



HIGH PERFORMANCE AIR SYSTEMS

Caution: CO₂ is a cryogenic gas which means it can freeze your skin almost instantly if mishandled. Improper handling during the transfilling process can result in serious injury or death. If you do not completely understand these instructions or have a question contact a professional for help.

WARNING!

- **CO₂ will freeze burn your skin if put in contact with the CO₂.**
- **Always use eye and skin protection when handling CO₂**
- **Do not over fill a CO₂ bottle beyond its labeled capacity. This will cause over pressurization inside bottle and blow the blow-off cap.**
- **Never heat a CO₂ bottle with an open flame.**
- **Never breathe CO₂ as it is not a life supporting gas. Serious injury or death can result. If you start to feel light-headed remove yourself from the area.**
- **A CO₂ bottle being filled from should always be restrained to a wall or post.**
- **All CO₂ bottles use a 3k psi emergency pressure release cap. Do not exceed this pressure when filling.**
- **Do not refill any CO₂ bottle without a Hydrostatic Test Date or an expired HT date (over 5 years) stamped on the bottle crown.**
- **Do not try to top-off a bottle. All CO₂ bottles must be empty before filling begins.**

INSTRUCTIONS:

1. **Mounting the Pump – The CO₂ pump needs to be operated with the pump mounted on a rigid fashion (usually to a wall or post).**
2. **Connecting Air Supply Lines – Use only filtered regulated air. Refer to the diagram for proper pump assembly. All tapered pipe threads must have a thread sealant (Teflon tape is one type). Do NOT put thread sealant on the flare fittings. The pump will deliver its maximum performance when inlet air is at 100-150 psi and 15 cfm.**
3. **First, you must determine if your supply bottle does or does not have an internal siphon tube or dip tube. The bottle will be marked by with the word “SIPHON” or “DIP TUBE” on it. If the bottle does have a siphon tube the bottle must be used in an “upright” position. If the bottle does NOT have a siphon tube then the bottle must be inverted using the optional bottle inverter stand (#ITT-1000).**
4. **Connect the main supply bottle (mother bottle) to the inlet side of the pump (the side that the filter is attached to). Connect the outlet hose to the bottle being filled (baby bottle).**
5. **Filling the Bottles –**
 - a. **Place the baby bottle on the scale platform. Make sure it will not slide off or tip over during filling. For smaller bottles you can use a box to put it in.**
 - b. **Make sure both ball valves are closed and the inlet air line is connected to the pump.**
 - c. **Open the mother bottle valve one full turn.**
 - d. **At this point you will want to zero out the scale.**
 - e. **Open the baby bottle valve and the ball valve at the baby bottle. You should hear CO₂ gas rush into the baby bottle.**
 - f. **Watch the scale readout. If you are filling a 20 oz. bottle you must make sure the weight on the scale does not exceed 20 oz.**
 - g. **If the weight does not reach full weight you can open the pump air valve and get the pump to start pumping more CO₂ into the baby bottle. Shut the air valve when the scale reaches proper gas weight for that bottle.**
 - h. **Remove hose from baby bottle.**
 - i. **After last bottle is filled shut mother bottle valve and open line valve to purge CO₂ from lines.**

