



# ADT914A

## Handheld Pneumatic Pressure Test Pump

### User's Manual

[Version number:1706V14]  
Please download the latest version from [www.additel.com](http://www.additel.com)



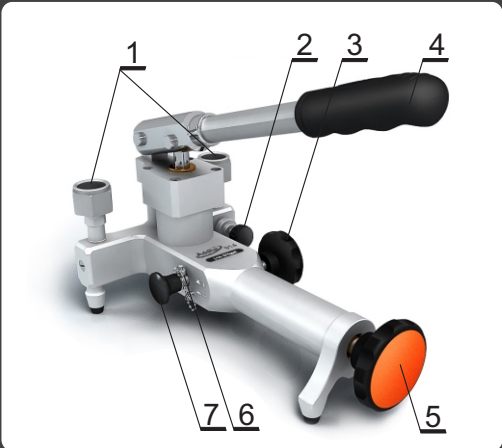
### Warnings and cautions

- > Low pressure gauges can very easily be over pressured if not careful. Please take caution when applying pressures.
- > Do not exceed the safety pressure limit of 1000 psi (70bar).
- > Do not switch between pressure and vacuum mode under pressure.
- > Over tightening connectors may cause damage.
- > Store the pump in dry and non-corrosive environments.
- > All moisture and contaminants should be cleaned out of the liquid isolator before creating a vacuum. This is accomplished by venting the pump when at high pressure.
- > For the least risk in contamination of the reference gauge, the DU should be installed to the pressure port which is closest to the vent valve.
- > Additel is not liable for any safety problems or damages caused by misuse or incorrect operation.

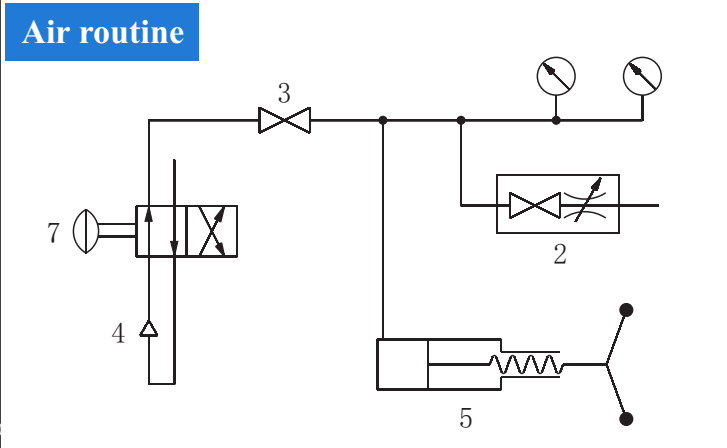
### Specification

- > Pressure range: 95% vacuum to 375 psi ( 25 bar )
- > Temperature: 0~50 °C
- > Humidity: < 85%RH
- > Adjusting fineness: 10 Pa ( 0.1 mbar )
- > Safety pressure: < 1000 psi ( 70 bar )
- > Pressure media: Air
- > Size: Height: 5.12' ( 130 mm );
- > Base: 9.45' ( 240 mm ) x 4.72' ( 120 mm )
- > Weight: 3.3 lb ( 1.5 kg )
- >

### Configuration & Air routine



- 1 - Quick connector
- 2 - Vent valve (clockwise to close/ counterclockwise to open)
- 3 - Isolation valve (isolates the calibration volumn from pressurizing)
- 4 - Hand pump
- 5 - Fine adjust handle (clockwise to increase pressure)
- 6 - Security bolt pin (use it to ensure safety)
- 7 - Pressure/vacuum (P/V) selector (Postive pressure: pull it out; Vacuum: push it in)



