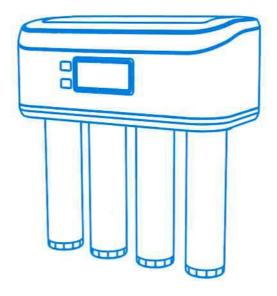
# Bayonet Cartridge Series RO Unit

# Installation and Maintenance Manual



RO-50G/75G-FFE

Read through all the instructions before installing and using the unit.

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#### INTRODUCTION

We would like to thank you for choosing the Reverse Osmosis Unit. This is our standard 4-stage filtration unit. Our unit has been manufactured to strict quality standards to ensure you receive the best product possible. This unit is your first step to cleaner, healthier and better tasting water. The stages and their functions are outlined below.

Spun PP Filter - removes lager particles suspended in water.

Block Carbon Filter -removes any organics, chlorine, odor and turbidity.

RO Membrane -removes bacteria, heavy metals, dissolved matter, and salinity.

Inline Carbon Filter (post filter) -adjusts the taste of treated water.

#### **PACKAGE CONTENTS**

Reverse Osmosis Unit - 1 pc

Food Grade Tubing - 4 pcs (Red, White, Yellow and Blue)

Faucet - 1 pc

Accessories – Tube Plug, Screws, Drain Clamp, Tee Fitting, Ball Valve, Feed Water Valve

Manual - 1 pc

#### **TECHNICAL SPECIFICATIONS**

Voltage and Frequency: 110V-240V 50Hz/60Hz

Wattage: 25W-36W

RO Element Capacity: 50/75GPD Tank Capacity: 3.0G Plastic

Inlet TDS: ≤ 250ppm

Chlorine Level: ≤ 0.2ppm

Average RO Rejection Rate: 98%

Inlet Water Pressure (min/Max): 14.5 - 43.5 psi Inlet Water Temperature (min/Max): 5°C - 45°C

Flush Type (model dependent): Auto



#### **BEFORE YOU START**

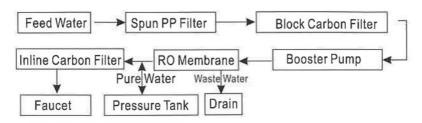
- Read through all instructions before beginning installation and using this system. Follow all steps exactly or risk damaging system/incorrect operation.
- This system contains filters that need to be replaced at certain intervals. Replacement intervals will vary according to use, please contact your local dealer for details.
- Please install system on potable water only. On non-potable water sources, system will not function properly and additional pre-treatment may be needed.
- Ensure source water pressure is between 14.5 43.5 psi. If source water pressure exceeds maximum pressure a pressure reduction valve may be needed, consult your local dealer.
- Ensure source water temperature is between 5°C 45°C.
   System will not function properly if these temperatures are exceeded. DO NOT INSTALL ON HOT WATER SOURCE.
- Do not use system on noticeably contaminated water such raw sewage or well water.
- This unit operates on 110V~240V power. Please ensure you are using the correct power source.

# CAUTION:

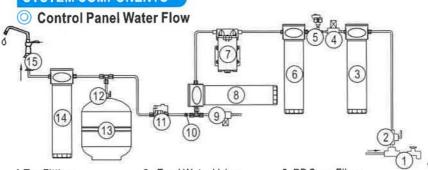
- Do not disassemble, open, or modify this unit. Tampering with the unit may cause failure or damage and will void warranty.
- Do not cover the unit, as this will prevent proper heat dissipation and can cause damage or fire.
- Do not place objects on top of the unit as this may cause damage to the unit and may cause leaking.
- Follow all recommended operating pressures and temperature, failure to do so will cause damage to the unit and void warranty.
- Avoid contact with corrosive materials.
- Keep away from heat.



