



# User Manual Installation and Product Warranty



**MODEL**  
AR600-C-S-1

# Company Profile

1874

A.O.Smith is founded in Milwaukee, Wisconsin.

1936

A.O.Smith patents the glass-lined water heater. This concept quickly became the standard of the industry, and company became one of the biggest water heater manufacturers in US.

1974

A.O.Smith's 100th anniversary. Introduction of the Conservationist® line of residential water heater.

1998

The A.O.Smith headquarter invests USD 30 million to set up A.O.Smith Water Heater Co. Ltd in China

1999

The water heaters manufactured by A.O.Smith (China) have passed the UL Certificate by Underwriter Laboratories Inc. and begun to export to US.

2001

A.O. Smith acquires State Industries, Inc., and its APCOM Inc. subsidiary, nearly doubling the size of its water heater business.

A.O.Smith announced to invest USD 20 million to increase the R&D investment and enlarge the water heater production line in China.



2006

A.O. Smith takes over GSW Inc., Canada. This makes A.O. Smith world's largest company in hot water supply.

2009

A.O.Smith enters the global water treatment industry with the creation of A.O.Smith Water Treatment Products Co., Ltd. R&D departments dedicated for water purification products set up in the Corporation Technology Center in Milwaukee, Wisconsin US and Shanghai. A.O.Smith water Treatment Products Co., Ltd has received more than 80 patents for the development of our RO water purifiers, water softeners, industrial RO water systems and other water treatment products.

A.O.Smith water treatment products exports to over 50 countries and regions of the world, including North America, Europe, Middle East, Southeast Asia.

2010

The world first patented side stream RO membrane with highest recovery rate of tap water, energy saving, environmental protection and longer filters life. A.O.Smith set up a worldwide class factory to produce water heater and water treatment products in India.

2014

A.O.Smith has founded for 140 years

# Letter to Customer

## **Dear Esteemed Customer:**

Thank you for purchasing an A. O. Smith water purifier. You now own water treatment equipment from A. O. Smith - a brand that throughout its 140-year history has brought comfort and reliability to customers in more than 50 countries in North America, Europe, the Middle East, Southeast Asia and beyond.

We firmly believe that our strictly controlled, in-house water purifier manufacturing processes offer the most reliable and effective product. With regard to materials, we exceed the strict statutory requirements in the industry by fabricating the best fittings and parts used in water treatment equipment. We guarantee the highest possible purity of water from your device by using unique, proprietary technology and by applying strict quality controls beginning with raw materials through to the finished product.

Our tagline "Innovation has a name" is reflected in A. O. Smith's commitment to continuous innovation in residential water purification manufacturing. To date we have received more than 80 patents for the development of our RO water purifiers, water softeners, industrial RO water systems and other water treatment products.

A. O. Smith is dedicated to providing healthy drinking water solutions for our customers worldwide.

Before installing and using your water purifier, please be sure to read the user manual to ensure that installation is done in a qualified and safe manner as well as to provide you with operating and maintenance tips to maximize the use of your water purifier.

If you experience any difficulty installing or using your water purifier, please contact our professional service team via our hotline for timely assistance.

# Outstanding Features



## Side Stream RO Membrane

The world first patented side stream RO membrane with highest recovery rate of tap water, it can reduce at least 50% of waste water vs. the traditional RO membrane, while increase 30% of pure water output.



## Filter Replacement Warning

Timely remind you when filters need to replace to ensure highest pure water quality.



## LED Display

Big LED display screen and icons that indicate working function and filter replacement reminder.



## 1:1 Pure water : Waste water



## Touch Screen Control

Modern and convenience with touch screen button.

# Contents

## Silicone pad installation diagram

<b>Safety Information</b>	6	<b>Maintenance &amp; Upkeep</b>	16
<b>Product Introduction</b>	8	• Filter Life	16
• Product Appearance	8	• How to Replace Filter	17
• Technical Parameters	8	• Notes	18
• Structural Drawing	9	<b>Troubleshooting</b>	19
• Electrical Circuit Diagram	9	<b>Package Contents</b>	20
• Water Flow Diagram	10	<b>Silicone Pad Installation</b>	
• Primary Water Quality Treatment	10	<b>Diagram</b>	21
• Core Control Components	11	<b>Warranty Terms &amp;</b>	
• Water Purifier Characteristics	11	<b>Conditions</b>	22
<b>How to Install</b>	12	<b>Warranty Card</b>	23
• Pre-Installation Preparation	12		
• Instruction for Proper Installation	12		
• Notes	14		
<b>Adjustment Procedures</b>	14		
<b>Operating Instructions</b>	15		
<b>LED Screen</b>	15		
<b>Faucet Display</b>	16		

# Safety Information

Read and follow all safety information contained in these instructions to avoid possible property damage or harm to you or others.

**Ignoring the following safety precautions could result in a hazardous situation:**

**ⓘ WARNING:** If not observed, serious injury or property damage could occur.

**⚠ NOTES:** If not observed, slight injury or property damage could occur.

## ⓘ WARNING

**Don't disassemble or modify this water purifier on your own.**



Unauthorized disassembly or modification of the machine could lead to machine malfunctions or leaks.

**Don't covers top of water purifier with things.**



Damage to the machine or fire may occur as a result of hindering heat dissipation .

**Don't put heavy things on the water purifier.**



Damage to inner components, water leakage, machine failure, or even severe financial losses might occur.

**Don't operate the water purifier under high water pressure.**



Operating under high water pressure conditions may cause the water purifier pipes to rupture, resulting in leaks, machine malfunctions, or even serious property damage.

Recommended inlet pressure is 0.1MPa to 0.35MPa. if inlet pressure exceeds 0.4MPa, users should purchase and install relief valve.

