

 MONARCH WATER

240WW

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INSTALL GUIDE
Reverse Osmosis System



EVOLUTION SINCE 1964

Technical Data

Product name: Professional Reverse Osmosis

Applicable water temperature: 5-38°C

Product model: PRORO240WW

Rated working pressure: 0.4-0.6Mpa

Environmental humidity: ≤90% (at 25°C)

Approvals: CE and RoHS

Filtration accuracy: 0.0001 micron

Rated voltage: 220VV

Purified water flow: 1600GPD (240lph) at 25°C

Suitable water source: Potable Water

Filter element configuration: Carbon Block Pre-Filter + RO Membrane + RO Membrane + Complex Filter 4 in 1

Water Purification Diagram

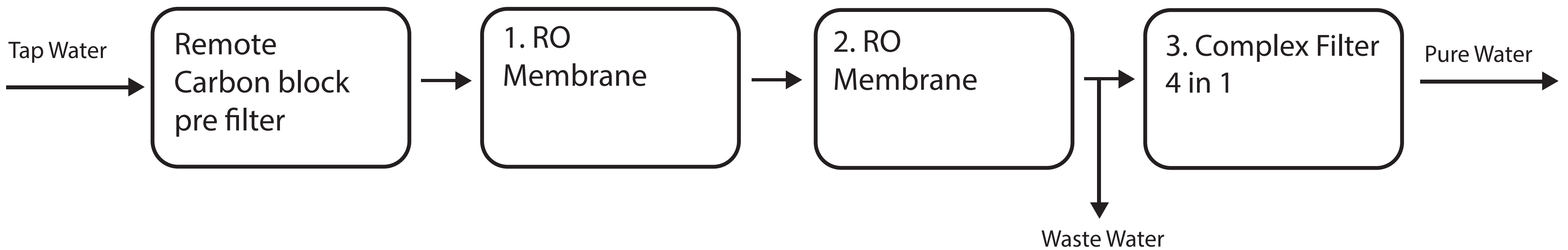


Figure 1 Schematic diagram of water purification

Carbon Block Pre-Filter - Filter out substances and absorbs chlorine and odours in water

x2 RO membranes - Filtration accuracy: 0.0001 microns, effectively filtering bacteria, scale, colloids, heavy metal ions and other harmful substances

Complex Filter 4 in 1 - Extra polishing filter which further filters out substances and absorbs residual chlorine and odours in water

