

DP-583H

Freestanding Tri-Temperature
RO Water Dispenser

User Instruction Manual

TABLE OF CONTENTS

1. Model Introduction	1
2. Product Specifications	6
3. Inlet Conditions	6
4. Product Part Descriptions	7
5. Panel LED Indicator Description	8
6. Included Parts	9
7. HOW QUICK CONNECTORS WORK	9
8. Cold-Hot Exchange System Explanation	10
9. Water Source Installation Instructions	11
10. Initial Machine Setup	12
11. Filter Replacement and Maintenance	13
12. Resetting the Filter Timer Setting	15
13. Troubleshooting Reference	16



■ Model Introduction

Model Introduction Thank you for purchasing the Puricom DP-583H Freestanding Tri-Temperature RO Water Dispenser (hereinafter referred to as DP-583H Water Dispenser).

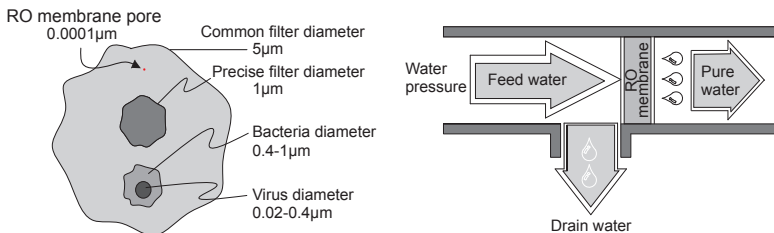
Key Features:

- Built-in hot and cold exchange system, fully boiling for safe consumption.
- LED real-time hot water temperature display.
- Automatic water replenishment and heating functions, providing 24-hour hot water supply.
- Hot water is equipped with a scald-proof safety lock to prevent accidental burns, especially for children.
- 21cm ultra-deep water tray design accommodates various containers.
- Suction cup-style screwless bottom cover for convenient operation.
- Quick-detachable filters throughout the machine for time-saving and effortless maintenance.
- Automatic filter replacement reminders.
- Low water level automatic thermal cutoff function to prevent overheating and danger.
- Selective use of Japanese WAKO temperature control device for precise temperature control.
- Heats RO purified water to prevent scale formation in the hot tank

■ WHAT IS REVERSE OSMOSIS (RO)

To fully understand the technology of Reverse Osmosis, it is a must to understand normal osmosis. Osmosis is a natural process that occurs in all living things. For instance, osmosis permits water and nutrients absorption through the root system of plants; similarly, nutrition is assimilated from blood to cells in human bodies. The drawings shall help to proceed in further explanation on the principle of reverse osmosis as possibly clear and simple.

As the water exerts pressure on a semi-permeable membrane, the purified (or filtered) part enters through the pores of the membrane, while the rejected (or concentrated) is diverted to the drain. When the diameter of the pores is shorter than 0.0001 microns, only pure water and a balanced quantity of minerals (sodium, potassium, calcium, and magnesium, etc) can pass through; while other substances (such as bacteria, viruses, metals, pesticides, chemical products, etc) are eliminated during the process.



■ Safety Precautions

Carefully read this user manual to safeguard your property and personal safety.

Electrical Safety Precautions



Precautions for Electrical Appliances

1. Please use the specified voltage distribution as indicated in the system specification to prevent plug damage.
2. Avoid using damaged power cords, plugs, and loose sockets to prevent fires.
3. Do not touch the plug with wet hands to prevent electric shock.
4. Do not bind or frequently plug and unplug the power cord to prevent damage.
5. In case of wet plugs or power cords, please wait for them to dry before use.
6. Disconnect the power cord before maintenance, inspection, or part replacement.
7. Perform a monthly test using the test button. If the power cannot be disconnected, immediately turn off the power and notify customer service for assistance.
8. Use a power socket with a load capacity of at least 20 amperes dedicated to the water dispenser. The socket should have a two-pin plus grounding (2P+E) configuration.
9. If the length of the water dispenser's power cord is insufficient and an extension cord is required, use a qualified single-seat extension cord (rated at 20 amperes or higher). The extension cord length should not exceed 10 meters to avoid poor contact.
10. When moving the product, do not pull or tug on the power cord.



