

13431 NE 20th Street Bellevue, WA 98005 United States Phone +1-425-643-9866

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1005515729

14-JUN-2022 320177193

#### SERVICE REPORT

## **CUSTOMER INFORMATION**

Name: NOAA - ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB

Account: 40279759 **GRANT RAWSON** 

GRANT.RAWSON@NOAA.GOV

(305) 361-4363

**Bill To Address** 

NOAA - ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB 4301 RICKENBACKER CAUSEWAY MIAMI,FL,33149,US

**Ship To Address** 

NOAA - ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB 4301 RICKENBACKER CAUSEWAY MIAMI,FL,33149,US

**Service Request** 

PO Number:

1333MJ22FNRMA0011

Sales Order

**Date** 

#### PRODUCT INFORMATION

Item: 09P.1J100

Item Description: SBE 9PLUS CAL LEVEL, AL, 10K DIGI, XSG

**Serial:** 09-1292

**Special Notes** 

Services Requested:

CONCERT9B

**CUSTOMER NOTES: Pressure Calibration** 

Services Performed:

Perform initial diagnostic evaluation. Performed pressure calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Replaced the anodes.

Item	Item Description	Qty
CONCERT9B	Confirm and recertify SBE 9plus. Includes opening main housing, replacing end cap "piston" o-rings and making minor internal repairs or modifications. Complete external inspection. Test all functions and input channel responses. Replace anodes if necessary. Cross-check pressure sensor (room temperature comparison to SBE reference Digiquartz giving new slope/offset coefficients). Hydrostatic pressure test and water bath check following closure. Cost of sensor calibrations, major repairs or modifications is extra.	1

Item	Item Description	Qty
30044	SEACAT ANODE, 1" DIA., G1050	3



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#### **SERVICE REPORT**

#### PRODUCT INFORMATION

Item: 09P.LEGACY

Item Description: (LEGACY) SBE 09Plus CTD

Serial: 09P79223-1207

**Special Notes** Services Requested: CONCERT9B

CUSTOMER NOTES: Pressure calibration, Comm issue with unit, not able to establish comms

Services Performed:

Perform initial diagnostic evaluation. Performed pressure calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Replaced the anodes.

Item	Item Description	Qty
CONCERT9B	Confirm and recertify SBE 9plus. Includes opening main housing, replacing end cap "piston" o-rings and making minor internal repairs or modifications. Complete external inspection. Test all functions and input channel responses. Replace anodes if necessary. Cross-check pressure sensor (room temperature comparison to SBE reference Digiquartz giving new slope/offset coefficients). Hydrostatic pressure test and water bath check following closure. Cost of sensor calibrations, major repairs or modifications is extra.	1

Item	Item Description	Qty
30044	SEACAT ANODE, 1" DIA., G1050	3



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# SERVICE REPORT

#### PRODUCT INFORMATION

Item: 09P.1J100

Item Description: SBE 9PLUS CAL LEVEL, AL, 10K DIGI, XSG

**Serial:** 09-1335

**Special Notes**Services Requested:
CONCERT9B

**CUSTOMER NOTES: Pressure Calibration** 

Services Performed:

Perform initial diagnostic evaluation. Performed pressure calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Replaced the anodes.

Item	Item Description	Qty
CONCERT9B	Confirm and recertify SBE 9plus. Includes opening main housing, replacing end cap "piston" o-rings and making minor internal repairs or modifications. Complete external inspection. Test all functions and input channel responses. Replace anodes if necessary. Cross-check pressure sensor (room temperature comparison to SBE reference Digiquartz giving new slope/offset coefficients). Hydrostatic pressure test and water bath check following closure. Cost of sensor calibrations, major repairs or modifications is extra.	1

Item	Item Description	Qty
30044	SEACAT ANODE, 1" DIA., G1050	3



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## **SERVICE REPORT**

#### PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432083

Special Notes
Services Requested:

CAL\_43

Problems Found:

The membrane was found to be damaged.

Services Performed:

Perform initial diagnostic evaluation.

