

Bayonet Cartridge Series RO Unit

Installation and Maintenance Manual

Good water, Diamond life

RO-50G/75G/80G/100G/125G-FF/FFB/FFC/FFD

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

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TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
No product water	Water supply is off	Turn on feed water
Not enough product water	Water supply is blocker	Clear restriction
	Feed water valve is plugged	Open valve or unplug
	No drain flow	Clear or replace check valve
Pump not running	Low feed water pressure	Check source water supply
	No power supply or loose connection	Turn on power supply
	Transformer burnt out	Replace filter cartridges
Pump is running but system is not producing water	Pre-filters plugged	Replace filter cartridges
	Inlet solenoid valve not working	Repair or replace valve
System does not shut off	Auto shut off switch not working	Repair or replace switch
Abnormal pump noise	Pre-filters plugged	Replace filter cartridges
	Low feed water pressure	Adjust feed water pressure
No drain water	Plugged drain flow restrictor	Replace
Tubing leaks	Tubing connection incorrect	Check/reinstall tubing
	Defective or damaged tubing	Replace section of tubing

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 tampering 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 4°C. Using water below 4°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.

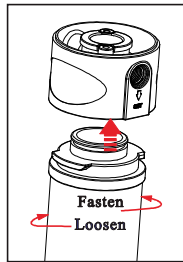
quality . The following are some guidelines for scheduled filter changes, keep in mind that the frequency of filter changes may vary. If in doubt, contact your local dealer or service technician.

- Change Spun PP Filter and Granular Carbon Filter every 3-6 months or as required.
- Change Granular Carbon Filter and Block 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.

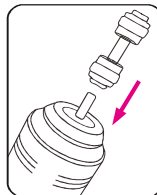
Filter Replacement

- 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.



Membrane Replacement

- Close Feed Water Valve.
- Open Faucet and drain any remaining water from system.
- Disconnect quick connect filters.
- Replace Membrane, reconnect, and open valves.
- Perform pre-filter flush after filters have been changed.



Note: Diagrams on how to connect using quick connect fittings can be found in the installation section.

INTRODUCTION

We would like to thank you for choosing the Reverse Osmosis Unit. This is our standard 5-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 larger particles suspended in water.

Granular Carbon Filter - removes organics, chlorine, odor, and turbidity.

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(FFC NO POWER)

Wattage: 25W-36W (FFC /FFD NO POWER)

RO Element Capacity: 50/75/80/100/125 GPD

Tank Capacity : 3.2G Steel or 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 or Manual

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. (FFC NO POWER)

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.

OPERATION AND MAINTENANCE

• 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 3 pre-filters.
- 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.

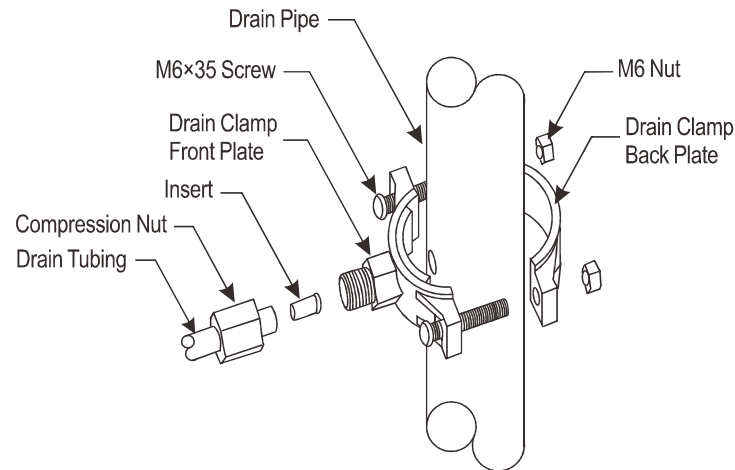
• Filter Maintenance

To ensure the unit operates at its optimum level, routine maintenance is required. The frequency of maintenance depends on the feed water

☉ Drain Clamp Installation

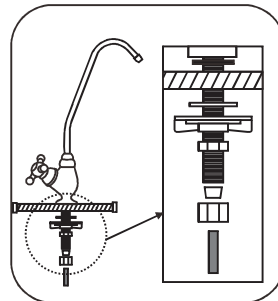
- Position drain clamp on drain pipe above the drain trap and tighten securely.
- Using the drain clamp as a guide, drill a **6mm** hole, enough for the **1/4"** tubing to pass through one side of the drain pipe. **DO NOT** drill through both sides.
- Connect **Red Waste Water Tubing** from unit to Drain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

