



HYDROVOS

Reverse Osmosis System with Tank

Installation and Operation Manual
HV-RO075-RO-T

Contents

Welcome to Hydrovos!

Congratulations on choosing the best filtration product for your home and family. The 0.0001 μm reverse osmosis membrane in your system effectively reduces heavy metals, pesticides, hardness, volatile organic compounds, chlorine, and more, leaving you with great tasting water.*

Our quick-twist filter design allows you to replace the filter cartridges quickly and easily. Please review this carefully before you install and use the appliance.

*These substances are not necessarily in your water.

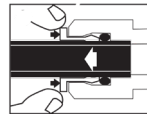


<https://www.hydrovos.com>

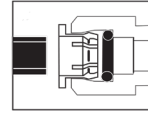
Before you start

This system uses a unique mechanism to connect tubing to the unit. To insert tubing or remove it, please follow the steps below:

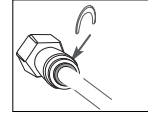
- Use your fingernails or fingertips to pinch the collet as shown below
- Insert the end of the tubing or remove it
- Lightly tug on the tubing to create a small space between the collet and the fitting
- Insert a tubing clip into that space



Step 1



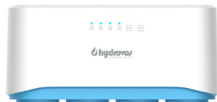
Step 2



Step 3

What's in the Box:

HV-RO075-RO-T Unit



3 Gallon Tank
Nominal



4 Filter Cartridges

Faucet x1



User Manual



Three-Way
Ball Valve x1



Screws x2



Ball Valve
for Tank x1



Batteries x4



1/4" PE Tube White
1/4" PE Tube Red
3/8" PE Tube White



1/4" Anti-Drop
Clip x7



Drain Clamp
x1



Quick Connect
x1

Before you start

Additional materials needed:

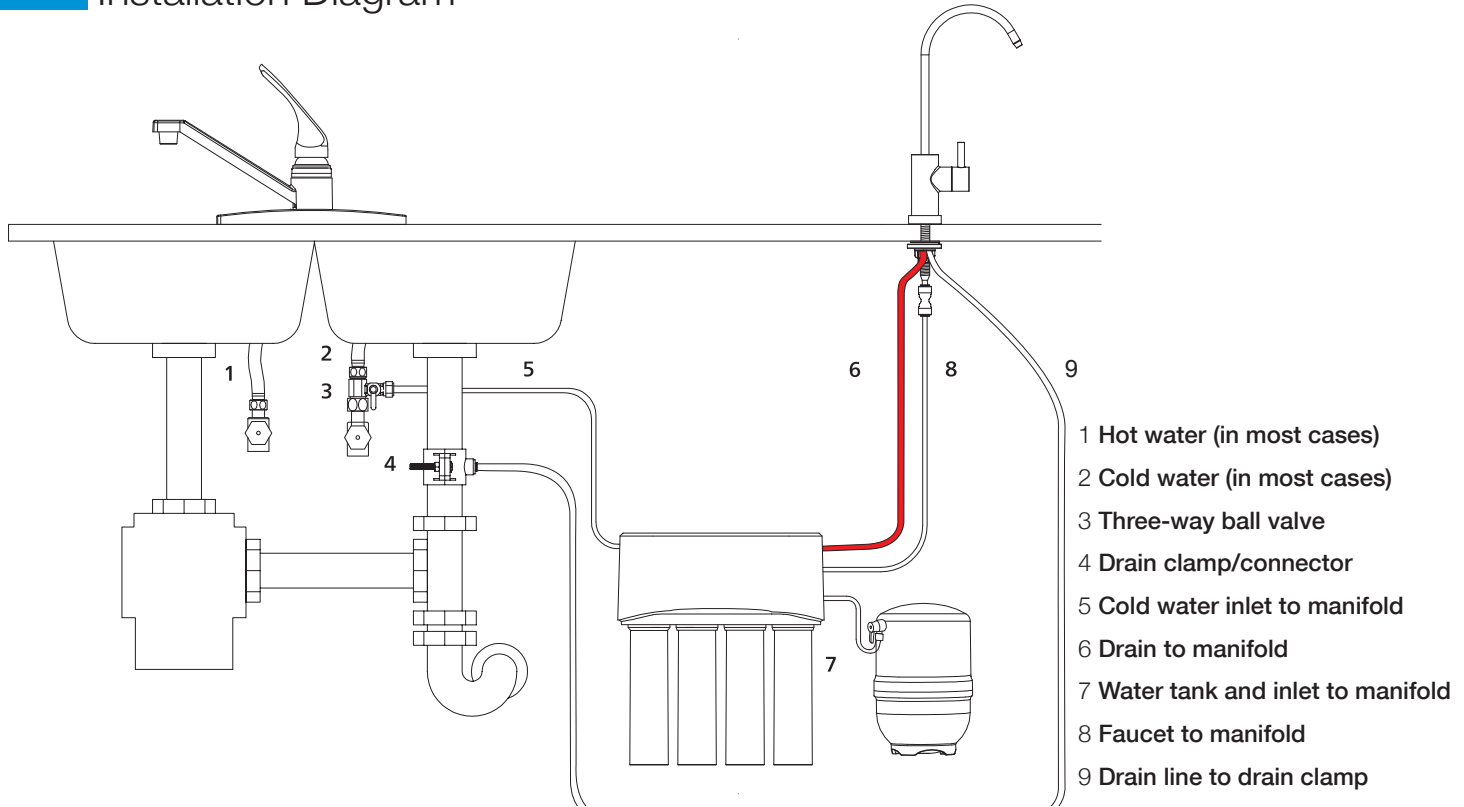
- Adjustable wrench
- Thin screwdriver
- X-acto knife or similar to cut tubing
- Drill with small bit to create pilot holes