**Don't contact with corrosive material.**



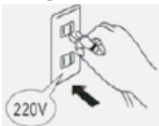
Corrosive material might corrode inner components. Or if some toxic substances penetrate into water purifier pipeline, pollution, water leakage, even severe personal injury and property loss may result.

**Keep the water purifier away from fire.**



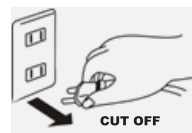
Damage to the machine's housing, even severe personal injury or property loss may occur as a result.

**Do not use a power source exceeding the machine's specified value, only use 220V AC power.**



Overheating or fire may result if the power source and machine's current are incompatible.

**Unplug the unit before repair, inspection, or replacement.**



Electrical shock may occur if you do not unplug the unit.

**This machine must be connected to socket with reliable grounding which conforms to related national standards!**



Accelerated aging of the water purifier pipes and parts may result, leading to leakage or machine failure.

**Don't contact the socket with wet hand.**

Otherwise electric shock may occur.



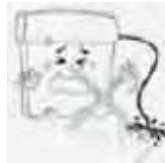
**NOTES**

**Do not operate the water purifier when the sewer is blocked.**



Wastewater backflow and pollution of the water purifier may result.

**Do not block water proportioner!**



Higher TDS of produced water, RO membrane blocking or no water production may occur.

**Feed water should be municipal tap water and cannot exceed 38 ℃**



If the inlet water exceeds 38 ℃, damage to the RO membrane and membrane failure may result.

**Don't place the unit in a place where temperature is below 5 ℃**



When ambient temperature is below 5 ℃, make sure anti-freezing measures, such as turning on the heat or air conditioner, should be adopted. Otherwise, water freezes in the machine due to low temperature. As a result, pipe cracking, water or electricity leakage might occur.

**Don't store or operate the water purifier outdoors.**



Accelerated aging of the water purifier pipes and parts may result, leading to leakage or machine failure.

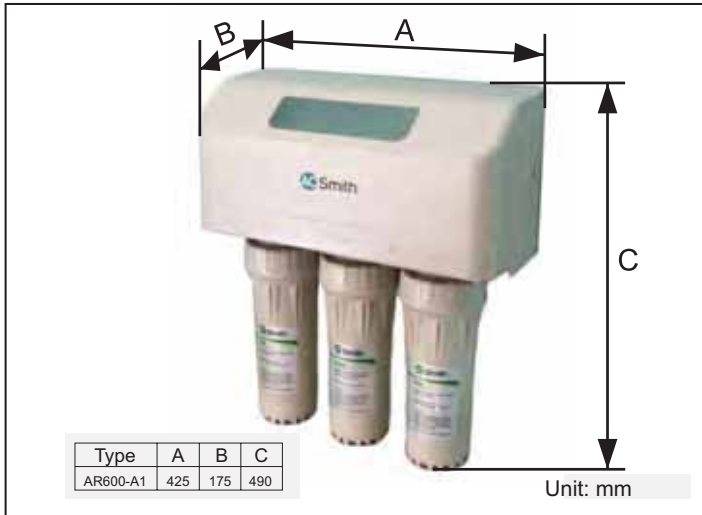
**Don't put it in direct sunshine.**



Microorganism breeding, water quality decrease, pollution of internal components may occur.

# Product Introduction

## 1.Product Appearance



## 2.Technical Parameters

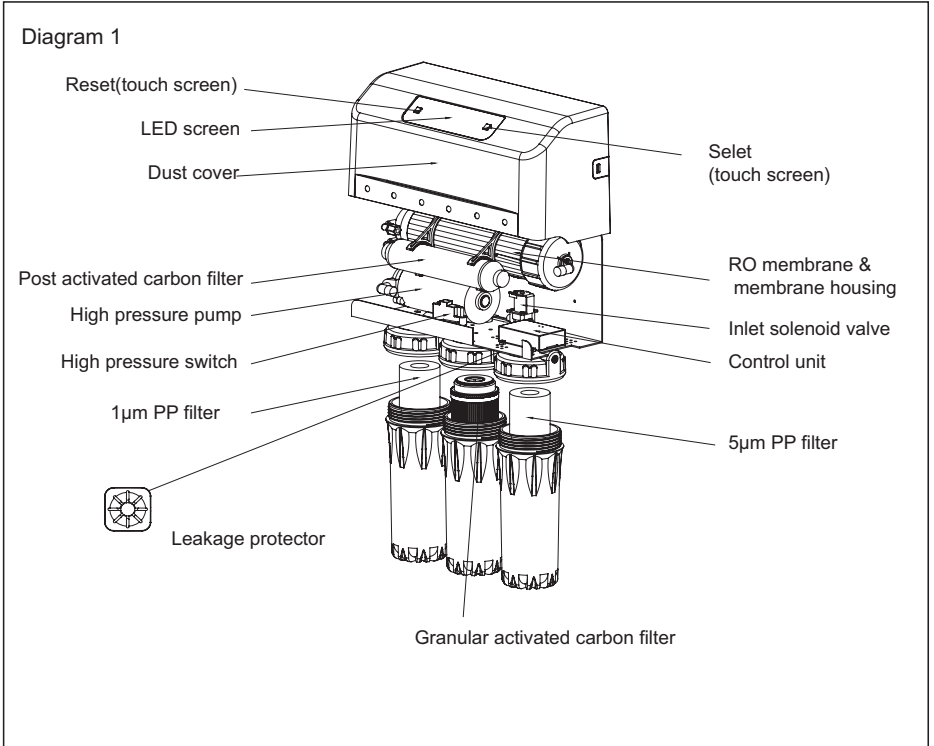
Model	AR600-C-S-1
Voltage	AC 220V 50Hz
Rated Power	107W
Suitable Feedwater Quality	Municipal tap water, accord with GB5749 -2006
Suitable Water Pressure	0.1MPa~0.35MPa
Feed Water Temperature	5~38 ℃
Pure Water Flow	1.5L/min
Rated Gross Pure Water Output	The rated pure water output is 7000L. (Tested according to requirements of Sanitary Standard for Hygienic Safety and Function Evaluation on Treatment Devices of Drinking Water——reverse osmosis Treatment Device.)
Net Weight	12.8kg
Quality Of Produced Water	Accord with requirements of Sanitary Standard for Hygienic Safety and Function Evaluation on Treatment Devices of Drinking Water——reverse osmosis Treatment Device.
Electric Shock Protection Type	Type I

