

# Reverse Osmosis/Nanofiltration Drinking Water Filter System



**APEX WATER FILTERS, INC.**

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[www.apexwaterfilters.com](http://www.apexwaterfilters.com)

## Inspect the System before Installation:

Please inspect the System and all connection fittings carefully, and make sure there is no damage during shipping. If you find a damaged or broken part, please **DO NOT** proceed with the installation, and contact us for a replacement, broken part or assistance via **1 (844) 338-5520**.

## General Installation and Maintenance Requirements:

- Please make sure that the installation complies with State and local laws and regulations.
- Do not use with the water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after system.
- System must be installed indoor.
- It is recommended that installation of the water filter be done by a professional plumber.



**APEX RF-2030  
PRE FILTER PACK**

### Important !

It is recommended to change the 3 pre-filters at least every 6-8 months. It is advised to change them on time to avoid any damages to the RO System. It is advised to use APEX replacement filters. Using 'non-APEX' and poor quality filters may clog the RO system and will also damage the membrane.

Visit us on [www.apexwaterfilters.com](http://www.apexwaterfilters.com) or call us at **1 (844) 338-5520**

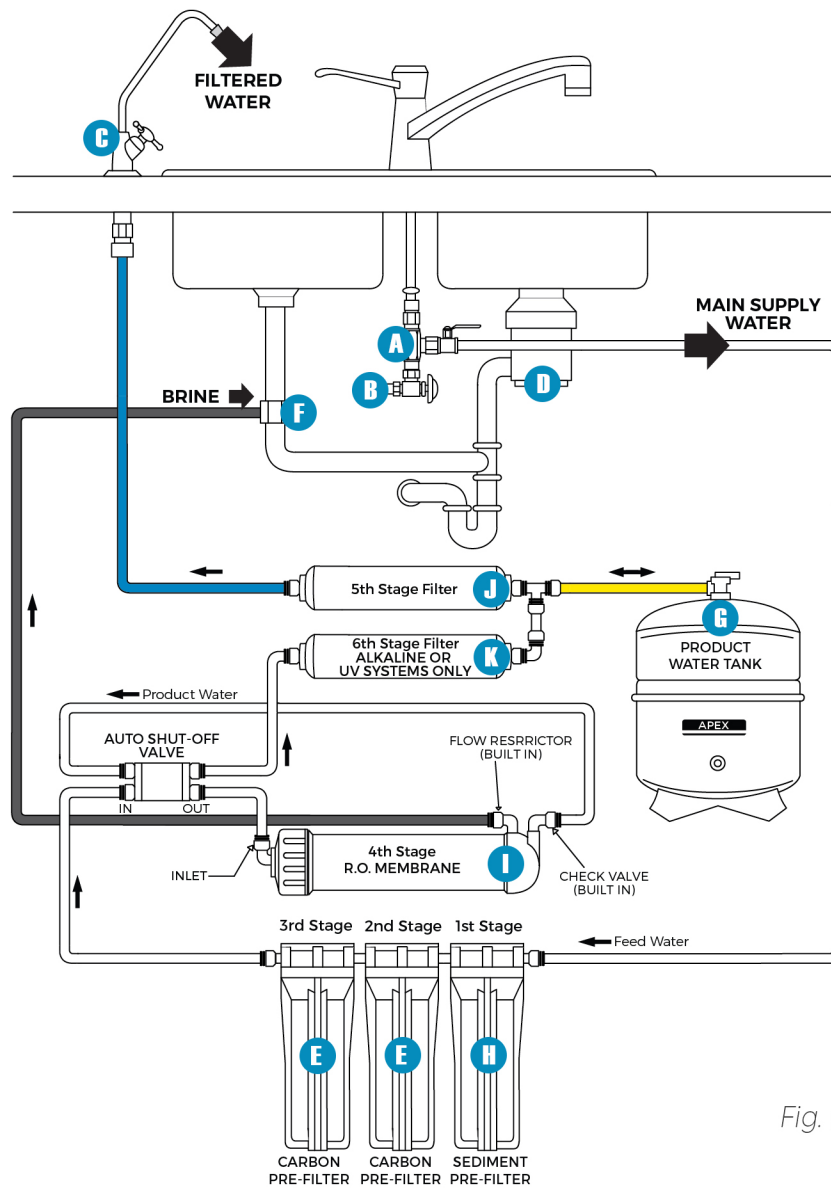


Fig. #1

- A** Water supply adapter valve
- B** Cold water shut-off valve
- C** Auxiliary faucet
- D** Garbage disposal
- E** Carbon Filters
- F** Drain Saddle
- G** Storage tank with valve in open Position
- H** Sediment Filter
- I** Membrane assembly
- J** Inline GAC Filter
- K** Alkaline/UV Filter (optional)

