The graPHIGS Programming Interface: Messages and Codes

SC33-8196-03

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Note
Before using this information and the product it supports, read the information in Appendix D, “Notices,” on page 131.

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This edition applies to the following IBM program products: the GDDM/graPHIGS Programming Interface, Version 2, Release 2.5, Program Number 5688-093, the AIXwindows Environment/6000 (1.2.5) AIXwindows/3D feature, Program Number 5601-257, and any subsequent offerings until otherwise indicated in new editions or technical newsletters.

List of Device-Independent Messages

1 FUNCTION REQUIRES STATE PHCL
2 FUNCTION REQUIRES STATE PHOP
3 FUNCTION REQUIRES STATE WSOP
4 FUNCTION REQUIRES STATE STOP
5 FUNCTION REQUIRES STATE STOP OR NROP (NOT STCL)
7 FUNCTION REQUIRES STATE AROP
11 FUNCTION REQUIRES STATE STCL
12 FUNCTION REQUIRES STATE SSSL
13 FUNCTION REQUIRES STATE SSOP
14 FUNCTION REQUIRES STATE WSSL
15 FUNCTION REQUIRES STATE NROP
16 FUNCTION REQUIRES STATE STCL OR STOP (NOT NROP)
21 CONNECTION IDENTIFIER IS INVALID
23 SPECIFIED WORKSTATION TYPE DOES NOT EXIST
24 SPECIFIED WORKSTATION IDENTIFIER ALREADY IS IN USE
25 SPECIFIED WORKSTATION DOES NOT EXIST
26 SPECIFIED WORKSTATION CANNOT BE OPENED
35 WORKSTATION HAS ONLY INPUT CAPABILITIES
37 WORKSTATION IS NOT OF CATEGORY OUTIN
38 WORKSTATION HAS ONLY OUTPUT CAPABILITIES
39 WORKSTATION NOT AVAILABLE FOR EXPLICIT CONTROL
41 WORKSTATION TYPE CANNOT GENERATE SPECIFIED GDP
43 BUNDLE INDEX EXCEEDS WORKSTATION TABLE CAPACITY
44 INVALID WINDOW DEFINITION
47 HATCH INDEX EXCEEDS WORKSTATION TABLE CAPACITY
48 PATTERN INDEX EXCEEDS WORKSTATION TABLE CAPACITY
49 COLOR INDEX EXCEEDS WORKSTATION TABLE CAPACITY
50 DATA MAPPING INDEX EXCEEDS WORKSTATION TABLE CAPACITY
55 PRP IS POSITIONED ON THE VIEW PLANE
56 SPECIFIED VECTOR HAS LENGTH ZERO
58 UP AND PLANE NORMAL VECTORS ARE PARALLEL
59 VIEW INDEX VALUE < ZERO
60 BUNDLE INDEX VALUE < ONE
61 LENGTH IS INVALID
62 NUMBER OF LINE PATTERN SECTIONS IS INVALID
63 LINETYPE VALUE < ONE
64 SPECIFIED LINETYPE NOT AVAILABLE ON WORKSTATION
65 CURVE APPROXIMATION CRITERIA IS INVALID
66 CONTROL VALUE < ZERO
67 POLYHEDRON EDGE CULLING MODE IS INVALID
69 MARKER TYPE VALUE < ONE
70 SPECIFIED MARKER TYPE NOT AVAILABLE ON WORKSTATION
71 FIELD IN DEFINITION DATA IS INVALID
75 TEXT FONT VALUE IS INVALID
76 CHARACTER LINE SCALE FACTOR < ZERO
77 CHARACTER EXPANSION FACTOR <= ZERO
78 CHARACTER HEIGHT VALUE <= ZERO
79 CHARACTER UP VECTOR HAS LENGTH ZERO
80 CHARACTER UP AND BASE VECTORS ARE COLINEAR
81 CHARACTER POSITIONING MODE IS INVALID
82 ANNOTATION STYLE IS INVALID
83 INTERIOR STYLE NOT AVAILABLE ON WORKSTATION
84 INTERIOR STYLE INDEX VALUE < ONE

85 PATTERN INDEX VALUE < ONE
86 SURFACE APPROXIMATION CRITERIA IS INVALID
87 POLYGON CULLING MODE IS INVALID
88 FACE DISTINGUISH MODE IS INVALID
89 HATCH INDEX < ONE
90 INTERIOR STYLE NOT SUPPORTED ON WORKSTATION
91 STARTING POINT OR DIMENSION < ONE
92 COLOR INDEX < ZERO
93 COLOR INDEX VALUE(S) EXCEED WORKSTATION TABLE CAPACITY
94 ERROR HANDLING MODE IS INVALID
95 POLYLINE SHADING METHOD IS INVALID
96 COLOR PARAMETER OUT OF RANGE FOR CURRENT COLOR MODEL
97 COLOR FORMAT PARAMETER IS INVALID
98 CONVEXITY CHECKING MODE IS INVALID
100 NUMBER OF POINTS < ZERO
101 NUMBER OF SPHERES < ZERO
102 PARAMETRIC SURFACE CHARACTERISTICS TYPE IS INVALID
103 PARAMETRIC SURFACE CHARACTERISTICS DATA IS INVALID
105 GEOMETRIC TEXT CULLING DISPLAY METHOD IS INVALID
106 GEOMETRIC TEXT CULLING HEIGHT < ZERO
107 REFERENCE VECTORS ARE COLINEAR
108 NUMBER OF CHARACTERS IN TEXT STRING < ZERO
110 REFLECTANCE MODEL IS INVALID
111 AMBIENT COEFFICIENT IS INVALID
112 DIFFUSE COEFFICIENT IS INVALID
113 SPECULAR COEFFICIENT IS INVALID
114 SPECULAR EXPONENT IS INVALID
115 TRANSPARENT COEFFICIENT IS INVALID
116 NUMBER OF LIGHT SOURCE INDEXES < ZERO
118 FRAME BUFFER COMPARISON IS INVALID
119 FRAME BUFFER COMPONENT NUMBER IS INVALID
120 WARNING, ONE OR MORE STRUCTURES DO NOT EXIST
121 EDIT MODE IS INVALID
122 STRUCTURE IDENTIFIER DOES NOT EXIST
123 CONDITION CRITERIA IS INVALID
124 EXECUTE MODE IS INVALID
125 ATTEMPTING TO EXECUTE THE OPEN STRUCTURE
126 PRIORITY VALUE IS INVALID
127 CONFLICT RESOLUTION FLAG IS INVALID
128 STRUCTURE CONFLICT OCCURS WHEN RESOLUTION FLAG IS ABANDON
129 ATTEMPTING TO HAVE THE RESULTING STRUCTURE EXECUTE ITSELF
130 LABEL IDENTIFIER CANNOT BE FOUND IN THE OPEN STRUCTURE
132 ELEMENT CODE DOES NOT EXIST BEFORE END OF STRUCTURE
133 LABEL DELETE OPTION IS INVALID
134 NUMBER OF ENTRIES IN LIST < ONE
135 VALUE OF SOURCE IS INVALID
136 VALUE OF SEARCH FLAG IS INVALID
137 VALUE OF CONDITIONAL EDIT FLAG IS INVALID
138 STARTING ELEMENT CANNOT BE FOUND
139 SEARCH METHOD IS INVALID
140 DEVICE NUMBER < ONE OR DEVICE NOT AVAILABLE
141 INPUT DEVICE NOT IN CORRECT MODE
142 VALUE OF ARCHIVE FLAG IS INVALID
143 OPTION VALUE IS INVALID
144 PROMPT/ECHO TYPE NOT AVAILABLE ON WORKSTATION

145 ECHO AREA BOUNDARY VALUE IN ERROR
146 FIELD IN INPUT DEVICE DATA RECORD IN ERROR
147 EVENT QUEUE HAS OVERFLOWED
148 EVENT QUEUE HAS NOT OVERFLOWED
150 GET FUNCTION DOES NOT MATCH CURRENT EVENT CLASS
151 TIMEOUT VALUE < ZERO
152 INITIAL CHOICE VALUE < ZERO OR IS INVALID
155 VIEW PRIORITY REFERENCE NUMBER IS INVALID
156 PICK PATH ORDER IS INVALID
158 INVALID ELEMENTS IN THE INITIAL PICK PATH
160 PHYSICAL INPUT DEVICE CATEGORY IS INVALID
161 PHYSICAL INPUT VALUE IS INVALID
162 PHYSICAL INPUT DEVICE HAS NOT BEEN DISABLED
163 PHYSICAL DEVICE MODE IS INVALID
164 PICK DEVICE DOES NOT PROVIDE EXTENDED INFORMATION
166 INITIAL PICK CORRELATION STATE IS INVALID
167 PICK SELECTION CRITERIA IS INVALID
168 INPUT DEVICE IS CURRENTLY OWNED BY ANOTHER CONNECTION
169 PHYSICAL INPUT DEVICE CANNOT BE DISABLED
177 ORIGIN PARAMETER IS INVALID
178 DATATYPE PARAMETER IS INVALID
179 ENVIRONMENT DESCRIPTOR IS INVALID
180 CURSOR SHAPE TYPE IS NOT SUPPORTED
181 CURSOR PIXEL ARRAY SIZE IS INVALID
183 SPECIFIED CURSOR FORMAT IS NOT SUPPORTED
197 MESSAGE STRING LENGTH < ZERO
198 NUMBER OF SUBAREAS < ZERO
199 POLYGON SUBAREA HAS < ZERO POINTS
201 SPECIFIED NUCLEUS IDENTIFIER ALREADY IS IN USE
202 SPECIFIED NUCLEUS DOES NOT EXIST
203 SPECIFIED CONNECTION METHOD IS NOT SUPPORTED
204 NUCLEUS CONNECTION FAILED
205 SHELL DEFERRAL MODE IS INVALID
206 SYNCHRONIZATION MODE IS INVALID
207 SPECIFIED APPLICATION IDENTIFIER DOES NOT EXIST
208 CONNECTION NOT CURRENTLY PERMITTED FROM THIS HOST
209 UPDATE NOTIFICATION MODE IS INVALID
210 RESOURCE CREATION DETECTED AN INVALID USERID/PASSWORD
211 RESOURCE TYPE IS INVALID
212 SPECIFIED RESOURCE IDENTIFIER DOES NOT EXIST
213 SPECIFIED PASSWORD IS INCORRECT
214 PASSWORD CANNOT BE CHANGED FROM THIS APPLICATION
215 SPECIFIED RESOURCES DO NOT EXIST ON THE SAME NUCLEUS
216 ONE OR MORE RESOURCES IS NOT ATTACHED
217 RESOURCE CREATION REQUEST EXCEEDS NUCLEUS TABLE CAPACITY
218 ARCHIVE FILES ARE NOT SUPPORTED ON SPECIFIED NUCLEUS
219 SPECIFIED ARCHIVE FILE IDENTIFIER ALEADY IN USE
220 SPECIFIED ARCHIVE FILE DOES NOT EXIST
221 SPECIFIED STRUCTURE STORE IDENTIFIER ALREADY IS IN USE
222 SPECIFIED STRUCTURE STORE DOES NOT EXIST
223 SPECIFIED STRUCTURE STORE TYPE IS NOT SUPPORTED
224 SPECIFIED VIEW DOES NOT HAVE ASSOCIATED STRUCTURE STORE
225 STRUCTURE STORE THRESHOLD SIZE < ZERO
226 MAXIMUM NUMBER OF SIMULTANEOUS ASSOCIATED WORKSTATIONS EXCEEDED
227 STRUCTURE STORE IS NOT SELECTED

231 SPECIFIED IMAGE BOARD IDENTIFIER ALREADY IS IN USE
232 SPECIFIED IMAGE BOARD DOES NOT EXIST
233 SPECIFIED IMAGE BOARD BIT DEPTH IS NOT SUPPORTED
234 SPECIFIED IMAGE BOARD SIZE IS INVALID
235 SPECIFIED IMAGE BOARD TYPE IS NOT SUPPORTED
236 RECTANGLE DEFINITION IS INVALID
237 SPECIFIED APPLICATION IMAGE FORMAT IS NOT SUPPORTED
238 SPECIFIED TWO OPERAND OPERATION IS NOT SUPPORTED
239 SPECIFIED THREE OPERAND OPERATION IS NOT SUPPORTED
240 APPLICATION IMAGE DESCRIPTION IS INVALID
241 SPECIFIED FONT DIRECTORY IDENTIFIER ALREADY IS IN USE
242 SPECIFIED FONT DIRECTORY DOES NOT EXIST
243 SPECIFIED FONT DIRECTORY TYPE IS NOT SUPPORTED
245 FONT OPTION IS INVALID
250 HLHSR IDENTIFIER IS INVALID
251 SPECIFIED HLHSR MODE IS NOT SUPPORTED
252 ANTIALIASING IDENTIFIER IS INVALID
253 SPECIFIED ANTIALIASING MODE IS NOT SUPPORTED
254 LIGHT SOURCE INDEX < ONE
255 LIGHT SOURCE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY
256 ACTIVATE LIST AND DEACTIVATE LIST ARE NOT DISJOINT
257 LIGHTING CALCULATION MODE IS INVALID
258 SPECIFIED LIGHT SOURCE TYPE IS NOT SUPPORTED
259 ONE OF LIGHT SOURCE PARAMETERS IS INVALID
260 SPECIFIED TRANSPARENT PROCESSING MODE IS NOT SUPPORTED
261 DEPTH CUE INDEX < ZERO
262 DEPTH CUE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY
263 DEPTH CUE REFERENCE PLANE IS INVALID
264 DEPTH CUE SCALE FACTOR IS INVALID
265 COLOR PROCESSING INDEX < ZERO
266 COLOR PROCESSING INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY
267 SPECIFIED RENDERING COLOR MODEL IS NOT SUPPORTED
268 SPECIFIED QUANTIZATION METHOD IS NOT SUPPORTED
269 ONE OF QUANTIZATION PARAMETERS IS INVALID
272 GROUP IDENTIFIER IS INVALID
273 NUMBER OF GROUP IDENTIFIERS < ONE
274 THIS FUNCTION IS NOT SUPPORTED BY THE WORKSTATION
275 SPECIFIED ENTRY CANNOT BE CHANGED
276 DEFINITION DATA FORMAT IS NOT SUPPORTED
277 DEFINITION DATA EXCEEDS THE WORKSTATION TABLE CAPACITY
278 CULL SIZE INDEX < ONE
279 CULL SIZE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY
280 CULL SIZE < ZERO
281 DEPTH CUE MODE IS INVALID
282 COLOR TABLE IDENTIFIER < ONE
283 COLOR TABLE IDENTIFIER ALREADY IS IN USE
284 COLOR TABLE IDENTIFIER DOES NOT EXIST
285 SPECIFIED COLOR MODEL IS NOT SUPPORTED
286 COLOR TABLE SIZE EXCEEDS THE WORKSTATION MAXIMUM
287 COLOR TABLE SIZE < ONE
288 IMAGE INDEX NOT WITHIN WORKSTATION TABLE RANGE
289 SPECIFIED COLOR TABLE CANNOT BE MODIFIED
290 SPECIFIED IMAGE INDEX IS NOT DEFINED
291 SPECIFIED IMAGE CONNECTION TYPE IS NOT SUPPORTED
292 NUMBER OF IMAGE BOARDS DOES NOT MATCH THE CONNECTION TYPE

293 CHARACTERISTICS OF THE SPECIFIED IMAGE BOARDS DO NOT MATCH
294 SPECIFIED IMAGE MAPPING METHOD IS NOT SUPPORTED
295 PIXEL OPERATION TYPE IS INVALID
296 SPECIFIED IMAGE MAPPING DOES NOT EXIST
297 LINE RENDERING STYLE IS INVALID
299 FACE LIGHTING METHOD IS INVALID
300 STORAGE REQUEST FAILED
301 CONTROL FLAG IS INVALID
302 REGENERATION FLAG IS INVALID
303 DEFERRAL MODE IS INVALID
304 MODIFICATION MODE IS INVALID
305 TEXT PRECISION VALUE IS INVALID
306 TEXT PATH VALUE IS INVALID
309 TEXT ALIGNMENT COMPONENT IS INVALID
310 INTERIOR STYLE VALUE IS INVALID
311 EDGE FLAG VALUE IS INVALID
314 AN ATTRIBUTE IDENTIFIER IS INVALID
315 ATTRIBUTE SOURCE IS INVALID
318 COLOR MODEL INVALID
319 COMPOSITION TYPE VALUE IS INVALID
320 CLASS NAME VALUE IS INVALID
321 FILTER VALUE IS INVALID
323 VIEW INDEX EXCEEDS VIEW TABLE CAPACITY
324 PROMPT/ECHO TYPE < ONE
325 NUMBER OF POINTS IN INITIAL STROKE < ZERO
326 OPERATING MODE IS INVALID
327 ECHO SWITCH VALUE IS INVALID
328 INPUT CLASS VALUE IS INVALID
329 ONE OF THE SPECIFIED SWITCH VALUES IS INVALID
330 INVALID VIEWPORT
331 PROJECTION TYPE IS INVALID
332 CLIP INDICATOR VALUE IS INVALID
333 RELATIVE VIEW PRIORITY VALUE IS INVALID
334 TEMPORARY VIEW INDICATOR IS INVALID
336 FAR CLIPPING PLANE IN FRONT OF NEAR CLIPPING PLANE
340 MINIMUM GRID LIMIT > MAXIMUM
341 ORDER OF BASIS FUNCTION < TWO
342 ORDER IS GREATER THAN NUMBER OF CONTROL POINTS
343 KNOT VECTOR IS INVALID
345 WEIGHT IN CONTROL POINT IS <=ZERO
347 PARAMETER LIMITS ARE OUTSIDE VALID PARAMETER RANGE
348 MINIMUM PARAMETER LIMIT > MAXIMUM
349 NORMAL VECTOR HAS ZERO LENGTH
351 OPTIONAL DATA AVAILABILITY FLAG IS INVALID
352 BOUNDARY FLAG IS INVALID
353 NUMBER OF CONTOURS < ZERO
354 NUMBER OF CURVES PER CONTOUR < ONE
355 CURVE TYPE IS INVALID
356 NUMBER OF POLYLINES < ZERO
357 DIMENSION OF VERTEX ARRAY < ZERO
361 CURVE OPTIONS FIELD IS INVALID
362 TESSELLATION CONTROL VALUE IS INVALID
363 NUMBER OF EDGES < ONE
501 DATA RECORD WAS NOT SPECIFIED BUT IS REQUIRED
502 FIELD IN DATA RECORD NOT SUPPORTED ON WORKSTATION

505 LENGTH OF RETURN ARRAY < ZERO
506 NUMBER OF INITIAL VALUES < ZERO
507 SHIELDING INDICATOR VALUE IS INVALID
508 VIEW ACTIVE FLAG VALUE IS INVALID
509 DATA LENGTH VALUE < ZERO OR REQUIRED LENGTH
511 INVALID VALUATOR RANGE
512 METHOD NOT SUPPORTED
513 NUMBER OF INITIAL VALUES EXCEEDS DEVICE MAXIMUM
514 INAPPROPRIATE DEVICE FOR WORKSTATION TYPE
515 INITIAL VALUATOR VALUE NOT WITHIN RANGE
516 SCALE FACTOR IS INVALID
517 NUMBER OF INDEXES < ONE
518 VIEW ZERO CANNOT BE MODIFIED
519 NO CURRENT EVENT REPORT AVAILABLE
520 ERROR QUEUE HAS OVERFLOWED
521 NOT IN ERROR STATE
522 VIEW MATRIX IS SINGULAR
523 NUMBER OF ASFS < ZERO
524 ELEMENT POSITION > NUMBER OF ELEMENTS IN STRUCTURE
525 FUNCTION CANNOT BE CALLED IN ERROR STATE
526 REQUESTED DATA NOT AVAILABLE FOR THIS FUNCTION
527 ESCAPE FUNCTION NOT AVAILABLE
528 DIRECTION VALUE IS INVALID
529 NUMBER OF ENTRIES IN INCLUSION OR EXCLUSION LIST < ZERO
530 NUMBER OF CLASS NAMES < ZERO
531 FILTER LIST LENGTH < ZERO
532 TIME INTERVAL IS TOO LARGE
533 INQUIRY DATA EXCEEDS AREA. OUTPUT TRUNCATED
534 TYPE VALUE IS INVALID
535 CURRENT ELEMENT POINTER IS ZERO
536 INQUIRY DATA EXCEEDS AREA. LENGTH OF REQUIRED AREA RETURNED
537 PATTERN OR PIXEL ARRAY EXCEEDS INPUT ARRAY SIZE
538 START VALUE < ONE
539 REQUESTED NUMBER < ZERO
540 REQUESTED NUMBER < ONE
542 CHARACTER SET IDENTIFIER IS INVALID
543 START EXCEEDS DATA EXTENT. TOTAL NUMBER AVAILABLE RETURNED
544 START VALUE < ZERO
547 VIEW BORDER=1 INDICATOR IS INVALID
548 SPECIFIED WORKSTATION TYPE CANNOT BE LOADED
549 INVALID PIXEL PACK FACTOR
550 CHARACTER SET ID IS NOT SUPPORTED ON WORKSTATION
551 START VALUE EXCEEDS COLOR TABLE SIZE
552 PATH ORDER IS INVALID
553 PRIMARY CHARACTER SET FONT ONE CANNOT BE DEACTIVATED
554 PICK APERTURE < ZERO
555 MOVE/DRAW INDICATOR IS INVALID
556 ELEMENT EXCEEDS MAXIMUM ALLOWED SIZE
557 WIDTH PARAMETER < MINIMUM ALLOWED
558 PATH DEPTH < ZERO
559 FONT POOL SIZE EXCEEDED ON WORKSTATION
560 CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE
561 CHARACTER SET/FONT COMBINATION IS NOT ACTIVE
562 CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE FOR ANNOTATION
563 CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE FOR GEOMETRIC TEXT

564 TEXT STRING CONTAINS AN UNSUPPORTED CHARACTER CODE
565 WARNING, A TRIGGER QUALIFIER VALUE IS INVALID
566 PICK IDENTIFIER DOES NOT EXIST IN THE OPEN STRUCTURE
567 A TRIGGER TYPE VALUE IS INVALID
568 A TRIGGER QUALIFIER VALUE IS INVALID
569 DEVICE DOES NOT SUPPORT PROGRAMMABLE TRIGGERS
570 SPECIFIED TRIGGER LIST IDENTIFIER DOES NOT EXIST
571 INQUIRED INFORMATION IS NOT AVAILABLE
572 WORKSTATION DOES NOT SUPPORT PROGRAMMABLE BREAK ACTION
574 RANGE INVALID, LOW VALUE EXCEEDS HIGH VALUE
575 NUMBER OF ENTRIES IN TRIGGER LIST IS INVALID
576 PRIMARY TRIGGER LIST MUST HAVE AT LEAST ONE ENTRY
577 BUFFER LENGTH IS < ZERO
578 BUFFER LENGTH EXCEEDS DEVICE MAXIMUM
579 INITIAL POSITION IS < ONE OR > NUMBER OF INITIAL VALUES PLUS ONE
580 INITIAL POSITION EXCEEDS BUFFER SIZE
581 PROCOPT SPECIFIES INVALID VIEW TABLE SIZE FOR WORKSTATION
582 RADIUS SPECIFIED < ZERO
583 PROCOPT SPECIFIES INVALID NUMBER OF INPUT DEVICES FOR WORKSTATION
584 END TYPE VALUE < ONE
585 PROCOPT SPECIFIES INVALID KEYBOARD FOR WORKSTATION
586 PROCOPT SPECIFIES INVALID DISPLAY MODEL NUMBER FOR WORKSTATION
587 PROCOPT SPECIFIES INVALID ECHO METHOD FOR WORKSTATION
588 PROCOPT SPECIFIES INVALID FRAME BUFFER VALUE FOR WORKSTATION
591 NUMBER OF CHARACTERISTICS IDENTIFIERS IS < ONE
592 VIEW CHARACTERISTICS IDENTIFIER IS INVALID
593 COMMUNICATION ERROR: MAJOR *n1*, MINOR *n2*
594 DATA EXCEEDS CONNECTION BUFFER SIZE
595 A TRIGGER TYPE IS INCOMPATIBLE WITH THE TRIGGER LIST IDENTIFIER
596 PROCOPT SPECIFIES INVALID NUMBER OF POLYLINE TABLE ENTRIES
597 PROCOPT SPECIFIES INVALID NUMBER OF POLYMARKER TABLE ENTRIES
598 PROCOPT SPECIFIES INVALID NUMBER OF TEXT TABLE ENTRIES
599 PROCOPT SPECIFIES INVALID NUMBER OF EDGE TABLE ENTRIES
600 PROCOPT SPECIFIES INVALID NUMBER OF DEPTH CUE TABLE ENTRIES
601 PROCOPT SPECIFIES INVALID NUMBER OF LIGHT SOURCE TABLE ENTRIES
602 PROCOPT SPECIFIES INVALID NUMBER OF INTERIOR TABLE ENTRIES
603 INTERNAL COMMUNICATIONS PROTOCOL ERROR
604 NUCLEUS *n1* NOT STARTED OR NOT RESPONDING
605 gP IS UNABLE TO START A REMOTE NUCLEUS
606 ILLEGAL COMBINATION OF ISO PHIGS AND GPXXX CALLS
607 NUCLEUS IS DOWN LEVEL. VERSION @A1, RELEASE @A2.@A3 IS REQUIRED
608 FRONT PLANE DISTANCE = BACK PLANE DISTANCE WHEN Z-EXTENT NON-ZERO
609 ERROR LOGGING PARAMETERS DO NOT MATCH CURRENT ERROR REPORT
610 PROJECTION REFERENCE POINT BETWEEN NEAR AND FAR PLANES
612 TSL STACK OVERFLOW HAS OCCURRED
613 TSL STACK UNDERFLOW HAS OCCURRED
614 UNKNOWN ELEMENT FOUND IN STRUCTURE
616 NO DEVICE ADDRESSES AVAILABLE
617 DEVICE ADDRESS xxx ALREADY ALLOCATED OR UNAVAILABLE
618 gPgated I/O ERROR *errno*, DEVICE ADDRESS xxx, COMMAND xxx
619 RESET RECEIVED ON DEVICE ADDRESS xxx
620 NO CONNECTION PROFILE ENTRY FOR NUCLEUS *hostname*:*nucid*
621 INVALID OPTION
622 NO FUNCTION SPECIFIED
623 SUBARGUMENT MISSING

624 CONVERSION TYPE IS INVALID
625 POINT TYPE IS INVALID
626 NO CONNECTION PROFILE ENTRIES EXIST
627 NUMBER OF HALF-SPACES < ZERO
628 OPERATOR IS INVALID
629 BLENDING FUNCTION IS INVALID
630 DATA MAPPING INDEX < ZERO
631 FILTERING METHOD IS INVALID
632 BOUNDING METHOD IS INVALID
633 MATRIX VALUE IS INVALID
634 DATA MAPPING COLOR TYPE NOT SUPPORTED
635 DATA ORGANIZATION FORMAT IS INVALID
636 FULLWORDS OF VERTEX DATA EXCEEDS MAXIMUM OF 255
637 DATA LIST INDEX IS INVALID
638 COLOR DATA LENGTHS PARAMETER IS INVALID
639 SPECIFIED ALPHA VALUE IS INVALID
647 UNICODE IS NOT SUPPORTED ON THE SPECIFIED WORKSTATION
648 PROCOPT SPECIFIES AN INVALID DISPLAY WIDTH AND/OR HEIGHT
649 PROCOPT SPECIFIES AN INVALID IMAGE OUTPUT FORMAT
650 PROCOPT SPECIFIES AN INVALID HLHSR COORDINATE SYSTEM

