

# *AccuPyc<sup>®</sup> II SERIES*

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*GAS DISPLACEMENT PYCNOMETER SERIES*



## *ERROR MESSAGES*

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Mar 2016  
V2.x

## ***ERROR MESSAGES FOR THE 1340 ACCUPYC***

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See [Error Messages for the 1340 AccuPyc Keypad Only on page 20](#)

### **2201 Cannot execute report subsystem.**

*Cause:* Start Report failed to execute the report subsystem (which is a separate process).

*Action:* Restart the computer. If the problem persists, reinstall the application (this will not affect any of your sample files). Contact a Micromeritics service representative if this error message continues.

### **2204 Communication attempt with [n] failed [n]. Please check application directory for file.**

*Cause:* A file necessary for reporting is missing.

*Action:* Re-install the software.

### **2430 Error accessing file [n], error code = [n].**

*Cause A:* Media may be damaged.

*Action A:* Clean the media drive. If this does not eliminate the problem, attempt operation using a backup copy of the file.

*Cause B:* Hard disk may be damaged.

*Action B:* Contact your Micromeritics service representative.

*Cause C:* A software error occurred when the file was accessed.

*Action C:* Contact your Micromeritics service representative.

*Cause D:* The file name specified contains one or more invalid characters.

*Action D:* Enter a valid file name. Do not use characters such as \* or ?. Refer to the operating system manual.

### **2431 Error writing file [n], error code = [n].**

*Cause A:* User logged onto a computer that does not have Write permissions.

*Action A:* Contact your IT department to change user permissions.

*Cause B:* Insufficient hard disk to perform the operation.

*Action B:* Copy files not used regularly to the hard disk external media. Delete them from the hard disk, and then try the operation again.

**2432 Invalid response from MMI 'FILE\_READ' request.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact a Micromeritics service representative if this error message continues.

**2433 New entries have been found in this directory. Refresh the directory information?**

*Cause:* Several analyzer files (sample information, analysis conditions, adsorptive properties, or report options) have been added to this directory by some function other than the analyzer program.

*Action:* Click **Yes** to update the directory information with data from each new file. This operation may take a minute. Click **No** to locate the file manually. This option may be feasible if a large number of files have been copied into the directory and the file name is known.

**2434 File [n] — Subset [n] wrote wrong [n] of data, expected [n] bytes.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics service representative.

**2436 Path specification [n] is invalid.**

*Cause:* An invalid path name and/or extension was entered.

*Action:* Type a valid path name (including the proper extension), then press **Enter**.

**2437 File name [n] does not exist.**

*Cause:* The overlay file selected in the report option does not exist.

*Action:* Enter an existing file specification, or select a file name from the list box.

**2439 Could not register file.****2440 Subset not found.****2441 Seek within file failed.****2442 Bad header in subset file.****2443 Subset owner denied access****2444 Not a valid file format.****2445 Subset wrote the wrong amount of data.**

**2446**      **Error reading data.**

**2447**      **Error writing data.**

*Cause:* An unexpected error occurred when trying to access a data file.

*Action:* Contact your Micromeritics service representative.

**2449**      **This field does not contain a valid file specification.**

*Cause:* An invalid file name was entered.

*Action:* See the description of file naming conventions in a Windows manual, then re-enter the name.

**2450**      **Sample Defaults may not be edited while this operation is in progress. Do you wish to save and close the Sample Defaults edit session?**

*Cause:* An automatic analysis (an analysis in which sample files are created using the defaults) was processing while editing the defaults.

*Action:* Finish the edit session of the defaults, close the window, then restart the automatic analysis.

**2452**      **The instrument is busy performing an operation of which this application is unaware. Do you want to cancel?**

*Cause:* The instrument is performing an operation which is not recognized by the application.

*Action:* Click **Yes** to have the application cancel the operation. Click **No** to allow the operation to continue.

**2452**      **Attempt to write MICATTR.DIR in read only mode. [n]**

**2453**      **Attempt to append MICATTR.DIR in read only mode. [n]**

*Cause:* The *Read-Only* attribute is turned on in the application's MICATTR.DIR file (this file exists in each folder containing sample or parameter files).

*Action:* Use Windows Explorer to access the folder containing the MICATTR.DIR file, then disable the *Read-Only* option.

**2454**      **Too many selections for a print-to-file operation. Only the first (number) selections will be processed. Please reselect the remainder.**

**2455**      **Too many selections for an export-to-file operation. Only the first (number) selections will be processed. Please reselect the remainder**

*Cause:* Too many files were selected for this operation.

