



Sea-Bird Electronics, Inc.
13431 NE 20th Street
Bellevue, WA 98005
USA

Phone: (425) 643-9866
Fax: (425) 643-9954
E-mail: seabird@seabird.com
Web: www.seabird.com

Field Service Bulletin No. 12

May 2007

Retrofit for SBE 39s with Firmware Version 2.0 through 2.2

Equipment Affected

All SBE 39s with firmware version 2.0 through 2.2; the firmware version is shown on the first line of the SBE 39's status command (DS) response. These units fall *roughly* in the range of serial numbers 1251 to 3403, but there are exceptions. The firmware version is the definitive factor.

Notes:

- This Field Service Bulletin does **not** apply to SBE 39s with firmware version less than 2.0 or firmware version 3.0 or greater.
- This Field Service Bulletin does **not** apply to the SBE 39-IM (SBE 39 with inductive modem interface).

Description of Problem

There is a **potential** for a short between the battery + and – power, causing premature battery failure. **At this time, Sea-Bird is aware of only one failure caused by this problem.** However, there is a possibility that a few other problems reported by customers may have been caused by this known failure mode.

Solution

A design change, involving modification of a mechanical piece, has been implemented to prevent this failure.

Sea-Bird is retrofitting all instruments with this potential problem. Installation requires substantial disassembly of the electronics. It is not recommended that this retrofit be performed in the field.

Corrective Action by Sea-Bird

These instruments are still covered under our 5-year warranty, and Sea-Bird will perform the modifications at no charge under normal warranty conditions (see www.seabird.com/customer_support/warranty.htm for details). As part of this service, Sea-Bird will also calibrate the temperature sensor on these instruments at no charge.

As noted above, we are aware of only one failure caused by this problem. To determine if your instrument may be affected, review battery life vs. expected battery life for your most recent deployments (see the *Battery Endurance* topic in *Section 2: Description of SBE 39* in the SBE 39 manual for details on calculating expected battery life for your selected sampling scheme).

- If the batteries provided power for less than 50% of the expected life (an indication of premature battery failure), we recommend that you return the instrument to Sea-Bird for retrofitting before its next deployment.
- If there is no indication that premature battery failure is occurring, we recommend that you return the instrument to Sea-Bird when convenient (i.e., when you are ready to send the instrument in for calibration or for other repairs).

Please contact Sea-Bird for an RMA number before sending the instrument.