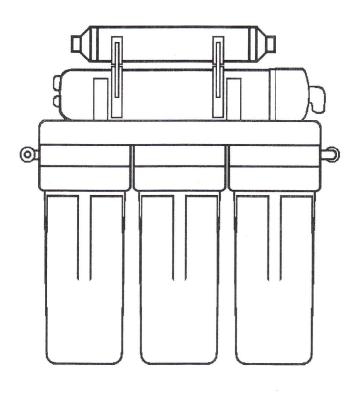


# INSTALLATION AND OPERATING INSTRUCTIONS

## 5-STAGE DRINKING WATER SYSTEM



MODEL:

PW-RO4L



CUNO WATER TREATMENT 12628 U.S. 33 North Churubusco, IN 46723 Ph: (260) 693-2141 Fax: (260) 693-3950

IN270(05-092)

Congratulations on your purchase of a Purwater Drinking Water System. This system will reduce the concentration of many dissolved solids (i.e., Sodium, Calcium, Chloride, etc.) in your drinking water.

When properly installed on a SOFT, IRON-FREE water supply, this system will provide years of trouble-free service with only periodic maintenance.

## READ THE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING THE SYSTEM.

*IMPORTANT:* This system should NOT be used to make non-potable water safe to drink. It should be installed only on potable water supplies.

#### DESCRIPTION AND OPERATION OF THE SYSTEM:

The Purwater Drinking Water System consists of five major components:

- (1) The SYSTEM ASSEMBLY which contains the Membrane Module and pre- and post-filters.
- (2) The FAUCET which can be conveniently mounted on the sink next to your everyday tap or on the counter top adjacent to the sink.
- (3) The PRODUCT WATER STORAGE TANK which stores the product water until you are ready to use it.
- (4) The DRAIN LINE AIR-GAP built into the faucet, prevents any possibility of back-siphoning of drain water into the drinking water system and may be required by local plumbing codes.

(5) The AUTOMATIC SHUT-OFF, which terminates flow to drain when Product Water Storage Tank is full

The membrane is a Thin-Film Composite (TFC). This system includes an activated carbon pre-filter which allows it to be used on both chlorinated and non-chlorinated water supplies with a pH between 3 and 11 and a TDS of less than 1800 ppm. If the system is installed on chlorinated water, the activated carbon pre-filter should be changed approximately once per year, depending on incoming water quality. Failure to regularly change the pre-filter, may result in damage to the membrane.

#### **FEED WATER:**

The main contaminants (and recommended limits) which can adversely affect the life and performance of this drinking water system are shown below:

Hardness < 1.0 gpg Iron (Fe) < 0.1 ppm Managanese (Mn) < 0.05 ppm

There are other water characteristics that pertain to the quality of the feed water which will affect the performance of the system; your dealer can determine their affects prior to installing a Purwater Drinking Water System and suggest any beneficial pretreatment.

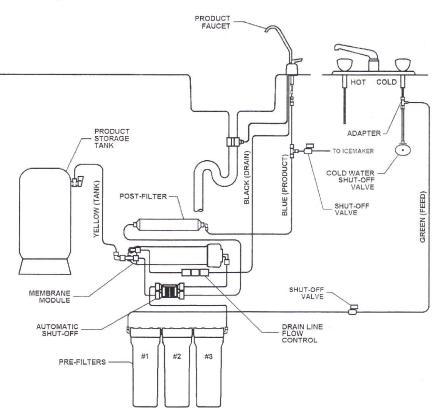


Figure 1. TUBING CONNECTIONS

#### INSTALLATION:

Water which has been treated with a reverse osmosis system can be aggressive, therefore consider this when choosing the material of construction of the treated water distribution lines.

