate cancel.

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3P
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(continued)

UC3PUS   13   **Reason:** System does not have requested disk unit online.

                      Recovery 1: Retry. Correct and reread.

                              3: Immediate cancel.

UP3PCE   13   **Reason:** Too many control cards.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PCX   13   **Reason:** Continuation is indicated on the control statement but the continuation is not valid.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PDK   13   **Reason:** Keyword appeared more than once in statement.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PF2   13   **Reason:** FROM keyword parameter is not R1, R2, F1, F2, D1, or D2.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PFT   13   **Reason:** Either both or neither of the FROM and TO keywords are specified.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PIK   13   **Reason:** Invalid keyword specified.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

UP3PNP   13   **Reason:** No keywords or parameters found.

                      Recovery 1: Retry. Correct and reread.

                                3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

3P

(continued)

UP3PPK 13

Reason: Invalid pack name.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UP3PSE 13

Reason: Format or punctuation error.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UP3PT2 13

Reason: TO keyword parameter is not R1, R2, F1, F2, D1, or D2.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UP3PTS 13

Reason: Unit specified in TO parameter of COPYPACK statement is the system pack or a pack from which a program currently in execution was loaded, or an intermediate copy from R1 is being attempted and the system was loaded from R1.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UP3PUS 13

Reason: System does not have requested unit online.

Recovery 1: Retry. Correct and reread.

3: Immediate cancel.

UP3PXC 3

Reason: Block length given requires more main storage than is available.

Recovery 3: Immediate cancel. If dumping disk to tape, reduce BLKL parameter, run on larger system, or increase the size of the program level in a DPF environment.

If restoring tape to disk, run on larger system or increase the size of the program level in a DPF environment. Rerun the job.

Note: If the job is canceled due to insufficient length of tape or an unrecoverable hardware error, the TO volume, either disk or tape, may need to be reinitialized before it is usable.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

34

03

Reason: Requested secondary initialization of a disk that requires primary initialization. The halt occured because:

1. Pack has never been initialized.

2. Permanent disk error occurred which requires that a primary initialization be done.

3. A secondary initialization has already been done.

4. A secondary initialization has been attempted on a half-capacity disk drive.

Probable user error.

UI3YIS   **Recovery 0:** Continue to next request.

3: Immediate cancel. The pack requires primary initialization.

3
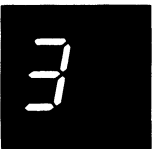
3 blank

13

Reason: Error in VOL statement.

Probable user error.

UI3 CX   Continuation was indicated on the previous control statement but a continuation was not received.

UI3 DK   Duplicate keyword.

UI3 I1   No parameter for ID keyword.

UI3 I2   Invalid parameter for ID keyword. ID must be ten characters or less.

UI3 IK   Keyword not pack ID or NAME360.

UI3 N1   No parameter for NAME360.

UI3 N2   NAME360 parameter too long or invalid.

UI3 N3   NAME360 keyword used for unit other than 5445 disk.

UI3 NP   No keywords or parameters in statement.

UI3 P1   PACK keyword missing, or parameter missing for PACK keyword.

UI3 P2   Invalid parameter for OLDPACK or PACK keyword. Pack name must be six characters or less.
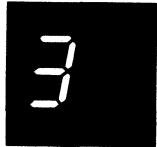
UI3 SE   Format or punctuation error.

UI3 V3   Too many VOL statements. Only five are allowed.

| HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

3 (3 blank) (continued) — UI3 VS

VOL statement invalid for secondary initialization.

Recovery 1: Correct statement and reread. If the statement is a continuation, reread all statements back to and including the last // VOL statement read. Card input-NPRO card in error. Correct, and place ahead of cards in hopper. Console input — re-enter statement.

Note: For UI3 V3 and UI3 VS, do not perform the action indicated in option 1 recovery. Dial 1 on the rightmost ADDRESS/DATA switch and press console START or appropriate HALT/RESET key if you have DPF. The last VOL statement is ignored.

    3: Immediate cancel. If the error statement is in a procedure on disk, the procedure must be rebuilt.
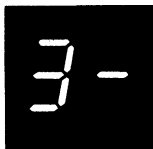
3- — 03

Reason: The sort pass of the Tape Sort has ended. The input tape may be removed and replaced with a work tape if the tape drive is used for a work file tape.

Recovery 0: Continue after readying the last work tape.

    3: Immediate cancel.

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40 — 03 — DD40

Reason: A file has been referenced as an output or add file and the file is already allocated.

If you are using COPYFILE, the file named COPYO has the same label, location, and pack name as the file named COPYIN. One of these three parameters must be different.

Probable user error.

Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

    3: Immediate cancel.

`4 1`		03

Reason: This halt occurred for one of the following reasons:

1. A file has been referenced as an output file and the file has not been allocated.

2. A file has been referenced as an input file and cannot be found because it either does not exist or the attributes on the FILE statement do not match the attributes of the input file in the VTOC.

When copying files, the halt may occur for one of these additional reasons:

1. The input file was not online when the job was initiated.

2. The first volume of the multivolume input file was not online when the job was initiated.

3. The output file was not a new file.

4. The output file could not be allocated because there was insufficient space on the pack, the pack was bad, or the wrong pack was mounted.

Note: Display the VTOC using File and Volume Label Display Program to determine the exact cause of the halt.

Probable user error.

DD41   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

3: Immediate cancel.

`4 2`		3

Reason: A system program is requesting another system program and that program is not in the object library.

DD42   **Recovery 3:** Immediate cancel. Print object library directory. Compare with listing of known good system to determine if program is missing. System programs start with $$. If module is missing, mount known good pack, IPL from good pack and copy $$.ALL. If no modules are missing, contact IBM for programming support.

`4 3`		03

Reason: A file has been referenced as a consecutive add file and the file is a direct file.

Probable user error.

DD43   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

Recovery 3: Immediate cancel.

`4 4`		03

Reason: A file has been referenced as an indexed file, but the file is not an indexed file.

Probable user error.

DD44   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

45

03   **Reason:** A file has been referenced for consecutive add or update and the file is an indexed file.

Probable user error.

DD45   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors. Then halt 4J will occur.

         3: Immediate cancel.

46

03   **Reason:** An existing file has been referenced and the wrong record length has been specified.

Probable user error.

DD46   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

         3: Immediate cancel.

Note: Run File and Volume Label Display utility. Compare record length in printout against length of record on compiler source listing for all files.

47

03   **Reason:** An existing file has been referenced and the wrong key length or key location has been specified.

Probable user error.

DD47   **Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

         3: Immediate cancel.

Note: Run File and Volume Label Display utility and compare key lengths and key locations.

48

3   **Reason:** A permanent disk I/O error occurred during one of the following:

1.   Formatting index extents.

2.   Formatting data file extents.

3.   Initial loading of input buffers.

4.   Attempting to delete data during $DELET on a 5445.

| HALT/SUBHALT | LOG | OPTIONS | REASON AND RECOVERY |

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

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 48
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(continued)

DD48

Recovery 3: Immediate cancel.

Note: If the halt occurred for reason 1, run the Alternate Track Assignment Program before using the file. If no alternate track is assigned, contact IBM for hardware support.

If the halt occurred for reason 2 and a new direct output file is being opened, run the Alternate Track Assignment Program before using the file. If no alternate track is assigned, contact IBM for hardware support.

If the halt occurred for reason 2 and $DELET is being run with DATA-YES specified, the file has not been completely deleted. Before using this data file, the user should run the Alternate Track Assignment Program and then run $DELET with DATA-YES to delete the file from the disk and VTOC. If no alternate track is assigned, contact IBM for hardware support.

If the halt occurred for reason 3, run the Alternate Track Assignment Program. If an alternate track is not assigned, check the file index. If the file index is destroyed, contact IBM for programming support. If the file index is not destroyed, contact IBM for hardware support.

```
 49
```

03

Reason: This halt occurred for one of the following reasons:

1. A basic assembler program coded at your installation is being run and it is attempting to use a device that has not been allocated for it or,

2. A system error has occurred because an attempt is being made to use a device that has not been allocated for the current program in this level.

Before attempting recovery, determine if a basic assembler program is being run in this level. If there is, notify the programmer that this halt occurred and that his program may be in error. If there is no basic assembler program being run, a system error has occurred and your IBM representative should be contacted. In either case, option 0 will allow the job to continue.

DD49

Recovery 0: Continue. The device can be used but it will not be reserved for the current program. If the device is allocated for the other program level, its use by the current program will be interrupted.

3: Immediate cancel.

```
 4A
```

03

Reason: A file that has already been opened for record additions has been re-opened before end-of-job has occurred.

Probable user error.

DD4A

Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.
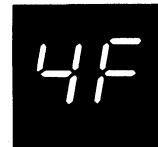
3: Immediate cancel.

4C

DD4C

03

Reason: Two files have been referenced on the same removable pack, and one is an offline multivolume file.

Probable user error.

Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.

3: Immediate cancel.

4E

DD4E

03

Reason: The FILE statement indicates that a multivolume file will be built, however, a single volume file was indicated when the program was compiled.

Recovery 0: Continue. The file will be built as a single volume file.

3: Immediate cancel.

4F

DD4F

3

Reason: A print file whose I/O buffers are not aligned on the required boundary in core has been specified.

Recovery 3: Immediate cancel.

Note: If you are using IBM-supplied programs, a program trouble is indicated. You can try running other jobs or rerunning the same job. If the same halt occurs, contact IBM for programming support.

4H

DD4H

03

Reason: Unordered load has been specified for an indexed multivolume file. Ordered load must be specified on RPG II file description specifications.

Probable user error.

Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.
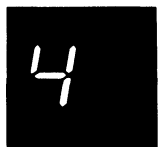
3: Immediate cancel.

4J

DD4J

3

Reason: All of the file specifications for this job have been checked for errors. There was at least one error found that must be corrected.

Recovery 3: Immediate cancel.

4L

DD4L

03

Reason: Referenced file is already allocated with output to the file specified.
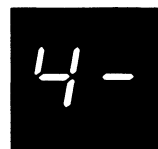
Probable user error.

Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.
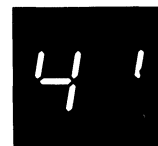
3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

4P

		3	**Reason:** A file has been specified by the using program as a direct multivolume file. However, the FILE statement indicates an offline file.
			Probable user error.
	DD4P		**Recovery 3:** Immediate cancel. Direct multivolume files must be online.

4U

		03	**Reason:** A file has been referenced as an update file and it is already allocated as an update file.
			Probable user error.
	DU4U		**Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.
			3: Immediate cancel.

4Y

		3	**Reason:** This halt occurred for one of the following reasons:
			1. A basic assembler program coded at your installation is being run and it is attempting to reference a file that has an incorrect device specification or,
			2. A system error has occurred because an attempt is being made to reference a file that has an incorrect device specification.
	DO4Y		**Recovery 3:** Immediate cancel.

Note: If a basic assembler program is being run, inform the programmer that this halt occurred and that his program may be in error. If a basic assembler program is not being run or there is nothing wrong with the basic assembler program, contact IBM for programming support.

4 (4 blank)

		03	**Reason:** No FILE statement for referenced file.
			Probable user error.
	XX4		**Recovery 0:** Continue. The specifications for any subsequent files used by the same job will be checked for errors, then halt 4J will occur.
			3: Immediate cancel.

Note: XX can be either DD or JE.

4 -

		3	**Reason:** A permanent I/O error has occurred. A message is printed that indicates the file that was being processed when the error occurred.
			Recovery 3: Immediate cancel.

4 1

DD4'		03	**Reason:** Attempting to reference a file in two levels, one or both levels using RETAIN-S.
			Recovery 0: Continue. The specifications for any subsequent files used by the same job will be checked for errors; then halt 4J will occur.
			3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

50

2   **Reason:** A bad track exists which cannot be assigned. Before this pack can be used properly, it must be initialized.

UA50ID   **Recovery 2:** Controlled cancel. The volume label is rewritten and the next ALT statement is read.

51

3   **Reason:** OCL and control statements for the Alternate Track Rebuild program cannot be in a procedure.

Probable user error.

UR51   **Recovery 3:** Immediate cancel.

52

12   **Reason:** End-of-job for Card List or Card Reproduce and Interpret.

ML52   End-of-job for Card List.

MR52   End-of-job for Card Reproduce and Interpret.

Recovery 1: Restart program.

2: Controlled cancel.

53

13   **Reason:** Number of VOL statements read does not agree with number of units to be initialized as listed on the UIN statement.

Probable user error.

UI53   **Recovery 1:** Correct as follows:

1. If there are too many VOL statements, place an END statement in front of the cards in the primary hopper. The last VOL statement is ignored.

2. If a VOL statement is missing, NPRO END card and place the needed VOL statement in front of the END card in the primary hopper.

3: Immediate cancel.

54

3   **Reason:** End-of-file.

Probable user error.

EO54   End-of-file statement found before END statement.

LA54   Invalid end-of-file. LOAD * and RUN followed by a /* or /&.

LM54   End-of-file statement found before END statement.

UA54   End-of-file statement found before END statement.

UB54   End-of-file statement found before END statement.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

54

(continued)

	UC54		End-of-file statement found before END statement.
	UF54		End-of-file statement found before END statement. If running File Delete, any files that have been specified on previous control statements for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.
	UI54		End-of-file statement found before END statement.
	UP54		End-of-file statement found before END statement.
	UR54		End-of-file statement found before END statement.
			Recovery 3: Immediate cancel.

55

		13	**Reason:** Error in SCRATCH or REMOVE statement.
			Probable user error.
	UF55A2		DATA parameter must be DATA-YES or DATA-NO.
	UF55A4		DATA-YES cannot be specified on a SCRATCH statement.
	UF55CX		Continuation indicated on the control statement, but a continuation not valid.
	UF55D1		DATE keyword parameter missing.
	UF55D2		DATE keyword parameter not a valid six-character date.
	UF55D3		DATE keyword is not valid when LABEL parameter contains more than one name or when the LABEL parameter is VTOC.
	UF55DK		Duplicate keyword.
	UF55IK		Keyword invalid.
	UF55KM		Keyword missing — UNIT, LABEL, or PACK.
	UF55L1		LABEL keyword parameter missing.
	UF55L2		LABEL keyword parameter is not VTOC or is not a valid eight-character-or-less file name.
	UF55NP		No keywords or parameters in statement.
	UF55P1		PACK keyword parameter missing.
	UF55P2		PACK keyword parameter is not valid six-character-or-less ID.
	UF55PE		PACK IDs different on duplicate UNIT IDs.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

55

(continued)

UF55SE — Format or punctuation error.

UF55U1 — UNIT keyword parameter missing.

UF55U2 — UNIT keyword parameter not R1, R2, F1, F2, D1, or D2.

UF55US — The requested disk unit is not online.

Recovery 1: Retry. Correct and reread.

    3: Immediate cancel.

Note: Any files that have been specified on previous control statements for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.

56

03

Reason: Error during alternate track assignment.

Probable user error.

UA56TS — The TRACK parameter specified on the ASSIGN or UNASSIGN keyword is beyond the initialized capacity of the pack.

UA56XX — The unit specified on the ALT statement is an uninitialized pack. XX on the log indicated the pack that is not initialized.

Recovery 0: Continue. For UA56TS all tracks within the capacity of the pack will be handled normally. The remaining are ignored.

For UA56XX, the ALT statement that specified the pack that is not initialized will not be processed. The remaining ALT statements will be processed.

    3: Immediate cancel.

57

013

Reason: File Delete Program. The wrong pack is mounted. The pack may be a $PCOPY backup pack. If log is on, the serial number of the needed pack is logged before the halt code.

UF57WP — **Recovery 0:** Mount correct pack and continue. This option is not available for 5448 units.

    1: Retry. Correct error and reread.

    3: Immediate cancel.

Note: Any files that have been specified for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.

5A

012

Reason: Alternate track assignment error.

UA5AIU

Invalid request. Trying to cancel the prior assignment of a track that has not been assigned an alternate.

UA5ANA

No more alternate track assignments can be made. All 6 alternates are assigned for a 5444 disk or a 5448 disk, or all 60 alternates are assigned for a 5445 disk. Cancel prior assignment if possible to free alternate for use.

Note: A list of track numbers may be printed out before this halt. These are the tracks that:

    1.   Were not assigned and were in the ASSIGN parameter or,

    2.   Were in the suspected defective track list as recorded by error logging.

If the track number listed is already assigned, this is an indication that the alternate track assigned has a permanent error. In this case, you may attempt to cancel the prior assignment of the primary track and conditionally assign this primary track to another alternate. If the halt occurs again, it is probable that no more alternate track assignments can be made.

UA5APA

Attempting to assign an alternate track that has been previously assigned.

Note: If you were attempting to assign this track to a different alternate using unconditional assignment, it may be necessary to cancel the prior assignment of the primary track and conditionally assign this primary track to another alternate.

Recovery 0: Continue. Request is ignored. Next request on ALT statement is processed.

Note: For UA5ANA, the 0 option will cause the result indicated in the 1 option.

        1: The next ALT statement is processed.

        2: Controlled cancel. The volume label is updated to reflect current status and end-of-job occurs.

Note: Run File and Volume Label Display program to determine alternate track assignments.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

5C

13

Reason: Error in reformat data card. Card Reproduce and Interpret program.

Probable user error.

MR5CIC Invalid card column specified on a reformat data card. Any entry other than 01 through 96 is invalid.

MR5CRE FROM start columns are greater than FROM end columns. Or data fields as specified cannot be punched in the new deck. For example, 010503.

Recovery 1: Correct and reread.

3: Immediate cancel.

5F

13

Reason: Error in DISPLAY statement.

Probable user error.

UF5FCX Continuation is indicated on the control statement but a continuation is not valid.

UF5FDK Duplicate keyword.

UF5FIK Keyword not LABEL or UNIT.

UF5FKM LABEL or UNIT keyword is missing.

UF5FL1 No parameter for LABEL keyword.

UF5FL2 Invalid parameter for LABEL keyword. It must be VTOC or an eight-character-or-less filename.

UF5FL3 Too many names as LABEL parameters on all the DISPLAY statements combined. Only 20 names can be processed in one run. VTOC is treated as one name.

UF5FNP No keywords or parameters in statement.

UF5FSE Format or punctuation error.

UF5FU1 No parameter for UNIT keyword.

UF5FU2 Invalid parameter for UNIT keyword. It must be R1, F1, R2, F2, D1, or D2.

UF5FUS Parameter for UNIT keyword is R2, F2, D1, or D2 and that unit is not defined within the system.

Recovery 1: Correct and reread. Card input - NPRO card in hopper. Correct, and place ahead of cards in hopper.

Console input — re-enter statement.

3: Immediate cancel.

5H

UA5HEU

0123

Reason: This halt occurs when trying to cancel the prior assignment of an alternate track. It indicates that the primary track is still defective.

Recovery 0: Ignore the defective primary track and force the cancellation of the prior assignment.

1: Retry the operation.

2: Bypass this request and go to next request on this ALT statement or next ALT statement.

3: Immediate cancel.

5L

Reason: Error with files. File Delete or File and Volume Label Display program.

Probable user error.

LOG	OPTIONS	
UF5LAF	03	This program is attempting to delete active files that are being used by a program in the other program level, or by an interrupted program.
UF5LB1	03	LABEL-VTOC specified and a basic file exists on this pack. Basic files can be removed or scratched only by the basic system.
UF5LB2	03	Trying to delete a basic file. Basic files can be removed or scratched only by the basic system.
UF5LNF	03	File not on specified unit. File name is printed on log device.
UF5LNI	03	Attempting to delete file from uninitialized disk.
UF5LTM	23	Too many files being deleted. 40 is maximum.

Recovery 0: Continue.

For UF5LAF - if the entire volume table of contents is being deleted, the next statement will be processed. If specific files are being deleted, the next file is processed.

For UF5LB1 - all files except basic files are removed or scratched.

For UF5LB2 - the next file is processed.

For UF5LNF - next file name is processed.

2: Controlled cancel.

For UF5LTM - first 40 files are deleted.

3: Immediate cancel.

Note: If running File Delete, any files that have been specified on previous control statements for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.

If halt UF5LNF was issued, the 0 option will have been assumed if this halt was bypassed. See *Bypassed Halts* in this manual for procedures on how to bypass a halt.

| | | 13 | **Reason:** Trying to rebuild track with no alternate track assigned. Primary track number was printed by Alternate Track Assignment program. |

SP

Probable user error.

UR5PAA — **Recovery 1:** Correct control statement and reread control statement and data statement.

3: Immediate cancel

| | | 13 | **Reason:** Error in UIN statement. |

SU

Probable user error.

UI5UAE	Statement ended in middle of keyword.
UI5UCE	Too many UIN statements. Only one is allowed.
UI5UCX	Continuation is indicated on the control statement but a continuation is not valid.
UI5UDK	Duplicate keyword.
UI5UE1	Parameter for ERASE keyword is missing.
UI5UE2	Parameter for ERASE keyword invalid. Must be YES or NO.
UI5UIC	Invalid combination of TYPE and ERASE parameters or invalid combination of UNIT-D1 or UNIT-D2 and TYPE or CAP parameters.
UI5UIK	Invalid keyword.
UI5UNP	No keywords or parameters in statement.
UI5UP1	Parameter for the CAP keyword is missing.
UI5UP2	Parameter for the CAP keyword is sublist that is not allowed.
UI5UP3	Parameter for the CAP keyword is neither HALF nor FULL.
UI5USE	Format or punctuation error.
UI5UT1	Parameter for TYPE keyword is missing.
UI5UT2	Parameter for TYPE keyword is invalid.
UI5UU1	UNIT keyword missing or UNIT keyword parameter missing.
UI5UU2	Parameter for UNIT keyword invalid. Must be R1, R2, F1, F2, D1, or D2.
UI5UU4	Unit specified more than once. For example R1, R1.
UI5UU5	Unit specified in UNIT parameter is a pack from which a program currently in execution was loaded or is the system pack. The pack cannot be initialized.
UI5UUS	Parameter for UNIT keyword is R2, F2, D1, or D2, and that unit is not online.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
▮5U▮ (continued)	UI5UV1 UI5UV2		Parameter for VERIFY keyword missing. Parameter for VERIFY keyword not 1-255. **Recovery 1:** Correct statement and reread. Card input - NPRO card in error, correct, and place ahead of cards in hopper. **Note:** For UI5UCE, do not perform the action indicated in option 1 recovery. Dial 1 on the rightmost ADDRESS/DATA switch and press console START or appropriate HALT/RESET key if you have DPF. The last VOL statement is ignored. **3:** Immediate cancel. If the error statement is in a procedure on disk, the procedure must be rebuilt.
▮5Y▮		13	**Reason:** Error in REBUILD statement or card sequence error. Probable user error.
	UR5YAT		TRACK parameter specifies an alternate track address. The parameter must specify a primary track.
	UR5YCI		Continuation is indicated on the control statement, but a continuation is not valid.
	UR5YCS		Card sequence error. Order of cards should be REBUILD card, data cards, END card.
	UR5YD1		Invalid DISP parameter. Characters of parameter must be numeric.
	UR5YDK		Duplicate keyword.
	UR5YDL		Number of hexadecimal digits on data card does not agree with LENGTH parameter on REBUILD statement.
	UR5YIC		TRACK portion of TRACK parameter exceeds pack capacity.
	UR5YID		Parameter for DISP keyword is invalid. It is not 1 through 255.
	UR5YIK		Invalid keyword.
	UR5YIL		LENGTH parameter not 2-256 or the length specified is not an even number.
	UR5YIP		Invalid PACK parameter. This parameter cannot exceed six characters.
	UR5YIS		For 5444 disk or 5448 disk, sector portion of TRACK parameter not 0-23. For 5445 disk, record portion of TRACK parameter not 1-20.
	UR5YIT		For 5444 disk or 5448 disk, track portion of TRACK parameter is less than 8 or greater than 405. For 5445 disk, track portion of TRACK parameter is less than 20 or greater than 3999. For 5448 disk, track portion of TRACK parameter is less than 16 or greater than 811.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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	LOG		REASON AND RECOVERY
	UR5YIU		Parameter for UNIT keyword not R1, R2, F1, F2, D1, or D2.
	UR5YL1		Invalid LENGTH parameter. Characters of parameter must be numeric.
	UR5YLD		Length plus displacement exceeds 257.
	UR5YMK		Missing keyword — PACK, UNIT, TRACK, LENGTH, or DISP.
	UR5YNP		No keywords or parameters in statement.
	UR5YSE		Format or punctuation error.
	UR5YSU		Parameter for UNIT keyword is R2, F2, D1, or D2, and that unit is not online.
	UR5YT1		Invalid TRACK parameter. Characters of parameter must be numeric.
	UR5YTP		Invalid TRACK parameter. For 5444 disk or 5448 disk, it must be exactly 5 digits in length. For 5445 disk, it must be exactly 6 digits in length.
	UR5YVH		Invalid hexadecimal digits on data card.

Recovery 1: Correct and reread. Card input - NPRO card in error. Correct, and place ahead of cards in hopper. For UR5YDL, UR5YIC, and UR5YVH, perform the following:

1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO.
3. Remove cards from stacker 1.
4. Remove the last control statement and the data cards that follow it from the deck of cards removed from stacker 1.
5. Place the control statement and corrected data cards in front of the cards in the primary hopper.
6. Press MFCU START.

Console input — re-enter statement. For UR5YD1 and UR5YVH, re-enter last control statement and corrected data cards that follow it.

3: Immediate cancel.

5

	LOG	OPTIONS	REASON AND RECOVERY
		13	**Reason:** Error in ALT statement.
			Probable user error.
	UA5 A4		Too many ALT statements. Only six allowed.
5 blank	UA5 AU		Both ASSIGN and UNASSIGN keywords found.
	UA5 CX		Continuation is indicated on the control statement but a continuation is not valid.
	UA5 DK		Duplicate keyword.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

5

5 blank
(continued)

UA5 IK   Invalid keyword. Keyword not PACK, UNIT, VERIFY, ASSIGN, or UNASSIGN.

UA5 KM   PACK or UNIT keyword is missing.

UA5 NP   No keywords or parameters in statement.

UA5 P1   PACK keyword missing, or parameter missing for PACK keyword.

UA5 P2   Invalid parameter for PACK keyword. Pack name must be six characters or less, no apostrophes and leading or embedded blanks.

UA5 SE   Format or punctuation error.

UA5 T1   Parameter missing for ASSIGN or UNASSIGN keyword.

UA5 T2   Invalid parameter for ASSIGN or UNASSIGN keyword. For the 5444 disk, it must be a track number between 8 and 405. For the 5445 disk, it must be a track number between 20 and 3999. For the 5448 disk, it must be a track number between 16 and 811.

UA5 T3   Too many tracks given for ASSIGN or UNASSIGN keyword. Only six tracks are allowed.

UA5 T4   The parameter for the ASSIGN or UNASSIGN keyword contains duplicate track numbers.

UA5 U1   No parameter for UNIT keyword.

UA5 U2   Invalid parameter for UNIT keyword. It must be R1, R2, F1, F2, D1, or D2.

UA5 US   Parameter for UNIT keyword is R2, F2, D1, or D2 and that unit is not online.

UA5 V1   No parameter for VERIFY keyword.

UA5 V2   Invalid parameter for VERIFY keyword. It must be a decimal number between 1 and 255.

Recovery 1: Correct and reread. Card input - NPRO card in error. Correct, and place ahead of cards in hopper.

Console input — re-enter statement.

Note: For UA5 A4, do not perform the action indicated in option 1 recovery. Dial 1 on the rightmost ADDRESS/DATA switch and press console START or appropriate HALT/RESET key if you have DPF. The last ALT statement is ignored.
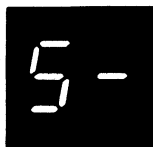
3: Immediate cancel. If the error statement is in a procedure on disk, the procedure must be rebuilt.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

5-

3

Reason: A Tape Sort Program error has occurred.

Recovery 3: Immediate cancel.

Note: If possible, take a core storage dump rather than selecting option 3. For information on taking a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Contact IBM for programming support.

5 1

03

Reason: This pack cannot be used. The pack may be a $PCOPY backup pack. If log is on, the unit number is logged before the halt code.

Probable user error.

UF5'N1

The pack is not initialized.

UF5'NU

The pack was used as the TO pack on a COPYPACK job that required early termination. This pack can only be used as a pack for another COPY-PACK job or it must be reinitialized.

Recovery 0: Continue. If any different units are listed, those files will be displayed.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
60		03	**Reason:** An attempt is being made to deallocate or reallocate the libraries, or to copy, delete, or rename the system or Library Maintenance entries on the pack from which the system or Library Maintenance program was loaded.
			Probable user error.
	LM60SY		**Recovery 0:** Continue. For deallocating or reallocating libraries or deleting entries, ignore the request. The next control statement is read. For copying or renaming entries, the function will be performed. However, this method is not recommended for copying or renaming system or Library Maintenance entries since unpredictable results can occur. It is suggested that an IPL be performed when the job is completed.
			3: Immediate cancel.
61		03	**Reason:** Error found when attempting to perform a library function.
			Probable user error.
	LM61EP		Possible reasons: Attempting to copy a system (LIBRARY-O, NAME-SYSTEM) or all libraries (LIBRARY-ALL, NAME-ALL) to a library that is:
			1. Not empty,
			2. Not allocated with a scheduler work area as large as the FROM library scheduler work area, or
			3. Not allocated sufficient space.
	LM61NS		Attempting to copy a system but it does not exist on the FROM pack.
	LM61S7		Attempting to use a pack that contains a System/7 system.
			Recovery 0: Continue. Ignore the request. Next control statement is read.
			3: Immediate cancel.
62		013	**Reason:** Error in records being placed in library.
			Probable user error.
	LM62CS		Check sum error. All records in object decks have a self-check number in columns 86-88.
	LM62DR		It cannot be determined if the REMOVE statement is a data record or a control statement.
	LM62EF		FROM, TO, or AFTER sequence number does not exist or is not in ascending sequence.
	LM62ND		No data records following INSERT or REPLACE control statements.
	LM62NH		Header record missing on object deck.
	LM62SQ		Records out of sequence.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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(continued)

LM62TP

Incorrect type record.

Recovery 0: For log LM62DR, the REMOVE statement is placed in the source library entry with no further checking done. For all other logs, continue. Ignore the request. Records are read through // CEND and then the next control statement is processed.

Note: For LM62CS, LM62SQ, and LM62TP, if option 0 or 3 was selected when a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

1: For LM62CS, ignore the error, accept the record, and continue. No further attempts are made to detect check sum errors. Otherwise, correct the record and retry.

3: Immediate cancel.

63

03

LM63DE

LM63NF

Reason: Directory entry error.

An attempt has been made to remove an entire directory entry using MODIFY.

The directory entry cannot be found, or if the entry exists in the library for the DELETE statement, the attributes do not match.

Probable user error.

Recovery 0: Continue. Ignore the request. Next control statement is read.

If this was a DELETE statement, the 0 option will have been assumed if this halt was bypassed. See *Bypassed Halts* in this manual for procedures on how to bypass a halt.

3: Immediate cancel.

Load SCP from
other pack and load
from that pack:
& maint.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

64

		13	**Reason:** Functional or syntax error on ALLOCATE statement.
			Probable user error.
	LM64DS		Attempting to change to a directory size that is too small for the active permanent directory entries.
	LM64MN		Attempting to allocate an object library that is less than the minimum size required.
	LM64NO		OBJECT-R specified on ALLOCATE statement but there is no object library.
	LM64NS		SOURCE-R specified on ALLOCATE statement but there is no source library.
	LM64OA		Attempting to reallocate the object library but it is being made too small to contain all permanent entries.
	LM64SA		Attempting to reallocate the source library but it is being made too small to contain all permanent entries.
			Recovery 1: Correct the statement and retry.
			3: Immediate cancel.

65

			Reason: Pack specified that is not initialized, or pack may be a $PCOPY backup pack.
			Probable user error.
	EL65UN	03	**Reason:** RPG II Linkage Editor detected an attempt to catalog a module on a pack that was not initialized.
			Recovery 0: Catalog attempted is ignored. Module is punched.
			3: Immediate cancel.
	EO65UN	03	**Reason:** Overlay Linkage Editor detected an attempt to catalog a module on a pack that was not initialized.
			Recovery 0: Catalog attempt is ignored. Module is punched.
			3: Immediate cancel.
	LM65UN	13	**Reason:** Library Maintenance Program detected an attempt to use an uninitialized pack.
			Recovery 1: Correct the statement and retry.
			3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

66

Reason: Error with LOAD * function.

Probable user error.

LA66CM 3

Reason: Invalid object deck. The number of cards in the deck does not agree with the information in the header card for the deck, or a /* statement was found before the end of the deck.

Recovery 3: Immediate cancel.

LA66CS 13

Reason: Check sum error detected in deck loaded from system input device.

Recovery 1: Retry. No further attempts to detect check sum errors are made. Object program may not execute properly.

3: Immediate cancel.

LA66IC 13

Reason: Incorrect card type, not T, E, or R. Object deck cards have T, E, or R in column 1.

Recovery 1: Retry. Correct card and reread.

3: Immediate cancel.

LA66NH 13

Reason: No header card. Header on object deck has H in column 1.

Recovery 1: Retry. Correct card and reread.

3: Immediate cancel.

LA66NR 3

Reason: Attempting to place an object module using LOAD* in the object library and there is not enough room in the library.

Recovery 3: Immediate cancel.

LA66SQ 13

Reason: Object deck out of sequence. Sequence numbers in columns 93-96.

Recovery 1: Retry. Correct card and reread.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

67

Reason: Library does not exist on specified pack.

Probable user error.

| | EL67NL | 03 | **Reason:** Error detected by system control program. |

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

| | EO67NL | 03 | **Reason:** Error detected by Overlay Linkage Editor. |

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

| | LM67NL | 03 | **Reason:** Error detected by Library Maintenance Program. |

Recovery 0: Continue. The request is ignored and the next control statement is read.

3: Immediate cancel.

68

Reason: No room in library or directory.

Probable user error.

| | EL68DF | 03 | **Reason:** System control program detected that no more directory space is available for the entry. |

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

| | EL68LF | 03 | **Reason:** System control program detected that not enough space exists in the library to contain the new entry. |

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

| | EO68DF | 03 | **Reason:** Overlay Linkage Editor detected that no more directory space is available for the entry. |

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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(continued)

EO68LF 03

Reason: Overlay Linkage Editor detected that no more library space is available for the entry.

Recovery 0: The request is ignored and the module is punched.

3: Immediate cancel.

LM68DF 03

Reason: Library Maintenance Program detected that no more directory space is available for the entries being copied.

Recovery 0: Continue. Request is ignored. Next control statement is read.

3: Immediate cancel.

Note: If a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

LM68LF 03

Reason: No room exists in the library to copy the specified entry or entries, or there is not enough room to write the modified entry back into the library.

Recovery 0: Continue. Request is ignored. Next control statement is read.

3: Immediate cancel.

Note: If a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

69

3

Reason: Unrecoverable disk error while using a disk library.

Note: For the LM69HE log, when the logging device is on, the unit in error is displayed by the OX halt. The pack is referenced on the last library statement used. The pack is defective and the library used by the executing program must be recreated.

- If the error is on the TO pack, the TO pack is defective and the library must be recreated from the master. Run the alternate track assignment program to check for a defective track.

- If the error is on the FROM pack, run the alternate track assignment program to check for a defective track. If no alternate is assigned, rerun the program. If the alternate track assignment program indicates errors during transfer of data, recreate the library.

- If the error is on the WORK pack, consider that the WORK and TO packs are defective. Assign an alternate track to the WORK pack, if necessary, and rerun the program.

XX69HE

Recovery 3: Immediate cancel.

Note: XX can be EL, EO, or LM.

```
6A
```

Reason: Error in library maintenance control statements.

Probable user error.

LM6AAL	13	**Reason:** SOURCE or OBJECT keyword or keyword parameter is missing or invalid.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6AAZ	13	**Reason:** SYSTEM keyword or keyword parameter is missing or invalid.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6AD2	13	**Reason:** FROM, TO, or WORK parameter is R2 or F2 and that unit is not available.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6ADK	13	**Reason:** Control statement contains a duplicate keyword.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6ADS	13	**Reason:** Invalid DIRSIZE keyword. Value specified must be from 1 through 9 and less than the value specified for the OBJECT keyword parameter.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6AFL	13	**Reason:** Invalid or missing FILE keyword or keyword parameter.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6AFM	13	**Reason:** Invalid or missing FROM keyword or keyword parameter.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

LM6AIK	13	**Reason:** Control statement contains an invalid keyword.

Recovery 1: Correct statement and retry.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6A

(continued)

LM6AIN   13

Reason: Invalid INCR keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6AIS   13

Reason: First three columns do not contain // blank.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6AIV   13

Reason: Invalid statement identifier for this program.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6ALB   13

Reason: Invalid or missing LIBRARY keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6ALS   13

Reason: Invalid LIST keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6ANK   13

Reason: No keywords or keyword parameters exist on control statement.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6ANM   13

Reason: Invalid or missing NAME keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6ANU   13

Reason: Invalid or missing NEWNAME keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

LM6AOM   13

Reason: Invalid OMIT keyword or keyword parameter.

Recovery 1: Correct statement and retry.

     3: Immediate cancel.

```
6A
```

(continued)

LM6ARL   13

Reason: Invalid RECL keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6ARS   13

Reason: Invalid or missing RESER keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6ART   13

Reason: Invalid or missing RETAIN keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6ASF   13

Reason: Invalid SEQFLD keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6ASQ   13

Reason: Invalid or missing FROM, TO, or AFTER keyword or keyword parameter.

Recovery 1: Correct statement and retry.

Recovery 3: Immediate cancel.

