

# ADT925

## Handheld Hydraulic Pressure Test Pump User's Manual

[Version number:1505V14]

Please download the latest version from www.additel.com

## Warnings and cautions

- Operate the pump in the rated pressure range and do not exceed the safety pressure of 9000 psi (600 bar).
- Close the valves and tighten the ports when transporting the pump.
- Always open the reservoir release valve during operation.
- Do not over tighten the connectors or handles to avoid any damage.
- Change contaminated media immediately.
- Do not let the media level get below the mid line of the reservoir when the pump is place horizontal.
- Keep the outer threads clean.
- Additel is not liable for any safety problems or damages caused by misuse or incorrect operation.

## Specification

- **Pressure range:** 12.5 psi ( 0.85 bar ) vacuum to 6000 psi ( 400 bar ) positive pressure

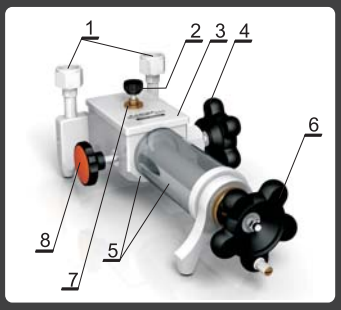
  ***Remark:*** *If local atmosphere pressure is 1 bar, the vacuum can reach to 0.85 bar; If local atmosphere pressure is P, the vacuum can reach to ( P × 85% ) bar.*

- **Temperature:** ( 0~50 ) ℃
- **Humidity:** < 95%RH
- **Adjustment resolution:** 0.015 psi ( 1 mbar )
- **Safety pressure:** < 9000 psi ( 600 bar )
- **Pressure media:** Oil or deionized water

  *To reach the best performance, oil is recommended. Recommended oil: Mineral oil SO-VG22 or compatible oil.*

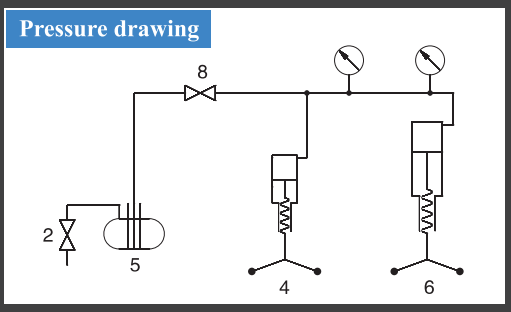
- **Size:** Height: 4.72" ( 120 mm ); Base: 9.84" ( 250 mm ) x 5.51" ( 140 mm )
- **Weight:** 3.8 lb ( 1.7 kg ) ( excluding the media )

## Configuration & Pressure drawing




**1 – Quick connector**
**2 – Reservoir release valve**
(open it to connect with atmosphere)
**3 – Upper cover of reservoir**
**4 – High–pressure pressurization and fine pressure adjustment handle**
(clockwise to increase pressure)
**5 – Liquid reservoir**
(inner is pressure media)
**6 – Pre–pressurization handle**
(clockwise to increase pressure)
**7 – Screw of fitting cover**
**8 – Vent valve**
(Open to connect with atmosphere)

**Pressure drawing**




## Troubleshooting

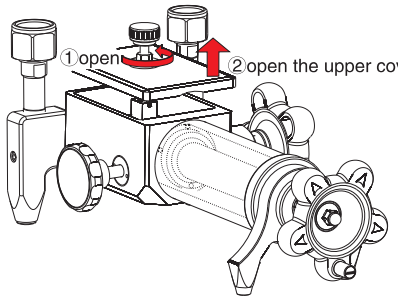
| Problem | Cause | Solution |
|---|---|---|
| Difficult to increase pressure with pre–pressurization handle | A. Vent valve is not closed. | Close the vent valve. |
| | B. The O–ring seal is loose or damaged. | Replace the O–ring |
| | C. Not enough media is in the reservoir. | Fill with more fluid. Make sure fluid level is high enough after the gas purging process. |
| | D. The pump is not horizontal. | Place the pump horizontally to prepare for pressure or vacuum. |
| Hard to fine adjust | A. The vent valve is not closed. | Close the vent valve. |
| | B. The gauges are not connected tight. | Tighten the gauges. |
| | C. The sealing ring is aged or frayed. | Replace sealing ring. |
| | D. The thread surface is not smooth. | Use Teflon tape on the thread and turn it in tight. |
| | E. The connector type is mismatched to the gauge pressure port. | Use the correct adapter. |
| it is difficult to turn valves or quick connectors | A. Too much force was previously applied. | Do not over tighten. |
| | B. The pre–pressurization handle may not adjust easily under high pressure. | Adjust pressure by using fine adjustment handle. (Pressure may need to be decreased with the fine adjustment handle before the pre–pressure handle can be used). |
| | C. The threads have no lubrication. | Lubricate the thread. |

**O–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 |

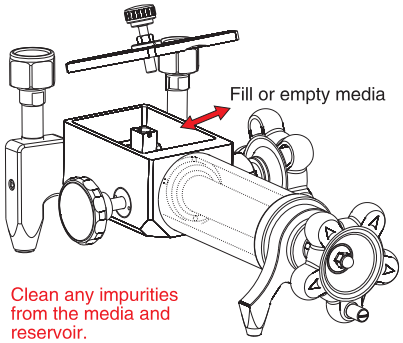
## Preparation

### Open the reservoir A



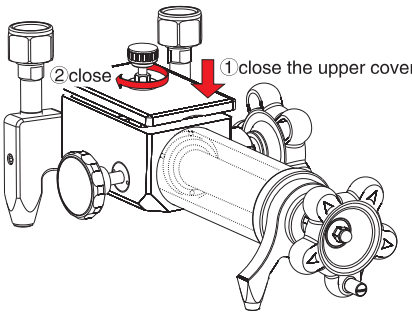

The media level should be 2/3 the height of the reservoir.

