



SEA-BIRD ELECTRONICS, INC.

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DATE	SYM	REVISION RECORD	AUTH	DR	CHK

SBE P/N 50236

SBE Seacat Profiler TC Duct Kit

ALUMINUM ENDCAP KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
23842	Profiler TC Duct	Primary Celcon Ductwork Part	1
30151	Machine Screw, 6-32 x 1 PH	Secures Assembly to Profiler, Replaces existing, shorter screw	1
30383	Tygon Tube, 1/4ID x 1/8 Wall	Connector Fitting tube for Duct to Polyethylene	1"
30384	Tygon Tube, 7/16 x 1/16 Wall	Connector Fitting for Duct to Cell	1/4"
30814	Morrison Seal, .026"ID x .24	Connector Seal for Duct to Temp probe	1
30955	Polyethylene Tubing, 1/4" OD	Main Ductwork Tubing	2"

TITANIUM ENDCAP KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
23850	SEACAT T/C Duct, TI	Primary Celcon Ductwork Part	1
30383	Tygon Tube, 1/4ID x 1/8 Wall	Connector Fitting tube for Duct to Polyethylene	1"
30384	Tygon Tube, 7/16 x 1/16 Wall	Connector Fitting for Duct to Cell	1/4"
30814	Morrison Seal, .026"ID x .24	Connector Seal for Duct to Temp probe	1
30955	Polyethylene Tubing, 1/4" OD	Main Ductwork Tubing	2"

Duct And Plumbing Assembly

- In general, TC-Ducts will be pre-assembled at Sea-Bird.
 - Duct assembly is fairly precise, and all of the factors may not be obvious to all users.
 - If the ducts are not assembled already, please follow these directions.
- Cut lengths of the three tubing types as outlined above.
- The shortest piece should be dipped in some alcohol then fitted into one end of the widest piece.
- Bend the long piece.
 - Use a strong cable or wire that completely fills the inside diameter of the tubing.
 - Use a heat gun to heat the tubing until it is pliable.
 - Bend to 180°, leaving about a 3/4" radius.
 - While still hot, test exact size by laying against the cell/temp probe of your Seacat.
 - Holding the form in shape, dip the assembly into some cold water to force fast cooling, and help it to hold its shape.
- Fit the first assembly onto the long piece as follows:
 - Inner portion first.

SBE DRAWING: imbedded photo

TITLE: SBE16/19 TC-Duct, Installed

REV:

Sea-Bird Electronics Procedure

PROCEDURE NUMBER: 67088

TITLE: SBE16/19 TC Duct Kit Installation

REVISION: B

EFFECTIVE DATE: 11/08/2002

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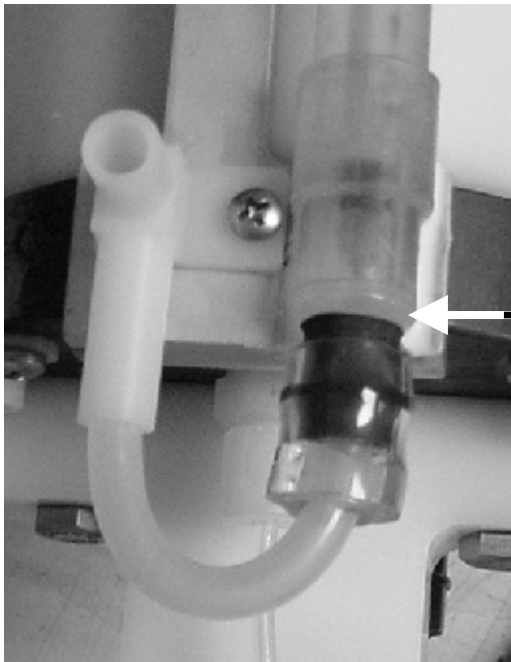
- b. Slide onto the long piece until ends of both parts are flush.
- c. Very carefully insert into the cell. If the inner tubing is going to contact the cell electrode, you will need to shorten it.
 - *Pull the inner tubing back slightly.*
 - *If the outer tubing becomes excessively long, you may shorten it a little.*
- d. Once the fit is good, slide the assembly back into the cell.

Final Duct Installation

1. VERY CAREFULLY press temp probe region over probe.
 - a. This is a tight fit.
 - b. Do not bend the probe during this install.
2. VERY CAREFULLY insert long end of tubing into cell end, by turning the assembly first away from the cell, then back.
3. Watch carefully, to make sure inner tubing does not push hard against the cell walls.
4. It is IMPERATIVE that the end of the tubing does not come into contact with the first electrode.
5. If you are encountering much resistance, the fit is probably not quite right, and should be modified.
6. Once duct is comfortably seated into position, you may secure it to the endcap.

For Aluminum Endcaps/Housing

 - a. Use the stainless steel (SS) screw provided.
 - b. Hence, you need to coat each screw with NeverSeez, or another Graphite lubricant, so that screws do not bind to the endcap material.



Location of end of inner tubing



Sea-Bird will not be held responsible for damage to cells due to TC-Duct installation.

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