Service manual



Water Purifier

JL1850S-RO (Z80)



When replacing parts, be sure to use specified parts at parts list for safety and performance maintenance

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Safety instruction and accessories

(1) Safety instruction

1. Precaution

1-1 Safety Issues

Please note the following brief icons and rules for safe use of this product



Troubleshooting

When the machine fails, please disconnect the power and water source immediately



Maintenance

Never remove the parts on the machine to avoid leakage or damage



Avoid contact with children Never have the machine

operated by a child



Temperature

Please use the product in a dry place with the temperature of 4-43°C



Electricity prevention

To avoid leakage of electricity.



Accessories and filters

To maintain the normal operation of the machine, be sure to use accessories and filters supplied by original company



Emergency call

For any help, please call the local sale service center or the national service hotline



Correct repair service

This machine can only be repaired by qualified personnel designated by this company



Avoid direct sunshine

Do not install the machine in a place exposed to direct sunshine



Anti-freeze

Never store or expose the product duct in an environment less than 0°C

- 1. 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.
- Children should be supervised to ensure that they do not play with the appliance.
- 3.If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- 4.Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
- 5. This appliance is intended to be used in household and similar applications such as staff kitchen areas in shops, offices and other working environments; farm houses and by clients in hotels, motels and other residential type environments; bed and breakfast type environments; catering and similar non-retail applications.
- The appliance is suitable for indoor use only.
- 7.WARNING: Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- 8.WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- The appliance must not be immersed.
- 10.WARNING: To avoid a hazard due to instability of the appliance, it must be fixed in accordance with the instructions.
- 11. This product is not recommended to use in areas above 2,000m altitude.
- 12. WARNING: UV radiation is dangerous for eyes and skin. Do not operate the UV-C emitter outside the appliance.
- 13. WARNING: Do not operate the UV-C emitter when it is removed from the appliance enclosure;
- WARNING: This appliance contains a UV emitter. Do not stare at the light source.
- 15. Unintended use of the appliance or damage to the housing may result in the escape of dangerous UV-C radiation. UV-C radiation may even in little doses, cause harm to the eyes and

16. Appliance the are obviously damaged must not operated.

17.If the replacement of the UV-C emitter by the user is not allowed, this must be clearly stated. 18.WARNING: When positioning the appliance, ensure the supply cord is not trapped or damaged.

19.WARNING: Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

20.To ensure the product using well, please make sure the product installation, testing and filter exchange are made by aftersales service person.

(2) Supplied items

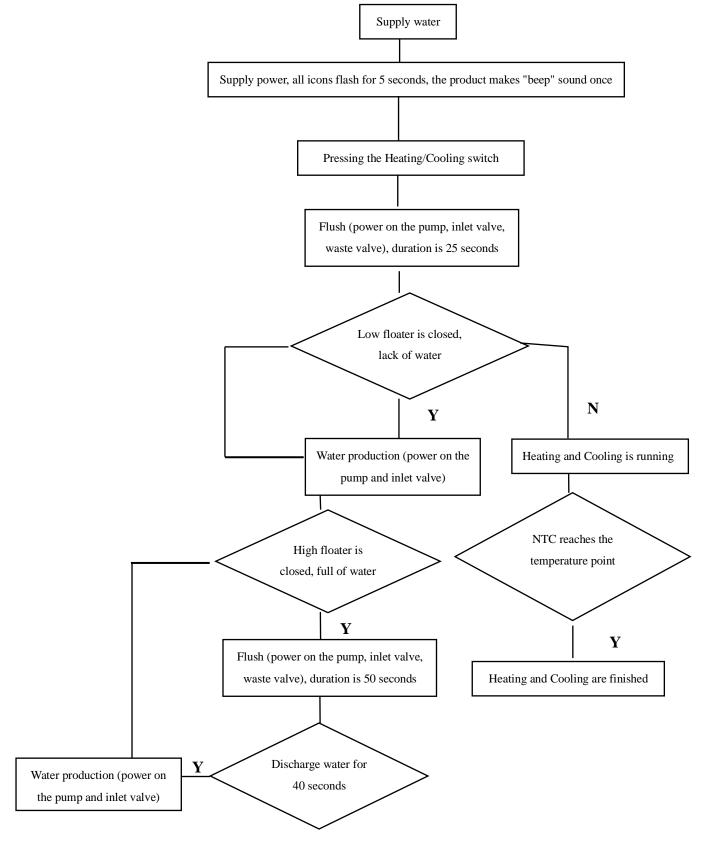
Instruction Manual(1 copy)	Bracket(1PC)	Screws(2PC)	Crossover sub (1PC)	1/4 "PE pipe 1/4 "PE pipe 3/8"PE pipe	(Blue)(2m)
Instruction Manual					
Snap ring(4PC)	Sealing ring (1PC)	Small sealing plug(1PC)	Large sealing plug(1PC)	Pipe clamp (1PC)	reducing valve(1PC)
			9		

