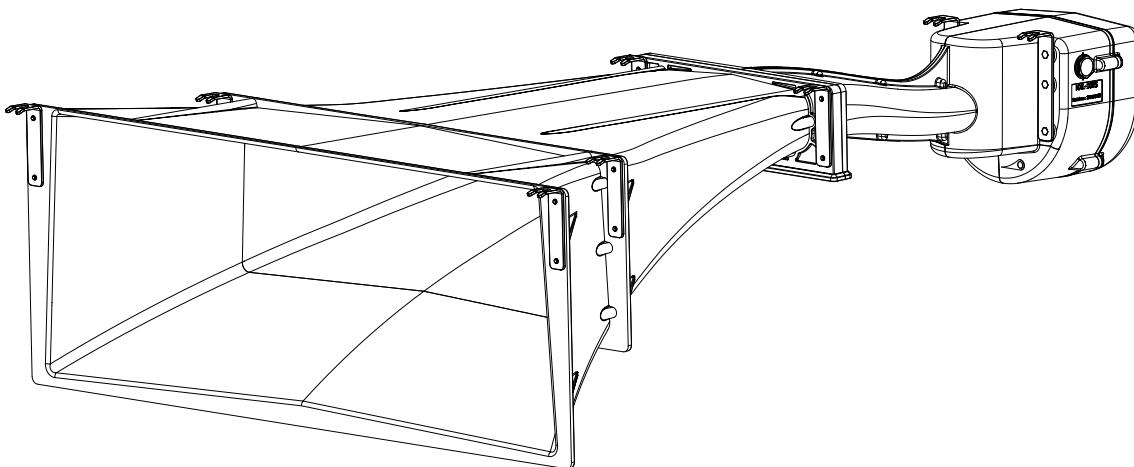


## MANUAL

<b>Product</b>	NXL-100S NXL-100S-RH	<b>Part numbers</b>	0200201, 0200202, 0200203, 0200204, 0200205 and 0200206
<b>Document version</b>	1.0	<b>Document status</b>	Release
<b>Notes</b>	Full Height and Reduced Height (RH) product variants 0200201 = Standard with cable gland on left side (front view) 0200202 = RH variant as 0200201 0200203 = Optional Hirschmann CA 3 GD* on left side (front view) 0200204 = RH variant as 0200203 0200205 = Optional Hirschmann CA 3 GD on right side (front view) 0200206 = RH variant as 0200205		

## FILTER SERVICE INSTRUCTIONS

This document describes the detailed filter service instructions for the NXL-100S and NXL-100S-RH advanced tunnel horn loudspeaker.