Components and working principle

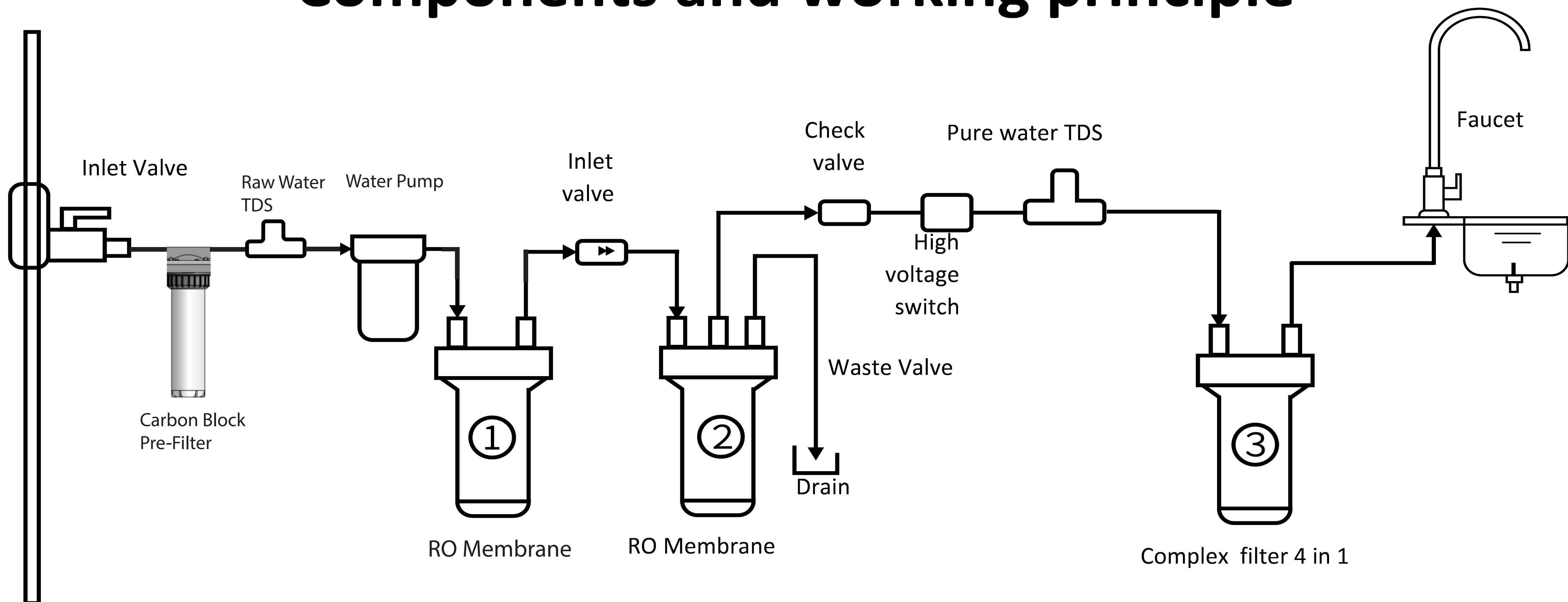


Figure 2. Components and working principle

Features

Pure water: Effectively filter scale, bacteria, organic matter, inorganic matter, metal ions, radioactive substances in the water, and can be used for direct drinking and tea making.

Wastewater: The ion concentration is higher than that of tap water. It can be held in buckets for watering flowers, mopping floor, flushing toilets etc.

Protection: 10 minutes automatic shutdown protection function.

Unit Installation

1. The installation location of the RO unit and Carbon Block Pre-Filter can be selected according to your actual situation
2. It is recommended that the RO unit be installed close to your incoming water, drain and electrical socket (Figure 3)
3. It is recommended that the RO unit be attached to the wall for support,, attach the self-tapping screws or cement steel nails to the wall according to the position of the hanging holes on the ROs hanging board (back of unit), four are enough.
4. Install the filter element of the main machine, from left to right in front of the main machine, install complex filter, RO membrane, RO membrane.
5. Carbon Block cartridge. Insert the carbon block filter in to the housing, ensuring it slides over the main part in the bottom of the bowl. Grease the 'O' ring on the housing. Put the head back on, making sure the male part protruding down from the head goes in to the top of the cartridge. Tighten bowl/nut to seal. Take the two white fittings, PTFE tape the male threads and head in to the head of the cartridge. Tighten to seal. Screw the bracket on to the top of the filter head.