Note: the above-mentioned specifications may change due to product update, and the specifications shall be subject to the nameplate.

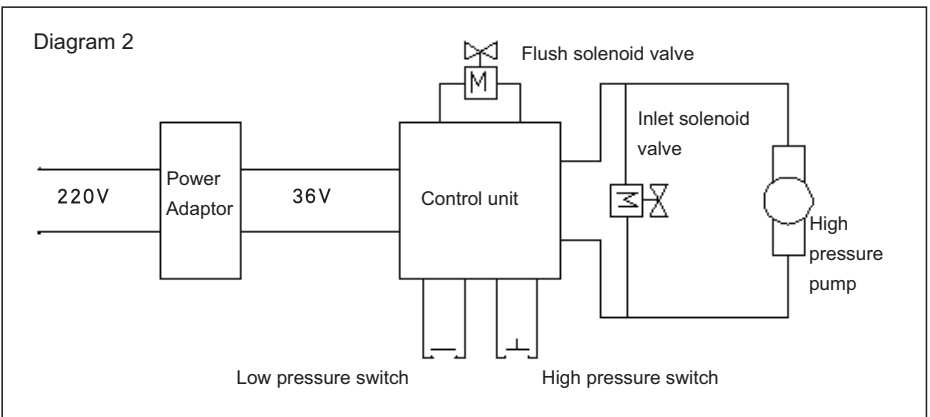
The pure water flow is tested under environmental temperature of 25 ±2 ℃ and water temperature 25 ±1 ℃.



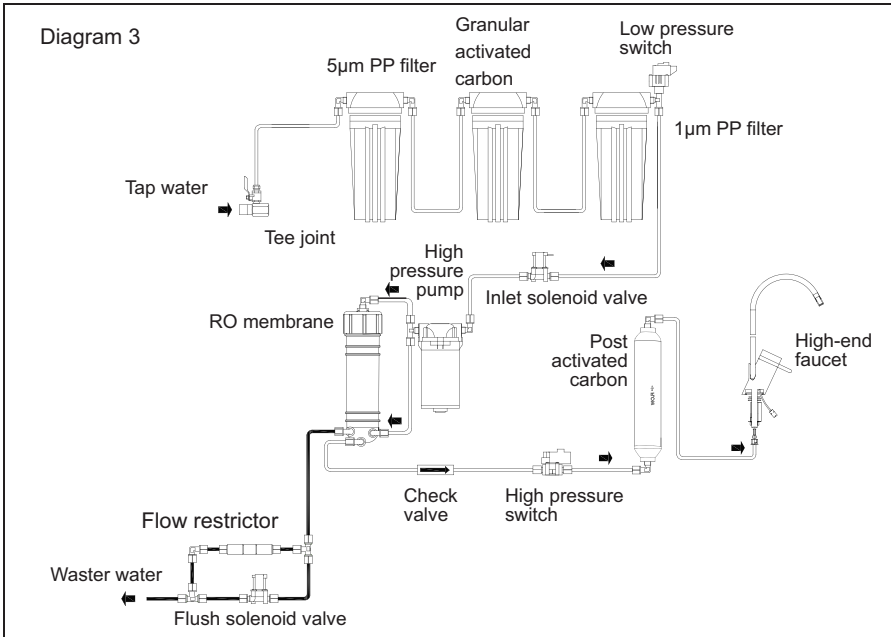
### 3.Structural Drawing



### 4.Electrical Circuit Diagram



## 5. Water Flow Diagram



## 6. Primary Water Quality Treatment Components

Our primary water quality treatment components adopt the most advanced RO technology in the world. Please find below their configurations.

Stage	Product type and material	Function
1st stage	5µm PP filter	The PP filter has a 5 micron pore size that can effectively filter rust, sand, other solid impurities, and larger particles in water.
2nd stage	Granular activated carbon filter	The carbon filter can effectively adsorb free chlorine, organic matter, disinfection byproducts, smells, discoloration, and other substances in water.
3rd stage	1µm PP filter	The 1-micron PP filter can further remove particles of a smaller size, such as suspended solids and colloids.
4th stage	Reverse osmosis membrane	Effectively remove bacteria, viruses, heavy metals, pesticide residues, and other harmful substances from the water
5th stage	Post activated carbon filter	Removes odor and adjusts taste.

## 7.Core Control Components

Adaptor: Convert 220V AC to 36V DC power supply (safe working pressure).

Control unit: control the unit's water production procedures.

High pressure pump: boost pressure to create a stable environment for RO membrane's normal operation.

Low pressure switch: prevent water pump from idling. It will cut off power supply and stop the unit's operation automatically when feed water pressure is low or there is no water supply.

High pressure switch: prevent water pump from overloaded operation. It will cut off power supply and stop the unit's operation automatically when pure water pressure reached set value.

Inlet solenoid valve: connect or disconnect feed water

Flush solenoid valve: (controlled by control unit) Flush RO membrane.

