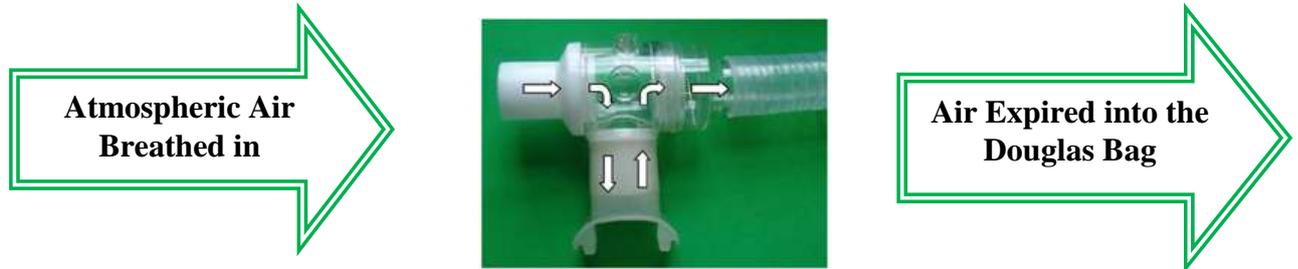


How to use.....Douglas bags for Gas Analysis

Connecting the mouth piece



- The breathing tube must be connected to the side of the mouth piece where air is expired.

- Connect the breathing tube to the Douglas bag as shown

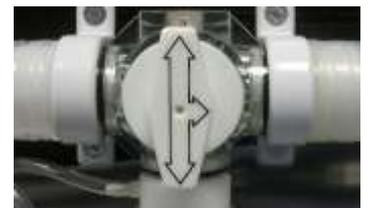


- Ask your participant to breathe through the mouth piece, once connected, before commencing a test to make sure that the mouth piece is connected correctly.
- Vacuum pump the Douglas bags to make sure that the bags are empty before you start your test.

- Close all the valves
(Large arrow horizontal, small arrow vertical)



- To collect air turn the valve 90° clockwise, so the large arrow is vertical and the small arrow is horizontal. When you have finished collecting your sample return the arrow to its original position.



How to use.....The Servomex to sample Expired Air

After completion of any test using Douglas Bags, gas collected must be analysed for volume and composition. The Servomex will give you a % expired O₂ and % expired CO₂. Results must be divided by 100 to obtain FEO₂ and FECO₂. This data will allow you to calculate VO₂, VCO₂, and RER.

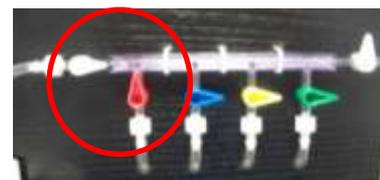
- The Servomex will already have been calibrated by the technicians
- Connect the sample line from Douglas bag to the sample line of the Servomex



- Press the cycle button on the Servomex
- When you are ready to begin analysis, open the white valve nearest the sample line. Then open the appropriate colour valve that corresponds to the bag you wish to sample

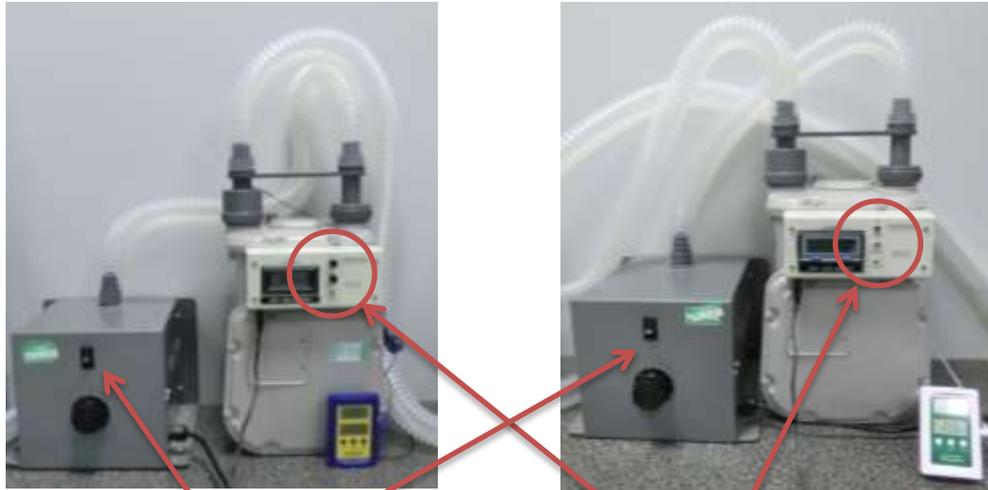


- The Servomex will automatically sample the air, you do not need to press any buttons
- Wait until the %O₂ and %CO₂ readings are stable. Note down the readings, close the coloured valve
- Repeat the process for the other bags if necessary
- Turn off the cycle button on the Servomex
- Close white valve back to their original positions and disconnect the sample line.



How to use.....The Dry Gas meter

Make sure that you have sampled the air using the servomex (if necessary) before you use the dry gas meter



Pump switch

On Off switch/ Reset

- Attach the large pipe from the Gas Meter to the Douglas bag (Red bag)
- Ensure that the reading is on zero on the gas pump (if not press reset)
- Turn the valve 90° clockwise (as you did when you collected gas) and turn on the pump simultaneously.
- When the bag is empty the reading will plateau (listen for a higher pitched noise). Make a note of the reading, and also note the temperature of expired air. Turn the valve back to the original position and turn off the pump.
- Reset the Gas meter back to zero

Make sure that you disconnect the tube from the Douglas bags before you move the rack away from the Dry gas meter

Please ensure that all tubes, nose clips, and mouth pieces are sterilised when testing has finished.