Hi Seoul

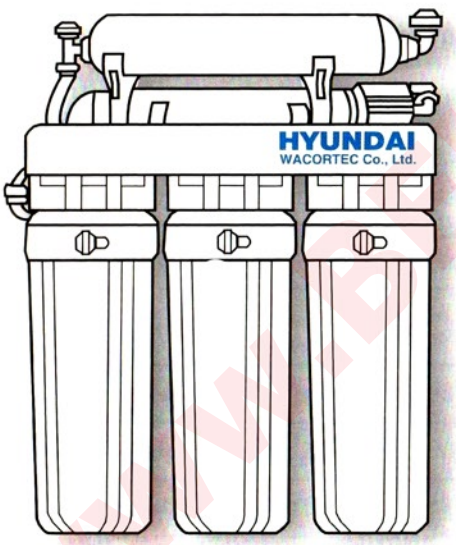
HYUNDAI
WACORTEC Co., Ltd.

The Excellent Company
Brand of Seoul

REVERSE OSMOSIS SYSTEM

USER MANUAL

HR-800(M)



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Thank you very much for selecting HYUNDAI wacor Tec.Co.,Ltd. In order to bring the best use of your system, please read the user's manual carefully before installation and follow the regulations.

HYUNDAI WACORTEC

made in korea

Introduction of HR-800(M)

HR-800(M)

Saving Space
In compliance with the new RO technology, HR-800(M) is designed for places where feed water has very low water pressure (under 45psi), or where source water contains higher than normal amount of dissolved solids.

Benefits
It uses high quality booster pump that can provide 100~120 psi water pressure to pass through the membrane even with areas under low water pressure.
The booster pump improves the TDS (Total Dissolved Solids) rejection. It is capable to remove over 90~95% of TDS, 99% of all organics and 99% of all bacteria. HR-800(M) meets all different water quality needs.

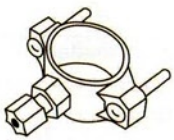
Recommended Operating Regulation of RO Membrane

1. Need enough flushing after installation and changing filters.
2. It takes 1 week to get the correct valve of TDS (after stabilizing RO membrane)
3. Rate of removal and the volume of treated water depends on water temperature, water pressure, condition of raw water and etc.
4. Product Specifications for RO Membrane.

Model Name	Permeate Flow Rate (GPD)	Applied Pressure Psig(bar)	Stabilized Salt Rejestion(%)	Minimum Salt Rejestion(%)	Remarks
50 GPD	50	60(4.1)	98	95	Dry type elements
75 GPD	75	60(4.1)	98	95	Dry type elements
100 GPD	100	80(5.5)	98	95	Dry type elements
150 GPD	150	80(5.5)	98	95	Dry type elements

1. Permeate flow and salt rejection based on the following test conditions : 250 ppm(NaCl) softened tap water, 77°F(25℃), 15% recovery, PH 7.5 and the specified applied pressure.
2. Permeate flows for individual elements may vay ±20%
3. For the purpose of improvement, specifications may be updated periodically.
4. This Membrane is Tested and Certified by NSF International against NSF/ANSI Standard 58 for material requirements only.

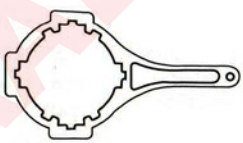
Components



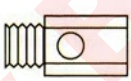
Drain Saddle

3.2G Water Storage Tank

1/4 inch tubing for system connection

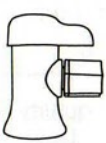


Housing Wrench



Water Supply Connector

Delivery-Valve

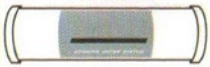
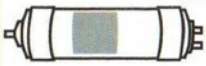
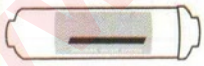


