



# TEPS-01 Instrument Manual

## Pneumatic Hand Pump-TEPS-01

Range: -0.8 to 30 Bar



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## 1. Technical Specification

- Range : -0.8- 30 Bar.
- Material : Delrin
- Pressure Port : SS304
- O-rings: Nitrile rubber
- Fittings : SS304
- Connection: 1/2"BSPF.
- Weight : 250gms approx.

## 2. Guidline For Safe Use

- Use the Hand Pump only for calibration.
- Clean the guage inlet thread and the inlet hole for any dirt or any oil before connecting with the pump. These can choke the pump.
- Always wear protection gear while doing the calibration.

## 3. Unpacking

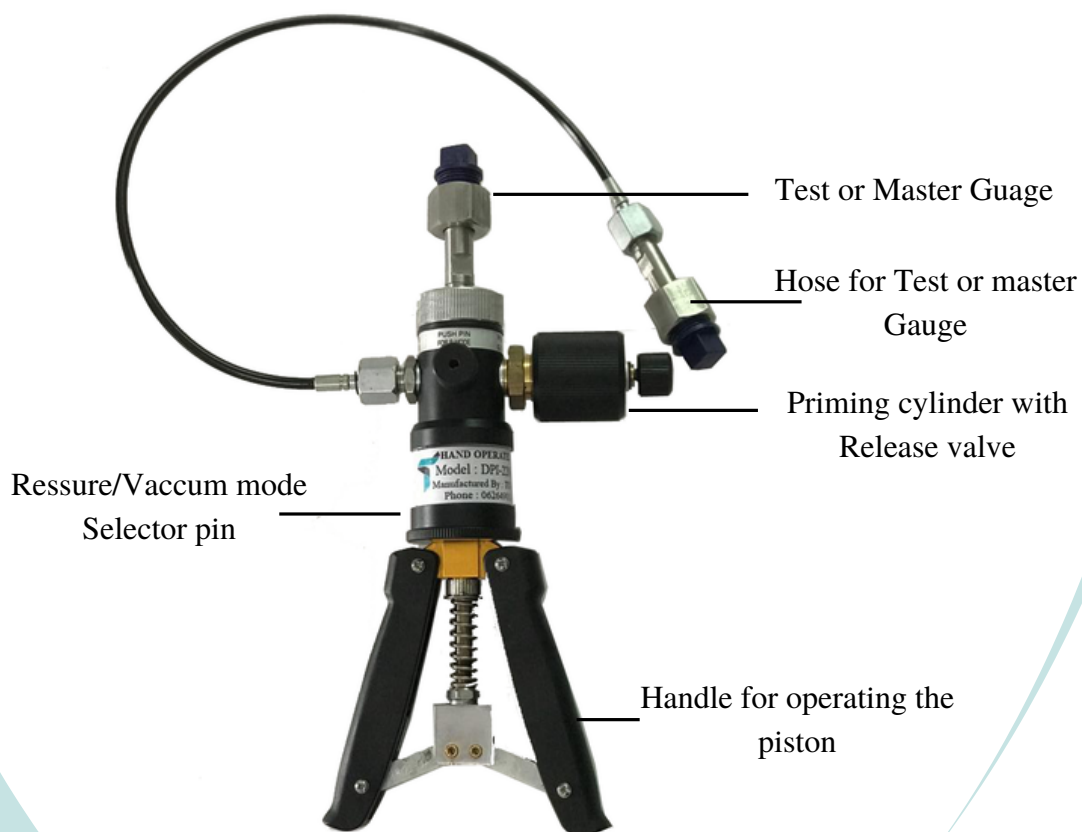
Visually check the exterior for any damage to the shipping carton box. Open the cartoon box and check the receipt of the following along with the pump.

Pneumatic hand pump  
Spare fittings  
Spare O rings  
Flexible Hose.

## 4. Technology used in Hand Pump.

The principle of Operation is similar to a pump we use at home to fill air in the Cycle tube. A piston moves back and forth in a cylinder and fills a chamber with air. Two Non return valves are fitted inside and both operate in opposite direction, Which means at any point of time during operation only one NRV is open. The piston is moved inward and outward movement by operation of the handle. A high tension spring placed over the piston stem ensures the return of the piston to its home position. With each pumping the pressure of the air inside the closed chamber builds up.

The user can generate pressure by hand upto 20 Bar and pressure further increased by the priming cylinder. As both test and master gauges are fitted to the pump, both should show the same value. If the test gauge is showing differently, the gauge is adjusted to show correctly.



## CALIBRATION OF PRESSURE/ VACUUM GAUGE

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- Fix the Master Gauge to one of ports. Use of the O-ring ensure hand is sufficient.
- Fix the test gauge at the other port in the same way.
- Select the mode of calibration. Pressure mode or vacuum mode by pushing the mode pin. Use a small screw driver for doing this.
- Tightly close the release valve and place the priming cylinder in the outer most position while using in pressure mode or in the innermost position while using in vacuum mode.
- Generate the pressure/Vacuum by operating the handle.
- When the required value at another range and if required adjust the test gauge.
- When the testing is over, release the pressure before removing the gauge.

## **PREVENTION MAINTENANCE**

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- Replace O-rings when required. Continuous use of the same O rings will result in leakage which can not be arrested.

## **TROUBLESHOOTING SECTION**

The following pages are intended to help you resolve functional problems with your pump. We are always available to assist you with solutions.