



# SEA-BIRD ELECTRONICS, INC.

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SBE P/N 60037

DATE	REV	REVISION RECORD	AUTH	DR	CHK
10/6/04	B	Changed Loctite to JB Weld	CB	KLP	
11/3/04	C	Added Slow profiling exhaust tee	CB	KLP	

## SBE 49 FastCaT Spare Hardware and O-Ring Kit

### KIT CONTENTS

SBE P/N	Manufacturer Description	Primary SBE Application	QTY
231408	Alace Pump Exhaust Tee	Exhaust Tee	1
30132	Mach Screw, 4-40 x 3/4" FH SS	Secures exhaust tee	1
31081	Mach screw, 4-40 x 1/2 SH SS	Retaining Rod screw	1
30389	4" Cable tie	Holds tubing to exhaust tee	4
30857	Parker, 2-033E515-70	O-Rings for both endcaps	4
30859	Mach Screw, 8-32 x 3/8" FH Ti	Secure endcaps to Housing	5
30947	Mach Screw, 2-56 x 1/2 FH SS	Secures AF24173 Antifoulant Device Chamber top on sensor head	2
30992	Mach Screw, 2-56 x 5/8 PH Phillip SS	Holds V2 Duct on	4
31076	O-ring, Parker 2-003 E515-80	Seal for V2 screws	4
31182	O-ring, NAS1611-021 Ethylene Propylene	Goes under V2 duct to form seal	1

### A. Retaining Rod Screw Replacement

1. If this screw (31081) should come loose from the retaining rod, you may replace it.
2. Run a 4-40 bottom tap about 1/4" into the rod to clean out old JB Weld.
3. Use JB Weld to fasten the new screw into the rod.
4. Hold rod tight in a vise, but be sure not to bend it, and thread the screw tight.

### B. Sensor Head TC-Duct Hardware Replacement (Version 1)

1. PN 30947 screws may be used to replace the existing screws. It is recommended to use Loctite or RTV glue to assist in holding the screw tight.
2. Be very careful working with these screws. It takes little force to strip the 2-56 threads in Celcon pieces.
3. In general, there is no need to replace these screws. You may continue to use existing screws if they aren't worn out.

### C. Sensor Head TC-Duct Hardware Replacement (Version 2)

1. For the V2 cap use the PN 30992 screws with the PN 31076 o-rings around them
2. The PN31182 o-ring is sandwiched between the two pieces to form a seal.

### D. Removing an Endcap

1. Remove the 2 titanium screws (30859) that secure endcap to housing.
2. Carefully pull endcap free. *You may want to wear gloves.*

Endcaps are often very difficult to remove, so if they are necessary there are two notches on the housing to aid in its removal. A flathead screwdriver can be used in these notches to maneuver the endcap out a little. Alternate from notch to notch pushing the endcap out a little at a time; the

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endcap needs to come straight off - if one side comes up significantly more than the other than the placement pin could bend or the o-ring could be damaged and ruin the seal.

### E. Re-Installing an Endcap

1. Endcaps have pins or notches to enforce alignment of endcaps to housings.
  - a. Please check your equipment before re-installing the endcaps.
  - b. It should not require much force to get the endcap on. If it does, try removing it, and putting it on again, as it is possibly not straight.
2. Make sure O-Rings (30857) are lubricated properly, and show no signs of any wear at all.
3. Replace any bad O-Rings. Clean with a static-free wipe, and lubricate with silicon O-Ring Lube.
4. Slide endcap carefully onto housing.
  - a. *DO NOT TILT OR OFFSET ENDCAP, as it will bind.*
  - b. Make sure screw holes on endcap line up with screw holes on the housing.
5. Secure the endcap with the two Flathead titanium screws.

### F. Replacing Exhaust Tee

1. Remove the 4-40 screw holding the current exhaust duct in place at the end of the guard.
2. Cut off the cable tie holding the duct tube to the exhaust tee.
3. Remove the exhaust tee from the tubing
4. Insert the Exhaust Tee for slow profiling applications into the tube
5. Secure cable tie around hose.
6. Attach the new exhaust tee to the housing using the same screw that has holding the old tee on.

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