

10.0 Routine maintenance on the SeaKeepers Oceanographic sensors.



Once a month the sensors should be inspected for silt and or biological fouling.

To clean the sensors follow these steps

1. Shut off power to the system with the switch located inside, top, center of the computer module.
2. Close the sweater discharge valve, DO NOT CLOSE THE INTAKE VALVE LOCATED BENEATH THE INLET CONTAINMENT VESSEL.

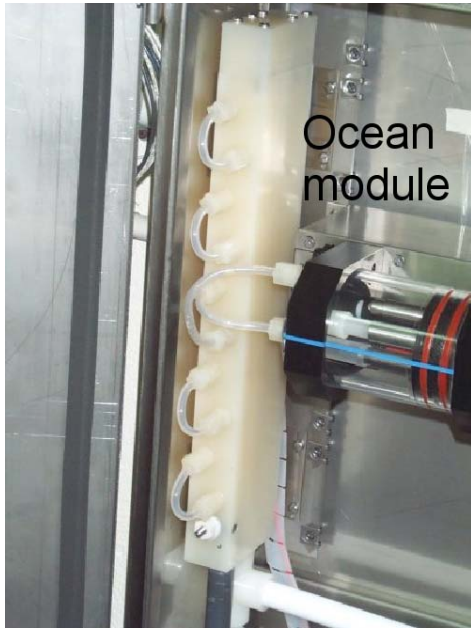
3. Cover the controller module at the bottom of the instrument module with plastic to protect it against water spillage.



Containment vessel

Inlet valve

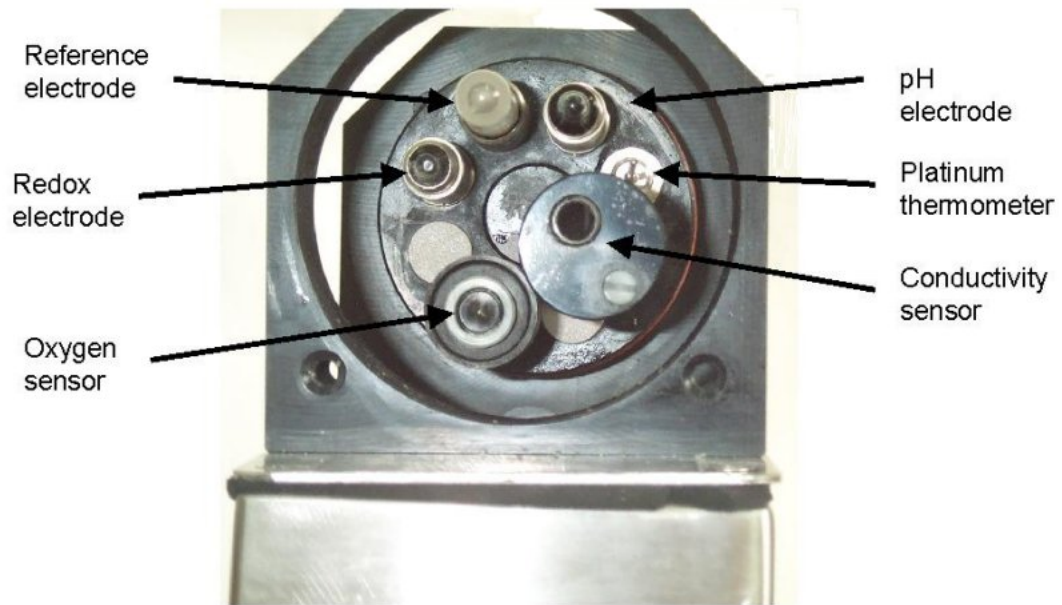
4. Remove all electrical connectors from the right hand side of the ocean sensor module, do not allow them to sit at the bottom of the instrument module as this surface may become wet with seawater.



5. With a beaker or small plastic container to collect any water leakage carefully disconnect the plumbing from the ocean sensing module. If the top hose is removed from the sensor and the lower hose is removed from the manifold then the end removed from the manifold may be temporarily attached to the top of the sensor to avoid draining the sensor in situ. A 5/8 inch wrench can be used if the fittings are more than finger tight.
7. Undo the two quarter turn screws to the left of the sensor and remove the ocean sensor from the instrument module.

You must now open the sensor flow cell in order to wash out the flow cell and clean the individual sensors.

1. The plexiglass housing is held in place by two black plastic thumb screws after removing these and draining the water into a sink or bucket you may then remove the plexiglass housing.
2. The sensors are a mixture of glass electrodes for pH Eh and the reference and a flow through conductivity cell, the conductivity cell may be cleaned with a cotton bud and soapy water, more difficult surfaces may be cleaned with a toothbrush and soapy water. The Platinum resistance thermometer is inside a thin stainless steel or somewhat thicker Titanium tube, please take care not to bend this probe.
3. The Oxygen sensor is a little more delicate the outer surface is a thin Teflon membrane that should not be abraded.



Re-assembly is the reverse of the above process.