

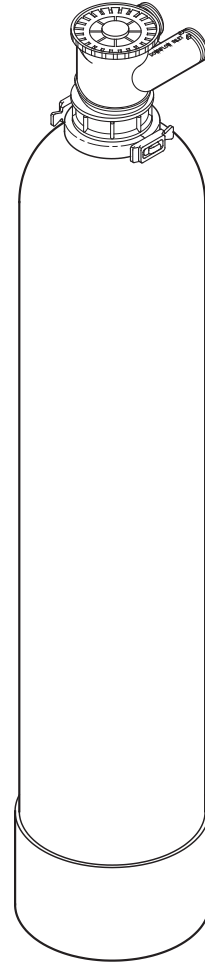
OWNER'S MANUAL

Upflow Water Neutralizer

Models UAN10 & UAN12

In/Out All Purpose Filter

Models IOAPF10 & IOAPF12



Installation

Operation

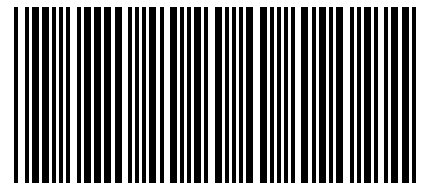
Maintenance

Repair Parts



Designed, Engineered &
Assembled in the U.S.A.

Manufactured and warranted by
Ecodyne Water Systems
1890 Woodlane Drive
Woodbury, MN 55125



7355642 (Rev. A 4/25/16)

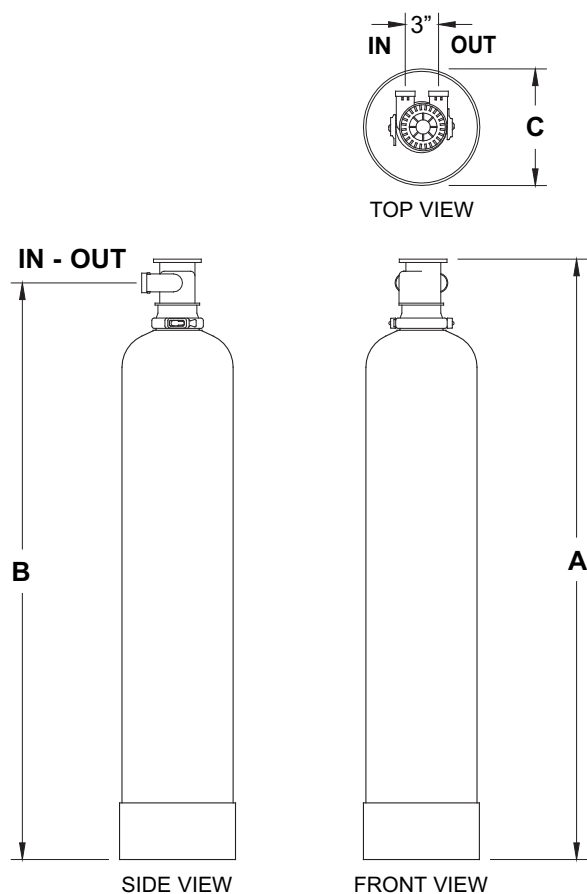
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SPECIFICATIONS				
Model	UAN10	UAN12	IOAPF10	IOAPF12
Nominal Mineral Tank Size	10" dia. x 47" tall	12" dia. x 54" tall	10" dia. x 47" tall	12" dia. x 54" tall
Amount of Neutralite Mix Media (75% Neutralite / 25% Magnesium Oxide)	100 lbs.	200 lbs.*	—	—
Amount of HDPE Pellets	3 lbs.	3 lbs.	3 lbs.	3 lbs.
Service Flow Rate	10 gpm	12 gpm	—	—
Supply Water Pressure Limits (min./max.)	20 - 125 psi			
Water Temperature Limits (min./max.)	40 - 120 °F			

*Neutralite Mix Media is shipped in four 50 lb. buckets with Model UAN12 and must be loaded into the mineral tank.



DIMENSIONS

	UAN10 IOAPF10	UAN12 IOAPF12
Nominal Mineral Tank Size	10" dia. x 47" tall	12" dia. x 54" tall
A	53-3/4"	59-1/2"
B	51-3/8"	57-1/8"
C	10-1/2"	12-1/4"

FIG. 1

Before You Start

HOW AN ACID NEUTRALIZER SYSTEM WORKS

All water, when chemically analyzed, is either acidic, neutral, or base (alkaline). Water measuring from 0 to 6.9 on the pH scale is acidic. A pH of 7 is neutral. Above 7, the water is alkaline.

