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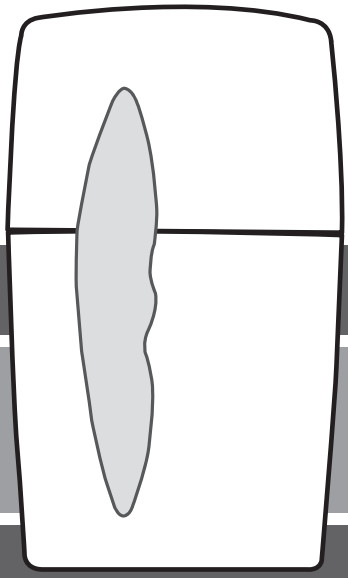

CQB-R3

COMPACT RO SYSTEM

USER MANUAL

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INTRODUCTION

We sincerely thank you for purchasing PURICOM CQB-R3 ADVANCE 5 Stage RO Water Purifier. To ensure your safety and satisfaction, please read through this manual before use.

As the environment continues to deteriorate, it is increasingly difficult to obtain a reliable source of clean, pure, healthy drinking water. That is why PURICOM chooses to use RO membrane and other relevant technologies to develop series of versatile and economical RO water purifiers, and thus able to provide pure and healthy water.

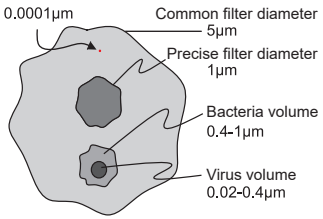
You will find PURICOM CQB-R3 ADVANCE 5 Stage RO Water Purifier very easy to maintain, with its quick, simple, sanitary filter replacements. The good tasty water flows directly from the system is also perfect for beverages such as coffee, tea and lemonade.

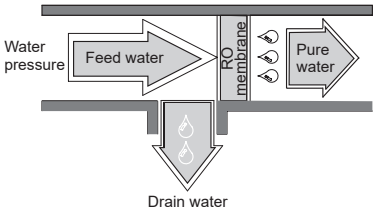
Please read this manual carefully, paying attention especially to maintenance procedures and safety information. With all gratitude, we assure you a constant, sustainable supply of pure healthy water.

WHAT IS REVERSE OSMOSIS (RO)

To fully understand the technology of Reverse Osmosis, it is a must to understand normal osmosis. Osmosis is a natural process that occurs in all living things. For instance, osmosis permits water and nutrients absorption through the root system of plants; similarly, nutrition is assimilated from blood to cells in human bodies. The drawings shall help to proceed in further explanation on the principle of reverse osmosis as possibly clear and simple.

As the water exerts pressure on a semi-permeable membrane, the purified (or filtered) part enters through the pores of the membrane, while the rejected (or concentrated) is diverted to the drain. When the diameter of the pores is shorter than 0.0001 microns, only pure water and a balanced quantity of minerals (sodium, potassium, calcium, and magnesium, etc) can pass through; while other substances (such as bacteria, viruses, metals, pesticides, chemical products, etc) are eliminated during the process.





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SAFETY INFORMATION

Please read this information to prevent property loss and to ensure your safety.

ELECTRICITY SAFETY

1. Be sure the local voltage accords with the system voltage. Electrical shock or fire may occur as a result.
2. Do not use a damaged power cord or plug, and loose outlet. Electrical shock or fire may occur as a result.
3. Do not unplug by pulling the cord or handle the plug with wet hands. Electrical shock or fire may occur as a result.
4. Do not bundle the power cord tightly, it may cause damage.
5. If the cord or plug is wet, unplug the unit and let it dry completely before subsequent use. Electrical shock or fire may occur as a result.
6. Unplug the unit before repair, inspection, or replacement. Electrical shock may occur as a result.
7. Do not plug into an outlet or power strip that is being used by several other appliances. Use a separate outlet for the unit. Fire may occur as a result.
8. Shut the main water supply valve and unplug the power cord when not using for a long time. Electrical shock or fire may occur as a result.
9. Do not attempt to repair the power cord. Electrical shock or fire may occur as a result.
10. Do not repeatedly plug and unplug the unit from the electrical outlet. Electrical shock or fire may occur as a result.
11. Remove any dust or water if it's on the plug. Never use benzene or gasoline to clean the plug. Electrical shock or fire may occur as a result.
12. Do not move the product by pulling the electrical cord.