Reverse Osmosis System Tubing Diagram (without pump)

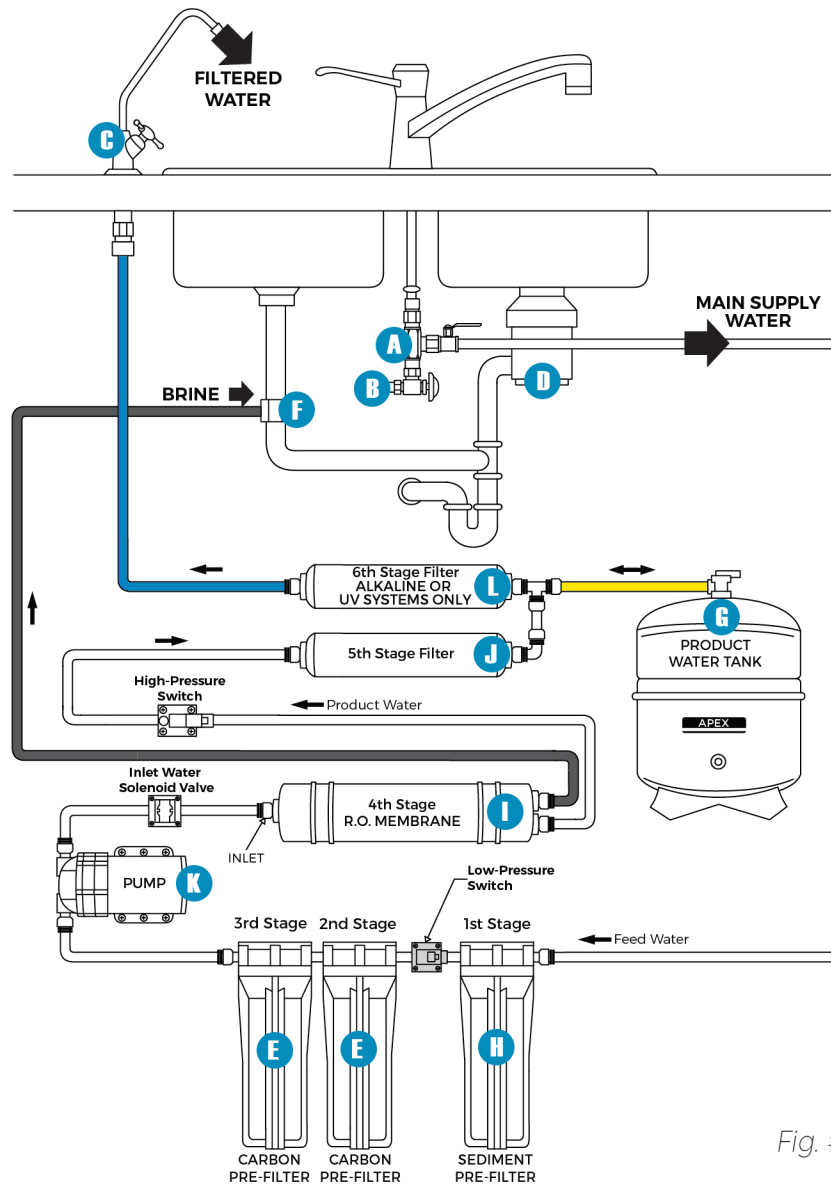


Fig. #2

- A** Water supply adapter valve
- B** Cold water shut-off valve
- C** Auxiliary faucet
- D** Garbage disposal
- E** Carbon Filters
- F** Drain Saddle
- G** Storage tank with valve in open Position
- H** Sediment Filter
- I** Membrane assembly
- J** Alkaline/UV Filter (optional)
- K** Pump
- L** Inline GAC Filter

Reverse Osmosis System with Pump

## INSTALLATION INSTRUCTIONS

### Tapping into the cold water line

(Using the water supply adapter model FW 1)

**NOTE:** The drinking water system must be connected to the COLD water supply only.

- 1 Turn off the cold water supply to the sink faucet by locating the Round or oblong handle on the right side of the sink cabinet and Turning clockwise until the water supply is off.