Product Specification

Model	JL1850S-RO
Rated voltage	220-240V~
Rated frequency	50/60Hz
Rated power	994W
Heating power	874W
Cooling current	1.0A
Rated pure water flow	1.2L/min(0.3MPa)
Hot water capacity	7.5L/h(≥85°C)
Cold water capacity	4L/h(≤10°C)
Applicable environment	4-43°C humidity ≤85%
Applicable water pressure	0.1-0.4MPa
Applicable water	Tap water
	TDS≤350ppm
Applicable water temperature	5-38°C
Stage 1	PP sediment filter-F1
Stage 2	C1 active carbon filter-F1
Stage 3	RO reverse osmosis filter-F1
Stage 4	C2 active carbon filter-F1
Product size	360(W)*460(D)*1400(H) mm
Packing size	480(W)*505(D)*1490(H) mm



Principle of operation

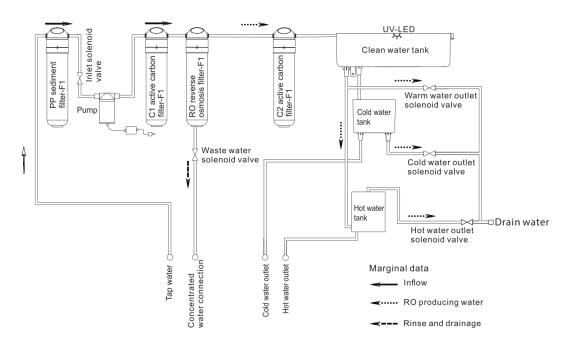


Filter function

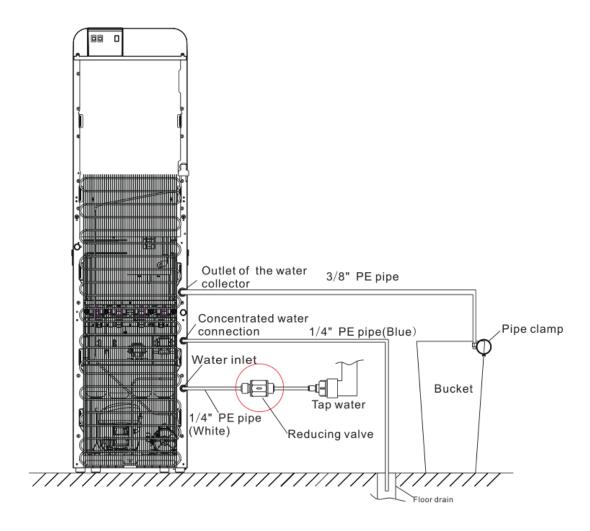
Stage	Filter	Function	Replacement Cycle
Stage 1	PP sediment filter-F1	Carry out coarse filtration of original water, and filter out mud, sand, impurity, iron rust and suspension, etc.	3-6 months
Stage 2	C1 active carbon filter-F1	Absorb unusual colors and odors, Remove residual chlorine and organic substances in water.	6-12 months
Stage 3	RO reverse osmosis filter-F1	Nonionic Absorbing: Organics, alcohol, ketone, aldehyde, phenol. Particulate retention: Solid suspended solids, Colloids.	12-24 months
Stage 4	C2 active carbon filter-F1	Further absorb micro-molecules and organic substances in water. Make water taste better.	6-12 months

System Diagram

1, the water flow inside of water purifier:



2, the water flow outside of water purifier:



Construction Views

1, Front



2, Back



3, Left



4、 right



4, Top



5, bottom



Product feature

- 1. Hot & Warm & Cold water, three types of water temperature.
- 2. Full plate quality toughened glass design, elegant and beautiful.
- 3. The latest leakage protection device, to ensure the safety of Public environmental.
- 4. Water tank built-in UV-LED bacteriostatic, to ensure the safety and health of water.
- 5. Large screen display, working status at a glance.(heating /cooling /filtrating /filter lifetime/UV).

