



ADT912

Low Pressure Test Pump User's Manual

[Version number:1111V10]



Warnings and cautions

- > Avoid possible damage when suddenly apply pressure to low pressure and small chamber gauges.
- > Do not exceed the safety pressure limit (90 psi) .
- > Compressed air may cause problem in explosive or corruptive environment.
- > Do not shift between pressure and vacuum mode under pressure.
- > Do not over tighten connectors to avoid any damage.
- > Store the pump in the dry and non-corruptive environment.
- > Any safety problems or damages caused by incorrect operation, is beyond Additel's responsibility.

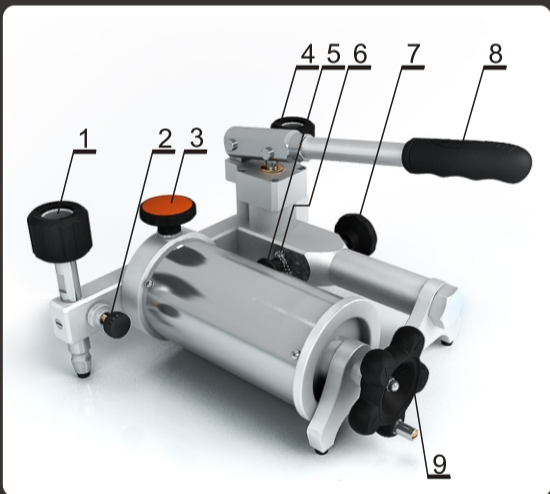
Specification

- > **Pressure range:** 14 psi (0.95 bar) vacuum to 60 psi (4 bar) positive pressure

*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 (P× 95%) bar.*

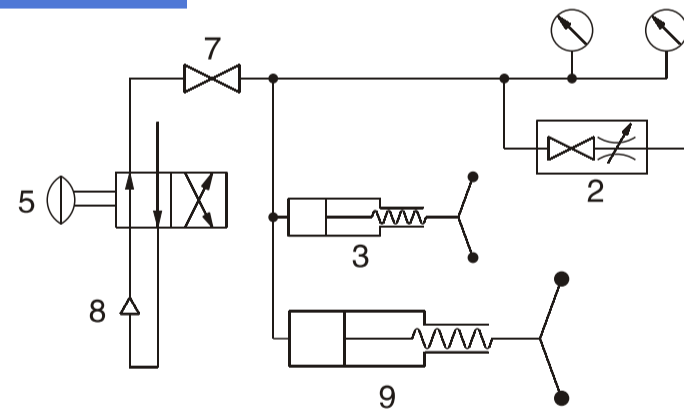
- > **Temperature:** (0~50) °C
- > **Humidity:** < 95%RH
- > **Pressure Resolution:** 0.01 Pa (0.0001 mbar)
- > **Safety pressure:** < 90 psi
- > **Pressure media:** Air
- > **Size:** Height: 5.51" (140 mm);
Base: 10.75" (273 mm) x 10.16" (258 mm)
- > **Weight:** 6.2 lb (2.8 kg)