DRAIN CLAMP ASSEMBLY



☉ Faucet Installation

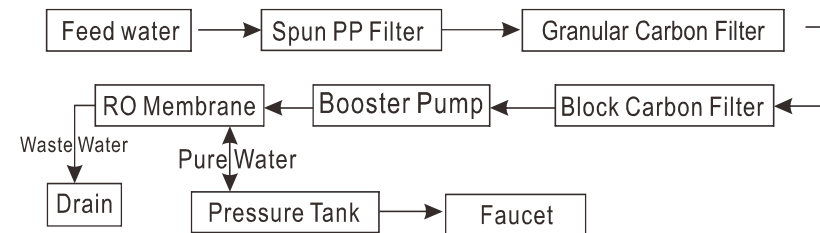
- Select a convenient location near your sink to place the faucet.
- Drill a hole **12mm** in diameter in counter top.
- Place washers, plates, seals and nuts in order as per diagram and tighten on to counter.
- Attach **Blue Pure Water tubing** to the bottom of faucet and connect tubing to unit.



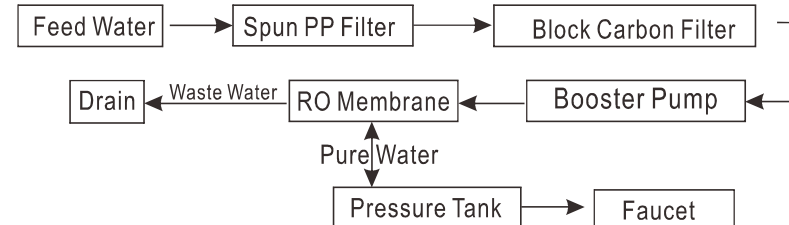
- Do not place objects on top of the unit as this may cause damage to the unit and may cause leaking.
 - Follow all recommended operating pressures and temperature, failure to do so will cause damage to the unit and void warranty.
 - Avoid contact with corrosive materials.
- Keep away from heat.

