



ADT920

Pneumatic High Pressure Test Pump User's Manual

[Version number:1305V01]



Warnings and cautions

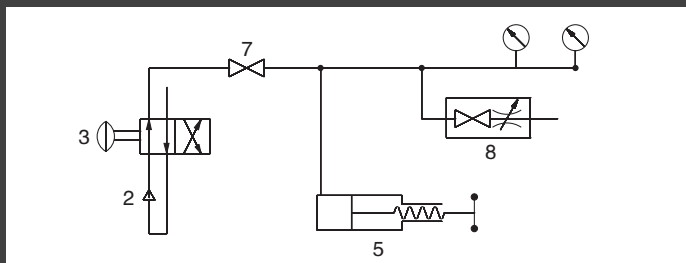
- > Be careful when attaching low pressure/small chamber gauges to pump. It is easy to overpressure these types of gauges.
- > Do NOT exceed the safety pressure limit (3500 psi / 235 Bar).
- > Compressed air can be dangerous in an explosive or dirty environment.
- > Do NOT switch the pressure/vacuum selector switch to vacuum while pump is under pressure. Make sure you have released pressure from BOTH the "Release Valve" as well as the "Isolation Valve" before switching to vacuum.
- > Do NOT over tighten connectors or you may cause damage.
- > Pump should be stored in a dry/clean environment.
- > Safety issues or damage caused by incorrect operation is not the responsibility of the manufacturer.
- > Do NOT hold pressure above 1000 psi for more than 4 hours.

Specification

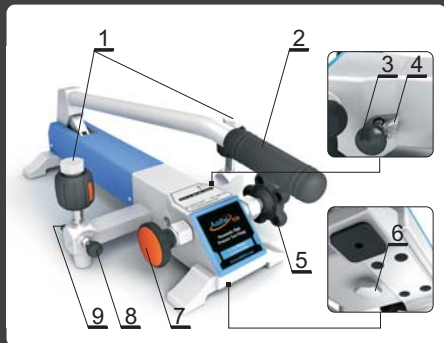
- > **Pressure range:** 14 (0.95 bar) vacuum to 3000 psi (200 bar)
(Based on an atmospheric pressure of 1 bar)
- > **Temperature:** 0 to 50 °C / 32 to 122 F
- > **Humidity:** < 85%RH
- > **Fine adjust:** 0.001psi (0.1mbar, 10 Pa)
- > **Overpressure Safety Limit:** 3500 psi (235 bar)
- > **Pressure media:** Air
- > **Weight:** 14.4 lbs (6.5 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.*

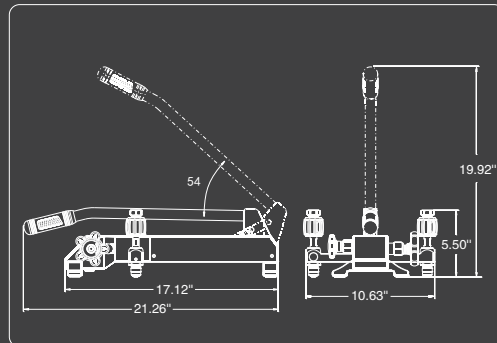
Air routine



Configuration & Size

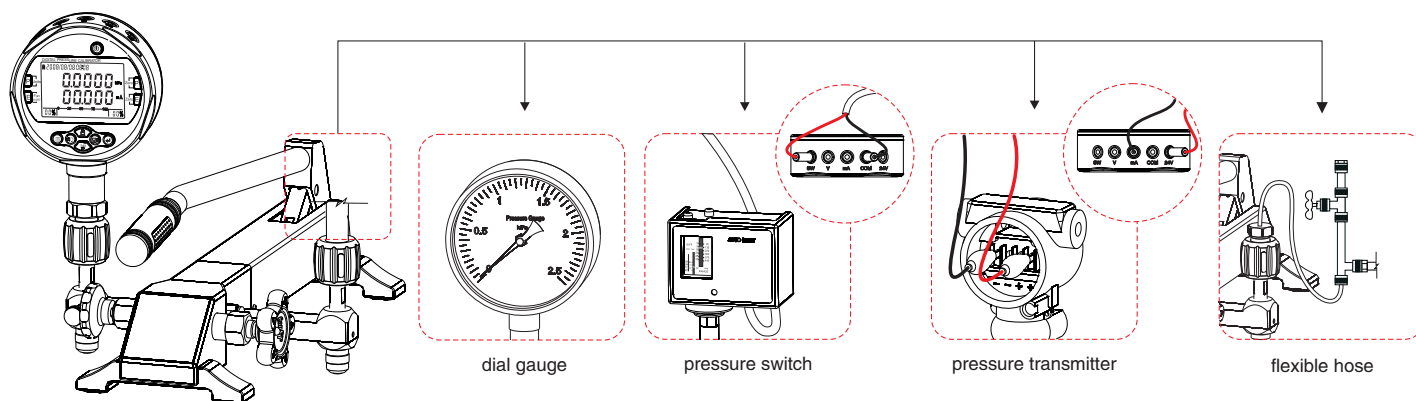


- 1 – 1/4" NPT plug
- 2 – Pressure lever
- 3 – Pressure/vacuum selector switch
(Out position to generate pressure / In position to generate vacuum) Do NOT switch while unit is under any pressure
- 4 – Pressure/Vacuum switch protector
- 5 – Fine adjust handle
(Turn Clockwise to increase pressure)
- 6 – Maintenance cleaning hole
- 7 – Isolation valve
(isolates the calibration from the pump and one way valve)
- 8 – Release valve
(clockwise to close/Counter clockwise to release pressure)
- 9 – Vent hole
- 10 – Sealing Ring (located under each 1/4" NPT plug (1))

