Water Systems, LLC	*Version 2013-1*

Installation and User Manual

iSpring™ 3-Stage Ultra-Filtration Water Purifier

Model No.: CU-A/B/C

For indoor use only

CU-B3 CU-A3 CU-C3

(Image for reference only)

LIST **PAGE**

Safety Warnings

In order to avoid property damage to you and others, please follow the safety precautions below.

★Ignoring the following safety precautions could result in a risky situation:

Warnings If you ignore contents in this section, it may cause permanent damage to the water purifier or cause serious property damage.

Notes If you ignore the contents in this section, it may lead to damage of some parts of the water purifier or may result in some property damage.

WARNINGS

Do not disassemble or modify this water purifier on your own!

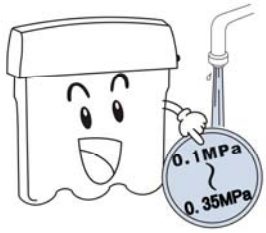
Unauthorized disassembly or modification of the machine could lead to machine malfunctions or leaking incidents.

Please check with the store where you purchased this product from for any technical questions.

Do not put heavy objects on the water purifier!

If heavy objects are placed on the water purifier, it may result in damaging the anti-dust cover or internal components of the water purifier, which could lead to leakage, mal-functioniing machine, and even serious property damage.

Do not run the machine under extremely higher hydro pressure conditions



Operating under high pressure conditions may cause the water purifier to rupture and leaking, and even serious property damage, Recommended inlet pressure is 20 psi to 50 psi. Add a pressure regulator is it is over 50 psi.

Do not let the machine come in contact with corrosive materials!

These materials could corrode the system or some toxic and hazardous compounds could penetrate the water purifier tubings, leading to contaminated water production and machine leakage, which could even cause body and property damage.

Notes

Water purifier inlet water temperature should not exceed 90ºF!

If the inlet water temperature is over 90ºF, it will damage the ultra filtration membrane that leads to membrane failure.

Do not use in conditions under 45ºF!

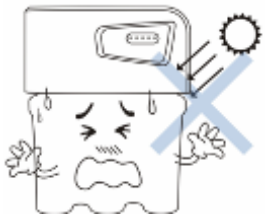
If the temperature in the room is below 45ºF, please be sure to take measures to prevent freezing, such as starting the heater or air conditioner to prevent leakage or cracked tubings caused from water freezing inside the machine.

Do not use this water purifier outdoors!

If this water purifier is used outdoors, it can lead to accelerated aging of the water purifier tubingss and parts, which can cause leaking or machine failure.

Do not use the water purifier in direct sunlight!

When the water purifier is in direct sunlight for a period of time, it may create a breeding ground for microorganisms so the water purifier water quality will decrease, and they may pollute the internal components of the water purifier.



Packing List

· Main machine	1 unit
· Installation Manual	1 copy
· Accessory pack:	1 package
½” 3 way inlet valve	1
Inlet water ball valve	1
Tubing stopper	1
Faucet hanging piece	1

