1450 Pressure Test Pump Instructions

⚠ WARNING

Read these instructions and the warnings and instructions for all equipment and material being used before operating this tool to reduce the risk of serious personal injury.

SAVE THESE INSTRUCTIONS!

- **Use personal protective equipment.** Always wear eye protection to reduce the risk of eye injury.
- **Only use with specified fluids.** Use with other fluids may result in personal injury or pump damage.
- **Do not over-reach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

Description and Specifications

The RIDGID® Model 1450 Pressure Testing Pump is designed to pressure test a wide range of fluid systems for leaks including heating, compressed air, oil, fire sprinkler, and small bore pipeline systems using water, oil or a mixture of water and ethylene glycol.

The Model 1450 uses a variable lever-arm design and automatic pressure holding valves to enable the user to easily pressurize the system.

Specifications

Max. Pressure.....725 psi (50 Bar)

Piston Volume.....2.3 In^3 (37.7 cm^3)

Outlet Hose Connection .....$^1/_2$" NPT (marked "N") or $^1/_2$" BSPP

Outlet Hose Length....72" (1.83 m)

Reservoir Capacity ....3.6 gallons (13.6 liters)

Test Liquids.....Water, Oil, Ethylene Glycol (Viscosities similar to water)

Max. Temperature .....120°F (50°C)

Dimension.....28"x 8.5"x 9.5" (710 x 220 x 240 mm)

Weight .....14 lbs. (6.4 kg)

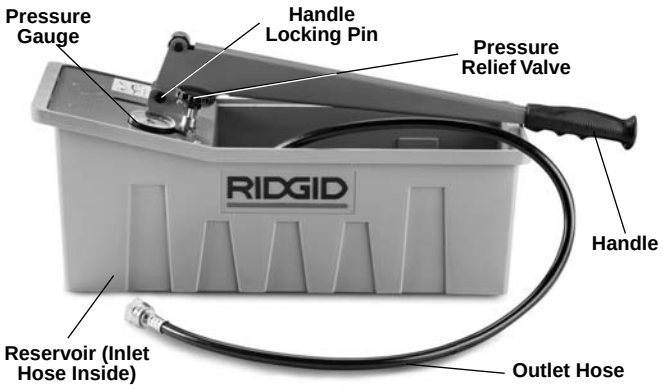

Figure 1 – 1450 Pressure Test Pump

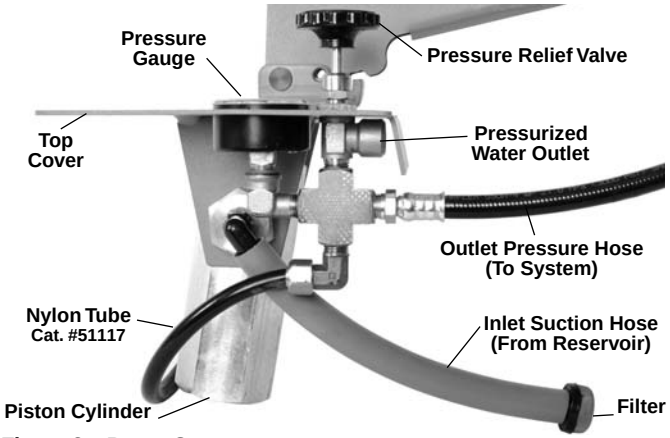

Figure 2 – Pump Components

Inspection/Maintenance

Daily before use, clean equipment, including reservoir, and handle to aid inspection and improve control. If needed, clean filter by removing from hose and flushing clean.

Inspect the pump for proper assembly, completeness, binding, wear or damage. Make sure hose is in good condition with no fraying, cuts or tears. If any problems are found, do not use until corrected. Use only identical replacement parts when servicing.

Set-Up/Operation

1. Locate a clear, level, stable location for the pump, other equipment and the operator.
2. Inspect the system to be tested and determine an appropriate connection point and test pressure.
3. Completely fill piping system with liquid. Purge air from system.
4. Fill reservoir with enough liquid to cover inlet suction hose. Only use clean liquids – debris can clog the filter and damage the pump. Observe applicable safety precautions for the fluids being used.
5. Close pressure relief valve and remove locking pin from handle.
6. Securely connect outlet hose to the piping system. Do not sharply bend or kink the hose.
7. Pump liquid into system until desired pressure is reached.
   - Use long pump handle strokes to fill system (high volume, low pressure) Do not use handle extensions.
   - Use short pump handle strokes to reach desired pressure (low volume, high pressure).

NOTICE Closely monitor pressure to avoid exceeding the test/rated pressure. Pressure above the pump rating of 725 psi (50 Bar) will cause damage to the pump. Typically the nylon tube *(Figure 2)* will rupture, protecting other system components.

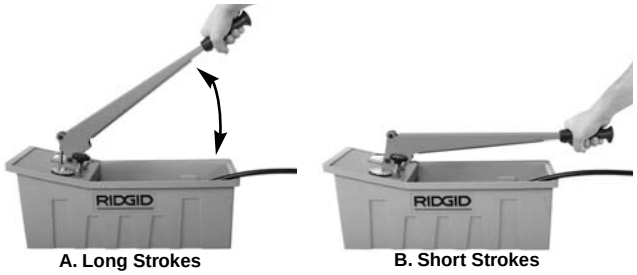

Figure 3 – Handle Strokes

8. Allow unit to stabilize for 15-30 seconds. Pump additional liquid into system until desired pressure is reached. If

pressure does not build up, there may be a leak in the system or pump.

9. If system has no leaks, the gauge pressure will not drop during test period (after temperature stabilization).
10. Release pressure by opening relief valve. Always release pressure before disconnecting hose from system.
11. If exposed to freezing conditions, make sure to purge water from test pump.