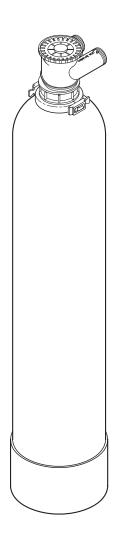
## **OWNER'S MANUAL**

# In/Out All Purpose Filter

Model IOAPF10



Installation

Operation

Maintenance

Repair Parts

Point-of-entry system tested and certified by NSF International for NSF/ANSI/CAN Standard 372, and is not certified for materials safety, contaminant reductions or structural integrity by NSF International.





### **Table of Contents, Specifications & Dimensions**

### **TABLE OF CONTENTS**

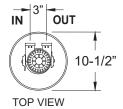
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SPECIFICATIONS		
Model	IOAPF10	
Amount of Neutralite Mix Media (not included) that can be loaded into the mineral tank	100 lbs.	
Amount of HDPE Pellets	3 lbs.	
Amount of Fine Quartz Gravel	16 lbs.	
Service Flow Rate*	10 gpm	
Supply Water Pressure Limits (min./max.)	20 - 125 psi	
Water Temperature Limits (min./max.)	40 - 120 °F	

<sup>\*</sup>With Neutralite Mix Media (75% Neutralite / 25% Magnesium Oxide) loaded into the mineral tank.

### **DIMENSIONS**

	IOAPF10
Nominal Mineral	10" dia. x
Tank Size	47" tall



53-3/4"

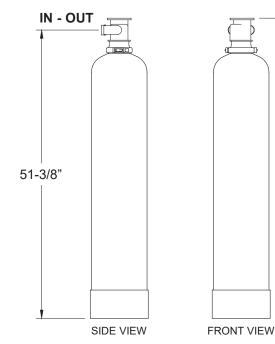


FIG. 1

### **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 nonmetallic 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.

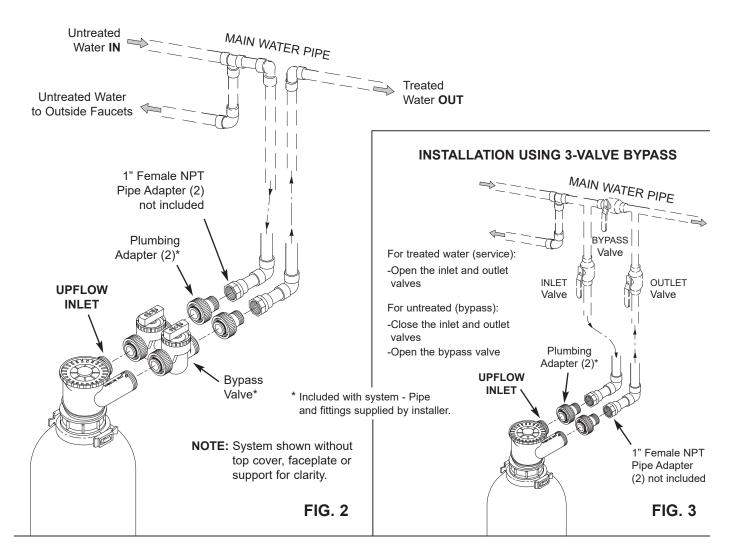
### PLAN HOW YOU WILL INSTALL THE SYSTEM

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?

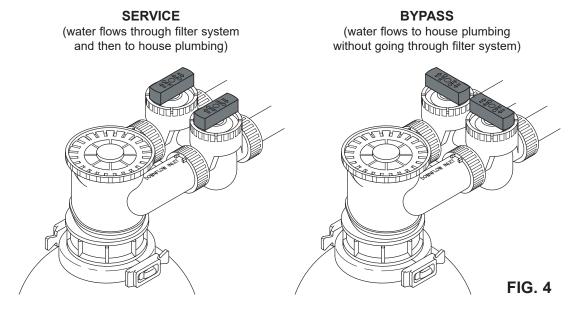
Now look at the typical installation illustrations on page 4. Use them as a guide when planning your particular installation. Be sure to direct incoming, untreated water to the "UPFLOW INLET" port.

