

13431 NE 20th Street Bellevue, Washington 98005 USA Phone +1-425-643-9866 Fax +1-425-643-9954 www.seabird.com

SERVICE REPORT Service Request 1005500667
Date 07-APR-2017

CUSTOMER INFORMATION

Name: NOAA PMEL - PACIFIC MARINE ENVIRO LAB

Account: 40279844 DAVID STRAUSZ

DAVID.STRAUSZ@NOAA.GOV

206-526-4510

Bill To Address

7600 SAND POINT WAY NE;

SEATTLE,WA,98115-6349,US

Ship To Address

SUPPLY CENTER / RECEIVING;7600 SAND POINT WAY NE,

PO Number:

EA-133M-15-CQ-0039 D0042

BLDG 8;

SEATTLE, WA, 98115, US

PRODUCT INFORMATION

Item: 03P.LEGACY

Item Description: (LEGACY) SBE 03Plus Temperature Sensor

Serial: 03P2786

Special Notes

Services Requested:

Evaluate/Repair Instrumentation. Perform Routine Calibration Service.

Problems Found:

The 3-pin bulkhead connector was found to have corrosion damage.

Services Performed:

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

Installed NEW three pin bulkhead connector(s).

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Item	Item Description	Qty
17653	CONN, 3 PIN BLKHD, 1/2-20, XSG-3BCL-HP-SS	1
CAL_3	SBE 3 TEMPERATURE SENSOR CALIBRATION; 11 POINTS -1 TO 31DEG.C (FRRF)	1
CONCERT/S	CONFIRM AND RECERTIFY MODULAR SENSOR (FRRF)	1
BHCON	EXTRA CHARGE TO REPLACE BULKHEAD CONNECTOR (ANY SENSOR, PUMP OR INSTRUMENT). COST OF CONNECTOR IS ADDITIONAL (SEE PRICE (FRRF)	1

Item	Item Description	Qty



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SERVICE REPORT

PRODUCT INFORMATION

Item: 03P.LEGACY

Item Description: (LEGACY) SBE 03Plus Temperature Sensor

Serial: 03P5584

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

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 (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 748

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

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 P (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 04C.LEGACY

Item Description: (LEGACY) SBE 04C Conductivity Sensor

Serial: 042489

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

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 P (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 09P.LEGACY

Item Description: (LEGACY) SBE 09Plus CTD

Serial: 91220-A

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found:

JB5 broken pin JT2, JT3, JT5, JT6 corrosion damage

Services Performed:

Perform initial diagnostic evaluation. Installed NEW bulkhead connector(s).

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed pressure calibration.

Performed complete system check and full diagnostic evaluation.

Item	Item Description	Qty
17628	CONN, 6 PIN BLKHD, 1/2-20, AG306-HP-SS	4
17653	CONN, 3 PIN BLKHD, 1/2-20, XSG-3BCL-HP-SS	1
CONCERT9B	CONFIRM AND RECERTIFY SBE 9PLUS. INCLUDES OPENING MAIN HOUSING, REPLACING END CAP "PISTON" O-RINGS AND MAKING MINOR INTE (FRRF)	1
BHCON	EXTRA CHARGE TO REPLACE BULKHEAD CONNECTOR (ANY SENSOR, PUMP OR INSTRUMENT). COST OF CONNECTOR IS ADDITIONAL (SEE PRICE (FRRF)	5

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 16.LEGACY

Item Description: (LEGACY) SBE 16 CT(D)

Serial: 164208-0658

Special Notes
Problems Found:

The conductivity cell was found to have been broken.

The anode was found to be near end of life.

Services Performed:

Perform initial diagnostic evaluation.
Performed "POST" cruise calibration.
Performed pressure calibration.
Replaced the conductivity cell.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW anode(s)

Item	Item Description	Qty
SERVICE16	CONFIRM / RECERTIFY SBE 16/16PLUS/16PLUSV2. COMPLETE	1
	EXTERNAL INSPECTION. TEST ALL FUNCTIONS AND INPUT	
	CHANNEL RESPONSES (FRRF)	
PCAL16	CHARGE TO CALIBRATE SBE 16/16PLUS/16PLUSV2 PRESSURE	1
	CHANNEL (FRRF)	

Item	Item Description	Qty
80050.1	SEACAT VERT COND. CELL, 6000 M, SUB-ASSY	1
30044	SEACAT ANODE, 1" DIA., G1050	1



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PRODUCT INFORMATION

Item: 16P.LEGACY

Item Description: (LEGACY) SBE 16Plus (V1/V2) CT(D)

Serial: 16P29504-4287

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found:

The anti-foulant devices appeared "dirty".