Product strong point

Booster pump

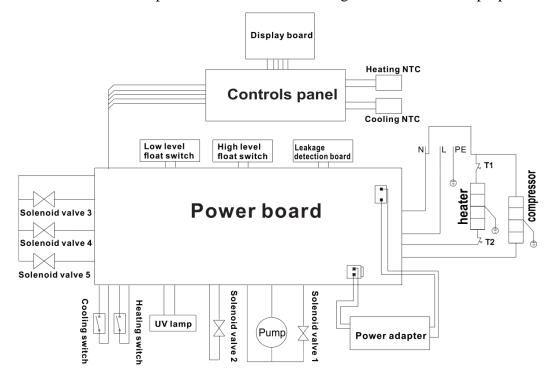
- 1. Increase the pressure on the front end of the RO filter element; ensure the system works properly to produce purified water.
- 2. Rated voltage: 24V.
- 3. Rated current: $\leq 1A$.
- 4. Rated flow: ≥ 0.55 L/min



Electrical schematics and wiring diagrams

WARNING: Disconnect electrical power before servicing.

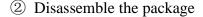
Caution: Label all wires prior to disconnection . Wiring errors can cause improper.



Preparation before operation of the water purifier

Installation procedure





3 Take out water purifier and accessories

4 Connection of water supply tube

® Water leakage check

(9) Instruction for use

10 Final inspection

(1) Finish

† †

⑤ Connection of drain tube ⑥ Open the water inlet valve. ⑦ Turn on electricity ♣

Setting the installation location

Install it in the room close to the power source, water source and floor drain, install in a dry place without direct sunlight, and keep away from flammable and explosive materials.

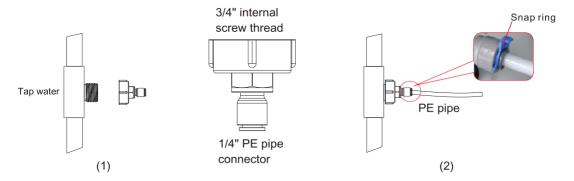
Keep this machine in a dry and cool place and avoid direct sunshine. Rearward of the machine shall be at least 25 cm away from the wall. Never put the machine on paper or foam, which may store water and then cause creepage. Never put anything flammable beside this machine.

Do not use the machine outdoors or in a place that can be splashed by water.

Fixing guide

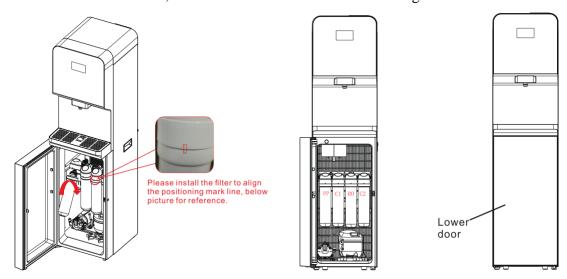
WARNING: Please cut off water source before replacing filters. Never plug filters in water running state.

- 1. Unpack the product.
- 2. Put the accessories aside.
- 3. Take out the quick joint, and install it on the water pipe. Clamps should not be missed.

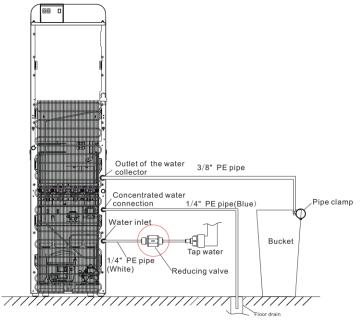


- 4. Open the lower door.
- 5. Use the after sale accessory—filter flushing tip, the arrow direction is the water flow direction, insert the PE pipe in the quick joint.
- 6. Insert the C1 active carbon filter into the filter flushing tip, tighten it by turning anticlockwise, and open the water tap to flush the filter till it doesn't discharge black water, for about 10min; Take the same step to flush the C2 active carbon filter-F1. Take the same step to flush the PP filter for 5min.
- 7. Install the clean filter in the product, hold the filter with the left hand and enclosure of filter with the right hand, and insert it upwards in the filter, tighten it by turning anticlockwise, the installation order is: PP sediment filter-F1→C1 active carbon

filter-F1→RO reverse osmosis filter-F1→C2 active carbon filter-F1. After washing and installation of filters, the lower door must be fixed with original screws.