List of System Service Messages

1003 INCORRECT NUMBER OF ARGUMENTS (=0) ON REENTRANT CALL
1004 INCORRECT NUMBER OF ARGUMENTS (=0) ON SPI CALL
1005 INCORRECT NUMBER OF ARGUMENTS (=1) ON SPI CALL
1006 AMODE (31) APPLICATION CALL BUT graPHIGS INITIALIZED IN AMODE (24)
1007 INCORRECT ARGUMENTS
1008 INSUFFICIENT STORAGE FOR INITIALIZATION
1009 UNABLE TO ALLOCATE STORAGE POOLS
1010 UNABLE TO CREATE CHILD PROCESS
1011 PERSONAL graPHIGS API NOT INSTALLED PROPERLY
1051 DEFAULTS ERROR. INVALID SYNTAX OR VALUE AT *a2*
1052 NUMBER OF ARGUMENTS IS *n1*, SHOULD BE *n2*
1053 UNSUPPORTED FUNCTION CODE ON SPI CALL
1054 DEFAULTS ERROR. *a1* UDS KEYWORD *a2* IS IN CONFLICT
1055 TOO MANY ARGUMENTS, SHOULD BE *n1*
1056 (*gggggg*, CALLED FROM)*ffffff*, AT '*xxxxxxxx*'X
1057 DEFAULTS ERROR. ADS LENGTH, *n1*, INVALID IN ADIB SPECIFICATION
1058 DEFAULTS ERROR. INVALID LENGTH *n1* FOR *a1* UDS
1059 DEFAULTS ERROR. LABEL *a2* IN SOURCE UDS TOO LONG
1060 DEFAULTS ERROR. INVALID TOTAL LENGTH *n1* IN ADIB
1061 DEFAULTS ERROR. SOURCE UDS FOR *a1* NOT COMPLETE
1062 DEFAULTS ERROR. UDS TYPE *a1* KEYWORD *a2* CODE *n1* NOT ALLOWED IN *a2*
1063 DEFAULTS ERROR. UDS TYPE *a1* CODE *n1* UNKNOWN
1064 DEFAULTS ERROR. *a1* UDS KEYWORD *a2* UNKNOWN
1065 DEFAULTS ERROR. VALUE OF *a1* DEFAULT KEYWORD *a2* CODE *n1* IS INVALID
1066 DEFAULTS ERROR. DEFAULT KEYWORD *a2* CODE *n1* NOT VALID ON THIS SUBSYSTEM
1067 DEFAULTS ERROR. *a1* KEYWORD *a2* CODE *n1* - TOO MANY OPERANDS
1068 DEFAULTS ERROR. *a1* PROCOPT *a2* UNKNOWN
1101 NOT ENOUGH STORAGE TO PERFORM REQUESTED FUNCTION
1103 *a1* ABEND/ERROR CODE *a2* - *xxx* X-*nn*, ON *a2* (- *eeee*)
1104 *a2* HAS AN INVALID FIRST RECORD
1105 INVALID FILE NAME, *a2*
1106 FILE OPERATION ON *a2* IGNORED BECAUSE OF PREVIOUS ABEND
1107 FILE *a2* NOT FOUND
1108 *a1* ERROR CODE *n1* ON *a2*
1109 FUNCTION NOT SUPPORTED
1110 CONCURRENT USAGE OF FILE *a2* NOT ALLOWED
1111 FILE *a2* HAS INVALID RECORD CONTENT
1112 UNABLE TO OPEN *a2* DD STATEMENT MISSING
1113 FILE IS READ ONLY
1114 FILE CANNOT BE CREATED. DISK IS READ ONLY
1115 FILE *a2* HAS INVALID DCB CHARACTERISTICS
1116 UNABLE TO OPEN *a2* FILE MISSING OR INVALID
1117 INCORRECT RECORD LENGTH OR FORMAT ON *a2*
1118 NO MORE DISK SPACE AVAILABLE, WHEN WRITING TO *a1*
1119 FILE *a2* ALREADY EXISTS
1121 UNRECOVERABLE I/O ERROR
1122 *a1* ERROR CODE *n1*-*n2*, ON *a2*
1123 PACKAGING ERROR. RMODE OF *a1* CONFLICTS WITH INITIALIZATION AMODE
1124 ABEND CODE *n1*
1125 INVALID VERSION IDENTIFIER IN FILE *a1*
1126 FILE *a1* IS NOT VALID IN THIS ENVIRONMENT
1127 INVALID DEFAULT CHARACTER IN FILE *a1*
1128 INVALID INDEX VALUE IN FILE *a1*

1129 SYMBOL DEFINITION OFFSET INVALID IN FILE *a1*
1130 INVALID OFFSET DATA IN FILE *a1*
1132 RESOURCE CREATION AFS USERID/PASSWORD VALIDATION SUBSYSTEM TIMEOUT
1133 RESOURCE CREATION REQUIRED AN AFS TOKEN THAT DOES NOT EXIST
1150 SF ERROR. SF: *a1*, RSID: *a2*, OFS: *a3*, EC: *a4*
1201 SYSTEM SERVICE *xxx* ERROR RETURN CODE = *yyy*
1202 MESSAGE NUMBER *xxx* CANNOT BE FOUND
1203 FILE SERVICE *xxx* ERROR RETURN CODE = *yyy* ON FILE *nn*
1204 graPHIGS ABORT CODE = *n1*
1205 FILE IS NOT A VALID graPHIGS ARCHIVE FILE
1206 VERSION OF graPHIGS ARCHIVE FILE NOT RECOGNIZED
1207 LINK ADDRESS CONFLICT
1208 gPgated CHILD EXITING, RECEIVED SIGNAL *n1*
1209 gPgated SHUTDOWN, RECEIVED SIGNAL *n1*
1210 RECOVERY ACTION ON DEVICE ADDRESS *xxx* ALLOCATED TO *hostname*:*nucid* IS COMPLETE
1301 SPECIFIED APPLICATION PROCESS ID ALREADY IN US
1302 SPECIFIED APPLICATION PROCESS ID DOES NOT EXIST
1303 SIZE OF APPLICATION PROCESS REGION IS TOO LARGE
1304 APPLICATION PROCESS REQUEST EXCEEDS NUCLEUS CAPACITY
1305 LENGTH OF APPLICATION MODULE NAME IS INVALID
1307 APPLICATION MODULE HAS UNRESOLVED EXTERNAL REFERENCE *a1*
1308 PARAMETER TYPE IS INVALID
1309 PARAMETER LENGTH < ZERO
1310 APPLICATION MODULE SIZE > REGION SIZE
1311 APPLICATION LOAD MODULE IS INVALID
1312 APPLICATION REGION IS NOT IN " LOAD PENDING " STATE
1313 APPLICATION REGION IS NOT IN " ACTIVATE PENDING " STATE
1314 ABEND IN APPLICATION PROCESS. ID= *n1* CODE= *n2* OFFSET=*n3*
1315 ABEND IN SYSTEM SERVICE CALLED BY APPLICATION PROCESS. ID=*n1* CODE=*n2* OFFSET= *n3*
1316 APPLICATION PROCESS ID=*n1* EXITED WITH CODE=*n2*
1317 FLAG PARAMETER IS INVALID

List of Device Driver Messages

Contents

About This Book

This book is intended to assist application and system programmers in diagnosing, modifying, and tuning the graPHIGS API.

> **Attention:** Do not use Diagnosis, Modification, or Tuning Information books as programming interface specifications.

This book also documents the graPHIGS API Product-sensitive Programming Interface and Associated Guidance Information provided by the graPHIGS API.

Product-sensitive programming interfaces allow customers to diagnose, modify, monitor, repair, tailor, and tune the graPHIGS API. Because programming interfaces rely on the design and implementation of the original IBM hardware product, they should only be used for the aforementioned specialized purposes, and they may need to be changed after a product is serviced, or when a new version of the product is released.

Who Should Use This Book

Application and system programmers who do Diagnosis, Modification, or Tuning Information of the graPHIGS API.

Highlighting

The following highlighting conventions are used in this book:

Bold	Identifies commands, subroutines, keywords, files, structures, directories, and other items whose names are predefined by the system. Also identifies graphical objects such as buttons, labels, and icons that the user selects.
Italics	Identifies parameters whose actual names or values are to be supplied by the user.
`Monospace`	Identifies examples of specific data values, examples of text similar to what you might see displayed, examples of portions of program code similar to what you might write as a programmer, messages from the system, or information you should actually type.

ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

Related Publications

Publications that relate to this product include:

- *The graPHIGS Programming Interface: Writing Applications*
- *The graPHIGS Programming Interface: Subroutine Reference*
- *The graPHIGS Programming Interface: Technical Reference*
- *Installation Guide*
- *AIX 5L Version 5.2 Commands Reference*
- *AIX 5L Version 5.2 Technical Reference*
- *AIX 5L Version 5.2 General Programming Concepts: Writing and Debugging Programs*

Chapter 1. General Information

During the processing of your graPHIGS API subroutine calls, errors may occur. For example, an invalid parameter value may be passed or a hardware error may occur at the workstation. These errors are most commonly reported to your application in an error message that describes the error situation. Your application has several facilities for dealing with errors. For example, it can cause the error message to be displayed on a user's terminal or it can require additional information from the graPHIGS API. This chapter describes how the errors are reported, the information provided with the error, and options available to your application in processing the error and its message.

> **Note:** See Distributed Application Program Error Processing for a description of restrictions on error processing by a DAP.

Most errors are reported to your application for further processing. However, some errors, such as errors encountered during a traversal, result in a default action being taken, and no error is reported. If the error did not occur during the processing of an inquiry subroutine, the error and the associated message are processed by the error facilities of the graPHIGS API.

The remainder of this chapter presents the errors and messages, as well as the graPHIGS API error processing performed. If the error is detected during the processing of an inquiry subroutine, an error number is returned as the error indicator *errind* parameter. These error numbers are listed with the *errind* parameter description of each inquiry subroutine listed in *The graPHIGS Programming Interface: Subroutine Reference*. In addition to the errors listed with each subroutine description, it is possible that additional errors will be reported when the error occurs within an internal service of the graPHIGS API. See Error Numbers for a description of the error numbers by the graPHIGS API in the *errind* parameter.

A few errors are so severe that the graPHIGS API will terminate processing. This termination will be done using the ABORT service of AIX and the ABEND service of MVS and VM. For the ABORT service, a 1204 message is displayed on stderr that provides the ABORT code for the error that occurred. These ABORT codes and a brief explanation of the error are listed in Appendix B. For the ABEND service, the ABEND code identifies the error that occurred. These ABEND codes and a brief explanation of the error are listed in Appendix A.

graPHIGS API Error Processing

For most errors detected by the graPHIGS API, the error is reported by using a message that briefly explains the problem that has been detected. This is performed by the graPHIGS API error processing facilities. You and your application can control whether this message is displayed or whether it is to be suppressed. In addition, your application can provide recovery routines to be invoked as error handling routines for processing the error.

The graPHIGS API error processing defaults to logging the error messages in a designated error file. See Application Error Processing for a description of replacing this default error processing with your own application error processing. This error file is specified as a parameter of the **GPOPPH** subroutine.

For AIX	This parameter specifies a filename in the current working directory.
For MVS	This parameter specifies a DDNAME.
For VM	This parameter specifies a filename. The filetype is AFMPELOG.

If you specify blanks for the file name or if the error file is not usable, the error message is written to stderr, which defaults to the console (AIX), to the job log (MVS batch processing), or to the user's terminal (VM and MVS).

Error Message Format

Each error message provided by the graPHIGS API consists of the following parts. See Example of a graPHIGS API Error File Entry.

API Subroutine Name	Name of the graPHIGS API subroutine associated with the error.
Message Identifier	The three-letter product identifier 'AFM' followed by a four-digit message number
Message Text	A brief explanation of the error
Date and Time	The date and time when the error occurred (AIX only).

Example of a graPHIGS API Error File Entry

```
GPCR    AFM0049  COLOR INDEX EXCEEDS WORKSTATION TABLE CAPACITY
```

> **Note:** Specific errors detected by the subroutines are listed with the corresponding subroutine description in *The graPHIGS Programming Interface: Subroutine Reference*.

The graPHIGS API subroutine name is provided to help identify a graPHIGS API subroutine call that may have caused the error. For most errors, this name is the graPHIGS API subroutine called by your application. In the case where the error is not directly related to any graPHIGS API subroutine call (such as an asynchronous hardware error), the subroutine name field contains asterisks. In addition, it is not possible to always identify the subroutine call issued by your application that may have caused the error. For example, the error may be detected long after the invoked graPHIGS API subroutine has returned to your application and other graPHIGS API subroutines have been called. The graPHIGS API provides the name of a graPHIGS API subroutine that is most likely to have been invoked when the error occurred. In the case where such a related subroutine name is provided in the error message, an asterisk follows the subroutine name to indicate that the identified subroutine may not be the actual subroutine called. See Appendix C for more information on errors not directly related to any API subroutine calls.

Message Numbers

The message number provided in each message identifies each unique error message text and identifies the additional information in the error message descriptions in the remaining chapters of this manual. The message numbers are arranged in groups of related messages. Message groups are defined as follows:

Messages 1-899	Base graPHIGS API messages for errors that are device-independent. These messages generally identify errors in the parameters passed to the graPHIGS API subroutines.
Messages 1000-1299	System Service messages generated by errors in the internal service utilities.
Messages 1300-1399	Distributed Application Process (DAP) messages generated from errors while processing a distributed application.
Messages 2000-2999	Device-dependent messages for errors detected during processing for a specific workstation.

Error Message Description

The remaining chapters of this manual provide additional information for each of the error messages provided by the graPHIGS API. The description of each error contains the following information. See Error Description Example.

Explanation:	A statement of why the error was issued.

System Action: A statement of what the graPHIGS API does, if anything, as a result of the error.

There are two types of system actions, warning and ignoring subroutine.

1. Warning - A default action may be taken, causing the result to differ slightly from the intended action.
2. Ignoring subroutine - No graphical data or state list is modified, nor is any workstation affected. The resulting effect is as though the subroutine was never called.

Programmer Response: Actions for the programmer to perform to resolve the problem.

Error Description Example

1 - FUNCTION REQUIRES STATE PHCL

Explanation: A second call to **GPOPPH** was made using the non-reentrant interface without an intervening call to **GPCLPH**.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the program so that **GPOPPH** is not called when the graPHIGS API is initialized already.

Error Number: 1

Application Error Processing

Your application can provide error handling routines that are called by the graPHIGS API whenever an error occurs. See *The graPHIGS Programming Interface: Subroutine Reference* and *The graPHIGS Programming Interface: Technical Reference* for a complete description of error processing. The routine identified on the **GPEHND** subroutine is invoked in place of the graPHIGS API error processing. When invoked, this error exit routine can perform the processing required to deal with the error for the application. The error handling routine can cause the error message associated with the error to be written to the error file by using the **GPELOG** subroutine. The error exit can also obtain the text of the error message by issuing the **GPQEMS** subroutine call. Note that these two functions can only be invoked by a first-level error exit, since the graPHIGS API must be in an error state for an error message to be available.

Error Numbers

One of the parameters provided to your first-level error handling routine is an error number. See the **GPEHND** subroutine call in *The graPHIGS Programming Interface: Subroutine Reference* for a complete description of the interface and parameters passed to your error handling routine. The error number identifies the error that has occurred and reveals the severity of the error. This can assist you in determining how your error handling routine should react to the error.

The error number provided to your error handling routine is related to, but is separate from, the message number of the error message text associated with the error. For most errors, the error number and the message number are the same number. Only for the Device Support errors (900-999) are the error numbers different from the message numbers. For the Device Support errors, the error numbers are in groups that indicate the severity of the error (see Errors 900-999 DEVICE SUPPORT). Using this grouping, your application's error handling routine can process workstation errors in general categories without having to deal with each workstation-specific error that can occur across many different workstations. The message number associated with each Device Support error is unique, and identifies the unique message text associated with the reported error.

The graPHIGS API error numbers are divided into the following ranges:

Errors 1-899 Base graPHIGS API

The errors in this range are device-independent (common to all devices). Most errors will be found in this category, including errors generated by parameter validation. Note that for errors in this range, the message number is the *same as* the error number. There are two types of system actions in this category:

Warning A default action may be taken, causing the result to differ slightly from the intended action.

Ignoring subroutine No graphical data or state list is modified nor is any workstation affected. The resulting effect is as though the subroutine was never called.

Errors 900-999 Device Support

The errors in this range are detected during processing for a specific workstation. The types of errors detected include I/O errors, workstation capacity exceeded errors, and device or host service errors. Note that for errors in this range, the message number is *different from* the error number. The device support errors are subdivided into the following error classes:

900-909 - INFORMATIONAL A minor error has been detected or a previous error condition has been cleared. Processing will continue to normal completion although default actions may be taken as indicated by the message.

910-919 - WARNING An inconsistent state has been detected. This condition is not severe. No information has been lost and the device support may be able to clear the inconsistency at a later time. The requested subroutine call has been logically completed and processing will continue to normal completion, although default actions may be taken as indicated by the message.

920-929 - ERROR The device support was unable to complete the requested subroutine call, either logically or physically. If the requested operation was a non-structure modification subroutine, the device support will attempt to back out of the operation, so the environment can return to its previous state. Non-structure modification subroutines are effectively ignored, since the action has been reset. Structure modifications cannot be removed from the workstation detecting the error, because they are device-independent and may be completed on other workstations. Therefore, it will probably be impossible for the application to eliminate inconsistency, without closing and reopening the workstation.

930-939 - SEVERE ERROR An inconsistency has been detected between an actual device and the current graPHIGS API state (workstation state list or graphic data content). After an error of this type, the workstation state is unknown. The application should not invoke any subroutine involving this workstation except Close Workstation or any inquiry subroutine. This is only a recommendation; other subroutine calls are not prevented, but can produce unpredictable results.

The application may attempt to return the workstation to a determinate state by closing and reopening the workstation.

940-949 - TERMINATING ERROR The device support has detected an unrecoverable error and cannot accept any further requests. For example, this type of error will be generated if the Open Workstation subroutine call cannot be completed, or if corrupted control blocks are detected. If open, the workstation will be closed immediately to reclaim resources.

Errors 1000-1299 System Service Error

These messages are generated by the graPHIGS API service utilities. Examples of these errors include initialization, incorrect number of parameters passed on a subroutine, storage request failures, and file I/O errors. Note that for errors in this range, the message number is the *same as* the error number.

The state of the system after the error, is dependent on the error conditions. Some errors will have no effect on the system; other errors may be unrecoverable, causing the application to terminate.

Errors 1300-1399 Distributed Application Processing Errors

These errors are generated while trying to process a distributed application. The state of the system and the distributed application after the error is dependent on the error. Note that for errors in this range, the message number is the *same as* the error number.

Distributed Application Program Error Processing

The execution environment of a Distributed Application Program (DAP) is more restrictive than that of the other graPHIGS API environments. Since there is no general purpose file I/O facility, messages and error file facilities are not available as part of the graPHIGS API error processing. Your application will have to provide explicit error processing in order to deal with errors that occur.

Following are the restrictions on error processing in the DAP environment:

- There is no default graPHIGS API error processing, since there is no capability to write a message to a file.
- The error file name parameter on **GPOPPH** is ignored.
- The **GPQEMS** subroutine call will not return the error message text associated with the error. Rather, the text of the message will read “MESSAGE TEXT NOT YET AVAILABLE.” The other parts of the message (API subroutine name and message identifier) will be present.
- The **GPELOG** subroutine call performs no processing as there is no general file I/O facility available.

Since the DAP error processing will not produce an error message, your application will need to use error handling routines to obtain the desired error information. A first-level error handling routine (defined using **GPEHND**) can pass the error number and message number parameter values to the application mainline or to a second-level error handling routine (defined using **GPEXIT**). From there, the information can be sent to the cooperating host application (using **GPSPMS**) for further processing.

Chapter 2. Device-Independent Messages 1 - 650

Device-Independent Messages 1 - 98

1 - FUNCTION REQUIRES STATE PHCL

Explanation: A second call to **GPOPPH** was made using the non-reentrant interface without an intervening call to **GPCLPH**.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the program so that **GPOPPH** is not called when the graPHIGS API is initialized already.

Error Number: 1

2 - FUNCTION REQUIRES STATE PHOP

Explanation: One of the following conditions exists:

- **GPOPPH** was not invoked successfully before the graPHIGS API function was called. Previous initialization failed, and **GPOPPH** was never called.
- The Application Anchor Block (AAB), which passed through the reentrant or system programmer interface (SPI), does not contain the same storage anchor value that was set at the initialization of the graPHIGS API.
- An application program using the non-reentrant interface was link edited so that multiple copies of that module were used.
- An application program was link edited so that calls to the graPHIGS API are resolved by mixtures of reentrant and non-reentrant interface modules.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the program in one of the following ways:

- Be sure the graPHIGS API is properly initialized.
- Be sure the AAB is preserved and passed correctly on each call.
- Be sure only one copy of the graPHIGS API non-reentrant interface module is used in link editing.
- Be sure the application program is link edited with the correct graPHIGS API module(s).

Error Number: 2

3 - FUNCTION REQUIRES STATE WSOP

Explanation: A graPHIGS API subroutine was invoked with no open workstations.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Check for possible failure of **GPOPWS** or **GPCRWS** calls. Check the code sequence to be sure a workstation is open when this subroutine is invoked.

Error Number: 3

4 - FUNCTION REQUIRES STATE STOP

Explanation: The subroutine invoked operates on structure content and, therefore, requires an open structure. However, no structure is currently open.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Check the code sequence to be sure a structure is open when this subroutine is invoked.

Error Number: 4

5 - FUNCTION REQUIRES STATE STOP OR NROP (NOT STCL)

Explanation: The subroutine invoked operates on structure content or sends structure elements to the workstation. However, no structure is opened or Begin Structure (**GPBGST**) has not been issued.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Check the code sequence to be sure a structure has been opened or **GPBGST** has been issued.

Error Number: 5

7 - FUNCTION REQUIRES STATE AROP

Explanation: A subroutine was invoked that requires the current archive state to be set to Archive Open (AROP).

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Issue **GPOPAR** to open a graPHIGS API archive file, which sets the current archive state to AROP.

Error Number: 7

11 - FUNCTION REQUIRES STATE STCL

Explanation: **GPBGST** or **GPOPST** was invoked while a structure was open. This subroutine requires all structures to be closed.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Check the code sequence to be sure all structures are closed before this subroutine is invoked.

Error Number: 11

12 - FUNCTION REQUIRES STATE SSSL

Explanation: A subroutine was invoked that requires a structure store to be selected either implicitly or explicitly. Use **GPOPPH** for implicit selection of a structure store. Use **GPSSS** for explicit selection of a structure store.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. The application can use this subroutine only after a structure store has been selected.

Error Number: 12

13 - FUNCTION REQUIRES STATE SSOP

Explanation: **GPSSS** was invoked before the application issued, either implicitly or explicitly, at least one **GPCRSS** or **GPATR** for a structure store. This subroutine requires at least one structure store to be implicitly or explicitly open.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. The application can use this subroutine only after it has issued either an implicit or explicit structure store open function.

Error Number: 13

14 - FUNCTION REQUIRES STATE WSSL

Explanation: **GPBGST**, **GPDRI2**, or **GPENTR** was invoked that requires the workstation to be selected using the Begin Traversal (**GPBGTR**) subroutine call to receive the explicit traversal command. However, no workstation has been selected.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Issue **GPBGTR** to select the workstation before issuing the explicit traversal subroutine.

Error Number: 14

15 - FUNCTION REQUIRES STATE NROP

Explanation: An explicit traversal subroutine was invoked that results in subsequent structure elements being sent to the workstation for immediate processing. A Begin Structure (**GPBGST**) subroutine must also be issued to set the structure state to NROP. However, **GPBGST** has not been issued.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Issue **GPBGST** before sending the immediate data to the workstation.

Error Number: 15

16 - FUNCTION REQUIRES STATE STCL OR STOP (NOT NROP)

Explanation: **GPDRI2**, or **GPENTR** was invoked that cannot be processed by the workstation, but must be processed by the structure store manager. However, the subroutine was issued within a Begin Structure (**GPBGST**) - End Structure (**GPENST**) sequence, and was sent to the workstation for processing.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Issue the subroutine outside of a **GPBGST** - **GPENST** sequence so that the subroutine can be processed by the structure store manager.

Error Number: 16

21 - CONNECTION IDENTIFIER IS INVALID

Explanation: **GPOPWS** or **GPCRWS** was called and one of the following conditions exists:

- The External Defaults File (EDF) resolved a nickname to an invalid connection identifier *connid*
- The workstation specified by the connection identifier is not available.
- The correct definition of the device was not performed.
- The workstation specified by the connection identifier is not in the system configuration.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the program in one of the following ways:

- Be sure the CONNIDs in the External Defaults File (EDF) that specify the valid connection identifiers are resolved to valid TOCONNIDs.
- Be sure all TOCONNIDs specify valid connection identifiers or nicknames which in turn specify valid connection identifiers.
- Be sure the device is connected and functioning before calling **GPOPWS** or **GPCRWS**
- Contact your system programmer to ensure that the device is defined correctly to the operating system.

Error Number: 21

23 - SPECIFIED WORKSTATION TYPE DOES NOT EXIST

Explanation: A subroutine requiring a workstation type as an input parameter has received an invalid workstation type.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the problem in one of the following ways:

- Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the invalid workstation type parameter.
- Make sure the workstation type is valid.
- See *The graPHIGS Programming Interface: Writing Applications*, *The graPHIGS Programming Interface: Technical Reference*, or use the inquiry subroutine, **GPQWST** or **GPQRCT**, to determine valid workstation types.
- If the call is **GPOPWS**, or **GPCRWS**, ensure that the specified parameter is mapped either to a valid workstation type or to a nickname, which, in turn, specifies a valid workstation type.

Error Number: 23

24 - SPECIFIED WORKSTATION IDENTIFIER ALREADY IS IN USE

Explanation: **GPATR**, **GPOPWS**, or **GPCRWS** was invoked with a workstation identifier that is already being used.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the workstation identifier. Use another workstation identifier or close the specified workstation.

Error Number: 24

25 - SPECIFIED WORKSTATION DOES NOT EXIST

Explanation: Specified workstation is closed and the subroutine requires an open workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the error that caused the closed workstation. For example, a previous error may have closed the workstation. A call to **GPOPWS** or **GPCRWS** may have been omitted or failed. Make sure **GPCLWS** or **GPDTR** is called with the proper identifier.

Error Number: 25

26 - SPECIFIED WORKSTATION CANNOT BE OPENED

Explanation: **GPOPWS** or **GPCRWS** has failed because one of the following conditions exists:

- The device is not operational.
- The device is defined at the wrong address.
- The device cannot be allocated by the operating system.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the problem in one of the following ways:

- Be sure the device is connected, powered on, and functional.
- Be sure the 5080 device is at the correct address.
  - On MVS, be sure the DD statement specifies the correct UNIT.
  - On VM/CMS, be sure the FILEDEF contains the correct virtual device address.
- Be sure **GPOPWS** or **GPCRWS** is not called more than once for the same connection identifier.
- Be sure the desired device is present and defined at that address. Contact your system support to be sure the hardware for the device is correct and functional.

Error Number: 26

35 - WORKSTATION HAS ONLY INPUT CAPABILITIES

Explanation: An output related subroutine has been invoked for a workstation with no OUTPUT capabilities.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Be sure the workstation is correct for the application.

Error Number: 35

37 - WORKSTATION IS NOT OF CATEGORY OUTIN

Explanation: An output related subroutine has been invoked for a workstation without OUTIN capabilities.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which specific function caused the error. Be sure the workstation is correct for the application.

Error Number: 37

38 - WORKSTATION HAS ONLY OUTPUT CAPABILITIES

Explanation: An input related subroutine has been invoked for a workstation with no INPUT capabilities.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Be sure the workstation is correct for the application.

Error Number: 38

39 - WORKSTATION NOT AVAILABLE FOR EXPLICIT CONTROL

Explanation: An explicit traversal subroutine was invoked for a workstation that does not support explicit control by the application.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Use the inquiry subroutine **GPQART** to determine if the workstation supports explicit control by the application.

Error Number: 39

41 - WORKSTATION TYPE CANNOT GENERATE SPECIFIED GDP

Explanation: **GPQGDP** was invoked, but the workstation does not support the specified Generalized Drawing Primitive (GDP).

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQGDP** that caused the error. This error can only be returned on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Use another GDP that is supported by your workstation. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQGD** for the complete set of supported GDPs.

Error Number: 41

43 - BUNDLE INDEX EXCEEDS WORKSTATION TABLE CAPACITY

Explanation: A subroutine was invoked with a bundle index greater than the bundle table size.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the bundle index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the appropriate inquiry function to determine the available bundle sizes.

Error Number: 43

44 - INVALID WINDOW DEFINITION

Explanation: A subroutine was invoked with a window definition that has one of the maximum values less than or equal to the corresponding minimum value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the window definition parameter. See *The graPHIGS Programming Interface: Understanding Concepts* for an explanation of window definition.

Error Number: 44

47 - HATCH INDEX EXCEEDS WORKSTATION TABLE CAPACITY

Explanation: **GPHR** was invoked with a hatch index greater than the hatch table size.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQHF** to inquire the size of the workstation's hatch table.

Error Number: 47

48 - PATTERN INDEX EXCEEDS WORKSTATION TABLE CAPACITY

Explanation: **GPPAR**, **GPQPAR**, or **GPQPPR**, was invoked with a pattern index greater than the pattern table size.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the pattern index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQLW** to determine the available pattern indexes.

Error Number: 48

49 - COLOR INDEX EXCEEDS WORKSTATION TABLE CAPACITY

Explanation: **GPCR** or **GPXCR** was invoked with a color index value greater than the color table size.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCCH** or **GPQLW** to determine the available color indexes.
Error Number: 49

50 - DATA MAPPING INDEX EXCEEDS WORKSTATION TABLE CAPACITY

Explanation: **GPDMR** or **GPQDMR** was invoked with a data mapping index value greater than the data mapping table size.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the data mapping index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function (**GPQWDT**) to determine the available data mapping indexes.
Error Number: 50

55 - PRP IS POSITIONED ON THE VIEW PLANE

Explanation: **GPEVM3**, **GPVMP3** or **GPXVR** was invoked with the projection reference point (PRP) situated on the view plane.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the PRP and/or the view plane distance parameters. See *The graPHIGS Programming Interface: Understanding Concepts* for an explanation of viewing parameters.
Error Number: 55

56 - SPECIFIED VECTOR HAS LENGTH ZERO

Explanation: **GPVPLN** or **GPVUP** was invoked and received a vector with all components equal to zero. The function requires a vector of non-zero length.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the vector definition.
Error Number: 56

58 - UP AND PLANE NORMAL VECTORS ARE PARALLEL

Explanation: **GPCVMT** or **GPDFCO** failed because the up direction cannot be determined when the up vector is normal to the specified plane.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. If **GPCVMT** caused the error, check the utility state list values. See *The graPHIGS Programming Interface: Understanding Concepts* for an explanation of utility functions. If **GPDFCO** caused the error, correct the parameter.
Error Number: 58

59 - VIEW INDEX VALUE < ZERO

Explanation: A subroutine was invoked with a view index less than zero. All view table indexes must be equal to or greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the view index parameter.
Error Number: 59

60 - BUNDLE INDEX VALUE < ONE

Explanation: A subroutine was invoked with a bundle table index value less than one. The bundle table index must be greater than or equal to one.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the bundle table index parameter.
Error Number: 60

61 - LENGTH IS INVALID

Explanation: A subroutine was invoked with an invalid length parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the length parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 61

62 - NUMBER OF LINE PATTERN SECTIONS IS INVALID

Explanation: **GPLTR** was invoked with an invalid number of pattern sections.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPLTR** that caused the error. Correct the number of pattern sections. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 62

63 - LINETYPE VALUE < ONE

Explanation: A subroutine was invoked with a linetype value less than one. The linetype must be greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the linetype parameter.
Error Number: 63

64 - SPECIFIED LINETYPE NOT AVAILABLE ON WORKSTATION

Explanation: A subroutine was invoked and the target workstation does not have the requested linetype available.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the linetype parameter. See *The graPHIGS Programming Interface: Technical Reference* or use an inquiry function, either **GPQEF** or **GPQPLF**, to determine the supported linetypes.