Acidic water, although sometimes clear in appearance, shortens the life of iron pipe and corrodes copper and brass pipe and fittings. It causes green or blue stains on plumbing fixtures, and may etch porcelain enamel over time.

An acid neutralizer filter is used to treat water with a pH of 6.0 to 6.8. The filter tank is filled with a bed of neutralite mix media (75% neutralite / 25% magnesium oxide). As acidic water passes through the filter, some of the media dissolves to raise the pH and neutralize the acid. Because the neutralite mix media is consumed, the filter will need to be refilled from time to time. How often depends on the degree of acidity, and how much water is used. See page 6 to determine when refilling is needed.

INSPECT SHIPMENT

The parts required to install the filter system are included with the unit. Thoroughly check the system for possible shipping damage and parts loss. Remove and discard (or recycle) all packing materials.

SAFETY GUIDES

- Follow the installation instructions carefully. Failure to install the system properly voids the warranty.
- Before you begin installation, read this entire manual. Then obtain all the materials and tools you will need to make the installation.
- Check local plumbing codes. The installation must conform to them.
- Use only lead-free solder and flux for all sweat-solder connections as required by state and federal codes.
- Use care when handling the system. Do not turn upside down, drop, or set on sharp protrusions.
- Recommended maximum allowable inlet water pressure is **125 psi**. Use a pressure reducing valve if necessary.
- This system is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

WHERE TO INSTALL THE SYSTEM

- Place the system as close as possible to the pressure tank (well system) or water meter (city water).
- Connect the system to the main water supply pipe upstream of the water heater. **Do not run hot water through the system.** The temperature of water passing through the system must not be above **120°F**. Damage caused by hot water is not covered by the warranty.
- Do not install the system where freezing temperatures could occur. Damage caused by freezing is not covered by the warranty.
- Keep outside faucets on untreated water to conserve media capacity.
- Put the system in a place water damage is least likely to occur if a leak develops. The manufacturer will not repair or pay for water damage.
- If installing in an outside location, you must take the steps necessary to assure the system is as well protected from the elements, contamination, vandalism, etc., as when installed indoors.
- Avoid installing in direct sunlight. Excessive sun heat may cause distortion or other damage to non-metallic parts.

TOOLS, PIPE & FITTINGS, OTHER MATERIALS YOU WILL NEED

- Plastic inlet and outlet fittings included with the system allow water flow equivalent to 1 inch nominal pipe. To maintain full valve flow, 1" pipes to and from the system fittings are recommended. Do not reduce the pipes to less than 3/4" size.
- Use copper, brass or PEX plastic pipe and fittings.
- ALWAYS install the included bypass valve, or 3 shut-off valves. Bypass valves let you turn off water to the system for repairs if needed, but still have water available to the house pipes.

