

ADT927

Hydraulic Pressure Test Pump User's Manual

[Version number:1111V10]



Warnings and cautions

- > Operating the pump in the rated pressure range, do not over the safety pressure (15,000 psi).
- > Close the valves and tighten the plugs in transportation or hand carrying.
- > Always open the release valve during operation.
- > Do not over tighten the connectors or handles to avoid any damage.
- > Change the contaminated media immediately.
- > Do not let the media level below to the mid line of reservoir, when the pump is placed horizontally.
- > Keep the outer threads clean.
- > Any security problems or damages caused by incorrect operations is beyond Additel's responsibility.

Specification

- > **Pressure range:** 12.5 psi (0.85 bar) vacuum to 10,000 psi (700 bar) positive pressure

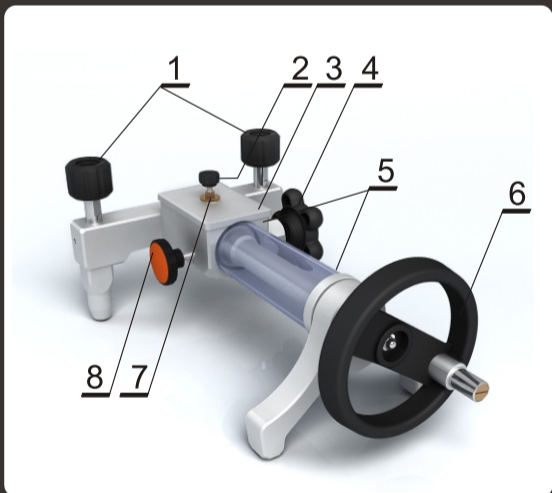
*Remark: If local atmosphere pressure is 1 bar, the vacuum can reach to 0.85 bar;
If local atmosphere pressure is P, the vacuum can reach to (P × 85%) bar.*

- > **Temperature:** (0~50) °C
- > **Humidity:** < 95%RH
- > **Adjusting fineness:** 0.015 psi (0.001 bar)
- > **Safety pressure:** < 15,000 psi (1000 bar)
- > **Pressure media:** Oil or deionized water

*To reach the best performance, oil is recommended.
Recommended oil: Di-ethylhexyl Sebacate, Isovoltine II.*

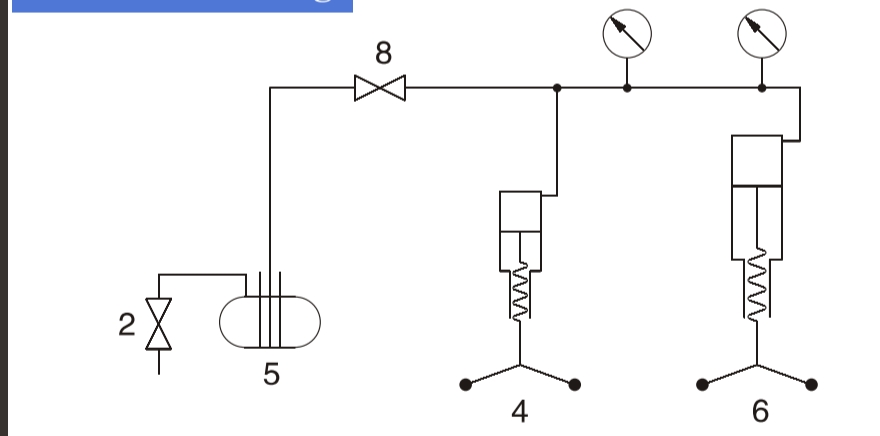
- > **Size:** Height: 5.31" (135 mm);
Base: 11.42" (290 mm) x 7.80" (198 mm)
- > **Weight:** 7.1 lb (3.2 kg) (excluding the media)

Configuration & Pressure drawing



- 1 – 1/4 NPT connector
(or customized female connector)
- 2 – 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 – Isolating valve