Error Number: 64

65 - CURVE APPROXIMATION CRITERIA IS INVALID

Explanation: **GPCAC** or **GPTCAC** was invoked with an invalid curve approximation criteria.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the curve approximation criteria. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCDF** to determine the supported curve approximations.

Error Number: 65

66 - CONTROL VALUE < ZERO

Explanation: **GPCAC**, **GPTCAC**, or **GPSAC** was invoked with an invalid control value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the control value. The control value is a multiplier applied to the tessellation value. The value may be less than one for fewer tessellations, or greater than one for more; however, it may not be less than zero.

Error Number: 66

67 - POLYHEDRON EDGE CULLING MODE IS INVALID

Explanation: **GPPHEC** was invoked with an invalid culling mode parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific function of **GPPHEC** that caused the error. Correct the culling mode parameter.

Error Number: 67

69 - MARKER TYPE VALUE < ONE

Explanation: A subroutine was invoked with a marker type value less than one. The marker type value must be greater than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the value assigned to the marker type parameter.

Error Number: 69

70 - SPECIFIED MARKER TYPE NOT AVAILABLE ON WORKSTATION

Explanation: **GPMTR**, **GPPMR**, **GPQMTR**, or **GPXPMR** was invoked and the specified workstation generating the error does not have the requested polymarker type available.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the polymarker type parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQPMF** to determine the supported marker types.

Error Number: 70

71 - FIELD IN DEFINITION DATA IS INVALID

Explanation: **GPHR**, **GPLNR**, or **GPMTR** was invoked with an invalid field in the marker definition data.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the marker definition data. See *The graPHIGS Programming Interface: Subroutine Reference* for a description of marker definition data.
Error Number: 71

75 - TEXT FONT VALUE IS INVALID

Explanation: A subroutine was invoked with the text font value less than one. The text font value must be greater than zero and less than 256.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the text font parameter.
Error Number: 75

76 - CHARACTER LINE SCALE FACTOR < ZERO

Explanation: **GPCHLS** was invoked with an invalid scale parameter. The scale parameter must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCHLS** that caused the error. Correct the scale parameter.
Error Number: 76

77 - CHARACTER EXPANSION FACTOR <= ZERO

Explanation: **GPCHXP**, **GPTXR**, or **GPXTXR** was invoked with the character expansion factor value less than or equal to zero. The character expansion factor must be greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the character expansion factor parameter.
Error Number: 77

78 - CHARACTER HEIGHT VALUE <= ZERO

Explanation: **GPAH**, **GPCHH**, or **GPCHL2** was invoked with character height less than or equal to zero. The character height must be greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the character height parameter.
Error Number: 78

79 - CHARACTER UP VECTOR HAS LENGTH ZERO

Explanation: **GPAUP** or **GPCHUP** was invoked with a character up vector of zero length. The character up vector identifies the up direction for text and cannot be a zero length vector.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the character up vector parameter.

Error Number: 79

80 - CHARACTER UP AND BASE VECTORS ARE COLINEAR

Explanation: **GPCHUB** was invoked with the up and base vectors incorrectly put on the same line.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCHUB** that caused the error. Correct the up or the base vector.
Error Number: 80

81 - CHARACTER POSITIONING MODE IS INVALID

Explanation: **GPCHPM** was invoked with an invalid character positioning mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCHPM** that caused the error. Correct the positioning mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid character positioning values.
Error Number: 81

82 - ANNOTATION STYLE IS INVALID

Explanation: **GPAS** was invoked with an invalid annotation style.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPAS** that caused the error. Correct the annotation style parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid annotation style values.
Error Number: 82

83 - INTERIOR STYLE NOT AVAILABLE ON WORKSTATION

Explanation: **GPIR** or **GPXIR** was invoked and the specified workstation does not have the requested interior style.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the interior style parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQIF** to determine the supported interior styles.
Error Number: 83

84 - INTERIOR STYLE INDEX VALUE < ONE

Explanation: **GPIR**, **GPISI**, **GPQHR**, or **GPXIR** was invoked with an interior style index value less than one. The interior style index must be greater than or equal to one
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the interior style index parameter.
Error Number: 84

85 - PATTERN INDEX VALUE < ONE

Explanation: **GPPAR**, **GPQPAR**, or **GPQPPR** was invoked with the pattern index value less than one. The pattern index must be greater than or equal to one.

System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the pattern index value parameter.
Error Number: 85

86 - SURFACE APPROXIMATION CRITERIA IS INVALID

Explanation: **GPSAC** was invoked with an invalid surface approximation criteria parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPSAC** that caused the error. Correct the surface approximation criteria parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid surface approximation values.
Error Number: 86

87 - POLYGON CULLING MODE IS INVALID

Explanation: **GPPGC** was invoked with an invalid culling mode parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPGC** that caused the error. Correct the culling mode parameter.
Error Number: 87

88 - FACE DISTINGUISH MODE IS INVALID

Explanation: **GPFDMO** was invoked with an incorrect face distinguish mode parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPFDMO** that caused the error. Correct the face distinguish mode parameter.
Error Number: 88

89 - HATCH INDEX < ONE

Explanation: **GPHR** was invoked with the hatch index value less than one. The hatch index parameter must be greater than or equal to one.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPHR** that caused the error. Correct the hatch index value parameter.
Error Number: 89

90 - INTERIOR STYLE NOT SUPPORTED ON WORKSTATION

Explanation: **GPQPAR** or **GPQPPR** was invoked and the specified workstation does not support patterns as an interior for polygons.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQIF** to determine the supported interior styles.
Error Number: 90

91 - STARTING POINT OR DIMENSION < ONE

Explanation: A subroutine was invoked with a starting point or a dimension less than one. For functions that accept or return a grid of information (for example, pixel and pattern functions), all dimensions and start locations must be greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the parameter in error.
Error Number: 91

92 - COLOR INDEX < ZERO

Explanation: A subroutine was invoked with a color index value less than zero. All color table indexes must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color index parameter.
Error Number: 92

93 - COLOR INDEX VALUE(S) EXCEED WORKSTATION TABLE CAPACITY

Explanation: A subroutine that accepts one color index or a list of color indexes has found index values greater than the table size. The indexes must be within the table range.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function, either **GPQCCH** or **GPQLW**, to determine the supported color index range.
Error Number: 93

94 - ERROR HANDLING MODE IS INVALID

Explanation: **GPEMO** was invoked with an invalid error handling mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPEMO** that caused the error. Correct the error handling mode. See *The graPHIGS Programming Interface: Subroutine Reference* for valid values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the error handling mode.
Error Number: 94

95 - POLYLINE SHADING METHOD IS INVALID

Explanation: **GPPLSM** was invoked with an invalid polyline shading *method* parameter value.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPLSM** that caused the error. Correct the polyline shading *method* parameter *The graPHIGS Programming Interface: Subroutine Reference* and *The graPHIGS Programming Interface: Understanding Concepts* for more information on polyline shading.
Error Number: 95

96 - COLOR PARAMETER OUT OF RANGE FOR CURRENT COLOR MODEL

Explanation: A subroutine was invoked with one or more color parameters out of range (zero to one inclusive).
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color parameter(s). See *The graPHIGS Programming Interface: Understanding Concepts* for an explanation of the color range and components.
Error Number: 96

97 - COLOR FORMAT PARAMETER IS INVALID

Explanation: A subroutine was invoked with an invalid color format parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color format parameter.
Error Number: 97

98 - CONVEXITY CHECKING MODE IS INVALID

Explanation: **GPCCM** was invoked with an invalid convexity checking *mode* parameter value.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCCM** that caused the error. Correct the convexity checking *mode* parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for more information on convexity checking.
Error Number: 98

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177 178 179 180 181 182 183 197 198 199

100 - NUMBER OF POINTS < ZERO

Explanation: A subroutine was called with the number of points value less than zero. The number of points value must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the number of points parameter.
Error Number: 100

101 - NUMBER OF SPHERES < ZERO

Explanation: **GPSPH** was invoked with the number of spheres less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPSPH** that caused the error. Correct the number of spheres.

Error Number: 101

102 - PARAMETRIC SURFACE CHARACTERISTICS TYPE IS INVALID

Explanation: **GPPSC** was invoked with an invalid parametric surface characteristic type.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPSC** that caused the error. Correct the parametric surface characteristic type parameter.
Error Number: 102

103 - PARAMETRIC SURFACE CHARACTERISTICS DATA IS INVALID

Explanation: **GPPSC** was invoked with an invalid parametric surface characteristic data.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPSC** that caused the error. Correct the parametric surface characteristic data parameter.
Error Number: 103

105 - GEOMETRIC TEXT CULLING DISPLAY METHOD IS INVALID

Explanation: **GPGTXC** was invoked with an invalid geometric text culling display method.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPGTXC** that caused the error. Correct the geometric text culling display method.
Error Number: 105

106 - GEOMETRIC TEXT CULLING HEIGHT < ZERO

Explanation: **GPGTXC** was invoked with an invalid geometric text culling height of less than zero. The geometric text culling height must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPGTXC** that caused the error. Correct the geometric text culling height.
Error Number: 106

107 - REFERENCE VECTORS ARE COLINEAR

Explanation: A subroutine was invoked with the two reference vectors parallel. These two vectors are used to define a local text plane for drawing the primitive and, therefore, must not be parallel.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the reference vector parameters. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of text primitives.
Error Number: 107

108 - NUMBER OF CHARACTERS IN TEXT STRING < ZERO

Explanation: A subroutine was invoked with the character string length less than zero. The number of characters in the text string must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the string length parameter.

Error Number: 108

110 - REFLECTANCE MODEL IS INVALID

Explanation: **GPBRMO** or **GPRMO** was invoked with an invalid reflectance model value parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the reflectance model parameter.

Error Number: 110

111 - AMBIENT COEFFICIENT IS INVALID

Explanation: **GPBSPR** or **GPSPR** was invoked with an invalid ambient coefficient value parameter. The ambient coefficient must be 0.0 <= value <= 1.0.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the ambient coefficient value parameter.

Error Number: 111

112 - DIFFUSE COEFFICIENT IS INVALID

Explanation: **GPBSPR** or **GPSPR** was invoked with an invalid diffuse coefficient value parameter. The diffuse coefficient must be 0.0 <= value <= 1.0.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the diffuse coefficient value parameter.

Error Number: 112

113 - SPECULAR COEFFICIENT IS INVALID

Explanation: **GPBSPR** or **GPSPR** was invoked with an invalid specular coefficient value parameter. The specular coefficient must be 0.0 <= value <= 1.0.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the specular coefficient value parameter.

Error Number: 113

114 - SPECULAR EXPONENT IS INVALID

Explanation: **GPBSPR** or **GPSPR** was invoked with an invalid specular exponent. The specular exponent must be greater than or equal to zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the specular exponent value parameter.

Error Number: 114

115 - TRANSPARENT COEFFICIENT IS INVALID

Explanation: A subroutine was invoked with an invalid transparent coefficient value. The transparent coefficient must be 0.0 <= value <= 1.0.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the transparent coefficient parameter.

Error Number: 115

116 - NUMBER OF LIGHT SOURCE INDEXES < ZERO

Explanation: **GPLSS** was invoked with an invalid number of light source indexes parameter. The number of light source indexes must be greater than or equal to zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLSS** that caused the error. Correct the number of light source indexes parameter.

Error Number: 116

118 - FRAME BUFFER COMPARISON IS INVALID

Explanation: **GPFBC** was invoked with an invalid frame buffer comparison parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPFBC** that caused the error. Correct the frame buffer comparison. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of frame buffer functions.

Error Number: 118

119 - FRAME BUFFER COMPONENT NUMBER IS INVALID

Explanation: **GPRDFB** was invoked with an invalid frame buffer component number parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPRDFB** that caused the error. Correct the frame buffer component number parameter.

Error Number: 119

120 - WARNING, ONE OR MORE STRUCTURES DO NOT EXIST

Explanation: A subroutine was invoked that specified one or more structures that do not exist in the source resource. (The source resource can be either a structure store or an archive file, depending on which subroutine was used.)

System Action: One of the following actions is taken, depending on the condition:

- If **GPARST** or **GPARSN** was invoked, then the non-existent structures are ignored.
- If the conflict resolution flag is `3=UPDATE`, then an empty structure is created in the currently selected structure store for every non-existent structure identifier.
- If the conflict resolution flag is `1=MAINTAIN`, and if that identifier does not already exist in the currently selected structure store, then an empty structure is created in the currently selected structure store for every non-existent structure identifier.

Programmer Response: Check the error log to determine which function issued the warning. If the message is unexpected, verify the existence of the structure identifiers in the parameter list by using either **GPQSTI**, **GPQSTS** (for a structure store), or **GPRSTI** (for an archive file). Correct the structure identifier list.

Error Number: 120

121 - EDIT MODE IS INVALID

Explanation: **GPEDMO** was invoked with an invalid edit mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPEDMO** that caused the error. Correct the edit mode parameter.
Error Number: 121

122 - STRUCTURE IDENTIFIER DOES NOT EXIST

Explanation: A structure store inquiry or **GPQVR** was invoked to derive information about a structure that does not exist.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. The programmer can correct the parameter with an existing structure identifier, or ignore the results returned. Use the inquiry function **GPQSTI** to inquire the structures currently defined. Use **GPQSTS** to determine if an individual structure exists.
Error Number: 122

123 - CONDITION CRITERIA IS INVALID

Explanation: **GPCEXS** or **GPCRET** was invoked with an invalid condition criteria value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the value of the criteria parameter.
Error Number: 123

124 - EXECUTE MODE IS INVALID

Explanation: **GPCEXS** was invoked with an invalid invocation mode value.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCEXS** that caused the error. Correct the value of the invocation mode.
Error Number: 124

125 - ATTEMPTING TO EXECUTE THE OPEN STRUCTURE

Explanation: **GPCEXS**, **GPCPER**, **GPCPST**, or **GPEXST** was invoked with a structure identifier equal to the current open structure. Self-referencing structures are not allowed.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the structure identifier parameter, so that it does not reference the current open structure.
Error Number: 125

126 - PRIORITY VALUE IS INVALID

Explanation: **GPARV**, **GPCIM2**, or **GPCIM3** was invoked with an invalid priority value. Priorities must be in the range (0.0 <= priority <=1.0).
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the priority parameter.

Error Number: 126

127 - CONFLICT RESOLUTION FLAG IS INVALID

Explanation: **GPCNRS**, **GPTAST**, or **GPTST** was invoked with an invalid value for the conflict resolution flag.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPCNRS**, **GPTAST**, or **GPTST** that caused the error. Correct the conflict resolution flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 127

128 - STRUCTURE CONFLICT OCCURS WHEN RESOLUTION FLAG IS ABANDON

Explanation: A subroutine was invoked with the conflict resolution flag set to `2=ABANDON`, and a conflict was found.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. If the message is unexpected, then verify which structures in the source structure store or archive file conflict with the structures in the destination structure store or archive file, using the appropriate inquiry subroutine—such as **GPQACA** or **GPQACS**. Depending on the desired result, the application could:

- use a different conflict resolution flag to perform the functionality
- delete the conflicting structures
- take no action

See *The graPHIGS Programming Interface: Subroutine Reference* for more information.

Error Number: 128

129 - ATTEMPTING TO HAVE THE RESULTING STRUCTURE EXECUTE ITSELF

Explanation: **GPCSI**, **GPCSRS**, or **GPCSIR** was invoked with an original structure identifier and a resulting structure identifier such that either the original structure references the resulting structure (**GPCSI** or **GPCSRS**) or the resulting structure references the original structure (**GPCSRS**). This would cause the resulting structure to have an execute structure-type element that referenced itself when the subroutine was completed.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Change the structure identifier in error.

Error Number: 129

130 - LABEL IDENTIFIER CANNOT BE FOUND IN THE OPEN STRUCTURE

Explanation: Either **GPDELB**, **GPEPLB**, or **GPEPLG** (with label search flag set to WRAP) was invoked with a nonexistent label identifier, or **GPDLEG** or **GPEPLG** (with label search flag set to NOWRAP) was invoked with a label identifier that did not exist between the current element pointer to the end of the structure. When calling **GPDELB** or **GPDLEG**, both labels must exist.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the parameter or be sure that the specified labels exist.

Error Number: 130

132 - ELEMENT CODE DOES NOT EXIST BEFORE END OF STRUCTURE

Explanation: **GPEPCD** was invoked. An element with the desired element code was not found before the end of the open structure.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPEPCD** that caused the error. Correct the element code, or be sure that an element with the specified code exists in the structure (from the current element to the end of the structure).

Error Number: 132

133 - LABEL DELETE OPTION IS INVALID

Explanation: **GPDLEG** was invoked with an invalid label deletion option value.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDLEG** that caused the error. Correct the label deletion option value.

Error Number: 133

134 - NUMBER OF ENTRIES IN LIST < ONE

Explanation: A subroutine was invoked that specified a number less than one in the number of structures identifier parameter. The value for this parameter must be greater than one.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the number of structures identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 134

135 - VALUE OF SOURCE IS INVALID

Explanation: **GPQCNA** or **GPQCSN** was invoked with an invalid value for the *source* parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQCNA** or **GPQCSN** that caused the error. Correct the *source* parameter.

Error Number: 135

136 - VALUE OF SEARCH FLAG IS INVALID

Explanation: **GPEPLG** or **GPEPPG** was invoked with an invalid search flag.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Change the search flag to one of the allowed search options.
Error Number: 136

137 - VALUE OF CONDITIONAL EDIT FLAG IS INVALID

Explanation: **GPCEDT** was invoked with an invalid edit flag.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCEDT** that caused the error. Change the edit flag to one of the allowed edit options.
Error Number: 137

138 - STARTING ELEMENT CANNOT BE FOUND

Explanation: **GPATS** or **GPTE** was invoked with an invalid starting element.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the starting element parameter.
Error Number: 138

139 - SEARCH METHOD IS INVALID

Explanation: **GPTE**, **GPATS**, or **GPNLER** was invoked with an invalid search method.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the search method parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 139

140 - DEVICE NUMBER < ONE OR DEVICE NOT AVAILABLE

Explanation: A subroutine was invoked with one of the following conditions existing:

- with an input device that is not available on the workstation, or
- with an input device number less than one.

Device numbers must be greater than zero and within the range valid for the specified workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the parameter in error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQLI** to determine the supported input devices.
Error Number: 140

141 - INPUT DEVICE NOT IN CORRECT MODE

Explanation: A subroutine was invoked without the device in the proper mode. All input device initialization and request functions require the device to be in REQUEST mode.

System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the application so that the input device is the proper mode when the function is called. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of input device modes.
Error Number: 141

142 - VALUE OF ARCHIVE FLAG IS INVALID

Explanation: **GPOPAR** was invoked with an invalid archive flag parameter value.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPOPAR** that caused the error. Correct the archive flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 142

143 - OPTION VALUE IS INVALID

Explanation: **GPNLER** was invoked with an invalid option.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPNLER** that caused the error. Correct the option. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameters.
Error Number: 143

144 - PROMPT/ECHO TYPE NOT AVAILABLE ON WORKSTATION

Explanation: An input device initialization subroutine was called, and the specified prompt/echo type is unavailable on the workstation.
System Action: Type one is used.
Programmer Response: Check the error log to determine which function caused the error. Correct the prompt/echo type parameter. See *The graPHIGS Programming Interface: Technical Reference* or use one of the inquiry functions, **GPQDxx**, to determine the supported prompt/echo types.
Error Number: 144

145 - ECHO AREA BOUNDARY VALUE IN ERROR

Explanation: An input device initialization subroutine was called with an invalid echo area boundary. All echo area boundary values must be within the device coordinate range. Also, minimum values must always be less than the corresponding maximum values.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the echo area parameter.
Error Number: 145

146 - FIELD IN INPUT DEVICE DATA RECORD IN ERROR

Explanation: An input device initialization subroutine was called with an invalid data record. The error may be one of the following conditions:

- The data length parameter is shorter than the data record length defined by the data record header.
- The header information in the data record does not correspond with the format specified by the requested prompt/echo type.
- One of the values within the data record other than the header is in error.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Subroutine Reference* for valid data record formats. Then, either correct the data record, or change the prompt/echo type to match the specified data record.

Error Number: 146

147 - EVENT QUEUE HAS OVERFLOWED

Explanation: The event queue overflow occurs asynchronous to application processing and is reported on the next invocation of a subroutine, which forces an update of the event queue.

System Action: No other event report will be accepted until the event queue is cleared.

Programmer Response: Check the error log to determine which function caused the error. The application may use **GPQIQO** to inquire the workstation and the device which caused the overflow. The event queue can be cleared using AWAIT and/or FLUSH subroutines.

Error Number: 147

148 - EVENT QUEUE HAS NOT OVERFLOWED

Explanation: **GPQIQO** has been called and the queue has not overflowed.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQIQO** that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. This is probably not an error and requires no response if the application intends to poll the event queue overflow status. **GPQIQO** will be used most often, within an application defined error handler, in response to event queue overflow.

Error Number: 148

150 - GET FUNCTION DOES NOT MATCH CURRENT EVENT CLASS

Explanation: A **GPGTxx** subroutine was invoked for a device class that does not match the class in the current event report (CER).

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log for the function causing the error. Be sure the device class returned on the previous **GPAWEV** is used to select the correct **GPGTxx** subroutine. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of input queue handling.

Error Number: 150

151 - TIMEOUT VALUE < ZERO

Explanation: **GPAWEV** was invoked with a timeout value less than zero. The timeout value must be greater than or equal to zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPAWEV** that caused the error. Correct the timeout parameter. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of **GPAWEV** timeout.

Error Number: 151

152 - INITIAL CHOICE VALUE < ZERO OR IS INVALID

Explanation: **GPINCH** was invoked with an invalid initial choice value. The choice value was less than zero, or not a valid choice alternative supported by the device.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINCH** that caused the error. Correct the initial choice parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQIT** to determine the valid choice alternatives on this device.

Error Number: 152

155 - VIEW PRIORITY REFERENCE NUMBER IS INVALID

Explanation: **GPVIP**, **GPVOP**, or **GPVP** was invoked with an invalid view priority reference number. The view priority reference number must be a valid view index (greater than or equal to zero and less than or equal to the maximum number of view table entries that the workstation supports).

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the view priority reference parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQNV** to determine the valid range for a specific workstation.

Error Number: 155

156 - PICK PATH ORDER IS INVALID

Explanation: **GPINPK** was invoked with an invalid pick path order.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINPK** that caused the error. Correct the pick path order parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 156

158 - INVALID ELEMENTS IN THE INITIAL PICK PATH

Explanation: **GPINPK** was invoked with invalid pick path elements. The following conditions must exist for a valid pick path:

- The structure identifiers must be integers.
- The element numbers must be greater than zero.
- The pick identifiers must be integers.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINPK** that caused the error. Correct the pick path parameter. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the pick path.

Error Number: 158

160 - PHYSICAL INPUT DEVICE CATEGORY IS INVALID

Explanation: **GPEPD**, **GPPDMO**, or **GPQPDC** was invoked with an invalid physical device category.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the physical device category parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for the valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of physical device categories.

Error Number: 160

161 - PHYSICAL INPUT VALUE IS INVALID

Explanation: **GPEPD** was invoked with an invalid physical input value.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPEPD** that caused the error. Correct the physical input value. See *The graPHIGS Programming Interface: Subroutine Reference* for the valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of physical input values.

Error Number: 161

162 - PHYSICAL INPUT DEVICE HAS NOT BEEN DISABLED

Explanation: **GPEPD** was invoked for a physical input device that has not been disabled.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPEPD** that caused the error. Ensure that the physical input device is in disabled mode. A **GPPDMO** call may have been omitted or failed.

Error Number: 162

163 - PHYSICAL DEVICE MODE IS INVALID

Explanation: **GPPDMO** was invoked with an invalid physical device mode.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPPDMO** that caused the error. Correct the physical device mode parameter.

Error Number: 163

164 - PICK DEVICE DOES NOT PROVIDE EXTENDED INFORMATION

Explanation: **GPRQXP** or **GPSMXP** was invoked for a pick device that does not provide extended pick information.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. For pick devices that do not provide extended pick information, use the function **GPRQPK** or **GPSMPK**.

Error Number: 164

166 - INITIAL PICK CORRELATION STATE IS INVALID

Explanation: **GPIPKC** was invoked with an invalid initial pick correlation state.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPIPKC** that caused the error. Correct the initial pick correlation state parameter.
Error Number: 166

167 - PICK SELECTION CRITERIA IS INVALID

Explanation: **GPPKSC** was invoked with an invalid pick selection criteria parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPKSC** that caused the error. Correct the pick selection criteria parameter.
Error Number: 167

168 - INPUT DEVICE IS CURRENTLY OWNED BY ANOTHER CONNECTION

Explanation: A set mode routine was invoked for a logical device that was in use by another application process. Some other application process has activated the device for input, and no other application process may activate the device for input until the device becomes inactive.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Cooperating application processes need to be aware of each other's operations. When a device is activated for input by an application process, no other application process may receive input from the device until the device is deactivated explicitly by the owning application process, or implicitly by the graPHIGS API.
Error Number: 168

169 - PHYSICAL INPUT DEVICE CANNOT BE DISABLED

Explanation: **GPPDMO** was invoked for a physical device that cannot be disabled.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQPDC** to determine if a physical device may be disabled.
Error Number: 169

177 - ORIGIN PARAMETER IS INVALID

Explanation: **GPCVD** was invoked with an invalid origin parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCVD** that caused the error. Correct the origin parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid origin values.
Error Number: 177

178 - DATATYPE PARAMETER IS INVALID

Explanation: **GPCVD** was invoked with an invalid datatype parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCVD** that caused the error. Correct the datatype parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid datatype parameter values.
Error Number: 178

179 - ENVIRONMENT DESCRIPTOR IS INVALID

Explanation: **GPCVD** was invoked with an invalid environment descriptor.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCVD** that caused the error. Correct the environment descriptor. See *The graPHIGS Programming Interface: Subroutine Reference* for valid environment descriptor values.
Error Number: 179

180 - CURSOR SHAPE TYPE IS NOT SUPPORTED

Explanation: **GPCUS** was invoked for a fixed cursor shape type which is not supported on the workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCUS** that caused the error. Correct the fixed cursor shape type to one that is supported by your workstation. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCUF** to determine available fixed cursor types.
Error Number: 180

181 - CURSOR PIXEL ARRAY SIZE IS INVALID

Explanation: **GPCUR** was invoked with an invalid cursor pixel array size.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCUR** that caused the error. Correct the pixel array sizes.
Error Number: 181

182 - CURSOR SHAPE TABLE INDEX NOT WITHIN WORKSTATION TABLE RANGE

Explanation: **GPCUR** or **GPCUS** was invoked using a cursor shape table index that is not within the valid range of indexes for the cursor shape table. The index supplied was either less than one or greater than the maximum entry.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCUF** to determine the maximum number of cursor shape table entries.
Error Number: 182

183 - SPECIFIED CURSOR FORMAT IS NOT SUPPORTED

Explanation: **GPCUR** was invoked with a cursor definition format that is not supported on the specified workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCUR** that caused the error. Correct the cursor definition format to one that your workstation supports. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCUF** to obtain a list of available cursor definition formats.
Error Number: 183

197 - MESSAGE STRING LENGTH < ZERO

Explanation: **GPMSG**, **GPSBMS**, and **GPSPMS** was invoked with a message string that has less than zero characters. A message must have zero or more characters.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the message length parameter.
Error Number: 197

198 - NUMBER OF SUBAREAS < ZERO

Explanation: **GPPGD2**, **GPPGD3**, **GPPG2**, or **GPPG3** was called with a number of polygon subareas less than zero. A polygon must have zero or more subareas.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the polygon subareas parameter.
Error Number: 198

199 - POLYGON SUBAREA HAS < ZERO POINTS

Explanation: **GPPGD2**, **GPPGD3**, **GPPG2**, or **GPPG3** was called with one of the entries in the number of points per subarea parameter less than zero. A subarea must have zero or more points.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the polygon subarea parameter.
Error Number: 199

Device-Independent Messages 201 - 299

201	**202**	**203**	**204**	**205**	**206**	**207**	**208**	**209**	**210**	**211**	**212**	**213**	**214**	**215**
216	**217**	**218**	**219**	**220**	**221**	**222**	**223**	**224**	**225**	**226**	**227**	**231**	**232**	**233**
234	**235**	**236**	**237**	**238**	**239**	**240**	**241**	**242**	**243**	**245**	**250**	**251**	**252**	**253**
254	**255**	**256**	**257**	**258**	**259**	**260**	**261**	**262**	**263**	**264**	**265**	**266**	**267**	**268**
269	**272**	**273**	**274**	**275**	**276**	**277**	**278**	**279**	**280**	**281**	**282**	**283**	**284**	**285**
286	**287**	**288**	**289**	**290**	**291**	**292**	**293**	**294**	**295**	**296**	**297**	**299**		

201 - SPECIFIED NUCLEUS IDENTIFIER ALREADY IS IN USE

Explanation: **GPCNC** was invoked with a nucleus identifier for which a nucleus connection already exists.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCNC** that caused the error. Select a unique nucleus identifier. Check that a unique nucleus identifier is supplied for each nucleus connection requested.
Error Number: 201

202 - SPECIFIED NUCLEUS DOES NOT EXIST

Explanation: A subroutine has been invoked with an invalid nucleus identifier.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Ensure that a valid nucleus identifier is specified.
Error Number: 202

203 - SPECIFIED CONNECTION METHOD IS NOT SUPPORTED

Explanation: **GPCNC** was invoked with an invalid communication method.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCNC** that caused the error. Correct the communication method parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCMM** to obtain a list of valid communication methods.
Error Number: 203

204 - NUCLEUS CONNECTION FAILED

Explanation: **GPCNC** has failed to establish a connection to the specified nucleus.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCNC** that caused the error. Ensure that the target nucleus specification is correct, that the nucleus is active and ready for operation, and that any required communication facilities are operational.
Error Number: 204

205 - SHELL DEFERRAL MODE IS INVALID

Explanation: **GPSHDF** was invoked with an invalid deferral mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPSHDF** that caused the error. Correct the deferral mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See also *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of shell deferral mode, or use the inquiry function **GPQSHD** to obtain a list of available shell deferral modes.
Error Number: 205

206 - SYNCHRONIZATION MODE IS INVALID

Explanation: **GPSYNC** was invoked with an invalid synchronization mode.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPSYNC** that caused the error. Correct the synchronization mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of synchronization mode.