- (1) Figure 1 shows the tubing connections necessary.
- (2) The system housing can be mounted on wall or side of cabinet using appropriate fasteners.
- (3) Faucet Mounting Instructions:

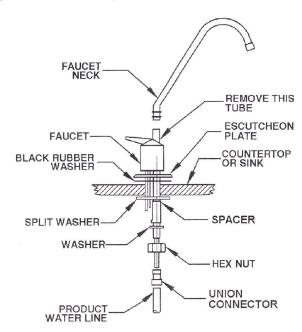


Figure 2. AIR-GAP FAUCET

- a. Drill 7/8" hole in sink or counter top, using appropriate tools, or use pre-existing hole, if available.
- b. Remove short piece of tubing from top of faucet and insert faucet neck into opening.
- c. Slide, over threaded faucet stem and product water tubing, the escutcheon plate, followed by the black rubber washer.
- d. Slide threaded faucet stem and product water tubing through hole in counter top.
- e. Under sink: slide on the split washer, followed by the spacer, washer and nut over product water tubing onto faucet stem.
- f. Tighten nut until faucet is firmly mounted in place. DO NOT overtighten as this may strip the threads.
- g. Connect union connector to blue poly tubing from bottom of product water faucet. Then connect 3/8" blue poly tubing from Taste-X™ post-filter to union connector on faucet.

- h. Attach 1/4" black poly tubing provided between small barbed valve stem on air-gap faucet and drain line flow control. Tubing should be cut to keep drain line as short as possible.
- (4) An adapter is included with the drinking water system and must be installed to provide feed water (Figure 3).

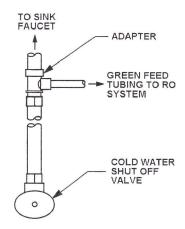


Figure 3. FEED WATER CONNECTIONS

- a. Close cold water shut off valve to sink faucet.
- b. Relieve pressure by opening sink faucet.
- Install adapter between sink faucet stem and cold water feed line.
- d. Install green feed line to drinking water system by pushing tube into adapter until it seates. Make sure tubing is fully inserted, otherwise a leak will result. CAUTION: DO NOT open cold water shut off valves until ALL drinking water system tubing connections have been completed. Cut the feed line and install the shut-off valve provided. Make sure tubing is fully inserted, failure to do so, will result in a leak.

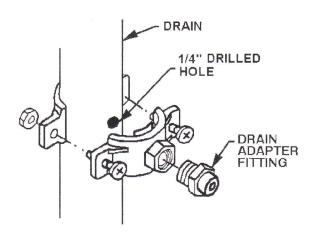


Figure 4. DRAIN ADAPTER

- (5) Drain Water Connector Mounting:
  - a. Drill 1/4" hole in sink drain as low as possible, but above the level of the trap.

NOTE: Attaching the drain line to the sink drain pipe directly below a garbage disposal may cause the drinking water system drain to become plugged resulting in a malfunction of the air-gap.

- b. Install the drain adapter fitting. (Figure 4). Hole in drain adapter must line up with hole just drilled in drain pipe.
- c. Connect 3/8" tubing (provided) to large barbed fitting valve stem on air-gap faucet. Cut and connect other end of tubing to drain adapter fitting. Length of tubing should be as short as possible to eliminate any sagging in the line.
- (6) Install shut-off valve on side of R.O. storage tank.
- (7) Attach yellow tubing to PRODUCT WATER STORAGE TANK. Fully insert tubing into shut-off valve approximately 1/2", tug on tubing to make sure tubing is installed properly.
- (8) Make sure all tubing connections have been completed and then open cold water shut off valve. Check for leaks and correct as necessary.

#### **ICE-MAKER CONNECTION:**

This system may be connected directly to an ice-maker by installing a union teeand shut-off valve (provided) anywhere in the product water line between the post-filter and the product water faucet. However, the final connection should not be made or the valve not opened until after performing the drain to waste procedure described in the "Post Installation" section below.

#### POST INSTALLATION:

We recommend that you not use the water from the drinking water system for the first 72 hours after installation and that you drain the system before retiring each night for the first three days. Be sure to close the faucet handle when the water stops flowing after 2-3 minutes. The proper functioning of the equipment should be determined, prior to using the water for consumption. (Ask the dealer how this is to be done.)