*Action:* Select only the number of files specified in the message.

**2456 Insufficient file handles available. Application cannot continue.**

*Cause:* More than 50 files are open at the same time.

*Action:* Refer to an operating system manual then set the limit for open files to 50 or greater. Alternatively, close any unused open files.

**2457 Results cannot be displayed. More than [n] windows are currently displaying or printing results.**

*Cause:* Too many windows are open in the application.

*Action:* Close some of the open windows.

**2458 An instrument is performing a critical operation. Wait a few moments before exiting the application.**

*Cause:* An attempt was made to exit the application while the instrument was performing a critical operation. This operation must be completed before the application can be exited.

*Action:* Wait a short time and attempt to exit the application again.

**2459 An instrument is busy. A delay in restarting this application could result in loss of new data. Continue with program Exit?**

*Cause:* An attempt was made to exit the application while an analysis was in progress. While this is possible, the data collected when the application is inactive will not be permanently recorded until the application is re-started. A power failure to the instrument could cause some data to be lost.

*Action:* If not concerned with the potential for loss of data should a power failure occur, click **Yes** to continue; otherwise, click **No**.

**2460 Fatal Communications error on [n].**

*Cause:* There was a fatal error in communication between the application and the software in the instrument. All displays for that instrument will be closed.

*Action:* Ensure that the analyzer is connected to the computer on the communications port configured in the *Setup* program. Stop and restart the analyzer software. Contact your Micromeritics service representative.

**2461 No instruments are in operation. This application will unconditionally terminate.**

*Cause:* At least one instrument must be active for the application to operate. The initialization of all of the instruments configured with the Setup program has failed. The application stops.

*Action A:* Usually this message is preceded by another message giving the reason for the instrument's failure to initialize. Refer to the instructions for that message.

*Action B:* Ensure that the instrument is attached to the computer on the communications port configured with the *Setup* program. Verify that the instrument's power switch is in the ON position and that the light on the front panel is illuminated. Contact a Micromeritics service representative if this error message continues.

**2477 [n] did not properly initialize.**

*Cause:* The software was unable to initialize this instrument. This is usually caused by one of the conditions listed in the previous error messages.

*Action A:* Run the *Setup* program and ensure that a valid port is specified; if not, specify a valid one when prompted.

*Action B:* Reinstall the software, then restart application.

*Action C:* Contact a Micromeritics service representative if this error message continues.

**2478 Error copying sequential data segment.**

*Cause:* An internal processing and/or hardware error occurred while accessing a portion of a sample file.

*Action:* Confirm that the media being accessed does not contain errors. Contact your Micromeritics service representative.

**2480 File [n] cannot be analyzed. It is currently being edited.**

*Cause:* An attempt was made to start an analysis using a file that is open for editing.

*Action:* Finish editing the file, save and close it, then start the analysis.

**2481 Error accessing the sample information file [n].**

*Cause:* An unexplained error prevented access to this file.

*Action:* The hard disk drive may be corrupt. Run diagnostics.

**2482 File cannot be opened for writing.**

*Cause:* An attempt was made to open a file currently being used.

*Action:* Locate the application using the file (in the Micromeritics application, use the Windows menu item to get a list of all open windows, one of which may contain this file).

**2483 An analysis cannot be performed on [n]. It is open for editing and contains errors.**

*Cause:* An attempt was made to use a sample file containing errors that is currently open.

*Action:* Go to the window containing the file, correct the errors, then save it.

**2484 The edit session for [n] must be saved before the analysis. Save changes and continue with the analysis?**

*Cause:* An attempt was made to start an analysis using a file that contains unsaved changes and is open for editing.

*Action:* Click **Yes** to save the changes, then proceed with the analysis. Click **No** to cancel the analysis, then continue editing the sample file.

**2485 The sample file [n] has an invalid status and cannot be used for this operation.**

**2485 The service test file has an invalid status and cannot be used for this analysis.**

*Cause:* The selected file has a status other than *No Analysis*.

*Action:* Select a different sample file, or create a new one and click **Replace All** to copy parameters from the file originally selected.

**2486 Could not construct [n] report type. Program will terminate.**

**2487 Could not start report generator. Error code [n]. Program will terminate.**

*Cause A:* Full rights to the application's folders and files is required.

*Action A:* Contact a system administrator to have full rights granted.

*Cause B:* An internal processing and/or hardware error has occurred.

*Action B:* Contact your Micromeritics service representative.

