



HYDROVOS

Reverse Osmosis System with Tank

Installation and Operation Manual
HV-RO075-RO-T

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To HYDROVOS Users

1) Product Introduction - HV-RO075-RO-T

Congratulations on your purchase and welcome to Hydrovos. The 0.0001 μm reverse osmosis membrane effectively reduces heavy metals, pesticides, hardness, volatile organic compounds, chlorine, and more, leaving you with just great tasting water.* Quick twist filter design allows you to replace the filter cartridges easily. Read this user manual carefully before you use the appliance. Save it for future reference.

*These substances are not necessarily in your water.



Official Website: <https://www.hydrovos.com>

Products & Accessories

MAIN RO

Unit x 1



FILTER #1

HV-RO075-PRE

FILTER #2

HV-RO075-PREC

FILTER #3

HV-RO075-ROM

FILTER #4

HVRO075-POST

Preparations Prior to Installation

Please confirm all accessories in the packing box are intact before installation.

1. Unpack and take out the RO system and parts kit.
2. Confirm the installation site and space for the RO system.
3. Confirm access to cold water and drain.

What's in the Box:

HV-RO075-RO-T Unit



4 Filter Cartridges

3 Gallon Tank
Nominal



Faucet x1



User Manual



Inlet 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 x8
3/8" Anti-Drop Clip x1