Because the system is new and has many plastic components, you may experience some taste distortion if this drain to waste procedure is not followed. You may also notice a cloudiness or fine black particles in the water during this time, this is simply fines from the Taste-X<sup>TM</sup> carbon filter and should be gone after the flushing period.

Your newly installed system can provide approximately 35-50 GPD, with 80-95+% rejection of dissolved solids, depending on your water supply pressure. Reduced quantity and quality can be expected if source water supply pressure is low.

Air may occasionally accumulate in your storage tank, causing the water you draw to appear cloudy. This cloudy or milky appearance will disappear if you let the water stand for a few minutes. This is not a sign of poor quality, it is more often a sign of lack of use. If you have this air problem, drain your tank for 2 or 3 days like you did when the system was first installed. The more you use your drinking water system, the better it will operate, therefore, find new uses for your R. O. water. Besides using it for all of your cooking and drinking needs, you may also use it to make ice cubes and water your house plants and pets. You should use at least 2 gallons daily; if not, please drain your system at least once a week, following the same procedure as when the system was installed.

The drinking water system requires little maintenace, however, periodic servicing of both the pre- and post-filters will be required. Every six (6) months replace the pre- and post-filters.

Maintenance of the R. O. membrane module is usually performed when the quality of the product water falls below the desired rejection level of dissolved solids in your water. Often the taste of the water will indicate the need for maintenance. When the taste closely resembles the regular tap water this indicates the need for service. The water may also be checked periodically by the dealer to determine when the module needs replaced.

Module replacement will generally be necessary by the 4th year of service; however, some systems may require module replacement in the 2nd or 3rd years, depending on water quality and usage habits.

#### Replacement Parts:

Model	Pre-Filter #1	Pre-Filter #2	Pre-Filter #3	Membrane	Post-Filter
PW-RO4L	MB05-S	GAC (5552803)	GAC (5552803)	TFM50EM	IL-T02-S

### DRINKING WATER SYSTEM LIMITED WARRANTY

#### WARRANTY POLICY

Cuno Water Treatment, Churubusco, Indiana warrants this Drinking Water System as stated herein:

For a period of one (1) year from date of installation, but not more than one and one half (1-1/2) years from the date of manufacture, we will repair or replace any part which we find defective because of faulty materials or workmanship. You pay only freight to our factory and local labor charges, if any.

The obligation of Cuno Water Treatment is limited to the repair or replacement of a part or parts found to be defective due to faulty materials or workmanship by our repair department. No liability is assumed or warranted for incidental or consequential damages. It is specifically understood that this warranty covers component parts only and is not a performance warranty.

In the event the drinking water system loses its effectiveness after the warranty period expires, contact your dealer.

## FILL IN THE FOLLOWING AND KEEP FOR YOUR RECORDS

Date Purchased	Model No.	Serial No.			
Name of Original Purchaser					
Address of Original Installation	n				
City		State			
Dealer Purchased From					
Dealer Address					

#### **GENERAL CONDITIONS**

Damage to any part of this system because of misuse, misapplication, neglect, alteration, acident, installation or operation contrary to our printed instructions (including iron-fouling of membrane), or damage caused by freezing, flood, fire, vacuum, or Act of God, is not covered by this warranty. Field disassembly or damage caused during the attempt thereof by anyone will void this warranty. In all such cases, regular parts and service charges will apply.

We assume no warranty liability in connection with this system other than specified herein. This warranty is in lieu of all other warranties, expressed or implied, including warranties of fitness for a particular purpose. We do not authorize any person or representative to assume for us any other obligation on the sale of this Drinking Water System.

Should a defect or malfunction occur, contact your dealer. If you are unable to contact your dealer, return the part, freight prepaid, directly to the factory (address below). Enclose with the part, a full description of the problem, with your name, full address, date purchased, model and serial number and selling dealer's name and address. We will repair or replace the part, at our option, and return it to you at no cost if our repair department determines it to be defective under the terms of this warranty.

The Drinking Water System is manufactured by Cuno Water Treatment, 12628 U. S. 33 North, Churubusco, Indiana 46723