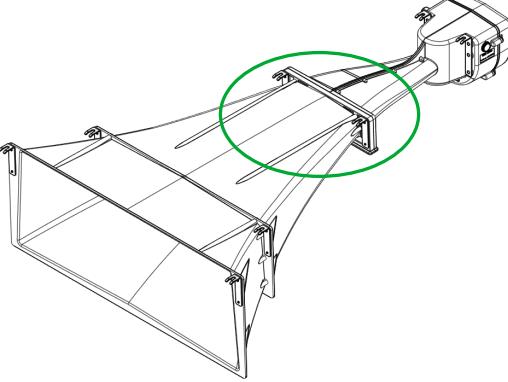
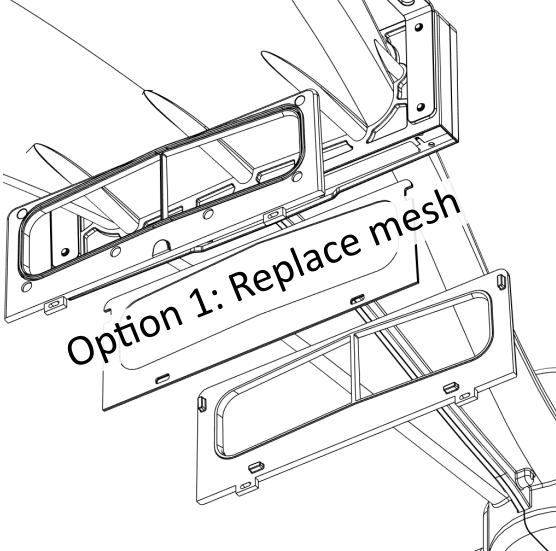
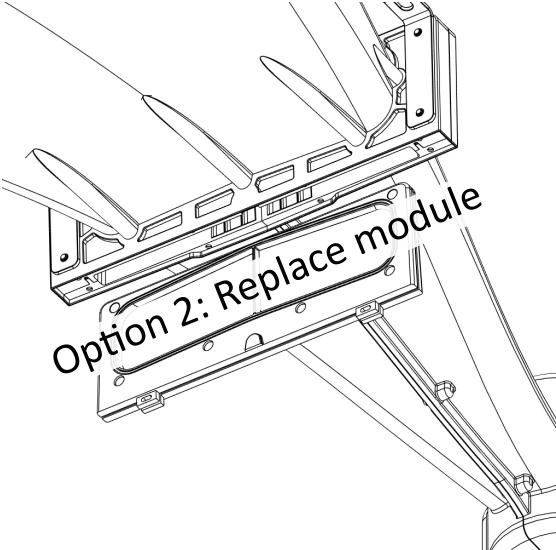


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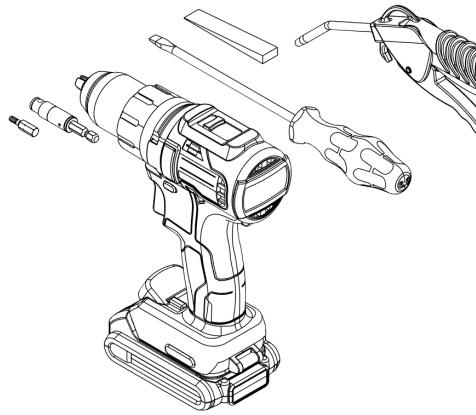
\* Product names such as Hirschmann CA 3 GD mentioned in this document are the property of their respective owners. The use of these names is solely for identification and reference purposes. NXD-Audio BV does not claim any ownership of the trademarked names mentioned.

## SETUP

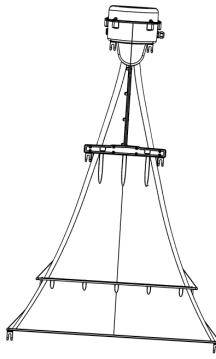
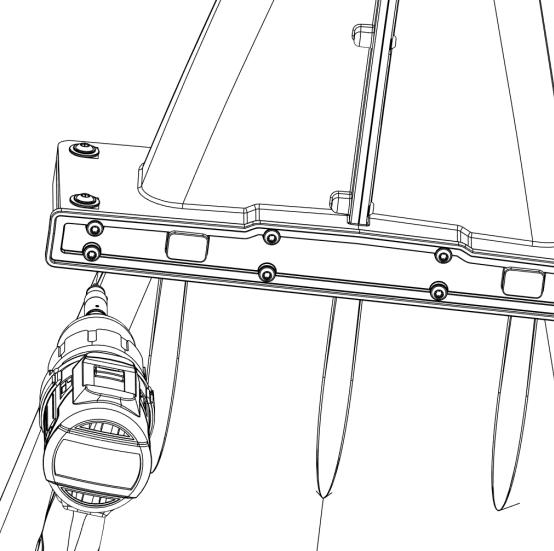
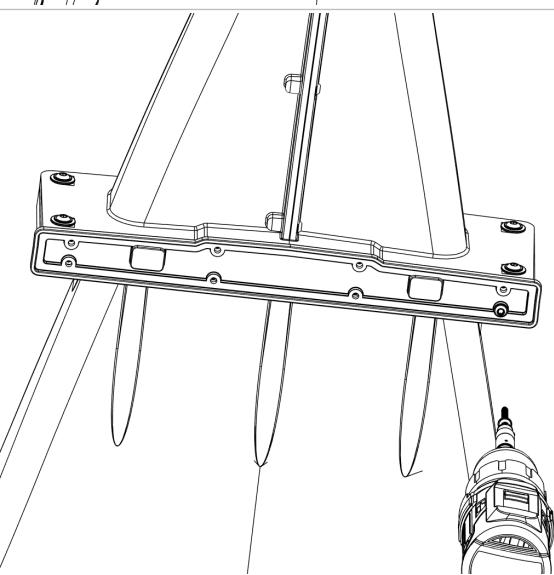
1.	<p>The filter module is located between the mid and rear section of the horn.</p> <p>It is recommended to inspect the filter once a year. The actual maintenance interval depends on the dust deposits in the environment.</p>	
2 <sup>a</sup> .	<p>For servicing there are 2 options:</p> <p><u>Option 1:</u> Only replace the mesh assembly. The existing filter frames with gaskets are reused after cleaning and inspection.</p>	 <p>Option 1: Replace mesh</p>
2 <sup>b</sup> .	<p><u>Option 2:</u> Replace the complete filter module by a new or refurbished one.</p> <p>The first option may offer the lowest cost, the second option is the fastest.</p>	 <p>Option 2: Replace module</p>