LM6AST   13

Reason: Format, continuation, or punctuation error.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6ATO   13

Reason: Invalid or missing TO keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6AWK   13

Reason: Invalid or missing WORK keyword or keyword parameter.

Recovery 1: Correct statement and retry.

        3: Immediate cancel.

LM6AXC   013

Reason: Invalid record.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

        1: No further records are read from this file. The next control statement is read from the system input device or procedure.

        3: Immediate cancel.

6A

(continued)

	LOG	OPTIONS	REASON AND RECOVERY

LM6AXD   013

Reason: A duplicate keyword has been found.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

    1: No further records are read from this file. The next control statement is read from the system input device or procedure.

    3: Immediate cancel.

LM6AXF   13

Reason: $$SYFG could not be found.

Recovery 1: No further records are read from this file. The next control statement is read from the system input device.

    3: Immediate cancel.

LM6AXL   013

Reason: The LIBRARY keyword is missing.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

    1: No further records are read from the file. The next control statement is read from the system input device or procedure.

    3: Immediate cancel.

LM6AXM   013

Reason: The NAME keyword is missing.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

    1: No further records are read from the file. The next control statement is read from the system input device or procedure.

    3: Immediate cancel.

LM6AXN   013

Reason: The NAME parameter is invalid.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

    1: No further records are read from the file. The next control statement is read from the system input device or procedure.

    3: Immediate cancel.

LM6AXP   013

Reason: The library does not exist on the pack.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

    1: No further records are read from the file. The next control statement is read from the system input device or procedure.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6A

(continued)

LM6AXS 013

Reason: A syntax error has been detected. A hyphen (-) must separate the keyword and parameter.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

1: No further records are read from the file. The next control statement is read from the system input device or procedure.

3: Immediate cancel.

LM6AXT 013

Reason: An invalid library type has been specified.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

1: No further records are read from the file. The next control statement is read from the system input device or procedure.

3: Immediate cancel.

LM6AXV 013

Reason: An invalid operation has been specified.

Recovery 0: Continue. Records are read through // CEND and then the next control statement from the file is processed.

1: No further records are read from the file. The next control statement is read from the system input device or procedure.

3: Immediate cancel.

6C

03

Reason: No space available on pack.

Probable user error.

LM6CSP

Not enough space available on pack for which allocation is being performed.

LM6CSW

Space needed on work pack is not available, or for a MODIFY run, additional work space is not available.

Recovery 0: Continue. The request is ignored and the next control statement is read. If this is a MODIFY run, the MODIFY request is ignored and the next control statement is read.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6E
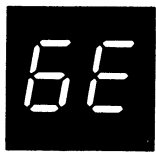
03   **Reason:** Error occurred when copying or modifying an entry.

Probable user error.

LM6EOF   An overflow has occurred in the sequence field during reserialization.

XX6EDP   An entry with the same name already exists in the library.

Recovery 0: Continue. For log XX6EDP, the old entry is deleted and re-placed with the new entry. For log LM6EOF, the high order digit(s) of the sequence value will be dropped.

         3: Immediate cancel.

Note: XX can be EL, EO, or LM.

6F
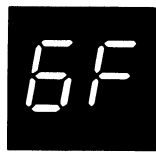
3   **Reason:** Uncorrected MFCU error.

MR6FAC   MFCU error during Data Record program run.

MV6FAC   MFCU error during Data Verify program run.

Recovery 3: Immediate cancel.

6H

Reason: Error found when replacing entries.

Probable user error.

EL6HDT   03   **Reason:** System control program has detected an attempt to replace a perma-nent entry with a temporary entry.

Recovery 0: The request is ignored and the module is punched.

Recovery 3: Immediate cancel.

EO6HDT   03   **Reason:** Overlay Linkage Editor has detected an attempt to replace a perma-nent entry with a temporary entry.

Recovery 0: The request is ignored and the module is punched.

         3: Immediate cancel.

LM6HDP   03   **Reason:** NEWNAME keyword on RENAME statement specifies name of entry that is already in the directory.

Recovery 0: Continue. The request is ignored and the next control statement is read.

         3: Immediate cancel.

LM6HDT   03   **Reason:** Attempting to replace permanent entry with a temporary entry.

Recovery 0: Continue. The request is ignored and the next control statement is read.

         3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6J

Reason: Control statements are missing or invalid.

Probable user error.

LM6JCC   13   **Reason:** Control statements between the RUN and END statements are missing or invalid.

Recovery 1: Insert or correct the statements and retry.

      3: Immediate cancel.

LM6JCS   013   **Reason:** Control statements between the MODIFY and CEND statements are missing or invalid.

Recovery 0: Continue. Ignore the request. The next control statement is processed.

      1: Insert or correct the statements and retry.

      3: Immediate cancel.

6L

      3   **Reason:** Log device required for this program.

UA6L   Log device must be on.

UI6L   Log device must be on.

Recovery 3: Immediate cancel. Supply LOG ON statement and rerun job.

6Y

      13   **Reason:** No NEWNAME keyword when copying an entry to the same library.

Probable user error.

LM6YNN   **Recovery 1:** Perform one of the following:

      1.   Add a NEWNAME keyword and parameter to the COPY statement and reread statement.

      2.   Ignore request. Next control statement is read.

        3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6

6 blank

Reason: Error in records being placed in library.

Probable user error.

LM6ØBC 3

Reason: Invalid character in source record.

Recovery 3: Immediate cancel.

Note: If a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

LM6ØCM 03

Reason: Invalid object deck. The number of records in the deck does not agree with the information on the header record for the deck, or a CEND control statement was found before the end of the deck.

Recovery 0: Continue. Ignore the request. Records are read through // CEND, if one was not just read; then the next control statement is processed.

3: Immediate cancel.

Note: If a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

LM6ØND 03

Reason: No data records between the COPY and CEND control statements.

Recovery 0: Continue. Ignore the request. The next control statement is processed.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

6-

LM6-BC — OPTIONS **01**

Reason: An entry containing a blank card or statement is about to be placed in the source or procedure library.

Probable user error.

Recovery 0: Continue. The entry containing blanks is placed in the library. The entry might not be usable.

1: Correct the statement and retry. The next statement entered is processed. This option is available only for the keyboard.

6'

LM6'CE — OPTIONS **13**

Reason: CEND statement expected but not found.

Probable user error.

Recovery 1: Retry. Insert CEND statement.

3: Immediate cancel.

Note: For option 3, if a module was being replaced, it might have been deleted, but the new module will not have been copied into the library.

70

CR70 — OPTIONS **3**

Reason: Too many override statements for procedure. Maximum is 25.

Probable user error.

Recovery 3: Immediate cancel.

71

CR71 — OPTIONS **03**

Reason: Statement identifier missing.

Probable user error.

Recovery 0: Ignore statement and continue.

3: Immediate cancel.

72

CR72 — OPTIONS **23**

Reason: Statement identifier missing.

Probable user error.

Recovery 2: Remaining OCL will be read and scanned, but job will not be executed.

3: Immediate cancel.

73

CR73 — OPTIONS **0**

Reason: A PARTITION statement was given in program level 2, or program level 2 was active when a PARTITION statement was given in program level 1.

Probable user error.

Recovery 0: Continue. Ignore PARTITION statement.

74

CR74 — OPTIONS **3**

Reason: /& between LOAD or CALL, and RUN statements.

Probable user error.

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
75	CR75	23	**Reason:** Extraneous statement. Not //, or /& in columns 1 and 2, or * in column 1. Probable user error. **Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed. **3:** Immediate cancel.
76	CR76	03	**Reason:** Extraneous statement. Not //, or /& in columns 1 and 2, or * in column 1. Probable user error. **Recovery 0:** Ignore statement and continue. **3:** Immediate cancel.
77	CR77	23	**Reason:** Invalid OCL statement identifier. Probable user error. **Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed. **3:** Immediate cancel.
78	CR78	03	**Reason:** Invalid statement identifier. Probable user error. **Recovery 0:** Ignore statement and continue. **3:** Immediate cancel.
79	CR79	23	**Reason:** Continuation of OCL statement was expected but not received. Probable user error. **Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed. **3:** Immediate cancel.
7A	CR7ALR CR7AOV	3	**Reason:** A second LOAD or CALL statement has been read prior to reading a RUN statement. A second LOAD or CALL statement has been read prior to reading a RUN statement. A CALL statement has been found in procedure override statements. Either an extra CALL statement is present, or a RUN statement has been omitted. Probable user error. **Recovery 3:** Immediate cancel. The OCL read prior to the second LOAD or CALL statement will be ignored. If the LOAD or CALL statement just read belongs to the next job, it must be reread.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

7C

      03   **Reason:** COMPILE statement found between jobs. COMPILE statement must be between LOAD or CALL, and RUN statements.

Probable user error.

CR7C   **Recovery 0:** Ignore COMPILE statement and continue.

       3: Immediate cancel.

7E

      03   **Reason:** DATE statement found between jobs. DATE statement must be between LOAD or CALL, and RUN statements.

Probable user error.

CR7E   **Recovery 0:** Ignore DATE statement and continue.

       3: Immediate cancel.

7F

      03   **Reason:** FILE or BSCA statement found between jobs. FILE or BSCA statement must be between LOAD or CALL, and RUN statements.

Probable user error.

CR7F   **Recovery 0:** Ignore FILE or BSCA statement and continue.

       3: Immediate cancel.

7H

      03   **Reason:** SWITCH statement found between jobs. SWITCH statement must be between LOAD or CALL, and RUN statements.

Probable user error.

CR7H   **Recovery 0:** Ignore SWITCH statement and continue.

       3: Immediate cancel.

7J

      23   **Reason:** READER statement found between LOAD or CALL statement, and RUN statement.

Probable user error.

CR7J   **Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed.

       3: Immediate cancel.

7L

Reason: An error has occurred while attempting to input a tape file.

The file name is logged before the halt code. If a standard labeled tape file is being processed and the file statement specifies volume identifications using the REEL parameters, the volume identification is logged following the file name.

To determine the reason for the 7L halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the error occurred. The right character indicates the specific reason for the halt.

If log is on, the last two characters of the error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error codes can be any one of the possible right characters of the subhalt) —

1   CI7L1X   **Reason:** The error occurred on T1.

2   CI7L2X   **Reason:** The error occurred on T2.

3   CI7L3X   **Reason:** The error occurred on T3.

4   CI7L4X   **Reason:** The error occurred on T4.

The possible right characters of the subhalt and corresponding error codes are (note that the Y in the error codes can be any one of the possible left characters of the subhalt) —

0   CI7LY0   23   **Reason:** No REEL parameter was specified on the FILE statement for the input file.

                         Recovery 2: Controlled cancel.

                              3: Immediate cancel.

1   CI7LY1   0123   **Reason:** An input volume of multivolume tape file has been used out of the expected order. Input volumes of a multivolume tape file are expected to be used in the order in which they were created. The input volume can be used out of order by selecting option 0.

                         Recovery 0: Continue processing the tape volume. If this option is selected for a checkpoint program and the program is later restarted, the 0 option should also be selected for the UX subhalt of halt H (halt H blank).

                              1: Mount the correct tape and retry.

                              2: Controlled cancel.

                              3: Immediate cancel. The OCL may be incorrect.

Halt 7L   93

7L

(continued)

2   CI7LY2   123   **Reason:** An input file is not on the tape volume.

Recovery 1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

3   CI7LY3   123   **Reason:** The LABEL parameter on the file statement (or the NAME parameter if the LABEL parameter is not specified) does not match the input file's label.

Recovery 1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

4   CI7LY4   123   **Reason:** The DATE parameter on the file statement does not match the input file's creation date.

Recovery 1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

5   CI7LY5   23   **Reason:** If a non-assembler program is being run, the record format of the input tape does not match the record format of the file defined in the program and/or by the FILE statement.

If an assembler program is being run, the record format of the input file does not match the record format specified in the DTF and/or by the FILE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

6   CI7LY6   23   **Reason:** If a non-assembler program is being run, the record length of the input tape does not match the record length of the file defined in the program and/or by the file statement.

If an assembler program is being run, the record length of the input file does not match the record length specified in the DTF and/or by the FILE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

94

7L

(continued)

7   CI7LY7   23   **Reason:** If a non-assembler program is being run, the block length of the input tape does not match the block length of the file defined in the program and/or by the FILE statement.

If an assembler program is being run, the block length of the input file does not match the block length specified in the DTF and/or by the FILE statement.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

8   CI7LY8   023   **Reason:** The last (or only) standard labeled tape used as input is not the last tape volume of the tape file.

Recovery 0: Continue. If this option is selected, the last record of the last volume is assumed to be the last record of the file (EOF).

         2: Controlled cancel.

         3: Immediate cancel.

9   CI7LY9   23   **Reason:** The input file does not contain fixed or variable length records.

Recovery 2: Controlled cancel.

         3: Immediate cancel.

A   CI7LYA   023   **Reason:** An unlabeled or non-standard labeled input file is being processed. The UNIT parameter indicates a multivolume file, but the REEL parameter does not give the number of volumes the file occupies.

Recovery 0: Process the data in the volume mounted on the first unit (first unit given in the UNIT parameter).

         2: Controlled cancel.

         3: Immediate cancel.

7P

Reason: New print chain expected.

Recovery: Change print chain then press console START, HALT/RESET if you have DPF.

7U

3   **Reason:** A RUN statement was found, but it was not preceded by a LOAD or CALL statement.

Probable user error.

CR7U   **Recovery 3:** Immediate cancel.

7Y

Reason: An error has occurred during the output of a tape file.

The file name is logged before the halt code. If a standard labeled tape file is being processed and the FILE statement specifies volume identifications using the REEL parameter, the volume identification is logged following the file name.

To determine the reason for the 7Y halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the error occurred. The right character indicates the specific reason for the halt.

If log is on, the last two characters of the error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error codes can be any one of the possible right characters of the subhalt) —

1   CI7Y1X   **Reason:** The error occurred on T1.

2   CI7Y2X   **Reason:** The error occurred on T2.

3   CI7Y3X   **Reason:** The error occurred on T3.

4   CI7Y4X   **Reason:** The error occurred on T4.

The possible right characters of the subhalt and corresponsing error codes are (note that the Y in the error codes can be any one of the possible left characters of the subhalt) —

0   CI7YY0   23   **Reason:** REEL-NS cannot be specified on the FILE statement for the output file.

Recovery 2: Controlled cancel.

   3: Immediate cancel.

74
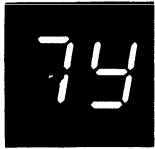
(continued)

1 CI7YY1 023 **Reason:** The standard labeled output file requires more volumes than the number specified by the FILE statement's REEL parameter.

Recovery 0: Ignore the error and continue. If this option is selected, the next volume should be mounted on the tape drive indicated by the left character of the subhalt or the next-to-last character of the error code.

2: Controlled cancel.

3: Immediate cancel.

2 CI7YY2 0123 **Reason:** The DATE parameter was specified on the file statement for the output file, however, no output file exists on the tape.

Recovery 0: Ignore the error and continue.

1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

3 CI7YY3 0123 **Reason:** The tape used for output contains an unexpired file.

Recovery 0: Ignore the error and continue.

1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

4 CI7YY4 23 **Reason:** The tape used for output contains a non-expiring permanent file. The tape must be reinitialized before it can be used for output.

Recovery 2: Controlled cancel.

3: Immediate cancel.

5 CI7YY5 0123 **Reason:** The DATE parameter was specified on the FILE statement, however, the output tape's file label does not match the FILE statement's LABEL parameter or NAME parameter if the LABEL parameter was not specified.

Recovery 0: Ignore the error and continue.

1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

74

(continued)

6   CI7YY6   0123   **Reason:** The creation date of the file on the output tape does not match the date specified by the FILE statement's DATE parameter.

Recovery 0: Ignore the error and continue.

1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

7   CI7YY7   123   **Reason:** The end-of-tape reflective marker was detected during the writing of the header label group.

Recovery 1: Retry. Mount another standard labeled volume. The volume ID must match the REEL parameter if the REEL parameter is given (unless you previously selected option 0 on a CI7YY1 halt for this file).

2: Controlled cancel.

3: Immediate cancel.

A   C17YYA   23   **Reason:** REEL-BLP cannot be specified for an output file.

Recovery 2: Controlled cancel.

3: Immediate cancel.

| | | 3 | **Reason:** There are too many utility control statements. The maximum is 25. |

7

Probable user error.

CR7   **Recovery 3:** Immediate cancel.

7 blank
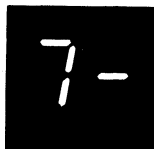
7-

| | | 0 | **Reason:** PARTITION statement was read, but the system does not have the dual programming feature. |

Probable user error.

CR7-   **Recovery 0:** Ignore PARTITION statement and continue.

---

7 1
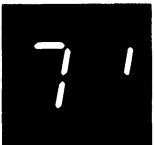
Reason: An error has occurred while processing a tape file. If a non-assembler program is being run, the file defined in the program may be incorrect or the file attributes may not match the attributes specified by the FILE statement. If an assembler program is being run, the DTF contains incorrect information.

The file name is logged before the halt code. If a standard labeled tape file is being processed and the FILE statement specifies volume identifications using the REEL parameter, the volume identification is logged following the file name.

To determine the reason for the 7' halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the error occurred. The right character indicates the specific reason for the halt.

If log is on, the last two characters of the error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error codes can be any one of the possible right characters of the subhalt) —

7 1

(continued)

1   CI7'1X   **Reason:** The error occurred on T1.

2   CI7'2X   **Reason:** The error occurred on T2.

3   CI7'3X   **Reason:** The error occurred on T3.

4   CI7'4X   **Reason:** The error occurred on T4.

The possible right characters of the subhalt and corresponding error codes
are (note that the Y in the error codes can be any one of the possible left
characters of the subhalt) —

0   CI7'Y0   23   **Reason:** An attempt is being made to input or output a file that contains
spanned records, and the file is not a basic file.

Recovery 2: Controlled cancel.

3: Immediate cancel.

1   CI7'Y1   23   **Reason:** The record format is not specified in the DTF or by the FILE state-
ment's RECFM parameter. If the file is a standard labeled input file, the
record format is also not specified by the file label.

Recovery 2: Controlled cancel.

3: Immediate cancel.

2   CI7'Y2   23   **Reason:** The block length is not specified in the DTF or by the FILE state-
ment's BLKL parameter. If the file is a standard labeled input file, the block
length is also not specified by the file label.

Recovery 2: Controlled cancel.

3: Immediate cancel.

3   CI7'Y3   23   **Reason:** The record length is not specified in the DTF or by the FILE state-
ment's RECL parameter. If the file is a standard labeled input file, the record
length is also not specified by the file label.

Recovery 2: Controlled cancel.

3: Immediate cancel.

7 1

(continued)

4   CI7′Y4   23

Reason: The DTF and/or FILE statement defines the record format as fixed or fixed blocked, but the block length is not an integral multiple of the record length.

Recovery 2: Controlled cancel.

3: Immediate cancel.

5   CI7′Y5   23

Reason: The record format specified in the DTF does not match the record format specified by the FILE statement's RECFM parameter.

Recovery 2: Controlled cancel.

3: Immediate cancel.

6   CI7′Y6   23

Reason: The block length specified in the DTF does not match the block length specified by the FILE statement's BLKL parameter.

Recovery 2: Controlled cancel.

3: Immediate cancel.

7   CI7′Y7   23

Reason: The record length specified in the DTF does not match the record length specified by the FILE statement's RECL parameter.

Recovery 2: Controlled cancel.

3: Immediate cancel.

8   CI7′Y8   23

Reason: The fixed length records for the file are less than 18 bytes long.

Recovery 2: Controlled cancel.

3: Immediate cancel.

9   CI7′Y9   23

Reason: The block length for the file is greater than 32767 bytes.

Recovery 2: Controlled cancel.

3: Immediate cancel.

A   CI7′YA   23

Reason: ASCII data cannot be processed by this program.

Recovery 2: Controlled cancel.

3: Immediate cancel.

7 1

(continued)

C CI7'YC 23 **Reason:** An attempt is being made to process a tape file that contains FORMAT-D records, but the FILE statement does not specify ASCII-YES. FORMAT-D records are valid only for ASCII files.

Note: ASCII files cannot be processed on 7-track tape units.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E CI7'YE 23 **Reason:** Unexpected information has been read while the file labels were being read.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F CI7'YF 023 **Reason:** The parameters given for CONVERT, PARITY, and TRANSLATE do not agree with the tape recording technique given in the HDR2 file label on tape. (If this halt occurs for the first volume of a multivolume input file, it will occur for each volume of the file.)

Recovery 0: Process the tape using the recording technique parameters given in the HDR2 label.

2: Controlled cancel

3: Immediate cancel.

H CI7'YH 23 **Reason:** An attempt is being made to process a file containing variable length records and CONVERT-ON was not specified (7-track tape only).

Recovery 2: Controlled cancel.

3: Immediate cancel.

J C17'YJ 123 **Reason:** An attempt is being made to write a file label and the file protect ring is not on the tape reel.

Probable user error.

Recovery 1: Insert the ring and retry the operation.

2: Controlled cancel.

3: Immediate cancel.

7 1

(continued)

P   CI7'YP   23   **Reason:** A permanent tape error has occurred while allocating a tape volume.

Note: If this subhalt appears after the 0 option was taken for primary halt 2P, the permanent tape error cannot be ignored during the tape allocation.

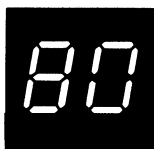**Recovery 2:** Controlled cancel.

3: Immediate cancel.

U   CI7'YU   23   **Reason:** An attempt is being made to process an ASCII file containing variable length records.

Recovery 2: Controlled cancel.

3: Immediate cancel.

---

8 0   0   **Reason:** The first statement read after the IPL process was not a DATE statement.

Probable user error.

CR80   **Recovery 0:** Resubmit all OCL for present job after supplying a system date.

---
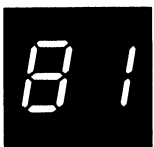
8 1   23   **Reason:** Error in LOAD statement.

Probable user error.

CR810D   LOAD card has incorrect number of parameters.

CR810N   No program name given.

CR810P   No parameters found.

CR810U   No unit given.

CR81N1   First character of program name is not valid.

CR81N2   Invalid character in program name.

CR81N3   Program name exceeds six characters.

CR81U1   Invalid unit. Unit specified is not R1, R2, F1 or F2.

CR81U2   F2 or R2 specified as unit but that unit is not online.

Recovery 2: Remaining OCL is read and scanned, but job is not executed.

3: Immediate cancel.

| HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

83

	23	**Reason:** LOAD * statement invalid in program level 2.
		Probable user error.
CR83P2		**Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed.
		3: Immediate cancel.

84

	3	**Reason:** Error in CALL statement.
		Probable user error.
CR8401		First character of procedure name invalid.
CR8402		Invalid character in procedure name.
CR8403		Procedure name exceeds six characters.
CR8404		Invalid unit. Unit specified is not R1, R2, F1, or F2.
CR8405		F2 or R2 specified as unit, but the unit is not online.
CR840N		No procedure name specified.
CR840P		No parameters found.
CR840U		No unit specified.
		Recovery 3: Immediate cancel.

85

	23	**Reason:** Second SWITCH statement found. A SWITCH statement has already been specified for this job.
		Probable user error.
CR85		**Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed.
		3: Immediate cancel.

86

	23	**Reason:** Invalid parameter in SWITCH statement.
		Probable user error.
CR8601		More than eight characters in parameter.
CR8602		Fewer than eight characters in parameter.
CR8603		Character other than X, 1, or 0 specified in parameter.
CR8604		No parameter specified.
		Recovery 2: Remaining OCL is read and scanned, but job is not executed.
		3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
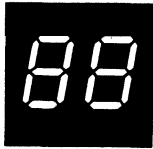
88

		13	**Reason:** Procedure not found in source library on specified unit.
			Probable user error.
	CR88		**Recovery 1:** Mount correct pack and retry.
			3: Immediate cancel.
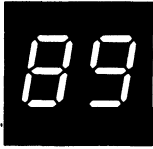
89

		01	**Reason:** System date already specified.
			Probable user error.
	CR89		**Recovery 0:** Continue. Ignore date.
			1: Ignore previous date and accept this date as system date.

8A
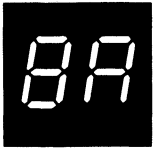
		0	**Reason:** Invalid date, or date specified incorrectly on DATE statement.
			Probable user error.
	CR8A01		Date specified incorrectly.
	CR8A02		DATE parameter missing.
			Recovery 0: Proceed. A correct system date must be given before first job.

8C

		23	**Reason:** Second DATE statement found. DATE statement already received for this job.
			Probable user error.
	CR8C		**Recovery 2:** Remaining OCL will be read and scanned, but job will not be executed.
			3: Immediate cancel.

8E

		23	**Reason:** DATE parameter missing or invalid.
			Probable user error.
	CR8E01		Date specified incorrectly.
	CR8E02		DATE parameter missing.
			Recovery 2: Remaining OCL will be read and scanned, but job will not be executed. If the erroneous DATE statement is in a procedure and you respond to the 8E halt with a 2 option, the system searches for an override to the DATE statement. If a valid override is found, the system ignores the 2 option and continues processing the job.
			3: Immediate cancel.

8F

		23	**Reason:** BSCA statement error.
			Probable user error.
	CR8F01		No parameters found on BSCA statement.

(continued on next page)

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

8F
(continued)

	LOG	OPTIONS	REASON AND RECOVERY
	CR8F02		Abnormal end of statement.
	CR8F03		Syntax or punctuation error.
	CR8F04		Invalid continuation.
	CR8F05		Invalid keyword.
	CR8F06		Duplicate keyword.
	CR8F07		Specified line is not supported.
	CR8F08		Specified line is not available.
	CR8F09		Invalid LINE parameter.

Recovery 2: Controlled cancel. The remaining OCL for the job will be read and checked.

3: Immediate cancel. The remaining OCL is read but not checked.

8H

		OPTIONS	REASON AND RECOVERY
		3	**Reason:** More than nine levels of procedures have been called.
			Probable user error.
	CR8H		**Recovery 3:** Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
8J		0	**Reason:** Invalid parameter on READER or PUNCH statement.
			Probable user error.
	CR8JID		Invalid device specified.
	CR8JND		No parameter specified.
			Recovery 0: Continue. System input or output device is not changed.
8L		0	**Reason:** Desired system input device is being used by the other level.
			Probable user error.
	CR8L		**Recovery 0:** Continue. System input device is not changed.
8P		0	**Reason:** Desired system input or output device was not defined as part of system at system generation, or CCP has made the console unavailable.
			Probable user error.
	CR8P		**Recovery 0:** Continue. System input or output device is not changed.
8U		23	**Reason:** Invalid HIKEY parameter in the FILE statement.
	CR8UIP		A non-zoned numeric character was found in a HIKEY-P parameter.
	CR8UKL		The parameters in the sublist are not the same length.
	CR8ULO		The HIKEY parameter length is greater than 29 characters.
	CR8UPL		The HIKEY-P length is greater than 15 zoned numeric characters.
	CR8USQ		The HIKEY parameters are not in ascending sequence.
			Recovery 2: Controlled cancel.
			3: Immediate cancel.
8Y		0	**Reason:** No logging can be done. Log was turned off in other program level. DPF only.
			Probable user error.
	CR8Y		**Recovery 0:** Continue. Log status is unchanged.
8-		023	**Reason:** Logging is requested, but cannot be done because log was turned off by other program level. DPF only.
			Probable user error.
	CR8-		**Recovery 0:** Continue. Log status is unchanged.
			2: Remaining OCL will be read and scanned, but job will not be executed.
			3: Immediate cancel.
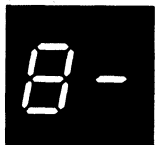
HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

90

| | | 0 | **Reason:** PAUSE statement has been read before the first LOAD statement or after the RUN statement. Check printer output or program run sheet for instructions. |
| | CR90 | | **Recovery 0:** Continue. |

91

		023	**Reason:** PAUSE statement has been read between LOAD and RUN statements. Check printer output or program run sheet for instructions.
	CR91		**Recovery 0:** Continue.
			2: Controlled cancel. Remaining OCL is read and checked, however, the job will not be executed.
			3: Immediate cancel. OCL is read but not checked.

92

		23	**Reason:** COMPILE statement already received for this job.
			Probable user error.
	CR92		**Recovery 2:** Controlled cancel. Remaining OCL is read and checked.
			3: Immediate cancel. OCL is read but not checked.

93

		23	**Reason:** Error in COMPILE statement.
			Probable user error.
	CR93AE		Abnormal end of statement.
	CR93AP		Format or punctuation error.
			Recovery 2: Controlled cancel. Remaining OCL is read and checked.
			3: Immediate cancel. OCL is read but not checked.

94

		23	**Reason:** Error in COMPILE statement.
			Probable user error.
	CR94DK		Duplicate keyword.
	CR94IK		Invalid keyword.
			Recovery 2: Controlled cancel. Remaining OCL is read and checked.
			3: Immediate cancel. OCL is read but not checked.

95

	23	**Reason:** Error in COMPILE statement.
		Probable user error.
CR9501		Source name does not consist of a single parameter.
CR9502		First character of source name invalid.
CR9504		Source name exceeds six characters.
CR9505		Unit does not consist of a single parameter.
CR9506		UNIT parameter is not F1, R1, F2, or R2.
CR9507		F2 or R2 specified on UNIT parameter, but these units are not online.
CR9508		OBJECT parameter does not consist of a single parameter.
CR9509		OBJECT parameter is not R1, R2, F1, or F2.
CR950A		F2 or R2 specified on OBJECT parameter, but these units are not online.
CR950B		SOURCE or UNIT parameter missing.
CR950C		No parameters specified.

Recovery 2: Controlled cancel. Remaining OCL is read and checked.

3: Immediate cancel. OCL is read but not checked.

96

	023	**Reason:** A system error has occurred. An OCL error has been found, but the system cannot resolve the error. However, you still may be able to determine what is wrong with the OCL statement.
CR96		**Recovery 0:** Continue.
		2: Controlled cancel.
		3: Immediate cancel.

Note: If possible, take a core storage dump. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Contact IBM for programming support.

97

	0	**Reason:** Error in LOG statement.
		Probable user error.
CR970P		No parameter specified.
CR972P		Logging device specified in program level 2.
CR97IP		Invalid parameter.

Recovery 0: Continue.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

98

		23	**Reason:** Error in LOG statement.
			Probable user error.
	CR980P		No parameter specified.
	CR982P		Logging device specified in program level 2.
	CR98IP		Invalid parameter.
			Recovery 2: Controlled cancel. Remaining OCL is read and checked.
			3: Immediate cancel. OCL is read but not checked.

99

		023	**Reason:** Error in LOG statement.
			Probable user error.
	CR990P		No parameter specified.
	CR992P		Logging device specified in program level 2.
	CR99IP		Invalid parameter.
			Recovery 0: Continue.
			2: Controlled cancel. Remaining OCL is read and checked.
			3: Immediate cancel. OCL is read but not checked.

9A

		23	**Reason:** Indicated action on the last OCL statement read will be ignored due to previous OCL statement errors found, or to previous PAUSE statement.
	CR9A		**Recovery 2:** Controlled cancel.
			3: Immediate cancel.

9C

Reason: The system has found an incorrect tape volume online.

The file name is logged before the error code. If a standard labeled file is being processed and the FILE statement specifies volume identifications using the REEL parameter, the volume identifications are logged following the file name.

To determine the reason for the 9C halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the error occurred. The right character indicates the specific reason for the halt.

If log is on, the last two characters of the error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error code can be any one of the possible right characters of the subhalt) —

9C

(continued)

1   CI9C1X   **Reason:** The error occurred on T1.

2   CI9C2X   **Reason:** The error occurred on T2.

3   CI9C3X   **Reason:** The error occurred on T3.

4   CI9C4X   **Reason:** The error occurred on T4.

The possible right characters of the subhalt and corresponding error codes are (note that the Z in the error codes can be any one of the possible left characters of the subhalt) —

U   CI9CZU   123   **Reason:** The REEL parameter specified on the FILE statement does not match the volume label on the tape.

Recovery 1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

Y   CI9CZY   123   **Reason:** The type of tape volume or data specified by the FILE statement is incorrect for the mounted volume.

If REEL-NS is specified, a non-standard labeled tape must be mounted. If REEL-NL is specified, an unlabeled tape volume must be mounted. If REEL-name is specified or if no REEL parameter is specified, a standard labeled tape must be mounted.

If ASCII-YES is specified, the volume must have been initialized with ASCII-YES. If ASCII-NO is specified, or if no ASCII parameter is given, the volume label(s) must not be written in ASCII.

Recovery 1: Mount the correct tape and retry.

2: Controlled cancel.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

9E

0 — **Reason:** Desired logging device is allocated to other program level.

Probable user error.

CR9E — **Recovery 0:** Continue. Log status is unchanged.

9F

023 — **Reason:** Desired logging device is allocated to other program level.

Probable user error.

CR9F — **Recovery 0:** Continue. Log status is unchanged.

        2: Controlled cancel.

        3: Immediate cancel.

9H

23 — **Reason:** Desired logging device is allocated to other program level.

Probable user error.

CR9H — **Recovery 2:** Controlled cancel.

        3: Immediate cancel.

9J

0 — **Reason:** Error in FORMS statement.

Probable user error.

CR9J01 — Duplicate keyword.

CR9J02 — Invalid keyword.

CR9J03 — Abnormal end of statement.

CR9J04 — Format or punctuation error.

CR9J05 — DEVICE parameter invalid.

CR9J06 — Device not supported.

CR9J07 — LINES parameter greater than 112.

CR9J08 — LINES parameter missing or is 0.

CR9J09 — No parameters specified.

CR9J0A — LINES parameter contains a non-numeric character.

CR9J0B — LINES or DEVICE parameter was specified by a list of data.

CR9J0C — Invalid continuation.

Recovery 0: Continue. Ignore FORMS statement.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

9L

		023	**Reason:** Error in FORMS statement.
			Probable user error.
CR9L01			Duplicate keyword.
CR9L02			Invalid keyword.
CR9L03			Abnormal end of statement.
CR9L04			Format or punctuation error.
CR9L05			Invalid DEVICE parameter.
CR9L06			Device not supported.
CR9L07			LINES parameter greater than 112.
CR9L08			LINES parameter missing or is 0.
CR9L09			No parameter specified.
CR9L0A			LINES parameter contains a non-numeric character.
CR9L0B			LINES or DEVICE parameter was specified by a list of data.
CR9L0C			Invalid continuation.

Recovery 0: Continue. Ignore FORMS statement.

　　　　　2: Controlled cancel. Remaining OCL is read and checked.

　　　　　3: Immediate cancel. OCL is read but not checked.

9P

		23	**Reason:** Error in FORMS statement.
			Probable user error.
CR9P01			Duplicate keyword.
CR9P02			Invalid keyword.
CR9P03			Abnormal end of statement.
CR9P04			Format or punctuation error.
CR9P05			Invalid DEVICE parameter.
CR9P06			Device not supported.
CR9P07			LINES parameter greater than 112.
CR9P08			LINES parameter missing or is 0.
CR9P09			No parameters specified.
CR9P0A			LINES parameter contains a non-numeric character.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HALT/SUBHALT | **LOG** | **OPTIONS** | **REASON AND RECOVERY**

9P (continued)

CR9P0B   LINES or DEVICE parameter was specified by a list of data.

CR9P0C   Invalid continuation.

Recovery 2: Controlled cancel. Remaining OCL is read and checked.

3: Immediate cancel. OCL is read but not checked.

9U

03

Reason: The other program level has received a // IMAGE statement or the other program level is using the printer. DPF only.

Probable user error.

CR9U   **Recovery 0:** Continue. Ignore IMAGE statement.

3: Immediate cancel.

9Y

23

Reason: Desired logging device not defined as part of the system at system generation, or CCP has made the console unavailable.

Probable user error.

CR9Y   **Recovery 2:** Controlled cancel. Remaining OCL is read and checked.

3: Immediate cancel. OCL is read but not checked.

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9 (9 blank)

023

Reason: Desired logging device was not defined as part of the system at system generation, or CCP has made the console unavailable.

Probable user error.

CR9   **Recovery 0:** Continue. Logging device is unchanged. Resubmit a correct LOG statement.

2: Remaining OCL will be read and scanned, but job will not be executed.
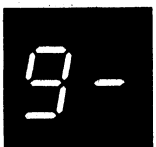
3: Immediate cancel.

9-

03

Reason: The other program level has received a // FORMS statement or the other program level is using the printer. DPF only.

Probable user error.

CR9-   **Recovery 0:** Continue. Ignore this FORMS statement.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

9'

0   **Reason:** Desired logging device was not defined as part of the system at system generation, or CCP has made the console unavailable.

Probable user error.

CR9'   **Recovery 0:** Continue. Logging device is unchanged. Submit a correct LOG statement to change logging device.

A0

23   **Reason:** Format or punctuation error in FILE statement.

Probable user error.

CRA0AE   Abnormal end of statement, or continuation was indicated but the next statement processed was not the correct continuation statement.

CRA0AP   Incorrect punctuation.

CRA0HK   Error found in HIKEY parameters.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

           3: Immediate cancel. Remaining OCL for job is read but not checked.

A1

23   **Reason:** Keyword error in FILE statement.

Probable user error.

CRA1DK   Duplicate keyword.