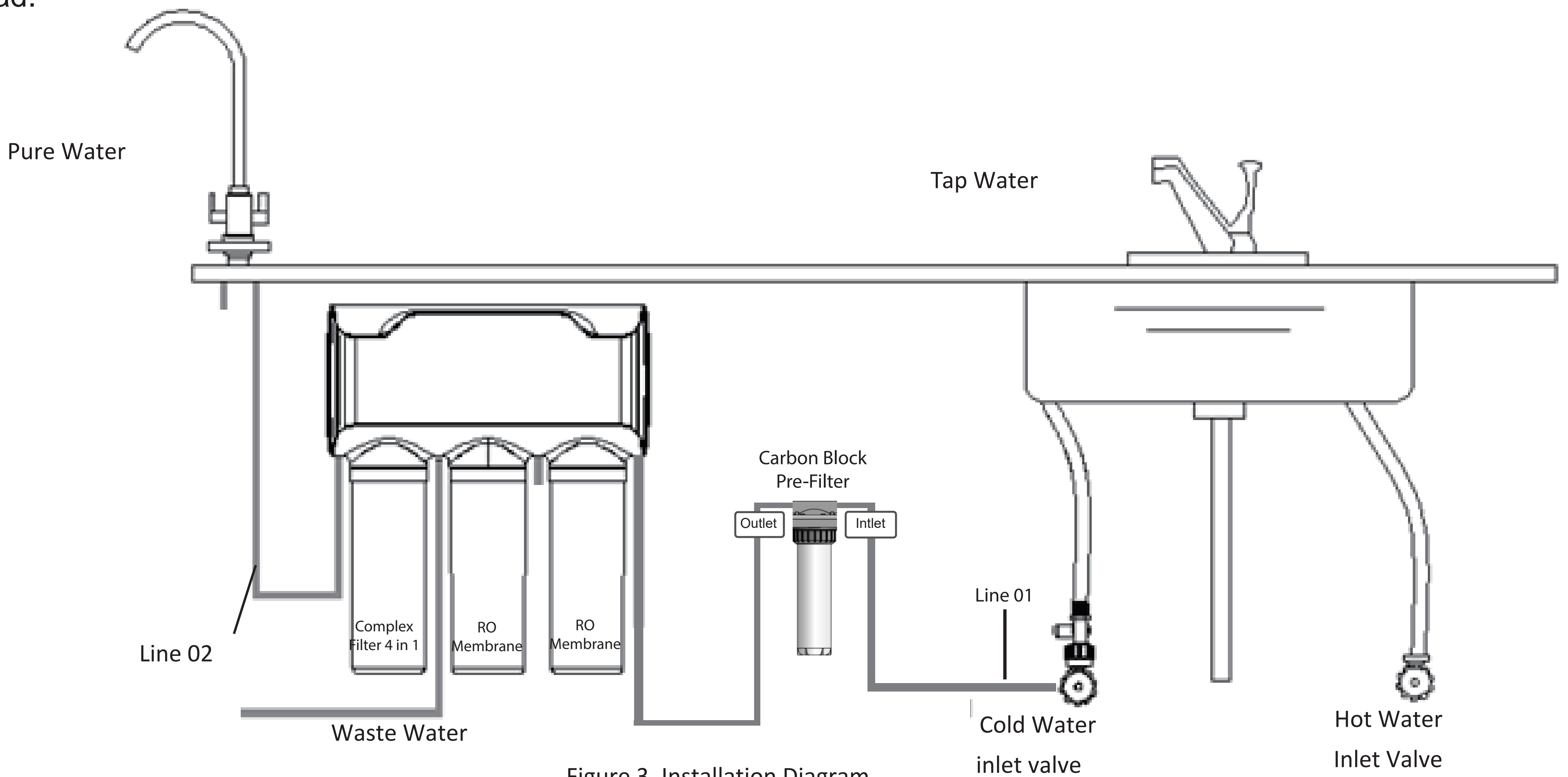


Figure 3. Installation Diagram

Faucet Installation (if using)

WHERE TO PLACE YOUR FAUCET

The faucet should be placed in a convenient area near the sink tap. There should be a reasonable amount of space above and below the faucet mounting position to allow to connections to the RO unit..