## REQUIRED TOOLS

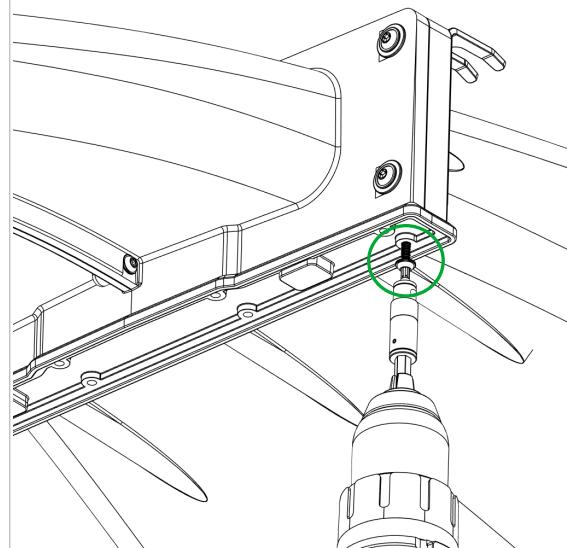
1. The following tools are required for the filter service procedure:
  - Torx T20 bit.
  - Torque adapter 2.0 Nm.
  - Cordless drill or manual drive tool.
  - Flathead screwdriver with head width of about 6 mm and shaft length of about 150 mm.
  - Commercially available small plastic leveling wedge of about 80 mm in length.
  - A quick way to remove dust.



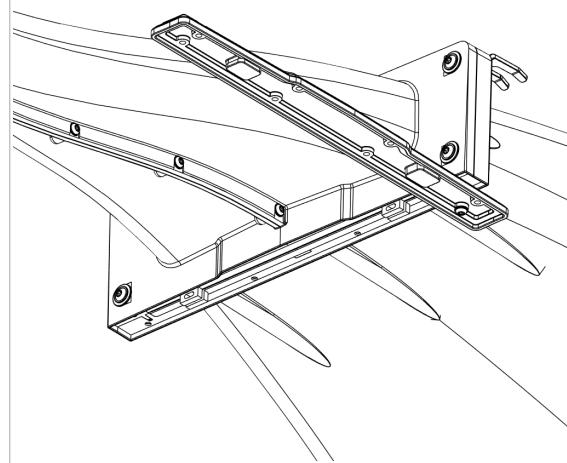
## UNSCREW FILTER COVER

1.	<p>Ensure that all required safety regulations are met when working at height.</p>	 <p><b>Follow safety procedures</b></p>
2 <sup>a</sup> .	<p>Start by removing the filter cover.</p> <p>This cover is positioned at the bottom, between the rear and mid section of the horn.</p>	
2 <sup>b</sup> .	<p>The filter cover is mounted with eight T20 torx screws, size M4 x 25.</p> <p>It can either be removed in its entirety, or remain attached with 1 screw.</p> <p>This manual shows the last option.</p>	

2<sup>c</sup>. The last screw should be loosened about 10 mm.

