

## Whetstone Algol Translator – Compilation Error Numbers

### See Appendix G of the English Electric Algol Users' Manual

#### Error/Meaning

- 0 adjacent delimiters inadmissible
- 1 constant before **:=** or **[**
- 2 illegal form of parameter
- 3 **switch** misplaced
- 4 constant used as statement
- 5 identifier or constant must not follow **)** or **]**
- 6 translated program (object program) > 8192 words
- 7 block head must end with semicolon
- 8 relation on each side of simple arithmetic expression
- 9 illegal statement – delimiter misused
- 10 declaration starts incorrectly
- 11 error between **for** and **:=**
- 12 adjacent delimiters inadmissible
- 13 **;** misused in array declaration
- 14 **switch** declaration ends incorrectly
- 15 declaration without identifier
- 16 **:=** preceded by constant or used inside an expression
- 17 identifier inconsistently used
- 18 **end** misused
- 19 local identifier used in array bound
- 20 **goto** must not follow an identifier or constant
- 21 wrong for clause preceding **do**
- 22 underline misused
- 23 parameters or dimensions missing
- 24 Boolean constant cannot be used here
- 25 non type procedure as function designator
- 26 assignment to procedure identifier outside procedure body
- 27 **real**, **integer** or **Boolean** misplaced
- 28 illegal form of parameter
- 29 blank parameter
- 30 **;** misused
- 31 wrong number of subscripts or parameters
- 32 **:=** illegal in type or array declaration
- 33 statement ends incorrectly
- 34 declaration follows statement
- 35 **:**, **goto** or **for** used in expression
- 36 redeclaration of identifier
- 37 **own** misplaced
- 38 non type procedure as function designator
- 39 procedure identifier inconsistently used
- 40 identifier inconsistently used
- 41 adjacent arithmetic operators
- 42 wrong use of delimiter
- 43 relation or logical operator used as an arithmetic operator
- 44 illegal use of logical operator
- 45 **string**, **label**, **]**, **KDF9**, **ALGOL**, **EXIT**, **\***, **value** or **|** misplaced
- 46 omission or error preceded **begin**, or **begin** follows **:=**
- 47 **(** misplaced
- 48 **(** must not appear in a type declaration
- 49 misused **(** in array or switch declaration
- 50 function designator as designational expression
- 51 **:** in type or switch declaration
- 52 misplaced declarator
- 53 subscripted variable as statement
- 54 local identifier used in array bound

55 **:=** must not appear in actual parameter list  
56 misused comma or colon in an expression  
57 **if** misused  
58 **if** must not be used in a type declaration  
59 corresponding **if** has been omitted or conditional expression without an **else**  
60 corresponding **then** missing  
61 code procedures not allowed  
62 too many own scalar or array identifiers  
63 too many scalars, array identifiers of formal parameters in current block or procedure  
64 more than 63 blocks nested within each other  
65 illegal use of operator in a switch declaration or a designational expression  
66 no assignment to procedure identifier within body of type procedure  
67 should be **own real array**  
68 **array** misplaced  
69 wrong own array bound  
70 wrong delimiter used in own array bound  
71 own array bound must be an integer  
72 own array bound must be an integer  
73 **[** misused  
74 wrong delimiter used in own array bound  
75 wrong own array bound  
76 left square bracket must be preceded by an identifier  
77 unmatched closing square bracket  
78 upper bound missing in array declaration  
79 comma misused in switch declaration  
80 illegal type declaration  
81 illegal array list  
82 corresponding **for** missing  
83 **:=** omitted from for clause  
84 **step, until** or **while** misused in for list element  
85 misused **)** other than in expression  
86 unmatched closing round bracket  
87 illegal parameter list  
88 current use of procedure identifier not consistent with previous uses  
89 wrong delimiter after procedure statement  
90 non type procedure as function designator  
91 error before procedure  
92 repeated formal parameter  
93 wrong formal parameter delimiter  
94 identifier not in formal part but appearing in the value or specification part  
95 wrong delimiter in value or specification part  
96 wrong delimiter in specification part or specification part omitted  
97 constant should not be used in procedure heading  
98 wrong specification part  
99 wrong specification part  
100 wrong value or specification part  
101 wrong delimiter in value or specification part  
102 colon in subscript expression  
103 formal parameter has not appeared in the specification part  
104 declaration terminated by end  
105 identifier specified to be a procedure, switch or a string must not appear in the value part  
106 switch designator has more than one subscript  
107 wrong for clause  
108 misused comma in array declaration  
109 **then** misused  
110 wrong for clause  
111 current use of identifier inconsistent with previous uses  
112 **until** missing after **step**  
113 illegal number  
114 conditional expression needs parentheses  
115 wrong delimiter after procedure identifier in procedure declaration

