



INSTALLATION AND OPERATING INSTRUCTIONS MODEL - FC000/1M

Read carefully before proceeding and save for future reference

INTRODUCTION

This Drinking Water System is equipped with a unique cleanable, reusable, Ceramic Cartridge (Model 1M) that traps and kills harmful bacteria (ie. coliforms, E. coli, faecal coliforms) >99.99999%, traps cysts & protozoa (ie. cryptosporidium, Giardia lamblia) >99.9% and filters particulates as small as 0.3 micron (absolute). The activated carbon core within the ceramic further reduces tastes & odours. It can be used on any municipal or untreated drinking water supply to deliver bacteriologically safe drinking water.

INSTALLATION

DO NOT INSTALL AS A WHOLE HOUSE FILTER AS THE CERAMIC CARTRIDGE WILL REDUCE PRESSURE AND FLOW RATE.

Rated Service Flow - 1 gpm / 3.8 Lpm

NOTE: This filter is to be used for one cold drinking water outlet only.

It may be installed in-line as in Fig. 1 or undersink as in Fig. 2.

INSTALLATION CAUTIONS

- * Maximum Working Pressure - 100 psi / 690 kPa. If water pressure surges, or will at any time exceed the 100 psi / 6.9 bar / 690 kPa maximum, a pressure regulator must be installed before the filter. Recommended regulator setting is 75 psi (517 kPa) or less) along with a water hammer arrestor to prevent damaging shocks caused by water hammer.
- * Maximum operating temperature: 100°F / 38°C
- * Important to allow at least 5 inches above and below the filter for clearance.
- * Do not install in direct sunlight.
- * Only use teflon tape for fitting connections into unit, **DO NOT USE WICKING OR SEALER.**
- * If water pipes are used to ground electrical system, install jumper wire (#4 gauge solid copper wire) across the filter unit.
- * Protect your unit from freezing - drain the unit if freezing temperatures exist.

NOTE: IF BRASS OR SOLDER TYPE FITTINGS ARE USED:

DO NOT use torch near plastic housing. All solder joints should be made before joining pipe to filter head.

DO NOT overtighten metal fittings into plastic filter head or it may crack. Hand tighten fittings plus one turn with wrench to give water seal.

System and installation shall comply with applicable state and local regulations.

SOLDERLESS INSTALLATION

For solderless installation use a Rainfresh CK1 or CK3 connector kit available at your dealer. (see Fig.1&2)

INSTALLATION PROCEDURE

1. Turn off water supply and depressurize lines before installing filter.
2. Install filter using Rainfresh Connector Kits CK1 for Inline (Fig 1.) or CK3 Kit for undersink (Fig 2) or standard pipe fittings in desired location making sure water enters inlet side of filter as marked on Filter Head.
3. Remove sump by turning 1/8th turn counterclockwise and lower. Remove protective bubblepack around 1M Cartridge. The filter unit comes with a ceramic adaptor (1007-0) that is threaded onto the cartridge and allows a simple press up fit of the cartridge over the center boss of the filter head (501). To replace sump, align the sump grooves with inlet head (501) lugs and push straight up onto the head. Turn the sump 1/8 turn to right to lock.

Please keep the cartridge adaptor for use with future replacement cartridges.

NOTE: THE CERAMIC CARTRIDGE IS FRAGILE AND SHOULD BE HANDLED WITH CARE.

4. Open valves before and after the filter.
5. Turn on water supply and check for leaks.

Flushing and Conditioning: Allow water to flow for 10 minutes to flush unit, then close faucet and allow unit to sit overnight to condition. In the morning flush unit briefly before beginning service.