If your sink does not already have a hole available for the faucet, you will need adequate tooling to drill one or consult a professional prior to installation.

Prior to installation:

- Confirm that all accessories in the packing box are intact before installation
- Clean the installation area and confirm there is adequate space for the system
- Make sure you have clear access to the cold water, drain and water shut-off valve

Installation Diagram



Prior to installation

NOTE:

- Before installation, be sure to check the condition of the system to make sure it has not been damaged during transport.
- Remove the packaging materials and recycle them per your local regulations. Please keep any plastic bags or other packaging out of reach of children.



Warning: Keep plastic bags out of the reach of children as they may be dangerous.

- Please avoid touching any seals and water paths, and be sure that all of the tools to be used are clean, and free of any rust or grease.
- The system and installation shall comply with applicable local regulations.
- The inlet water pressure must be between 40 to 100 PSI. If the pressure is below 40 PSI, a booster pump can be installed in front of the system. If the pressure is over 85 PSI, a pressure reducing valve should be installed in front of the system.

MAIN RO
Unit x 1

FILTER #1
HV-RO075-PRE

FILTER #2
HV-RO075-PREC

FILTER #3
HV-RO075-ROM

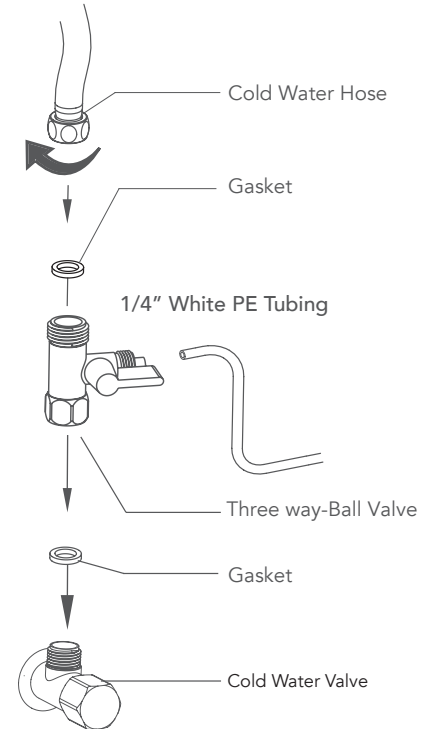
FILTER #4
HVRO075-POST



Step 1: Install the three-way ball valve

Make sure to turn off the water supply before installation.

