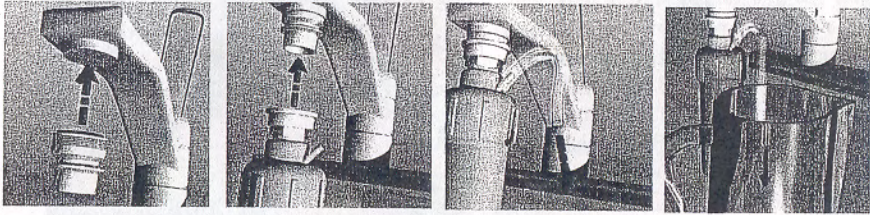


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Faucet Mounted Reverse Osmosis Water System Owner's Manual and Installation Guide



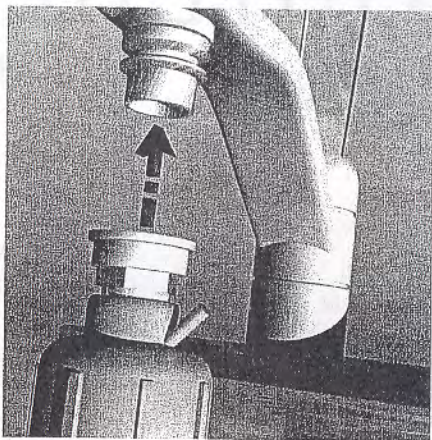
Nimbus
WATER SYSTEMS

WATERMAKER

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Congratulations on your purchase of a WaterMaker Mini by Nimbus Water Systems!

The WaterMaker Mini by Nimbus Water Systems produces high quality, reverse osmosis water simply and easily. No heavy bottles to lift, no trips to the store, no permanent plumbing connections required. Just connect it to your faucet and begin making sparkling fresh drinking water right away.



Reverse Osmosis Makes the Difference!

The patented WaterMaker Mini is the only reverse osmosis system available that attaches directly to the kitchen faucet. The reverse osmosis membrane in the Water Maker Mini removes up to 93% of dissolved solids, 99.97% of the microbiological contaminants Giardia and Cryptosporidium, and 99.29% of arsenic and lead. And, unlike simple carbon filter units, these impurities are continually flushed out of the system. With the WaterMaker Mini, your drinking water will taste better and smell fresher.* Please see the Performance Data sheet and Arsenic Facts section, in this manual, for an explanation of reduction performance.

*Better taste and fresher smell not tested or certified by NSF International.

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system. The following instructions outline a typical installation. Consult local plumbing codes and building regulations as they may pose different or additional requirements for the installation. The installer is responsible for ensuring that the installation is in compliance with all applicable state and local regulations.

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Installation

Step 1: Remove the aerator from the kitchen faucet.

Step 2: Install the aerator furnished with your unit. See Fig. 1.

Step 3: Remove and discard the protective cap. While holding down the white lock-ring on the unit, place the top over the end of the new aerator. Release the lock-ring. The unit will clamp into place. See Fig. 2. A slight downward tug on the entire assembly will confirm the connection.

Step 4: Remove the small protective cap from the stainless steel tube near the top of the unit and attach the plastic tubing as shown in Fig. 3. Fresh water will drip from this tube. Collect it by directing the tube into a pitcher or other container. Place the container in the sink to catch any overflow. Fig 4.

Operation

Slowly turn on the cold water. Tap water will circulate through the unit. Concentrated salts and impurities exit in a steady stream from the small outlet at the bottom of the unit. Allow this water to go to the drain. For the WaterMaker Mini to work properly, water should be produced in 0.5 gallon (2 liter) volumes or more.

Storage

Turn off the cold water. Allow the unit to drain for 30 seconds. Depress the white lock-ring and lower the unit away from the faucet. Place the unit in a plastic zipper-lock bag and store it in the refrigerator until next use. Do not allow the unit to freeze.

Troubleshooting

Normal fresh water flow is a drip process. Normal waste water flow is a steady stream. Both may be impaired by a high volume of particulate matter in your tap water. If either flow stops, particulate matter may be the cause. Return to the factory for investigation/repair.

