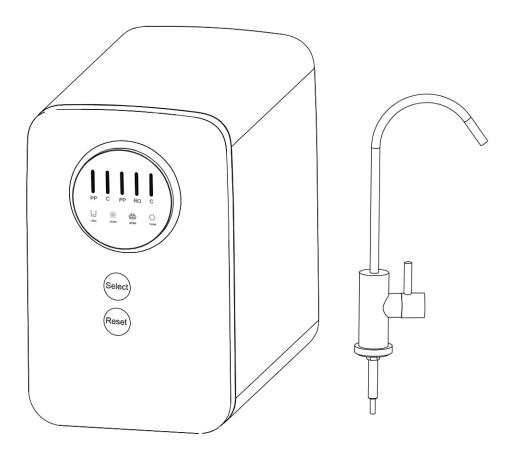
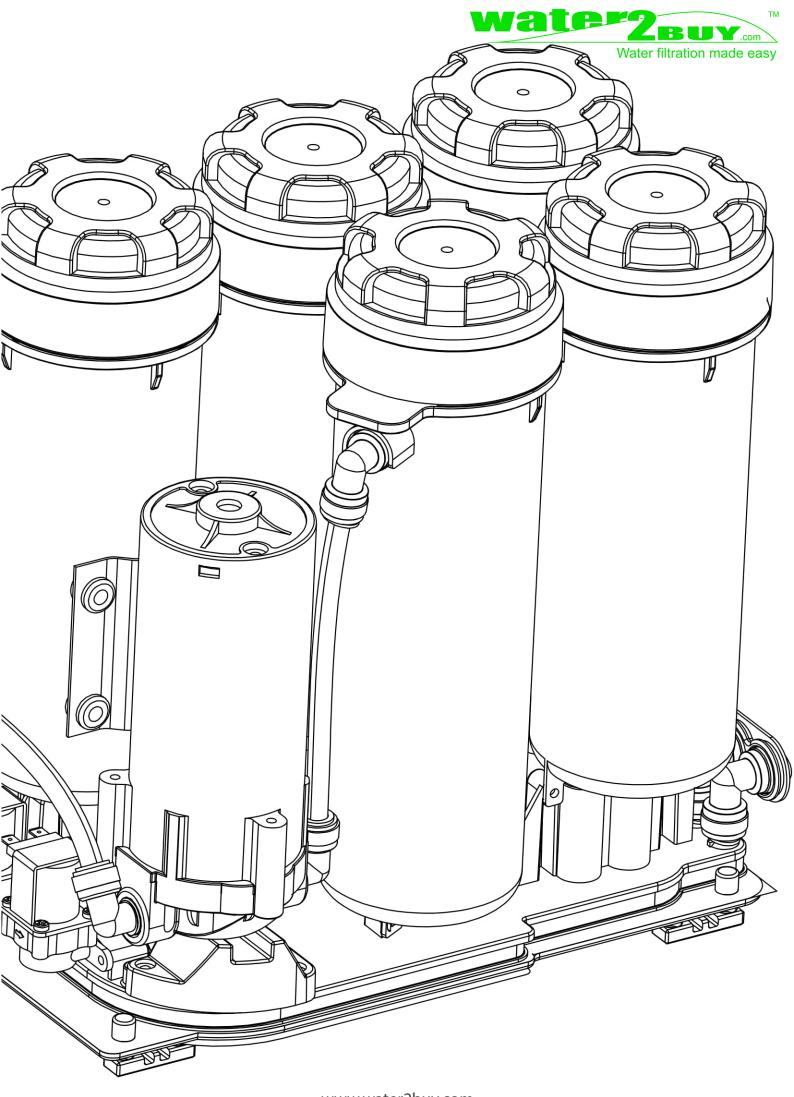


# RO Drinking Water System W2B400



- ▶ Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure. Keep this manual for future reference.
- Do not use the water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
- **■** Test the water periodically to verify that the system is performing satisfactorily.





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# READ THIS PAGE FIRST BEFORE STARTING INSTALLATION

▶You must read and understand the contents of this manual before installing or operating your RO system.

Personal injury or property damage could result if you fail to follow instructions in this manual.

- ▶This system and its installation must comply with state and local regulations. Check with your local public works department for plumbing and sanitation codes. Local codes should be followed in the event the codes conflict with any content in this manual.
- This RO system must be operated on pressures between 14 psi to 58 psi. If the water pressure is higher than 58 PSI, use a pressure reducing valve in the water supply line to the RO system.
- ► This unit must be operated at temperatures between 5°C 38°C (41°F and 110°F)
- ▶ Do not use this RO system on hot water supplies.
- ▶ Do not install this unit where it may be exposed to wet weather, direct sunlight, or temperatures outside of the range specified above.
- ► The appliance is only to be used with the power supply unit provided with the appliance.
- ► The appliance must only be supplied at safety extra low voltage corresponding to the marking on the appliance.

- ▶ Do not use water that is microbiologically unsafe without adequate disinfection before or after this system.
- This publication is based on information available when approved for printing. Continuing design refinement could cause changes that may not be included in this publication.
- ▶ This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- ► Children shall not play with the appliance.
- ► Cleaning and user maintenance shall not be made by children without supervision.