Configuration & Air routine



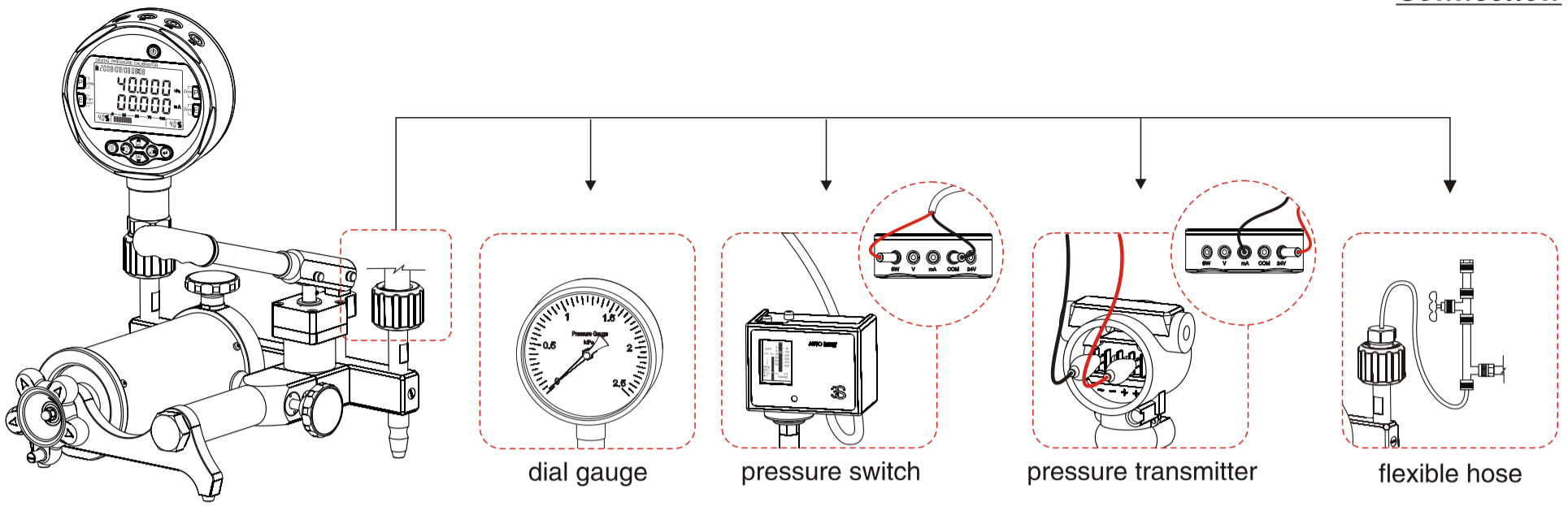
- 1&4 – 1/4 NPT finger-tight connector**
(or customized female connector)
- 2 – Release valve**
(clockwise to close/ anticlockwise to open)
- 3 – Fine adjust handle**
(clockwise to increase pressure)
- 5 – Pressure/vacuum selector**
(Pressure: pull it out; Vacuum: push it in)
- 6 – Safety bolt pin**
(use it to ensure safety)
- 7 – Isolating valve**
(isolate the calibration from pressurizing system)
- 8 – Pressure lever**
- 9 – Coarse adjust handle**
(clockwise to increase pressure)

Air routine

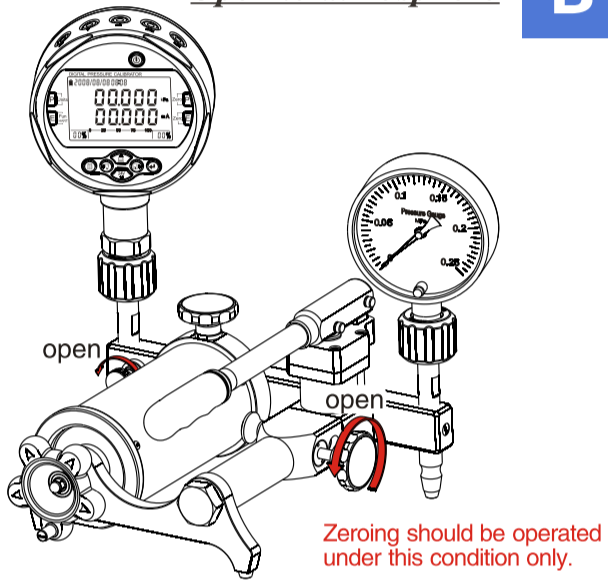


Troubleshooting

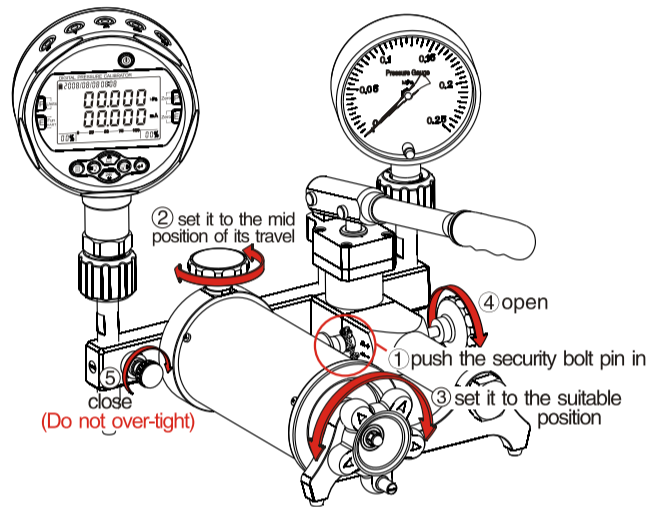
Problems	Causes	Solutions
Hard to use pressure lever	The isolating valve is not open.	Open the isolating valve.
Hard to pressurize	A. Release valve is not closed.	Close the release valve.
	B. The sealing O-ring is broken or loosen.	Replace sealing O-ring.
	C. P/V selector is in wrong position.	Pressure: pull it out; Vacuum: push it in.
Hard to use vernier	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 O-ring is aged or frayed.	Replace sealing O-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.