HOW YOUR SYSTEMS WORKS

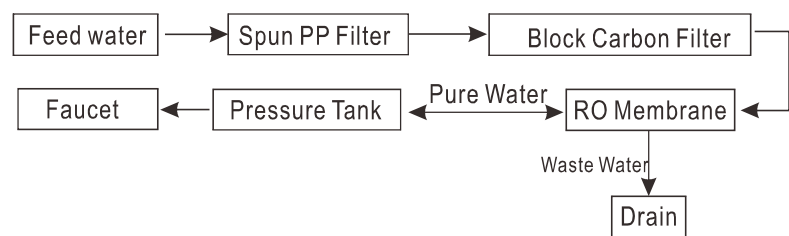
☉ FF



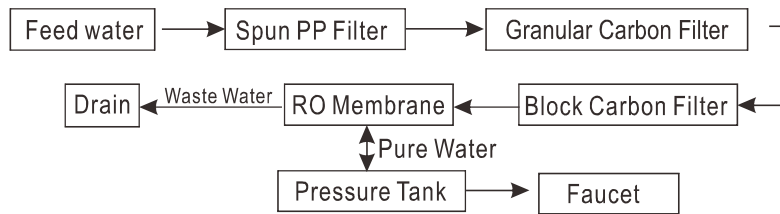
☉ FFB



☉ FFC

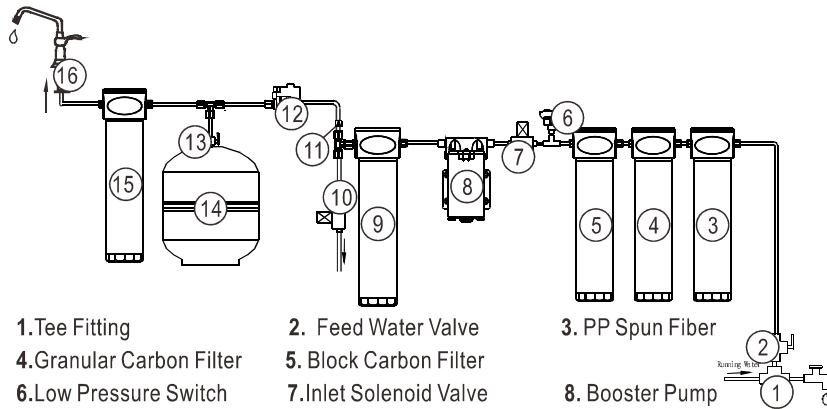


FFD



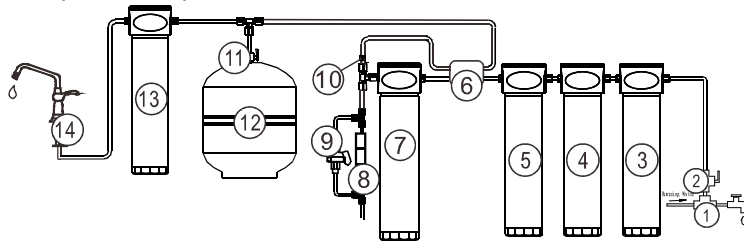
SYSTEM COMPONENTS

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- | | | |
|---------------------------|-------------------------|-------------------|
| 1. Tee Fitting | 2. Feed Water Valve | 3. PP Spun Fiber |
| 4. Granular Carbon Filter | 5. Block Carbon Filter | 8. Booster Pump |
| 6. Low Pressure Switch | 7. Inlet Solenoid Valve | 11. Check Valve |
| 9. RO Membrane | 10. Auto Flush Valve | 14. Pressure Tank |
| 12. High Pressure Switch | 13. Tank Valve | |
| 15. Inline Carbon Filter | 16. Faucet | |

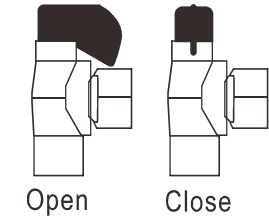
FF(no power)



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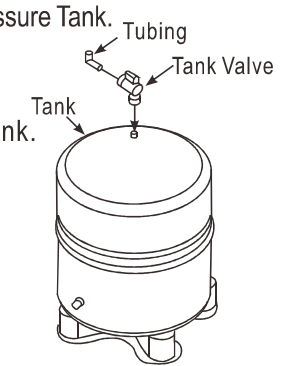
Pressure Tank

- 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.
- Connect Yellow tubing from post filter to Pressure Tank.



Tank ball valve

- 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 position.



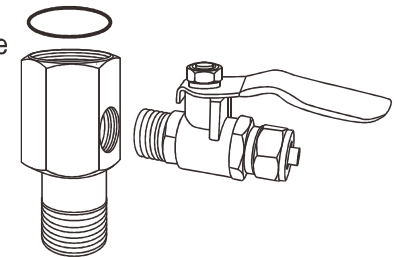
Feed Water Valve and Tee Fitting

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.

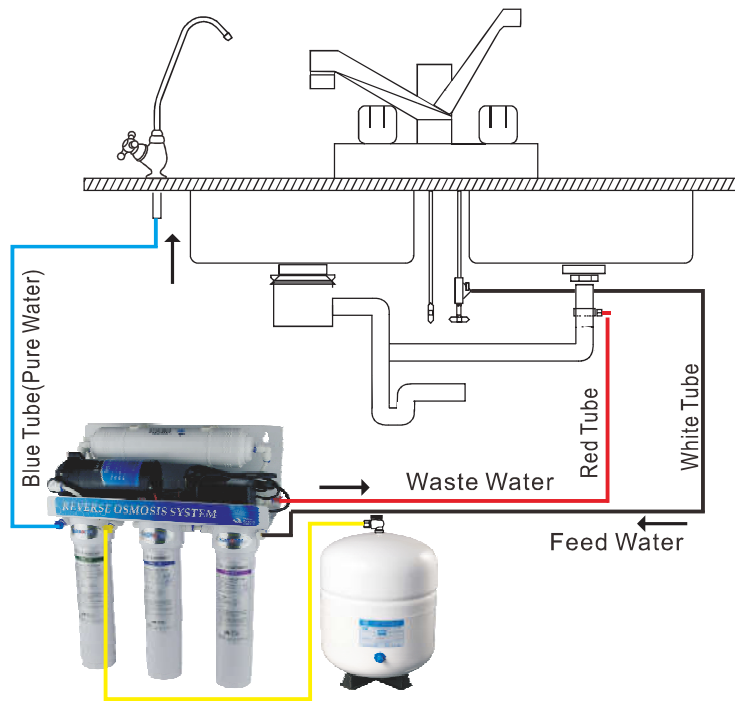
Caution: The water supply to your unit **MUST** be from **COLD WATER LINE**.



