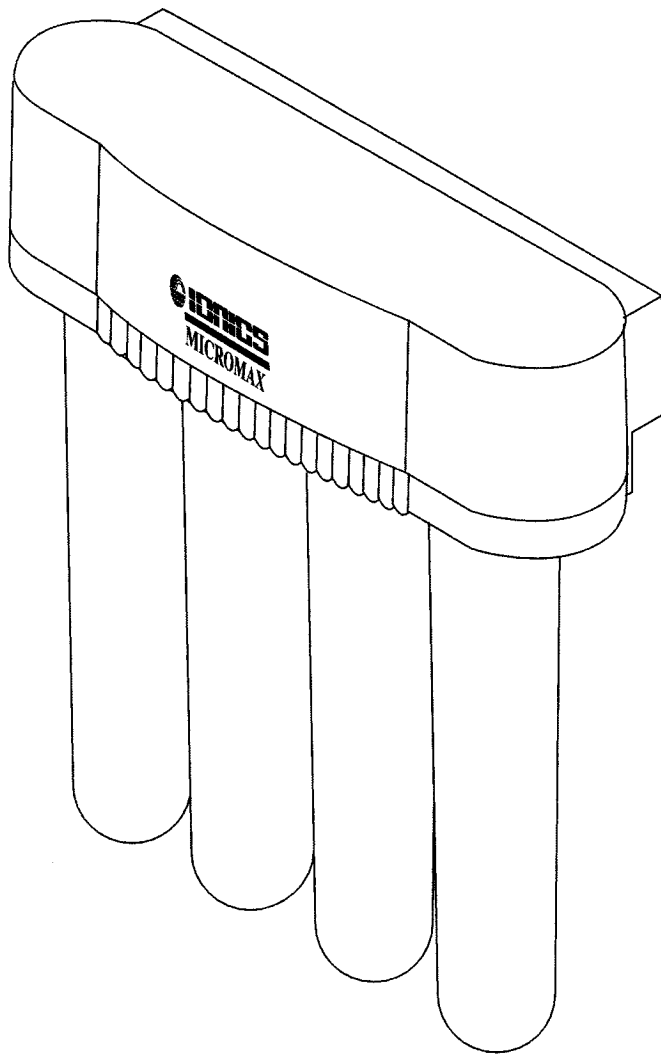


MICROMAX 6500 TFC

Owner's Manual

This manual is for the Installation, Operation, and Maintenance of the MICROMAX 6500 TFC Reverse Osmosis (RO) Drinking Water Appliance



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Installer: Leave with homeowner.

INSTR6018 1206 PRE

SAFETY INFORMATION

Read, understand and follow all safety information contained in these instructions prior to installation and use of the Micromax 6500 TFC Reverse Osmosis (RO) Drinking Water Appliance. Retain these instructions for future reference.

Intended use:

The Micromax 6500 TFC Reverse Osmosis (RO) Drinking Water Appliance is intended to connect permanently to a home plumbing system and has not been evaluated for other uses.

EXPLANATION OF SIGNAL WORD CONSEQUENCES



WARNING

Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.

CAUTION

Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.



WARNING

To reduce the risk associated with ingestion of contaminants due to use with water that is microbiologically unsafe or of unknown quality:

- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

CAUTION

To reduce the risk associated with property damage due to water leaks:

- Installation must comply with existing state or local plumbing codes;
- Protect from freezing. Drain system when room temperature drops below 40°F (4.4°C);
- Do not install system where line pressures above 100 psi (689 kPa) may occur;
- Do not use torches or other heat sources near plastic plumbing;
- Take care when using pliers or pipe wrenches to tighten plastic fittings;
- Change carbon cartridges every 6 months;
change the reverse osmosis element every 3 years.

IMPORTANT NOTES

- The system should be installed on cold water lines only.
- **Failure to install or operate your filter system in accordance with these use instructions or any other installation or use instructions accompanying this product may result in product failure and property damage, including water leakage and will void warranty.**

INTRODUCTION

This manual explains the installation, operation and maintenance of the Ionics U.S. Water Group Reverse Osmosis (RO) Drinking Water Appliances. Please read each section of this manual carefully. The specific model chosen should be appropriate for the local water conditions and the customer's needs. Check the Performance Data Sheet for the performance characteristics and the conditions of use.

The undercounter RO drinking water appliances are designed to connect permanently to a home plumbing system. To ensure that the installation conforms to your state and local plumbing codes, it is recommended that the installation be performed by a qualified installation specialist for RO drinking water appliances or a licensed plumber. Failure to install the system as instructed will **VOID** the warranty.