**2488 File [n] cannot be opened. It is already in use.**

**2488 File [n] cannot be opened for editing.**

*Cause:* The specified file is being used in another edit operation.

*Action:* Check the Windows list to locate the other edit session.

**2489 File [n] cannot be opened for writing.**

*Cause:* The specified file in a *Save As* operation is already open for edit.

*Action:* Select a different file for the *Save As* operation.

**2490 No '.INI' file present. Application will terminate.**

*Cause:* The ASCII .INI file containing initialization information and system options information used during program startup does not exist.

*Action:* Restore the .INI file from back-up, or re-install the software.

**2491 Highlighted fields contain errors. Please correct the errors before closing.**

*Cause:* The fields highlighted in red contain invalid entries. The window cannot be closed until all errors are corrected.

*Action:* Check the entries, correct the errors, then close the window.

**2492 This field's entry is invalid.****2493 An entry is required for this field.**

*Cause:* The highlighted field contains an invalid entry.

*Action:* Check the entry and correct the error.

**2494 Value is out of the valid range.****2495 Enter a value between [n] and [n].**

*Cause:* The entered value in the highlighted field is outside the valid range of values.

*Action:* Check the entry, then either enter or select an appropriate value.

**2496 Invalid number.****2497 This field contains an invalid character.**

*Cause:* An invalid number (or character) was entered in the highlighted field.

*Action:* Check the entry, then either enter or select a valid number (or character).

**2498 The requested change to the Sample's status is invalid at this time.**

*Cause:* A request to change the file's status, for example, from *automatically collected* to *manually entered* could not be done.



*Action:* Contact your Micromeritics service representative. Record the name of the sample file in which the problem occurred.

**2499 Sequence number must contain at least 3 digits.**

*Cause:* An attempt was made to enter a sequence number that did not contain at least three digits.

*Action:* Enter a sequence number that contains at least three digits.

**2500 All sample file names that can be created using the sequence number pattern already exist. You may want to modify the next sequence number.**

*Cause:* No more sample files can be created using the currently entered file name sequence number.

*Action:* Go to **Options > Default Method**, then enter another sequence number.

**2501 System resources have reached a dangerously low level. Please close some windows to avoid the loss of data.**

*Cause:* A large number of windows are open and consuming the system resources available to all applications.

*Action:* Close one or more windows. Contact your Micromeritics service representative.

**2502 Error writing to file [n] during print. Error code [n].**

*Cause:* An error occurred in the file being written to during a print operation.

*Action:* Ensure there is sufficient space on the drive containing the file.

**2503 Error converting file [n]. Cannot create DIO intermediate file.**

*Cause:* An error occurred while printing a report to file.

*Action:* An attempt was made to replace a file that is read only or the computer login does not have permission to do so. Contact your IT Department.

**2504 Cannot create output file for sample [n].**

*Cause:* There may be insufficient disk space.

*Action:* Ensure that sufficient space is available. Contact a Micromeritics service representative if this error message continues.

**2505 Error logger cannot be initialized. Error code [n]. Program will exit.**

*Cause:* An internal processing error has occurred.

*Action:* Contact your Micromeritics service representative.

**2506 Output device [n] is not installed. Printing cannot be accomplished.**

*Cause:* An internal processing error has occurred.

*Action:* Contact your Micromeritics service representative.

**2508 Overlay [n] was not found. It will not be included in the reports.**

*Cause:* The specified overlay file could not be found.

*Action:* Ensure the file specified as an overlay exists.

**2509 Error opening file [n]. Reports cannot be produced.**

*Cause:* An error occurred while the program was opening a file necessary to the report operation.

*Action:* Use the name given in the error message to investigate. Contact your Micromeritics service representative.

**2510 Error parsing reports from file [n]. Reports cannot be produced.**

*Cause A:* One or more data entry fields in the sample file may contain an invalid character (such as a single quote or double quotes).

*Action A:* Review the data entry fields (for example, the *Sample* field), then remove the invalid character.

*Cause B:* The system was unable to create the usual temporary files during the report, possibly due to insufficient disk space.

*Action B:* Check the space available on the hard disk.

*Cause C:* An internal processing error occurred.

*Action C:* Contact your Micromeritics service representative.

**2511 Print job [n] has been canceled due to insufficient disk space. Delete unnecessary files and restart the report.**

*Cause:* The media drive does not have required space for the temporary file.

*Action:* Delete unnecessary files from the disk. At least five megabytes of free space is

required for normal operation.

**2512 Print job [n] canceled.**

*Cause:* The print job was canceled by the operator.

*Action:* None required.