Error Number: 206

207 - SPECIFIED APPLICATION IDENTIFIER DOES NOT EXIST

Explanation: **GPSPMS** was invoked with an invalid target application identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPSPMS** that caused the error. Correct the target application identifier parameter. Ensure that the target environment is active and ready to accept messages.

Error Number: 207

208 - CONNECTION NOT CURRENTLY PERMITTED FROM THIS HOST

Explanation: A connection to a remote graPHIGS API nucleus was attempted explicitly through the **GPCNC** subroutine or implicitly through the **GPOPPH** subroutine during nucleus connection processing. The host attempting the connection does not have permission to access the specified nucleus.

System Action: The subroutine call in error is ignored.

Programmer Response: Before connecting to a remote nucleus, you must indicate to the nucleus which hosts are permitted access. You allow host permission by issuing the **gPhost** command or by creating a default host access file. See *The graPHIGS Programming Interface: Technical Reference* for a discussion on remote nuclei.

Error Number: 208

209 - UPDATE NOTIFICATION MODE IS INVALID

Explanation: **GPSHDF** was invoked with an invalid update notification mode.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPSHDF** that caused the error. Correct the update notification mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of update notification mode, or use the inquiry function **GPQSHD** to determine the valid update notification mode.

Error Number: 209

210 - RESOURCE CREATION DETECTED AN INVALID USERID/PASSWORD

Explanation: **GPEXAP** was invoked, and one of the following conditions exists:

- the specified userid/password combination is not valid for the node of the specified nucleus
- the specified nucleus does not have the authority to check the userid/password combination

A remote nucleus can perform userid/password checking only under the following conditions:

- the remote nucleus was started using the **-a** option on the **gPinit** command

  and

- the remote nucleus is running under the **root** userid. In this case the nucleus can validate all userid/password combinations.

  or

- The remote nucleus is running under a userid other than **root**. In this case the nucleus can validate only the userid/password combination under which it is running.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the problem in one of the following ways:

- Call **GPEXAP** using the same userid/password combination that was used to start the remote nucleus
- Start the remote nucleus under **root** authority using the **gPinit -a** command and then call **GPEXAP** using any userid/password combination that is valid for the node on which the remote nucleus is running.

Error Number: 210

211 - RESOURCE TYPE IS INVALID

Explanation: A subroutine was invoked with an invalid resource type.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the resource type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resource types.

Error Number: 211

212 - SPECIFIED RESOURCE IDENTIFIER DOES NOT EXIST

Explanation: **GPATR** was invoked with an invalid nucleus resource identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPATR** that caused the error. Correct the resource identifier parameter.

Error Number: 212

213 - SPECIFIED PASSWORD IS INCORRECT

Explanation: **GPATR** or **GPSPMS** was invoked with an invalid password.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPATR** or **GPSPMS** that caused the error. Correct the password parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of message and resource passwords.

Error Number: 213

214 - PASSWORD CANNOT BE CHANGED FROM THIS APPLICATION

Explanation: **GPPW** was invoked for a resource that was not created by the application.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPPW** that caused the error. Correct the call. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources and passwords.

Error Number: 214

215 - SPECIFIED RESOURCES DO NOT EXIST ON THE SAME NUCLEUS

Explanation: A subroutine was invoked with resource identifiers that do not exist on the same target nucleus.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct one of the resource identifier parameters. See *The graPHIGS Programming Interface: Subroutine Reference* for parameter descriptions. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources and the nucleus.

Error Number: 215

216 - ONE OR MORE RESOURCES IS NOT ATTACHED

Explanation: **GPQICH** was invoked to return a list of image board identifiers, some of which are not attached to the application. The graPHIGS API will not return the list of image board identifiers, when one or more resources is not attached to the application.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQICH** that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Either correct the workstation identifier, the image index, or attach the image board. See *The graPHIGS Programming Interface: Subroutine Reference* for parameter descriptions. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources and image boards.

Error Number: 216

217 - RESOURCE CREATION REQUEST EXCEEDS NUCLEUS TABLE CAPACITY

Explanation: A subroutine was invoked with the maximum number of the resource type currently created.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Either detach a resource using **GPDTR**, or change the program to avoid creating too many resources. See *The graPHIGS Programming Interface: Subroutine Reference* for parameter descriptions. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources.

Error Number: 217

218 - ARCHIVE FILES ARE NOT SUPPORTED ON SPECIFIED NUCLEUS

Explanation: **GPOPAR** was invoked and a nucleus was specified that does not support archive files.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPOPAR** that caused the error. Correct the *ncid* parameter if that nucleus does not support archive files. (Not all graPHIGS API nuclei support archive files. For example, older versions of the nucleus and the nucleus in the 6090 do not support archive files.)

Error Number: 218

219 - SPECIFIED ARCHIVE FILE IDENTIFIER ALEADY IN USE

Explanation: **GPOPAR** or **GPATR** was invoked with a specified archive file identifier that is already in use.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPOPAR** or **GPATR** that caused the error. Correct the *arid* parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 219

220 - SPECIFIED ARCHIVE FILE DOES NOT EXIST

Explanation: A subroutine was invoked with an archive file identifier that does not exist in the list of all opened archive files.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the *arid* parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 220

221 - SPECIFIED STRUCTURE STORE IDENTIFIER ALREADY IS IN USE

Explanation: **GPATR** or **GPCRSS** was invoked with a structure store identifier that is already in use.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Use another structure store identifier parameter, or detach the specified structure store. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources.

Error Number: 221

222 - SPECIFIED STRUCTURE STORE DOES NOT EXIST

Explanation: A subroutine was invoked with a structure store identifier for which a structure store has not been created.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine the function that caused the error. Use another structure store identifier parameter, or create the specified structure store prior to invoking the function. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources.

Error Number: 222

223 - SPECIFIED STRUCTURE STORE TYPE IS NOT SUPPORTED

Explanation: **GPCRSS** was invoked with a structure store type that is not supported. Ensure that you use structure store types that are valid for your level of the graPHIGS API.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPCRSS** that caused the error. Correct the structure store type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of structure store types.

Error Number: 223

224 - SPECIFIED VIEW DOES NOT HAVE ASSOCIATED STRUCTURE STORE

Explanation: **GPARV** was invoked before the specified workstation was associated to a structure store.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPARV** that caused the error. Correct the workstation identifier to one that is associated to a structure store, or use **GPASSW** to associate the workstation to a structure store.

Error Number: 224

225 - STRUCTURE STORE THRESHOLD SIZE < ZERO

Explanation: **GPSSTH** was invoked with a structure store threshold value less than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPSSTH** that caused the error. Correct the threshold value to be an integer greater than zero.

Error Number: 225

226 - MAXIMUM NUMBER OF SIMULTANEOUS ASSOCIATED WORKSTATIONS EXCEEDED

Explanation: **GPASSW** was invoked directly (or indirectly) by **GPOPWS** to associate a structure store to all views of a workstation and the maximum number of workstations have already been associated to the structure store.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPASSW** that caused the error. Correct the number of workstations that are associated to the structure store. The workstation cannot be associated to a structure store until one of the current associated workstations is disassociated from the structure store (by invoking the close workstation subroutine). At this time, the application should invoke **GPASSW** to associate the desired workstation to the structure store.

Error Number: 226

227 - STRUCTURE STORE IS NOT SELECTED

Explanation: **GPQAR** or **GPQVR** was invoked with no structure store selected.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Ensure that your application has created and selected a structure store prior to invoking the subroutine call. These functions may be done automatically for your application, unless overridden using the DEFNUC default in either the Application Defaults Interface Block (ADIB), or External Defaults File (EDF); ensure that the DEFNUC value is correct. See *The graPHIGS Programming Interface: Technical Reference* to determine the values supported by the DEFNUC default.

Error Number: 227

231 - SPECIFIED IMAGE BOARD IDENTIFIER ALREADY IS IN USE

Explanation: **GPCRIB** or **GPATR** was invoked with an image board identifier that was already in use.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the image board identifier to some value that has not already been used.

Error Number: 231

232 - SPECIFIED IMAGE BOARD DOES NOT EXIST

Explanation: A subroutine was invoked with an image board identifier which does not exist.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the image board identifier to be one that exists.

Error Number: 232

233 - SPECIFIED IMAGE BOARD BIT DEPTH IS NOT SUPPORTED

Explanation: **GPCRIB** was invoked with a bit depth value that is not supported by the specified nucleus.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPCRIB** that caused the error. Correct the bit depth value to one that is supported by the specified nucleus. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function, **GPQIBF**, to determine what bit depth values are supported.

Error Number: 233

234 - SPECIFIED IMAGE BOARD SIZE IS INVALID

Explanation: **GPCRIB** was invoked with a horizontal or vertical size that is not in the range supported by the specified nucleus.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCRIB** that caused the error. Correct the horizontal or vertical size parameters. Use the inquiry function, **GPQIBF**, to determine the maximum vertical and horizontal sizes.
Error Number: 234

235 - SPECIFIED IMAGE BOARD TYPE IS NOT SUPPORTED

Explanation: **GPCRIB** was invoked with a image board type that is not supported by the specified nucleus.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCRIB** that caused the error. Correct the image board type to one that is supported by the specified nucleus. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 235

236 - RECTANGLE DEFINITION IS INVALID

Explanation: A subroutine was invoked with a rectangle definition that is invalid. This error occurs if the source rectangle origin values are less than zero, the rectangle size values are less than one, or the rectangle exceeds the source image boundaries.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the rectangle definition (origin and size).
Error Number: 236

237 - SPECIFIED APPLICATION IMAGE FORMAT IS NOT SUPPORTED

Explanation: **GPWRCT**, **GPRDFB**, or **GPRRCT** was invoked with an invalid application image format parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the application image format parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.
Error Number: 237

238 - SPECIFIED TWO OPERAND OPERATION IS NOT SUPPORTED

Explanation: **GPTWPO** was invoked with an invalid operation type parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPTWPO** that caused the error. Correct the operation type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 238

239 - SPECIFIED THREE OPERAND OPERATION IS NOT SUPPORTED

Explanation: **GPTHPO** was invoked with an invalid operation type parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPTHPO** that caused the error. Correct the operation type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.
Error Number: 239

240 - APPLICATION IMAGE DESCRIPTION IS INVALID

Explanation: **GPWRCT**, **GPRDFB**, or **GPRRCT** was invoked with invalid data in the format-dependent parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the format-dependent parameter. Be sure that you use the correct parameters for the type of format that you have selected using the format parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.
Error Number: 240

241 - SPECIFIED FONT DIRECTORY IDENTIFIER ALREADY IS IN USE

Explanation: **GPATR** or **GPCRFD** was invoked with a font identifier that is already in use.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Use another font directory identifier parameter, or detach the specified font directory. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources.
Error Number: 241

242 - SPECIFIED FONT DIRECTORY DOES NOT EXIST

Explanation: A subroutine was invoked with a font directory identifier that has not been created.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Use another font directory identifier parameter, or create the specified font directory prior to invoking the function. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of resources.
Error Number: 242

243 - SPECIFIED FONT DIRECTORY TYPE IS NOT SUPPORTED

Explanation: **GPCRFD** was invoked with a font directory type that is not supported. The font directory type parameter allows future extensions of the graPHIGS API Be sure that you use font directory types that are valid for your level of the graPHIGS API.
System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPCRFD** that caused the error. Correct the font directory type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of font directory types.

Error Number: 243

245 - FONT OPTION IS INVALID

Explanation: **GPLDFO** was invoked with an invalid font option that is not supported.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLDFO** that caused the error. Correct the font option. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 245

250 - HLHSR IDENTIFIER IS INVALID

Explanation: **GPHID** was invoked with a HLHSR identifier that was not valid.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPHID** that caused the error. Correct the HLHSR identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 250

251 - SPECIFIED HLHSR MODE IS NOT SUPPORTED

Explanation: **GPXVR** was invoked with a HLHSR mode that is not supported by the specified workstation identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPXVR** that caused the error. Correct the HLHSR mode with a mode that the workstation supports. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQHMO** to determine what HLHSR modes are valid for a given workstation type.

Error Number: 251

252 - ANTIALIASING IDENTIFIER IS INVALID

Explanation: **GPAID** was invoked with an antialiasing identifier that was not valid.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPAID** that caused the error. Correct the antialiasing identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 252

253 - SPECIFIED ANTIALIASING MODE IS NOT SUPPORTED

Explanation: **GPXVR** was invoked with an antialiasing mode that is not supported by the specified workstation identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPXVR** that caused the error. Correct the antialiasing mode with a mode that the workstation supports. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQAMO** to determine what antialiasing modes are valid for a given workstation type.

Error Number: 253

254 - LIGHT SOURCE INDEX < ONE

Explanation: **GPLSR**, **GPLSS**, or **GPQLSR** was invoked with an invalid light source index parameter. The light source index value must be greater than or equal to one.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the light source index value parameter.

Error Number: 254

255 - LIGHT SOURCE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY

Explanation: **GPLSR** or **GPQLSR** was invoked with a light source index that was greater than the capacity of the light source table of the specified workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the light source index to be within the range allowed for the specified workstation. See *The graPHIGS Programming Interface: Understanding Concepts*, or use the inquiry function, **GPQLSF**, to determine the available information on light source facilities of the workstation.

Error Number: 255

256 - ACTIVATE LIST AND DEACTIVATE LIST ARE NOT DISJOINT

Explanation: **GPLSS** was invoked with an activation list and a deactivation list that had one or more entries that were the same.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLSS** that caused the error. Correct the values in the activation list (and/or the deactivation list), so that no entries in the activation list match any entry in the deactivation list.

Error Number: 256

257 - LIGHTING CALCULATION MODE IS INVALID

Explanation: **GPLMO** was invoked with an invalid lighting calculation mode parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLMO** that caused the error. Correct the lighting calculation mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid lighting calculation modes.

Error Number: 257

258 - SPECIFIED LIGHT SOURCE TYPE IS NOT SUPPORTED

Explanation: **GPLSR** was invoked with an invalid light source type parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLSR** that caused the error. Correct the light source type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for allowable light source types.

Error Number: 258

259 - ONE OF LIGHT SOURCE PARAMETERS IS INVALID

Explanation: **GPLSR** was invoked with an invalid value specified as part of a light source parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPLSR** that caused the error. Correct the light source parameter. The light source parameter format depends on the light source type. Be sure the parameter matches the type. See *The graPHIGS Programming Interface: Subroutine Reference* for valid light source parameters.

Error Number: 259

260 - SPECIFIED TRANSPARENT PROCESSING MODE IS NOT SUPPORTED

Explanation: **GPXVR** was invoked with an invalid value for the transparent processing mode. A value specified for the transparent processing mode was invalid, or the specified mode is not available on the specified workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the invocation for **GPXVR** that caused the error. Correct the transparent processing mode. See *The graPHIGS Programming Interface: Subroutine Reference* for allowable transparent processing modes.

Error Number: 260

261 - DEPTH CUE INDEX < ZERO

Explanation: **GPDCI**, **GPDCR**, or **GPQDCR** was invoked with an invalid value for the depth cue index parameter. The value assigned was less than zero. The depth cue value must be greater than or equal to zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the value of the depth cue index parameter.

Error Number: 261

262 - DEPTH CUE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY

Explanation: **GPDCR** or **GPQDCR** was invoked with an invalid depth cue index value that exceeds the workstation table capacity.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Use the appropriate inquiry function to determine the size of depth cue table for your workstation.

Error Number: 262

263 - DEPTH CUE REFERENCE PLANE IS INVALID

Explanation: **GPDCR** was invoked with invalid far and near depth cue reference plane distances. The far distance must be less than the near distance.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDCR** that caused the error. Correct the far and near distance values.
Error Number: 263

264 - DEPTH CUE SCALE FACTOR IS INVALID

Explanation: **GPDCR** was invoked with invalid depth cue scale factors.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDCR** that caused the error. Correct the scale factor parameter.
Error Number: 264

265 - COLOR PROCESSING INDEX < ZERO

Explanation: **GPCPI**, **GPCPR**, **GPQCPR**, or **GPXVR** was invoked with a color processing index less than zero. The index must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the color processing index parameter.
Error Number: 265

266 - COLOR PROCESSING INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY

Explanation: **GPCPR**, **GPQCPR**, or **GPXVR** was invoked with a color processing index which was too large for the specified workstation. The color processing index must be less than or equal to the maximum index supported on the workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the color processing index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCPF** to determine the supported color processing indexes.
Error Number: 266

267 - SPECIFIED RENDERING COLOR MODEL IS NOT SUPPORTED

Explanation: **GPCPR** was invoked with a color model value which is not supported on the specified workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCPR** that caused the error. Correct the color processing index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQRCM** to determine the supported rendering color models.
Error Number: 267

268 - SPECIFIED QUANTIZATION METHOD IS NOT SUPPORTED

Explanation: **GPCPR** was invoked with a color quantization method that is not supported on the specified workstation.
System Action: The function is ignored.
Programmer Response: Locate the specific invocation of **GPCPR** that caused the error. Correct the color quantization method parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCQM** to determine the supported color quantization methods.
Error Number: 268

269 - ONE OF QUANTIZATION PARAMETERS IS INVALID

Explanation: **GPCPR** was invoked with an invalid color quantization parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCPR** that caused the error. Correct the color quantization parameter.
Error Number: 269

272 - GROUP IDENTIFIER IS INVALID

Explanation: A subroutine was invoked with an invalid group identifier parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the group identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for a list of allowable group identifiers.
Error Number: 272

273 - NUMBER OF GROUP IDENTIFIERS < ONE

Explanation: A subroutine was invoked with an invalid number of group identifiers. The number of group identifiers must be greater than or equal to one.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the number of group identifiers, so that it is greater than or equal to one (this number must match the number of group identifiers in the list to be passed to the function).
Error Number: 273

274 - THIS FUNCTION IS NOT SUPPORTED BY THE WORKSTATION

Explanation: A subroutine was invoked that is not supported on the specified workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the workstation identifier if it is not correct. See *The graPHIGS Programming Interface: Technical Reference* or use the appropriate inquiry function, either **GPQLTF**, **GPQMTF**, or **GPQHF**, to determine whether the workstation supports the desired function.
Error Number: 274

275 - SPECIFIED ENTRY CANNOT BE CHANGED

Explanation: A subroutine was invoked that attempted to change an entry in a table that is not allowed to be changed.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Determine that the index into the table is correct. See *The graPHIGS Programming Interface: Subroutine Reference* to check which entry is restricted for the failing function.

Error Number: 275

276 - DEFINITION DATA FORMAT IS NOT SUPPORTED

Explanation: **GPHR** or **GPMTR** was invoked with a data format that is not supported by the specified workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the data format if it is invalid. See *The graPHIGS Programming Interface: Technical Reference* or use the appropriate inquiry function, either **GPQHF** or **GPQMTF**, to determine the allowed data format for the specified workstation.

Error Number: 276

277 - DEFINITION DATA EXCEEDS THE WORKSTATION TABLE CAPACITY

Explanation: **GPLTR**, **GPMTR**, or **GPHR** was invoked with definition data that is larger than the size of the table for the specified workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Determine that the definition data is correct. See *The graPHIGS Programming Interface: Technical Reference* or use the appropriate inquiry function, **GPQLTF**, **GPQMTF**, or **GPQHF**, to determine the size of the definition data for the specified workstation.

Error Number: 277

278 - CULL SIZE INDEX < ONE

Explanation: **GPCSR**, **GPQCSR**, **GPTEX2**, or **GPTEX3** was invoked with an invalid cull size index. The cull size index must be greater than or equal to one.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the cull size index so that it is greater than or equal to one.

Error Number: 278

279 - CULL SIZE INDEX EXCEEDS THE WORKSTATION TABLE CAPACITY

Explanation: **GPCSR** or **GPQCSR** was invoked with an invalid cull size index. The index exceeds the size of the cull size table in the specified workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the cull size index. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQCSF** to determine the size of the cull table for the specified workstation.

Error Number: 279

280 - CULL SIZE < ZERO

Explanation: **GPCSR** was invoked with an invalid cull size. The cull size must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCSR** that caused the error. Correct the cull size so that it is greater than or equal to zero.
Error Number: 280

281 - DEPTH CUE MODE IS INVALID

Explanation: **GPDCR** was invoked with a depth cue mode parameter which is incorrectly specified.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDCR** that caused the error. Correct the depth queue mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* or use the inquiry function **GPQDCF** for a list of allowable depth cue modes.
Error Number: 281

282 - COLOR TABLE IDENTIFIER < ONE

Explanation: **GPCRC** or **GPDLC** was invoked with an invalid color table identifier. The color table identifier must be greater than 0.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color table identifier.
Error Number: 282

283 - COLOR TABLE IDENTIFIER ALREADY IS IN USE

Explanation: **GPCRC** was invoked with a color table identifier that was previously used.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color table identifier.
Error Number: 283

284 - COLOR TABLE IDENTIFIER DOES NOT EXIST

Explanation: A subroutine was invoked with an invalid color table identifier. The color table identifier does not exist on the workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the color table identifier parameter. Use the inquiry function **GPQCID** to obtain a list of color table identifiers that exist on the workstation.
Error Number: 284

285 - SPECIFIED COLOR MODEL IS NOT SUPPORTED

Explanation: **GPCRC** was invoked to create a color table with a color model that is not supported.

System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color model parameter.
Error Number: 285

286 - COLOR TABLE SIZE EXCEEDS THE WORKSTATION MAXIMUM

Explanation: **GPCRC** was invoked to create a color table with a color table length greater than the specified workstation maximum table size.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCRC** that caused the error. Specify a color table length within the workstation's limitation. Use the inquiry function **GPQCCH** to determine the maximum table size supported by the workstation.
Error Number: 286

287 - COLOR TABLE SIZE < ONE

Explanation: **GPCRC** was invoked to create a color table with an invalid color table length parameter. The color table length parameter must be specified in log2.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color table length parameter.
Error Number: 287

288 - IMAGE INDEX NOT WITHIN WORKSTATION TABLE RANGE

Explanation: A subroutine was invoked with an invalid image index.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the image index parameter. Use the inquiry function **GPQIDF** to determine the maximum image index supported by the workstation. Ensure that the image index is not less than one.
Error Number: 288

289 - SPECIFIED COLOR TABLE CANNOT BE MODIFIED

Explanation: **GPXCR** was invoked with a color table identifier for a color table that does not exist on the workstation, or cannot be modified.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPXCR** that caused the error. Correct the color table identifier parameter, and determine if the color table can be modified. See *The graPHIGS Programming Interface: Technical Reference*. See also *The graPHIGS Programming Interface: Understanding Concepts*, or use the inquiry function **GPQXCF** to determine the characteristics of the specified color table on your workstation.
Error Number: 289

290 - SPECIFIED IMAGE INDEX IS NOT DEFINED

Explanation: A subroutine was invoked with an invalid image index parameter.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the image index parameter, or create the image using **GPDFI**. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.

Error Number: 290

291 - SPECIFIED IMAGE CONNECTION TYPE IS NOT SUPPORTED

Explanation: **GPDFI** was invoked with an invalid connection type parameter or a connection type parameter that is not supported by the workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDFI** that caused the error. Correct the connection type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing. See *The graPHIGS Programming Interface: Technical Reference* to determine the image connection types supported by the workstation, or use the **GPQIDF** inquiry function.

Error Number: 291

292 - NUMBER OF IMAGE BOARDS DOES NOT MATCH THE CONNECTION TYPE

Explanation: **GPDFI** was invoked with an invalid number of image boards for the specified connection type parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDFI** that caused the error. Either correct the number of image boards parameter for the connection type specified in the connection type parameter, or correct the connection type parameter, if incorrect. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.

Error Number: 292

293 - CHARACTERISTICS OF THE SPECIFIED IMAGE BOARDS DO NOT MATCH

Explanation: **GPDFI** was invoked specifying image boards that were not created with the same horizontal and vertical size.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDFI** that caused the error. Correct the specified list of image boards. The image boards used to define the image must be created with the same horizontal and vertical size. Image boards are created using the **GPCRIB** subroutine call.

Error Number: 293

294 - SPECIFIED IMAGE MAPPING METHOD IS NOT SUPPORTED

Explanation: **GPCIM2**, **GPCIM3**, or **GPDRI2** was invoked with an invalid image mapping method parameter, or an image mapping method that is not supported by the workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the image mapping parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing. See also *The graPHIGS Programming Interface: Technical Reference* to determine the image mapping methods supported by the workstation, or use the **GPQIMF** inquiry function.

Error Number: 294

295 - PIXEL OPERATION TYPE IS INVALID

Explanation: **GPQPO** was invoked with an invalid pixel operation type parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQPO** that caused the error. Correct the pixel operation type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.

Error Number: 295

296 - SPECIFIED IMAGE MAPPING DOES NOT EXIST

Explanation: **GPQIMC** was invoked with an invalid image mapping identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQIMC** that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Either correct the image mapping identifier parameter, or create the image mapping using **GPCIM2** or **GPCIM3**. See *The graPHIGS Programming Interface: Subroutine Reference* for a parameter description and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of image processing.

Error Number: 296

297 - LINE RENDERING STYLE IS INVALID

Explanation: **GPLNR** was invoked with an invalid line rendering style.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocaton of **GPLNR** that caused the error. Correct the line rendering style. See *The graPHIGS Programming Interface: Subroutine Reference* for valid rendering styles, or use the inquiry function **GPQLNR** to determine the line rendering styles supported by the workstation.

Error Number: 297

299 - FACE LIGHTING METHOD IS INVALID

Explanation: **GPFLM** was invoked with an invalid face lighting method.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the face lighting method parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 299

Device-Independent Messages 300 - 363

300 - STORAGE REQUEST FAILED

Explanation: Insufficient storage was available to complete the requested function.
System Action: The function is terminated.
Programmer Response: Specify additional storage and re-invoke the graPHIGS API.
Error Number: 300

301 - CONTROL FLAG IS INVALID

Explanation: **GPRAST** was invoked with an invalid redraw flag.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPRAST** that caused the error. Correct the redraw flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the redraw flag.
Error Number: 301

302 - REGENERATION FLAG IS INVALID

Explanation: **GPUPWS** was invoked with an invalid regeneration flag.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPUPWS** that caused the error. Correct the regeneration flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the regeneration flag.
Error Number: 302

303 - DEFERRAL MODE IS INVALID

Explanation: **GPDF** was invoked with an invalid deferral mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDF** that caused the error. Correct the deferral mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of deferral mode.
Error Number: 303

304 - MODIFICATION MODE IS INVALID

Explanation: **GPDF** was invoked with an invalid modification mode.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDF** that caused the error. Correct the modification mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of modification mode.

