ADT919

Pneumatic High Pressure Test Pump User's Manual

[Version number:1103V10]

Warnings and cautions

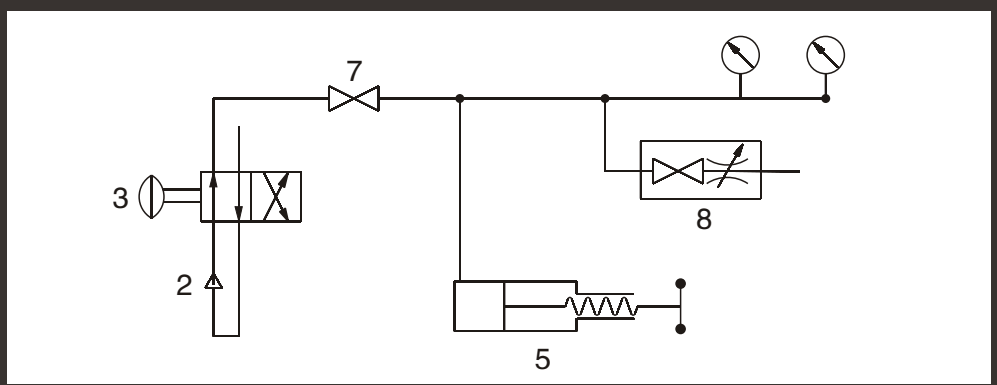
- Avoid possible damage when suddenly apply pressure to low pressure and small chamber gauges.
- Do not exceed the safety pressure limit (2600 psi) .
- Compressed air may cause problem in explosive or corruptive environment.
- Do not shift the selector to vacuum mode under pressure.
- Do not over tighten connectors to avoid any damage.
- The pump could store in the dry and non–corruptive environment.
- Any safety problems or damages caused by incorrect operation, are beyond Additel's responsibility.

Specification

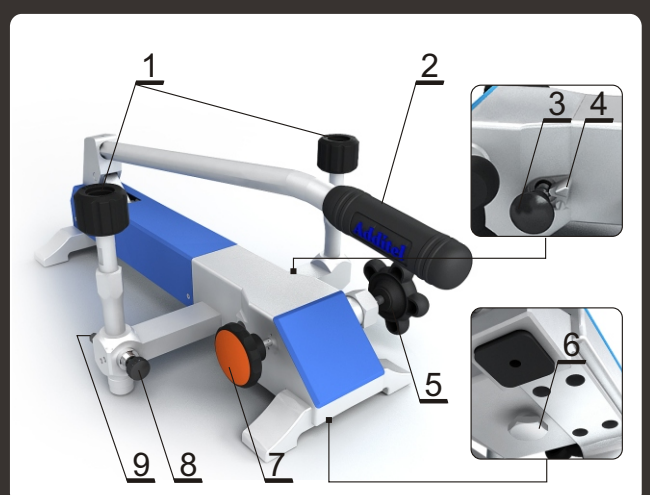
- **Pressure range:** 14 psi (0.95 bar) vacuum to 2000 psi (140 bar) positive pressure
- **Temperature:** (0~50) ℃
- **Humidity:** < 85%RH
- **Adjusting fineness:** 10Pa (0.1 mbar)
- **Safety pressure:** < 2600 psi (180 bar)
- **Pressure media:** Air
- **Weight:** 16.4 lb (7.4 kg)

Remark: *If local atmosphere pressure is 1 bar, the vacuum can reach to -0.95 bar; If local atmosphere pressure is P, the vacuum can reach to - 0.95P bar.*

