UNDER SINK

iSpring RCCP Series Reverse Osmosis System with Pump



Installation Instructions & User Manual

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We stand behind our products

Since 2005, iSpring has been dedicated to providing high-quality drinking water to families across the United States. We provide various residential faucets and water filtration systems that purify your water in everyday life and deliver pure, healthy, and tasty water to you and your family.

At iSpring, we strive to develop products to the highest of standards and aim to make excellent drinking water accessible for all households. With affordable pricing, reliable quality, prompt delivery, and top-notch customer service, we hope to assist in bringing you great water for years to come.

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User Information

The user must adhere to the installation specifications described in this Product Installation and Operation Manual (hereinafter referred to as the "instruction manual"). iSpring is not responsible for damage, loss, or injury resulting from neglect, improper maintenance, or unauthorized modification of products.

- This product is designed for residential use only. Contact iSpring customer service to inquire about usage in non-residential settings.
- The operating temperature range is 40°F 100°F (4 37 °C). This RO system is NOT designed for HOT water. If the water temperature or ambient temperature falls below 40°F, immediately shut off the inline water supply and drain the remaining water from the system. Within the range, the warmer the water is, the faster is the RO process.
- In case of malfunction due to damage or failure of the power supply system, unplug the system immediately and contact iSpring customer service for guidance.
- If leaking occurs, shut off the inline water supply by turning off the adapter. Then unplug the system and contact iSpring customer service.
- Use only authorized iSpring parts and filters. Using unauthorized or aftermarket components will void the product warranty.
- It is recommended that users check external fittings and connections regularly to ensure all components are secure and operating properly.
- Unauthorized modification and disassembly are strictly prohibited and will void the warranty.
- Never touch the power cord connector when your hands are wet, as this may result in electric shock.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent, or similarly qualified persons in order to avoid a hazard.
- The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.

Operating ConditionsParameterSpecificationMinimum Inlet Water Pressure30 psiMaximum Inlet Water Pressure70 psiIncoming Water Temperature40 - 100 °FMaximum TDS750 ppm

Product Features

- Maximum water pressure: 70 psi, or a pressure regulator (part# APR70) is required if there is high water pressure or water hammer.
- Minimum water pressure: 30 psi, or a booster pump is needed to improve RO efficiency
- Install this RO system where it is protected from hot/cold weather and direct sunlight. Avoid hitting, dropping, or dragging as they may cause cracks and leaks.

Component Identification



RO Machine Head (membrane not yet installed)



3 Pre-filter Housings



3 Pre-filter Cartridges



RO Membrane



Tubing and Spare Parts



Storage Tank (Model: T32M)



Drain Saddle 1/4" (Model: ADS1K)



RO Faucet w/ Installation Kit



Plumber's Tape



Feed Water Adapter (Model: AFW43)



Housing Wrench (Model: AWR2)



Leak Stop Valve (Model: ALS1)



Bracket



Tank Valve (Model: ABV2K)

* If your system is a 6-stage or 7-stage with an Alkaline, DI, or UV filter, they are already preinstalled on the machine head.

Understanding the Booster Pump and RO Process

1. Source water enters the system and passes through the stage 1, 2, and 3 pre-filters. Located between the pre-filters is the **Low-pressure Switch**. This switch turns on when the incoming water pressure is 6 psi or greater.

2. The **High-pressure Switch** turns on when the pressure from the pressurized tank is below 20 psi, and turns off at 45 psi (e.g., when the tank is full).

3. When the Low-pressure Switch and High-pressure Switch are both on, the **Feed Water Solenoid Valve** opens, allowing water to the **Booster Pump**.

4. The source water passes through the Booster Pump, bringing it to approximately 135 psi entering the membrane housing.

5. Coming out of the RO membrane is a pure water port and wastewater port. The RO water is forced through the .0001 micron-sized holes of the RO membrane and exits through the one-way **Check Valve** on the membrane's pure water exit port. The water rejected by the RO membrane exits through the wastewater exit port. On the drain line before the wastewater is disposed of is the **Flow Restrictor**, limiting the amount of drain water allowed out to keep pressure in the system.