NOTE:

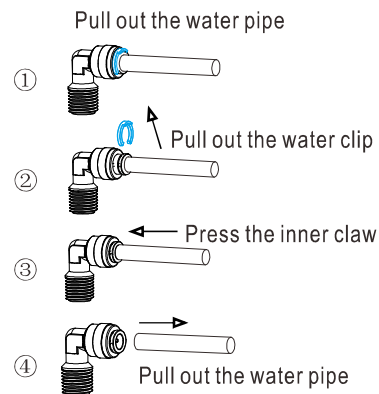
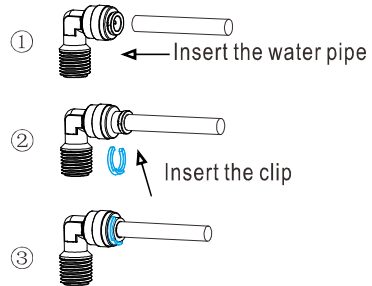
Use only a cold potable water supply as Feed Water, hot water will damage your unit. Softened Feed Water will extend the life of the RO Membrane.

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⦿ Tubing Connection

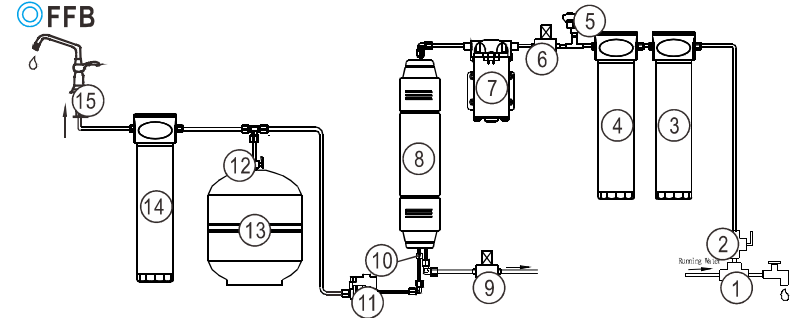
Install the water pipe



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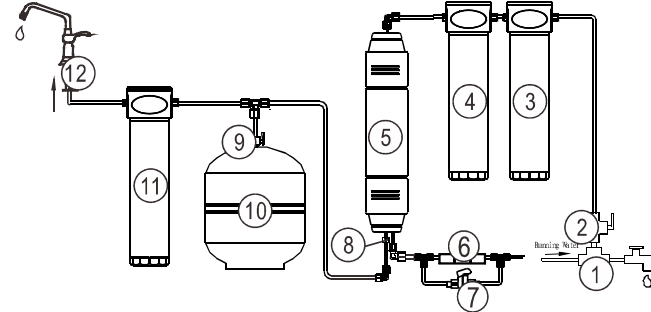
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|---------------------------|------------------------|------------------------|
| 1. Tee Fitting | 2. Feed Water Valve | 3. PP Spun Fiber |
| 4. Granular Carbon Filter | 5. Block Carbon Filter | 6. Auto Shot-off Valve |
| 7. RO Membrane | 8. Flow-Limit Insert | 9. Manual Flush Valve |
| 10. Check Valve | 11. Tank Valve | 12. Pressure Tank |
| 13. Inline Carbon Filter | 14. Faucet | |

⦿ FFB



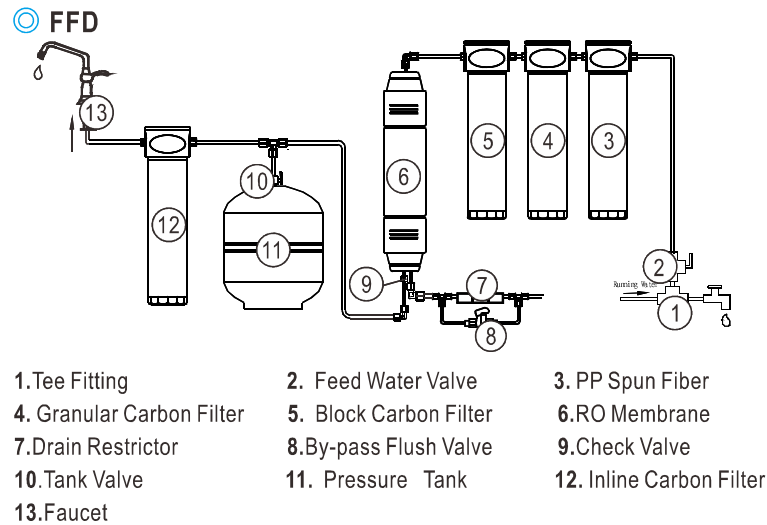
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|------------------------|--------------------------|-------------------------|
| 1. Tee Fitting | 2. Feed Water Valve | 3. PP Spun Fiber |
| 4. Block Carbon Filter | 5. Low Pressure Switch | 6. Inlet Solenoid Valve |
| 7. Booster Pump | 8. RO Membrane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