INSTALLATION SAFETY

1. Keep the product away from inflammable gas or burnable materials. Electrical shock or fire may occur as a result.
2. Do not install the unit near heaters. Fire may occur as a result.
3. Do not spray water or wipe product with benzene when cleaning. Electrical shock or fire may occur as a result.
4. The length of the water inlet hose must be shorter than 5 m. If longer; product performance may be degraded.
5. Do not use with hot water. Optimal inlet water temperature is 5℃- 45℃.
6. Inlet water pressure is 15-45 PSI.
7. Max. working pressure is 100 PSI.
8. Water analysis TDS should not exceed 1000 PPM . Hardness should not exceed 250 PPM.
9. Ensure the inlet, outlet and drain connections are correct and that the drain point is not blocked.
10. The filtration system installation shall comply with state and local laws and regulations. Do not use with water that is microbiologically unsafe, of unknown quality, or without adequate disinfection before or after the system.

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OPERATION SAFETY

1. Cut off the supplying valve and unplug, then call the Customer Service when any water leaks from the product. Electrical shock or fire may occur as a result.
2. Unplug immediately and call the Customer Service if the unit makes a strange noise or odd smell. Fire may occur as a result.
3. Use or place the unit on an even surface and do not apply force to the unit. Injury to the user or damage may occur as a result.
4. Do not put candles, cigarettes or any other flammable objects on the product. Fire may occur as a result.
5. When water is stored or the product is not in use for a long time, drain all water from the storage tank before use. Stored water may be contaminated.
6. Periodical filter replacement is prerequisite for clean water. In case filters are overused, the performance of filters is degraded.
7. Use with Puricom filter products to maintained expected product lifespan and performance.
8. After activated carbon filter replacement, a certain amount of fine dust may be introduced to the water. It is activated carbon particles and is harmless to human body.
9. At first time usage and immediately after replacement of activated carbon filters, to eradicate any carbon dust, which may present,flush water through the system continuously until the water runs clear.
10. Do not expose the unit to direct sunlight and high humidity environment. The optimal room temperature for the unit is 4℃-40℃.

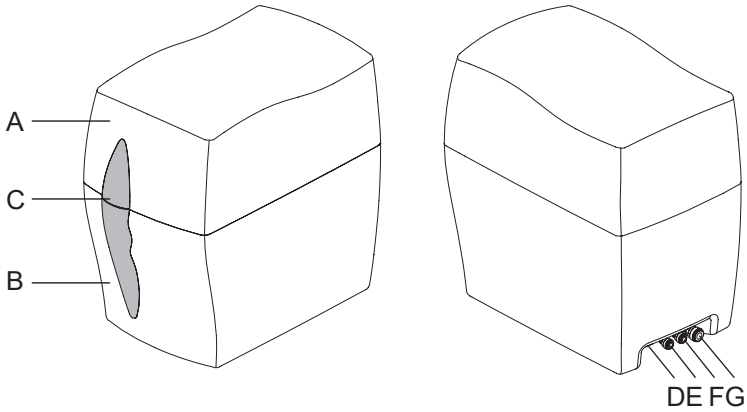
SPECIFICATION

Model	CQB-R3 ADVANCE
Input Voltage	AC110V~240V / 50.60Hz
Output Voltage	DC 24V
Capacity	75 GPD
Storage Tank	8 L
Size	D17 cm × W28cm × H42cm

INLET WATER REQUIREMENT

Inlet water TDS	< 1000 ppm
Inlet water pressure	15-45 psi
Total hardness	< 250 ppm
Temperature	5℃- 45℃

