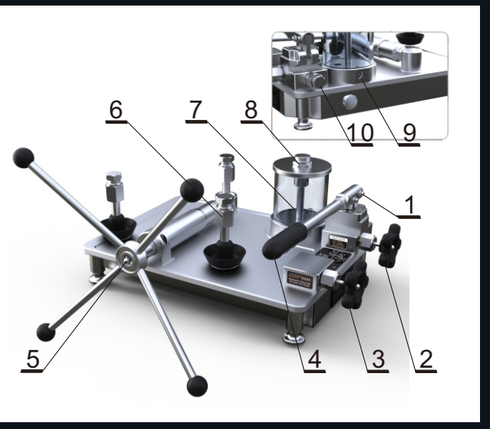
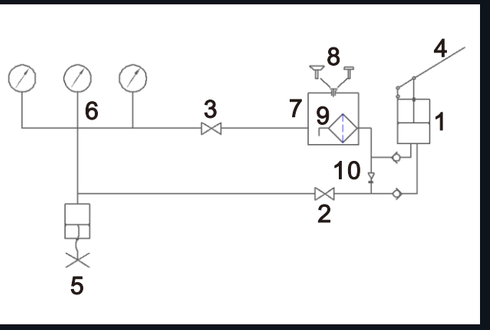
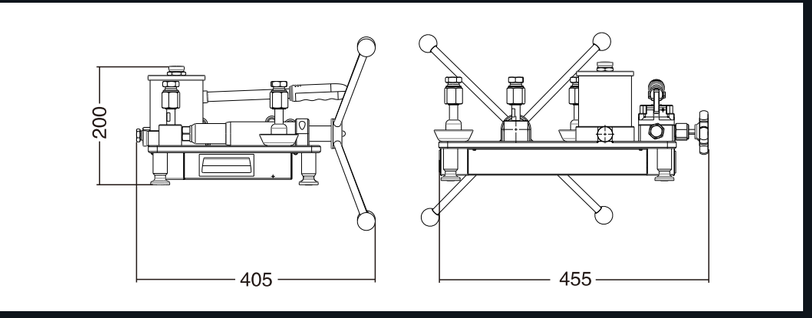
Views and Hydraulic Schematic



1 – Pre–pressure pump
2 – Isolation valve
3 – Vent valve
4 – Pre–pressure pump handle
5 – High–pressure and fine adjustment handle
6 – Connection port
7 – Reservoir
8 – Reservoir cover vent valve
9 – Liquid drain valve
10 – Safety valve (do not open)





Warnings and cautions

- Operate the pump in the rated pressure range of 40,000 psi (2,800 bar) and do not exceed the safety pressure of 44,000 psi (3,080 bar).
- Close all valves and handles and tighten the ports when transporting the pump.
- Always keep the reservoir cover vent valve(#8)open during operation.
- Change media immediately if it is contaminated.
- Keep media level between 1/4 and 3/4 of the liquid reservoir filled.
- Keep the connection threads clean and remove any particles or dirt on the threads.
- Do not over tighten the valves, connectors and handles to avoid damage.
- Do not use the pre–pressure pump to generate more than 8,700 psi (600 bar)
- Additel corporation is not liable for any safety problems or damages caused by misuse or incorrect operation.

Specification

- **Pressure range:** 0 to 40,000 psi (2,800 bar) positive pressure
- **Temperature:** (0 ~ 50) ℃ **Storage temperature:** (–25 ~ 75) ℃
- **Humidity range:** < 95%
- **Adjustment resolution:** 0.015 psi (1 mbar)
- **Safety pressure:** < 44,000 psi (3,080 bar)
- **Pressure media:** Diethylhexyl Sebacate
- **Reservoir capacity:** 420 ml (25.6 in^3)
- **Size:** Height: 7.9" (200 mm) Base: 17.9" (455 mm) x 16.0" (405 mm)
- **Weight:** 27.6 lb (12.5 kg) without media
- **Material:** SS, aluminum, copper, Buna–N

Remark: *Please drain the liquid in transportation.*

Troubleshooting

Problem	Cause	Solution
Can not to generate pressure with the pre-pressure pump lever (#4)	Vent valve(#3) is open	Close Vent valve(#3)
	O–ring is broken	Replace O–ring
	Not enough media is in the reservoir.	Fill more media
Hard to generate pressure with the pre-pressure pump lever (#4)	Isolation valve(#2) is closed	Open the isolation valve(#2)
	Lever raised too high when above 2,900 psi	Lift the lever in small angel
	Pre–pressure pump max pressure of 8,700 psi (600 bar) is reached	Use High–pressure and fine adjustment handle(#5)
Hard to turn the Valves or handles	Too much power used in last operation	Close vent valve smoothly
	Hard to close isolation valve in high pressure	Use more force
	Hard to turn the High–pressure Handle(#5)	Use more force
	Not enough lubrication on screw thread	Apply more lubrication