Tank Ball Valve

Faucet

Fitting Opener

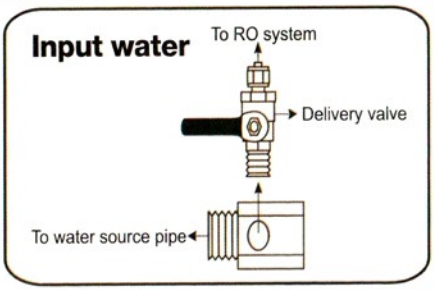
Installed Filters

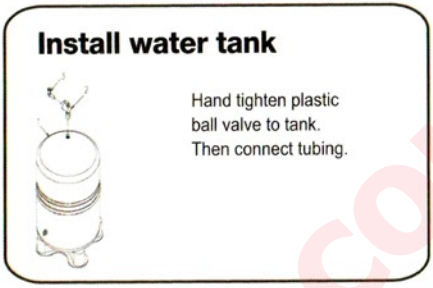
Cartridge Filter	Filter Description	Service Life (nomal type)
Stage 1 **5 Micron Sediment Filter** 	This 5 micron sediment filter is made of 100% pure polyproplylene fibers. High capacity filter removes dusts, particles and rests.	3 months
Stage 2 **Pre-Carbon Filter** 	The carbon filter that uses activated carbons utilizing chemical absorption eliminates the generated chlorine during the process of treatment for the city water and also other organic compounds and odors to make the city water to be just a natural water.	6 months
stage 3 **Carbon Block Filter** 	This carbon block filter is composed of high-performance carbon that removes free chlorine, odor, organic contaminants, pesticides and chemicals that contribute to taste and odor.	9 months
stage 4 **RO Membrane** 	R/O Membrane Filter eliminates all pollutants such as heavy metals, virus, bacteria and organic chemicals through stomata with the size of 0.0001 μm, which is 1/1,000,000 of the thickness of human hair. R/O Membrane separates organic chemicals better than inorganic chemicals and electrolytes better than non-electrolytes. R/O Membrane can eliminate not only the substances of particle nature but also the substances of ionic nature, the particle size of which is very small.	12~18 months
stage 5 **Post Carbon Filter** 	This post carbon filter is designed to improve taste. It removes any residual impurities and odors from the tank and provides a finer conditioning of pure water.	9 months

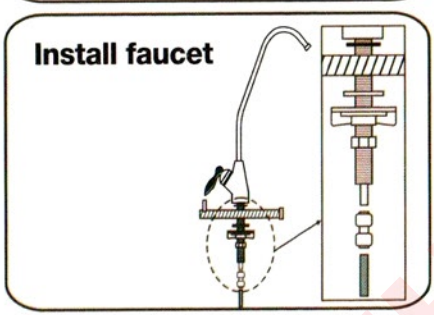
* There are several analysis specifications for water quality. But Normal Type is generally used once TDS is under 200ppm and it is necessary to add Pre-Sediment filter where TDS is 200~400ppm as optional type.

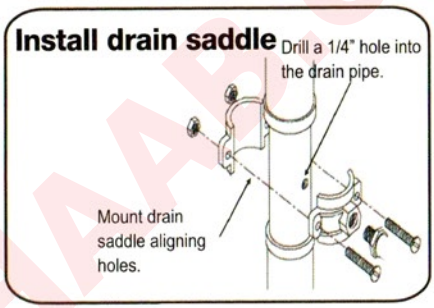
* Filtering System and Service Life should be adjusted according to Raw water conditions. And Service Life depends on Raw water conditions.