116 identifier or constant not as expected  
117 comment does not follow **;** or **begin**  
118 **true** or **false** must not follow identifier or constant  
119 letter, digit, **.** or **10** misused  
120 no **;** between formal parameter part and value or specification part  
121 integer number too big  
122 real number too big  
123 commas or colons wrong in array bounds  
124 no entry is given, but the translator contains code to give this error report  
125 illegal parameter comment  
126 illegal underlined word  
127 **I** must be the first symbol of actual parameter  
128 illegal parameter delimiter after string  
129 integer labels not allowed  
130 non type input/output procedure used as function designator  
131 underlined space or tab or illegal paper tape character  
132 parity fail  
133 EM (I) appears inside program  
134 time limit expired, machine failure, etc (even restart)  
135 illegal character in string  
136 operator intervention (odd restart)  
137 illegal description of code body  
138 **EXIT** or **ALGOL** or parameter calls not followed by or preceded by **;**  
or CR-LF in Code Body for array parameter  
139 N negative (block level). (machine failure).  
140 title of ALGOL program too long or does not end with EM (I)  
141 illegal parameter call in code body  
(identifier not a parameter or identifier not followed by closing string quote)  
142 identifier specified to be a procedure or a switch not allowed as parameters of code procedures  
143 too many code procedures (only 7890 allowed)  
144 illegal ALGOL basic symbol (machine or POST failure)  
145 no EM (I) after program  
511 Nest not empty, Return to main loop  
999 P127 (binary to integer routine) tries to convert a negative number

## Whetstone Algol Controller - Error Numbers

### This is Appendix 2 from the English Electric Service Routine Library Manual.

#### Error/Meaning

- 0 Machine Compiler (non-existent operation)
- 1 KDF9 too small
- 2 Expression in an if clause not boolean
- 3 Incorrect number of parameters in a procedure call
- 4 Left and right-hand sides not compatible
- 5 Variables in left part list of differing types
- 6 Integer overflow
- 7 Integer assigned to real actual parameter called by name
- 8 Real assigned to integer actual parameter called by name
- 9 Actual parameter incompatible with formal parameter used in an expression
- 10 Invalid actual parameter corresponding to real formal parameter used in an expression (call by name)
- 11 Invalid actual parameter corresponding to integer formal parameter used in an expression (call by name)
- 12 Integer overflow in converting real actual parameter corresponding to integer formal parameter (call by name)
- 13 Arithmetic actual parameter corresponding to boolean formal parameter (call by name)
- 14 Algebraic actual parameter corresponding to label formal parameter (call by name)
- 15 Invalid actual parameter corresponding to real formal parameter used in an expression (call by value)
- 16 Invalid actual parameter corresponding to integer formal parameter used in an expression (call by value)
- 17 Integer overflow in converting real actual parameter corresponding to integer formal parameter (call by value)
- 18 Arithmetic actual parameter corresponding to boolean formal parameter (call by value)
- 19 Algebraic actual parameter corresponding to label formal parameter (call by value)
- 20 Actual parameter should be real array
- 21 Actual parameter should be integer array
- 22 Actual parameter should be boolean array
- 23 Actual parameter should be procedure
- 24 Actual parameter should be real procedure
- 25 Actual parameter should be integer procedure
- 26 Actual parameter should be boolean procedure
- 27 Actual parameter should be string
- 28 Actual parameter should be switch
- 29 Actual parameter not arithmetic
- 30 Actual parameter not boolean
- 31 Actual parameter not label
- 32 Array bound not arithmetic
- 33 Lower bound exceeds upper bound
- 34 Integer overflow in converting real bound
- 35 Integer overflow in converting real subscript
- 36 Subscript not arithmetic
- 37 Incorrect number of subscripts to formal array
- 38 Subscripted variable outside array limits
- 39 Integer overflow in converting real array to integer
- 40 Actual parameter corresponding to real formal array should be arithmetic array
- 41 Actual parameter corresponding to integer formal array should be arithmetic array
- 42 Actual parameter should be boolean array
- 43 Out-of-range switch index
- 44 Operand of unary minus not arithmetic
- 45 Real overflow - unary minus
- 46 Integer overflow - unary minus
- 47 Operand of **not** is not boolean
- 48 Operands of integer divide ( $\div$ ) not integers

