Premier Water Systems P100PP5SN

Premier Water Systems 5 Stage Reverse Osmosis Drinking Water Filter System 100 GPD with Permeate Pump Instruction Manual

Model: P100PP5SN

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Premier Water Systems 5 Stage Reverse Osmosis Drinking Water Filter System 100 GPD with Permeate Pump, Model P100PP5SN. Please read this manual thoroughly before installation and operation to ensure proper function and longevity of your system.

Safety Information

- Always turn off the water supply before performing any maintenance or installation.
- Ensure all connections are secure to prevent leaks.
- Do not use the system with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- Keep the system away from direct sunlight and extreme temperatures.
- Follow all local plumbing codes during installation.

Included Components

Your system includes the following components:

- 5-Stage Reverse Osmosis Unit
- Permeate Pump
- Feed Water Adapter
- Saddle Drain Valve
- Check Valve
- Color-coded Tubing for easy installation

- Filter Set (Sediment, Carbon Block, GAC, RO Membrane, Inline Carbon Post Filter)

Setup and Installation

This section outlines the steps for installing your RO system. It is designed for under-sink installation.

1. Prepare the Installation Area

Clear the area under your sink where the system will be installed. Ensure there is enough space for the main unit, filters, and tubing connections.

2. Install the Feed Water Adapter

Turn off the cold water supply to your sink. Disconnect the cold water line from the existing faucet. Install the provided feed water adapter between the cold water supply and the faucet line. Ensure a tight, leak-free connection.

3. Install the Saddle Drain Valve

Locate a suitable position on the drain pipe, typically above the P-trap. Drill a 1/4-inch hole in the drain pipe. Attach the saddle drain valve over the drilled hole, ensuring a secure and leak-free seal.

4. Connect Color-Coded Tubing

Use the color-coded tubing to connect the components as follows:

- Connect the feed water adapter to the inlet of the first filter stage.
- Connect the RO membrane outlet to the permeate pump inlet.
- Connect the permeate pump outlet to the storage tank (if applicable, tank not included) and the post-filter.
- Connect the drain line from the RO membrane to the saddle drain valve.
- Connect the purified water line from the post-filter to the dedicated RO faucet (faucet not included).

Ensure all tubing connections are pushed in firmly and secured with clips if provided.

5. Permeate Pump Integration

The included permeate pump enhances the efficiency of your RO system. It operates without electricity, utilizing the energy from the brine water. This results in:

- Improved water recovery rates by up to 400%.
- Reduced wastewater by up to 80%.
- Enhanced contaminant rejection.
- Increased membrane life.
- Faster filling of the product water tank (up to 4 times more rapidly).
- Effective operation even with inlet water pressure as low as 30 psi.

Connect the permeate pump according to the color-coded tubing instructions, ensuring the brine line from the RO membrane connects to the pump's brine inlet and the purified water line connects from the membrane to the pump's purified water inlet, then to the storage tank/post-filter.

6. Leak Check and System Flush

Slowly turn on the cold water supply. Check all connections for leaks. Allow the system to fill and flush for several hours (e.g., 2-3 tank fulls) to remove any carbon fines and air from the system before consuming the water.

Operating Instructions

Once installed and flushed, your RO system operates automatically. When you open the dedicated RO faucet, purified water will be dispensed. The system will automatically refill the storage tank as water is used.

- **Initial Use:** After the initial flush, the first few gallons of water may still contain some air or carbon fines. It is recommended to discard the first full tank of water.
- **Water Taste:** The 5-stage filtration process ensures clean, refreshing water. The post-inline carbon filter polishes the taste.
- **System Noise:** The permeate pump operates silently without electricity. You may hear minimal water flow sounds during operation.

Maintenance and Filter Replacement

Regular maintenance, primarily filter replacement, is crucial for optimal performance and water quality. The system utilizes a 5-stage filtration process:



Image: Filtration Stages Diagram. This diagram illustrates the five stages of filtration within the Premier Water Systems RO unit, showing the flow of water through the various filter types and the RO membrane.

1. **Stage 1: Polypropylene Sediment Filter**

   Removes dirt, rust, dust, chemical resistance, sand, and scale particles. Replace every 6-12 months.

2. **Stage 2: UDF Activated Carbon Filter**

   Removes chlorine, organic chemicals, tastes, odors, VOCs, and other impurities from tap water. Replace every 6-12 months.

3. **Stage 3: Coconut Carbon Block Filter**

   Removes free chlorine, taste, odor, and organic chemicals that make the water impure. The uniform block design offers enhanced absorption and efficiency. Replace every 6-12 months.

4. **Stage 4: Reverse Osmosis Membrane (100 GPD)**

   Removes up to 99% of total dissolved solids (TDS) and contaminants such as arsenic, lead, fluoride, chromium, radium, bacteria, viruses, and more. Replace every 2-3 years, or as needed based on water quality and usage.

5. **Stage 5: Post Inline Nutshell Carbon Filter**

   Used to polish the taste of the water and remove any residue from the storage tank. Made with quality apricot shell, olives, walnut shell, and palm shell. Replace every 12 months.

Filter Replacement Procedure:

1. Turn off the cold water supply to the RO system and close the valve on the storage tank.

2. Open the RO faucet to relieve pressure in the system.
3. Using a filter wrench (not included), unscrew the filter housings.
4. Remove old filters and dispose of them properly.
5. Clean the inside of the filter housings with mild soap and water, then rinse thoroughly.
6. Insert new filters into their respective housings, ensuring proper orientation.
7. Screw the filter housings back on, hand-tighten, then use the wrench for a quarter turn more. Do not overtighten.
8. Slowly turn on the cold water supply and open the storage tank valve.
9. Check for leaks. Flush the system as described in the "Setup and Installation" section.

Troubleshooting

Problem	Possible Cause	Solution
Slow water flow from faucet	Clogged filters, low water pressure, air in system, depleted storage tank.	Replace pre-filters or RO membrane. Check incoming water pressure. Flush system to remove air. Allow time for storage tank to refill.
Water has an unusual taste or odor	Depleted carbon filters, new system not fully flushed.	Replace carbon filters (Stage 2, 3, 5). Flush the system thoroughly.
Leaks at connections	Loose connections, damaged O-rings, improperly seated tubing.	Turn off water supply. Tighten connections. Inspect and replace O-rings if damaged. Ensure tubing is fully inserted into quick-connect fittings.
System continuously drains water	Faulty automatic shut-off valve, clogged flow restrictor, damaged check valve.	Inspect and replace the automatic shut-off valve. Check and clear the flow restrictor. Replace the check valve on the membrane product water side.

Specifications

- **Brand:** Premier Water Systems
- **Model Name:** P100PP5SN
- **Capacity:** 100 Gallons Per Day (GPD)
- **Purification Method:** Reverse Osmosis, Sedimentation
- **Number of Stages:** 5
- **Special Feature:** NSF certified, includes Permeate Pump
- **Installation Type:** Under Sink
- **Power Source:** Manual (Permeate Pump requires no electricity)
- **Included Components:** Filter, Permeate Pump, Feed Water Adapter, Saddle Drain Valve, Check Valve, Color Code Tubing
- **UPC:** 818368013071

Warranty and Support

For warranty information, technical support, or to purchase replacement parts, please contact Premier Water Systems customer service. Keep your purchase receipt as proof of purchase.
Return Policy: This product is eligible for a refund/replacement within 30 days of purchase, subject to the seller's return policy.

Protection Plans: Extended protection plans may be available for purchase. Refer to your retailer for details on 3-Year or 4-Year Protection Plans, or monthly Complete Protect options.

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