Quantum Design



EverCool II Service Note 1099-011

EverCool II Bottle Changing Instructions

The purpose of this procedure is to help eliminate and prevent any air trapped in the regulator from getting into the Evercool system. Air in the regulator will cause ice to form in the Dewar thus resulting in temperature control or liquefaction problems.

Tools and Supplies

- Gas Tank regulator relief valve Assembly (4095-242)
 5/8" Wrench See Figure 1.
- o 3/4" Wrench o Big crescent wrench



Figure 1.

- 1. Close the **supply valve** using the Multivu software and click set. (Path:Utilities\Evercool\Valve Control\Supply Valve) Do **not** close the pressure regulator on the Evercool manifold.
- 2. Close the main valve on the empty Helium gas supply cylinder and decrease the pressure on the regulator.
- 3. Using the two wrenches, hold the supply line Aero-quip self-sealing fitting with the 5/8" wrench and turn the ³/₄" wrench to loosen and remove the Aero-quip self-sealing fitting from the regulator. See Figure 2.



Figure 2. *Note: Using only one wrench to remove this fitting can cause damage to the supply line.

- 4. Remove the regulator from the empty Helium gas supply cylinder using the big crescent wrench.
- 5. Place the regulator on the full Helium gas supply cylinder.
- 6. Attach the Gas Tank Regulator Relief Valve Assembly on to the regulator using the 5/8" wrench and the ³/₄" wrench. The Aero-quip self-sealing fitting should be snug. Do **not** over tighten! See Figure 3.



Figure 3. *Note Using only one wrench to remove this fitting can cause damage to the Gas Tank Regulator Relief Valve Assembly (4095-243).

- 7. Open the main valve on the Helium gas supply cylinder and slowly increase the pressure on the regulator. The air in the regulator will begin to bleed out of the check valve.
- 8. Decrease the pressure in the regulator and remove the Gas Tank Regulator Relief Valve Assembly using the two wrenches.
- 9. Reconnect the supply line to the regulator, again using the two wrenches to tighten the Aero-quip self-sealing fittings.
- 10. Set the regulator pressure to 12psi and open the supply valve in Multivu.