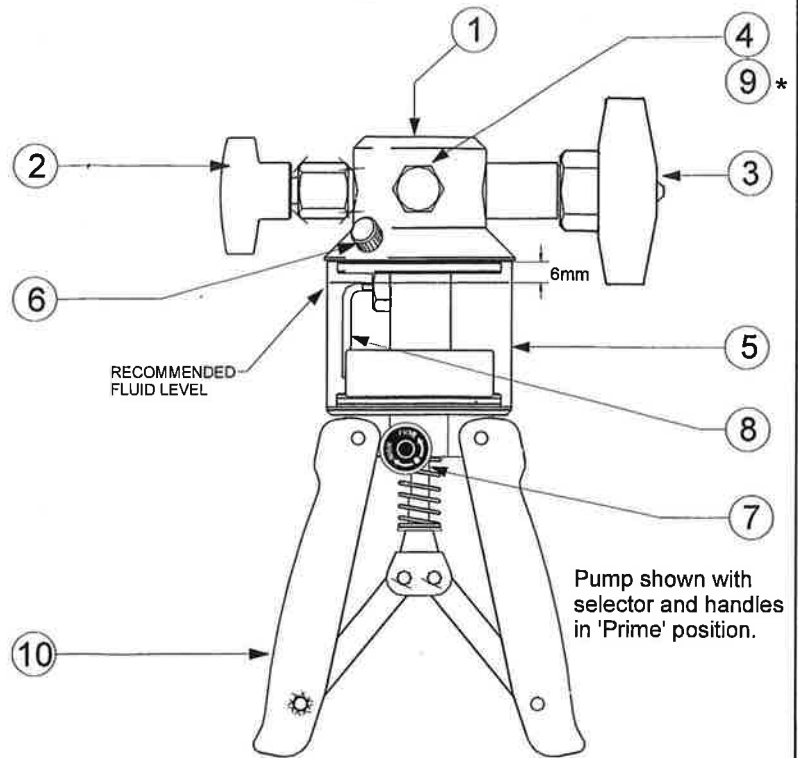


# Hydraulic Hand Pump HTP1

## KEY:

1. 3/8" BSP female connection to take master instruments. E.g. PC6 Calibrator, Digital / Analogue indicators.
2. Pressure release valve.
3. Fine control.
4. Front port: 1/4" BSP female to take optional Quick-fit connection and flexible hose.
5. 100cc's Reservoir.
6. Reservoir filling plug.
7. Priming / High pressure selector.
8. Fluid inlet tube.
9. Rear port: Reserved for PRV12 Pressure Relief Valve ONLY.  
( \* Do not use for any other purpose )
10. Pump Handles



## Specification:

- Pressure range:** 0 to 700 bar/10,000 psi max. and 0 to 1000 bar/15,000 psi max. ( depending on model- see below ).
- Pressure media:** Low Viscosity Mineral based Hydraulic Oil (e.g. SI part No. DW6292 )  
Distilled water  
( 'Skydrol' and brake fluid option available HTP1-S )
- Pressure connections:** 3/8" BSP female. ( item 1 )  
1/4" BSP female. ( item 4 blanked off )
- Dimensions:** L 236mm x W 159mm x D 70mm; approx. 1.6kg in weight.

## Master Instruments Available to suit HTP1:

- Pressure Calibrator (PC6, PC6-PRO, PC6-IS)  
Digital Indicator (DTG-2K)  
100mm Analogue Gauge (HTPG)

## Accuracy FS:

- up to 0.025%  
0.2%  
0.5%

## Order Codes:

- |   |  |
|---|--|
| <p>HTP1-700<br/>HTP1-1000<br/>PRV12-X-HTP1<br/>PC6, PC6-PRO, PC6-IS<br/>DTG-2K<br/>DPM<br/>HTPG-1/2/3/4<br/>HTPA-BSP<br/>HTPA-NPT<br/>HK1-1000<br/>HTPK1<br/>DW6292</p> | <p>700 bar Hydraulic Pressure Test System in compact carrying case.<br/>1000 bar Hydraulic Pressure Test System in compact carrying case.<br/>5 ranges of Pressure Relief Valve: 10-50, 50-200, 200-400, 300-700 &amp; 600-1000 bar<br/>A Range of Pressure Calibrators available between -1 and 1000 bar (15,000psi)<br/>5 ranges of Digital Indicator up to 1000 bar (15,000psi)<br/>A range of Digital Pressure Modules up to 1000 bar (15,000psi)<br/>100mm Analogue Gauges 0.5% FS. Accuracy. 0-100, 0-350, 0-700 &amp; 0-1000 bar/psi<br/>Set of 7 BSP adaptors.<br/>Set of 6 NPT adaptors.<br/>1m Long flexible hose &amp; gauge adaptor with 'quick-fit' connections (oil or water)<br/>Service kit containing a set of seals.<br/>1 Litre can of hydraulic oil.</p> |
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# USER INSTRUCTIONS : HYDRAULIC HAND PUMP HTP1

## SAFETY WARNING !

**High Pressure:** Uncontrolled release of high pressure is hazardous to personnel and may cause damage to equipment. Before connection of any pressure component to the HTP1 ensure that the component(s) is/are isolated from the pressure supply and any internal pressure is released slowly. Do not connect pump to external pressure source. Pressure built up internally during use can be extremely high, ensure that all connections are made correctly.

1. Remove filling plug (6) and fill reservoir (5) to the recommended level with the appropriate fluid and replace filling plug.
2. Connect master instrument to pump via connection (1) using the appropriate seals.
3. Connect instrument under test to flexible hose / gauge adaptor and attach to pump via the quick-fit connection (4) (see optional accessories).
4. Adjust the Fine control (3) to 'mid-travel'.
5. Ensure the pressure release valve (2) is **open** ( turn fully clockwise then one turn anticlockwise ). Fully squeeze handles (10) 'in' and turn the selector (7) to the 'prime' position.
6. Operate handles (10) several times to expel air from the pump. ( Ensure that the fluid inlet tube (8) remains immersed in fluid at all times).
7. Close the release valve (2) fully clockwise.
8. Prime system by squeezing handles (10) together and then releasing, allowing the oil to enter the pump cylinder. Repeat as necessary until system is fully primed and low pressure is indicated on either the master or test instrument.
9. With handles (10) fully squeezed 'in' select the 'high' pressure position on selector (7) and operate handles to generate approximate pressure.  
**NOTE:-** Smaller handle strokes enable easier pressure generation at high pressures.
10. Adjust pressure to required value using the fine control (3).

**NOTE:-** Pressure will fall slightly, immediately after pressure generation due to Thermodynamic effects, but will stabilise after a short time.

### **WARNING: DO NOT EXCEED MAX. OPERATING PRESSURE INDICATED ON PUMP LABEL!**

11. To totally release pressure from the system turn release valve (2) one turn anticlockwise and select the 'prime' position on selector (7) after first squeezing handles (10) fully in.

**NOTE:-** Careful use of the release valve (2) and fine control (3) enables a controlled release of pressure, essential for calibration purposes.

12. **RESERVOIR FLUID LEVEL:** If the fluid level in the reservoir falls considerably during use, a partial vacuum can be created in the reservoir which may affect the pump performance. To avoid this, Simply allow air to enter the reservoir by partly unscrewing the filling plug (6).
13. **SEAL REPLACEMENT:** Dependant on the frequency of use, the Main Piston Seal (and others) may need replacing. Replacement seals and instructions for fitting are contained in the seal set ( HTPK1)