Pressure drawing

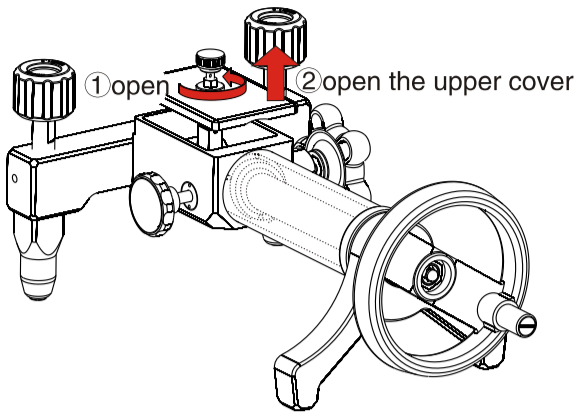


Troubleshooting

Problems	Causes	Solutions
Hard to coarsely adjust	A. Isolating valve is not closed.	Close the isolating valve.
	B. The sealing ring is broken or loosen.	Replace sealing ring.
	C. The media is not enough.	Fill adequate media in reservoir.
	D. The pump is skewed.	Place the pump horizontally to prepare for pressure or vacuum.
Hard to fine adjust	A. The isolating valve is not closed.	Close the isolating valve.
	B. The gauges are not connected tightly.	Turn the gauges tightly.
	C. The sealing ring is aged or frayed.	Replace sealing ring.
	D. The thread surface is not smooth.	Put in a Teflon seals and turn it tightly.
	E. The connector type is unmatched.	Use the right and suitable adapter.
Hard to rotate the screws	A. Too tightly turned last time!	Do not over tighten the valves.
	B. The pressure maybe not adjustable by coarse adjustment handle under high pressure.	Adjust pressure using fine adjust handles.
	C. The new pump maybe not smooth.	The new pump needs time to abrade.
	D. The threads have no lubrication.	Lubricate the thread.

Open the reservoir

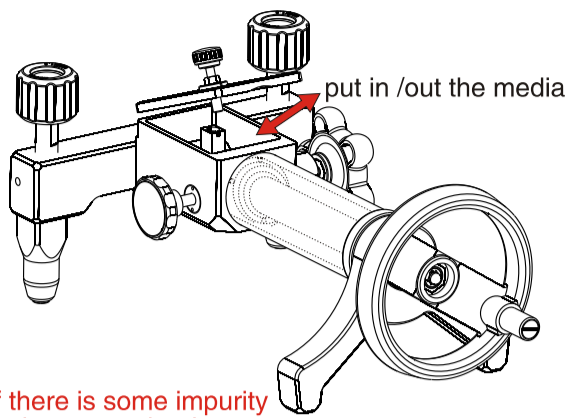
A



It is adequate if the level of media is placed to the 2/3 height of reservoir.

Put in/out the media

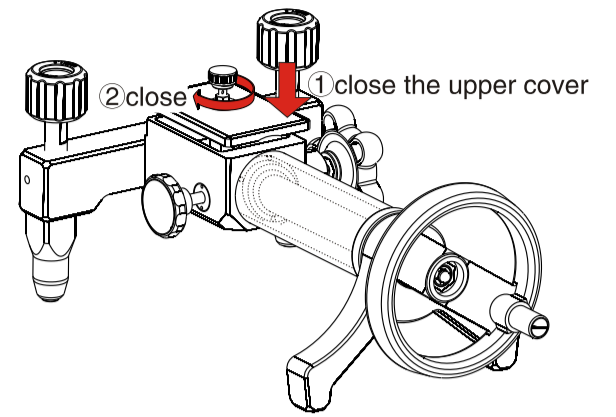
B



If there is some impurity in the reservoir, please clean it.