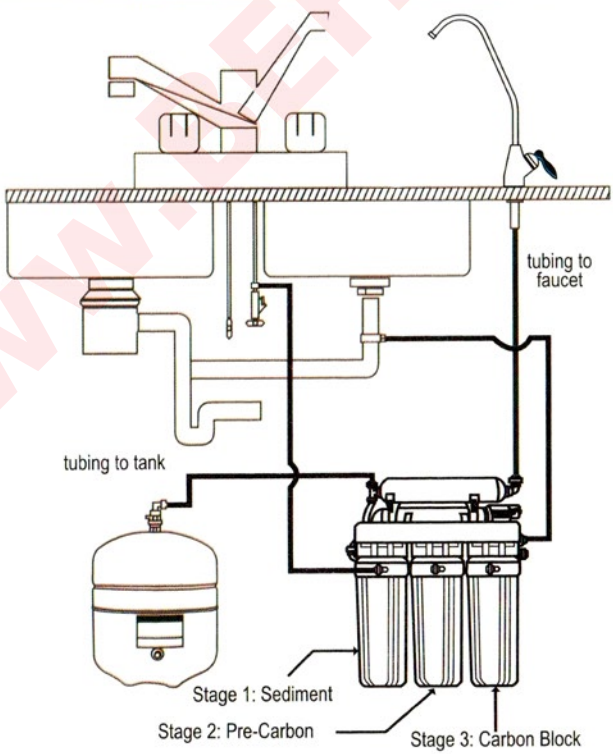
Installation Diagram



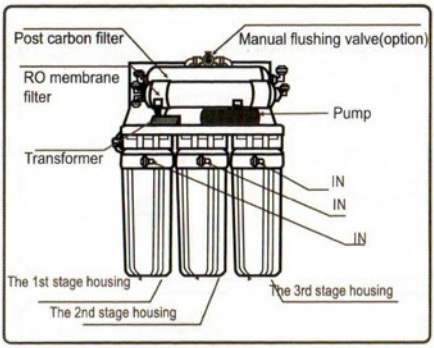


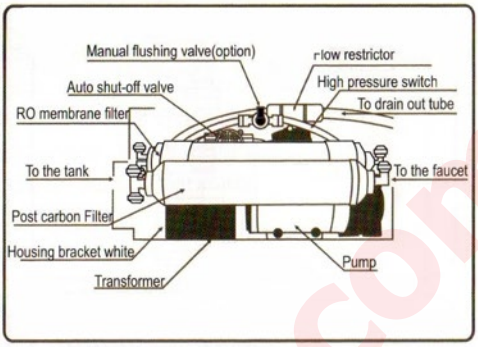




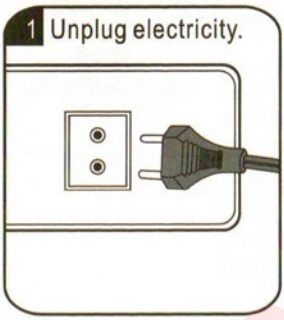


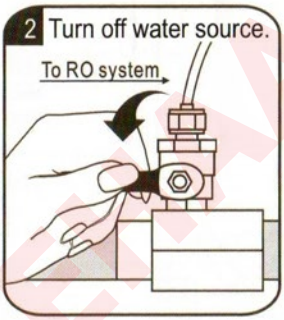
Each part of the System

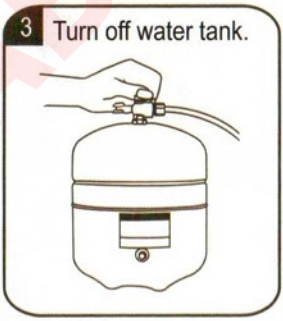


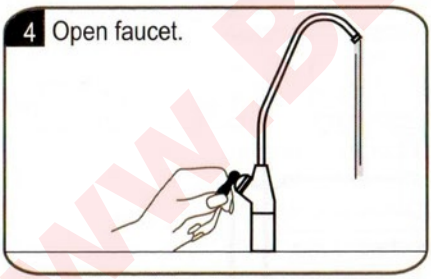


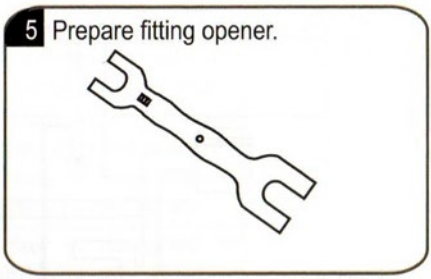
How to Change RO Membrane

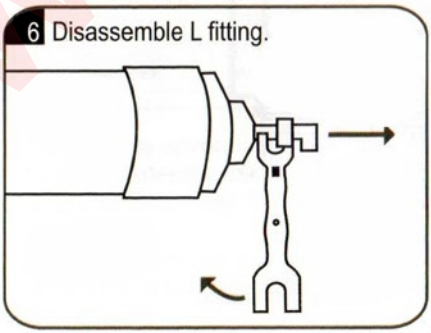


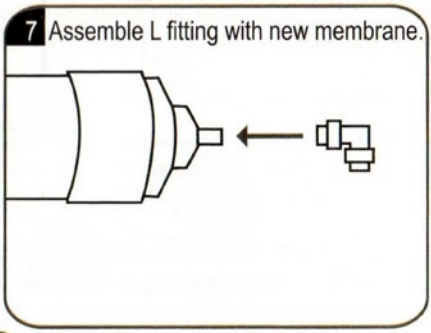






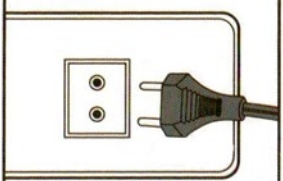




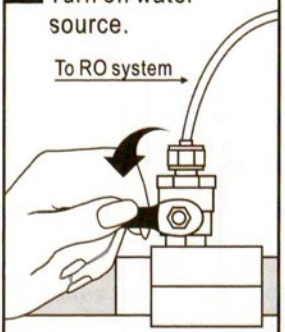


How to Change Cartridge Filters