**NOTE:** If the cold water shut-off valve fails to turn off the water, the house water supply can be turned off at the main water supply.

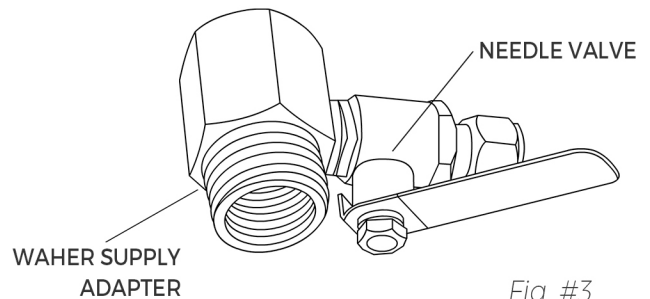


Fig. #3

- 2 The water supply adapter can be installed at the faucet Connection (A of Fig. #1) of the cold water line or at the shut-off Valve connection (B of Fig. #1).
- 3 Disconnect the threaded nut at the connection and thread the water supply adapter, with the flat washer in place, onto the connection and tighten. Connect the white tubing to the water supply adapter with the threaded nut and tighten.
- 4 Thread the needle valve into the adapter tightly and turn the handle clockwise all the way in. Turn on cold water supply to the sink faucet and check for leaks.

### Drilling the hole for the faucet

**NOTE:** Safety glasses should be worn to protect your eyes while drilling the faucet hole.

- 1 For best results, a 1/2" carbide-tipped drill bit should be used to drill a hole into your sink for the auxiliary faucet.
- 2 Carefully select the faucet location making sure it will have a neat water fall pattern and that the faucet stud will be accessible from below once the hole is completed.
- 3 For Porcelain Sink: Before starting the drill motor, apply firm downward pressure on the bit until a crunching occurs. This will help keep the drill bit from moving.
- 4 For Stainless Steel Sink: Before using a 1/2" carbide drill bit, an indent should be made with a center punch to keep the drill bit from moving. A small pilot hole will also aid the 1/2" drill bit.
- 5 For best results, keep steady firm pressure during the start of the hole will cause excess wear on the bit and progress will be slow.
- 6 Once the hole is complete, clean the area of metal chips and roughness around the hole. Metal chips will stain Porcelain.

## Mounting the faucet

Your unit comes complete with a long reach faucet.

**NOTE:** Air gap option installation instructions are available upon request. The following instructions is for non-air gap option.

- 1 Slide chrome cover plate and rubber gasket onto stem of faucet and place faucet onto sink with the stem going through the hole.
- 2 Place metal washer and lock washer over threaded stem of faucet and tighten nut from under the counter surface to lock the faucet into place. **DO NOT OVER TIGHTEN.**
- 3 Connect the blue tube to the faucet stem under the counter and tighten.

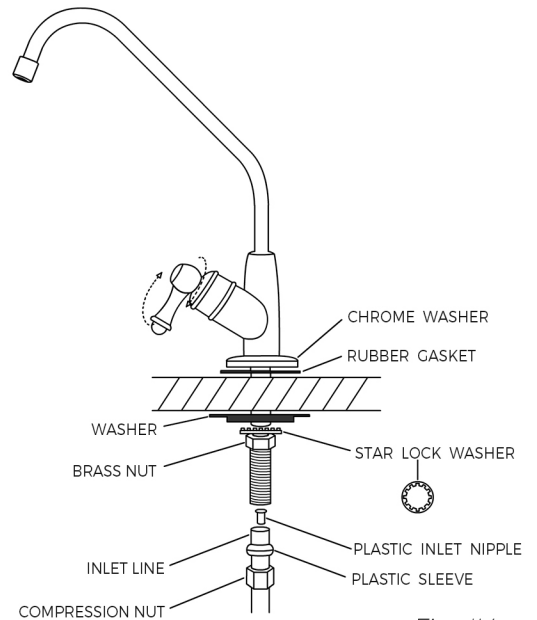


Fig. #4

## Drain clamp installation

- 1 The drain clamp assembly should be installed above the trap and on the vertical or horizontal tailpiece (Fig. #5)