Product Description

1. Blown-up profile of the water purifier

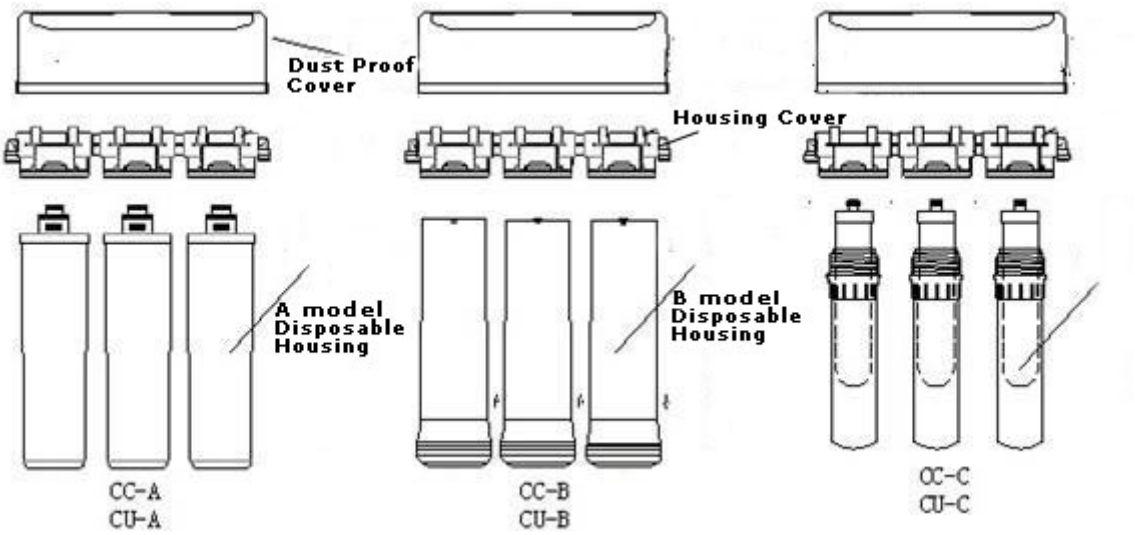


Diagram 1

2. Water route diagram

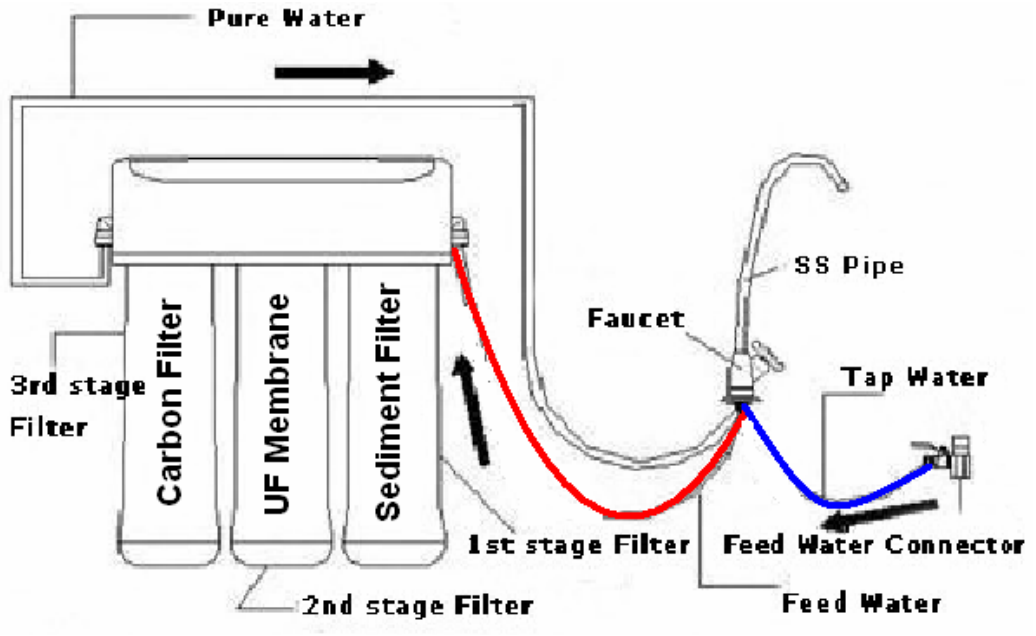


Diagram 2

Tubing Connections:

BLUE tubing to cold water line; RED to Sediment filter; WHITE to Carbon Filter.

3. Technical Parameters

Model No.	CU-A/B/C
Pure water flow	23.8 gallon/H (43.5psi）
TDS	300 PPM*
pH range	3 - 11
Feed water Temperature	45 -90ºF
Feed water Pressure	20 - 50psi

***** If feed water has hardness level above 300 ppm, we recommend putting a water softener prior to this ultra filtration system.

4. Main Parts Function Introduction

Our 3-stage water purifier adopts the multi filter mixing solution technology. The standard configuration is as followed:

First Stage: Inline Sediment filter

PP sediment filter with the aperture in 5 microns is made by food-grade polypropylene material and certified by NSF. It can effectively remove rust, sand, other larger particles and solid Impurities in water.