Replaced the lid and membrane assembly (0.5 mil).

Replaced the electrolyte with new fluid.

Replaced the lithium back-up battery(s).

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Item Description	Qty
SBE 43 dissolved oxygen sensor calibration	1

Item	Item Description	Qty
801576	SBE43 LID & MEMBRANE SUB-ASSY, .5MIL MEMBRANE	1
22085	BATTERY, SANYO CR14250SE-SP1-1, 850 mA-h	2



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## **SERVICE REPORT**

#### PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432082

Special Notes Services Requested:

CAL\_43

Problems Found:

The anode sub assembly was found to have failed.

Services Performed:

Perform initial diagnostic evaluation.

Replaced the SBE 43 Anode sub assembly.

Replaced the SBE 43 Getter sub assembly.

Replaced the lid and membrane assembly (0.5 mil).

Replaced the electrolyte with new fluid.

Replaced the lithium back-up battery(s).

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Item	Item Description	Qty
CAL_43	SBE 43 dissolved oxygen sensor calibration	1

Item	Item Description	Qty
801576	SBE43 LID & MEMBRANE SUB-ASSY, .5MIL MEMBRANE	1
801230	SBE43 ANODE SUB-ASSEMBLY / DWG 41092	1
801229	SBE43 GETTER SUB-ASSEMBLY / DWG 41091	1
22085	BATTERY, SANYO CR14250SE-SP1-1, 850 mA-h	2



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# SERVICE REPORT

#### PRODUCT INFORMATION

Item: 03P.210

Item Description: SBE3PLUS TEMP, GE PROBE, 6800M, XSG

**Serial:** 03P5898

**Special Notes**Services Requested:
CAL\_3

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_3	SBE 3 Temperature sensor calibration; 11 points -1 to 31deg.C	1

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Item	Item Description	Qty
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## **SERVICE REPORT**

#### PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

**Serial:** 432691

**Special Notes** Services Requested: CAL\_43

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_43	SBE 43 dissolved oxygen sensor calibration	1

Item	Item Description	Qty



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### **SERVICE REPORT**

### PRODUCT INFORMATION

Item: 03P.210

Item Description: SBE3PLUS TEMP, GE PROBE, 6800M, XSG

**Serial:** 03P5889

Special Notes
Services Requested:

CAL\_3

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_3	SBE 3 Temperature sensor calibration; 11 points -1 to 31deg.C	1

Item	Item Description	Qty



**SERVICE REPORT** 

# Sea-Bird Electronics, Inc.

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Service Request Date Sales Order 1005515729 14-JUN-2022 320177193

#### PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

**Serial:** 430140

Special Notes
Services Requested:

CAL\_43

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_43	SBE 43 dissolved oxygen sensor calibration	1

Item	Item Description	Qty



**SERVICE REPORT** 

# Sea-Bird Electronics, Inc.

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Service Request Date Sales Order 1005515729 14-JUN-2022 320177193

# PRODUCT INFORMATION

Item: 04C.210

Item Description: SBE4C COND SENSOR V2, 6800M, XSG, SCOTCHCAST

**Serial:** 04-4349

**Special Notes** Services Requested: CAL\_4C

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_4C	SBE 4C Conductivity Calibration for CTD sensors (includes 6-point 35 PSU post deployment cal., and C&P with 6-point 35 PSU re-cal, if necessary)	1

Item	Item Description	Qty



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# SERVICE REPORT

#### PRODUCT INFORMATION

Item: 04C.210

Item Description: SBE4C COND SENSOR V2, 6800M, XSG, SCOTCHCAST

**Serial:** 04-4346

Special Notes
Services Requested:

CAL\_4C

Services Performed:

Perform initial diagnostic evaluation. Performed "POST" cruise calibration.

Item	Item Description	Qty
CAL_4C	SBE 4C Conductivity Calibration for CTD sensors (includes 6-point 35 PSU post deployment cal., and C&P with 6-point 35 PSU re-cal, if necessary)	1

Item	Item Description	Qty