

Like other gas sensors, Senovol 4S PID has an expected operating life. Under normal operating condition, the 4S PID will gradually lose its original sensitivity. The UV lamp and the detection electrode will need to be cleaned or replaced when one of the following happens:

- The sensitivity and resolution don't meet the product specifications.
- The output is inaccurate after calibration.
- The output is very sensitive to ambient moisture.
- A chemical liquid has been sucked into the detector causing contamination.

### UV lamp and detection electrode cleaning or replacement

- Remove the label if the junction between the PID lid and body is not visible.
- Place the PID on a flat and secure surface and then use one hand to hold it firmly. Use an instrument screwdriver and insert the flat tip (less than 3mm wide) of the screwdriver into the notch and twist the screwdriver gently as shown in Figure 1. The lid of the sensor should open then.



Figure 1



Figure 2

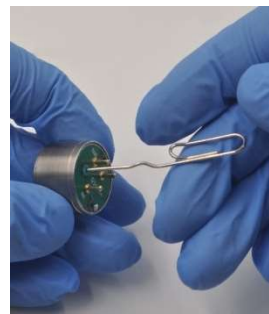


Figure 2

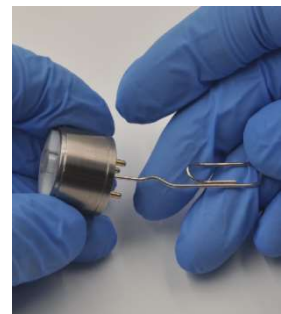


Figure 4

- Use fingers to slowly pull the detection electrode out of the PID body as shown in Figure 2.
- Insert a paper clip or toothpick through the hole on the bottom of the PID (PCB side) to gently and slowly push the UV lamp out of the PID body as shown in Figure 3 and 4.
- Wear finger cots or gloves before the cleaning.
- Clean the UV lamp window surface and the metal area of the detection electrode by wiping with GC grade methanol using a lint-free cotton swab with moderate pressure. After cleaning, hold the UV lamp up to the light at an angle to view any remaining contamination. The cleanliness of the detection electrode can be checked by using a magnifying glass.
- Dry the UV lamp and detection electrode naturally and thoroughly after cleaning.

**Caution:** Do not touch the UV lamp window surface with fingers or anything else to prevent the contamination that may cause loss of the sensitivity of the 4S PID.

### Assembly after cleaning or replacement

- Carefully insert the UV lamp into the PID body.
- Align the 2 pins on the detection electrode to the receptacles on the PID body and then carefully push it all the way down.

- Place the PID lid on a flat surface. Place the stainless-steel mesh screen and PTFE filter together as shown in Figure 5 and 6.
- Place two long screwdrivers on the PID as shown in Figure 7. Hold the screwdrivers firmly and then press down the PID body until it engages completely with the lid.



Figure 5



Figure 6

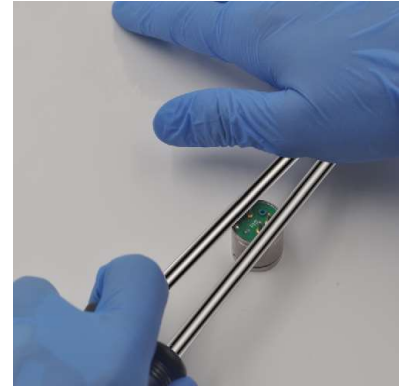


Figure 7