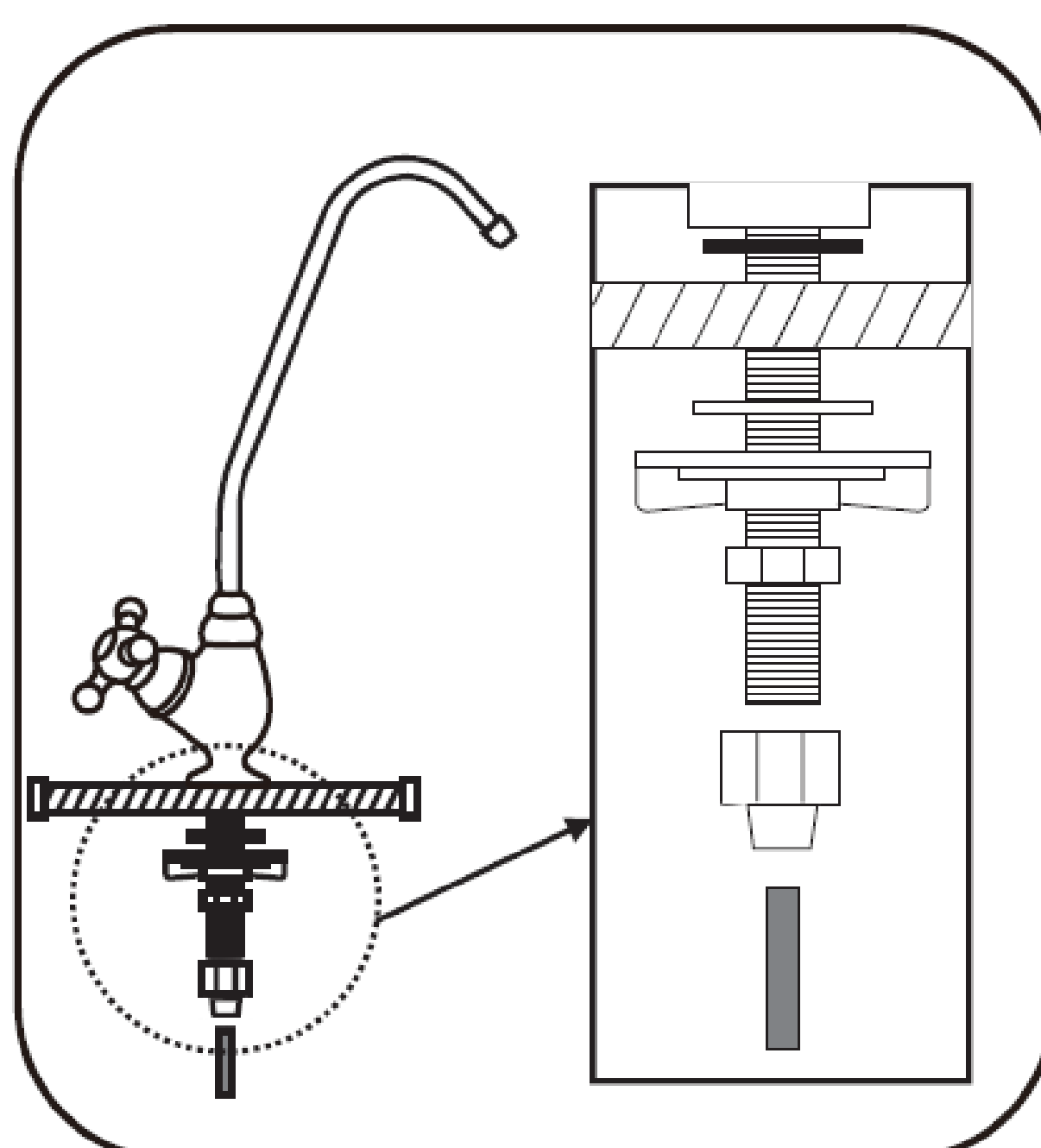
There should be a 2" diameter area for the faucet to be mounted..

The thickness of mounting surface should not exceed 32mm..

Select a convenient location near your sink to place the faucet.

Drill a hole 12mm in diameter into the countertop.

Place washers, plates, seals and nuts in order as per diagram and tighten on the countertop. Attach the grey plastic adapter to the bottom of the faucet (this is a push-fit connection, push connector until you feel it 'click' in to place.).