Second Stage: UF membrane filter in hollow fiber

With the aperture in 0.1 microns, the UF (Ultra Filtration) membrane effectively removes infectious microbe such as bacteria, protozoan and algae, while maintains the healthy mineral substance in the water. With unique front-loading ultra filter configuration and self-clean design, the UF membrane will sterilize itself during the filtration process. This feature will also prevent the UF from being soiled by bacteria propagation, ensuring the quality of purified water. The UF membrane also avoids the blockage caused by the smaller granule of activated carbon in the traditional post-loading design. Amount of the purified water was dramatically increased with this new design.

Third Stage: Post Activated Carbon Filter

Adopting non-renewable coconut shell activated carbon with ultra-micron aperture, this carbon filter adsorbs any residual chlorine, organics, humus, and odor from the water. Improve the taste and ensure health drinking.

5. Contaminants removal list

iSpring Ultra-filtration systems reject a wide variety of impurities. Here is a partial list.

You may or may not have these contaminants in your water.

The percentage rejection rate is for reference only. Percentages may vary since water chemistry varies in each water supply.

Substance	Percent Reduction	Influent Challenge Concentration (mg/L unless noted)	Maximum Permissible Product Water Concentration
ALACHLOR*	>98%	0.05	0.001
ATRAZINE*	>97%	0.1	0.003
BENZENE*	>99%	0.081	0.001
BROMODICHLOROMETHANE (TTHM)*	>99.8%	0.300 +/- 0.30	0.015
BROMOFORM (TTHM)*	>99.8%	0.300 +/- 0.30	0.015
CARBOFURAN (Furadan)*	>99%	0.19	0.001
CARBON TETRACHLORIDE*	98%	0.078	0.0018
CHLOROBENZENE (Monochlorobenzene)*	>99%	0.077	0.001
CHLOROFORM (TTHM)*	>99.8%	0.300 +/- 0.30	0.015
CRYPTOSPORIDIUM (see Cyst)	99.99%	minimum 50,000/mL	99.95%
CYST	99.99%	minimum 50,000/mL	99.95%
2, 4-D*	98%	0.110	0.0017
DBCP (see Dibromochloropropane)*	>99%	0.052	0.00002
1,2-DCA (see 1,2-DICHLOROETHANE)*	95%	0.088	0.0048
1,1-DCE (see 1,1-DICHLOROETHYLENE)*	>99%	0.083	0.001
DIBROMOCHLOROMETHANE (TTHM;Chlorodibromomethane)*	>99.8%	0.300 +/- 0.30	0.015
DIBROMOCHLOROPROPANE (DBCP)*	>99%	0.052	0.00002
o-DICHLOROBENZENE (1,2 Dichlorobenzene)*	>99%	0.08	0.001
p-DICHLOROBENZENE (para-Dichlorobenzene)*	>98%	0.04	0.001
1,2-DICHLOROETHANE (1,2-DCA)*	95%	0.088	0.0048
1,1-DICHLOROETHYLENE (1,1-DCE)*	>99%	0.083	0.001
CIS-1,2-DICHLOROETHYLENE*	>99%	0.17	0.0005
TRANS-1,2- DICHLOROETHYLENE*	>99%	0.086	0.001
1,2-DICHLOROPROPANE (Propylene Dichloride)*	>99%	0.08	0.001
CIS-1,3- DICHLOROPROPYLENE*	>99%	0.079	0.001
DINOSEB*	99%	0.17	0.0002
EDB (see ETHYLENE DIBROMIDE)*	>99%	0.044	0.00002
ENDRIN*	99%	0.053	0.00059

