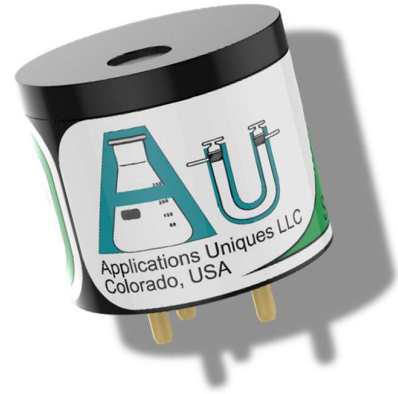


PID Sensor - Assembly Details

Technical Note No. DTN-01092-AB

Purpose

This document provides details of how to disassemble and reassemble AU PID sensors. The information presented here is required to perform maintenance on PID sensors which is necessary to ensure proper performance.



Components

The components that are part of the sensor assembly are as follows:

Sensor Body



Ionization Cell



Cap



10.6 eV Lamp



Cell Spacer



Filter Set



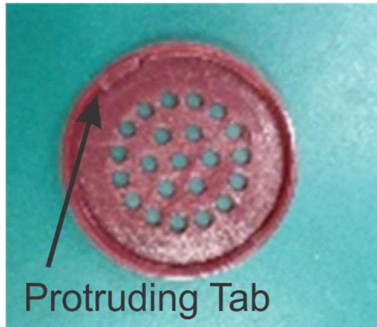
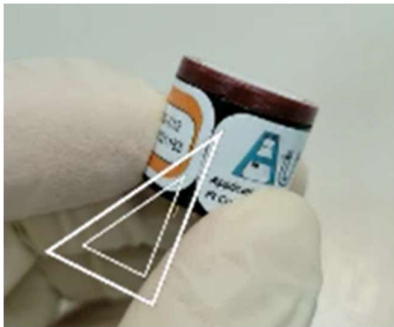
Lamp Spring



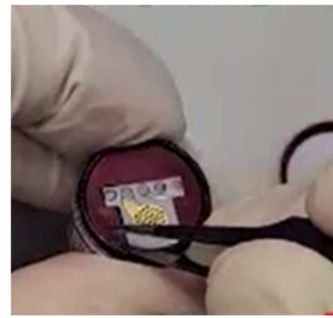
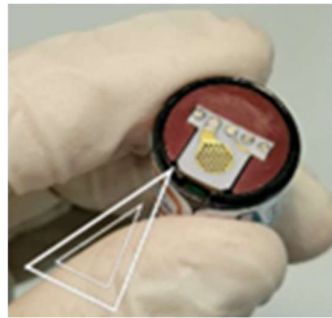
Cleanliness

Always wash hands thoroughly and wear clean nitrile gloves when handling sensor components. Do not expose sensor components to harsh or dusty environments. Contaminants from oils and particulates transferred from hands or other environmental conditions cause poor and unpredictable performance.

Disassembly & Assembly Procedure

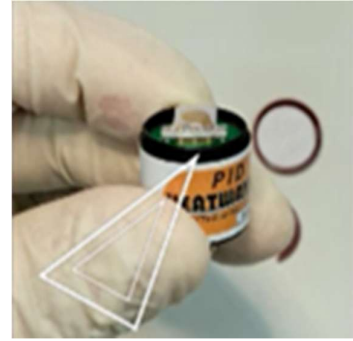


- 1) Locate the point where the protruding tab of the sensor cap fits into the slot on the sensor body rim. Use your thumbnail to separate the cap from the body and remove the cap and filters.

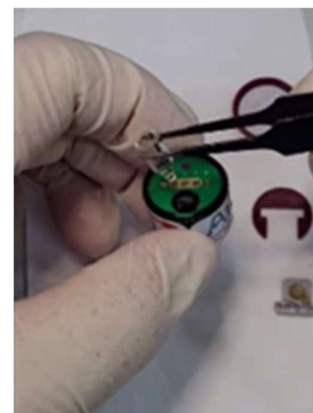
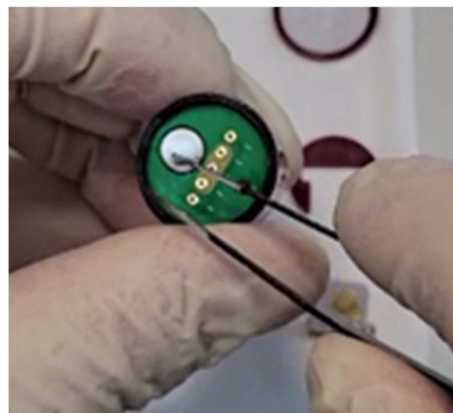


- 2) Use a pair of tweezers to carefully lift the spacer from around the ionization cell. Be careful not to damage the cell.

- 3) The Ionization cell is attached to the top of a PCB board by 5 pins. These pins fit into individual sockets on the PCB. Using the tweezers, carefully pry the ionization cell free of the PCB. Do not bend the pins of the ionization cell.



- 4) Locate the lamp, now exposed and, using tweezers, carefully work it out of the sensor body. Under the lamp is Lamp Spring. It may not come out but must be replaced if so.



- 5) To re-assemble the sensor, reverse the above steps. Ensure the internal filters are replaced with the woven filter against the cell and the membrane filter against the cap.