6. The pure water is then routed to the pressurized storage tank. As the storage tank fills, the tank pressure rises. When the pressurized storage tank reaches 45 psi, the tank pressure triggers the High-Pressure Switch off, shutting the booster pump and system off.

7. When you open the RO faucet, the

Faucet

water exits the tank, passes through the FT15 post-carbon filter, and is dispensed from the RO faucet. As the RO water is dispensed, the tank pressure will gradually drop back down, triggering the High-Pressure Switch back on to refill the water removed from the tank.

Installation

Before you start the installation

- It is highly recommended that you watch the video "iSpring RCCP Series RO System with Booster Pump DIY Installation | Step by Step" on YouTube.
- Choose a suitable location for the system. Again, it must be placed on a flat surface and make sure this system is to be installed on INDOOR cold-water supply ONLY.
- Check the packing list to confirm all accessories are included in the package. Contact iSpring customer service if any components are missing.
- Required tools:







 $\langle 1 \rangle$

Flash

Light



Plumber's Phillips Head Spanner Tape Screwdriver Wrench Utility Knife

Towels

- Recommended tools:
 - Variable speed drill with two bits: 1/4" (for drilling a hole on PVC drain pipe), 1/2" hollow diamond (for drilling a hole on the countertop for drinking faucet)
 - > 5/8", 9/16" open-end wrench, or adjustable wrench, pliers
- Quick connect instruction:

HOW TO CONNECT



It is highly recommended that you watch the video "How to Connect and Disconnect Quick Connect Fittings | DIY Installation" on YouTube.

Cut the tubing end squarely using utility knife or scissors. Insert the tubing into the quick connect fitting for at least 1/2". You will need to wiggle the tube and apply additional pressure to create a seal.

Step 1: Install Feed Water Adapter (AFW43)

It is highly recommended that you watch the video "How to Install a Feed Water Adapter for Reverse Osmosis (RO) and Other Applications | iSpring AFW43" on YouTube.

- *Step 1. a.* Turn off the Cold Water Supply Valve (CWSV) under the sink and open the kitchen faucet to release pressure. Get a towel or bucket to catch any water drips. Disconnect the kitchen faucet connector pipe from the CWSV.
- *Step 1. b.* Install the Feed Water Adapter onto the CWSV and tighten it using a wrench or pliers. Make sure the O-ring is seated inside the adaptor.
- *Step 1. c.* Re-install the kitchen faucet connector pipe onto the male end of the Feed Water Adapter. Turn the handle of the Feed Water Adapter to the perpendicular OFF position. Turn on the CWSV slowly, and ensure you are getting a proper seal.
- Step 1. d. Connect the 1/4" RED tubing to the Feed Water Adapter.



The included bushing can be threaded on either side of the Feed Water Adapter to fit the configuration of both 3/8" COMP and 1/2" NPT.



How to Drill a Hole in Sink or Counter-top

- 1. It is highly recommended that you watch the YouTube video "How to Drill Faucet Holes."
- 2. Choose a 1/2" Diamond Core Bit for granite and a titanium drill bit for steel. Do NOT use a hammer drill on natural stone, glass, and ceramic.
- 3. An indent should be made with a punch on steel before drilling to help guide the bit.
- 4. Use caution when drilling on a Porcelain sink, as it could be easily chipped—set drill speed on slow. Press the bit downward firmly until it breaks through the slippery surface.
- 5. Use a coolant to disperse heat. Choose water for granite and oil for steel. Use the Water Suction Cup to hold coolant inside and prevent the drill bit from slipping.
- 6. Hold the drill firmly and vertically at the slowest speed to prevent the drill bit from slipping on the counter.
- 7. Once you break through the smooth surface, swirl the drill a little to evenly apply pressure in a circle. Be patient and deliberate. It can take 20 40 minutes to drill through 1".
- Step 2. a. If your kitchen sink does not have an existing 1/2" faucet hole, you will have to drill one. (Refer to *How to drill a Hole on Sink or Countertop*). Wipe clean, and dry the area.
- Step 2. b. Slip the front plate on the faucet stem, followed by the rubber washer. Insert the faucet stem into the hole on the countertop. Under the sink, slip on the back rubber washer, and tighten the nut with the plastic wing.
- Step 2. c. Slide the quick connecting up the push-in adapter on the base so that it seats securely into the faucet stem, then lock it in place by sliding the blue clip under the collet.
- Step 2. d. Insert the **BLUE** tubing about 1/2" into the push-in fitting, and again, secure it with the blue clip.

