



# SEA-BIRD ELECTRONICS, INC.

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SBE P/N 50288/50288.1

DATE	SYM	REVISION RECORD	AUTH	DR	CHK
12.03	A	Added reference to AF24173	CB	MJ	
06.03	B	PN 231071 Usage revised	DB	MJ	
09.04	C	Added AF24173 Anti-Foulant Cylinders	DB	MJ	
09.04	D	AF24173 is Optional	MJ	KH	
09.06	E	Update AF24173 Part Number	MJ	CB	CB

## SBE19plus Moored Mode Conversion Kit w/ or w/o Anti-Foulant

### Kit Contents

SBE P/N	Description	Primary SBE Application	QTY
231071	Anti-Foulant Device Cap, with Barb	For both ports, when pump is installed	2
231505	Anti-Foulant Device Cap, No Barb	For exhaust port, when no pump is installed	1
231863	SeacatPLUS TC-Duct/ Anti-Foulant Device Cup	For use when AF24173 Anti-Foulant Devices are installed	1
231864	SeacatPLUS Exhaust/ Anti-Foulant Device Cup	For use when AF24173 Anti-Foulant Devices are installed	1
231904	SeacatPLUS Temp Probe Retainer	For use when NO AF24173 Anti-Foulant Devices OR Pumps are installed	1
30514	Machine Screw, 8-32 x 1/2 PH TI	To secure Temp Probe retainer to endcap	2
801542*	AF24173 Anti-Foulant Device	Anti-Foulant cylinders installed in cup parts	1 pair

\*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 cup



Hole for thermistor

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.

SBE DRAWING: 67114B, imbedded photos

TITLE: SeacatPLUS Moored Mode Conversion Kit

REV:

### Sea-Bird Electronics Procedure

PROCEDURE NUMBER: 67114

TITLE: **SBE PN 50288, SeacatPLUS Moored Mode Kit**

REVISION: E

EFFECTIVE DATE: 09/28/2006

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1. On pumped applications, remove the Tygon tubing from the existing conductivity cell exhaust duct. When there is not a pump, an Anti-Foulant Dummy #231515 must be used or the kit shall not be used at all.

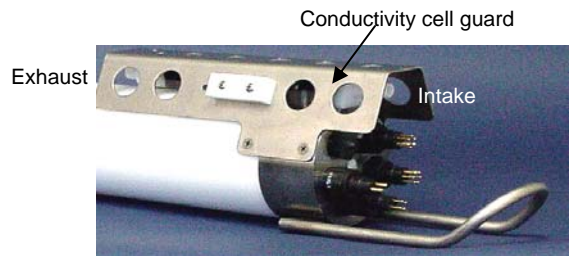
2. Remove the four Phillips-head screws attaching the conductivity cell guard to the housing and end cap. Remove the conductivity cell guard.

3. Exhaust -

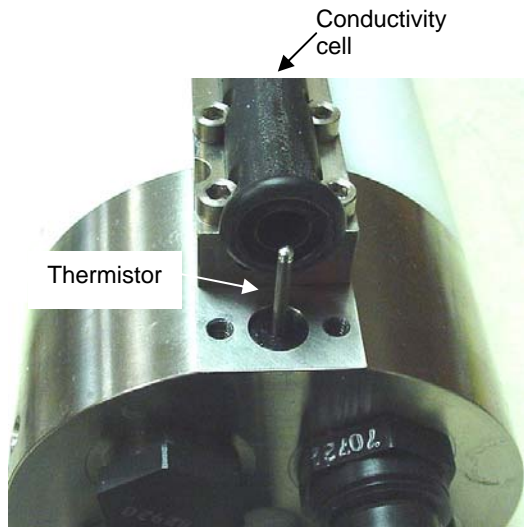
- A. On the conductivity cell guard, remove the two small screws attaching the exhaust duct to the guard.
- B. Remove the existing exhaust duct and replace with the exhaust anti-foulant device cup, reinstalling the two screws.
- C. See the SBE 19*plus* or 16*plus* manual (as applicable) for details on 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 -

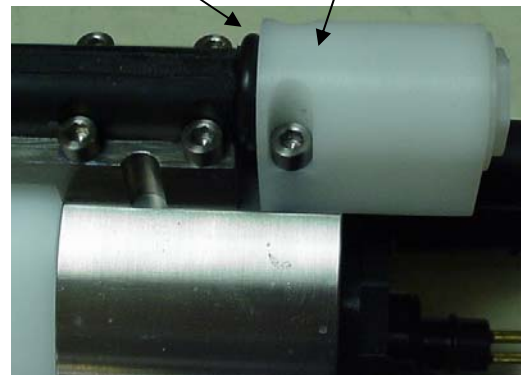
- A. Remove the two hex head screws attaching the existing intake duct to the end cap.
- B. Remove the existing intake duct, pulling it straight up to avoid damaging the thermistor.
- C. Check to ensure that the o-ring at the end of the conductivity cell is still in place.
- D. Place the intake anti-foulant device cup over the thermistor and reinstall the hex head screws.
- E. See the SBE 19*plus* or 16*plus* 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.



Exhaust anti-foulant device cup



O-ring (typical both ends of conductivity cell) Intake anti-foulant device cup



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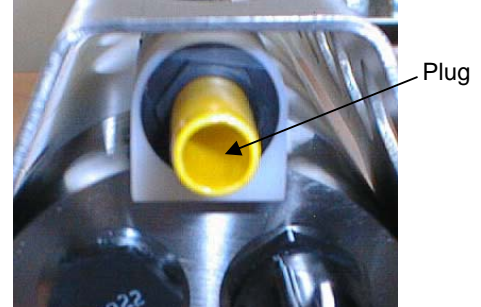
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5. Check the exhaust end of the conductivity cell to ensure that the o-ring is still in place.
6. Reinstall the conductivity cell guard on the housing and end cap using the four Phillips-head screws.

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 19*plus* (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.

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