

# NAG Fortran Library Routine Document

## H02CDF

**Note:** before using this routine, please read the Users' Note for your implementation to check the interpretation of *bold italicised* terms and other implementation-dependent details.

### 1 Purpose

To supply individual optional parameters to H02CBF.

### 2 Specification

```
SUBROUTINE H02CDF (STRING)
CHARACTER*(*)      STRING
```

### 3 Description

H02CDF may be used to supply values for optional parameters to H02CBF. It is only necessary to call H02CDF for those parameters whose values are to be different from their default values. One call to H02CDF sets one parameter value.

Each optional parameter is defined by a single character string of up to 72 characters, consisting of one or more items. The items associated with a given option must be separated by spaces, or equal signs [=]. Alphabetic characters may be upper or lower case. The string

```
Print level = 1
```

is an example of a string used to set an optional parameter. For each option the string contains one or more of the following items:

- (a) a mandatory keyword;
- (b) a phrase that qualifies the keyword;
- (c) a number that specifies an INTEGER or *real* value. Such numbers may be up to 16 contiguous characters in Fortran 77's I, F, E or D formats, terminated by a space if this is not the last item on the line.

Blank strings and comments are ignored. A comment begins with an asterisk (\*) and all subsequent characters in the string are regarded as part of the comment.

Normally, each user-specified option is printed as it is defined, on the current advisory message unit (see X04ABF), but this printing may be suppressed using the keyword **nolist**. Thus the statement

```
CALL H02CDF ('Nolist')
```

suppresses printing of this and subsequent options. Printing will automatically be turned on again after a call to H02CBF, and may be turned on again at any time by the user, by using the keyword **list**.

Optional parameter settings are preserved following a call to H02CBF, and so the keyword **defaults** is provided to allow the user to reset all the optional parameters to their default values by the statement,

```
CALL H02CDF ('Defaults')
```

prior to a subsequent call to H02CBF.

A complete list of optional parameters, their abbreviations, synonyms and default values is given in Section 11 of the document for H02CBF.

### 4 References

None.

## 5 Parameters

- 1: STRING – CHARACTER\*(\*) *Input*  
*On entry:* a single valid option string (as described in Section 3 above and in Section 11 of the document for H02CBF).

## 6 Error Indicators and Warnings

If a line is not recognized as a valid option, then a warning message is output on the current advisory message unit (see X04ABF).

## 7 Accuracy

Not applicable.

## 8 Further Comments

H02CCF may also be used to supply optional parameters to H02CBF. Note that if E04NFF/E04NFA is used in the same program as H02CBF, then in general H02CCF will also affect the options used by E04NFF/E04NFA.

## 9 Example

See Section 9 of the document for H02CCF.

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