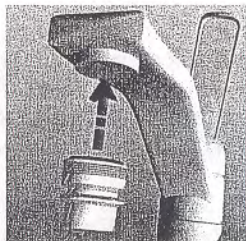


Fig. 1

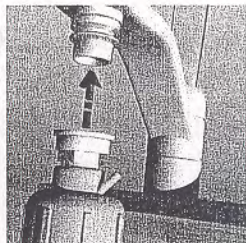


Fig. 2

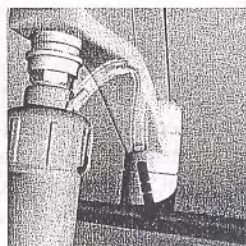


Fig. 3

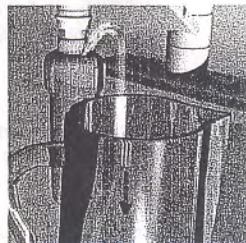


Fig. 4

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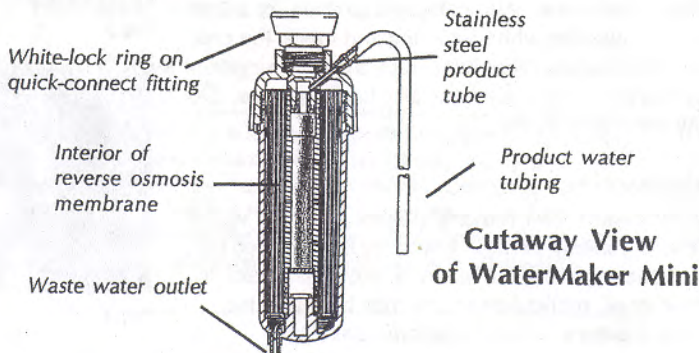
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If your unit develops a leak, check the following:

1. If the unit leaks between the replacement aerator and the quick-connect locking ring, a poor seal may be the cause. Lubricate the circular black ring in the quick-connect portion of the unit with a very small amount of petroleum jelly.
2. If a leak occurs between the quick-connect and the cap at the top of the plastic pressure vessel, first check to see that the mesh screen located in the cap is properly seated, then hand-tighten the cap and pressure vessel.

Important Product Information

1. **Use cool water only.** Hot water may damage the membrane in this unit.
2. **First Use - Allow the unit to run for 4 hours before collecting any drinking water.** This will allow carbon dust and residue from the sanitizing agent to be rinsed from the unit.
3. **Store the WaterMaker Mini in the refrigerator.** Do not allow the unit to freeze.
4. This reverse osmosis system contains a replaceable treatment component critical for effective reduction of total dissolved solids. The product water shall be tested periodically to verify that the system is performing satisfactorily. With normal use and care, the membrane in this unit will last one year. In order to determine when your unit requires maintenance, Nimbus recommends testing the product water every six months. A water quality testing kit has been included. Additional kits and replacement parts are available from Nimbus Water Systems. Please see Parts and Accessories Order in this manual.





Parts and Accessories Order Form

You may order replacement parts and accessories by telephone, fax, or mail. Please allow 2-4 weeks for delivery. Credit card orders are not charged until shipped.



Warranty

The Manufacturers Limited Warranty extends to the original purchaser of the system. This warranty covers all parts and factory labor needed to repair any supplied item that proves to be defective in material, workmanship or factory preparation. The above-mentioned warranty applies for four calendar years from date of purchase. These defective items are subject to the following exclusions: membranes, filters, O-rings, and all other parts or components that require regular replacement as a result of ordinary usage.

Disclaimers This Warranty applies only if the system is installed and used in compliance with the instructions enclosed with the system.

The Warranty does not cover any non-WaterMaker Mini parts. This Warranty does not cover the costs of repairs or adjustments to the unit that may be needed because of the use of improper parts, equipment or materials. This Warranty does not cover repairs required due to use of non-WaterMaker Mini parts, unauthorized alterations of the unit, or failure of a unit caused by such alterations or by unauthorized repairs.

The Warranty does not cover malfunctions of the unit due to tampering, misuse, alteration, lack of regular maintenance, misapplication, fouling due to hydrogen sulfide or iron, scaling from excessive hardness, or excessive membrane hydrolysis due to chlorine levels in excess of 1.0 mg/L. In addition, damage to the unit due to fire, accident, negligence, act of God, or events beyond the control of the manufacturer are not covered by this warranty.

Incidental and Consequential Damages The manufacturer does not assume responsibility for payment of incidental and consequential damages as a result of the failure of this unit to comply with express or implied warranties, such as lost time, inconvenience, damage to personal property, loss of revenue, commercial losses, postage, travel, telephone expenditures, or other losses of this nature. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion may not apply to you.

Owner's Warranty Responsibilities Under the provisions of the Warranty, the owner is expected to schedule maintenance, as described in this Manual. Neglect, improper maintenance, abuse, or unapproved modifications may invalidate the Warranty. Should your unit develop a defect or otherwise fail to perform in accordance with this warranty, you should contact Nimbus Water Systems customer service.

Implied Warranties The implied at-law warranties of merchantability and fitness for a particular purpose shall terminate on the date one year after the date of purchase. Note: some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

Other Rights This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Buyer:			Seller:		
_____			_____		
Name			Name		
_____			_____		
Address			Address		
_____			_____		
City	State	Zip	City	State	Zip
_____			_____		
Signature			Signature		
_____			_____		
Date			Date		

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Performance Data Sheet

System Specifications

Daily production rate	37.85 L/d (10 gpd) ¹
Post filter	Activated carbon
Unit dimensions	8.5"L x 4.5"D (21.59 cm x 11cm)
Unit weight (dry)	11 oz. (0.34kg)
Efficiency / Recovery	8.8 / 18% ²

Operating Parameters

Feed water	Potable water ³
Minimum feed pressure	40 psi (275 kPa)
Maximum feed pressure	100 psi (690 kPa)
Minimum feed temp.	32°F (0°C)
Maximum feed temp	100°F (38°C)
Maximum TDS	1,000 mg/L
Chlorine	1.0 mg/L max.