Error Number: 304

305 - TEXT PRECISION VALUE IS INVALID

Explanation: **GPTXPR**, **GPTXR**, or **GPXTXR** was invoked with an invalid text precision value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the text precision parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of text precision.
Error Number: 305

306 - TEXT PATH VALUE IS INVALID

Explanation: **GPAPT** or **GPTXPT** was invoked with an invalid text path value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the text path parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of text path.
Error Number: 306

309 - TEXT ALIGNMENT COMPONENT IS INVALID

Explanation: **GPAAL** or **GPTXAL** was invoked with an invalid horizontal or vertical alignment value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the text alignment parameters. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of text alignment.
Error Number: 309

310 - INTERIOR STYLE VALUE IS INVALID

Explanation: **GPIR**, **GPIS**, or **GPXIR** was invoked with an invalid interior style value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the interior style parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of interior style.
Error Number: 310

311 - EDGE FLAG VALUE IS INVALID

Explanation: **GPEF**, **GPER**, or **GPXER** was invoked with an invalid edge flag value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the edge flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the edge flag.
Error Number: 311

314 - AN ATTRIBUTE IDENTIFIER IS INVALID

Explanation: **GPASF** or **GPQAAF** was invoked with an invalid attribute identifier.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the attribute identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid attribute identifiers.
Error Number: 314

315 - ATTRIBUTE SOURCE IS INVALID

Explanation: **GPASF** was invoked with an invalid attribute source value.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPASF** that caused the error. Correct the source value parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of attribute source flags.
Error Number: 315

318 - COLOR MODEL INVALID

Explanation: **GPCML** or **GPDCM** was invoked with an invalid color model.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the color model parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of color models.
Error Number: 318

319 - COMPOSITION TYPE VALUE IS INVALID

Explanation: **GPMLX2** or **GPMLX3** was invoked with an invalid modeling transformation composition type.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the composition type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of composition types.
Error Number: 319

320 - LASS NAME VALUE IS INVALID

Explanation: **GPADCN** or **GPRCN** was invoked with an invalid class name value. A class name value must be greater than zero and less than the maximum supported by the device.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQNCN** to determine the maximum class name value that is supported by the workstation.
Error Number: 320

321 - FILTER VALUE IS INVALID

Explanation: **GPHLF**, **GPIVF**, or **GPPKF** was invoked with an invalid class name in one of the filters. A class name value must be greater than zero and less than the maximum supported by the device.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQNCN** to determine the maximum class name value that is supported by the workstation.

Error Number: 321

323 - VIEW INDEX EXCEEDS VIEW TABLE CAPACITY

Explanation: A subroutine was invoked with the specified view index greater than the view table size.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the view index parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function, **GPQNV**, to determine the view table size.

Error Number: 323

324 - PROMPT/ECHO TYPE < ONE

Explanation: A subroutine with an input device initialization function has been called with an invalid prompt/echo type. Prompt/echo type values must be greater than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the prompt/echo type parameter.

Error Number: 324

325 - NUMBER OF POINTS IN INITIAL STROKE < ZERO

Explanation: **GPINSK** was invoked with the number of initial stroke points parameter less than zero. The number of initial stroke points parameter must be greater than or equal to zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINSK** that caused the error. Correct the initial stroke parameter.

Error Number: 325

326 - OPERATING MODE IS INVALID

Explanation: A subroutine which sets the input device operating mode was invoked with an invalid operating mode parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the operating mode parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of operating mode.

Error Number: 326

327 - ECHO SWITCH VALUE IS INVALID

Explanation: A subroutine which sets the echo switch of an input device was invoked with an invalid echo switch.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the echo switch parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of echo switch.

Error Number: 327

328 - INPUT CLASS VALUE IS INVALID

Explanation: A subroutine with an input device function was invoked with an invalid device class parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the input class parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of input class.

Error Number: 328

329 - ONE OF THE SPECIFIED SWITCH VALUES IS INVALID

Explanation: **GPIDMO** was invoked with an invalid switch value.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPIDMO** that caused the error. Correct any of the switch parameters that are in error. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 329

330 - INVALID VIEWPORT

Explanation: A subroutine was invoked with one of the following:

- One of the maximum viewport extents is less than or equal to the corresponding minimum extent.
- For **GPVMP2** or **GPVMP3**, one of the points was outside normalized projection space (0.0 to 1.0 inclusive).
- For **GPWSX2** or **GPWSX3**, one of the points was outside the device coordinate space.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the invalid viewport parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQADS** to determine the device coordinate values.

Error Number: 330

331 - PROJECTION TYPE IS INVALID

Explanation: A subroutine was invoked with an invalid projection type parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the projection type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of projection types.

Error Number: 331

332 - CLIP INDICATOR VALUE IS INVALID

Explanation: **GPMCI**, **GPVCH**, **GPXVCH**, or **GPXVR** was invoked with an invalid clipping indicator.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the clipping indicator. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 332

333 - RELATIVE VIEW PRIORITY VALUE IS INVALID

Explanation: **GPVP**, **GPVOP**, or **GPVIP** was invoked with an invalid relative view priority.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the view priority parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of relative view priority.

Error Number: 333

334 - TEMPORARY VIEW INDICATOR IS INVALID

Explanation: **GPXVR** or **GPXVCH** was called with an invalid temporary view indicator.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the temporary view indicator parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid temporary view indicator values.

Error Number: 334

336 - FAR CLIPPING PLANE IN FRONT OF NEAR CLIPPING PLANE

Explanation: **GPEVM3**, **GPVMP3**, or **GPXVR** was invoked with the far clip plane distance parameter less than or equal to the near clip distance parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the near and/or far clip plane distance. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of clipping planes.

Error Number: 336

340 - MINIMUM GRID LIMIT > MAXIMUM

Explanation: **GPLG2**, **GPLG3**, **GPMG2**, or **GPMG3** was invoked with a line grid or marker grid primitive with invalid grid limits.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct grid limit values. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the line marker grid primitives. Also see *The graPHIGS Programming Interface: Subroutine Reference* for valid line marker grid primitives.

Error Number: 340

341 - ORDER OF BASIS FUNCTION < TWO

Explanation: A subroutine was invoked with an invalid order of the basis number. The order of the basis function is used to specify the degree of the curve or surface. For example, with order 4 (degree 3), a cubic approximation would be done. Order of less than two is not defined.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the order parameter.

Error Number: 341

342 - ORDER IS GREATER THAN NUMBER OF CONTROL POINTS

Explanation: A subroutine was invoked with an invalid order parameter. A primitive contains an inconsistency among the parameters specifying a non-uniform B-spline curve or surface. The order parameter is greater than the corresponding number of control points parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Ensure that the order parameter is less than or equal to its corresponding number of control points parameter. If the subroutine takes a *curve info* structure array parameter, check that the *curve type* field in an element of *curve info* does not mistakenly specify a non-uniform B-spline curve or surface.

Error Number: 342

343 - KNOT VECTOR IS INVALID

Explanation: A subroutine was invoked with an invalid sequence of knot values. The knot vector is not a non-decreasing sequence of floating-point numbers. There is some *i* for which the *(i+1)*-th knot is less than the *i*-th knot.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the sequence of knot values. If the subroutine takes a *curve info* structure array parameter, check that the knot vector is consistent with the type of curve, order, and number of vectors fields in *curve info*

Error Number: 343

345 - WEIGHT IN CONTROL POINT IS <=ZERO

Explanation: A subroutine was invoked with an invalid definition of control points. When the rational control points are used for curve or surface definition, the value of the weight parameter must be greater than zero. Other values have no meaning.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Check the definition of your control points. If the points are not rational, check your flag settings. If you are defining a surface, be sure that the control points are in the sequence requested.

Error Number: 345

347 - PARAMETER LIMITS ARE OUTSIDE VALID PARAMETER RANGE

Explanation: A subroutine was invoked with invalid minimum and maximum limit parameters. Limits of parameter evaluation for a parametric curve, or surface are outside their valid range. The minimum parameter limit is less than the maximum parameter order or the maximum parameter limit is greater than parameter number of control points plus one.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the minimum and maximum parameter limits. If the primitive takes a *curve info* structure array parameter, check that the type of curve field is used where it is intended.

Error Number: 347

348 - MINIMUM PARAMETER LIMIT > MAXIMUM

Explanation: A subroutine was invoked with invalid parameter limits. The minimum parameter limit is greater than the maximum parameter limit in evaluating a parametric curve or surface.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the minimum and maximum parameter limits. If the primitive takes a *curve info* structure array parameter, check that the type of curve field is used where it is intended.

Error Number: 348

349 - NORMAL VECTOR HAS ZERO LENGTH

Explanation: **GPPGD3**, **GPPHE**, **GPQM3**, or **GPTS3** was invoked using a zero vector as a normal, which is invalid. A normal vector in a primitive is identically zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Do not use a zero vector as a normal. Check that an optional data flag specifying a normal is not mistakenly set. Have your program check that normals are not zero.

Error Number: 349

351 - OPTIONAL DATA AVAILABILITY FLAG IS INVALID

Explanation: A subroutine was invoked with an incorrect value set on the optional data flag set. The optional data flag indicates which optional data is present for a complex primitive. Either an undefined flag is set or a flag is not allowed for the particular primitive.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the value of the optional data flag in error.

Error Number: 351

352 - BOUNDARY FLAG IS INVALID

Explanation: **GPPGD2**, **GPPGD3**, **GPQM3**, or **GPTS3** was invoked with an invalid boundary flag.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the boundary flag. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values.

Error Number: 352

353 - NUMBER OF CONTOURS < ZERO

Explanation: **GPCFA2**, **GPRTNS**, or **GPTNBS** was invoked with an invalid number of contours parameter. The number of contours parameter is less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the number of contours parameter value in the primitive.
Error Number: 353

354 - NUMBER OF CURVES PER CONTOUR < ONE

Explanation: **GPCFA2**, **GPRTNS**, or **GPTNBS** was invoked with an invalid number of curves parameter. A value in the number of curves parameter is less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the value in the number of curves parameter array.
Error Number: 354

355 - CURVE TYPE IS INVALID

Explanation: **GPCFA2** was invoked with an invalid value in the type of curve field. The value in a type of curve field in an element of a *curve info* structure array parameter is not permitted for the primitive.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCFA2** that caused the error. Correct the type of curve value.
Error Number: 355

356 - NUMBER OF POLYLINES < ZERO

Explanation: **GPPLD3** was invoked with an invalid number of polylines. The number of polylines, which is specified in the *pdata* parameter, must be greater than or equal to zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPLD3** that caused the error. Correct the value in the *pdata* parameter.
Error Number: 356

357 - DIMENSION OF VERTEX ARRAY < ZERO

Explanation: **GPQM3** was invoked with an invalid value for the dimensions of the vertex array. The values for these dimensions must be greater than or equal to zero. The dimensions of the vertex array are specified in the first field of the *mdata* parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPQM3** that caused the error. Correct the *mdata* parameter.
Error Number: 357

361 - CURVE OPTIONS FIELD IS INVALID

Explanation: **GPCFA2**, **GPRTNS**, or **GPTNBS** was invoked with an invalid curve options field. The curve options field has a flag other than those that can be used with the curve specified by the type of curve field.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the curve options field.

Error Number: 361

362 - TESSELLATION CONTROL VALUE IS INVALID

Explanation: A subroutine was invoked with invalid tessellation quality values. Tessellation quality values were specified with a curve or surface definition and one or more of these values was less than zero. This value is used as a multiplier on the tessellation value, and a value less than zero has no meaning.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the tessellation quality values.

Error Number: 362

363 - NUMBER OF EDGES < ONE

Explanation: **GPPHE** was invoked with an invalid number of edges parameter. A polyhedron edge must have at least one edge.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPPHE** that caused the error. Correct the number of edges parameter.

Error Number: 363

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501 - DATA RECORD WAS NOT SPECIFIED BUT IS REQUIRED

Explanation: A subroutine was invoked as an input device initialization function with a specified prompt/echo type that requires a data record. Either the data record length was specified as zero, or the header of the data record is all zeros.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the data record format specification or change the prompt/echo type. See *The graPHIGS Programming Interface: Subroutine Reference* for an explanation of data record formats.

Error Number: 501

502 - FIELD IN DATA RECORD NOT SUPPORTED ON WORKSTATION

Explanation: A subroutine was invoked as an input device initialization function with a data record containing a value which the workstation cannot support.
System Action: An appropriate default value will be used for the data record value.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter in error. See *The graPHIGS Programming Interface: Technical Reference* for supported data record values.
Error Number: 502

505 - LENGTH OF RETURN ARRAY < ZERO

Explanation: A subroutine was invoked with an invalid array length parameter. This function has detected a return array length specified by the application that is less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the array length parameter.
Error Number: 505

506 - NUMBER OF INITIAL VALUES < ZERO

Explanation: **GPINPK**, **GPINSK**, **GPINST**, or **GPPREC** was invoked with an invalid the number of initial values parameter. The number of initial values must be equal to or greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the number of initial values parameter.
Error Number: 506

507 - SHIELDING INDICATOR VALUE IS INVALID

Explanation: **GPVCH**, **GPXVCH**, or **GPXVR** was invoked with an invalid shielding parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine the function that caused the error. Correct the shielding indicator parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of shielding indicators.
Error Number: 507

508 - VIEW ACTIVE FLAG VALUE IS INVALID

Explanation: **GPVCH**, **GPXVCH**, or **GPXVR** was invoked with an invalid view active parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the view active flag parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of active flag values.
Error Number: 508

509 - DATA LENGTH VALUE < ZERO OR REQUIRED LENGTH

Explanation: A subroutine was invoked that caused an error that can be generated by three different circumstances:

1. Input device initialization function.

   The data length value parameter is less than zero or less than the minimum length required. For example, if the data must contain at least four real values, then the minimum record data length would be 28 bytes (3 fullword integers for the header, followed by 4 reals).

2. Input device inquiry function.

   The specified length of the area that the data record is returned to is smaller than the data record size. This condition is returned only in the error indicator parameter of the inquiry call.

3. Conversion Utility

   The data length parameter is less than zero, or less than the minimum length required.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Identify the function causing the error and correct the parameter. Be sure the data-length parameter is greater than or equal to the length defined by the data-record header or zero if no data is required. For input device inquiry, increase the length parameter value and size of the area in which the record is to be returned. If the data record is not required by the application, this error may be ignored.

Error Number: 509

511 - INVALID VALUATOR RANGE

Explanation: **GPINVL** was invoked with the minimum value of the range greater than the maximum value of the range.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINVL** that caused the error. Correct the valuator range parameters.

Error Number: 511

512 - METHOD NOT SUPPORTED

Explanation: A subroutine was invoked with an invalid *method* parameter value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the *method* parameter.

Error Number: 512

513 - NUMBER OF INITIAL VALUES EXCEEDS DEVICE MAXIMUM

Explanation: **GPINSK**, **GPINPK**, or **GPINST** was invoked with the number of the initial values greater than the maximum supported.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry functions, **GPQDSK** or **GPQDST**, to determine the maximum number of initial values that are supported.

Error Number: 513

514 - INAPPROPRIATE DEVICE FOR WORKSTATION TYPE

Explanation: **GPCRWS** or **GPOPWS** was invoked with an inconsistent workstation type and connection identifier.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the connection identifier and/or the workstation type in one of these places:

- On a **GPOPWS** or **GPCRWS** call
- In a nickname definition in the External Defaults File (EDF) or Application Defaults Interface Block.

See *The graPHIGS Programming Interface: Technical Reference* and *The graPHIGS Programming Interface: Writing Applications* for information on connection identifiers, workstation types and nicknames.

Error Number: 514

515 - INITIAL VALUATOR VALUE NOT WITHIN RANGE

Explanation: **GPINVL** was invoked with the initial valuator value not between the minimum and maximum values of the valuator range.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPINVL** that caused the error. Correct the initial value and/or valuator range.

Error Number: 515

516 - SCALE FACTOR IS INVALID

Explanation: **GPDCMM** was invoked with an invalid scale factor value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the scale factor value.

Error Number: 516

517 - NUMBER OF INDEXES < ONE

Explanation: **GPCR** or **GPXCR** was invoked with the number of indexes less than one.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the indexes parameter.

Error Number: 517

518 - VIEW ZERO CANNOT BE MODIFIED

Explanation: A subroutine was invoked with an invalid request for changes to view zero. View zero is statically defined and unchangeable.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the view index or remove the function call.

Error Number: 518

519 - NO CURRENT EVENT REPORT AVAILABLE

Explanation: A subroutine was invoked when the current event report was empty.
System Action: The subroutine call in error is ignored.
Programmer Response: **GPAWEV** must be issued to move an event from the event queue into the current event report. **GPGTxx** functions empty the current event report.
Error Number: 519

520 - ERROR QUEUE HAS OVERFLOWED

Explanation: A subroutine was invoked that caused more errors than the error queue can hold.
System Action: All errors are lost until room exists on the queue. As errors are reported to the error handler, space becomes available on the error queue to hold additional errors.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Contact your systems support to assist you in problem determination at this point.
Error Number: 520

521 - NOT IN ERROR STATE

Explanation: **GPELOG** or **GPQEMS** was invoked with the graPHIGS API not in error state.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine the function that caused the error. The application should be modified to use these functions only within the first-level error handler.
Error Number: 521

522 - VIEW MATRIX IS SINGULAR

Explanation: **GPVMT2**, **GPVMT3**, or **GPXVR** was invoked with a matrix that cannot be inverted.
System Action: The matrix is accepted and used normally for output. Since there is no inverse matrix for transforming stroke/locator input from device coordinates to world coordinates, default actions will be taken. The coordinates (0,0,0), will be returned for locator input, and zero points will be returned for stroke input from the corresponding view.
Programmer Response: Check the error log to determine which function caused the error. Verify the usage of a non-invertible matrix. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of view matrix and stroke/locator input.
Error Number: 522

523 - NUMBER OF ASFS < ZERO

Explanation: **GPASF** was invoked with the number of attribute source flags (ASF) parameters less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPASF** that caused the error. Correct the parameter.
Error Number: 523

524 - ELEMENT POSITION > NUMBER OF ELEMENTS IN STRUCTURE

Explanation: **GPQEDA** or **GPQEHA** was invoked with a starting element position that is larger than the number of elements in the structure.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Check that the number of elements in the specified structure is larger than the specified starting element position (**GPQSTS** can be used for this). Change the starting element position so that it is less than the last element in the structure.

Error Number: 524

525 - FUNCTION CANNOT BE CALLED IN ERROR STATE

Explanation: Only inquiry and error handling functions are valid while in error state.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. Correct the error by eliminating the call. Within the first-level error handler, eliminate all calls to graPHIGS API subroutines which are not error handling or inquiry functions.

Error Number: 525

526 - REQUESTED DATA NOT AVAILABLE FOR THIS FUNCTION

Explanation: A subroutine was invoked and data was found that cannot be translated to fit the format expected by these functions. The values returned in the output parameters are unpredictable.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. These inquiries are part of the compatibility subroutines that allow existing programs to continue to run unaltered. Applications that have been changed to make use of the new graPHIGS API functionality should use the **GPQED**, **GPQEMS**, **GPQCVR**, or **GPQRVR** subroutines (respectively) in order to make use of the information created.

Error Number: 526

527 - ESCAPE FUNCTION NOT AVAILABLE

Explanation: **GPCCV**, **GPES**, **GPQMDS**, or **GPRDFB** was invoked and the target workstation does not support the specified escape.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. Use the inquiry function **GPQES** to determine the supported escapes for a specified workstation.

Error Number: 527

528 - DIRECTION VALUE IS INVALID

Explanation: **GPELS** was invoked with an invalid search direction.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPELS** that caused the error. Correct the search direction parameter.

Error Number: 528

529 - NUMBER OF ENTRIES IN INCLUSION OR EXCLUSION LIST < ZERO

Explanation: **GPELS** was invoked with a negative inclusion or exclusion list length.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPELS** that caused the error. Check and correct the list length parameters of the **GPELS** element search structure function.
Error Number: 529

530 - NUMBER OF CLASS NAMES < ZERO

Explanation: **GPADCN** or **GPRCN** was invoked with the number of class names less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the number of class names parameter.
Error Number: 530

531 - FILTER LIST LENGTH < ZERO

Explanation: **GPHLF**, **GPIVF**, or **GPPKF** was invoked with an invalid filter list length parameter. The value of the filter list length must be equal to or greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the filter list length parameter.
Error Number: 531

532 - TIME INTERVAL IS TOO LARGE

Explanation: **GPAWEV** was called with the timeout value greater than the maximum supported, which is approximately 15 hours.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Decrease the timeout interval, so that it is less than the maximum timeout value.
Error Number: 532

533 - INQUIRY DATA EXCEEDS AREA. OUTPUT TRUNCATED

Explanation: A subroutine inquiry function has been invoked, and the amount of information to be returned exceeds the length of the output area provided by the application. This error is only returned as an error indicator from an inquiry function. It is never placed on the error queue. This may not be considered an error if the information is from an unknown length list.
System Action: The information is truncated to the size of the output area.
Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. The error can be corrected by:

- Increasing the output area size
- Requesting the rest of the information through additional inquiry calls with different start locations.

Error Number: 533

534 - TYPE VALUE IS INVALID

Explanation: A subroutine function was invoked with an invalid type parameter.
System Action: The subroutine call in error is ignored.

Programmer Response: Determine which function caused the error. Correct the type value. See *The graPHIGS Programming Interface: Subroutine Reference* for valid values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the type parameter.

Error Number: 534

535 - CURRENT ELEMENT POINTER IS ZERO

Explanation: **GPQE**, **GPQED**, or **GPQEHD** was invoked with the element pointer at zero. There is no structure element at this location.

System Action: No element content information is returned.

Programmer Response: Set the element pointer at a valid structure element before invoking the failing function. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the element pointer.

Error Number: 535

536 - INQUIRY DATA EXCEEDS AREA. LENGTH OF REQUIRED AREA RETURNED

Explanation: **GPQNS**, **GPQRCT**, or **GPQWTO** was invoked and the amount of information to be returned exceeds the length of the output area provided by the application. This error is only returned as an error indicator from an inquiry function.

System Action: The length of the output parameter area that is required is returned, but the information is not returned.

Programmer Response: This error can be returned only on an inquiry function. Therefore, it can only be detected by checking the error indicator parameter after invoking the inquiry function. The inquiry may be reissued with an output area large enough to contain the required information.

Error Number: 536

537 - PATTERN OR PIXEL ARRAY EXCEEDS INPUT ARRAY SIZE

Explanation: **GPPAR**, **GPPXL2**, or **GPPXL3** was invoked with a subarray that exceeds the input array dimensions.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the array or subarray specification to conform to input array dimensions.

Error Number: 537

538 - START VALUE < ONE

Explanation: A subroutine inquiry function was invoked that returns a subset of a list of values. The first location to be returned within the list was specified as less than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: This error can be returned only on an inquiry function. Therefore, it can only be detected by checking the error indicator parameter after invoking the inquiry function. Correct the start value to be greater than or equal to one.

Error Number: 538

539 - REQUESTED NUMBER < ZERO

Explanation: A subroutine inquiry function was invoked that returns a subset of a list of values. The number of values from the list to be returned was specified as less than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the requested number to a value that is greater than or equal to zero.

Error Number: 539

540 - REQUESTED NUMBER < ONE

Explanation: **GPQEHD**, **GPQEHA**, **GPQEDA**, or **GPQED** inquiry function was invoked, but the number of items requested is less than one. The number of items must be greater than or equal to one.

System Action: The subroutine call in error is ignored.

Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the number of entries or number of elements parameter.

Error Number: 540

542 - CHARACTER SET IDENTIFIER IS INVALID

Explanation: A subroutine was invoked with a character set identifier less than zero or greater than 255, or it is an identifier reserved for IBM.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or the error indicator parameter, as appropriate, to determine which function caused the error. Correct the character set identifier parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid values.

Error Number: 542

543 - START EXCEEDS DATA EXTENT. TOTAL NUMBER AVAILABLE RETURNED

Explanation: A subroutine was invoked with an invalid list length. The first location to be returned within the list is specified as greater than the number of values in the list.

System Action: The list length output parameter is returned and is valid, but no members of the list are returned.

Programmer Response: This error can be detected only by checking the error indicator parameter after calling the inquiry function. Either decrease the start parameter, or ignore this error if the list is not required. The list length may be used to adjust the start parameter for the future calls.

Error Number: 543

544 - START VALUE < ZERO

Explanation: **GPQCR** or **GPQXCR** was invoked with the start value less than zero. Color tables begin at entry zero.

System Action: The subroutine call in error is ignored.

Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Check the start value parameter and correct if necessary.

Error Number: 544

547 - VIEW BORDER=1 INDICATOR IS INVALID

Explanation: **GPVCH**, **GPXVCH**, or **GPXVR** was invoked with an invalid view border.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the view border indicator parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of view borders.
Error Number: 547

548 - SPECIFIED WORKSTATION TYPE CANNOT BE LOADED

Explanation: A subroutine was invoked for a workstation description table that is either unavailable on the system, or the system service failed when it tried to access the table.
System Action: The subroutine call in error is ignored.
Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Be sure the specified workstation type is supported. Check with the system programmer to be sure that the specified workstation type has been installed.
Error Number: 548

549 - INVALID PIXEL PACK FACTOR

Explanation: **GPPXL2** or **GPPXL3** was invoked with an invalid pixel pack factor.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the pixel pack factor. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameters values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of pixel pack factor.
Error Number: 549

550 - CHARACTER SET ID IS NOT SUPPORTED ON WORKSTATION

Explanation: **GPICS** was invoked with a character set identifier not supported by the workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPICS** that caused the error. Correct the parameter in error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQAIS** to determine the actual input character sets that are supported.
Error Number: 550

551 - START VALUE EXCEEDS COLOR TABLE SIZE

Explanation: **GPQCR** or **GPQXCR** was invoked with the start value parameter exceeding the size of the color table.
System Action: The subroutine call in error is ignored.
Programmer Response: This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the start parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQLW** to determine the actual size of the color table.
Error Number: 551

552 - PATH ORDER IS INVALID

Explanation: **GPRAS**, **GPRDS**, **GPQPDS**, or **GPQPAS** was invoked with an invalid path order.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Check and correct the path order parameter of the associated structure inquiry function.
Error Number: 552

553 - PRIMARY CHARACTER SET FONT ONE CANNOT BE DEACTIVATED

Explanation: **GPDAFO** was invoked with a character set identifier of the primary character set. The primary character set cannot be deactivated.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPDAFO** that caused the error. Eliminate all invocations to **GPDAFO** with a primary character set identifier. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQPCS** to determine the primary character set.
Error Number: 553

554 - PICK APERTURE < ZERO

Explanation: **GPPKAP** was invoked with the pick aperture size less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPPKAP** that caused the error. Correct the pick aperture size. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of pick aperture.
Error Number: 554

555 - MOVE/DRAW INDICATOR IS INVALID

Explanation: **GPDPL2** or **GPDPL3** was invoked with an invalid move/draw indicator in the move/draw array.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the move/draw indicator. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of the disjoint polyline.
Error Number: 555

556 - ELEMENT EXCEEDS MAXIMUM ALLOWED SIZE

Explanation: A subroutine was invoked, creating a structure element that exceeded the maximum size allowed. Total element size exceeds the maximum allowed by the graPHIGS API The maximum size structure element that may be defined is 64k bytes.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the structure element size. See *The graPHIGS Programming Interface: Technical Reference* for an explanation of the format and size of each structure element.
Error Number: 556

557 - WIDTH PARAMETER < MINIMUM ALLOWED

Explanation: A subroutine was invoked that has a point list parameter. The width of the point list parameter is less than the minimum allowed. The width parameter must be greater than or equal to 2 for 2D functions and greater than or equal to 3 for 3D functions.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the function that caused the error. Correct the parameter in error. See *The graPHIGS Programming Interface: Understanding Concepts*, for an explanation of point lists.
Error Number: 557

558 - PATH DEPTH < ZERO

Explanation: **GPRAS**, **GPRDS**, **GPQPDS**, or **GPQPAS** was invoked with a negative path depth.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Check and correct the path depth parameter of the associated structure inquiry function.
Error Number: 558

559 - FONT POOL SIZE EXCEEDED ON WORKSTATION

Explanation: **GPACFO** was invoked after the maximum number of fonts had already been activated.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPACFO** that caused the error. Deactivate other fonts to make room in the font pool preceding this invocation. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQFP** to determine the supported font pool size.
Error Number: 559

560 - CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE

Explanation: **GPQFAR** or **GPQFCH** was invoked, and the system could not find the requested character set/font combination.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Specify an available character set/font combination.
Error Number: 560

561 - CHARACTER SET/FONT COMBINATION IS NOT ACTIVE

Explanation: **GPQGFC** was invoked with character set and font identifiers that do not map to a currently active font.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPQGFC** that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the character set and font identifier parameters.
Error Number: 561

562 - CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE FOR ANNOTATION

Explanation: **GPQAFC** or **GPQXAF** inquiry function was invoked with character set and font identifiers which do not map to an available annotation font.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function. Correct the character set and font identifier parameters. See *The graPHIGS Programming Interface: Subroutine Reference* for a list of available annotation fonts.

Error Number: 562

563 - CHARACTER SET/FONT COMBINATION IS NOT AVAILABLE FOR GEOMETRIC TEXT

Explanation: **GPACFO** or **GPQGFC** was invoked with character set and font identifiers which do not map to an available geometric font.

System Action: The function is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Correct the character set and font identifier parameters. See *The graPHIGS Programming Interface: Subroutine Reference* for a list of available geometric fonts.