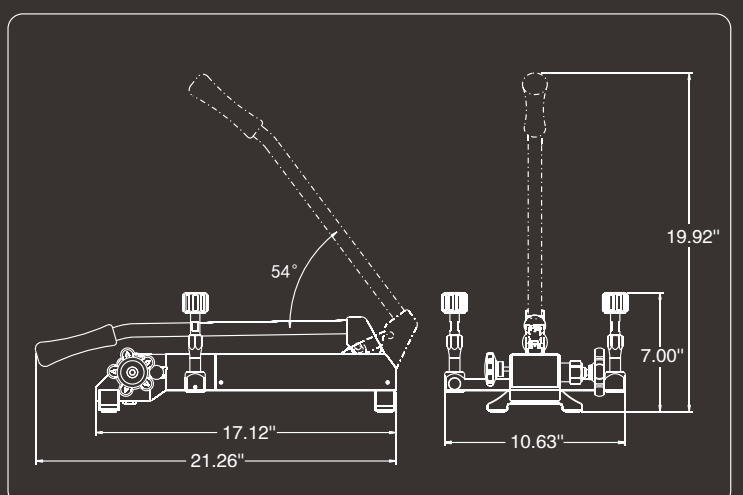
Air routine



Configuration & Size



1 – 1/4 NPT connector
2 – Pressure lever
3 – Pressure/vacuum selector
(Pressure: pull it out; Vacuum: push it in.Do not shift under pressure)
4 – Selector–protector
5 – Fine adjust handles
(clockwise to increase pressure)
6 – Clean–out hole
7 – Isolating valve
(isolate the calibration from pressurizing system)
8 – Release valve
(clockwise to close/ anticlockwise to open)
9 – Vent hole