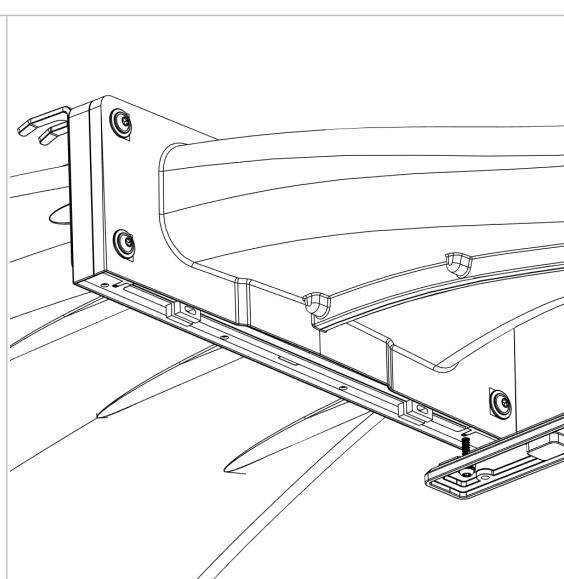


2<sup>d</sup>. The filter cover can then be moved downwards and rotated 90 degrees to the rear.



## REMOVE FILTER

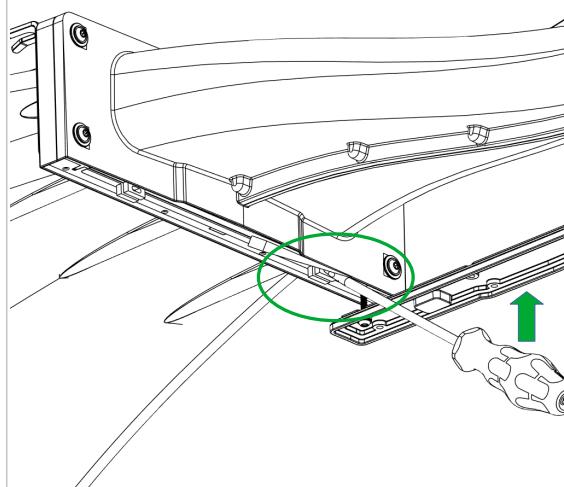
1. The filter module is now accessible and can be extracted.



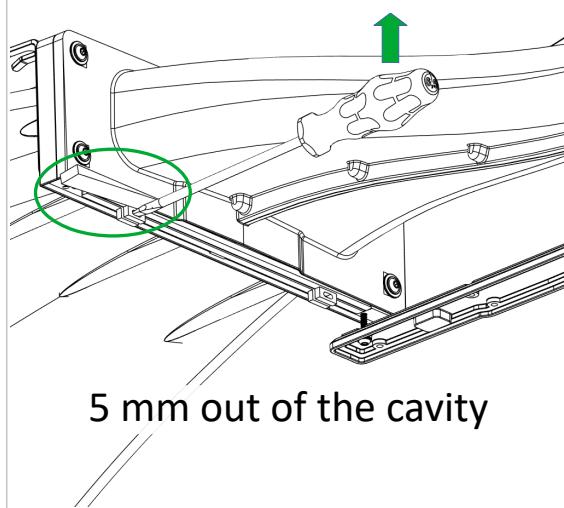
2<sup>a</sup>. Use the flat screwdriver, and the helper wedge.

