TITLE: Replacing the ME220 Particle Filter Element and Gasket

The Particle Filter removes particulate that could otherwise damage the pump or negatively affect the acoustic performance of the instrument. The Particle Filter Element and Gasket should be replaced annually.

Included

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particle Filter Gasket</td>
<td>1</td>
</tr>
<tr>
<td>40 Micron Particle Filter Element</td>
<td>1</td>
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</tbody>
</table>

1. Wear gloves when replacing the Particle Filter Element and Gasket.
2. Disconnect the bottle by pressing the thumb latch on the Quick Disconnect Cap. See Figure 1.

3. Use the Particle Filter Wrench, which is provided with the kit, to remove the filter cap.
4. Tap the side of the Particle Filter Element with the Particle Filter Wrench to loosen it. Remove and discard the Particle Filter Element and Gasket.

![Figure 3 – Particle Filter Components]

5. Rinse the gasket surface with a squirt water bottle and wipe with a Kim-wipe or similar lint-free towel.

6. Place the replacement Particle Filter Gasket against the flat surface in the filter housing.

![Figure 4 – Particle Filter Gasket]

7. Orient the replacement Particle Filter Element so that the closed end of the cup faces out. Gently, but firmly, press it into the filter housing until it remains centered without being held.
8. Thread the filter cap onto the housing until it is finger-tight. There should be no threads showing behind the filter cap (see Figure 5). If there are, the Particle Filter Element may not be properly aligned. Remove the filter cap, straighten the Particle Filter Element, and reinstall the filter cap.

![Figure 5 – Particle Filter Element Misaligned](image)

9. Using the Particle Filter Wrench, tighten the filter cap approximately 1/8 turn beyond finger-tight.

10. Orient the bottle in the Water Works Bay with the label on the Quick Disconnect Cap facing out, as shown in Figure 6.

![Figure 6 – Connecting the Bottle to the Water Works System](image)

11. Reconnect the bottle by pressing the Quick Disconnect Insert into the coupling on the Quick Disconnect Cap until it clicks into place.