PRODUCT DESCRIPTION



Ⓐ Top case Ⓑ Bottom case Ⓒ Decorative panel
Ⓓ Power Ⓔ Inlet Ⓕ Drain
Ⓖ To faucet

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■ ACCESSORIES

- Accessories Pack

  A. PE tube B. Drain clamp C.Feed water ball valve

  D. Feed water connector E. Adaptor F. Faucet connector

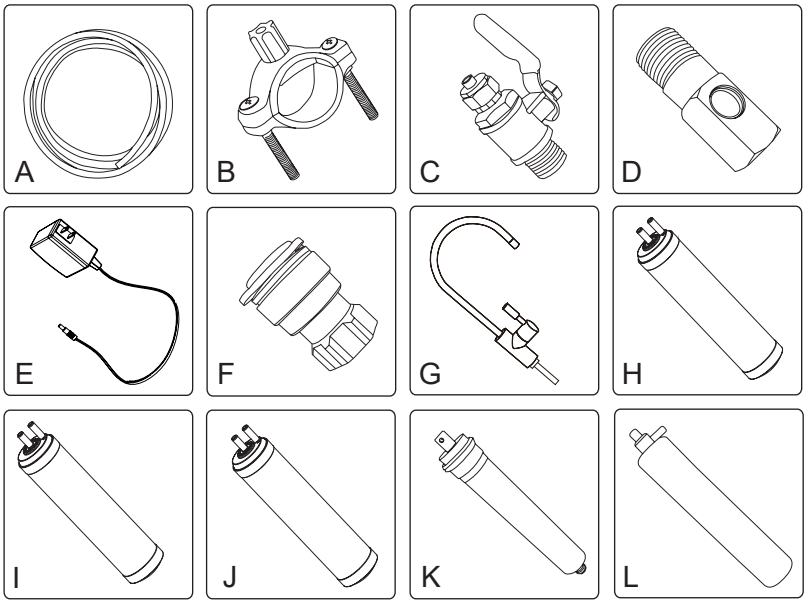
  G. Faucet

- Filters

  I. 1st Stage- FK-S PP 5μ filter J. 2nd Stage- FK-S Carbon filter

  K. 3rd Stage- FK-S PP 1μ filter L. 4th Stage- RO membrane

  M. 5th Stage- FP-A Post carbon



■ FILTER FUNCTION DESCRIPTION & RECOMMENDED FILTER REPLACEMENT

① Prefilter-PP 5μ filter	3~6 months	Traps dirt, rust, and other impurities.
② Prefilter-Carbon filter	3~6 months	This filter removes chemicals and odors, such as chlorine and chemical fertilizer, thus protecting the RO mem-brane from being damaged.
③ Prefilter-PP 1μ filter	5~10 months	Traps dirt, rust, and other impurities. **Note:** Water analysis by qualified dealer is required to determine optimal lifespan.
④ R.O. membrane (0.0001μ)	1~3 year	This high technology, semi permeable membrane effectively takes out TDS, viruses, bacteria, slime, heavy metal, pesticides, and chemicals etc. Harmful impurities separated by the RO mem-brane are diverted to the drain.
⑤ Post filter	6 months	Drinking water enters this filter after the storage tank. It is used as the final polishing filter before use.
Note: Frequent use or bad quality feed water shortens filter lifespan. If water pressure and water quality are not within limits, please contact your distributor to make proper modifications.		

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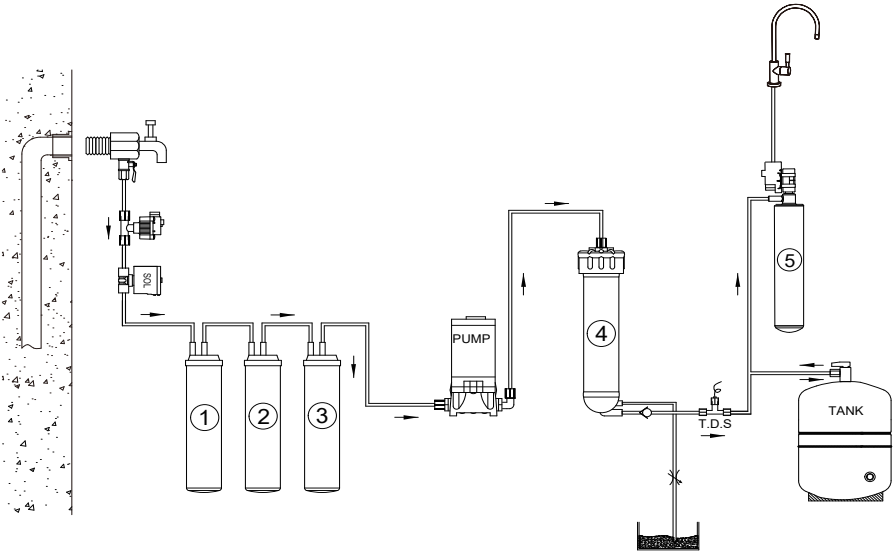
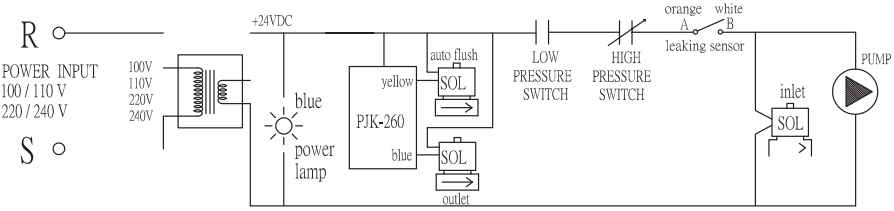
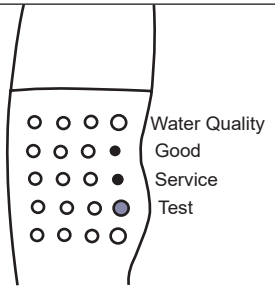
FLOW CHART



