

## FILL PROCEDURE FOR CAIRE RESERVOIRS

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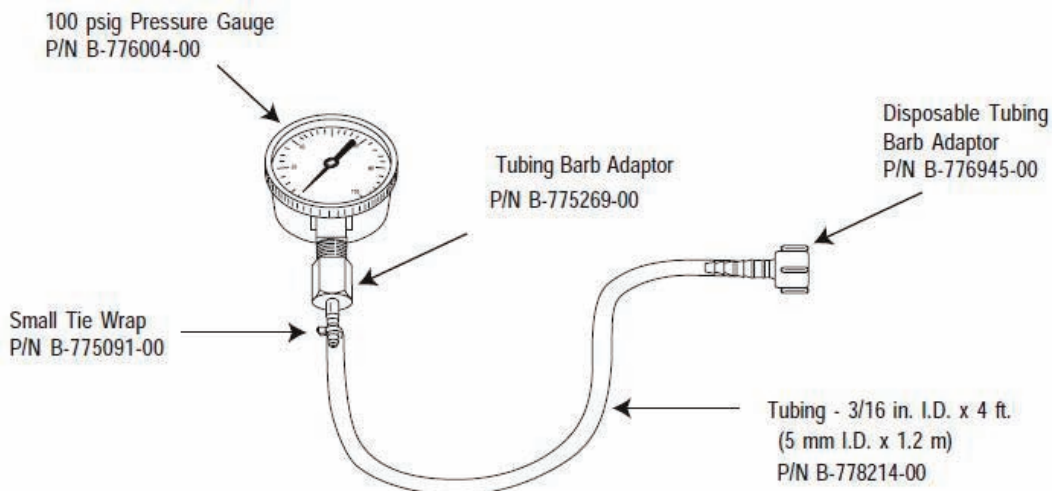
To ensure the proper operation of all CAIRE liquid oxygen systems, it is imperative that the reservoir being used is filled at the appropriate saturation pressure. Below is a step-by-step fill procedure that is universally applicable to all CAIRE reservoirs.

### PROCEDURE

1. Connect the fill adapter and transfer hose to a liquid oxygen source with LOX saturated between 35 psi (2,41 bar) and 50 psi (3,45 bar), with 50 psi (3,45 bar) being optimal.
2. Purge the transfer hose by depressing the poppet on the QDV against a hard, metallic surface until a vapor stream is apparent.
3. Wipe the reservoir fill connector with a clean, lint free towel to remove any moisture.
4. Weigh the unit as required by local and federal standards.
5. Connect a pressure gauge to the flow control valve and open the valve to a setting of 2 lpm or greater. For HELiOS reservoirs, connect the Pressure Gauge W/ DISS Fitting Adapter, shown in Figure 1 below, to the DISS fitting on the side of the unit.
6. Open the reservoir vent valve.
7. Connect the fill adapter to begin filling.
8. Throughout the course of the fill, monitor the internal pressure of the reservoir and throttle (i.e. open and close) the vent valve to maintain a pressure just beneath the primary relief valve setting. The appropriate fill pressures for CAIRE reservoirs are shown in Table 1 below.
9. When liquid begins to spurt from the vent valve, close the vent valve and immediately remove the fill adapter.
10. Disconnect pressure gauge and close the flow control valve, if applicable.

Unit	Fill Pressure
Liberator	20-22 psi (1,38-1,52 bar)
Companion	18-20 psi (1,24-1,38 bar)
HELiOS Universal	21-23 psi (1,45-1,49 bar)
HELiOS Standard	26-28psi (1,79-1,93 bar)

Figure 1: Pressure Gauge with DISS Fitting Adapter, PN B-701732-00



## NEW SERIAL NUMBER LOCATION FOR HELIOS PORTABLES

The location of the serial number for new HELIOS Plus and HELIOS Marathon units is changing. It will now be located on a decal placed on the side of the tank as shown in Figure 1 below, with the upper edge aligned with the evac port and the leading edge in alignment with the bottom circ weld seam. The serial number will remain visible through the slotted vents on the side of the casing as shown in Figure 2.

Figure 1: New HELIOS Portable SN Location



Figure 2: SN As Seen Through Vent Slots of H300 (Left) & H850 (Right)



### Customer & Technical Info

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