Installation Safety Precautions

1. Installation personnel must assess the site environment and avoid installing on carpets or wooden floors.
2. Within a two-meter radius around the water dispenser, there must be proper floor drainage to ensure smooth water drainage in case of machine leakage.
3. There are ventilation holes at the rear and sides of the water dispenser; do not place any objects there, and maintain a gap of at least 15 centimeters for ventilation.
4. Keep the water dispenser away from sources of fire, heat, flammable materials, chemicals, etc., for safety.
5. Do not install the water dispenser outdoors to prevent exposure to sunlight and rain, which may lead to hazards.
6. If the installation location is uneven, adjust the adjustable screws to make the front higher and the rear lower for better drainage.
7. Do not use hot water in this machine. The recommended water temperature for inlet water is 5°C-45°C.
8. Ensure that the inlet and waste water connections are installed correctly and be mindful not to block the waste water.
9. The inlet water pipes should be kept away from heat sources, flammable materials, chemicals, etc., and the inlet water pipes should be protected to avoid bending or damage from external forces.
10. After the inlet water pipe is installed, plug in the power and turn on the circuit breaker, and the water dispenser will start to receive water.
11. Turn on the cold-water control to the "4" position to use, but do not exceed this setting to prevent the ice container from freezing.
12. Product installation should comply with local regulations. Do not use unclear, biologically harmful, or untreated water sources at the front or rear of the product.



Product Operating Precautions

1. If a malfunction or unusual noise or odor is detected, immediately unplug the power cord and contact customer service.
2. Do not allow young children to use it alone to prevent burns.
3. Do not pour tea leaves, residues, etc., into the water tray to avoid odor due to pipe blockage.
4. Do not touch the water outlet directly with your mouth or hands or drink directly from it.
5. When cleaning the machine, do not wash it directly with water to avoid rusting of the exterior or damage to internal components.
6. If the product is not used for an extended period (more than a week) or there is a water supply interruption, turn off the power and water source to ensure safety.
7. Regularly maintain the filter system's cartridges to maintain product stability and lifespan and ensure water quality.
8. This product exclusively uses original brand-specific filter materials to extend product life.
9. If black residue is found in the water after initial installation or replacement of the post-activated carbon filter, this is activated carbon powder which in normal and healthy and will not cause any harm to the human body. Continue draining water from the outlet until the black residue is cleared and the water is clear.
10. If you need to relocate the machine, please contact customer service for professional technical assistance.
11. This product is covered by product liability insurance. In case of accidents, take necessary and reasonable measures immediately to minimize losses, preserve the original condition for the insurance company's investigation to protect your rights.

■ Product Specifications

Model	DP-583H
Type	Freestanding RO Water Dispenser
System	Hot and Cold Exchange
Capacity	Hot Water 15L / Cold Water 8L / Ice Water 4L
Power	Electric Heater 750W / Compressor 210W
Voltage	220V / 60Hz
Dimensions	D45cm × W41cm × H137cm