NOTE: In some cases with low water pressure, the sump may only partially fill due to an air block. If this happens, turn off faucet and press top vent button until water level rises past the sealing point on sump. **YOUR UNIT IS NOW IN OPERATION.**

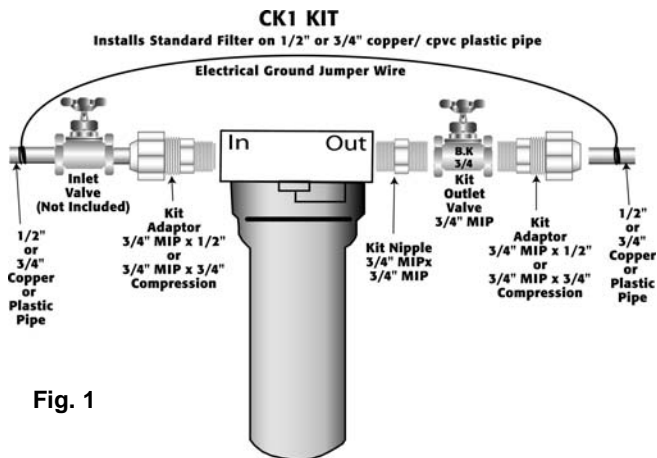


Fig. 1

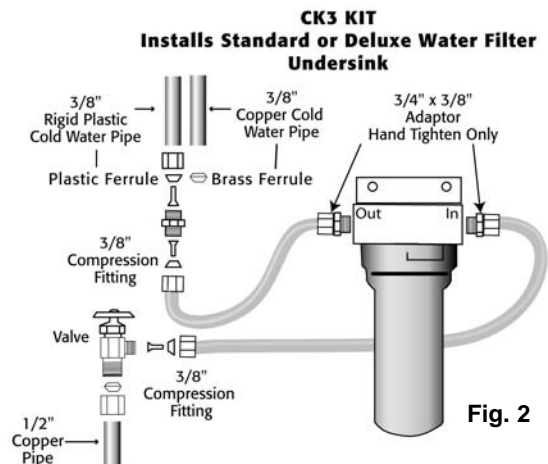


Fig. 2

WHEN & HOW TO CLEAN THE CARTRIDGE

Periodically sediment will clog the outer pores of the ceramic cartridge and the water flow will decline. **The cartridge should be cleaned when the flow rate has dropped to an unacceptable level. A new cartridge will typically deliver 1 gpm at 40 psi (45 litres at 2.5 bar).** The cartridge may be cleaned many times until cartridge gauge 703-4 can be passed over width of the ceramic.

Continued on next page

1. Shut off valves before and after the filter unit and depress the vent button on top of the head until pressure is relieved. Remove the sump by lifting and rotating it counterclockwise an eighth turn to stop and lowering carefully. Remove the cartridge (1M) by pulling and twisting gently downwards. Do not remove cartridge by unscrewing from adaptor (1007-0).
2. To clean ceramic. (Note: Please wear rubber gloves) hold body of ceramic cartridge in the palm of your hand and gently scrub entire surface with abrasive screen cleaner (811-0) provided under running water. Do not hold cartridge by adapter, as this may put undue strain on the fragile ceramic. Do not use soaps or detergents. Scrubbing removes trapped particulates along with part of the ceramic.
3. Replace the cartridge into the filter base by pushing and turning gently to seal the o-ring. Replace the sump over the filter head lugs and lock by rotating clockwise to stop. Open valves and check for leaks.

WHEN TO REPLACE THE CARTRIDGE

NOTE: This cartridge is designed for typical use up to 12 mths. However, its life depends on the quality of the water and the amount of water used. Cartridge life may be shortened where sediment levels are high. **It is time to replace the cartridge when the cartridge gauge (703-4) can be passed over the width of the ceramic or after 12 months or 1000 US gal / 3785L.**

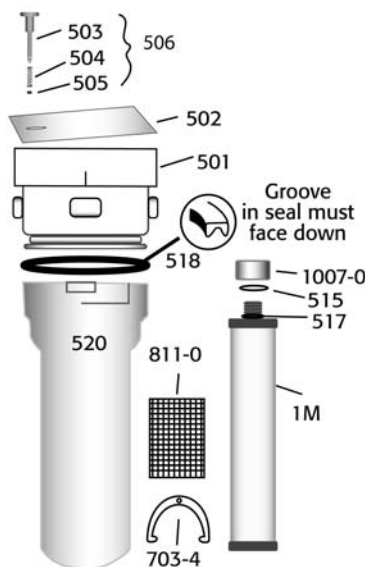
Note: If water contains excessive sediment, install a Rainfresh Whole House Sediment Filter (FC100,FC150,FC300,FC350, FC355 or BH010/020) on the main cold water line to protect all fixtures and appliances.