Pipeline installation

1. Tee off cold water pipework with 15mm copper pipe (not supplied).
2. Install metal fitting (left picture below) to copper pipe and apply sealant to olive as per picture right.
3. Attach the grey plastic fitting to male thread on the metal fitting.
4. Ensure compression fitting and grey fitting are tight to seal.
5. Cut the 3/8" white tubing to the required length, chamfer both ends and connect one end to the grey fitting and the other end to the water inlet on the **Carbon Block Pre-Filter (Line 01)**.
6. Connect the 3/8" tubing from the outlet of the **Carbon Block Pre-Filter to the inlet on the RO machine**.
7. Attach the drain clamp to the drain pipe as per the diagram 1.0 below.
8. Using the 1/4" Red Tubing, chamfer one end. Attach the chamfered end to the waste water connection on the R.O unit, and the other end to the drain clamp (Diagram 1.0).
9. Using the remaining 3/8" White tubing, chamfer both ends. Attach one end to the pure water connection on the R.O. unit. and the other end to the push-fit connector on the bottom of the faucet (Line 02).



Metal Fitting - 15mm
Compression x 3/4" Male
complete with non return valve

Grey Fitting -
3/4" Female x 3/8" Pushfit

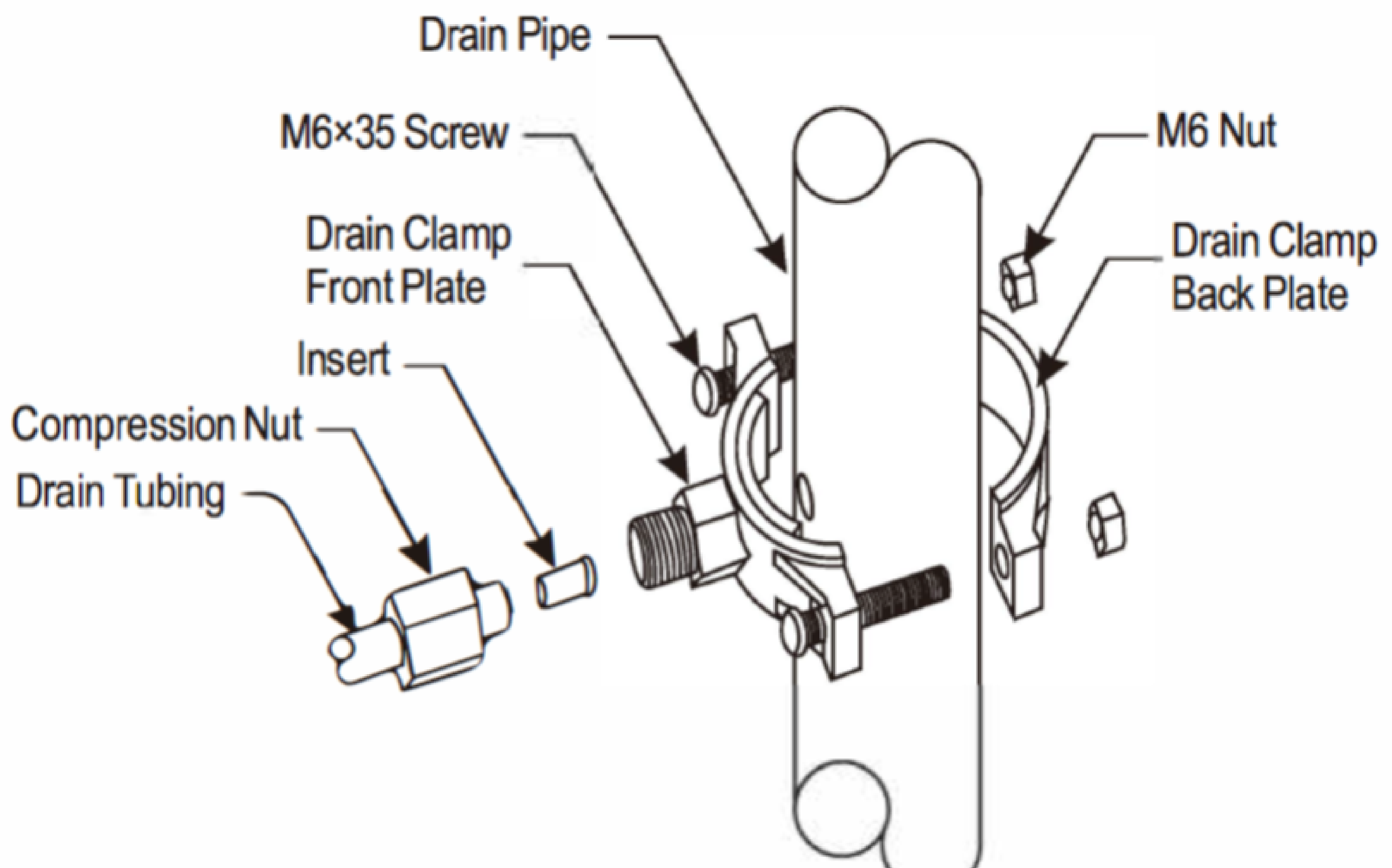
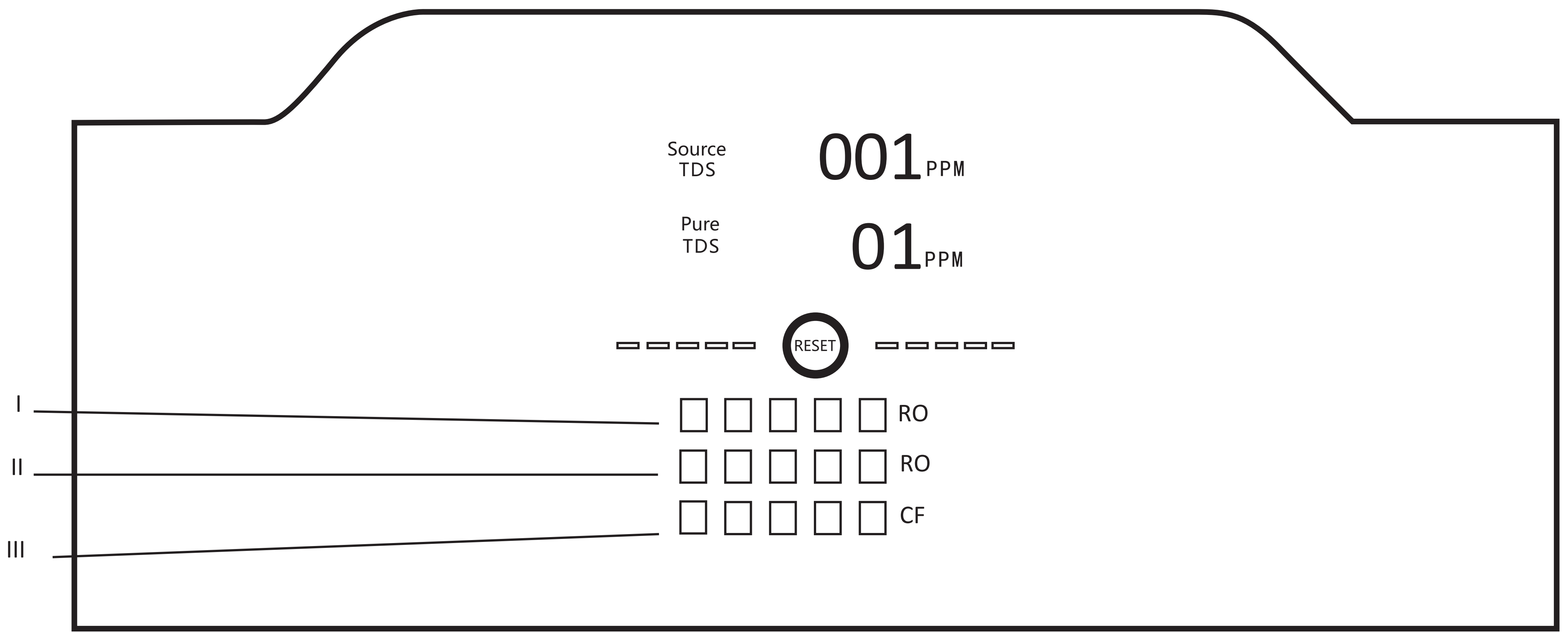


Diagram 1.0. Drain Clamp Installation

Initial Setup and Pre-Flushing

1. Ensure all pipeline connections are secure, open inlet valve slowly and check for initial leaks.
2. Once leaks have been tested for, plug the machine in and turn it on
3. Open the faucet and allow water to run for 15 minutes. This water should not be used. After 15 minutes the water can then be used.
4. Check machine Pure TDS reading to ensure the machine is working.