Step 3: Install Drain Saddle (ADS1K)



It is highly recommended that you watch the video "How to Install iSpring Drain Saddle (ADS1K) for Reverse Osmosis (RO) System | DIY Installation" on YouTube.

- *Step 3. a.* Choose a proper spot anywhere before the P-trap on the drain pipe to install the drain saddle and tubing. Remember the drain saddle should NOT be installed after the P-trap to prevent potential microorganism growth.
- Step 3. b. Drill a 1/4" hole in the drain pipe, and paste the black sticky pad around the hole.
- Step 3. c. Cut the **BLACK** tubing end to make a 45° angle. Insert the tubing into the 1/4" hole in the drain pipe, install the back plate, and tighten the two screws with hex nuts while the tubing remains in the hole.
- Step 3. d. Insert Lock Clip. Pull the tubing lightly to make sure it is secure.

Step 4: Install the Vertical Filters: Stages 1, 2, and 3

- Step 4. a. Make sure that the O-ring is seated inside the groove at the top of the filter housing. Food-grade silicone jelly may help the O-ring stay in place and seal better.
- Step 4. b. Filter cartridges are preserved in shrink wrap. Note the direction sign on the sticker before removing the wrap.
- Step 4. c. When placing the filter cartridge into its housing, make sure it is centered, and the knob is protruding from the bottom of the housing fits in the central hole of the filter.
- Step 4. d. Screw the housing, with filters attached, onto the housing caps (caps are pre-assembled on the machine head). The cap also has a center knob that should be inserted into the center hole of the filter



cartridge. Twist the housing on in a counter-clockwise direction by hand, and then use a housing wrench to tighten it up for about 1/4 - 1/2 turn. Do not overtighten. This can cause leaks and make it difficult to unscrew the housing when replacing filters.

Note the second stage GAC is the only filter that must go in a certain direction. Make sure that the end with the rubber washer faces up, attaching to the housing cap.

Step 5: Installing Tank Shut-off Valve (ABV2K)

- Step 5. a. Add 10 15 wraps of Plumber's tape clockwise (when looking from above) onto the metal thread at the top of the tank.
- Step 5. b. Screw the Tank Shut-off Valve onto the tank and tighten it by hand. Do not over tighten.
- Step 5. c. Connect the **YELLOW** tubing into the Quick-Fitting on the TSV.

Step 6: Installing the Reverse Osmosis Membrane



Step 6. a. Disconnect the tubing from the quick-fitting connection on the membrane cap.

- Step 6. b. Open the membrane housing cap. A thick rubber band can be slipped on the housing body for better grip.
- *Step 6. c.* Find **the inner end with 2 O-rings**, cut open the end of the sealed bag, use it to hold the RO membrane to avoid contamination, and firmly insert the membrane into the housing until the outer end without O-ring is completely inside the housing. See Figure above.
- Step 6. d. Before twisting the housing cap back on, check that the O-ring is evenly snagged on the membrane housing. Hang tight and tighten up for about 1/4 1/2 turns using a small plastic housing wrench, but do not over tighten. DO NOT reconnect the tubing to the inlet on the cap at this point (will do it in system startup).

Step 7: Tubing Hook Up Drinking Kitchen Water Faucet Faucet Ħ Ϊ н Feed Water Tank Ball Valve Connection G Cold Water Line 5 F A 4 C Drain Line В Drain Saddle 2 R 6 Sample Drain Pipe Spring Water Systen 4th VERSE OSMOS E AEMBRANE Ε iSpring Wate 5th **DUDY AUT AU** -B

^G↓ 5–Stage RO Top View (RCC7P)



6-Stage RO Top View (RCC7P-AK)



7-Stage RO Top View (RCC1UP-AK)

Note: The sequence of connection for different colors can be adjusted.