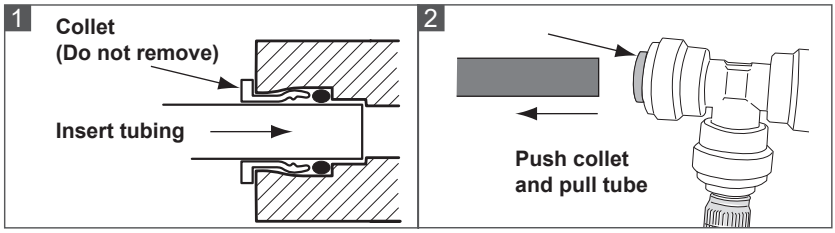
ELECTRIC DIAGRAM



■ LED INDICATOR

Panel	Indicator		Description
	● constantly lit	good	Push down 'Water Quality' button for 3 seconds. Indicator it constantly lit green, if water quality is good.
	☼ flashing	service	Push down 'Water Quality' button for 3 seconds. Indicator flashes red, if water quality is bad.

■ HOW QUICK CONNECTORS WORK

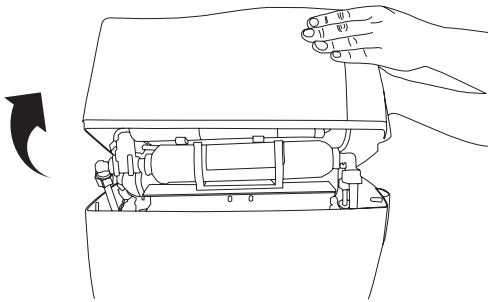


1.Ensure the tube edge is clean and free of burrs. Push the tube into the connector until it stops.

2.Push down the collet and pull to remove the tube from the connector.

■ CASE DISASSEMBLY

Lift top case to reveal unit content.