CRA1IK   Invalid keyword. The keyword may be invalid for the device supported by the system.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

           3: Immediate cancel. Remaining OCL for job is read but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
		23	**Reason:** Parameter error on FILE statement.
A2	CRA201		Invalid NAME parameter.
	CRA202		Invalid UNIT parameter or device not supported.
	CRA203		Invalid PACK parameter.
	CRA204		Invalid LABEL parameter.
	CRA205		Invalid RETAIN parameter.
	CRA206		Invalid DATE parameter.
	CRA207		Invalid RECORDS parameter.
	CRA208		Invalid TRACKS parameter.
	CRA209		Invalid LOCATION parameter.
	CRA2AS		Invalid ASCII parameter.
	CRA2BL		Invalid BLKL parameter.
	CRA2CV		Invalid CONVERT parameter.
	CRA2DF		Invalid DEFER parameter.
	CRA2DN		Invalid DENSITY parameter.
	CRA2EN		Invalid END parameter.
	CRA2PT		Invalid PARITY parameter.
	CRA2RC		Invalid RECL parameter.
	CRA2RF		Invalid RECFM parameter.
	CRA2RL		Invalid REEL parameter.
	CRA2SP		Invalid SPLIT parameter.
	CRA2TN		Invalid TRANSLATE parameter.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. Remaining OCL for job is ready but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

A3

	23	**Reason:** Missing parameter on FILE statement.
CRA3NN		NAME parameter missing.
CRA3NP		PACK parameter missing.
CRA3NU		UNIT parameter missing.
CRA3OP		No parameters on FILE statement.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. Remaining OCL for job is read but not checked.

A4

	23	**Reason:** Invalid combination of keywords and/or parameters on FILE card.
CRA4AS		ASCII-YES and/or RECFM-D/DB specified on 7-track tape file.
CRA4AV		ASCII-YES specified with RECFM-V or RECFM-VB.
CRA4AY		RECFM-D or RECFM-DB specified without ASCII-YES.
CRA4CT		CONVERT-ON and TRANSLATE-ON specified.
CRA4DI		UNIT parameter specifies tape, however disk keywords are also specified.
CRA4DN		DENSITY-800 is specified but not supported on the unit or units specified.
CRA4FS		RECFM parameter specifies fixed or fixed blocked records and the block or record length is less than 18, or variable or variable blocked records and the block length is not 4 greater than the record length.
CRA4IL		BLKL and/or RECL incorrect for the RECFM that is specified.
CRA4IP		Split cylinder file. SPLIT or LOCATION filename used with RECORDS and/or TRACKS.
CRA4IR		LABEL, DATE, and/or RETAIN specified with REEL-NL or REEL-NS.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

A4

(continued)

LOG	REASON AND RECOVERY
CRA4NS	Not all UNITs specified are 7-track units.
CRA4PC	CONVERT-ON and PARITY-EVEN specified.
CRA4RC	CONVERT-ON was not specified with RECFM-V/VB for a 7-track tape file.
CRA4SD	DENSITY-1600 specified for a 7-track tape file.
CRA4SL	LOCATION missing or invalid for SPLIT parameter.
CRA4SM	SPLIT used with multivolume files.
CRA4ST	Seven-track tape parameters given with a 9-track unit.
CRA4SU	SPLIT used with 5444 UNIT parameter.
CRA4TL	TRACKS and/or LOCATION incorrect for device type.
CRA4TP	UNIT parameter specifies disk, however tape keywords are also specified.
CRA4TR	Both TRACKS and RECORDS specified on FILE card.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. Remaining OCL for job is read but not checked.

A6

OPTIONS 23

Reason: Error in FILE statement for multivolume files.

LOG	REASON AND RECOVERY
CRA61H	Number of HIKEY parameters does not equal number of PACK parameters.
CRA61L	Number of LOCATION parameters does not equal number of PACK parameters.
CRA61R	Number of RECORD parameters does not equal number of PACK parameters.
CRA61T	Number of TRACK parameters does not equal number of PACK parameters.
CRA61U	Number of UNIT parameters does not equal number of PACK parameters for online multivolume files.
CRA62U	For 5445 disk, more than two UNIT parameters are specified.
CRA64U	For 5444 disk or 3410 tape, more than four UNIT parameters are specified.
CRA6UP	Number of UNIT parameters is greater than number of PACK parameters.
CRA6UR	For 3410 tape, REEL-NAME is specified and the number of units is greater than the number of reels.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. OCL for job is read but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

A7

		23	**Reason:** Error in IMAGE statement.
			Probable user error.
	CRA701		No parameters found.
	CRA702		First parameter is invalid.
	CRA703		LENGTH parameter is missing.
	CRA704		LENGTH parameter is non-numeric.
	CRA705		Too many parameters.
	CRA706		No NAME parameter specified.
	CRA707		No unit specified.
	CRA708		First character of NAME parameter is invalid.
	CRA709		Invalid character in source entry name.
	CRA70A		NAME parameter length is greater than six characters.
	CRA70B		Unit is not R1, R2, F1, or F2.
	CRA70C		Unit F2 or R2 is not online.
	CRA70E		One of the following has occurred:

1. Character length greater than 120.

2. Hex length greater than 240.

3. LENGTH parameter is too long.

	CRA70F		Hex length is an odd number.
	CRA70G		/& found in columns 1 and 2, or chain image data statements missing.
	CRA70H		// found in columns 1 and 2, however, chain image data was expected but not found.

Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. OCL is read but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

A8

		0	**Reason:** Error in IMAGE statements on disk.
			Probable user error.
	CRA801		IMAGE statement not first statement in member.
	CRA802		End of member reached before sufficient data received.
	CRA803		Member not found on specified unit.
			Recovery 0: Continue. Ignore IMAGE statement.

A9

		023	**Reason:** Error in IMAGE statements on disk.
			Probable user error.
	CRA901		IMAGE statement not first statement in member.
	CRA902		End of member reached before sufficient data received.
	CRA903		Member not found on specified unit.
			Recovery 0: Continue. Ignore IMAGE statement.
			2: Remaining OCL is read and scanned, but job is not executed.
			3: Immediate cancel.

AA

		23	**Reason:** Error in IMAGE statements on disk.
			Probable user error.
	CRAA01		IMAGE statement not first statement in member.
	CRAA02		End of member reached before sufficient data received.
	CRAA03		Member not found on specified unit.
			Recovery 2: Remaining OCL is read and scanned, but job is not executed.
			3: Immediate cancel.

AC

		0	**Reason:** Invalid hex character in chain image.
			Probable user error.
	CRAC		**Recovery 0:** Continue. Ignore IMAGE statement.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

AE

023

Reason: Invalid hex character in chain image.

Probable user error.

CRAE

Recovery 0: Continue. Ignore IMAGE statement.

          2: Controlled cancel. Remaining OCL for job is read and checked.

          3: Immediate cancel.

AF

23

Reason: Invalid hex character in chain image.

Probable user error.

CRAF

Recovery 2: Remaining OCL for job is read and checked.

          3: Immediate cancel.

AH

0

Reason: Error in IMAGE statement.

Probable user error.

LOG	REASON
CRAH01	Parameter missing.
CRAH02	First parameter invalid.
CRAH03	No LENGTH parameter.
CRAH04	LENGTH parameter is non-numeric.
CRAH05	Too many parameters.
CRAH06	No NAME parameter specified.
CRAH07	No unit specified.
CRAH08	First character of NAME parameter is invalid.
CRAH09	Invalid entry name.
CRAH0A	NAME parameter length is greater than six characters.
CRAH0B	Unit specified not F1, R1, F2, or R2.
CRAH0C	Unit specified F2 or R2 and that unit is not online.
CRAH0E	One of the following has occurred:

    1. Character length greater than 120.

    2. Hex length greater than 240.

    3. LENGTH parameter is too long.

LOG	REASON
CRAH0F	Hex length is an odd number.
CRAH0G	/& found in columns 1 and 2, or chain image data statements missing.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

AH

	CRAH0H		// found in columns 1 and 2, however, chain image data was expected but not found.

Recovery 0: Continue. Ignore IMAGE statement.

(continued)

AJ

		023	**Reason:** Error in IMAGE statement.

Probable user error.

CRAJ01	Parameters are missing.
CRAJ02	First parameter is invalid.
CRAJ03	No LENGTH parameter.
CRAJ04	LENGTH parameter non-numeric.
CRAJ05	Too many parameters.
CRAJ06	No NAME parameter specified.
CRAJ07	No unit specified.
CRAJ08	First character of NAME parameter is invalid.
CRAJ09	Invalid characters in name.
CRAJ0A	NAME parameter length is greater than six characters.
CRAJ0B	Unit specified not F1, F2, R1, or R2.
CRAJ0C	Unit F2 or R2 is not online.
CRAJ0E	One of the following has occurred:

1. Character length greater than 120.

2. Hex length greater than 240.

3. LENGTH parameter is too long.

CRAJ0F	Hex length is an odd number.
CRAJ0G	/& found in columns 1 and 2, or chain image data statements missing.
CRAJ0H	// found in columns 1 and 2, however, chain image data was expected but not found.

Recovery 0: Continue. Ignore IMAGE statement.

2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. Remaining OCL is read but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

AL

		0	**Reason:** Error in PARTITION statement.
			Probable user error.
	CRAL01		Parameters are missing.
	CRAL02		Parameter is non-numeric.
	CRAL03		Size exceeds available space in core.
	CRAL04		Insufficient space requested for partition, 5120 minimum.
			Recovery 0: Continue. Ignore PARTITION statement.

AP
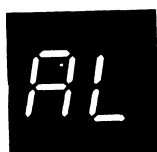
		03	**Reason:** Either recovery option 2 has been selected for a halt during OCL processing or OCL errors have occurred for this job.
			Probable user error.
	CRMN		**Recovery 0:** Continue with next job. Use this option if no data for cancelled job is in system input device.
			3: Immediate cancel.

AU

		23	**Reason:** Error in PARTITION statement.
			Probable user error.
	CRAU01		Parameters are missing.
	CRAU02		Parameter is non-numeric.
	CRAU03		Size exceeds available space in core.
	CRAU04		Insufficient space requested for partition, 5120 minimum.
			Recovery 2: Controlled cancel. Remaining OCL for job is read and checked.
			3: Immediate cancel. OCL for job is read but not checked.
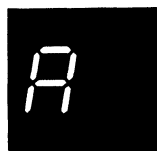
A

		23	**Reason:** The total number of volumes specified on the FILE statement for this job exceeds 40. The total number of volumes is the number of packs specified plus the number of high keys specified plus the number of reels specified.
			Probable user error.
A blank	CRA		**Recovery 2:** Controlled cancel. Remaining OCL for job is read and checked.
			3: Immediate cancel. Remaining OCL for job is read but not checked.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

023
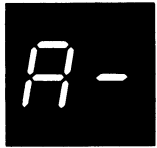
Reason: Error in PARTITION statement.

Probable user error.

CRA-01   Parameters are missing.

CRA-02   Parameter is non-numeric.

CRA-03   Partition size requested exceeds available space in core.

CRA-04   Insufficient space requested for partition 5120 bytes minimum.

Recovery 0: Continue. Ignore PARTITION statement.

2: Controlled cancel. Remaining OCL for job is read and checked.

3: Immediate cancel. OCL for job is read but not checked.

3

Reason: No space left in system work area. There are too many FILE statements for this job.

Probable user error.

CRA'   **Recovery 3:** Immediate cancel. Reduce number of FILE statements.

123

Reason: Read check. Multiple punches were found in rows 1-7 in any card column, or card was upside down or backwards.

IFC1   **Recovery 1:** Retry. Follow these recovery procedures:

1. Press 1442 STOP.
2. Remove cards from hopper.
3. Press 1442 NPRO.
4. Remove last two cards from stacker 1.
5. If job is to be continued, proceed with step 6. If not, mark the second-to-last card removed from stacker 1.
6. Examine second-to-last card removed from stacker 1 to see if it is upside down or backwards or if it has multiple punches in rows 1-7 in any column.
7. Correct the card.
8. Place cards from stacker back in hopper. Place all cards which have not been read on top of these.
9. Press 1442 START.
10. Press console START.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

C2

123

Reason: A read check was caused by one of the following:

1. Off-registration punching.

2. Damaged card.

3. Upside-down or backward card.

4. 1442 feeding problem.

An overrun check occurs when data is lost.

IFC2

Recovery 1: Retry. Follow these recovery procedures:

1. Press 1442 STOP.
2. Remove cards from hopper.
3. Press 1442 NPRO.
4. Remove last two cards from stacker 1.
5. If OVER RUN light is on, proceed to step 7. If READ REG light is on, check second-to-last card removed from stacker 1 for:

   — Off-registration punching.

   — Card damage.

   — Backward or upside-down condition.

6. Reproduce card if damaged.
7. Place two cards removed from stacker 1 back in hopper.
8. Place deck back in hopper.
9. Press 1442 START.
10. Press console START.

   2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

   3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

123

Reason: This halt occurred because extra or missing punches occurred due to a failure of the punch unit or because data was lost when a punch feed command was issued.

IFC3

Recovery 1: Retry. Follow these recovery procedures:

1. Press console START. If log is on, the last two characters of the printed message designate the stacker containing the card in error. If log is off, one of the following secondary halts occurs that indicates the stacker containing the card in error.

IF01

The card in error is in stacker 1.

IF02

The card in error is in stacker 2.

To continue after the secondary halt, select option 1.

2. Check for blank or pre-punched cards being punched. If blank cards are used, discard last card from the indicated stacker. Go to step 10. If pre-punched cards are used, mark the last card in the indicated stacker.
3. Press 1442 STOP.
4. Remove cards from hopper.
5. Press 1442 NPRO.
6. Place a blank card in hopper.
7. Place last two cards from stacker 1 in hopper.
8. Place deck back in the hopper.
9. Press 1442 START.
10. Press console START.
11. If you are using pre-punched cards, punch and verify pre-punched information from marked card into card immediately following it when job is completed. Discard marked card and place card that followed it into its proper place.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

C 4

IFC4

123

Reason: This halt occurred because extra or missing punches occurred due to a failure of the punch unit or because data was lost when a punch feed command was issued.

Recovery 1: Retry. Follow these recovery procedures:

1.   Press 1442 STOP.
2.   Remove cards from hopper.
3.   Press 1442 NPRO.
4.   Remove last card from stacker 1. Place it in front of cards removed from hopper.
5.   Check for blank or pre-punched cards being punched. If blank cards are used, discard card which is now last in stacker 1. Go to step 7. If pre-punched cards are used, mark card which is now last in stacker 1 and place it in hopper.
6.   Place a blank card in hopper.
7.   Place deck back in hopper.
8.   Press 1442 START.
9.   Press console START.
10.   Two cards will be read. If log is on, the stacker containing the card in error is indicated by the last two characters of the printed message. If log is off, one of the following secondary halts occurs that indicates the stacker containing the card in error.

IF01

0 1

The card in error is in stacker 1.

IF02

0 2

The card in error is in stacker 2.

To continue after the secondary halt select option 1.

If you are following the procedure for pre-punching cards, go to step 11. If you are following the procedure for blank cards, remove and discard last card from indicated stacker.

11.   Press console START.
12.   If you are using pre-punched cards, punch and verify pre-punched information from marked card into card immediately following it when job is completed. Discard marked card and place card that followed it back into its proper place.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

```
  ___
 |   __|     IFC5
 |  |__
 |_____|
```

123

Reason: Hopper check. Card was not fed from hopper.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Check hopper for foreign material. Remove any you find.
3. Check bottom card of deck for damage. Reproduce damaged cards.
4. Remove cards from stacker 1. These cards have been processed.
5. Press 1442 NPRO.
6. If there is a card in stacker 1, remove it and place it in the hopper. In addition, if the hopper check occurred for the first card processed because the 1442 was not ready. Place a blank card in the hopper. Remove this card from the deck when the job is completed.
7. Place deck back in hopper.
8. Press 1442 START.
9. Press console START.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

```
  ___
 |   __|     IFC6
 |  |__
 |_____|
```

123

Reason: A read check has been caused by a read station failure or a card jam at read station.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers.
3. Check read station for card jam. If one exists,
   — Remove jammed card from read station.
   — Remove card from the pre-read station.
4. • Close machine cover.
5. Press 1442 NPRO.
6. If no card jam existed, place last two cards from stacker 1 in hopper. If a card jam existed, place last two cards taken from feed path (reproduce them if damaged) in hopper.
7. Place deck back in hopper.
8. Press 1442 START.
9. Press console START.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

123

Reason: Punch check. Cards are jammed in punch station.

IFC7

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers. Remove all cards from feed path. Keep these cards in order.
3. Reproduce damaged cards.
4. Close machine covers.
5. Press 1442 NPRO.
6. Place cards removed from feed path in hopper.
7. Place deck back in hopper.
8. Press 1442 START.
9. Press console START.

    2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

    3: Immediate cancel.

123

Reason: Punch check. A card is jammed at punch station.

IFC8

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers.
3. Remove all cards from feed path. Keep these cards in proper sequence.
4. Close machine covers.
5. Press 1442 NPRO.
6. Check for blank or pre-punched cards being punched. If blank cards are used, discard cards taken out of feed path, and go to step 10. If pre-punched cards are used, reproduce any damaged cards taken from feed path and go to step 7.
7. Mark first card of the two or three removed from feed path. This card has been in the punch station. Place it in the hopper.
8. Place a blank card in hopper.
9. Place remaining cards taken from feed path in hopper.
10. Place deck back in hopper.
11. Press 1442 START.
12. Press console START.
13. Two cards will be read. If log is on, the stacker containing the card in error is indicated by the last two characters of the printed message. If log is off, one of the following secondary halts occurs that indicates the stacker containing the card in error. If you are following the procedure for pre-punched cards, remove and discard last card from indicated stacker.

IF01

The card in error is in stacker 1.

IF02

The card in error is in stacker 2.

To continue after the secondary halt select option 1.

```
 _   _
|_   |_|
|_   |_|
```

(continued)

14. Press console START.
15. If you are using pre-punched cards, punch and verify pre-punched information from marked card into card immediately following it when job is completed. Discard marked card and place card that followed it back into its proper place.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

```
 _   _
|_    |
|_   _|
```

IFC9

123

Reason: Transport check. A card is jammed in stacker area.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers.
3. Clear the jammed cards out of stacker transport area.
4. Close machine covers.
5. Reproduce card if it is damaged.
6. Press 1442 NPRO.
7. Place card removed from stacker transport in hopper.
8. Place last two cards from stacker 1 back in hopper.
9. Place deck back in hopper.
10. Press 1442 START.
11. Press console START.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

```
 _   _
|_   |_|
|_   | |
```

IFCA

123

Reason: Feed check. All cards in card feed path have advanced one position because of an unrequested feed cycle.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.

2. Press 1442 NPRO.

3. Place last three cards from stacker 1 back in hopper.

4. Place deck back in hopper.

5. Press 1442 START.

6. Press console START.

2: Controlled cancel.

Note: Clear all error indications on the 1442 before selecting option 2.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

12

Reason: Error returned from the 3881 Optical Mark Reader or Serial Input/Output Channel, or 3881 not ready.

Recovery 1: Retry. Clear error condition at the 3881 operator panel and/or ready the 3881.

2: Controlled cancel.

2

Reason: 3881 Optical Mark Reader halt. Halt occurred for one of the following reasons:

1. A 3881 array is not specified in the 3881 DTF.

2. Elements in the 3881 array are more than one byte long.

3. The 3881 array contains either fewer than or more than three elements.

4. The device code and attributes in the 3881 array are incorrect.

5. The user's record length specified in the 3881 DTF is smaller than the record length transmitted by the 3881.

6. The 3881 is being used by the other program level.

7. The 3881 is not attached to the SIOC (Serial Input/Output Channel).

Recovery 2: Controlled cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

CL

Reason: Error detected by 5445 Data Interchange Utility program. The subhalt or log indicates the reason for the halt.

01 UDCL01 13

Reason: End-of-file reached. /* or /& read.

Recovery 1: Continue with next control card.

3: Immediate cancel.

02 UDCL02 13

Reason: In columns 1 through 3, control card not //.

Recovery 1: Continue with next control card.

3: Immediate cancel.

03 UDCL03 13

Reason: Control card not // END, // NEWVTOC, or // UPDATE.

Recovery 1: Continue with next control card.

3: Immediate cancel.

04 UDCL04 13

Reason: Pack is not a System/3 50-file VTOC pack and cannot be interchanged by this program.

Recovery 1: Continue with next control card.

3: Immediate cancel.

05 UDCL05 013

Reason: Pack has incorrect volume label.

Recovery 0: Mount a new pack and retry.

1: Continue with next control card.

3: Immediate cancel.

CL

(continued)

06   UDCL06   13   **Reason:** File indicated has no space for EOF record.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

07   UDCL07   13   **Reason:** Specified unit is not supported.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

08   UDCL08   13   **Reason:** Invalid keyword.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

09   UDCL09   13   **Reason:** Syntax error.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

0A   UDCL0A   13   **Reason:** No parameters found.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

0C   UDCL0C   13   **Reason:** Duplicate keyword found.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

0E   UDCL0E   13   **Reason:** Abnormal end of card.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

0F   UDCL0F   13   **Reason:** No files for 5445 Data Interchange Utility program found on pack.

                                       Recovery 1: Continue with next control card.

                                                 3: Immediate cancel.

CU

Reason: This halt allows you to set the rightmost ADDRESS/DATA switch on the console to the program option you want to run. Set ADDRESS/ DATA switch and press console START, HALT/RESET if you have DPF, to continue.

Reproduce and interpret:

Read and interpret, print as punched — 0

Reproduce, punch a new card deck — 1

Reproduce and interpret, punch and print on cards — 2

Reproduce with reformatting — 3

Reproduce and interpret with reformatting — 4

Any switch setting other than 0 through 4 selects the reproduce and interpret option, same as 2.

List:

Card count only, no listing — 0

Single space with card count — 1

Double space with card count — 2

Triple space with card count — 3

Any switch setting other than 0 through 3 selects the double space with card count option, same as 2.

CY

13

UMCYDW

Reason: The 1255 utility program has been run. One or more warning messages may have been diagnosed in the utility program specifications. Check the validity check and readout logs on the device to be sure that they are correct.

Recovery 1: Continue if no errors are noted or if the errors do not affect document processing.
        3: Immediate cancel. The errors do affect document processing. Return the job, including the printout, to the programmer.

C

C blank

Reason: Errors in basic assembler object program being converted by the Library Deck Generator program.

The following messages can be logged:

1. THE NUMBER OF CONTROL CARDS GENERATED IS INCORRECT.
2. LENGTH OF CONTROL CARD TEXT TOO GREAT FOR ONE CARD.
3. THE CARD SEQUENCE IS INCORRECT.
4. TITLE IS TOO LONG, OR THE FIRST TEXT IS CONTIGUOUS.
5. FIRST CONTROL CARD CHARACTER MAY NOT BE BLANK.
6. NOT ENOUGH BREAKS FOR CONTROL STRINGS.

C blank
(continued)

7. MORE BREAKS THAN CONTROL STRINGS.
8. LAST TEXT NOT AT HIGHEST ADDRESS EXPECTED.
9. IMPROPER CARD IN DECK.
10. END CARD IS OUT OF SEQUENCE.
11. INVALID CONTROL CARD IDENTIFICATION.
12. THE FIRST OBJECT CARD MUST BE AN ESL CARD.
13. INSUFFICIENT CORE FOR CONTROL CARD STORAGE.
14. INVALID ENTRIES ON *** CONTROL CARD.
15. /* or *** CARD OUT OF SEQUENCE.
16. -GEB- NOT USED AS MODULE IDENTIFIER.
17. *** CARD REQUIRED BEFORE OBJECT DECK.
18. TOO MANY CONTROL CARD IDENTIFIERS OR INVALID SEQUENCE.

Recovery: Retry for messages 14 and 17: correct the *** card or provide the missing *** card. Place the card in front of any cards in the hopper, then press console START, or appropriate HALT/RESET key to continue. Messages 5, 7, 8, and 15 are warning messages. The job will continue. Press console START, or appropriate HALT/RESET key to continue. The remaining messages are terminal messages. The job will be terminated, EJ displayed in the message display unit, after pressing console START, or appropriate HALT/RESET key.

3
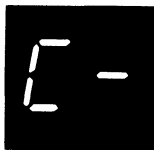
Reason: The halt occurred for one of the following reasons:

1. Severe or terminal errors were found in the Tape Sort sequence specifications.

2. The sort job's FILE statement is incorrect.

3. When restarting from a checkpoint, the user has specified incorrect restart information, mounted the wrong tapes, or changed the FILE statement or sequence specification.

Recovery 3: Immediate cancel.

1

Reason: A stacker on the 1255 contains the number of documents specified in columns 3-5 of the system specifications. The stacker that contains the number of documents specified is indicated in columns 3 and 4 of the stacker specifications.

UMC'DC

Recovery 1: Perform the action indicated on the program run sheet and continue.

0

Reason: End of first pass of sort with omits. The following message is printed on the log device:

Feed stack 1 to pri-stack 3 to sec. Set aside cards from stacks 2 and 4. Press MFCU START and console START.

MSEO

Recovery 0:
1. Follow printed instructions.
2. Press MFCU START.

```
E 1
```

MSE1

03   **Reason:** Cards from primary hopper out of order. Cards in stackers. Sort/
Collate Merge, Match, or Select job.

Probable user error.

Recovery 0:
1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO. One card is fed to stacker 1.
3. Correct card sequence if you can.
4. If you were able to correct the sequence, proceed as follows:

Select
— Place sequenced cards in primary hopper.
— Press MFCU START.

Merge or Match
— Place sequenced cards in primary hopper.
— Raise cards in secondary hopper and press NPRO. One card is fed into stacker 1.
— Place this card ahead of cards in secondary hopper.
— Press MFCU START.

   3: Immediate cancel.
1. Select this option if you can not correct the card sequence.
2. Mark the card that was fed into stacker 1, clear MFCU, and return job to the programmer.

```
E 2
```

MSE2

03   **Reason:** Cards from secondary hopper out of order, cards in stackers. Sort/
Collate Merge or Match job.

Probable user error.

Recovery 0:
1. Press MFCU STOP.
2. Raise cards in secondary hopper and press NPRO. One card is fed into stacker 1.

Note: If the primary hopper is empty, the card fed into stacker 1 will be the end-of-file card from the primary file. Set this card aside and press NPRO again to feed out the card that is out of sequence.

3. Correct card sequence if you can.
4. If you were able to correct the sequence, proceed as follows:
   — Place sequenced cards in secondary hopper.
   — Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
   — Place this card ahead of cards in primary hopper.
   — Press MFCU START.

   3: Immediate cancel.
1. Select this option if you cannot correct the card sequence.
2. Mark the card that was fed into stacker 1, clear MFCU, and return job to the programmer.

E3

03

Reason: A card that should have been omitted on the first pass has been found on an intermediate pass of a sort/collate sort job.

Probable user error.

MSE3

Recovery 0: Remove last card in stacker 4. This is the card that should have been omitted on the first pass.

Note: If the same halt occurs again, there's a chance you put the omitted cards back in a hopper. If you can identify these cards, remove them from the hopper and continue. The halt will occur one more time when the card in the wait station is fed into stacker 4.

3: Immediate cancel. If you cannot determine which cards were omitted, clear MFCU and rerun program.

E5

3

Reason: The halt occurred for one of the following reasons:

1. Alternate collating sequence card missing.

2. Separator card that must follow the last alternate collating sequence card missing. The separator card has asterisks, *, in columns 1 and 2.

3. Entry in columns 1 through 8 of alternate collating sequence card not ALTSEQ blank blank.

The logging device prints the following message:

INVALID ALTERNATE COLLATING SEQUENCE CARD

Probable user error.

MSE5

Recovery 3: Immediate cancel.
1. Press MFCU STOP.
2. Press NPRO. One card is fed into stacker 1.
3. Remove OCL cards from stacker 1.
4. Raise cards in secondary hopper and press NPRO. One card is fed into stacker 1.
5. Remove cards from stacker 4 and place card in stacker 1 behind them.
6. Remove cards from secondary hopper and place them behind cards removed from stackers 4 and 1.
7. Do one of the following:
   — If the alternate collating sequence cards are missing, get them from the programmer and rerun the job.
   — Correct the entry in columns 1 through 8 of the mispunched card to ALTSEQ blank blank and rerun the job.
   — Place a separator card in the specification deck following the last alternate collating sequence card and rerun the job.
   — Return the job, including the program printout, to the programmer.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

E6

Reason: A Gangpunch Program error has occurred.

To determine the exact cause of the E6 halt when log is off, press console START or the appropriate HALT/RESET key. One of the following subhalts is displayed. If log is on when the E6 halt occurs, one of the error codes is logged.

50   03   Reason: A sequence error was detected in the master file.

Recovery 0: Continue. The card causing the sequence error is selected to the normal stacker. The control field information for sequence checking of the next card in the file is compared with the data in the card that caused the sequence error.

3: Immediate cancel.

51   03   Reason: A sequence error was detected in the detail file.

Recovery 0: Continue. The card causing the sequence error is selected to the normal stacker. The control field information for sequence checking of the next card in the file is compared with the data in the card that caused the sequence error.

3: Immediate cancel.

52   0   Reason: An unmatched master card was detected in the master file and stop on unmatched was specified in Column 38 of the control card.

Recovery 0: Continue. The unmatched card is selected as specified in columns 40 and 42 of the control card. The program reads the next card from the file that contains the lower sequence.

53   0   Reason: An unmatched detail card was detected in the detail file and stop on unmatched was specified in Column 38 of the control card.

Recovery 0: Continue. The unmatched card is selected as specified in columns 40 and 42 of the control card. The program reads the next card from the file that contains the lower sequence.

E6

(continued)

54   03   **Reason:** Counting with variable limits has been specified and the starting number is larger than the ending number when counting is in ascending sequence. This error also occurs if the starting number is less than the ending number when counting in descending sequence.

Recovery 0: Continue. The master card causing the error must be treated as if a read error has occurred when reading it. Follow the restart procedure for the particular device. If a control field was used, the same field must be used in the card replacing the error card.

3: Immediate cancel.

55   03   **Reason:** Warning messages have occurred. Review the printed warning messages.

Recovery 0: Continue.

3: Immediate cancel.

56   3   **Reason:** Terminal errors have occurred.

Recovery 3: Immediate cancel.
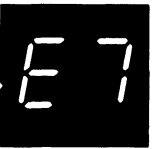
57   03   **Reason:** The first card in an intermixed processing operation is not a master record.

Recovery 0: Correct the card and continue.

3: Immediate cancel.

E7

Reason: An invalid record length was specified for the directly attached 3741. The record length specified in the program is not 1-128 bytes.

DK E7   03   **Recovery 0:** Continue. The specification for any subsequent files used by the same job will be checked for errors. Halt 4J will occur.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

E8

Reason: Error in Tape Initialization Program's // VOL statement.

To determine the exact reason for the E8 halt when log is off, press console START or the appropriate HALT/RESET key. One of the following subhalts is displayed. If log is on when the E8 halt occurs, one of the error codes appears.

11 UTE811 13 **Reason:** T1 not supported.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

21 UTE821 13 **Reason:** T2 not supported.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

31 UTE831 13 **Reason:** T3 not supported.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

41 UTE841 13 **Reason:** T4 not supported.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

52 UTE852 13 **Reason:** The statement read is not a CONTROL or COMMENT statement.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

53 UTE853 13 **Reason:** Invalid or duplicate keyword.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

56 UTE856 13 **Reason:** Syntax error.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

57 UTE857 13 **Reason:** Missing or invalid parameter.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

63 UTE863 13 **Reason:** Invalid or missing REEL parameter.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

64 UTE864 13 **Reason:** Duplicate unit has been specified.

Recovery 1: Correct statement and retry.
        3: Immediate cancel.

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

```
E8
```
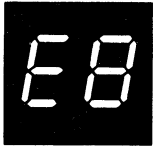
(continued)

```
65
```
UTE865   13   **Reason:** Invalid or missing UNIT parameter.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
66
```
UTE866   13   **Reason:** Invalid TYPE parameter or conflicts with another parameter.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
67
```
UTE867   13   **Reason:** Invalid ID parameter.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
68
```
UTE868   13   **Reason:** Valid VOL statement not read before END statement.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
69
```
UTE869   13   **Reason:** Invalid ASCII parameter.

Note: ASCII is invalid for seven track tapes.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
70
```
UTE870   13   **Reason:** Invalid DENSITY parameter.

Recovery 1: Correct statement and retry.
          3: Immediate cancel.

```
E9
```

Reason: An error has occurred during execution of the Tape Initialization Program.

To determine the reason for the E9 halt when log is off, press console START or the appropriate HALT/RESET key to display a subhalt. The left character of the subhalt indicates the unit on which the error occurred. The right character indicates the specific reason for the halt.

If log is on, the last two characters of the error code indicate the unit on which the error occurred and the reason for the halt.

The possible left characters of the subhalt and corresponding error codes are (note that the X in the error code can be any one of the possible right characters of the subhalt).

```
1
```
UTE91X   **Reason:** The error occurred on T1.

Halt E8   141

HALT/SUBHALT LOG OPTIONS REASON AND RECOVERY

E9
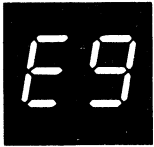
(continued)

2 UTE92X   **Reason:** The error occurred on T2.

3 UTE93X   **Reason:** The error occurred on T3.

4 UTE94X   **Reason:** The error occurred on T4.

The possible right characters of the subhalt and corresponding error codes are (note that the Y in the error codes can be any one of the possible left characters of the subhalt).

2 UTE9Y2   03 **Reason:** An active file exists and TYPE-CHECK is specified.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

3 UTE9Y3   03 **Reason:** End of tape mark recognized while writing the volume label.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

4 UTE9Y4   03 **Reason:** Tape unit requested but it is being used by the other program level.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

5 UTE9Y5   03 **Reason:** TYPE-CHECK or TYPE-DISPLAY specified for unlabeled tape or for tape file with non-standard labels. The volume label might be skipped if the density on the control statement does not match the density at which the header labels were written.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

6 UTE9Y6   03 **Reason:** A permanent I/O error has occurred.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

HALT/SUBHALT   LOG   OPTIONS   REASON AND RECOVERY

```
E9
```

(continued)

```
8
```
UTE9Y8   03   **Reason:** TYPE-DISPLAY specified, but log device is not available.

Recovery 0: Continue. The request is ignored and the next control statement is processed. If all control statements have been processed, end-of-job occurs.

3: Immediate cancel.

