# **EXATADYN**<sup>®</sup> MAKING WATER DRINKING WATER

Vario Water Microfilter (Model #8014932) Vario Replacement Cartridge (Model #8014933) Replacement Prefilter Disc (Model #8015035) Replacement Activated Carbon (Model #8015036)



# Cut of Katadyn Vario



# **Detail Pictures Katadyn Vario**

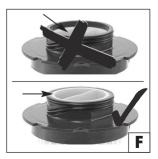






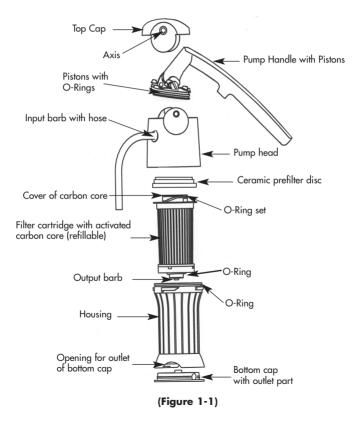


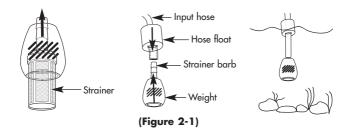




## English

Thank you for choosing a Katadyn portable water microfiltration 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 modular prefilter (Figure 2-1) works in still and running water. It consists of two components: a strainer and a weight.

<u>Note:</u> 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

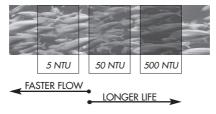
Your Katadyn Vario allows easy filling of many hydration bladders such as Nalgene, Camelbak, etc. Turn the bottom cap until the outlet appears in the opening of the housing. The outlet port in the bottom cap is designed to fit hydration pack bladder drink tubes. Remove bite valve from drink tube and 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 filter with 2 filter modes: LONGER LIFE and FASTER FLOW. With LONGER LIFE (initial position) the water flows through the 1.0 micron ceramic prefilter disc first before passing the glassfiber cartridge. If set to FASTER FLOW the water flows directly to the cartridge. To extend cartridge life, we recommend using FASTER FLOW only when water is clear.



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

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 hydration bladder, connect bladder drink tube to the outlet of the bottom cap. To use with output hose, remove the bottom cap and attach the output hose to the output barb. Push the bottle clip on to the output hose. (Figure 1-1, Pictures B, C)

#### 3) Flush System

<u>Important</u>: 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.
- 2) Remove the bottom cap and retain. Connect a Nalgene Bottle to the bottom of the Vario filter or attach the output hose to the output barb. Alternatively connect hose of hydration bladder as described above \*. (Pictures A, B, C)
- 3) Make sure the hoses are not kinked. Pump the handle in a slow, steady manner. Approximately 38 strokes per minute equals 1 liter of water in FASTER FLOW mode.
- 4) 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 hole until covered. in the resealable bag inside the carry bag.
- 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.

\*<u>Note</u>: Before each use, flush and discard a small amount (5 – 10 strokes) of water to remove stale taste.

### Field Performance Tips

The Katadyn Vario is designed to remove bacteria and protozoan cysts such as Giardia and Cryptosporidium. 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.

#### Maintain your Katadyn water system to keep it operating smoothly.

#### 1) If handle is hard to push:

**Lubricate o-rings of pistons.** Silicone lubricant is provided with your new unit. 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. no pistons. Place a small amount of silicone lubricant all the way around the o-rings. Re-assemble. <u>Note:</u> When reassembling, carefully insert pistons, making sure to not pinch o-rings.

**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. If flow is not restored, replace cartridge.

#### 2) If unit pumps easily, but no water flows:

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 cleaing the ceramic prefilter with the cleaning pad provided. Pump slowly to get water started and resume normal pump rate when flow has begun.

3) 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 Micropur (if not available use 2 tablespoons of ordinary household bleach).
- 2) Place prefilter into solution.
- 3) Pump entire amount of solution through unit (into sink or container).

- **4)** Remove prefilter from the solution and continue pumping another 5 to 10 strokes to remove remaining water from the pump body and hoses.
- 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 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 2' 000 litres and found effective for removal of bacteria (Klebsiella terrigena) and protozoan cysts (Giardia and Cryptosporidium). To reach maximum cartridge life, always use the Vario filter in LONGER LIFE mode. The cartridge should be replaced after 2' 000 litres or when the output becomes too slow.

### **Cartridge Installation**

Replacement cartridges are available where you purchased your Katadyn Vario.

- Detach pump head from filter housing. Remove ceramic prefilter unit with cartridge from housing by turning and lifting it, and detach ceramic prefilter unit from cartridge. Discard used cartridge in trash receptacle. <u>Note:</u> If removal of ceramic prefilter unit and cartridge is difficult, detach bottom cap first and push on the outlet barb.
- 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.
- Remove new cartridge from packaging and apply a small amount of silicone lubricant to cartridge o-ring set before attaching ceramic prefilter unit. <u>Note:</u> A new cartridge is already filled with activated carbon.
- 4) Before installing the new cartridge please lift the ceramic prefilter off the filter cartridge. Now insert the new cartridge making sure the longest ridge in the filter housing is aligned with the triangular gap 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. (Picture D) Note: To extend cartridge life, we recommend using the Vario in LONGER LIFE mode.
- <u>Note:</u> Io extend cartridge life, we recommend using the Vario in LONGER
  **6)** Reattach pump head with handle and close tight.
- 7) Screw bottom cap back on housing. To protect the inside from dirt, turn outlet hole until covered.
- 8) Flush cartridge by pumping and discarding the first liter.

## **Refill of Carbon Cartridge**

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

- 1) Follow instructions 1 and 2 from cartridge installation above. Remove red cover and green foam underneath to reveal activated carbon.
- 2) Rinse inside of cartridge with filtered water. Do not remove white filter disc from the bottom of the cylinder.
- 3) Open package of activated carbon and pour into the cartridge. Cover with new green foam and red lid (Picture F). Note: Apply a small amount of silicone lubricant to o-ring of red cover

### **Activated Carbon Capacity**

Activated Carbon capacity depends on water quality. Normal effective lifespan of carbon is 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 disinfectant such as Micropur MF1T or boil your water.

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 +41 44 839 21 11.

### **Product Registration**

Please take a moment to register your new Katadyn product by completing the short productregistration 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 two (2) years from the date of purchase against defects in materials and workmanship. Should your Katadyn Vario prove defective within two years 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 International: Katadyn Products Inc. Pfäffikerstrasse 37 8310 Kemptthal / Switzerland info@katadyn.ch / www.katadyn.com