# INSTALL NOTES & SAFETY MESSAGES

Watch for the following messages in this manual:

#### **EXAMPLE:**

# NOTE

Check and comply with your state and local codes. You must follow these guidelines.

#### **EXAMPLE:**



Disassembly while under pressure can result in flooding.

#### **EXAMPLE:**



# **WARNING**

Electrical Shock Hazard! Unplug the unit before removing the cover or accessing any internal control parts.



# RO SYSTEM SPECIFICATIONS W2B

Specifications and Performance Data Sheet			
Water Supply		Municipal Water	
Feed Line	Pressure	0.1MPa~0.4MPa	
Product Flow		1.04 L/min	
Salt Rejection		96%	
Recovery		≥50%	
Water Temperature		5~38℃	
Ambient Humidity		≤90%	
Sound Level		≤55db	
Electrical	Input	100~240V AC 50/60Hz 3A	
	Output	24V DC 5A	
	Power Used	60 Watts	
	Туре	Thin Film Composite Membrane	
Membrane	Rating	400 GPD	
	Model	3012-400-NPI	
Connection	Inlet		
	Faucet	3/8" Quick Connect	
	Drain		
	Transformer	Quick Connect Power Cable	

• Salt rejection and product flow are variable and can be effected by temperature and feed water conditions.

Model	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Faucet
W2B400	Sediment Filter	Pre Carbon Filter	Sediment Filter	Reverse Osmosis Membrane	Post Carbon Filter	SS Steel
	10" 5 Micron	10" GAC	10" 1 Micron	400GPD	10" CTO	



# **PERFORMANCE & TECHNICAL INFORMATION**

The performance of the W2B400 system can be characterized and judged by the quality of the water produced by the system. By measuring the contaminant removal performance and flow rates of the system, its operating status can be easily evaluated.

## **Factors Which Affect Performance**

Performance of the reverse osmosis membrane is affected by several factors which must be considered when judging the condition of the system. The main factors which affect system performance are pressure, temperature, total dissolved solids level, recovery and PH.

#### Pressure

Water pressure affects both the quantity and quality of the water produced by the RO membrane. Generally, the more water pressure, the better the performance of the system.

# **Temperature**

The reverse osmosis process slows with decreasing temperature. To compensate, a temperature correction factor is used to adjust the actual performance of the RO membrane filter to the standard temperature of 77°F (25°C). This allows the performance of the unit to be accurately gauged against published standards. Temperature does not affect the concentrate flow rate.

#### **Total Dissolved Solids**

The minimum driving force which is necessary to stop or reverse the natural osmosis process is termed osmotic pressure. As the total dissolved solids level of the feed water increases, the amount of osmotic pressure increases and acts as back pressure against the reverse osmosis process. Osmotic pressure becomes significant at TDS levels above 500 mg/L(ppm).

#### **Hardness**

Hardness is the most common membrane foulant. If ignored, this relatively harmless component of feed water will scale a membrane over time. Use of a softener will reduce the fouling effect on a membrane. One way to detect too much hardness in the feed water is the weight of a membrane installed for a period of time. A fouled membrane(dried) will weigh significantly more than a new membrane. The increase in weight is a result of precipitated hardness inside the membrane.

#### Iron

Iron is another common membrane foulant. There are a variety of types of iron, some of which cannot be removed by an iron filter. Clear water iron can be removed more effectively by a 1 micron filter. Organic-bound iron can be removed only by activated carbon or macroporous anion resin. If there is enough iron to exceed the EPA secondary drinking water standard and softening the water is not an option and the iron is soluble, then an iron filter is appropriate. If none of these are an option, then regular replacement of membranes will have to be accepted.

#### **Product Water Recovery**

Product water recovery plays an important role in determining membrane and system performance. Recovery refers to the amount of water produced in relation to the amount of water sent to drain. The standard calculation is:

%Recovery = Prodcut Water  $\div$  (Product Water + Waste Water)  $\times$  100

The system uses a flow control assembly to restrict the flow of waste water to the drain. This restriction helps maintain pressure against the membrane. The sizing of the flow control assembly determines the recovery rating of the system. The system is manufactured with a recovery rating designed to be more than 50%. Depending on temperature, pressure and tolerances the actual recovery value may be slightly different for each system.



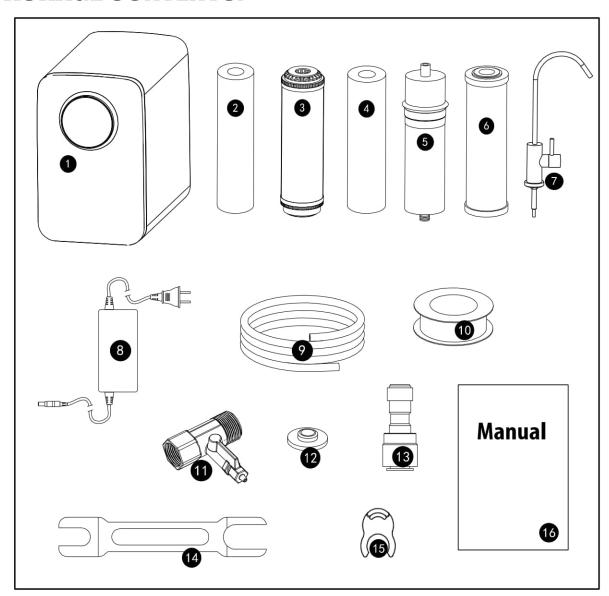
# **UNPACK & INSPECT YOUR RO SYSTEM**

Inspect the RO system for any shipping damage. If damage is found, notify the transportation company and request a damage inspection. Damage to cartons should also be noted.