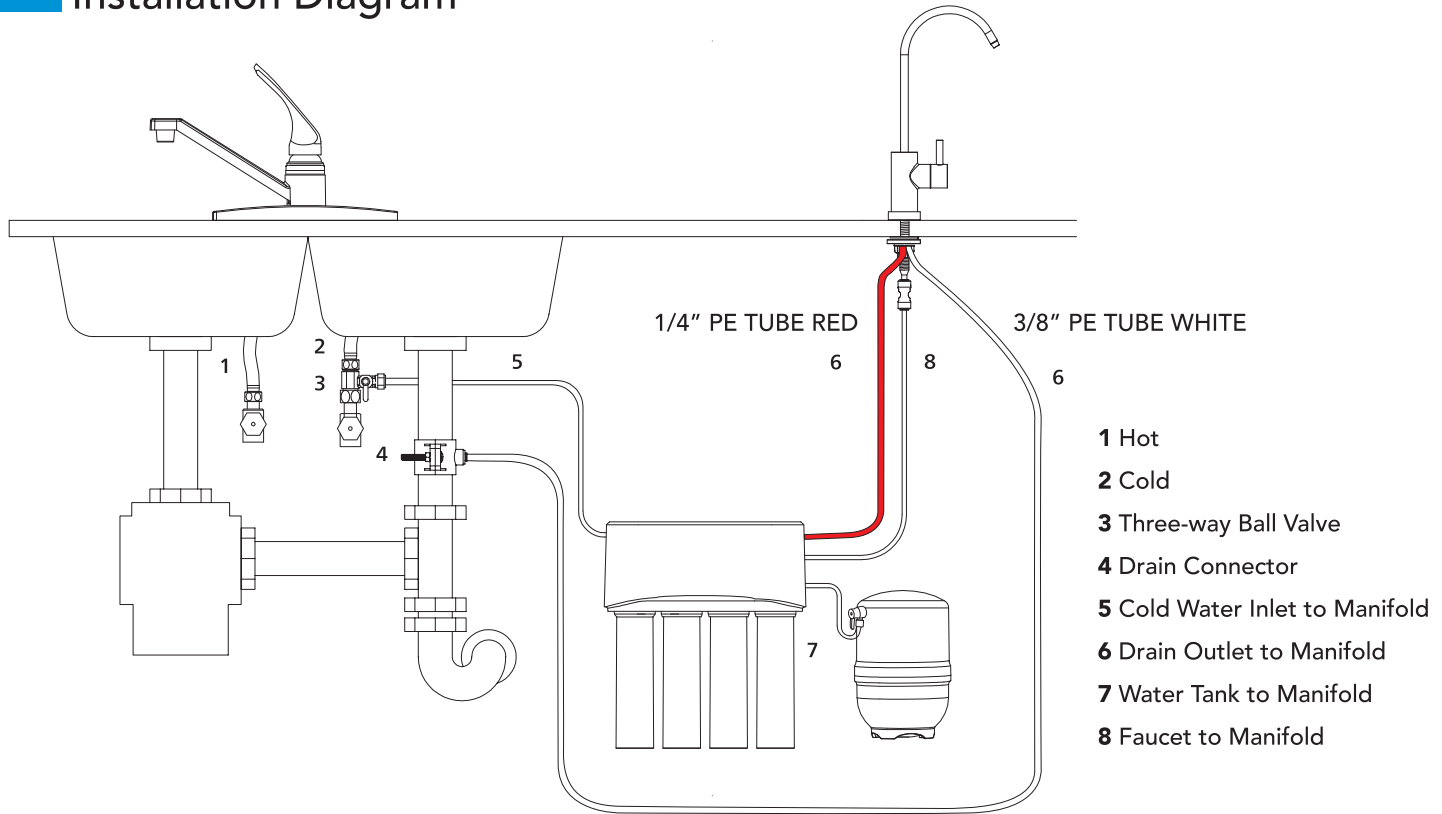


Drain Clamp
x1



Quick Connect
x1

Installation Diagram



Installation of RO System

NOTE:

- Before installation. It is important to check the condition of the system to make sure it has not been damaged during transport.
- Unpack the system and its accessories. Remove the protective, packaging material. Recyclable materials have been used for the packaging and should be disposed of in the appropriate recycling bins or at local recycling centers.

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

- Check if anything is missing according to the packing list and the overview.
- Given that the system will improve the quality of your drinking water all the tools to be used in the installation process should be clean, rust and grease-free.

- The installation area should be clean. Wash hands before touching filters. Avoid touching seals and water paths before installation.
- The system and installation shall comply with applicable local regulations.



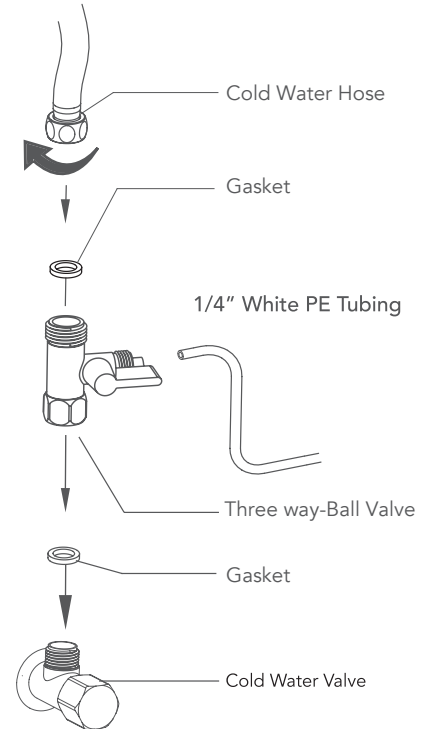
Step 1: Install the Inlet Three-way Ball Valve

Install the inlet Three-way-Ball Valve and connect the 1/4" White PE tubing to the inlet Three-way ball valve.

1. Close water at Cold Water Valve.
 2. Remove 3/8" compression fitting (Cold Water Hose) using adjustable wrench.
- Install female side of Three-way-Ball Valve to the Cold Water Valve, hand tighten only.
 - Reconnect 3/8" compression fitting (Cold Water Hose) to male side of Three way-Ball Valve.
 - Push one end of White PE Tubing into quick-connect port on Three way-Ball Valve.

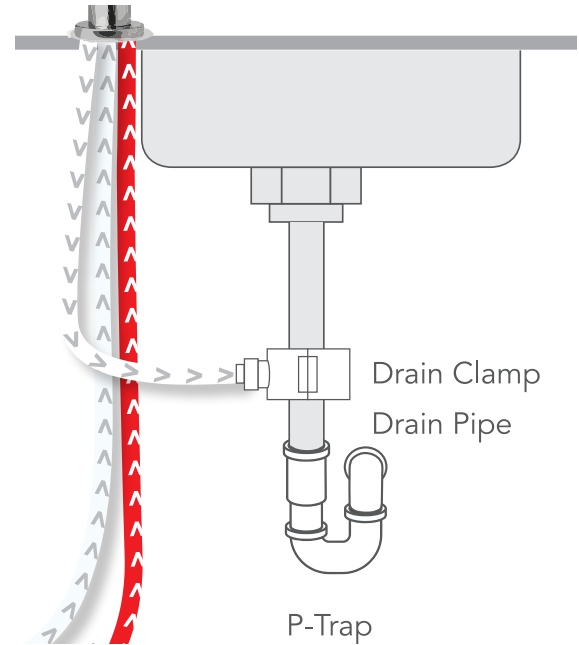


Make sure to turn off the water supply before installation.