```
EA
```
                    3   **Reason:** Errors in the sort/collate specification deck. The error messages are listed on the logging device, accompanied by the following message:

ERRORS IN SOURCE DECK, JOB TERMINATED

Probable user error.

MSEA   **Recovery 3:** Immediate cancel.
1.   Press MFCU STOP.
2.   Press NPRO. One card is fed into stacker 1.
3.   Remove OCL cards from stacker 1.
4.   Press NPRO. One card is fed into stacker 1.
5.   Remove cards in stacker 4 and place card in stacker 1 behind them.
6.   Return the job, including the program printout, to the programmer.
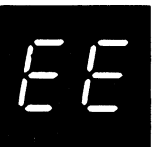
```
EE
```
                    0   **Reason:** Sort/Collate program ready for execution. To continue, do recovery 0 option for job you are running.

MSEE   **Recovery 0:** Perform one of the following sets of procedures:

Sort:
1.   Clear cards from MFCU.
2.   Divide deck to be sorted and place approximately half in primary hopper and remainder in secondary hopper.
3.   Place an end-of-file card /* behind each deck.
4.   Press MFCU START.

Merge and Match:
1.   Clear cards from MFCU.
2.   Place primary file in primary hopper.
3.   Place secondary file in secondary hopper.
4.   Place an end-of-file card (/*) behind each deck.
5.   Press MFCU START.

Select:
1.   Clear cards from MFCU.
2.   Place data deck in primary hopper.
3.   Place an end-of-file card (/*) behind this deck.
4.   Press MFCU START.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

REASON AND RECOVERY

EF
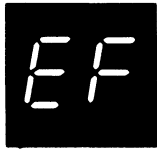
Reason: End-of-file (/*) or /& cards were first cards read from hoppers on an intermediate pass of a sort job. You probably forgot to remove the cards from under the cards in stackers 1 and 3 when you prepared for the next pass.

01 MSEF01 0

Reason: End-of-file (/*) cards were first cards read.

Recovery 0: Continue by performing the following steps:

1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO.
3. Raise cards in secondary hopper and press NPRO.
4. Remove end-of-file cards from stacker 1.
5. Press MFCU START.

02 MSEF02 3

Reason: A /& card was read from the MFCU. This blocks all attempts to read from the MFCU. You probably used a /& card as an end-of-file card instead of a /* card.

Probable user error.

Recovery 3: Immediate cancel. Perform the following:

1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO.
3. If card fed into stacker 1 is a /& card, remove it. If it is not a /& card, place it in front of deck in primary hopper.
4. Set deck from primary hopper aside.
5. Raise cards in secondary hopper and press NPRO.
6. If card fed into stacker 1 is a /& card, remove it. If it is not a /& card, place it in front of deck that was in secondary hopper.
7. Set deck from secondary hopper aside.
8. Restart job by reloading Sort/Collate program and re-entering specification cards.
9. When halt EE occurs, place decks back in the primary and secondary hoppers.
10. Press console START to continue processing.

Note: Reloading the Sort/Collate program may cause end-of-job to occur before your job is completed. If end-of-job does occur before your job finishes, re-enter your specifications as often as necessary to complete your job.

144

EH

MSEH

13

Reason: No header card for Sort/Collate job. The first card read from the secondary hopper does not have an H in column 6.

Recovery 1:
1. Press MFCU STOP.
2. Press NPRO. One card is fed into stacker 1.
3. Remove OCL cards from stacker 1.
4. Raise cards in secondary hopper and press NPRO. One card is fed into stacker 1.
5. Remove card from stacker 1 and place it ahead of cards in secondary hopper. This should be the header card.
6. Find header card. It may be out of order in the sort specification deck.
7. Place header card ahead of cards in secondary hopper.
8. Press MFCU START.

3: Immediate cancel.
1. Press MFCU STOP.
2. Remove cards from secondary hopper.
3. Press NPRO. One card is fed into stacker 1.
4. Remove OCL cards from stacker 1.
5. Press NPRO. One card is fed into stacker 1.
6. Remove this card from stacker 1 and place it behind the card from stacker 4. Place these two cards in front of the cards removed from the secondary hopper.
7. Return the job and the printout to the programmer.

EJ

MSEJ

Reason: End-of-job.

Recovery:
1. Clear cards from MFCU.
2. Dismount disk cartridges if necessary.
3. Prepare for next job.
4. Start next job.

Note: EJ is also displayed when a core storage dump is complete. You must IPL the system after the core storage dump is complete.
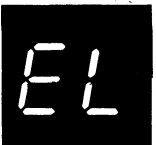
EL

03

Reason: Sort/Collate job caution messages are printed on logging device. The job can be continued. However, the programmer should be notified before continuing. The programmer may have provided instruction for caution messages on the program run sheet.

The logging device prints:

REVIEW WARNING MESSAGE

MSEL

Recovery 0: Continue with job.

3: Immediate cancel.
1. Press MFCU STOP.
2. Press NPRO. One card is fed into stacker 1.
3. Remove OCL cards from stacker 1.
4. Press NPRO. One card is fed into stacker 1.
5. Remove cards from stacker 4 and place card in stacker 1 behind them.
6. Return the job, including the program printout, to the programmer.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

EP

0

Reason: End of pass of Sort/Collate job. The message printed is determined by the number of stackers being used:

** FOUR STACKERS ** STACKS 1, 2 TO PRI-STACKS 3, 4, TO SEC

** THREE STACKERS ** SHORT STRINGS TO PRI AND SEC — CLEAR STACK 1

** TWO STACKERS ** FEED STACK 1 TO PRI-STACK 3 TO SEC

** ONE STACKER, FOLLOWING THREE STACKER PASS ** ONE STRING TO PRI AND OTHER TO SEC

Following any of the above messages, the logging device prints:

PRESS MFCU START AND CONSOLE START

Note: For more information on 3 stack pass, see sort/collate message SC123A in *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.

MSEP

Recovery 0:
1. Follow printed instructions.
2. Press MFCU START. Remember to remove the end-of-file cards from under the cards in stackers 1 and 3.

EU

Reason: Invalid interrupt recognized during execution of Data Record or Data Verify program. You may have pressed two keys at the same time or turned on a keyboard switch while the program was running.

Probable user error.

Recovery: Press console START, HALT/RESET if you have DPF. The program in operation will diagnose and correct the problem.

E Y

23   **Reason:** There is not enough space on the disk or tape to contain the records being read by the 1255.

Probable user error.

UMEYEX   **Recovery 2:** Controlled cancel. Totals are printed and the job is cancelled.

3: Immediate cancel.

Note: For a disk file, if you want to rerun the entire job, change the TRACKS or RECORDS parameter in the FILE statement to specify enough disk space for the job and place all the documents back in the feed hopper. For a tape file, if you want to rerun the entire job, add or change the BLKL and RECFM parameters in the FILE statement and place all the documents back in the feed hopper. For either a disk or tape file, you may want to rerun the job using only those documents that have not yet been processed. For each stacker, the last document shown on the listing is the last document to be processed. There may be documents on top of the last document processed and these should be removed and returned to the feed hopper. When you rerun the job, you must create another file.

E

23   **Reason:** A permanent I/O error occurred when disk or tape file F 1255 was being created for the 1255 utility program.

Probable user error.

UME DE

E blank   **Recovery 2:** Controlled cancel. End-of-job totals are printed. Assign more tracks or records to the file and rerun the job.

3: Immediate cancel.

E -
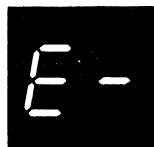
03   **Reason:** The debug dump has ended.

Recovery 0: Continue.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
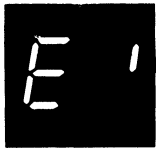
023 **Reason:** The 1255 has stopped for one of the following reasons:

1. The device is jammed.

2. A stacker stop has occurred.

3. A stacker is full or a stacker select stop has occurred.

4. The hopper is empty.

5. You have stopped the device.

6. The device is not attached to the system.

7. The device is not ready.

8. The device has started but no VALIDITY CHECK AND READOUT keys were pressed.

UME'ST **Recovery 0:** Correct the condition that caused the stop and continue normal processing.

1: (For SUBR08 and SUBR09) Correct the condition that caused the stop and continue processing.

2: Controlled cancel. The totals are printed and the job is cancelled.

3: Immediate cancel.

Note: For information on jams and stacker stops, see *IBM System/3 Disk System Utility Program for IBM 1255 Magnetic Character Reader Reference Manual*, SC21-7521, or *IBM System/3 Disk System Utility Program for IBM 1255, 1270 Models 21, 22, and 23 Reference Manual*, SH19-0041.

---

123 **Reason:** MFCU feed check. One or more cards are mispositioned or jammed in card feed path.

IMF0 **Recovery 1:**
1. Press console START. The display in the message display unit will change from F0 to two numbers. You will use these numbers in step 5.
2. Open MFCU top covers.
3. Remove card from primary, upper, wait station, if present, and place it under the cards in primary hopper. Read clearing a card jam in Operator's Guide if you are not familiar with how to physically remove the cards from the card feed path.
4. Remove all remaining cards from card feed path, starting at area between hopper and wait station and progressing through print unit area. Keep cards face down and in order, with the card removed from the print unit area on the bottom.
Note: If the light indicators 7, 8, 10, or 12 in the MFCU operator's panel are lit, replace the card that will be found between the punch station and corner station with a blank card if a blank card is there or with a pre-punched card if a prepunched card is there.

FO

(continued)

5. Check message display unit. The tens digit indicates the number of cards that must be placed back in the secondary hopper. If the number of cards removed from the card feed path in step 4 is equal to the tens digit, go to step 7.

6. If the number of cards removed is less than the tens digit, you must reposition last cards in stacker indicated by units digit of display. For example, you removed two cards from the card feed path. The message display unit display is 34. This indicates the last card in stacker 4 must be placed in the secondary hopper.

7. The cards must be placed in the hoppers in the following order:
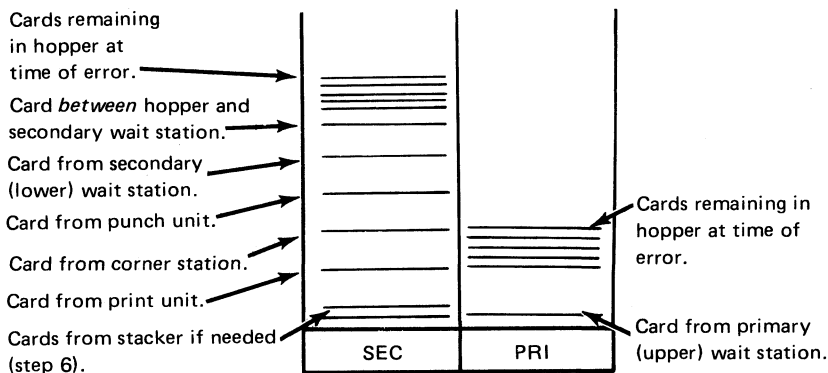
Cards remaining in hopper at time of error.

Card *between* hopper and secondary wait station.

Card from secondary (lower) wait station.

Card from punch unit.

Card from corner station.

Card from print unit.

Cards from stacker if needed (step 6).

Cards remaining in hopper at time of error.

Card from primary (upper) wait station.

SEC   PRI

8. When cards are positioned in hopper in correct order, close MFCU covers.

9. Raise cards in primary hopper and press NPRO to turn off error indicator on MFCU panel. If error indicator does not turn off, raise cards in secondary hopper and press NPRO.

10. Press MFCU START.

    2: Controlled check.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

F1

IMF1

123

Reason: MFCU feed check. One or more cards are mispositioned or jammed in card feed path.

Recovery 1:

1. Press console START. The display in the message display unit will change from F1 to two numbers. You will use these numbers in step 5.
2. Open MFCU top covers.
3. Remove card from secondary, lower, wait station, if present, and place it under any cards in secondary hopper. Read clearing a card jam in Operator's Guide if you are not familiar with how to physically remove the cards from the card feed path.
4. Remove all remaining cards from card feed path, starting at area between hopper and wait station and progressing through print unit area. Keep cards face down and in order, with the card removed from the print unit area on the bottom.

Note: If the light indicators 7, 8, 10, or 12 in the MFCU operator's panel are lit, replace the card that will be found between the punch station and the corner station with a blank card if a blank card is there or with a prepunched card if a prepunched card is there.

5. Check message display unit. The tens digit indicates the number of cards that must be placed back in primary hopper. If the number of cards removed from the card feed path in step 4 is equal to the tens digit, go to step 7.
6. If the number of cards removed is less than the tens digit, you must reposition last cards in stacker indicated by units digit of display. For example, you removed two cards from the card feed path. The message display unit display is 34. This indicates the last card in stacker 4 must be placed in the primary hopper.
7. The cards must be placed in the hoppers in the following order:
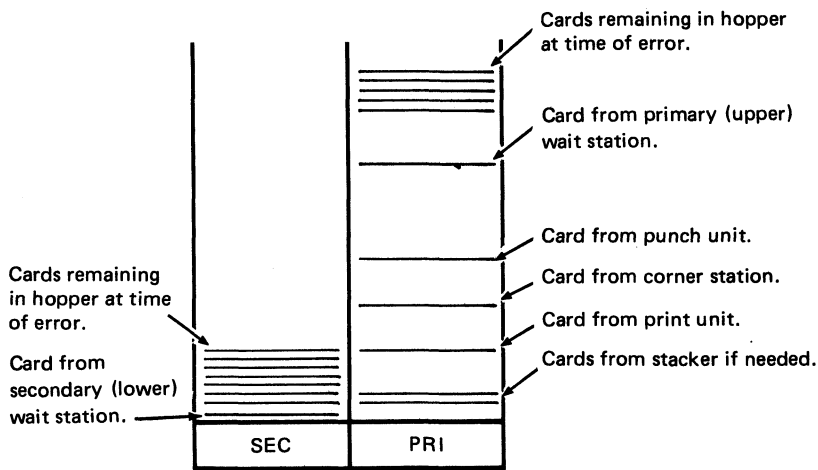
Cards remaining in hopper at time of error.

Card from primary (upper) wait station.

Card from punch unit.

Card from corner station.

Card from print unit.

Cards from stacker if needed.

Cards remaining in hopper at time of error.

Card from secondary (lower) wait station.

SEC   PRI

8. When cards are positioned in hoppers in correct order, close MFCU covers.
9. Raise cards in primary hopper and press NPRO to turn off error indicator on MFCU panel. If error indicator does not turn off, raise cards in secondary hopper and press NPRO.
10. Press MFCU START.

   2: Controlled cancel.

   3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

F2
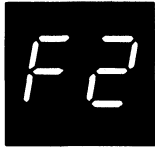
IMF2

123

Reason: MFCU hopper check. Card not fed from hopper.

Recovery 1:
1. Check MFCU. The SEC or PRI light tells you which hopper failed to feed a card.
2. Straighten cards in hopper. If necessary, correct damaged cards.
3. Press MFCU START.

    2: Controlled cancel.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

F3

123

Reason: MFCU read check caused by:

1. Damaged card

2. Information recorded incorrectly on card

3. MFCU feed problem, or

4. Cards incorrectly placed in hopper.

IMF3

Recovery 1:
1. Check MFCU. The SEC and PRI light tells you which hopper fed the card that caused the halt.
2. Press MFCU STOP.
3. Raise cards in indicated hopper. Press NPRO. One card is fed into stacker 1.
4. If halt is caused by cards being placed in hopper wrong, reposition cards. Place card from stacker 1 ahead of deck and place deck in hopper face down, top edge to left. If halt is caused by a damaged or mispunched card, replace card and place new card under cards in hopper from which card was fed.
5. Press MFCU START.

    2: Controlled cancel.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

F4
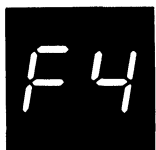
IMF4

123

Reason: MFCU punch check. Extra or missing punches in card in stacker indicated by second halt.

Recovery 1:
1. Check SEC or PRI light on MFCU to determine which hopper held card that caused halt.
2. Press console START. The message display unit changes to 01, 02, 03, 04. This halt indicates stacker which holds incorrect card.
3. Check if blank or prepunched cards are being punched. If blank cards are being used, remove last card in stacker indicated by second halt and go to step 8. If prepunched cards are being used, proceed with steps 4 through 9.
4. Mark last card in indicated stacker.
5. Press MFCU STOP.
6. Raise cards in hopper which fed last card and press NPRO. One card is fed into stacker 1.
7. Under cards in hopper, place blank card followed by last card in stacker 1.
8. Press MFCU START.
9. If you are using prepunched cards, do the following when the job is completed: Punch and verify the prepunched information from the marked card into the card immediately following it. Discard the marked card and place the new card in the deck in its place.

    2: Controlled cancel.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

F5

IMF5

023

Reason: MFCU punch invalid. A character which is not one of the 64 characters recognized by System/3 has been specified to be punched by the MFCU.

Recovery 0:
1. Press console START. The message display unit changes to 01, 02, 03, or 04. This halt indicates stacker which holds incorrect card.
2. Mark last card in indicated stacker.
3. Press MFCU START.

Processing continues. The marked card will need to be corrected.

    2: Controlled cancel.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
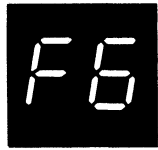
F6

023

Reason: MFCU print check. The printing on the cards could be in error. The wrong characters could be printed, characters could only be partially printed, the printing could be in the wrong position on the cards, or some of the printing could be missing from the cards.

IMF6

Recovery 0:
1. Mark the last card in each stacker being used for output. If in doubt, mark the last card in each stacker containing cards.
2. On completion of the run, notify the programmer of the MFCU print check. The cards to check for print errors are the marked cards and the two preceding cards in each output file.

    2: Controlled cancel.

    3: Immediate cancel.

Note: Clear all error indications on the MFCU before selecting option 2 or 3.

F8

3

Reason: The halt occurred for one of the following reasons:

1. For an assembler program, the forms length is zero and the maximum skip value specified in the DTF is greater than the page size for that tractor.

2. For an RPG II program, the line counter specifications have been omitted and the maximum skip value specified on the output specifications is greater than the page size for the tractor.

Probable user error.

DDF8

Recovery 3: Immediate cancel.

F9

Reason: The requested tape drive is not available.

1A   CIF91A   23   **Reason:** T1 is designated for the file (or volume of a file if it is a multivolume file), however it contains an active file.

Recovery 2: Controlled cancel.

    3: Immediate cancel.

2A   CIF92A   23   **Reason:** T2 is designated for the file (or volume of a file if it is a multivolume file), however it contains an active file.

Recovery 2: Controlled cancel.

    3: Immediate cancel.

3A   CIF93A   23   **Reason:** T3 is designated for the file (or volume of a file if it is a multivolume file), however it contains an active file.

Recovery 2: Controlled cancel.

    3: Immediate cancel.

F9

(continued)

4A   CIF94A   23   **Reason:** T4 is designated for the file (or volume of a file if it is a multivolume file), however it contains an active file.

Recovery 2: Controlled cancel.

3: Immediate cancel.

AC   CIF9AC   23   **Reason:** An attempt has been made to allocate a tape DTF, however tape is not supported by the system.

Recovery 2: Controlled cancel.

3: Immediate cancel.

JO   CIF9JO   23   **Reason:** The tape drives requested are not available, one or more tape units are being used by the other program level.

Recovery 2: Controlled cancel.

3: Immediate cancel.

FA   3   **Reason:** Program is requesting the data recorder. This device is not supported by the IBM System/3 Disk System.

Probable user error.

CIFA   **Recovery 3:** Immediate cancel. This program must be run on the IBM System/3 Model 6.
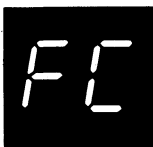
FC   3   **Reason:** Program is requesting the cathode ray tube display. This device is not supported by the IBM System/3 Disk System.

Probable user error.

CIFC   **Recovery 3:** Immediate cancel. This program must be run on the IBM System/3 Model 6.
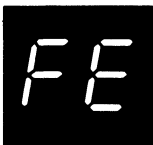
FE   03   **Reason:** The printer line length requested by the program exceeds the actual size of the printer as specified at system generation.

Probable user error.

DDFE   **Recovery 0:** Continue. The printer line length that was specified at system generation will be used.

3: Immediate cancel.

FF
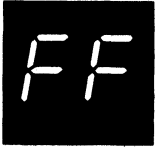
Reason: The halt occurred for one of the following reasons:

1. An error has occurred on an I/O device supported via an RPQ routine.

2. An error has occurred in an RPQ external subroutine.

3. An operator action is requested by an RPQ routine.

4. An operator action is requested by an application program.

Recovery: Press console START or the appropriate HALT/RESET key. A secondary halt is displayed that indicates the name of the RPQ routine or application program. For example, if 02 is displayed, the subroutine name is SUBR02.

Refer to the reference manual for the RPQ routine for further halt recovery information.

FH

123

Reason: The halt occurred for one of the following reasons:

1. The program is attempting to allocate BSCA line 1, and BSCA line 1 is not supported.

2. The program is attempting to allocate BSCA line 1, and BSCA line 1 is being used by the other program level.

3. The program is attempting to allocate BSCA line 2, and BSCA line 2 is not supported.

4. The program is attempting to allocate BSCA line 2, and BSCA line 2 is being used by the other program level.

Probable user error.

CIFH

Recovery 1: If the halt occurred for reason 2 or 4, wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, BSCA line 1 or 2 can be used by the program in this level.

      2: Controlled cancel.

      3: Immediate cancel.

Reason: An error has occurred while trying to use an I/O device.

CIFJ01   123

Reason: The halt occurred for one of the following reasons:

1. 1442 Card Read Punch is not supported, or

2. 1442 Card Read Punch is allocated to the other program level and cannot be used by this program level.

Probable user error.

CIFJ

Recovery 1: If the halt occurred for reason 2, wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, the 1442 can be used by the program in this level.

    2: Controlled cancel.

    3: Immediate cancel.

CIFJ02   123

Reason: The halt occurred for one of the following reasons:

1. Directly attached 3741 is not supported, or

2. Directly attached 3741 is allocated to the other program level and cannot be used by this program level.

Recovery 1: If the halt occurred for reason 2, wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, the device can be used by the program in this level.

    2: Controlled cancel.

    3: Immediate cancel.

FL
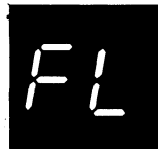
123   **Reason:** The halt occurred for one of the following reasons:

1. Printer-keyboard or data entry keyboard is not supported or,

2. Data entry keyboard is allocated to the other program level and cannot be used by this program level.

3: The program is requesting the model 6 keyboard, and this device is not supported by the IBM/3 disk system.

4. CCP has made the console unavailable.

Probable user error.

CIFL   **Recovery 1:** If the halt occurred for reason 2, wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, the data entry keyboard can be used by the program in this level.

        2: Controlled cancel.

        3: Immediate cancel.

FP

123   **Reason:** The halt occurred for one of the following reasons:

1. Printer is not supported, or

2. Printer is allocated to the other program level and cannot be used by this program level.

Probable user error.

CIFP   **Recovery 1:** Wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, the printer can be used by the program in this level.

        2: Controlled cancel.

        3: Immediate cancel.

FU

123   **Reason:** The halt occurred for one of the following reasons:

1. MFCU is not supported, or

2. MFCU is allocated to the other program level and cannot be used by this program level.

Probable user error.

CIFU   **Recovery 1:** If the halt occurred for reason 2, wait until the program in the other program level goes to end of job and take the 1 option. After the 1 option is taken, the MFCU can be used by the program in this level.

        2: Controlled cancel.

        3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

CIFY

23

Reason: The halt occurred for one of the following reasons:

1. The program is attempting to allocate a device that is not supported by the system.

2. The program is attempting to allocate a device and there is an operation pending on the console.

3. There is an incorrect device specification.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.
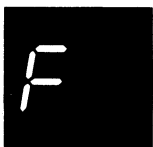
F blank

Reason: The log should be referenced to determine the reason for this halt.

Probable user error.

CIF   23

Reason: The halt has occurred for one of the following reasons:

1. A file cannot be allocated for the unit because a utility program in the other program level is using the unit.

2. The other program level is processing an offline multivolume file on the removable unit specified in the // LOAD statement.

3. The unit specified in the // LOAD statement is being used by the other program level.

Recovery 2: Controlled cancel.

3: Immediate cancel.

Note: If the halt was issued for reason 2 or reason 3, only *Recovery 3: Immediate cancel* is valid.

ELF IL   013

Reason: RPG II Linkage Editor is attempting to catalog a program to a pack which is being used by the other program level, or is attempting to catalog a program to a pack when a ROLLIN is pending in program level 1.

Recovery 0: Attempted catalog is ignored and module is punched.

1: Retry. F blank halt reappears if pack is still being used or ROLLIN is still pending. This option should not be selected if the RPG II Linkage Editor is running in program level 1 during an inquiry request.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
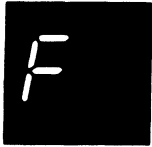
F blank
(continued)

EOF IL   013

Reason: Overlay Linkage Editor ia attempting to change the library on a pack being used.

Recovery 0: Punch the deck instead of the catalog.

       1: Retry. F blank halt appears if pack is still being used. This option should not be selected if the Overlay Linkage Editor is running in program level 1 during an inquiry request.

       3: Immediate cancel.

UAF   3

Reason: The Alternate Track Assignment utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated to this unit from this level prior to an inquiry request.

Recovery 3: Immediate cancel.

UBF   3

Reason: The Disk Pack Backup/Restore utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated prior to a rollout request.

Recovery 3: Immediate cancel.

UCF   3

Reason: The Copy/Dump utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated to this unit from this level prior to an inquiry request.

Recovery 3: Immediate cancel.

Halt F blank   159

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

F
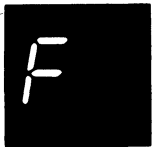
F blank
(continued)

	UFF	3	**Reason:** The File Delete or File Display utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated to this unit from this level prior to an inquiry request.

Warning: If running File Delete, any files that have been specified on previous control statements for this job will not be removed or scratched from the VTOC. If DATA-YES is used, the data for previous files has already been removed.

	UIF	3	**Reason:** The Disk Initialization utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated to this unit from this level prior to an inquiry request.

Recovery 3: Immediate cancel.

	UPF	3	**Reason:** Dump/Restore detected that the unit is being used by a utility program in the other level.

Recovery 3: Immediate cancel.

	URF	3	**Reason:** The Alternate Track Rebuild utility program detected that one of the following occurred:

1. The unit is being used by a utility program in the other level.

2. A file has been allocated to this unit in the other program level.

3. A file has been allocated to this unit from this level prior to an inquiry request.

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

F -

03
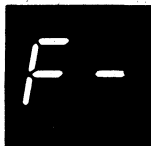
Reason: The halt occurred for one of the following reasons:

1. Tape Sort. The final pass of Tape Sort is ready to begin. If the tape for the output file is not mounted, it must now be mounted. WORK1 may be removed.

2. Disk Sort. The final pass of Disk Sort is ready to begin. If the tape for the output file is not mounted, it must now be mounted.

Note: This halt occurs regardless of the value specified for the DEFER parameter on the tape FILE statement.

Recovery 0: Continue when the output tape is ready.

3: Immediate cancel.

F 1

23

Reason: Program is requesting the matrix printer. This device is not supported by IBM System/3 Model 10 Disk System.

Probable user error.

CIF'

Recovery 2: Controlled cancel.

3: Immediate cancel. This program must be run on an IBM System/3 Model 6 system.

H0

023

Reason: RPG II halt indicator previously displayed.

Recovery 0: Do functions required by H halt and continue. All RPG II halt indicators in this cycle have been displayed.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

H 1

023

Reason: RPG II indicator H1 is on.

Recovery 0: Continue to halt H0.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

H2

023

Reason: RPG II indicator H2 is on.

Recovery 0: Continue to halt H0.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

H3

023

Reason: RPG II indicator H3 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H4

023

Reason: RPG II indicator H4 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H5

023

Reason: RPG II indicator H5 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H6

023

Reason: RPG II indicator H6 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H7

023

Reason: RPG II indicator H7 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H8

023

Reason: RPG II indicator H8 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

H9

023

Reason: RPG II indicator H9 is on.

Recovery 0: Continue to halt H0.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HALT/SUBHALT   **LOG**   **OPTIONS**   **REASON AND RECOVERY**

3

Reason: An attempt is being made to compile a source program, and FILE statement with NAME-$SOURCE has been read. The space specified in the FILE statement is too small to contain the source program.

Probable user error.

CIHA

Recovery 3: Immediate cancel.

3

Reason: Requested program not found on specified fixed disk.

Probable user error.

CIHC

Recovery 3: Immediate cancel.

Reason: A permanent disk error has occurred and the system may not be able to continue proper functioning.

If you cannot ready the disk or mount a pack that has been initialized for an IBM System/3, re-IPL the system before continuing.

To determine the exact reason for the HE halt, press console START, or appropriate HALT/RESET key to display the secondary halt. The left character of the display indicates the unit on which the disk error occurred. The right character of the display indicates the exact reason for the halt. The possible left characters that can be displayed and the unit they represent are:

Meaning the disk error occurred on R1.
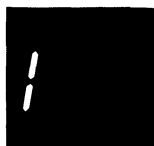
Meaning the disk error occurred on F1.

Meaning the disk error occurred on D1.

Note: The halt may have occurred when a 5445 pack has been initialized on a System/360 or System/370 and used on a System/3.

Meaning the disk error occurred on R2.
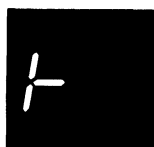
Meaning the disk error occurred on F2.

HE

(continued)

1

Meaning the disk error occurred on D2.

Note: The halt may have occurred when a 5445 pack has been initialized on a System/360 or System/370 and used on a System/3.

0
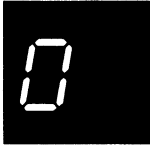
See note at end of description.

The possible right characters that can be displayed, the exact error they represent, and the recovery follow:

2

Reason: The disk error occurred in the system work area of the unit indicated by the left character of the display.

Recovery:
1. Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit.
2. Rerun the job. If the halt recurs, perform the following:
3. Initialize the disk indicated by the left character of the display.
4. Rebuild the system or data on the initialized disk.
5. Rerun the job. If the HE halt recurs, perform the following:
6. Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR.
7. Contact IBM for hardware support.

Note: If the disk error occurred on a removable pack and the system has two disk drives, mount the pack on the other drive. Mount a scratch pack and attempt to copy the bad pack onto the scratch pack. Using this method, you may be able to recover all data from the removable pack.

3

Reason: The disk error occurred on cylinder 0 of the unit indicated by the left character of the display. The pack is probably unusable.

Recovery:
1. Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit.
2. Rerun the job. If the halt recurs, perform the following:
3. Initialize the disk indicated by the left character of the display using the clear type of initialization.
4. Rebuild the system or data on the initialized disk.
5. Rerun the job. If the HE halt recurs, perform the following:
6. Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR.
7. Contact IBM for hardware support.

Note: If the disk error occurred on a removable pack and the system has two disk drives, mount the pack on the other drive. Mount a scratch pack and attempt to copy the bad pack onto the scratch pack. Using this method, you may be able to recover all data from the removable pack.

HE

(continued)

4

Reason: The disk error occurred in the object library of the unit specified by the left character of the display.

Recovery:
1. Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit.
2. Rerun the job. If the halt recurs, perform the following:
3. Initialize the disk indicated by the left character of the display.
4. Rebuild the system or data on the initialized disk.
5. Rerun the job. If the HE halt recurs, perform the following:
6. Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR.
7. Contact IBM for hardware support.

Note: If the disk error occurred on a removable pack and the system has two disk drives, mount the pack on the other drive. Mount a scratch pack and attempt to copy the bad pack onto the scratch pack. Using this method, you may be able to recover all data from the removable pack.

5

Reason: The disk error occurred in the inquiry or checkpoint work area of the unit indicated by the left character of the display.

Recovery:
1. Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit.
2. Rerun the job. If the halt recurs, perform the following:
3. Initialize the disk indicated by the left character of the display.
4. Rebuild the system or data on the initialized disk.
5. Rerun the job. If the HE halt recurs, perform steps 6 and 7.
6. Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR.
7. Contact IBM for hardware support.

Note: If the disk error occurred on a removable pack and the system has two disk drives, mount the pack on the other drive. Mount a scratch pack and attempt to copy the bad pack onto the scratch pack. Using this method, you may be able to recover all data from the removable pack.

6

Reason: The disk error occurred while a disk was being initialized. If the error occurred on F1 or F2, contact IBM for hardware support. If the error occurred on R1 or R2, the pack is unusable. The pack being initialized is indicated by the left character of the display.

Recovery: Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR. Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit. Rerun job using a different pack.

7

Reason: The disk error occurred while running Alternate Track Assignment program. If the error occurred on F1 or F2, contact IBM for hardware support. If the error occurred on R1 or R2, the pack is unusable. The unit on which the error occurred is indicated by the left character of the display.

Recovery: Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR. Press console START, or appropriate HALT/RESET key. EJ is the displayed in message display unit. Rebuild system or data on a different pack and run other jobs.

HE

(continued)

9

Reason: The error occurred while TVES was reading or writing on the CE tracks.

Recovery: Press console start or the appropriate halt/reset key. Halt EJ is then displayed in the message display unit.

A

Reason: See note at end of description.

C

Reason: The disk error occurred in the source library of the unit indicated by the left character of the display.

Recovery:
1.   Press console START, or appropriate HALT/RESET key. EJ is then displayed in the message display unit.
2.   Rerun the job. If the halt recurs, perform steps 3, 4, and 5.
3.   Initialize the disk indicated by the left character of the display.
4.   Rebuild the system or data on the initialized disk.
5.   Rerun the job. If the HE halt recurs, perform steps 6 and 7.
6.   Record contents of the ARR. See procedures later in the description of this halt on how to read the ARR.
7.   Contact IBM for hardware support.

Note: If the disk error occurred on a removable pack and the system has two disk drives, mount the pack on the other drive. Mount a scratch pack and attempt to copy the bad pack onto the scratch pack. Using this method, you may be able to recover all data from the removable pack.

HE

(continued)

Reason: The disk error occurred while the RJE support was using the disk. If the error occurred on F1 or F2, contact IBM for hardware support. If the error occurred on R1 or R2, the pack cannot be used. The unit on which the error occurred is indicated by the left character of the display.

Recovery: Record contents of the ARR. See the procedures later in the description of this halt on how to read the ARR. Press console START or the appropriate HALT/RESET key. EJ is then displayed in the message display unit. Rebuild the system or data on a different pack and run other jobs.

To read ARR:

1. Press console STOP.
Note: If you have DPF, disable the program level in which the halt did not occur by setting the appropriate P1 or P2 switch located on the CE panel to OFF. The PROCESS light for the level in which the halt occurred must be on before reading the ARR.
2. Set LSR display selector on CE panel to ARR.
3. Set register display unit to LSR HI LSR LO.
4. Record contents of ARR.
5. Set LSR display selector on CE panel to NORMAL.
6. For a DPF system, set P1 or P2 switch to ON.

Note: Save the contents of the ARR that you recorded for IBM. The contents of the ARR indicate the cylinder/sector of where the disk error occurred.

Note: There is also an HE halt followed by a secondary 0A halt. The reason for the secondary 0A halt is that the error occurred during IPL, thus preventing the completion of IPL. The recovery for this is to IPL again. If the halt continues to occur, record the contents of the ARR and contact IBM for hardware support.

HF

CIHF

03

Reason: A COMPILE statement with a SOURCE parameter was read and is not required.

Probable user error.

Recovery 0: Continue. The statement is ignored.

3: Immediate cancel.

HH

CCHHNN

0

Reason: A checkpoint request has been received and ignored.

Recovery 0: Continue. If log is on, the NN indicates the checkpoint number that was ignored. NN is a value from 01 to 99. It begins at 01 for the first requested checkpoint, increments by 1 for each additional requested checkpoint until 99 is reached, and resets to 01 when the next checkpoint is requested. This process repeats as many times as necessary. If log is off, the operator should indicate the checkpoint was ignored and follow the operating instructions for the object program.

Note: The HH halt can occur if any device used by the checkpoint program is not ready or has an outstanding hardware error.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HU

Reason: Requested program cannot be found.

01   CIHJ01   13

Reason: Requested program not found on the specified removable pack.

Recovery 1: Retry after mounting the correct pack.

3: Immediate cancel.

02   CIHJ02   3

Reason: Requested program not found on the specified removable pack. The removable pack is also being used for some other function and cannot be removed at this time.

Recovery 3: Immediate cancel.

HL

3

Reason: An inquiry request has been allowed, but the program to be executed is the wrong type and cannot be executed. The invalid types of programs that cannot be executed are:

1. Programs that must run alone.

2. All LOAD * programs.

3. Checkpointed programs.

Probable user error.

CIHL

Recovery 3: Immediate cancel.

HP

Reason: There is insufficient main storage to run the requested program.

Probable user error.

CIHP   3

Reason: The main storage specified in the CORE-SIZE-TO-EXECUTE parameter plus the main storage required for the supervisor must be less than the system main storage size. If possible, recompile the program specifying a smaller CORE-SIZE-TO-EXECUTE parameter.

Recovery 3: Immediate cancel.

LMHP   3

Reason: $MAINT has insufficient main storage to resolve system transient disk addresses.

Recovery 3: Immediate cancel.

Note: After taking the immediate cancel, you must perform an IPL from the system pack for which $MAINT was run or the pack will be unusable.

HU

Reason: Requested source program not found on disk specified by the COMPILE statement, or a permanent disk error occurred while writing to the $SOURCE file.

01 CIHU01   3

Reason: Source program not found on the fixed disk specified by the COMPILE statement.

Recovery 3: Immediate cancel.

02 CIHU02   13

Reason: Source not found on the removable disk specified by the COMPILE statement.

Recovery 1: Retry after mounting the correct pack.

Note: Recovery 1 is not allowed if the removable pack is also being used for some other function and cannot be removed at this time.

                3: Immediate cancel.

03 CIHU03   3

Reason: A permanent disk error has occurred while writing to the $SOURCE file.

Recovery 3: Immediate cancel.

HY

           0   **Reason:** A checkpoint request has been received and accepted.

CCHYNN

Recovery 0: Continue. If log is on, the NN indicates the checkpoint number that was accepted. NN is a value from 01 to 99. It begins at 01 for the first requested checkpoint, increments by 1 for each additional requested checkpoint until 99 is reached, and resets to 01 when the next checkpoint is requested. This process repeats as many times as necessary. If log is off, the operator should indicate the checkpoint was accepted and follow the operating instructions for the object program.

If the tape, 3741, printer, MFCU, or 1442 card read punch is being used by the checkpoint program, refer to the *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508, for procedures to resume execution of the program.

H

H blank

Reason: A restart has been requested.

CCH NN   023

Value From
01 to 99

Reason: A restart has been requested and the checkpoint program can now resume processing.

Recovery 0: Continue. If log is on, the NN indicates the last checkpoint number that was requested. NN is a value from 01 to 99. It begins at 01 for the first requested checkpoint, increments by 1 for each additional requested checkpoint until 99 is reached, and resets to 01 when the next checkpoint is requested. This process repeats as many times as necessary.

Prepare and ready all devices required by the checkpoint program. If the tape, 3741, printer, MFCU, or 1442 card read punch is used, refer to the *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508 for procedures to resume execution.

   2: Controlled cancel. The checkpoint is deactivated and the job is immediately cancelled.

   3: Immediate cancel.

CCH NN   13

Either A1, A2,
P1, or P2.

Reason: The pack that was being used by the interrupted program is not mounted and must be mounted. If log is on, the pack name of the pack to be mounted will be logged, followed by CCH NN where NN is:

A1 indicating R1

A2 indicating R2

P1 indicating D1

P2 indicating D2

Recovery 1: Retry and continue. Mount the pack that was being used by the checkpoint program.

   3: Immediate cancel.

AC   CCH AC   3

Reason: A restart has been requested but an active checkpoint does not exist.

Recovery 3: Immediate cancel.

CS   CCH CS   3

Reason: A restart has been requested and sufficient core is not available.

Recovery 3: Immediate cancel.

H
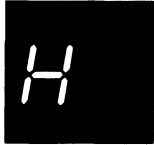
H blank
(continued)

U   CCH UX   013

Note: This number
indicates a tape unit
number

Reason: The tape unit that was being used by the interrupted program either must be mounted and rewound or is not mounted and must be mounted and rewound.

If log is on, the file name of the tape to be mounted will be logged followed by CCH UX, where X is the unit number on which the tape should be mounted. In addition, NS is logged for a nonstandard, labeled tape and NL is logged for an unlabeled tape.

Recovery 0: Continue. This option is available only if option 0 has been selected for the YI subhalt of halt 7L during the execution of the checkpoint program. The files of a multivolume file are desired to be processed out of order.

1: Retry. Mount the tape that was being used by the checkpoint program. If a multivolume file is being processed, the volume mounted at the last accepted checkpoint must be mounted and not necessarily the reel that is mounted when this subhalt occurs.

3: Immediate cancel.

H -
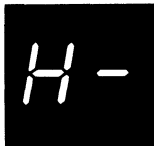
03

Reason: This halt appears at the end of the Tape Sort generation phase if warning errors have occurred and no severe or terminal errors have occurred.

Recovery 0: Continue.

3: Immediate cancel.

Halt H blank   171

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

H1

	3	**Reason:** An uninitialized pack has been referenced. The file name is logged before the halt.

Probable user error.

CIH'   **Recovery 3:** Immediate cancel. Initialize the pack before running the job again.

J0

123   **Reason:** Record with a specified match field is out of sequence. The file in error is indicated by a FILE statement number greater than 9 on the RPG II source listing.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 and 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

J1

123   **Reason:** Record with a specified match field is out of sequence. Statement number 1 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123

Reason: Record with a specified match field is out of sequence. Statement number 2 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123

Reason: Record with a specified match field is out of sequence. Statement number 3 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cars.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123

Reason: Record with a specified match field is out of sequence. Statement number 4 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123   **Reason:** Record with a specified match field is out of sequence. Statement number 5 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123   **Reason:** Record with a specified match field is out of sequence. Statement number 6 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

123   **Reason:** Record with a specified match field is out of sequence. Statement number 7 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

J8

123

Reason: Record with a specified match field is out of sequence. Statement number 8 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

J9

123

Reason: Record with a specified match field is out of sequence. Statement number 9 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

JA

3

Reason: Attempting to load a program that requires or allows inquiry while a program that also requires or allows inquiry is in execution in the other program level. DPF only.

Probable user error.

CIJA

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

JC

Reason: The log or subhalt indicates the reason that the program cannot be run.

01 CIJC01 3

Reason: The program must be run in the dedicated mode, and the other program level is being used.

Recovery 3: Immediate cancel.

02 CIJC02 3

Reason: The program in the other level must run in the dedicated mode.

Recovery 3: Immediate cancel.

03 CIJC03 3

Reason: $$RSTR (restart) must not execute in program level 2.

Recovery 3: Immediate cancel.

04 CIJC04 03

Reason: Checkpointed program is not allowed in program level 2.

Recovery 0: Continue. The checkpoint request is ignored.

   3: Immediate cancel.

05 CIJC05 013

Reason: Certain programs cannot be run when a checkpoint is active. See *Intervening Programs* in *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.

Recovery 0: Continue. Deactivate the checkpoint.

   1: Continue. Checkpoint remains active.

   3: Immediate cancel.

JE

03

Reason: A dedicated program being loaded into level 1 requires more core storage than is available. A PARTITION statement has previously been given which has set level 2 boundaries, therefore reducing core storage available for level 1. There is no job running in level 2 when this halt occurs.

Probable user error.

CIJE

Recovery 0: Continue. Initiate the dedicated job in level 1. The partition boundaries are temporarily disabled for level 2. The partition values are reset when the dedicated job is completed.

   3: Immediate cancel.

To run the job:

1. Supply a PARTITION statement changing level 2 boundaries, and run the job or

2. IPL the system and then run the job.

176

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

JF

CCJF

3

Reason: An attempt is being made to load an inquiry program, but the printer-keyboard is being used as the system input device by the other program level.

Recovery 3: Immediate cancel. Then halt J' will occur.

JH

CIJH

3

Reason: An attempt is being made to start a program which allows interrupts in program level 2. DPF only.

Probable user error.

Recovery 3: Immediate cancel. This type of program must be processed in program level 1.

JJ

CIJJ

3

Reason: An attempt is being made to load an object program, but there is no object library on the specified unit.

Probable user error.

Recovery 3: Immediate cancel.

JL

Reason: There is not enough available storage to start the selected program. DPF only.

Probable user error.

Recovery: Press appropriate HALT/RESET key to try to get core storage needed for the job.

Note: If the preceding does not work, wait until the job in the other level is complete, then try loading this job again.

JP

Reason: A system input device has been selected to load a program, but the system input device has already been assigned to the other program level. DPF only.

Probable user error.

Recovery: Try one of the following:

1. Press appropriate HALT/RESET key to try to get device again, or

2. Select another device for this job.

Note: If the preceding does not work, wait until the job in the other level is complete, then try loading this job again.

JU

0123

Reason: A cancel request has been made from the interrupt key. DPF only.

Probable user error.

Recovery 0: Continue. The cancel request is ignored.

       1: Continue. The cancel request is ignored.

       2: Controlled cancel. Job is cancelled.

       3: Immediate cancel.

Setting the rightmost ADDRESS/DATA switch to any value other than 2 and 3 will allow the job to continue.

(continued)

| | | 02 | **Reason:** An inquiry request has been received and accepted. |

CCJYRD

Recovery 0: Continue. If the MFCU or 1442 was being used by the inter-rupted program, use NPRO to clear any cards from the card feed paths. Pre-pare and ready any devices required by the interrupting program. If system IPL was from a removable pack, that pack must not be dismounted.

Note 1: If the MFCU or 1442 will not be used by the interrupting program, do not remove (NPRO) any cards from the devices. To perform a rollin after a J' halt, select option 1 to tell the system that card repositioning is not necessary.

Note 2: If the 3741 was being used by the interrupted program, note the track and sector address on the display screen. This information will be needed at rollin time. If the 3741 will not be used by the interrupting program, do not take the device offline. For 3741 considerations during inquiry, see the *IBM System/3 3741 Reference Manual,* GC21-5113.

2: Controlled cancel. The inquiry request is cancelled and control is given back to the interrupted program. If option 2 is selected and the inter-rupted program is using card devices, do not NPRO the cards from the device. Select option 1 after the J' halt to avoid card repositioning.

Note: If the MFCU is being used by the interrupted program, perform the following:

1. Raise cards in primary hopper.
2. Press MFCU NPRO.
3. Place card fed into stacker 1 in front of cards in primary hopper.
4. If secondary hopper is being used, raise cards in hopper.
5. Press MFCU NPRO.
6. Place card fed into stacker 1 in front of cards in secondary hopper.
7. Press MFCU START.

Note: If the 1442 is being used by the interrupted program, perform the following:

1. Raise cards in hopper.
2. Press 1442 NPRO.
3. Place two cards fed into stacker in front of cards in hopper. If only one card is fed into the stacker, place it in the hopper and place a blank card on top of it.
4. Press 1442 START.

Note: If the printer is being used by the interrupted program, record the number of the line printed when the inquiry request is accepted. The paper in the printer can then be repositioned to this line after the program resumes execution.
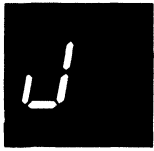
3   **Reason:** Halt occurred for one of the following reasons:

Probable user error.

1. Selected DUAL PROGRAM CONTROL switch position does not have the device desired assigned to that position.

2. You do not have the device requested.

3. Device is being used by the other level.

4. CCP has made the console unavailable.

This is a DPF halt only.

J blank

CTJ   **Recovery 3:** Immediate cancel.

---

3   **Reason:** Attempting to run a CCP application program on a system on which CCP is not running.

Recovery 3: Immediate cancel.

---

013   **Reason:** Execution of an inquiry program has been completed. The interrupted program can now resume processing.

Note: The J' halt can recur for any of the following reasons:

1. The pack that was being used by the interrupted program is not mounted. You must mount the pack that was being used by the interrupted program.

2. An MFCU error could have occurred when reading the first card from either hopper. Check the lights on the MFCU to determine if an MFCU error occurred. If an MFCU error occurred, perform the following:
    A. Open MFCU top covers.
    B. Remove card from primary feed path if any, and place it ahead of cards in primary hopper.
    C. Remove card from secondary feed path, if any, and place it ahead of cards in secondary hopper.
    D. Close MFCU top covers.
    E. Press MFCU START.

CCJ'RD

(continued)

Recovery 0: Continue. Prepare and ready all devices required by the interrupted program. If the MFCU and/or 1442 is used, place the cards from the interrupted program back in the hoppers. Cards that were run out on NPRO must be placed ahead of any cards in their respective hoppers. If the 3741 is used, insert the diskette in drive 1. Position the diskette head to the address saved at rollout time, and place the 3741 online.

Note 1: If the halt occurred for reason 2 and the correct pack is not mounted when you select option 0, the halt will recur. The pack name of the needed pack will be logged followed by the halt code CCJ'XX where XX is either R1, R2, D1, or D2.

Note 2: For 3741 considerations during inquiry, see the *IBM System/3 3741 Reference Manual,* GC21-5113.

1: Continue. Prepare and ready all devices required by the interrupted program except card devices. The system will not attempt to reposition cards for the MFCU or 1442. If the MFCU or 1442 was used by the interrupting program and both devices will be used by the interrupted program, select option 0 and prepare and ready both devices.

Note: The 1 option is valid only the first time the halt appears, and cannot be selected for reappearing J' halts.

3: Immediate cancel.

Note: After a program using a page size different from the size specified at system generation time has been rolled out, the line counter value is not reset to the system generation page size when the 3 option is taken. The page size remains at the value specified by the rolled-out program. To reset the page size and re-align the paper, specify /& and //FORMS LINES-xx as the first two OCL statements of the next job, and align the paper to the top of the next page after the EJ halt occurs. To align the paper, perform the following steps.

1. Disengage the carriage clutch.
2. Position the forms using the vertical adjustment knob until the crease between the forms is aligned with the upper scribe line on the forms guide.
3. Press the CARRIAGE RESTORE key.
4. Engage the carriage clutch.
5. Press the CARRIAGE SPACE key until the paper is at the line at which the inquiry was accepted.
6. If the printer has the dual feed carriage feature and two forms were changed, both forms must be repositioned. Unequal length forms must maintain the same relative position after repositioning what they had when the inquiry request was accepted.

If either the forms or the forms length was changed for the inquiry program, reposition the paper in the printer to the line that was being printed when the inquiry request was accepted. To reposition the paper, perform the preceding six steps.
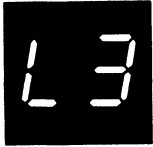
L0

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. The file in error is indicated by a FILE statement number greater than 9 on the RPG II source listing.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 and 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L1

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 1 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L2

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 2 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel

| HALT/SUBHALT | LOG | OPTIONS | REASON AND RECOVERY |

L3

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 3 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L4

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 4 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L5

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 5 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L6

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 6 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L7

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 7 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

L8

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 8 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

L9

123

Reason: Record unidentifiable or out of sequence. This halt occurs only for files with numeric entries in columns 15 and 16 of RPG II input specifications. Statement number 9 on the RPG II source listing indicates the file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

LA

CILA

23

Reason: There is insufficient storage available for the number of files to be processed.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel. Reduce the number of files to be processed.

LC

CILC

0

Reason: Insufficient main storage to perform the requested allocation.

Note: A minimum of 5K of main storage is required to perform disk or tape allocation.

Recovery 0: The system will wait until 5K of main storage can be obtained for the program level from which the allocation request was issued. Allocation will proceed normally as soon as storage is available.

LE

23

Reason: Either no FILE statement or an incorrect FILE statement was read for a file used by the current program.

Probable user error.

File name is logged before halt code.

CILE

Recovery 2: Controlled cancel.

3: Immediate cancel.

Note: This halt may occur for a user's program when the UNIT parameter differs from the unit requested by the program. For example, if UNIT-D1 is specified and the program requests a 5444 disk. It may also occur when the UNIT parameter specifies a 5445 disk for an IBM program's input, output, or work file and the IBM program does not support the 5445. Refer to the file consideration information in the reference manual for the IBM program when the halt occurs for this reason.

LH

23

Reason: An attempt is being made to use an existing file as an output file but no location and space was specified by the FILE statement.

If you are using COPYFILE with WORK-YES, the file named COPYO has the same label, location, and pack name as the file named COPYIN. One of these parameters must be different.

File name is logged before halt code.

Probable user error.

CILH

Recovery 2: Controlled cancel.

3: Immediate cancel. In order to reload an existing file, location, and tracks or records must be specified.

LJ

23

Reason: An existing permanent file is referenced as an output file. File must be temporary or scratch.

Probable user error.

CILJ

Recovery 2: Controlled cancel.

3: Immediate cancel.

LL

023

Reason: An existing temporary file is being allocated as an output file.

Probable user error.

File name is logged before halt code.

CILL

Recovery 0: Continue. The file is allocated with the current system date, and the existing temporary file is made available to the new file. Additional halts may occur if the file specifications for the existing temporary file and the new file do not match. If an additional halt does occur and a 3 option is taken, the file will be unusable.

2: Controlled cancel.

3: Immediate cancel.

L P

23   **Reason:** This halt occurred for one of the following reasons:

1. An attempt is being made to allocate a new file, and the same file already exists on the referenced volume in a different location. The existing file has the current system date or the same job date as the new file.

2. During a disk copy with WORK-YES, or during a disk sort with a deferred mount of the output file, an attempt is being made to allocate a new file, and the same file already exists on the referenced volume. The existing file has the current system date or the same job date as the new file.

3. An attempt is being made to allocate a multivolume file, and the volume ID is not unique.

File name is logged before halt code.

Probable user error.

CILP   **Recovery 2:** Controlled cancel.

          3: Immediate cancel.

L U

123   **Reason:** An attempt is being made to use a file and the pack name does not agree with the file pack specification.

This halt may occur because the output file was not initially online, in which case the pack should be mounted when the LU halt occurs.

File name is logged before halt code.

Probable user error.

CILU   **Recovery 1:** Retry after mounting correct pack.

          2: Controlled cancel.

          3: Immediate cancel.

L Y

Reason: An attempt is being made to allocate space that is not available.

0 1   CILY01   23

Reason: This halt occurred for one of the following reasons:

1. An attempt is being made to allocate a new disk file and there is either insufficient space on the pack or the specified track location is not available. This includes the total space for a series of split files when trying to allocate the first file in a group of split files.

2. During a disk copy with WORK-YES, or during a disk sort with a deferred mount of the output file, an attempt is being made to allocate a new file, and the same file already exists on the referenced volume.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.

0 2   CILY02   23

Reason: An attempt is being made to allocate a split cylinder file and there is not enough space left in the area on disk reserved for the split cylinder files.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.
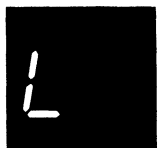
L blank

013

Reason: Library Maintenance program detected an attempt to alter a library via a DELETE, MODIFY, COPY, or ALLOCATE parameter on a pack with an active checkpoint.

LML CP

Recovery 0: Ignore the request. The next control card is read.

1: Continue. The checkpoint is deactivated.

3: Immediate cancel.

3

Reason: An attempt is being made to add a split cylinder file to a series of split cylinder files while:

1. Other program level or Rollout program is adding a split cylinder file to the same split cylinder file series.

2. Other program level or Rollout program is reactivating an existing split cylinder file in the series of split cylinder files using RETAIN-A.

3. Your program level is reactivating an existing split cylinder file in the series of split cylinder files using RETAIN-A.

CIL-

Recovery 3: Immediate cancel. A new split cylinder file cannot be added until the other program, the other program level, or the rolled out program has reached end-of-job, or until your program level has reactivated the old split cylinder file to a temporary file.

23

Reason: An attempt is being made to allocate a split cylinder file before allocating the first split cylinder file in the split cylinder files group.

CIL'

Recovery 2: Controlled cancel.

3: Immediate cancel.

P 1

123

Reason: Printer carriage check. Carriage synchronous check caused by loss of attachment synchronization with the forms. For the 1403 printer, inspect the carriage tape for wear and replace it if necessary. If this halt continues to occur, contact IBM for hardware support.

Note: Could be caused by programming error if a skip is issued and the line counter is greater than the forms length.

For 5203 Printer:

Recovery 1:
1.   Open printer top cover.
2.   Open rear unit.
3.   Check last line of print:
   — If the carriage has not moved from the last line of print, print line is between scribe lines on carriage. Go to step 4.
   — If the carriage has moved, last print line is above upper scribe line on carriage.
      — Disengage carriage clutch.
      — Use knob on right end of carriage to back up forms until first line on form is positioned between scribe lines.
      — Press CARRIAGE RESTORE key.
      — Engage carriage clutch.
      — Press CARRIAGE SPACE key until the last line of print is between the scribe lines.
      — If your printer has the dual feed carriage feature and two forms are being used, both forms must be repositioned. Unequal length forms must maintain the same relative position after repositioning that they had when the error occurred.
4.   Close rear unit.
5.   Close top cover.
6.   Press printer START.

For 1403 Printer:

1.   Press printer CHECK RESET key.
2.   Open printer top cover.
3.   Turn FEED clutch to NEUTRAL. For Model N1 skip to step 5.
4.   Unlock and swing back print unit by pulling print unit release lever toward you. Unlatch ribbon guide bar from print unit and swing it against forms.

5.   Check last line of print by turning paper advance knob forward:

P1

(continued)

Model 2: Three lines spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

— If carriage has not moved (last print line is just visible above the ribbon guide bar) turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Turn FEED CLUTCH to DRIVE. Go to step 6.

— If carriage has moved, position last line printed so that it is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Note line on form that is just visible above ribbon guide bar. This is your print stop line.

Turn paper advance knob backwards until first line of form is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Press CARRIAGE RESTORE key and turn FEED CLUTCH to DRIVE.

Using CARRIAGE SPACE key advance form until print stop line is just visible above ribbon guide bar.

6. Close printer top cover.
7. Press printer START.
8. Press console START.

Printing continues with no loss of data or carriage information.

2: Controlled cancel.

Note: Clear all error indications on the printer before selecting option 2.

3: Immediate cancel

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

P2

DDP2   03

Reason: For the 5203 or 1403 Printer, the current carriage position is beyond the forms length.

Recovery 0:

For the 5203 Printer:

1.   Open printer top cover.
2.   Disengage carriage clutch.
3.   Position new form at the top of the page.
4.   Press CARRIAGE RESTORE key.
5.   Engage carriage clutch.
6.   Close top cover.
7.   Press printer START.

For the 1403 Printer:

1.   Press printer CHECK RESET.
2.   Open printer top cover.
3.   Turn FEED CLUTCH to NEUTRAL.
4.   Position new form at the top of the page.
5.   Press CARRIAGE RESTORE key and then turn FEED CLUTCH to DRIVE.
6.   Close printer top cover.
7.   Press printer START.

Recovery 3: Immediate cancel.

123   **Reason:** For the 5203 Printer, the paper forms have jammed in the print area. For the 1403 Printer, the forms have jammed causing a misalignment in the print line, or the CARRIAGE STOP key was pressed.

P3

IPP3   **Recovery 1:** For the 5203 printer:

1. Open printer top cover.
2. Open rear unit.
3. Clear forms jam.
4. Disengage carriage clutch.
5. Position new form at first print line. The program will skip to the line where the jam was detected.
6. Press CARRIAGE RESTORE key.
7. Engage carriage clutch.
8. Close rear unit.
9. Close top cover.
10. Press printer START.

Printing continues on the new form at the line on which the forms jam was detected. If the forms jam occurred before the carriage stopped, the forms may be positioned on the wrong line. This will be corrected when the next skip command is issued.

Note: If your printer has the dual feed carriage feature and two forms are being used, both forms must be repositioned. Position both forms at the first print line of the form that was being printed when the error occurred.

For the 1403 printer:

1. Press printer CHECK RESET key.
2. Open printer top cover.
3. Turn FEED CLUTCH to NEUTRAL.
4. Unlock and swing back print unit by pulling print unit release lever toward you.
5. If form was damaged, clear damaged form. Unlatch ribbon guide bar from print unit and swing it against forms. Reposition next good form by using paper advance knob so that line 1 of next good form is just visible above ribbon guide bar. Now go to step 6.

    If form was not damaged, unlatch ribbon guide bar from print unit and swing it against forms. Reposition undamaged form by using paper advance knob so that line 1 of undamaged form is just visible above ribbon guide bar.
6. Turn paper advance knob backwards:

    Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

    Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

7. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.
8. Press CARRIAGE RESTORE key and then turn FEED CLUTCH to DRIVE.
9. Close printer top cover.
10. Press printer START.
11. Press console START.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

P3

(continued)

Note: The remainder of the form will be printed on the new form or on the remainder of the undamaged form. The information may be printed on the wrong line, but the next new form will regain synchronization. If any printed information is missing it may be recovered only by IPL.

2: Controlled cancel.

Note: Clear all error indications on the printer before selecting option 2.

3: Immediate cancel.

P5

023

Reason: For the 5203 Printer, a printer synchronous check has occurred. The mechanical and electrical operations of the printer are not working together. Two lines may contain print errors. If this halt continues to occur, contact IBM for hardware support. For the 1403 Printer, a chain synchronous check was caused by the loss of attachment synchronization with the chain.

IPP5

Recovery 0: For the 5203 Printer, press printer START. For the 1403 Printer, press the printer CHECK RESET key. Processing continues. It is not possible to correct the characters that are printed wrong.

2: Controlled cancel.

Note: Clear all error indications on the printer before selecting option 2.

3: Immediate cancel.

P6

123

Reason: For the 5203 Printer, a printer incrementer failure check has occurred. The print hammers were not moved to the next group of print positions. If this halt continues to occur, contact IBM for hardware support.

For the 1403 Printer, a print data check has been caused by faulty transfer of information to or from the printer attachment buffer. This data check could be caused by a programming error if LIO instructions are not issued after powering up the system.

IPP6

Recovery 1: For the 5203, press printer START. For the 1403, follow the 1403 recovery procedures for halt P8. Information on line will be printed with no loss of data.

2: Controlled cancel.

Note: Clear all error indications on the printer before selecting option 2.

3: Immediate cancel.

P7

023

Reason: Printer thermal check. Hammer unit area on printer is overheated. If this halt continues to occur, contact IBM for hardware support.

IPP7

Recovery 0: Press printer START. Processing continues.

2: Controlled cancel.

Note: Clear all error indications on the printer before selecting option 2.

3: Immediate cancel.