1 Unplug electricity.

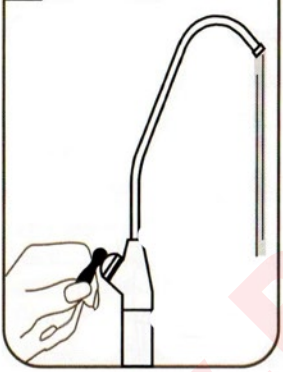


2 Turn off water source.



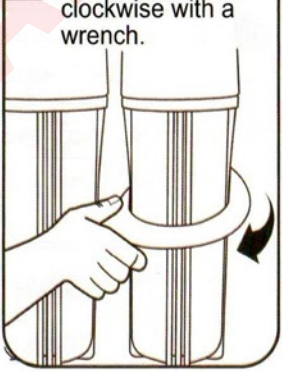
3 Turn off water tank.

4 Open faucet.

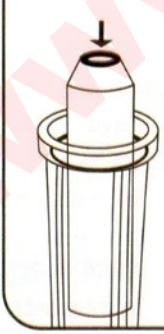


5 Prepare a housing wrench.

6 Open housings clockwise with a wrench.

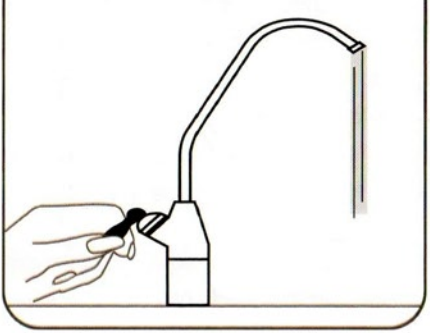


7 Put the replacement filters in the housings and double O' ring.

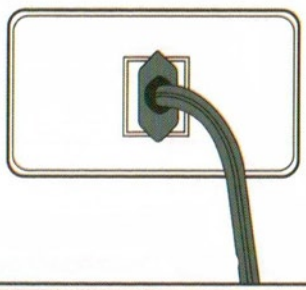


Be sure put O-ring on the inside groove and then tighten the leakage.

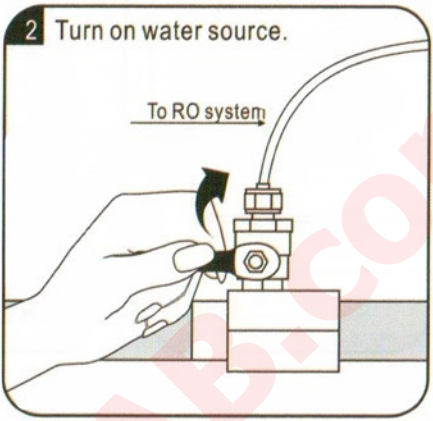
8 Drain out 1 Gallon of water to purify replacement filters.