RED tubing: connect source water from the Feed Water Adapter (**Point A**) to the 1^{st} Stage water inlet elbow fitting (**Point B**)

BLACK tubing: connect wastewater from the Flow Restrictor (**Point C**) to the Drain Saddle/drain pipe (**Point D**)

YELLOW tubing: install the T-fitting to the 5^{th} Stage Post Carbon Filter (**Point E**) and then <u>connect</u> it to the Storage Tank Valve (**Point F**)

BLUE tubing: connect the 5th Stage Post Carbon Filter (**Point G**) and the drinking faucet (**Point H**)

Note: For models with AK/DI/UV filter, the **BLUE** tubing should be used to connect the output of the final stage and RO faucet (**Point H**).

You may neatly organize the tubing, but make sure to leave enough length so the filter system can be moved freely in and out of the cabinet when replacing filters.

Step 8: Leak Stop Valve (ALS1) Installation

The Leak Stop Valve is a reusable mechanical leakage protector. Whenever a water leakage is detected, it will shut down the feed water.

Step 8. a. Make sure the end of the tubing is cut square before connecting it to the fitting.

Step 8. b. Follow the water flow direction indicated on the Leak Stop Valve to connect it to the water inlet pipeline.

Step 8. c. Tape the bottom of the Leak Stop Valve against the floor.



Pulp is for ONE TIME USE only. In case of any leak incidence and the pulp is expanded, please shut off incoming water supply completely, fix the leak, and replace the expanded pulp before turning the water supply back on.

Step 9: Mounting the System (Optional)

- Mounting the system is NOT required. The system does NOT need to be mounted to work correctly.
- +) eccanages
- Please note if the system is to be mounted, it is recommended to use two 10 x 1-1/4 Phillips Flat Wood Screws (not included). This will make replacing filter cartridges easier.

Note: If you plan on mounting/hanging the system, it is highly recommended to include supports under each of the bottom three housings. Supports under the housings will take the water weight off the housing threads and ensure the thread strength does not decay over the years.

Step 10: System Start-up (model specific sub-steps are marked with a *)

Note: You may now plug in the booster pump to an outlet. The pump will not turn on until the water is flowing.

* If your model has a UV stage, do not plug in the UV power until the system has been fully flushed.

Step 10. a. Make sure no tubings are kinked. Turn the Tank Shut-off Valve OFF (perpendicular to the YELLOW tube). Place a towel under the system to catch any possible water leaks.

- *Step 10. b.* Disconnect the RO membrane housing cap inlet tubing. Open the Feed Water Adapter Valve (AFW43) and Cold Water Supply Valve (CWSV), and flush the first three stages into a bucket until the water turns clear.
- Step 10. c. Once the water is clear, shut off the AFW43 and reconnect the tubing to the RO membrane housing cap. You will want to flush the first three stages like this whenever they are changed.
- Step 10. d. Open the RO faucet. Slowly open the AFW43 and check for any leaks. The top 3 causes of leaks are 1) The tubing is not fully inserted into the quick-connect fitting. 2) The O-ring is not in the correct place or is kinked. 3) The Housing/Cap is not tightened properly or is misaligned with the threads.
- *Step 10. e.* Within 5 minutes, the booster pump will kick on, and RO water will start slowly trickling from the faucet. Let the faucet trickle for at least 15 minutes to flush out the entire system apart from the tank. The water may appear black at first due to loose carbon from new carbon filters. It will eventually turn clear apart from many tiny air bubbles leaving the system.
- *Step 10. f.* Shut off the RO Drinking Faucet. Open the Tank Shut-off Valve. Wait for the tank to fill up completely. It will take 1 to 2 hours depending on your water temperature (40°F -100°F, the warmer, the faster) and source water TDS (up to 750 ppm, the lower, the faster). The pump will shut off automatically when the tank is full.
- *Step 10. g.* After the tank is full, open the RO Drinking Faucet to drain the tank completely. **Do not use the first tank of water.** Let it drain into the sink until the stream turns back to a trickle. This means the tank has emptied, and you can close the RO faucet to let it begin filling again.
- Step 10. h. * If your system has a UV filter, plug in the UV power and check to ensure the UV light turns on when water flows through it. The UV filter has a Flow Sensor Switch that detects water flow and only turns the light on when needed. If the UV is not turning on when water flows through, confirm the power source you are using has power. Typically, the garbage disposal outlet only has power when the disposal is switched on.
- *Step 10. i.* The TDS (total dissolved solids) of the water should be tested periodically to verify that the system is performing properly. iSpring RO systems have exceeded the minimum requirements for NSF/ANSI standard 58. They should be giving an average TDS reduction rate of 90%+, so if your tap water is 100 ppm, you should be getting 10 ppm or less from the RO water (200/20>, 400/40>, etc This reverse osmosis system contains a replaceable treatment component critical for the effective reduction of total dissolved solids. That product water should be tested periodically. TDS is measured with a TDS meter it is an inexpensive, easy-to-use device that can be found on Amazon.com or 123filter.com by searching "iSpring TDS."
- *Step 10. j.* Check for leaks daily for the first two weeks after installation to ensure the system is functioning properly. Install the Flood Alarm (optional, model: WD01) to provide additional peace of mind and protection.

