

Under Counter Drinking Water Systems

Installation & Service Manual

UC-1



Single Stage

Model UC-1 consists of 1 replacement filter.

Filter Part # _____

UC-2



Double Stage

Model UC-2 consists of 2 replacement filter.

Filter Part 1 # _____

Filter Part 2# _____

UC-3



Triple Stage

Model UC-3 consists of 3 replacement filter.

Filter Part 1 # _____

Filter Part 2# _____

Filter Part 3 # _____



WATER[®]
WORLD USA

Member



Made in USA

Under Counter Water Filter Systems

Congratulations on choosing the Drinking Water System

This high quality unit has been designed to fit under most kitchen and wet-bar sinks. We suggest that you carefully review the following information booklet before you attempt to install the reverse osmosis system.

We strongly recommend using only trained & experienced technicians for installation and troubleshooting. To locate the closest authorised service technician contact your dealer or visit us at www.waterworldusa.com.

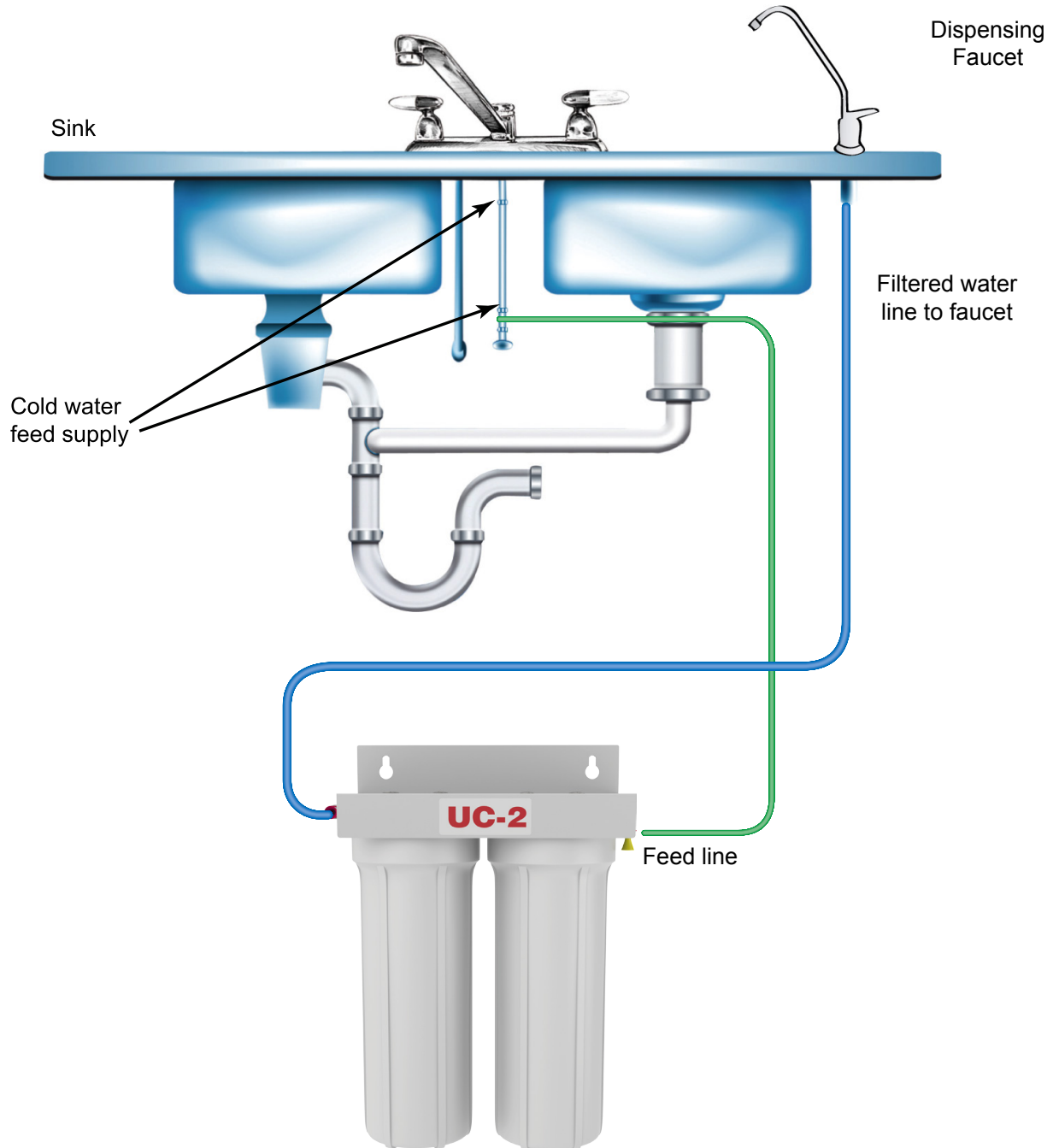
If you decide to install the unit yourself, please follow these installation instructions. All your local plumbing codes and regulations must be followed while installing your system. For installation assistance, contact your local dealer.