### Filling/emptying the reservoir B



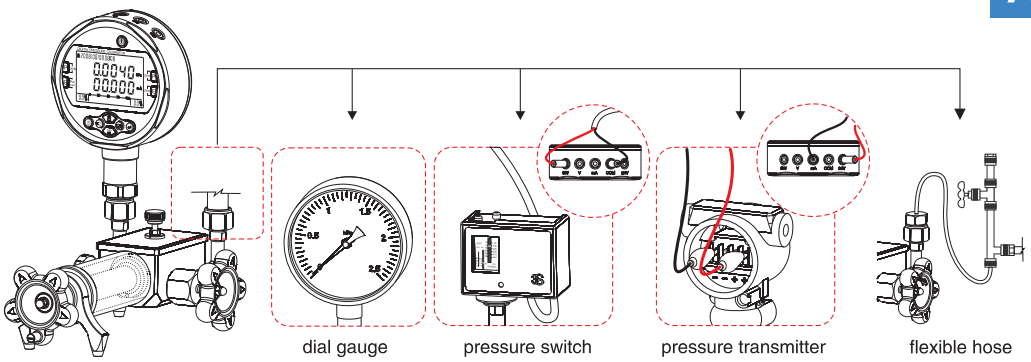

Clean any impurities from the media and reservoir.

### Lock the reservoir C

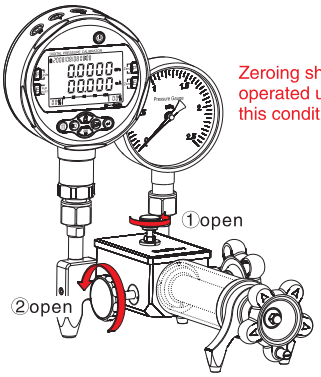



## Basic Operation

### Connection A

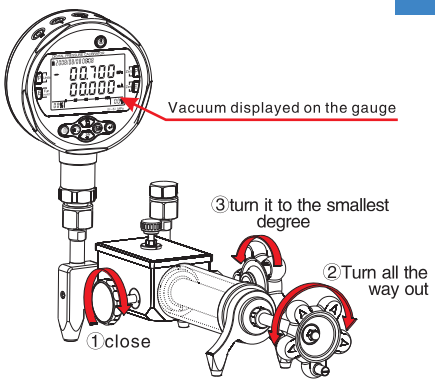



### Vent B

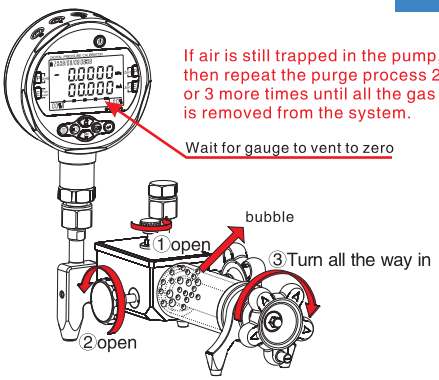



Zeroing should be operated under this condition only.

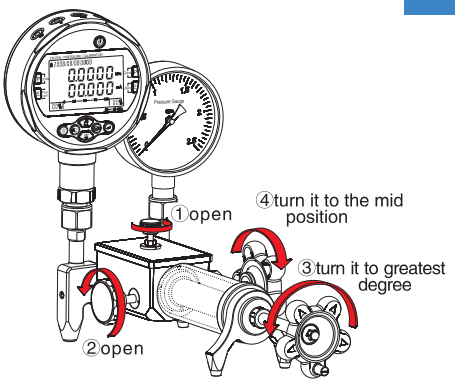
### Purge process C



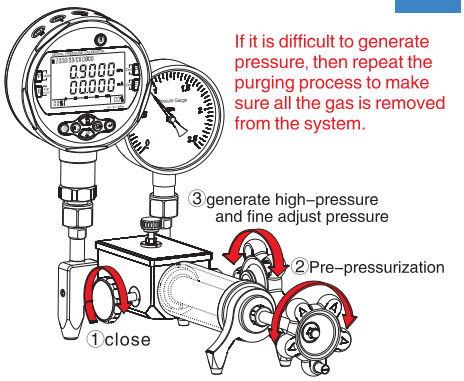

### Purge process (cont.) D



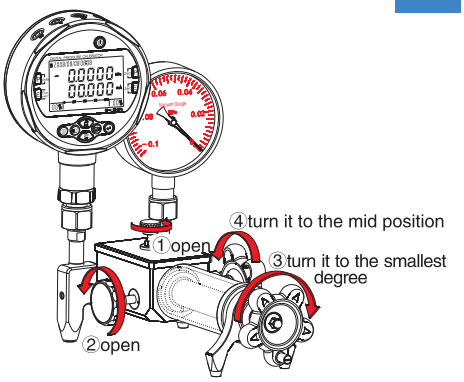

### Pre-pressure E



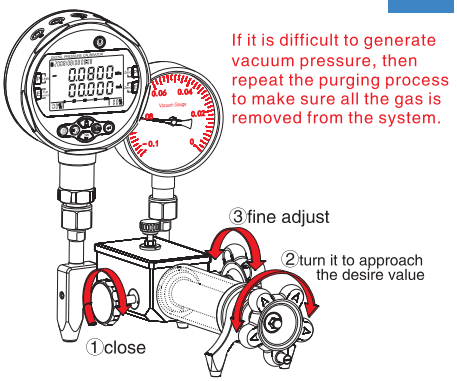

### Pressurizing process F




### Vacuum preparation G




### Vacuum process 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.