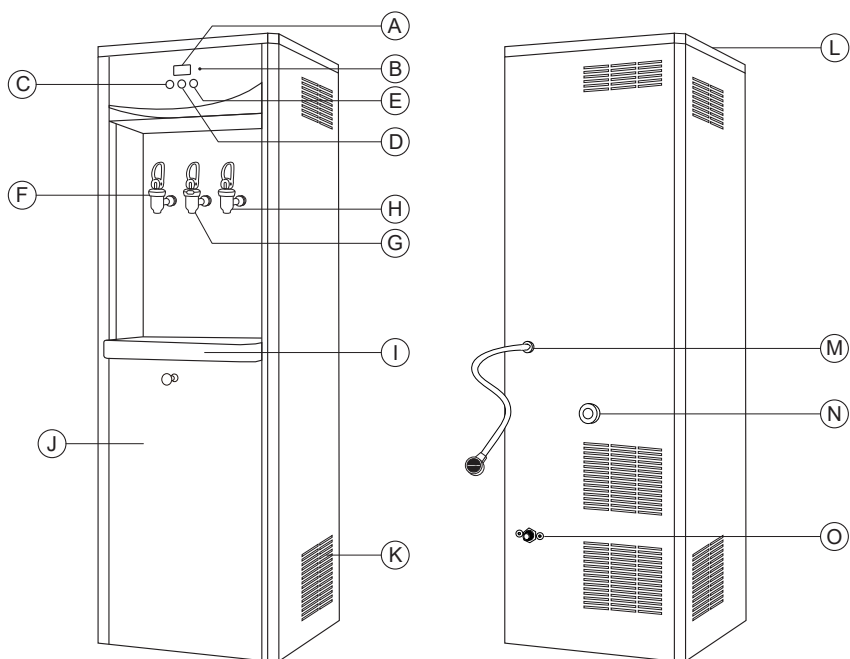
■ Inlet Conditions

Water Source	Tap water. Using groundwater will reduce the lifespan of the RO water purifier and water dispenser.
Water Pressure	10 - 40 psi
Water Temperature	5°C - 45°C
Water Hardness	< 250 ppm
Total Dissolved Solids in Water	< 1000 ppm

Not:

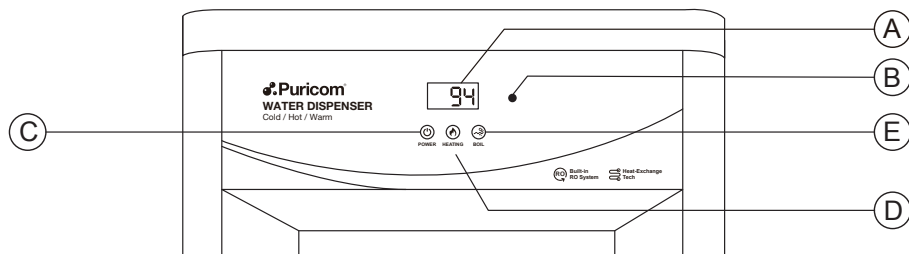
1. If the water source used does not meet the inlet conditions, please contact customer service.
2. If the inlet water pressure exceeds 35.5 psi, professional technicians should install a pressure reducing valve or take relevant measures to reduce pressure to prevent structural abnormalities in the RO water purifier or water dispenser due to excessively high water pressure.

■ Product Part Descriptions



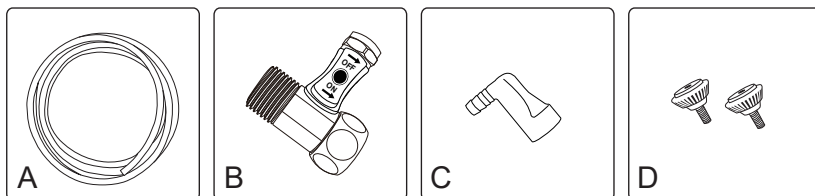
A	Temperature Display	F	Cold Water Faucet	K	Heat Dissipation Vents
B	Filter Replacement Indicator Light	G	Hot Water Faucet	L	Top Cover
C	Power Light	H	Ice Water Faucet	M	Power Cord
D	Heating Light	I	Water Collection Tray	N	Drain Outlet (Approximately 62cm from the ground)
E	Boiling Light	J	Lower Panel	O	Inlet (Approximately 33cm from the ground)

■ Panel LED Indicator Description



Number	Name	Description	
A	Temperature Display		Displays the current hot water temperature.
		Marquee	Machine is in a water shortage state.
B	Filter Replacement Indicator Light	Constantly lit	Standby mode.
		Blinking	Filter replacement period has arrived.
C	Power (POWER) Light	Constantly lit	Power is connected and in standby.
D	Heating (HEATING) Light	Constantly lit	When the hot water temperature drops to 94 degrees, the system will automatically heat. The light remains on in this state.
E	Boil (BOIL) Light	Constantly lit	When there is no water in the tank, the system will automatically add water. The light remains on in this state.