Substance	Percent Reduction	Influent Challenge Concentration (mg/L unless noted)	Maximum Permissible Product Water Concentration
ENTAMOEBA	99.99%	minimum 50,000/mL	99.95%
ETHYLBENZENE*	>99%	0.088	0.001
ETHYLENE DIBROMIDE (EDB)*	>99%	0.044	0.00002
FURADAN (see CARBOFURAN)*	>99%	0.19	0.001
HALOACETONITRILES (HAN)*			
BROMOCHLOROACETONITRILE	98%	0.022	0.0005
DIBROMOACETONITRILE	98%	0.024	0.0006
DICHLOROACETONITRILE	98%	0.0096	0.0002
TRICHLOROACETONITRILE	98%	0.015	0.0003
HALOKETONES (HK):*			
1,1-DICHLORO-2-PROPANONE	99%	0.0072	0.0001
1,1,1-TRICHLORO-2-PROPANONE	96%	0.0082	0.0003
GIARDIA LAMBLIA (see Cyst)	99.99%	minimum 50,000/mL	99.95%
HEPTACHLOR*	>99%	0.25	0.00001
HEPTACHLOR EPOXIDE*	98%	0.0107	0.0002
HEXACHLOROBUTADIENE (Perchlorobutadiene)*	>98%	0.044	0.001
HEXACHLOROCYCLOPENTADIENE*	>99%	0.060	0.000002
LEAD pH 6.5	96%	0.15 +/- 10%	0.010
LEAD pH 8.5	99%	0.15 +/- 10%	0.010
LINDANE*	>99%	0.055	0.00001
METHOXYCHLOR*	>99%	0.050	0.0001
METHYLBENZENE (see TOLUENE)*	>99%	0.078	0.001
MONOCHLOROBENZENE (see CHLOROBENZENE)*	>99%	0.077	0.001
PCE (see TETRACHLOROETHYLENE)*	>99%	0.081	0.001
PENTACHLOROPHENOL*	>99%	0.096	0.001
PERCHLOROBUTADIENE (see HEXACHLOROBUTADIENE)*	>98%	0.044	0.001
PROPYLENE DICHLORIDE (see 1,2 -DICHLOROPROPANE)*	>99%	0.080	0.001
SIMAZINE*	>97%	0.120	0.004
SILVEX (see 2,4,5-TP)*	99%	0.270	0.0016
STYRENE (Vinylbenzene)*	>99%	0.15	0.0005
1,1,1-TCA (see 1,1,1 - TRICHLOROETHANE)*	95%	0.084	0.0046
TCE (see TRICHLOROETHYLENE)*	>99%	0.180	0.0010
1,1,2,2- TETRACHLOROETHANE*	>99%	0.081	0.001
TETRACHLOROETHYLENE*	>99%	0.081	0.001
TOLUENE (Methylbenzene)*	>99%	0.078	0.001
TOXOPLASMA		minimum 50,000/mL	99.95%
2,4,5-TP (Silvex)*	99%	0.270	0.0016
TRIBROMOACETIC ACID*		0.042	0.001
1,2,4 TRICHLOROBENZENE (Unsymtrichlorobenzene)*	>99%	0.160	0.0005
1,1,1-TRICHLOROETHANE (1,1,1-TCA)*	95%	0.084	0.0046
1,1,2-TRICHLOROETHANE*	>99%	0.150	0.0005
TRICHLOROETHYLENE (TCE)*	>99%	0.180	0.0010
TRIHALOMETHANES (TTHM) (Chloroform; Bromoform; Bromodichloromethane; Dibromochloromethane)	>99.8%	0.300 +/- 0.30	0.015
Unsym-Trichlorobenzene (see 1,2,4-TRICHLOROBENZENE)*	>99%	0.160	0.0005
Vinylbenzene (see STYRENE)*	>99%	0.150	0.0005
XYLENES (TOTAL)*	>99%	0.070	0.001

Contaminant	Influent Challenge Concentration	Percent Reduction Achieved	Maximum Permissible Product Water Concentration
Chlorine Taste & Odor	2.0 mg/L + 10%	97%	>= 50%
Particles Class IV	13,000 Particles /ml	96%	>= 85%

Installation

1. Preparation

① Confirm the location the water purifier will be installed

② Confirm the various tools required for installation

RECOMMENDED TOOLS LIST	
Variable speed drill	1/8" ¼", 7/16", ½", 5/8", 1", 1 1/8" drill bit
5/8, 9/16 open-end wrench, or adjustable wrench, pliers	Phillips screwdriver
Utility knife, or scissor	Teflon tape

③ Confirm that you have all the connection accessories required for installation

④ Prior to installation, turn off the water and/or electricity

2. Instructions for Proper Installation

① Inlet water metal hose and 3-way inlet water joint installation method: First close the inlet water valve. Unscrew from the metal hose. Remove the 3-way inlet water joint from the water purifier accessories box, thread one end of the inlet water 3-way joint into the inlet water valve outlet; one end of the newly unscrewed metal hose should be screwed into the 3-way inlet water joint screw nut (See Diagram 4).