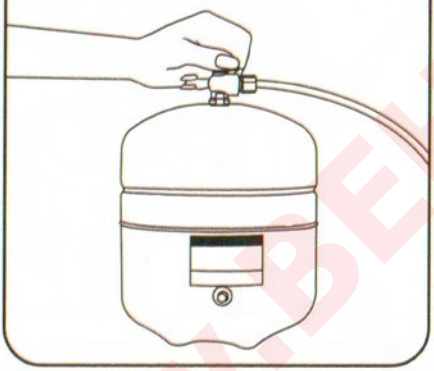
1 Plug in electricity.



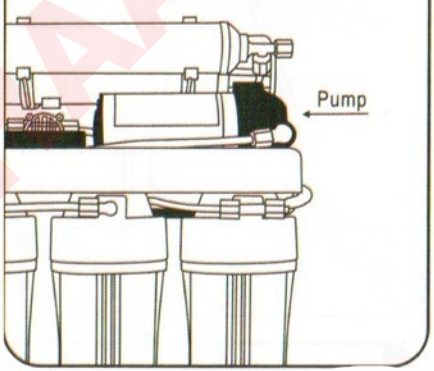
2 Turn on water source.



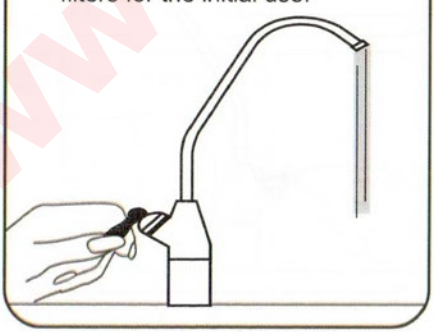
3 Valve on water tank.



4 Make pump to funtion.



5 Let the water run for at least 30 minutes. This flushes the carbon filters for the initial use.



FAQ

Q: What do factors affect the quantity and the quality of the water production?

There are four major variables to consider :

1. Pressure - The ideal water pressure is 60~80 psi for the better water capacity and quality.
2. The ideal water temperature for RO is 25℃. In case under 25℃, it will cause the reduction of water capacity to half. The maximum recommended water temperature is 45℃.
3. TDS - In case of a high level of TDS such as the higher amount of dissolved contaminants in water, additional water pressure is necessary to obtain the required water.
4. Membrane - Different membranes have different characteristics. Some membranes produce more treated water than others; some has better capabilities ofcontaminant rejection; some has greater resistance to chemical abrasion for longer life. HYUNDAI Wacortec system includes the Thin Film Composite (TFC). Membranes combine the best of these characteristics and they are considered the finest membrane in the world.

Q: Can the HYUNDAI Wacortec system be connected to an extra faucet?

It only takes a 1/4" tee and tubing to run the water to a refrigerator or an extra faucet. Some families run HYUNDAI Wacortec system to all of their bathrooms.

Q: What taste is the HYUNDAI Wacortec series for drinking water?

The taste of the HYUNDAI Wacortec water depends on the amount of contaminants in the tap water originally. If 90~95% of dissolved minerals and chemicals are removed, RO water may taste like distilled water (no minerals), bottled water (low minerals) or natural spring water (moderate mineral content).

Q: How will the water of HYUNDAI Wacortec series affect the mixed beverages?

It allows the natural taste of your beverages to come through because RO removes invisible contaminants that mask flavor. You will be able to use less coffee and still get the full flavor. Concentrated beverages like orange juice will taste tangier. You will probably be drinking a lot more water as well, since many people drink soda, Kool-Aid, concentrated juices, and beer as an alternative to bad-tasting tap water. Also, HYUNDAI Wacortec eliminates most of the lime build up on drip coffee makers, preventing the need for frequent cleaning. No longer you will find the white scum on the inside of pans after boiling water.

Q: How much water does the HYUNDAI Wacortec system produce?

Under ideal conditions, the TFC membrane is rated at 100 gallons of production per day (100gpd at 80 psi, 150 gpd at 80 psi). Under the average conditions, the consumer can expect 100-150 GPD.

Maintenance for filters List

Filters / Date	Stage1 **5 Micron Sediment Filter**	Stage 2 **Pre-Carbon Filter**	Stage 3 **Carbon Block Filter**	Stage 4 **RO Membrane**	Stage 5 **Post Carbon Filter**

Type of product			
Date of purchase			
Name		Tel	
Address			

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