



Sea-Bird Electronics, Inc.

13431 NE 20th Street
Bellevue, WA 98005 United States

(Do Not Send Payments To This Physical Address – See Remit to Information)

Phone

+1-425-643-9866

www.seabird.com

SERVICE REPORT

Service Request

1005518923

Date

08-NOV-2023

Sales Order

320741385

CUSTOMER INFORMATION

Name: NOAA - AMOL ATLANTIC OCEANOGRAPHIC and METEOROLOGICAL LAB

PO Number:

Account : 40279759

SEABIRD 1333MJ22FNRMA0017

GRANT RAWSON

GRANT.RAWSON@NOAA.GOV

(305) 361-4363

Bill To Address

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

Ship To Address

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

PRODUCT INFORMATION

Item: 03F.LEGACY

Item Description: (LEGACY) SBE 03F Temperature Sensor

Serial: 031692

Special Notes

Services Requested:

CAL_3

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.210

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

Serial: 03-5207

Special Notes

Services Requested:

CAL_3

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03P.LEGACY

Item Description: (LEGACY) SBE 03Plus Temperature Sensor

Serial: 03P5140

Special Notes

Services Requested:

CAL_3

Problems Found:

The temperature was found to have excessive drift.

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: 03F.LEGACY

Item Description: (LEGACY) SBE 03F Temperature Sensor

Serial: 031075

Special Notes

Services Requested:

CAL_3

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03F.LEGACY

Item Description: (LEGACY) SBE 03F Temperature Sensor

Serial: 031701

Special Notes

Services Requested:

CAL_3

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 03F.LEGACY

Item Description: (LEGACY) SBE 03F Temperature Sensor

Serial: 031609

Special Notes

Services Requested:

CAL_3

Problems Found:

The temperature was found to have excessive drift.

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: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 041374

Special Notes

Services Requested:

CAL_4C

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" 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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 041387

Special Notes

Services Requested:

CAL_4C

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" 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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 042980

Special Notes

Services Requested:
CAL_4C

Problems Found:
Internal water damage.

Services Performed:
Perform initial diagnostic evaluation.
Replaced the housing, conductivity cell, electronic board set, and anode.
Replaced the O-rings.
Performed a hydrostatic pressure test.
Performed a "Final" Calibration.

Item	Item Description	Qty

Unbilled Items

Item	Item Description	Qty
80994T	SBE-4 (ver. 2) conductivity electronics	1
80009.2	CONDUCTIVITY CELL, 6800M ALUMINUM ASSEMBLY	1
23548	Zinc anode ring (sensors with tubing connector)	1
23026C	SBE4 COND HOUSING 6800M, HARDCOATED	1
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



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 041335

Special Notes

Services Requested:

CAL_4C

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" 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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 041346

Special Notes

Services Requested:

CAL_4C

Problems Found:

Sensor was found to have internal water damage.

The housing, end cap, and conductivity cell require replacement.

Services Performed:

Perform initial diagnostic evaluation.

Replaced the housing, end cap, and conductivity cell.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Item	Item Description	Qty
23024C	SBE4 COND. ENDCAP 6800M, HARDCOATED	1
23026C	SBE4 COND HOUSING 6800M, HARDCOATED	1
REP4CEL/A	Replace broken SBE 4 cell (aluminum tray). Requires calibration	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
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
80009.2	CONDUCTIVITY CELL, 6800M ALUMINUM ASSEMBLY	1



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432082

Special Notes

Services Requested:

CAL_43

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432083

Special Notes

Services Requested:

CAL_43

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 43-2940

Special Notes

Services Requested:

CAL_43

CONCERT/S (requested by email)

No problems found:

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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
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

Unbilled Items

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432085

Special Notes

Services Requested:

CAL_43

Problems Found:

The membrane was found to be punctured.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

Replaced the lid and membrane assembly (0.5 mil).

Replaced the electrolyte with new fluid.

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

Unbilled Items

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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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 43-2934

Special Notes

Services Requested:

CAL_43

Problems Found:

The Anode/Getter 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 O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

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

Unbilled Items

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



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 432691

Special Notes

Services Requested:

CAL_43

CONCERT/S (requested by email)

No problems found.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

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
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

Unbilled Items

Item	Item Description	Qty