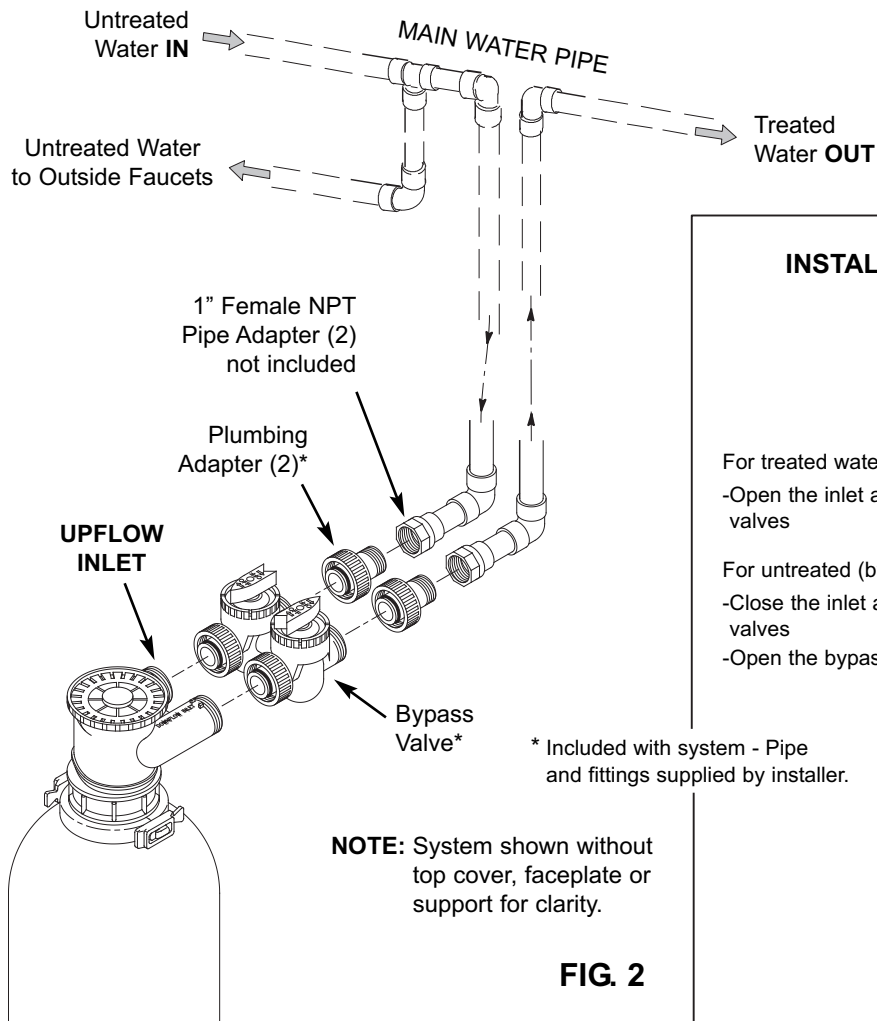
PLAN HOW YOU WILL INSTALL THE SYSTEM

You must first decide how to run in and out pipes to the system. Look at the house main water pipe at the point where you will connect the system. Is the pipe soldered copper, glued plastic, or threaded brass/galvanized? What is the pipe size?

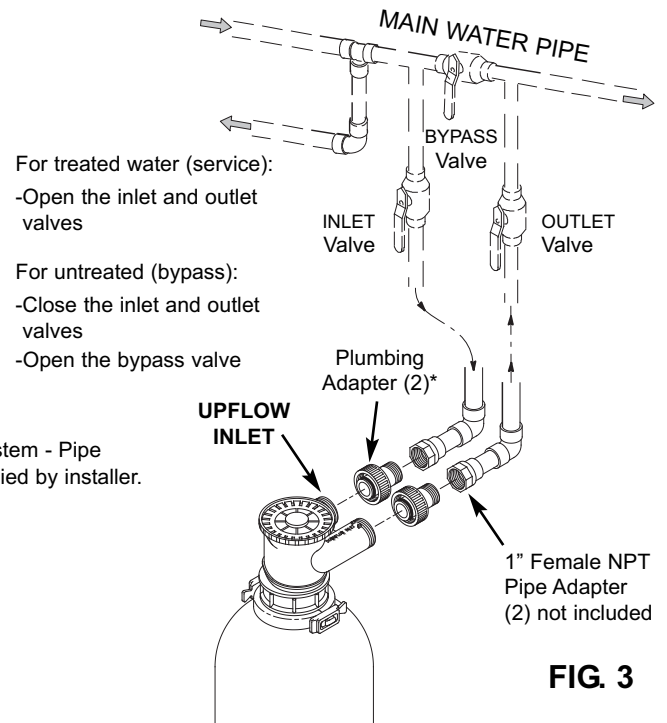
Now look at the typical installation illustrations on page 4. Use them as a guide when planning your particular installation. **Be sure to direct incoming, untreated water to the "UPFLOW INLET" port.**

Typical Installation Illustrations

INSTALLATION USING INCLUDED BYPASS VALVE

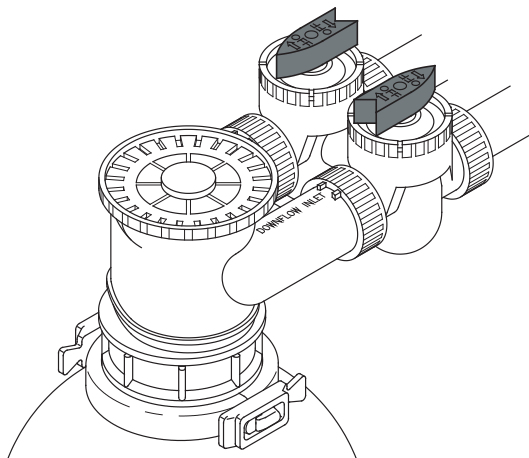


INSTALLATION USING 3-VALVE BYPASS



BYPASS VALVE OPERATION

SERVICE
(water flows through filter system and then to house plumbing)



