Manuals+
Q & A | Deep Search | Upload

Geekpure RO5

Geekpure 5-Stage Reverse Osmosis Drinking Water Filter System (75GPD) User Manual

Model: RO5

Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your Geekpure 5-Stage Reverse Osmosis Drinking Water Filter System. This system is designed to provide high-quality filtered water by reducing various contaminants down to 0.0001 micron, including arsenic, lead, fluoride, mercury, cadmium, and heavy metals, while also improving water taste and odor.
For optimal performance and longevity of your system, please read these instructions carefully before proceeding with installation or use.

Product Components

The Geekpure 5-Stage Reverse Osmosis System includes the following main components:

- Main System Bracket with pre-filters and RO membrane housing
- Drinking Water Faucet
- 2.8 Gallon Storage Tank
- Sediment Filter (1st Stage)
- Granular Carbon Filter (2nd Stage)
- Carbon Block Filter (3rd Stage)
- RO Membrane (4th Stage)
- Post Carbon Filter (5th Stage)
- Feed Water Diverter Valve (for connecting to cold water line)
- Drain Saddle (for connecting to drain pipe)
- Tank Ball Valve
- Color-coded Tubing (1/4 inch and 3/8 inch)
- Quick Connect Fittings
- Housing Wrench (2)
- Fasteners/Clips

- Faucet Fittings

Figure 1: Complete list of parts included with the system.

Setup and Installation

The Geekpure RO system is designed for under-sink installation and features quick connect fittings and color-coded tubing for a straightforward DIY experience. Basic plumbing knowledge and tools are recommended.

Pre-Installation Checklist:

- **Water Pressure:** Ensure your feed water pressure is between 40 - 100 PSI.
- **Temperature:** Operating temperature should be 40-110°F (5-45°C).
- **pH:** Water pH should be between 3.0 - 11.0.
- **Max TDS:** Maximum Total Dissolved Solids (TDS) should not exceed 1000 PPM.
- **Space:** Verify sufficient space under your sink for the main unit (14.2"L x 9.5"W x 18.1"H) and the 2.8-gallon storage tank.

Installation Steps:

1. **Faucet Installation:**
   Drill a hole (approximately 1.5 inches in diameter) on your countertop for the faucet. Ensure the hole is positioned conveniently. Secure the faucet using the provided base plate, rubber washer, plastic washer, lock washer, and nut. Use Teflon tape on threaded connections as instructed.

Figure 2: Faucet installation diagram, showing components and dimensions.

2. **Connect Feed Water:**
   Install the feed water diverter valve to your cold water line. Connect the appropriate color-coded tubing from the diverter valve to the system's inlet.
3. **Connect Drain Saddle:**
   Attach the drain saddle to the drain pipe under your sink. Connect the waste water tubing from the RO system to the drain saddle.

Figure 3: Main RO unit with drain water connection point highlighted.

4. **Install Filters and RO Membrane:**
   Ensure all filters (sediment, granular carbon, carbon block) are correctly seated in their housings. Install the RO membrane into its housing. Refer to the filter stage diagram for correct order.

Figure 4: Five stages of filtration and filter lifetimes.

5. **Connect Storage Tank:**
   Connect the storage tank to the system using the tank ball valve and appropriate tubing.
6. **Final Connections:**
   Connect the remaining color-coded tubing between the filter stages, RO membrane, and faucet as per the system diagram. Ensure all quick-connect fittings are pushed in completely and secured with blue locking clips.
7. **Leak Check:**
   After completing all connections, slowly turn on the feed water. Carefully check all connections for leaks. It is recommended to wait until the entire system is pressurized (including the storage tank and faucet) and re-check for any leaks before leaving the installation site. Check again after a few hours, and then periodically for a few days to ensure no slow leaks develop.

Figure 5: Example of under-sink installation.

Operating Instructions

Initial System Flush:

After installation, the system requires an initial flush to remove any carbon fines and air from the filters. This is a critical step to ensure optimal water quality.

1. Allow the storage tank to fill completely. This may take several hours depending on water pressure.
2. Once the tank is full, open the RO faucet and allow all the water from the tank to drain completely.
3. Repeat this process for a second tank fill and drain cycle. The first two tanks of water produced should be emptied and not consumed. It is normal for some black carbon fines to appear in the water during this initial flush.
4. After the second flush, the system is ready for use.

