



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

Phone +1-425-643-9866
 Fax +1-425-643-9954
 www.seabird.com

SERVICE REPORT

Service Request 1005510203
Date 28-MAY-2020
Sales Order 316009092

CUSTOMER INFORMATION

Name: NOAA - ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LAB
 Account : 40279759

PO Number:
 IDIQ EA133M-15-CQ-0039(TASK
 1333MJ20FNRMA0011)

GRANT RAWSON
 GRANT.RAWSON@NOAA.GOV
 (305) 361-4363

Bill To Address
 4301 RICKENBACKER CAUSEWAY
 MIAMI,FL,33149,US

Ship To Address
 4301 RICKENBACKER CAUSEWAY
 MIAMI,FL,33149,US

CUSTOMER NOTES:

We are starting a new PO for Seabird calibrations. It should be approved before these sensors are ready to ship.

REQUESTED SERVICE DETAILS:

UPDATE FIRMWARE: Yes

REQUESTED TRANSACTION DETAILS:

PO NAME: PO Pending
 PAPER COPIES: Yes
 REQUESTED RETURN: 02-Mar-2020
 SPLIT SHIP: split

PRODUCT INFORMATION

Item: 09P.LEGACY
Item Description: (LEGACY) SBE 09Plus CTD
Serial: 09P54833-0957

Special Notes

Services Requested:
 Pressure Calibration

Problems Found:

The housing and bottom end cap have corrosion damage to the O-ring seating surface.
 The housing, bottom end cap, and associated bottom end cap require replacement.

Services Performed:

Perform initial diagnostic evaluation.
 Replaced the housing.
 Replaced the bottom end cap.
 Replaced the corresponding connectors.
 Performed pressure calibration.
 Replaced the O-rings.
 Performed a hydrostatic pressure test.

Item	Item Description	Qty
172268	CONN, MCBH-2-F, AL, 1/2-20, 3/8" TL	1



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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
233036C	SBE9plus BOTTOM ENDCAP, 7/16-20, HARDCOATED	1
23081HC	SBE9plus HOUSING, 6800M, HARDCOAT ONLY	1
17652	Bulkhead connector, 2-pin Standard, XSG-2-BCL-HP-SS	1
17653	Bulkhead connector, 3-pin Standard, XSG-3-BCL-HP-SS	4
BHCON	Extra charge to replace bulkhead connector (any sensor, pump or instrument). Cost of connector is additional (see price list).	1

Unbilled Items

Item	Item Description	Qty
50029	PRESSURE SENSOR CAPILLARY ASSEMBLY, SPARE	1



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PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 430703

Special Notes

Services Requested:
 Dissolved Oxygen Calibration

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

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 430140

Special Notes

Services Requested:
 Dissolved Oxygen Calibration

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

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 431348

Special Notes

Services Requested:
 Dissolved Oxygen Calibration

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

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 430154

Special Notes

Services Requested:
 Dissolved Oxygen Calibration

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

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY
Item Description: (LEGACY) SBE 03Plus Temperature Sensor
Serial: 03P5237

Special Notes

Services Requested:
 Temperature Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY
Item Description: (LEGACY) SBE 03Plus Temperature Sensor
Serial: 03P5236

Special Notes

Services Requested:
 Temperature Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY
Item Description: (LEGACY) SBE 03Plus Temperature Sensor
Serial: 03P2946

Special Notes

Services Requested:
 Temperature Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY
Item Description: (LEGACY) SBE 03Plus Temperature Sensor
Serial: 03P5233

Special Notes

Services Requested:
 Temperature Calibration

Problems Found:
 The sensor has drifted outside of specification and the temperature probe requires replacement.

Services Performed:
 Perform initial diagnostic evaluation.
 Performed "POST" cruise calibration.
 Replaced the temperature probe.
 Replaced the O-rings.
 Performed a hydrostatic pressure test.
 Performed a "Final" Calibration.

Item	Item Description	Qty
CAL_3	SBE 3 Temperature sensor calibration; 11 points -1 to 31deg.C	1
CONCERT/S	Confirm and recertify sensor including opening the main housing, replacing end cap "piston" o-rings, and making minor internal repairs or modifications. Hydrostatic pressure test following closure. Cost of major repairs or modifications is not included.	1
REP3PROB	Replace SBE 3 thermistor probe	1

Unbilled Items

Item	Item Description	Qty
80004	FAST TEMP 70 MS THERMISTOR PROBE ASSEMBLY	1



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PRODUCT INFORMATION

Item: 03P.210
Item Description: SBE3PLUS TEMP, GE PROBE, 6800M, XSG
Serial: 03-5348

Special Notes

Services Requested:
 Temperature Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY
Item Description: (LEGACY) SBE 03Plus Temperature Sensor
Serial: 03P2958

Special Notes

Services Requested:
 Temperature Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.210
Item Description: SBE4C COND SENSOR V2, 6800M, XSG, SCOTCHCAST
Serial: 044223

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY
Item Description: (LEGACY) SBE 04C Conductivity Sensor
Serial: 043833

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY
Item Description: (LEGACY) SBE 04C Conductivity Sensor
Serial: 043657

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY
Item Description: (LEGACY) SBE 04C Conductivity Sensor
Serial: 043861

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.210
Item Description: SBE4C COND SENSOR V2, 6800M, XSG, SCOTCHCAST
Serial: 044222

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.210
Item Description: SBE4C COND SENSOR V2, 6800M, XSG, SCOTCHCAST
Serial: 044204

Special Notes

Services Requested:
 Conductivity Calibration

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

Unbilled Items

Item	Item Description	Qty