```
 _   _
|_|  |_|
|    |_|
```

123

Reason: For the 5203 Printer, a printer print check has occurred. One charac-
ter may be printed wrong. For the 1403 Printer, a hammer echo check has
occurred because of an improper hammer driver response during print time,
or an any hammer on check has occurred because a hammer turned on when
hammer set pulse was generated by the attachment.

If this halt continues to occur, contact IBM for hardware support.

IPP8

Recovery 1: For the 5203 Printer, follow the 5203 recovery procedures for
halt P1. For the 1403 printer:

1. Press printer CHECK RESET key.
2. Check for FORMS CHECK light on. If it is off, go to step 7.
3. Open printer top cover.
4. Turn FEED CLUTCH to NEUTRAL. For Model N1 skip to step 6.
5. Unlock and swing back print unit by pulling print unit release lever
   toward you. Unlatch ribbon guide bar from print unit and swing it
   against forms.
6. Position last line printed so that it is just visible above ribbon guide
   bar. Now turn paper advance knob backwards:

   Model 2: Three line spaces if in 6-line neutral or four line spaces if
   in 8-line neutral.

   Model N1: Four line spaces if in 6-line neutral or five line spaces if
   in 8-line neutral.

   Note line on form that is just visible above ribbon guide bar. This is
   your print stop line.

   Turn paper advance knob backwards until first line of form is just
   visible above ribbon guide bar. Now turn paper advance knob
   backwards:

   Model 2: Three line spaces if in 6-line neutral or four line spaces if
   in 8-line neutral. Close and lock print unit. Be sure to push print
   unit release lever as far back as it can go.

   Model N1: Four line spaces if in 6-line neutral or five line spaces if
   in 8-line neutral.

   Press CARRIAGE RESTORE key and turn FEED CLUTCH to
   DRIVE.

   Using CARRIAGE SPACE key advance form until the print stop
   line is just visible above the ribbon guide bar.
7. Close printer top cover.
8. Press printer START.
9. Press console START.

Processing continues. It is not possible to correct the character that is printed
wrong.

Note: If the carriage has moved and you do not reposition the forms, printing
will occur on the line where the carriage stopped.

2: Controlled cancel.

```
┌──────────┐
│  ┌┐  ┌┐  │
│  │ │ ┌─┘ │
│  │ │ │┌─ │
│  │ │ └─┘ │
└──────────┘
```

Note: Clear all error indications on the printer before selecting option 2.

       3: Immediate cancel.

(continued)

```
┌──────────┐
│  ┌┐  ┌─┐ │
│  │ │ │ │ │
│  │ │ └─┤ │
│  │ │  ─┘ │
└──────────┘
```

Reason: An error has been found in a control statement or in the input deck for the Form Descriptor Program conversion routine.

IBP9DK   13   **Reason:** A duplicate keyword has been found.

                     Recovery 1: Correct the statement and retry.

                               3: Immediate cancel.

IBP9EC   3   **Reason:** The end control character for the last form descriptor program in the input deck has not been found.

                     Recovery 3: Immediate cancel.

IBP9OC   13   **Reason:** The card following the RUN card does not contain // CONVERT, and MFCU1 is not used for input.

                     Recovery 1: Correct the statement and retry.

                               3: Immediate cancel.

IBP9PS   13   **Reason:** An invalid or missing RESERVED keyword or keyword parameter has been found.

                     Recovery 1: Correct the statement and retry.

                               3: Immediate cancel.

IBP9SQ   3   **Reason:** The last card read in the input deck was out of sequence.

                     Recovery 3: Immediate cancel.

IBP9VA   3   **Reason:** The last card read in the input deck did not contain valid Form Descriptor Program data.

                     Recovery 3: Immediate cancel.

PC

023

Reason: For the 5203 or 1403 printer, one or more characters in the print line could not be printed. They were not part of the chain image in the communications area. The unprintable characters were replaced by blanks.

IPPC

Reason: $$FTRC is active and the printer is busy or an error condition occurred.

Recovery 0: Press console START, or appropriate HALT/RESET key if you have DPF. Processing continues.

2: Controlled cancel.

3: Immediate cancel.

Note: Any option will allow processing to continue when $$FTRC is active and has issued this halt (this halt will not be logged). If this halt is issued on on the first print line after completion of an inquiry program, see *IBM System/3 Model 10 Disk System Control Programming Reference Manual*, GC21-7512.

PE

123

Reason: A chain or train check has occurred. A 48 character set chain or train is mounted, but the chain image in storage is for UCS. If the chain image is incorrect, perform the IPL procedure using the correct chain image.

Probable user error.

CRPE

Recovery 1: Mount correct chain or train and press printer START.

2: Controlled cancel. Do not select this option if the IMAGE statement is not between LOAD and RUN statements. This option does not change the chain image.

3: Immediate cancel. This option does not change the chain image.

PF

123

Reason: For the 5203 or 1403 printer, a chain check has occurred. Print chain on printer is not the same as chain image in core storage. For the 5203, a 120 character set chain is mounted on the printer. For the 1403, a UCS chain is mounted. If the chain image in storage is incorrect, perform the IPL procedure using the correct chain image.

Probable user error.

CRPF

Recovery 1: Mount correct chain and press printer START.

2: Controlled cancel. Do not select this option if the IMAGE statement is not between LOAD and RUN statements. This option does not change the chain image.

3: Immediate cancel. This option does not change the chain image.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

PH

23   **Reason:** An attempt is being made to allocate a new file and there is insufficient space on the specified unit. That is, LOCATION has been specified and the number of tracks required exceeds the capacity of the pack.

File name is logged before halt code.

Probable user error.

CIPH   **Recovery 2:** Controlled cancel.

                   3: Immediate cancel.

PU

1   **Reason:** A pack is to be remounted.

If log is on, the last two characters of the printed message designate the unit number.

Pack name is logged before halt code.

CIPJXX   **Recovery 1:** Continue after remounting the correct pack. If log is not on, each preceding volume of the file must be remounted on the unit specified on the FILE statement until end of job is reached.

PU

3   **Reason:** Duplicate file names have been found in the FILE statements.

File name is logged before halt code.

Probable user error.

CIPU   **Recovery 3:** Immediate cancel.

PY

Reason: An error has been made in allocating an indexed file.

01 CIPY01   23

Reason: An attempt is being made to allocate a disk file as an indexed file, and the FILE statement specifies only one track. An indexed file requires at least two tracks.

File name is logged before halt code.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.

02 CIPY02   23

Reason: An attempt is being made to allocate an indexed file as a split cylinder file.

File name is logged before halt code.

Probable user error.

Recovery 2: Controlled cancel.

3: Immediate cancel.

P
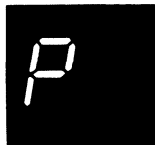
P blank

3

Reason: The halt has occurred for one of the following reasons:

1. Inquiry. An attempt has been made to create a new file with the same label and date as an existing file on this pack. The existing file is used by the program rolled out by this inquiry request.

2. The other program level is creating a file with the same label and date as this program level. Therefore, this program level cannot create or access the file.

3. A program has used two FILE statements for a new file in this program level in which the LABEL, DATE, and PACK parameters are the same. The LOCATION parameters are either omitted or not the same.

Probable user error.

CIP

Recovery 3: Immediate cancel.
For reasons 1 and 2, change the system or job date if a new file is desired and rerun the job.
For reason 3, correct the FILE statements and rerun the job.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

P-

3
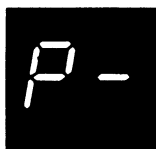
Reason: An attempt is being made to create a split cylinder file, and location-filename is not given, or the filename either does not exist or is not being created at the same time.

File name is logged before halt code.

Probable user error.

CIP-

Recovery 3: Immediate cancel. The first split cylinder file must be a temporary or permanent file, or must be allocated in the same job step as a new split cylinder file.

P 1
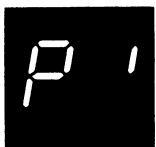
Reason: Too many requests to allocate scratch work files have been made.

01 CIP'01 23

Reason: For the 5444 disk, more than 4 requests have been made.

Recovery 2: Controlled cancel.

3: Immediate cancel.

02 CIP'02 23

Reason: For the 5445 disk, more than 2 requests have been made.

Recovery 2: Controlled cancel.

3: Immediate cancel.

Note 1: If this halt occurs while the Library Maintenance program is running, select option 3. Reload the Library Maintenance program and continue processing the last control statement read or entered. Since this error is unusual for other programs, it is recommended that a core storage dump be taken rather than selecting option 3. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide*, GC21-7508. Save the dump and contact IBM for programming support.

Note 2: This halt might also occur if too many file cards are present. (If running $COPY or $KCOPY, see the *Scheduler Work Area*, in the *IBM System/3 Model 10 Disk System Control Programming Reference Manual*, GC21-7512.)

UO

0123 **Reason:** Unidentified record in file. The file in error is indicated by a FILE statement number greater than 9 on the RPG II source listing.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

1: Bypass to beginning of RPG II cycle and read again from the file. This option does not apply to demand files. For chained files, the read may not be from the same file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

Note: *If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.*

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U1

0123 **Reason:** Unidentified record in file. Statement number 1 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card of the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

U1

(continued)

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

   1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

   2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

   3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U2

0123

Reason: Unidentified record in file. Statement number 2 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can fed into any stacker desired, it will be necessary to mark the the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

   1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

   2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

   3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

```
U3
```

0123   **Reason:** Unidentified record in file. Statement number 3 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

      1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

      2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

      3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

```
U4
```

0123   **Reason:** Unidentified record in file. Statement number 4 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

U4

(continued)

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

    1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U5

0123

Reason: Unidentified record in file. Statement number 5 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

    1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U6

0123   **Reason:** Unidentified record in file. Statement number 6 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any card since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

      1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

      2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

      3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U7

0123   **Reason:** Unidentified record in file. Statement number 7 on RPG II source listing indicates file in error.

Note: If the record in error is read from primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stacker other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

U7

(continued)

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

U8

0123

Reason: Unidentified record in file. Statement number 8 on RPG II source listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

```
U9
```

0123

Reason: Unidentified record in file. Statement number 9 on RPG II source; listing indicates file in error.

Note: If the record in error is read from the primary hopper, PRI light on, it will be fed into stacker 1. If the record in error is read from the secondary hopper, SEC light on, it will be fed into stacker 4. Since the data cards can be fed into any stacker desired, it will be necessary to mark the last card in stacker 1 or 4 when data cards are being fed into either stacker. The card in error will be the marked card or the one following it. If the data cards are being fed into any stackers other than 1 and 4, it is not necessary to mark any cards since the cards in error will be separated from the other data cards.

Probable user error.

Recovery 0: Continue. Next record is read from the file. This option is for demand files only.

    1: Bypass to beginning of RPG II cycle and read again from this file. This option does not apply to demand files. For chained files, the read may not be from the same file.

    2: Controlled cancel. Store tables and execute LR calculations and LR output if available.

    3: Immediate cancel.

Note: If sequence is important and double buffering is being used to process a card file, the 3 option should be selected for this halt. If the 0 or 1 option is selected, the cards may be processed out of order.

If the input file is on a 3741, taking the 3741 offline to correct the record and then to reposition the data set is not a supported recovery procedure. The results are unpredictable.