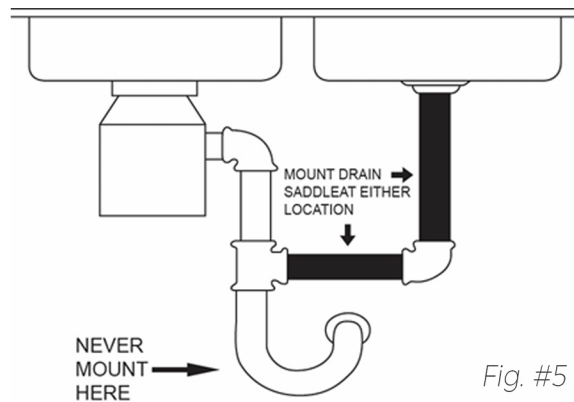


Fig. #5

- 2 Mark the hole position on the pipe and drill a 1/4" hole through one side of the pipe (Fig. #6).

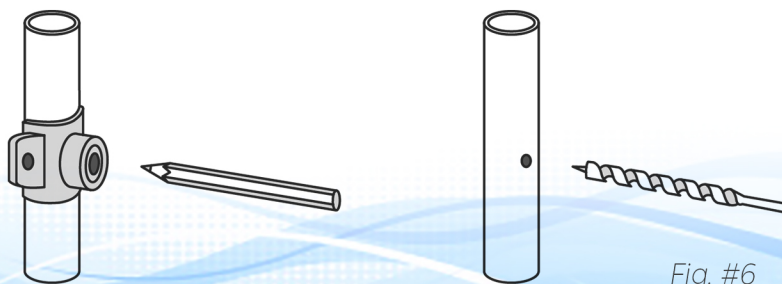


Fig. #6

- 3 Make sure to align drain saddle to drilled hole. Attach drain clamp to drain pipe and tighten the two screws evenly. (Fig. # 7)

NOTE: The center hole on the sponge must be removed.

- 4 Connect the Black tubing to the drain clamp.

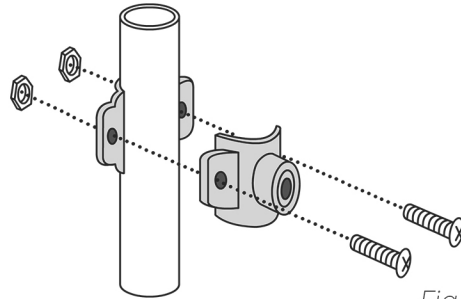


Fig. #7

## Positioning the system

- 1 The head assembly will stand up in the sink cabinet or can be hung on screws provided.
- 2 The storage tank may be laid on its side.
- 3 The head assembly and/or storage tank may be placed up to 15 feet from the point of use with nominal pressure loss.

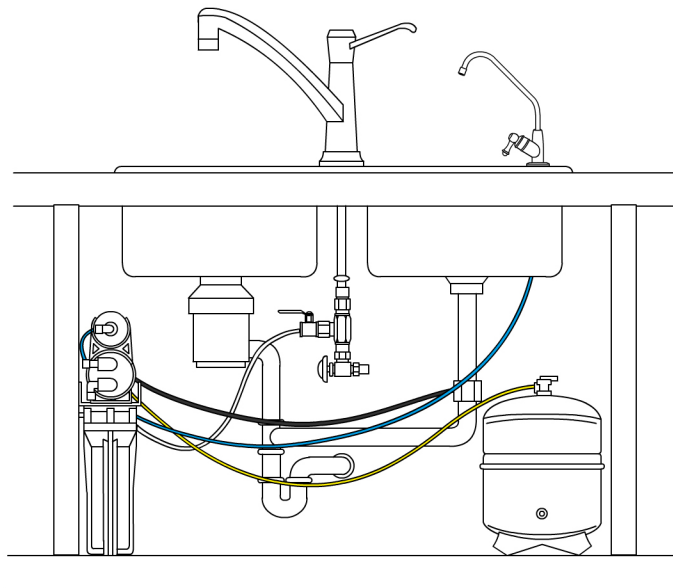


Fig. #8

### CONNECTING THE SYSTEM

Use the color coded tubing to make the following connections:

- The **white** tubing connects the water supply adapter to the inlet side.
- The **blue** tubing connects the faucet to the outlet side.
- The **Black** tubing connects to the drain clamps.
- The **yellow** tubing connects the storage tank to the inlet side of the post carbon.