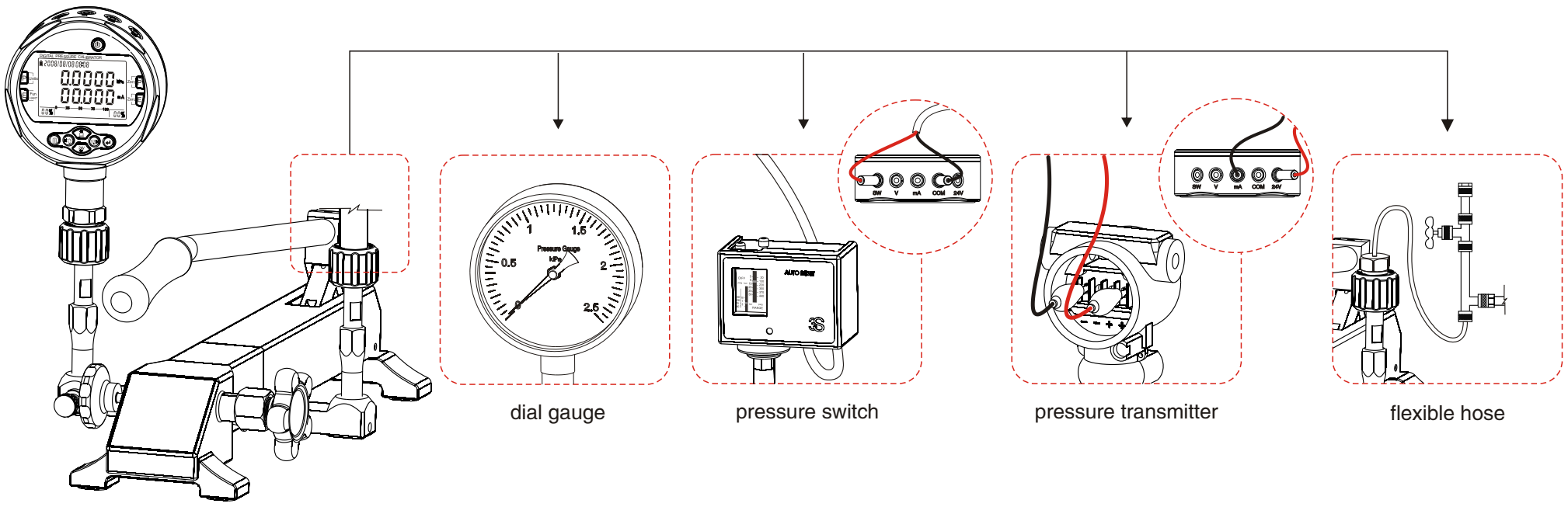


Troubleshooting

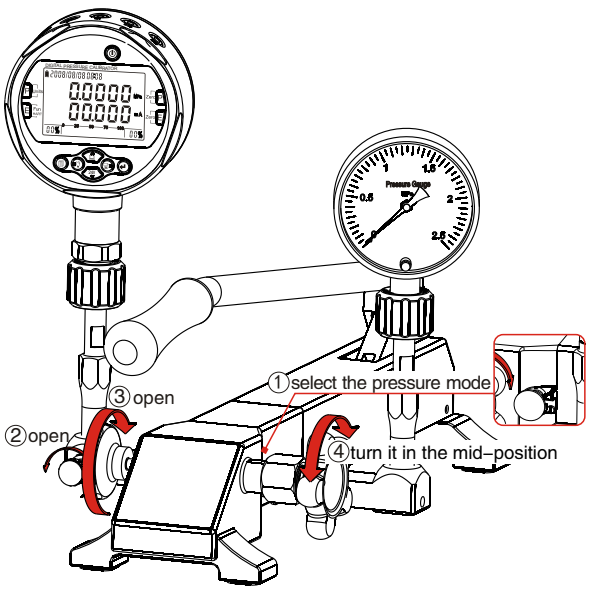
Problems	Causes	Solutions
Hard to use pressure lever	The isolating valve is not open.	Open the isolating valve.
Hard to pressurize	A. Release valve is not closed.	Close the release valve.
	B. The sealing ring is broken or loosen.	Replace sealing ring.
	C. P/V selector is in wrong position.	Pressure: pull it out; Vacuum: push it in.
	D. Pipeline jamed with impurity.	Open the Clean–out bolt and clean.
Hard to use fine adjust	A. The isolating valve is not closed.	Close the isolating valve.
	B. The gauges is not tightened.	Tighten the reference gauge or the gauge under test.
	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.
	F. The impurity blocks the air routine.	Repeat pressurizing several times and then release it suddenly, make airflow to bring the impurity out.
Not easy to turn the fittings	A. Too tightly turned last time!	Do not apply much force to close the fittings and valves.
	B. The new pump is not smooth.	The new pump needs time to abrade.
	C. The threads have no lubrication.	Lubricate the thread.

Basic Operation

Connection A

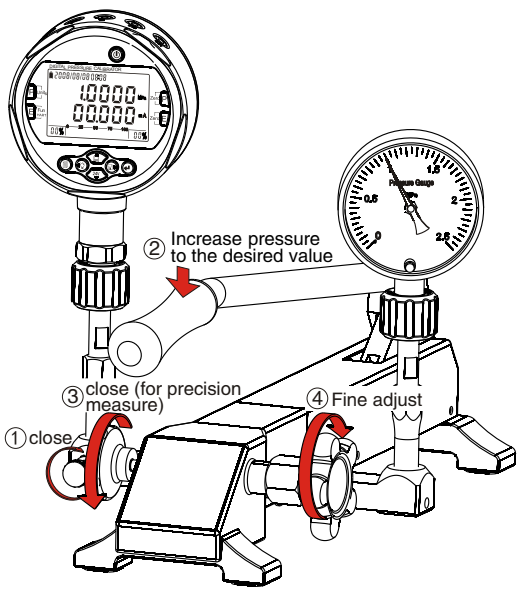


Open to atmosphere Pre-pressure B

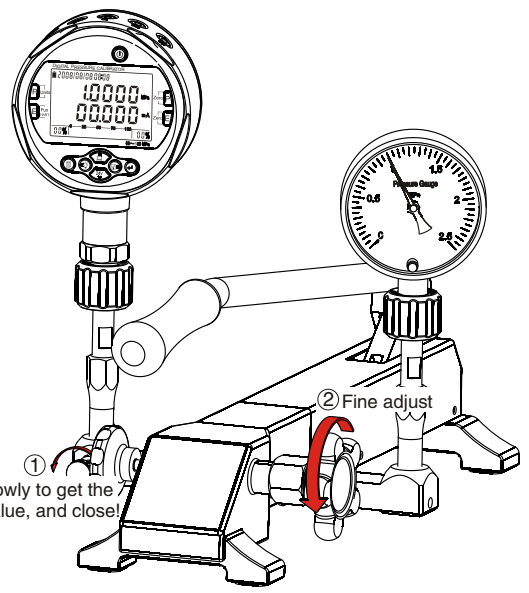


Zeroing should be operated under this condition only.

