

#### 915J Continuous Mercury Monitor Preventative Maintenance Checklist Quarter 3

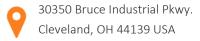
| Company/Plant                                                                   | Date                                                                                                                                                     |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Serial Number                                                              | Service Performed by                                                                                                                                     |
| ☐ Probe and Umbilical Line  <br>☐ Check probe and umbilical li<br>☐ Clean probe | e for proper heating                                                                                                                                     |
|                                                                                 | 1<br>1T-002D<br>Iter MT-010                                                                                                                              |
| ☐ Console ☐ ☐ Check for proper heating                                          |                                                                                                                                                          |
|                                                                                 | oling<br>ner filter (rinse with soapy water and vacuum excess water before reinstalling)<br>ner condensate management system (pan, drain nipple, tubing) |
| ADDITIONAL NOTES                                                                |                                                                                                                                                          |
|                                                                                 |                                                                                                                                                          |
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|                                                                                 |                                                                                                                                                          |



#### 915J Continuous Mercury Monitor Parts & Consumables List Quarter 3

|                     | PART NUMBER   | PART NAME                                                       |
|---------------------|---------------|-----------------------------------------------------------------|
|                     | MT-001        | Scrubber 1 (Total Scrubber)                                     |
|                     | MT-001 Reload | Reload service of Scrubber 1 (Total Scrubber                    |
| as as               | MT-002D       | Scrubber 2 (Disposable Elemental Scrubber)                      |
|                     | MT-010        | Probe filter element 2Um Titanium (with 2 viton gaskets MT-081) |
| 01 to 10 Th         | 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 3

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



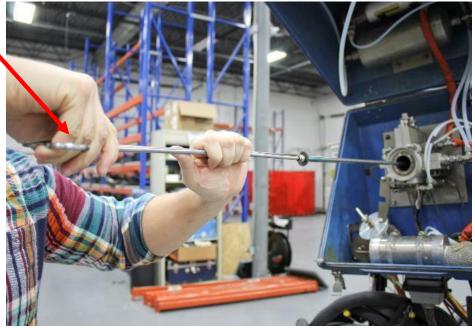
Before beginning work on the head, make sure to pull the Service Button on the bottom center of the console to cut air to the system!



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

Forceps needed to remove liner if one is present

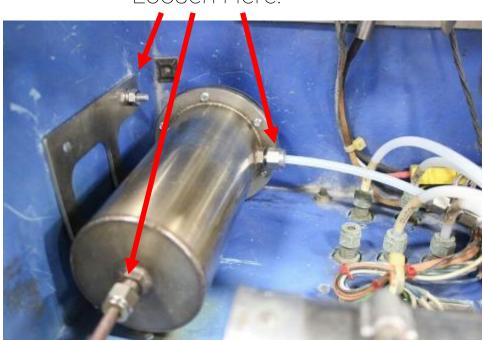




Replace Total Scrubber (MT-001)

Replace Elemental Scrubber (MT-002)

Loosen Here:



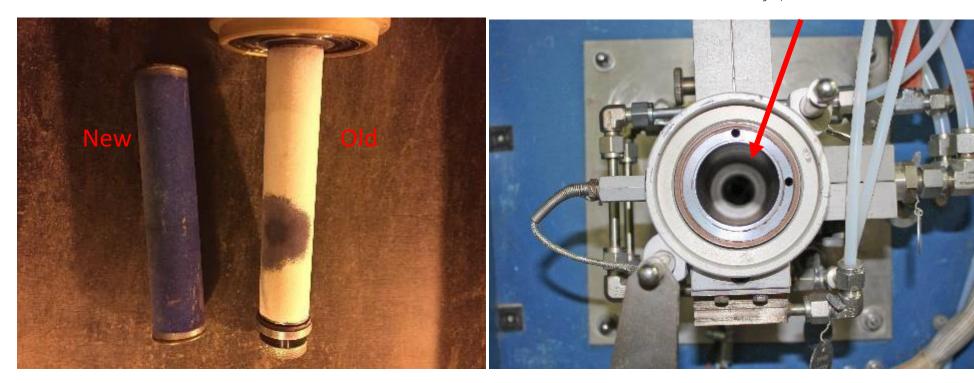
Loosen Teflon lines here:



Replace/Clean Titanium Filter (MT-010)

Inspect/Clean Filter Housing

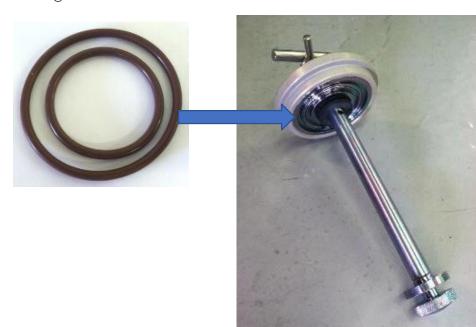
Use cloth to remove any particulate in here



#### 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:







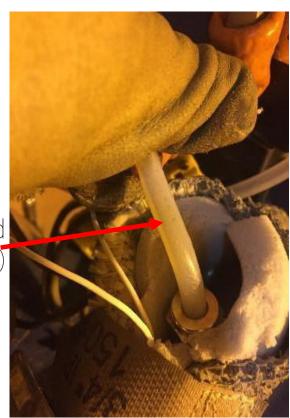
#### Inspect Teflon lines and replace if needed

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

Pay special attention to line from solenoid to total converter:



Needs replaced (Moisture, particulate)



#### Head Maintenance Complete

Turn air back on by pressing the Service Button back in



#### 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



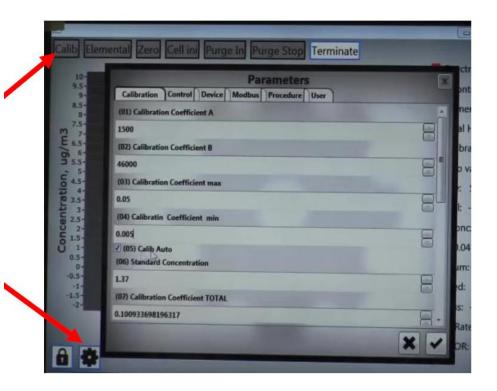
Replace/Clean AC filter here:

#### 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

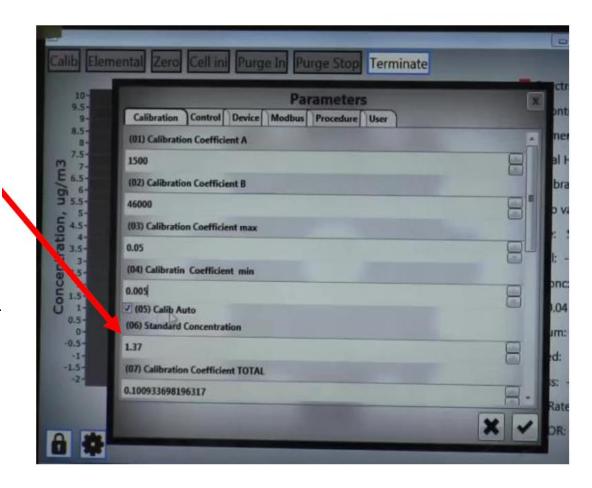
#### Completing Maintenance

- 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.