Note: Do not use microbiologically unsafe water or unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

Congratulations, you have successfully installed your iSpring Reverse Osmosis Water Filtration System!

Start enjoying fantastic reverse osmosis water right from your tap!

-----End of Installation Section-----

System Maintenance

All iSpring RO systems are designed with ease of use and low maintenance in mind. If the filter cartridges are changed on schedule as suggested, the system will work properly for years to come. See the chart below for the filter pack model numbers for your system. The filter packs can be found on 123 filter.com, Amazon, or HomeDepot.com.

<u>System Model</u>	<u>1-Year Filter Pack</u>	<u>2-Year Filter Pack</u>	<u> 3-Year Filter Pack</u>
RCC7, RCC7P	F7-GAC	F15-75	F22-75
RCC7AK, RCC7P-AK	F9K	F19K75	F28K75
RCC7AK-UV	F10KU	F21KU75	F31KU75
RCC7D	F9D	F19D75	F28D75
RCC7U	F8U	F17U75	F25U75
RCC100P	F7-GAC	F15-100	F22-100
RCC1UP	F8U	F17U100	F25U100
RCC1UP-AK	F10KU	F21KU100	F31KU100



*Please note, the general filter cartridge replacement schedule is for reference only. Not all filters included in the same filter pack. Carefully choose the filter pack that suits your RO system. Filter replacement schedule may vary depending on the quality of your source water.

Note: Stages 6 and/or 7 only exist on specific models.

When to change the filter?

The filters are highly suggested to be replaced when they reached their recommended replacement cycle. However, the actual lifespan of filters may vary depending on the source water quality and daily usage. If you notice a great decrease in the tap water flow, or detect a unpleasant smell, taste, and odor, it would be a good time to get your filters changed.

Page 14 <u>www.123filter.com</u> | +1 (678) 261-7611 | <u>support@123filter.com</u>

How to change the filters?

Carefully follow the instructions that comes in with the filter package.

O-rings: Replace every 3 years or sooner if leak happens at O-ring.

The package comes with spare O-rings for the pre-filter housing and the membrane housing. Please save them with this manual.

Tank Maintenance

It is recommended to empty and refill the tank at least once a month. This keeps the water inside the tank fresh and not sitting for an extended period.

What should I do with the system when going out of town?

When you are leaving for an extended time, you will want to shut off the water supply to the system and empty the tank. To do this, close the knob on the feed water adapter, and open the faucet until it stops running. This will signify that the tank is empty. The filters should be replaced if the system is not used for over a week as they will be sitting in stagnant water.

Leak Stop Valve Pads (ALS1P3) Replacement

It is highly recommended that you watch the video "Absorb Pad Replacement of iSpring Leak Stop Valve | Easy DIY | Step by Step" on YouTube.



Optional Add-on

Ice Maker Connection Kit (Model# ICEK)

The iSpring ICEK can be purchased separately to feed RO water to your refrigerator for crystal clear ice cubes and great tasting water. It can be easily installed to connect the RO system to the ice maker or water dispenser of your fridge.

TDS Test Meter (Model# TDS2 or TDS3)

The TDS test meter can be used to check your tap water quality regularly and help determine the time for filter replacement.

Tubing (Model# T14B or T14W)

1/4" food-grade tubing in a 50' roll, which is good to use for tubing replacement and extension as needed.

