

Zero air filter set replacement

L108-A3-01M

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Contributed by (service): M. Dolžan

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Printed copies of this document are to be considered as informative.

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1 SERVICE PREPARATION

	Photo
Hex key standard set with ball ends	
pin wrench (used for 160mm grinder)	
Powder free gloves (Halyard or Kimberly-Clark)	

2 EQUIPMENT


Accessories	Photo
<p>Set of O-rings, which separately packed on bags with numbers: O-ring 2 for filter 2 O-ring 1 and 3 for filter 3</p>	
<p>Filter cartridges, marked as filter cartridge 2 and 3</p>	
<p>All parts which will be in the package: 2x Filter 3x O-ring 2x Sticks 1x One pair of protection gloves</p>	


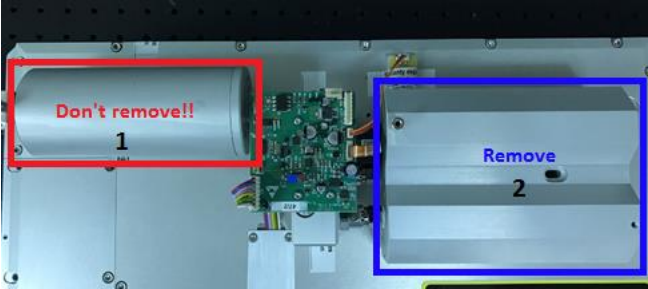

3 DESCRIPTION OF THE SERVICE PROCEDURE


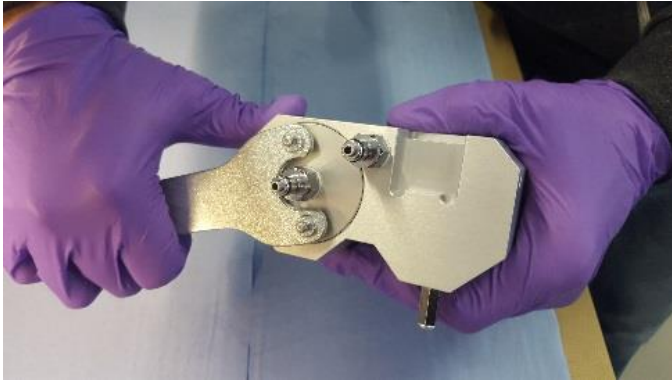
3.1 Important

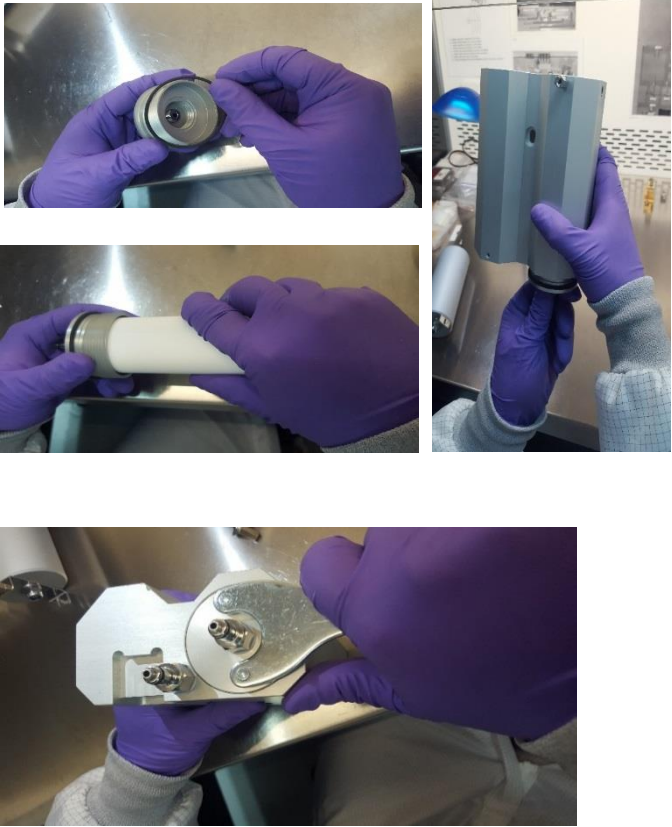
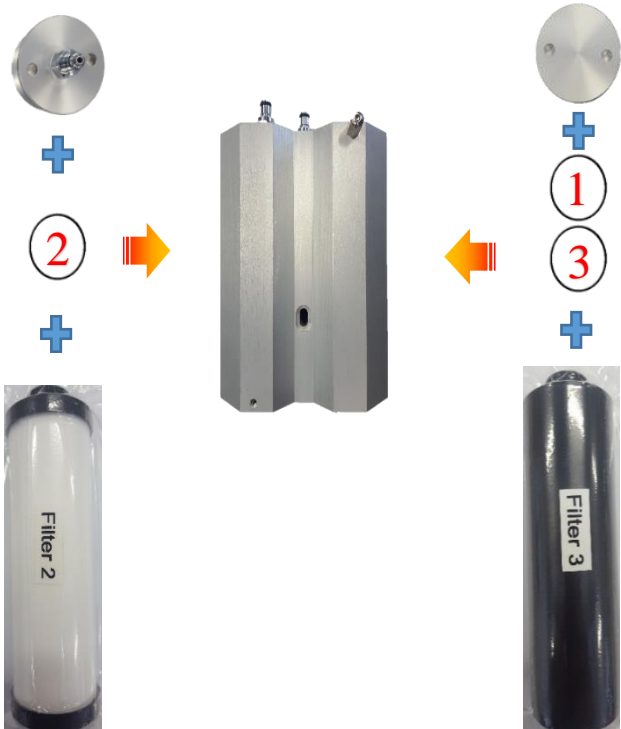
- Filter replacement must be done in clean area.
There are different types of systems that contain slight differences between each other. Please check for each one the proper procedure for cover removals to gain access to filter unit cover.
- System must be shut down completely before filter removal in order to prevent the zero air pump to be running during replacement procedure, which can in turn lead to damage and/or contamination of the resonator cavity.