Step 2: Install the Drain Clamp

1. Decide where drain clamp is to be installed and drill a 1/4" hole in only one side of the vertical drain pipe.
2. Remove paper from adhesive side of drain saddle gasket and apply to the inside surface of drain saddle so that the hole in the gasket is aligned with the hole in the drain saddle.
3. Using a small rod or thin screwdriver center drain saddle hole over hole in drain pipe.
4. Place opposite side of drain saddle on the back side of the drain pipe so that the parts are aligned and use stainless steel bolts to tighten drain saddle parts together.



Caution - Do not install before garbage disposal if present. Must be installed on a vertical pipe after garbage disposal. If installing in a two-drain sink, install on side opposite garbage disposal.

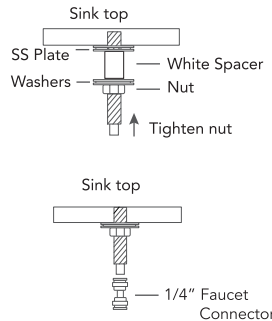


Step 3: Installing the faucet

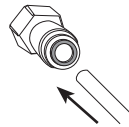
Install the faucet

1. If your sink has a third hole for a soap dispenser or sprayer, this hole may be used to install the faucet. If there is no unused hole, one must be drilled into the sink top or otherwise provided. Consult a professional if needed.

2. HYDROVOS RO systems are equipped with an air-gap faucet. Hole size required to fit air-gap module is $7/8"$. Insert air-gap module through decorative escutcheon plate and pass through $7/8"$ hole. Place SS plate with cutout on bottom of sink so barbs are within cutout. Place white spacer with cutout facing up onto threaded rod on faucet. Push all the way up. Place SS washer, star washer and nut onto threaded rod and tighten until secure.

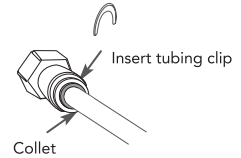


3. Install $1/4"$ faucet connector to bottom of threaded rod on faucet. Hand tighten only. Take care not to cross thread.



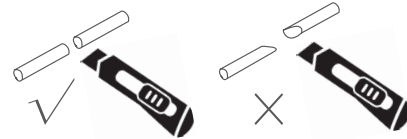
4. Insert the $1/4"$ white polyethylene tubing firmly into $1/4"$ quick connector.

5. Once the $1/4"$ polyethylene tubing is seated into the fitting, lightly tug tubing to create a space between the collet and the fitting. Insert tubing clip into the space created.



(In the event that you need to remove the tubing from the fitting, first remove the clip, then press the collet down against the fitting face and pull the tubing out.)

When cutting tubing, make only 90° cuts. Never cut it at an angle. Angled cuts will leak.



Step 4: Installing the System Manifold

NOTE:

Ensure that there is sufficient space for installing the system, accessories, connections and for service and repair. Under no circumstances should the system be installed outdoors. Install

system in a clean and dry area. This system should be placed on a stable and flat surface or mounted to the wall using mounting bracket. Keep the system away from heat.

Wall Mounting (optional step)

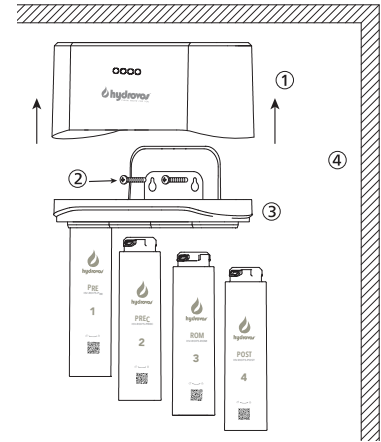
- A. Select an easily accessible area under the sink to mount the system manifold.
- B. Take off the cover. Mark wall placement for mounting screws using the built in bracket on the back of the manifold. Ensure holes are as level as possible.

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

- C. Drill two pilot holes for mounting bracket.