Error Number: 563

564 - TEXT STRING CONTAINS AN UNSUPPORTED CHARACTER CODE

Explanation: **GPQFAR** was invoked, and the text string contains a character code that is undefined in the given character set.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPQFAR** that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function.

This may not be an error in all cases. For example, this function can be used to determine the set of supported character codes by invoking it once for each value in the range 0 to 255. Before invoking this function for codes 0 to 255, be sure to activate the character set/font.

Error Number: 564

565 - WARNING, A TRIGGER QUALIFIER VALUE IS INVALID

Explanation: **GPIT** was issued with a trigger qualifier that does not exist for the corresponding input device.

A potential error is being tolerated. In early releases, it was not possible to determine the number of mouse buttons available. The trigger ranges were for the maximum possible range of buttons. In later releases, it became possible to determine the number of mouse buttons available, so calls to **GPIT** that specify invalid trigger values (based on the new information) are tolerated for compatibility.

System Action: The invalid trigger qualifier is ignored. Any valid trigger qualifiers specified by **GPIT** are used in setting the specified input device trigger.

Programmer Response: Check the error log to determine which **GPIT** function caused the error. Correct the parameter and use **GPQIT** to determine which trigger qualifiers are present.
Error Number: 565

566 - PICK IDENTIFIER DOES NOT EXIST IN THE OPEN STRUCTURE

Explanation: Either **GPEPPK** or **GPEPPG** (with pick identifier search flag set to WRAP) was invoked with a nonexistent pick identifier, or **GPEPPG** (with pick identifier search flag set to NOWRAP) was invoked with a pick identifier that did not exist between the current element pointer and the end of the structure.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter, or be sure the specified pick identifier exists.
Error Number: 566

567 - A TRIGGER TYPE VALUE IS INVALID

Explanation: **GPIT** or **GPBKAC** was called with a trigger type value that either does not exist or is not supported by the corresponding input device for **GPIT** or workstation for **GPBKAC**.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter and use the appropriate inquiry, **GPQAIT** or **GPQABK**, to determine which trigger types are present.
Error Number: 567

568 - A TRIGGER QUALIFIER VALUE IS INVALID

Explanation: **GPBKAC** or **GPIT** was called with a trigger qualifier that either does not exist or is not supported by the corresponding input device for **GPIT** or workstation for **GPBKAC**.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter and use the appropriate inquiry, **GPQAIT**, to determine which trigger qualifiers are present.
Error Number: 568

569 - DEVICE DOES NOT SUPPORT PROGRAMMABLE TRIGGERS

Explanation: **GPIT**, **GPQAIT**, or **GPQIT** was invoked for an input device that does not support programmable triggers.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. For **GPIT**, correct the input device parameters. Use **GPQIT** to determine which input devices support programmable triggers on a given workstation.
Error Number: 569

570 - SPECIFIED TRIGGER LIST IDENTIFIER DOES NOT EXIST

Explanation: **GPIT** or **GPQDIT** was called with a trigger list identifier that does not exist.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Use **GPQNST** to determine the number of secondary triggers for the specified device.

Error Number: 570

571 - INQUIRED INFORMATION IS NOT AVAILABLE

Explanation: A subroutine was called for a workstation that either does not support this function or does not possess distributed storage, or **GPQAFC** or **GPQXAF** were called for a workstation type of GDF or CGM. Since the GDF or CGM plot file support cannot determine at file creation time the characteristics of the plotter to be used, this information cannot be returned.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of the function that caused the error. This error can be returned only on an inquiry function. Therefore, it can be detected only by checking the error indicator parameter after invoking the inquiry function.

Error Number: 571

572 - WORKSTATION DOES NOT SUPPORT PROGRAMMABLE BREAK ACTION

Explanation: **GPBKAC**, **GPQABK**, or **GPQBK** was called for a workstation that does not allow the break action to be modified.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log or error indicator parameter, as appropriate, to determine which function caused the error. Use **GPQBK** to determine if the break action is programmable for the given workstation.

Error Number: 572

574 - RANGE INVALID, LOW VALUE EXCEEDS HIGH VALUE

Explanation: A trigger descriptor that was passed to **GPIT** had an invalid range of trigger qualifiers.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPIT** that caused the error. Correct the parameter list passed, so that all high-trigger qualifiers are greater than or equal to the corresponding low-trigger qualifiers.

Error Number: 574

575 - NUMBER OF ENTRIES IN TRIGGER LIST IS INVALID

Explanation: **GPIT** was invoked with an invalid specified number of entries in the trigger list. The number of entries in the trigger list must be equal to or greater than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPIT** that caused the error. Correct the parameters on the call, or refer to *The graPHIGS Programming Interface: Understanding Concepts*, for more information.

Error Number: 575

576 - PRIMARY TRIGGER LIST MUST HAVE AT LEAST ONE ENTRY

Explanation: **GPIT** was called for the primary trigger list, which must have at least one entry.

System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPIT** that caused the error. Correct the parameters on the call, or refer to *The graPHIGS Programming Interface: Understanding Concepts*, for more information on primary trigger lists.
Error Number: 576

577 - BUFFER LENGTH IS < ZERO

Explanation: A subroutine was invoked with an invalid buffer-length parameter. The buffer-length parameter must be equal to or greater than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter.
Error Number: 577

578 - BUFFER LENGTH EXCEEDS DEVICE MAXIMUM

Explanation: **GPINST** or **GPINSK** was invoked with the string input buffer size value greater than the maximum buffer size for the device.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the parameter. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQDST** to determine the maximum string buffer length.
Error Number: 578

579 - INITIAL POSITION IS < ONE OR > NUMBER OF INITIAL VALUES PLUS ONE

Explanation: **GPINST** or **GPINSK** was invoked with an invalid initial position parameter. The initial position parameter must be equal to or greater than one.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the initial position parameter.
Error Number: 579

580 - INITIAL POSITION EXCEEDS BUFFER SIZE

Explanation: **GPINST** or **GPINSK** was invoked with the initial position value greater than the buffer size for the device.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the initial position parameter.
Error Number: 580

581 - PROCOPT SPECIFIES INVALID VIEW TABLE SIZE FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid number of View Table entries. The PROCOPT option VWTBLSZ specified an invalid number of View Table entries for this workstation. Either the VWTBLSZ option was too large or less than two. All workstations must have at least one definable View Table entry. Therefore, VWTBLSZ must be greater than or equal to two (view 0 plus one definable entry).

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the VWTBLSZ option as set in the External Defaults File (EDF), Application Defaults Interface Block, or **GPCRWS** call, so that it specifies a valid number of view table entries. The limits for the view table size are device-dependent. See *The graPHIGS Programming Interface: Technical Reference* for the limits for the view table size.

Error Number: 581

582 - RADIUS SPECIFIED < ZERO

Explanation: **GPCR2**, **GPCRA2**, or **GPSPH** was invoked with an invalid specified radius value. The specified radius value must be equal to or greater than zero.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the radius parameter.

Error Number: 582

583 - PROCOPT SPECIFIES INVALID NUMBER OF INPUT DEVICES FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid number of locator or string devices. The PROCOPT option LOCDEVS or STRDEVS specified an invalid number of locator or string devices for this workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the option for the incorrect entry as set in the External Defaults File (EDF), Application Defaults Interface Block, or **GPCRWS** call, so that it specifies a valid number of input devices. The number of input devices is device-dependent. See *The graPHIGS Programming Interface: Technical Reference*.

Error Number: 583

584 - END TYPE VALUE < ONE

Explanation: **GPPLET** was invoked with an invalid polyline end type value. The polyline end type value must be equal to or greater than one.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPPLET** that caused the error. Correct the end type parameter value. See *The graPHIGS Programming Interface: Technical Reference* to determine valid end type values.

Error Number: 584

585 - PROCOPT SPECIFIES INVALID KEYBOARD FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid KEYBOARD PROCOPT value. The KEYBOARD PROCOPT contains a value that is not supported on the given workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the KEYBOARD option as set in the External Defaults File (EDF), Application Defaults Interface Block, or **GPCRWS** call, to specify a value that is supported by your workstation. See *The graPHIGS Programming Interface: Technical Reference* for lists of supported KEYBOARDS.

Error Number: 585

586 - PROCOPT SPECIFIES INVALID DISPLAY MODEL NUMBER FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid display model value. The DISPLMOD PROCOPT contains an invalid value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the DISPLMOD option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, to specify a value that is supported by your workstation. See *The graPHIGS Programming Interface: Technical Reference* for lists of DISPLMODs.

Error Number: 586

587 - PROCOPT SPECIFIES INVALID ECHO METHOD FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid echo method. The ECHOMETH PROCOPT contains an invalid value.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the ECHOMETH option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, to specify a value that is supported in the given workstation. See *The graPHIGS Programming Interface: Technical Reference* for list of supported ECHOMETHs.

Error Number: 587

588 - PROCOPT SPECIFIES INVALID FRAME BUFFER VALUE FOR WORKSTATION

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid value for the frame buffer control (FBUFFER) PROCOPT.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the frame buffer control option. See *The graPHIGS Programming Interface: Technical Reference* for information on the FBUFFER PROCOPT.

Error Number: 588

591 - NUMBER OF CHARACTERISTICS IDENTIFIERS IS < ONE

Explanation: **GPXVCH** was invoked with an invalid specified number of characteristic identifiers value. The specified number of characteristics must be equal to or greater than one.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPXVCH** that caused the error. Correct the parameter value.

Error Number: 591

592 - VIEW CHARACTERISTICS IDENTIFIER IS INVALID

Explanation: **GPXVCH** was invoked with an invalid view characteristics identifier parameter value. A characteristic identifier is not one of the valid identifiers.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPXCVH** that caused the error. Correct the parameter value.

Error Number: 592

593 - COMMUNICATION ERROR: MAJOR n1, MINOR n2

Explanation:

An error has been detected by an internal graPHIGS API communication routine. If the major code is five or seven, then an I/O error has occurred and may indicate a hardware problem. Use the following table for a more detailed explanation and appropriate programmer response for errors with a major code of five or seven.

TCP/IP Symbol	AIX Minor Number	VM/MVS Minor Number	Explanation	Programmer Response
ENOENT	2	2	The remote graPHIGS API nucleus is not running on the target workstation.	Start the remote graPHIGS API nucleus on the target workstation.
EPIPE	32	32	The socket connection between gateway or shell and nucleus is broken. This is most probably a software error.	Contact your IBM service representative.
ENETDOWN	69	50	The socket connection between gateway or shell and nucleus is broken due to a network problem.	Contact your system administrator.
ENETUNREACH	70	51	The socket connection between gateway or shell and nucleus is broken due to a network configuration problem.	Contact your system administrator.
ENETRESET	71	52	The socket connection between gateway or shell and nucleus is broken due to a network problem.	Contact your system administrator.
ECONABORTED	72	53	The socket connection between gateway or shell and nucleus is broken due to a network problem.	Contact your system administrator.

TCP/IP Symbol	AIX Minor Number	VM/MVS Minor Number	Explanation	Programmer Response
ECONRESET	73	54	The socket connection between gateway or shell and nucleus is broken due to a network problem.	Contact your system administrator.
ENOBUFS	74	55	The socket connection between gateway or shell and nucleus is broken due to a TCP/IP configuration problem.	Contact your system administrator.
ETIMEDOUT	78	60	The socket connection between gateway or shell and nucleus is broken due to a network loading problem.	Contact your system administrator.
ECONREFUSED	79	61	The remote graPHIGS API nucleus is not running on the target workstation.	Start the remote graPHIGS API nucleus on the target workstation.

System Action:
None.

Programmer Response:
If the major code is five or seven, see the above table. If the major code is other than five or seven, inform a service representative of the error number, major code, minor code and the conditions surrounding the error's occurrence.

Error Number:
593

594 - DATA EXCEEDS CONNECTION BUFFER SIZE

Explanation: An API subroutine was called with more data than can be fit into the shell/nucleus connection buffer.
System Action: The function is ignored.
Programmer Response: Reduce the amount of data supplied to the API function in error, or increase the connection buffer size, using the defaults file or PROCOPT data.
Error Number: 594

595 - A TRIGGER TYPE IS INCOMPATIBLE WITH THE TRIGGER LIST IDENTIFIER

Explanation: **GPIT** was invoked to set a secondary trigger to type -1.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Either eliminate the -1 type, or else change the trigger list id to primary (0). See *The graPHIGS Programming Interface: Subroutine Reference* for valid values.
Error Number: 595

596 - PROCOPT SPECIFIES INVALID NUMBER OF POLYLINE TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid PLBTES option. The PLBTES PROCOPT specifies an invalid number of polylin bundle type entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the PLBTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of bundle table entries. The limits for the valid number of bundle table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 596

597 - PROCOPT SPECIFIES INVALID NUMBER OF POLYMARKER TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid PMBTES option. The PMBTES PROCOPT specifies an invalid number of polymarker bundle type entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the PMBTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of bundle table entries. The limits for the valid number of bundle table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 597

598 - PROCOPT SPECIFIES INVALID NUMBER OF TEXT TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid TXBTES option. The TXBTES PROCOPT specifies an invalid number of text bundle type entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the TXBTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of bundle table entries. The limits for the valid number of bundle table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 598

599 - PROCOPT SPECIFIES INVALID NUMBER OF EDGE TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid EBTES option. The EBTES PROCOPT specifies an invalid number of edge bundle type entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the EBTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of bundle table entries. The limits for the valid number of bundle table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 599

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600 - PROCOPT SPECIFIES INVALID NUMBER OF DEPTH CUE TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid DCTES option. The DCTES PROCOPT specifies an invalid number of depth cue table entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the DCTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of depth cue table entries. The limits for the valid number of depth cue table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 600

601 - PROCOPT SPECIFIES INVALID NUMBER OF LIGHT SOURCE TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid LSTES option. The LSTES PROCOPT specifies an invalid number of light source table entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the LSTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of light source table entries. The limits for the valid number of light source table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 601

602 - PROCOPT SPECIFIES INVALID NUMBER OF INTERIOR TABLE ENTRIES

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid IBTES option. The IBTES PROCOPT specifies an invalid number of interior bundle table entries.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the IBTES option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid number of interior bundle table entries. The limits for the valid number of bundle table entries are device-dependent. See *The graPHIGS Programming Interface: Understanding Concepts*, for details about these limits.

Error Number: 602

603 - INTERNAL COMMUNICATIONS PROTOCOL ERROR

Explanation: An error has occurred involving a communication protocol internal to the graPHIGS API.

System Action: The subroutine call in error is ignored.

Programmer Response: This error can be returned only on an inquiry subroutine in the error indicator parameter. This is probably not an application problem. Document the series of instructions that caused the message to be issued and report the problem to IBM.

Error Number: 603

604 - NUCLEUS n1 NOT STARTED OR NOT RESPONDING

Explanation: One of the following conditions exists:

- A **gPhost**, **gPq**, **gPinit**, or **gPterm** command was issued and the remote graPHIGS API nucleus which was the target of the command was not started, or the command was not able to communicate with the nucleus.
- A graPHIGS API gateway host is not started or not responding.

System Action: The command is ignored.

Programmer Response: Make sure that you have a remote nucleus started with the specified identifier. See *The graPHIGS Programming Interface: Technical Reference* for a complete explanation of the **gPhost**, **gPq**, **gPinit**, and **gPterm** commands and the graPHIGS API gateway daemon.

Error Number: 604

605 - gP IS UNABLE TO START A REMOTE NUCLEUS

Explanation: A remote nucleus was started either explicitly or via **gPinit**. The nucleus was unable to initialize. This error occurs because the system found another nucleus that already exists with the same identifier as the one being used to start this nucleus.

System Action: The command is ignored.

Programmer Response: Either start this nucleus with a different nucleus identifier or terminate the nucleus that already exists and reissue the command. See *The graPHIGS Programming Interface: Technical Reference* for a complete explanation of remote nuclei.

Error Number: 605

606 - ILLEGAL COMBINATION OF ISO PHIGS AND GPXXX CALLS

Explanation: Either a **GPxxx** function was invoked to inquire information which is only defined by ISO PHIGS, or else an ISO PHIGS function was invoked to inquire information only defined in a **GPxxx** call.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Change the function to either an ISO PHIGS function or a **GPxxx** function as appropriate.

Error Number: 606

607 - NUCLEUS IS DOWN LEVEL. VERSION @A1, RELEASE @A2.@A3 IS REQUIRED

Explanation: A function has been invoked which requires a matching level of nucleus code.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Install the required level of nucleus code or remove the function.
Error Number: 607

608 - FRONT PLANE DISTANCE = BACK PLANE DISTANCE WHEN Z-EXTENT NON-ZERO

Explanation: The front plane distance is equal to the back plane distance, but the viewport z-extent is not zero. The front plane distance may equal the back plane distance only when the viewport z-extent is zero.
System Action: If the error is generated by **GPEVM3**, the subroutine call in error is ignored. If the error is generated during traversal, the view mapping matrix defaults to the identity matrix.
Programmer Response: Either set the viewport z-extent to zero, or set the back (far) plane distance less than the front (near) plane distance.
Error Number: 608

609 - ERROR LOGGING PARAMETERS DO NOT MATCH CURRENT ERROR REPORT

Explanation: PERLOG was invoked with either the function identifier parameter or the error number parameter not matching that of the current error report.
System Action: The subroutine call in error is ignored.
Programmer Response: Invoke PERLOG from within a user-supplied Error Handling function, passing the same parameters as received by the Error Handling function.
Error Number: 609

610 - PROJECTION REFERENCE POINT BETWEEN NEAR AND FAR PLANES

Explanation: **GPEVM3** was invoked with the projection reference point between the near and far clipping planes.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPEVM3** that caused the error. Correct the projection reference point and/or the near and far plane distances.
Error Number: 610

612 - TSL STACK OVERFLOW HAS OCCURRED

Explanation: **GPPSTS** was invoked and there is no more room to save another TSL. The network beyond this maximum depth is ignored.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Issue **GPPTS** (Pop TSL) before **GPPSTS** so that subsequent TSLs will be pushed on the stack.
Error Number: 612

613 - TSL STACK UNDERFLOW HAS OCCURRED

Explanation: **GPPTS** was invoked and there was no TSL saved on the stack to pop.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Check the code sequence of calls that are using **GPPTS** to correct this issuance of **GPPTS**.
Error Number: 613

614 - UNKNOWN ELEMENT FOUND IN STRUCTURE n1

Explanation: A subroutine was invoked to move structure data from a source structure store or archive file to a destination structure store or archive file. The data environment of the source resource was different from that of the destination resource. During the structure data transfer, the structure elements went through a data conversion, and an element of unknown type was found during the check for data translation.

This situation can occur only when there is a mismatch in graPHIGS API release levels between graPHIGS API resources (either a shell/nucleus mismatch or an archive file/nucleus mismatch).
System Action: Structures that were transferred from the source structure store or archive file to the destination structure store or archive file *before* the error condition occurred are left in the destination resource. The structure where the error was found is emptied of elements and no further structure data is transferred between the source resource and the destination resource.
Programmer Response: Structure stores or archive files that contain structure elements should not be used by graPHIGS API shells or nuclei that are at a lower release level. This is true especially if the data environment is different (e.g., ASCII vs. EBCDIC, IEEE floating point vs. System/390 floating point, etc.).
Error Number: 614

616 - NO DEVICE ADDRESSES AVAILABLE

Explanation: A request was made, using the **chgPcon** command, to add a runtime connection profile entry. However, no device addresses were available.
System Action: The request is ignored.
Programmer Response: This condition may normally occur if all available device addresses are DEFINED. Use the **lsgPcon** command with the *-s* option to determine the state of device addresses in use by the graPHIGS API gateway daemon. If there is an inconsistency between this information and what is expected, contact the administrator of the graPHIGS API Gateway.
Error Number: 616

617 - DEVICE ADDRESS xxx ALREADY ALLOCATED OR UNAVAILABLE

Explanation: A request was made, using the **chgPcon** command with the *-a* option, to allocate a specific device address, but the specified address is not available.
System Action: The request is ignored.
Programmer Response: Verify that the specified address is correct. If it appears to be correct, use the **lsgPcon** command with the *-s* option to determine the state of the device address in use by the graPHIGS API gateway daemon. If there is an inconsistency between this information and what is expected, contact the administrator of the graPHIGS API gateway.
Error Number: 617

618 - gPgated I/O ERROR errno, DEVICE ADDRESS xxx, COMMAND xxx

Explanation: An error was encountered on the communication path between the specified device address and the target remote graPHIGS API nucleus. `errno` is the operating system error number.

System Action: The error is logged in the graPHIGS API gateway daemon's transaction file.

Programmer Response: Use the operating system **panel20** command to determine the error condition, or contact the administrator of the graPHIGS API gateway.

Error Number: 618

619 - RESET RECEIVED ON DEVICE ADDRESS xxx

Explanation: One of the following occurred:

- A communication error
- A S/370 reset
- A Halt Device, Halt I/O, or Clear I/O was executed on the S/370 for the specified device address.

System Action: The error is logged in the graPHIGS API gateway daemon's transaction file.

Programmer Response: Use the operating system **panel20** command to determine the error condition, or contact the administrator of the graPHIGS Gateway.

Error Number: 619

620 - NO CONNECTION PROFILE ENTRY FOR NUCLEUS hostname:nucid

Explanation: A request was made, using the **chgPcon** command with the *-d* option or the **lsgPcon** command with the *-q* option, to delete a runtime connection profile entry. However, no such entry exists.

System Action: The request is ignored.

Programmer Response: Verify that the parameters specified on the **chgPcon** command are correct. If they appear to be correct, use the **lsgPcon** command with the *-s* option to determine the state of the device addresses in use by the graPHIGS API gateway daemon. If there is an inconsistency between this information and what is expected, contact the administrator of the graPHIGS API Gateway.

Error Number: 620

621 - INVALID OPTION

Explanation: The **gPafut** utility was used and was passed an invalid or incomplete option or parameter.

System Action: The utility is terminated.

Programmer Response: Run the utility again with valid parameters. See *The graPHIGS Programming Interface: Technical Reference* for information on valid parameters for the **gPafut** utility.

Error Number: 621

622 - NO FUNCTION SPECIFIED

Explanation: The **gPafut** utility was used and no *function* parameter was given.

System Action: The utility is terminated.

Programmer Response: Run the utility again with valid parameters. See *The graPHIGS Programming Interface: Technical Reference* for information on valid parameters for the **gPafut** utility.
Error Number: 622

623 - SUBARGUMENT MISSING

Explanation: The **gPafut** utility was used, and a function or option parameter was specified. However, a required parameter for the function or option was not given.
System Action: The utility is terminated.
Programmer Response: Run the utility again with valid parameters. See *The graPHIGS Programming Interface: Technical Reference* for information on valid parameters for the **gPafut** utility.
Error Number: 623

624 - CONVERSION TYPE IS INVALID

Explanation: **GPCCV** was invoked with an invalid conversion type value in the *ctype* parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPCCV** that caused the error. Correct the conversion type value in the *ctype* parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for more information on converting coordinate values.
Error Number: 624

625 - POINT TYPE IS INVALID

Explanation: **GPCCV** was invoked with an invalid point type value.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the point type value. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 625

626 - NO CONNECTION PROFILE ENTRIES EXIST

Explanation: A request was made, using the **lsgPcon** command with the *-Q* option, to inquire runtime connection profile entries. However, no entries exist.
System Action: The request is ignored.
Programmer Response: Verify that the parameters specified on the **lsgPcon** command are correct. If they appear to be correct, then if there is an inconsistency between this information and what is expected, contact the administrator of the graPHIGS API Gateway.
Error Number: 626

627 - NUMBER OF HALF-SPACES < ZERO

Explanation: **GPMCV2** or **GPMCV3** was invoked with an invalid number of half-spaces. The specified number of half-spaces must be >= zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the number parameter.
Error Number: 627

628 - OPERATOR IS INVALID

Explanation: **GPMCV2** or **GPMCV3** was invoked with an invalid modeling clipping operator.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the modeling clipping operator value. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 628

629 - BLENDING FUNCTION IS INVALID

Explanation: **GPBBLF** or **GPBLF** was invoked with an invalid blending function parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the blending function value. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 629

630 - DATA MAPPING INDEX < ZERO

Explanation: **GPDMI**, **GPBDMI**, **GPDMR**, or **GPQDMR** was invoked with an invalid data mapping index parameter. The specified data mapping index must be >= zero, except for **GPDMR** where it must be >=1.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the data mapping index parameter.
Error Number: 630

631 - FILTERING METHOD IS INVALID

Explanation: **GPDFM** or **GPBDFM** was invoked with an invalid filtering method parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the filtering method value. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 631

632 - BOUNDING METHOD IS INVALID

Explanation: **GPDFM** or **GPBDFM** was invoked with an invalid bounding method parameter.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the bounding method value. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 632

633 - MATRIX VALUE IS INVALID

Explanation: **GPDM2** or **GPBDM2** was invoked with an invalid matrix parameter.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the matrix. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.

Error Number: 633

634 - DATA MAPPING COLOR TYPE NOT SUPPORTED

Explanation: **GPDMR** was invoked with an invalid data mapping color type parameter, or a data mapping color type that is not supported by the workstation.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDMR** that caused the error. Correct the data mapping color type parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for valid parameter values and *The graPHIGS Programming Interface: Understanding Concepts* for an explanation of data mapping.

Error Number: 634

635 - DATA ORGANIZATION FORMAT IS INVALID

Explanation: **GPDMR** was invoked with an invalid data organization format parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDMR** that caused the error. Correct the data organization format parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.

Error Number: 635

636 - FULLWORDS OF VERTEX DATA EXCEEDS MAXIMUM OF 255

Explanation: **GPPGD2**, **GPPGD3**, **GPPLD3**, **GPTS3**, or **GPQM3** was invoked with more than 255 fullwords of data per vertex.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Decrease the amount of data per vertex to 255 fullwords or less.

Error Number: 636

637 - DATA LIST INDEX IS INVALID

Explanation: **GPDMR** was invoked with an invalid data list index.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDMR** that caused the error. Correct the data mapping method parameter to include a valid data list index. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.

Error Number: 637

638 - COLOR DATA LENGTHS PARAMETER IS INVALID

Explanation: **GPDMR** was invoked with an invalid color data lengths parameter.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPDMR** that caused the error. Correct the color data lengths parameter. See the *The graPHIGS Programming Interface: Subroutine Reference* for more information.

Error Number: 638

639 - SPECIFIED ALPHA VALUE IS INVALID

Explanation: **GPXVR** was invoked with an invalid alpha value parameter. Alpha must be 0 <= value <= 255.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPXVR** that caused the error. Correct the alpha value parameter. See *The graPHIGS Programming Interface: Subroutine Reference* for more information.
Error Number: 639

647 - UNICODE IS NOT SUPPORTED ON THE SPECIFIED WORKSTATION

Explanation: **GPACFO** was invoked with the Unicode character set identifier which is not supported by the specified workstation.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPACFO** that caused the error. See *The graPHIGS Programming Interface: Technical Reference* or use the inquiry function **GPQWDT** to determine if the specified workstation supports Unicode.
Error Number: 647

648 - PROCOPT SPECIFIES AN INVALID DISPLAY WIDTH AND/OR HEIGHT

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid display width and/or height. The DCUNITS or DCMETERS PROCOPT contains a value that is not supported.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the DCUNITS or DCMETERS option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid display width and height. See *The graPHIGS Programming Interface: Technical Reference* for details.
Error Number: 648

649 - PROCOPT SPECIFIES AN INVALID IMAGE OUTPUT FORMAT

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid image output format. The IMAGEFMT PROCOPT contains a value that is not supported.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the error log to determine which function caused the error. Correct the IMAGEFMT option as set in the External Defaults File (EDF), or Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid image output format. See *The graPHIGS Programming Interface: Technical Reference* for more details.
Error Number: 649

650 - PROCOPT SPECIFIES AN INVALID HLHSR COORDINATE SYSTEM

Explanation: **GPCRWS** or **GPOPWS** was invoked with an invalid HLHSR coordinate system. The PNTHLHSR PROCOPT contains a value that is not supported.
System Action: The subroutine call in error is ignored.

Programmer Response: Check the error log to determine which function caused the error. Correct the PNTHLHSR option as set in the External Defaults File (EDF), Application Defaults Interface Block (ADIB), or **GPCRWS** call, so that it specifies a valid HLHSR coordinate system. See *The graPHIGS Programming Interface: Technical Reference* for more details.

Error Number: 650

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System Service Messages 1000 - 1399

1003 - INCORRECT NUMBER OF ARGUMENTS (=0) ON REENTRANT CALL

Explanation: An Application Anchor Block (AAB), required for all calls to the graPHIGS API through the reentrant interface, was absent.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the call so that the required arguments are present.

Error Number: 1003

1004 - INCORRECT NUMBER OF ARGUMENTS (=0) ON SPI CALL

Explanation: Both an Application Anchor Block (AAB) and a function request code are required for any call to the graPHIGS API through the system programmer interface (SPI). Both were missing.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the call so that the required arguments are present.

Error Number: 1004

1005 - INCORRECT NUMBER OF ARGUMENTS (=1) ON SPI CALL

Explanation: Both an Application Anchor Block (AAB) and a function request code are required for any call to the graPHIGS API through the system programmer interface (SPI). One was missing.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the call so that the required arguments are present.