Tools Required:

- 1) Hand drill for faucet hole. Use the appropriate ½" drill bit for the surface you are drilling.
 - A) Titanium bit for metal sinks.
 - B) Glass and tile bit or Relton cutter for porcelain sinks.
 - C) Diamond core bit for granite.
- 2) Phillips head screwdriver.
- 3) Adjustable crescent wrench.
- 4) Basin wrench.
- 5) Teflon tape (apply when using the AD-4BC-3W & BV-2BC).

Your local dealer







INSTALLATION DIAGRAM FOR UC-2



WARNING:

CONNECT YOUR SYSTEM TO THE COLD WATER SUPPLY ONLY. DO NOT USE WATER SUPPLY THAT IS MICRO-BIOLOGICALLY UNSAFE, OR OF UNKNOWN SOURCE WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

Installation Kit Contents

 tubing	1. 1/4" Tubing (approximately 10 feet)
 SV-01	2. SV-01: SV-01 (Self Piercing Saddle Valve) for tapping into cold water supply. (See figure #2).
  AD-4BC-3W BV-2BC	3. BV-2BC (Chromed Ball Valve NPT 1/4") and AD-4BC-3W (Chromed Adapter NPT 1/2") are used for tapping into cold water supply at the top of undersink . If you have a vinyl feed line or flexible metal feed line use the BV-2BC and AD-4BC-3W. (see figure #3)
 WR-1W	8. WR-1W : WR-1W (White Wrench) Make sure the black rubber O-ring is properly in place in the filter housing after changing filters following any maintenance.
 4FC4	9. 4FC4: 4FC4 (Faucet connector) to connect the faucet with blue 1/4" tubing coming from the post filter labeled TO FAUCET.

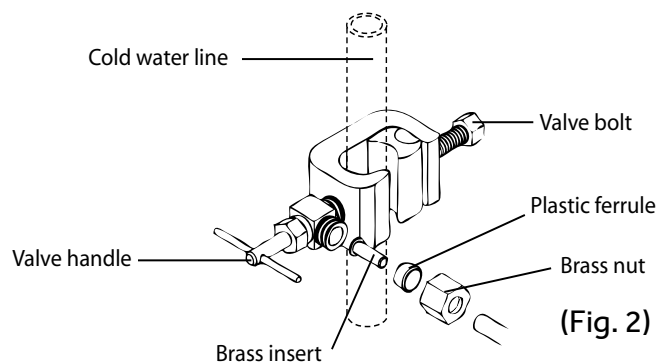
TAPPING INTO THE COLD WATER LINE

A - (Using self-piercing saddle valve Part # SV-01)

NOTE: This valve is designed for standard copper lines. If your cold water line is not plumbed with copper line, use water supply adapter AD-4BC-3W & BV-2BC.

- 1) Turn off cold water supply under the sink and install the saddle valve to the cold line. Clamp onto a smooth section and tighten valve bolt securely.
- 2) Turn the valve handle clockwise so that it pierces the copper cold water line.
- 3) Install the 1/4" tubing from the first stage filter to the saddle valve (Fig. #2).

***Do not over tighten brass nut**



NOTE: All local plumbing codes must be followed to ensure proper installation and use of your UC-System system.

NOTE: Use brass insert and plastic ferrule when connecting tubing to saddle valve.

CAUTION: A pressure regulator is recommended for feedwater pressure above 80 psi.

TAPPING INTO THE COLD WATER LINE

B - (Using the water supply adaptor Part # AD-4BC-3W & BV-2BC)

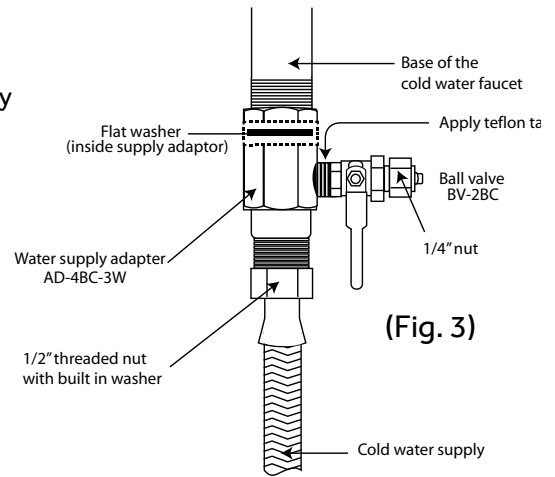
For flex metal or plastic line.

