BERKEY SHOWER FILTER™ OWNER'S INSTRUCTIONS

Berkey Shower Filter™

The **Berkey Shower Filter™** removes most of the chlorine present but it also saves water and energy as well.

It is just as logical to remove the chlorine from our showers as it is to remove it from our drinking water. Many authorities feel that we accept more chlorine from one shower than from drinking the same water in one day.

Chlorine and You

Chlorine is universally used to chemically purify water. Municipal water suppliers use chlorine and its derivatives to effectively destroy micro-organisms in drinking water.

Chlorine is also familiar as a bleaching agent. Almost every home uses household bleach in its laundry. To be an effective bleach, it is necessary that a substance must also be able to attack organic matter. This chlorine does very well. Our skin, hair, lungs, and eyes are also organic - and chlorine attacks these as well. Chlorine bonds with the protein in our bodies making hair dry and unmanageable, and sensitive dry skin, flake and itch.

More About Chlorine

Chlorine exists in two forms - combined available chlorine and free available chlorine. Combined available chlorine is present as chloramine or other derivatives in water. Free available chlorine is the residual chlorine present as dissolved gas, hypochlorous acid, or hypochlorite not combined with ammonia. It is free available chlorine that presents the most danger to the human, and it is this form of chlorine that the **Berkey Shower Filter™** removes. NOTE: Simple OTO type chlorine tests cannot be relied upon to show the presence of free available chlorine. This type of test also shows the presence of combined chlorine. When testing for free available chlorine, an inexpensive test is the DPD type test method.

INSTALLATION

- 1. Tools and material required:
 - A. Slip joint pliers or adjustable wrench (to remove existing showerhead).
 - B. Teflon joint sealing tape.
- 2. Remove the existing shower head from the shower arm. (See Fig A)
- 3. If your showerhead has an integral ball joint it should be either replaced with a standard ½" threaded shower arm or an adapter can be used (see Fig B). Ball adapters can be purchased from most hardware or building supply dealers. The following table may be of help:

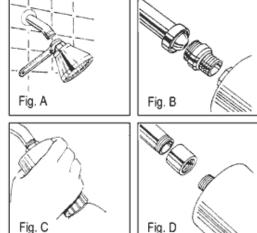
Plumb Shop	Shower
<u>Adapter</u>	<u>Brand</u>
PS-2592	American Standard
PS-2593	Price Pfister
PS-2596	Gerber

- 4. Wrap about 4 turns of Teflon joint sealing tape around the shower arm threads (or adapter threads, if adapter is used.
- 5. Attach adapter, if adapter is required, with slip joint pliers.
- 6. Attach the **Berkey Shower Filter™** by hand tightening to shower arm or adapter (see Fig C). Be careful to avoid cross threading when starting the threads. Do not over tighten. It is only necessary to tighten enough to prevent leaks.
- 7. IF THE SHOWERHEAD IS REPLACED, OR WHEN INSTALLING A **BERKEY SHOWER FILTER™** WITH YOUR OWN SHOWER HEAD IT IS IMPERATIVE THAT A FLOW RESTRICTING HEAD BE USED. This is not only mandatory in most cities but is necessary to insure proper filter action of the **Berkey Shower Filter™** unit SHOWER HEAD FLOW SHOULD NOT EXCEED 2.5 GPM AT 60 PSI.
- 8. The **Berkey Shower Filter**™ can be used with a hand held shower unit by removing the existing shower head and attaching the **Berkey Shower Filter**™ to the shower arm using Teflon joint sealing tape. Attach the flexible hose to the outlet of the **Berkey Shower Filter**™ as per the manufacturer's instructions for the hand held unit.

Care of your Berkey Shower Filter™ and "Back Flushing"

The ability of the **Berkey Shower Filter™** to continue to remove the chlorine will depend on the quality of the water sources; the amount of chlorine and hardness, and the amount the **Berkey Shower Filter™** is used. Over a period of time, a reduction of water flow may be experienced. Should this occur, the **Berkey Shower Filter™** filter may be "back flushed" as follows:

- 1. Remove the **Berkey Shower Filter**™ from the shower arm.
- 2. Remove the shower head from the **Berkey Shower Filter™**.
- 3. Turn the **Berkey Shower Filter**™ around and attach the back flushing coupling (supplied) to the outlet of the **Berkey Shower Filter**™ (see Fig. D).
- 4. Attach the coupling to the shower arm.
- 5. Turn on the shower and flush the **Berkey Shower Filter™** with warm water for several minutes at full flow.
- 6. Remove the unit and reassemble using Teflon joint sealing tape.



Media

The **Berkey Shower Filter™** contains a new and improved shower filtration media, which is most effective in reducing free chlorine, hydrogen sulfide, scale and iron oxide (rust water). The **Berkey Shower Filter™** process media works in a wide range of temperatures with a maximum operating temperature of 120 degrees Fahrenheit

How Long Will Your Berkey Shower Filter™ Last?

The length of time that the **Berkey Shower Filter™** will reduce the chlorine level in your shower water will depend on the level of chlorine present, pH, amount of water used, the hardness of the water and the care of the unit. If the unit is back flushed as required it should last a year or more under average water conditions. The improved **Berkey Shower Filter™** will typically last 25,000 gallons or one year, whichever comes first. While testing was performed under standard laboratory conditions, actual performance may vary.

Using a Flow Restricting Water Head

The **Berkey Shower Filter™** showerhead incorporates a patented feature that regulates the water flow rate 2.5 gallons per minute (GPM) from water pressure as low as 15 pounds per square inch (psi) to pressures as high as 100 (psi). This feature not only results in substantial energy and water savings, but it also is an important part of the **Berkey Shower Filter™** design. The flow restricting feature of the **Berkey Shower Filter™** insures the proper "contact time" of the water within the filter. DO NOT USE SHOWER HEADS WITH FLOW RATES GREATER THAN 2.5 GPM AT 60 PSI. TO DO SO WILL REDUCE THE EFFECTIVENESS OF THE **BERKEY SHOWER FILTER™**.

NOTICE OF LIMITATIONS:

- --The Shower **Berkey Shower Filter**™ is designed for potable water systems only.
- -- Do not allow to freeze, or use with water over 110 F (43 C) temperature.
- -- Maximum water pressure should not exceed 100 psi.
- --Do not use in high iron content water systems that use chemicals such as polyphosphates.
- --The Shower **Berkey Shower Filter™** is not to be used for drinking purposes.