CAUTION

Your pump will provide longer, trouble-free service if you follow these precautions:

- Do not allow liquids to be drawn into the pump (liquids will damage the internal mechanism). To prevent liquids from entering the pump, use a trap (as described in "To Transfer Liquids").
- Protect the inside of the pump from volatile acid and solvent vapors, which will also damage the mechanism.
 If such vapors are accidentally pumped in, quickly disassemble the pump and thoroughly clean with water. Lubricate with a non-petroleum-based (vegetable or silicone) oil.
- When cleaning the pump, do not immerse it or use solvents.
 Wipe it with a mild detergent solution to remove surface dirt.
- To prevent breakage do not force the pump handle. If operation becomes difficult, disassemble the pump and lubricate the piston with a few drops of non-petroleum-based (vegetable or silicone) oil.

Use your pump with other Nalgene Products

In addition to the products shown on this insert, use your pump with:

- All Nalgene Disposable and Reusable Filterware
- Nalgene Filtering Flasks (Cat. No. DS4101)
- For longer lengths of tubing order Nalgene Clear Plastic Tubing, (Cat. No. 8000-0070).
- For more information, refer to the current Nalgene Labware Catalog or contact www.nalgenelabware.com

WARNING:

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm and/or cancer. The tubing provided with this product contains DOP (Dioctyl phthalate) and/or DEHP ([Bis(2-ethylhexyl)]phthalate), commonly used plasticizers.

8-0400-01 0509 © 2009 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Made in China.

Asia: China Toll-free 800-810-5118 or 400-650-5118, India. +91 22 6716 2200, India Toll-free 1 800 22 8374, Japan +81 3 3816 3355

Other Asian countries: 65 68729717

Europe: Austria +43 1 801 40 0; Belgium +32 2 482 30 30, Denmark +45 4631 2000; France +33 2 2803 2180; Germany +49 6184 90 6940, Germany Toll-free 08001-536 376, Italy +39 02 02 95059 or 434-254-375, Netherlands +31 76 571 4440;

Nordic/Baltic countries: +358 9 329 100, Russia/CIS: +7 (812) 703 42 15,

Spain/Portugal. +34 93 223 09 18; Switzerland. +41 44 454 12 12; UK/Ireland. +44 870 609 9203

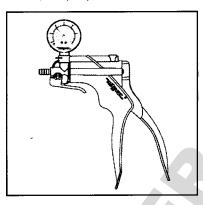
North America: USA/Canada +1 585 586 8800, USA Toll-free: 800 625 4327

South America: USA sales support: +1 585 899 7198 **Countries not listed:** +49 6184 90 6940 or +33 2 2803 2180

Thermo

Thermo Scientific Nalgene Repairable Hand-operated Vacuum/Pressure Pumps

Cat. No. 6133-0010, Zinc pump, 15cc



Nalgene® Cat. No. 6133-0010 repairable, multi-purpose vacuum/ pressure pump is cast of corrosion resistant zinc/aluminum.

It quickly and easily attains a vacuum of 25 in. (635mm) Hg. or a pressure of 30 psi (35kPa). For convenience, the pump has a lever to release the vacuum without disconnecting it from the line. The nozzle fits 1/4-in. (6.35mm) I.D. tubing. It comes equipped with a 2-ft. (60.9cm) length of 1/4-in. clear plastic tubing.

The pump can be easily disassembled for repair or replacement of internal parts - see instructions on next page. Repair kits include all necessary maintenance parts and detailed diagrams. Order Cat. No. 6133-2000 for repair kit.

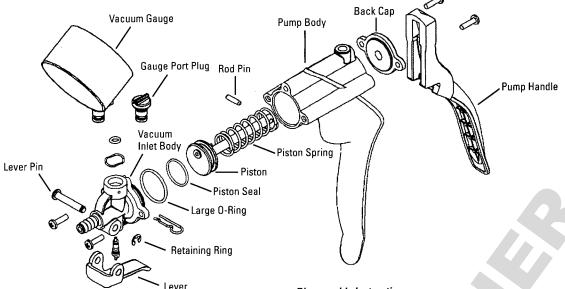
The pump has a pumping rate of 15cc/stroke. Full blank port pressure is obtained with only two strokes.

These pumps are self-lubricating. Gauges are calibrated in inches of Mercury and kPa.

Applications

- Siphoning
- Filtration
- · Adjusting vacuum-operated apparatus
- Checking for equipment leaks
- Bleeding fluid lines
- Evacuation and indirect transfer of liquids

NALGENE Thermo

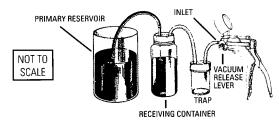


How to Use

- Attach one end of the tubing to the vacuum/pressure inlet of the pump and the other end to the container to be evacuated. Make sure all the connections are tight. Air is exhausted at the rate of 15cc/stroke (at atmospheric pressure).
- Operate the vacuum/pressure release lever to release all or part of the vacuum or pressure without disconnecting the pump from the line.

To Transfer Liquids

Nalgene Hand-operated Vacuum/Pressure Pumps are not intended for direct transfer of liquids. However, they can be safely used to transfer liquids indirectly, using a set-up like the one shown below. Note: Use a Nalgene Straight-side Wide-mouth Jar (Cat. No. 2116) as a trap between the receiving container and the pump. The trap prevents liquid from being drawn into the pump.



Nalgene Fluid Transfer Closures (Cat. No. DS2153-0700) are shown on the trap and the receiving container (NALGENE Mason Jar, Cat. No. 2116-0125, -0250) Flexible tubing is also shown (Cat. No. 8000-0070).

Disassembly Instructions

Tools needed: Phillips screwdriver

Main Body

- Remove the two screws securing the valve housing to the pump body.
- Push the piston into the pump body cylinder to relieve spring tension from the handle.
- Remove the rod pin from the end of the piston rod, and remove the piston from the pump body.
- Install new components from appropriate repair kit. Apply lubrication to piston seal and reassemble.

Vacuum/Pressure Inlet Body

- Remove two screws from the front of the vacuum inlet body.
- Replace the large o-ring at the back of the vacuum inlet body.
- Remove the screw from the dual converter knob.
- Remove the knob and valve by pushing the valve stem back through the housing.
- Replace the valve o-rings, apply lubrication to the valve seals, and reassemble.

Vacuum Release Assembly

- Remove the retaining ring securing the vacuum lever pin.
- Remove the vacuum lever pin and lever.
- Replace needed parts and reassemble.

Pump gauges can also be replaced. Contact Nalgene Technical Support at 1-800-625-4327 for information.