Kit Contents

<table>
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<tr>
<th>SBE P/N</th>
<th>Description</th>
<th>Primary SBE Application</th>
<th>QTY</th>
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<tr>
<td>233538.01</td>
<td>Anti-Foulant Device Cap, with Barb</td>
<td>For exhaust port, when pump is installed</td>
<td>1</td>
</tr>
<tr>
<td>233540</td>
<td>Anti-Foulant Device Cap, No Barb</td>
<td>For both ports, when no pump is installed</td>
<td>2</td>
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<tr>
<td>233544</td>
<td>SeacatPLUS TC-Duct/ Anti-Foulant Device Cup</td>
<td>For use when AF24173 Anti-Foulant Devices are installed</td>
<td>1</td>
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<tr>
<td>233545</td>
<td>SeacatPLUS Exhaust/ Anti-Foulant Device Cup</td>
<td>For use when AF24173 Anti-Foulant Devices are installed</td>
<td>1</td>
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<tr>
<td>30389</td>
<td>Cable Tie, 6” POWER PHASE #63123</td>
<td>Secure Tygon® tubing to barbs</td>
<td>8</td>
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<tr>
<td>30579</td>
<td>Tygon® Tube, 3/8” ID 1/2” OD, 63010-122</td>
<td>Tubing used for plumbing</td>
<td>3 inch</td>
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<tr>
<td>31450</td>
<td>Tygon® Tube, Black Vinyl, 3/4” x 1/2”</td>
<td>Tubing used for plumbing</td>
<td>1 foot</td>
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<tr>
<td>801542*</td>
<td>AF24173 Anti-Foulant Device</td>
<td>Anti-Foulant cylinders installed in cup parts</td>
<td>1 pair</td>
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</tbody>
</table>

*optional item

The SBE 19plus is intended primarily for use as a profiling instrument, and does not come standard with anti-foulant device cups and caps. Some customers, finding that they are using the 19plus in moored mode on occasion, choose to install anti-foulant device cups and caps. This procedure addresses retrofitting a 19plus with anti-foulant device cups and caps.

Note: This procedure can also be used to replace existing anti-foulant device cups and caps on an SBE 16plus.

Intake anti-foulant device cup

Exhaust anti-foulant device cap

Exhaust anti-foulant device cap (barbed) for pumped applications

Intake anti-foulant device cap for all applications and exhaust cap for non-pumped applications

Note:
- The larger diameter of the intake cap / exhaust cap for non-pumped applications helps maintain good flow through the conductivity cell and reduces growth of biological material. Do not use the barbed cap in its place.
1) On pumped applications, remove the Tygon tubing from the existing conductivity cell exhaust duct.

2) Remove the four Phillips-head screws attaching the conductivity cell guard to the instrument. Carefully remove the conductivity cell guard. (Note, the screws are different lengths. The long screws go through the cell guard and housing into the end cap and the short screws go through the guard directly into the end cap)

3) Exhaust
   a) On the conductivity cell guard, remove the two small screws attaching the exhaust duct to the guard.
   b) Remove the existing exhaust duct and replace with the exhaust anti-foulant device cup, reinstalling the two screws.
   c) See the SBE 19plus or 16plus manual (as applicable) for details on handling and installing the AF24173 Anti-Foulant Device.
   d) Install the Anti-Foulant device cap to secure the Anti-Foulant Device in the cup.

4) Intake
   a) Remove the two hex head screws attaching the existing intake duct to the end cap.
   b) Remove the existing intake duct, pulling it straight up to avoid damaging the temperature probe.
   c) Check to ensure that the o-ring at the end of the conductivity cell is still in place.
   d) Place the intake anti-foulant device cup over the temperature probe and reinstall the hex head screws.
   e) See the SBE 19plus or 16plus manual (as applicable) for details on handling and installing the AF24173 Anti-Foulant Device, or dummy.
   f) Install the Anti-Foulant device cap to secure the Anti-Foulant Device in the cup.
5) Check the exhaust end of the conductivity cell to ensure that the o-ring is still in place.

6) Reinstall the conductivity cell guard on the housing and end cap using the four Phillips-head screws.

7) If not deploying immediately, install a protective plug in the intake cap, and (for a non-pumped application) in the exhaust cap.

8) (for a pumped application) Reconnect the plumbing to the exhaust. Note that the barbed exhaust cap has a smaller diameter than the standard exhaust cap on the SBE 19plus (which does not accommodate Anti-Foulant Devices). When reconnecting the plumbing, place a 25 mm (1/2 inch) long piece of Tygon tubing, 9.5 mm (0.375 inch) ID, 1.59 mm (0.0625 inch) wall on the barbed cap. Then install the existing plumbing over the Tygon.

**NOTE:** When the instrument is returned to profiling applications it is recommended that the original intake and exhaust be reinstalled. If the unit will be used in both applications frequently the Anti-Foulant cups may be left installed, but should always either have P/N AF24173 Anti-Foulant devices or P/N 231515 Anti-Foulant Dummies installed to optimize the flow through the cell.
NO PUMP, NO AF24173 Anti-Foulant Devices
INSTALL NOTHING

PUMP, NO AF24173 Anti-Foulant Devices
INSTALL 231790 ONLY

NO PUMP, WITH AF24173 Anti-Foulant Devices
INSTALL 233544 & 233540

PUMP, WITH AF24173 Anti-Foulant Devices
INSTALL 233545, 233538

NO PUMP, NO AF24173 Anti-Foulant Devices
INSTALL NOTHING

PUMP, NO AF24173 Anti-Foulant Devices
INSTALL 231790 ONLY

NO PUMP, WITH AF24173 Anti-Foulant Devices
INSTALL 233544, 2335640

PUMP, WITH AF24173 Anti-Foulant Devices
INSTALL 233545, 233538