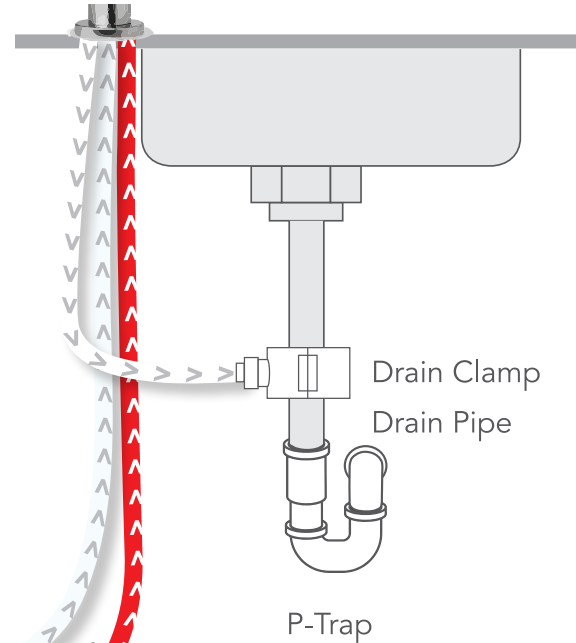
1. Make sure the cold water valve is fully closed
2. Use an adjustable wrench to turn the compression fitting on the cold water hose
3. Ensure the gasket is placed on top the female end of the three-way ball valve
4. Connect the female end of the three-way ball valve to the cold water valve and hand-tighten the compression fitting
5. Ensure the gasket is placed on top the cold water valve
6. Connect the male end of the three-way ball valve and hand-tighten the compression fitting
7. Connect one end of the 1/4" white PE tubing to the quick-connect port on the side of the three-way ball valve
8. Make sure the valve is in the "open" position as shown in the diagram on the right



Step 2: Install the drain clamp

Warning: do not install the drain clamp above a garbage disposal. The drain clamp must be installed on a vertical pipe below. If your sink has two separate drains, please install on the side without a garbage disposal.

1. Determine where you will install the drain clamp and drill a 1/4" hole in only one side of the vertical drain pipe (do not drill through both sides of the pipe)
2. Remove the paper from the adhesive side of the drain saddle gasket
3. Position the gasket inside the drain saddle so that the hole in the gasket is aligned with the hole in drain saddle
4. Use a small rod or thin screwdriver to center the hole in the drain saddle over the hole in the pipe
5. Place the opposite side of drain saddle on the back side of the drain pipe so that the parts are aligned
6. Use the stainless steel bolts to tighten the drain saddle parts together

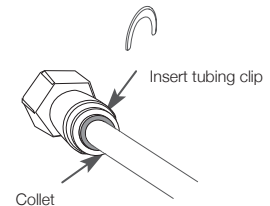
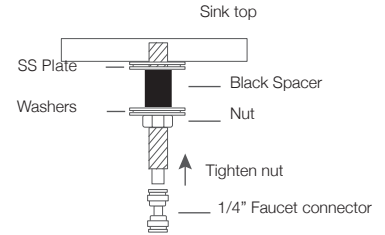
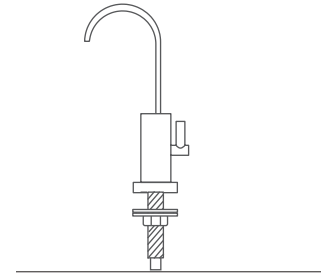


Step 3: Install the faucet

Warning: make sure your sink has a third hole of about 22mm in diameter available to install the faucet. If your sink does not have an unused hole, one must be drilled into the sink top or otherwise provided. Be sure to consult a professional if needed.

1. Insert the spigot through the 7/8" hole in the sink or counter
2. Place the SS plate with cutout on bottom of sink so the barbs are within the cutout
3. Next, place the white spacer with the cutout facing up onto the threaded rod of the faucet and push all the way up
4. Place the SS washer, star washer and nut onto the threaded rod of the faucet and tighten until secure
5. Install the 1/4" faucet connector to the bottom of the threaded rod on the faucet and hand tighten the nut, taking care not to cross thread
6. Locate the 1/4" white polyethylene tubing
7. Insert one end firmly into the open end of the 1/4" quick connector (as shown on the right)
8. Lightly tug on the tubing to create a small space between the collet and the fitting
9. Insert the tubing clip into that space

Note: If you should need to remove the tubing, remove the clip first and push the collet against the fitting face. Then pull the tubing out.



