

Appendix D

Troubleshooting

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Introduction

This appendix provides help in understanding and overcoming problems that might occur with the HP 49G.

To ensure the reliability and proper functioning of your calculator—and not void your warranty—you should only store and use it within the following environmental limits:

Operating temperature: 0° to 55° C (32° to 131° F)

Storage temperature: -40 to 70° C (-40° to 158° F)

Maximum operating humidity: 90% at 40° C (104° F).

Calculator will not turn on

This condition most likely indicates that the batteries have run out. Install new batteries and see if the condition persists.

If, after replacing the batteries, the calculator still does not turn on when you press **(ON)**, follow the steps set out in “Resetting the calculator” below.

If the calculator does turn on but the main display is blank:

1. press and hold **(ON)**
2. press **(+)** several times
3. release **(ON)**.

If characters still do not appear on the main display, follow the steps set out in “Resetting the calculator” below.

Resetting the calculator

To reset the calculator:

1. Press and hold **(ON)**
2. Press and hold **(F3)**
3. Release both keys. The calculator should reset. If it does not:
 - a. Insert the end of a metal paper clip into the hole in the back of the calculator. Insert the clip as far as it will go. Hold for one second and then remove the clip.
 - b. Press **(ON)**.

If this does not fix the problem, the calculator requires a service.

In the event that the calculator contains a library with a bad configuration object, the calculator will re-boot repeatedly. If this happens, hold down the **(⏏)** key to prevent the configuration object from running.

Batteries

The HP 49G needs three AAA batteries to run. (Each AAA battery provides 1.5 volts.) To ensure optimum operation always use alkaline batteries, and always use batteries of the same brand and type.

Rechargeable batteries are *not* recommended because of their lower capacity and short low-battery warning time.

When to replace the batteries

When battery power is low, the ((●)) annunciator is displayed. This annunciator remains displayed even when you turn the calculator off.

If the battery power is low when you turn the calculator on, the message LowBat (S) appears briefly on the screen.

Replacing the batteries



You risk losing data if you:

- remove the batteries while the power is on
- press (ON) while replacing the batteries or
- leave the calculator without batteries for more than 2 minutes.

To change the batteries:

1. Turn the calculator off.
2. Remove the cover of the battery compartment. You do this by pressing down on the cover and sliding it away from the calculator.
3. Carefully remove the old batteries.
4. Immediately insert the new batteries.



The batteries must be oriented according to the outlines shown on the bottom of the battery compartment. Inserting batteries the wrong way may damage the calculator.

5. Replace the cover.
6. Press (ON) to turn the calculator on.

Always discard the old batteries according to the manufacturer's instructions.

Calculator is not responding

If the HP 49G freezes and will not respond when you press **CANCEL**, its memory may have become corrupted. There are two ways to correct this:

1. halting the system
2. resetting the memory.



If your calculator has frozen, always try to fix the problem by halting the system. Only reset the memory if halting the system has not worked. Resetting the memory returns the calculator to its default state. All stored information, except for that stored in flash memory, will be lost.

Halting the system

A system halt:

- cancels all system operations
- clears the history and the stack
- cancels all executing programs and initializes any local variables used in them
- turns off the user keyboard
- makes HOME the current directory.

Halting the system from the keyboard

1. Press and hold **ON**.
2. Press **F3**.
3. Release both keys.

If the calculator is not responding to the keyboard, try the method outlined in the following section.

Halting the system without using the keyboard

1. Insert the end of a metal paper clip into the hole in the back of the calculator. Insert the clip as far as it will go. Hold for one second and then remove the clip.
2. Press **ON**.
3. If necessary:
 - a. press and hold **ON**
 - b. press and hold **F3**
 - c. release both keys.

If this does not fix the problem, you will need to reset the memory (explained in the next section).

Resetting the memory

Resetting the memory returns the calculator's memory to its default state. All variables, directories, and programs you have stored in the calculator will be lost, except for those that you stored in ports 1 (ERAM) and 2 (FLASH).

1. Press and hold down **ON** **F1** and **F6**.
2. Continue to hold **ON** while releasing **F1** and **F6**.
3. Release **ON**.

Calculator continually re-boots

A faulty or incompatible library can cause the calculator to re-boot continually. This can occur when you install a HP 48 series library that contains functions that are incompatible with the HP 49G.

1. Press and hold down **⏮** (backspace key) until the calculator re-boots successfully.
2. Use File Manager to delete the faulty library from the port.

Error on start up

If the message “Invalid Card Data” is displayed each time you turn the calculator on, you need to initialize the calculator’s ports. This message is displayed if you attempted to recover memory when you turned the calculator on for the first time—see page 2-2—or if a port has become corrupted.

To initialize the calculator’s ports:

1. Press **(CAT)**.
2. Highlight PINIT in the commands catalog.
3. Press **(ENTER)** or OK to place the command on the command line.
4. Press **(ENTER)** to run the command and initialize the ports.

Low memory

The calculator’s operations share memory with the objects you create. Therefore the calculator may operate slowly if memory is low.

The calculator displays messages as memory becomes critically low. These messages are discussed in the following three sections.

No room for last stack

If there is not enough memory to save a copy of the current stack or history, No room for last stack is displayed when you press ENTER.

Solution: this is a warning message only. The calculator will complete its current operation, but the UNDO command will not be available. You should delete unwanted objects from the stack to prevent this condition continuing.

Insufficient memory

`Insufficient memory` is displayed if there is not enough memory to complete an operation.

Solutions:

1. Try to do the calculation or operation in a way that would use less memory. (For example, use the factorial command instead of entering a string of consecutive integers each separated by the multiplication sign.)
2. Delete unwanted objects from history or from the stack.
3. Delete unwanted variables.

Out of memory

`Out of memory` is displayed when the calculator runs completely out of user memory. In this state, the calculator is capable of only one operation: a one-by-one interactive purge. In this operation, you are asked if you want to purge—that is, delete—a series of objects, starting with the object on level 1 of the stack. If you agree—by pressing **(F1)**—you are then asked about the new level-1 object. This continues until either the stack is empty or you respond to a request to purge an object by pressing **(F6)** (for NO).

The calculator then asks if you want to delete other items. All together, the items you will be asked to purge are:

- the object on level 1 of the stack (repeated until there are no objects on the stack or until you press **(F6)** when asked to purge a particular stack object)
- the contents of LAST CMD
- the contents of LAST STACK (if active)
- the contents of LAST ARG (if active)
- the variable PICT (if present)
- user key assignments
- alarms
- the entire stack (unless already empty)
- each global variable.

After cycling through the list of purgeable objects, the calculator attempts to return to normal operation. If there is still not enough free memory, the purge process is repeated.

You can stop the purge process at any time by pressing **CANCEL**. You might do this after a while to check if the low-memory condition has been rectified. If sufficient memory is now available, the calculator returns to normal display; otherwise, the calculator beeps and continues with the purge process.

In summary:

- To delete the indicated object, press **F1**.
- To keep the indicated object, press **F6**.
- To stop the purge process, press **CANCEL**.