## START-UP PROCEDURE

- 1 Check to see all connections are made
- 2 Check that the pre-filter and pre-carbon sumps are secure using the housing wrench provided.
- 3 Slowly turn on the water by turning the needle valve counterclockwise.
- 4 The valve handle on top of the tank should be in the open position, parallel to the valve body
- 5 The handle of the faucet should be perpendicular to the spigot (closed).
- 6 Check for leaks.
- 7 The RO/NF ro drinking water system makes 2 gallons of drinking water per hour and requires 1 to 2 hours before water is readily available.
- 8 During this initial fill period, you will hear water being discharged through the black drain line. This is normal as the contaminated water is being rejected by the reverse osmosis membrane.

DO NOT DRINK THE WATER FROM THE FIRST TANK PRODUCED BY THE SYSTEM.  
DISCHARGE THE WATER FROM THE STORAGE TANK BY OPENING THE FAUCET.  
DISCHARGING MIGHT TAKE UP TO 15 MINUTES.

If you have any difficulties with the installation, or require additional information on your unit, please consult with our factory technicians.

We thank you for purchasing our Reverse Osmosis Nanofiltration unit for your high quality processed drinking water. In order to maintain this high quality water, it is important that scheduled maintenance be followed.



## RECOMMENDED SYSTEM MAINTENANCE

To properly maintain your APEX drinking water system, please use  
only genuine APEX water replacement filters at  
[www.apexwaterfilters.com](http://www.apexwaterfilters.com) or call us at (844) 338-5520

**Sediment Pre-filter:** The pre-filter protects the system and should be maintained regularly, a clear housing has been provided for your convenience. The show-white pre-Filter should be changed when the outside discolors to a cardboard brown color and before the inner surface discolors. The life of the pre- filter will depend upon the condition of your water supply and should be checked at 3-month intervals until a filter life is established (**average life 6 months**).

**Carbon Block:** Designed to remove chlorine form the water supply, as well as organic and inorganic substance before entering the TFC membrane (**average life 12 months**).

**Post-Carbon:** The post-filter should be changed when you experience an unusual taste and/or odor to the water and has a nominal life of **1 year**.

**Membrane:** The high quality Thin Film Composite membrane should last between **2 to 4 years** depending on the quality of your local water.

Drain your storage tank twice each month to extend the membrane and have the freshest water in the storage tank. Drain the storage tank by lifting the faucet handle into the parallel position with the spigot until water flow stops from the tank. Return the faucet handle to the closed position and the tank will refill in 2 hours. It is best to drain the system before retiring for the evening.

### Nanofiltration Systems

Filter Model	Stage 1 [750 gallons or 6 months]	Stage 2 [750 gallons or 6 months]	Stage 3 [750 gallons or 6 months]	Stage 4 [12 months]	Stage 5 [12 months]
NF-0150	RF-1000	RF-1010	RF-1010	NF4-1812	RF-1001

### Reverse Osmosis Systems

Filter Model	Stage 1 [750 gallons or 6 months]	Stage 2 [750 gallons or 6 months]	Stage 3 [750 gallons or 6 months]	Stage 4 [24 months]	Stage 5 [12 months]	Stage 6 [12 months]
MR-5050	RF-1000	RF-1010	RF-1010	CM 50	RF-1001	-
MR-5051	RF-1000	RF-1010	RF-1010	CM 50	RF-1001	-
MR-5100	RF-1000	RF-1010	RF-1010	CM 100	RF-1001	-
MR-5150	RF-1000	RF-1010	RF-1010	CM 150	RF-1001	
MR-6101	RF-1000	RF-1010	RF-1010	CM 50	RF-1001	-
MR-6050	RF-1000	RF-1010	RF-1010	CM 50	RF-1001	RF-1002
MR-6051	RF-1000	RF-1010	RF-1010	CM 50	RF-1001	UVA-1C
MR-6100	RF-1000	RF-1010	RF-1010	CM 100	RF-1001	RF-1002

## CHANGING THE INLINE GAC CARTRIDGE AND ALKALINE CARTRIDGE (6 stage models only)

**CAUTION:** ANY REPLACEMENT FILTERS OR MEMBRANE NOT RECOMMENDED BY THE FACTORY CAN CAUSE SEVERE DAMAGE TO THE SYSTEM AND VOIDS ALL WARRANTIES.