**2513 Unable to read the calibration file [n].**

*Cause:* An invalid calibration file was selected or cannot be read.

*Action:* Ensure the media containing the calibration file has no problems.

**2514 Unable to write the calibration file [n].**

*Cause:* An attempt to save calibration data has failed due to possible media problems.

*Action A:* Ensure the destination location has no problems.

*Action B:* Choose an alternate media to save the calibration data.

**2515 Warning: Changing the calibration information will affect the performance of the instrument. Only qualified service personnel should do this. Do you wish to proceed?**

*Cause:* The process of performing a calibration operation was started.

*Action:* Calibration operations should only be done by or under the direction of qualified service personnel.

**2516 Warning: Keeping a backup copy of the calibration data is recommended by Micromeritics. Would you like to do so now?**

*Cause:* A calibration operation was performed and a backup copy is recommended.

*Action:* Go to **Unit [n] > Calibration > Save to File** to perform a calibration save operation.

**2517 Canceling this dialog will reset the calibration state to what it was when this dialog was first opened. Are you sure you want to cancel?**

*Cause:* The calibration has not been accepted.

*Action:* If the calibration operation was successful, click **Accept**.

**2520 No data points available for reporting.**

*Cause:* The selected sample file does not have collected data and cannot be used for reporting.

*Action:* Select a different sample file.

**2521 Unable to program controller.**

*Cause:* A hardware malfunction has occurred.

*Action:* Contact your Micromeritics service representative.

**2522 Invalid controller application file.**

*Cause:* The application's control file has been corrupted or deleted.

*Action:* Reinstall the analysis program.

**2523 Programming controller failed.**

**2524 CRC check failed on programming controller.**

**2525 Unknown error programming controller.**

**2526 Controller download was not successful.**

**2527 Controller CRC error on boot block.**

**2528 Controller DRAM error.**

**2529 Controller Com 1: error.**

**2530 Controller Com 2: error.**

**2531 Controller debug port error.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics service representative.

**2532 The instrument contains a different software version. Do you want to reset it?**

*Cause:* The application has discovered a different version of software operating in the analyzer.

*Action:* If there are no analyzers other than the one connected to the computer, click **Yes**, then allow the updated software to load.

**2533 Analyzer initialization failed.**

*Cause:* An internal processing and/or hardware error has occurred.

*Action:* Contact your Micromeritics service representative.

**2534 Error opening file[n] for printing. Error Code [n].**

*Cause:* An error occurred in the selected file for print output.

*Action:* Ensure that sufficient disk space is available.

**2548 System status [n].**

*Cause:* There was a problem establishing communication with the analyzer.

*Action:* Ensure that the communications cable is seated firmly in the Ethernet slot at the analyzer connection and the computer connection. Contact your Micromeritics service representative.

**2549 Error accessing online manual file [n].**

*Cause:* The operator's manual file could not be located.

*Action A:* Reinstall the application.

*Action B:* Copy the contents of the manual folder from the setup media to the application directory.

**2550 Attempts to acquire the instrument's status timed out.**

*Cause:* There was a problem establishing communication with the analyzer.

*Action:* Ensure that the communications cable is seated firmly in the Ethernet slot at the analyzer connection and the computer connection. Contact your Micromeritics service representative.

**2551 Cannot access web page [n].**

*Cause:* The Micromeritics web page for DFT models cannot be accessed. This could be caused by an ISP problem of high internet traffic.

*Action:* Try the operation later.

**6000 An error occurred while loading the application control information. Data entry cannot be performed. (Code [n]).**

*Cause:* An error occurred accessing the control information disk file required by this application.

*Action:* The disk drive may have failed or be corrupt. Run diagnostics on the disk drive.

**6001 Unable to establish the TCP connection with the instrument.**

*Cause:* A communications problem between the computer and the analyzer has occurred.

*Action A:* Check the cable connection between the computer and the analyzer

*Action B:* Go to **Unit [n] > Unit Configuration** and verify that the TCP/IP configuration for the computer and the analyzer are correct.

*Action C:* Exit the application, and turn off the analyzer. Then turn on the analyzer and restart the application. Contact a Micromeritics service representative if this error message continues.

**6002 Configured serial number does not match instrument.**

*Cause:* An incorrect serial number was entered when installing the software.

*Action:* Exit the application. Access the *Setup* program and remove the incorrect analyzer. Then use the *Add an Analyzer* option in the *Setup* program to add the correct serial number for the controlling unit. Contact a Micromeritics service representative if this error message continues.