Check valve: control water flow direction

Flow restrictor: control system flow rate.

## 8.Water Purifier Characteristics

1) No tank—— It adopts a brand new and breakthrough design whose water output is comparable to pressure tank type's. High quality drinking water can be obtained at any time once the faucet is turned on. It is healthy and safe.

2) Extra large water flow—— Pure water flow is about 1.5L/min (test conditions: municipal tap water, accord with GB5749-2006, environmental temperature 25 ±2 ℃ and water temperature 25 ±1 ℃)

3) Automatic control——control the whole unit's operation status automatically, such as automatic shutdown due to shortage of feed water, automatic flush, early warning, etc.

4) Mandatory stop—— Stop operation for 60 mins by force after the unit works for 60mins continuously. It can be restored after 60 mins standby.

5) Intelligent flush——Flush RO membrane automatically when the unit is powered on.

6) Filter replacement reminder—— The machine will remind user of replacing filter with sound and color when filter life is due. Faucet will also set reminder with corresponding color at the same time

7) Water leakage protection——When water leakage is detected, it will stop operation automatically and turn off water pump as well as inlet solenoid valve to prevent water leakage. Alarm indicator on the display screen will flicker and alarm buzzes. It can only be reset after power on and troubleshooting.

# How to Install

The company recommends professionals install the machine for you because the product needs to be installed and adjusted according to on-site situations of the user.

## 1. Pre-Installation Preparations

- 1) Confirm the location where the water purifier will be installed.
- 2) Confirm that you have the various tools required for installation.

Monkey wrench	1 piece
Electric drill	1 piece
6.2mm drill	1 piece (concentrated water hole)
Hole saw 14mm	1 piece (high speed steel hole saw or marble hole saw)
Philips and flathead screw driver	1 piece for each
Pipe scissors	1 piece
14-16mm wrench	1 piece
19-21mm wrench	1 piece
Nipple pliers	1 piece

- 3) Confirm that you have all of the accessories required for installation
- 4) Prior to installation, turn off the water and electricity

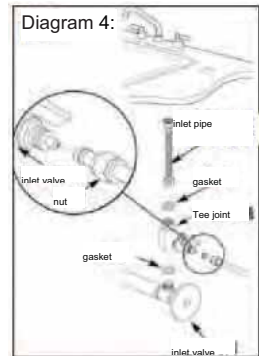
## 2. Instructions for Proper Installation

- 1) How to install inlet metal hose and tee joint (if the diameter of metal hose is not 1/2", additional tee joint or adapter need to be purchased)

Turn off inlet valve and unscrew the metal hose off inlet valve. Take the tee joint out of accessory box and screw its female thread end on inlet valve outlet. And screw metal hose on tee joint's male thread end. (Please see diagram 4)

- 2) How to install water inlet pipe

Take 3/8" water pipe out of accessory box and cut a suitable length of water pipe using scissors. Connect the pipe's one end with tee joint inlet. (See Diagram 4). Screw on the metal nut to right position; Then the other end of water pipe is connected to the joint of 1st filter cartridge. Please be noted that water pipe shall be plugged in correctly to prevent tube burst and water leakage.



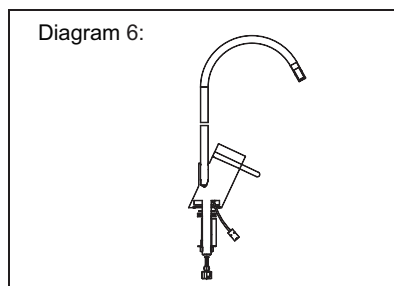
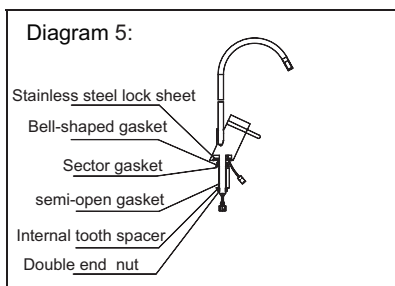
- 3) Installation of gooseneck faucet

Drill a  $\Phi 14\text{mm}$  hole on countertop and take the gooseneck faucet out of accessory box. Then start the installation: firstly remove screw nut off faucet bottom and place seal ring into the sealing groove at the bottom of the faucet. Install the screw rod of faucet through the countertop. Then put bell-shaped gasket, sector gasket, semi-open gasket, internal tooth gasket and double end nut onto the screw rod in turn (the wiring of faucet passes through the bell-shaped gasket and sector gasket). Fix the faucet on the countertop and cut a suitable length of 1/4" water pipe. Install plastic hollow ball, plastic pipe plug and single-end nut on one end of the water pipe and then screw it to the faucet bottom (See Diagram 5).

Connect the wiring of the faucet to the control unit and then the installation is completed. If the user wants to fix the faucet onto wall, please use faucet hanger. (Please be noted that all joints should be tightened during installation to prevent water leakage.)

#### 4) How to install waste water pipe

Use a  $\Phi 6\text{mm}$  drill to punch a small hole into the sink drain pipe. Cut a suitable length of 1/4" water pipe and insert one end into the drilled hole. Put some silica gel where the 1/4" pipe and the drain pipe connect to prevent leakage and use a cable tie or concentrated water clip to attach the wastewater pipe to the drain pipe.

