

- 4) Remove prefilter from the solution and continue pumping another 5 to 10 strokes to remove remaining water from the pump body and hoses.
 - 5) Remove and clean the ceramic prefilter by brushing with the supplied cleaning pad. Allow to air-dry completely.
 - 6) Remove cartridge and allow to dry.
 - 7) Rinse the black plastic housing and remove any dirt.
 - 8) Lubricate the piston o-rings with silicone lubricant provided.
 - 9) Re-assemble the filter.
 - 10) Wrap hoses around body and store in carry bag.
- Note: When removing unit from long-term storage, flush the system with one liter of water to remove any stale tasting water.

Cartridge Capacity

Cartridge capacity depends on water quality. The Katadyn Vario was tested at 500 gallons (1875 liters) and found effective for removal of bacteria (*Klebsiella terrigena*) and protozoan cysts (*Giardia* and *Cryptosporidium*). To extend the life of your cartridge, always use the Vario filter in LONGER LIFE mode. The cartridge should be replaced after 500 gallons (1875 liters) or when the output becomes too slow.

Replacement Cartridge Installation

Replacement cartridges are available where you purchased your Katadyn Vario.

- 1) Detach pump head from filter housing. Remove ceramic prefilter and cartridge from housing by turning and lifting it. Detach ceramic prefilter unit from cartridge. Discard used cartridge in trash receptacle. **Note:** If removal of cartridge is difficult, detach bottom cap first and push on the outlet barb.
- 2) Rinse inside of Vario housing by swishing with clear water (non-filtered water is ok). Discard water. Wipe inside of housing with soft cloth to remove sediment.
- 3) Remove new cartridge from packaging and apply a small amount of silicone lubricant to cartridge o-ring set before attaching ceramic prefilter unit. **Note:** A new cartridge is already filled with activated carbon.
- 4) Next insert the new cartridge making sure the pointed ridge in the filter housing is aligned with the triangular notch in the cartridge. Now reinstall the ceramic prefilter and reattach the pump head. (Picture E)
- 5) Choose FASTER FLOW or LONGER LIFE mode by turning the ceramic prefilter unit until the white arrow points to your preferred setting. **Note:** To extend cartridge life, we recommend using the Vario in LONGER LIFE mode. (Picture D)
- 6) Reattach pump head with handle and close tight.
- 7) Screw bottom cap back on housing. To protect the inside from dirt, turn bottom cap until outlet port is covered.
- 8) Flush cartridge by pumping and discarding the first liter of water.

Refill of Carbon Core

Carbon refill packs are available where you purchased your Katadyn Vario.

- 1) Follow instruction 1 from Cartridge Installation above. Remove red cover and green foam underneath to reveal activated carbon.
- 2) Discard used activated carbon. Use more force if the carbon is wet. Rinse inside of cartridge with filtered water. Do not remove white filter disc from the bottom of the cylinder.
- 3) Open package of new activated carbon and pour into the cartridge. Cover with green foam and red lid. (Picture F) **Note:** Apply a small amount of silicone lubricant to o-ring of red cover.
- 4) Flush unit by pumping 1 liter of water to remove carbon dust.

Activated Carbon Capacity

Activated Carbon capacity depends on water quality. Normal effective lifespan of carbon is 50 gallons (200 liters). High chemical or odor concentration can reduce the capacity of the carbon. Replace the carbon when you notice a change in taste or odor after filtering or after 6 months of constant use - whichever comes first.

When You Travel Abroad, Camp or Backpack...

...you run a risk of illness ranging from the inconvenience and discomfort of diarrhea to more serious illnesses caused by protozoan cysts (i.e., *Giardia*, *Cryptosporidium*), viruses and bacteria.

The microorganisms that cause these diseases are often found in the food and water you consume. Lakes, streams and the local water supply may be contaminated.

To minimize the risk of contracting these illnesses, we suggest that you consult with your physician, state health department or travelers' clinic 4-6 weeks before you depart.

And while you are traveling...