49 Zero divisor to integer divide ( $\div$ )  
 50 Operands of **and** not boolean  
 51 Operands of **or** not boolean  
 52 Operands of **imp** not boolean  
 53 Operands of **eqv** not boolean  
 54 Operands of **+** not arithmetic  
 55 Operands of **-** not arithmetic  
 56 Operands of **x** not arithmetic  
 57 Operands of **<** not arithmetic  
 58 Operands of **≤** not arithmetic  
 59 Operands of **=** not arithmetic  
 60 Operands of **≥** not arithmetic  
 61 Operands of **>** not arithmetic  
 62 Operands of **≠** not arithmetic  
 63 Real overflow on **+**  
 64 Real overflow on **-**  
 65 Real overflow on **x**  
 66 Real overflow on **<**  
 67 Real overflow on **≤**  
 68 Real overflow on **=**  
 69 Real overflow on **≥**  
 70 Real overflow on **>**  
 71 Real overflow on **≠**  
 72 Integer overflow on **+**  
 73 Integer overflow on **-**  
 74 Integer overflow on **x**  
 75 Integer overflow on **/**  
 76 Operands of **/** not arithmetic  
 77 Procedure identifier as controlled variable  
 78 Expression after while not boolean  
 79 Operands of exponentiation not arithmetic  
 80  $a^r$   $a < 0$   
 81  $a^r$   $a = 0, r < 0$   
 82  $a^i$   $a = i = 0$   
 83  $a^i$  integer overflow  
 84  $a^i$   $i < 0$ , integer overflow  
 85 Nest and SJNS not empty on exit from a code procedure  
 86 Nest and SJNS not empty on  $J[a]$  in a code procedure  
 87 Input/Output devices not closed before end of program  
 88 Input/Output function not available  
 89 Parity failure on reading object program  
 90 Even restart — operator does TINT;I0.  
 91 Odd restart — operator does TINT;I1.  
 92 Invalid operand to function *exp*  
 93 Invalid operand to function *ln*  
 94 Invalid operand to function *sin*  
 95 Invalid operand to function *cos*  
 96 May not be used  
 97 Invalid operand to function *sqrt*  
 98 Invalid operand to function *entier*  
 99 May not be used  
 100 C not arithmetic in **for**  $V := A$  **step** B **until** C  
 101 B not arithmetic in **for**  $V := A$  **step** B **until** C  
 102 Real overflow in forming  $V - C$  in **for**  $V := A$  **step** B **until** C  
 103 Integer overflow in forming  $V - C$  in **for**  $V := A$  **step** B **until** C  
 104 Real overflow in forming  $V + B$  in **for**  $V := A$  **step** B **until** C  
 105 Integer overflow in forming  $V + B$  in **for**  $V := A$  **step** B **until** C  
 106 Machine/Compiler (nesting store not empty on return to main loop)  
 107 Real overflow on  $a^r$   
 121 Device already open  
 122 Device number contains 8 or 9