Gently extract the filter by using the screwdriver as a lever, and the rear rim as a fulcrum.

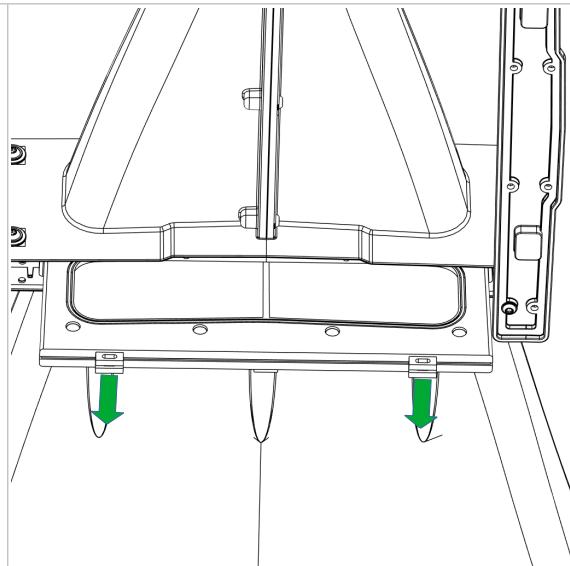
The wedge ensures that the leverage continues as the filter is pulled further out of the cavity. It also prevents damage to the rear rim.



2<sup>b</sup>. Remove the filter module approximately 5 mm from the cavity, using the extraction points on both sides.

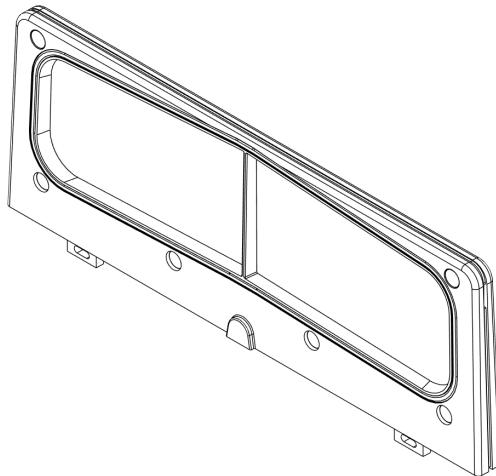


3. Due to the filter module's tapered shape, it can then be pulled out further by hand.

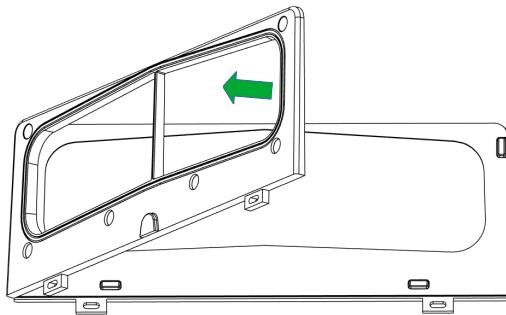


**DISASSEMBLE FILTER**

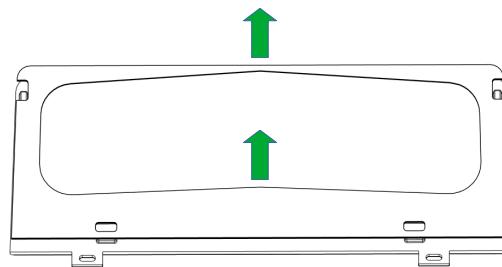
1. The filter module can be disassembled without tools because the front and rear frame are held together by magnets.