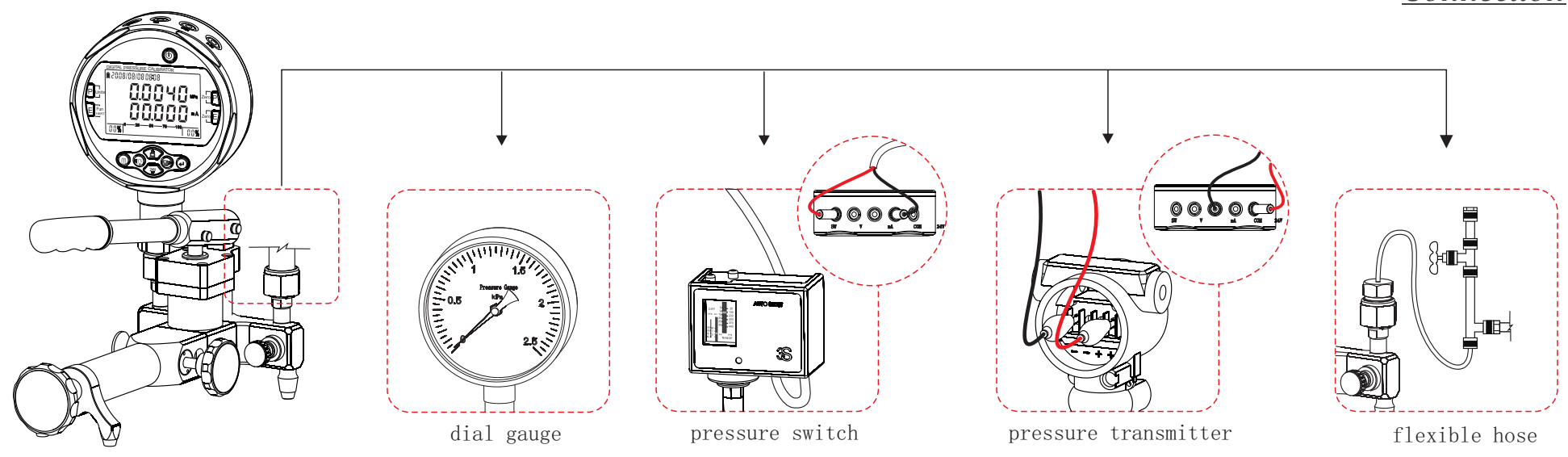
### Troubleshooting

| Problem                                      | Cause   | Solution  |
|--|---|---|
| Hand pump will not generate pressure         | The isolation valve is not open.                          | Open the isolation valve.   |
| It is difficult to increase pressure         | A. Vent valve is not closed.                              | Close the vent valve.   |
|  | B. The O-ring seal is loose or damaged.                   | Replace the O-ring seal.  |
|  | C. P/V selector is in the wrong position.                 | Pressure: pull the P/V selector out; Vacuum: push the P/V selector in.                                  |
| Hard to use the fine adjust handle           | A. The isolation valve is not closed.                     | Close the isolation valve.  |
|  | B. The gauges are not tightened.                          | Tighten the reference gauge or the gauge under test.  |
|  | C. The O-ring seal is damaged.                            | Replace the O-ring seal.  |
|  | D. The thread surface is not smooth.                      | Use Teflon tape on the thread and turn it in tight.   |
|  | E. The connector is mismatched to the gauge pressure port | Use the correct adapter.  |
|  | F. Dust or contaminants are blocking the pressure flow    | Repeat pressurizing the pump several times and then suddenly vent which will push any contaminants out. |
| It is difficult to turn the quick connectors | A. Too much force was previously applied.                 | Secure the quick connection with less force.  |
|  | B. The threads have no lubrication.                       | Apply lubrication to the threads.   |

0-Rings for pressure connector

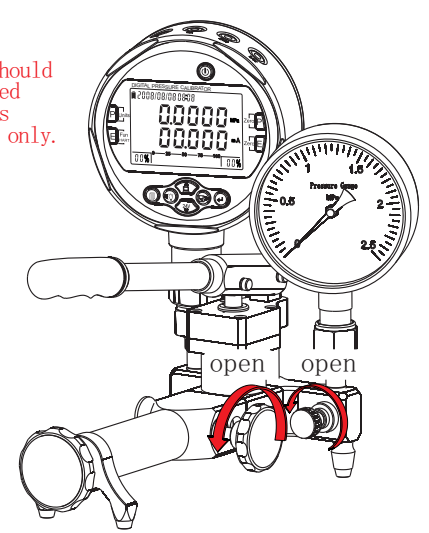
| P/N        | Size  | Connector                       |
|------------|-------|---------------------------------|
| 1611300004 | 4X1.5 | M10X1, 1/8BSP, 1/8NPT           |
| 1611300220 | 6.5X3 | M20X1.5, 1/2BSP, 1/2NPT         |
| 1611300024 | 6X2   | M14X1.5, 1/4BSP, 1/4NPT, 3/8BSP |

