

SEA-BIRD ELECTRONICS, INC.

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SBE P/N 60034

DATE	SYM	REVISION RECORD	AUTH	DR	CHK
04.99	А	Added parts, Instructions	MJ	DW	CEG
09.99	В	Added reference for SBE 44	MJ	MG	CEG
09.03	С	Correct quantity on one screw	DB	MJ	
11.03	D	Added part 30544	CB	KLP	
12.03	E	Removed PN 30123 & 30243	CB	KLP	
2.06	F	Correct 31040 screw length	CB	CB	

SBE 37MSI Spare Hardware and O-Ring Kit

KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
30544	Mach Screw 8/32 x ¹ / ₂ FH Ti	Secures cell guard to housing	2
30633	Washer, ¼" Split ring lock, Ti	For mounting clamps	4
30634	Washer, ¼" flat, Ti	For mounting Clamps	4
30857	Parker, 2-033E515-70	Connector Endcap O-Rings	2
30859	Mach Screw, 8-32 x 3/8" FH Ti	Secures connector endcap to Housing	2
30860	Screw, 6-32 x 1/2" FH Ti	Hold cable clamp half to flat area of sensor endcap	1
30900	Bolt, ¹ / ₄ -20 x 2" Hex Ti	Secure mount clamps to Housing	2
31019	O-ring, Parker, 2-008	Retains Mounting Hardware	4
31040	Screw, 8-32 x 1" FH Ti	Secures Cable Clamp to Connector Endcap	3

A. Retaining Rod Screw Replacement

- 1. If this screw (30123) should come loose from the retaining rod, you may replace it.
- 2. Run a 4-40 bottom tap about $\frac{1}{4}$ " into the rod to clean out the old Loctite.
- 3. Use Loctite primer and permanent Loctite to fasten the new screw into the rod.
 JB-Weld can be used instead of the permanent Loctite.
- 4. Hold rod tight in a vise, but be sure not to bend it, and thread the screw tight.
 - Don't tighten the vise down over the threads.

<u>Removing and Replacing Connector Endcap</u>

A. Removing the Microcat's Endcap

- 1. Remove the 2 titanium screws (30859) that secure the endcap to the housing.
- 2. Carefully pull the endcap free.
 - Endcaps are often very difficult to remove.
 - You may want to wear gloves for a better grip.
 - Under NO CIRCUMSTANCES should you use anything, especially something metal, to pry the endcap off of the housing.

B. Re-Installing the Microcat Endcap

- 1. Make sure o-rings (30857) are properly lubricated, and don't show any signs of damage.
 - a. Replace any bad o-rings at this time.
 - b. Clean with a static-free wipe, and lubricate with a silicone based lubricant like Parker Super-O.
- 2. Slide the endcap carefully onto the housing.

Sea-Bird Electronics Procedure					
PROCEDURE NUMBER: 670	091				
TITLE: SBE 37 MSI Spare F	Hardware & O-Ring Kit				
REVISION: F					
EFFECTIVE DATE: 2/14/200	6				
CHECKED BY:	PAGE 1 of 2				



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- a. DO NOT TILT OR OFFSET THE ENDCAP, as it will bind during installation.
- b. Make sure the screw holes on the endcap line up with the screw holes on the sensor guard.
- 3. Secure the endcap with the two Flathead titanium screws.

<u>Removing and Replacing Cable Clamps</u>

A. Connector Endcap

- 1. Install the clamp onto the clamp mount
 - a. Insert one lock washer (30633) and one flat washer (30634) onto each of the two bolts (30900).
 - b. Insert one bolt through each hole on the flat side of the clamp.
 - c. Slide one o-ring (31019) over each bolt.
 - d. Secure the clamp to the base with these bolts.
 - The o-rings sit in the internal countersinks on the blocks.
- 2. Install the assembly onto the connector endcap
 - a. The assembly secures to the endcap so that the clamp end points to the side opposite the cell guard.
 - b. Secure with three screws (31040)
 - Use Never-Seez on the screws.

B. The Sensor Endcap

- 1. Install the hardware into the upper clamp part
 - a. Insert one lock washer (30633) and one flat washer (30634) onto each of the two bolts (30900).
 - b. Insert the screws from the flat side of the block.
 - c. Slide one o-ring (31019) onto each bolt.
 - d. Secure the clamp to the base with these bolts.
 - The o-rings sit in internal countersinks on the blocks.
- 2. Install lower clamp part onto microcat
 - a. The lower clamp sits into a notch in the endcap, and is secured with one screw (30860).
 - b. It is not necessary to use a lubricant; however DC-4 may be applied.
- 3. Assemble the clamp parts
 - a. Screw the upper part into the lower part.
 - Use Never-Seez on the screws.

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