

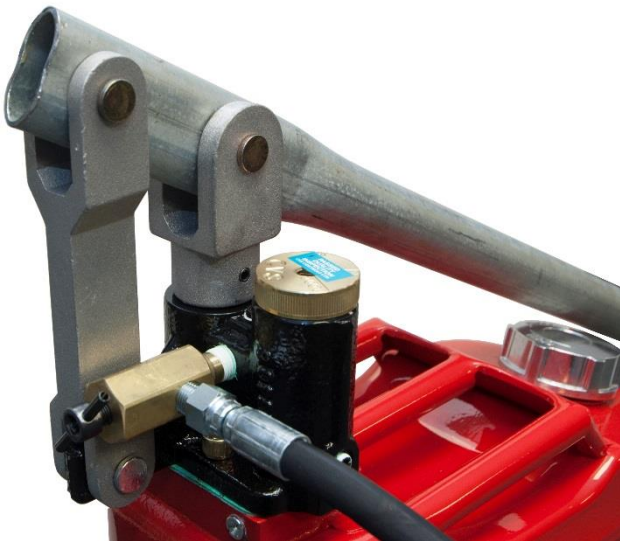
PROLINE

PIPE EQUIPMENT INC.

High Pressure Portable Injection Hand Pump

The High Pressure Chemical Injection Hand Pump is a durable, rugged design that allows quick and effective de-icing to valves or lines with just a few strokes.

The High Pressure Chemical Injection Hand Pump features adjustable pressure settings of 1000, 2000, and 3000 psi.



The Hand Pump is mounted on either a 10 litre (2.5 gallon), or a 20 litre (5 gallon) tank. The height of the 10 litre tank makes it ideal for storing and transporting where space is an issue.

The steel braided rubber core discharge line is fitted with 1/4 NPT swivel end, allowing for easy connections. Also included is a pressure bleed valve to assist in priming the pump or relieving discharge line pressure.

Working pressure up to a maximum of 3000 psi.

Discharge stroke volume is .730 cu. In, or 11.96 ml.

High Pressure Portable Injection Hand Pump – Operation and Maintenance

The following components are shipped loose and must be installed prior to operation of hand pump.

1. "Link Kit", consists of 2 Clevis Pins (4), 1 Clevis Pin (33), 3 Flat Washers (3), and 1 Handle Link (30), 2 Cotter Pin (5), and 1 R Clip (41)
2. Handle (1)
3. Discharge Hose Assembly (40)

Link Kit and Handle Assembly Installation

1. Install Handle Link (30) by inserting Clevis Pin (33) through Handle Link and Pump Body (28). Install 1 Flat Washer (3) and 1 Cotter Pin (5). Bend back tabs of cotter pin to secure.
2. Install Handle (1), by inserting 2 Clevis Pins (4) through upper Handle Link (30), and Plunger (14). Install 1 Flat Washer (3) on each Clevis Pin and secure upper handle link with Cotter Pin (5) by bending back tabs of cotter pin. Install R Clip (41) on clevis pin securing handle to the plunger to allow for easy removal for priming.
3. Apply thread tape or equivalent to fixed end of Discharge Hose Assembly (40). Thread into Bleed Valve Body (31), and secure.

Operation

1. Remove Tank Cap (37), and fill Tank assembly with alcohol or desired liquid best suited for your application. Replace Tank Cap. Cycle pump two to three full strokes with bleed valve open to Prime. Close bleed valve for normal operation. Should pump not be primed for regular use follow instructions below.

To Prime Pump

- A. Remove Plunger (14), by first removing 1 R-Clip (41) which attaches Handle to Plunger.
- B. Fill with alcohol or equivalent
- C. Replace Plunger
- D. Release excess pressure using the Bleed Valve Screw (32)
- E. Re-attach handle to plunger.

Unit is now primed and ready for use.

***Note: The High Pressure Hand Pump has a working pressure up to a maximum of 3000 psi. Prior to connecting Discharge Hose Assembly ensure working line pressure has been relieved.** Proline has available the A-0675 Inline Check Valve for installation on the discharge hose assembly to prevent potential back pressure to the tank assembly.