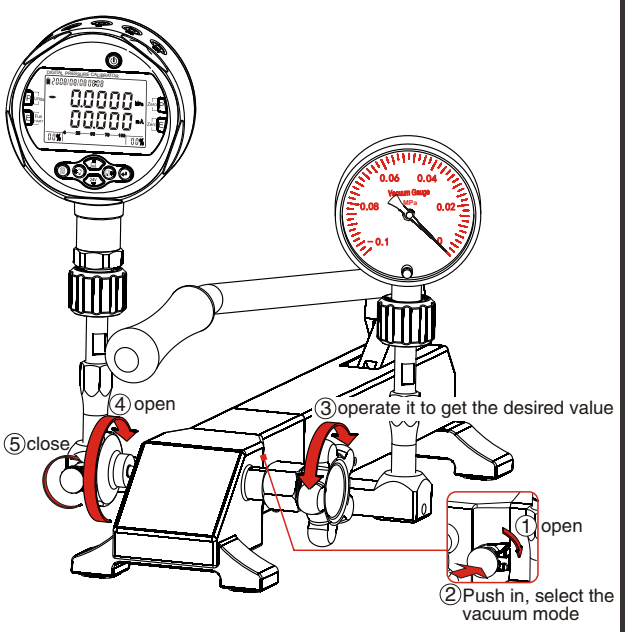
Increase pressure process C



Decrease pressure process D

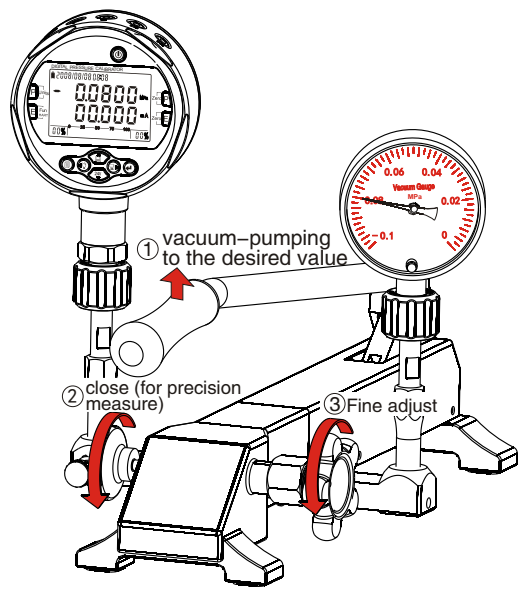


Prepare for vacuum E

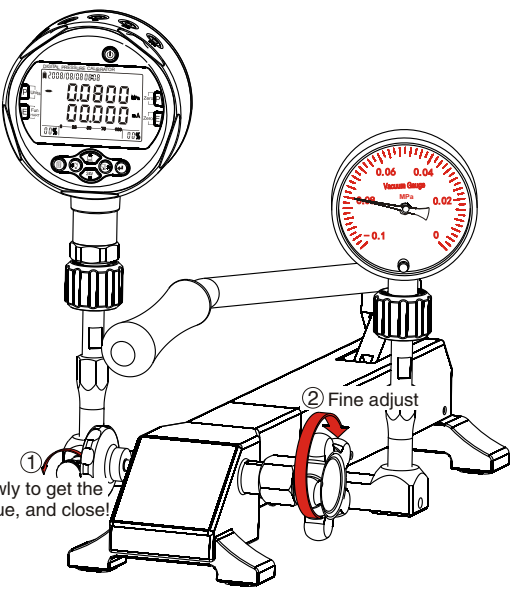


Open to atmosphere before operation

Vacuum process F



Decrease vacuum process G



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.