■ Included Parts



Accessory
Package

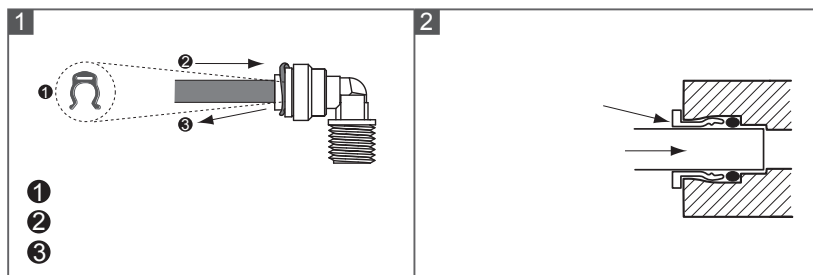
A. PE Pipe (White)

B. Union connected three-way
valve

C. Drain Pipe (Wastewater)

D. Adjustment Screws x 2

■ HOW QUICK CONNECTORS WORK

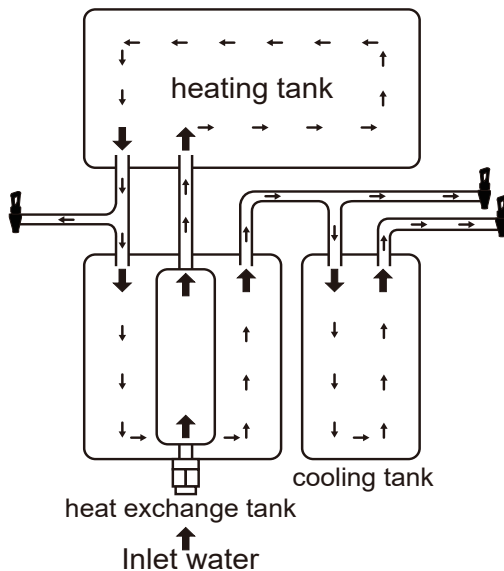


1. To remove tubing from the connector: Remove the safety clip from under the collet, push in the collet, and pull the tube out. (fig. 1)
2. Installation. Ensure the tube is clean and free of burrs. Push the tube into the connector until it stops. (fig. 2)
3. Pull tube out a little bit, and replace the safety clip.

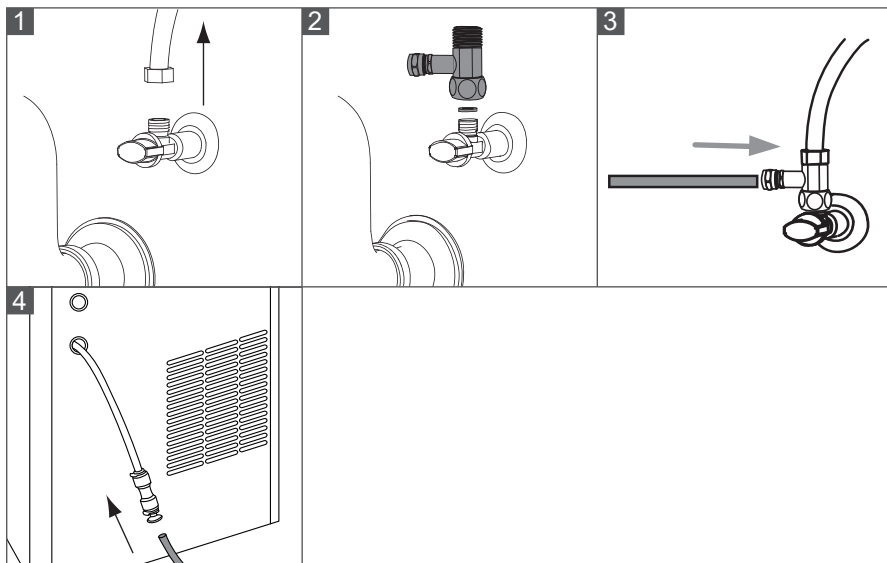
■ Cold-Hot Exchange System Explanation

The "Cold-Hot Exchange System Working Principle" involves gradually heating inlet water as it passes through hot water from the heating tank. The heated hot water then passes through internal pipes and a circular exchange pipe, transfer heat to the incoming water. This process results in temperature reduction for warm water use and temperature elevation before entering the heating tank.

This function reduces the time required for heating hot water and cooling cold water, thereby reducing energy consumption. Additionally, all water goes through a boiling process, ensuring it is safe for drinking.



