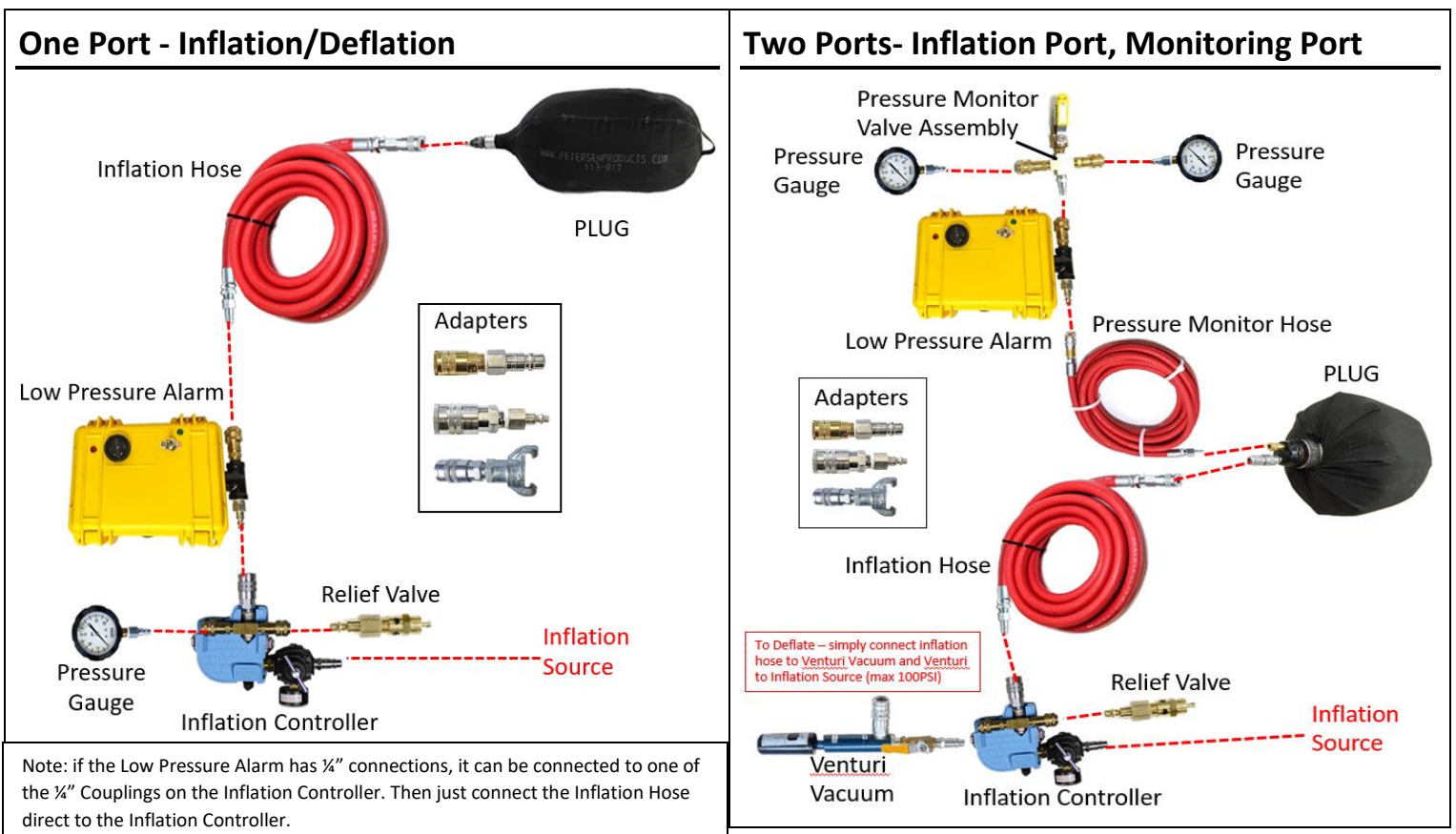


Petersen Air Inflation/Deflation Components

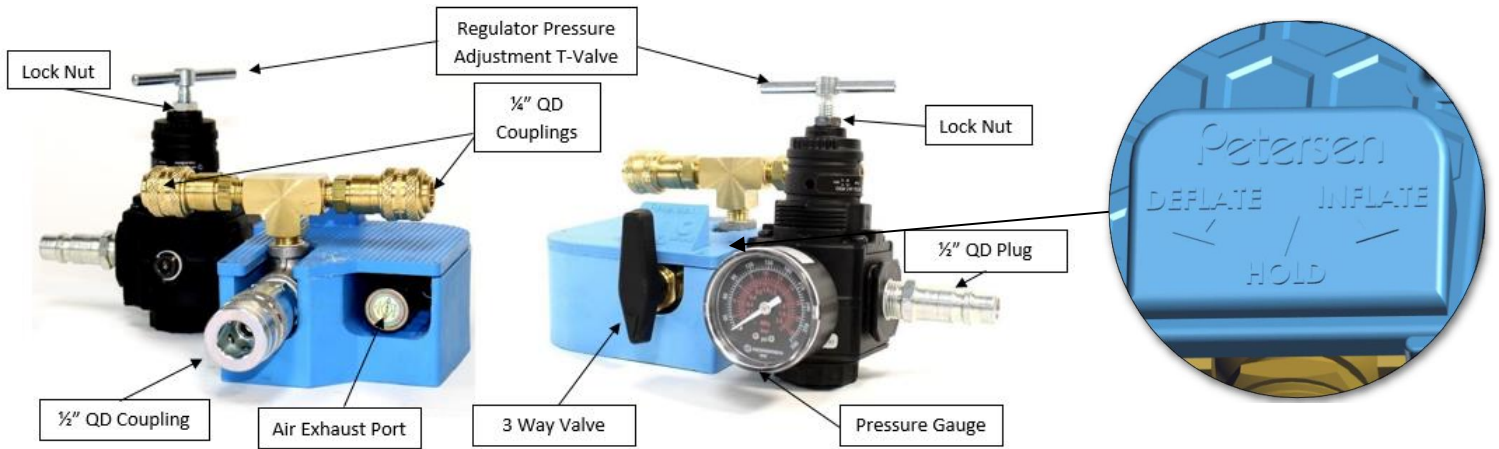
Air/Gas Inflation Components

 <p>Inflation Controller</p>	 <p>Hose 3/4" with 1/2" QD</p>	 <p>Hose 3/8" with 1/4" QD</p>	 <p>Low Pressure Alarm</p>
 <p>Pressure Monitor Valve Assembly</p>	 <p>Calibrated Pressure Gauges</p>	 <p>Adjustable Relief Valve</p>	 <p>Fixed Relief Valve</p>
 <p>Venturi Vacuum Generator</p>	 <p>QD Adapter - 1/2" Coupling, 1/4" Plug</p>	 <p>QD Adapter - 3/4" Coupling, 1/2" Plug</p>	 <p>Adapter, 1/2" QD Coupling to Chicago Connector</p>