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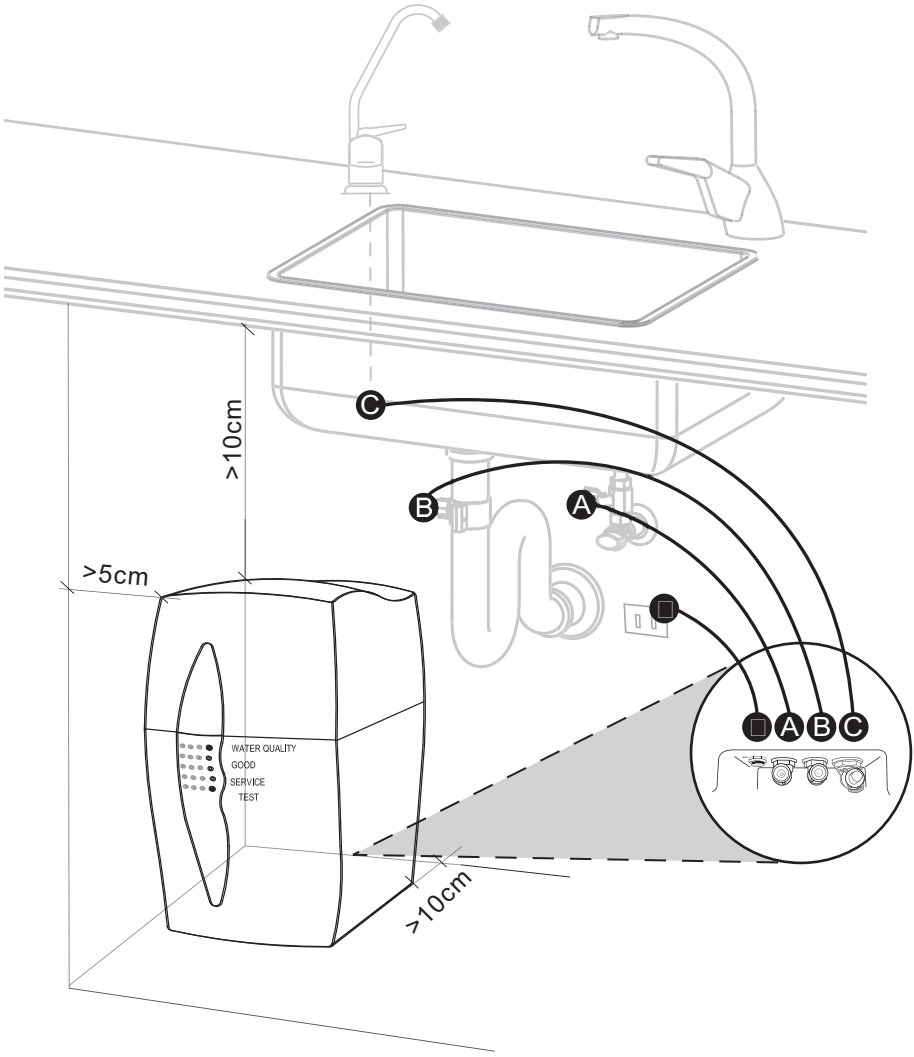
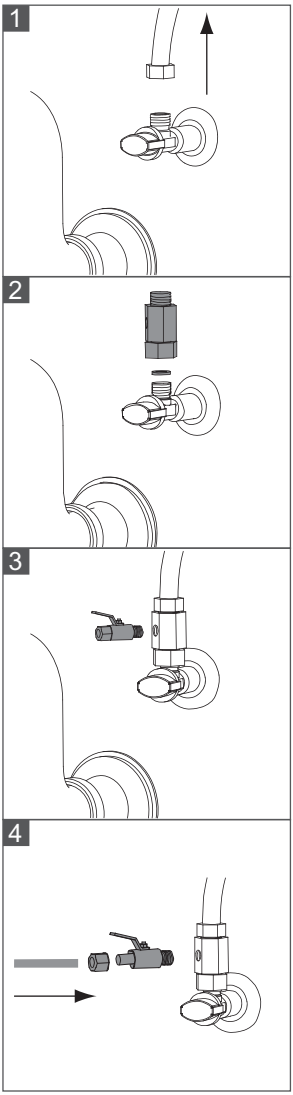
■ INSTALLATION DIAGRAM



■ INSTALLATION

A. Feed Water Assembly



1.Turn off the feed water supply, and disconnect the existing cold water line from the existing cold water supply valve.

2.Wrap several turns of seal tape on the new feed water connector and install it with the black washer on the existing cold water supply valve.

3.Reinstall the existing cold water line on the new feed water connector. Wrap several turns of seal tape on the ball valve and install it on the new feed water connector.

4.Refer to p.11 Ⓐ .Connect the PE tube and complete the feed water assembly.

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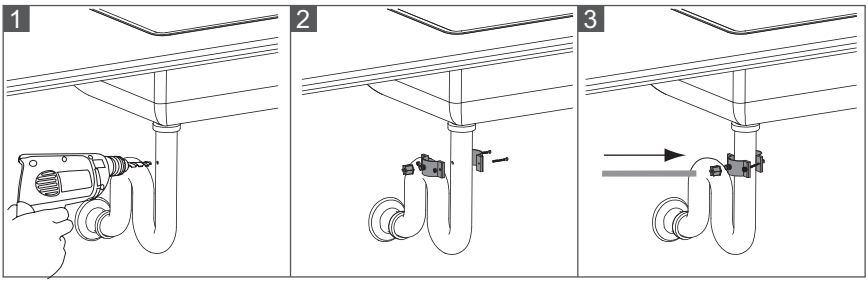
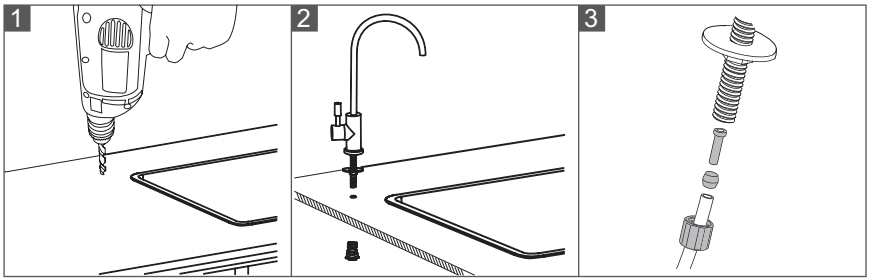
B. Drain Clamp Assembly