Top Mount Faucet Installation Kit (Model# AIG1)

A US patent pending tool-free product for Countertop RO faucet installation. It works great for countertops with 1" - 1 $\frac{1}{2}$ " (D) holes and also fits standard 7/16" drinking faucet stem. It is highly recommended that you watch the video "How to install a drinking water faucet WITHOUT reaching under sink | iSpring AIG1 Installation Kit" on YouTube.

iSpring Tanks

This RO system can be used with a 20 - 200 gallons storage tank. A tank helps meet the impulsive high volume demand and build a commercial or whole house Reverse Osmosis solution.

Troubleshooting Guide



To Faucet

1) Zero output water from RO faucet

- a) Water supply is closed. Open the water supply to the system, so the valve is in line with the red tubing.
- b) Incorrect installation. Verify all tubing connections.
- c) The pump is not running, therefore not allowing water through. Make sure the pump is plugged into a live outlet that gets continuous power.
- d) A tubing is crimped, blocking the water flow. Check all tubings and uncrimp any crimped tubings.

2) Tank not filling after several hours

- a) Pump is not running, therefore not allowing water to pass through. See "Pump does not start."
- b) Incorrect installation. Verify all tubing connections.
- c) Tank valve is closed. Make sure the tank valve is in line with the yellow tubing.

3) Leaking from where the tubings are inserted into the fittings

- a) The tubing is not pushed in past the O-ring inside the fitting, therefore not creating a seal. Make sure the tubing is pushed in a full 1/2" into the fitting. It will take some extra pressure, but you will feel the tube go entirely into the fitting when it does so.
- b) The O-ring inside the fitting is not creating a seal with the tubing. Unscrew the elbow fitting, and replace it with one of the extra elbow fittings. Make sure to wrap the new fitting thread several times with Teflon tape before screwing it in.

4) Leaking from between the membrane cap and membrane housing

a) If the membrane housing is leaking, make sure the O-ring is seated correctly, as shown in sections "Installing the RO Membrane" and "How to Change the RO Membrane." It should

be seated on the end of the membrane housing before the threads begin. The membrane cap is then screwed on over it. When positioned incorrectly, it will create a gap or damage the Oring. When in the correct place, there will not be any pressure or tension on the O-ring.

5) Low water flow (trickle) at RO faucet

- a) Tank has not been given a chance to fill. Allow approximately two hours for the tank to fill.
- b) Tank valve is closed. Make sure the blue tank valve is in line with the yellow tube.

6) High TDS in RO water

- a) The system will provide a 90%+ TDS rejection rate when working correctly. Meaning if your tap water TDS is 500 ppm, the water from the system should be 50 ppm or lower.
- b) Incorrect installation. Verify all connections on the system.
- c) If the TDS of the tap water and water from the system is about the same, ensure the RO membrane is installed. The semi-permeable membrane is blue, comes in sealed packaging, and goes in the stage 4 membrane housing.
- d) If you are getting some reduction in TDS but not 90%+, some water could be bypassing the membrane. Contact iSpring customer support to identify the exact cause.

7) Cloudy water after installation

a) In the weeks after installing the system or changing the filters, you will see many tiny air bubbles in the RO water. This can cause the water to appear "cloudy." The bubbles will disappear as the system clears itself of trapped air and are harmless for the time being.

8) The system drains water 24/7 (continuous drain)

- a) Keep in mind that it will take anywhere from 1-3 hours for the system to fill the tank from empty, and the drain line will be trickling during this time. If the drain line continues to run for 4+ hours, one of the following reasons could be the problem.
- b) The pump is running 24/7. See "Pump runs 24/7".
- c) The inlet water solenoid valve is bad and cannot shut off the incoming water supply.

9) Leak from tank valve connection

a) Make sure you have applied Teflon tape to the tank threads before screwing on the tank valve. There should be at least 8-10 wraps of Teflon tape to ensure a proper seal. If you have done this and it continues to leak, contact iSpring customer support for a replacement.

10) Water from the system tastes the same as tap water

- a) Incorrect installation. Verify all connections on the system.
- b) The RO membrane is not installed in the housing. Ensure the membrane has been installed.