Handle all components of the system with care. Do not drop, drag or turn components upside down.

The manufacture is not responsible for damages in transit. Small parts, needed to install the RO system, are in a parts box. To avoid loss the small parts, keep them in the parts bag unitly ou are ready to install.

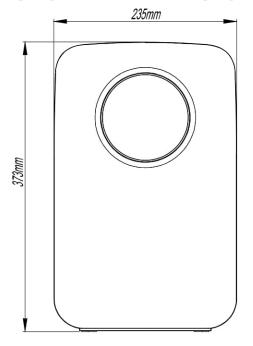
# **PACKAGE CONTENTS:**

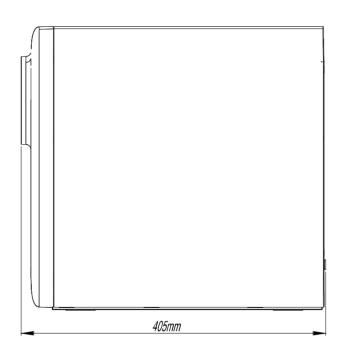


- 1. RO Module Assembly × 1
- **2.** Sediment Filter Cartridge(5  $\mu$ m)  $\times$  1
- 3. Pre Carbon Filter Cartridge × 1
- **4.** Sediment Filter Cartridge(1  $\mu$ m)  $\times$  1
- **5.** RO Filter Cartridge × 1
- 6. Post Carbon Filter Cartridge × 1
- **7.** SS Faucet  $\times$  1
- **8.** Power Transformer  $\times$  1
- 9. 3/8" Tubing × 1
- **10.** Thread Sealing Tape  $\times$  1
- **11.** Inlet T-Adaptor Valve $(1/2") \times 1$
- **12.** Inlet 3-Way Valve Washer  $\times$  1
- **13.** Faucet QC Connector(1/4" to 3/8")  $\times 1$
- **14.** Tubing Tool(1/4" & 3/8")  $\times 1$
- **15.** Secure Clip × some
- **16.** User Manual  $\times$  1



# **RO SYSTEM DIMENSIONS**





# **CHECK MODEL LABEL AND SERIAL NUMBER**

The model label and serial number is located on the rear of the RO system housing. Check to make sure this RO system matches what you ordered. Serial numbers are important for troubleshooting.

The Model Label shows product model, product flow rate, power supply requirement, feed water temperature etc.

The Series Number Label shows part number and manufacturing date.

# How to Read Series Number? W20000180P340001 0005 Product Part # Year Month Date Batch code Sequence #

(W20000180): Product part #

(P)YEAR: "P" stand for year 2019, "O" stand for year 2018, "N" stand

for year 2017, "M" stand for year 2016...

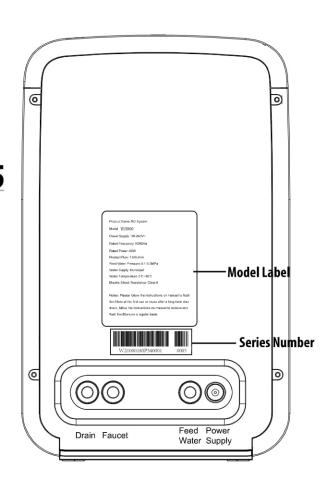
(3)MONTH: 1(JAN), 2(FEB), 3(MAR), 4(APRIL), 5(MAY), 6(JUNE),

7(JULY), 8(AUG), 9(SEP), A(OCT), B(NOV), C(DEC)

**(4)DATE:** 1 2 3 4 5 6 7 8 9 (A)10 (B)11 (C)12 (D)13 (E)14 (F)15 (G)16 (H)17 (I)18 (J)19 (K)20 (L)21 (M)22 (N)23 (O)24

(P)25 (Q)26 (R)27 (S)28 (T)29 (U)30 (V)31

(**0001**): Batch code (**0005**): Sequence #





# **OVERVIEW OF THE RO SYSTEM'S COMPONENTS**

# 1 RO Manifold Assembly

The manifold assembly serves as the functional hub of the RO manifold assembly by directing the flow through each of the system's main components.

# 2 Booster Pump

The booster pump built inside the manifold assembly improves the production rate and reduction of dissolved substances from water. It runs on electricity.

# 3 Automatic Solenoid Valve

The automatic solenoid valves are controlled by the program settings, it is used to control the water flow ON&OFF.

# 4 Low Pressure Switch

Low pressure switch ensure the boost pump running safely. It will shut off the power to avoid the boost pump "run dry" if feed water presssure is less than 0.5Kg/cm<sup>2</sup>.

# 5 High Pressure Switch

As the faucet is closed, the high pressure switch will shut off the power to stop running the boost pump.