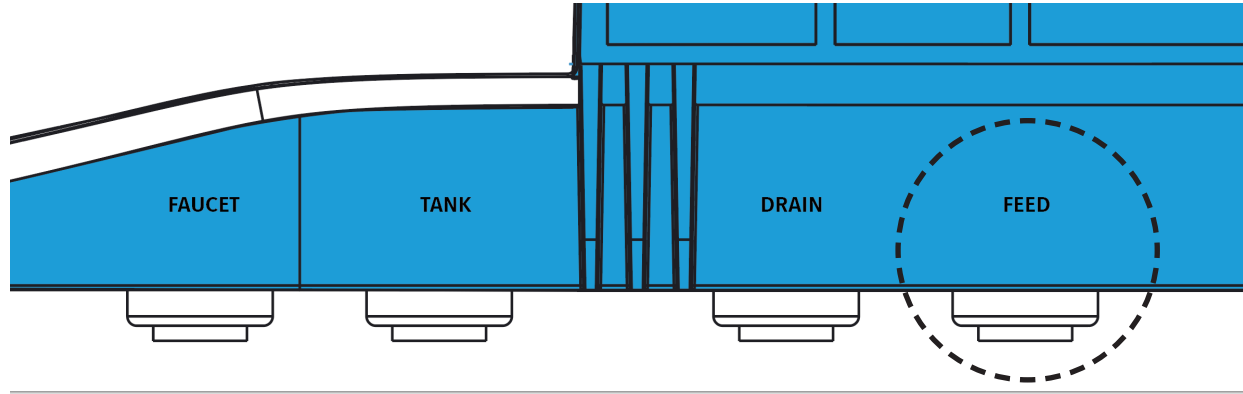
NOTE: Take care not to drill into anything beyond the cabinet wall.

- D. Insert mounting screws into the wall, leaving approximately 3/8" of each screw exposed.
- E. Remove the packaging of the filter, cartridges, insert them into the manifold, according to the order, and turn them to the right to lock them in place.



- ① On the cover
- ② Screws
- ③ System manifold
- ④ The wall

Step 4: (cont) Connect the Water Inlet and three-way ball

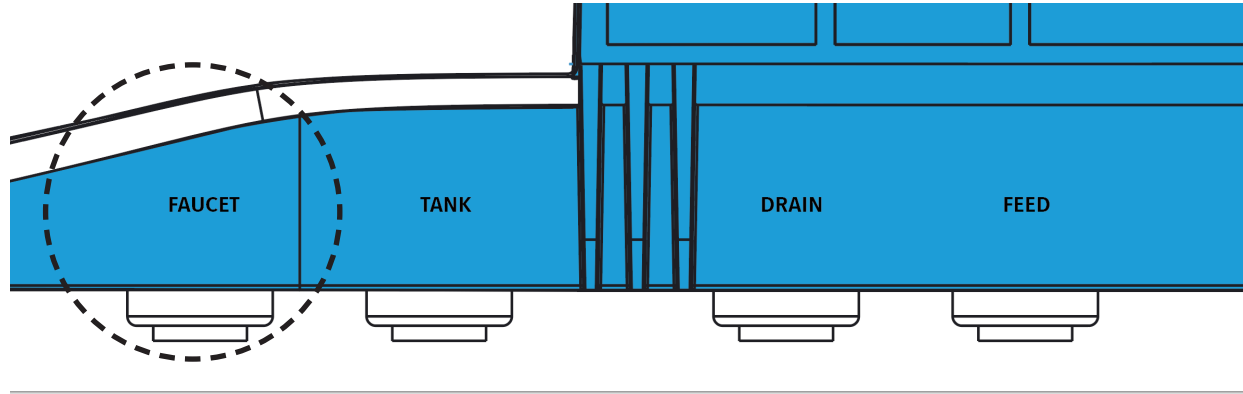


- Insert the open end of the 1/4" tube previously installed to the three-way ball valve in Step 1 to the FEED port at the back of the system manifold. Use a clip to secure the tube.