Services Performed:

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

Performed pressure calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

Item	Item Description	Qty
SERVICE16	CONFIRM / RECERTIFY SBE 16/16PLUS/16PLUSV2. COMPLETE EXTERNAL INSPECTION. TEST ALL FUNCTIONS AND INPUT CHANNEL RESPONSES (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2
PCAL16	CHARGE TO CALIBRATE SBE 16/16PLUS/16PLUSV2 PRESSURE CHANNEL (FRRF)	1

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM24246-1678

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

Perform initial diagnostic evaluation. 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 A (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM25541-1865

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

Perform initial diagnostic evaluation. 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 A (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM28082-2322

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

Perform initial diagnostic evaluation. 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 A (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM28082-2323

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

Perform initial diagnostic evaluation. 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 A (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 37SM.LEGACY

Item Description: (LEGACY) SBE 37SM MicroCAT

Serial: 37SM28082-2336

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

Item	Item Description	Qty
PCAL37	EXTRA CHARGE TO CALIBRATE SBE 37 PRESSURE CHANNEL (FRRF)	1
SERVICE37	COMPLETE EXTERNAL INSPECTION. TEST ALL FUNCTIONS. CALIBRATE C & T, C&P AND RECAL IF NECESSARY. REPLACE END CAP O-RINGS A (FRRF)	1
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF)	2

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	2



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PRODUCT INFORMATION

Item: 38.LEGACY

Item Description: (LEGACY) SBE 38 Digital Temperature Sensor

Serial: 3834558-0205

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Performed complete system check and full diagnostic evaluation.

Item	Item Description	Qty
CAL_38	SBE 38 TEMPERATURE SENSOR CALIBRATION (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 38.LEGACY

Item Description: (LEGACY) SBE 38 Digital Temperature Sensor

Serial: 3848614-0370

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Performed complete system check and full diagnostic evaluation.

Item	Item Description	Qty
CAL_38	SBE 38 TEMPERATURE SENSOR CALIBRATION (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 431875

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Item	Item Description	Qty
CAL_43	SBE 43 DISSOLVED OXYGEN SENSOR CALIBRATION (FRRF)	1

Item	Item Description	Qty



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 431876

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

No post cal possible, noisy data found.

Sensor appears to have an anode/getter failure.

Services Performed:

Perform initial diagnostic evaluation. Replaced the lid and membrane assembly. Replaced the electrolyte with new fluid. Performed a "Final" Calibration.

Item	Item Description	Qty
CAL_43	SBE 43 DISSOLVED OXYGEN SENSOR CALIBRATION (FRRF)	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



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PRODUCT INFORMATION

Item: 43.LEGACY

Item Description: (LEGACY) SBE 43 Oxygen Sensor

Serial: 43-3200

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Item	Item Description	Qty
CAL_43	SBE 43 DISSOLVED OXYGEN SENSOR CALIBRATION (FRRF)	1

Item	Item Description	Qty



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SERVICE REPORT

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PRODUCT INFORMATION

Item: 45.LEGACY

Item Description: (LEGACY) SBE 45 Micro TSG

Serial: 4525553-0026

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found: No problems found

Services Performed:

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

Cleaned and replatinized the conductivity cell.

Performed a "Final" Calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

Item Description	Qty
EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES	1
ONE 801542.1. (FRRF)	
EXTRA CHARGE TO CALIBRATE C, T, C&P CELL AND RECAL IF	1
NECESSARY. (FRRF)	
CONFIRM AND RECERTIFY SBE 45. COMPLETE EXTERNAL	1
INSPECTION. TEST ALL FUNCTIONS AND INPUT CHANNEL	
RESPONSES. REPLACE MAIN (FRRF)	
	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES ONE 801542.1. (FRRF) EXTRA CHARGE TO CALIBRATE C, T, C&P CELL AND RECAL IF NECESSARY. (FRRF) CONFIRM AND RECERTIFY SBE 45. COMPLETE EXTERNAL INSPECTION. TEST ALL FUNCTIONS AND INPUT CHANNEL

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	1



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PRODUCT INFORMATION

Item: 45.LEGACY

Item Description: (LEGACY) SBE 45 Micro TSG

Serial: 4534558-0093

Special Notes

Services Requested:

Evaluate/Repair Instrumentation. Perform Routine Calibration Service.

Problems Found:

The conductivity cell was found to have failed.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.
Replaced the conductivity cell.

Replaced the O-rings.

Performed a hydrostatic pressure test.

Performed a "Final" Calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

Item	Item Description	Qty
REPLACEAF	EXTRA CHARGE TO INSTALL ONE ANTIFOULANT DEVICE, INCLUDES	1
	ONE 801542.1. (FRRF)	
CAL45	EXTRA CHARGE TO CALIBRATE C, T, C&P CELL AND RECAL IF	1
	NECESSARY. (FRRF)	
CONCERT45	CONFIRM AND RECERTIFY SBE 45. COMPLETE EXTERNAL	1
	INSPECTION. TEST ALL FUNCTIONS AND INPUT CHANNEL	
	RESPONSES. REPLACE MAIN (FRRF)	

Item	Item Description	Qty
801066.004	SBE41 ALACE CONDUCTIVITY CELL ASSEMBLY	1
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	1
233259	SBE45 MICRO TSG SENSOR ENDCAP (ALACE CELL)	1



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PRODUCT INFORMATION

Item: 45.LEGACY

Item Description: (LEGACY) SBE 45 Micro TSG

Serial: 4548614-0219

Special Notes

Services Requested:

Evaluate/Repair Instrumentation.
Perform Routine Calibration Service.

Problems Found:

The conductivity cell was found to require cleaning and re-platinization.

Services Performed:

Perform initial diagnostic evaluation.

Performed "POST" cruise calibration.

Cleaned and replatinized the conductivity cell.

Performed a "Final" Calibration.

Performed complete system check and full diagnostic evaluation.

Installed NEW AF24173 Anti-foulant cylinder(s).

1
1
1

Item	Item Description	Qty
801542.1	AF24173 ANTI-FOULANT, SINGLE CYLINDER, V2	1