NOTE: The UC-System drinking water system must be connected to the COLD water supply only.

- 1) Turn off the **cold** water supply to the sink faucet by locating the round or oblong handle and turning clockwise until the water supply is off.

NOTE: If the cold water shut off valve fails to turn off the water, the house supply can be turned off at the main water supply.

- 2) The water supply adapter (Fig. #3) may be installed at the faucet connection
- 3) Disconnect the 1/2" threaded nut from the base of the faucet on the cold water side. Place the flat washer inside the female end of the water supply adapter. Screw on the base of the cold water faucet.
- 4) Re-connect the 1/2" threaded nut onto the male threads of the adapter. "DO NOT USE TEFLON TAPE ON THIS THREAD, RUBBER WASHERS WILL SEAL THE CONNECTIONS".
- 5) Place Teflon tape on the 1/4" male threads of the ball valve supplied with the adapter. Screw the ball valve into the 1/4" female port on the side of the adapter.
- 6) Remove the 1/4" nut from the ball valve, place the nut over the 1/4" tubing, insert the tubing onto the barbed connection of the ball valve and tighten into place with the 1/4" nut



DRILLING THE HOLE FOR THE FAUCET

NOTE: SAFETY GLASSES SHOULD BE WORN TO PROTECT YOUR EYES WHILE DRILLING THE FAUCET WHOLE.

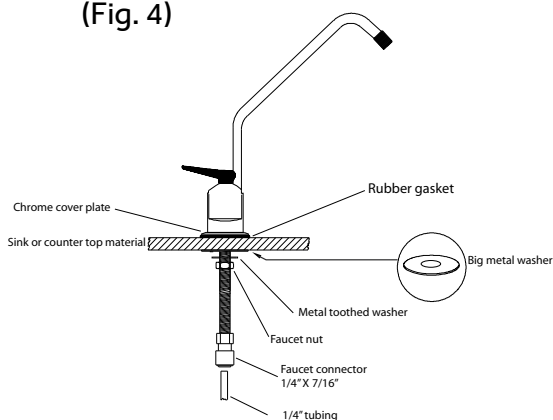
- 1) For best results, a 1/2" drill bit to drill a hole into your sink for the auxiliary faucet.
- 2) Carefully select the faucet location making sure it will have a neat water fall pattern and that the faucet stud will be accessible from below once the whole is completed.
- 3) **For Porcelain Sink:** Before starting the drill motor, apply firm downward pressure on the bit until a crunching occurs. This will help keep the drill from moving when starting the hole. Use a special porcelain hole cutter.
- 4) **For Stainless Steel Sink:** Before using the selected bit, an indent should be made with a center punch to keep the drill bit from moving. A small pilot hole will also aid the drill process.
- 5) For best results, keep steady firm pressure while drilling the hole. Too little pressure during the start will cause excess wear on the bit and progress will be slow.
- 6) Once the hole is complete, clean the area of metal chips and roughness around the hole. Metal chips will stain porcelain.

For granite use a special diamond core bit only, help cool bit with water.

WARNING: IT IS HIGHLY RECOMMENDED FOR GRANITE SLATE COUNTER-TOPS, TO USE THE ASSISTANCE OF A TRAINED PROFESSIONAL TO DRILL THE HOLE FOR THE FAUCET. SERIOUS DAMAGE CAN OCCUR TO THE COUNTER IF DONE BY AN INEXPERIENCED PERSON.

MOUNTING THE FAUCET

(Fig. 4)

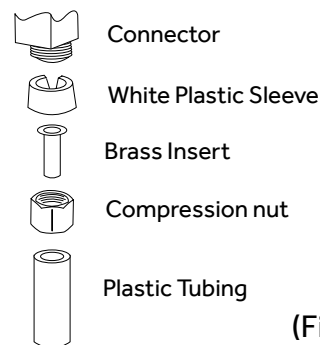


- 1) Drill a 1/2" hole in the sink or the counter top, or use an existing hole.
- 2) Slide chrome cover plate and rubber gasket on to stem of faucet and place faucet onto sink, with the stem going through the hole.
- 3) Place metal slotted washer over threaded stem of faucet.
- 5) Tighten nut from under the counter surface to lock the faucet into place.
- 7) Thread the faucet connector onto threaded stem of faucet. Do not use Teflon tape.
- 8) Connect 1/4" tubing to faucet connector.

CONNECTING THE SYSTEM

Compression fitting may be found on the water supply adapter. To make the connections, slide a compression nut onto the tubing (Fig. 5). Slip the white plastic sleeve onto the tubing with the beveled end towards the end of the tubing. Insert a brass or plastic insert into the tubing, bottom the tubing into the fitting, slide the nut up and tighten with a wrench.

