



# OI Analytical Eclipse 4660 Preventative Maintenance



## Purpose

Preventative maintenance (PM) is a factory recommended procedure designed to maintain optimum instrument performance and reduce the likelihood of instrument failures. PM should be performed on a regularly-scheduled basis. Failure to perform PM may reduce long-term reliability of your instrument or analytical system.

## Frequency

To maintain optimum performance of the OI Analytical Eclipse Sample Concentrator, schedule PM at six-month intervals.

## Customer Responsibility

Customers should ensure availability of all necessary operating supplies, consumables, and essential items, including solvents and gases, and provide a means of disposing of waste material. A customer representative (for example, the instrument operator) should be present during the PM procedure. The customer is responsible for completing the “Site Preparation Checklist” before the service engineer arrives on site. The engineer is responsible for completing the “Preventative Maintenance Checklist” and “Service Review” portions of the procedure.



<b>Site Preparation Checklist</b>	
	Gas chromatograph (GC) fully operational with column installed
	Data collection system fully operational and connected to the GC
	PM performed on the inlet system and a clean GC blank has been run
	GC detectors (PID, ELCD, FID, etc.) or MS are fully operational. (Not necessary if PM will be done on the detectors during the same visit.)
	MS under good vacuum and properly tuned

<b>Preventative Maintenance Checklist</b>	
	Review any instrument deficiencies or failures with the user.
	Perform general inspection of the system for cleanliness, completeness, broken parts, or obvious faults.
	Replace all parts shown in the Preventative Maintenance Parts List on page 3.
	Remove and clean (acid wash, rinse, and bake) the sparger or replace with a new sparger at the discretion of the service engineer. Wipe down the thermocouple if present.
	Clean the inside of the sparge mount by removing it, sonicating in methanol, rinsing in deionized water, and baking. If the sparge mount becomes severely pitted, it may need to be replaced at the discretion of the service engineer.
	Remove and clean the Foam Buster™ if present.
	Rinse and bake the transfer line. If the transfer line has become severely contaminated it can be replaced at the discretion of the service engineer.
	Confirm functionality of all valves, fans, and heated zones.
	Set purge pressure and purge flow according to the <i>Eclipse Purge-and-Trap Sample Concentrator Operator's Manual</i> .
	Perform leak test.
	Update firmware and software if needed. (Review upgrade instructions and verify compatibility before proceeding.)
	Review customer's method for optimization and recommend changes as needed.

<b>Service Review</b>	
	Record in the instrument log that PM was performed.
	Record any unusual findings or additional work required.
	Notes:
Date completed:	
Customer signature:	
Service engineer signature:	

<b>Preventative Maintenance Parts List</b>	
<b>Description</b>	<b>Part Number</b>
Tube assembly, sparge mount to filter	321932
Sample filter assembly, or Sample filter assembly without filter	321659S, or 291450S
Tube assembly, cross 4- to six-port valve 1	321047
Tube assembly, six-port valve 2 to water management fitting	321048
Water management fitting	321596
Trap	Depends on customer application
Needle assembly	Depends on customer application
Sparger ferrule, Teflon® (TFE), 18 mm	Depends on customer application
Sparger ferrule, TFE, 6 mm tube	224337
<b>Optional Parts</b>	
Sparger	Depends on customer application
Sparge mount, no Foam Buster, or Sparge mount, with Foam Buster	320581, or 320724 Note: The sparge mount is usually only replaced if it becomes severely pitted and cannot be cleaned.
Tube assembly, transfer line, 48", or Tube assembly, transfer line, 60"	321692, or 321693 Note: Transfer line is usually only replaced if it becomes severely contaminated and cannot be cleaned.

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