

Vacuum Chamber Component Diagram



If you have any questions, contact St. Croix Sensory, Inc.

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Step-By-Step Instructions for Collecting an Odor Sample

Set Up

1. Open the vacuum chamber and place the odor sampling bag into it.
2. Connect the bag to the inside of the Sample Valve (**Port D**) with the supplied 7" piece of PTFE tubing.
3. Open the valve on the bag.
4. Insert one of the supplied Hose Barb Connectors with 1" length of 1/4" silicone tubing into the outside of the Sample Valve (**D**).
5. Connect a length of PTFE tubing to the 1" length of silicone tubing (ensure this length is long enough to reach the sample source). This is now the Sample Line.
6. Insert 4 D-Cell Batteries into the battery holder and turn on the pump.
7. Close the chamber and secure all four latches.

Condition the Bag

1. Insert the Sample Line into the air source that will be used to condition the bag. The most common option used by practitioners is the odor source that is being sampled.
2. With the supplied 10" Silicone Tubing Connector Line, connect the Pump Inlet Valve (**B**) to the Chamber In/Out Valve (**C**). This will draw a vacuum and create a low-pressure zone within the chamber, filling the bag through the Sample Line attached to the Sample Valve (**D**).
3. Fill the bag 1/2 full.

Empty the Bag After Conditioning

1. Disconnect one end of the Silicone Tubing Connector Line from the Pump Inlet Valve (**B**) and attach it to the Pump Outlet Valve (**A**). This will pressurize the chamber and deflate the bag through the Sample Line.
NOTE: The Hose Barb Connector must be inserted into the Sample Valve (**D**) to keep the valve open and deflate the bag.
2. Empty the bag completely.

Prime the Sample Line

1. Ensure the Sample Line is in the air source to be sampled.
2. Disconnect the Silicone Tubing Connector Line from the Pump Outlet Valve (**A**).
3. Disconnect the Sample Line from the Sample Valve (**D**) and attach it to the Pump Inlet Valve (**B**).
4. Allow odorous air to flow through the Sample Line for 30 seconds to remove non-sample air from the line.
5. Disconnect the Sample Line from the Pump Inlet Valve (**B**) and reattach it to the Sample Valve (**D**).

Collect the Sample

1. Attach the Silicone Tubing Connector Line to the Pump Inlet Valve (**B**) and the Chamber In/Out Valve (**C**). This will begin collecting the sample.
2. Fill the bag 3/4 full. **Do not overfill the bag, or it may rupture during shipping.**
3. Disconnect the Hose Barb Connector from the Sample Valve (**D**). This will close the valve.
4. Open the chamber. If difficult to open due to the negative pressure, release the pressure by unscrewing the Purge Valve located on the front of the chamber.
5. Close the bag valve, turn the pump off, and remove the bag from the chamber. The odor sample has been collected – repeat these instructions for any subsequent samples.

NOTE: Depending on the quality of the air being sampled, it may be necessary to replace the PTFE Sample Line and the PTFE tubing on the inside of the Sample Valve (**D**) between samples.

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