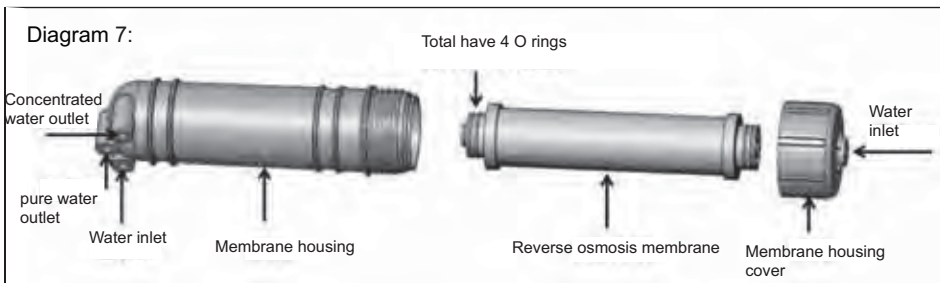


#### 5) How to install RO membrane

Take the water inlet pipe from the quick joint of membrane housing and unscrew the membrane housing with its wrench. Then take RO membrane out of vacuum package and install the end with four O rings into membrane housing tightly (see Diagram 8), in the end install the housing cover and tighten it with cover wrench. Reconnect the water inlet pipe into the quick joint of membrane housing and then lock the membrane housing clip into the large single clip.

#### **Warning:**

- ◆ Pay attention to RO membrane direction during installation;
- ◆ Check whether one end of the membrane has 4 O rings or not when installing RO membrane.
- ◆ If it is installed properly, RO membrane can be installed into membrane housing easily. if it is difficult for membrane to install into it, don't insert RO membrane into membrane housing violently which might cause permanent damage to membrane housing and membrane element (The manufacturer is not liable for any damage to membrane caused by improper installation);
- ◆ Damage to membrane housing and RO membrane caused by above-mentioned reasons is not included in the warranty scope.



### 6) How to install filter

Firstly take filters out of packing box, tear off their packaging film and place them into filter cartridge in turns. : firstly 5 $\mu$ m PP filter; secondly Granular activated carbon filter, the end with silicone pad upward (don't omit); and thirdly 1 $\mu$ m PP filter. Flush the 2nd stage Granular activated carbon filter according to item (1) of 'Method to replace filter element' on page 13 when use it for the first time.

### 7) Fasten the water purifier

If user would like to hang the water purifier on the wall, screw two M5 $\times$ 16mm big flat head self-tapping screws at corresponding position on the cabinet plate and hang the water purifier.

If user would like to fasten it on the wall, expansion screw needs to be purchased by users.

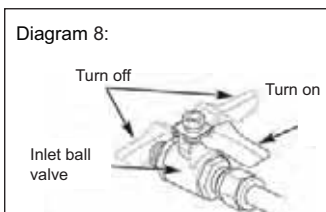
### 3. Notes

- 1) When installing water pipe, don't miss pipe plug where necessary. Screw the nut tightly and water pipe must be inserted to right place when connected with quick joint.
- 2) During installation, if users would like to punch holes on the wall, please confirm that there is no circuit or water pipe at the position of holes.

# Adjustment Procedures

After confirming that water pipe is connected properly, please check whether there is water and/or power supply. Then follow below adjustment procedures:

- 1) Turn on tap water inlet valve and inlet ball valve of water purifier, connect the power (see Diagram 8) and wait till the filter is filled with water. Then pure water will run out from the gooseneck faucet.
- 2) After the water purifier starts to produce pure water and works normally (about 5~10 minutes), check the connectors of water purifier and whether there is water leakage at the joints of membrane housing and filter cartridge.

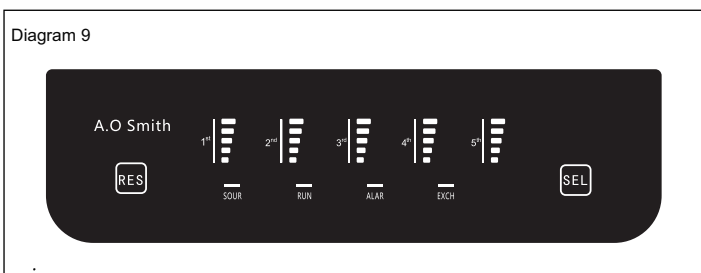


- 3) Turn off gooseneck faucet and wait for about 30 seconds. Then check whether concentrated water of water purifier stops.
- 4) Turn on gooseneck faucet and observe whether pure water comes out. If no pure water, please check whether it is because tap water pressure is too low or high pressure switch can't be reset.
- 5) When the machine is under working conditions, turn off water inlet ball valve and observe whether the machine stops. If it does not stop, check whether low pressure switch can be reset or not.
- 6) The water purifier can be used safely after confirming the above goes well.

# Operating Instructions

- 1) There is some protective fluid in the package of RO membrane element to prevent microorganism pollution during storage and transportation. Besides, some activated carbon powder will be flushed out when post activated carbon filter is used for the first time. Therefore, users should drain the water produced during the first 15 minutes' working. Otherwise, produced water will taste bad.
- 2) TDS value of purified water might be a little high during early operation stage of the water purifier and the TDS value will decrease to a stable level after the unit works for some time.
- 3) Water inlet ball valve shall be turned on when the water purifier works. Purified water can be obtained once faucet is turned on. Or if it is not needed, just turn off the faucet. High Pressure switch can automatically cut water supply under the control of water purifier.
- 4) The 'Operating' in this 'Operating Instructions' means turning on power supply and/or opening inlet ball valve to make the water purifier under working conditions.

# LED Screen



Produce Water : Icon "RUN" becomes green.

Standby: Icon "RUN" doesn't stay on.

Lack of water: "SOUR" flickers with red light. And alarm buzzes 7 times.

Compulsive stop: " RUN" flickers with red light at 0.5 second interval. Alarm buzzes 7 times with 1 second as a cycle.

Alarm: If water leakage is detected, " ALAR " flickers and buzzes with 2seconds as a cycle. It cannot be reset until power supply is reconnected.