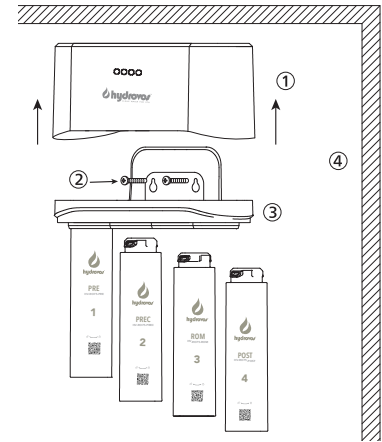
Step 4: Installing the system manifold

Ensure that there is a clean, dry and sufficient space for installing the system, accessories, and connections. Under no circumstances should the manifold be installed outdoors. Install the system on a stable, flat surface or secure it to a wall using a mounting bracket. Keep the system away from heat.

1. Select an easily accessible area under the sink to mount the system manifold
2. Remove the cover from the manifold
3. Use the bracket on the back of the manifold as a template to determine the location of the screws (ensuring the holes are as level as possible)

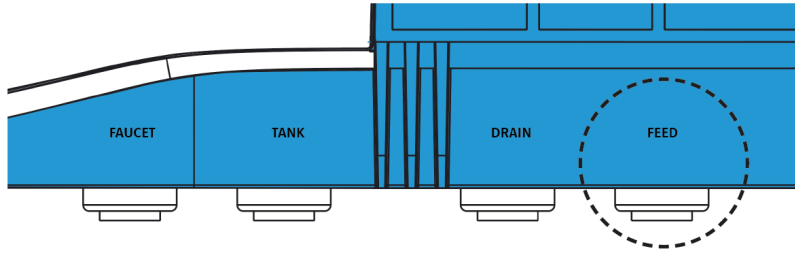
NOTE: Allow at least 15" from screw hole locations to the cabinet floor to allow ample space for filter replacement.

4. Drill two pilot holes for mounting bracket, taking care not to drill into anything beyond the cabinet wall
5. Insert mounting screws into the wall, leaving approximately 3/8" of each screw exposed
6. Remove the packaging of the filter, cartridges, insert them into the manifold in order and turn them to the right to lock them in place



- ① Cover
- ② Screw holes
- ③ Bracket
- ④ Cabinet

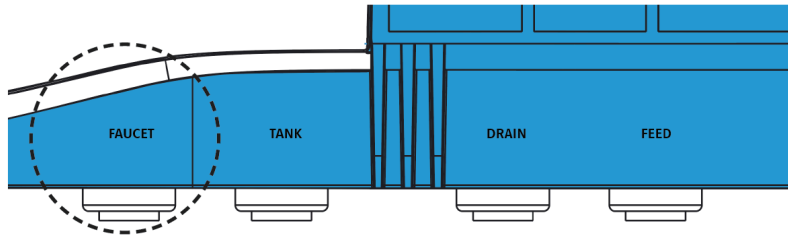
Step 5: Connecting the water inlet and three-way ball valve



Your system will come equipped with protective pins installed in each inlet to protect the system during shipping. To remove the pin, pinch the collet and push the pin inward to trigger the mechanism.

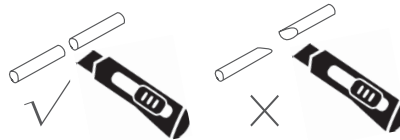
1. Find the open end of the 1/4" tubing that you previously installed into the three-way ball valve
2. Insert it into the FEED port at the back of the system manifold as shown above
3. Lightly tug on the tubing to create a small space between the collet and the fitting
4. Insert a tubing clip into that space

Step 6: Connect the water outlet and faucet

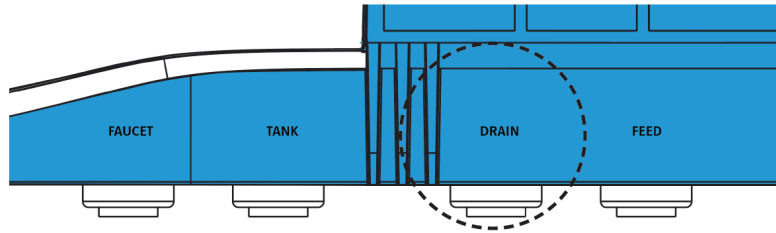


1. Locate the white 1/4" tubing connected to the three-way inlet valve (installed in Step 1)
2. Determine the length of tubing needed to connect the FAUCET port to the faucet and mark it
3. Cut the 1/4" inch tubing at the mark with a utility knife
4. Insert the tubing into the FEED port at the back of the system manifold as shown above
5. Lightly tug on the tubing to create a small space between the collet and the fitting
6. Insert a tubing clip into that space