MAINTENANCE/TROUBLESHOOTING

1. Lubricate Head Seal at least once a year and when draining for winter. Use food grade silicone grease or non petroleum lubricant. Water conditions can be hard on rubber seals. Head Seal replacement at least every two years is recommended to minimize wear and tear and prevent leakage.
2. Caution: Due to a limited product service life and to prevent costly repairs or possible water damage, we strongly recommend that sump (#520) be replaced every 5 years. If sump of your filter unit has been used for more than this period, replace immediately. Date the bottom of any new sump to indicate next replacement date.
3. Do Not clean housing with organic solvents such as those found in sprays for cleaning products or insecticides as these may cause cracking or crazing and lead to failure and leakage.
4. If Sump is difficult to remove, the unit is still under pressure. Depress vent button on top of unit again.
5. If leakage occurs around the Head Seal:
 - a) Seal may have become twisted during cartridge change. Reinstall the seal with groove facing down and check for leaks.
 - b) Sediment has caused a seal interference. Remove seal and clean sealing area on Head and Sump. Reinstall seal with groove facing down and check for leaks. NOTE: If leak persists after trying a) or b), replace seal.
 - c) The seal is cracked and should be replaced.
6. If leakage occurs around top of unit, Vent Valve assembly is not closing. Replace the assembly.

PARTS LIST

Ceramic Cartridge	1M
Cartridge Adaptor c/w O-ring	1007-0
Standard Head	501
Standard Top Plate	502
Vent Pin	503
Vent Spring	504
Vent O-ring	505
Vent Assembly	506
Cartridge Adaptor O-Ring	515
1M Cartridge O-ring	517
Head Seal	518P
Sump	520
Cartridge Gauge	703-4
Cleaning Screen	811-0



Tested and certified by CSA International to CSA B483.1 and to NSF/ANSI Standard 53 for reduction of cyst (e.g. Cryptosporidium, Giardia) and to Standard 42 for reduction of chlorine taste and odour.



The standards referenced above evaluate products for use with disinfected water.

Additional testing and verification for reduction of bacteria, cyst and particulates performed by independent laboratory.

Limited 5 Year Warranty

Envirogard system housings are warranted, to the original Consumer purchaser/owner, for a period of five (5) years, from the date of purchase, against defects in materials of workmanship. Head Seal and O-rings are warranted for a period of one (1) year from the original date of consumer purchase. The Companies obligation under this warranty shall consist of repair, replacement or credit, at its option, of any part found by the Company inspection to be defective, provided that the product has not been misused, abused, altered or damaged as determined by the Company and provided that only approved Envirogard/Rainfresh replacement cartridges have been used in the housings. This warranty does NOT apply to the replacement cartridge(s), which by nature will diminish in performance through normal use and require(s) regular replacement. This warranty does NOT cover, and is intended to exclude, any liability on the part of Envirogard for any incidental damages, consequential damages, labour charges or any other costs incurred in connection with the purchase, installation, use, maintenance or repair or the water filter whether under this warranty or any other warranty implied by law. Some provinces/states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights, which vary from province to province/state. This warranty applies only to water filter/systems purchased in Canada or the U.S.A.

Thank you for purchasing one of our Drinking Water Systems. We are committed to ensuring that you are totally satisfied. If you have any problems, don't go back to the store - please give us a call !

HELPLINE: 1-800-667-8072 TORONTO & AREA: 1-905-884-9388

Web Site: www.rainfresh.ca



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