**Caution: The RO membrane cartridge may be shipped with a preservative solution inside.
Make sure to flush it thoroughly as directed before the first use.**

TABLE OF CONTENTS

I. Installation Instructions

A.	Determine the appliance location	3
B.	Prepare the area for installation	3
C.	Prepare the appliance for installation	4
D.	Make the faucet mounting hole.....	4
E.	Mount the faucet	5
F.	Install the feed water valve.....	6
G.	Prefill and sanitize the storage tank	6
H.	Install the drain connection.....	9
I.	Install the filtration assembly and storage tank.....	7
J.	Make the tubing connections	7
K.	Install the icemaker hookup (optional).....	7
L.	Start up the appliance	8
M.	Flush the appliance of the preservative and check the operation	8
N.	Cleanup, paperwork and customer orientation.....	8
O.	Installation troubleshooting.....	9

II. Operation & Maintenance Instructions

A.	Important water quality assurance requirements	10
B.	Replacing the filter cartridges	10
C.	Replacing the RO membrane cartridge	11
D.	Sanitizing the RO appliance.....	11
E.	Long term non-use	12



I. Installation Instructions

Failure to install or operate your filter system in accordance with these use instructions or any other installation or use instructions accompanying this product may result in product failure and property damage, including water leakage and will void warranty.

A. DETERMINE THE APPLIANCE LOCATION

The appliance can be located under a sink or in a basement depending on space availability and the customer's preference. If a basement installation is selected, additional tubing, hardware and fittings may be needed and a hole will have to be made from inside the cabinet, through the floor, to the basement. **Never** install it in an area of the home where the temperature may drop to freezing, damage to the appliance may occur.

The exact placement of the various components of the appliance will vary from installation to installation. The installer, in conjunction with the customer, must decide on where to place the faucet, tank and filtration assembly by balancing the homeowner's convenience with ease of installation and servicing. (See Fig. 1).

Considerations for an icemaker or other remote hookup should be predetermined, including routing and any additional tools, fittings, and tubing that may be required.

Installation must comply with state and local plumbing codes.

B. PREPARE THE AREA FOR INSTALLATION

To save time, it is often advised to call the customer and request that they clean under the sink prior to arrival. Otherwise, remove supplies from under the sink and stack them neatly away from the working area. Arrange a light for the work area, if necessary.

Inspect the cold water supply line and determine if any special fittings, in addition to what is included in the kit, are required.

NOTE: It is a good idea at this time to check the condition of the undercounter plumbing for any existing or potential leaks. The customer should be advised of any problem so there is no misunderstanding as to who is responsible.