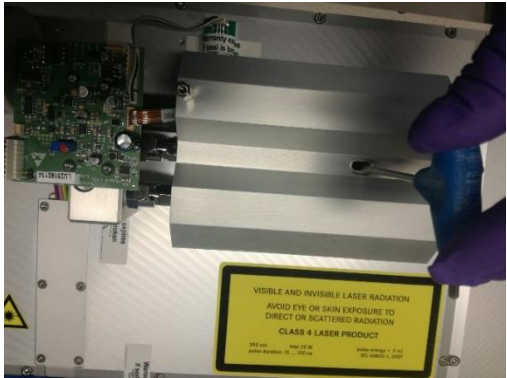
3.2 Servicing/upgrade instructions for MLXXX systems

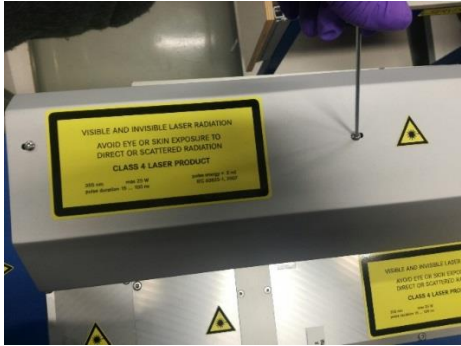
Step no.	Step description (important instructions)	Photograph
1.	When the outer packaging of filter cartridges is opened, both filters needs to be checked if they are vacuum sealed, the process is showed on the picture	 <p>each filter contains humidity indicator.</p> <p>Send filter back to us if 60% circle is NOT yellow.</p> <p>Send filter back to us if 10% circle is NOT yellow and 5% circle is green.</p>

2.	<p>Access to filter unit</p> <ol style="list-style-type: none"> 1. Use hex key 2.5mm to unscrew two hex bolts and remove filter unit cover 	
3.	<p>Dismounting filter unit</p> <ol style="list-style-type: none"> 1. Only unit number 2 is to be removed and filter cartridges in it replaced, unit number 1 must stay attached to the laser head with no filter cartridge replacement 	
4.	<p>Dismount of dual filter unit</p> <ol style="list-style-type: none"> 1. Use hex key 3 mm to unfasten bolt which holds filter unit in position. 2. Simultaneously push retches on both air connectors and same time push out filter unit from middle cube. 	

		
5.	<p>Replace filter cartridges</p> <p>Unscrew both filter caps and clean filter housing with N2 or fully filtered compressed air, to remove any dust.</p>	

6.	<p>Replacing filter cartridges</p> <ol style="list-style-type: none"> 1. Replace the correct O-ring on filter connectors. 2. Mount filter and filter connector together and fasten it with power of three fingers. 3. You need to turn filter housings upside down and then attach the filters, otherwise you can damage O-rings . 4. Use a grinder wrench to fasten the replaced filters back to filter housing. 	
7.	<p>Description of proper selection of O-rings:</p> <p>Filter 2: Replace O-ring #2 on filter housing cap and then install the filter number 2.</p> <p>-Filter 3: Replace O-ring #1 and #3 on filter housing cap and then install the filter number</p>	

8.	<p>After both filters are exchanged, stick which is included in package must be placed on the housing, date and performed by must be filled</p>	
9.	<p>Mounting filter unit back on laser source</p> <p>When you replace filter cartridges and put back filter unit together, slide it on connectors and tighten hex bolt to fix unit on place</p>	 

10.	Mount cover back in place <ol style="list-style-type: none">1. In opposite direction as dismounting, mount cover back and tighten it with two hex bolts.2. Put covers of system back according manuals	
11.	Mark each filter unit, where you perform filter cartridge replacement and log every filter replacement.	

3.3 Important

WARNING: Immediately after filter replacement procedure is completed, the laser/system must be powered on, so that the airflow into the correct direction prevents any back-drift of contaminants into the resonator chamber!

3.4 Replacement Form

T-341 replacement FORM (Please send after modification)

1. **Service procedure:** Zero air filter set replacement
2. **System serial number:**
3. **Date of replacement:**
4. **Remarks:**