# 6 Sediment Filter

The sediment filter screens out particulate material, such as dirt, sand, or rust, which may clog the other filters in the system.

# Pre Carbon Filter

The activated carbon prefilter reduces chlorine which may damage the RO membrane filter. It must be regularly checked and/or replaced to prevent premature membrane failure and poor water quality.

# 8 Reverse Osmosis Membrane

The RO membrane (4) reduces dissolved substances and other microscopic impurities. It consists of a membrane envelope wound around a perforated tube. Product water diffuses through the membrane to the inside of the envelope where it flows to and is collected by the tube. Impurities are flushed away in the drain stream. The RO membrane featured in the W2B400 system offers exceptional contaminant rejection, application versatility and long life. The membrane material is sensitive to an attack by chlorine.

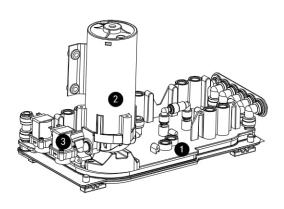
The activated carbon filter must be maintained properly to prevent premature failure of the RO membrane.

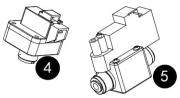
# Post Carbon Filter

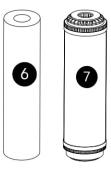
The post carbon filter adsorbs any residual tastes and odors just before the water is delivered through the faucet.

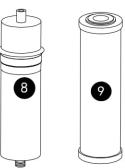
# 10 Faucet

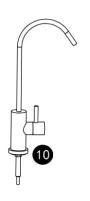
The faucet allows the product water to be drawn from the system with a simple rotation of the handle.





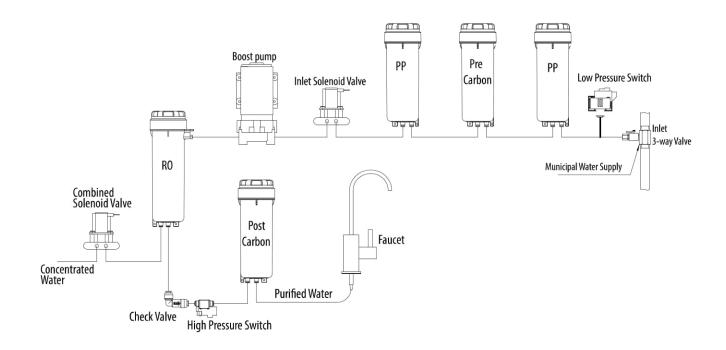




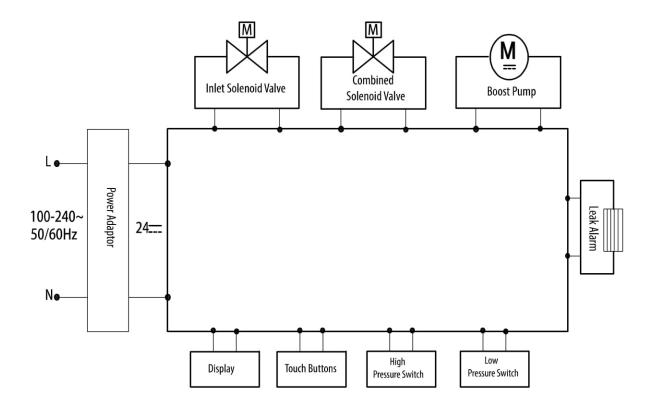




# **FLOW SEQUENCE**



# **ELECTRICAL SCHEMATIC**





# PARTS BREAKDOWN 15 18 14 13 19 20 21 22 23 24 11 3 3 3 3 3 25 27 28 11 29

No.	Description	Qty
1	Front Cover	1
2	Display Label	1
3	Decoration Cover	1
4	Display Installation Plate	1
5	Controller PCB	1
6	Display Board	1
7	Low Pressure Switch	1
8	Flush Solenoid Valve	1
9	Inlet Solenoid Valve	1
10	I-Connector 3/8"×3/8"	2
11	L-Connector 3/8"×3/8"	5
12	Left-Side Cover	1
13	PP Cartridge(1µm) 1	
14	GAC Cartridge	1
15	Fixing Cover	1
16	Filter Housing Cover	5