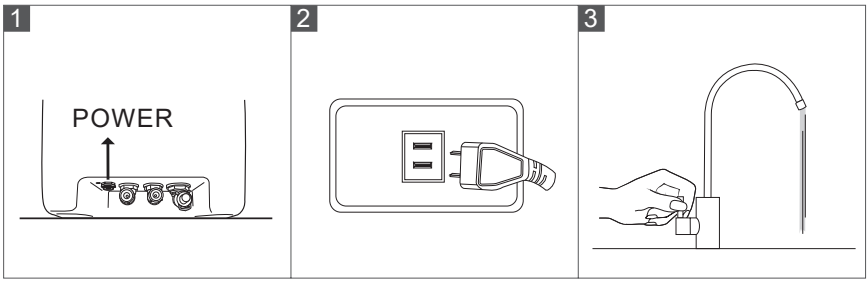
1. Drill a 6mm hole on the existing drain pipe.
2. Tighten the drain clamp evenly on both sides.
3. Refer to p.11 Ⓑ .Connect the PE tube and complete the drain clamp assembly.

C. Faucet Assembly



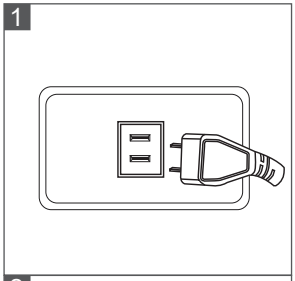
1. Drill a 12mm hole on the right or left hand side of the sink.
2. Install the new faucet in the sink hole, and from below the sink,assemble the mounting hardware.
3. Refer to p.11 Ⓒ.Connect the PE tube and complete the faucet assembly.

D. POWER

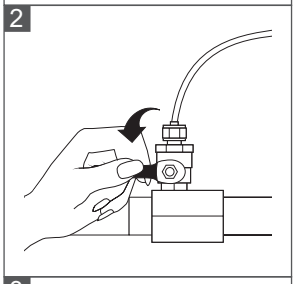


1. Plug in power at system end.
2. Plug in power at electric socket. Refer to p.11 Ⓓ.
3. Allow a tank of water to rinse through the system before first time use.

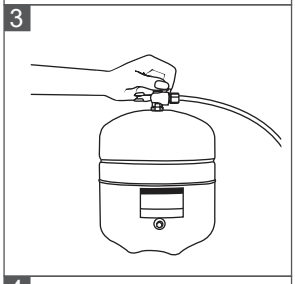
■ PREFILTER REPLACEMENT (FOR 1st ~3rd STAGE FILTERS)



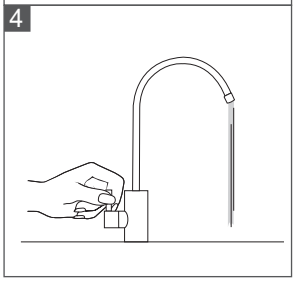
1. Unplug power.



2. Turn off feed water at the feed water valve.

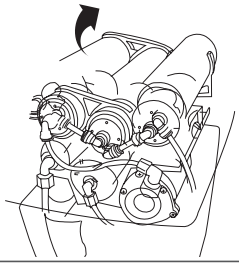


3. Turn off the storage tank ball valve.



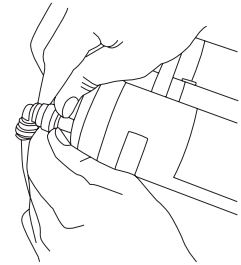
4. Turn on the faucet to release pressure from the tubing.

5



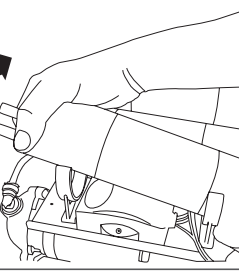
5. Pull the filter out of the clips.

6



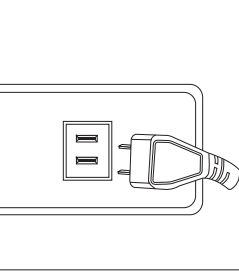
6. Refer to p.10 and remove the quick connector from the filter.

