

AIR CANISTERS

Instructions for Canister Time Weighted Sampling

(Tools needed: two open ended 9/16" wrenches)

1. INSPECTION – Inspect your canister shipment upon arrival. Compare the contents with the packing slip and notify Pace Analytical of any discrepancy or damage. Familiarize yourself with the contents you received by comparing them to the pictures on the right. Do not open the valve until you are ready to sample. Even a small loss of vacuum will compromise your sample.

2. CONNECTION – Remove the brass caps with a 9/16" wrench. Connect the flow controller to the valve where the cap was. The connection is made by hand tightening the Swagelock® connection to the canister. There is only one way to connect the flow controller, so you will not be able to put it on backwards or incorrectly. The particulate filter points away from the can. Once connected, use two open ended 9/16 inch wrenches to further tighten this connection. It has been found that using two open ended wrenches makes the most reliable connection. Make sure that the connection is firmly tightened. The final connection must be leak tight recognizing also that over-tightening can cause leaks as well. Do not use pliers or adjustable-end wrenches to tighten this Swagelock® connection. Use only open ended wrenches for tightening. If you did not request extra media (tubing, fittings and moisture filters etc...) the canister is now ready for sampling. If you are connecting to a predetermined sampling point you may have received the following: 6 inches of ¼ inch OD Teflon tubing, ¼ inch Swagelock® nut, ferrule, spacer nut and moisture filter (if requested). Connect these items in series using the pictures on the right as a guide. The spacer fits between the nut and the ferrule. The ferrule must be pointed down toward the flow controller connection.

3. SAMPLING – To begin sampling simply open the canister valve (you may have either a rotary valve or a toggle valve). One full turn counter clockwise for the rotary valve is sufficient. The toggle valve will open by flipping upward. Record the initial vacuum gauge reading. Depending on atmospheric conditions; it should be between -26 and -30 inches of Hg. Watch the vacuum decline. The vacuum rate decline is directly proportional to collection set time.

4. COMPLETION – After sampling is complete, close the canister valve and record the ending vacuum gauge reading. Disassemble the components and return them in the original shipping package they were received in. Verify the contents for return to the laboratory. Complete the Chain-of-Custody form and return with the samples to the laboratory. Please reference the canister ID on the Chain-of-Custody.

Time Weighted Sample Configuration

Sampling Point Connection