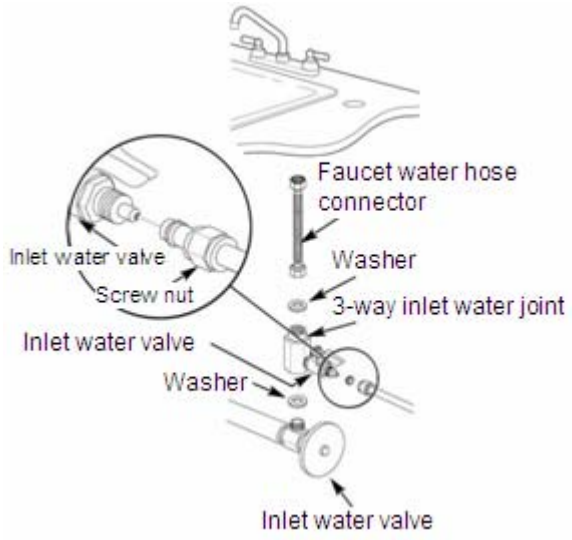


Diagram 3

② 3-way inlet water joint and inlet water ball valve installation method

Take out the inlet water ball valve from the water purifier accessories box, wrap one end of the ball valve external threads with the appropriate Teflon tape (See Diagram 5), if you have silica gel, spread a little on and then screw the ball valve into the corresponding hole of the 3-way inlet water joint (See Diagram 6). Take out the tubing from the accessories box, using scissors cut a suitable length of tube, connect one end of the tube with the inlet water ball valve (See Diagram 4), finally screw the nut in place.

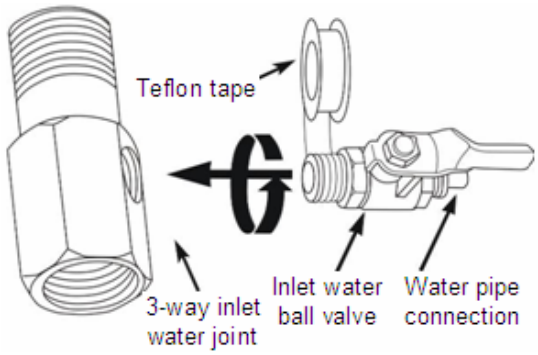


Diagram 4

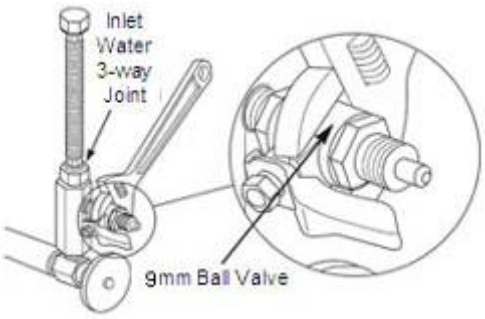
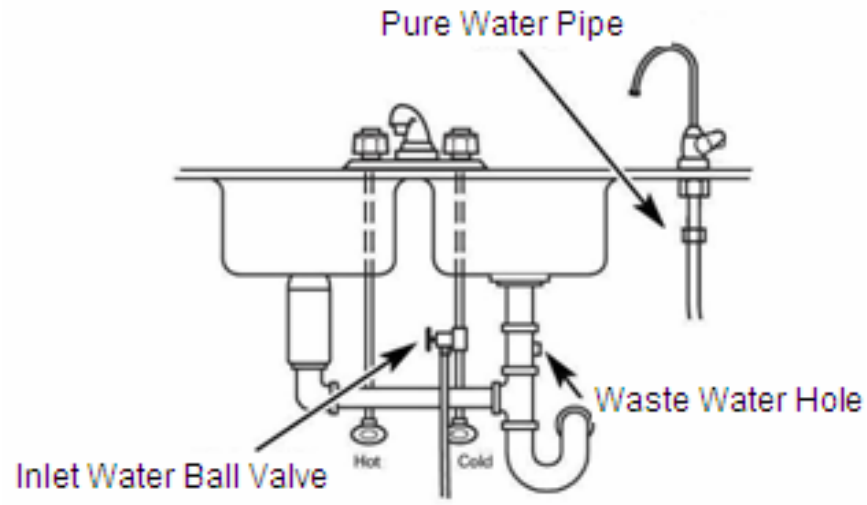