"SEL " button: Can select the 1st, 2nd, 3rd, 4th, 5th stage filter. Corresponding icon flickers.

" RES" button: Hold it for over 3 seconds to activate it. Reset selected filter life and corresponding filter icon flashes in green. Do nothing for 10 seconds to exit this status.

filter life: Icon" 1,2,3,4,5" uses different colors to show the status of filter in corresponding stage. When all filter and " EXCH" flickers with green light: normal state. When have filter and " EXCH" flickers with red light: filter needs to be replaced immediately. When have filter and " EXCH" flickers with orange light: early warning, filter needs to be replaced after some time (please call our hot line for machine maintenance)



Notice: 'Res' button can only be operated when replacing filter. Otherwise, it is not permitted.

# Faucet Display

When the machine is powered on and faucet is turned on, 'Smith' icon and 'Water drop' icon stays on. 'Smith' icon turns blue and color of 'Water drop' will be determined based on filter life. If 'Water drop' icon turns orange or red, please check the machine and call our hotline for maintenance according to detailed indication on LED screen.(When filter of any stage turns red, "water drop" icon becomes red too. When all filters of five stages light in green, then "water drop" icon turns green. When filter of any stage displays in orange and no filter lights in red, then "water drop icon" lights in orange too. 'Smith' icon and 'Water drop' stay off when the faucet is turned off.

Diagram 10:



# Maintenance & Upkeep

## 1.Filter Life

- 1) This machine has the function of automatic filter replacement reminder. (Please see page 9) The recommended filter life is based on the average indexes of tap water in various districts. If users' actual water quality and using frequency have a great discrepancy with average index, actual filter life differs greatly from estimated time, such as early clogging or invalidity of filters. The customer should arrange for replacement with their local service center based on the machine's actual usage conditions.



- 2) The estimated filter life of this purifier is calculated based on household use. Please do not use this purifier in a public place with much higher water consumption. In those cases, we recommend that you choose our commercial model.
- 3) Based on the assumption that the feed water is municipal water and according to average household water consumption, the suggested filter life is as follows(below data is for reference only):

Stage	Period
1st stage: 5µm PP filter	12 months
2nd stage: Granular activated carbon filter	24 months
3rd stage: 1µm PP filter	24 months
4th stage: Reverse osmosis membrane	36 months
5th stage: Post activated carbon filter	12 months

Note: Since water quality exerts great influence upon filter life, and RO membrane life is also affected by various factors, filter life might be higher or lower than above-mentioned in reality, and thus above data is only for reference. The customer should consider replacing filters under below circumstances:

- ‡ The taste of the pure water is bad and the TDS value has increased.
- ‡ The pure water flow has decreased. Check whether the filters or membrane are blocked (make sure it is not because of low inlet water temperature).
- ‡ The filter is covered by mud or its color has changed.
- ‡ No pure water comes out of the water purifier.

## 2.How to Replace Filter

- 1) Replacement of the 1st and 3rd stage filter cotton and the 2nd stage pre- activated carbon

Firstly turnoff water inlet ball valve and unscrew corresponding filter cartridge with filter cartridge wrench. Take out old filter and place new filters into the filter cartridges (note: dense filter cotton is installed in the 1st filter cartridge; front activated carbon is installed in the 2nd stage filter cartridge and the end with silicone pad shall be upward; super dense filter cotton is installed in the 3rd stage filter cartridge). Then tighten cartridge cover with wrench.

Before pre-activated carbon filter is replaced, flush it firstly to prevent activated carbon powder from entering into the 3rd stage filter or RO membrane, which will damage filter and membrane elements. The detailed operation procedures are as follows:

- 2) Turn off inlet ball valve of water purifier.
- 3) Remove the 3rd stage cartridge with cartridge wrench;
- 4) Collect water at the 3rd stage filter cartridge cover with a big container;
- 5) Turn on inlet ball valve and wait until the outlet water from the 2nd filter is not black anymore;
- 6) Turn off inlet ball valve, place the filter into filter cartridge and then tighten the 3rd stage filter cartridge cover.

Note: when the machine is restarted after filter replacement, the machine will alarm shortly for water shortage. However, this is completely normal because the machine hasn't been filled with water yet. It will stop alarming and return to normal quickly.

7) Please refer to " How to Install RO Membrane" (page 9) for replacement of the 4th stage RO Membrane

8) Replacement of the 5th stage post activated carbon

Firstly, turn off inlet ball valve and take out the water pipes on the two sides of the post activated carbon to be replaced. Get a new filter and install it according to original water inlet and outlet direction. Turn on inlet switch and the unit starts producing water normally. Yet produced water can't be used until the new post activated carbon is flushed for 15 minutes.

## **2.Note**

1) Water output of RO membrane

Water output of RO membrane is subject to inlet pressure and inlet temperature. Nominal 600GPD of this machine is tested when the net pressure before RO membrane is 0.6MPa and inlet water temperature is 25 ℃. If net pressure is less than 0.6MPa or water inlet temperature is lower than 25 ℃, water output of RO membrane will be less than 600GPD. The rated gross pure water output is 7000L (Tested according to requirements of Sanitary Standard for Hygienic Safety and Function Evaluation on Treatment Devices of Drinking Water—Reverse Osmosis Treatment Device.)

2) Treatment of old filter

The replaced old filter can't be cleaned or recycled. So it is recommended that old filter shall be abandoned as solid household garbage and treated by professionals.

3) When you will not use the machine for an extended period of time, disconnect the water and power source of water purifier.

4) When any of the following situations occur, immediately disconnect the water source (and/or the power source from the purifier and call our national hot line 4008288988

‡ If the water purifier pipes or related components are leaking.

‡ If the water purifier's related components stop working.