### **Typical Installation Illustrations**

### **INSTALLATION USING INCLUDED BYPASS VALVE**



### **BYPASS VALVE OPERATION**



### **Installation Instructions**

#### 1. TURN OFF WATER SUPPLY

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

## 2. INSTALL BYPASS VALVE AND/OR PLUMBING ADAPTERS:

a. 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 -

b. 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 leaktight 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.

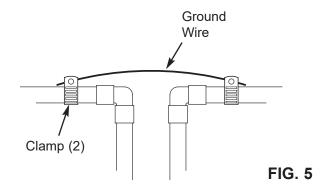
#### 4. COLD WATER PIPE GROUNDING

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 the following:

**a**. Install a #4 copper wire across the removed section of main water pipe, securely clamping at both ends (See Figure 5) 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:

- **a**. Fully open two treated water faucets, one cold and one hot, nearby the system.
- b. 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).
- **c**. Fully open the house main water pipe shutoff valve. Observe a steady flow from both opened faucets.
- d. Close both faucets.
- e. Check your plumbing work for leaks and, if any are found, fix right away. Be sure to observe previous caution notes.
- **f**. Turn on the gas or electric supply to the water heater. Light the pilot, if applicable.

### 7. START UP PROCEDURE

- **a**. 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.
- **b**. Check all connections for leaks.
- **c**. 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.

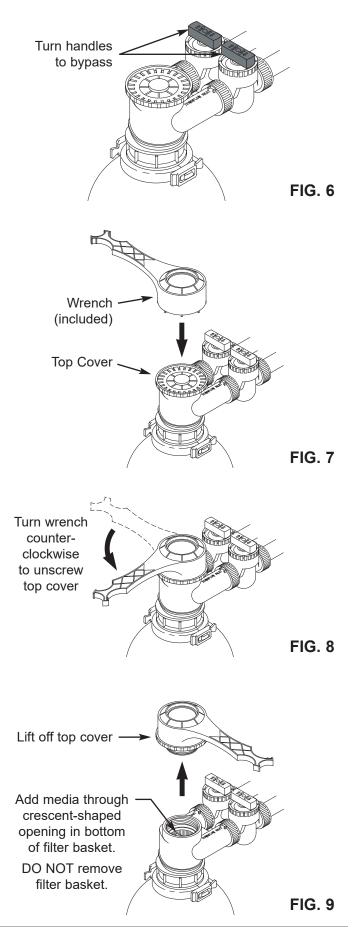
#### PROCEDURE FOR ADDING MEDIA

- **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.

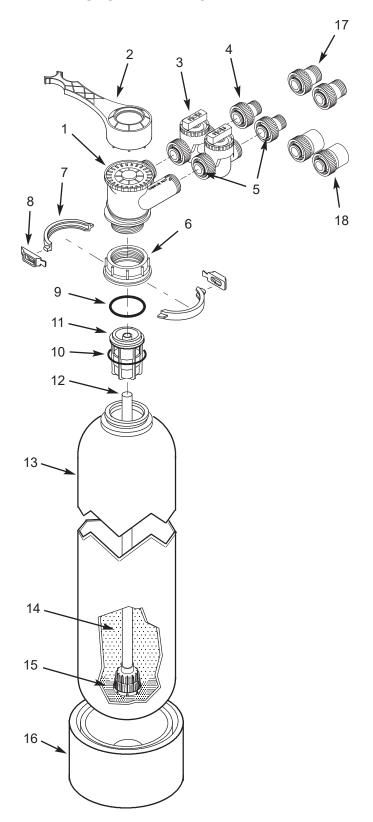
Media entering the riser pipe will restrict flow and increase system pressure drop significantly.

- **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.
- Place the bypass valve back into service position, with both handles turned in the direction of water flow.