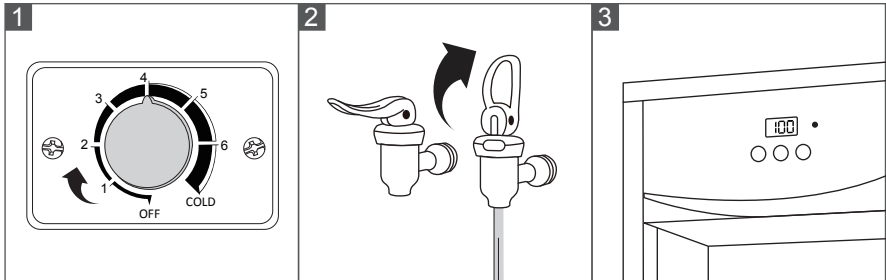
■ Water Source Installation Instructions



1. Turn off the water source. Disconnect the inlet pipe from the existing water inlet valve.
2. First, wrap the inlet joint with a leak-proof tape, then secure the inlet joint and washer onto the water inlet valve.
3. Next, wrap the inlet ball valve with a leak-proof tape, install it on the inlet joint, and connect the PE pipe to the inlet ball valve.
4. Connect the other end of the PE pipe to the water dispenser's inlet port, completing the water source installation.

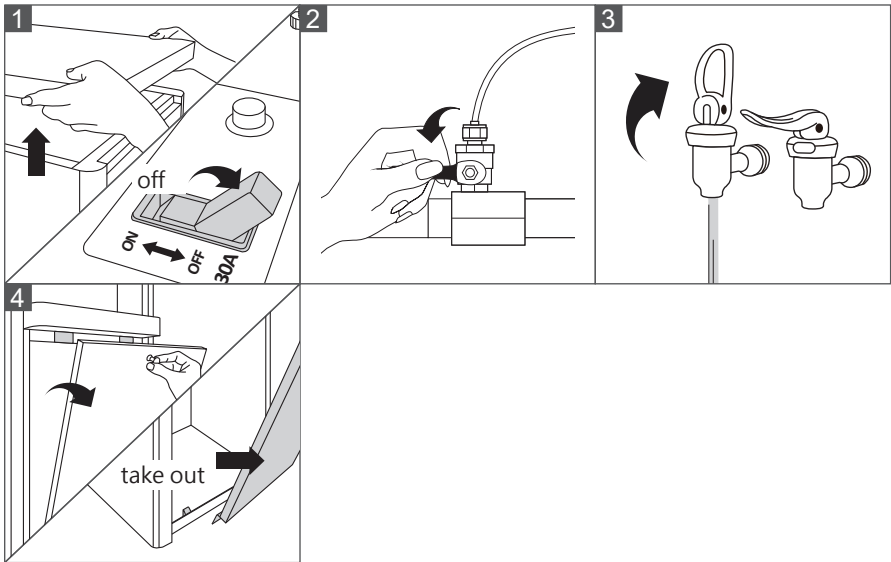
■ Initial Machine Setup

After completing the water source and drain installation, plug in the power and switch on the circuit breaker to allow the water dispenser to start filling with water. Follow these steps for the initial setup:

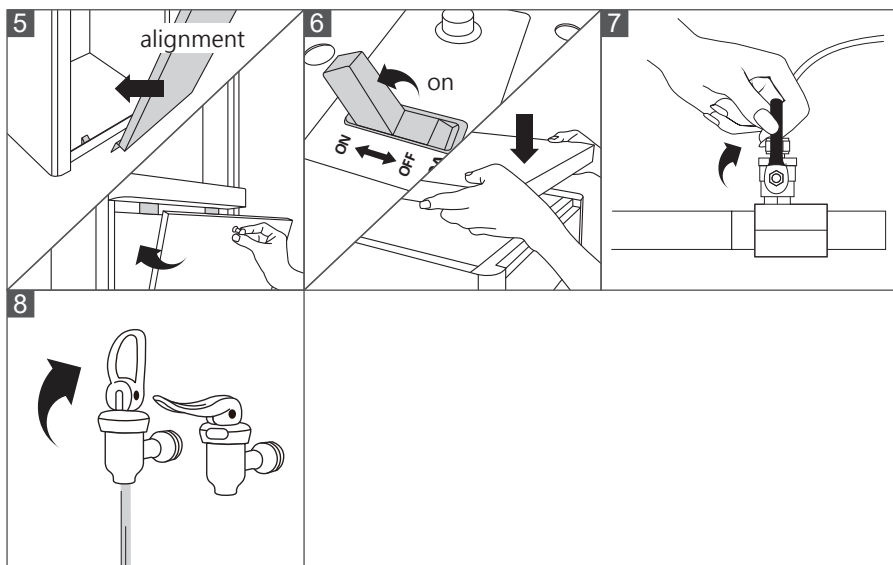


1. Adjust the cold water control to position "4."
2. Press and hold the hot water tap to check if water flows smoothly.
3. Once the hot water temperature reaches 100 degrees, the machine is ready for use.

