SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington 98005 USA
Telephone: (425) 643-9866   Telex: 292915 SBEI UR
Fax: (425) 643-9954   email: seabird@seabird.com

SBE P/N 60050

DATE	SYM	REVISION RECORD	AUTH	DR	CHK

Spare Hardware and O-Ring Kit
For SBE 37 Modular Microcat

KIT CONTENTS

SBE P/N	Manufacturer P/N	Primary SBE Application	QTY
30544	Mach screw, 8-32 x ½", FH, Ti	For Securing 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	O-Ring, Parker 2-033E515-80	Battery Endcap O-Rings	2
30858	O-ring, Parker 2-133 N674-70	Battery Pack End Cap O-ring	1
30859	Mach Screw, 8-32 x 3/8", FH Ti	Secures Battery endcap to Housing	2
30900	Bolt, ¼-20 x 2" Hex Ti	Secure mount clamps to Housing	2
31019	O-ring, Parker, 2-008	Retains Mounting Hardware	4
31322	O-ring, Parker 2-130 N674-70	Battery Pack Housing O-rings	2
31749	Hex Key, 7/64" Long Arm, DoAll BDH12106	Tool for securing battery pack	1

Removing and Replacing the Cable Mount Clamps

A. At the Connector Endcap End
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 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*

B. At the other 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 the lower clamp part into the Microcat.

SBE DRAWING:

TITLE: SBE 37 IM Battery Pack Replacement

REV:

Sea-Bird Electronics Procedure
PROCEDURE NUMBER: **67202**
TITLE: **SBE 37 MIM V2 Spare Hardware & O-Ring Kit**
REVISION:
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   a. Lower clamp set into the endcap notch, 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.
   b. It is not necessary to use a lubricant; however DC-4 may be applied.

Removing and Replacing Battery Endcap

C. Removing Microcat 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 any thing, especially anything metal, to pry the endcap off of the housing.*

D. Re-Installing the Microcat Endcap
   1. Make sure the 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 into 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 Flathead titanium screws

Removing and Installing Battery Pack

A. Removing battery pack assembly from SBE 37
   1. Unscrew the cap screw in the center of the battery pack using a 7/64" hex key (31749)
   2. Use handle to slide battery pack out of housing.

B. Re-Installing battery pack into SBE 37
   1. Look inside the battery pack chamber to see how to align the pack.
   2. Carefully slide the pack into the housing.
   3. When the pack "bottoms out," make sure it is aligned properly, and that the pins on the underside of the pack are all firmly seated into the receiving plate in housing.
   4. Secure the pack with the cap screw in the center of the battery pack.
   5. Re-secure the endcap with the two titanium screws.

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Installing and Replacing Batteries in the Pack

A. Install the Batteries

1. Unscrew the battery pack end cap using a 7/64 hex key (31749) and set it aside.
2. If unit has previously been in service, it is a good idea to use the spare kit to replace the endcap (30858) and housing (31322) o-rings.
   - *Always check the o-rings carefully for any damage and replace any that are worn.*
   - *Never use an o-ring that shows any signs of any damage.*
   - *Lubricant is not required for any of the o-rings on the battery pack.*
3. Install the batteries one-by-one into the slots in the battery pack.
   - *Following the stickers on the battery pack housing, the positive terminal of each battery should face the "bottom" of the pack.*
4. Mate the ground return pin on the battery pack endcap with the ground return in the battery pack housing.
5. Gently screw the end cap into the housing using the handle.
6. Tighten the end cap down using a 7/64" hex key (31749)

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