7

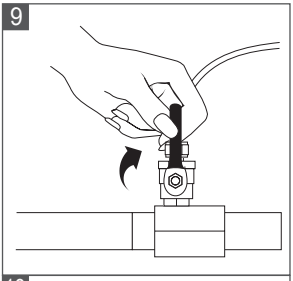


7. Replace filter and reconnect all fittings.

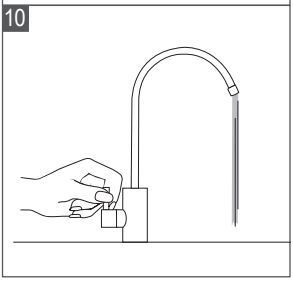
8



8. Plug in power



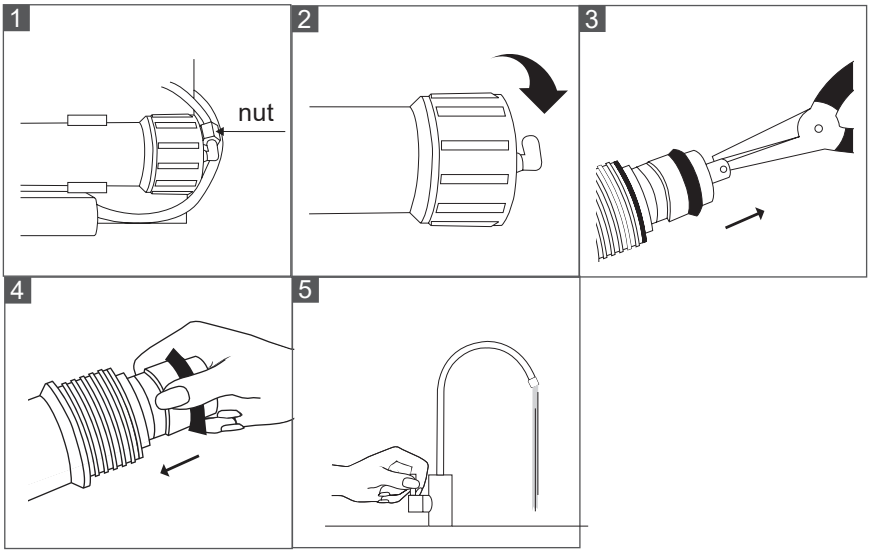
9. Turn on the feed water ball valve.



6. Allow a tank of water to rinse through the system before drinking.

■ RO MEMBRANE REPLACEMENT(FOR RO Membrane)

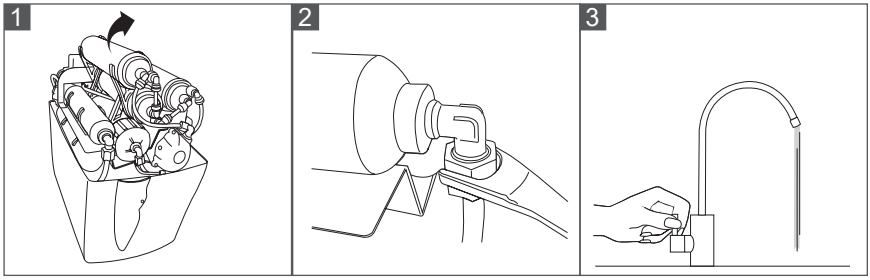
Please follow the instructions of steps 1~4 of Prefilter Replacement on p.15, before proceeding with RO Membrane Replacement.



1. Unscrew the fitting nut of the RO housing cap to remove the tubing.
2. Unscrew the RO housing cap.
3. Use a pair of pliers to remove the worn RO membrane.
4. Replace RO membrane and reconnect all fittings.
5. Follow steps 8~10 of Prefilter Replacement on p. 16 and p.17 to complete RO membrane replacement.

■ POST FILTER REPLACEMENT

Please follow the instructions of steps 1~4 of Prefilter Replacement on p.15, before proceeding with Post Filter Replacement.



1. Remove the post filter from the clips.
2. Unscrew the tubing from the post filter and replace the filter.
3. Reconnect all fittings and follow steps 8-10 of Prefilter Replacement.