NOTE:

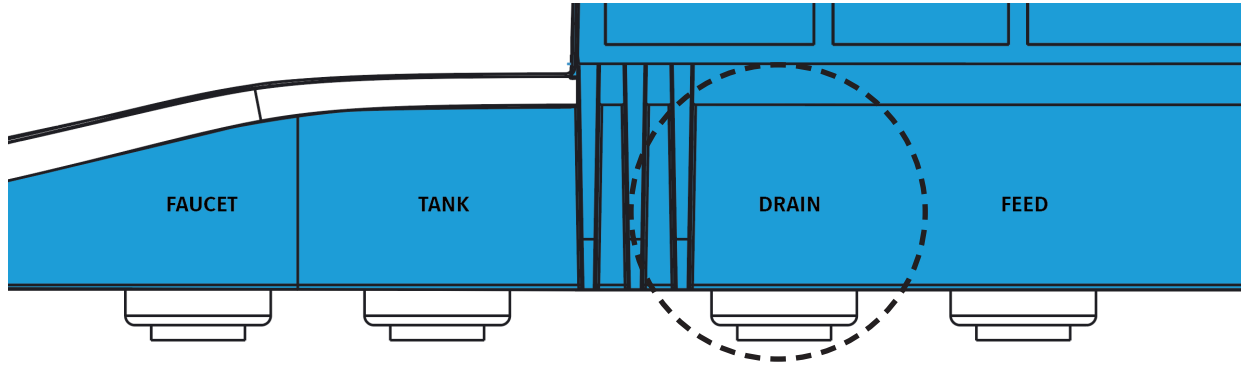
The inlet water pressure must be between 40 to 100 PSI. If the pressure is below 40 PSI, a booster pump can be installed in front of the system. If the pressure is over 85 PSI, a pressure reducing valve should be installed in front of the system.

Step 5: Connect the Water Outlet and Faucet

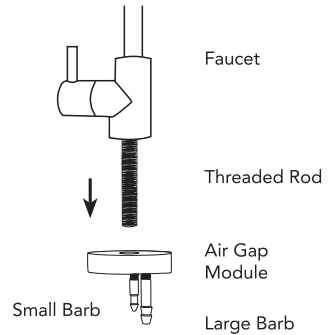


- Locate white tube in Step 2. Measure the length of the 1/4 inch tube you need to connect the FAUCET port to the faucet. Cut the 1/4 inch tube with a utility knife.
- Insert 1/4 inch tube into the FAUCET port in the back of the system until it stops. Use a clip to secure the tube.

Step 6: Connect the Drain Port to the Drain Clamp

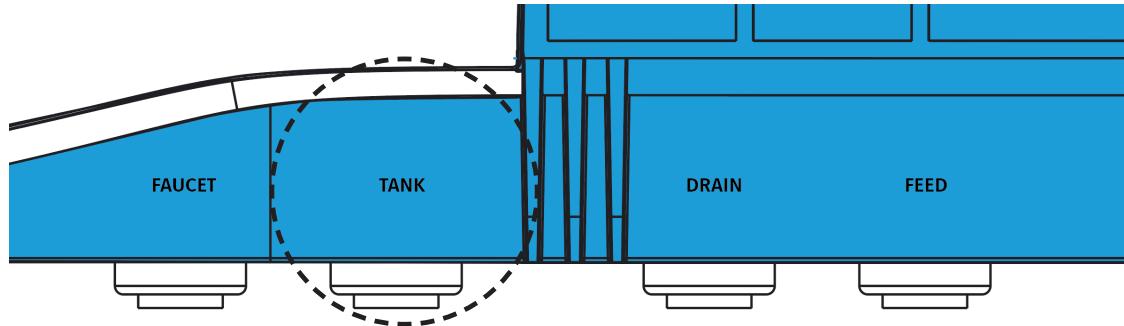
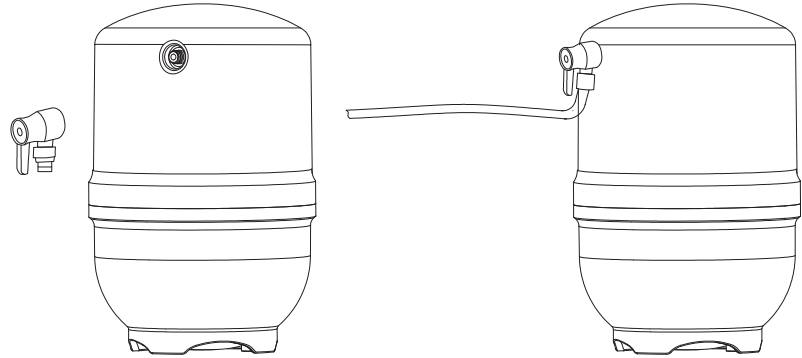


- Locate red tube from install kit. Measure length of 1/4 inch tube needed to connect DRAIN port to small barb on faucet air gap from Step 3. Cut 1/4 inch tube.
- Insert 1/4 inch tube into DRAIN port in the back of system until it stops. Connect other side of red tube to small barb on faucet air gap. Use a clip to secure tube connected to DRAIN port.
- Locate white 3/8" tube from install kit. Cut to length needed to reach from air gap to drain clamp. Press one end of 3/8" tube onto large barb on air gap. Connect other end to 3/8" port on drain clamp.