Diagram 5

③ Gooseneck faucet installation

In the counter where the faucet is to be installed drill a 1 1/8" inch hole in an appropriate position, then take out the faucet from the water purifier accessory box. Start the faucet installation: first put the stainless steel neck on the faucet main body (See Diagram 6), then lower the main part of the faucet into the already drilled hole, and then put the spacer on the lower part of the faucet. Screw the fixed nut into the bottom end of the faucet to fix the faucet to the counter, finally put the appropriate length of ¼" tubing into the water inlet connection, put on the tubing stopper and screw nut, screw to the bottom of the faucet (see Diagram 6). If you want to fix the faucet to the wall, please use the faucet hanging piece. (when installing be sure to tighten the joints to prevent leakage.)



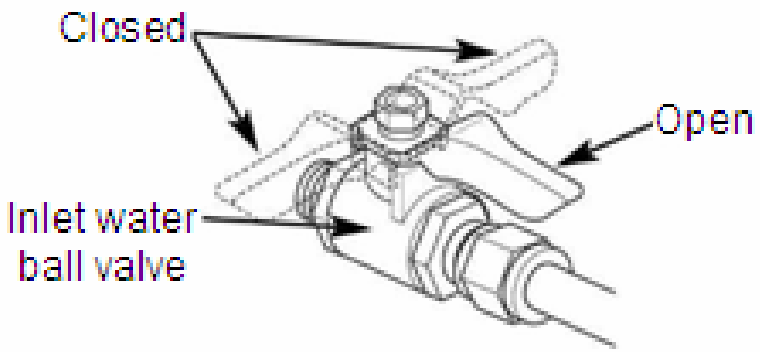
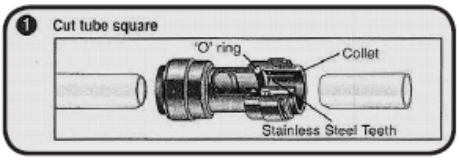


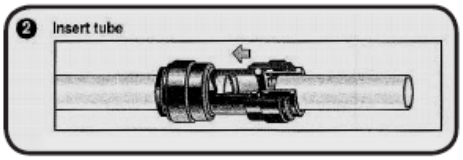
Diagram 6

How To Use the Quick Connect Fittings on the Filter Module

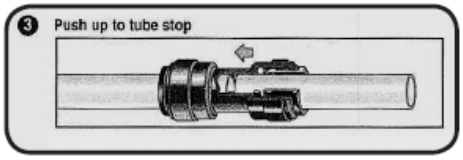
To make a connection, the tube is simply pushed into the fitting. The unique patented John Guest® locking system holds the tube firmly in place without deforming it or restricting flow.



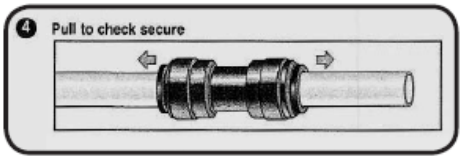
It is essential that the outside diameter be free of score marks and that burrs and sharp edges be removed before inserting into fitting.



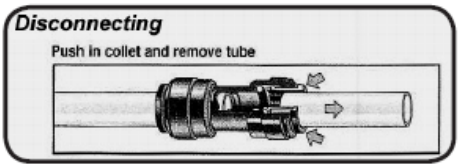
Fitting grips before it seals. Ensure tube is pushed into the tube stop.



Push the tube into the fitting, to the tube stop. The collet (gripper) has stainless steel teeth which hold the tube firmly in position while the O-ring provides a permanent leak proof seal.



Pull on the tube to check that it is secure. It is a good practice to test the system prior to leaving site and /or before use.



To disconnect, ensure the system is depressurized before removing the tube. Push in collect squarely against face of fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.

