

## **Model 802215 Water Trap Replacement or Upgrade for CA-CALC Sampling Probes**

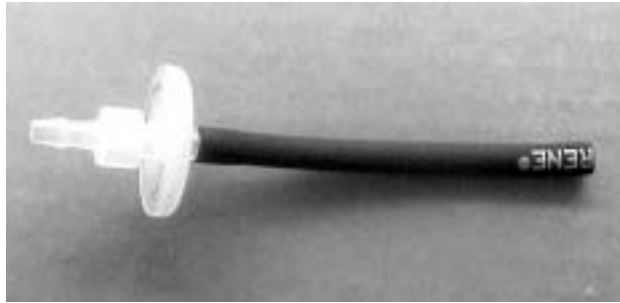
### **Installation Instructions for Sampling Probes used with CA-6000 Series Single Gas Monitors**

Find the following parts included with your Water Trap.

1 - 6" x 1/8" ID x .1/4" OD rubber tubing.

1 - 6" x 5/16" ID x 3/8" OD rubber tubing.

1. Remove the Water Stop filter, fitting and tubing depicted in Figure 1.



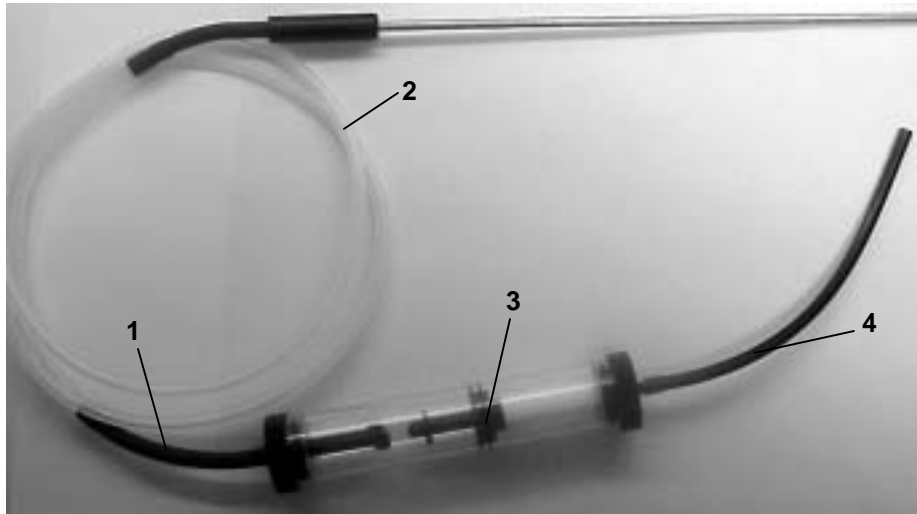
**Figure 1. Water Stop Filter**

#### ***If your probe appears as in Figure 2.***

1. Slide the 5/16" ID rubber tubing over the polypropylene tube as shown in Figure 2, about 1-2 inches.
2. Trim the rubber tube, so about 2" protrudes beyond the polypropylene tube.
3. Orient the water trap as shown in Figure 2 and push the tube stub on the water trap into the rubber tubing.
4. Find the 1/8" ID rubber tube and push this over the end of the trap as shown.

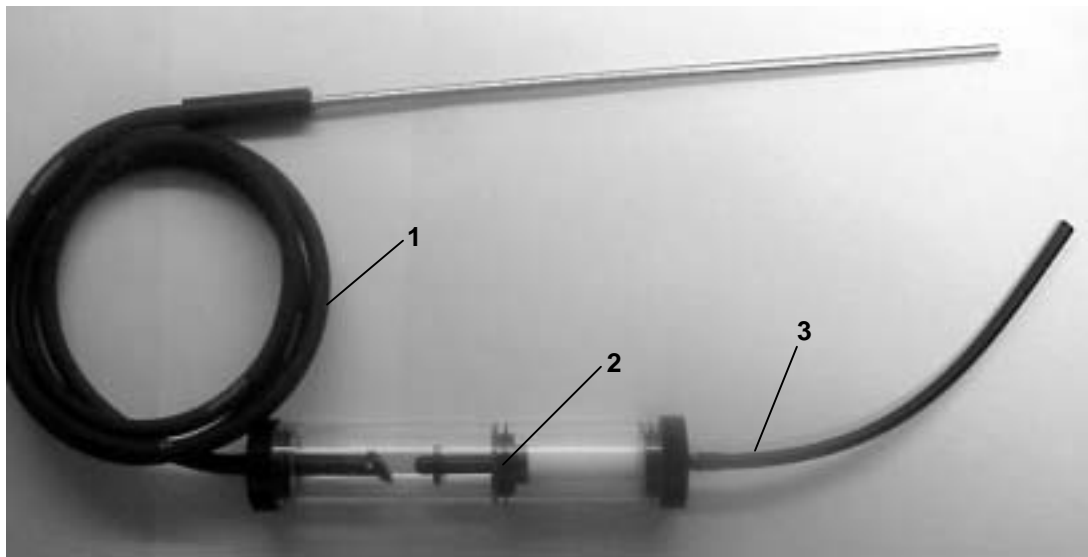
#### ***If your probe appears as in Figure 3.***