- Make sure that prepared food is thoroughly cooked.
- Select non-cooked foods (fruits, nuts, etc.) that have intact shells or skins, and clean your hands before peeling the food.
- Disinfect your hands with soap and water (or Katadyn Klean Hand Sanitizer) thoroughly and often, especially before you eat. Filter all drinking water with your Katadyn Vario Water Microfilter.
- If there is any risk of viruses in the water, use an EPA-registered disinfectant such as Micropur MP1 after filtering.

The Katadyn Vario Microfilter is an essential piece of outdoor equipment. We hope it makes your outdoor experience more enjoyable. For questions or suggestions, please contact us at 1-800-755-6701.

Product Registration

Please take a moment to register your new Katadyn product by completing the short product registration form online at www.katadyn.com/productregistration. The information you provide will enable us to better serve you with products developed to meet your needs and interests. Register your Katadyn product online and you will be automatically entered into a drawing to win a free Katadyn product.

Limited Warranty

Your Katadyn Vario Microfilter is warranted for one (1) year from the date of purchase against defects in materials and workmanship. Should your Katadyn Vario prove defective within one year from the date of purchase, return it to the Katadyn retailer from whom it was purchased. If you do not receive a satisfactory resolution, contact Katadyn Consumer Relations at 1-800-755-6701 for service assistance. Katadyn, at its discretion, will replace or repair the damaged item. Please retain your purchase receipt as proof of date purchased. This warranty gives you specific legal rights and you may have other legal rights which vary from state to state.

Contact North America:
Katadyn North America Inc.
 4830 Azelia Avenue North
 Minneapolis, MN 55429
 1-800-755-6701
outdoor@katadyn.com / www.katadyn.com

Contact International:
Katadyn Products Inc.
 Pfäffikerstrasse 37
 8310 Kempthal / Switzerland
info@katadyn.ch / www.katadyn.com

KATADYN®
 MAKING WATER DRINKING WATER

Vario Water Microfilter

(Model #8014931)

Vario Replacement Cartridge

(Model #8014933)

Replacement Prefilter Disc

(Model #8015035)

Replacement Activated Carbon

(Model #8015036)



Cut of Katadyn Vario



Dual Action Pump - Dual piston technology provides maximum output with minimum effort

Multi-Stage Filtration System - A simple turn engages a ceramic prefilter for longer life in dirty water or a pleated glassfiber filter in normal conditions

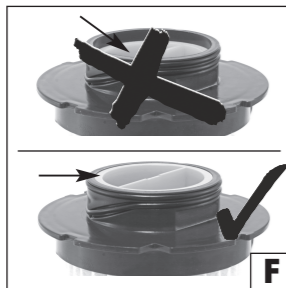
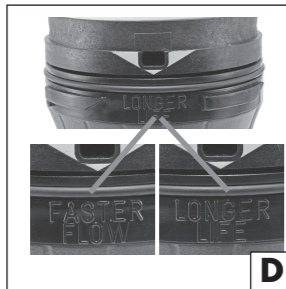
Fast Water Flow - Produces up to 2 qt (2 l) per minute in "Faster Flow" mode and 1 qt (1 l) per minute in "Longer Life" mode

Carbon Core - Replaceable carbon keeps water tasting fresh. Reduces chemicals, odors and toxins through life of cartridge

