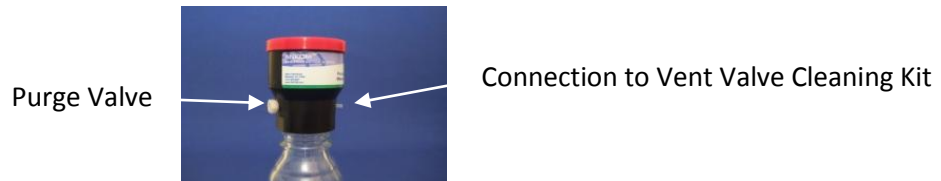


Purge Method

RF

To purge the system means to eliminate any Oxygen by adding CO₂ to the mixture. You will need a source of CO₂ in order to purge the system. Make sure that your CO₂ tank is fitted with a regulator and a valve with a ¼” (approximate) flat nozzle for injecting gas into the Purge Valve (see picture below). Regulate the pressure of the CO₂ to 6-10 psi.



You can purge your system in one of two ways.

Purge Method #1

To purge the Glass Bottles of Oxygen in a manner similar to the ANKOM Daisy^{II} Incubator, execute the following procedure:

- (1) With the Module's Glass Bottle in position to reattach, and after inserting the rumen inoculum, allow a blanket of CO₂ to flow over the contents until the CO₂ fills and overflows the Module's Glass Bottle.
- (2) With the CO₂ flowing, pull the hose away and immediately secure the Module's Glass Bottle.
- (3) Repeat this procedure for each Module.

Purge Method #2

To purge the Glass Bottles of Oxygen with an alternative method, execute the following procedure:

- (1) With the Module's Glass Bottle in position to reattach, and after inserting the rumen inoculum, allow a blanket of CO₂ to flow over the contents until the CO₂ fills and overflows the Module's Glass Bottle.
- (2) Reattach the Module's Glass Bottle.
- (3) On your computer loaded with the GPM Software, check the "Valve Open" box corresponding to the Module number you are about to purge. This will open the Side Vent Valve for that Module.
- (4) Hold the CO₂ valve against the ANKOM RF Gas Production System purge Valve and allow the CO₂ to flow into the Module's Glass Bottle through the Purge Valve. Continue to apply a CO₂ blanket until you feel confident that you have replaced any oxygen that may have been in the Module's Glass Bottle.
- (5) When the pressure in the Module's Glass Bottle drops back close to zero, uncheck the "Valve Open" box on the software for the corresponding Glass Bottle to close the valve.
- (6) Repeat this procedure for each Module.



Warning: Never apply more than 10 psi to the Module's Glass Bottle while purging, or allow the pressure in the Bottles to exceed 10 psi during the experiment. Always regulate incoming purge pressure down to 10psi or less before purging bottles. Always wear safety glasses and appropriate lab protection when handling the Modules and Glass Bottles.