Lock the reservoir

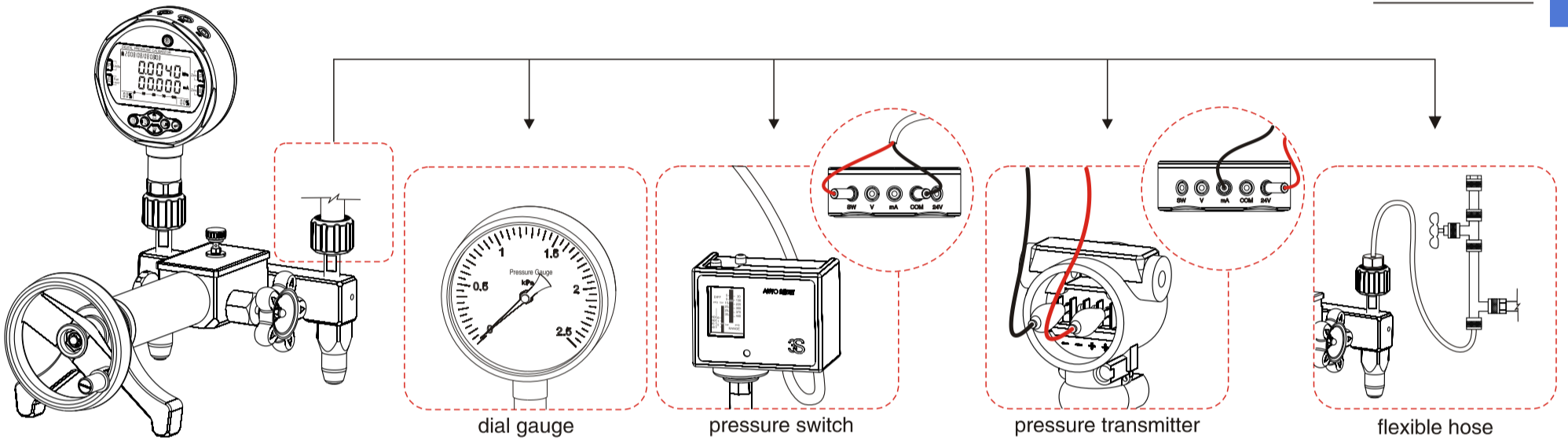
C



Basic Operation

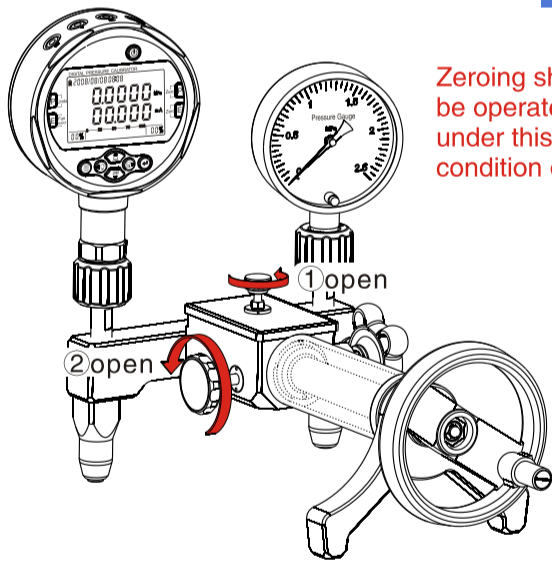
Connection

A



Open to atmosphere

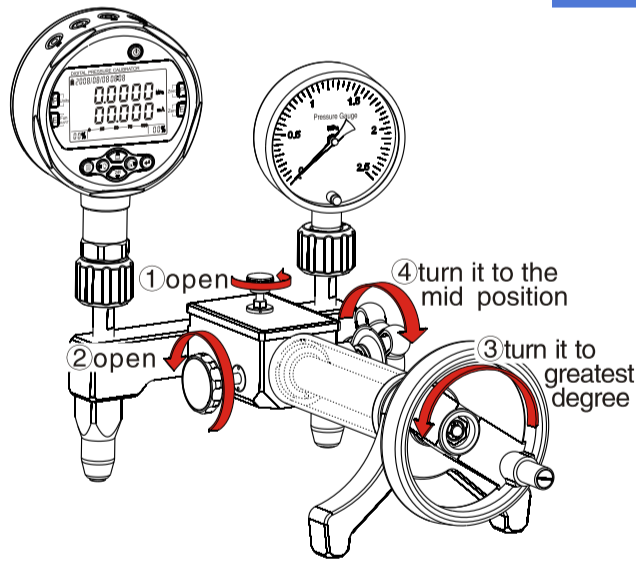
B



Zeroing should be operated under this condition only.