Error Number: 1005

1006 - AMODE (31) APPLICATION CALL BUT graPHIGS INITIALIZED IN AMODE (24)

An application executing in 31-bit addressing mode called the graPHIGS API This call is not an initialization call **Explanation:GPOPPH**. The graPHIGS API is initialized in 24-bit mode and cannot process calls made in 31-bit mode.

System Action: The subroutine call in error is ignored.

Programmer Response: Contact your system programmer to ensure that the GDDM/graPHIGS API is properly installed. If it is properly installed, change your application to ensure that the call to **GPOPPH** is made in 31-bit mode (if any part of the application uses 31-bit mode).

Error Number: 1006

1007 - INCORRECT ARGUMENTS

Explanation: The second parameter on the **GPOPPH** function is a zero and not a pointer to a zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Review the **GPOPPH** invocation in your application and be sure the second parameter is a zero. If your program is written in C, check to see that all the graPHIGS API calls are in uppercase.
Error Number: 1007

1008 - INSUFFICIENT STORAGE FOR INITIALIZATION

Explanation: The system was unable to allocate sufficient storage to initialize the graPHIGS API.
System Action: The subroutine call in error is ignored.
Programmer Response: The user exceeded the system imposed maximum for memory allocation. Use the **ulimit** system call for changing this maximum.
Error Number: 1008

1009 - UNABLE TO ALLOCATE STORAGE POOLS

Explanation: The system was unable to build the required graPHIGS API buffer pools.
System Action: The subroutine call in error is ignored.
Programmer Response: The user exceeded the system imposed maximum for memory allocation. Use the **ulimit** system call for changing this maximum.
Error Number: 1009

1010 - UNABLE TO CREATE CHILD PROCESS

Explanation: The FORK system call failed.
System Action: The subroutine call in error is ignored.
Programmer Response: The user exceeded the system imposed maximum for processes. Reduce the number of active processes and start the application again.
Error Number: 1010

1011 - PERSONAL graPHIGS API NOT INSTALLED PROPERLY

Explanation: A required part of the Personal graPHIGS API was not found.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the installation of the Personal graPHIGS API.
Error Number: 1011

1051 - DEFAULTS ERROR. INVALID SYNTAX OR VALUE AT a2

Explanation: A user default specification (UDS) contains invalid values or syntax at the point listed.
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS in the External Defaults File (EDF). See *The graPHIGS Programming Interface: Technical Reference* for information on supported defaults.
Error Number: 1051

1052 - NUMBER OF ARGUMENTS IS n1, SHOULD BE n2

Explanation: A call to the graPHIGS API contains fewer arguments than were defined for the routine invoked. The most common reason for this message is that a program has been linked with the reentrant interface, but the graPHIGS API calls are coded in the non-reentrant format.
System Action: The subroutine call in error is ignored.
Programmer Response: Correct the call so that all required arguments are present or link-edit with the correct interface library.
Error Number: 1052

1053 - UNSUPPORTED FUNCTION CODE ON SPI CALL

Explanation: An invalid request control parameter (RCP) code was supplied to the graPHIGS API system programmer interface (SPI).
System Action: The subroutine call in error is ignored.
Programmer Response: Determine which SPI call generated the error and correct the RCP code parameter. See *The graPHIGS Programming Interface: Subroutine Reference* under each graPHIGS API function, for the correct RCP code value.
Error Number: 1053

1054 - DEFAULTS ERROR. a1 UDS KEYWORD a2 IS IN CONFLICT

Explanation: The keyword *a2* in the NICKNAME or AFMMNICK user default specification (UDS) was repeated incorrectly or is mutually exclusive with a previously specified keyword.
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS in the External Defaults File (EDF). See *The graPHIGS Programming Interface: Technical Reference* to determine the supported UDS keywords.
Error Number: 1054

1055 - TOO MANY ARGUMENTS, SHOULD BE n1

Explanation: A call to the graPHIGS API contains more arguments than were defined for the routine invoked. The most common reason for this message is that a program has been linked with the non-reentrant interface, but the graPHIGS API calls were coded in the reentrant format.
System Action: The subroutine call in error is ignored.
Programmer Response: Remove the excess arguments or link-edit with the correct interface library.
Error Number: 1055

1056 - (gggggg, CALLED FROM)ffffff, AT 'xxxxxxxx'X

Explanation: This is an informational message that is generated with some errors to identify where the function was invoked. *ffffff* contains the graPHIGS API function name and *xxxxxxxx* is the hexadecimal value in Register 14. When present, *gggggg* contains the name of a graPHIGS API function invoked as part of the processing of function *ffffff*.
System Action: None.
Programmer Response: None required. The message is only informational.
Error Number: 1056

1057 - DEFAULTS ERROR. ADS LENGTH, n1, INVALID IN ADIB SPECIFICATION

Explanation: An application default specification (ADS) has a length that is greater than 32,000 characters or has a length greater than the specified Application Default Interface Block (ADIB) total length.
System Action: This ADS and all additional ADSs in the ADIB are ignored.
Programmer Response: Correct the ADS in the ADIB. See *The graPHIGS Programming Interface: Technical Reference* for information on ADSs.
Error Number: 1057

1058 - DEFAULTS ERROR. INVALID LENGTH n1 FOR a1 UDS

Explanation: A user default specification (UDS) of type *a1* has a length *n1* that is either negative or greater than 32,000 characters. The UDS was specified in the External Defaults File (EDF).
System Action: This UDS and all additional UDSs in the External Defaults File are ignored.
Programmer Response: Correct the length of the UDS in the External Defaults File. See *The graPHIGS Programming Interface: Technical Reference* for information on UDSs.
Error Number: 1058

1059 - DEFAULTS ERROR. LABEL a2 IN SOURCE UDS TOO LONG

Explanation: A user default specification (UDS) has a label, *a2*, which is longer than eight characters. The UDS was specified in the External Defaults File (EDF).
System Action: This UDS and all additional UDSs in the External Defaults File are ignored.
Programmer Response: Correct the UDS in the External Defaults File. See *The graPHIGS Programming Interface: Technical Reference* for information on UDSs.
Error Number: 1059

1060 - DEFAULTS ERROR. INVALID TOTAL LENGTH n1 IN ADIB

Explanation: Total ADIB length exceeds maximum.
System Action: Defaults are ignored; the graPHIGS API is not opened.
Programmer Response: Decrease ADIB size.
Error Number: 1060

1061 - DEFAULTS ERROR. SOURCE UDS FOR a1 NOT COMPLETE

Explanation: A user default specification (UDS) of type *a1* does not contain any text for its value. The UDS was specified in the External Defaults File (EDF).
System Action: This UDS and all additional UDSs in the External Defaults File are ignored.
Programmer Response: Correct the UDS in the External Defaults File. See *The graPHIGS Programming Interface: Technical Reference* for information on UDSs.
Error Number: 1061

1062 - DEFAULTS ERROR. UDS TYPE a1 KEYWORD a2 CODE n1 NOT ALLOWED IN a2

Explanation: Default not supported in current subsystem environment.
System Action: Defaults are ignored; the graPHIGS API is not opened.

Programmer Response: Specify the default only in a valid subsystem environment.
Error Number: 1062

1063 - DEFAULTS ERROR. UDS TYPE a1 CODE n1 UNKNOWN

Explanation: An unknown user default specification (UDS) of type *a1* or code *n1* has been defined.
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS. The type should be AFMMDFT, AFMMNICK, DEFAULT, or NICKNAME. If the type is one of these, check that at least one blank precedes it. If the type is positioned in column 1, it was interpreted as a label, and subsequent key word text was interpreted incorrectly as a type. See *The graPHIGS Programming Interface: Technical Reference* for information on defaults and nicknames.
Error Number: 1063

1064 - DEFAULTS ERROR. a1 UDS KEYWORD a2 UNKNOWN

Explanation: An unknown user default specification (UDS) of type *a1* or keyword *a2* has been defined.
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS in the External Defaults File (EDF). See *The graPHIGS Programming Interface: Technical Reference* for information on defaults and nicknames.
Error Number: 1064

1065 - DEFAULTS ERROR. VALUE OF a1 DEFAULT KEYWORD a2 CODE n1 IS INVALID

Explanation: A default specification of type *a1*, keyword *a2*, or code *n1*, has an invalid value.
System Action: This default and all additional defaults specified through the current mode are ignored.
Programmer Response: Correct the default. See *The graPHIGS Programming Interface: Technical Reference* for information on defaults and nicknames.
Error Number: 1065

1066 - DEFAULTS ERROR. DEFAULT KEYWORD a2 CODE n1 NOT VALID ON THIS SUBSYSTEM

Explanation: A default specification with keyword *a1* or code *n1* is not supported on the subsystem being used.
System Action: This default and all additional defaults specified through the current mode are ignored.
Programmer Response: Remove the default. See *The graPHIGS Programming Interface: Technical Reference* for details on the defaults that are valid for your subsystem.
Error Number: 1066

1067 - DEFAULTS ERROR. a1 KEYWORD a2 CODE n1 - TOO MANY OPERANDS

Explanation: A user default specification (UDS) of type *a1*, keyword *a2*, or code *n1* has too many operands.
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS in the External Defaults File (EDF). See *The graPHIGS Programming Interface: Technical Reference* for information on UDSs and external defaults.
Error Number: 1067

1068 - DEFAULTS ERROR. a1 PROCOPT a2 UNKNOWN

Explanation: An unknown PROCOPT keyword *a2* was defined in a NICKNAME or AFMMNICK user default specification (UDS).
System Action: This UDS and all additional UDSs in the list of UDSs are ignored.
Programmer Response: Correct the UDS. See *The graPHIGS Programming Interface: Technical Reference* for the PROCOPT values you can specify in a nickname UDS.
Error Number: 1068

1101 - NOT ENOUGH STORAGE TO PERFORM REQUESTED FUNCTION

Explanation: Insufficient storage was available to complete the requested function.
System Action: The function is terminated.
Programmer Response: Specify additional storage and re-invoke the graPHIGS API.
Error Number: 1101

1103 - a1 ABEND/ERROR CODE a2 - xxx X-nn, ON a2 (- eeee)

Explanation: An abend or error occurred while attempting to perform operation *a1* on *a2*. The operation terminated with a subsystem ABEND and error codes *XXX* and *nn*. The message text may include a character string *eeee...*, which is an interpretation of the error.
System Action: The operation is terminated.
Programmer Response: Determine the cause of the error and re-execute the program.
Error Number: 1103

1104 - a2 HAS AN INVALID FIRST RECORD

Explanation: The specified subroutine required reading the graPHIGS API file *a2*. The first record in the file is invalid for the indicated type of file.
System Action: The subroutine call in error is ignored.
Programmer Response: Check to see if the file was incorrectly overwritten, for example, by an attempt to renumber or sequence the file. Correct or recreate the file and re-execute the program.
Error Number: 1104

1105 - INVALID FILE NAME, a2

Explanation: The specified subroutine required the input or output of the graPHIGS API file *a2*, which contains an invalid file name.
System Action: The subroutine call in error is ignored.
Programmer Response: Correct the call to the graPHIGS API Specify a valid name and re-execute the program.
Error Number: 1105

1106 - FILE OPERATION ON a2 IGNORED BECAUSE OF PREVIOUS ABEND

Explanation: Because of a previous ABEND, the graPHIGS API is unable to perform input or output on the file *a2*.
System Action: The subroutine call in error is ignored.
Programmer Response: Determine the cause of the original error and re-execute the program.
Error Number: 1106

1107 - FILE a2 NOT FOUND

Explanation: The specified subroutine required reading the graPHIGS API file *a2* from auxiliary storage; however, the file cannot be found on auxiliary storage.
System Action: The subroutine call in error is ignored.
Programmer Response: Access or create the required file and re-execute the program.
Error Number: 1107

1108 - a1 ERROR CODE n1 ON a2

Explanation: An error occurred while attempting to perform an I/O function *a1* on the graPHIGS API file *a2*. The I/O function terminated with subsystem return code *n1*.
System Action: The file operation is terminated.
Programmer Response: Determine the cause of the error and re-execute the program.
Error Number: 1108

1109 - FUNCTION NOT SUPPORTED

Explanation: An unsupported RCP code has been encountered or a subroutine was issued that is not supported by the graPHIGS API.
System Action: No function is performed.
Programmer Response: If your application is using the SPI interface, correct the RCP code in error. If your application is issuing a subroutine that is not supported, it should issue the appropriate inquiries before issuing the subroutine in order to avoid the error.
Error Number: 1109

1110 - CONCURRENT USAGE OF FILE a2 NOT ALLOWED

Explanation: An attempt was made to write or read to file *a2* while the application or another user was reading or writing to the file.
System Action: The file operation is terminated.
Programmer Response: Correct the application to remove multiple accesses to the file or wait for the other user to finish accessing the file.
Error Number: 1110

1111 - FILE a2 HAS INVALID RECORD CONTENT

Explanation: The specified subroutine required reading the graPHIGS API file *a2*. The content of the file is invalid.
System Action: The subroutine call in error is ignored.

Programmer Response: Correct or recreate the file and re-execute the program.
Error Number: 1111

1112 - UNABLE TO OPEN a2 DD STATEMENT MISSING

Explanation: An error was found while attempting to open the graPHIGS API file *a2*. A DD statement for the file was not specified.
System Action: The file operation remains incomplete.
Programmer Response: Allocate a DD statement for the specified file and re-execute the program.
Error Number: 1112

1113 - FILE IS READ ONLY

Explanation: This message is either:

- A warning that is returned by **GPOPAR** when the archive file is in a read-only state and the archive flag is set to `1=OPEN_READ_WRITE`.

  or

- An error that occurred while an attempt was being made to perform an I/O function on a graPHIGS API file.

System Action: If the message is a warning issued by **GPOPAR**,then the archive file is opened. However, structures cannot be added to or deleted from the archive file. If the message is an error issued by another subroutine, the file operation is terminated.
Programmer Response: Check the error log to determine which function caused the error. If the message is a warning issued by **GPOPAR**, do one of the following:

- Set up the file so that it can be written to by the graPHIGS API nucleus.
- Change the archive file to `2=OPEN_READ_ONLY`.
- Take no action.

If the message is an error issued by another subroutine, make sure that the file is on a disk/file system/directory to which the nucleus has write access.
Error Number: 1113

1114 - FILE CANNOT BE CREATED. DISK IS READ ONLY

Explanation: **GPOPAR** was invoked with a file descriptor of a file that does not exist and could not be created because the location is read only or the archive flag parameter is set to `2=READ_ONLY`.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPOPAR** that caused the error. If the archive flag parameter is set to `2=READ_ONLY`, then change it to `1=READ_WRITE`. If the file is supposed to exist, then change the file descriptor to match the file or change the file mode (for VM) or the disk/directory characteristics so that the graPHIGS API nucleus has read/write capability.
Error Number: 1114

1115 - FILE a2 HAS INVALID DCB CHARACTERISTICS

Explanation: The specified subroutine required opening file *a2* for input. The DCB characteristics of the file are incompatible with the requirements.
System Action: The subroutine call in error is ignored.
Programmer Response: Correct or recreate the file and then re-execute the program.

Error Number: 1115

1116 - UNABLE TO OPEN a2 FILE MISSING OR INVALID

Explanation: An error was encountered during an attempt to open the the graPHIGS API file *a2*. Possible causes are:

- File organization is inconsistent with the anticipated organization.
- DDNAME was not allocated (MVS).
- An attempt was made to open a read-only file for output.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the file definition and then re-execute the program.

Error Number: 1116

1117 - INCORRECT RECORD LENGTH OR FORMAT ON a2

Explanation: The specified subroutine required opening file *a2* for input. The record length or the format of the file is incompatible with the requirements.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct or recreate the file and then re-execute the program.

Error Number: 1117

1118 - NO MORE DISK SPACE AVAILABLE, WHEN WRITING TO a1

Explanation: Additional disk space is unavailable for new data in the specified file or data set *a1*.

System Action: The operation is terminated.

Programmer Response: Provide more disk space, possibly by rebuilding the library or data set.

Error Number: 1118

1119 - FILE a2 ALREADY EXISTS

Explanation: The specified subroutine required writing to the graPHIGS API file *a2* without replacing any existing file(s) having the same name. A file of the same name already exists.

System Action: The subroutine call in error is ignored.

Programmer Response: Correct the program by specifying a file name that does not currently exist.

Error Number: 1119

1121 - UNRECOVERABLE I/O ERROR

Explanation: A previous error has occurred in an archive file subroutine which has left the file in a state such that it cannot continue to be used.

System Action: The subroutine call in error is ignored.

Programmer Response: Run the **gPafut** utility to recover the archive file to make it usable by archive file subroutines. See *The graPHIGS Programming Interface: Technical Reference* for more information on using the **gPafut** utility.

Error Number: 1121

1122 - a1 ERROR CODE n1-n2, ON a2

Explanation: An error occurred during an attempt to perform an I/O function *a1* on the graPHIGS API file *a2*. The I/O function terminated with subsystem return codes *n1* (decimal) and *n2* (decimal).
System Action: The file operation is terminated.
Programmer Response: Determine the cause of the error and re-execute the program. See the bibliography for a list of manuals containing information on subsystem and return codes.
Error Number: 1122

1123 - PACKAGING ERROR. RMODE OF a1 CONFLICTS WITH INITIALIZATION AMODE

Explanation: Dynamically loaded routine *a1* requires execution in 31-bit addressing mode. The graPHIGS API is initialized in 24-bit mode and cannot execute routines requiring 31-bit mode. Successful execution of subsequent the graPHIGS API calls cannot be guaranteed.
System Action: The subroutine call in error is ignored.
Programmer Response: Contact your system administrator to check the installation of the GDDM/graPHIGS API. If the graPHIGS API is properly installed, change the loaded routine to execute in 24-bit mode.
Error Number: 1123

1124 - ABEND CODE n1

Explanation: The specified subroutine terminated abnormally and gave the user ABEND number *n1* in decimal form.
System Action: The function is terminated.
Programmer Response: If the remedy is not apparent, inform your system programmer. See the Appendix A. ABEND Codes for the GDDM/graPHIGS API.
Error Number: 1124

1125 - INVALID VERSION IDENTIFIER IN FILE a1

Explanation: An unsupported version identifier has been found in the version identifier field of the file *a1*.
System Action: The subroutine call in error is ignored.
Programmer Response: Check the file *a1* to ensure that the format, including the version number, is correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.
Error Number: 1125

1126 - FILE a1 IS NOT VALID IN THIS ENVIRONMENT

Explanation: File *a1* is not valid under one of the following conditions:

- Current environment is ASCII, but ASCII index flag in file *a1* is off.
- Current environment is EBCDIC, but EBCDIC index flag in file *a1* is off.
- EBCDIC to ASCII translation table requested, but EBCDIC to ASCII translation table flag is off in file *a1*.
- ASCII to EBCDIC translation table requested, but ASCII to EBCDIC translation table flag is off in file *a1*.

System Action: The subroutine call in error is ignored.
Programmer Response: Check the file *a1* to ensure that the format and content, including the flag settings, are correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.
Error Number: 1126

1127 - INVALID DEFAULT CHARACTER IN FILE a1

Explanation: An invalid default character has been found in processing file *a1*.

- If file *a1* is for a single-byte character set, possible errors include:
  - The default character is out of the given codepoint range.
  - The symbol id for the default character is zero.
  - The symbol id index entry for the default character has the 'undefined symbol' flag on.
- If file *a1* is for a double-byte character set, possible errors include:
  - The first byte of the default character is out of the given B1 table range.
  - The second byte of the default character is out of the given B2 table range.
  - The symbol id for the default character is zero.
  - The symbol id index entry for the default character has the 'undefined symbol' flag on.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the file *a1* to ensure that the format and content are correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.

Error Number: 1127

1128 - INVALID INDEX VALUE IN FILE a1

Explanation: An incorrect index value (or values) has been found in processing file *a1*. Possible errors include:

- The start index value is greater than the end index value.
- For symbol files, the start symbol index is zero.
- For character set files, the start and end index is not within the range of valid index values ('40'X to 'FE'X in GDDM/graPHIGS or '20'X to 'FF'X in the Personal graPHIGS API).

System Action: The subroutine call in error is ignored.

Programmer Response: Check the file *a1* to ensure that the format and content, including index values, are correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.

Error Number: 1128

1129 - SYMBOL DEFINITION OFFSET INVALID IN FILE a1

Explanation: While processing an entry in the symbol ID index of file *a1*, the offset to locate the symbol definition, plus the number of bytes for that symbol ID exceeded the length of the symbol definitions.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the file *a1* to ensure that the format and content are correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.

Error Number: 1129

1130 - INVALID OFFSET DATA IN FILE a1

Explanation: There is invalid data in the header of the symbol file *a1*. Possible errors include:

- Offsets that are past the end of the file.
- Offsets that are equal.

System Action: The subroutine call in error is ignored.

Programmer Response: Check the file *a1* to ensure that the format and content, including header data, are correct. See *The graPHIGS Programming Interface: Technical Reference* for more information.

Error Number: 1130

1132 - RESOURCE CREATION AFS USERID/PASSWORD VALIDATION SUBSYSTEM TIMEOUT

Explanation: **GPEXAP** was invoked on an operating system with AFS installed and AFS could not validate the userid and password within a time limit.
System Action: The request is ignored.
Programmer Response: Check that the AFS subsystem is running and active. Rerun the application. If the problem persists, contact your system administrator.
Error Number: 1132

1133 - RESOURCE CREATION REQUIRED AN AFS TOKEN THAT DOES NOT EXIST

Explanation: **GPEXAP** was invoked on an operating system with AFS installed to a nucleus that was started by a user who does not have an active token for the user in the userid parameter.
System Action: The request is ignored.
Programmer Response: Create an AFS token for the user specified in the **GPEXAP** call on the nucleus host processor from the same user that started the remote nucleus or start the remote nucleus as root user. Rerun the application.
Error Number: 1133

1150 - SF ERROR. SF: a1, RSID: a2, OFS: a3, EC: a4

Explanation: A structured field error has occurred at offset *a3* within structured field *a1*. The resource identifier is *a2* and the error code is *a4*.
System Action: The structured field is ignored.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 1150

1201 - SYSTEM SERVICE xxx ERROR RETURN CODE = yyy

Explanation: An operating system call or C library subroutine *xxx* has completed with *yyy* in error number.
System Action: The subroutine call in error is ignored.
Programmer Response: See *AIX 5L Version 5.2 Technical Reference*, for an explanation of error number *yyy* for function *xxx*. If the remedy is not apparent, contact your system programmer.
Error Number: 1201

1202 - MESSAGE NUMBER xxx CANNOT BE FOUND

Explanation: The required message cannot be located.
System Action: The subroutine call in error is ignored.
Programmer Response: Inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 1202

1203 - FILE SERVICE xxx ERROR RETURN CODE = yyy ON FILE nn

Explanation: An operating system file service *xxx* has completed with error *yyy* in error number when accessing file *nnn*.
System Action: The subroutine call in error is ignored.

Programmer Response: Check to see that you have the required authority to read, write, and create files in the current directory and that there is available disk space. See *AIX 5L Version 5.2 Technical Reference* for an explanation of error number *YYY* for function *XXX*.

Error Number: 1203

1204 - graPHIGS ABORT CODE = n1

Explanation: A very severe error occurred. The graPHIGS API could not continue.

System Action: The application process is terminated by calling the operating system call, ABORT. See *AIX 5L Version 5.2 Technical Reference* for a description of this function.

Programmer Response: See Appendix B. ABORT Codes for the Personal graPHIGS API for an explanation of the condition associated with the ABORT code *n1*. If a remedy is not apparent, inform a service representative of the error number and the conditions surrounding its occurrence.

Error Number: 1204

1205 - FILE IS NOT A VALID graPHIGS ARCHIVE FILE

Explanation: **GPOPAR** was invoked, and the archive file specified in the archive file descriptor is not a valid graPHIGS API archive file.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPOPAR** that caused the error. Verify that the file specified in the archive file descriptor is a file that was generated by the graPHIGS API as an archive file. (The graPHIGS API archive format is the only binary format that is currently supported.) If the file is a graPHIGS API archive file, then run the **gPafut** utility to recover the file. The archive file must have a fixed record format and a record length of 256 bytes. See *The graPHIGS Programming Interface: Technical Reference* for more information on using the **gPafut** utility.

Error Number: 1205

1206 - VERSION OF graPHIGS ARCHIVE FILE NOT RECOGNIZED

Explanation: **GPOPAR** was invoked, and the archive file specified in the archive file descriptor is a valid graPHIGS API archive file. However, the format of the archive file is not known to the current graPHIGS API nucleus. This situation can happen only if:

- An archive file is generated by a graPHIGS API nucleus which is of a later release than the graPHIGS API nucleus that is trying to open the archive file.

  and

- The later graPHIGS API release underwent an archive file format change that is not backwards compatible.

System Action: The subroutine call in error is ignored.

Programmer Response: The archive file cannot be used by the older graPHIGS API nucleus. It can be used only by applications that are using the later graPHIGS API release. Make sure the graPHIGS API releases are compatible.

Error Number: 1206

1207 - LINK ADDRESS CONFLICT

Explanation: A request was made, using the **chgPcon** command, to allocate a device address, but **gPgated** determined that there was a configuration conflict.

System Action: The request is ignored.

Programmer Response: Contact your system administrator to determine the correct configuration for the gateway or other devices (e.g., 5086s) that may be sharing the link.

Error Number: 1207

1208 - gPgated CHILD EXITING, RECEIVED SIGNAL n1

Explanation: A **gPgated** child has exited as a result of either a user request or an error.
System Action: Connection to the application is terminated.
Programmer Response: If the signal received was 2, then this message is a confirmation of a user-generated interrupt (e.g., CTRL-C). No response is needed. If the signal received was other than 2, then check the error log to determine what caused the error. Rerun the application.
Error Number: 1208

1209 - gPgated SHUTDOWN, RECEIVED SIGNAL n1

Explanation: All **gPgated** child processes have exited as a result of either a user request or an error.
System Action: All connections managed by the gateway are terminated.
Programmer Response: If the signal received was 2, then this message is a confirmation of a user-generated interrupt (e.g., CTRL-C). No response is needed. If the signal received was other than 2, then check the error log to determine what caused the error. Rerun the application.
Error Number: 1209

1210 - RECOVERY ACTION ON DEVICE ADDRESS xxx ALLOCATED TO hostname:nucid IS COMPLETE

Explanation: A **gPgated** connection was terminated and an attempt was made to recover the connection.
System Action: System attempted to recover the connection.
Programmer Response: The connection has been reset, but the application state information has been lost. Rerun the application.
Error Number: 1210

1301 - SPECIFIED APPLICATION PROCESS ID ALREADY IN USE

Explanation: **GPEXAP** or **GPINAP** was invoked with an application process identifier for which an application process already exists.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of **GPINAP** that caused the error. Assign a unique application process identifier. Guarantee that a unique application process identifier is supplied for each application process initiated.
Error Number: 1301

1302 - SPECIFIED APPLICATION PROCESS ID DOES NOT EXIST

Explanation: **GPTMAP** was invoked with an application process identifier that does not exist.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Assign a correct application identifier. Be sure that **GPINAP** was successful for the application process identifier involved.
Error Number: 1302

1303 - SIZE OF APPLICATION PROCESS REGION IS TOO LARGE

Explanation: **GPINAP** or **GPEXAP** was invoked with a size which exceeds the memory available on the target nucleus.

System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Check for the correct memory size allocated. Memory for items such as structure store, image board, and application regions come from a common pool. Decrease memory use of the pool.
Error Number: 1303

1304 - APPLICATION PROCESS REQUEST EXCEEDS NUCLEUS CAPACITY

Explanation: **GPEXAP** or **GPINAP** was invoked and the nucleus does not support this service or too many application processes have been created on the nucleus.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused error. Check for the correct nucleus identifier. Guarantee that the nucleus identifier is for a nucleus running on a 9999. If you wish to start this application process, then you may need to terminate existing applications.
Error Number: 1304

1305 - LENGTH OF APPLICATION MODULE NAME IS INVALID

Explanation: **GPEXAP** or **GPINAP** was invoked with an invalid file name length.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the file name length parameter.
Error Number: 1305

1307 - APPLICATION MODULE HAS UNRESOLVED EXTERNAL REFERENCE a1

Explanation: **GPEXAP** or **GPINAP** was invoked for a program module that resulted in an unresolved external reference, when an attempt was made to load the module.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Determine why the specified external reference cannot be resolved and correct it.
Error Number: 1307

1308 - PARAMETER TYPE IS INVALID

Explanation: **GPEXAP** or **GPINAP** was invoked with an invalid parameter format type.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the parameter format type.
Error Number: 1308

1309 - PARAMETER LENGTH < ZERO

Explanation: **GPEXAP** or **GPINAP** was invoked with a parameter length less than zero.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error and correct the parameter length.
Error Number: 1309

1310 - APPLICATION MODULE SIZE > REGION SIZE

Explanation: **GPEXAP** or **GPINAP** was invoked with a program module larger than the size parameter specified.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the size parameter or the program module size, or both, if incorrect.
Error Number: 1310

1311 - APPLICATION LOAD MODULE IS INVALID

Explanation: **GPEXAP** or **GPINAP** was invoked with a program module containing format errors.
System Action: The subroutine call in error is ignored.
Programmer Response: Locate the specific invocation of the subroutine that caused the error. Correct the program module. See *The graPHIGS Programming Interface: Subroutine Reference* for an explanation of the program module format required.
Error Number: 1311

1312 - APPLICATION REGION IS NOT IN " LOAD PENDING " STATE

Explanation: **GPINAP** has been invoked and an unexpected error was encountered.
System Action: More errors may be generated depending on the cause of the error.
Programmer Response: This is probably not an application error. If possible, reproduce the error with the graPHIGS API trace turned on. Inform a service representative of the error number and conditions surrounding its generation.
Error Number: 1312

1313 - APPLICATION REGION IS NOT IN " ACTIVATE PENDING " STATE

Explanation: **GPINAP** has been invoked and an unexpected error was encountered.
System Action: More errors may be generated depending on the cause of the error.
Programmer Response: This is probably not an application error. If possible, reproduce the error with the graPHIGS API trace turned on. Inform a service representative of the error number and conditions surrounding its generation.
Error Number: 1313

1314 - ABEND IN APPLICATION PROCESS. ID= n1 CODE= n2 OFFSET=n3

Explanation: An execution error has occurred at offset *n3* within the load module for the distributed application process with identifier *n1*. Code *n2* indicates the cause of the ABEND. For valid codes, see Appendix A, "Distributed Application Process" in *The graPHIGS Programming Interface: Writing Applications*.
System Action: The application process is terminated. However, the allocated memory is not freed. The nucleus is disconnected and all open files are closed.
Programmer Response: Determine the cause of the error at the given offset within the distributed application process load module. Correct the error.
Error Number: 1314

1315 - ABEND IN SYSTEM SERVICE CALLED BY APPLICATION PROCESS. ID=n1 CODE=n2 OFFSET= n3

Explanation: An execution error in a system service has occurred. The system service which detected the error was called at offset *n3* within the load module for the distributed application process with identifier *n1*. Code *n2* indicates the cause of the ABEND. For valid codes, see Appendix A, “Distributed Application Process” in *The graPHIGS Programming Interface: Writing Applications*.