17 High Cover 1 18 PP Cartridge(5μm) 1 19 CTO Cartridge 1 20 RO Cartridge 1 21 Filter Cartridge Housing 4 22 RO Cartridge Housing 1 23 Boost Pump 1 24 L-Connector 3/8"×3/8"Thread 2 25 High Pressure Switch 1 26 Leak Detect Board 1 27 L-Connector 1/4"×1/4"Stem 1 28 L-Check Valve 1			
19 CTO Cartridge 1 20 RO Cartridge 1 21 Filter Cartridge Housing 4 22 RO Cartridge Housing 1 23 Boost Pump 1 24 L-Connector 3/8"×3/8"Thread 2 25 High Pressure Switch 1 26 Leak Detect Board 1 27 L-Connector 1/4"×1/4"Stem 1 28 L-Check Valve 1	17	High Cover	1
20 RO Cartridge 1 21 Filter Cartridge Housing 4 22 RO Cartridge Housing 1 23 Boost Pump 1 24 L-Connector 3/8"×3/8"Thread 2 25 High Pressure Switch 1 26 Leak Detect Board 1 27 L-Connector 1/4"×1/4"Stem 1 28 L-Check Valve 1	18	PP Cartridge(5μm)	1
21 Filter Cartridge Housing 4 22 RO Cartridge Housing 1 23 Boost Pump 1 24 L-Connector 3/8"×3/8"Thread 2 25 High Pressure Switch 1 26 Leak Detect Board 1 27 L-Connector 1/4"×1/4"Stem 1 28 L-Check Valve 1	19	CTO Cartridge	1
22 R0 Cartridge Housing 1 23 Boost Pump 1 24 L-Connector 3/8"×3/8"Thread 2 25 High Pressure Switch 1 26 Leak Detect Board 1 27 L-Connector 1/4"×1/4"Stem 1 28 L-Check Valve 1	20	RO Cartridge	1
23         Boost Pump         1           24         L-Connector 3/8"×3/8"Thread         2           25         High Pressure Switch         1           26         Leak Detect Board         1           27         L-Connector 1/4"×1/4"Stem         1           28         L-Check Valve         1	21	Filter Cartridge Housing	4
24L-Connector 3/8"×3/8"Thread225High Pressure Switch126Leak Detect Board127L-Connector 1/4"×1/4"Stem128L-Check Valve1	22	RO Cartridge Housing	1
25         High Pressure Switch         1           26         Leak Detect Board         1           27         L-Connector 1/4"×1/4"Stem         1           28         L-Check Valve         1	23	Boost Pump	1
26         Leak Detect Board         1           27         L-Connector 1/4"×1/4"Stem         1           28         L-Check Valve         1	24	L-Connector 3/8"×3/8"Thread	2
27         L-Connector 1/4"×1/4"Stem         1           28         L-Check Valve         1	25	High Pressure Switch	1
28 L-Check Valve 1	26	Leak Detect Board	1
7	27	L-Connector 1/4"×1/4"Stem	1
20 Rack Cover 1	28	L-Check Valve	1
29   Dack Cover   1	29	Back Cover	1
30 Integrated Water Manifold 1	30	Integrated Water Manifold	1
31 Right-Side Cover 1	31	Right-Side Cover	1
32 Main Frame 1	32	Main Frame	1
33 Rubber Seat 5	33	Rubber Seat	5

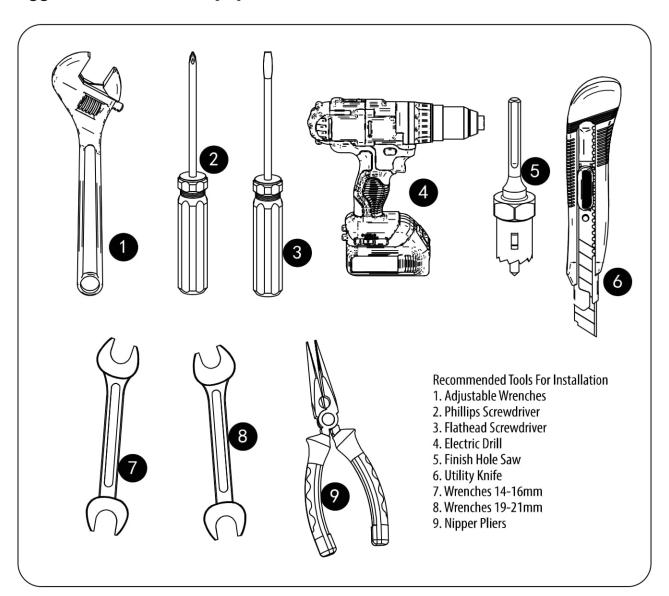


# **INSTALLATION RO UNIT**

# **Before Installation**

- 1. Check the accessories in the packing box and confirm if they are complete.
- 2. Shut off the water supply before installation.
- 3. Prepare some tools or equipments required for installation.

# **Suggested Installation Equipment**



NOTE

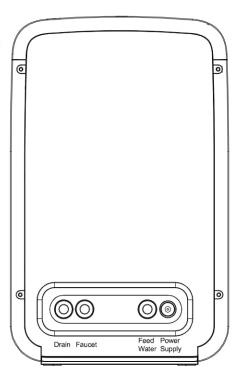
As installations may vary, some extra plumbing connection fittings may be required.



# **Tubing and Power Cable Connection**

# Please familiarize yourself with the ports on the rear of RO system:

- **1. Drain:** attach one end of tubing to the port of Drain and attach another end to drain line.
- **2. Faucet:** attach one end of tubing to the port of Faucet and attach another end to the faucet connector.
- **3. Feed Water:** attach one end of tubing to the port of Feed Water and attach another end to the T-adaptor valve.
- 4. Power Supply: attach the power cable.



The following steps will enable you to install the system quickly and orderly. Some variation may be necessary depending on the installation.