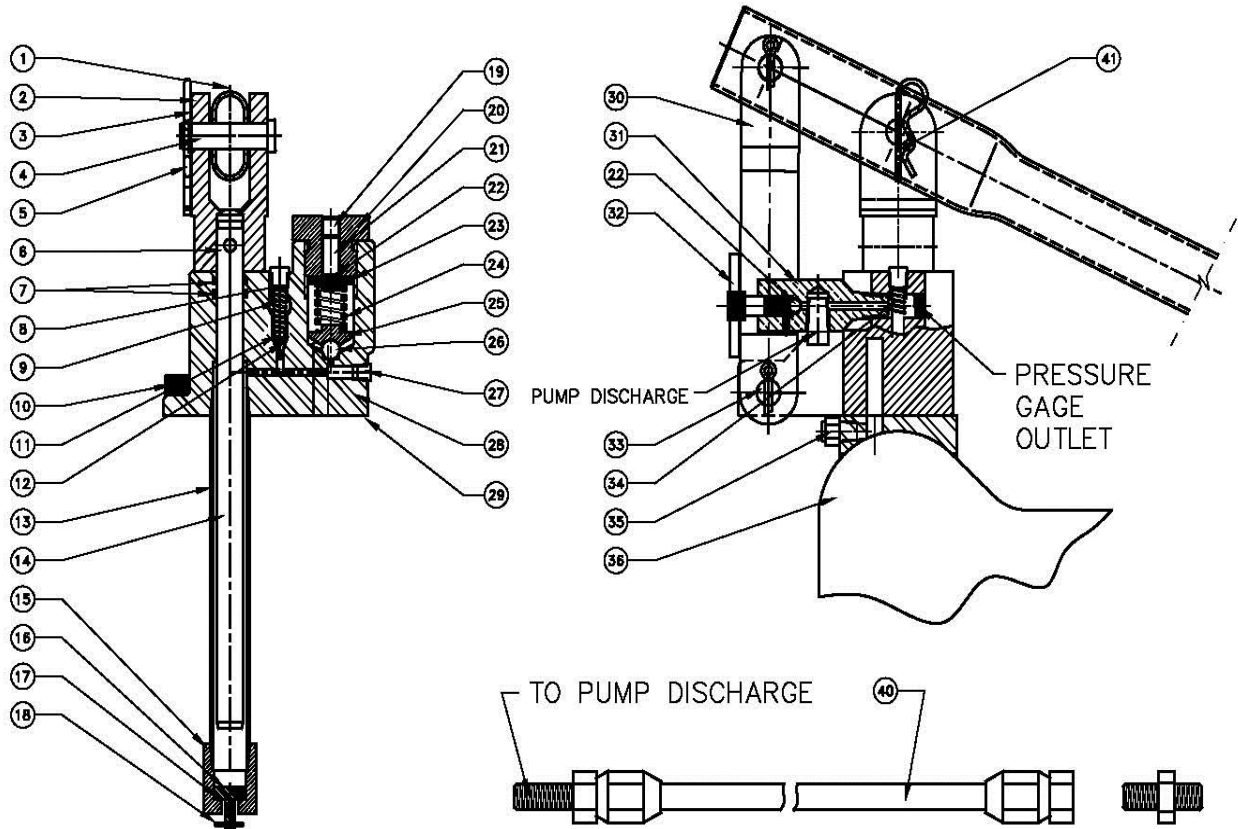
2. Connect discharge line.
3. Pump handle to inject alcohol.

Maintenance and Trouble Shooting

- If unit is not pumping, remove plunger and check Foot Valve o-ring (17), replace as necessary
- Unit does not hold pressure, Discharge Poppet (11) and Discharge Poppet o-ring (12) may be damaged or need replacing.

After hand pump use, fill the tank and pump with corrosion inhibitor; pump the inhibitor through the pump head to help prevent premature internal rusting of the tank and head assembly during storage.

High Pressure Chemical Injection Hand Pump – Assembly



Parts List

Item	Part No.	Description
	HP-1000	Complete Unit – 20L
	HP-1000-10L	Complete Unit – 10L
1	HP-1001	Handle
2*	HP-1042	Plunger Clevis
3	HP-1003	Washer
4	HP-1004	Clevis Pin
5	HP-1005	Cotter Pin
6	HP-1006	Roll Pin
7**	HP-1007	O-Ring Plunger
8	HP-1008	Pipe Plug
9**	HP-1009	Spring
10	HP-1010	Cap Screw
11**	HP-1011	Discharger Poppet
12**	HP-1012	O-Ring Poppet
13	HP-1013	Pump Barrel – 20L
	HP1013S	Pump Barrel – 10L
14*	HP-1042	Plunger – 20L
	HP1042ST	Plunger – 10L
15	HP-1015	Foot Valve Cage
16	HP-1016	Foot Valve Poppet
17**	HP-1017	O-Ring Foot Valve
18	HP-1018	Cotter Pin
19	HP-1019	Set Screw

Item	Part No.	Description
20	HP-1020	Pressure Setting Screw
21	HP-1021	Set Screw
22**	HP-1022	Stainless Steel Ball
23	HP-1023	Spring Set Plate
24**	HP-1024	Spring
25	HP-1025	Spring Base Plate
26**	HP-1026	Stainless Steel Ball
27	HP-1027	Pipe Plug
28	HP-1028	Body
29**	HP-1029	Gasket
30	HP-1030	Handle Link
31	HP-1031	Bleed Valve Body
32	HP-1032	Bleed Valve Screw
33	HP-1033	Clevis Pin
34	HP-1034	Pipe Plug
35	HP-1035	Vent Check Valve
36	HP-1036	Tank assembly
37	HP-1037	Tank Cap
38	HP-1038	Repair Kit-(Incl. all ** Items)
39	HP-1039	Cap Gasket
40	HP-1040	Hose Assembly
41	1005HP	R-Clip

*Item 14, Plunger and Item 2, Plunger Clevis are sold as an assembly only – Part number HP-1042

** Repair Kit Items included in Part Number HP-1038