BYPASS
(water flows to house plumbing without going through filter system)

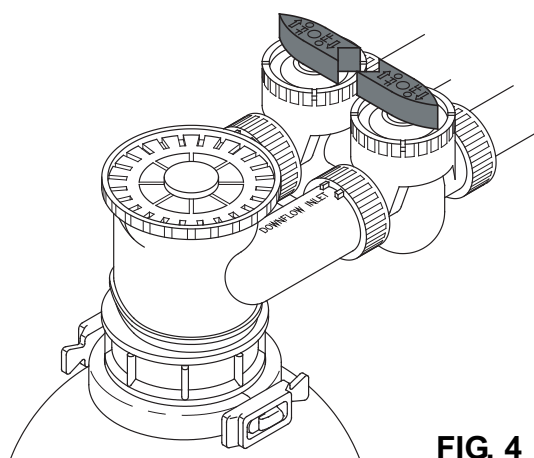


FIG. 4

Installation Instructions

1. TURN OFF WATER SUPPLY

- Close the main water supply valve near the well pump or water meter.
- Shut off the electric or fuel supply to the water heater.
- Open high and low faucets to drain all water from the house pipes.

2. INSTALL BYPASS VALVE AND/OR PLUMBING ADAPTERS:

- If installing a single bypass valve, thread the bypass valve, with lubricated o-ring seals in place, onto the head inlet and outlet ports (See Fig. 2). Tighten the collars by hand for a leak-tight seal.

- OR -

- If installing a 3-valve bypass system, thread the included plumbing adapters, with lubricated o-ring seals in place, onto the head inlet and outlet ports (See Fig. 3) Tighten the collars by hand for a leak-tight seal.

3. COMPLETE PLUMBING TO AND FROM THE SYSTEM

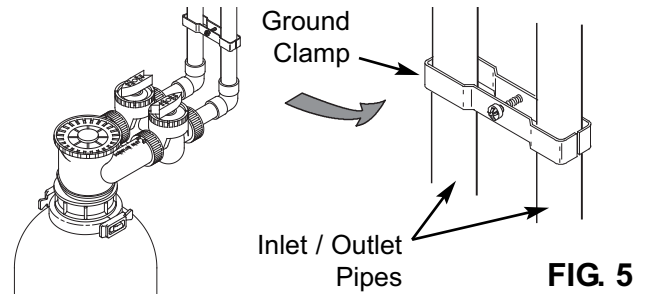
Using the "Typical Installation Illustrations" on page 4 as a guide, observe all of the following cautions while you connect inlet and outlet plumbing:

- Be sure incoming, **untreated water** is directed to the **UPFLOW INLET** port. It may be necessary to plumb a crossover if the water pipe's flow is from right to left.
- Be sure to install bypass valve(s).
- If making a soldered copper installation, do all sweat soldering before connecting pipes to the included plastic adapters. Torch heat will damage plastic parts.
- Use pipe joint compound on all external pipe threads.
- When turning threaded pipe fittings onto plastic fittings, use care not to cross-thread.
- Support inlet and outlet plumbing in some manner (use pipe hangers) to keep the weight off of the head adapters.

4. COLD WATER PIPE GROUNDING

The house cold water pipe (metal only) is often used as a ground for the house electrical system. The 3-valve bypass type of installation, shown in Figure 3, will maintain ground continuity. If you use the plastic bypass, continuity is broken. To restore the ground, do either step **4a** or **4b** following.

- Use the 7248706 ground clamp kit (not included) to make a jumper across the inlet and outlet pipes (See Figure 5).
- Install a #4 copper wire across the removed section of main water pipe, securely clamping at both ends – parts not included.



5. LOAD MEDIA (models other than UAN10)

Model UAN12 is shipped with no neutralite mix media in the tank (media is shipped in separate containers). The IOAPF models do not include media.

Follow Steps 2-5 of the "Procedure to Add Media" on the following page to remove the top cover using the included wrench, load media, and reinstall the cover.