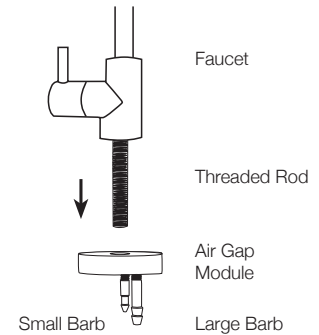
*When cutting tubing, make only 90° cuts.
Never cut it at an angle or it may leak.*



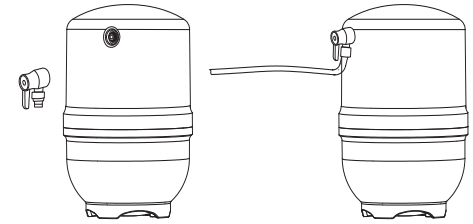
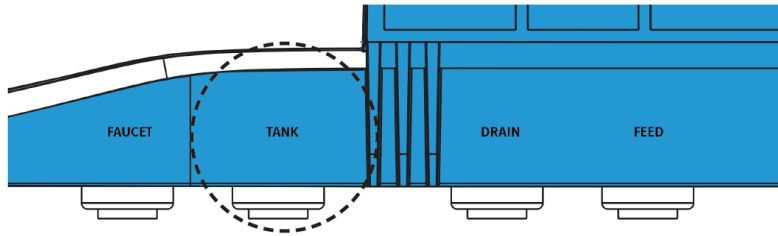
Step 7: Connect the drain port to the drain clamp



1. Locate the red tubing from the parts kit
2. Determine the length of tubing needed to connect the DRAIN port to the small barb on the faucet air gap from Step 2 and mark it
3. Cut the red tubing at the mark with a utility knife
4. Insert the red tubing into the DRAIN port at the back of the system manifold as shown above
5. Lightly tug on the tubing to create a small space between the collet and the fitting
6. Insert a tubing clip into that space
7. Connect the other side of red tubing to the small barb on the faucet air gap (as shown on the right)
8. Locate the white 3/8" tube from the parts kit
9. Determine the length of tubing needed to reach from the air gap module to the drain clamp, mark it, then cut the tubing at the mark with a utility knife
10. Press one end of white 3/8" tube onto the large barb on air gap, then connect the other end to the 3/8" port on the drain clamp



Step 8: Connect the storage tank and install cover



1. Install the tank ball valve on the storage tank by turning clockwise
2. Locate the 1/4" tubing from the parts kit
3. Determine the length of tubing needed to connect from the TANK port to the tank ball valve and mark it
4. Cut the 1/4" tubing at the mark with a utility knife
5. Insert one end of tubing into the tank ball valve, and insert the other end into the TANK port in the back of system
6. Lightly tug on the tubing to create a small space between the collet and the fitting
7. Insert a tubing clip into that space
8. Locate the battery cover and install the included batteries from the parts kit
9. Install the cover on the manifold

Using the system for the first time

Step 1: Turn the water on

1. Turn the water on using three-way ball valve
2. Close the tank ball valve and open the faucet
3. Let the system run until a steady trickle of water is visible, then close the faucet
4. Check all the connections for leaks
5. If any leaks are present, turn off the feed water and allow the system to depressurize
6. Repair leaks if needed

Step 2: Flush the filters

1. Open the faucet to let water flow through system for 30 minutes

Step 3: Flush the water tank

1. Close the faucet
2. Open the tank ball valve and let tank fill with water (it will take about 2 hours)
3. After 2 hours, open the faucet and allow water to flow into the tank until the flow is a steady trickle
4. Close the faucet and allow the tank to refill (it will take about 2 hours)
5. Empty the tank

NOTE:

The flow rate will be less than your kitchen water faucet. Water will run to the drain while the RO filter system is filtering water — even when not in use. This is normal. Water going to the drain will stop automatically when the water tank is at capacity.



Maintenance of the RO System

Routine maintenance

- Use only a wet cloth to clean the outer surface of the RO system. Do not use chemicals.
- If the system is not used for more than two days, turn on the faucet for more than five minutes to flush the system.
- If the system will not be used for an extended period, the filters should be removed and stored. Turn off the three-way ball valve and open the faucet to empty the tank. When the water flow from the faucet stops, close the ball valve on tank. Remove the filter cartridges (there may be some water spillage), seal them in a recloseable plastic bag, and store in the refrigerator.
- To put the system back into service, repeat the instructions on page 14.

