



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

CUSTOMER INFORMATION

Name: NOAA IRC
 Account : 40288197
 RUHUL AMIN
 RUHUL.AMIN@NOAA.GOV
 808-725-5633

PO Number:

Bill To Address

1845 WASP BLVD;BUILDING 176;
 Honolulu,HI,96818,US

Ship To Address

1845 WASP BLVD;BUILDING 176;
 Honolulu,HI,96818,US

PRODUCT INFORMATION

Item: 09P.LEGACY
Item Description: (LEGACY) SBE 09Plus CTD
Serial: 09P-92740

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

Services Performed:

Perform initial diagnostic evaluation.
 Performed pressure calibration.

Item	Item Description	Qty
CONCERT9A	Confirm and recertify SBE 9plus. 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.) Cost of sensor calibrations, major repairs or modifications is extra.	1

Unbilled Items

Item	Item Description	Qty



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: 04C.LEGACY
Item Description: (LEGACY) SBE 04C Conductivity Sensor
Serial: 0652

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

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



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: 03F.LEGACY
Item Description: (LEGACY) SBE 03F Temperature Sensor
Serial: 975

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

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



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 430715

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

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



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: 43.LEGACY
Item Description: (LEGACY) SBE 43 Oxygen Sensor
Serial: 430593

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

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



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: ECO.LEGACY
Item Description: (LEGACY) ECO (FLRTD-XXX, BBFL2-XXX, BB2FL-XXX..ETC)
Serial: FLRTD-1366

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

ECO Calibration and Repairs

Diagnosis:
 Evaluated instrument FLRTD-1366 and found no problems.

Repairs and Modifications:

Standard service performed.

Comments:

New Device file and characterization sheets included.

ECO Standard Service:

The instrument bulkhead connector, pressure housing and window\optics are inspected for damage. Instrument is checked to determine proper functionality. Incoming settings and memory are collected if incoming condition allows. A pre-service characterization is performed. Data is analyzed and Instrument is rescaled, if applicable. The head is inspected for cracks in detector and motor bores. Case seals, shaft, shaft seal, faceplate, wiper, desiccant pack and batteries (if equipped) are replaced. Noise, stability, and live pressure test is performed. Final calibration and characterization is completed. Including calibration of thermistor and pressure sensor, if equipped. A device file, repair sheet, and new characterization sheets are provided to customer via hard copy and CD.

Item	Item Description	Qty
WET_SRV_CHRG	Service Charges from WETLabs (FRRF)	1

Unbilled Items

Item	Item Description	Qty



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

Phone
 Fax

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

SERVICE REPORT

Service Request
Date
Sales Order

1005506497
 29-JAN-2019
 315385666

PRODUCT INFORMATION

Item: ECO.LEGACY
Item Description: (LEGACY) ECO (FLRTD-XXX, BBFL2-XXX, BB2FL-XXX..ETC)
Serial: FLNTURTD-4108

Special Notes

Services Requested:
 Evaluate/Repair Instrumentation.
 Perform Routine Calibration Service.

ECO Calibration and Repairs

Diagnosis:
 Evaluated instrument FLNTURTD-4108 and found no problems.

Repairs and Modifications:

Standard service performed.

Comments:

New Device file and characterization sheets included.

ECO Standard Service:

The instrument bulkhead connector, pressure housing and window\optics are inspected for damage. Instrument is checked to determine proper functionality. Incoming settings and memory are collected if incoming condition allows. A pre-service characterization is performed. Data is analyzed and Instrument is rescaled, if applicable. The head is inspected for cracks in detector and motor bores. Case seals, shaft, shaft seal, faceplate, wiper, desiccant pack and batteries (if equipped) are replaced. Noise, stability, and live pressure test is performed. Final calibration and characterization is completed. Including calibration of thermistor and pressure sensor, if equipped. A device file, repair sheet, and new characterization sheets are provided to customer via hard copy and CD.

Item	Item Description	Qty
WET_SRV_CHRG	Service Charges from WETLabs (FRRF)	1

Unbilled Items

Item	Item Description	Qty