## **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	7346805	Bypass Valve Assembly, includes o-rings (See Key No. 5)
4	7346790	Adapter, Plumbing, 1" NPT, pack of 2, includes o-rings (See Key No. 5)
	7311127	O-Ring, 1-1/16" x 1-5/16", single
5	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	<b>^</b>	Clamp Section
8	<b>↑</b>	Retainer, Clamp
_	7112963	Distributor O-Ring Kit (includes Key Nos. 9 & 10)
9	<b>^</b>	O-Ring, 2-7/8" x 3-1/4"
10	<b>^</b>	O-Ring, 2-3/4" x 3"
11	7088855	Top Distributor
12	7105047	Repl. Bottom Distributor
13	7092202	Repl. Mineral Tank, 10" x 47"
	7351761	HDPE Pellets, 3 lbs.
14	7161912	Neutralite Mix, 50 lbs. ★
	7336834	Activated Carbon, 1 cu. ft. ★
	7339141	Catalytic Carbon, 1 cu. ft. 🖈
15	7124415	Gravel, 17 lbs.
16	7302039	Tank Foot, 10"
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 *

<sup>\*</sup> Optional - not included with system.

Manufactured and warranted by Water Channel Partners 2805 Dodd Road, Suite 300 Eagan, MN 55121

### WATER FILTER WARRANTY

Warrantor: Water Channel Partners, 2805 Dodd Road, Suite 300, Eagan, MN 55121

Warrantor guarantees, to the original purchaser when the product is purchased from an authorized dealer, and when installed and maintained in accordance with the instructions, that:

#### One Year Full Warranty:

• For a period of one (1) year from the date the product is delivered, all parts will be free from defects in materials and workmanship and will perform in accordance with their written specifications.

#### **Limited Warranties:**

- For a period of ten (10) years from the date the product is delivered, the fiberglass mineral tank, excluding filtration media, will not rust, corrode, leak, burst, or in any other manner, fail to perform in accordance with its written specifications.
- For a period of three (3) years from the date the product is delivered, the electronic control board and valve body will be free of defects in materials and workmanship and will perform in accordance with their written specifications.

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

#### **General Provisions**

The above warranties are effective provided the water filter is operated at water pressures not exceeding 125 psi (8.8 kg/cm²), and at water temperatures not exceeding 120°F (49°C); provided further that the water filter is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the water filter is not damaged as the result of any force of nature such as, but not limited to, flood, hurricane, tornado or earthquake.

The limited warranty does not cover damage due to: (a) transportation, (b) storage, (c) improper use, (d) failure to follow the product instructions or to perform any preventive maintenance, (e) modifications, (f) unauthorized repair, (g) normal wear and tear, or (h) external causes such as accidents, abuse, or other actions or events beyond Warrantor's reasonable control. Use of aftermarket, used, or non-manufacturer provided parts will void all warranties. Warranty does not cover failures due to improper product installation. Warrantor is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages, or other circumstances beyond its control.

THERE ARE NO WARRANTIES ON THE WATER FILTER BEYOND THOSE SPECIFICALLY DESCRIBED ABOVE. ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, ARE DISCLAIMED TO THE EXTENT THEY MIGHT EXTEND BEYOND THE ABOVE PERIODS. THE SOLE OBLIGATION OF WARRANTOR UNDER THESE WARRANTIES IS TO REPLACE OR REPAIR THE COMPONENT OR PART WHICH PROVES TO BE DEFECTIVE WITHIN THE SPECIFIED TIME PERIOD, AND WARRANTOR IS NOT LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. NO DEALER, AGENT, REPRESENTATIVE, OR OTHER PERSON IS AUTHORIZED TO EXTEND OR EXPAND THE WARRANTIES EXPRESSLY DESCRIBED ABOVE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state. This warranty applies to consumer-owned installations only.

This water filter is manufactured by Water Channel Partners, 2805 Dodd Road, Suite 300, Eagan, MN 55121 Customer Information Telephone No. 1-800-972-0136