# Typical installations follow this sequence:

- 1. Select System Installation Locations
- 2. Faucet Installation
- 3. Install T-Adapter Valve on Water Supply
- 4. Connect System Drain
- 5. Install Filters Cartridges
- 6. Start Up the System

# **Step-1 Select System Installation Locations**

# **Important Considerations:**

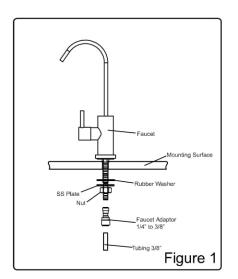
- Access to the bottom (undersink) of the faucet is required for attachment of product water line.
- There should be no undersink obstructions which would prevent smooth tubing runs to the inlet, faucet, drain connection, or RO module assembly.
- A nearby electrical power socket is required for operation, check the electrical power requirement on transformer.
- The RO system assembly is designed to be installed on counter top or under sink. It should be positioned such that there is access to an inlet water source and drain. The installation should also allow convenient access for servicing.
- Be sure the floor under the RO system is clean, level and strong enough to support the unit.



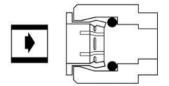
# **Step-2 Faucet Installation**

**Dispenser Faucet**—The faucet is designed to be mounted on the rear lip of the sink. It may be installed in an existing sprayer attachment hole or in a hole drilled at the time of installation. It may also be mounted to an adjacent counter top. It should be positioned so that water is dispensed over the sink. A 12mm diameter hole is required.

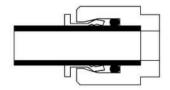
- 1. Drill a  $\varphi$ 12mm hole at a proper location on the mounting surface, then take out the faucet from the accessory bag, install the faucet as the figure 1.
- 2. Tighten the SS screw and be sure to properly align the faucet.
- 3. Insert the faucet adaptor to the bottom of faucet.
- 4. Take out the 3/8" tubing from the accessory bag, cut it to proper length, attached one end to the faucet adaptor(3/8"), attach the another end to the faucet port on RO module assembly, make sure the tubings are fully seated.



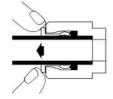
# The RO system features reliable and convenient push-to-connect tubing connectors. Tubing is easily connected and disconnected from these fittings as follows.







2. Tube is securely in position.



3. Push in collet from both sides to release tubing.



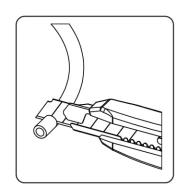
Do not miss the blue secure clip for all tubing connection.

#### Connect:

Cut the tubing squarely with a sharp knife. Be careful not to crush the tubing. To avoid leaks, make sure the tubing end is smooth and free of burrs and abrasions. Lubricate the end of the tube with water or a light coat of silicone and push the tube end firmly into the fitting. You should feel it push past the O-ring. Avoid bending the tubing sharply away from the fitting.

#### Disconnect:

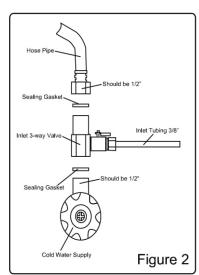
Hold the collar against the fitting body and pull the tube from the fitting. In the unlikely event that the connection leaks, remove and recut the tubing. Check the inside of the fitting for debris or O-ring damage. Reconnect. Push-to-connect tubing connectors grip the outside diameter of the tube. To help assure a reliable connection, it is important to use high quality tubing with a consistent outside diameter.





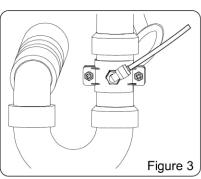
# **Step-3 Install T-Adapter Valve**

- 1. Turn off the water supply, disconnect the hose pipe. take the inlet 3-way valve out from the accessory bag, install it on the pipe line as the figure 2.
- 2. Take out the 3/8" tubing from the accessory bag, cut it to proper length, attach one end to the inlet 3-way valve, attach the another end to the feed water port on RO module assembly, make sure the tubings are fully seated.



# **Step-4 Connect System Drain**

1. Take out the 1/4" tubing from the accessory bag, cut it to proper length, attach one end to the drain port on RO module assembly and attach the another end to the drain pipe line(Figure 3). Make sure the tubings are fully seated.

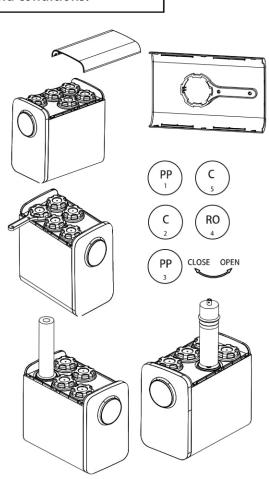


NOTE

The installation figures above are only for reference, it may vary from different installation sites and conditions.

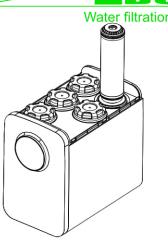
# Step-5 Install Filter Cartridges and Start Up

- 1. Remove the top cover.
- 2. Use the wrench attached on top cover to loose the cover on housing.
- 3. Follow the sequence number on housing cover to install the 1-PP cartridge,
- 2-C cartridge, 3-PP cartridge.
- 4. Use the wrench to tighten the housing cover.
- 5. Open inlet valve, connect to water supply.
- 6. Plug in power cord, connect power on.
- 7. Open the faucet and let the water flow through each filter cartridges. Then flush the three filter cartridges for 2 hours.
- 8. Close the inlet valve, shut off water supply, then open the faucet to release the water pressure.
- 9. Install 4-RO membrane cartridge and open the inlet valve and faucet to flush the RO membrane for 2 hours.
- 10. Close the faucet to immerse the RO membrane for 2 hours.





