

915J Continuous Mercury Monitor Preventative Maintenance Checklist Quarter 1

Company/Plant	Date
Unit Serial Number	Service Performed by
☐ Probe and Umbilical Line ☐ Check probe and umbilical line for pro	oper heating
☐ Clean probe ☐ Probe Head ☐ ☐ Check for proper heating of all compo ☐ Replace total scrubber MT-001 ☐ Replace elemental scrubber MT-002D ☐ Clean and sonicate titanium filter MT-0 ☐ Clean filter housing & lid assembly MT ☐ Inspect Viton O-rings in filter lid assem☐ Inspect Teflon lines and replace if disconsistent of the clean valve MT-030	010 -035, MT-009
☐ Console ☐ Check for proper heating	
	(rinse with soapy water and vacuum excess water before reinstalling) lensate management system (pan, drain nipple, tubing)
ADDITIONAL NOTES	



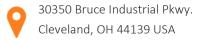
915J Continuous Mercury Monitor Parts & Consumables List Quarter 1

	PART NUMBER	PART NAME
	MT-001	Scrubber 1 (Total Scrubber)
	MT-001 Reload	Reload service of Scrubber 1 (Total Scrubber
and of the same of	MT-002D	Scrubber 2 (Disposable Elemental Scrubber)
	MT-010	Probe filter element 2Um Titanium (with 2 viton gaskets MT-081)
10 to	MT-035	Filter Holder/Lid Assembly
	MT-009	Probe Tube, Filter Block Cleanout Kit
$\bigcirc \bigcirc$	MT-004	Filter Lid O-Rings (set of 2)
	MT-030	Stainless Steel Solenoid Valve (V4)

ADDITIONAL NOTES	 		









915J Maintenance Guide Quarter 1

Last Update: 10/02/2020



915J maintenance consists of 3 primary components: head/probe, console, enclosure

Head/probe: Console: Enclosure:







Begin by confirming proper heating of all temperature controllers:

- Interior Temp: 45.0 ± 0.1
- Sample Heated Line: 100.0
- Heated Probe Tube:300.0
- Heated Converter: 560.0
- Heated Filter: 180.0 ± 20.0



Confirm pressures/flow/vacuum on gauges

- Dilution: ~60 psi
- Bypass: ~15 psi
- Vacuum: ~20 inHg
- Analyzer Vent: >6 L/min



Before beginning work on the head, make sure to pull the Service Button on the bottom center of the console to cut air to the system!



Replace/clean the probe insert/liner (use rifle cleaner or allthread)

Forceps needed to remove liner if one is present

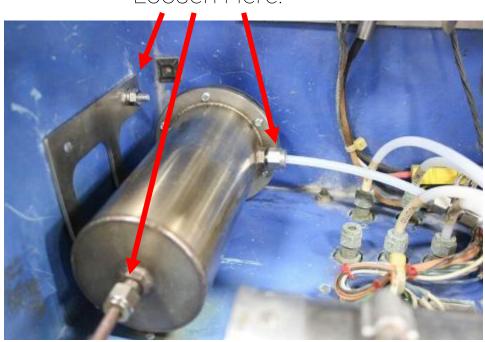




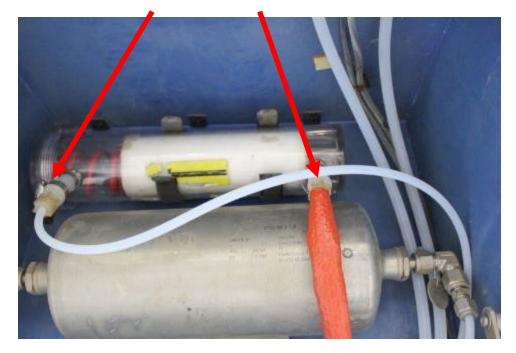
Replace Total Scrubber (MT-001)

Replace Elemental Scrubber (MT-002)

Loosen Here:



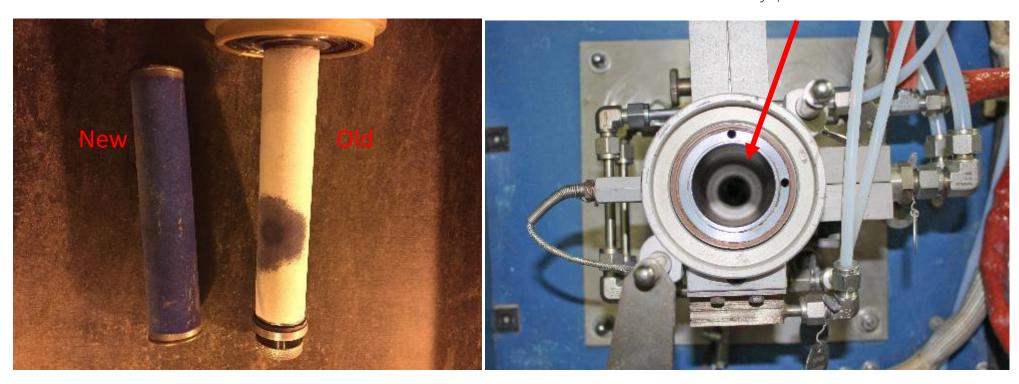
Loosen Teflon lines here:



Replace/Clean Titanium Filter (MT-010)

Inspect/Clean Filter Housing

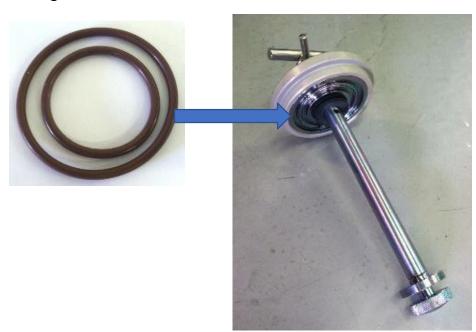
Use cloth to remove any particulate in here



Inspect Viton O-rings (MT-004) in filter lid assembly

Gently Pre-stretch O-rings to ensure proper seating





Inspect Viton O-rings (MT-004) in filter lid assembly (cont...)

Gaskets not stretched and improperly seated:



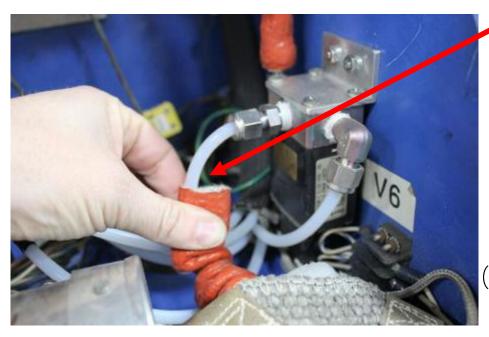
Gaskets properly stretched and seated:



Inspect Teflon lines and replace if needed

(Look for discoloration, moisture, leaking, etc.)

Pay special attention to line from solenoid to total converter:



Needs replaced (Moisture, particulate)



Head Maintenance Complete

Turn air back on by pressing the Service Button back in



A/C Maintenance

Confirm proper heating/cooling

- Inspect/clean AC filter
- Inspect and clean AC condensate pan, drain, tubing
- Clean AC cabinet

Replace/Clean AC filter here:

Completing Maintenance

- After all maintenance, complete, ensure all temperatures and pressures have returned to their expected ranges.
- Be sure to allow the system a minimum of 12 hours to recover from this maintenance.
- Once the system has recovered, it is advisable to run a set of 30B sorbent traps to confirm the readings. A typical run would consist of a 60-minute duration at 500cc.
- Compare the trap data to the 915J Hg total concentration over that time. Adjust calibration coefficient as needed

Completing Maintenance

If an adjustment is made, the standard concentration will need to be adjusted as well.

- To do this, click the "cal" button in the top left of the software.
- Once the calibration has reached a steady average, click the gear icon to open a window.
- Adjust the Standard Concentration to match the current average in calibration mode.
- Note: this adjustment can only be performed while system is in calibration mode.
- Once system enters into "post-calibration" mode, the calibration coefficient will be adjusted based off the value you adjusted.
- Confirm the calibration coefficient is still at its expected value from before the calibration run.

Your maintenance is now complete.