‡ If electricity leaks from any components.

‡ if water leakage protector makes alarm.

‡ if water leakage protector makes alarm, the machine will stop working immediately.

Users need to find out water leakage reason and solve the problem. Then wipe the control panel in the protector with tissues. Power on the machine again and the unit can be operated normally.

If there are any other anomalies or failures.

‡ If related component of the water purifier is damaged, please contact with national service hot line 4008288988 and our after-sale service staff will replace it for you to avoid damage. Our company is not liable for any loss caused by operation not following this user manual.

# Trouble shooting

Failure	Possible Cause	Resolution Method
The machine can't be started.	Power supply is not connected	Check power supply or power supply socket
	low feed water pressure or no water supply	Check feed water pressure.
	Low pressure switch fails. Power supply cannot be connected.	Measure resistance after feed water is connected. Replace low pressure switch.
	High pressure switch can't reset	Measure resistance after decompression. Replace high pressure switch.
	Power switch is burned out	Measure output voltage, replace power switch.
The high pressure pump works normally but no water is produced	No output voltage from control unit	Measure output voltage, replace control unit.
	High pressure pump failure	Measure pump's outlet pressure. Replace pump.
	Inlet solenoid valve fail to open (no pure water or wastewater)	Replace inlet solenoid valve
	filter blocking	Observe pure water and wastewater flow. Replace filter.
	check valve blocking(have wastewater, no pure water)	Replace check valve
	RO membrane blocking	Replace RO membrane
System stops but waste water doesn't stop	Control unit failure. Can not turn off flush solenoid valve.	Check whether there is input voltage. Replace control unit.
	Inlet solenoid valve fails. Can not stop water flow.	Observe waste water. Replace inlet solenoid valve
The machine keeps powering on and off repeatedly after standby	Decompression of check valve (small flow of waste water)	Observe waste water and replace check valve.
	Decompression of check valve	Replace check valve
	High pressure switch failure.	Replace high pressure switch
small or no pure water output	System decompression	Check whether there is water leakage on the pure water pipe behind check valve
	Filter blocking	Replace filter
	RO membrane blocking	Replace RO membrane
	Inlet solenoid valve failure	Replace inlet solenoid valve
	Check valve blocking	Replace check valve
	lack of pressure in high pressure pump	Measure pump's outlet pressure. Replace high pressure pump.
No display on faucet	post activated carbon blocking	Replace post activated carbon
	The wiring is not connected	Connect wiring of the faucet with control unit
	Faucet display screen failure	Replace faucet display screen

# Package Contents

Machine (including RO membrane)	1 set
Three filter cartridges and three filters	1 set
2' water pipe	1 roll
3' water pipe	1 roll
Gooseneck faucet	1 piece
Filter cartridge wrench	1 piece
Membrane housing wrench	1 piece
User manual	1 piece
Silicone pad and demonstration instruction	1 piece
Accessories:	1 package
Including: tee joint	1 piece
2' pipe plug	2 pieces
3' pipe plug	1 piece
3' nut	1 piece
Hangers for faucet	1 piece
waste water clip	1 piece
Teflon tape	1 roll
M5×16mm big flat head self-tapping screws	2 pieces
Nylon cable ties	5 pieces

**Note:**

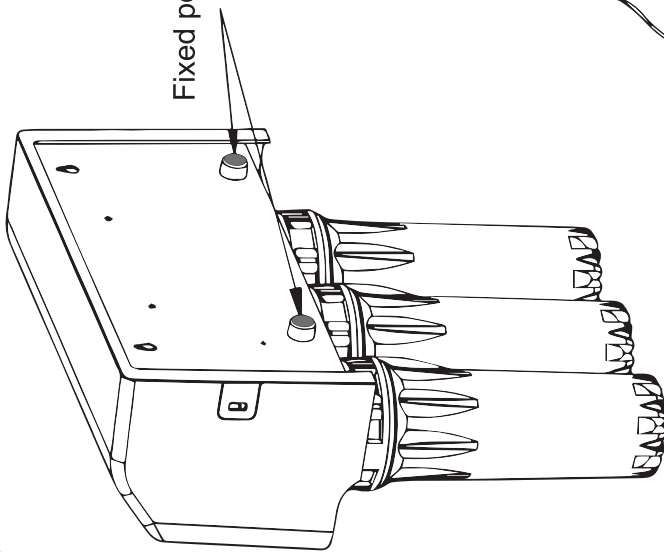
Unit conversion:

0.1 MPa=1.02kg/cm<sup>2</sup>=14.5 Psi

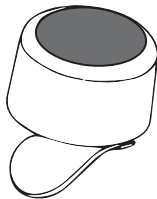
1 Psi= 0.07Kg/cm<sup>2</sup>

1 gallon= 3.785 Liters

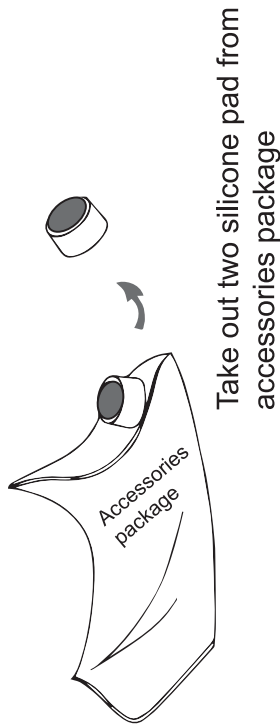
Step 2



Remove the paper of silicone pad



Step 1



## Silicone pad installation diagram

# Warranty Terms & Conditions

## 1. Warranty period

Complete machine is warranted for one year from the installation date or the date of purchase on invoice. However, consumable items are not covered by the guarantee. (Consumable items include filter and RO membrane).