Filter Lifetime

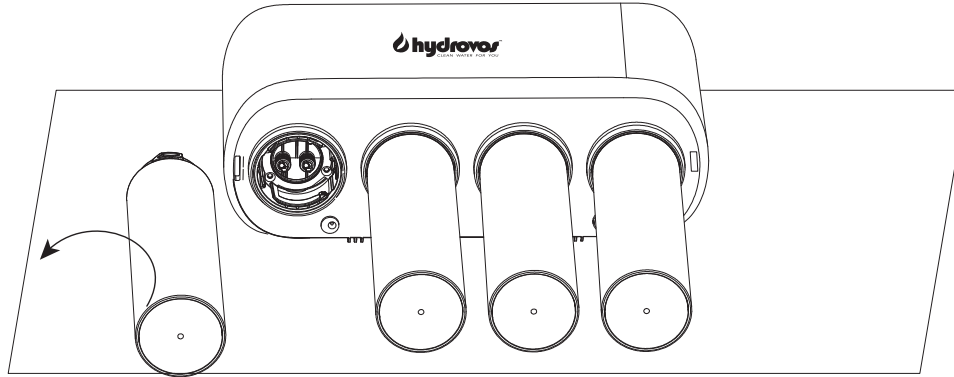
Note:

For best performance, please change filter cartridges according to the filter replacement cycle suggested below. The actual lifetime of filter cartridge depends on local tapwater quality and daily usage. The recommended replacement cycle is a guideline only. Your actual lifetime may vary. This system will only work with Hydrovos filters.

FILTER	FILTER REPLACEMENT
Pre Filter	6-12 Months
Carbon Pre Filter	6-12 Months
RO Membrane	24-36 Months
Post Filter	6-12 Months

Filter Cartridge Replacement

1. Turn off the three-way ball valve, then turn off the water tank ball valve
2. Open the faucet to relieve the pressure
3. Turn filter that needs to be replaced counter-clockwise and pull it out
4. Remove the packaging of the new filter
5. Insert the cartridge and turn it clockwise until it stops
6. Open the faucet, then open the three-way ball valve and watch for a trickle of water
7. Close the faucet and open the water tank ball valve to allow the tank fill (it will take about 2 hours)
8. Empty the storage tank by opening the faucet, then close the faucet to let the tank refill
9. Repeat Step 8 above again and the system will be ready to use



Warnings and Specifications

- For use with potable water only.
- Do not use water that is microbiologically unsafe or of unknown quality without disinfecting the system
- Do not attempt to modify the system, or the warranty is void
- This device is intended for domestic use only
- For cold water use only, do not install on a hot water line
- Ensure the filters are installed in the correct order or the system will not operate normally and the warranty will be void
- If not using the system for an extended period, turn off the water supply, and turn on the faucet to release internal pressure to avoid damage to the system
- If you need warranty assistance, please call (833)-787-5001

Product Name	HYDROVOS RO System
Model	HV-RO075-RO-T
Filtration capacity	Pre Filter/Carbon Filter/RO Membrane/Post Filter
Inlet Water Pressure	40 - 100 PSI (0.3-0.7 MPa)
Water Tank Capacity	3 Gallons Nominal
Inlet Water Temperature	40°-100°F
Feed Water Quality	Municipal Tap or Well water
Maximum Inlet Water TDS	1500 ppm
Maximum Inlet Water Hardness	15 Grains per Gallon (250 ppm)
Manufacturer	Hydovos
Address	PO Box 4761 Mission Viejo, CA 92690
Dimensions	14.8" x 5.1" x 16.7" (LxWxH)