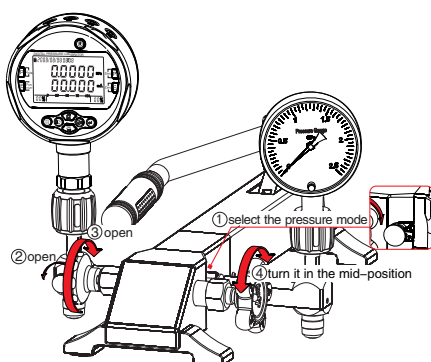


Troubleshooting

Problems	Causes	Solutions
Hard to use pressure lever	The isolation valve is not open.	Open the isolation valve.
Can't pressurize	A. Release valve is not closed.	Close the release valve.
	B. The sealing ring is broken or loose.	Replace sealing ring.
	C. P/V switch is in wrong position.	Pressure : Pull out PV switch; Vacuum : Push in PV switch.
	D. Internal tubing is dirty.	Disassemble and clean (Request diagram).
Hard to use fine adjust	A. Isolation valve is not closed.	Close isolation valve.
	B. Gauge is not tight.	Tighten the reference gauge and / or the gauge under test.
	C. The sealing ring is aged or frayed.	Replace sealing ring.
	D. The thread type is not correct.	Use the appropriate thread type or adaptor.
	E. Air route is blocked/dirty.	Pressurize to high pressure and release pressure quickly via the release valve.
Not easy to turn fittings	A. Turned too tight last time.	Do Not over tighten.Finger tight is good.
	B. New pump.	Pump will abrade with a few uses.
	C. The threads have no lubrication.	Lubricate the thread.
	D. The thread type is not correct.	Use appropriate thread type or adaptor.

Pre-pressure

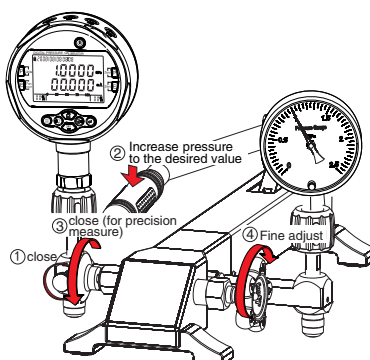
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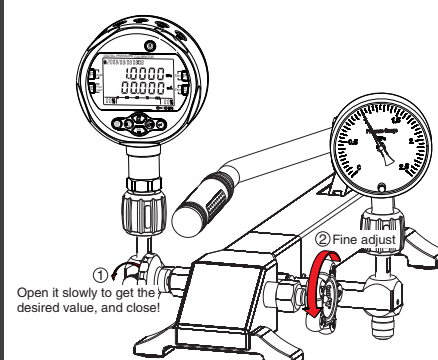
Zeroing should be operated under this condition only.

Increase pressure process

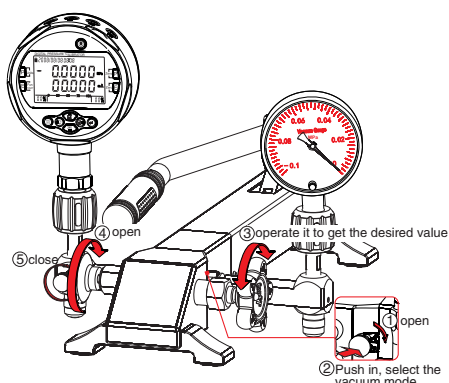
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Decrease pressure process

D

Prepare for vacuum

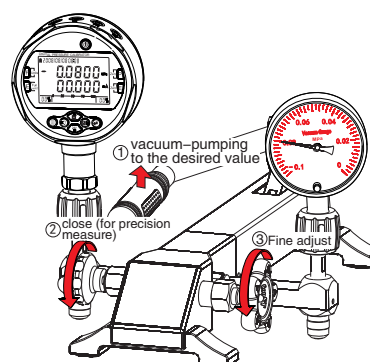
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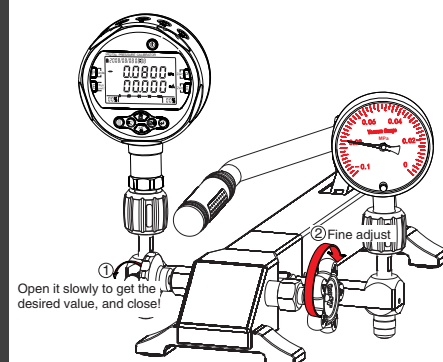
⚠ Open to atmosphere before operation

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.