Additel 959A

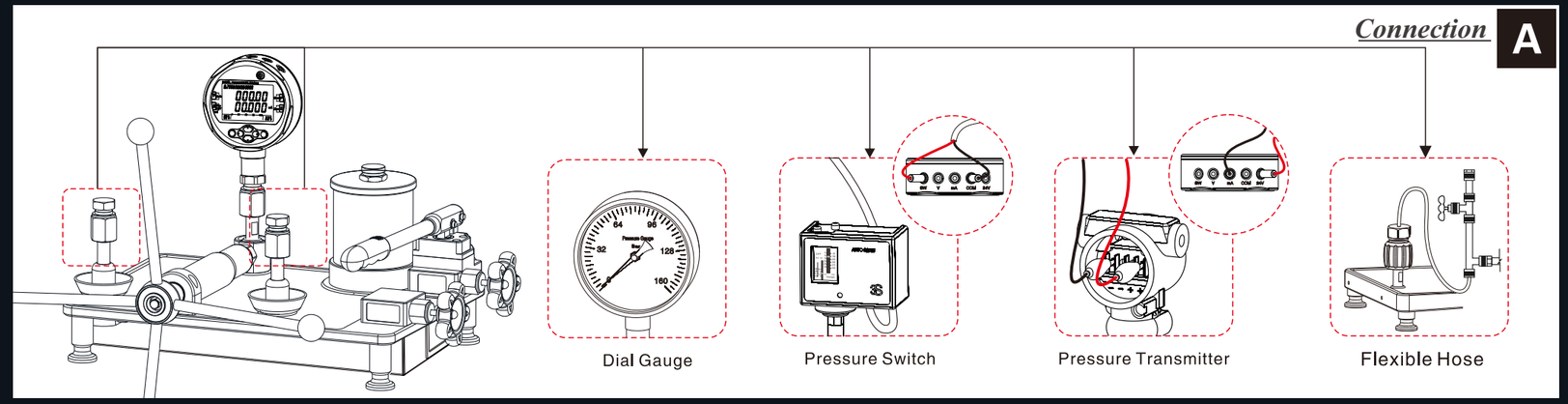
Hydraulic Ultra-High Pressure Test Pump User's Manual

[Version number:1811V03]

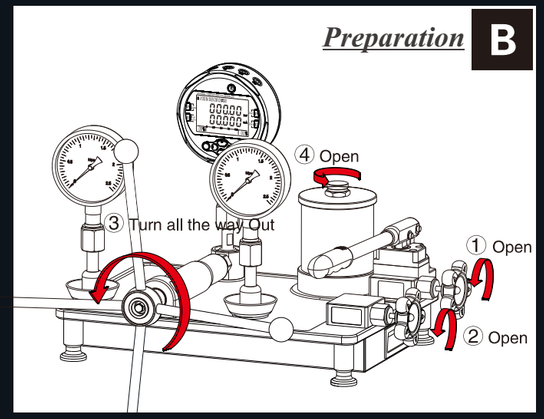
Please download the latest version from www.additel.com

Basic Operation

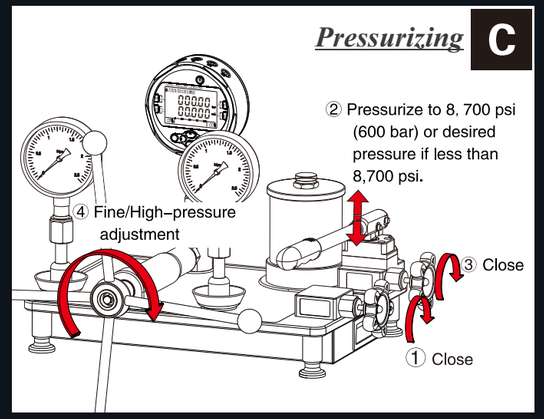
Connection A



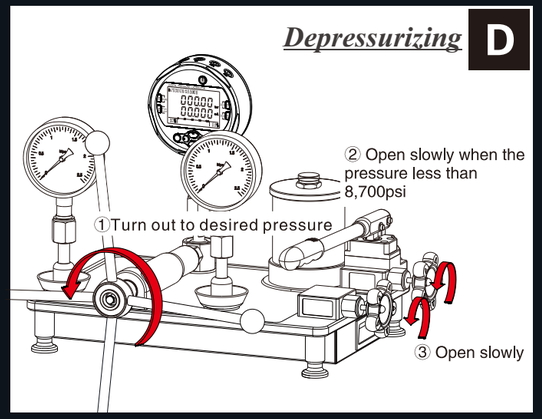
Preparation B



Pressurizing C

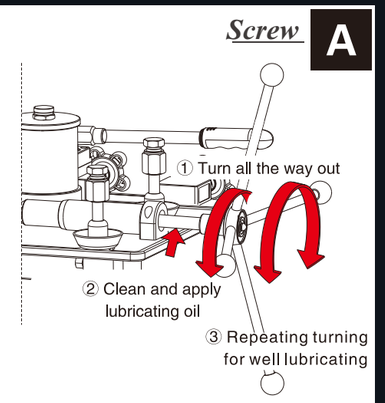


Depressurizing D

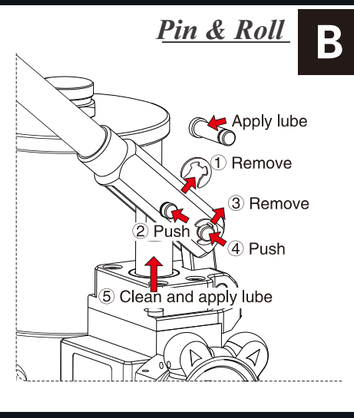


Maintenance

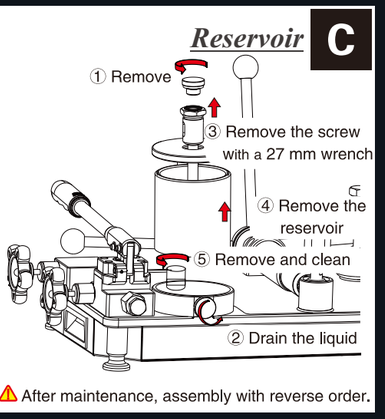
Screw A



Pin & Roll B



Reservoir C



⚠ After maintenance, assembly with reverse order.

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.