123 Trying to use *open* on a magnetic tape  
124 No table entry for this device  
125 No tables for this device  
126 Parity failure on monitor  
127 Exponent out of range  
128 **10** or decimal point in exponent  
129 More than one decimal point  
130 More than one sign  
131 Sign not at the beginning of a number  
132 **+** **-** **10** or decimal point without a digit  
133 No digit after decimal point  
134 Number out of range  
135 Negative number with empty sign  
136 No digits at all in given field layout  
137 More characters than bits in the field  
138 Digit before start of initial spaces  
139 Digits left over at decimal point position  
140 More digits to left of decimal point than given in field layout before round off  
141 More digits to left of decimal point than given in field layout after round off  
142 Only guard digit in layout field  
143 No digits after decimal point  
144 More than 8 characters in exponent  
145 More than 2 but less than 9 characters in exponent  
146 Failure in alarm printing  
147 An inadmissible basic symbol in inner string quotes  
148 String does not start with **␣**  
149 Trying to close a device that is not open  
150 8 or 9 in device number  
151 Character fetching with basic symbol buffer not empty  
152 Device not open  
153 Reading on writing device  
154 CR by itself (5-hole input only)  
155 More than one retain character entry  
156 Basic symbol buffer full  
157 Write on binary  
158 Parity failure on a device  
159 Reading characters on a binary device  
160 5- or 8-hole tables not available  
161 writing on a reading device  
162 Device already found  
163 **␣** not first symbol of a string  
164 character other than 0-9 A-Z in tape identifier except for 'zero' **␣\*\*\*\*\*␣**  
165 Input tables not present  
166 Parity failure  
167 Device not found  
168 8 or 9 in device number  
169 Table for other function not present  
170 Device not a magnetic tape  
171 Device not found  
172 Writing on a reading device  
173 Writing on a character device  
174 Parity failure  
175 Block count wrong on rewinding after reaching end-tape-warning  
176 **␣** not first symbol of string  
177 An inadmissible basic symbol in inner string quotes  
178 Device not found  
179 Array size incompatible  
180 Read binary on character device  
181 Read on writing device  
182 Block count wrong on rewinding after reaching end-tape-warning  
183 Parity failure

184 Skip on writing device  
185 Skip on character device  
186 Backward skip to BTL (beginning-of-tape-label) i.e. before data  
187 Parity failure  
188 Device not found  
189 not taken up - sic  
190 not taken up - sic  
191 Parity failure  
192 Device not found  
193 Out of range integer in array heading  
194 W not 1 or -1  
195  $d > 31$   
196 Array size incompatible  
197 Invalid terminator to a number  
198 Array does not terminate with end-message  
199 Number before Z terminator out of range  
200 Number of zeros too great for size of array  
201 Row or column or grand sum not at end of row, column or array  
202 Sum check failure  
203  $\perp$  not first symbol of a string  
204 Incorrect dope vector  
205 8 or 9 in device number  
206 BTC on device other than magnetic tape  
207 Device not found  
208 8 or 9 in device number  
209 ETW on device other than magnetic tape  
210 Device not found  
211 Parity failure  
212 Rewind on output device  
213 Device not found  
215 Over-reading of cards (END of DATA card being processed)  
220 No variable called for standard entry, i.e. sread, swrite called with no E, F or I format specified  
222 First Algol Basic Symbol of string not  $\perp$   
223 integer brought from format string: -ve sign but no decimal digits  
224 -ve scale factor used with E-type transfer  
227 w-integer for E- or F-type number not found  
228 w-integer for E- or F-type number out of range  
229 No decimal point in format string for E- or F-type number  
230 d-integer for E- or F-type number not found  
231 d-integer for E- or F-type number out of range  
232 w-integer < d-integer for E- or F-type number  
233 w-integer for I-type number not found  
234 w-integer for I-type number out of range  
235 Invalid format symbol in the string  
238 Incompatibility between kind of variable and the format type of the number,  
i.e. integer used with E-, F-type format or real number used with I-type format  
243 I-type number out of 39-bit range  
245 A difference of at least 6 does not exist between w and d for E-type format  
260 Two exponent fields in one number  
261 Invalid symbol on input medium  
262 Decimal point found in number expected to be I-type  
263 No decimal digits in exponent field on input  
264 No decimal digits in mantissa  
265 Exponent of more than two digits  
269 Space found in decimal number after first non-space character found  
270 Exponent field found in number expected to be I-type  
999 Occurs after stack post-mortem