

Procedure for filling the T-shirt cannon tanks with nitrogen

I - Check how much gas is available in the main supply tank:

- 1) Connect feeder hose w/pressure gauge to main supply tank.
- 2) Turn on supply tank valve and read PSI level on gauge.
- 3) Close the valve on the main supply tank.
- 4) Open the bleeder valve on supply hose and drain out the remaining gas.
- 5) Close the bleeder valve.

II - Check how much gas is available in the T-shirt cannon supply tanks, and determine which tank has the MOST gas in it. – This will be the first tank to fill:

- 6) Connect the free end of the supply hose on to one of the T-shirt cannon tanks.
- 7) Open the valve on the T-shirt cannon tank, and read the available PSI.
- 8) Close the valve on the T-shirt cannon tank.
- 9) Open the bleeder valve on the supply hose and drain out the remaining gas.
- 10) Close the bleeder valve.
- 11) Remove the supply hose from the T-shirt cannon tank.

12) **REPEAT STEPS 6 THROUGH 11 TO DETERMINE THE AMOUNT OF GAS AVAILABLE IN THE SECOND T-SHIRT CANNON TANK.**

III - Fill the T-shirt cannon tanks STARTING WITH THE FULLEST TANK.

- 13) Reconnect the supply hose to the T-shirt cannon tank that has the most nitrogen in it.
- 14) Open the supply valve on the MAIN supply tank.
- 15) **SLOWLY** open the valve on the T-shirt cannon tank.

AVOID FILLING THE T-SHIRT TANKS TOO QUICKLY.

- 16) Fill the T-shirt cannon tank up to 2000 – 2500 psi capacity – or the maximum value that is available from the main supply tank.
- 17) Turn off the supply valve on the T-shirt cannon tank.
- 18) Turn off the supply valve on the Main supply tank.
- 19) Turn on the bleeder valve on the supply hose and drain out the remaining gas.
- 20) Remove the supply hose from the T-shirt cannon tank valve.

21) **REPEAT STEPS 13 THROUGH 20 FOR THE REMAINING T-SHIRT CANNON TANK.**

IV - Top off the T-shirt cannon tanks.

- 22) For each T-shirt cannon tank, (after the T-shirt cannon tanks have cooled down), go back and repeat steps 13 through 20 in order to top off each tank.

V – Return tanks to their storage positions

- 23) **Replace the screw-on valve cover on top of the main nitrogen supply tank.**

Date	Tank	Initial PSI	Final PSI
	Main supply tank		
	T-Shirt cannon tank #01		
	T-Shirt cannon tank #02		

Rules of Thumb (Not definitive)

A full tank is 2500 psi.

A T-shirt travels one foot per PSI (i.e. with the cannon set at 80 psi, a t-shirt will shoot 80 feet.)

With the tank pressure set at 80 PSI, seven trigger pulls decreases the supply tank 100 PSI.
Therefore a full tank (2500 psi) will provide 175 shots.

With the tank pressure set at 100 PSI, four trigger pulls decreases the supply tank 100 PSI.
Therefore a full tank (2500) psi will provide 100 shots.

NOTE: 20 PSI remains left in the auxiliary tank after a trigger pull with the valve set a 100 psi.

Supplier: GTS-Welco Item #NI H Nitrogen H \$76.80
 804 231-1192