Normal Operation:

The system operates automatically. When water is drawn from the faucet, the pressure in the storage tank drops,

and the system begins to produce more filtered water to refill the tank. The RO process produces a small amount of wastewater, which is discharged through the drain line.

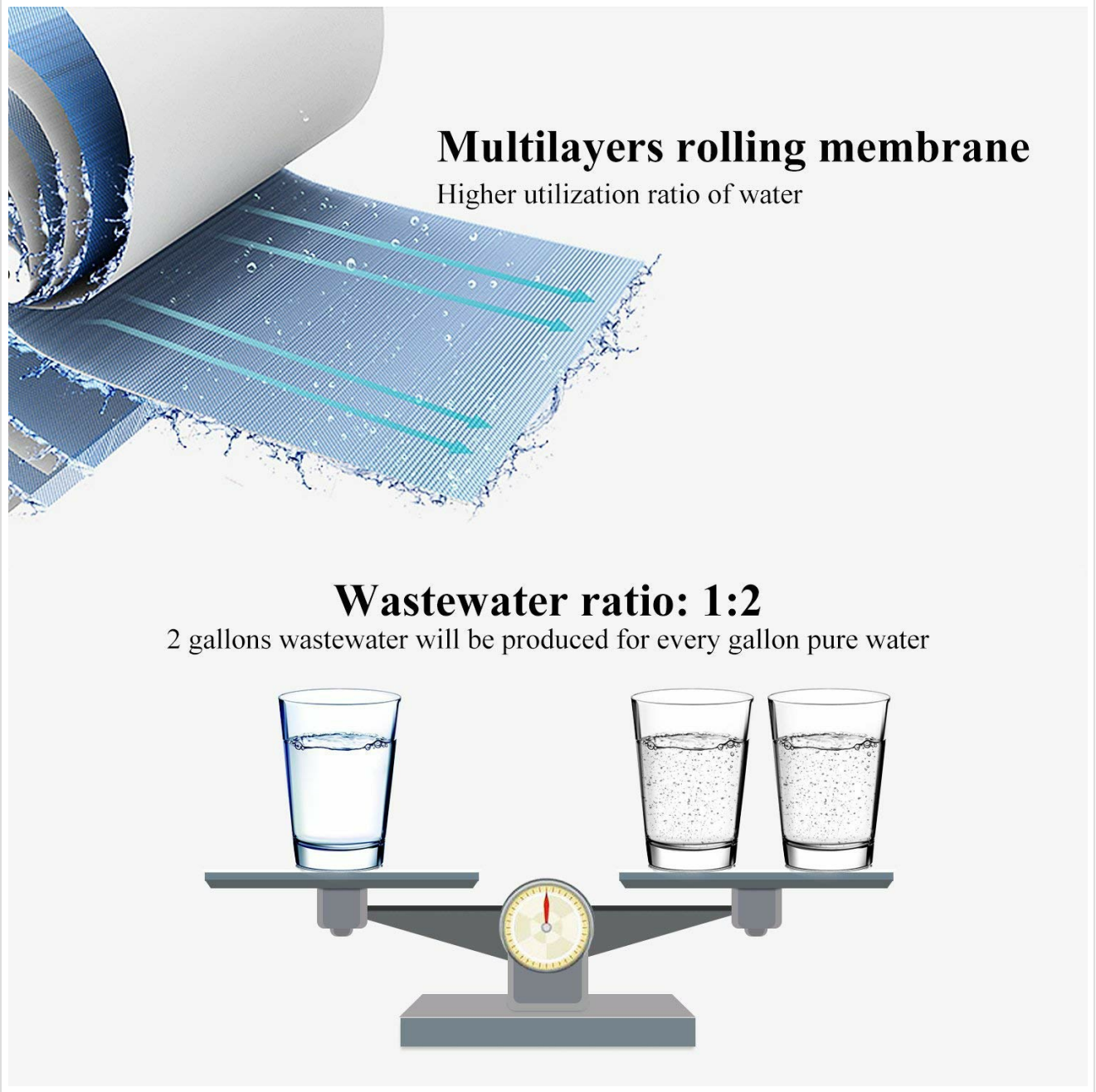

Figure 6: Wastewater ratio for the RO system.

Maintenance

Regular maintenance, primarily filter replacement, is essential for the continued performance and water quality of your RO system. The replacement filters are universally compatible and standard size.