Maintenance

1. Filter Replacement Schedule

Filtration Stage	Filter	Recommended Changing Frequency	Replacement Part No. (A Series)	Replacement Part No. (B Series)	Replacement Part No. (C Series)
1st Stage	Sediment Filter	Every 6 months	FP-CUA	FP-CUB	FP-CUC
2nd Stage	UF Membrane	Every 12 months	UF-CUA	UF-CUB	UF-CUC
3rd Stage	Activated Carbon Filter	Every 6 months	FG-CUA	FG-CUB	FG-CUC

① This machine's filter replacement cycle for the various filters is derived from statistical indicators on average tap water use estimates. If there are big discrepancies between the user's actual water quality and utilization rate and the average indicators, there will be obvious differences between the filter's actual use time and the estimated cycle such as premature filter clogging, premature failure, etc. If this happens, filter replacement should be based on actual use, you should also promptly contact your local after-sales service department.

② This machine's estimated filter replacement cycle is based on average household water consumption and is suitable only for residential use, do not install this machine in places that require large

volumes of water. If the water volume requirements are large, this company has appropriate machines for business purchase.

2. Filter Replacement Method

Housing Type A： Shut off the water supply, spin out the housing that needs removal, installed the new one.

Housing Type B： Type B has the self-lock function, without closing the sourcing water, will be used normally after spin out the housing need removal, installed the new one in term of the regular adjusting procedure.

3. Notes

① For new water purifier or new filter cartridges, the pure water TDS value may be a little high, after running for some time the TDS value for pure water will gradually decrease until it is stable.

② Water from the new filter will be cloudy which is normal. The cloudieness is actually air bubbles. It will disappear after 2 weeks' use.

Failure Diagnosis and Resolution

Failure	Reason	Resolution
The pure water flow is not flowing	● Low inlet water pressure or no water	● Check water source
	● Incorrect tubing connections	● Check the tubing connections
Purified and wasted water flowed simultaneously	● Handle was not spin properly	● Spin the handle tight
	● Poor tightness for the spool in the adaptor	● Change the adaptor
The pure water flow is small	● Pre-filter is plugged	● Check from back to front stages of filters, and replace them accordingly
	● Life span of the filter was expired	● Replace the filter
	● Far low pressure for inlet water	● Check the inlet water source

LIMITED ONE-YEAR WARRANTY

1. What your warranty covers:

iSpring Water Filter Systems are warranted to the original owner to be free of defects in material and workmanship from the date of manufacture for one year as follows:

a. Manufacturer will, within one year of purchase, replace the defected parts (excluding filters) at no charge.
b. The replaceable filters are not warranted since the service life of replaceable filter varies with local water conditions and thus not warranted.

2. Conditions of Warranty:

a. System must be maintained and serviced with the manufacturer original replacement parts and filters. The performance of your drinking water system is directly related to the conditions of the water been treated and the particular application in which it is used. Therefore, manufacturer's liability is limited to the cost of repair of the RO systems. The manufacturer is not liable for incidental or consequential damages of any kind. Systems must be installed and operated in accordance with manufacture's recommended procedures and guidelines.

3. What iSpring Water Filter Systems will not do:

a. Warranty is void if product failure or damage results from freezing, neglect, misapplication, fouling with sediment or scale or failure to operate the system in accordance with the instructions contained in this manual.
b. The following operating conditions must also be followed for this warranty to be valid
   - The hardness of the water cannot exceed 7 grains per gallon or 120 ppm.
   - No iron can be present in feed water. Or iron should be removed from feed water.
   - The pH of the water must not be lower than 3 or higher than 11
   - Feed water Total Dissolved solids TDS should not exceed 1000 ppm
   - Feed water temperature between 90 F and 45 F or (32C and 5 C)

4. Obtaining Warranty Service:

For Warranty service, obtain a Return Merchandise Authorization (RMA #) number from the manufacture or distributor. You can also contact our technical support department to obtain the RMA # or visit our web site at http://www.123filter.com or email your request to sales@123filter.com

5. Limitations and exclusions:

Manufacturer will not be responsible for any implied warranties, including those of merchantability and fitness for a particular purpose. Manufacturer assumes no liability whatsoever for any incidental and consequential damages, including loss of revenue, loss of time, travel expenses, inconvenience, and any damage caused by the equipment and its failure to function properly.

Please visit our online store at **www.123filter.com** for all of your future filter needs. Send us an email to sales@ispringfilter.com for any question you have. ***Better water, better health!***