

**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****1005518210****Date****07-AUG-2023****Sales Order****320635377****CUSTOMER INFORMATION**

Name: NOAA - PMEL PACIFIC MARINE ENVIRO LAB

Account : 40299841

DAVID STRAUZ

DAVID.STRAUSZ@NOAA.GOV

1-206-526-4510

PO Number:

1333MJ23FNRMA0011

Bill To Address

NOAA - PMEL PACIFIC MARINE ENVIRO LAB
7600 SAND POINT WAY NE
SEATTLE,WA,98115,US

Ship To Address

NOAA - PMEL PACIFIC MARINE ENVIRO LAB
7600 SAND POINT WAY NE
SEATTLE,WA,98115,US

PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM25541-1866

Special Notes

Services Requested:

Service37

Problems Found:

Found residuals in bad condition, had to resolder connections. Replaced cell & o-rings.

Services Performed:

Performed initial diagnostic evaluation.

Performed pressure calibration.

Performed "POST" cruise calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

Item	Item Description	Qty
SERVICE37	Complete External Inspection. Test All Functions. Calibrate C & T, C&P and recal if necessary. Replace end cap O-rings and Hydrostatic pressure test if necessary. Includes typical repairs. (Does not include: Major electronic board replacement. Instruments deemed "Damaged Beyond Repair". Missing/damaged mounts or cables. Upgrades or modifications. Spares or antifoulant replacement.)	1
REPLACEAF	Extra charge to install one antifoulant device, includes one 801542.1.	2

Unbilled Items

Item	Item Description	Qty
801139	MODULAR MICROCAT COND. CELL TRAY ASSEMBLY	1
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2

**Sea-Bird Electronics, Inc.**

13431 NE 20th Street
Bellevue, WA 98005 United States

Phone

+1-425-643-9866

www.seabird.com

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

SERVICE REPORT**Service Request****1005518210****Date**

07-AUG-2023

Sales Order

320635377

PRODUCT INFORMATION**Item:** ECO.LEGACY**Item Description:** (LEGACY) ECO Single Channel**Serial:** FLSB-194**Special Notes**

ECO Calibration and Repairs

Diagnosis:

Evaluated instrument (FLSB-194) and found it was out of spec.

Repairs and Modifications:

Retuned and standard service performed including new processor and bulkhead replacement.

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.

If applicable, a pre-service characterization is performed. Data is analyzed and Instrument is rescaled.

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 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 USB.

Item	Item Description	Qty
SRVECOSINGLE	Standard service includes evaluation, minor repairs, firmware updates, board modifications, calibration, and testing. This pricing does not include major repairs or shipping costs. Any additional repairs that are not listed will be quoted on an individual basis and provided with a revised service order after the technician examines the instrument.	1

Unbilled Items

Item	Item Description	Qty

**Sea-Bird Electronics, Inc.**

13431 NE 20th Street
Bellevue, WA 98005 United States

Phone

+1-425-643-9866

www.seabird.com

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

SERVICE REPORT**Service Request****1005518210****Date**

07-AUG-2023

Sales Order

320635377

PRODUCT INFORMATION**Item:** ECO.LEGACY**Item Description:** (LEGACY) ECO Single Channel**Serial:** FLSB-1795**Special Notes**

ECO Calibration and Repairs

Diagnosis:

Evaluated instrument (FLSB-1795) and found was out of spec.

Repairs and Modifications:

Standard service performed.

Comments:

New Device file and characterization sheets included.

CO 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.

If applicable, a pre-service characterization is performed. Data is analyzed and Instrument is rescaled.

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 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 USB.

Item	Item Description	Qty
SRVECOSINGLE	Standard service includes evaluation, minor repairs, firmware updates, board modifications, calibration, and testing. This pricing does not include major repairs or shipping costs. Any additional repairs that are not listed will be quoted on an individual basis and provided with a revised service order after the technician examines the instrument.	1

Unbilled Items

Item	Item Description	Qty
EXA-KX0188	CONN, MCBH, 3 Pin Female, Brass	1
EXA-AX0067	DIODE, 1N5819GIC, 30V, 1A	2
EXA-MX0004	HEADER, MOLEX, Locking, 6 Pin, Strt	1
EXA-MX0013	HEADER, MOLEX, 3 Pin, Straight	1
MAA-220527	SEAL, Shaft, ECO	1
BAA-000034	ASSY, Battery Flange, ECO	1
MAA-220082	PLUG, Blow Out, Battery, ECO	1
MAA-220119	FLANGE, W / Vent, 2 Conn, ECO	1



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

1005518210

Date

07-AUG-2023

Sales Order

320635377