Tono-Pen® XL & AVIA® Tonometer Cleaning Instructions

The Tono-Pen XL & AVIA tonometers may have difficulty taking measurements or display “bad” (or “Fail” for an AVIA) after a verification test when its tip is dirty and requires cleaning. When the Transducer Assembly of the tonometer has dirt and contaminants in the tip, cleaning of the tip is necessary. When the tip contains contaminants, it cannot move freely and the Tono-Pen will not successfully pass the verification test.

To clean the tonometer, perform the following steps:

1. Remove the Ocu-Film® + tip cover from the tonometer, if one is installed.
2. Using canned air, place the outlet of the canned air firmly against the Transducer Tip of the Tono-Pen to inject air into the tip as shown in Figure 1.
3. Blow canned air directly into the tip of the tonometer for approximately 3 seconds to push out any contaminants embedded in the tip of the Tono-Pen.

**Note:** Try to get a good seal between the canned air and the Tono-Pen tip to blow any contaminants stuck in the tip of the Tono-Pen safely into the internal cavity of the Tono-Pen.

4. After cleaning the tip with compressed air, the Transducer Assembly will be cold. Allow the Transducer Assembly to warm to room temperature.

5. Wipe the outside of the Tono-Pen with a clean, dust-free, cotton cloth dampened with either a 70% isopropyl alcohol solution, 7.5% Hydrogen Peroxide solution, or 5.25% Bleach solution, and distilled water, or a Clorox Bleach Germicidal Wipes (0.55% sodium hypochlorite) or a Sani-Cloth Prime Germicidal wipes (Didecyl Dimethyl Ammonium Chloride, isopropyl alcohol and ethyl alcohol). Refer to Figure 2.

6. Perform the Tono-Pen Tonometer Verification (also known as the Up/Down procedure) as indicated in the Tono-Pen User’s Guide.

**Note:** If the tonometer does not successfully complete the verification procedure, then repeat the above cleaning instructions as needed. If the Tono-Pen has been cleaned 3 times in a row and it still does not pass the Tonometer Verification, request an RMA (http://www.reichert.com/service.cfm) to return of the Tono-Pen for repair.

7. Install a new Ocu-Film tip cover as indicated in the User Guide.

**Note:** DO NOT use the Tono-Pen XL or AVIA tonometer on a patient without a new Ocu-Film tip cover installed.

**Note:** ALWAYS store the Tono-Pen XL or AVIA tonometer in its case with a new Ocu-Film tip cover installed to protect the tonometer tip from dirt and contaminants.

**Note:** Ocu-Film + tip covers are the only manufacturer approved covers for use with the Tono-Pen AVIA tonometer. Use of any other type of branded tip cover may affect readings or may void your warranty.

### Suggested Cleaning Schedule

<table>
<thead>
<tr>
<th>Number of Patients per Week</th>
<th>Number of Days Between Cleaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>100</td>
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<tr>
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<td>600</td>
<td>1</td>
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For Service and Support information and to order Tono-Pen AVIA tonometer accessories, such as genuine Ocu-Film + Tip Covers, please visit [www.tonopen.com](http://www.tonopen.com)

**Important Notice:**

For your own protection, only have your Tono-Pen AVIA tonometer serviced by Reichert Technologies.