■ Filter Replacement and Maintenance



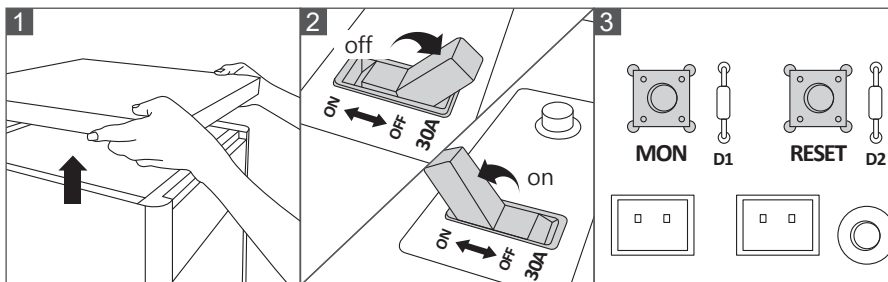
1. Open the top cover of the water dispenser and turn off the circuit breaker.
2. Shut off the water source.
3. Open the hot water tap to release pressure from inside the pipes.
4. Pinch the handle located on the lower panel, pull it outward to open it. Then, pull it upward to remove the panel replace with the new filter.



5. After fitting the lower edge of the panel into the tabs for secure fastening, push it inward to close the lower panel.
6. Turn on the circuit breaker, and cover the top of the water dispenser.
7. Open the inlet ball valve.
8. Open the hot water tap and allow water to flow for approximately 5-10 minutes to facilitate filter cleaning. After completing the above steps, the filter maintenance is finished.

■ Resetting the Filter Timer Setting

After replacing the first and second stage filters, you should perform this reset to establish a new timer setting.



1. Open the top cover of the water dispenser.
2. Turn off the circuit breaker, wait for 5 seconds, and then turn on the circuit breaker again.
3. Simultaneously hold down the MON and RESET buttons without releasing them. When the system emits a beep sound, the reset is complete, and the indicator lights on the front panel will stop flashing.

■ Troubleshooting Reference

Water Dispenser Not Dispensing Water

Possible Causes	Solutions
No water supply	Ensure there is a water supply available.
Abnormal water level sensor	If the water level sensor detects an issue and stops the water supply, please call the customer service hotline for assistance. A technician will address the problem.
Clogged filters	Replace the filters with higher-quality ones if they are clogged.
Water Purifier Unable to Produce Pure Water	Please call the customer service hotline for assistance. A technician will address the issue.
Internal Water Leakage in the Machine	Please call the customer service hotline for assistance. A technician will address the issue.

No Power Display on the Water Dispenser

Possible Causes	Solutions
No power supply	Check if there is a power supply to the electrical box. It may be due to the external power cable having a lower specification, causing a power outage. Replace the cable (core wire should be at least 2.0mm, single socket type).
Circuit breaker tripped due to electrical leakage	If there is an electrical leakage in the water dispenser, first turn off the power and water supply, then call the customer service hotline for assistance. A technician will address the issue.
Burned fuse	Check if the fuse under the front panel is burned out (specifications - 20A).

Unable to Reach the Desired Hot Water Temperature


Possible Causes	Solutions
Heating element burnt out	Turn off the power and water supply, then call the customer service hotline for assistance. A technician will address the issue.
Display malfunction	Turn off the power and water supply, then call the customer service hotline for assistance. A technician will address the issue.