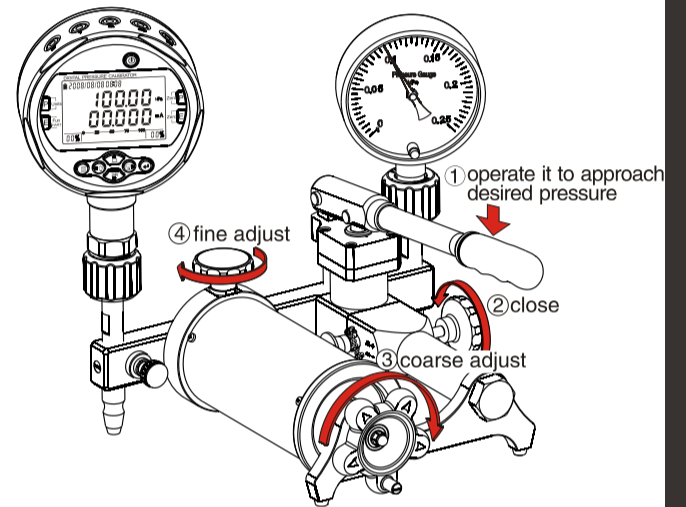
B *Open to atmosphere*



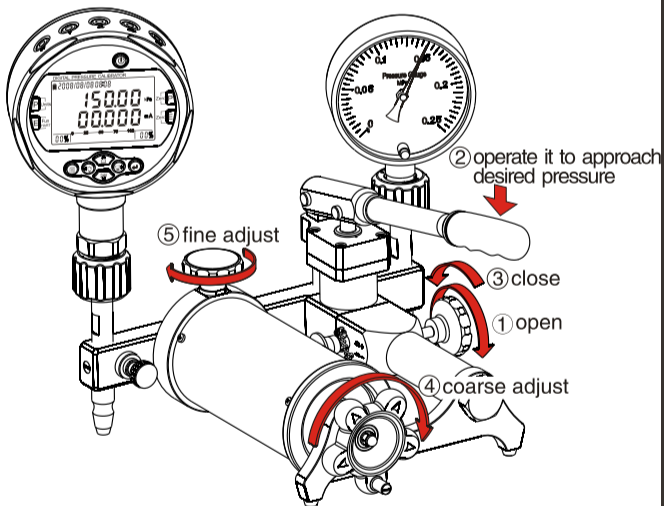
C *Pre-pressure*



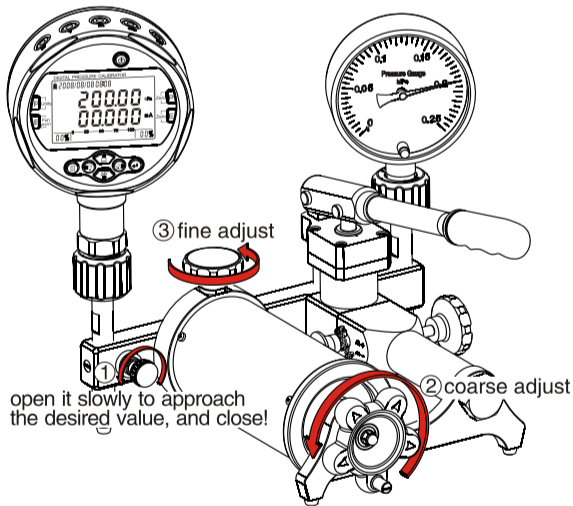
D *Pressurizing process*



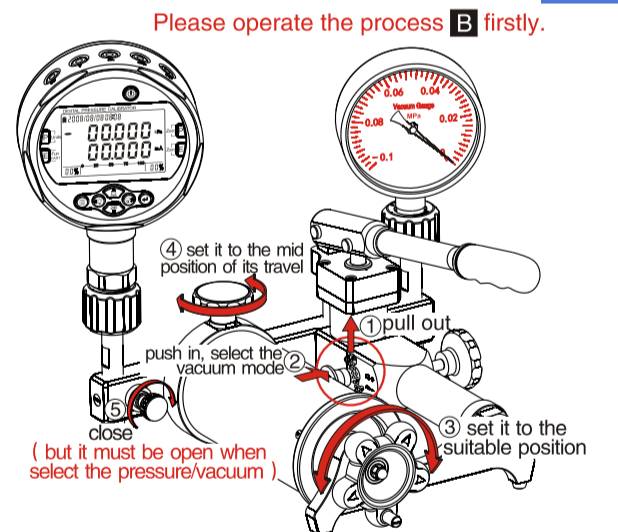
E *Repeat pressurizing process*



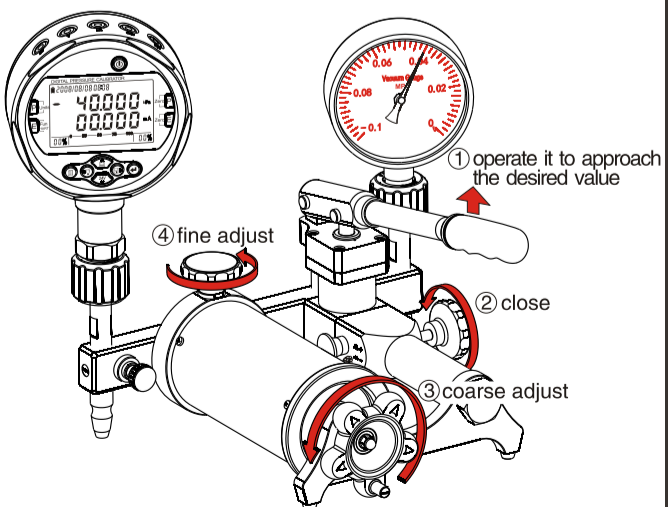