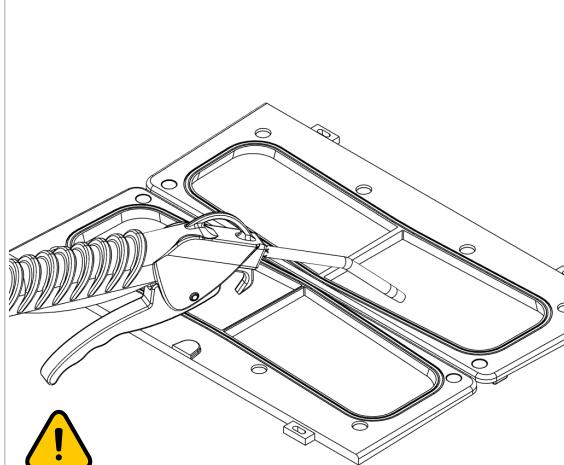
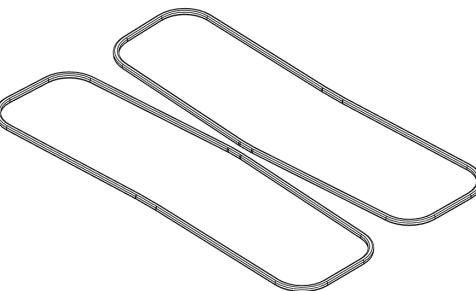
2. Remove the front frame.



3. Lift the filter mesh assembly off the cams that are located on the rear frame.

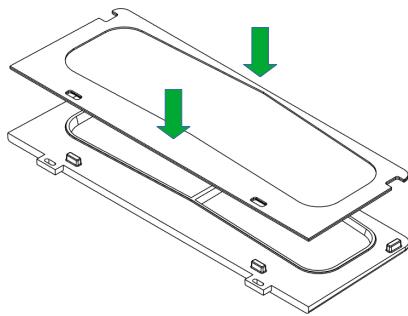


## CLEAN FILTER FRAMES

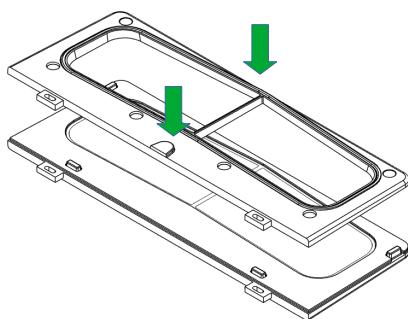
1.	<p>Clean and inspect the filter frames.</p> <p>Remove any accumulated dust using a vacuum cleaner, soft brush or cloth, or compressed air if permitted.</p> <p>Do not use aggressive cleaning agents.</p>	  <b>No aggressive cleaning agents</b>
2.	<p>The gaskets that are present in the grooves of the filter frames should be inspected for signs of damage.</p> <p>Replacement of these gaskets is normally not necessary. This is only required in the unlikely event of damage.</p>	

## ASSEMBLE FILTER

1. After cleaning and inspection, the filter can now be reassembled.  
Place the new filter mesh assembly over the cams of the rear filter frame.