- 11. Close the inlet valve, open the faucet to release the water pressure again, then install the 5-C cartridge.
- 12. Open the inlet valve and faucet to flush the carbon cartridge for 2 hours.
- 13. As all above is done correctly, your RO system is ready to use.





Do not drink water produced by the system until the Start-Up procedure has been followed completely: followed completely!

# LED DISPLAY & TOUCH KEYS PROGRAMMING GUIDE

As the power is on, the display will flash 3 times and then system will automatically flush itself for 30 seconds. Display will automatically light off if no key is operated in 5 minutes. Then system enters Power Saving Mode, press any key to light on the display.

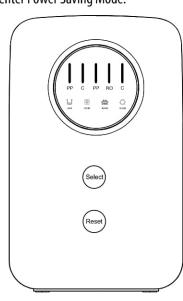
In the event of System Error, Leakage Detected or Filter Life Expired, display will always on and not enter Power Saving Mode.

"Select" Key Used For: 1) Select the desired filter element to reset filter life.

2) Press and hold "Select" key for 3 seconds to have an automatic forced rinse.

"Reset" Key Used For: 1) Press and hold "Reset" key for 3 seconds to enter Filter Life Reset programming.

> 2) Touch "Select" key to select the desired filter element that need to reset life. Press and hold "Reset" key for 3 seconds, filter life is reset.





**Icon Light Flashing:** No water supply or inlet water pressure is too low.



**Icon Light On:** RO system is in standby position, ready for use.

WORK

**Icon Light On:** RO system is producing water.

**FLUSH** 

**Icon Light Flashing:** RO system is flushing filter elements.

"Whole display" flashing along with beeping means leakage is found somewhere.

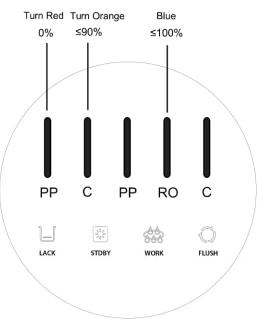


## Filter Life Indication:

Filter life is indicated by the color of the light. If the filter element is first use, the light should be all blue color display and indicate the filter element life is 100% full. As the filter system treated more water, the filter element life become less.

As the duration of one filter element reached to its 90% designed life. The light color turn to orange.

As the filter element reached to its 100% designed life, the light color turn to red.



# Types of Filter Element Flush:

- **1.Power on:** RO system will automatically have a rinse for 30 seconds when the power is supplied.
- **2.Forced:** Press and hold "Select" key for 3 seconds, RO system will automatically have a rinse for 18 seconds.
- **3.Accumulated:** As the duration of producing water accumulated to 1 hour, system will automatically have a rinse for 18 seconds. If any forced rinse was operated in this period, the accumulated duration of producing water will be reset.
- **4.After Producing Water:** If the system produces water less than 1 minute, it will rinse for 3 seconds. If between 1 to 5 minutes, it will rinse for 5 seconds. If between 5 to 10 minutes, it will rinse for 8 seconds. If more than 10 minutes, it will rinse for 12 seconds.

# **How to Reset Filter Elements Life?**

- 1. Press and hold "Reset" key for 3 seconds to enter Filter Element Reset program.
- 2. Touch "Select" key to choose the filter element you are ready to reset life.
- 3. Press and hold "Reset" key for 3 seconds, after that you will hear a beep sound, that means the filter element life is reset successfully.

NOTE

In the process of filter reset, if no key is operated for 10 seconds, system will exit Filter Element Reset program.



# **SERVICE AND MAINTENANCE**

#### **Service Schedule**

To keep the RO system operating properly, it is necessary to change the filter elements periodically. Typically, this should be done on an annual basis. Service frequency may vary depending on local water conditions. High sediment, chlorine, turbidity, or hardness levels may require more frequent service.

# Use the Following as a Guide:

Filter Elements	Service Schedule
Stage 1 Sediment Filter	3 months
Stage 2 Pre Carbon Filter	6 months
Stage 3 Sediment Filter	3 months
Stage 4 RO Membrane Filter	24 months
Stage 5 Post Carbon Filter	6 months

Note: Filter life may vary greatly depend on different water quality, RO filter life will be affected by other factors. The service schedule above is only for reference.



W2B400 is designed only for household use, do not install the system where the water usage demand is high.

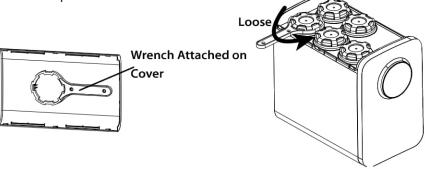
## Filter Element Should Be Replaced If Following Situations Occur:

- 1. Produced water quality is poor, taste bad.
- 2. Product water rate decrease dramatically, PP filter or RO membrane may clog. (Make sure it is not caused by cold water temperature)
- 3. Filters are heavily clogged, almost no produced water.



