

SOP for CO₂ tank

Basics

CO₂ tanks are purchased from Praxair using the catalog number of CD50. We try to keep three tanks in our lab at all times. Two of the tanks will be hooked up to regulators and will deliver CO₂ to all our incubators.

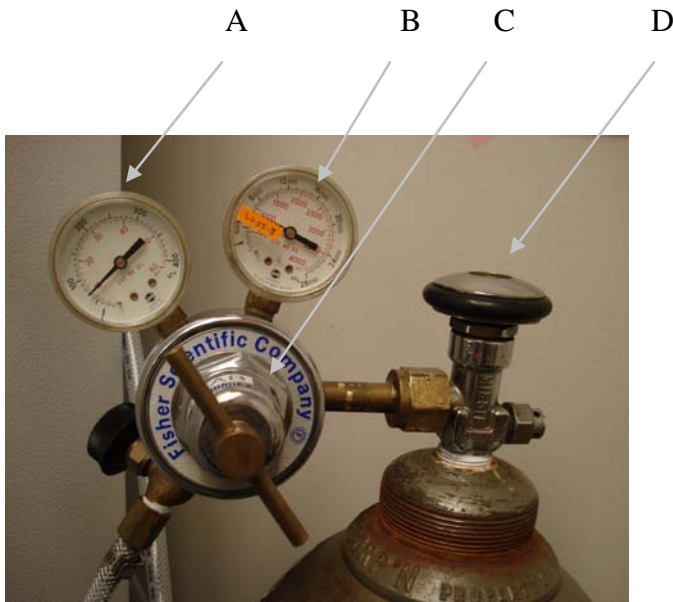


An extra tank is kept as backup next to the door connecting the tissue culture room to the Alsberg lab.



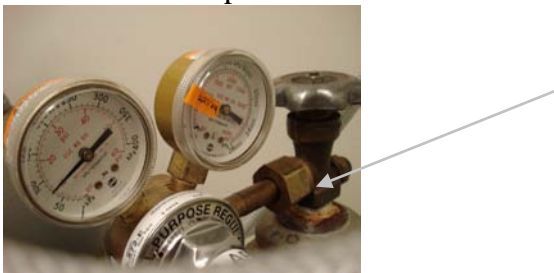
Monitoring CO₂ level in tanks

CO₂ tanks need to be monitored daily to ensure that neither of the CO₂ tanks connected to the system is empty. To check if any CO₂ is left in the tank, there are two pressure gauges attached to each regulator. The gauge on the left is the outgoing line pressure (A), while the gauge on the right is the tank pressure(B). To ensure nitrogen is flowing out of the tank into the CO₂ incubators, both gauges need to some level of pressure (not zero). If the outgoing pressure gauge is zero, you can open up the valve on the side of the regulator (C). If the tank pressure gauge is zero, you can open up the valve directly on top of the tank(D). If both valves are open and there is still no pressure in the tank, this indicates the tank is empty and you need to switch out the empty tank with the back up tank



Switching out the empty tank

If you realize one of the CO₂ tanks is empty, you need to replace the empty tank with a backup tank. Location of the backup tank is described above in the basics section. To replace an empty tank, first use a wrench to remove the regulator from the empty tank. The arrow in the picture below indicates where the wrench should be applied.



Once the regulator has been removed, replace (switch the location) the empty tank with the backup tank. Hook up the regulator to the new tank using a wrench. (make sure to use Teflon tape to seal the regulator and the tank.) Open the tank gauge and make sure the

pressure gauge is no longer at zero. At this point, listen and check for small leaks. Make sure there are no leaks before continuing.

Use a little piece of tape to indicate the initial level on the pressure gauge. (see example below). This will aid you in monitoring gas levels as it provides an easy way to checking if pressure changed.



Also label the replaced empty tank as “empty” and order a new CO₂ tank. When you are ordering the new tank, on the pre-purchase requisition form indication that you need a pickup in room Wick 228 and write the tank number associated with the empty tank (ex below).



Once the new tank arrives from Praxair, apply “HvR lab” label.