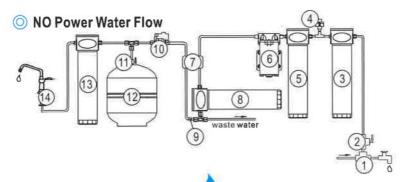
# **HOW YOUR SYSTEMS WORKS**



# SYSTEM COMPONENTS



- 1.Tee Fitting
- 4.Low Pressure Switch
- 7.Booster Pump
- 10.Check Valve
- 13.Pressure Tank
- 2. Feed Water Valve
- 5.Inlet Solenoid Valve
- 8. RO Membrane
- 11. High Pressure Switch
- 14. Inline Carbon Filter
- 3. PP Spun Fiber
- 6.Block Carbon Filter
- 9. Auto Flush Valve
- 12. Tank Valve
- 15.Faucet



- 1.Tee Fitting
- 4. Low Pressure Switch
- 7.Auto Shot-off Valve
- 10.. High Pressure Switch
- 13. Inline Carbon Filter
- 2. Feed Water Valve
- 5. Block Carbon Filter
- 8.RO Membrane
- 11.Tank Valve
- 14.Faucet

- 3. PP Spun Fiber
- 6.Booster Pump
- 9.Check Valve
- 12.Pressure Tank

# **INSTALLATION**

Tools and Parts Required







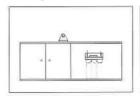


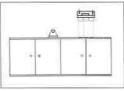


Drain Clamp

# Unit placement

- This unit was designed to be placed under your sink or on your counter top. However, if due to space or other limitations, this unit can be placed where it is convenient.
- When choosing a location for the unit, remember to have easy access to cold water line, drain pipe, power outlet, and enough room to change filters.



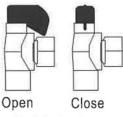


# Tubing Connection Quick Fitting Install the water pipe Insert the water pipe Insert the water pipe Insert the clip Pull out the water pipe Pull out the water pipe



#### O Pressure Tank

- Keep Pressure Tank within 10 feet of faucet.
- If longer length of tubing is needed, use 1/4" tubing only to prevent pressure drop.
- Tank can weigh up to 30lbs when full, find firm and level flooring.
- Install Ball Valve by screwing Valve on to Tank and apply Teflon tape to prevent leaking.



Tank ball valve

- Connect Yellow tubing from post filter to Pressure Tank.
- Apply teflon tape to nozzle on top of tank.
- Install and hand tighten tank valve.
- Connect yellow tubing from system.
- Check valve is in open posistion.



# Feed Water Valve and Tee Fitting

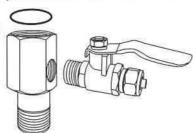
Install Tee Fitting and Feed Water Valve as per diagram.

Wrap threads of Feed Water Valve and Tee Fitting with Teflon tape.

Connect White Feed Water Tubing from unit to Feed Water Valve.

Install the Feed water valve Install the Feed water valve Tee fitting, and then connect to source water.

Caution: The water supply to your unit MUST be from COLD WATER LINE.



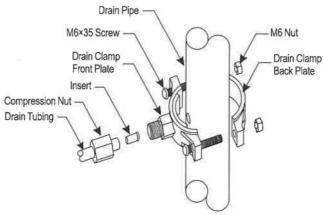
#### NOTE:

Use only a cold potable water supply as Feed Water, hot water will damage your unit. Softened Feed Water will extend the life of the RO Membrane.

#### Drain Clamp Installation

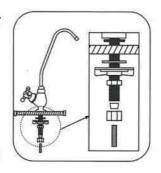
- Position drain clamp on drain pipe above the drain trap and tighten securely.
- Using the drain clamp as a guide, drill a 6mm hole, enough for the 1/4" tubing to pass through one side of the drain pipe. DO NOT drill through both sides.
- Connect Red Waste Water Tubing from unit to Drain Clamp.

#### **DRAIN CLAMP ASSEMBLY**



#### Faucet Installation

- Select a convenient location near your sink to place the faucet.
- Drill a hole 12mm in diameter in counter top.
- Place washers, plates, seals and nuts in order as per diagram and tighten on to counter.
- Attach Blue Pure Water tubing to the bottom of faucet and connect tubing to unit.