# **How to Replace Filter Elements?**

- 1. Close the T-adaptor valve to shut off water supply.
- 2. Open the faucet to release pressure.
- 3. Turn off power supply.
- 4. Use the attached wrench to rotate the filter housing cover anti-clockwise until it can be removed, take out the old filter element.
- 5. Get the new filter element, remove the plastic wrap.
- 6. Insert the new filter element into the correct housing, use the attached wrench to rotate the filter housing cover clockwise until it is tightened.
- 7. Turn on the power and water supply.
- 8. Follow the instructions on **Page 17** to reset filter element life.
- 9. Flush the new installed filters for 5~10 minutes.
- 10. Filter element replacement complete.





**CAUTION** Always follow the steps below prior to replace the filters.

1. Shut off water supply. — 2. Open the faucet. — 3. Turn off power supply.

# **Application Notes:**

- **1.Product Water Rate:** Product flow are variable and can be effected by water temperature and pressure. The product flow rate of 1.58L/min stated in the performance data sheet is tested at standard conditions.
- **2.Disposal of Replaced Filter Element:** The replaced filters can not be recycling and reusing, it is recommended to discard it as household garbage and let professional garbage recycler to treat it.
- **3.**When you are on vocation or not using the system for a long time, please close the T-adaptor valve and turn off power supply.
- **4.** Any of the following occurs, please shut off the water supply and power supply immediately and fix the issue.
- 4.1 Leakage is found somewhere.
- 4.2 System's componet is malfunctioning.
- 4.3 Electric leakage is found somewhere.
- 4.4 Any other abnormal situation or faulty.



# **TROUBLE SHOOTING GUIDE**

Problem	Possible Solutions
<ol> <li>Pump Not Running, No Product Water</li> <li>Power supply is not on.</li> <li>Transformer is damaged.</li> <li>Filter element life expired.</li> <li>Leakage is detected by system.</li> <li>System continuously produce water for 6 hours.</li> <li>Low incoming water pressure.</li> <li>Low pressure switch is malfunctioning, power is not switched to pump.</li> <li>High pressure switch is malfunctioning and not reset itself.</li> <li>Pump is damaged.</li> </ol>	A. Plug in the power supply or wait for restore power.  B. Replace the transformer  C. Replace filter element.  D. Check the leakage and remedy it.  E. Unplug the power and replug it.  F. Increase incoming water pressure to allow low pressure switch on.  G. Repair low pressure switch or replace it.  H. Repair high pressure switch or replace it.  I. Replace the pump.
2. Pump Continuously Running. A. Pump is malfunctioning. B. High pressure switch is malfunctioning.	A. Replace the pump. B. Repair high pressure switch or replace it.
<ul> <li>3. Pump Continuously On &amp; Off.</li> <li>A. Low incoming water pressure.</li> <li>B. Low pressure switch is malfunctioning.</li> <li>C. High pressure switch is malfunctioning.</li> <li>D. Leakage happens somewhere in system.</li> </ul>	A. Increase incoming water pressure. B. Repair low pressure switch or replace it. C. Repair high pressure switch or replace it. C. Find the leakage and fix it.
<ul> <li>4. Not Enough Product Water</li> <li>A. Feed water valve is plugged or closed.</li> <li>B. Sediment/Carbon prefilter or Carbon Post Filter is clogged.</li> <li>C. Low incoming water pressure.</li> <li>D. Reverse Osmosis Membrane is fouled.</li> <li>E. The Faucet is out of adjustment or faulty.</li> <li>F. No water to drain. Drain Flow Restrictor is clogged.</li> </ul>	A. Open valve or unclog. B. Replace filters. C. Increase incoming water pressure. D. Make sure incoming water pressure is within operating limits. Make sure drain line is not clogged. Correct cause of fouling and replace RO Membrane. E. Repair or replace Faucet. F. Replace flush solenoid valve.
<ul> <li>5. Product Water is High in TDS</li> <li>A. Clogged Prefilter.</li> <li>B. Reverse Osmosis Membrane is expended.</li> <li>C. Product water and drain water lines are reversed.</li> <li>D. No water to drain. Drain Flow Restrictor is clogged.</li> <li>E. New Carbon Postfilter has not been rinsed completely.</li> <li>F. The incoming feed water TDS has increased.</li> </ul>	A. Replace Filter. B. If Membrane life is unusually short, find and correct the problem. (Average life is 2 years.) Replace RO Membrane. C. Correct plumbing. D. Replace flush solenoid valve. E. Open the faucet and flush the post carbon filter for 10 minutes. F. An increase in feed water TDS will also give an increase in Product Water TDS.
6. Tastes and Odors in Product Water A. Carbon Post Filter is exhausted. B. Product water and Drain water lines are reversed. C. Increase in Product Water TDS.	A. Replace Post Carbon Filter. B. Correct plumbing. C. Replace RO Membrane.
7. Faucet Leaks or Drips A. Water leaks from faucet spout.	A. Repair or replace the faucet.
8. External Leakage on Connection A. Tubing not fully seated in fitting. B. Tubing abraded in seal area. C. O-rings sealing aging.	A. Check all fittings for tightness. B. Recut tubing and redo connection. C. Replace the O-rings.