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|  VITEK MS Preventative Maintenance  |
| **Purpose** | This procedure provides instructions on how to perform preventative maintenance for the VITEK MS.  |
| **Routine Maintenance**  | ALL routine preventative maintenance is to be documented on the VITEK MS Instrument PreventiveMaintenance/Quality Control form.

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| **Daily Maintenance** |
| * Record room temperature (18-26˚C) by checking the automated temperature monitoring device (‘Micro room temp’)
	+ If room temperature is outside of range, place a request through St.Croix System Service Requestor to Facilities/Maintenance to have the temperature in the laboratory adjusted.
	+ Temperatures out of range can affect the performance of the VITEK MS (calibration may drift resulting in errors).
	+ The VITEK MS internal temperature can be monitored under the Acquisition software by clicking on Supervision.
* Check printer paper supply
* Subculture *E.coli* ATTC 8739 organism
* See Desk 3 subculture schedule
* Refer to protocol “LyfoCults Plus *E.coli* ATTC 8739” for monthly subculturing (found on Desk 3).
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| **Weekly Maintenance** |
| * Check desiccant (Every Monday)
	+ Acceptable: Desiccant should be a deep rich orange color.
	+ If desiccant is not a deep rich orange color but rather displays a pale or yellow look, change desiccant using a fresh batch.
	+ To change the desiccant:
1. Exit the Acquisition software.
2. At the back of the instrument, carefully pull desiccant bottle away from its holder (spring clip mountings).
3. Unscrew the bottle from the bottle cap.
4. Empty old desiccant into a large glass beaker.
5. Refill the bottle approximately ¾ full with dry (orange) desiccant. Use a funnel.
6. Screw the bottle on to the cap and tighten.
7. Push the bottle back into its holder.
	* To regenerate the desiccant:
8. Cover beaker containing old desiccant tightly with aluminum foil.
9. Place into laboratory oven.
10. Set temperature to 190˚C and timer to 6 hours.
11. Desiccant should change back to a deep orange rich color.
	1. If not, re-heat for an additional 3 hours.
	2. If re-heating doesn’t work, consider disposal of the desiccant and use a new batch. Have additional desiccant ordered through bioMérieux if necessary.
12. Once cooled, place regenerated desiccant back into a seal tight desiccant container.
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| **Performing Maintenance As Required** | ALL preventative maintenance performed as required is to be documented on the VITEK MS Instrument Preventive Maintenance/Quality Control form. |
|  | **Additional Maintenance** |
|  | * **Fine Tuning**
	+ Performed once every 12 weeks (scheduled with bioMérieux Customer Support).
1. Prepare entire VITEK MS-DS target slide containing Matrix only on spot #1 of row “A” and a fresh (18-24 hours) culture of *E.coli* ATCC 8739 in ALL remaining spots.
2. Scan the slide barcode, enter and validate all specimen information, then click Send Slide.
3. At the acquisition station, click Open and remove the adapter from the instrument. Place the fine tuning target slide into position 1 of the adapter. Place an unused slide into position 4. Load the adapter and click Close (\***DO NOT click Start**).
4. Call bioMérieux Customer Support (800-682-2666).
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|  | * **VITEK MS Instrument**
	+ Clean external surfaces
		- This includes: VITEK MS instrument, acquisition and prep station computers, acquisition and prep station monitor frames and keyboards.
		- Use Super Sani-Cloth® Germicidal Disposable Wipes to clean all external surfaces.
		- To clean acquisition station screen, use dry cloth (not tissue paper).
		- To clean prep station touchscreen, dampen a cloth/paper towel with window cleaner and wipe the screen.
	+ Clean adapter
		- Remove adapter from machine using powder-free gloves.
		- Using an alcohol wipe, remove any fingerprints or other material from the adapter. Wipe off any residual matter with dry cloth.
	+ Clean O-ring seal (Figure 1.)

O-ring sealFigure 1. * + - While the door is open, check condition of the O-ring and sealing face of the door.
		- Using a clean, lint-free tissue slightly moistened with water, wipe away any soiling.
		- If badly contaminated, use a solvent (i.e. ethanol) to clean the seal. Rinse with a lint-free tissue moistened with water.
		- NOTE: The VITEK MS door will close automatically after 5 minutes.
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| **References** | VITEK MS Clinical Workflow User Manual, 2013. VITEK MS “The Basics” manual, 2014. |
| **Historical Record** |  |  |  |
|  | **Version** | **Written/Revised by:** | **Effective Date:** |
| 1 | Andrew Fangel/Dr. Phillip Heaton | 10/19/16 | Initial Version |
| 2 | Susan DeMeyere | 3/5/2018 | Removed Isensix, added automated temperature monitoring device |
| 3 | Andrew Fangel/ Susan DeMeyere | 4/20/2018 | Updated Fine-tuning instructions. |
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