⦿ FFC



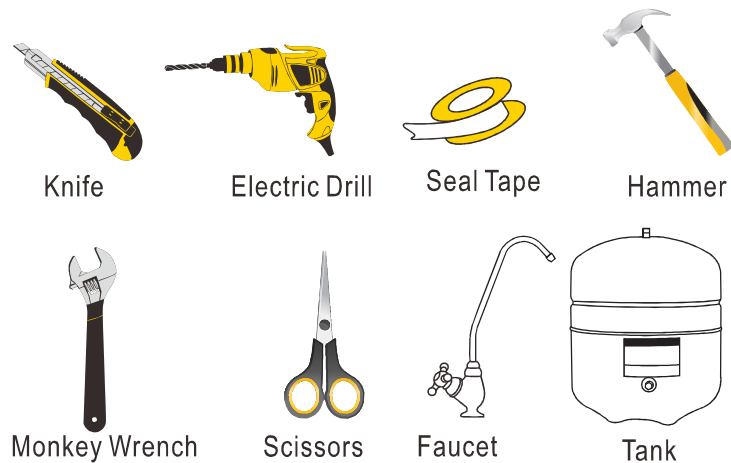
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|------------------------|--------------------------|---------------------|
| 1. Tee Fitting | 2. Feed Water Valve | 3. PP Spun Fiber |
| 4. Block Carbon Filter | 5. RO Membrane | 6. Drain Restrictor |
| 7. By-pass Flush Valve | 8. Check Valve | 9. Tank Valve |
| 10. Pressure Tank | 11. Inline Carbon Filter | 12. Faucet |

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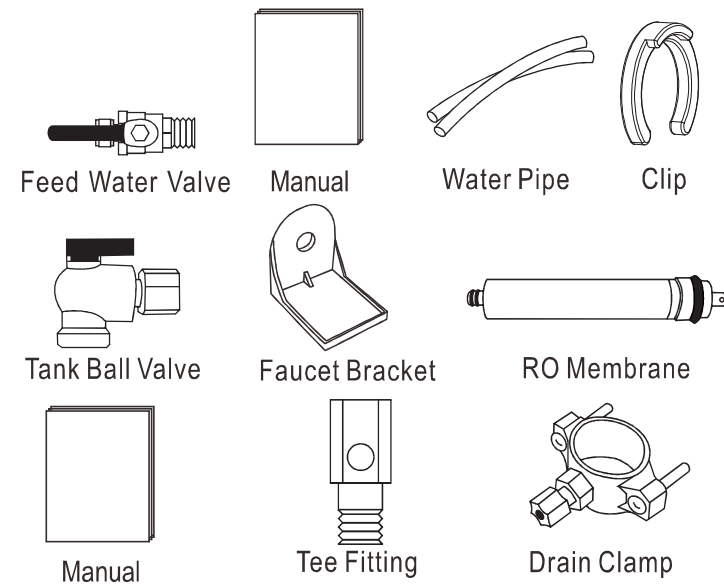


INSTALLATION

Tools and Parts Required

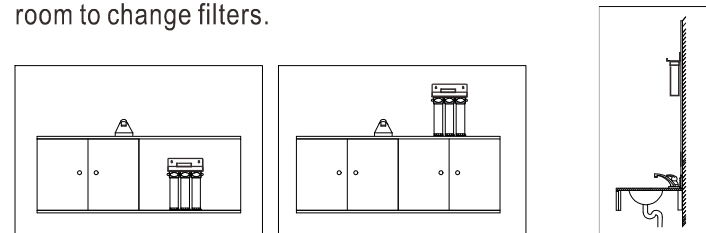


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Unit placement

- 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.



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