¹ System performance under standard test conditions. Based on membrane performance on a 750 mg/L NaCl solution after 24 hours at a feed pressure of 50 psi (448 kPa), 77°F (25°C), and a pH of 7.5. Performance may vary \pm 10%.

²Efficiency rating means the percentage of the influent water to the system that is available to the user as reverse osmosis treated water under operating conditions that approximate typical daily usage. Recovery rating means the percentage of the influent water to the membrane portion of the system that is available to the user as reverse osmosis treated water when the system is operated without a storage tank or when the storage tank is bypassed.

³The feed water must be free of potential membrane foulants such as Iron, Hydrogen Sulfide and Manganese. Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

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Performance Data Sheet (continued)

Contaminant Reduction

This system has been tested according to NSF/ANSI 58 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 58. This reverse osmosis system contains a replaceable treatment component critical for effective reduction of total dissolved solids. The product water shall be tested periodically to verify that the system is performing properly. A water quality testing kit has been included. Additional kits and replacement parts are available from Nimbus Water Systems.



	NSF/ANSI 58 Requirements		WaterMaker Results	
	Influent Challenge Concentration mg/L	Maximum Permissible Product Water Concentration mg/L	Average System Effluent Concentration mg/L	Average Percent Reduction
Total dissolved solids ¹	750 ± 40	187	27	93.0
Cysts ²	50,000	-	4.9	99.97
Arsenic (Pentavalent) ³	0.30 ± 10%	0.025	0.002	99.29
Lead	0.15 ± 10%	0.010	0.001	99.29

¹At 50 psi, NTU ≤ 1, pH 7.5 ± 0.5 and a temperature of 77°F ± 2°F (25°C ± 1°C). ²Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts. ³This system has been tested for the treatment of water containing pentavalent arsenic (also known as As(V), As(+5), or arsenates) at concentrations of 0.050 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic. Please see the Arsenic Facts section of the Performance Data sheet for further information.



Arsenic Fact Sheet

Arsenic (abbreviated AS) is a naturally occurring contaminant found in many ground waters. Arsenic in water has no color, taste or odor. It must be measured by a lab test. Public water utilities must have their water tested for arsenic. You can get the results from your own water utility. If you have your own well, you can have the water tested. The local health department or the state environmental health agency can provide a list of certified labs. The cost is typically \$15 to \$30. Information about arsenic in water can be found on the Internet at the US Environmental Protection Agency website: www.epa.gov/safewater/arsenic.html.

There are two forms of arsenic: pentavalent arsenic (also called As(V), As(+5), and arsenate) and trivalent arsenic (also called As(III), As(+3), and arsenite). In well water, arsenic may be pentavalent, trivalent, or a combination of both. Special sampling procedures are needed for a lab to determine what type and how much of each type if arsenic is in the water. Check with the labs in your area to see if they can provide this type of service.

Reverse osmosis (RO) water treatment systems do not remove trivalent arsenic from water very well. RO systems are very effective at removing pentavalent arsenic. A free chlorine residual will rapidly convert trivalent arsenic to pentavalent arsenic. Other water treatment chemicals such as ozone and potassium permanganate will also change trivalent arsenic to pentavalent arsenic. A combined chlorine residual (also called chloramine) may not convert all the trivalent arsenic. If you get your water from a public water utility, contact the utility to find out if free chlorine or combined chlorine is used in the water system.

The WaterMaker Mini system is designed to remove pentavalent arsenic. It will not convert trivalent arsenic to pentavalent arsenic. The system was tested in a lab. Under those conditions, the system reduced 0.30 mg/L (ppm) pentavalent arsenic to 0.010 mg/L (ppm) (the USEPA standard for drinking water) or less. The performance of the system may be different at your installation. Have the treated water tested for arsenic to check if the system is working properly.

The RO component of the WaterMaker Mini must be replaced yearly to ensure the system will continue to remove pentavalent arsenic. The component identification and location where you can purchase this component are listed in this installation manual.

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Maintenance Schedule

The Water Maker Mini must be checked on a regular basis to maintain efficiency and to safeguard water quality. The chart below gives a general replacement timetable. For more accurate membrane filter replacement intervals, the system should be tested for TDS every six months. A water quality test kit is included with system. Additional test kits and replacement parts are available from Nimbus Water Systems or authorized Nimbus dealers. Please see the owners manual for general operation and maintenance requirements.

Component	Interval	Part #	Cost ¹	¹ Estimated replacement cost. Cost may vary. Shipping & handling charges not included.
Membrane Element	12 months	104467	\$49.95	
Carbon Post-Filter	3 months	104127	\$30.00	