Inflation Connections



Air Inflation Controller

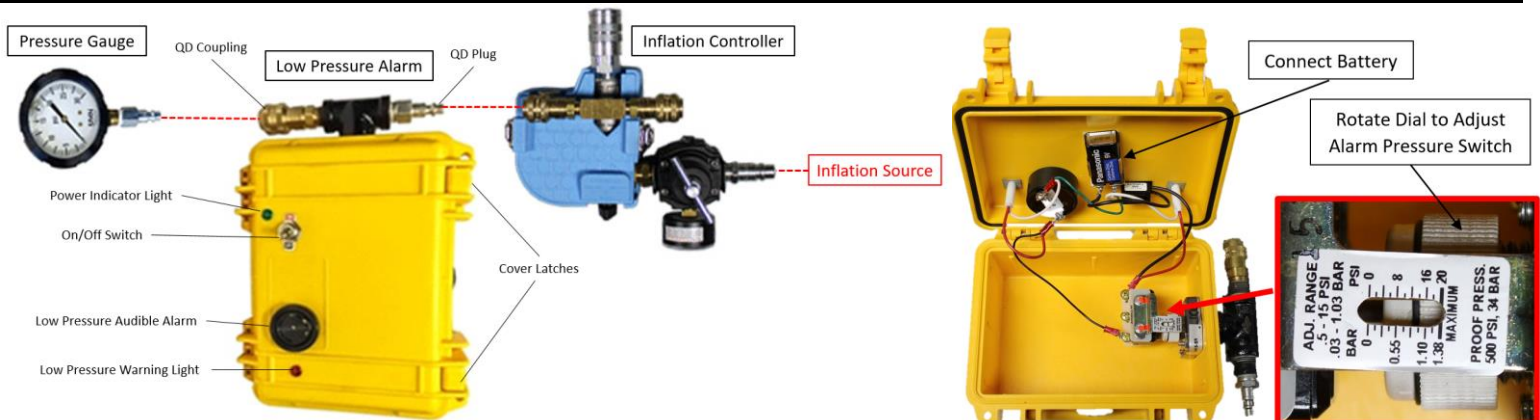


- **1/2" QD Plug** – connect to air inflation source.
- **Regulator Pressure Adjustment T-Valve** – Delivers constant pressure to the plug. The Regulator slowly bleeds any increases in air pressure. The regulator uses a relief-style design. Clockwise to increase and counter clockwise to decrease pressure setting.
- **Lock Nut** – Locks pressure setting.
- **Pressure Gauge** – Displays the actual input pressure reading.
- **3-Way Valve** – Controls the inflation pressure to inflate, hold or deflate out to atmosphere.
- **Air Exhaust Port** – deflates to atmosphere.
- **2x 1/4" QD Couplings** –couplings to connect pressure gauges and pressure relief valves.
- **1/2" QD Coupling** – connect to air inflation hose 1/2" QD plug.

Inflating the Plug using the Inflation Controller

1. Before connecting to 1/2" QD Plug on the Inflation Controller, turn Regulator Pressure Adjustment T-Valve counter clockwise to remove all pressure. Be sure the 3-Way Valve is on the HOLD setting.
2. Connect Air source to 1/2" QD Plug on the Inflation Controller then turn the Regulator Pressure Adjustment T-Valve clockwise to increase and counterclockwise to decrease pressure setting.
3. Always approach the desired pressure from a lower pressure.
4. Connect Inflation Hose 1/2" QD Plug to 1/2" QD Coupling on Inflation Controller. Connect other end of hose with 1/2" QD Coupling to 1/2" QD Plug on the inflatable device.
5. Attach Relief Valve to 1/4" QD Coupling (a pressure gauge may be connected to other 1/4" QD Coupling to verify proper pressure)
6. Turn the 3-Way Valve to INFLATE.
7. Once plug reaches desired pressure, turn 3-Way Valve to HOLD. NOTE: monitor plug pressure very closely until pressure stabilizes – larger plugs may take longer. Be aware of any changes in temperature, pressure or other conditions.
8. To deflate plug, turn 3-Way Valve to DEFLATE. Air/gas will escape through the Air Exhaust Port on the Inflation Controller. NOTE: for larger plugs it is recommended to use a Venturi Vacuum Generator for faster deflation.

Low Pressure Alarm



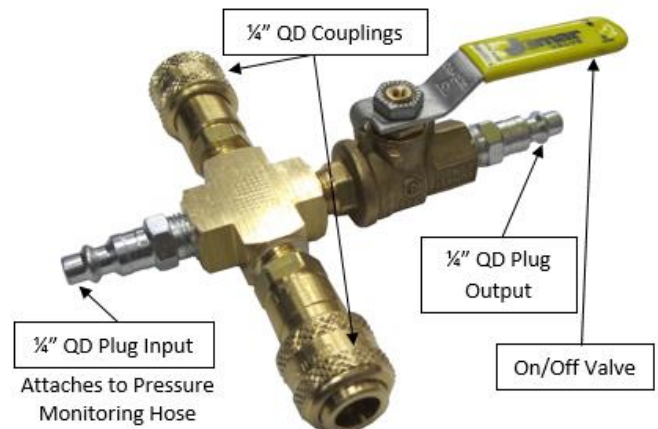
- Alarms are available for 0-15 psi, 10-90 psi, 20-300 psi, and 20-500 psi. The alarm should match the inflation pressure, inflation medium and hose connections.
- Also available in 1/4" Quick Disconnect, 1/2" Quick Disconnect and Cam & Groove (Water Inflation). See website for more info.
- The plug rated pressure should be within the Alarm high and low pressure rating and around the mid-range of the Alarm.
- Never connect the Alarm to a pressure higher than the Low Pressure Alarm high-pressure limit.