11) Pump does not start

- a) No power. Make sure the pump is plugged in. If it is plugged in and still not kicking on, make sure it is not plugged into the same outlet as the garbage disposal. <u>Typically this outlet only has power when the garbage disposal is switched on.</u>
- b) Incoming water pressure is below 30 psi. The low-pressure switch kicks on the booster pump at 30 psi, and if this pressure is not reached, the pump will not turn on.
- c) Low-pressure switch is not functioning correctly and is therefore unable to turn the pump on.

12) Pump runs 24/7

- a) If the pump is running 24/7 and the output flow remains normal, the high-pressure switch is faulty and not triggering the pump to turn off.
- b) If the pump is running 24/7 and you are getting little to no output flow, either the check valve is losing pressure, or the pump itself is faulty.
- c) Tank pressure is too low, never reaching the pressure required to shut the pump. Empty the tank and set it between 7-10 psi, and reconnect.

Glossary and Terms to Know

Add-On Kit (#ACL1): Filter add-on kit for adding additional in-line filters to an existing system. It comes with quick-connect elbow fittings, filter clamps, and extra tubing

Alkaline Remineralization Filter* (**#FA15**): 6th stage. Remineralizes the RO water and neutralizes the pH

Auto Flush Solenoid Valve (#ASOF7): Automatically flushes the RO membrane to preserve membrane life and efficiency

Booster Pump (#PMP5): 24-volt booster pump used by residential iSpring RO systems

Check Valve (#ACV1K): One-way valve that does not allow water back into the membrane housing. It looks like a standard fitting and is located on the RO water port of the membrane housing

CTO Carbon Block Filter (#FC15): 3rd stage. 5-micron 10" carbon block filter. Further reduces any residual chlorine, tastes, and odors before the water reaches the RO membrane

Drain Saddle (#ADS1K): Attaches to your under-sink drain pipe to secure the drain tube coming from the system

Drinking Faucet (#GA1-BN): The output source for the RO water. The faucet is a non-air gap faucet with a 1/4" tubing connection. The optimally sized counter-top hole for the faucet is 1/2", but holes up to approximately 1 1/2" will work

Elbow Fittings (#4044K): Quick connect elbow fittings used on the system (except the membrane housing and cap). 1/4" tubing connection and 1/4" NPT male thread

Feed Water Adapter (#AFW43): It goes in line with your cold water line and branches off a water supply line to the RO system. Can adapt to 3/8" and 1/2" cold water lines

Feed Water Solenoid Valve (#ASOW7): Opens the water supply to the booster pump when the low-pressure switch and high-pressure switch are both on. Shuts off the water supply when one or both turn off

Flow Restrictor (#AFR200): Limits the drain water flow, keeping pressure in the system and allowing the RO process to occur

Flow Sensor Switch* (#FSS): Detects water flow to turn the UV filter on and off as needed

GAC Filter (**#FG15**): 2nd stage. 5-micron 10" granulated activated carbon filter. Reduces chlorine, tastes, and odors from the water

GPD: Gallons Per Day

High-Pressure Switch (#AHP1): Receives pressure signals from the pressurized storage tank. It turns on when the tank pressure is below 20 psi and turns off when tank pressure reaches 45 psi (e.g., tank full)

Housing Wrench for Membrane and Stages 1, 2, and 3 Housings (#AWR2): Housing wrench used to screw on and unscrew the membrane housing cap and the stage 1, 2, and 3 filter housings

Ice Maker Kit (**#ICEK**): Add on kit that allows you to run water from the system to your fridge ice maker or fridge water dispenser

Leak Stopper (#ALS1): Protects from any possible leaks by cutting off the water supply when the sponge absorbs water

Low-Pressure Switch (#ALP1): Turns on when the source water pressure reaches 6 psi, turns off when source water pressure drops below 6 psi

Membrane Housing and Cap (#NW12): Horizontal housing that the RO membrane is inserted into Membrane Housing O-Ring (#ORM): 2 1/2" O.D. O-ring used to create the seal between the membrane housing and the membrane cap **Post Carbon Filter (#FT15):** 5th stage. Works as a final polishing filter before the water is delivered to the faucet