**6003 The instrument [n] is not calibrated.**

*Cause:* Calibration data for the selected unit was not found

*Action:* Go to **Unit > Calibration**. Select the appropriate Calibration menu item or load a saved calibration.

**6110 Error accessing the sample information file [n].**

*Cause:* There was an error opening a file.

*Action:* Code 5: There is a problem with the computer login permissions. Consult your IT department.  
Code 2: File not found. Select a different file name.

**6111 File [n] cannot be analyzed. It is currently being edited.**

*Cause:* An open file was selected. This message is informational-only.

*Action:* Click **OK** to close the error message window. Then continue editing the file, save and close it; or click **Browse** and choose a different file.

**6112 File [n] cannot be opened. It is currently being setup for analysis.**

*Cause:* An open file was selected that is currently being used for analysis.

*Action:* Select a different file.

**6113 An analysis cannot be performed on [n]. It is open for editing and contains errors.**

*Cause:* The selected analysis file contains errors and is open for editing.

*Action:* Finish editing the file, save, and close it, or choose a different file. Then restart the analysis.

**6114 The edit session for [n] must be saved before the analysis. Save changes and proceed with the analysis?**

*Cause:* An attempt was made to start an analysis using a file that contains unsaved changes and is still open.

*Action:* Click **Yes** to save the changes and proceed with the analysis. Click **No** to cancel the analysis and continue editing the file, save and close it; or click **Browse** and choose a different file.

**6120 Unable to read the calibration file [n].**

*Cause:* The selected calibration file is not valid or cannot be read.

*Action:* Ensure the media containing the calibration file has no problems.

**6121 Unable to write the calibration file [n].**

*Cause:* An attempt to save calibration data has failed due to possible media problems.

*Action A:* Confirm the media containing the calibration file has no problems.

*Action B:* Choose an alternate media to save the calibration data.

**6122 File contains calibration data for a different unit [n].**

*Cause:* A calibration file from a different unit was loaded.

*Action:* Load a file for the current unit or go to **Unit > Calibration** and select the appropriate menu item.

**6123 The device has no calibration data for the selected insert.**

*Cause:* A calibration report was produced for an insert that has not been calibrated.

*Action:* Perform a volume calibration for the insert or produce a report for a different insert.

**6126 The cell and expansion volumes must be positive. Enter positive values and recalibrate.**

*Cause:* According to the calibration data, the cell volume or expansion volume for the selected insert is zero or a negative value

*Action:* Perform these steps:

1. Select *Setup > Calibration Data*.
2. In the *Cell volume* field, enter the volume of the sample cell (or insert).
3. In the *Expansion volume* field, enter half of the sample cell volume.
4. Perform a volume calibration.

**6127 The entered calibration volume is < 10% of the cell volume. The resulting calibration may be inaccurate.**

*Cause A:* An incorrect volume was entered for the calibration standard.

*Action A:* Correct the volume entry.

*Cause B:* The calibration standard is too small for the cell.

*Action B:* Use a larger calibration standard.

**6160 Device in recognizable state. Analysis canceled.**

*Cause:* The application was closed during an analysis. When the application was restarted, the analysis had been canceled.

*Action:* None required. The data collected up to the point of cancellation is saved in the sample file.

**6161 The sample file [n] is already present in the sequence.**

*Cause:* An attempt was made to insert an existing file into the Sample File list.

*Action:* None required. The same file cannot be inserted into the list multiple times.

**6162 The sequence list is full.**

*Cause:* An attempt was made to add another file to the Sample File list for sequenced analyses when the list already contains eight entries.

*Action A:* Run the sequence analysis with the current list and include the preferred file in the next sequence analysis.

*Action B:* Remove one of the files from the list, then add the preferred file.



**6163 The sample file has an invalid status and cannot be used for analysis.**

*Cause:* A sample file with a status other than *No Analysis* was selected.

*Action:* Select a sample file that has not been used in an analysis.

**6164 FoamPyc analyses cannot be done on a 1 cm<sup>3</sup> unit.**

*Cause:* An attempt was made to perform a FoamPyc analysis on a unit that does not support it. FoamPyc analyses cannot be performed on a unit with a 1 cm<sup>3</sup> or 2L sample cell.

*Action A:* Start the analysis on a different unit.

*Action B:* Close the analysis window, open the sample file, and select **Standard Method**. Then restart the analysis.

**6165 Failure to fill sample cup.**

*Cause:* There was insufficient pressure to allow filling within five minutes during an analysis.

*Action:* Increase the regulator pressure or, if there is insufficient helium in the tank, obtain a new tank of helium.