Notes: residential drinking fountain is intended for individual household use, not suitable for commercial application.

## 2. Warranty Conditions

Users shall abide by following rules; otherwise, warranty will be void.

- 1) Users shall purchase our products from authorized retailers and through official channels.
- 2) Please keep your invoice and user manual properly, and make sure product's serial No. on user manual is in accordance with the one which can be found on the machine.
- 3) Product shall be installed by staff designated by manufacturer or qualified installer approved by national authorized organizations. (Any installation without guidance is not allowed.)
- 4) Users must follow instructions strictly.
- 5) Users shall use products in appropriate conditions.
- 6) If any maintenance or repair is needed, please dial company's hot line for repair.

## 3. Exceptions

The following product failure or damage is not covered in the warranty.

- 1) Obtain products in illegal ways or through unauthorized channels.
- 2) Loss of invoice, user manual or serial No. on product.
- 3) Serial No. on instruction is not in accordance with the one on product.
- 4) Any failure or damage caused by self-installation without manufacturer's guidance or qualified staff's installation.
- 5) Product misuse, or any failure or damage caused by violation of instruction.
- 6) Product failure or damage due to use beyond normal conditions
- 7) (Intentional or unintentional) damage to the machine
- 8) Damage caused by force majeure (such as natural disasters, wars)
- 9) Company is not liable for the warranty If customer doesn't call company's hot line for repair, or product has been repaired by unauthorized staff.

## 4. Warranty Service

As for any product failure of damage in accordance with warranty conditions during warranty period, and without violating exceptions, company will provide all-around warranty service, which includes:

- 1) Repair of damaged machine for free.
- 2) Replace damaged parts for free
- 3) Other items regulated by national laws (including Law on Protection of the Rights and Interests of Consumers)

## 5. Warranty Service Procedures

- 1) Please turn off water valve or cut off power immediately after discovering fault phenomenon when using our products. After confirming that all meet warranty conditions, please dial our company's hot line for timely repair.
- 2) Please show maintenance staff valid invoice and report use & failure situation. After checking the machine, service staff will do the maintenance.
- 3) When service is finished, customer makes comments on Service Order and sign name. If any doubt, please enquire service staff promptly.
- 4) If damage is not covered in warranty, user should pay service charge according to charging standard shown by service staff.
- 5) If users have any objections or questions to service procedures, please dial our company's hot line for consultation.

**Our company's 8h00 -17h00pm hot line 1900 XXXXXX**

# Warranty card

**Model**

AR600-C-S-1

**PURCHASER INFORMATION**

PURCHASER'S NAME

ADDRESS

CITY

MODEL NO.

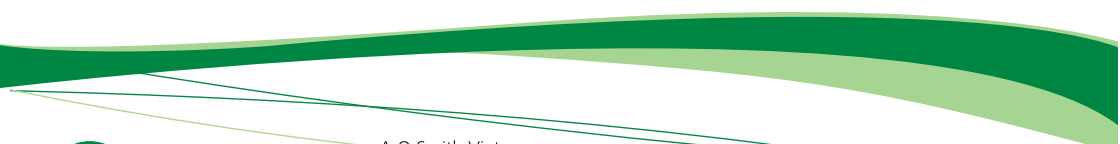
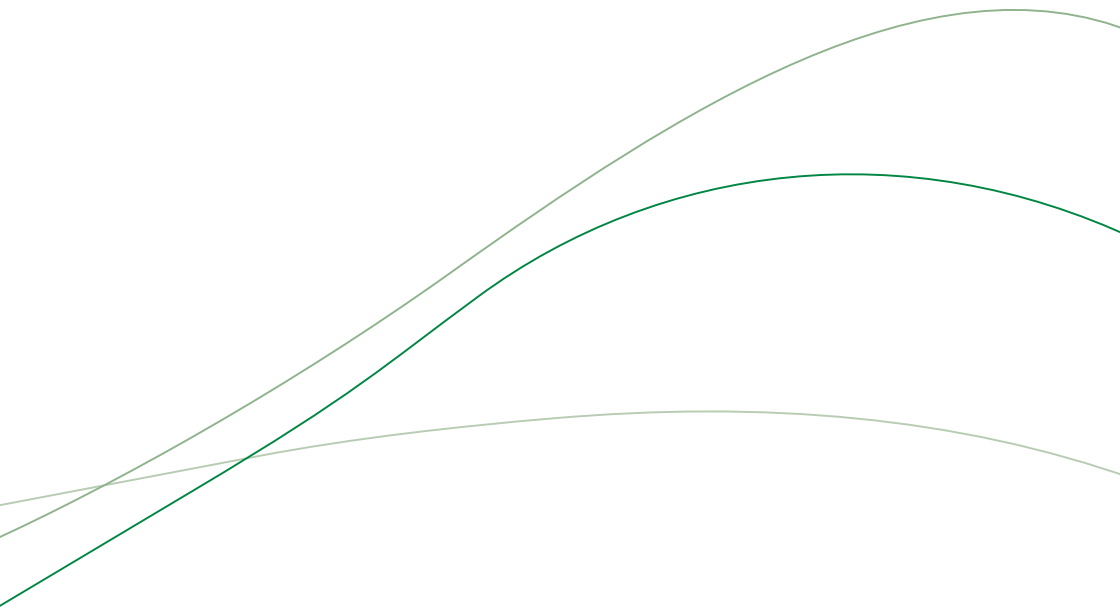
SERIAL NO.

DATE OF PURCHASE

INVOICE NO.

Hotline

**1900XXXX**



A.O. Smith Vietnam  
16 Ly Dao Thanh Street, Hoan Kiem Distric,  
Ha Noi, Viet Nam.