# WIDDER TOOLS



#### **HPIH-5000 Hand Pump**



#### PRODUCT INFORMATION AND OPERATING INSTRUCTIONS:

**Description:** The HPHI-5000 Hand Pump is a portable, manually operated hydrostatic test system. The aluminum base with convenient built-in handle creates a light weight and compact unit, while retaining ruggedness and durability. This unit comes

standard with a relief valve and stainless-steel check valve for solid performance.

**Specifications:** Weight 17 lbs.

Weight	1 / 103.
Pump Ratio	150:1
Max. Output Pressure	6,800 PSI (75 lbs. handle load)
Displacement / Stroke	0.140 cu. in.
Max. Flow Rate	1.0 GPM w/ 60 PSI inlet pres.
Fluid Inlet	1/2" NPT Female
Fluid Outlet	1/2" NPT Female

IMPORTANT: READ MANUAL CAREFULLY BEFORE OPERATING THIS TOOL. FOLLOW ALL SAFETY PRECAUTIONS LISTED AND ALL OSHA REGULATIONS PERTAINING TO THIS TOOL.



#### **SAFETY PRECAUTIONS:**

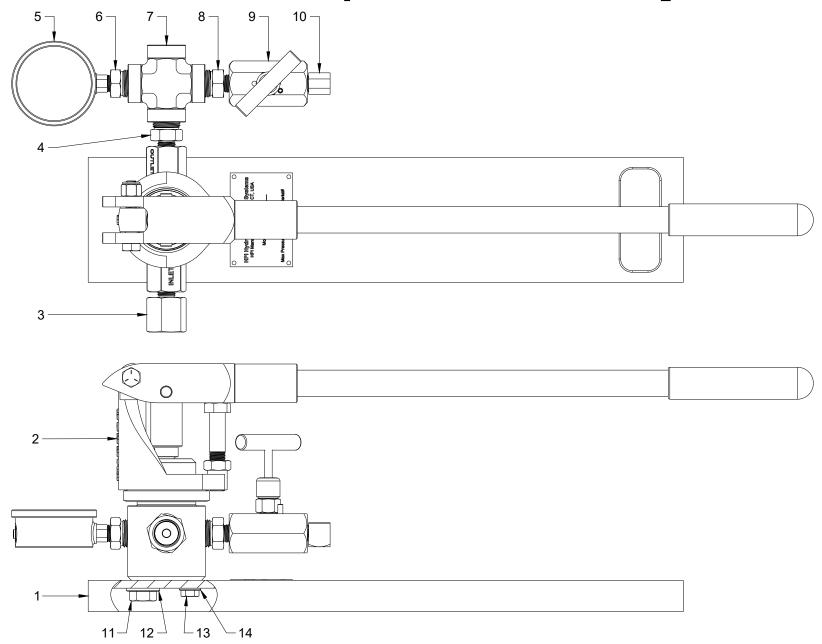
- 1. Be sure all pressure on air and water fittings is relieved before disconnecting any hoses or fittings.
- 2. Wear eye protection.
- 3. Pressurization of any materials is dangerous- follow OSHA procedures for stored energy and any pressurization cautions pertaining to the fluids used.
- 4. This system can develop pressure up to the nameplate pressure- do not over pressure test vessels as damage can occur.

#### **OPERATING INSTRUCTIONS:**

- 1. Close Bleed Valve.
- 2. Attach water supply to inlet side with supply off.
- 3. Attach outlet side to vessel using suitable hose.
- 4. Fill vessel to be tested by opening water supply
- 5. When vessel is full, lift pump handle completely and crack needle valve to bleed any air
- 6. Once air is bled from the system, firmly close needle valve.
- 7. Pump unit to desired test pressure \*\* Do not exceed pump rated pressure!
- 8. When test is complete, close inlet water supply, then crack needle valve to relieve system pressure.
- 9. Disconnect hoses from inlet and outlet sides of pump.