6. FLUSH PIPES AND TEST FOR LEAKS

CAUTION: To avoid water or air pressure damage to system inner parts, be sure to do the following steps exactly as listed:

- Fully open two treated water faucets, one cold and one hot, nearby the system.
- Place bypass valve(s) into BYPASS position. On a single valve, turn both handles perpendicular to water flow (See Fig. 4). On a 3 valve system, close the inlet and outlet valves, and open the bypass valve (See Fig. 3).
- Fully open the house main water pipe shutoff valve. Observe a steady flow from both opened faucets.
- Close both faucets.
- Check your plumbing work for leaks and, if any are found, fix right away. Be sure to observe previous caution notes.
- Turn on the gas or electric supply to the water heater. Light the pilot, if applicable.

7. START UP PROCEDURE

- Place bypass valve(s) into SERVICE position, EXACTLY as follows:
 - Single Bypass Valve:** Turn the outlet (marked downflow inlet on head) handle parallel to water flow. SLOWLY, turn the upflow inlet handle parallel to water flow, pausing several times to allow the system to pressurize slowly.
 - 3 Valve Bypass:** Fully close the bypass valve and open the outlet valve. SLOWLY, open the inlet valve, pausing several times to allow the system to pressurize slowly.
- Check all connections for leaks.
- Fully open a cold water faucet, downstream from the system, and allow 50 gallons of water to pass through the system. This should take at least 20 minutes. Close the faucet.

Adding Media

DETERMINING WHEN TO ADD MORE NEUTRALITE MIX MEDIA

The neutralite mix media slowly dissolves to neutralize acidic water. Eventually, all of this media would dissolve. How quickly depends on the pH of the water, how much water is used, and other water conditions.

Check the filter about 6 months after installation. You can check the media level inside the tank without removing the top cover. Stop water flow through the system and shine a bright light toward you through the media tank. The light will be blocked in the lower part of the tank filled with media, but should be visible shining through the area above the media.

If, after 6 months, the tank is still more than half full, you could wait longer, say 9 months, before refilling the next time. If, after 6 months, the tank is less than 1/4 full, it may be better to add media more often than every 6 months.

PROCEDURE FOR ADDING MEDIA

1. Bypass the system by turning both bypass handles perpendicular to the flow of water (See Fig. 6).
2. Using the included wrench (See Fig. 7), engage the in/out head's top cover. Loosen and unscrew the cover by turning it counterclockwise (See Fig. 8), allowing pressure to escape from system.
3. Once the cover is completely unscrewed, lift it off the in/out head (See Fig. 9). Make sure that the white plastic filter basket is still seated in place inside the head.

IMPORTANT: DO NOT remove the filter basket. Media entering the riser pipe will restrict flow and increase system pressure drop significantly.

4. Add media through the crescent-shaped opening in the bottom of the filter basket.
5. Make sure the threads are clear of media and reinstall the top cover, turning it clockwise with the wrench to tighten.
6. Place the bypass valve back into service position, with both handles turned in the direction of water flow.