Troubleshooting

Problem	Causes	Troubleshooting
RO System is leaking	The components are damaged.	Turn off the three-way ball valve and contact HYDROVOS at info@hydrovos.com
	The tubing or filters are not connected properly.	Check whether the filters are not installed in place or tubing is not pushed in tightly.
No water comes out from the faucet.	The cold water valve or three-way ball valve is not turned open.	Open the valve to test again.
Abnormally low water flow rate from the faucet after start-up of the RO system	The tubing runs are twisted or bent.	Check all tubing runs, including inlet water tubing, drain water tubing, pure water tubing, and water tank tubing to make sure water can travel through tubing smoothly.
	The three-way ball valve is not turned open completely.	Check whether the inlet three-way ball valve is turned open completely.
	Filter is clogged.	Replace filter or contact HYDROVOS.
	Inlet water pressure is low.	Wait until inlet water pressure is stable. Install a booster pump before the system if standing inlet water pressure is lower than 40 psi.
No water runs to the drain.	The drain water tube is twisted or the RO filter is damaged.	Change the drain water tube or RO filter. Contact HYDROVOS if necessary.
The RO system fails to stop or repeatedly starts and stops	Filter has reached the end of life.	Replace the filter.
	The RO system hasn't been used for some time.	Check the routine maintenance section in the manual.

Problem	Causes	Troubleshooting
Leak at the drain saddle.	Drain saddle not clamped tightly enough.	Tighten the drain saddle screws evenly and firmly.
Leak at the fittings push-in connection.	Tubing is damaged if there is a tubing misassembly.	Remove the tubing. Squarely cut off 1/4 inch from the end of the tubing using a sharp razor knife and reinsert it into the fitting. Make sure that the tubing is pushed in completely until it seats.
Leak at the replacement filter head.	Damaged or misaligned O-ring.	Close the cold water feed valve and the storage tank valve. Lift up faucet handle to relieve pressure. Remove replacement filter at leak. Ensure both o-rings are present on replacement filter & seated into grooves; moisten o-rings with water. DO NOT use petroleum to lubricate o-rings.
The faucet leaks from the spout with the handle down.	An obstructed or damaged valve seat in the faucet mechanism.	Replace faucet or call HYDROVOS.
No steady drip from the open faucet.	<ul style="list-style-type: none"> • The cold water feed valve is not open. • A leak from any water fitting connection. • Air is still trapped in the system. 	<ul style="list-style-type: none"> • Open the cold water feed valve completely. • Correct the fitting leak as outlined above. • Wait for the air to be purged from system.
Water leaks from air gap module opening.	<ul style="list-style-type: none"> • The drain line is blocked or the drain hole is not drilled through completely. • The drain line has a loop in it. • Air is locked in the air gap outlet. • There is excessive RO reject flow. 	<ul style="list-style-type: none"> • Check to see that the drain line is clear of any obstruction and remove the drain saddle fitting to verify that the hole is drilled through completely. • Shorten tubing so that it is as vertical as possible. • Blow air into the air gap outlet using a short length of tubing.

Problem	Causes	Troubleshooting
<p>Noise in the drain (gurgling or dribbling sound).</p>	<p>The reject water is dripping into the standing water in the drain trap.</p>	<ul style="list-style-type: none"> • Make sure that the 3/8" tubing from the faucet air gap module slopes continuously downward to the drain saddle without any loops or low spots. • Angle the drain piping so that the reject water runs down the side of the drain pipe. • Change the location of the drain saddle to the horizontal drain pipe or any alternate vertical drain pipe which is farther from the trap. Properly plug the original hole. Caution: Make sure the drain saddle is always installed above (before) the trap. • Drill larger hole in drain pipe.
<p>Little or no water available.</p>	<ul style="list-style-type: none"> • Tank has not had time to fill. • Tank has little or no air charge. • RO membrane module output significantly below normal. 	<ul style="list-style-type: none"> • Wait. The tank will take approximately 2 hours to fill. • An empty tank with the ball valve open to atmosphere, should have a 7-8 psi air charge. • Contact our HYDROVOS at (833)-787-5001

 *If the troubleshooting problems cannot be eliminated, email info@hydrovos.com.*

Warranty Card

Thank you for choosing HYDROVOS products. We strive to provide you with quality products. This Warranty Card is an important part of your product warranty and encourage you to fill out this card and store it in a safe place. You can also visit our product registration page by scanning the QR code on the right with your mobile phone or by going to <https://hydrovos.com/product-registration/>



