INSTRUCTIONS FOR SYRINGE SAMPLING

Use this method for sampling when you have very little headspace, and a semi-rigid or rigid package. This method introduces sample into the analyzer without using the pump.

For example, when drawing on a package with 50cc of headspace, and pulling out 15cc for sampling, you are creating a vacuum condition which will result in erroneously low oxygen readings.

If you use this method, you can draw 15-20cc of sample from the package manually and inject it into the analyzer. Note: the pump button on the analyzer does not need to be pressed for it to react; it will react to an injection of sample.

HARDWARE NEEDED:
20 cc gas-tight syringe, plastic on-off valve, double-orange hubbed connector, needle, moisture filter (optional use)

SAMPLING FROM A BOTTLE OR OTHER CONTAINER
The container to be sampled must have a septum, foam seal, or other suitable entry point for insertion of the needle.

1) Insert a plastic on-off valve to the tip of the syringe.
2) Install a needle to the valve. When the white valve is aligned with the syringe, it is OPEN.

Your assembly should look like this:

3) Puncture the septum with this assembly and draw out the required volume of sample. If the sample volume is limited, there will be resistance to pulling the plunger back. Hold it forcibly back while closing the valve.
4) Quickly close the valve to trap the sample in the syringe and withdraw the needle from the package.
5) Then withdraw the needle from the bottle. Release the plunger and it will move to its pressure equilibrium point. This will be very near atmospheric pressure and is a good indication of the sample volume in the syringe.

SAMPLE INTRODUCTION TO ANALYZER

Your assembly should now look like this (note: the valve is CLOSED):

6) Remove the needle from the end of the assembly. If the needle is screwed on super tight, it may require pliers to loosen the needle.
7) Insert a double-ended orange connector onto the valve. Insert the free end to the white luer fitting installed in the front panel fitting, or, if so equipped, attach to the male luer tip of the sample probe, as pictured:

Turn the on-off valve to the open position (as pictured above) and gently depress the plunger to inject the syringe contents into the sensor. As the plunger is depressed, the O2 reading will decrease to the value in the package/bottle. Leave the syringe connected and the reading will reach its equilibrium point.

NOTE: (for Model 906 and 902P) If replacing the white fitting for any reason, be sure to install the rubber washer first to insure a good, leak-tight seal.

NOTE: if moisture contamination is a potential problem, a moisture filter may be installed onto the white fitting, or between the syringe and the on-off valve. This will add to the sample volume required and must be considered. If condensation is a problem, it will usually show up on the syringe wall if allowed to sit for a few minutes.