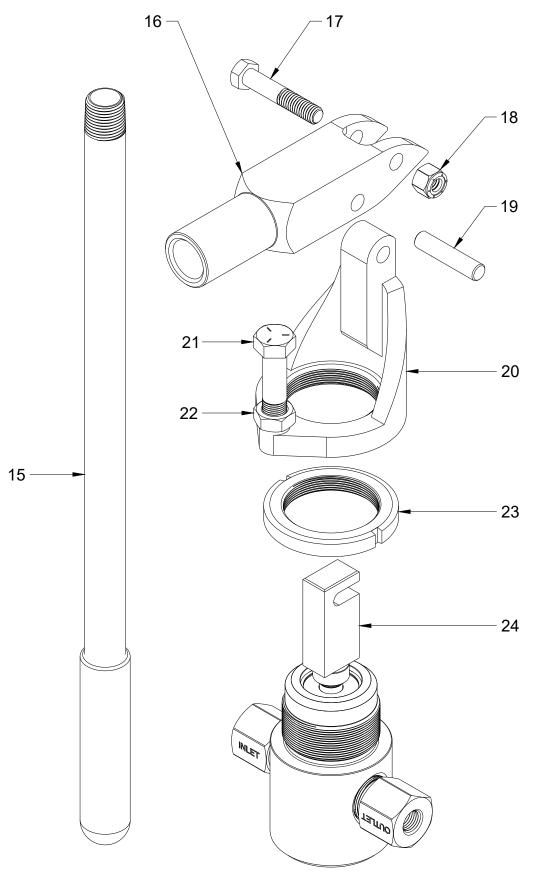
### **HPIH-5000 Hydrostatic Test Pump**



## **HPIH-5000 Hydrostatic Test Pump**

Item	Part #	Description
1	PH-1001	Base
2	PH-1002-150	Pump
3	PH-1004	Inlet Adapter
4	PH-1015	Outlet Adapter
5	PH-1003-5000	Gauge
6	PH-1005	Gauge Adapter
7	PH-1011	Cross
8	PH-1015	Valve Adapter
9	PMI028	Bleed Valve
10	PMI048	Elbow
11	PH-1006	Hex Bolt (Large)
12	PH-1007	Washer (Large)
13	PH-1008	Hex Bolt (Small)
14	PH-1009	Washer (Small)

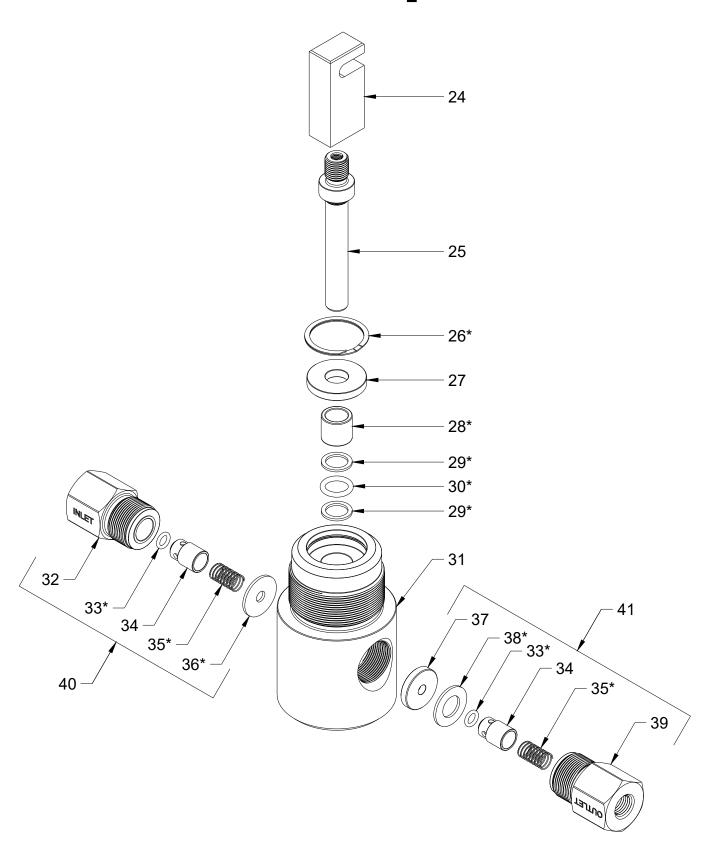
### **PH-1002-150 Pump - External**



### **PH-1002-150 Pump - External**

Item	Part #	Description
15	PH-1021	Handle
16	PH-2014	Handle Mount
17	PH-2012	Bolt, Handle Pivot
18	PH-2013	Nut, Handle Pivot
19	PH-2015	Pin, Piston Adapter
20	PH-2009	Handle Pivot Bracket
21	PH-2016	Bolt, Handle Stop
22	PH-2017	Jam Nut, Handle Stop
23	PH-2010	Lock Nut, Handle Pivot Bracket
24	PH-2011	Adapter, Piston to Handle

### **PH-1002-150 Pump - Internal**



### **PH-1002-150 Pump - Internal**

Item	Part #	Description
24	PH-2011	Adapter, Piston to Handle
25	PH-2003-150	Piston, 150:1
26*	PH-2008	Retaining Ring
27	PH-2007-150	Seal Retainer, 150:1
28*	PH-2006-150	Piston Guide, 150:1
29*	PH-2004-150	Backup Ring, 150:1 (2 per pump)
30*	PH-2005-150	O-Ring, 150:1 Piston
31	PH-2001-150	Cylinder, 150:1
32	PH-1019-1	Body, 1/4 NPT Inlet Check Valve
33*	PH-1019-4	O-Ring, 1/4 NPT CV (2 per pump)
34	PH-1019-3	Poppet, 1/4 NPT CV (2 per pump)
35*	PH-1019-5	Spring, 1/4 NPT CV (2 per pump)
36*	PH-1019-2	Gasket, 1/4 NPT Inlet CV
37	PH-2002	Seat, 1/4 NPT Outlet CV
38*	PH-1020-2	Gasket, 1/4 NPT Outlet CV
39	PH-1020-1	Body, 1/4 NPT Outlet Check Valve
40	PH-1019	Inlet Check Valve, 1/4 NPT
41	PH-1020	Outlet Check Valve, 1/4 NPT
*	HPIH-5000SK	Seal Kit (includes all items marked with asterisk)