System Action: The application process is terminated. However, the allocated memory is not freed. The nucleus is disconnected and all open files are closed.

Programmer Response: Determine the cause of the error at the given offset within the distributed application process load module. Correct the error.

Error Number: 1315

1316 - APPLICATION PROCESS ID=n1 EXITED WITH CODE=n2

Explanation: The distributed application process with identifier *n1* has exited processing with code *n2*. This is an application specified code.

System Action: The application process is terminated.

Programmer Response: Determine the reason that the application has exited and correct the error.

Error Number: 1316

1317 - FLAG PARAMETER IS INVALID

Explanation: **GPEXAP** was invoked with an invalid value for the transfer and/or execute parameter *xferflag*.

System Action: The subroutine call in error is ignored.

Programmer Response: See *The graPHIGS Programming Interface: Subroutine Reference* for valid values.

Error Number: 1317

Chapter 4. Device Driver Messages 2000 - 2999

Device Driver Messages 2000 - 2999

2001 - CHARACTER SET HAS UNSUPPORTED CHARACTER CODES WHICH ARE IGNORED

Explanation: The requested character set specifies character codes that are not in the range X'40' to X'FE' for EBCDIC characters, or in the range X'20' to X'FF' for ASCII characters.

System Action: All characters within this range are used. Any characters outside this range are ignored.

Programmer Response: None. The system will use only the supported characters.

Error Number: 900

2002 - NUMBER OF STRUCTURE ELEMENTS EXCEEDS 5080 CAPACITY

Explanation: An update to a structure cannot be displayed by the 5080 because the total number ofd structure elements exceeds the 5080 limit.

System Action: The display does not change.

Programmer Response: Edit the structure and delete elements until the structure element count is within the 5080 capability.

Error Number: 930

2003 - THE REQUESTED CHARACTER SET IS INVALID FOR THE 5080

Explanation: A request was made to activate a character set which is not in the list of valid character sets for the 5080. At Open Workstation time, the graPHIGS API constructs a list of the valid Character Set/Font Identifiers from the known graPHIGS API-defined character sets and those listed in the PROCOPT FONTLIST for this 5080 Workstation.

System Action: The character set is not activated.

Programmer Response: Check that the desired character set is being activated. If it is not a graPHIGS API-defined character set, be sure that the character set is specified in the FONTLIST for this workstation. See *The graPHIGS Programming Interface: Technical Reference* for a list of valid character sets.

Error Number: 920

2004 - 5085 STORAGE NOT AVAILABLE FOR THE REQUESTED CHARACTER SET

Explanation: This message is caused by either of the following conditions:

- The total number of single-byte character sets and wards of double-byte character sets exceeds the number of available Programmable Character Sets (PCS) defined by the graPHIGS API in the 5080.
- The size of a single-byte character set or a ward of a double-byte character set exceeds the size of available Programmable Character Sets (PCS) defined by the graPHIGS API in the 5080.

  Note: A ward is a section of a double-byte character set where the first byte of all the codes belonging to it are the same. A ward has a unique number which represents the first byte of the code belonging to that ward.

Both of these conditions indicate a problem with specifying user-defined character sets for the 5080. User-defined character sets for the 5080 must be specified via the PROCOPT FONTLIST in order for the graPHIGS API to accurately predict how much storage to allocate for character sets. The PROCOPT FONTPSIZ specifies the total number of simultaneously active character sets.

System Action: The character set is not activated.

Programmer Response: Check that the PROCOPT FONTLIST specifies the desired user-defined character sets for the 5080, and that the PROCOPT FONTPSIZ specifies a large enough Font Pool Size for the needed number of simultaneously active Character Sets. See *The graPHIGS Programming Interface: Technical Reference* for more details on user-defined character sets.

Error Number: 920

2005 - A REQUESTED CHARACTER SET SIZE EXCEEDS THE 5080 MAXIMUM

Explanation: At Open Workstation time, the graPHIGS API found that a character set listed in the PROCOPT FONTLIST fits one of the following conditions:

- For a single-byte character set, the size of the character set exceeds 65536 bytes.
- For a double-byte character set, either:
  - The size of a ward exceeds 65536 bytes, or
  - The total number of wards in the character set exceeds 48.

  Note: A ward is a section of a double-byte character set where the first byte of all the codes belonging to it are the same. A ward has a unique number which represents the first byte of the code belonging to that ward.

All sizes are the sizes of the character sets after conversion to the 5080 Programmable Character Set (PCS) format. These restrictions are imposed by the 5080. No PCS is allowed to exceed one 5080 page (65536 bytes), and the maximum number of PCSs allowed in the 5080 is 48.

System Action: The size of the character set in error is not used in allocating storage for the PCSs in the 5080, although the character set and font identifier are still listed as valid. Thus, activation of the character set will cause further errors.

Programmer Response: Either the user-defined character set in error cannot be used for the 5080, or it must be re-defined to fit the limitations of the 5080. See *The graPHIGS Programming Interface: Technical Reference* for more details on user-defined character sets.

Error Number: 910

2006 - THE 5080 CHARACTER SET TABLE SIZE HAS BEEN EXCEEDED

Explanation: An error occurred in writing a character set to the 5080 that indicates that the maximum number of 5080 Programmable Character Sets (PCS) has been exceeded. The maximum number is 48. One PCS is used for each single-byte character set and each ward of a double-byte character set.

> **Note:** A ward is a section of a double-byte character set where the first byte of all the codes belonging to it are the same. A ward has a unique number which represents the first byte of the code belonging to that ward.

System Action: The character set is not activated.

Programmer Response: If you need to activate additional character sets, close this workstation and re-open it. See *The graPHIGS Programming Interface: Technical Reference* for more details on how the graPHIGS API handles character sets.

Error Number: 920

2007 - THE PRIMARY CHARACTER SET FILE COULD NOT BE FOUND

Explanation: While attempting to activate the primary character set, the file for that character set could not be loaded.

System Action: The workstation is not opened.

Programmer Response: Be sure that you have access to the character set/font definition files. See *The graPHIGS Programming Interface: Writing Applications* for information on how to access these files, or contact your system programmer.

Error Number: 940

2008 - AN ELEMENT EXCEEDS THE MAXIMUM ELEMENT SIZE

Explanation: When a structure element was processed, it exceeded the maximum size for a single element.

System Action: The element is truncated and processing continues.

Programmer Response: Locate the element and redefine it as more than one element of a smaller size.

Error Number: 910

2009 - INSUFFICIENT CONTIGUOUS DLB STORAGE, ELEMENT TRUNCATED

Explanation: Inadequate contiguous DLB storage was encountered during connection of a structure to a workstation. This indicates that DLB storage is exhausted or fragmented.

System Action: The element is truncated and processing continues.

Programmer Response: Delete any unnecessary elements, or disassociate any unnecessary structures. Use **GPQWSU** to determine current storage utilization. Try to disassociate and reassociate structures to clean up and reduce fragmentation.

Error Number: 910

2010 - AN INITIAL STROKE OR LOCATOR POINT IS OUTSIDE OF THE VIEW

Explanation: One of the initial points was found outside the initial view.

System Action: The number of initial points is set to zero for a stroke device, and the center of a workstation window is used for a locator device.

Programmer Response: Examine the initial values for the stroke and locator devices. Adjust the values for the initial points so that they lie within the clip boundaries of the initial view.
Error Number: 910

2011 - THE 4TH COLUMN OF THE MATRIX IS ASSUMED TO BE (0,0,0,1)

Explanation: A viewing or modeling transformation matrix was found in which the fourth column was not (0,0,0,1). The workstation requires that these values be in the fourth column.
System Action: (0,0,0,1) is used as the fourth column.
Programmer Response: Check the error log to determine the error causing function. To avoid this message, change the fourth column of the matrix.
Error Number: 910

2012 - PRP IS BETWEEN NEAR/FAR CLIP PLANES, VIEW = a1 DEFAULTS TO PARALLEL

Explanation: The Projection Reference Point (PRP) is between the near and far clip planes. Under this condition, it is impossible for the workstation to project a perspective view.
System Action: The projection type defaults to parallel.
Programmer Response: Move the projection reference point outside both clip planes.
Error Number: 910

2013 - THE 5080 IS MISSING THE TRANSFORMATION AND CLIPPING FEATURE

Explanation: The configuration data returned indicates that the 5080 does not have the required transformation and clipping feature.
System Action: The workstation is not opened.
Programmer Response: Be sure that the feature is installed on your device. Contact a service representative.
Error Number: 940

2014 - THE 5080 CONTAINS A DISKETTE WITH UNSUPPORTED MICROCODE

Explanation: The configuration data returned indicates that the 5080 does not have the required microcode level.
System Action: The workstation is not opened.
Programmer Response: Go into Setup mode and check the microcode level number. See *The GDDM/graPHIGS Programming Interface: Installation and Problem Diagnosis* for the minimum level of microcode required. If the microcode level is less than the required minimum, obtain a diskette with a correct microcode level and do an initial program load in the device again. Then, rerun the application. You should obtain and use the latest level of microcode for your 5080 workstation. This will ensure that you have fixes for microcode problems and possible performance enhancements. Ask the person responsible for installing the graPHIGS API on your system to see the Program Directory supplied with the latest release for information about the latest microcode level.
Error Number: 940

2015 - THE ATTACHED DEVICE IS NOT A 5085

Explanation: The configuration data returned indicates that the attached unit is not a 5085 graphics processor.
System Action: The workstation is not opened.
Programmer Response: Be sure you are connected to a working 5085. Contact your system programmer.
Error Number: 940

2016 - THE 5085 IS NOT CONNECTED TO A 5088

Explanation: The configuration data returned indicates that the control unit is not a 5088 channel control unit.
System Action: The workstation is not opened.
Programmer Response: Be sure your 5085 is connected to a working 5088 control unit. Contact your system support.
Error Number: 940

2017 - THE 5085 IS NOT DEFINED AS A HIGH FUNCTION GRAPHICS DEVICE

Explanation: The configuration data returned indicates that the attached 5085 is not defined to the system as a high function graphics device (HFGD).
System Action: The workstation is not opened.
Programmer Response: Be sure you are connected to a working 5085 device. Contact your system programmer.
Error Number: 940

2018 - THE 5085 DOES NOT HAVE A PICK DEVICE ATTACHED

Explanation: The configuration data returned indicates that the 5085 does not have a pick device attached.
System Action: The workstation is not opened.
Programmer Response: Be sure a tablet is attached to the 5085.
Error Number: 940

2019 - THE 5085 DOES NOT HAVE A KEYBOARD ATTACHED

Explanation: The configuration data returned indicates that the 5085 does not have a keyboard attached.
System Action: The workstation is not opened.
Programmer Response: Be sure a keyboard is attached to the 5085.
Error Number: 940

2020 - The 5085 DOES NOT HAVE A TABLET ATTACHED

Explanation: The configuration data returned indicates that the 5085 does not have a tablet attached.
System Action: The workstation is not opened.
Programmer Response: Be sure a tablet is attached to the 5085.
Error Number: 940

2022 - THE 5085 DOES NOT HAVE THE REQUIRED MEMORY EXPANSION

Explanation: The configuration data returned indicates that the 5085 does not have the required memory increment.
System Action: The workstation is not opened.
Programmer Response: Be sure that at least one memory expansion is installed in your 5085. Contact a service representative.
Error Number: 940

2023 - THE 5080 CONTAINS AN UNSUPPORTED EPROM LEVEL

Explanation: The configuration data returned indicates that the 5080 does not have the required EPROM level. On open, this will be detected if the structured field buffer in the 5080 is less than 6,144 bytes, since the EPROM level is too low to redefine it.
System Action: The workstation is not opened.
Programmer Response: Contact your system programmer to either restore the original (6K) structured field buffer, or, if the serial number of the 5085 is below 12,000, install the 5085 Specify Feature #9401 (MSA). This will allow applications to define their own structured field buffer.
Error Number: 940

2024 - GSEVWT RETURNED ERROR CODE = xxxx

Explanation: An attempt to parse the ring buffer failed.
System Action: None.
Programmer Response: This failure is usually caused by the SIGMSG signal running at a high rate. Devices such as valuators and tablets generate large numbers of SIGMSG signals. Unless this occurs frequently or is linked to some application failure, it can be ignored. A discussion of signals, including SIGMSG, can be found in the *AIX 5L Version 5.2 Technical Reference*.
Error Number: 900

2025 - AN UNEXPECTED ERROR WAS ENCOUNTERED DURING CLOSE WORKSTATION

Explanation: While the device support was attempting to close the workstation, a component failed to successfully complete.
System Action: The workstation continues to close, performing as much of the close function as possible.
Programmer Response: Rerun the application with the graPHIGS API trace turned on to determine which component of the close process resulted in the error. If you cannot determine the cause of the error, contact a service representative.
Error Number: 910

2026 - THE DISPLAY LIST BUFFER IS FULL

Explanation: A request for 5080 display list storage could not be fulfilled.
System Action: Processing continues. However, the state of the 5080 workstation at this point is indeterminate. Structure contents on the workstation may not be consistent with the graPHIGS API structure contents. Thus, the results of any further structure editing on the workstation are unpredictable.

Programmer Response: In order to reconcile the 5080 workstation's structured contents with the graPHIGS API structure contents, you must disassociate all roots from the workstation and re-associate them. Delete any unnecessary structures and elements in order to make room on the workstation. If this error happened on a **GPOPWS** (Open Workstation) call, contact a service representative.

Error Number: 930

2027 - ASYNCHRONOUS 5080 ERROR, SENSE = xxxxxxxx xxxxxxxx xxxxxxxx xxxx

Explanation: An unexpected asynchronous error was received from the 5080. The first 14 bytes of the sense data, as returned from Graphics Access Method (GAM), are inserted in the message. This is shown by x's in the message description.

System Action: The operation continues. However, more errors may be generated depending on the cause of the error.

Programmer Response: Examine the sense data to determine the cause of the error. This is probably not an application error. Contact your service representative.

Error Number: 930

2028 - 5080 I/O ERROR: R: xx, C: xx S: xxxxxxxx xxxxxxxx xxxxxxxx xxxx

Explanation: An I/O operation, initiated by the 5080 device support, resulted in an abnormal completion code. The X's in the message description represent the following I/O error information:

R: In the S/370 environment, the GAM Recommendation Code returned with the error. See *GAM/SP Application Programming Guide*. In the RT PC environment, the error number code returned with the error.

C: In the S/370 environment, this field is the Channel Status byte (first byte of the second word of the CSW). In the RT PC environment, this field does not contain valid information.

S: Sense data (first 14 bytes).

In the RT PC environment, in addition to an error being logged, a trace of the CCW program causing the error is dumped to stderr.

System Action: The operation continues. However, more errors may be generated depending on the cause of the error.

Programmer Response: Check to be sure that the 5081 or 5085 is powered on. Examine the sense data to determine the cause of the error. This is probably not an application error. Contact your service representative.

Error Number: 930

2029 - THE 5085 LINK HAS BEEN SWITCHED AWAY

Explanation: After the 5085 workstation was opened, a Link Switch Notification was received indicating that the 5085 link was switched away from the current environment. This message is only logged if Link Switch Notification is not enabled via the **GPES** call.

System Action: Workstation processing continues but may result in I/O errors under certain circumstances. No further I/O will be performed to the workstation, and no updates will be seen.

Programmer Response: An application should utilize the Link Switch Notification Escape Function to handle this situation. If you wish to continue using the workstation, it should be closed and reopened after receiving Event Type 101 (Link Switch back to the application). See *The graPHIGS Programming Interface: Subroutine Reference*, for information on the **GPES** function and *The graPHIGS Programming Interface: Technical Reference* for information on the 5085 workstation.

Error Number: 930

2030 - GAM HAS RETURNED AN ERROR ON SPECIFYING AN ATTENTION ROUTINE

Explanation: The device support received a non-zero return code in response to a Graphics Access Method (GAM) SPAR Macro.

System Action: The workstation is not opened.

Programmer Response: Contact a service representative.

Error Number: 940

2031 - UNABLE TO GET THE CONFIGURATION DATA FROM THE 5080

Explanation: The device support received a non-zero code in response to a Graphics Access Method (GAM) GRAFINQ Macro.

System Action: The workstation is not opened.

Programmer Response: Be sure the device is powered on and does not have any hardware problems. Contact a service representative.

Error Number: 940

2032 - THE NUMBER OF BIT PLANES IN THE CONFIGURATION DATA IS INVALID

Explanation: The configuration data returned indicates that the 5080 does not have 2, 4, 6, or 8-bit planes.

System Action: The workstation is not opened.

Programmer Response: Be sure there are no 5080 hardware problems.

Error Number: 940

2033 - UNABLE TO OPEN GDDM

Explanation: GDDM has returned an error on trying to open the workstation.

System Action: The workstation is not opened.

Programmer Response: Check the error file for the error messages that GDDM has produced.

Error Number: 940

2034 - TABLE EXTENTS ARE TOO LARGE FOR INITIALIZATION

Explanation: There is not enough storage available in the 5080 to perform table initialization.

Programmer Response: Reduce the values specified for definable options (view table entries, string devices, etc.) to allow initialization. If the error still occurs, you must upgrade the 5080 memory to make additional memory available.

System Action: The workstation is not opened.

Error Number: 940

2036 - ERROR 0001 - CONTACT SERVICE PERSONNEL

Explanation: This is a 5080 device support internal error.
System Action: None.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 940

2037 - ERROR 0002 - CONTACT SERVICE PERSONNEL

Explanation: This is a 5080 device support internal error.
System Action: The function is ignored.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 900

2038 - ERROR 0003 - CONTACT SERVICE PERSONNEL

Explanation: This is a 5080 device support internal error.
System Action: The workstation is not opened.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 940

2039 - ERROR 0004 - CONTACT SERVICE PERSONNEL

Explanation: This is a 5080 device support internal error.
System Action: The workstation is not opened.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 940

2040 - ERROR 0008 - CONTACT SERVICE PERSONNEL

Explanation: This is a GDDM device support internal message.
System Action: None.
Programmer Response: If possible, reproduce the error with the graPHIGS API trace turned on. Contact and inform a service representative of the error number and conditions surrounding its occurrence.
Error Number: 900

2041 - ADMxxxx {MESSAGE TEXT}

Explanation: GDDM has encountered a warning type error.
System Action: None.
Programmer Response: See *Graphical Data Display Manager: Messages*
Error Number: 910

2042 - ADMxxxx {MESSAGE TEXT}

Explanation: GDDM has encountered an error.
System Action: None.
Programmer Response: See *Graphical Data Display Manager: Messages*.
Error Number: 920

2043 - ADMxxxx {MESSAGE TEXT}

Explanation: GDDM has encountered a severe error.
System Action: None.
Programmer Response: See *Graphical Data Display Manager: Messages*.
Error Number: 930

2044 - ADMxxxx {MESSAGE TEXT}

Explanation: GDDM has encountered a terminating error.
System Action: None.
Programmer Response: See *Graphical Data Display Manager: Messages*.
Error Number: 940

2045 - CONNECTION TO X SERVER LOST

Explanation: The X workstation is no longer able to communicate with the X server. This condition may be caused by either the termination of the X server process or an interruption in the network connection between the nucleus and the server.
System Action: The graphics device is now in an indeterminate state.
Programmer Response: The application should detect this error in its error handler and when notified of this error, the application should issue either the Disconnect Nucleus (**GPDNC**) or Close graPHIGS (**GPCLPH**) subroutine call. If this is not done, a wait condition may occur. Restart the failing X server or correct the network connection problem.
Error Number: 930

2046 - X PROTOCOL ERROR, message text, REQCDE = request code, RESID = resource id

Explanation: A graPHIGS API error has occurred or an X server resource shortage has caused the failure of a resource allocation request. The message text, request code, and resource id come directly from X.
System Action: The graphics device is now in an indeterminate state. Operation may continue, but results may be unpredictable.
Programmer Response: If the message text suggests a resource shortage, the user should take steps to reduce usage on the X server, possibly by removing other executing applications. Otherwise, inform a service representative of the error number and the conditions surrounding its occurrence.
Error Number: 930

2047 - XOPENDISPLAY FAILED - CHECK THE graPHIGS CONNID

Explanation: The X workstation is not able to connect to the X server that was specified by the connection identifier *connid* parameter on the **GPCRWS** or **GPOPWS** subroutine calls, or by a nickname in the External Defaults File (EDF) or Application Default Interface Block (ADIB).

System Action: The workstation is not opened.

Programmer Response: Verify that the connection identifier *connid* is correct and that all remote devices, and the paths to them, are operational. Also, verify that the host name has been enabled for access to the X server.

Error Number: 930

2048 - USER-SUPPLIED WINDOW ID INVALID, WINDOW ID = window id

Explanation: The X window identifier that was passed in by the application using the XWINDID PROCOPT in the Application Default Interface Block (ADIB) is invalid.

System Action: The workstation is not opened.

Programmer Response: Correct the value of the window identifier passed to the graPHIGS API in the ADIB.

Error Number: 930

2049 - UNSUPPORTED X VISUAL

Explanation: An X window identifier was passed in by the application using the XWINDID PROCOPT in the Application Default Interface Block (ADIB). The window was created using the DirectColor or TrueColor visuals. The graPHIGS API X workstation does not support the DirectColor or TrueColor visuals.

System Action: The workstation is not opened.

Programmer Response: A server with DirectColor or TrueColor may also support the other visuals. Create a window using a supported visual and pass the window id to the graPHIGS API.

Error Number: 930

2050 - INSUFFICIENT DATA LEN n1 FOR CGM WDO

Explanation: An application attempted to generate workstation-dependent output (WDO), and **GPWDO** or **GPES** with a function identifier (*funcid*) of 1014 was invoked with an invalid *length* parameter. One of the following conditions exists:

- A *length* parameter of less than 2 bytes was specified. The minimum length for a CGM element with a short form header is 2 bytes.
- The encoded length indicates a long form header, and a *length* parameter of less than 4 bytes was specified. The minimum length for a CGM element with a long form header is 4 bytes.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPWDO** or **GPES** that caused the error. Correct the *length* parameter. See *The graPHIGS Programming Interface: Technical Reference* for more information on CGM binary encoded elements.

Error Number: 920

2051 - DATA LEN n1 > 32771 FOR CGM WDO

Explanation: An application attempted to generate workstation-dependent output (WDO), and **GPWDO** or **GPES** with a function identifier (*funcid*) of 1014 was invoked with an invalid *length* parameter. Data must not exceed a single partition. The maximum length of data that fits in a single partition is 32771 bytes, which includes 4 bytes from the long form header.

System Action: The subroutine call in error is ignored.

Programmer Response: Locate the specific invocation of **GPWDO** or **GPES** that caused the error. Correct the *length* parameter. See *The graPHIGS Programming Interface: Technical Reference* for more information on CGM binary encoded elements.

Error Number: 921

2052 - DATA LEN n1 <> ENCODED LEN n2 + HDRSZ n3 IN CGM WDO - USING ENCODED LEN

Explanation: An application attempted to generate workstation-dependent output (WDO), and **GPWDO** or **GPES** a function identifier (*funcid*) of 1014 was invoked with a value for the *length* parameter that does not match the encoded length.

System Action: One of the following actions was taken:

- If data length > encoded length + header size, data up to the encoded length is output, and additional data is truncated.
- If data length < encoded length + header size, the data is output and then the element is padded with zeros to equal the encoded length.

Programmer Response: Locate the specific invocation of **GPWDO** or **GPES** that caused the error. Correct the value for the *length* parameter. See *The graPHIGS Programming Interface: Technical Reference* for more information on CGM binary encoded elements.

Error Number: 910

Appendix A. ABEND Codes for the GDDM/graPHIGS API

This appendix documents diagnosis, modification, or tuning information provided by the graPHIGS Programming Interface for determining the proper type-of-failure keyword for problem reporting. See Notices for information on the use of diagnosis, modification, or tuning information.

This appendix lists the abend codes produced by the GDDM/graPHIGS API in numerical order. Each code includes the information you need to create a list of type-of-failure keywords. If the issuing module on VM/CMS is in a discontiguous shared segment, the abend code may appear in hexadecimal form.

Table A-1. ABEND Codes for the GDDM/graPHIGS API

Hex.	Dec.	Explanation
1	1	Description table overflow
41A	1050	Invalid request code
426	1062	Local EUDS area too small
427	1063	AFMEODF entry wrong
514	1300	Invalid ECA
515	1301	Invalid RCP subcomponent code
516	1302	Invalid RCP function code
517	1303	Function not supported
51C	1308	Program load failure - only if unconditional request
521	1313	FREEMAIN failure
522	1314	Request exceeds maximum storage
523	1315	Invalid family code
524	1316	Invalid FRB or FRB parameters
525	1317	Invalid ORB parameters
526	1318	Invalid IFCTTSID field
564	1380	Wrong program load
565	1381	Module loaded above 16 megabytes when GDDM initialized in 24-bit mode-second occurrence—possible recursion
6E0	1760	Invalid RCP subcomponent code
6E2	1762	Invalid QUICKCELL request
6E3	1763	Zero cellsize
6E5	1765	Structure reference pointer found where none expected

Appendix B. ABORT Codes for the Personal graPHIGS API

This appendix documents diagnosis, modification, or tuning information provided by the graPHIGS Programming Interface for determining reasons for and responses to the issuance of the system call, ABORT. See Notices for information on the use of diagnosis, modification, or tuning information.

The ABORT codes described in the following table will be displayed as part of Message 1204, and a message will be displayed on stderr.

Table B-1. ABORT Codes for the Personal graPHIGS API

Hex.	Dec.	Explanation
1	1	Description table overflow
41A	1050	Invalid request code
426	1062	Local EUDS area too small
427	1063	AFME0DF entry wrong
516	1302	Invalid RCP function code
522	1314	Request exceeds maximum storage
532	1330	Invalid SSM request
532	1331	Overlap found on FAQE
6E0	1760	Invalid RCP subcomponent code
6E2	1762	Invalid QUICKCELL request
6E3	1763	Zero cellsize
6E5	1765	Structure reference pointer found where none expected

Appendix C. Non-Specific Subroutine Cross Reference

This appendix documents diagnosis, modification, or tuning information provided by the graPHIGS Programming Interface. See Notices for information on the use of diagnosis, modification, or tuning information.

A graPHIGS API error message may contain an asterisk (″*″) following the subroutine name field. The asterisk indicates that the graPHIGS API could not determine the exact name of the subroutine which generated the error. The subroutine name could not be determined because:

- Some errors are not detected until after the graPHIGS API subroutine returns control to your application.
- Some errors are generated by several graPHIGS API subroutines.

For example, if an error is detected by the graPHIGS nucleus, due to a call to **GPVCH**, the subroutine name field of the error message will contain **GPXVR**, which is the extended form of **GPVCH**.

Table C-1 contains a list of related subroutines. The first column of the table lists the subroutine names, which may be followed by an asterisk in a graPHIGS API error message. The second column lists related subroutines which may have caused the error to be generated.

Note, that when possible, an error message will contain the exact name of the API subroutine which generated the error. In such cases, the subroutine name will not be followed by an asterisk.

Table C-1. Subroutines With Asterisks

Subroutines	Related Subroutines
GPSDAL*	GPES
GPXVR*	GPVCH GPXVCH GPVMT3 GPVMT2 GPVMP3 GPVMP2
GPVIP*	GPVP
GPVOP*	GPVP
GPCHMO*	GPLCMO GPPKMO GPSKMO GPSTMO GPVLMO
GPXPLR*	GPPLR
GPXPMR*	GPPMR
GPXTXR*	GPTXR
GPXIR*	GPIR
GPXER*	GPER
GPXCR*	GPCR
GPDTR*	GPCLWS

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