

Performance Maintenance Protocol

2767 Sample Manager

Serial Number	
Date	
Performer	

Use the following guidelines when conducting performance maintenance visits.

This information is intended to be a guide only. For example:

- If a particular module has been recently serviced, it may need only testing and replacement of fewer parts.
- Not all procedures apply to all instruments (check **NA** if the procedure does not apply).

Goal

The goal of a performance maintenance visit is to ensure an uninterrupted period of trouble-free operation for the HPLC System.

Schedule

Waters recommends that maintenance visits be performed once a year. Systems under heavy use or using aggressive solvents may need more frequent maintenance.

General Tasks

The following table lists the general tasks to be performed during a performance maintenance visit.

Replace/Rebuild	Inspect/Replace	Inspect/Adjust	Test
Vented Probe	Flow Cell		
Injector Port Seal			
Injector Valve Rotor			
Prep Valve Rotor			

Tools/Materials

After installing Waters Quality Parts[®], perform the tests listed on the following pages.

Diagnostics Tests

Start-Up Diagnostics

Turn on power, allow instrument to complete and pass on-board software checks.

Pass Fail

Performer _____ Date _____

Optional Tests

After completion of the performance maintenance visit, the following supplementary tests can be performed for an additional charge.

Calibration Test

Note: To improve the accuracy of this test, handle the vial with forceps to ensure that the vial is as clean as possible.

1. Select a rack (the vial rack, tube rack, 2MTP rack or HEX rack will work), and appropriate workspace. Choose a sample container that fits the rack. Do not use self sealing tubes.
2. Ensure that the probe is calibrated to the workspace (See the Waters 2767 Sample Manager Operator's Guide).
3. Select or create a sample group with one sample (See Operator's Guide).
4. Filter and Degas one liter of HPLC grade water.
5. Prime the syringe pump and the wash pump with the HPLC grade water.
6. Add at least 1.0 mL of degassed water to the sample container.
7. Zero the analytical balance, and then weigh the container using forceps or gloves to move the container. Record the weight below (W1).
8. Load the container in the rack, and install the rack in the work table.
9. Perform the injections as described in the Operator's Guide. Program six injections using the following parameters:
 - Sample Group: 1 (sample)
 - # of injections: 6
 - Microliters sample: 20
 - Runtime, minutes: 0.5
 - Other parameters: None
10. Verify that the probe travels to the correct location.
11. After six injections, remove and weigh the sample container, and record the weight below (W2).
12. Calculate the average weight volume per injection.
 - Expected Result: 20 μ L \pm 1.5 μ L

	Actual Results
W1	
W2	
(W1-W2)(4 x 6 x 1000)	

Balance	
Serial/ID Number	
Calibration Date	

Pass Fail

Performer _____ Date _____

Results

Pass Fail

Comments:

Performer _____ Date _____

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