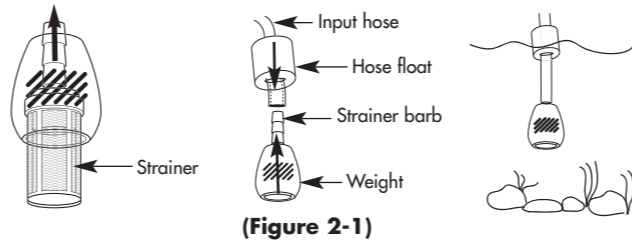
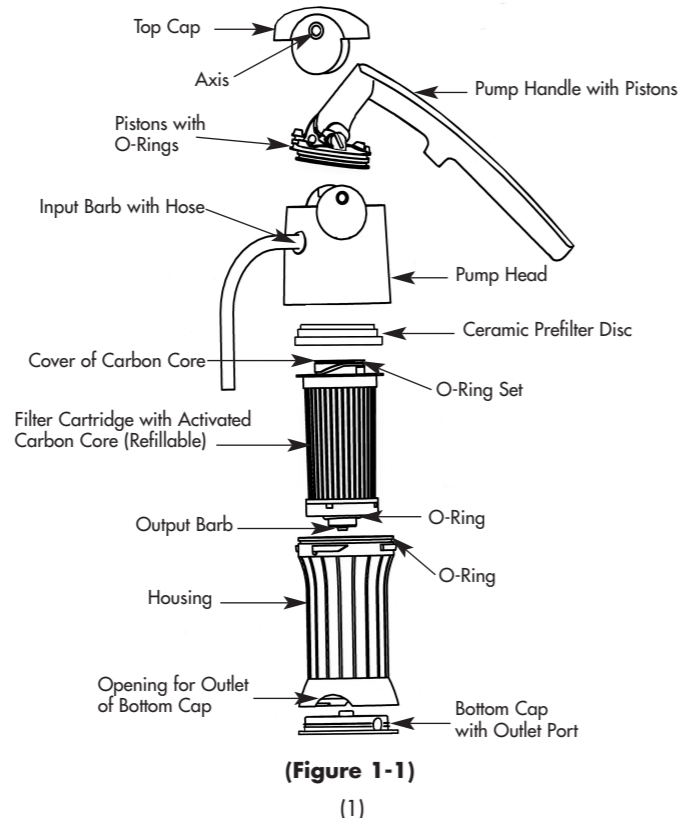
Adaptor Base - Attaches directly to water bottles or output hose can be used to fill hydration systems or larger containers



Detail Pictures Katadyn Vario



Thank you for choosing a Katadyn water system. The Katadyn Vario Microfilter meets industry standards for reduction of bacteria (99.9999% *Klebsiella terrigena*) and protozoan cysts (99.9% *Giardia* and *Cryptosporidium*). It also reduces chemicals and improves the taste of water. Its intelligent design combines high efficiency pumping with ease of use.



Intake Prefilter

The prefilter (Figure 2-1) works in still and running water. It consists of two components: a strainer and a weight.

Note: Apply a small amount of silicone lubricant to the strainer barb to ease assembly. The prefilter is important because it prevents large particles (larger than 130 microns) from entering the water system. See Field Performance Tips for helpful hints.

Hydration Bladder Compatible

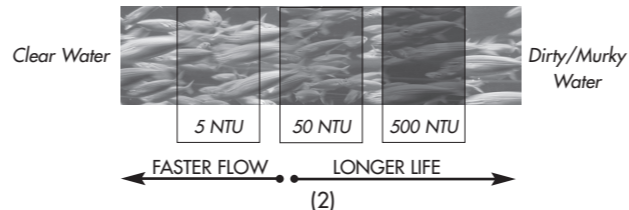
Your Katadyn Vario allows easy filling of many hydration bladders such as Nalgene, Camelbak, etc. Turn the bottom cap until the outlet port appears in the opening of the housing. The outlet port in the bottom cap is designed to fit hydration pack bladder drink tubes. Remove bite valve from drink tube and insert tube into bottom cap. (Figure 1-1, Picture C)

Product Set-up

The Vario requires minimal set up. For best results, try the Vario before first field use to familiarize yourself with its operation.

1) Filter Modes

The Vario is the first microfilter with 2 filter modes: LONGER LIFE and FASTER FLOW. With LONGER LIFE (initial position) the water flows through a ceramic prefilter disc first before passing through the glassfiber cartridge. This is the mode to use for longest cartridge lifespan. If set to FASTER FLOW the water flows directly to the cartridge. This mode produces higher water flow. For maximum cartridge life, we recommend using FASTER FLOW only when water is clear. See turbidity chart below:



To change the filter mode, detach pump head by turning and lifting the pumphead from the filter housing. Next, hold the housing in one hand and turn the ceramic prefilter unit until the white arrow points to the desired mode. (Picture D) Reattach pump head and close tight.

Note: The ceramic prefilter can easily be cleaned by brushing with the supplied cleaning pad.