# **OPERATION AND MAINTENANCE**

# LED Display and Control Panel

 Power on the power light is bright, buzzer chirping sound once, display screen flash once, the system start work,



auto flush 60 seconds, sature flush icon flashing.

Then the machine in water producing state, water producing icon is running, real-time display TDS; when the water in pressure tank is full, water producing icon is off, water full icon long bright.

Water shortage or water pressure is not sufficient, water lack icon long bright, buzzer sound 10 times.

- The machine produce water for 2 hours totally, no flush during the working time, it will flush 30 seconds automatically.
- When the machine is working (producing water) for 6 hours, or water leaking probe is detected, the machine automatically stops producing water and alert, energy repair icon flashing, buzzer sounds.
- Filter replacement reminder for four stages, the first and second filter set for 270 hours, third filter set for 1620 hours, the fourth filter set for 540 hours. Reminder for each filter with increased water use and the grid being exhausted, current set alarming and flashing when exhausted, after changing the filter, need to press the reset button reset to reset the filter detection timing again.
- Filter reset: shortly press the reset button [RESET] (less than 3 seconds), buzzer chirping sound once, into select function; shortly press the reset button again, until selected the filter for needed reset, tips of selected filter flashing; selected the filter

needed reset, tips of selected filter flashing; selected the filter for needed reset, long press the reset button (over 3 seconds) for selected filter reset; after three seconds, heard a sound of "di" means filter reset success, filter tips full bright. (Press the reset button, after buzzer chirping sound once, without any operation in 5 seconds then exit filter reset function.)

Press the flush button FLUSH, buzzer chirping sound once; press the flush button in a flushing state, exiting the flushing program; press the flush button under water producing or water full state, flush RO membrane for 120 seconds.

# Pre-filter Flushing (Initial Setup)

Prepare system for operation by flushing pre-filters:

- Disconnect RO element inlet tube on element's inlet. Open water main and inlet valve and allow system to run through the 2 prefilters.
- Discard output water into container or drain.
- Continue flushing until output water is visibly clean. Reconnect tube

**Note:** Pump and membrane may be severely damaged if system is running without flushing pre-filters. Discard all water from flush, it is not suitable for use or consumption.

- After flushing pre-filters open all valves to start operation.
- Wait approximately 2 minutes before opening faucet.
- Allow system to flush for first 10-15 minutes with tap on.
- Do not use water from unit at this time. When water becomes clear, it is ready for use.

#### Flushing the Pressure Tank

- After flushing the Pre-Filters, allow the unit to operate and fill the Pressure Tank.
- Tank will take approximately 3.5 hours to fill. Once tank is full, discharge Pressure Tank by leaving faucet open.
- Once Tank is completely empty, close faucet and allow tank to fill again.
  After flushing the system is ready to use.

# Regular Operation

Once system has been set-up and has been plugged into a power source, it will operate and begin treating water automatically the faucet is open. Once the faucet is closed, the unit will switch off automatically. After use, the unit will flush automatically if equipped with auto flush function.

#### Filter Maintenance

To ensure the unit operates at its optimum level, routine maintenance is required. The frequency of maintenance depends on the feed water quality. The following are some guidelines for scheduled filter changes, keep in mind that the frequency of filter changes may vary. If in doubt, contact your local dealer or service technician.

- Change Spun PP Filter and Change Block Carbon Filter every 3-6 months or as required.
- Inline Carbon Filter every 6-12 months or as required.
- Change RO Membrane every 18-24 months or as required.

If you will be away or not using the unit for an extended period of time, please disconnect unit from power supply. If the unit has been shut down and not used for an extended period of time, perform the same flushing procedure as in the initial set-up.

# Filter Replacement

- Close Feed Water Valve.
- Close Tank Ball Valve on Pressure Tank.
- Open Faucet and drain any remaining water from system.
- Revolve the old cartridge clockwise, and then take away it from the cap.
- Align the new cartridge with central cap then slightly push it into the hole.
- Turn counter-clockwise to tighten the new cartridge then open valves.
- Perform pre-filter flush after filters have been changed.





Good water, Diamond life