Date of Purchase: _____

Product Model: _____

Name: _____

Product S/N: _____

Phone: _____

Date of Install: _____

Address: _____

Purchased From: _____

1 Year Limited Warranty

[HYDROVOS] warrants to the original purchaser-consumer that its Product is free of defects in materials and workmanship. Any defect, malfunction, or other failure of the Product to conform to this warranty will be remedied by Warrantor in the manner provided below. This Warranty, together with any warranties implied by law, shall be limited to a duration of one (1) year from the original date of purchase by the consumer. This Warranty does not apply to defects that result from abuse, misuse, alteration or damage not caused by HYDROVOS or caused by accident, fire, flood, freezing, Acts of God, misuse, misapplication, neglect, oxidizing agents (such as chlorine, ozone, chloramines and other related components). This Warranty also does not apply to defects, deteriorations or damages that result from installation or use of the Product not in accordance with the specifications provided or caused by uses for which this Product was not expressly intended or by the use of accessories or components which do not meet the Product's specifications.

The Product must be used in operating conditions that conform to Warrantor's recommended design guidelines. This Warranty will not apply if the unit has been modified, repaired or altered by someone not authorized by Warrantor. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, WHETHER ORAL OR ARISING BY USAGE OF TRADE OR COURSE OF DEALING, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF FITNESS OR MERCHANTABILITY. THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Refer to the specifications section in the Installation and Operating manual for approved application parameters. THIS WARRANTY DOES NOT COVER, AND IS INTENDED TO EXCLUDE ANY LIABILITY ON THE PART OF WARRANTOR, WHETHER UNDER THIS WARRANTY OR UNDER ANY WARRANTY IMPLIED BY LAW, FOR ANY ANTICIPATED OR LOST PROFITS, INCIDENTAL DAMAGES, SPECIAL DAMAGES, GENERAL DAMAGES, CONSEQUENTIAL DAMAGES, COSTS, TIME CHARGES OR OTHER LOSSES, WHETHER BASED ON BREACH OF CONTRACT, TORTIOUS CONDUCT OR ANY OTHER THEORY, INCURRED IN CONNECTION WITH THE PURCHASE, INSTALLATION, REPAIR OR OPERATION OF THIS PRODUCT.

Warrantor does not authorize anyone to assume for it any liability or to make on its behalf any additional warranties in connection with this Product or any part thereof. Note: Some states prohibit limitations on the duration of implied warranties and on the exclusion of indirect or consequential damages; and so the limitation on implied warranties and on incidental and consequential damages may not be applicable to you.

Recommended Filter Replacement Intervals



Filter	Description	Functions	Interval of Replacement
1	Encapsulated Pre-Filter	Effective sediment removal, including sand, rust, suspended substances.	6-12 Months
2	Encapsulated Pre-Filter with Carbon	Removes residual chlorine, odor and others from the water; The carbon effectively reduces chlorine, protecting reverse osmosis membrane from damage.	6-12 Months
3	RO Membrane	Reduces dissolved contaminants including salts, hard water chemicals, heavy metals, and other contaminants. Up to 99% removal of dissolved solids.	24-36 Months
4	Encapsulated Post Filter	Provides final polish for great tasting water.	6-12 Months

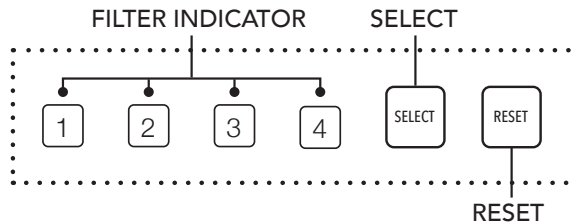
i Recommended intervals are estimated. Actual service life may differ due to variation in regional water quality, water temperature, usage and other factors.


Filter Change Record



Filter Number	#1	#2
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		
Date Replaced		



Quick Reference Operating Guide: Display Functions



INDICATOR	DISPLAY MODE	DISPLAY DESCRIPTION
	OFF	Normal operation
	FLASHING	Filter is reaching end of life
	ALL 4 LIGHTS FLASHING	Low Battery

BUTTON	NAME	DECRPTION
	SELECT	Select filter needs to be reset indicator for the corresponding filter. Selected will flash, click repeatedly to change filter selected.
	RESET	To reset filter, press filter # then press reset for 3 seconds, and light will turn off. This means reset was successful



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Made in China | Website: <https://www.hydrovos.com> | Toll Free: 833-787-5001

■ This manual may be modified without notice.
HYDROVOS reserves the right to final interpretation. Rev: V3 12092024 | P/N: HV-RO075-RTO-T_manual