**6166 Pressure overrange.**

*Cause A:* A pressure overrange occurred during an analysis because the regulator pressure is set too high.

*Action A:* Adjust the pressure so that it is equal to the higher of the two fill pressures specified in the analysis parameters plus 2.0 psig.

*Cause B:* A pressure overrange occurred during an analysis because an error occurred in the pressure measurement electronics.

*Action B:* Contact your Micromeritics service representative.

**6167 Pressure underrange.**

*Cause:* A pressure underrange occurred during an analysis because an error occurred in the pressure measurement electronics.

*Action:* Contact your Micromeritics service representative.

**6168 Pressure failed to equilibrate.**

*Cause A:* The sample being analyzed failed to equilibrate in 1000 seconds.

*Action A:* Check the system carefully for leaks following the instructions in the instrument operator manual. Ensure the sample is properly prepared before performing an analysis.

*Cause B:* Sample (foams, organics, etc.) absorbs helium slowly.

*Action B:* Set the equilibration rate to progressively higher values until reasonable equilibration times (15 sec to 120 sec) are achieved.

**6169 The instrument lost power during analysis.**

*Cause:* A power failure occurred and when power resumed, the automatic operation was canceled.

*Action:* Restart the automatic operation.

**6170 The measured volume is < 10% of the cell volume. Results may be inaccurate.**

*Cause:* Not enough sample was placed in the sample cup to give an accurate reading.

*Action:* Rerun the sample using enough material to occupy the maximum amount of the nominal cell chamber volume

**6171 Valve failed to respond.**

*Cause:* The instrument valves failed to operate.

*Action:* Contact your Micromeritics service representative.

**6200 At least one report item must be selected. Press Cancel if you do not want a report.**

*Cause:* No reports were selected in the *Selected Reports* list. No output could be produced.

*Action:* Ensure that at least one report is selected for the sample and re-submit the sample for reporting, or click **Cancel**.

**6201 No data available in [n] for reporting.**

*Cause:* The requested report file does not contain collected data.

*Action:* Use the file in an analysis before requesting reports.

**6202 Total solids concentration is invalid; liquid density is greater than or equal to solids density.**

*Cause:* A report was requested on a file containing invalid densities for *Total Solids Concentration*.

*Action A:* Specify appropriate densities for liquid and solids.

*Action B:* Do not request that total solids concentration be reported.

## ***ERROR MESSAGES FOR THE 1340 ACCUPYC KEYPAD ONLY***

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Press **CHOICE** to cycle through the messages and data. To delete the message, press **CLEAR**. Messages that are not cleared will remain in the queue until the next analysis or calibration is performed; at that time, any remaining messages will be cleared automatically.

- NN = Number of cycles completed
- ZZ = Number of cycles requested

### **Add Unit**

*Cause A:* A new analysis module has been attached to the instrument where previously a different module had been attached.

*Action A:* Press **Choice** and select *Yes* to add the new analysis module.

*Cause B:* An incorrect serial number was read by the analysis module.

*Action B:* Press **Choice** and select *No* to use the serial number and calibration information stored in the command module. Contact a Micromeritics service representative if this error message continues.

### **ANLSERR: Eq failure — NN/ZZ cycles completed**

*Cause A:* The sample being analyzed failed to equilibrate in 1000 seconds.

*Action A:* Check the system carefully for leaks following the instructions in the instrument operator manual. Ensure the sample is properly prepared before performing an analysis.

*Cause B:* Sample (foams, organics, etc.) absorbs helium slowly.

*Action B:* Set the equilibration rate to progressively higher values until reasonable equilibration times (15 sec to 120 sec) are achieved.

### **ANLSERR: Fill failure — NN/ZZ cycles complete**

*Cause:* There was insufficient pressure to allow filling within five minutes during an analysis

*Action:* Increase the regulator pressure or, if there is insufficient helium in the tank, obtain a new tank of helium.

### **ANLSERR: Overrange — NN/ZZ cycles completed**

*Cause A:* A pressure overrange occurred during an analysis because the regulator pressure is

set too high.

*Action A:* Adjust the pressure so that it is equal to the higher of the two fill pressures specified in the analysis parameters plus 2.0 psig.

*Cause B:* A pressure overrange occurred during an analysis because an error occurred in the pressure measurement electronics.

*Action B:* Contact your Micromeritics service representative.

### **ANLSERR: Underrange — NN/ZZ cycles completed**

*Cause:* A pressure underrange occurred during an analysis because an error occurred in the pressure measurement electronics.