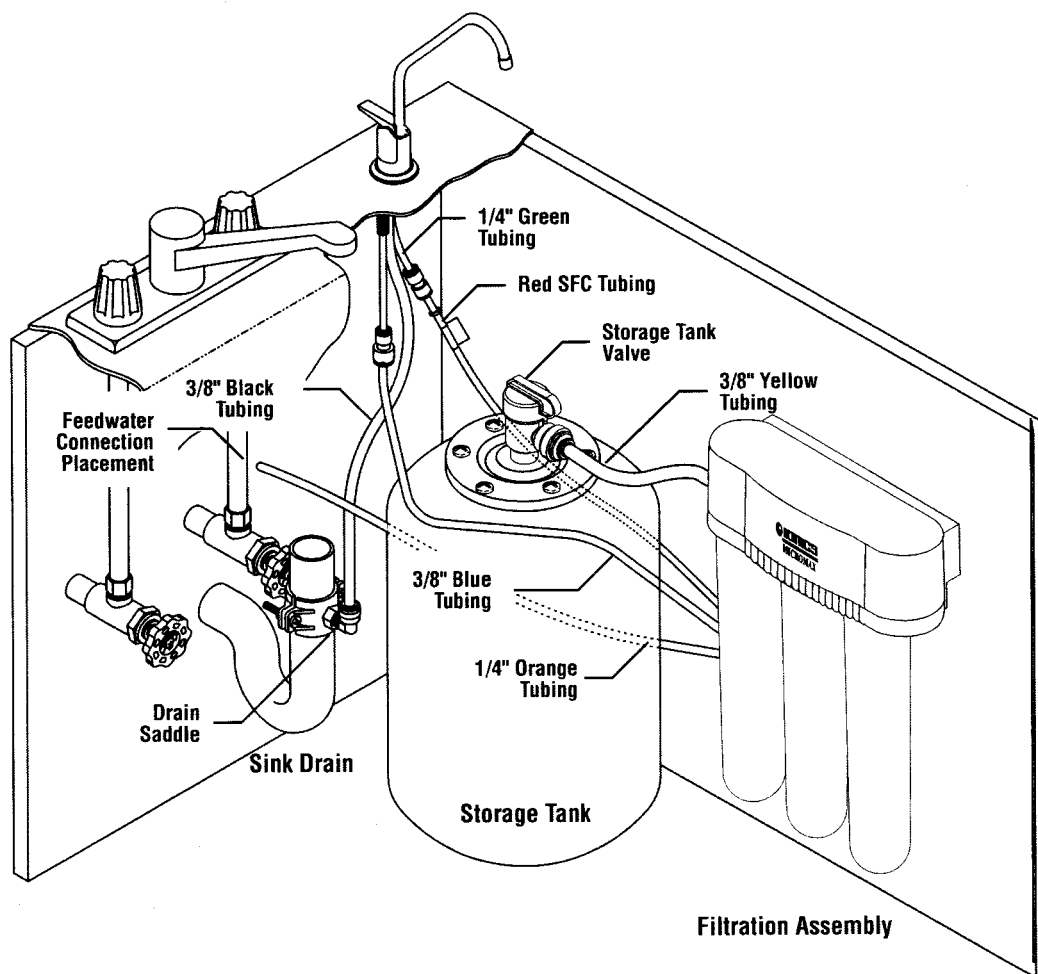


Fig. 1

C. PREPARE THE APPLIANCE FOR INSTALLATION

Open the shipping carton and remove the components. Check to see that all of the installation parts are present. They should include the filtration assembly, storage tank, faucet, installation hardware, RO membrane cartridge and tubing. Check to see that the air charge in the empty tank is approximately 7 psi (48 kPa). **Note:** Check the storage tank air pre-charge with the tank valve open. Adjust it if necessary. If the optional percent rejection monitor is selected, the probes should be installed at this time. Follow the instructions that came with the monitor. To help keep the membrane as clean as possible, the RO membrane cartridge has been shipped separately in a sealed plastic bag. Follow the steps below to install the RO membrane cartridge.

STEP 1: Cut open the sealed plastic bag and remove the RO membrane cartridge.

STEP 2: Remove the white plug from the fitting at the bottom of the cartridge by pushing in the small white collet and pulling out the plug simultaneously. (See figure 6.)

STEP 3: Remove the red plastic cap from the top of the cartridge.

STEP 4: Connect the red SFC reject tubing by inserting it into the fitting at the bottom of the RO membrane cartridge as far as it will go. Line up the cartridge ears (see figure 9), insert the cartridge and push it into the head until it is fully seated. Twist the cartridge 1/4 turn to the right to lock it into place. The final orientation should be such that the cartridge label faces toward the front and the fitting is located towards the rear.

D. MAKE THE FAUCET MOUNTING HOLE

A wide variety of RO faucet mounting situations may be encountered. The most common are stainless steel or ceramic on metal sinks. Consult your dealer for any other materials which may be encountered.

The customer should be consulted before determining the faucet location. The faucet should be positioned so that it empties into the sink and the spout swivels freely for convenience.

If the sink already has a hole provided that can accommodate the RO faucet, then no drilling is required.

NOTE: With customer's permission, sprayers can be disconnected to provide a suitable mounting hole for the RO faucet. A pipe cap or plug will be required to seal the sprayer connection.

WARNING: It is mandatory that safety glasses be worn during the sink hole drilling operations in order to prevent eye injury..

Before drilling the hole, always check underneath the sink to ensure that nothing will interfere with mounting the faucet such as reinforcing ribs, support brackets or the cabinet construction.

Stainless steel sink, air gap faucet.

Recommended tools:

- Center punch
- Variable speed drill and high speed drill bits
- Greenlee 7/8" chassis punch (alternate 9/16" may be used for a non-air gap faucet)
- Protective gloves

Procedure:

- 1) Center punch a small indent at the center of the desired faucet location.
- 2) Slowly drill the required pilot hole for the chassis punch.
- 3) Set up the chassis punch per the instructions and tighten the nut to cut the desired hole size.
- 4) Clean up all sharp edges with a file if necessary.

Porcelain/Enamel/Ceramic sink on sheet metal or cast iron base; air gap or non air gap faucet.