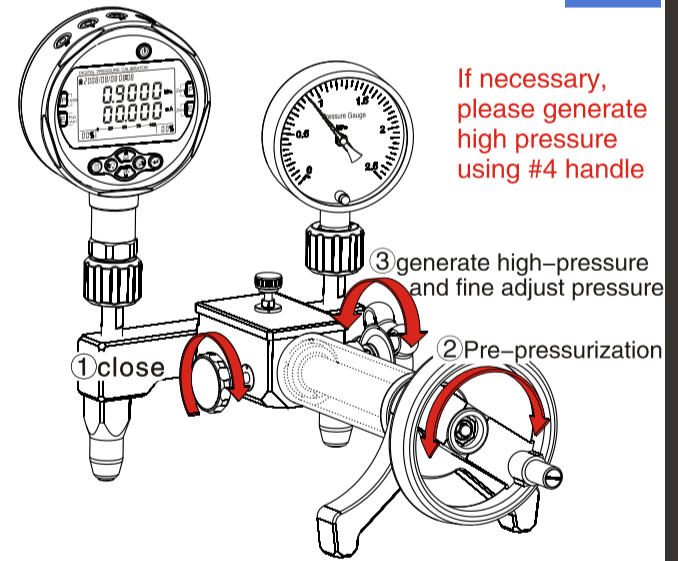
Pressure preparation

C



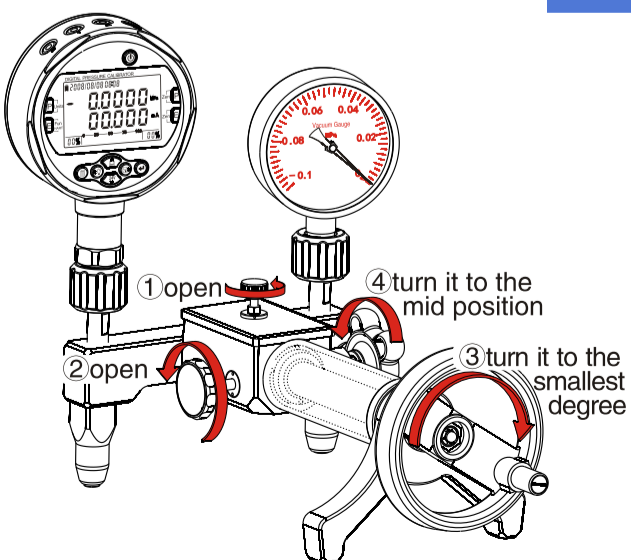
Pressurizing process

D



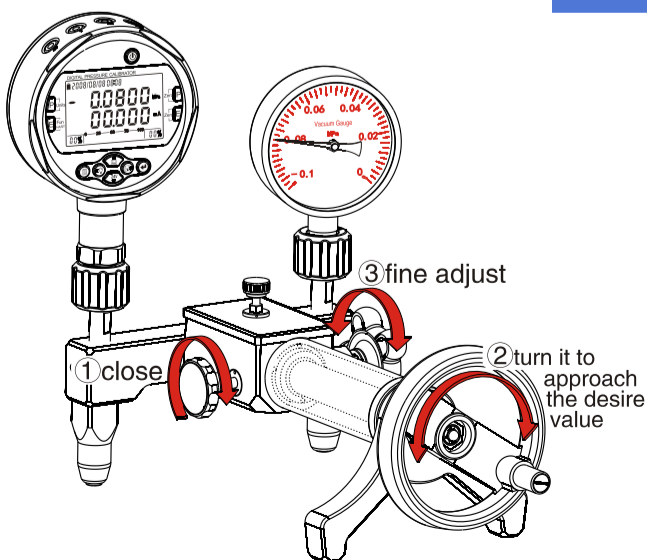
Vacuum preparation

E



Vacuum process

F



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.