1. Orient the water trap as shown in the Figure 3. Push the rubber sample tubing fully over the tube stub on the water trap.
2. Find the 1/8" ID rubber tube and push this over the opposite end of the water trap as shown in Figure 3.



- 1. 5/16" ID tubing
- 2. Polypropylene tubing
- 3. Water trap
- 4. 1/8" ID tube

**Figure 2. Water Trap Installation for Sampling Probe Model 801998 for NO<sub>2</sub> and SO<sub>2</sub>**



- 1. Rubber sample tubing
- 2. Water trap
- 3. 1/8" ID rubber tube

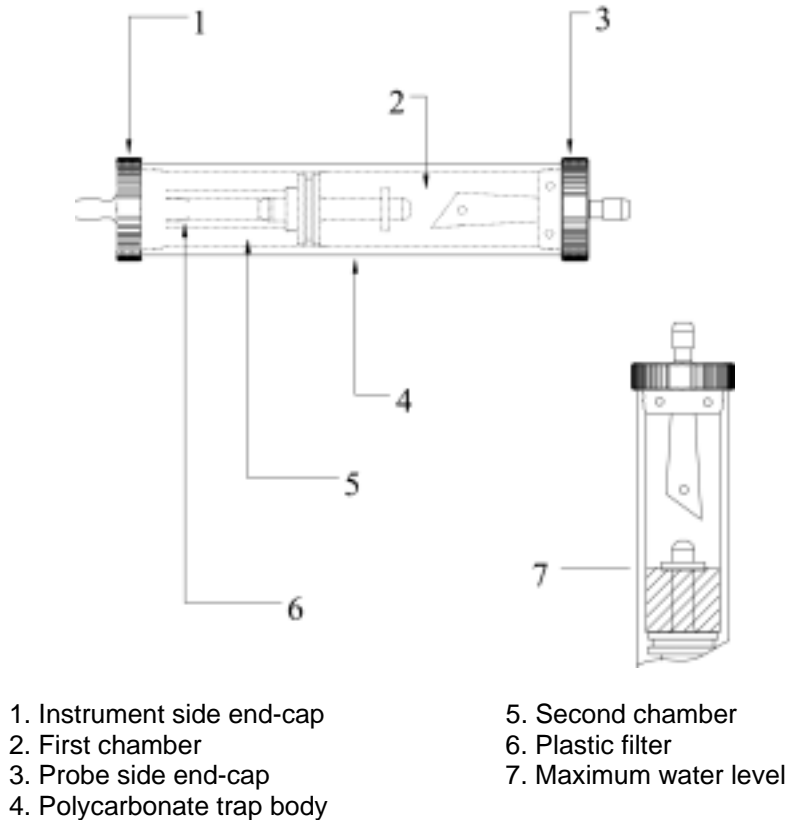
**Figure 3. Water Trap Installation for Sampling Probe Model 801993 for O<sub>2</sub>, CO, NO**

## General information

Refer to Figure 4 below. Liquid water forms in the first chamber of the water trap as gases are sampled from the flue. The water trap is designed so even when shaken, or when its orientation is changed, water does not pass to the second chamber. The water trap must be emptied when the water level exceeds that depicted in the figure, item 7.

To empty the water trap, remove the probe side end cap identified as item 3 in Figure 4. Use a twisting motion.

**Important:** Make sure the water trap is oriented so that end-cap 1 below is toward the instrument.



**Figure 4: Water Trap**

## Cleaning or Changing the Water Trap Filter

Identify the water trap filter (refer to Figure 4). This filter is designed to remove soot particles before they contaminate the instrument. The filter can be removed for cleaning or replacement by following these steps:

1. Remove the instrument side end cap (1) by pulling it out with a twisting motion.
2. Grasp the filter (6) using a needle-nose pliers and pull it out.
3. To clean the filter, remove the bulk of the soot by tapping the filter. The soot may be removed by rinsing with water or isopropyl alcohol. The effectiveness of the rinse depends on the soot composition—is it dry or oily. Avoid rubbing, which may drive contaminants into the filter causing permanent plugging.
4. Whether cleaned or replaced, install the filter by pushing it over the stub in the filter body, then replace the end cap.