*Action:* Contact your Micromeritics service representative.

### **Automatic operation has been canceled**

*Cause:* The automatic operation has been canceled.

*Action:* Wait for the termination process to complete or end the termination process by pressing **Alt + CLEAR** two more times.

### **CAL\_ERR: Reset Pressure Cal. ?**

*Cause:* The calibration information could not be read from the command or analysis module.

*Action A:* Select **Yes** and press **Enter** to reset the pressure and temperature calibration to nominal values. Resetting to nominal may restore normal readings but a proper calibration should be performed by a service technician.

*Action B:* Select **No** to avoid resetting the calibration. The instrument will be unresponsive.

### **CAL\_ERR: Temperature Calibration Failed**

*Cause:* The temperature calibration was unsuccessful.

*Action:* Contact your Micromeritics service representative.

### **CAL1ERR: Eq failure — NN/ZZ cycles complete**

*Cause:* The empty cell chamber failed to equilibrate in 1000 seconds during the first pass of calibration.

*Action:* Check the system for leaks.

**CAL1ERR: Fill failure NN/ZZ cycles completed**

*Cause:* There was insufficient pressure to allow filling within five minutes during the first pass of calibration.

*Action:* Open the tank valves if shut, increase the regulator pressure or, if there is insufficient helium in the tank, obtain a new tank of helium. Tank pressure should be at least 200 psi above regulator pressure.

**CAL1ERR: Overrange — NN/ZZ cycles completed**

*Cause A:* A pressure overrange occurred during the first pass of calibration because the regulator pressure is set too high.

*Action A:* Adjust the pressure so that it is equal to the higher of the two fill pressures specified in the analysis parameters plus 2.0 psig.

*Cause B:* A pressure overrange occurred during the first pass of calibration because an error occurred in the pressure measurement electronics.

*Action B:* Contact your Micromeritics service representative.

**CAL1ERR: Underrange — NN/ZZ cycles complete**

*Cause:* A pressure underrange occurred during the first pass of calibration because an error occurred in the pressure measurement electronics.

*Action:* Contact your Micromeritics service representative.

**CAL2ERR: Eq failure — NN/ZZ cycles completed**

*Cause:* The calibration standard failed to equilibrate in 1000 seconds during the second pass of calibration.

*Action:* Check the system for leaks.

**CAL2ERR: Fill failure — NN/ZZ cycles completed**

*Cause:* There was insufficient pressure to allow filling within five minutes during the second pass of calibration.

*Action:* Open the tank valves if shut, increase the regulator pressure or, if there is insufficient

helium in the tank, obtain a new tank of helium. (Tank pressure should be at least 200 psi above regulator pressure.)

**CAL2ERR: Overrange — NN/ZZ cycles completed**

*Cause A:* A pressure overrange occurred during the second pass of calibration because the regulator pressure is set too high.

*Action A:* Adjust the pressure so that it is equal to the higher of the two fill pressures specified in the analysis parameters plus 2.0 psig.

*Cause B:* Adjust the pressure so that it is equal to the higher of the two fill pressures specified in the analysis parameters plus 2.0 psig.

*Action B:* Contact your Micromeritics service representative.

**CAL2ERR: Underrange — NN/ZZ cycles completed**

*Cause:* A pressure underrange occurred during the second pass of calibration because an error occurred in the pressure measurement electronics.

*Action:* Contact your Micromeritics service representative.

**DATA\_ERR: Chamber volumes must be > 0**

*Cause:* According to the calibration data, the cell volume or expansion volume for the selected insert is zero or a negative value

*Action:* Perform these steps:

1. Select *Setup > Calibration Data*.
2. In the *Cell volume* field, enter the volume of the sample cell (or insert).
3. In the *Expansion volume* field, enter half of the sample cell volume.
4. Perform a volume calibration.

**DATA\_ERR: No data to compute**

*Cause A:* An automatic operation was canceled before a complete cycle could be completed.

*Action A:* Restart the automatic operation.

*Cause B:* All the cycles have been excluded in review mode.

*Action B:* Return to review mode and include some cycles.

**DTA\_WRN: Cal std — 10% of full-scale**

*Cause A:* You entered a value for the calibration standard that was less than 10% of the nominal cell chamber volume. Resulting data may be inaccurate.

*Action A:* Be sure you enter the value recorded on the Calibration Standard case.

*Cause B:* You used an inappropriate calibration standard for the nominal cell chamber.