Adjusting the Low Pressure Alarm

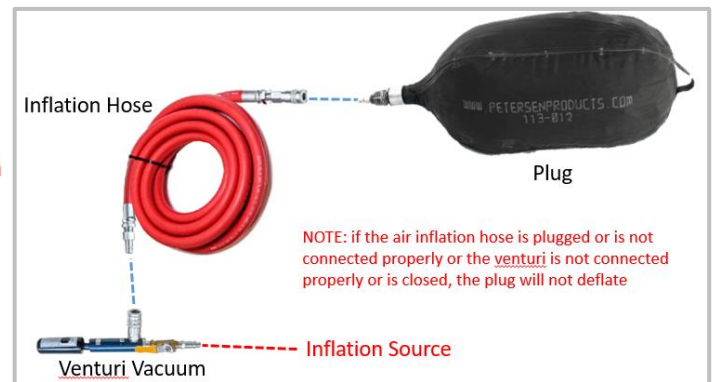
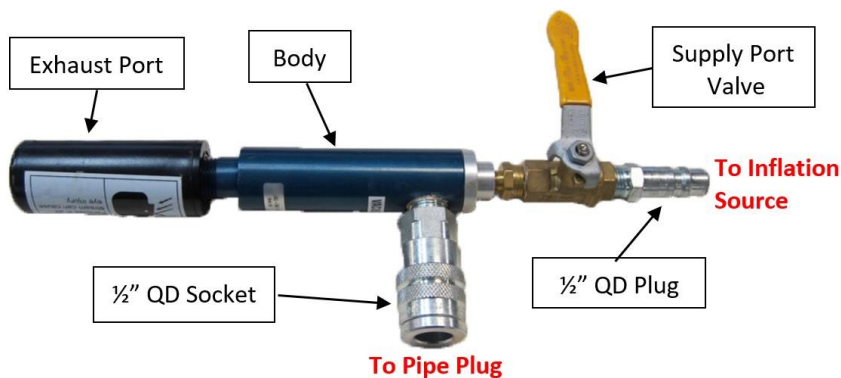
1. Release cover latches and open the Low Pressure Alarm cover. Connect the 9 Volt DC battery.
2. Adjust the Alarm pressure switch by rotating the dial to 10% below the pipe plug pressure.
3. Close and latch the Low Pressure Alarm cover.
4. Connect Low Pressure Alarm QD Plug to QD Coupling on Inflation Controller and turn the Regulator Pressure Adjustment T-Valve to the desired pressure. For greater redundancy attach a pressure gauge to the Inflation Controller or Low Pressure Alarm.
5. Turn On the Alarm with the On/Off Switch on the cover. The green light should come on.
6. Decrease the Regulator Pressure Adjustment T-Valve (counter clockwise) to 10% below the desired pressure to sound the alarm and activate red light. Your device is now set.

Pressure Monitor Valve Assembly

- Used for pressure monitoring when an inflatable device has a separate pressure monitoring port from the one used for inflation.
- Valve is used for deflation out to atmosphere.
- Two ¼ inch quick disconnect couplings are for two pressure monitoring gauges and/or a pressure relief valve.
- The ¼ QD Plug Output is by the On/Off Valve
- The ¼" QD Plug Input attaches to the Pressure Monitoring Hose



Venturi Vacuum Generator



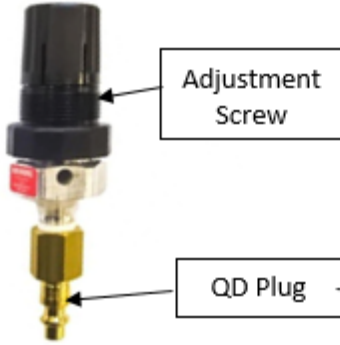
- Use the Venturi Vacuum Generator to deflate Inflatables faster when the pipeline pressure is not sufficient to force air out.
- The Venturi requires more air to deflate the inflatable than was used to inflate.
- A large volume of air will leave the exhaust port. **NOTE: Personnel should never be in direct line of the exhaust port.**

Deflating with the Venturi Vacuum Generator

1. Close Supply Port Valve on the Venturi Vacuum Generator.
2. Connect the plug Inflation Hose ½" QD Plug to the ½" QD Coupling on the Venturi Vacuum Generator.
3. Connect the ½" QD Plug to the ½" QD Coupling on the inflation source (do not exceed 100 PSI).
4. Open the Supply Port Valve.
5. You will hear an audible change in sound when the vacuum pressure increases, indicating the inflatable device is fully deflated. Run the air for an additional 5 minutes to sure all air is expelled from the plug.
6. Close the Supply Port Valve and disconnect the Venturi from the plug Inflation Hose.