■ TROUBLESHOOTING

Problem	Possibility	Trouble shooting
Pump is not working	1. No power supply.	1.Check the power source.
	2. The transformer is burned out.	2.Replace the transformer (possible reason is a pump leak causing the bearings to jam, and burns out the transformer. The pump and transformer should both be checked at the same time).
	3.Pump bearing is jammed.	3.Replace the pump.
	4.The wire connection is bad.	4.Check the wire connection.
	5.The pump has a bad electrical connection.	5.Replace the pump.
	6.The high/low pressure switch is damaged.	6.Replace the high/ low pressure switch.
Pump switches on and off continuously	1.The low pressure switch activates frequently due to low feed water pressure.	1.Increase the feed water pressure (if you are sure of a consistent, low water inlet pressure, a short circuit around the low-pressure switch could be made).
	2.The pump has a bad electrical connection.	2.Replace the pump.
	3.The electrical connection is poor.	3.Check all connections again.
Pump is leaking	1.The diaphram seal is worn-out or split.	1.Replace the pump.
	2.The feed water pressure is too high (over 50psi)	2.Install a pressure-reducing valve, or shut off the pump to allow the RO system to permeate water under the inlet water pressure.
Pump is noisy	1.The RO membrane or post filter is clogged.	1.Replace the RO membrane or the post filter.
	2.The pump bearing is worn.	2.Replace the pump.

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Problem	Possibility	Troubleshooting
Pump keeps running	1.Air in the tubes keep the pump from reaching sufficient pressure to shut off the pump.	1.Disconnect the outlet tube from the pump to discharge air. Reconnect to run water in the tubes.
	2.The torque of the Pump has decreased, so sufficient pressure cannot be reached to turn off the high pressure switch.	2. Replace the pump.
	3.The high-pressure switch is damaged.	3.Replace the high-pressure switch.
	4. The check valve doesn't close properly, so pressure cannot reach the shut off point	4. Replace the check valve.
TDS value of permeated water is rising (Rejection rate is lower than 90%)	1.The working pressure is lower than 50psi. (A)Air in the tubes keeps the the pump from reaching sufficient pressure to permeate properly. (B)The RO membrane or the post filter is clogged.	1.(A)Disconnect the outlet tube from of the pump to discharge the air, and reconnect to run water in the tubes. 1.(B)Replace the RO membrane or the post filter.
	2.The ratio of permeated water to drainage is less than 1:3. 3.The RO membrane is damaged.	2.Flow restrictor is clogged. Clean or replace it. 3.Replace the RO membrane.
Output of permeated water decreases	1.The RO membrane is clogged.	1.Replace the RO membrane. (If frequently clogged, increase the drainage ratio of the flow restrictor, or install a softener to extend the lifespan of the RO membrane.)
	2.Pump is worn-out decreasing the operating pressure.	2.Replace the pump.

Problem	Possibility	Troubleshooting
Capacity of storage tank decreases	1.The storage tank is corroded or the rubber inside the tank is damaged causing pressure loss.	1.Replace the pressure tank.
No permeated or drain water comes out of the RO system while running	1.The coil of the solenoid valve is burned-out.	1.Replace the solenoid valve.
	2.Electrical connection to the solenoid valve is bad.	2.Check electrical connections to the solenoid valve.
	3.Solenoid valve is clogged inside, so it is unable to be activated.	3.Replace the solenoid valve.
	Or: 4.Shut-off valve is damaged and becomes disfunctional.	4.Replace the shut-off valve.
System continues to drain after the RO system is turned off.	1.The feed water pressure is too high to turn off the shut-off valve.	1.Install a pressure-reducing valve.
	2.The solenoid valve or the shut-off valve is clogged.	2.Take the valve apart and clean it.
	3.Check if valve is damaged, causing permeate water in the tank to flow back to the drain.	3.Replace the check valve.
Solenoid valve is noisy	1.The coil of the solenoid valve is loose.	1.Adjust solenoid valve coil.
	2.The feed water pressure is insufficient causing the low-pressure switch and the solenoid valve to turn on and off continuously.	2. Increase feed water pressure.
RO system does not turn on.	1.The high/low pressure switch is damaged.	1.Replace the high/low pressure switch.
	2.The feed water pressure is lower than 5 PSI.	2.Increase the feed water pressure.
	3.No power.	3.Check the power source.
	4.The pump or transformer is damaged.	4.Refer to the trouble shooting for “Pump is not working”.

2019.10

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Association