

915J Continuous Mercury Monitor Preventative Maintenance Checklist Quarter 2

Company/Plant	Date
Unit Serial Number	Service Performed by
□ Probe and Umbilical Line □ Check probe and umbilical line for probe□ Clean probe	oper heating
☐ Probe Head ☐ ☐ Check for proper heating of all composition ☐ Replace total scrubber MT-001 ☐ Replace elemental scrubber MT-002D ☐ Clean and sonicate titanium filter MT-☐ Clean filter housing & lid assembly MT☐ Inspect Viton O-rings in filter lid assemulation of the clean valve MT-030) -010 T-035, MT-009
☐ Console ☐ Check for proper heating☐ Replace pre-analyzer scrubber MT-00	05D
☐ Enclosure ☐ Check for proper heating & cooling ☐ Inspect and clean air conditioner cond ☐ Clean air conditioner cabinet ☐ Replace air conditioner filter MT-059 ☐ Replace air system filter elements MT	densate management system (pan, drain nipple, tubing) T-041 (x2)
ADDITIONAL NOTES	



915J Continuous Mercury Monitor Parts & Consumables List Quarter 2

	PART NUMBER	PART NAME
***	MT-001	Scrubber 1 (Total Scrubber)
	MT-001 Reload	Reload service of Scrubber 1 (Total Scrubber
and st	MT-002D	Scrubber 2 (Disposable Elemental Scrubber)
	MT-010	Probe filter element 2Um Titanium (with 2 viton gaskets MT-081)
A to the state of	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)
	MT-005D	Scrubber 3 (Disposable Pre-Analyzer Scrubber)
	MT-059	Ice Qube AC Filter - Manufacturer's Part No. POF1030
	MT-041	Air Supply Zero Filter
ADDITIONAL NOTES		





915J Maintenance Guide Quarter 2

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



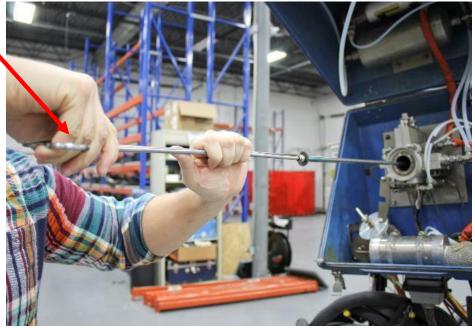
Before beginning work on the head, make sure to pull the Service Button on the bottom center of the console to cut air to the system!



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

Forceps needed to remove liner if one is present

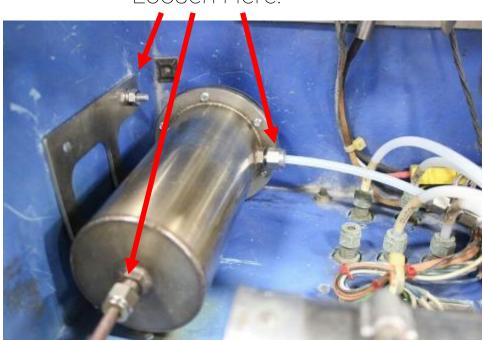




Replace Total Scrubber (MT-001)

Replace Elemental Scrubber (MT-002)

Loosen Here:



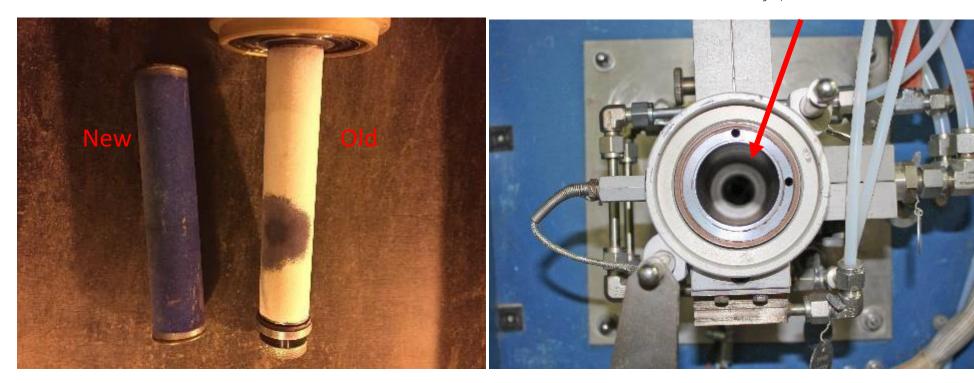
Loosen Teflon lines here:



Replace/Clean Titanium Filter (MT-010)

Inspect/Clean Filter Housing

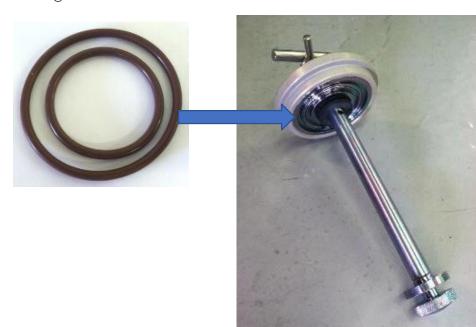
Use cloth to remove any particulate in here



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:







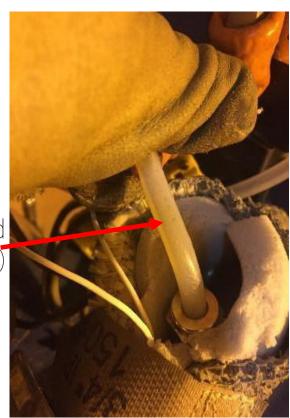
Inspect Teflon lines and replace if needed

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

Pay special attention to line from solenoid to total converter:

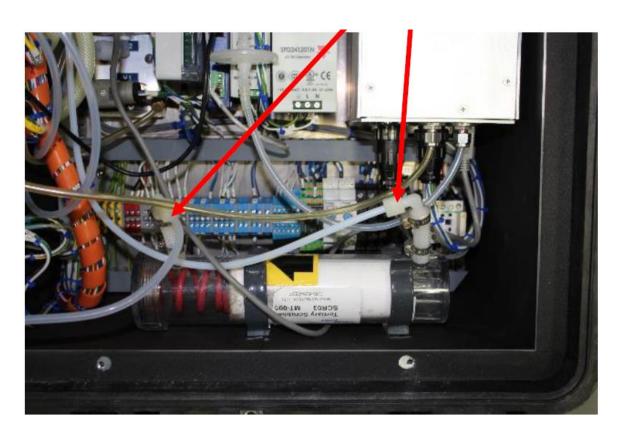


Needs replaced (Moisture, particulate)



Console Maintenance

Replace Pre-Analyzer Scrubber (MT 005)





Head Maintenance Complete

Turn air back on by pressing the Service Button back in



Enclosure Maintenance

Replace Air Supply Zero Filters (MT-041)



A/C Maintenance

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Confirm proper heating/cooling

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



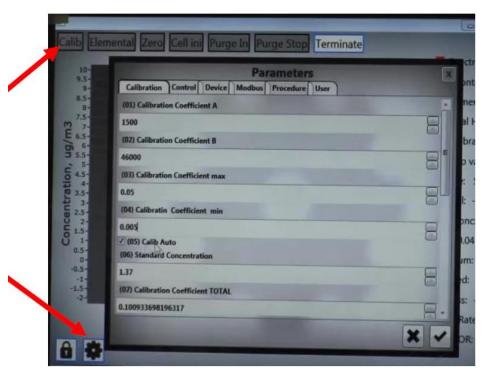
Replace/Clean AC filter here:

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

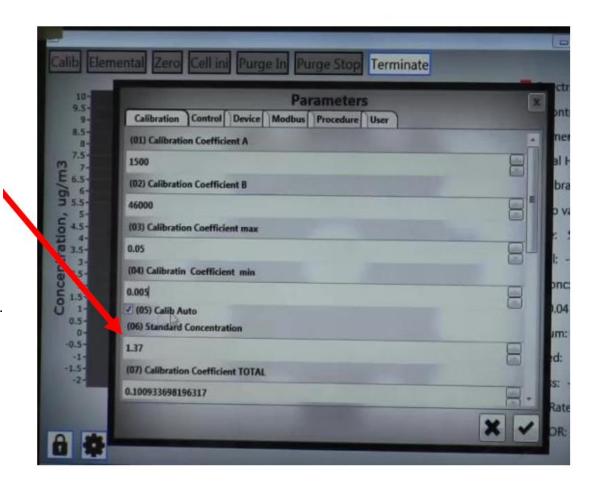
Completing Maintenance

- If an adjustment is made, the standard concentration will need to be adjusted as well.
 - To do this, click the "calib" button in the top left of the software.
 - Once the calibration has reached a steady average, click the gear icon to open a window.



Completing Maintenance

- 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.
- Confirm the calibration coefficient is still at its expected value from before the calibration gas used.



Your maintenance is now complete.