F *Decrease pressure process*



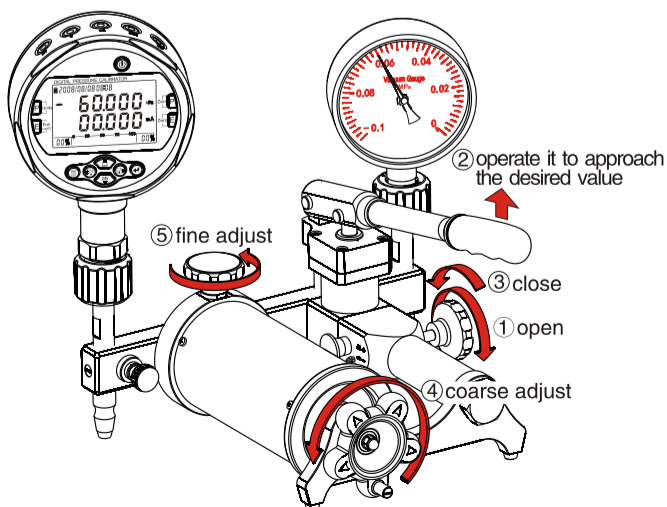
G *Prepare for vacuum*



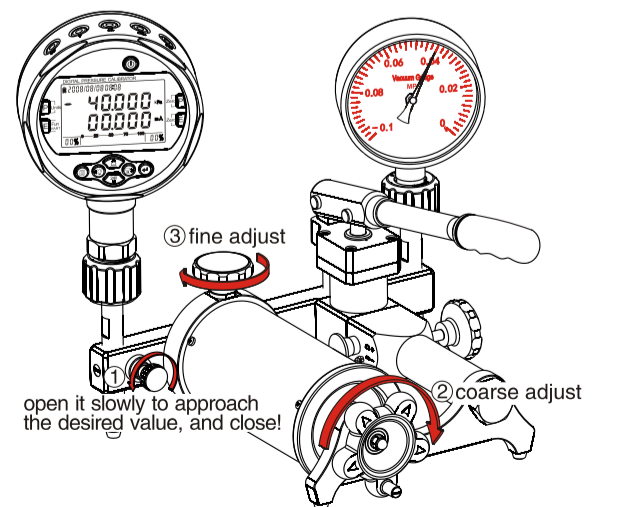
H *Vacuum process*



I *Repeat vacuum process*



J *Decrease vacuum process*



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.