Filter Replacement Schedule:

- **PP Sediment Filter (1st Stage):** Replace every 6-12 months. Reduces silt, sand, dirt, and sediment.
- **Granular Carbon Filter (2nd Stage):** Replace every 6-12 months. Reduces chlorine, odors, and taste.
- **Carbon Block Filter (3rd Stage):** Replace every 6-12 months. Reduces chlorine, odors, and taste.
- **RO Membrane (4th Stage):** Replace every 15-20 months. Reduces total dissolved minerals.
- **Post Carbon Filter (5th Stage):** Replace every 12-15 months. Improves water for refined taste.

Note: Filter life may vary based on local water quality and usage.

Filter Replacement Procedure:

1. Turn off the feed water supply to the RO system and close the tank ball valve.
2. Open the RO faucet to relieve pressure in the system.
3. Use the provided housing wrench to unscrew the filter housings.
4. Remove old filters and dispose of them properly.
5. Clean the inside of the filter housings.
6. Insert new filters, ensuring O-rings are properly seated.
7. Screw the housings back on tightly using the wrench. Do not overtighten.
8. Slowly turn on the feed water supply and open the tank ball valve.
9. Check for leaks. Flush the system as described in the "Initial System Flush" section if replacing multiple filters or the RO membrane.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Water Leaks	Loose fittings, improperly seated O-rings, damaged components.	• Ensure all quick-connect fittings are fully inserted and secured with blue clips. • Check O-rings in filter housings and ensure they are properly seated and not pinched. • Apply Teflon tape to threaded connections (e.g., tank connection, faucet base). • Tighten housing caps with the wrench, but do not overtighten. • Inspect tubing for cuts or damage.
No Water from Faucet / Very Slow Flow	Feed water supply off, tank valve closed, clogged filters, low water pressure, kinked tubing, air in system.	• Verify feed water supply is on and tank ball valve is open. • Check for kinks in tubing. • Ensure feed water pressure is within the recommended range (40-100 PSI). • Replace clogged pre-filters or RO membrane if they are past their service life. • Allow sufficient time for the storage tank to fill.

Problem	Possible Cause	Solution
Poor Water Taste or Odor	Expired carbon filters, expired RO membrane, initial carbon fines.	• Perform initial system flush if newly installed. • Replace granular carbon, carbon block, or post carbon filters if they are past their service life. • Replace the RO membrane if taste issues persist and other filters are new.

Specifications

- **Model Name:** RO5
- **System Capacity:** 75 gallons per day (GPD) @ 60 psi
- **Storage Tank Capacity:** 2.8 gallons
- **Installation Type:** Under Sink
- **Product Dimensions (Main Unit):** 14.2"L x 9.5"W x 18.1"H
- **Item Weight:** 23 Pounds (total system)
- **Feed Water Pressure:** 40 - 100 PSI
- **Operating Temperature:** 40-110°F (5-45°C)
- **pH Range:** 3.0 - 11.0
- **Max TDS:** 1000 PPM
- **Pipe Size:** 1/4 inches and 3/8 inches
- **Power Source:** Manual (Water Pressure)
- **Special Feature:** Replacement filters are standard size for universal compatibility.

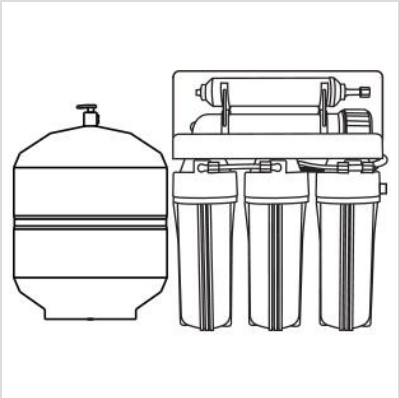

Figure 7: Reverse Osmosis Membrane with NSF certification details.

Warranty and Support

Geekpure products are manufactured with quality and reliability in mind. For specific warranty details regarding your 5-Stage Reverse Osmosis System, please refer to the warranty card included in your product packaging or contact Geekpure customer support directly.

For technical assistance, replacement parts, or any questions regarding your system, please visit the official

Geekpure website or contact their customer service department. Contact information can typically be found on the product packaging or the brand's official online presence.

Geekpure Store: Visit the Geekpure Store on Amazon

© 2023 Geekpure. All rights reserved.