Relief Valve

Adjustable Valve

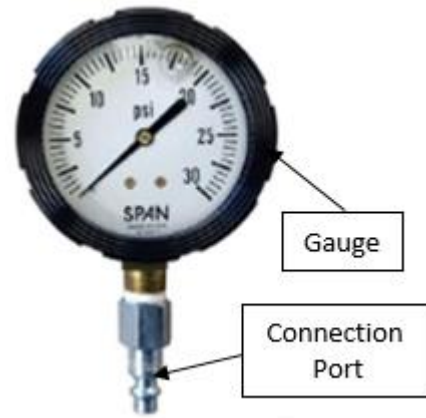


Fixed Valve



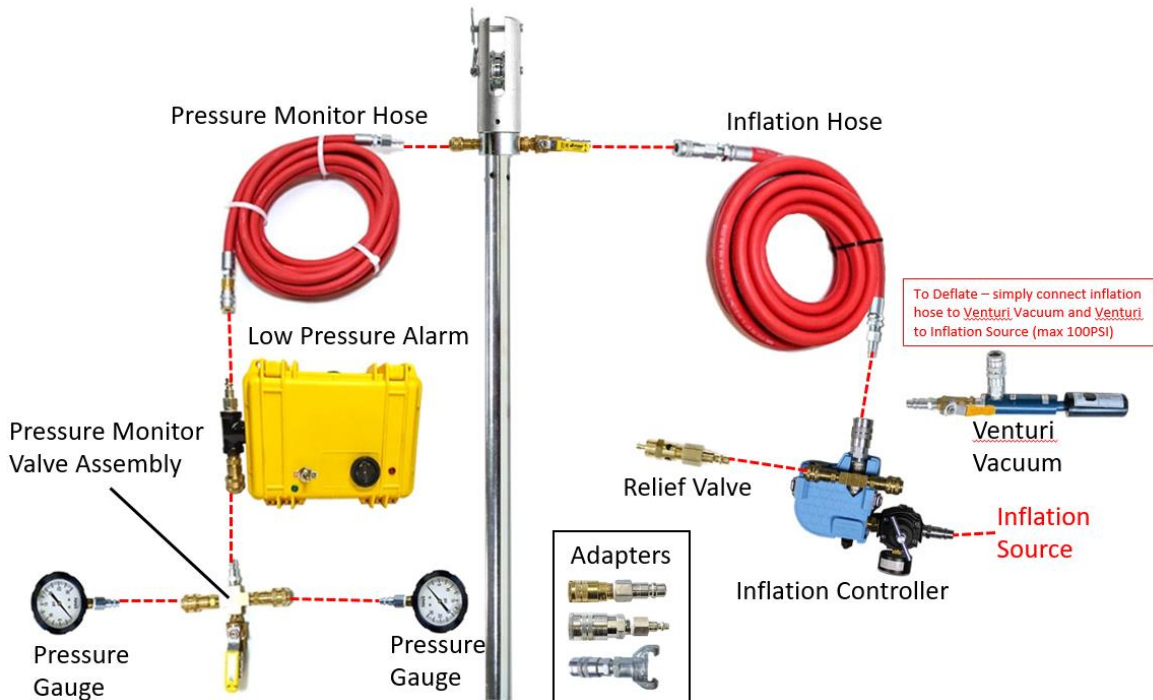
- Connects to the Inflation Controller ¼" QD coupling.
- Bleeds excess air pressure to avoid over inflation.
- Recommended setting is 10% over the rated pressure of the inflatable plug.
- Use the Inflation Controller to set the Adjustable Valve pressure. On the adjustable plug, adjust the screw cap until the Relief Valve just opens (clockwise to increase pressure, counter clockwise to decrease pressure). Flow can be heard escaping.
- Decrease the source pressure on the inflation controller to verify the Relief Valve closes at the rated pressure of the pipe plug.

Pressure Gauge



- Connects to the ¼" QD Coupling on the Pressure Monitor Valve Assembly or Inflation Controller.
- Inflatable pressure should be between 25% and 75% of gauge max. (eg. 60 Max PSI gauge – plug rated pressure 15 – 45 PSI)
- Best practice is to use two calibrated gauges to verify that they agree. If they disagree, test both gauges to see which one is bad.
- Do not exceed the maximum pressure of the gauge. This can cause the gauge to lose its calibration.
- Lightly tapping on the gauge helps provide a more accurate reading.

PeteStop® Air Inflation Connection



Call Petersen with any questions or suggestions relating to the use of any Petersen product



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