Connection **A**

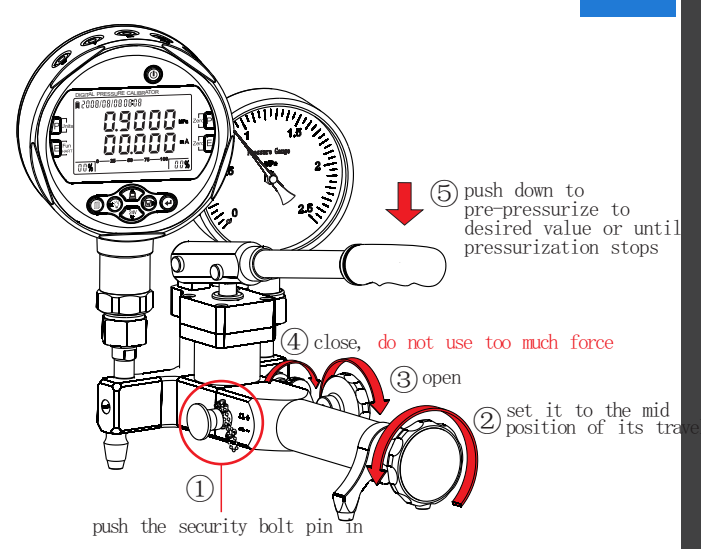


*Vent* **B**

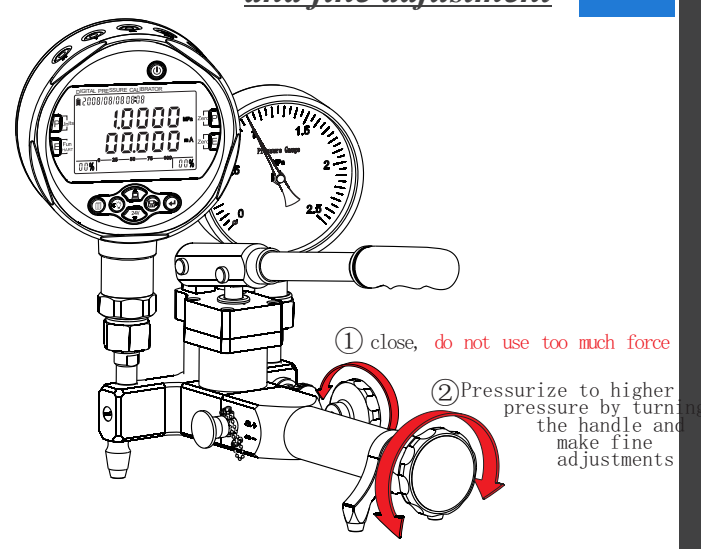
Zeroing should be operated under this condition only.