PPM: Parts Per Million, a unit used to measure TDS readings

Pressurized Holding Tank (#T32M): 3.2 gallons capacity pressurized water holding tank. The air bladder forces the water to the drinking faucet when the faucet is opened. The tank comes pre-pressurized and should read 7-10 psi when empty

psi: Pounds Per Square Inch, a unit used to measure water pressure

Quick Connect Fitting: A secure, easy-to-connect, and disconnect type of fitting used on the system. The tubing is inserted past the tiny O-ring located inside each fitting, then locked into place by the spider lock and blue clip

Reverse Osmosis (RO) Membrane (#MC7 / #MC1): 4th stage. High rejection, 0.0001 micron, thinfilm composite (TFC) reverse osmosis membrane, the heart of the reverse osmosis process

Sediment Filter (**#FP15**): 1st stage. 5-micron 10" polypropylene sediment filter. Traps particulate matter such as dirt, rust, and silt

Stage 1, 2, and 3 housing O-Rings (#ORF): 3 5/8" O.D. O-ring used to create the seal between the stage 1, 2, and 3 filter housings and their respective caps

Stage 1 See-Through Sediment Filter Housing (#HC12): Transparent stage 1 housing holds the sediment filter. The see-through housing allows for the sediment filter to be visually inspected

Stage 2 GAC Filter Housing (#HW12): Solid white housing that holds the stage 2 GAC filter

Stage 3 CTO Filter Housing (#HW12): Solid white housing that holds the stage 3 CTO filter

T Fitting on Stage 5 Post Carbon Filter (#7544K): T fitting located on the right side of the stage 5 Post Carbon Filter

Tank Valve (#ABV2K): On/off valve that screws onto the top of the tank

TDS: Total Dissolved Solids, a measure of the contamination level of a water source

TDS Meter (#TDS3): Handheld meter used to measure water quality

Transformer for Booster Pump (#ATRF5): Power supply used for the PMP5 booster pump on residential iSpring RO systems

Tubing (#T14B / #T14W): 1/4" food grade tubing used on the system

UV Replacement Bulb* (#UVB11): Replacement bulb for the UV filter

UV Transformer/Ballast* (#UVT11A/UVT11B): Power supply for the UV filter. Indicator lights on the ballast will only light up when water is flowing. UVF11A is for 110V power sources, UVF11B is for 220V power sources

iSpring Standard Limited Warranty (End-Users Only)

In order to be eligible for this warranty, the end-user must register at <u>www.123filter.com</u>.

For all water filtration systems, and upon registration by the end-user, iSpring Water Systems, LLC (iSpring) warrants for a one year from the date of purchase that the product is free of defects in materials and workmanship and that it will function for the duration of the warranty according to its specifications (the "Limited Warranty"). EXCEPT FOR THIS LIMITED WARRANTY, ISPRING EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTIES OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ISpring has no liability for any defect or deterioration which results from the improper installation, service, repair or use of the product. End-user's sole and exclusive remedy for any breach of the Limited Warranty shall be repair or replacement, at iSpring's option and expense. This warranty is only provided to end-users and only applies to products purchased directly from an authorized iSpring dealer or reseller.

However, we do not have the order information from websites other than 123Filter.com (Amazon, Home Depot, etc.), so please be sure to fill in that information upon registration of your system. If you have any questions or concerns about your product, please do not hesitate to call or email us, or put it in the notes/comments upon your warranty registration. Your satisfaction is our business!

If you are happy with our products and service, please show your support by writing a product review on Amazon, even just a single line. It takes you just a minute but means a lot to us. Thank you!

Warranty Registration Form

Name	Order#	
Email	Phone	
Address		-
City State	Zip	Code
Model #/ Serial Number		
Purchased at (e.g. Amazon, Home Depot)		
		-
iSpring Water Systems, LLC 2480 Industrial Park Blvd, Cumming, GA 3 678-261-7611	30041	

Plumber's information (Optional)

To best serve our customers, we'd like to recommend good plumbers throughout the USA. If you are happy with your installer, please provide their information so that we can pass it on as a courtesy.

Thank you!

Name of the plumbing company used to install your system:

____ or email : ___



Like our products?

Please show your support by writing a product review on the marketplace where you make your purchase. Even just a quick statement means a lot to us.

Thank you!

iSpringFilter.com



For questions, comments, or technical support, please contact us at:

support@123filter.com

C +1 (678) 261-7611

Monday-Friday 8:30 a.m. - 5:30 p.m. EST

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