*Action B:* Use a calibration standard of sufficient size (calibration standards are available from Micromeritics). The calibration standard should occupy at least 10% of the nominal cell chamber volume and the more nearly filled the cell is, the better the calibration.

**DTA\_WRN: Volume — 10% of full-scale**

*Cause:* There was not enough sample placed in the sample cup to give an accurate reading.

*Action:* Rerun the sample using enough material to occupy the maximum amount of the nominal cell chamber volume.

**HW\_ERR: Calibration could not be read**

*Cause:* The calibration information could not be read from the command or analysis module.

*Action:* Close the application and cycle power on the instrument. Contact a Micromeritics service representative if this error message continues.

**MAN\_ERR: Pressure overrange**

*Cause:* The fill valve was left open until the maximum system pressure was exceeded.

*Action:* Close the fill valve and open the vent and expansion valves. Allow the pressure to stabilize.

**No A.C. Found**

*Cause:* The control module cannot detect an analysis module.

*Action:* Contact your Micromeritics service representative.

**No collected data to report, or all cycles excluded**

*Cause:* You requested a report in which there is either no data available or data have been excluded via review mode.



*Action:* Initiate an automatic operation or return to review mode and include at least one cycle.

### **Printer port not responding**

*Cause:* Printer port not responding

*Action:* Check to make sure the printer is properly connected to the pycnometer, is turned on, and is online.

### **Queuing print job [ESCAPE] to cancel**

*Cause:* Status message displayed when a report is being printed.

*Action:* None; this is a status message only.

### **Reset to factory defaults**

*Cause:* The . (period) key was pressed at startup and the instrument was reset. Data files and HTML reports have been erased. Setup options have been returned to default values.

*Action:* Review setup options.

### **Sending line (line number) [ESCAPE] to cancel**

*Cause:* Status message displayed when data are being transmitted.

*Action:* None; this is a status message only.

### **SYS\_ERR: Power Fail — NN/ZZ Cycles Completed**

*Cause:* A power failure occurred and when power resumed, the automatic operation was canceled.

*Action:* Restart the automatic operation if desired.

### **Transmission port not responding**

*Cause:* The receiving device took longer than five seconds to acknowledge receipt of data from the pycnometer.

*Action:* Make sure the receiving device is properly connected to the pycnometer RS-232 port

and is turned on. Verify that the serial I/O parameters controlling the receiving device correspond with the data transmission parameters in the set up mode.

### **Transmission port waiting for Xon**

*Cause:* The receiving device stopped transmission by sending an Xoff, and hasn't resumed the transmission by sending an Xon.

*Action:* None; when the receiving device is ready for more data, it should send the pycnometer an Xon.

### **TRN\_ERR: Timeout failed to respond**

*Cause:* The receiving device took longer than 10 seconds to acknowledge receipt of data from the pycnometer.

*Action:* Make sure the receiving device is properly connected to the pycnometer RS-232 port and is turned on. Verify that the serial I/O parameters controlling the receiving device correspond with the data transmission parameters in the set up mode.

### **Updating Unit [n] failed: Press [CLEAR]**

*Cause:* One of the analysis modules has malfunctioned.

*Action:* Press CLEAR and follow the instructions displayed in the keypad window. After disconnecting the faulty unit (as instructed), you may reconnect the control module with the remaining analysis module(s) and continue using your system.

### **USR\_ERR: Cal std 10% of full-scale**

*Cause:* You tried to enter a calibration standard volume that is less than 10% of the nominal full-scale volume.

*Action:* Enter a volume that represents at least 10% of the nominal cell chamber volume.

### **USR\_ERR: No data to review**

*Cause:* You tried to review data for an automatic operation when there were no data to review.

*Action:* Abandon request.

**USR\_ERR: Number of cycles must be  $\geq 5$** 

*Cause:* You tried to enable run precision without increasing the number of runs to at least five.

*Action:* Increase the number of runs to five or abandon request.

**USR\_ERR: Out of range**

*Cause:* You tried to enter a value that is out of the valid range.

*Action:* Enter a value in the specified range.

**USR\_ERR: Pressure overrange**

*Cause:* A pressure overrange occurred but was left uncorrected.

*Action:* Return to manual mode and vent the system.

**USR\_ERR: Cal std 10% of full-scale**

*Cause:* You tried to enter a calibration standard volume that is less than 10% of the nominal full-scale volume.

*Action:* Enter a volume that represents at least 10% of the nominal cell chamber volume.

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*Action:* Enter a value in the specified range.

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*Cause:* A pressure overrange occurred but was left uncorrected.

*Action:* Return to manual mode and vent the system.