```
UA
```

3

Reason: Halt occurred for one of the following reasons:

1. Attempting to create an offline multivolume scratch file and this is not allowed.
2. Attempting to access a scratch file as an offline multivolume file and this is not allowed.
3. Offline multivolume files cannot have any volumes with RETAIN-S or RETAIN-A.

Note: An offline multivolume temporary file cannot be changed to an offline scratch file.

File name is logged before halt code.

Probable user error.

CIUA

Recovery 3: Immediate cancel. These files must be either permanent or temporary.

UC

3

Reason: The specified active file cannot be found in the list of scratch files.

File name is logged before halt code.

Probable user error.

CIUC

Recovery 3: Immediate cancel. Check FILE statement. If FILE statement is correct, display VTOC to determine if the file is still on disk.

UE

13

Reason: An attempt is being made to reference a disk file and the pack name on the specified unit does not match the FILE statement pack specification or the pack may not be initialized.

Note: The pack is removable.

File name is logged before halt code.

Probable user error.

CIUER

Recovery 1: Retry after the correct pack is mounted.

3: Immediate cancel.

UF

3

Reason: A disk file has been referenced by name and date, but the file name cannot be found.

File name is logged before halt code.

Probable user error.

CIUF

Recovery 3: Immediate cancel. A date should be given on the FILE card only when referencing the existing files with the same name but different creation dates.

UH

3

Reason: The halt occurred for one of the following reasons:

1. Attempting to create a multivolume file that will have the same label as an existing file.
2. Attempting to create a single volume file that will have the same label as an existing multivolume or split cylinder file.
3. Attempting to create a split cylinder file that will have the same label as an existing file.

Note: The halt occurs even if RETAIN-S has been specified for an existing file that is a scratch file of the same type specified by the FILE statement. If the existing file was previously used by Disk Sort as a work file, the file has a multivolume attribute.

File name is logged before halt code.

Probable user error.

CIUH

Recovery 3: Immediate cancel. Multivolume, single volume, and split cylinder file labels must be unique. If RETAIN-S is used to classify an old scratch file, the file is used as a new output file instead of as an input file.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

UU

3 — **Reason:** A referenced disk file has been found on the specified unit, however the location is not the same and no space was specified.

Probable user error.

CIUJ — **Recovery 3:** Immediate cancel. If the location is given but is different, it is assumed that a new output file is to be created. Therefore either TRACKS or RECORDS must be specified.

UL

3 — **Reason:** File cannot be found and no TRACKS or RECORDS parameters are given.

File name is logged before halt code.

Probable user error.

CIUL — **Recovery 3:** Immediate cancel. To correct the problem

1. If the old file was wanted, the job was probably started with the wrong pack online.

2. If a new file is desired, either TRACKS or RECORDS must be specified.

3. If a subsequent file of an on-line multivolume file is wanted and not present, change the file statement to match the volumes present.

UP

03 — **Reason:** A permanent file is being referenced with RETAIN-S on the FILE statement.

File name is logged before halt code.

Probable user error.

CIUP — **Recovery 0:** Continue. The type specified on the FILE statement is ignored.

3: Immediate cancel.

<table>
<tr><td></td><td></td><td>3</td><td>Reason: Disk pack not available. A disk file has been referenced but the requested pack is not available because:</td></tr>
</table>

UU

3

Reason: Disk pack not available. A disk file has been referenced but the requested pack is not available because:

1. An attempt is being made to reference a disk file and the pack name of the specified unit does not match the FILE statement pack specification. However, the referenced pack cannot be dismounted.

2. The same unit was previously requested in the current OCL with a different pack name and the OCL did not specify that the pack could be changed.

3. The other program level is using the specified unit with another pack.

4. The other program level is using the unit with the requested pack, but either that program or the one attempting to start may require that the pack be dismounted.

5. An offline multivolume file has been specified on the program, system, or IPL pack.

6. The pack may not be initialized.

File name is logged before halt code.

Probable user error.

CIUU

Recovery 3: Immediate cancel.

UY

3

Reason: The file you are referencing is a System/3 BASIC file, or the file name of the file you are creating is already used by a System/3 BASIC file. System/3 BASIC file names must be unique.
File name is logged before halt code.

Probable user error.

CIUY

Recovery 3: Immediate cancel.

U

3

Reason: An existing file has been referenced; however, either the location or tracks/records specified do not match the specifications of the file.

File name is logged before halt code.

U blank

Probable user error.

CIU

Recovery 3: Immediate cancel. The location must be the same, and the space specification of the same type, either tracks or records, and the same number as originally specified.

U-
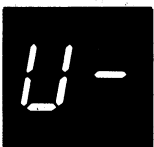
Reason: General CCP halt. Press START or HALT/RESET to display the subhalts. For a description of the specific subhalts, see *IBM System/3 Communications Control Program Messages Manual*, GC21-5170.

23   **Reason:** The halt occurred for one of the following reasons:

1.   VTOC is full. The current OCL indicates that one or more files that do not exist be created and there is not enough space left in the VTOC. The maximum number of files is 50.

2.   The number of indexed multivolume files allowed per pack has been exceeded. The maximum is two.

3.   The number of single volume indexed files that use the HIKEY parameter has been exceeded. The maximum is two.

File name is logged before halt code.

Probable user error.

CIU'   **Recovery 2:** Controlled cancel.

    3: Immediate cancel. The VTOC may be examined by use of the File and Volume Label Display program. Any permanent or temporary files no longer needed may be removed from the VTOC by use of the File Delete program.

---

12   **Reason:** BSCA. No connection on initialization. The system you are trying to connect to is not ready to connect with this system. This halt will not necessarily occur at the beginning of the program, it can occur when a different BSC file is used. The possible reasons for no connection are:

1.   The system you are trying to connect to is not running the job to match the job being run on your system.

2.   The data phone on the system you are trying to connect to is not on AUTO when required.

3.   The system you are trying to connect to is not running a BSC job.

IBYONC   **Recovery 1:** Retry. If the halt recurs, check with the other system to determine if they are ready to communicate with you.

Note: If the error occurred while attempting to connect to a 2770 or 2780 terminal, the System/3 should initialize the call for the retry.

    2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process. If this halt occurs during the execution of an RJE program, an RJ START statement may be required to resume processing.

Y1

IBY1

23   **Reason:** BSCA. The program is attempting to send or receive an invalid ASCII character.

Probable user error.

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process.

  3: Immediate cancel.

Note: For either option taken, return the job to the programmer. Check to determine if only valid ASCII characters are being used. If file translation is being used, check to determine if all characters will be translated properly.

Y2

IBY2

23   **Reason:** BSCA. The halt occurred for one of the following reasons:

1. Invalid identification, switched networks only. The identification used by this program does not match the identification used by the other program.

2. The remote terminal performed an answer, but did not return any identification.

3. The connection has been made, but the first record was not received correctly.

Probable user error.

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process.

  3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

43

23

IBY3

Reason: BSCA. The job attempted to use the output file before the end-of-file has been received for the input file.

Probable user error.

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process.

3: Immediate cancel.

Note: For either option taken, return job to programmer.

44

23

IBY4

Reason: BSCA. Program lost control. No data was transmitted or received within the time limit specified on the telecommunications specification.

Probable user error.

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process.

3: Immediate cancel.

Note: For either option taken, return job to programmer.

45

23

IBY5

Reason: Permanent error on BSC or BSCA. If you do not specify a permanent error indicator, this halt occurs when an error is found. If you do specify a permanent error indicator, the indicator is set on and control is returned to the object program. Processing continues. Possible errors are:

1. Communication line is no longer available to transmit or receive data.

2. Other system sent invalid message.

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process, or cancel the program if you have DPF.

3: Immediate cancel.

ᎽᏟ

Reason: BSCA error occurred while opening a file, or while logging terminal statistics for the multipoint control station, or while initiating a job using BSCA line 2.

Probable user error.

| IBY6BL | 123 | **Reason:** BSCA. Invalid load of the display adapter microcode. This halt occurred when BSC tried to load the dummy microcode or the real microcode. |

Recovery 1: Retry. If the halt continues, take a 2 or 3 option.

Note: If retrying this halt does not load the microcode, contact IBM for programming support.

2: Controlled cancel.

3: Immediate cancel.

| IBY6CH | 3 | **Reason:** The object program loaded for execution has been compiled on a system that did not support BSCA line 2. The program can use only BSCA line 1. To use BSCA line 2, the program must be recompiled on a system supporting BSCA lines 1 and 2. |

Recovery 3: Immediate cancel.

| IBY6MC | 23 | **Reason:** The display adapter microcode cannot be found on the system IPL pack. |

Recovery 2: Controlled cancel.

3: Immediate cancel.

| IBY6NF | 3 | **Reason:** The file name MLTERFIL cannot be found on F1 to log terminal statistics for the multipoint control station. |

Recovery 3: Immediate cancel.

| IBY6OP | 3 | **Reason:** The BSCA file was not opened because: |

1.   The allocated buffer area is not large enough, or

2.   Record length = 0.

Recovery 3: Immediate cancel.

| IBY6TS | 3 | **Reason:** The area defined in main storage for logging the terminal statistics for the multipoint control station is not large enough. |

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

46 (continued)

	IBY6WU	3	**Reason:** The file named MLTERFIL must be allocated on F1. **Recovery 3:** Immediate cancel.

47

		0	**Reason:** BSCA. You must perform a manual call. **Recovery 0:** 1. Select option 0. 2. Follow the procedures that apply to the modem online.

48

		0	**Reason:** BSCA. You must perform a manual answer. **Recovery 0:** 1. Select option 0. 2. Follow the procedures that apply to the modem online.

49

	IBY9	23	**Reason:** Permanent BSCA I/O error when processing last records of a file. **Recovery 2:** Controlled cancel. For RPG II — store tables and execute LR calculations and LR output if available. If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process, or if you have DPF, cancel that program level. For RJE — a permanent error indication is given to the RJE support. **3:** Immediate cancel. Do not select this option if RJE is executing. **Note:** If possible, take a core storage dump rather than selecting option 3. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508. Return dump to programmer and rerun the job.
	IBY9PE	23	**Reason:** Permanent error in the closing of the file when processing last records of a file. **Recovery 2:** Controlled cancel. For RPG II — store tables and execute LR calculations and LR output if available. **3:** Immediate cancel.

23

Reason: BSCA. Transmit with conversational reply error. This station has received two records in reply to the last record sent.

Probable user error.

IBYA

Recovery 2: Controlled cancel.

Note: If more than one BSC file is used by this program, a second BSCA halt or RECEIVE INITIAL may occur. If a second BSCA halt occurs, take the 2 option for that halt. If a RECEIVE INITIAL occurs, perform the IPL process.

        3: Immediate cancel.

Note: The Remote Terminal program should be checked to ensure that only one reply record is sent for each record received by that terminal.

12

Reason: The RJE session has terminated without error, or RJE central has closed down.

Recovery 1: Restart RJE. Continue reading from the current primary input device. A new RJ START statement is required.

Note: This option should not be chosen if RJE central has closed down.

        2: Go to end-of-job.

03

Reason: The halt occurred for one of the following reasons:

1. An incorrect job entry control language statement has been read.

2. The statement cannot be entered from the keyboard.

3. The statement is currently invalid.

Recovery 0: Ignore this statement and continue by reading the next statement.

        3: Immediate cancel. The YJ halt appears if the line has been opened.

03

Reason: A valid CONFIG statement with LINE parameters has not been received before the first command or statement to be transmitted to RJE central.

Recovery 0: Ignore this statement and continue by reading the next statement.

        3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

YH

CIYH

03

Reason: The card in the current punch device is not blank, or the card has caused a hardware error condition, or the 3741 is not in the proper mode.

Recovery 0: If the first card was not blank, place blank cards in the punch device, or put the 3741 into the proper mode. If a hardware error occurred, correct the error condition. Continue processing.

  3: Immediate cancel.

Note: Halt YJ occurs when this option immediately cancels the RJE support.

YJ

2

Reason: The RJE support has terminated abnormally for one of the following reasons:

1. The operator has cancelled the program.

2. The operator has selected a cancel option for a previous halt.

3. A permanent line error from BSCA has occurred.

Recovery 2: Terminate the RJE support.

YL

013

Reason: The UEXIT statement that specifies the file name for user exit output has been omitted or is incorrect.

Recovery 0: Print the user exit data. If the user exit record length is less than the print buffer length, random data may be printed following the user exit record.

  1: Read the file name from the first 8 columns of the next statement in the primary input device.

  3: Immediate cancel. The YJ halt occurs.

YP

0

Reason: An undefined record format for user exit output is being returned from RJE central.

Recovery 0: Accept the output from RJE central, but do not route it to an output device.

| | | 012 | **Reason:** RJE central is attempting to return output for the printer. However, the printer is not available. |

Recovery 0: Accept the output from RJE central, but do not route it to an output device.

1: Direct the output to the system log device.

2: Controlled cancel of the RJE support.

Note: If option 1 is selected and the output records being printed are relatively long, the Y' halt may occur.

| | | 2 | **Reason:** End-of-extent encountered on the user exit output file. |

Recovery 2: Controlled cancel of the RJE support. The data that is stored in the file remains in the file. The YJ halt occurs.

| | | 13 | **Reason:** The logging device has been allocated to the other program level or a LOG OFF statement has been specified. The logging device must always be available for RJE. |

Recovery 1: Attempt to access the logging device again.

Y blank

3: Immediate cancel.
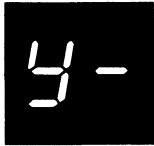
CIY-

| | | 23 | **Reason:** The block length specified is larger than the amount of space specified on each cylinder for a split cylinder file. |

Recovery 2: Controlled cancel.

3: Immediate cancel.

Reason: The halt occurred for one of the following reasons:

1. RJE has entered monitor mode and is alternately checking for input to transmit to RJE central or output to receive from RJE central. For example, RJE may be waiting for a RJEND accepted message.

2. A previous halt or an I/O attention condition occurred while receiving output from RJE central. The operator did not correct the condition within approximately 14 seconds.

3. By making the output device not-ready, the operator intentionally caused output to be discontinued.

4. A forms discontinue message has been received from RJE central.

5. A priority error message has been received from RJE central.

6. Compressed records were not processed within 15 seconds.

Recovery:

For reason 1: If input to send to RJE central is available, press HALT/ RESET (for a disk system with DPF), or console START while the halt is displayed. RJE then enters input mode by reading data or commands from the primary input device and transmitting them to RJE central.

For reason 2: A CONTINUE statement followed by a NULL statement must be sent to RJE central to resume output. Then follow the recovery procedures for reason 1.

For reason 3: Follow the recovery procedures for reason 2.

For reason 4: Follow the recovery procedures for reason 2.

For reason 5: Follow the recovery procedures for reason 1.

For reason 6: Follow the recovery procedures for reason 2.

Note: If you do not press console START or the appropriate HALT/RESET key, (if input to be sent to RJE central is not available), RJE automatically resets the Y' halt and attempts to receive output from RJE central.

If RJE central has no output to be transmitted, the Y' halt flashes on and off as follows:

For point-to-point network: On for 8 seconds, off for 12 seconds.

For multipoint network: On for 6 seconds, off for a period of time depending on the activity of other network terminals.

The Y' halt flashes until the operator presses console START or the appropriate HALT/RESET key or waits until output from RJE central is available.

blank 0

Reason: This halt occurred for one of the following reasons:

1.   The disk FILE WRITE switch is in the OFF position. This switch is on the CE panel.

2.   A disk error occurred during IPL.

3.   An attempt is being made to IPL from a pack that does not contain a system.

Recovery: Perform one of the following:

1.   If the FILE WRITE switch is in the OFF position, set it to ON. Then IPL the system.

2.   If the FILE WRITE switch is set to ON, IPL the system again. If the halt occurs again, mount a different system pack and IPL again. If the halt continues to occur, your system may need service.

blank 1

Reason: A terminal error has occurred for one of the following reasons:

1.   Permanent disk error when the system was trying to read. This could mean that there is a bad track in one of the libraries or directories.

2.   An attempt is being made to load a program outside of the allocated core for the program.

3.   The system has encountered an unexpected condition. If the job is allowed to continue, unexpected results could occur.

Note: If this halt occurs after selecting an option of the -P halt, it is called a secondary halt. It indicates that a disk pack should be mounted on R1.

Recovery: For non-DPF systems, perform one of the following:

1.   When this halt occurs, it is recommended that the following be performed:

Record the contents of the ARR as follows:

A. Press console STOP.
B. Set LSR display selector on CE panel to ARR.
C. Set register display unit to LSR HI LSR LO.
D. Record contents.
E. Set LSR display selector on CE panel to NORMAL.

After recording the contents of the ARR, take a core storage dump.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

1

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(continued)

2. If it is not possible to read the ARR and take a core storage dump, perform the following:

A. Press console START which will cause end-of-job to occur.

For DPF systems where the Communications Control Program (CCP) is in the program level in which the halt occurred, perform the following step 1.

For other DPF systems, perform the following step 1 or 2.

1. When this halt occurs, it is recommended that the following be performed:

A. Press console STOP.
B. Record contents of ARR as indicated in the recovery for a non-DPF system.
C. After recording the contents of the ARR, take a core storage dump.
D. Perform the Initial Program Load procedure.

2. If you want to allow the other level to continue, press appropriate HALT/RESET key to cause the level in which the blank 1 halt occurred to go to end of job. Other jobs can then be run in that level.

Note: For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide*, GC21-7508. If you recorded the contents of the ARR and obtained a core storage dump, save the information for IBM. This information will aid in determining the problem. If this halt continues to occur, contact IBM for support.

2
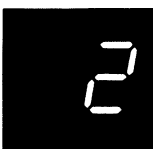
blank 2

Reason: COBOL. The halt occurred because an error has been detected that will prevent successful compilation or normal execution of your program, or because a non-recoverable error has occurred during execution of a COBOL object program.

To determine the exact reason for the b2 halt:
If log is off, press console START or the appropriate HALT/RESET key. One of the following subhalts is displayed. If log is on, one of the following error codes is logged.

11	RC 211	3	**Reason:** Insufficient space on the $WORK file.
			Recovery 3: Immediate cancel.
12	RC 212	3	**Reason:** Insufficient space on $SOURCE file.
			Recovery 3: Immediate cancel.
13	RC 213	3	**Reason:** Insufficient space on $WORKX file.
			Recovery 3: Immediate cancel.
14	RC 214	3	**Reason:** Subprogram name table exceeds 20 subprogram names.
			Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

2

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(continued)

19

RC 219   03   **Reason:** C or E level diagnostics detected.

Recovery 0: Continue.

3: Immediate cancel.

A1

RC 2A1   23   **Reason:** One of the following has occurred:

1.   The address calculated for a subscripted reference is over X'FFFF' (64K), is more than X'7FFF' (32K) from the beginning of the table, or is out of the data division.

2.   The calculated displacement is negative.

Recovery 2: Controlled cancel.

3: Immediate cancel.

A2

RC 2A2   23   **Reason:** One of the following has occurred:

1.   A negative exponent has been found in the program.

2. 0° has been specified in the program.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E1

RC 2E1   23   **Reason:** A permanent I/O error has occurred for the 5424 MFCU during the execution of a READ or WRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E2

RC 2E2   23   **Reason:** A permanent I/O error has occurred for the 1442 Card Reader-Punch during the execution of a READ or WRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E3

RC 2E3   23   **Reason:** A permanent I/O error has occurred for the 1403/5203 Printer during the execution of a WRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

Halt blank 2   221

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

2

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(continued)

E4 RC 2E4 23 **Reason:** A permanent I/O error has occurred for a standard sequential file on the 5444 or 5445 Disk Drive during the execution of a READ or WRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E5 RC 2E5 23 **Reason:** A permanent I/O error has occurred for a direct file on a 5444 or 5445 Disk Drive during the execution of a READ, WRITE, or REWRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E6 RC 2E6 23 **Reason:** A permanent I/O error has occurred for an indexed sequential file on a 5444 or 5445 Disk Drive during the execution of a READ, WRITE, REWRITE, or START statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E7 RC 2E7 23 **Reason:** A permanent I/O error has occurred for an indexed random file on a 5444 or 5445 Disk Drive during the execution of a READ, WRITE, REWRITE, or START statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

E8 RC 2E8 23 **Reason:** A permanent I/O error has occurred for the 3410/3411 Tape during the execution of a READ or WRITE statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F1 RC 2F1 23 **Reason:** The program is attempting to execute a READ or WRITE statement for a 5424 MFCU file that is either not open or that has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

2

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(continued)

F2
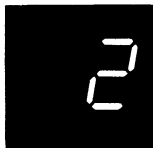
RC 2F2   23

Reason: The program is attempting to execute a READ or WRITE statement for a 1442 Card Reader-Punch file that is either not open or that has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F3

RC 2F3   23

Reason: The program is attempting to execute a READ or WRITE statement for a 1403/5203 Printer file that is either not open or that has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F4

RC 2F4   23

Reason: The program is attempting to execute a READ or WRITE statement for a standard sequential file on a 5444 or 5445 Disk Drive, and either the file is not open or it has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F5

RC 2F5   23

Reason: The program is attempting to execute a READ, WRITE, or REWRITE statement for a direct file on a 5444 or 5445 Disk Drive, and either the file is not open or it has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F6

RC 2F6   23

Reason: The program is attempting to execute a READ, WRITE, REWRITE, or START statement for an indexed sequential file on a 5444 or 5445 Disk Drive, and either the file is not open or it has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

2
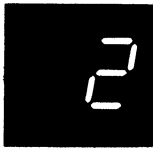
blank 2
(continued)

F7 RC 2F7 23 **Reason:** The program is attempting to execute a READ, WRITE, REWRITE, or START statement for an indexed random file on a 5444 or 5445 Disk Drive, and either the file is not open or it has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

F8 RC 2F8 23 **Reason:** The program is attempting to execute a READ or WRITE statement for a 3410/3411 Tape file that is either not open or that has been opened improperly for the requested operation.

Recovery 2: Controlled cancel.

3: Immediate cancel.

H1 RC 2H1 23 **Reason:** An OPEN statement in the program is attempting to open a file for which a CLOSE WITH LOCK statement has been issued.

Recovery 2: Controlled cancel.

3: Immediate cancel.

H2 RC 2H2 23 **Reason:** A permanent I/O error has occurred during the execution of an ACCEPT statement.

Recovery 2: Controlled cancel.

3: Immediate cancel.

H3 RC 2H3 23 **Reason:** The DISPLAY, EXHIBIT, or TRACE print operation could not be done because the $$STOP print transient could not be found on the system pack.

Recovery 2: Controlled cancel.

3: Immediate cancel.

H4 RC 2H4 23 **Reason:** A checkpoint for a RERUN statement could not be taken because the $$STKP checkpoint transient could not be found on the system pack.

Recovery 2: Controlled cancel.

3: Immediate cancel.

blank 2
(continued)

| | RC 2H5 | 23 | **Reason:** An ACCEPT statement for the console could not be executed because $$STIC console input transient could not be found on the system pack. |

Recovery 2: Controlled cancel.

        3: Immediate cancel.

| | RC 2H6 | 23 | **Reason:** The number of parameters in a CALL statement does not equal the number of parameters in the PROCEDURE DIVISION header of a called program. |

Recovery 2: Controlled cancel.

        3: Immediate cancel.

| | RC 2H7 | 23 | **Reason:** An attempt has been made to execute an ACCEPT statement after a /& has been read. |

Recovery 2: Controlled cancel.

        3: Immediate cancel

| | RC 2H8 | 23 | **Reason:** An OPEN statement has been issued for a file that was already open. |

Recovery 2: Controlled cancel.

        3: Immediate cancel.

| | RC 2 0 | 3 | **Reason:** There is insufficient main storage to compile the program. |

Recovery 3: Immediate cancel.

| | RC 2 1 | 3 | **Reason:** The Procedure or Data Division was not found. |

Recovery 3: Immediate cancel.

| | RC 2 3 | 3 | **Reason:** The program contains more than 65,535 statements. |

Recovery 3: Immediate cancel.

| | RC 2 4 | 3 | **Reason:** The member specified on the // COMPILE statement could not be found in the source library. |

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

blank 2
(continued)

5	RC 2 5	3	**Reason:** The name table contains more than 32,767 entries.
			Recovery 3: Immediate cancel.
6	RC 2 6	3	**Reason:** The object program exceeds 65,535 bytes.
			Recovery 3: Immediate cancel.
7	RC 2 7	3	**Reason:** A permanent I/O error has occurred on a reader file.
			Recovery 3: Immediate cancel.
8	RC 2 8	3	**Reason:** A permanent I/O error has occurred on a printer file.
			Recovery 3: Immediate cancel.
9	RC 2 9	3	**Reason:** A permanent I/O error has occurred on a disk file.
			Recovery 3: Immediate cancel.

3

Reason: COBOL. A STOP LITERAL statement has been executed in a COBOL object program so that an operator message can be logged. The program run sheet should provide further information about the message and indicate the operator's response to the message.

blank 3

R   3XX   03

User-Specified Value

Recovery 0: Continue.

　　　　　3: Immediate cancel.

Note: The user specifies the subhalt in the first two positions of the literal in the STOP LITERAL statement.

4

		3	**Reason:** The system cannot find the requested program on disk.
	VF 4NF		**Recovery 3:** Immediate cancel.

blank 4

Note: If log is on, the program name is logged in the following format:
O or R XXXXXX P or S, where O is object, R is relocatable, XXXXXX is the program name, P is program pack, and S is system pack.

Note: It is recommended that a core storage dump be obtained, rather than selecting option 3. For information on how to take a core storage dump, *see IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.

Contact IBM for programming support.

Reason: A FORTRAN STOP or PAUSE statement has been executed. This statement specifies the subhalt that will appear when console START or the HALT/RESET key is pressed.

blank 6

RF 6XX   023

User-Specified
Value

Recovery 0: Continue.

Note: This option cannot be selected if a STOP statement has been executed.

        2: Controlled cancel.

        3: Immediate cancel.

Reason: Error in FORTRAN compiler or load module.

To determine the exact reason for the b7 halt: If log is off, press console START or the appropriate HALT/RESET Key. One of the following subhalts is displayed. If log is on, one of the following error codes is logged.

blank 7

RF 701   23

Reason: The source library member specified on a // COMPILE statement could not be found in the library, or a library does not exist on the pack.

Recovery 2: Controlled cancel.

        3: Immediate cancel.

Note: Ensure that the program specified in the // COMPILE statement exists in the library, and that the correct disk pack is mounted on the appropriate disk.

RF 702   23

Reason: The program is too large to be contained in working main storage.

Recovery 2: Controlled cancel.

        3: Immediate cancel.

Note: Reduce the size of the program by subdividing it into subprograms, or by eliminating unnecessary parts of the program, or by increasing the program partition size.

RF 703   23

Reason: The main storage requirements for the program exceed 62,760 bytes.

Recovery 2: Controlled cancel.

        3: Immediate cancel.

Note: Reduce the size of the program by subdividing it into subprograms, by eliminating unnecessary parts of the program, or by increasing the program partition size.

7

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(continued)

04

RF 704   23   **Reason:** One of the following has occurred:

1. $$STOP or $$SYSG could not be found in the object library on the system pack.

2. One of the compiler phases is missing from the object library on the program pack.

Recovery 2: Controlled cancel.

3: Immediate cancel.

05

RF 705   23   **Reason:** The compiler has run out of space on the $WORK file while writing the object program.

Recovery 2: Controlled cancel.

3: Immediate cancel.

Note: Increase the size of the $WORK file.

10

RF 710   23   **Reason:** There is no match for a unit number in the units table, or there are no entries in the table.

Recovery 2: Controlled cancel.

3: Immediate cancel.

11

RF 711   23   **Reason:** An attempt has been made to execute a statement requiring output, and the printer is not available. The //NOPRINTER statement has been specified.

Recovery 2: Controlled cancel.

3: Immediate cancel.

12

RF 712   23   **Reason:** A FORTRAN subprogram requires I/O operations, however it has not been called by a FORTRAN main program.

Recovery 2: Controlled cancel.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

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blank 7
(continued)

13

RF 713   23   **Reason:** The program named in an INVOKE statement could not be loaded because it could not be found in the system library.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

14

RF 714   23   **Reason:** The CALL SLITE statement specifies a value other than 0, 1, 2, 3, or 4.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

15

RF 715   23   **Reason:** The CALL SLITET statement specifies a value other than 1, 2, 3, or 4 to indicate the sense light to test.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

16

RF 716   23   **Reason:** The CALL DATSW statement specifies a value other than from 0 to 15 to indicate the binary switch to test.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

17

RF 717   23   **Reason:** The CALL DUMP or CALL PDUMP statement parameter list is incorrect or missing.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

22

RF 722   23   **Reason:** A logical record is not long enough for an unformatted READ statement.

              Recovery 2: Controlled cancel.

                        3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

7

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(continued)

24

RF 724   23   **Reason:** One of the following invalid requests has been made for a tape or sequential disk file:

1. A READ request following a WRITE or ENDFILE.

2. A WRITE request following an ENDFILE.

3. An ENDFILE following an ENDFILE.

Recovery 2: Controlled cancel.

　　　　　　　3: Immediate cancel.

25

RF 725   23   **Reason:** One of the following errors has occurred during the processing of a tape or sequential disk file request:

1. An I/O error has occurred while processing a READ request and no error handling routine is specified in the READ statement.

2. An I/O error has occurred during WRITE or file positioning.

3. A wrong-length-record error has occurred during a READ.

Recovery 2: Controlled cancel.

　　　　　　　3: Immediate cancel.

26

RF 726   23   **Reason:** End-of-file has occurred and the FORTRAN I/O statement does not specify a routine to handle the condition.

Recovery 2: Controlled cancel.

　　　　　　　3: Immediate cancel.

27

RF 727   23   **Reason:** End-of-reel has occurred.

Recovery 2: Controlled cancel.

　　　　　　　3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

7

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(continued)

28
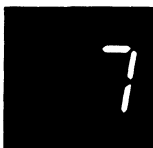
RF 728   23

Reason: One of the following has occurred:

1. Unformatted I/O is requested for a fixed length record file.

2. Formatted I/O is requested for a variable length record file.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

30

RF 730   23

Reason: An operation other than a read operation has been specified for the MFCU1.

Recovery 2: Controlled cancel.

      3. Immediate cancel.

31

RF 731   23

Reason: One of the following invalid operations has been specified for the MFCU2, 1442, or 5496:

1. An attempt has been made to write after reading.

2. An attempt has been made to read after writing.

3. An attempt has been made to use the device without defining it with a device OPTIONS statement at compile time.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

32

RF 732   23

Reason: An attempt has been made to use FORTRAN I/O after using a commercial subroutine.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

33

RF 733   23

Reason: The operation specified for the printer is not a write operation.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

7

blank 7
(continued)

34

RF 734   23

Reason: An invalid operation has been specified on the 5471 or the Model 6 console keyboard.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

35

RF 735   23·

Reason: A READ request has been made on a direct access data set that does not exist.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

36

RF 736   23

Reason: The relative position of the record is either zero or it exceeds the number of records in a direct access data set.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

38

RF 738   23

Reason: An unformatted I/O request was made to a direct access file, where a list variable is larger than the record size.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

42

RF 742   23

Reason: An invalid repeat count in list-directed input has been specified.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

EF

RF 7EF   23

Reason: End-of-file has been detected on the MFCU1, MFCU2, or 5471.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

FC

RF 7FC   23

Reason: An attempt has been made to either read or write a record under format control that exceeds the buffer length or read more characters than a record contains.

Recovery 2: Controlled cancel.

      3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

8
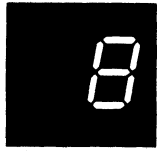
blank 8

CS 8

13

Reason: Device designated as system input for this job is allocated to the other program level. DPF only.

Probable user error.

Recovery 1: Retry to see if device is now available.

3: Immediate cancel.

9

blank 9

CS 9

13

Reason: Device designated as system input device has an error condition.

Recovery 1: Retry. For the MFCU correct error conditions and ready device. For the 1442:

1. Remove cards from hopper.
2. Correct the error condition. See *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.
3. Press 1442 NPRO.
4. Remove last card from stacker 1. Place in front of cards removed from hopper.
5. Place deck back in hopper.
6. Press 1442 START.
7. Press console START.

3: Immediate cancel.

Note: This halt can occur after the last card sequence of the 1442 is followed if the operator fails to place the next set of OCL statements in the 1442 before the system attempts to read OCL. (The 1442 last card sequence is described under *1442 Last Card Procedures* in *IBM System/3 Model 10 Disk System Operator's Guide,* GC21-7508.) The retry procedure for this situation is:

1. Press 1442 NPRO.

2. Place required OCL in hopper.

3. Press 1442 START.

4. Press console START.

A

blank A

DC A

123

Reason: Number of characters entered from the printer-keyboard is incorrect. If RPG, check file description specifications.

Recovery 1: Retry. Rekey the entry.

2: Controlled cancel.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
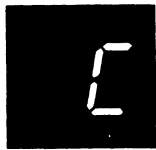
023

Reason: Unprintable character has been encountered in the output field. Printer-keyboard.

DD C

Recovery 0: Continue. A blank will be printed for the unprintable character.

2: Controlled cancel.

3: Immediate cancel.

blank C

123
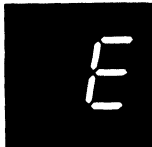
Reason: Hardware malfunction, printer-keyboard. If the halt continues to occur, contact IBM for hardware support.

DC E

Recovery 1: Retry. Wait for PROCEED light, rekey the operation.

2: Controlled cancel.

3: Immediate cancel.

blank E

023

Reason: End-of-forms, printer-keyboard.

DC F

Recovery 0: Perform one of the following to continue:

1. Place new form in the printer-keyboard and continue.

2. Continue by printing next line. The halt will recur until forms are loaded in the printer-keyboard.

blank F

2: Controlled cancel.

3: Immediate cancel.

23

Reason: Hardware malfunction, printer on printer-keyboard is out of order.

DC H

Recovery 2: Controlled cancel.

3: Immediate cancel.

blank H

The printer-keyboard needs service. Contact IBM for hardware support.

0123   **Reason:** Hardware malfunction, printer on printer-keyboard is out of order. Contact IBM for hardware support.

DC J   **Recovery 0:** Continue. Output may contain errors.

            1: Retry print line again.

blank J   **2:** Controlled cancel.

            3: Immediate cancel.

Note: If the hardware problem cannot be corrected, selecting options 1, 2, or 3 may cause the blank J halt to reappear. To continue processing, place a LOG OFF or a LOG PRINTER statement as the next statement in the input stream. Then select option 0. If the failure occurs while utility control cards are being logged, the LOG OFF statement is invalid.

---

03   **Reason:** Records with duplicate keys have been put into an indexed file. Each duplicate key was printed on log device followed by a blank P halt.

Probable user error.

DD L   **Recovery 0:** Continue. Index will contain duplicate keys. The file should be
blank L   reloaded after the duplicate records are eliminated.

            3: Immediate cancel. The file cannot be used and should be reloaded.

---
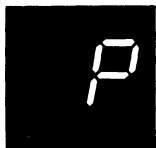
03   **Reason:** Duplicate keys encountered after output to an indexed file. The duplicated key is printed on log device.

Note: If packed keys are being used, they are not printable.

Probable user error.

DD P   **Recovery 0:** Continue. Halt will recur for any subsequent duplicate key;
blank P   then halt blank L will occur.

            3: Immediate cancel. The file cannot be used and should be reloaded.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

23   **Reason:** Permanent disk I/O error occurred while sorting index after output to an indexed file.

DD U   **Recovery 2:** Controlled cancel. Data in the file is correct and may be processed sequentially.

   3: Immediate cancel.

blank U

---
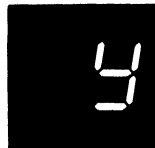
3   **Reason:** System error during file termination. The file label can not be found in the system work area.

DD Y   **Recovery 3:** Immediate cancel. Contact IBM for programming support.

blank Y

---
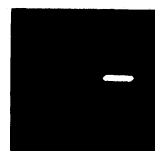
3   **Reason:** The work tape is too short.

   Recovery 3: Immediate cancel.

blank dash

---
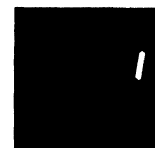
23   **Reason:** Permanent disk I/O error occurred while writing the last records to an output file.

DD   **Recovery 2:** Controlled cancel. File may contain unusable data.

   3: Immediate cancel.

blank

---
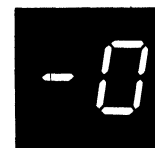
3   **Reason:** An indexed multivolume file is being processed and either the high key cannot be found for the current volume, or it does not agree with the file HIKEY specification. This halt can also occur if HIKEY is not specified for a load or add.

If log is on and the file is an offline multivolume file, the last two characters of the printed message designate the unit number.

DD-0XX   **Recovery 3:** Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

-1

123

Reason: Halt occurred for one of the following reasons:

1. Halt -P occurred while the system was processing an input file and option 0 was taken. The system has assumed you are skipping one or more input volumes, but the pack that is mounted is not a subsequent volume as specified on the file pack specification. If log is on, the last characters of the printed message designate the unit number.

2. The proper pack was not mounted after a retry operation. You selected option 1 for the following halts: −2, −3, −4, −5, −E, or −F.

Probable user error.

DD-1XX

Recovery 1: This option is not available for 5448 units.
For reason 1: Retry after mounting correct pack, or if the next sequential volume is mounted and option 0 was selected by mistake on the -P halt, leave the volume mounted. This option will allow processing to continue.

For reason 2: Mount correct pack.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

-2

123

Reason: A multivolume file is being reloaded, processing of a volume has been completed, and:

1. The next volume to be processed is not in the same sequence as when the file was originally loaded, or

2. The existing portion of the file on the next volume to be processed is a permanent file, or

3. The location of the existing portion of the next volume is different from that specified in the FILE statement.

If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-2XX

Recovery 1: Retry after mounting the correct pack. This option is not available for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

┌─ ─┐
│ - ╕ │   123   **Reason:** Halt occurred for one of the following reasons:

1. Processing of a volume of a multivolume file has been completed and
    the next volume to be processed is not being referenced in the
    proper sequence.

2. Processing a multivolume file by relative record number and the
    volumes have not been specified in the proper sequence on the FILE
    statement. If this is the reason for the halt, take recovery 3.

If log is on, the last two characters of the printed message designate the unit
number.

Probable user error.

DD-3XX   **Recovery 1:** Retry after mounting correct packs. This option is not available
for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file
occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.
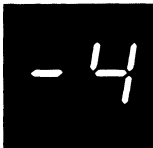
┌─ ─┐
│ - ┤ │   0123   **Reason:** This is a warning that one or more volumes of a multivolume file are
about to be bypassed. If log is on, the last two characters of the printed
message designate the unit number.

Probable user error.

DD-4XX   **Recovery 0:** Continue. The current volume will be processed. Any
bypassed volumes cannot be processed by this job.

1: Retry after mounting the correct pack. This option is not
available for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file
occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

-5

123
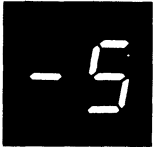
Reason: Processing of a volume of a multivolume file has been completed. The FILE statement did not specify any TRACKS or RECORDS parameters for the next volume to be processed and the file does not exist on the volume. If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-5XX

Recovery 1: Retry after mounting the correct pack. This option is not available for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

Note: The OCL must specify the space required unless the file already exists on the pack as a temporary file.

-6
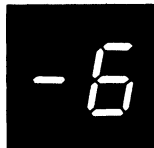
023

Reason: Warning. The end of the volume has been reached during the loading of an indexed multivolume file. The record containing the HIKEY for this volume was not loaded.

If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-6XX

Recovery 0: Continue. The HIKEY record can be added to the correct volume by using random add. See halts -' and 1F for exposure if you attempt a sequential add at a later time.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

-7
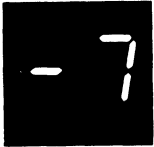
Reason: Halt -A has just occurred and option 1 was taken. However the pack name of the referenced volume does not match any OCL file pack-specifications. The last two characters of the printed message designate the unit on which the pack should be mounted.

Probable user error.

1 DD-7 1 13 **Reason:** Pack should be mounted on R1.

2 DD-7 2 13 **Reason:** Pack should be mounted on R2.

11 DD-711 13 **Reason:** Pack should be mounted on D1.

12 DD-712 13 **Reason:** Pack should be mounted on D2.

Probable user error.

Recovery 1: Retry. Mount the pack specified by the FILE statement PACK parameter. If the 1 option was selected for the -A halt by mistake, the correct option can be selected.

3: Immediate cancel.
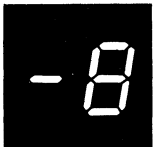
-8   3 **Reason:** Add to an existing multivolume file is specified, and

1. The referenced file is not a multivolume file, or

2. A consecutive add has been specified for an indexed multivolume file, or

3. Indexed processing is specified for a consecutive multivolume file.

If log is on, the last two characters of the printed message designate the unit on which the pack should be mounted.

Probable user error.

DD-8XX   **Recovery 3:** Immediate cancel.

240

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY
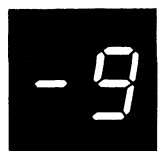
-9

3

Reason: Add to a consecutive multivolume file online has been specified. The last pack cannot be found.

Probable user error.

DD-9

Recovery 3: Immediate cancel. Any adds must begin on the last pack.

-A
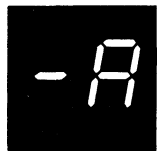
Reason: Add to an existing multivolume is specified and the file extent on the volume currently mounted is full. If the halt recurs after mounting another pack, either the file extent on that volume is also full, or the file cannot be found on that pack. The last two characters of the printed message designate the unit number on which the pack should be mounted.

1   DD-A 1   13   **Reason:** Pack should be mounted on R1.

2   DD-A 2   13   **Reason:** Pack should be mounted on R2.

11   DD-A11   13   **Reason:** Pack should be mounted on D1.

12   DD-A12   13   **Reason:** Pack should be mounted on D2.

Recovery 1: Retry. If it is known which volume was being processed when the load or last add was completed, that volume should be mounted. Otherwise, each subsequent volume should be mounted in order as designated by the file pack-specification until the halt no longer occurs.

             3: Immediate cancel.

-C

3

Reason: Multivolume file error. The halt occurred for one of the following reasons:

1. An online indexed multivolume file is being processed and the volumes are not in proper sequence. That is, first volume specified is not volume 1.

2. The volume being referenced is not a multivolume file.

3. Only one volume is specified on the FILE statement and the volume being referenced is part of a multivolume file.

If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-CXX   **Recovery 3:** Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

123
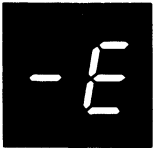
Reason: Processing of a volume of a multivolume file has been completed and the next volume cannot be processed for one of the following reasons:

1. If location is specified on the FILE statement, a file already exists at that location.

2. If location was not specified on the FILE statement, the system will begin allocating space for the files, starting at the last track. If space is not available, this halt will occur.

3. There are scratch files on this pack.

4. The wrong pack may be mounted.

If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-EXX

Recovery 1: Retry. Mount correct pack. If any pack has the same name, the wrong pack may be mounted. This option is not available for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

For reasons 1 and 2, specify location on pack known to be free and rerun the job. For reason 3, if the files on this pack are no longer needed, initialize the pack and rerun the job. Otherwise, use an empty pack and rerun the job.

123

Reason: Processing of a volume of a multivolume file has been completed and the referenced file cannot be found on the next volume to be processed. If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-FXX

Recovery 1: Retry after mounting the correct pack. This option is not available for 5448 units.

2: Controlled cancel. If an input file is being processed, end-of-file occurs. If an output file is being processed, end-of-extent occurs.

3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

- H
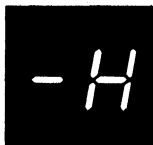
3   **Reason:** An indexed multivolume file is being processed and the HIKEY length specified in the FILE statement and the length of the keys in the file are not the same.

If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-HXX   **Recovery 3:** Immediate cancel.

- J

013   **Reason:** The first volume of an indexed multivolume file to be referenced is not volume sequence number one. If log is on and the file is an offline, multivolume file, the last two characters of the printed message designate the unit number.

Probable user error.

DD-JXX   **Recovery 0:** Continue. This volume will be processed, bypassing any preceding volumes.

        1: Retry after mounting the correct pack. This option is not available for 5448 units.

        3: Immediate cancel.

- L
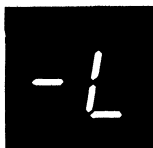
3   **Reason:** Output to an existing multivolume file is specified and, either the referenced file is not a multivolume file, or the referenced volume is not the first volume of the file. If log is on and the file is an offline, multivolume file, the last two characters of the printed message designate the unit number.

Probable user error.

DD-LXX   **Recovery 3:** Immediate cancel.

-P
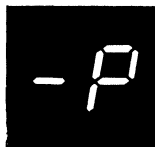
Reason: Processing of a volume of a multivolume file has been completed and the next sequential volume is not mounted. The last two characters of the printed message designate the unit on which the pack should be mounted.

DD-P 1   0123   **Reason:** Pack should be mounted on R1.

DD-P 2   0123   **Reason:** Pack should be mounted on R2.

DD-P11   0123   **Reason:** Pack should be mounted on D1.

DD-P12   0123   **Reason:** Pack should be mounted on D2.

Recovery 0: Continue if processing of one or more input or update volumes is to be bypassed and a subsequent volume of the file is mounted. Select this option only when you intend to skip a volume. If the next sequential volume is mounted, and option 0 taken instead of option 1, a -1 halt will occur. A 1 option on the -1 halt will allow processing to continue.

1: Retry after mounting the correct pack. This option is not available for 5448 units.

2: Controlled cancel. For an input file the file does not require all of the volumes specified in the PACK parameter of the FILE statement. The halt has occurred after the last volume containing data was processed. This option causes end-of-file on the multivolume file. For an output file, end-of-extent occurs.

3: Immediate cancel.

13

Reason: Halt -J has just occurred and option 0 or 1 was taken. Either the pack name is incorrect or the file cannot be found on the referenced volume. If log is on, the last two characters of the printed message designate the unit number.

Probable user error.

DD-UXX **Recovery 1:** Retry after mounting the correct pack.

3: Immediate cancel.
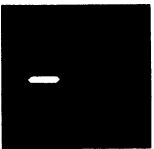
123

Reason: Multivolume file key error. Halt occurred for one of the following reasons:

1. Key too low for indexed random offline multivolume file.

2. Key higher than highest HIKEY specified for indexed random multi-volume file.

- blank

Probable user error.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file. This option is invalid if the halt has occurred for reason 2.

2: Controlled cancel. Store tables and execute LR calculations and LR output if available. If an input file is being processed, end-of-extent occurs. If an output file is being processed, end-of-volume occurs.

3: Immediate cancel.

123

Reason: Attempting sequential add to a multivolume file but the HIKEY record was missing on the previous volume. The key of the record you are loading is lower than the HIKEY of the previous volume.

Probable user error.

Recovery 1: Bypass to beginning of RPG II cycle and read again from this file. The record that caused this halt is not loaded.

2: Controlled cancel. Execute LR calculations and LR output if available. If an input file is being processed, end-of-extent occurs. If an output file is being processed, end-of-volume occurs.

3: Immediate cancel. Use random add to place HIKEY record on preceding volume.

Reason: System generation or macro processor errors.

GM'0DE **3**

Reason: A disk I/O error occurred while processing the system configuration statements or macro instructions. If this error persists and you are performing system generation, you need a new distribution disk cartridge. If you are using the macro processor, you must rebuild the source library.

Recovery 3: Immediate cancel. For a system generation error, perform the following:

```
 ' ⊓
   ⊔
```

(continued)

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside. Place // CALL $SGEN,R1 statement and the cards that follow it in the primary hopper.
4. Press the START key on the card reader. Continue with system generation from this point.

For a macro processor error, you must rerun the job.

GM'0EX   3

Reason: End-of-extents occurred while system generation was writing the MACOUT file on F1 or while the macro processor was writing the $SOURCE file.

Recovery 3: Immediate cancel. For a system generation error, perform the following:

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Prepare a FILE statement, increasing the amount of space indicated on the last logged output FILE statement.
4. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN, R1 statement and set them aside. Place the FILE statement prepared between the // CALL $SGEN, R1 and // RUN statements.
5. Place the // CALL $SGEN, R1 and the cards that follow it in front of the cards in the primary hopper.
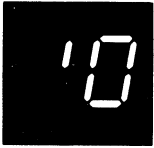6. Press the START key on the card reader. Continue with system generation from this point.

For a macro processor error, allocate more space to the $SOURCE file and rerun the job.

GM'0HW   3

Reason: Macro processor error. A hardware error has occurred during a read operation.

Recovery 3: Immediate cancel. You must rerun the job.

GM'0IC   13

Reason: System generation error. An operation was specified on the last system configuration statement that depends on an option from a preceding system configuration statement. This preceding option was not given or the wrong option was selected on the last system configuration statement logged. If the last system configuration statement logged is the only one in error, take recovery 1.

Probable user error.

Recovery 1:
1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3. Correct the card.
4. Place the corrected card in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

Recovery 3: Immediate cancel.

1. Press the STOP key on the card reader.
2. Remove cards from primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside.
4. Check system configuration statements for the invalid option, correct the statement and place it back in the deck.
5. Place the // CALL $SGEN, R1 statement and the cards that follow it in the primary hopper.
6. Press the START key on the card reader and continue with system generation.

GM'0ID   13   **Reason:** System generation error. Invalid delimiter on the last system config-uration statement logged. A dash was expected, but not found.

Probable user error.

Recovery 1:
1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3. Correct the card.
4. Place the corrected card in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

Recovery 3: Immediate cancel.
1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error. Correct the card and place it in front of the cards in the primary hopper.
3. Remove cards from stacker 1. Remove cards preceding the //CALL $SGEN, R1 statement and set them aside.
4. Place the // CALL $SGEN, R1 statement and the cards that follow it in front of the cards in the hopper.
5. Press the START key on the card reader and continue with system generation.

GM'0IK   13   **Reason:** System generation error. Invalid keyword on the last system config-uration statement logged.

Probable user error.

Recovery 1:
1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3. Correct the card.
4. Place the corrected card in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

Recovery 3: Immediate cancel.

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error. Correct the card and place it in front of the cards in the primary hopper.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside.
4. Place the // CALL $SGEN, R1 statement and the cards that follow it in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

(continued)

GM'0IO   3

Reason: A disk I/O error has occurred while system generation was writing the MACOUT file on F1 or while the macro processor was writing the $SOURCE file.

Note: If the error persists, run Alternate Track Assignment disk utility.

Recovery 3: Immediate cancel.

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1.
4. Place these cards in front of the cards in the primary hopper.
5. Press the START key on the card reader and start the job from the beginning.

GM'0IR   13

Reason: System generation error. An invalid option is specified on the last system configuration statement logged. Check the options specified on the system configuration statements that have been printed. If the last statement logged is the only one in error, take recovery 1.

Probable user error.

Recovery 1: If using a card reader, do the following:

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3. Correct the card.
4. Place the corrected card in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

'0

(continued)

Recovery 1: If using a directly attached 3741 do the following:

1. Take the 3741 offline by simultaneously pressing the NUM SHIFT, ALPHA SHIFT and RESET.
2. Press FUNCT SEL lower and @ (UPDATE) and REC ADV to get to the statement in error.
3. Make the correction and press REC ADV to write the corrected record to diskette.
4. Press REC BKSP to return to the corrected record.
5. Return the 3741 to the READ mode by pressing NUM SHIFT and 41, FUNCT SEL upper and DUP (READ).
6. Set the rightmost ADDRESS/DATA switch to 1 and press START or press HALT/RESET if you have DPF.

Recovery 3: Immediate cancel. If using a card reader, do the following:

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error. Correct the card and place it in front of the cards in the primary hopper.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN, R1 statement and set them aside. Check other system configuration statements following the // CALL $SGEN, R1 statement for errors. Be sure to keep the cards in the proper order.
4. Place the // CALL $SGEN, R1 statement and the cards that follow it in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with the system generation.

Recovery 3: Immediate cancel. If using a directly attached 3741 do the following:

1. Take the 3741 offline by pressing the NUM SHIFT, ALPHA SHIFT and RESET at the same time.
2. Press FUNCT SEL lower and @ (UPDATE) and REC ADV to get to the statement in error.
3. Make the correction and press REC ADV to write the corrected record.
4. Press REC BKSP to go to the // CALL $SGEN, R1 statement.
5. Return the 3741 to the READ mode by pressing NUM SHIFT and 41, FUNCT SEL upper and DUP (READ).
6. Set the rightmost ADDRESS/DATA switch to 1 and press START or press HALT/RESET if you have DPF.
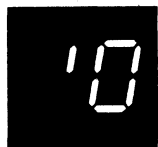
GM'0IS   13   **Reason:** System generation error. The last system configuration statement logged was not in the proper sequence or is a duplicate statement. Check the printout of the system configuration statements for proper order or duplicate statements. If the last statement logged is the only one in error, take recovery 1.

(continued)

Probable user error.

Recovery 1:
1.   Press the STOP key on the card reader.
2.   Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card that is out of sequence or a duplicate.
3.   Remove cards from primary hopper.
4.   Place the last card in stacker 1 in proper position within the system configuration statements removed from the primary hopper. If it is duplicate statement, discard it. Check all remaining system configuration statements for correct order.
5.   Place these cards back in the primary hopper.
6.   Press the START key on the card reader and continue with system generation.

Recovery 3: Immediate cancel.

1.   Press the STOP key on the card reader.
2.   Remove cards in primary hopper.
3.   Press NPRO. One card is fed into stacker 1.
4.   Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside. Place the // CALL $SGEN, R1 statement and the cards that follow it in front of the cards removed from the primary hopper.
5.   If you have a duplicate statement, select the correct statement and remove the incorrect statement from the deck.
6.   Check the system configuration statements and put them in their proper order.
7.   Place the // CALL $SGEN, R1 statement and the statements that follow in the primary hopper of the MFCU.
8.   Press the START key on the card reader and continue with system generation.

GM'0NF   13   **Reason:** System generation error. The entry in columns 8-12 of the last system configuration statement logged was found to be in error or specified a module that could not be found on the distribution disk cartridge.

Probable user error.

Recovery 1:
1.   Press the STOP key on the card reader.
2.   Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3.   Check the name in columns 8-12 for spelling errors and correct the card.
4.   Place the corrected card in front of the cards in the primary hopper.
5.   Press the START key on the card reader and continue with system generation.

'0
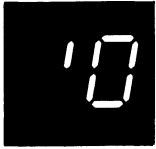
(continued)

Recovery 3: Immediate cancel.

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1. This is the card in error.
3. Correct the card and place it in front of the cards in the primary hopper.
4. Remove cards from stacker 1. Remove cards preceding the //CALL $SGEN, R1 statement and set them aside. Place the // CALL $SGEN, R1 statement and the cards that follow it in front of the cards in the primary hopper.
5. Press the START key on the card reader and continue with system generation.

GM'ONS   3

Reason: Requested source program not found on disk specified by the COMPILE statement.

Recovery 3: Immediate cancel.

GS'0EM   13

Reason: System generation error. An END control statement was not found. // must be in columns 1 and 2 and END must start in column 8. Check print-out of system configuration statements to determine if any of them are missing. If // END statement is the only one missing, take recovery 1.

Probable user error.

Recovery 1:
1. Press the STOP key on the card reader.
2. Place an END statement in front of the cards in the primary hopper.
3. Press the START key on the card reader and continue with system generation.

Recovery 3: Immediate cancel.

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Place an END statement in front of the cards in the primary hopper.
4. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside. Place any missing system configuration statements in the proper order in the deck of statements. Place the // CALL $SGEN,R1 statement and the cards that follow it in front of the cards in the primary hopper.
5. Press the START key on the card reader. Continue with system generation.

GS'0HW   3

Reason: System generation error. A hardware error has occurred during a read operation.

Recovery 3: Immediate cancel.

(continued)

1. Press the STOP key on the card reader.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside. Place // CALL $SGEN,R1 statement and the cards that follow it in the primary hopper of the card reader.
4. Press the START key on the card reader. Continue with system generation.

GS'0NP   3

Reason: Program module $SGXP2, $SGXP3, $SGXP4, $SGXP5, or $SGXP6 is missing for system generation or program module $MPXP2, $MPXP3, or $MPXP4 is missing for the macro processor.

Recovery 3: Immediate cancel. If you are performing system generation, you need a new distribution disk cartridge. If you are using the macro processor, perform system generation procedures to obtain the missing modules.
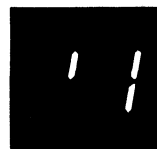
3

Reason: System generation errors.

GG'1

System generation has encountered programming problems that invalidate the system generation cartridge received from IBM.

GM'1

System generation has encountered programming problems that invalidate the system generation cartridge received from IBM.

Recovery 3: Immediate cancel.

Note: It is recommended that a core storage dump be taken rather than selecting option 3. For information on how to take a core storage dump, see *IBM System/3 Model 10 Disk System Operator's Guide*, GC21-7508. Save the core storage dump and contact IBM for programming support.

03

Reason: At least one error was detected during a macro processor run. An error indication, in the form of a comment record, has been written to the $SOURCE file and to the logging device.

Recovery 0: Continue the run.

       3: Immediate cancel.

3

Reason: A 5445 disk pack that contains an invalid System/3 label is either being used or being initialized using $INIT with TYPE-PRIMARY in the UIN utility control statement.

Recovery 3: Immediate cancel. The pack must be initialized on a System/3 using TYPE-CLEAR in the UIN utility control statement.

Note: Disk packs used on an IBM 5445 disk drive must have the System/3 VTOC on track 1 of cylinder 0. The OS/DOS VTOC must be on track 2 of cylinder 0.

System generation errors.

14

GG'4EX **3**

Reason: End-of-extent was reached while building output file on F1.

Recovery 3: Immediate cancel.

1. Examine the last logged FILE statement and prepare a new FILE statement increasing the space requirements. You will use this statement in step 7.
2. Press MFCU STOP.
3. Remove cards in the primary hopper.
4. Press NPRO. One card is fed into stacker 1.
5. Remove cards from stacker 1.
6. Remove all cards preceding the // CALL $SGEN, R1 card.
7. Place the FILE statement prepared in step 1 immediately after the // CALL $SGEN,R1 card.
8. Place the // CALL $SGEN,R1 card and cards that follow it in front of the cards removed from the primary hopper.
9. Place these cards back into the primary hopper.
10. Press MFCU START and continue with system generation from this point.

GG'4GT **3**

Reason: A permanent disk I/O error has occurred while reading from F1.

Recovery 3: Immediate cancel.

1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1 and place them in front of the cards in the primary hopper of the MFCU.
4. Press MFCU START. This restarts system generation.

GG'4PT **3**

Reason: A permanent disk I/O error occurred while writing on F1.

Recovery 3: Immediate cancel.

1. Press MFCU STOP.
2. Raise cards in primary hopper and press NPRO. One card is fed into stacker 1.
3. Remove cards from stacker 1. Remove cards preceding the // CALL $SGEN,R1 statement and set them aside. Place the // CALL $SGEN, R1 statement and the cards that follow it in the primary hopper of the MFCU.
4. Press MFCU START. Continue with system generation.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

'5

03   **Reason:** Inquiry program is ready to be executed.

     Recovery 0: Continue. The inquiry program is executed.

             3: Immediate cancel. The inquiry program is not executed.

'6

3   **Reason:** A problem has been encountered that invalidates the system genera-tion cartridge that contains the program products. Contact IBM for program-ming support.

GP'6NE   **Recovery 3:** Immediate cancel.

'7

Field Engineering Maintenance program errors.

GF'7AD   3   **Reason:** First three characters of PTF ID are not the same as the first three characters on the PTF statement.

     Recovery 3: Immediate cancel.

GF'7B1   3   **Reason:** An invalid unit was specified in the UNIT 1 field of the HEADER statement or the unit specified is not online.

     Recovery 3: Immediate cancel.

GF'7B2   3   **Reason:** An invalid unit was specified in the UNIT 2 field of the HEADER statement or the unit specified is not online.

     Recovery 3: Immediate cancel.

GF'7BD   3   **Reason:** Displacement for patch is greater than the total module length.

     Recovery 3: Immediate cancel.

GF'7CS   3   **Reason:** Invalid program temporary fix deck. The cumulative check sum in the CKSUM field of the control statement does not match the calculated check sum.

     Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

GF'7DC 3 **Reason:** Invalid patch characters on the DATA statement for the Program Temporary Fix program. Valid characters are 0-9 and A-F.

Recovery 3: Immediate cancel.

(continued)

GF'7DS 3 **Reason:** Format or punctuation error in the DATA statement for the Program Temporary Fix program.

Recovery 3: Immediate cancel.

GF'7ES 3 **Reason:** The last control statement was not an END statement.

Recovery 3: Immediate cancel.

GF'7HS 3 **Reason:** Format or punctuation error in the HEADER statement for the Program Temporary Fix program.

Recovery 3: Immediate cancel.

GF'7HN 3 **Reason:** HEADER statement not first statement of Program Temporaty Fix statements.

Recovery 3: Immediate cancel.

GF'7ID 3 **Reason:** The module referred to by the PTF ID field on the HEADER statement can not be found on the unit specified by the UNIT 2 field.

Recovery 3: Immediate cancel.

GF'7LD 3 **Reason:** An invalid RLD byte was found in the module being patched.

Recovery 3: Immediate cancel.

GF'7LV 03 **Reason:** The level of the module to which the program temporary fix is to be applied is not the same level as specified in the level field of the PTF statement.

Recovery 0: Continue. The program temporary fix is applied.

3: Immediate cancel.

GF'7ME 3 **Reason:** Insufficient room in the module being patched for the additional RLD's required by the addition of the patch.

Recovery 3: Immediate cancel.

GF'7ND 3 **Reason:** No DATA statements followed the PTF statements.

Recovery 3: Immediate cancel.

GF'7NE 3 **Reason:** No END statement foiund at end of PTF.

Recovery 3: Immediate cancel.

Halt '7 255

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

HALT/SUBHALT **LOG** **OPTIONS** **REASON AND RECOVERY**
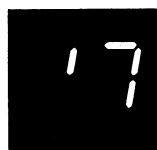
GF'7NM   3   **Reason:** Module name on PTF statement was not found.

Recovery 3: Immediate cancel.

GF'7NP   3   **Reason:** No PTF statement was found following the HEADER statement.

(continued)   **Recovery 3:** Immediate cancel.

GF'7NS   3   **Reason:** Insufficient space on the unit specified by the UNIT 1 field of the HEADER statement. Six tracks are needed for temporary work space.

Recovery 3: Immediate cancel.

GF'7PS   3   **Reason:** Format or punctuation error in the PTF statement.

Recovery 3: Immediate cancel.

GF'7TM   3   **Reason:** Too many PTF statements after one HEADER statement. The maximum is 11.

Recovery 3: Immediate cancel.

GF'7WP   3   **Reason:** Pack applying PTF to is not an active program pack or an active system pack.

Recovery 3: Immediate cancel.

GF'7WS   3   **Reason:** The check byte of the module to which the program temporary fix is to be applied is not the same as the check byte field of the DATA statement.

Recovery 3: Immediate cancel.

---

3   **Reason:** Auto Report. Terminal errors have been found in the Auto Report source program.

Note: This halt will be bypassed if NOHALT was specified for program level 1.

Recovery 3: Immediate cancel.

Reason: An error has been detected by the MULTI-LEAVING Remote Job Entry Work Station (MRJE/WS) program. The subhalt or logged error code indicates the reason for the halt.

Note: If recovery option 2 indicates that a failing task is deactivated, the other tasks of the MRJE/WS remain active when option 2 is selected.

256

'9
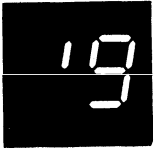
(continued)

MW'9CV	13	**Reason:** A carriage channel value is greater than number of lines/page, or value not between 1 and 112.

Recovery 1: Retry. Enter the corrected carriage statement.

3: Immediate cancel.

MW'9ED	13	**Reason:** An unexpected end of data (/*) was encountered by the MRJE/WS print utility on the system input device before an END statement was read.

Recovery 1: Retry. Correct or add the required OCL statement.

3: Immediate cancel.

MW'9EF	13	**Reason:** End-of-file has been reached on SYSIN for the print utility program before an END statement was read.

Recovery 1: Retry. Enter the remaining control statements.

3: Immediate cancel.

MW'9FT	13	**Reason:** The relative record number on the FROM parameter exceeds the relative record number on the TO parameter in the SELECT RECORD statement.

Recovery 1: Retry. Enter the corrected SELECT RECORD statement.

3: Immediate cancel.

MW'9F1	3	**Reason:** No FILE statement with NAME-COPYIN.

Recovery 3: Immediate cancel.

MW'9IC	13	**Reason:** An unrecognizable control statement has been read from SYSIN.

Recovery 1: Retry. Enter the corrected control statement.

3: Immediate cancel.

MW'9IK	13	**Reason:** A control statement with an invalid keyword has been read from SYSIN.

Recovery 1: Retry. Enter the control statement with the keyword corrected.

3: Immediate cancel.

```
'9
```
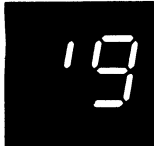
(continued)

MW'9IP   13

Reason: A control statement with an invalid parameter or no parameter has been read from SYSIN.

Recovery 1: Retry. Enter the control statement with the corrected parameter.

3: Immediate cancel.

MW'9LE   3

Reason: Length error—record length of input file is not 80 or 133.

Recovery 3: Immediate cancel.

MW'9OE   3

Reason: OPEN error—input file cannot be opened by data management.

Recovery 3: Immediate cancel.

```
01
```
MW'901   3

Reason: Required module for MRJE/WS was not included in link-edit. The initial CONFIG command requests a device for which the I/O module was excluded.

Recovery 3: Immediate cancel.

```
02
```
MW'902   3

Reason: Insufficient main storage available to execute MRJE/WS Program. Core is required at execution time for control blocks and buffers. See OPTIONS statement in Program Generation.

Recovery 3: Immediate cancel.

```
03
```
MW'903   13

Reason: CONFIG command required by MRJE/WS missing or misspelled. The CONFIG command must be the first statement following the // RUN OCL statement in the SYSIN device.

Recovery 1: Retry. Correct the CONFIG command or enter a CONFIG command.

3: Immediate cancel.