Step 7: Connect Storage Tank

Install tank ball valve on storage tank by turning clockwise. Measure and cut a section of 1/4" tube to reach from system TANK port to tank ball valve. Insert one end of tube into tank ball valve, and insert the other end into TANK port in the back of system until it stops.



Using the System

Before first time use

- A. Turn water on using 3-way Ball Valve.
- B. Close tank ball valve and open faucet. Let system run until a steady trickle of water is exiting the faucet. Close faucet.
- C. Check all connections for leaks. If any leaks, turn off feed water, allow system to depressurize and repair leaks if needed.

Flush filters:

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

Flush the water tank:

- Close faucet. Open tank ball valve and let tank fill with water. About 2 hours.
- After 2 hours, open faucet and allow water in tank to flow until flow is a steady trickle
- Close faucet, and allow tank to refill. (About 2 hours)
- Empty tank and system is ready to use.

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, filters should be removed and stored. Turn off the Three-way Ball Valve, open faucet to empty tank. When water flow from faucet stops, close ball valve on tank. Remove filter cartridges (there may be some water spillage), seal in a recloseable plastic bag and store in the refrigerator.
- To put back into service, repeat instructions on page 14.

Filter Lifetime

Note:

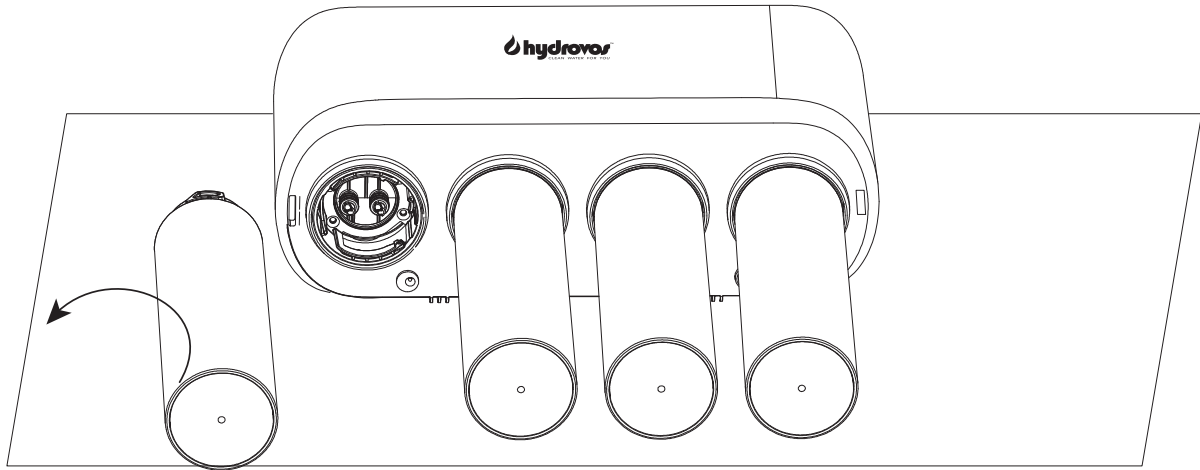
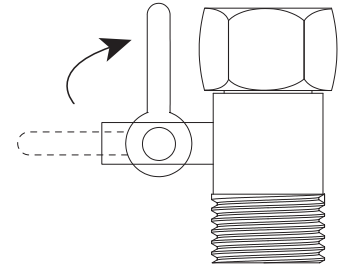
For best performance, please change filter cartridges according to the filter replacement cycle suggested below.
This system will only work with Hydrovos filters.

FILTER	FILTER REPLACEMENT
<i>Pre Filter</i>	<i>6-12 Months</i>
<i>Carbon Pre Filter</i>	<i>6-12 Months</i>
<i>RO Membrane</i>	<i>24-36 Months</i>
<i>Post Filter</i>	<i>6-12 Months</i>

- The actual lifetime of filter cartridge depends on local tapwater quality and daily usage. The recommended replacement cycle is a general guideline. Your actual lifetime may vary.