The indicator light of filter element **I** corresponds to the first-stage filter element, the indicator light of filter element **II** corresponds to the second-stage filter element, and the indicator light of filter element **III** corresponds to the third-stage filter element. When the life of the filter element expires, the corresponding light will go out. Replace the filter element and flush after replacement (follow steps below)

Changing the filters

To replace the filters, turn off the water inlet valve. Then open the faucet to release the pressure inside the unit. Once the pressure has been released close the faucet, remove the filter by twisting. Then insert the replacement filter and twist in to position.

Turn the water inlet valve back on and open the faucet for 15 minutes to allow the new filters to be flushed. Then hold the reset button for 3 seconds to enter the filter resetting mode. The lights will flash to indicate which filter you are currently on (**I**), to reset the filter expiry indicator, press and hold the reset button for 3 seconds and the lights will change from flashing to steady. To change which filter you want to reset, press the reset button once and the lights will begin to flash for the filter **II**, press again for filter **III**. Once all the required filter expiry indicators have been reset

Troubleshooting

Issue	Possible Reason	Solution
No Pure Water No Water	No water The water inlet valve is not open The inlet and outlet of the water purifier are connected reversely	Connect the water source Open the water inlet valve Follow the product water inlet and outlet prompts to connect it correctly Replace the filter element Replace RO membrane filter element Increase water pressure
Small Water Output	Composite filter plugged RO membrane filter plugged Low water pressure	Replace the filter element Replace RO membrane filter element Increase water pressure

Precautions

1. To prevent damages and water leaks do not try and disassemble the unit, attempts to disassemble the unit will result in your guarantee being void.
2. It is recommended that the machine be used in an environment with a temperature above 0°C. When the ambient temperature is below 0°C, freezing of water may cause the machine to burst.
3. After a long period of inactivity, flush the unit by following the instructions above
4. When not in use for a long time, close the water inlet valve to cut off the water source.

Table 1 Recommended Filter Replacement Cycle

Complex 4 in 1 filter	RO Membranes	Carbon Block Pre-Fliter
6 months or before if flow or performance decreases.	as determined by product water quality and flow.	6 monthhs or before if flow or performane decreases.

SAFETY INSTRUCTIONS

This appliance is intended to operate and function as per the instructions in this manual. It is not designed to operate outside of the specifications listed and any attempt to do so or tamper with the unit can cause damage to the unit and/or bodily harm. This unit is not a toy, keep out of reach from small children. If the unit requires service or repair, please contact your local service technician or sales representative.

- Please ensure feed water temperature is over 0 °C. Using water below 0 °C can cause ice to form and damage the unit.
- Please ensure power source is correct before connecting unit. Incorrect voltage could result in damage to unit and/or fire hazard.
- Do not cause damage to or use unit if the power cord is damaged. A damaged power cord could cause an electrical shock or fire hazard. If power cord is damaged, unplug and discontinue use immediately.

DISCLAIMER

In case of special circumstances during installation, you need to use accessories not included in the packing list of this product. Consumers are asked to purchase quality-guaranteed accessories through regular channels. Monarch Water is not responsible for the quality of non-original accessories because of the quality problems of the accessories purchased by consumers. Monarch Water assumes no responsibility for any water leakage accident.

REGULAR MAINTENANCE

Please ensure you change your filters when recommended. Failure to change your filters regularly may invalidate your warranty. Regularly check the TDS level of your output water.

Ensure that you change your Reverse Osmosis Membrane when recommended or when the TDS level starts to rise. For best performance, supply unit with softened water, as this will achieve maximum life expectancy of the membrane.