Recommended tools:

- Variable speed drill
- Relton 7/8" porcelain cutter tool set
- Plumber's putty

It is important to understand what is involved in this procedure. First, the glassy layer of porcelain must be penetrated through to the base metal. Second, a center disc of porcelain must be removed while protecting the surrounding porcelain against chipping or fracturing. Third, the base metal must be drilled through to complete the hole.

Procedure:

- 1) Mark the center for the 7/8" hole.
- 2) Form a shallow putty dam around the hole area and fill it with enough water to lubricate the carbide drill bit.
- 3) Carefully drill a pilot hole through the porcelain/enamel and the base metal using a carbide type pilot drill. Important: Always operate the drill with light pressure at a slow speed (300-400 rpm).
- 4) Insert the pilot tip of the spring-loaded porcelain cutter into the pilot hole.
- 5) Drill the porcelain/enamel using the spring-loaded porcelain cutter, making certain a complete ring has been cut through the porcelain/enamel to the metal base.
- 6) Change to the metal cutter. With a slow speed and light pressure, cut away the inner porcelain/enamel disc down to the base metal. Make certain that the cutter does not touch the outer rim of the cut porcelain/enamel. Continue with this bit to cut completely through the metal.

IMPORTANT: When using a porcelain cutter it is critical that it is always in a sharpened condition. Dull cutters have been known to chip sinks.

E. MOUNT THE FAUCET

Undercounter installations generally require that the faucet's built-in air gap be used. In basement installations, the built-in air gap does not have to be used if one is provided elsewhere on the drain line.

Undercounter Installation With An Air Gap Faucet (Air Gap is provided by hole 1" above faucet base):

- 1) Familiarize yourself with all of the components shown in the air gap faucet diagram. (See Fig. 2)
- 2) Remove the hardware from the threaded nipple of the faucet, except for the chrome base plate and the rubber washer. The rubber washer may be replaced with a bead of plumber's putty for a neater appearance.
- 3) Connect the 1/4" green tubing supplied in the installation kit to the smaller barb on the air gap faucet. Push it on firmly until it seats.
- 4) Connect the supplied 3/8" black tubing to the larger barb on the air gap faucet. Push it on firmly until it seats.
- 5) From above the sink counter-top, feed the air gap tubing and the threaded nipple through the faucet mounting hole and position the faucet spout over the sink.
- 6) From below the sink/countertop, install the white spacer (open side toward the air gap tubing), flat washer and hex nut onto the threaded nipple and tighten it by hand.
- 7) Back off on the hex nut just enough to slide the slotted washer (open side toward the air gap tubes) between the white spacer and the underside of the sink/countertop.
- 8) After rechecking the faucet orientation, tighten the hex nut with a 9/16" wrench until the faucet feels secure.
- 9) From above the sink, make any minor orientation corrections by turning the faucet on its flats with a padded adjustable wrench. Use care not to mar the finish.

Faucet with Air Gap

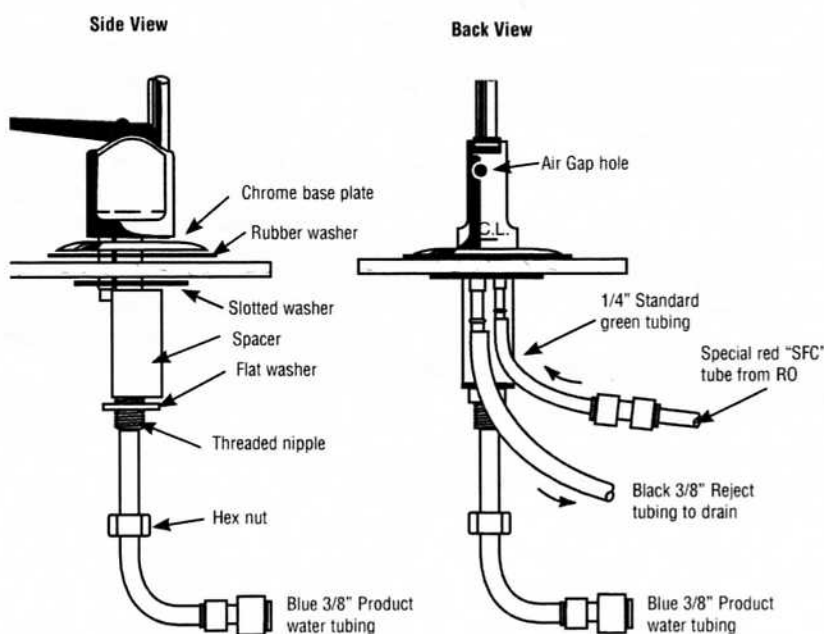


Fig. 2