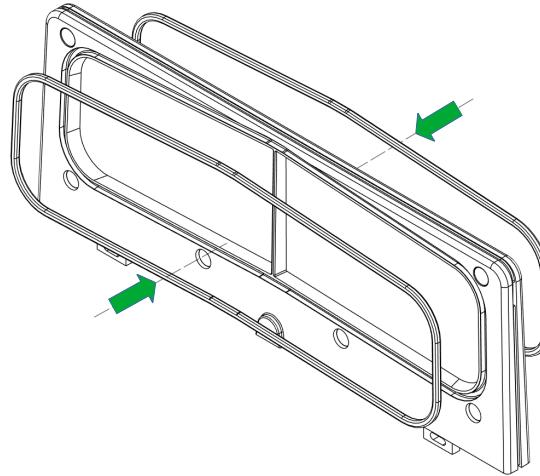


2. Place the front filter frame.  
The assembly will click together due to the magnets.

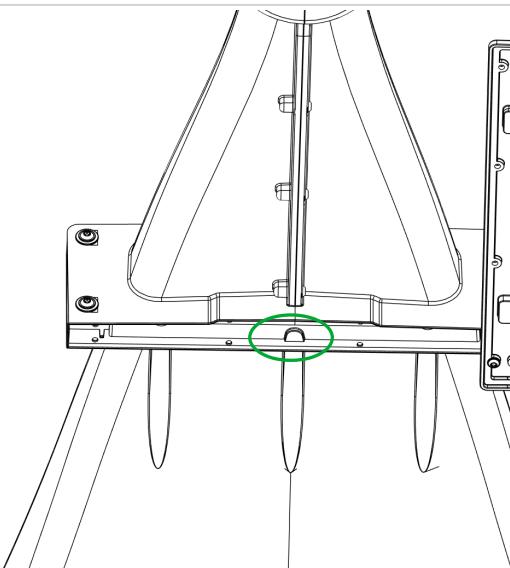


## INSERT FILTER

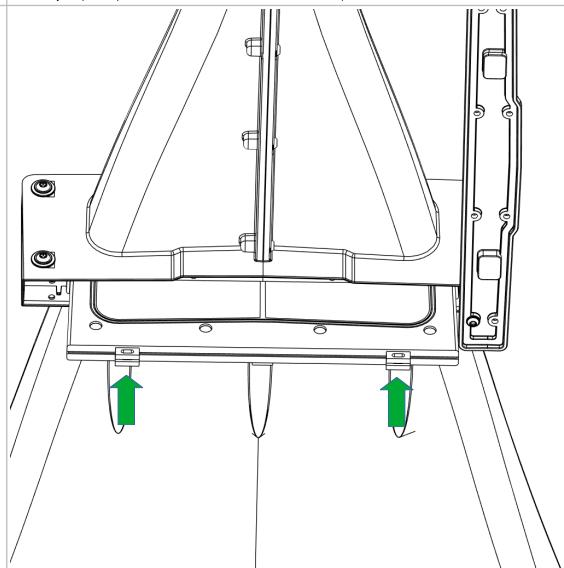
1. The filter module can now be installed.  
Always check that the round gaskets are clean and properly seated in the groove of the front and rear filter frames.



2. Pay attention to the correct orientation when installing the filter module.  
The front filter frame has a cam that corresponds with a recess in the filter cavity of the mid section.

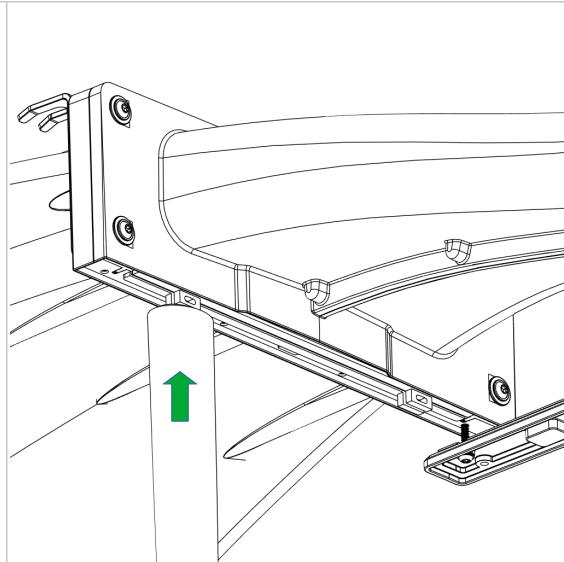


- 3<sup>a</sup>. Place the filter module and push it against the top edge of the filter cavity.



3<sup>b</sup>. The last few millimeters require more force due to the tapered shape of the filter.