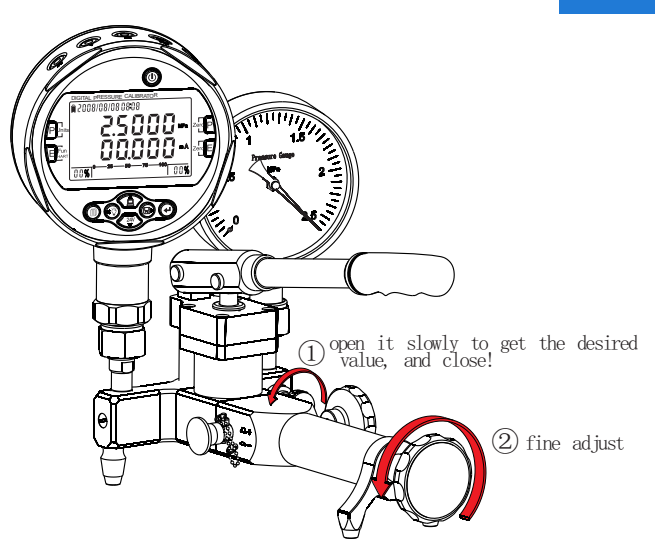
*Pre-pressure* **C**



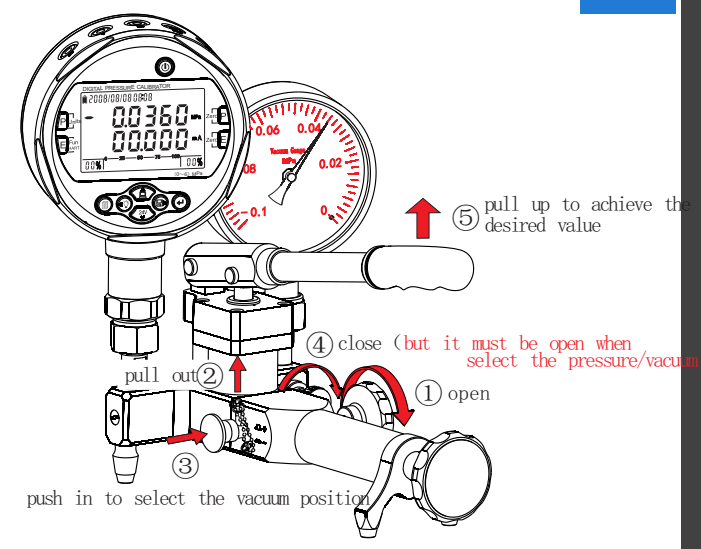
*Increasing pressure and fine adjustment* **D**



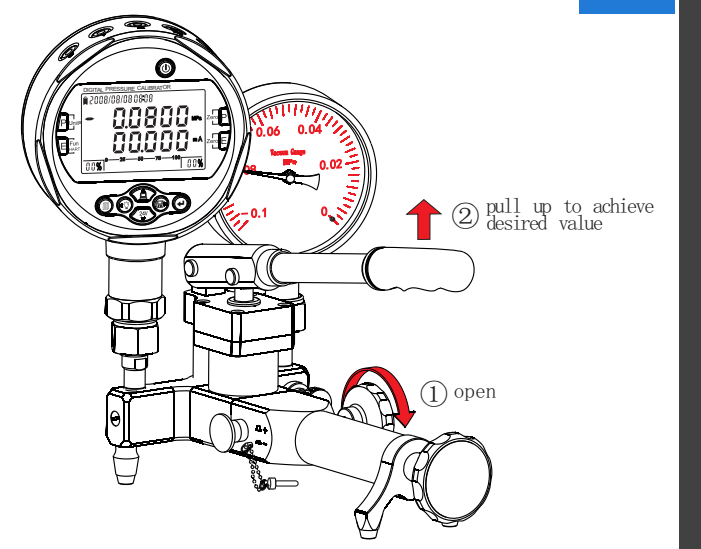
*Decreasing pressure* **E**



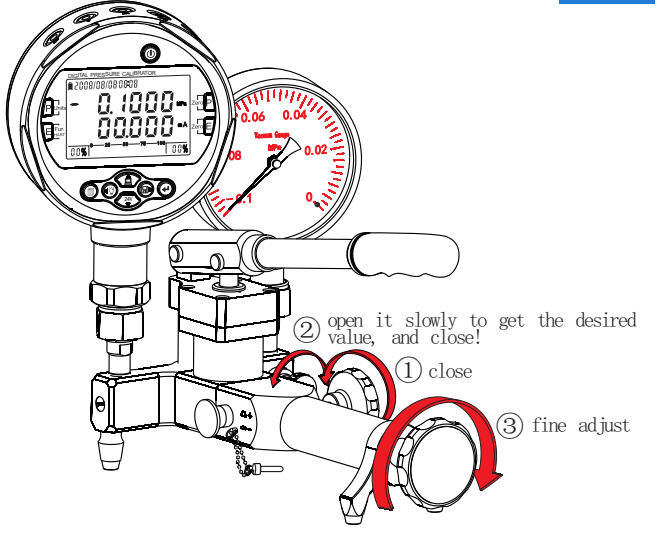
*Vacuum pressures* **F**



*Repeat Vacuum pressure* **G**



*Decreasing vacuum pressures* **H**



**Remark:**

A: Additel has made a concerted effort to provide complete and current information for the proper use of the equipment. The product specifications and other information contained this manual are subject to change without notice.

B: Above pictures are just for reference.