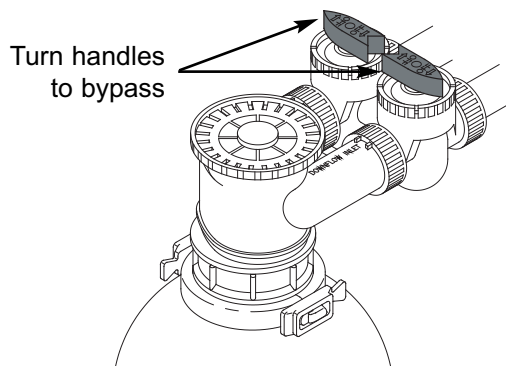


FIG. 6

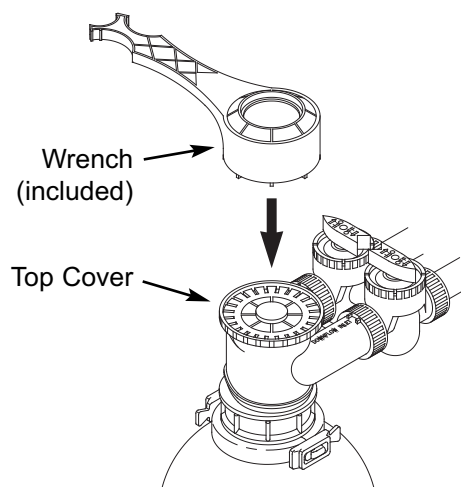


FIG. 7

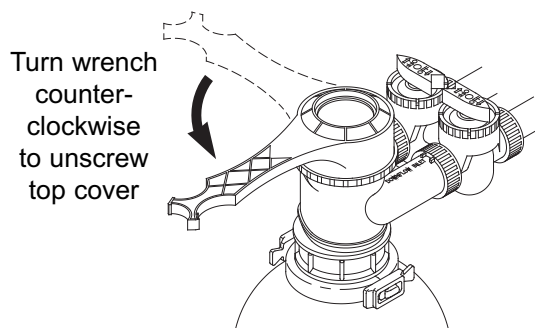


FIG. 8

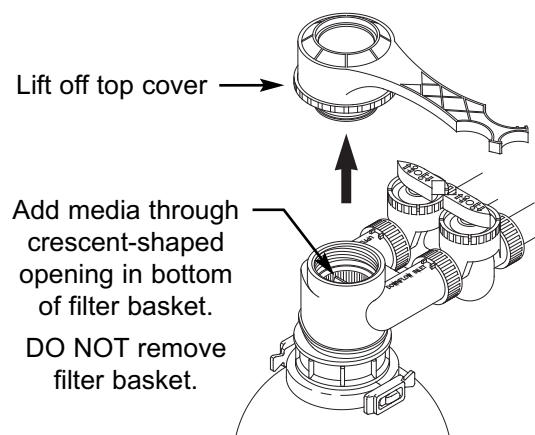
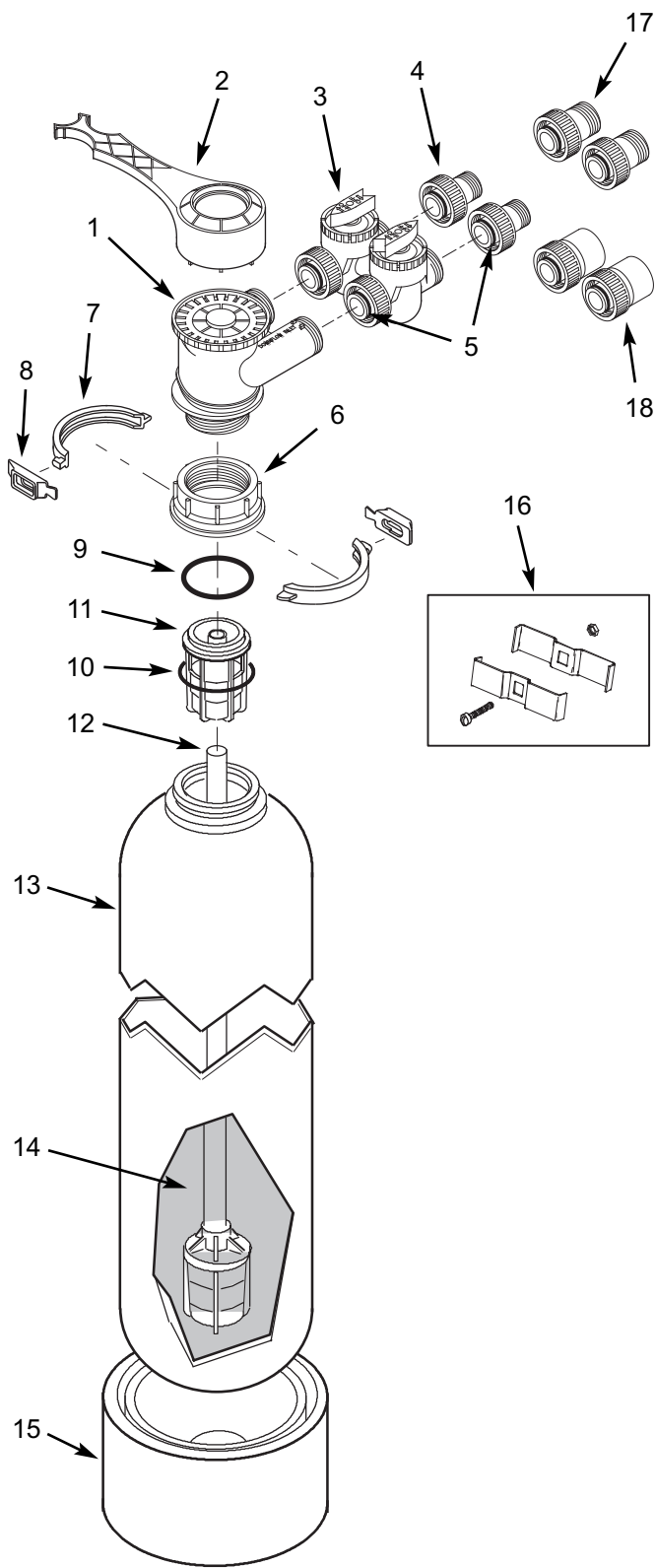


