



SEA-BIRD ELECTRONICS, INC.

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SBE P/N 60051

| DATE | SYM | REVISION RECORD | AUTH | DR | CHK |
|----------|-----|--|------|----|-----|
| 06/02/10 | A | Changed title to reflect plastic housing | DB | PC | |
| 01/14/14 | B | Update 31040 description | CB | CB | |
| | | | | | |

SBE 37MSI with Plastic Housing 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, 1/4" Split ring lock, Ti | For mounting clamps | 4 |
| 30634 | Washer, 1/4" 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 guide to connector endcap | 3 |
| 31516 | Hex Key, 9/64" Long Arm, DoALL AHT58010 | Tool for servicing cap screw | 1 |
| 31755 | Cap Screw, 8-32 X 1/4" SH, Titanium | Secures connector endcap to housing | 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 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.*

Removing and Replacing Connector Endcap

A. Removing the Microcat's Endcap

1. Remove the 2 titanium screws (31755) that secure the endcap to the housing using the hex key (31516).
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.*

Sea-Bird Electronics Procedure

PROCEDURE NUMBER: 67204

TITLE: SBE 37 MSI with Plastic Housing Spare
Hardware & O-Ring Kit

REVISION: B

EFFECTIVE DATE: 01/14/2014

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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.
 - 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 titanium cap screws.

Removing and Replacing Cable Clamps

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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