

Preventive Maintenance Chart

Month / Year: _____

Daily					Weekly							Monthly						
Clean Cycle and Wiping					Nozzle Performance							Clean Reagent Nozzles and Instrument						
Day	AM	PM	Night	*Daily Control Slides	Week	Reagent	Spray Pattern (✓ if okay)	**Expected Spray Volume	Measured Spray Volume	New Spray Volume (if nozzle was cleaned)	Drain Line Flush (see back page weekly step 4)	Initial	Reagent	Previous Months Ending Volume	Volume After Monthly Cleaning	Disinfect reusable rinse bottle (✓ when cleaned)	Initial	
1					1	A		9-11 mL	mL	mL			A					
2						B		9.5-12.0 mL	mL	mL								
3						C		9.5-12.0 mL	mL	mL								
4						D		9.5-12.0 mL	mL	mL								
5					2	A		9-11 mL	mL	mL			B					
6						B		9.5-12.0 mL	mL	mL								Not Applicable
7						C		9.5-12.0 mL	mL	mL								
8						D		9.5-12.0 mL	mL	mL								
9					3	A		9-11 mL	mL	mL			C					
10						B		9.5-12.0 mL	mL	mL								Not Applicable
11						C		9.5-12.0 mL	mL	mL								
12						D		9.5-12.0 mL	mL	mL								
13					4	A		9-11 mL	mL	mL			D					
14						B		9.5-12.0 mL	mL	mL								Not Applicable
15						C		9.5-12.0 mL	mL	mL								
16						D		9.5-12.0 mL	mL	mL								
17					Annually or as needed							Supervisor Approval						
18					Clean B and C lines				Date									
19					Check internal and exterior tubing and fittings				Date									
20					<p>Preventive Maintenance Chart procedures are located on reverse side.</p> <p>Instructions for the Spray Pattern Test, Spray Volume Test, and cleaning the nozzles are contained in the User's Manual.</p> <p>The frequencies set forth on this chart for maintenance are only estimates. Field conditions and usage affect the need for maintenance. Do preventive maintenance at the level necessary to keep nozzle performance within specification and slides staining correctly.</p> <p>Warning: Always wear eye and hand protection when performing preventive maintenance on the Aerospray Slide Stainer.</p> <p>This Preventive Maintenance Chart may be reproduced in its entirety by Aerospray users.</p> <p>* optional **Volume relationships between nozzles are as important as the actual volumes collected. Investigation should center on whether the nozzles are delivering close to the same volumes.</p>													
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Wescor Catalog SS-100

Preventive Maintenance Procedure	Reagent Lot Record					Corrective Action Log
DAILY: At end of each shift or if instrument will be idle for more than four hours:	Day	Reagent A	Reagent B	Reagent C	Reagent D	
1. Run the Carousel Clean followed by a System Clean cycle at the end of each shift or as required to keep the stainer clean. The carousel can also be cleaned manually as needed.	1					
2. Once each day or as needed, use a squirt bottle filled with SS-230 or methanol to spray the stainer interior. With a clean paper towel, wipe the nozzle faces and interior surfaces. Use a fine bristled brush as necessary to clean the nozzle orifices.	2					
3. Spray the exterior case using methanol. Wipe all surfaces clean with a paper towel.	3					
4. Initial completion of daily procedure on preventive maintenance (PM) chart.	4					
5. When you are ready to use the instrument again, you may want to run a SPRAY PATTERN test to verify nozzle performance prior to staining. Should any pattern appear abnormal repeat step 2 to clean nozzle orifice. (Run control slides if desired).	5					
WEEKLY:	6					
1. Perform the Spray Pattern and Spray Volume tests. Record the volume collected from each Reagent on the PM chart.	7					
2. If volume trends lower, or if the spray pattern is abnormal, clean the nozzle orifice with a fine-bristled brush or disassemble and clean the affected nozzle(s).	8					
3. Pour 50 mL of SS-230 into the bowl drain. Wipe down the nozzles, carousel tray and carousel lid using methanol in a squirt bottle (or SS-230) and a paper towel.	9					
4. Slowly pour 200-300 mL of water into instrument drain to prevent build up of paper fibers, precipitates, etc. Verify drain is flowing properly and not allowing fluid to back up in bowl or flow out of air vent on case back.	10					
5. Initial completion of weekly PM.	11					
MONTHLY:	12					
1. Disassemble and clean both nozzles as described in User's Manual. Do not mix or interchange nozzles or nozzle parts.	13					
2. Reinstall nozzles. <i>Always return nozzles to the same location in stainer.</i>	14					
3. Perform SPRAY PATTERN and SPRAY VOLUME tests. Record results of end of month SPRAY VOLUME test on preventive maintenance chart.	15					
<i>NOTE: As you enter a new month the Volume After Monthly Cleaning number becomes Previous Months Ending Volume number.</i>	16					
4. Disinfect reusable rinse (Reagent A) bottle with a 1/10 dilution of household bleach. Allow to stand in bottle for 10 minutes. Rinse thoroughly with deionized water.	17					
5. Initial completion of monthly PM.	18					
6. Supervisor check and initial.	19					
ANNUALLY:	20					
1. Clean the B & C reagent lines with prepared SS-029C, methanol, or ethanol (see manual). This procedure may be used whenever volume test shows declining values with a clean nozzle.	21					
2. Check internal and exterior tubing and fittings for cracks, leaks, or any type of deterioration. Replace as needed.	22					
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	Instructions for Reagent Lot Record Each time you replace a reagent bottle, record lot number from the new bottle in the box that corresponds to the reagent changed and current months numeric date.					Corrective Action Log Instructions The Corrective Action Log is optional. Document each problem occurrence with (1) the date, (2) a brief description of the nature of problem, and (3) any corrective action taken to resolve or correct problem.