2) Connect Hoses

Remove the red plastic cap from the input barb; retain for storage. Connect input hose (with prefilter) to input barb in the middle of the pump head. To use with Nalgene bottle, remove bottom cap and screw Vario to top of bottle. To use with hydration bladder, remove bite valve from hydration bladder and connect bladder drink tube to the outlet port of the bottom cap. To use with output hose, remove the bottom cap and attach one end of the output hose to the output barb. Push the enclosed bottle clip on the other end of the output hose. (Figure 1-1, Pictures A, B, C)

3) Flush System

Important: Before first use, flush system by pumping approximately 1 liter of water through the unit to remove harmless carbon dust. Slightly discolored water is normal when flushing. See following section on Normal Operation on how to filter water.

Normal Operation

- Place input hose in untreated water source. Adjust the float to keep prefilter off the bottom and away from sediment.
- Remove the bottom cap and retain. Connect a Nalgene Bottle to the bottom of the Vario filter (Picture A) or attach the output hose to the output barb. (Picture B) Alternatively connect hose of hydration bladder as described above.* (Picture C)
- Make sure the hoses are not kinked. Pump the handle in a slow, steady manner.
- After filling water container with filtered water, unscrew bottle/remove outlet hose/remove bladder drink tube and remove prefilter from water source. Continue pumping to remove remaining water from pump body. If applicable, screw bottom cap back on housing. To protect the inside from dirt, turn outlet port until covered.
- Store unit in the carry bag. To prevent the possibility of cross contamination, store the output hose with the clip separately in the resealable bag inside the carry bag.

***Note:** Before each use, flush and discard a small amount (5 - 10 strokes) of water to remove stale taste.

Field Performance Tips

To extend cartridge life, always use the best water source available. Keep the intake prefilter clean and off the bottom. In heavy sediment conditions, wrap a coffee filter or bandanna around the intake prefilter. Where possible, place untreated water in container and wait for sediment to settle out until water appears clear - then filter from water above the sediment.

(3)

Maintain your Katadyn water system to keep it operating smoothly.

1) If handle is hard to operate:

Lubricate o-rings of pistons. Silicone lubricant is provided with your new Vario. Remove axis from top cap by turning it 90° and pushing it out of its position. A coin can be used to turn the axis. Detach the translucent top cap and put aside. Grasp the pump handle and lift it upwards until the pistons come out of their position. Clean excess build-up from black rubber o-rings on pistons. Place a small amount of silicone lubricant all the way around the o-rings. Re-assemble. **Note:** When reassembling, carefully insert pistons, making sure to not pinch o-rings.

2) If unit pumps easily, but low output:

Make sure prefilter is submerged.

Make sure that hoses are not blocked or pinched.

Clean ceramic prefilter. Occasionally high pressure develops inside the pump head and prevents the filter from operating properly. This can be easily eliminated by removing the pump head and cleaning the ceramic prefilter with the cleaning pad provided. Pump slowly to get water started and resume normal pump rate when flow has begun.

Clogged cartridge. A clogged cartridge requires replacement. As a temporary solution in the field, remove the cartridge and swish it around in water. See Cartridge Installation for cartridge removal. Take care that untreated water does not contact the cartridge output barb.

3) Clean Intake Prefilter:

Rinse the strainer in water to remove any particles that may be caught in the strainer. For a more thorough cleaning, remove the prefilter from the input hose and clean with water and a soft brush. Reassemble. Apply a small amount of silicone lubricant to the strainer barb to ease assembly. (Figure 2-1)

For use without the weight. The prefilter is functional with or without the weight (we recommend using with the weight). To use without the weight, remove the strainer barb from the input hose. Reassemble without the weight.

4) Storage:

Your Katadyn water system comes with a carry bag for storage. To prevent the possibility of cross contamination, store the output hose with the clip separately in the resealable bag inside the carry bag.

Long-Term Storage (After Your Trip is Over)

Disinfect your Vario microfilter before storage to prevent microbiological growth within the pump. Do not use any alcoholic detergents, since it will damage the surface of the filter.

- Fill a liter container with tap water and add 2 tablets of Katadyn Micropur (if not available use 2 tablespoons of ordinary household bleach).
- Place prefilter into solution.
- Pump entire amount of solution through unit (into sink or container).

(4)