FIG. 9

Repair Parts

SYSTEM EXPLODED VIEW



SYSTEM PARTS LIST

Key No.	Part No.	Description
1	7346813	Head, In/Out, with Fill Port, includes Wrench (Key No. 2)
2	7351737	Wrench
3	7351779	Bypass Valve Assembly, Upflow, includes o-rings (See Key No. 5)
4	7346790	Adapter, Plumbing, 1" NPT, pack of 2, includes o-rings (See Key No. 5)
5	7311127	O-Ring, 1-1/16" x 1-5/16", single
	7336410	O-Ring, 1-1/16" x 1-5/16", pack of 20
6	7342788	Adapter, Tank Neck
—	7331177	Tank Neck Clamp Kit (includes 2 ea. of Key Nos. 7 & 8)
7	↑	Clamp Section
8	↑	Retainer, Clamp
—	7112963	Distributor O-Ring Kit (includes Key Nos. 9 & 10)
9	↑	O-Ring, 2-7/8" x 3-1/4"
10	↑	O-Ring, 2-3/4" x 3"
11	7088855	Top Distributor
12	7105047	Repl. Bottom Distributor
13	7092202	Repl. Mineral Tank, 10" x 47", Models UAN10 & IOAPF10
	7113074	Repl. Mineral Tank, 12" x 54", Models UAN12 & IOAPF12
14	7161912	Neutralite Mix, 50 lbs. (100 lbs. used in UAN10 & 200 lbs. used in UAN12)
	7351761	HDPE Pellets, 3 lbs. (3 lbs. used in all models)
	7301619	Activated Carbon, 27.5 lbs. *
	7175149	Activated Carbon, 50 lbs. *
	7339141	Catalytic Carbon, 27.5 lbs. *
15	7302039	Tank Foot, Models UAN10 & IOAPF10
	7339222	Tank Foot, Models UAN12 & IOAPF12
16	7248706	Ground Clamp Kit *
17	7352822	Adapter, Plumbing, 1-1/4" NPT, pack of 2, includes o-rings *
18	7352830	Adapter, Plumbing, 1-1/4" & 1-1/2" PVC Solvent, pack of 2, incl. o-rings *

* Optional - not included with system.

Warranty

WATER FILTRATION SYSTEM WARRANTY

Warrantor: Ecodyne Water Conditioning, 1890 Woodlane Drive, Woodbury, MN 55125

Warrantor guarantees, to the original owner, that:

One Year Full Warranty:

- For a period of one (1) year from the date of purchase, all parts will be free from defects in materials and workmanship and will perform their normal functions.

Limited Warranties:

- For a period of ten (10) years from the date of purchase, the fiberglass mineral tank will not rust, corrode, leak, burst, or in any other manner, fail to perform its proper functions.
- For a period of three (3) years from the date of purchase, the in/out head will be free of defects in materials and workmanship and will perform its normal functions.

The neutralite mix media, which is considered expendable, is excluded from this warranty.

If, during such respective period, a part proves to be defective, Warrantor will ship a replacement part directly to your home, without charge.

General Provisions

Damage to any part of this water conditioner because of misuse, misapplication, neglect, alteration, accident, installation or operation contrary to our printed instructions, or damage caused by any unusual force of nature such as, but not limited to, freezing, flood, hurricane, tornado, or earthquake is not covered by this warranty. In all such cases, regular parts and service charges will apply.

We assume no warranty liability in connection with this water treatment 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 obligations on the sale of this water treatment system. Should a defect or malfunction occur, contact your contractor. If you are unable to contact your contractor, return the part, freight prepaid, directly to the factory at the address below. Enclose with the part a full description of the problem, with your name, full address, date purchased, model and serial numbers, and selling contractor's name and address. We will repair or replace the part and return it to you at no cost if our repair department determines it to be defective under the terms of the warranty.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

This water treatment system is manufactured by
Ecodyne Water Conditioning, 1890 Woodlane Drive, Woodbury, MN 55125
Customer Information Telephone No. 1-800-972-0136