- 1 Shut off the feed water to the system by turning the saddle valve on the water supply adapter clockwise until it stops.
- 2 Close the storage tank ball valve by turning the handle perpendicular to the valve body.
- 3 Open the drinking water faucet relive pressure.
- 4 Allow 3-5 minutes for pressure in the system to drop.
- 5 Disconnect the tubing from the membrane housing cap by pushing in and holding down the end collar ring surrounding the quick connect elbow fitting while gently pulling back on the tubing.
- 6 Remove the membrane housing cap by turning counter-clockwise.
- 7 Using a pair of needle nose pliers, remove and discard the used membrane.
- 8 Rinse the inside of membrane housing with warm water.
- 9 Using pliers, insert the new membrane all the way into the housing (double o-ring end first), making sure it is properly seated.
- 10 Replace and hand-tighten the membrane housing cap by turning clockwise.
- 11 Reconnect the removed tubing by pushing it into the elbow fitting in the housing cap.
- 12 Gently pull back on the tubing to insure a leak free connection.

Turn on the feed water to the system by turning the saddle valve at the water supply adapter counter - clockwise.  
Turn the storage tank ball valve handle parallel to the valve body.

### Operating Limits

	Max.TDS	Water Temperature	pH Range	Water Pressure
<b>Standard RO System</b>	2000 ppm	40 - 85 °F	2 - 11	45 - 85 PSI
<b>RO with Booster Pump</b>	2000 ppm	40 - 85 °F	2 - 11	45 - 85 PSI

CUSTOMER SATISFACTION IS OF PRIMARY CONCERN,  
PLEASE CALL IN THE EVENT THERE IS A SERVICE PROBLEM.

**Notice:** Your RO system has been thoroughly tested and inspected for production, rejection, leaks and shut-off functions at our factory. Therefore, it might have some water in it.

**Warning:** Do not use this system if feed water has biological contamination or of unknown source. For operating parameters, please contact our technical support department.



Contact us

FOR REPLACEMENTS CARTRIDGES AND ACCESSORIES SHOP

[www.apexwaterfilters.com](http://www.apexwaterfilters.com)

FOR QUESTIONS AND CONCERNS, PLEASE FEEL  
FREE TO CONTACT OUR SUPPORT STAFF.

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Email: [sales@apexwaterfilters.com](mailto:sales@apexwaterfilters.com)

APEX WATER FILTERS, INC.

125 West Victoria Street  
Gardena CA 90248 – 3522  
U.S.A.

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Warranty

Your water filter includes a 30-day money-back guarantee and limited one-year manufacturer's warranty against defects in materials and workmanship.

To extend your warranty for an additional 12 months, return this installation log sheet within 15 days of original purchase, and be prepared to provide proof of purchase.

MODEL NUMBER: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

INSTALLATION DATE: \_\_\_\_\_

1. Water Souerce: \_\_\_\_\_ Well \_\_\_\_\_ Surface \_\_\_\_\_ Municipal

2. Feed Water: \_\_\_\_\_ Chlorinated \_\_\_\_\_ Not Chlorinated

3. PPM Chlorine Content: \_\_\_\_\_

4. Water Line Pressure: \_\_\_\_\_ PSI

5. Temperature: \_\_\_\_\_ F

6. Total Dissolved Solids: \_\_\_\_\_ PPM

7. Feed Water pH: \_\_\_\_\_

8. Hardness: \_\_\_\_\_ GPG

9. Iron (ferrous or clear water): \_\_\_\_\_ mg/l

RESULTS: 1. TDS reading of product - after second flushing of pressure tank: \_\_\_\_\_ PPM  
 2. Production rate: \_\_\_\_\_ GPD

Distributor's Name: \_\_\_\_\_

Order Number: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Customer's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Installer: \_\_\_\_\_

Date: \_\_\_\_\_

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# Owners Manual