```
04
```
MW'904   13

Reason: Device specified on initial CONFIG command not supported by system.

Recovery 1: Retry. Device must be included at System/3 System Generation. Correct the error and reenter the CONFIG command.

3: Immediate cancel.

'9

(continued)

05	MW'905	13	

Reason: Invalid parameter in CONFIG command. One of the following errors is detected:

1. Illegal parameter.

2. Illegal parameter option.

3. LEN is not 3 digits.

4. TEL is not between 1 and 15 digits.

5. FSN is not 4 digits (leading zeros required)

6. CEN is not specified.

7. Continuation is indicated but no continuation card was read.

8. COM-C is specified and module $@MRFC was not included during MRJE/WS generation.

9. RD1-K is specified and MRJE/WS does not have inquiry attribute specified during MRJE/WS generation.

Recovery 1: Retry. Correct the error and reenter the CONFIG command.

      3: Immediate cancel.

06	MW'906	13	

Reason: Invalid or missing SIGNON/LOGON command. This command must follow the initial CONFIG command in the SYSIN device.

Recovery 1: Retry. Correct the command in error or enter a SIGNON/LOGON command.

      3: Immediate cancel.

08	MW'908	3	

Reason: OCL error detected during initialization. One of the following errors is detected.

1. Disk device is used for deferred mount and permanent mount.

2. CONFIG parameter PU1 or PR1 specified temporary disk, and a TDISKPx1 FILE statement was not included in OCL.

3. CONFIG parameter PU1 or PR1 specified temporary tape and a deferred mount tape FILE statement was not included in OCL.

Recovery 3: Immediate cancel.

⌐⊓ (seven-segment display showing "19")

(continued)

09 (seven-segment display) MW'909   01

Reason: Console message waiting for a page break in the current printer data stream. A potential interlock exists.

Recovery 0: Continue waiting for page breaks. Halt will be reissued if interlock continues.

       1: Process console message without waiting for page break.

10 (seven-segment display) MW'910   03

Reason: One or more files have not been allocated. See SYSLOG output for filenames.

Recovery 0: Continue.

       3: Immediate cancel.

11 (seven-segment display) MW'911   3

Reason: A read error occurred during an attempt to retrieve an SWA buffer.

Recovery: Immediate cancel.

21 (seven-segment display)   13

Reason: Read invalid on 1442. Multiple punches were found in rows 1-7 in any card column, or card was upside down or backwards.

Recovery 1: Retry. Follow these recovery procedures:

1. Press 1442 STOP.
2. Remove cards from hopper.
3. Press 1442 NPRO.
4. Remove last two cards from stacker 1.
5. If job is to be continued, proceed with step 6. If not, mark the second-to-last card removed from stacker 1.
6. Examine second-to-last card removed from stacker 1 to see if it is upside down or backwards or if it has multiple punches in rows 1-7 in any column.
7. Correct the card.
8. Place cards from stacker back in hopper. Place all cards which have not been read on top of these.
9. Press 1442 START.

       3: Immediate cancel.

'9

(continued)

22

13

Reason: Read check was sensed on 1442. A read check was caused by one of the following:

1. Off-registration punching.

2. Damaged card.

3. Upside-down or backward card.

4. 1442 feeding problem.

An overrun check occurs when data is lost.

Recovery 1: Retry. Follow these recovery procedures:

1. Press 1442 STOP.
2. Remove cards from hopper.
3. Press 1442 NPRO.
4. Remove last two cards from stacker 1.
5. If OVER RUN light is on, proceed to step 7. If READ REG light is on, check second-to-last card removed from stacker 1 for:
    - Off-registration punching.
    - Card damage.
    - Backward or upside-down condition.
6. Reproduce card if damaged.
7. Place two cards removed from stacker 1 back in hopper.
8. Place deck back in hopper.
9. Press 1442 START.

3: Immediate cancel.

19

(continued)

23

12

Reason: Punch check on 1442. This halt occurred because extra or missing punches occurred due to a failure of the punch unit or because data was lost when a punch feed command was issued.

Recovery 1: Retry. Follow these recovery procedures:

1. Check for blank of pre-punched cards being punched. If blank cards are used, discard last card from stacker 2. Go to step 9. If pre-punched cards are used, mark the last card in the indicated stacker.
2. Press 1442 STOP.
3. Remove cards from hopper.
4. Press 1442 NPRO.
5. Place a blank card in hopper.
6. Place last two cards from stacker 1 in hopper.
7. Place deck back in the hopper.
8. Press 1442 START.
9. If you are using pre-punched cards, punch and verify pre-punched information from marked card into card immediately following it when job is completed. Discard marked card and place card that followed it into its proper place.

2: Deactivate the punch task (punch only).

25

123

Reason: 1442 hopper check. Card was not fed from hopper.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Check hopper for foreign material. Remove any you find.
3. Check bottom card of deck for damage. Reproduce damaged cards.
4. Remove cards from stacker 1. These cards have been processed.
5. Press 1442 NPRO.
6. If there is a card in stacker 1, remove it and place it in the hopper.
7. Place deck back in hopper.
8. Press 1442 START.

2: Deactive the punch task (punch only).

3: Immediate cancel (reader only).

19

(continued)

26

123

Reason: 1442 read station failure or a card jam at read station.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers.
3. Check read station for card jam. If one exists,
   - Remove jammed card from read station.
   - Remove card from the pre-read station.
4. Close machine cover.
5. Press 1442 NPRO.
6. If no card jam existed, place last two cards from stacker 1 in hopper. If a card jam existed, place last two cards taken from feed path (reproduce them if damaged) in hopper.
7. Place deck back in hopper.
8. Press 1442 START.

     2: Deactivate the punch task (punch only).

     3: Immediate cancel (reader only).

27

123

Reason: 1442 punch check or a card jammed at punch station.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers. Remove all cards from feed path. Keep these cards in order.
3. Reproduce damaged cards.
4. Close machine covers.
5. Press 1442 NPRO.
6. Place cards removed from feed path in hopper.
7. Place deck back in hopper.
8. Press 1442 START.

     2: Deactivate the punch task (punch only).

     3: Immediate cancel (reader only).

19

(continued)

29   123   **Reason:** 1442 transport check. A card is jammed in stacker area.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Open machine covers.
3. Clear the jammed cards out of stacker transport area.
4. Close machine covers.
5. Reproduce card if it is damaged.
6. Press 1442 NPRO.
7. Place card removed from stacker transport in hopper.
8. Place last two cards from stacker 1 back in hopper.
9. Place deck back in hopper.
10. Press 1442 START.

2: Deactivate the punch task (punch only).

3: Immediate cancel (reader only).

2A   123   **Reason:** 1442 feed check. All cards in card feed path have advanced one position because of an unrequested feed cycle.

Recovery 1: Retry. Follow these recovery procedures:

1. Remove cards from hopper.
2. Press 1442 NPRO.
3. Place last three cards from stacker 1 back in hopper.
4. Place deck back in hopper.
5. Press 1442 START.

2: Deactivate the punch task (punch only).

3: Immediate cancel (reader only).

⎡⧾ *(continued)*

∃ /   12   **Reason:** Printer carriage check. Carriage synchronous check caused by loss of sttachment synchronization with the forms. If this halt continues to occur, contact IBM for hardware support.

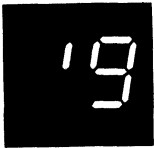For 5203 Printer:

Recovery 1:

1. Open printer top cover.
2. Open rear unit.
3. Check last line of print:
   − If the carriage has not moved from the last line of print, print line is between scribe lines on carriage. Go to step 4.
   − If the carriage has moved, last print line is above upper scribe line on carriage.
     − Disengage carriage clutch.
     − Use knob on right end of carriage to back up forms until first line on form is positioned between scribe lines.
     − Press CARRIAGE RESTORE key.
     − Engage carriage clutch.
     − Press CARRIAGE SPACE key until the last line of print is between the scribe lines.
     − If your printer has the dual feed carriage feature and two forms are being used, both forms must be repositioned. Unequal length forms must maintain the same relative position after repositioning that they had when the error occurred.
4. Close rear unit.
5. Close top cover.
6. Press printer START.

For 1403 Printer:

1. Press printer CHECK RESET key.
2. Open printer top cover.
3. Turn FEED clutch to NEUTRAL. For Model N1 skip to step 5.
4. Unlock and swing back print unit by pulling print unit release lever toward you. Unlatch ribbon guide bar from print unit and swing it against forms.
5. Check last line of print by turning paper advance knob forward.

   Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

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Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

— If carriage has not moved (last print line is just visible above the ribbon guide bar) turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Turn FEED CLUTCH to DRIVE. Go to step 6.

— If carriage has moved, position last line printed so that it is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Note line on form that is just visible above ribbon guide bar. This is your print stop line.

Turn paper advance knob backwards until first line of form is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Press CARRIAGE RESTORE key and turn FEED CLUTCH to DRIVE.

Using CARRIAGE SPACE key, advance form until print stop line is just visible above ribbon guide bar.

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31

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6.   Close printer top cover.
7.   Press printer START.

Printing continues with no loss of data or carriage information.

2: Deactivate the printer task.

33

12

Reason: For the 5203 Printer, the paper forms have jammed in the print area. For the 1403 Printer, the forms have jammed causing a misalignment in the print line, or the CARRIAGE STOP key was pressed.

Recovery 1: For the 5203 printer:

1.   Open printer top cover.
2.   Open rear unit.
3.   Clear forms jam.
4.   Disengage carriage clutch.
5.   Position new form at first print line. The program will skip to the line where the jam was detected.
6.   Press CARRIAGE RESTORE key.
7.   Engage carriage clutch.
8.   Close rear unit.
9.   Close top cover.
10.   Press printer START.

Printing continues on the new form at the line on which the forms jam was detected. If the forms jam occurred before the carriage stopped, the forms may be positioned on the wrong line. This will be corrected when the next skip command is issued.

Note: If your printer has the dual feed carriage feature and two forms are being used, both forms must be repositioned. Position both forms at the first print line of the form that was being printed when the error occurred.

For the 1403 printer:

1.   Press printer CHECK RESET key.
2.   Open printer top cover.
3.   Turn FEED CLUTCH to NEUTRAL.
4.   Unlock and swing back print unit by pulling print unit release lever toward you.

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5. If form was damaged, clear damaged form. Unlatch ribbon guide bar from print unit and swing it against forms. Reposition next good form by using paper advance knob so that line 1 of next good form is just visible above ribbon guide bar. Now go to step 6.

If form was not damaged, unlatch ribbon guide bar from print unit and swing it against forms. Reposition undamaged form by using paper advance knob so that line 1 of undamaged form is just visible above ribbon guide bar.

6. Turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

7. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.
8. Press CARRIAGE RESTORE key and then turn FEED CLUTCH to DRIVE.
9. Close printer top cover.
10. Press printer START.
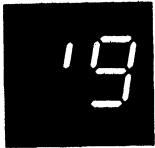
2: Deactivate the printer task.

35

02 **Reason:** For the 5203 Printer, a printer synchronous check has occurred. The mechanical and electrical operations of the printer are not working together. Two lines may contain print errors. If this halt continues to occur, contact IBM for hardware support. For the 1403 Printer, a chain synchronous check was caused by the loss of attachment synchronization with the chain.

Recovery 0: For the 5203 Printer, press printer START. For the 1403 Printer, press the printer CHECK RESET key. Processing continues. It is not possible to correct the characters that are printed wrong.

2: Deactivate the printer task.

'9

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36   12   **Reason:** For the 5203 Printer, a printer incrementer failure check has occurred. The print hammers were not moved to the next group of print positions. If this halt continues to occur, contact IBM for hardware support.

For the 1403 Printer, a print data check has been caused by faulty transfer of information to or from the printer attachment buffer.

Recovery 1: For the 5203, press printer START. For the 1403, follow the 1403 recovery procedures for halt 38, information on line will be printed with no loss of data.

2: Deactivate the printer task.

37   02   **Reason:** Printer thermal check. Hammer unit area on printer is overheated. If this halt continues to occur, contact IBM for hardware support.

Recovery 0: Press printer START. Processing continues.

2: Deactivate the printer task.

38   12   **Reason:** For the 5203 Printer, a printer print check has occurred. One character may be printed wrong. For the 1403 Printer, a hammer echo check has occurred because of an improper hammer driver response during print time, or an any hammer on check has occurred because a hammer turned on when hammer set pulse was generated by the attachment.

If this halt continues to occur, contact IBM for hardware support.

Recovery 1: For the 5203 Printer, follow the 5203 recovery procedures for halt 31 for the 1403 printer:

1.   Press printer CHECK RESET key.
2.   Check for FORMS CHECK light on. If it is off, go to step 7.
3.   Open printer top cover.
4.   Turn FEED CLUTCH to NEUTRAL. For Model N1 skip to step 6.
5.   Unlock and swing back print unit by pulling print unit release lever toward you. Unlatch ribbon guide bar from print unit and swing it against forms.

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38 (continued)

6. Position last line printed so that it is just visible above ribbon guide bar. Now turn paper advance knob backwards.

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Note line on form that is just visible above ribbon guide bar. This is your print stop line.

Turn paper advance knob backwards until first line of form is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Press CARRIAGE RESTORE key and turn FEED CLUTCH to DRIVE.

Using CARRIAGE SPACE key advance form until the print stop line is just visible above the ribbon guide bar.

7. Close printer top cover.
8. Press printer START.

Processing continues. It is not possible to correct the character that is printed wrong.

2: Deactivate the printer task.

`19`

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`40`

13   **Reason:** MFCU feed check in primary hopper. One or more cards are mis-positioned or jammed in card feed path.

Recovery 1:

1.   Open MFCU top covers.
2.   Remove card from primary, upper, wait station, if present, and place it under the cards in primary hopper. Read clearing a card jam in Operator's Guide if you are not familiar with how to physically remove the cards from the card feed path.
3.   Remove all remaining cards from card feed path, starting at area between hopper and wait station and progressing through print unit area. Keep cards face down and in order, with the card removed from the print unit area on the bottom.
4.   Place cards from step 3 in stacker 1.
5.   When cards are positioned in hopper in correct order, close MFCU covers.
6.   Raise cards in primary hopper and press NPRO to turn off error indicator on MFCU panel. If error indicator does not turn off, raise cards in secondary hopper and press NPRO.
7.   Press MFCU START.
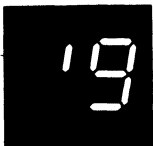
    3: Immediate cancel.

`42`

13   **Reason:** MFCU hopper check in primary hopper. Card not fed from hopper.

Recovery 1:

1.   Raise cards in hopper. Press NPRO to turn off error indicator on MFCU.
2.   Straighten cards in hopper. If necessary, replace damaged cards.
3.   Press MFCU START.

    3: Immediate cancel.

19

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43

13   **Reason:** MFCU read check on primary hopper caused by:

1.   Damaged card

2.   Information recorded incorrectly on card

3.   MFCU feed problem, or

4.   Cards incorrectly placed in hopper.

Recovery 1:

1.   Press MFCU STOP.
2.   Raise cards in indicated hopper. Press NPRO. One card is fed into
      stacker 1.
3.   If halt is caused by cards being placed in hopper wrong, reposition
      cards. Place card from stacker 1 ahead of deck and place deck in
      hopper face down, top edge to left. If halt is caused by a damaged
      or mispunched card, replace card and place new card under cards in
      hopper from which card was fed.
4.   Press MFCU START.

      3: Immediate cancel.

`'9`

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`50`   12

Reason: MFCU feed check in secondary hopper. One or more cards are mispositioned or jammed in card feed path.

Recovery 1:

1. Open MFCU top covers.
2. Remove card from secondary, lower, wait station, if present, and place it under any cards in secondary hopper. Read clearing a card jam in Operator's Guide if you are not familiar with how to physically remove the cards from the card feed path.
3. Remove all remaining cards from card feed path, starting at area between hopper and wait station and progressing through print unit area. Keep cards face down and in order, with the card removed from the print unit area on the bottom.
4. Place cards from step 3 in stacker 2.
5. When cards are positioned in hoppers in correct order, close MFCU covers.
6. Raise cards in primary hopper and press NPRO to turn off error indicator on MFCU panel. If error indicator does not turn off, raise cards in secondary hopper and press NPRO.
7. Press MFCU START.

    2: Deactivate the punch task.

`52`   12

Reason: MFCU hopper check in secondary hopper.

Recovery 1:

1. Raise cards in hopper. Press NPRO to turn off error indicator on MFCU.
2. Straighten cards in hopper. If necessary, correct damaged cards.
3. Press MFCU START.

    2: Deactivate the punch task.

`'9`

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`54`   12   **Reason:** MFCU punch check in secondary hopper. Extra or missing punches in card in stacker 2.

Recovery 1:

1. Check if blank or prepunched cards are being punched. If blank cards are being used, raise cards in hopper, press NPRO, place cards back in hopper, and go to step 6. If prepunched cards are being used, proceed with steps 2 through 7.
2. Mark last card in indicated stacker.
3. Press MFCU STOP.
4. Raise cards in hopper which fed last card and press NPRO. One card is fed into stacker 1.
5. Under cards in hopper, place blank card followed by last card in stacker 1.
6. Press MFCU START.
7. If you are using prepunched cards, do the following when the job is completed: Punch and verify the prepunched information from the marked card into the card immediately following it. Discard the marked card and place the new card in the deck in its place.

     2: Deactivate the punch task.

`55`   02   **Reason:** MFCU punch invalid secondary hopper. A character which is not one of the 64 characters recognized by System/3 has been specified to be punched by the MFCU.

Recovery 0:

1. Mark last card in stacker 2.
2. Raise cards in hopper. Press NPRO to turn off MFCU error indicator.
3. Press MFCU START.

Processing continues. The marked card will need to be corrected.

     2: Deactivate the punch task.

⌐9

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56

02   **Reason:** MFCU print check. The printing on the cards could be in error.
The wrong characters could be printed, characters could only be partially
printed, the printing could be in the wrong position on the cards, or some of
the printing could be missing from the cards.

Recovery 0:

1.   Mark the last card in stacker 2.
2.   Raise cards in hopper. Press NPRO to turn off MFCU error indicator.
3.   On completion of the run, notify the programmer of the MFCU print
     check. The cards to check for print errors are the marked cards and
     the two preceding cards in each output file.

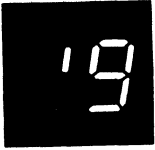   **2:** Deactivate the punch task.

61

13   **Reason:** Printer carriage check during console output. Carriage synchronous
check caused by loss of attachment synchronization with the forms. If this
halt continues to occur, contact IBM for hardware support.

Recovery 1:
For 5203 Printer:

1.   Open printer top cover.
2.   Open rear unit.
3.   Check last line of print:
     — If the carriage has not moved from the last line of print, print line
        is between scribe lines on carriage. Go to step 4.
     — If the carriage has moved, last print line is above upper scribe line
        on carriage.
        — Disengage carriage clutch.
        — Use knob on right end of carriage to back up forms until first
           line on form is positioned between scribe lines.
        — Press CARRIAGE RESTORE key.
        — Engage carriage clutch.
        — Press CARRIAGE SPACE key until the last line of print is
           between the scribe lines.
        — If your printer has the dual feed carriage feature and two forms
           are being used, both forms must be repositioned. Unequal length
        — forms must maintain the same relative position after repositioning
           that they had when the error occurred.
4.   Close rear unit.
5.   Close top cover.
6.   Press printer START.

19

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61

(continued)

For 1403 Printer:

1. Press printer CHECK RESET key.
2. Open printer top cover.
3. Turn FEED clutch to NEUTRAL. For Model N1 skip to step 5.
4. Unlock and swing back print unit by pulling print unit release lever toward you. Unlatch ribbon guide bar from print unit and swing it against forms.

5. Check last line of print by turning paper advance knob forward:

    Model 2: Three lines spaces if in 6-line neutral or four line spaces if in 8-line neutral.

    Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

    — If carriage has not moved (last print line is just visible above the ribbon guide bar) turn paper advance knob backwards:

    Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

    Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

    Turn FEED CLUTCH to DRIVE. Go to step 6.

    — If carriage has moved, position last line printed so that it is just visible above ribbon guide bar. Now turn paper advance knob backwards:
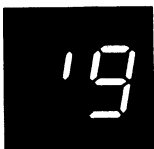
    Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

    Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

    Note line on form that is just visible above ribbon guide bar. This is your print stop line.

    Turn paper advance knob backwards until first line of form is just visible above ribbon guide bar. Now turn paper advance knob backwards:

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(continued)

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Press CARRIAGE RESTORE key and turn FEED CLUTCH to DRIVE.

Using CARRIAGE SPACE key advance form until print stop line is just visible above ribbon guide bar.
6.   Close printer top cover.
7.   Press printer START.

Printing continues with no loss of data or carriage information.

Recovery 3: Immediate cancel.

63

13

Reason: An error has occurred during console output to the printer. For the 5203 Printer, the paper forms have jammed in the print area. For the 1403 Printer, the forms have jammed causing a misalignment in the print line, or the CARRIAGE STOP key was pressed.

Recovery 1: For the 5203 printer:

1.   Open printer top cover.
2.   Open rear unit.
3.   Clear forms jam.
4.   Disengage carriage clutch.
5.   Position new form at first print line. The program will skip to the line where the jam was detected.
6.   Press CARRIAGE RESTORE key.
7.   Engage carriage clutch.
8.   Close rear unit.
9.   Close top cover.
10.   Press printer START.

Printing continues on the new form at the line on which the forms jam was detected. If the forms jam occurred before the carriage stopped, the forms may be positioned on the wrong line. This will be corrected when the next skip command is issued.

Note: If your printer has the dual feed carriage feature and two forms are being used, both forms must be repositioned. Position both forms at the first print line of the form that was being printed when the error occurred.

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` 63 `

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For the 1403 printer:

1. Press printer CHECK RESET key.
2. Open printer top cover.
3. Turn FEED CLUTCH to NEUTRAL.
4. Unlock and swing back print unit by pulling print unit release lever toward you.
5. If form was damaged, clear damaged form. Unlatch ribbon guide bar from print unit and swing it against forms. Reposition next good form by using paper advance knob so that line 1 of next good form is just visible above ribbon guide bar. Now go to step 6.

   If form was not damaged, unlatch ribbon guide bar from print unit and swing it against forms. Reposition undamaged form by using paper advance knob so that line 1 of undamaged form is just visible above ribbon guide bar.
6. Turn paper advance knob backwards:

   Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

   Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

7. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.
8. Press CARRIAGE RESTORE key and then turn FEED CLUTCH to DRIVE.
9. Close printer top cover.
10. Press printer START.

Recovery 3: Immediate cancel.

` 65 `

03

Reason: An error has occurred during console output to the printer. For the 5203 Printer, a printer synchronous check has occurred. The mechanical and electrical operations of the printer are not working together. Two lines may contain print errors. If this halt continues to occur, contact IBM for hardware support. For the 1403 Printer, a chain synchronous check was caused by the loss of attachment synchronization with the chain.

Recovery 0: For the 5203 Printer, press printer START. For the 1403 Printer, press the printer CHECK RESET key. Processing continues. It is not possible to correct the characters that are printed wrong.

3: Immediate cancel.

'9

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66   13   **Reason:** An error has occurred during console output to the printer. For the 5203 Printer, a printer incrementer failure check has occurred. The print hammers were not moved to the next group of print positions. If this halt continues to occur, contact IBM for hardware support.

For the 1403 Printer, a print data check has been caused by faulty transfer of information to or from the printer attachment buffer.

Recovery 1: For the 5203, press printer START. For the 1403, follow the 1403 recovery procedures for halt 38. Information on line will be printed with no loss of data.

        3: Immediate cancel.

67   03   **Reason:** Printer thermal check during console output. Hammer unit area on printer is overheated. If this halt continues to occur, contact IBM for hardware support.

Recovery 0: Press printer START. Processing continues.

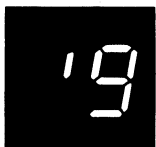   **3:** Immediate cancel.

68   13   **Reason:** An error has occurred during console output to the printer. For the 5203 Printer, a printer check has occurred. One character may be printed wrong. For the 1403 Printer, a hammer echo check has occurred because of an improper hammer driver response during print time, or an any hammer on check has occurred because a hammer turned on when hammer set pulse was generated by the attachment.

If this halt continues to occur, contact IBM for hardware support.

Recovery 1: For the 5203 Printer, follow the 5203 recovery procedures for halt 31. For the 1403 printer:

1. Press printer CHECK RESET key.
2. Check for FORMS CHECK light on. If it is off, go to step 7.
3. Open printer top cover.
4. Turn FEED CLUTCH to NEUTRAL. For Model N1 skip to step 6.
5. Unlock and swing back print unit by pulling print unit release lever toward you. Unlatch ribbon guide bar from print unit and swing it against forms.

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6.   Position last line printed so that it is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line neutral or four line spaces if in 8-line neutral.

Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Note line on form that is just visible above ribbon guide bar. This is your print stop line.

Turn paper advance knob backwards until first line of form is just visible above ribbon guide bar. Now turn paper advance knob backwards:

Model 2: Three line spaces if in 6-line netural or four line spaces if in 8-line neutral. Close and lock print unit. Be sure to push print unit release lever as far back as it can go.

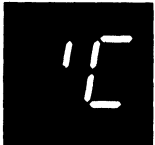Model N1: Four line spaces if in 6-line neutral or five line spaces if in 8-line neutral.

Press CARRIAGE RESTORE key and turn FEED CLUTCH to DRIVE.

Using CARRIAGE SPACE key advance form until the print stop line is just visible above the ribbon guide bar.

7.   Close printer top cover.

8.   Press printer START.

Processing continues. It is not possible to correct the character that is printed wrong.

Recovery 3: Immediate cancel.

3   **Reason:** Work file space is too small or not available.

AS'COB   Object file space too small. Increase the space specification on the $WORK FILE card.

AS'CSC   End-of-file encountered on source file. Check for proper use of // SWITCH statement when macroprocessor step has not preceded the assembly. If // SWITCH statement is proper, contact IBM for programming support.

AS'CWK   Work file space too small or is not available. If not using $WORK2 FILE card, add one. If using $WORK2 FILE card, increase the space specification.

Recovery 3: Immediate cancel.

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02   **Reason:** DECK and/or OBJ has been specified in the assembler option and there have been one or more assembler syntax errors diagnosed.

AS'EAE   **Recovery 0:** Continue processing DECK and/or OBJ function.

2: Controlled cancel.

---

23   **Reason:** Program is requesting the ledger card device. This device is not supported by the IBM System/3 Model 10 Disk System.

Probable user error.

CI'J   **Recovery 2:** Controlled cancel.

3: Immediate cancel. This program must be run on an IBM System/3 Model 6 System.

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3   **Reason:** System module on $WORK file missing.

EB'L   Pass 1 overlay routines are not online.

EB'LWF $WORK file not supplied.

EG'L   Pass 2 overlay routines are not online.

EK'L   Library output overlay routines are not online.

Recovery 3: Immediate cancel. Contact IBM for programming support.

'P

Reason: Error detected by Overlay Linkage Editor. The subhalt or the log indicates the reason for the halt.

01   EO'P01   03   **Reason:** Error in PHASE statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

02   EO'P02   03   **Reason:** Error in OPTIONS statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

03   EO'P03   03   **Reason:** Mutually exclusive attributes are specified in the OPTIONS statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

04   EO'P04   03   **Reason:** Error in INCLUDE statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

05   EO'P05   03   **Reason:** Error in CATEGORY statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

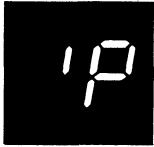**06**   EO'P06   03   **Reason:** Error in GROUP statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

       3: Immediate cancel.

⌐P

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	LOG	OPTIONS	
07	EO'P07	03	

Reason: Either an invalid statement identifier has been used for this program, or columns 1-3 are not //.

Probable user error.

Recovery 0: Continue. The statement is ignored.

     3: Immediate cancel.

08	EO'P08	03	

Reason: Too many PHASE or OPTIONS statements have been used. Only one of each is allowed.

Probable user error.

Recovery 0: Continue. The statement is ignored.

     3: Immediate cancel.

09	EO'P09	03	

Reason: Error in EQUATE statement.

Probable user error.

Recovery 0: Continue. The statement is ignored.

     3: Immediate cancel.

10	EO'P10	013	

Reason: The library does not exist on the specified pack.

Probable user error.

Recovery 0: Continue. The statement is ignored.

     1: Retry. Mount another pack.

     3: Immediate cancel.

11	EO'P11	3	

Reason: A card in the object (R) deck is out of sequence.

Probable user error.

Recovery 3: Immediate cancel.

'P

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12   EO'P12   013   **Reason:** A module specified on the INCLUDE card was not found.

Probable user error.

Recovery 0: Continue. The module name is ignored.

1: Retry. Mount another pack.

3: Immediate cancel.

13   EO'P13   03   **Reason:** Unit R2 is not supported.

Probable user error.

Recovery 0: Continue. The statement is ignored.

3: Immediate cancel.

14   EO'P14   03   **Reason:** Unit F2 is not supported.

Probable user error.

Recovery 0: Continue. The statement is ignored.

3: Immediate cancel.

15   EO'P15   3   **Reason:** An object (R) module was not included to link edit.

Probable user error.

Recovery 3: Immediate cancel.

16   EO'P16   03   **Reason:** An entry point name on the OPTIONS card was not found.

Probable user error.

Recovery 0: Continue. The standard entry point will be used.
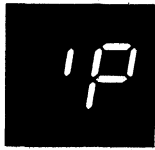
3: Immediate cancel.

17   EO'P17   3   **Reason:** The program has run out of work area in $WORK.

Probable user error.

Recovery 3: Immediate cancel.

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HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

'P

(continued)

18   EO'P18   3   **Reason:** The program has run out of work area in $SOURCE.

Probable user error.

Recovery 3: Immediate cancel.

19   EO'P19   3   **Reason:** Error in the compiler output in $WORK.

Contact IBM for programming support.

Recovery 3: Immediate cancel.

20   EO'P20   3   **Reason:** The object text is out of sequence. An ORG instruction has caused code to overlay other code.

Probable user error.

Recovery 3: Immediate cancel.

21   EO'P21   3   **Reason:** Invalid ESL record in the S record.

Contact IBM for programming support.

Recovery 3: Immediate cancel.

22   EO'P22   3   **Reason:** Invalid RLD.

Contact IBM for programming support.

Recovery 3: Immediate cancel.

23   EO'P23   3   **Reason:** There is an unresolved EXTRN to an entry point.

Probable user error.

Recovery 3: Immediate cancel.

24   EO'P24   3   **Reason:** A check sum error has occurred in an object (R) module card. The error may have occurred because information was punched into a prepunched card or because the user changed the card. All cards in object decks have a self-check number in columns 86-88.

Recovery 3: Immediate cancel.

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│ ¹P │
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(continued)

25	EO'P25	3	**Reason:** A module was not found during AUTOLINK.

Probable user error.

Recovery 3: Immediate cancel.

26	EO'P26	3	**Reason:** The program will not fit in the maximum storage size.

Probable user error.

Recovery 3: Immediate cancel.

27	EO'P27	03	**Reason:** The program will not fit in the specified storage size.

Recovery 0: Continue. The program requires the storage size shown in the core usage map.

Note: If the storage size was not specified on the OPTIONS card, the storage size is the partition size.

      3: Immediate cancel.

28	EO'P28	3	**Reason:** There are more than 400 entry points and module names in the combination of the root and one overlay.

Probable user error.

Recovery 3: Immediate cancel.

30	EO'P30	3	**Reason:** Mutually exclusive attributes are on the included object (R) modules.

Probable user error.

Recovery 3: Immediate cancel.

31	EO'P31	03	**Reason:** A module was read from the SYSIN device or named on an INCLUDE statement but it was not referenced by an EXTRN statement in the object module.

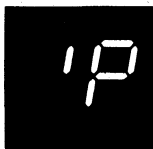**Recovery 0:** Continue.

      3: Immediate cancel.

32	EO'P32	03	**Reason:** The mainline module is named in a GROUP or CATEGORY card.

Recovery 0: Continue.

      3: Immediate cancel.

'P

(continued)

33	EO'P33	03	**Reason:** A module in a GROUP card has a category value from 0 to 7.

    Recovery 0: Continue. The GROUP card is ignored.

            3: Immediate cancel.

34	EO'P34	03	**Reason:** The module named in the GROUP or CATEGORY card was not included.

    Recovery 0: Continue.

            3: Immediate cancel.

35	EO'P35	3	**Reason:** A module with a category from 1 to 7 has called a module with a different category.

    Recovery 3: Immediate cancel.

36	EO'P36	03	**Reason:** Duplicate module names or entry points have been found. If only one of the duplicates is in the core usage map, a duplicate module has been dropped.

    Probable user error.

    Recovery 0: Continue.

            3: Immediate cancel.

37	EO'P37	3	**Reason:** The first ESL record was not the module name.

    Contact IBM for programming support.

    Recovery 3: Immediate cancel.

38	EO'P38	3	**Reason:** An invalid ESL number was found in the text.

    Contact IBM for programming support.

    Recovery 3: Immediate cancel.

39	EO'P39	3	**Reason:** An unrecognized card has been found in $WORK or in the library.

    Contact IBM for programing support.

    Recovery 3: Immediate cancel.

40	EO'P40	3	**Reason:** More than 254 overlays or program exceeds 64K.

    Probable user error.

    Recovery 3: Immediate cancel.

`IP`

(continued)

|			
`41`	EO'P41	03	**Reason:** Continuation is indicated on the control statement, but continuation is not allowed by this program. Probable user error. **Recovery 0:** Continue. The statement is ignored. **3:** Immediate cancel.
`42`	EO'P42	3	**Reason:** The entry point is not relative zero for a module with COMMON. Probable user error. **Recovery 3:** Immediate cancel.
`43`	EO'P43	3	**Reason:** FILE cards were omitted and work space was not found on F1 or R1. Probable user error. **Recovery 3:** Immediate cancel.
`99`	EO'P99	3	**Reason:** Incorrect error code. Contact IBM for programming support. **Recovery 3:** Immediate cancel.
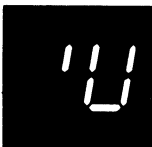
`U`	EJ'U04	3	**Reason:** Compiler output error. There is no text in the output file. **Recovery 3:** Immediate cancel.

`Y`
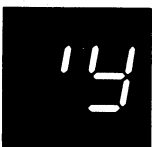
Reason: An error has been detected by the MULTI-LEAVING Remote Job Entry program. The logged error code and message indicate the reason for the halt.

Note: If recovery option 2 indicates that a failing task is deactivated, the other tasks of the MRJE/WS remain active when the option is selected.

MW'YCC   01   **Reason:** The CARRIAGE command is invalid. The message logged for this error is: INVALID CARRIAGE COMMAND.

Recovery 0: The command is ignored. If the command was entered from the reader, continue reading from the same device. If the command was in a READFILE, input from the READFILE will continue.

         1: The command is ignored. If the command was entered from the reader, begin reading from the primary reader.

MW'YCD 12

Reason: A line has been disconnected. If the SIGNON command was just entered, the disconnect may have been caused by an invalid format. See appropriate central system facilities manual for proper format. The message logged for this error is COMMUNICATIONS WITH CENTRAL DISCONNECTED.

(continued)

Recovery 1: Retry. Re-dial the line. An attempt is made to re-establish the connection.

2: Controlled cancel.

MW'YDS 12

Reason: The line connection with the central system has not been made. The message logged for this error is:

$$
\text{NO CONNECTION}: \left\{ \begin{array}{l} \text{MANUAL DIAL} \\ \text{AUTOCALL} \\ \text{PT TO PT} \end{array} \right\}
$$

For manual dial — Connection not made within approximately two minutes.

For auto call — 1. Connection not made within approximately two minutes or
2. "Abandon and Retry" signal received from Auto Call Unit.

For Point to Point — Line is not properly connected.

Recovery 1: Retry. For switched line, attempt to establish connection within two minutes of time this option is taken.

For Point to Point, check line connections.

**2:** Controlled cancel.

MW'YEE 02

Reason: End-of-extent has occurred while writing a permanent disk file. The message logged for this error is: END-OF-EXTENT CREATING PERMANENT FILE filename, where "filename" indicates the file on which end-of-extent has occurred.

Recovery 0: Deactivate the printer or punch task. The VTOC is updated with the specified filename.

2: Deactivate the printer or punch task. The VTOC is not updated.

```
 ┌─────────┐
 │ ╷ ╷ ╷╷  │
 │ ╵ ╵ ╵   │
 └─────────┘
```
          MW'YEC   0
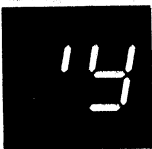
(continued)

Reason: End-of-extent or an I/O error has occurred during an attempt to create a temporary printer output file. This halt replaces MW006 and/or MW0020 if the console is assigned as the printer.

Recovery 0: Processing continues just as if the MW0006 message or the MW0020 message has been printed. See the *IBM System/3 MULTI-LEAVING Remote Job Entry Work Station Support Reference Manual,* GC21-7621, Appendix B, for recovery procedures.

          MW'YFM   01

Reason: The error has occurred for one of the following reasons:

1.   A request to mount forms has been received. The message logged for this error is: MOUNT FORMS nnnn ON device name, where "nnnn" indicates the forms to be loaded and "device name" indicates the device on which to load them.

2.   A request to mount forms has been received while the device is spooling to disk or tape. The message logged for this error is: FORMS MOUNT nnnn ON devicename SUSPENDED, where "nnnn" indicates the forms to be loaded and the "device name" indicates the device on which to load them.

Recovery 0: Continue. The MRJE/WS Program issues a central system START command to start the output.

   1: MRJE/WS Program does not send a START command to the central system. The operator must issue the start command.

Note: If it is necessary for the current output to be onform the operator should select option 1 and issue a command to hold the job.

          MW'YIC   01

Reason: An invalid command has been entered from the reader or console. The message logged for this error is: INVALID COMMAND parameter, where "parameter" indicates the invalid command.

Recovery 0: Continue. The command is ignored. If the command was entered from the reader, continue reading from the same device. If the command was in a READFILE, input from the READFILE will continue.

   1: The command is ignored. If the command was entered from the reader, begin reading from the primary reader.

          MW'YIP   01

Reason: A parameter in the CONFIG command is invalid. The message logged for this error is: INVALID PARAMETER IN CONFIG COMMAND.

Recovery 0: Continue. The command is ignored. If the command was entered from•the reader, continue reading from the same device. If the command was in a READFILE, input from the READFILE will continue.

   1: The command is ignored. If the command was entered from the reader, begin reading from the primary reader.

MW'YIR   01   **Reason:** The error has occurred for one of the following reasons:

1. The READFILE command is invalid. The message logged for this error is: INVALID READFILE COMMAND parameter, where "parameter" specifies the READFILE name (if entered).

2. A READFILE command has been entered and there are not deferred mount units available for mounting the requested volume. The message logged for this error is: READFILE filename NO DEFERRED MNT. UNITS AVAILABLE, where "filename" specifies the read file name.

Recovery 0: The command is ignored. Continue reading from the same device. If the command was in a READFILE, input from the READFILE will continue.

   1: The command is ignored. Begin reading from the primary reader.

(continued)

MW'YIU   01   **Reason:** The error has occurred for one of the following reasons:

1. A CARRIAGE command has been issued and the printer is being used.

2. A CONFIG command has been issued and:

   a. It references a reader, printer, punch, or console that is busy or being used by the other program level (System/3 Model 10 Dual Programming Feature only).

   b. The scheduler work area is interlocked.

The message logged for these errors is: DEVICE/PROCESSOR/SWA IN USE.

Recovery 0: The command is ignored. Continue reading from the same device. If the command was from a READFILE, input from the READFILE will continue.

   1: The command is ignored. If the command is entered from the reader, begin reading from the primary reader.

MW'YLF   012

(continued)

Reason: The error has occurred for one of the following reasons:

1.   A disk pack or tape reel is to be mounted for a deferred mount READFILE request. The message logged for this error is:

MOUNT $\left\{ \begin{array}{l} \text{reel ID} \\ \text{pack ID} \end{array} \right\}$ ON unit, where $\left\{ \begin{array}{l} \text{reel ID} \\ \text{pack ID} \end{array} \right\}$ indicates

the pack or reel ID and "unit" indicates the unit on which to mount the disk or tape.

Note: If the halt occurs for the preceding reason, recovery options 0 and 1 are the only options that can be taken.

2.   A standard label scratch tape is to be mounted in response to a forms mount request to create a permanent output tape file. The message logged for this error is: MOUNT SCRATCH ON unit, where "unit" indicates the unit on which to mount the tape.

3.   A standard label scratch tape is to be mounted in response to a request for temporary tape output (PR1-T or PU1-T on CONFIG command).

4.   A standard label scratch tape is to be mounted in response to an end-of-extent condition which occurred while creating a temporary or permanent tape file.

Recovery 0: For reason 1: Continue READFILE processing. The reader waits until the unit is ready.

For reason 2: Continue. The MRJE program issues a command to start the output. The dates of the tape label are checked, and if the tape contains an unexpired file, the tape is unloaded and another scratch tape is requested.

For reasons 3, 4: Continue. The dates of the tape label are checked, and if the tape contains an unexpired file, the tape is unloaded and another scratch tape is requested.

1: For reason 1 only: The mount message is ignored. The system begins reading from the primary reader.

2: For reason 2 only: A start command is issued to the central processor. The dates of the tape label are not checked.

3 and 4: For reasons 3 and 4: The dates of the tape label are not checked.

MW'YNF   1

Reason: The file or member specified on the READFILE command cannot be found on the disk or tape. The message logged for this error is: READFILE filename FILE NOT FOUND.

Recovery 1: Retry. Begin reading from the primary reader and allow the operator to correct and re-enter the READFILE command.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

MW'YPE **0**

Reason: Output to the printer cannot be completed because the printer is not ready. The normal device intervention message (MW0021) cannot be displayed on the console because the printer is currently assigned as the console output device.

(continued)

Recovery 0: Ready the printer and retry the output operation.

MW'YUC **12**

Reason: A unit check has occurred on BSCA while attempting to establish communication with the central processor. The message logged for this error is: BSCA UNIT CHECK ON ENQ.

Recovery 1: Retry. An attempt is made to retry the ENQ operation.

2: Controlled cancel.

MW'YUD **01**

Reason: A device specified in the CONFIG command is not supported by System/3 or by MRJE/WS. The message logged for this error is: UNSUPPORTED DEVICE IN CONFIG COMMAND.

Recovery 0: The command is ignored. If the command was entered from the reader, continue reading from the same device. If the command was entered from a READFILE, input from the READFILE will continue.

1: The command is ignored. If the command was entered from the reader, begin reading from the primary reader.

03
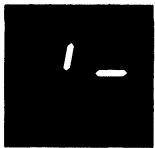
Reason: The halt occurred for one of the following reasons:

1. There are no records in the input file.

2. No records have been selected from the input file.

Recovery 0: Continue. The output file will be allocated, opened, and closed, and no records will be written.

Recovery 3: Immediate cancel.

HALT/SUBHALT	LOG	OPTIONS	REASON AND RECOVERY

OPTIONS: 3

Reason: System or program errors. The following message will be printed indentifying the error.

Error XX in phase NNN.

Where XX is the error number and NNN is the phase number where the error occurred.

EK"

Recovery 3: Immediate cancel.

Read the following items to determine what action to take. A list of all the messages follows item 3.

1. ` If you were compiling an RPG II program when the halt occurred, the following error messages are the ones for which you may be able to take corrective action.

    04— ALLOCATE MORE CORE STORAGE FOR THE PROGRAM ON THE HEADER CARD.
    05— INCREASE THE SIZE OF THE WORK FILE OR REDUCE THE SIZE OF THE PROGRAM.
    08— LOCATE CORE USAGE OF RPG II CODE ON THE PRINT-OUT. THEN LOCATE THE FOUR ASTERISKS - ****- UNDER CODE LENGTH. THE NAME OF THE MISSING ROUTINE WILL BE PRINTED THERE. PRINT THE OBJECT LIBRARY DIRECTORY. IF THE REQUESTED MODULE IS NOT THERE, PLACE MISSING MODULE IN OBJECT LIBRARY AND RERUN THE JOB. IF THE MISSING MODULE IS A SYSTEM MODULE, YOU MAY HAVE TO GENERATE YOUR SYSTEM AGAIN. IF THE REQUESTED MODULE IS IN THE OBJECT LIBRARY OR IF YOU DO NOT HAVE THE REQUESTED SYSTEM MODULE, CONTACT IBM FOR PROGRAMMING SUPPORT.
       A.   CHANGE THE NAME OF THE CURRENT SOURCE MODULE OR,
       B.   DELETE THE PERMANENT LOAD MODULE.

    If any other error messages were printed, contact IBM for programming support.

2. If you are performing system generation and this halt occurred, contact IBM for programming support.

3. If you were not compiling an RPG II program or generating a system when this halt occurred, contact IBM for programming support.

The following is a complete list of the error numbers and the reason for the errors.
    00— THE FIRST RECORD GENERATED WAS NOT A PHASE RECORD.
    01— THE PHASE NAME GENERATED IS GREATER THAN SIX CHARACTERS OR THERE IS NO PHASE NAME.
    02— THE PHASE ORIGIN ADDRESS IS INVALID OR MISSING.
    03— RPG II COMPILER GENERATED MORE THAN 128 PHASE RECORDS.
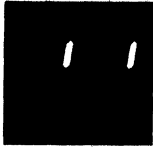
(continued)

04— EXTERNAL SYMBOL LIST TABLE GENERATED EXCEEDS STORAGE.

05— THE $WORK FILE IS TOO SMALL.

06— RPG II COMPILER INCLD NAME IS INVALID OR MISSING.

07— DUPLICATE INCLD RECORDS IN THE SAME PHASE.

08— A SYSTEM ROUTINE REQUESTED IS NOT AVAILABLE OR A USER SUBROUTINE REQUESTED IS NOT AVAILABLE.

09— START CONTROL POINT GIVEN IN ENTRY RECORD IS NOT VALID.

10— MORE THAN ONE ENTRY RECORD IN THE SAME PHASE.

11— INVALID OPTIONAL PHASE RECORD PARAMETER.

12— INVALID OPTNS RECORD PARAMETER.

13— MORE THAN ONE OPTNS RECORD IN THE SAME PHASE.

14— INVALID INPUT RECORD TYPE.

15— UNRESOLVED EXTRN IN RPG II OBJECT CODE OR A ROUTINE WAS RENAMED OR NEWNAMED.
TEXT RECORDS ARE OUT OF SEQUENCE OR TEXT LENGTH EXCEEDS S RECORD SPECIFICATIONS.

16— TEXT RECORDS ARE OUT OF SEQUENCE.

17— LOAD MODULE HAS AN UNRESOLVED EXTERN.

18— DUPLICATE MODULE NAME OR ENTRY POINT IN EXTERNAL SYMBOL LIST RECORD FOR ONE PHASE.

19— ATTEMPTING TO REPLACE A PERMANENT LIBRARY ENTRY WITH ANOTHER ENTRY HAVING THE SAME NAME.
EXTERNAL SYMBOL LIST RECORD FOR ONE PHASE.

20— INPUT TEXT RECORD IS TOO LARGE.

21— RELOCATION POINTER VALUE IS GREATER THAN THE LENGTH OF THE TEXT.

22— /* -END OF FILE- INDICATOR NOT FOUND IN THE WORK -$WORK- FILE.

23— OVERLAY FETCH TABLE REFERENCED IN A NON-OVERLAY PROGRAM.

24— FILE WORK SPACE TOO SMALL. FOR RPG INCREASE SIZE OF $SOURCE FILE; FOR ALL OTHER PROGRAMS DELETE UNUSED FILES FROM R1 OR F1.
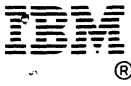
IBM

Technical Newsletter

IBM System/3
Models 8 and 10
Halt Guide

This technical newsletter applies to all current versions and modifications of the System/3 Model 10 Disk System, Program Number 5704-SC1, and provides replacement pages for the subject publication. These replacement pages remain in effect for subsequent versions and modifications unless specifically altered. Pages to be inserted and/or removed are:

9, 10
11 through 14
125, 126
141, 142
143, 144 (text rearranged)
147, 148
221,222
241,242

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

Summary of Amendments

- Miscellaneous technical changes

Note: Please file this cover letter at the back of the manual to provide a record of changes.
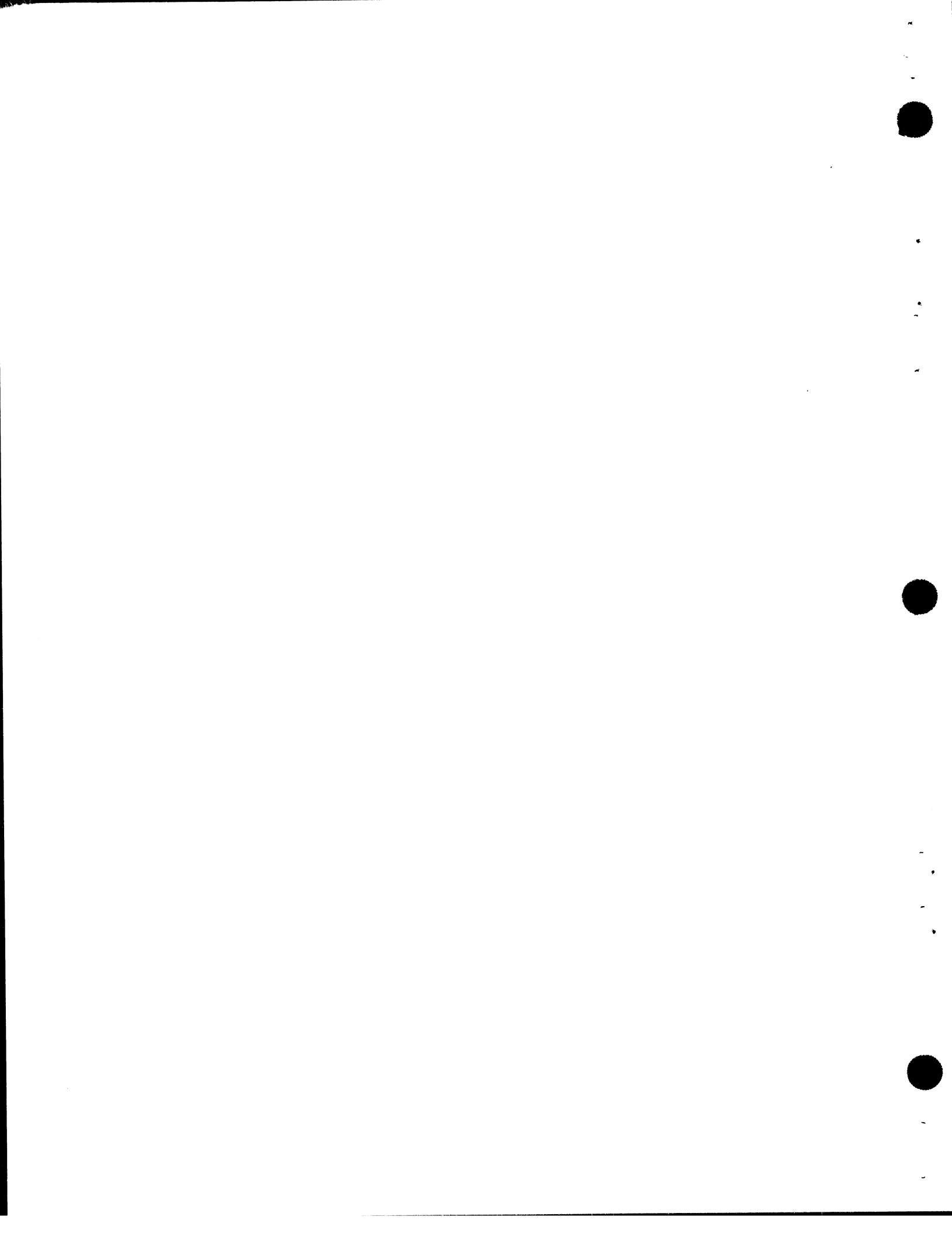
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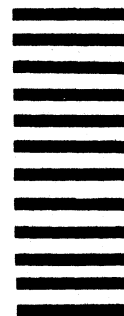
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