

Subject:	Needle Valve Adjustment - NitroPro
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Model Numbers Affected:	All NTF machines with catalog numbers beginning with 455
Manufacture Dates:	All
Serial Numbers Affected:	All
Tools Required:	None
Parts Required:	None
Supplemental Document:	None
Action Required:	Field adjustment is required if Needle Valve is replaced or Nitrogen purity level is not high enough or tank fill rate is too slow.

The setting of the Needle Valve determines the Nitrogen purity and the speed at which Nitrogen is generated and stored in the tank as follows:

- 1) The more the Needle Valve is closed, the higher the purity level of Nitrogen and the slower the rate of filling the tank.
- 2) The more the Needle Valve is opened, the lower the purity level of Nitrogen and the higher the rate of filling the tank.

The optimum setting of the Needle Valve is when the purity level of Nitrogen generated is between 93 and 95 percent, inlet pressure is 150 psi and filters are clean. This purity level can be measured using the RTI Purity Analyzer. The procedure to set the Needle Valve follows:

- 1) Locate the Needle valve inside the unit and disconnect the hose as shown in Figure 1. Press the green collar on the Push Fitting as indicated by the arrow and pull the Hose out of the fitting.
- 2) Connect air to the NitroPro machine and set the panel valves to Fill Tire. Nitrogen should be exiting the end of the disconnected hose. If not, press the trigger on the fill wand until Nitrogen is exiting the hose.
- 3) Turn Nitrogen Analyzer on and verify calibration.
- 4) Hold the RTI Nitrogen Analyzer as shown in Figure 2 and read the purity level of Nitrogen being generated.
- 5) Adjust the Needle Valve so that the Purity Analyzer reads 93 to 95 percent. Turning the stem of the Needle Valve clockwise increases the Nitrogen purity level. Take a new reading after each adjustment of the Needle Valve.

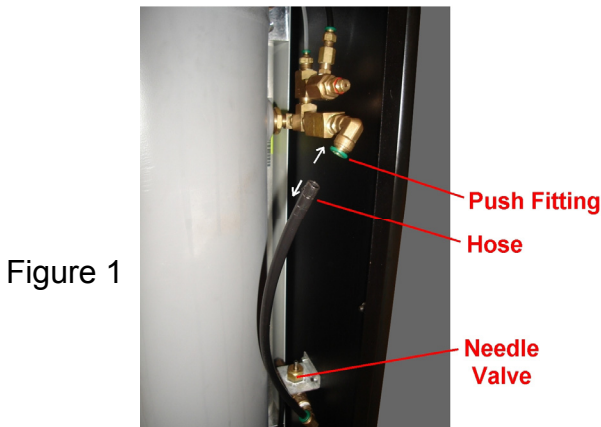


Figure 1

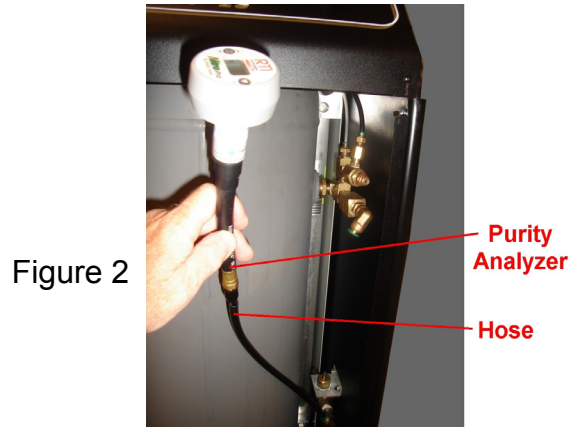


Figure 2