

PRESSURE TESTING THE 5200 HPR

After completing the installation of the 5200 HPR perform the following steps.

- 1.) With the instrument cold it is highly likely the Back Pressure regulator will not hold pressure. You can follow these steps with the instrument cold, but most likely will have to heat the valve oven upto 300C.**
- 2.) With a flow meter connected to the sample vent at the front of the 5200 adjust the following .**
 - Turn the power to the High pressure Module ON.**
 - Turn the heater controller to the OFF position.**
 - Turn MPV-2 to the LOAD position. (See page 170 of the manual.)**
 - On the Back Pressure Regulator turn the pressure adjusting knob counterclockwise completely to set the pressure control to zero. See page 170 of the manual.**
 - Turn both metering valves clockwise until you feel a slight resistance. These are not shut off valves, do not use torque or you may damage the valve.**
 - Turn both diverters to the SYSTEM position.**
 - Adjust the system metering valve to a flow of 50 mls.**
 - Turn the bottom diverter valve to pre-pressure.**
 - Adjust the pre-pressure metering valve to 250 mls.**
 - Turn the top metering valve to the OFF position.**
 - Remove the flow meter from the vent and plug the vent.**

- Turn the top diverter valve to the SYSTEM position and let the pressure build up to a maximum of 500 PSI. Then turn the diverter valve to the OFF position.
- Watch the pressure on the digital indicator the goal is to have no more than 2 PSI lost over 10 minutes.
- Now turn MPV-2 to the Run position with the probe installed in the interface and plug the purge vent instead of the sample vent. Repeat the previous steps with MPV-2 in the run position. The goal here is to have no more than 3 PSI lost over 10 minutes.

SETTING THE FLOWS, PRESSURE

- Adjust the back pressure regulator (BPR) pressure adjust nut counter-clockwise until the nut is loose. This means there will be no spring force on the nut. This will be a zero pressure setting. MPV -2 should be set to LOAD.
- With both diverter valves on the high pressure module turned to SYSTEM, adjust the SYSTEM flow adjust to 50 mls/minute. Measure the flow at the sample vent.
- Now switch the bottom diverter valve to the pre-pressure position. Adjust the pre-pressure flow adjust to 400 mls/minute.
- With a flow meter on the sample vent, turn the BPR pressure adjust Nut clockwise 2 full turns. This should put pressure on the spring that closes the vent in the BPR. You will notice the flow goes to zero or is reduced. As the pressure builds in the BPR the flow will increase as the pressure overcomes the spring force. Continue to turn the BPR pressure adjust nut clockwise until you reach the desired operating pressure. The BPR pressure setting is reached when maximum flow is achieved at the vent. It may be less than the original setting of 400mls.

- **Once the desired pressure is reached turn the bottom diverter valve back to the SYSTEM position.**

LOAD AND START YOUR RUN

- **Now that your pressure and flow are set its time to load your sample into the Interface via the Probe.**
- **After installing the probe in the interface you can turn MPV-2 to the run position. Initially the pressure will drop and than climb back up to the desired setpoint. It is important to wait for the pressure setpoint to be reached. This will allow the flow to carry your sample over to the trap when the probe is heated.**
- **Start your run via the CDS software.**
- **When the run is complete turn MPV-2 back to the LOAD position. Than turn the top valve on the High Pressure Module to the Vent position. This will assure that the entire system pressure is at ambient pressure.**
- **Now you can remove the probe from the interface.**