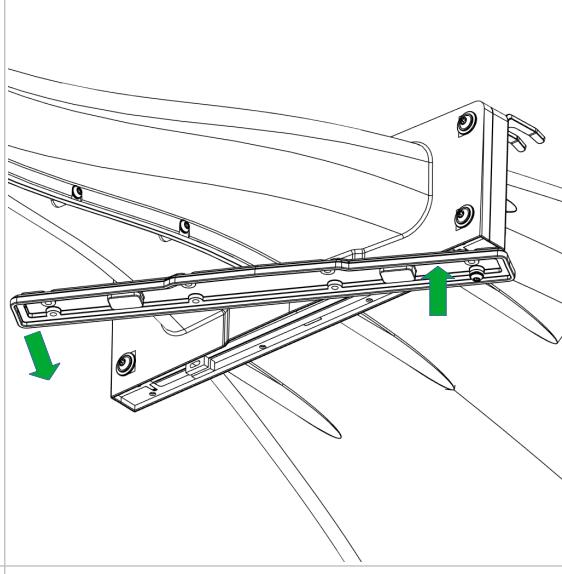
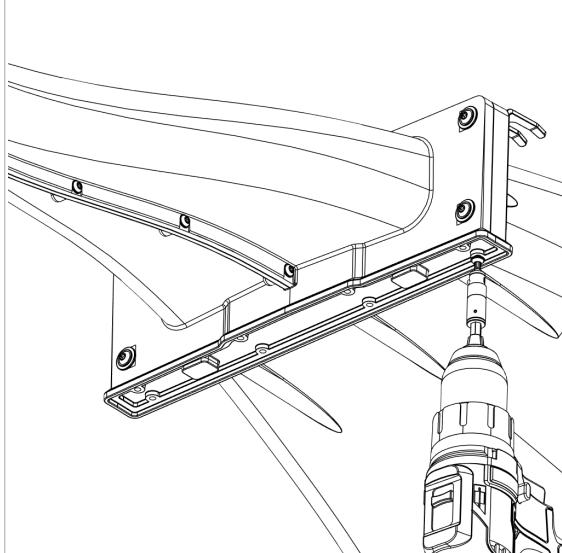
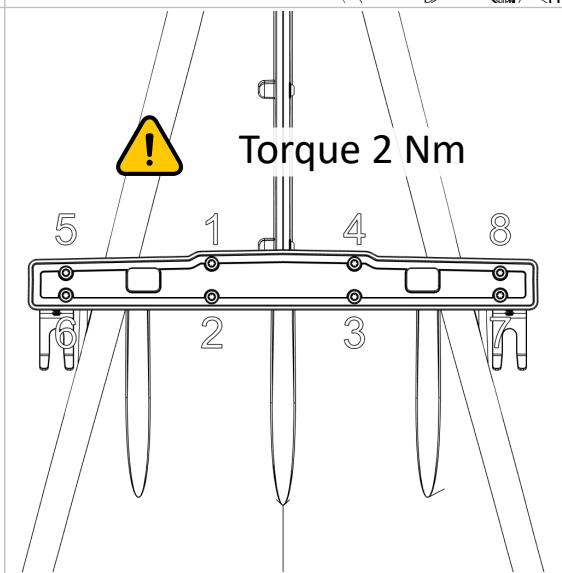
Pushing against both extraction points with a larger object such as a hammer handle is usually convenient.



4. The bottom of the filter frames aligns with the filter cavity when the filter module is fully inserted.



## MOUNT FILTER COVER

1.	<p>The filter cover can now be mounted.</p> <p>Rotate the cover and push it in place.</p>	
2 <sup>a</sup> .	<p>Mount the cover with the torx M4 x 25 screws. Do not fully tighten yet.</p> <p>Keep the speed below 500 rpm or below the maximum allowable speed for your torque adapter, whichever is lower.</p> <p>Note the proper orientation in case the cover was fully removed.</p> <p>The shape of this cover is asymmetrical, it cannot be reverse mounted.</p>	
2 <sup>b</sup> .	<p>Do not over-tighten the screws as this may result in thread stripping.</p> <p>After all screws are installed, tighten them in the indicated order with a torque of 2 Nm.</p>	

## DOCUMENT REVISION

1.0	26-01-2026	Start version.
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