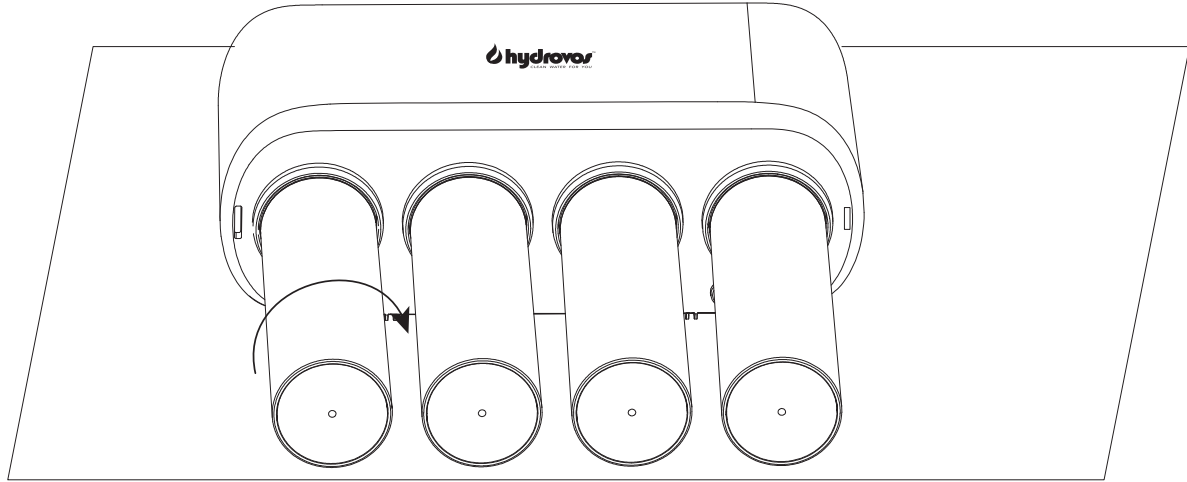
Filter Cartridge Replacement

- A. Turn off the Three-way Ball Valve and the Water Tank Ball Valve.
- B. Open faucet to relieve pressure.
- C. Turn the filter that needs to be replaced counter-clockwise and pull it out.



Filter Cartridge Replacement (cont)

D. Remove the packaging of new filter, insert cartridge into the system, and turn clockwise until it stops.



E. Open faucet, then open Three-way Ball Valve. Wait until you see a trickle.

F. Close faucet and open Water Tank Ball Valve. Allow tank to fill. (About 2 hours)

G. Empty storage tank by opening faucet. Close faucet and let tank fill again.

H. Empty storage tank one more time. System is now ready for use.

Precautions

Warning

- For use with potable water only.
- Do not use water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after 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 filters are installed in correct order or the system will not operate normally and will void your warranty.
- If the system is not functioning normally, close the Three-way Ball Valve and open the faucet to empty the system.

NOTE:

- 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.
- Contact Warranty Department for assistance at (833)-787-5001.

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.

Troubleshooting pt 2

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.

Troubleshooting pt 3

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.

Specifications

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 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)

Warranty Card

Dear Customer:

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 below 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: _____

Official Website: <https://www.hydrovos.com>

SCAN QR CODE TO
REGISTER PRODUCT



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

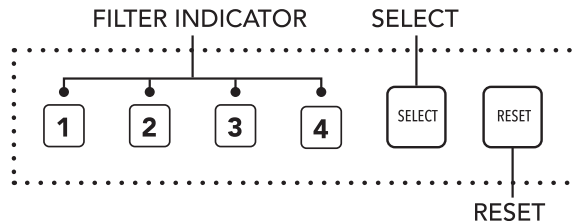
i Recommended intervals are estimated. Actual service life may differ due to variation in regional water quality, water temperature, usage and other factors.

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 MODES	DISPLAY DESCRIPTION
	OFF	Normal operation
	FLASHING	Filter has reached end of life. System emits audible beep for 1 second every minute until filter indicator is reset
	ALL 4 LIGHTS FLASHING	Low Battery

BUTTON	NAME	DECRPTION
	SELECT	Use SELECT button to cycle to corresponding filter which should be reset. Upon selection, indicator light will flash repeatedly. Next, press RESET button to reset expired filter.
	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 Taiwan | Rev 04/23 | 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: V5 20230427