Problem	Possible Cause	Troubleshooting
Pump not working.	1. No power supply.	1. Check the power supply.
	2. Transformer is burnt out.	2. Replace transformer. (A possible reason is a pump leak causing the bearing to jam, so the transformer burns out. The pump and the transformer should be checked at the same time.)
	3. Pump bearing jammed.	3. Replace pump.
	4. Bad wire connection.	4. Check wire connection.
	5. Bad electrical connection inside pump.	5. Replace pump.
	6. High / low pressure switch is damaged	6. Replace high/ low pressure switch.
Pump switches on and off repeatedly.	1. Low pressure switch switches on and off repeatedly because of low feed water pressure.	1. Increase feed water pressure. (If you are sure of a consistent feed water pressure, a short circuit around the low pressure switch could be made.)
	2. Bad electrical connection inside pump.	2. Replace pump.
	3. Bad wire connection.	3. Check all wire connection.
Pump keeps running.	1. Air in the tubes causes the pump to not reach sufficient pressure to shut off the pump.	1. Disconnect the outlet tube of the pump to discharge air and re-connect to run with water in the tube.
	2. The torque of the pump has decreased, so sufficient pressure cannot be reached to turn off the high pressure switch.	2. Replace pump.
	3. High pressure switch is damaged.	3. Replace high pressure switch.
	4. The check valve cannot close properly, thus pressure cannot reach shut off point.	4. Replace check valve.

Problem	Possibility	Troubleshooting
Pump is leaking.	1.Diaphragm seal is worn or split.	1.Replace pump.
	2.Feed water pressure is too high (> 40psi).	2.Install a pressure regulator or shut off pump to allow the system to run at natural feed water pressure.
Pump is noisy.	1.RO membrane or post filter is clogged.	1.Replace RO membrane or post filter.
	2.Pump bearing is worn.	2.Replace pump.
TDS value of permeated water is rising (rejection rate is lower than 90%).	1.Working pressure is lower than 40 psi.	
	(A)Air in the tubes prevents pump from reaching sufficient pressure to permeate properly.	1.(A)Disconnect the outlet tube of the pump to discharge air and reconnect to run with water in the tube.
	(B)RO membrane or post filter is clogged.	1.(B)Replace RO membrane or post filter.
	2.The ratio of permeate water to drain water is less than 1:3.	2.Flow restrictor is clogged. Clean it, or replace it.
	3. RO membrane is worn.	3. Replace RO membrane.
Output of permeate water decreases.	1.RO membrane is clogged.	Replace RO membrane. (If clogging is frequent, increase the drainage ratio of the flow restrictor or install a softener to extend the lifespan of the RO membrane.)
	2.Pump is worn, decreasing the working pressure.	2.Replace pump.
No permeate or drain water is produced.	1.The solenoid valve coil is burnt out.	1.Replace solenoid valve.
	2.Bad electrical connection in solenoid valve.	2.Replace solenoid valve.
	3.Solenoid valve is clogged inside, thus unable to turn on.	3.Replace solenoid valve.
	4.Shut-off valve is worn.	4.Replace shut-off valve.

Problem	Possibility	Troubleshooting
System drains at full tank when pump is not running.	1.Feed water pressure is too high to turn off the shut-off valve.	1.Install a pressure regulator.
	2.The shut-off valve or solenoid valve is clogged.	2.Clean the valve or replace it.
	3.Check valve is worn and causes permeate water in the storage tank to reverse flow to drain.	3.Replace check valve.
Solenoid valve is noisy.	1.The solenoid valve coil is not in place.	1.Fix the coil in its place.
	2.Feed water pressure is too low, causing the low pressure switch and the solenoid valve to turn on and off repeatedly.	2.Increase feed water pressure. (If you are sure of a consistent feed water pressure, a short circuit around the low pressure switch could be made.)
System does not run.	1.High / low pressure switch is worn.	1.Replace high / low pressure switch.
	2.Feed water pressure is lower than 5 psi.	2.(If you are sure of a consistent feed water pressure, a short circuit around the low pressure switch could be made.)
	3.No power.	3.Check power source.
	4.Pump or transformer is worn.	4.See trouble shooting for pump.
System runs at full tank when faucet is turned off.	1.Check valve is worn and causes permeate water in the storage tank to reverse flow to the drain. The high pressure switch senses pressure decrease and turns on.	1. Replace check valve
	2.High pressure switch is worn.	2.Replace high pressure switch.

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