DO NOT OVER TIGHTEN.



NOTE: Do not use the brass sleeves on plastic tubing, use only plastic sleeves on plastic tubing.

You are now ready to start up your system. Open the filter faucet and turn on the cold water supply. Allow the air to purge from the system and allow it to run for 5 minutes or until clear. This allows the carbon fines to be discarded to the drain. Turn off the filter faucet, allow system to pressure up and check for leaks.

You are now ready to enjoy your water the way it was meant to be.

Filter Cartridge Changing:

- 1) Turn ball valve on inlet side of your system ¼ turn to the off position. If you do not have a ball valve, turn off your cold water supply valve.
- 2) Release the pressure on the system by opening the filter faucet. Once the pressure on the system has been relieved, you may start the change process.
- 3) Open the canister(s) and discard the old filter(s).
- 4) Clean the inside of the filter housing with a mild soap and water solution. A mild bleach solution may also be used for disinfection. Rinse well.
- 5) Remove o-ring(s) and apply a very small amount of FDA approved silicone o-ring lubricant. Reinstall into grooves of housing(s).
- 6) Insert new cartridges in the same order they were removed. Screw the housings back into position. Usually hand tight is all you need, but you may add just a small amount of tightening with the wrench supplied. **DO NOT OVERTIGHTEN!!**
- 7) Reconnect the system if you removed it from the supply.
- 8) Open filter faucet.
- 9) Turn inlet valve ¼ turn to the on position or turn on your cold water supply.
- 10) Allow the system to purge of air. Run system 5 minutes or until water is, clear.
- 11) Close filter faucet

CAUTION: ALWAYS MAKE SURE THAT "O"-RINGS ARE SEATED PROPERLY INSIDE FILTER HOUSING SUMP(S) BEFORE TIGHTENING CANISTERS.

Notice: Replace entire system every 7 years to prevent consequential damage.

Trouble Shooting:

Problem	Answer	Solution
1) No water from the system	1) Filters are clogged and need changing. 2) Self-piercing valve did not pierce cold water supply. 3) Cold water supply valve is off.	1) Change Filters 2) Close self-piercing valve all the way and re-open. 3) Turn on feed supply.
2) Leak after filter change	1) O-Rings on housings were dislodged during their replacement.	1) Turn off system and check o-rings.

UC WATER FILTRATION SYSTEM LIMITED WARRANTY

The UC-System is warranted to be free from defects in materials and workmanship under normal use within the operating parameters listed below. For a period of twelve months from the date of purchase the factory will repair or replace any part of the reverse osmosis system with the exception of the filters and electrical components if any.

CONDITIONS OF WARRANTY:

The factory assumes no responsibility for incidental or consequential damages; for damages arising out of misuse of the product or the use of any unauthorized attachment; for damages resulting from improper installation or for damages resulting from the use of the product with a defective plumbing system.

In no event shall the factory be liable for any direct, indirect, special, punitive, incidental, exemplary or consequential damages, attorney's fees or any damages whatsoever, even if the factory has been previously advised of the possibility of such damages, whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use, or performance of the UC-System.

The factory is not responsible or liable for damage to any part of the UC-System because of misuse; misapplication; negligence; alteration; accident; installation; neglect; misapplication; physical damage; fouling and/or scaling of the membrane by minerals; sediment; bacterial attack; or operation contrary to our instructions, incompatibility with accessories not authorized for use with the system, or damage caused by freezing, flood, fire, or Act of God.

In no event shall the factory its subsidiaries or affiliates, or their respective officers, directors, employees, representatives, dealers or agents be liable for special, incidental, consequential, punitive, indirect, or other special damages, including but not limited to, loss of data, use, or profits, however caused, whether for breach of contract, negligence or otherwise, and whether or not the factory has been advised of the possibility of any such damages.

The factory assumes no warranty liability in connection with this reverse osmosis system other than that specified herein. This warranty is in lieu of all other warranties, expressed or implied, including warranties of fitness for a particular purpose.

WARRANTY SERVICE:

The factory will provide warranty service under the following conditions:

- 1) Contact your local dealer who will obtain return authorization instructions.
- 2) Ship the unit or part freight prepaid for warranty evaluation or service with RMA # written on package. Systems or parts covered under the warranty shall be repaired (or, at our option replaced) and returned without charge.

CONDITIONS FOR OPERATION:

Operating Parameters:

Chlorinated or City Supplied Only	
System Pressure	30-80psi
Temperature	4° -38° C (40° -100° F)
PH Range	3.0 to 11.0
Maximum feed TDS level	300 ppm

Under Counter Drinking Water Systems



Member



Made in USA