

### SEA-BIRD ELECTRONICS, INC.

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DATE	REV	REVISION RECORD	AUTH	DR	CHK
1.13.04	В	Corrected DC-200 quantity in instructions	СВ	KLP	
10.05.04	С	Added BOM, fixed oil qty, chngd FET to FEP		KLP	

#### SBE P/N 50025

### SBE Pressure Sensor Oil Refill Kit

KIT CONTENTS

SBE P/N	Primary SBE Application	QTY
30410	Dow Corning DC-200 oil	2 oz.
30419	Syringe for injecting DC 200	1
30420	Disposable 21 gauge Needle	1
30421	FEP Tube, 1/32 ID x 1/16 OD	3 in

# Use of the 50025 Kit

- 1. Fill syringe with DC-200 oil from the plastic bottle.
- 2. Screw-lock needle into place.
  - a. To replace needle, use a 21-guage surgical needle.
  - b. Grind off the tip so the needle is no longer sharp, and remove any burrs.
  - c. Make sure needle still has a hole through it.
- 3. Tubing on end of needle is SBE PN 30421 FEP tubing. This will fit into pressure capillary and allow refilling of the pressure plumbing arrangements.

## **Pressure Sensor Calibrations**

- 1. Remove pressure capillary nylon fitting from end cap. Fitting contains silicon oil, so there will be some spillage.
- 2. Endcap is tapped with a 5/16-24 straight thread to accept pressure fitting.
- 3. Use a fitting that has an O-ring face seal, such as Swagelok-200-1-OR.
- 4. After calibration, turn instrument so that endcap faces up.
- 5. Remove fitting and fill cavity with **silicon** oil (DC200 fluid, with 20 centistokes viscosity).
- 6. Use a 1-inch long 21 gauge hypodermic needle to inject oil inside stainless Swagelok fitting on endcap. *Make sure to insert the needle as far as it will go*.
- 7. Replace nylon fitting. Oil in cavity should fill capillary as capillary is screwed in.
- 8. The purpose of the nylon fitting and plastic tube is to prevent any salt water from getting into the end cap penetration. The pressure transducer itself is protected from salt water by the oil-filled stainless capillary tube connecting it to the end cap.

**Sea-Bird Electronics Procedure** 

PROCEDURE NUMBER: 67066

TITLE: SBE PN 50025 Pressure Oil Refill Kit

REVISION: C

**EFFECTIVE DATE: 10/05/2004** 

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