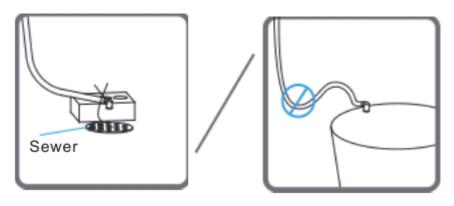


8. Take out the pin of the quick joint at the rear of the products side plate's, and then take out the white plug.

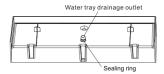


Note: When the tap water pressure exceeds 0.4MPa, it requires installing the pressure relief valve. Keep the water flowing arrow towards the water inlet interface of the machine.

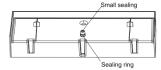
- 9. Insert the water inlet PE pipe in the quick joint, and tighten the pin. The new hose-sets supplied with the appliance are to be used and that old hose-sets should not be reused.
- 10. The water cooler plug cord into a ground fault interrupter receptacle.
- 11. After installation, supply water and power. Discharge the first 3 tanks of purified water by pressing the button, press the Heating and Cooling buttons on the rear panel to purify water again, then the water output is drinkable.
- 12. When installing filter and replace filter please turn off the water and power supply before installation and replacement.
- 13. Concentrated water and the water drained from the water tray can be directly discharged into the sewer or the water drained from the water box can also be discharged to the bucket. (Note: Drainage pipe must be vertical and shall not be "U" or twisted at any section)



14: Water tray discharge treatment

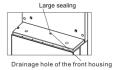


When the water can't be smoothly discharged from the water tray, please install the sealing ring on the drainage outlet slot of the water tray.



If the remaining water in the water tray won't be received with water tank, the big and small sealing plugs shall be adopted.

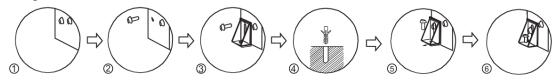
Step 1, install the small sealing plug in the drainage outlet of the water tray, and ensure installing in place.

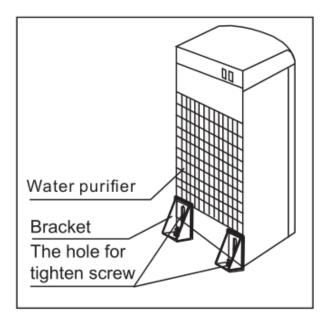


Step 2, install the big sealing plug in the drainage hole of the front housing, and then press it in place with the water tray.

15. Machine Installation

- 1-2. Loosen the screw of the left or right bottom angle just as the picture shown.
- 3. Use the screw to fix the bracket on the left or right bottom angle of the water purifier.
- 4. Make a hole on the floor's or the desk's surface where the water dispenser will be installed.
- 5. Fix the bracket on the floor by screw tightly.
- 6. Tighten the screw.

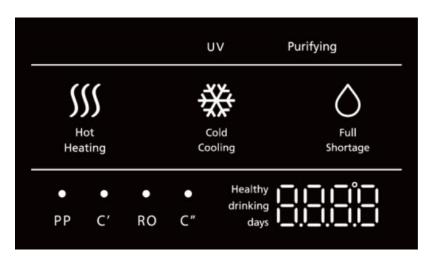




Inspection and confirmation

- 1. Confirm there is no water leakage from the branch faucet connected to pure water, the tube /filter inside the main body, and the connecting part.
- 2. Make sure that the drain tube does not move due to the force of drainage.
- 3. Confirm that sound and vibration during pump operation resonate on the installation surface and abnormal sound does not appear.

The display panel is shown as below:



- 1. "When displays as this, it indicates that water heating is completed.
- 2. "When displays as this, it indicates that water is heating.
- 3. "When displays as this, it indicates that water cooling is completed.
- 4. "When displays as this, it indicates that water is cooling.
- 5. "It indicates that there's insufficient water in the machine.
- 6. "It indicates that there's sufficient water in the machine.
- 7. "Purifying "When it is on, it indicates that the machine is purifying water.
- 8. "When indicator in this area flashes, it indicates that the filter of corresponding level expires, please replace the filter.

DISPENSING WATER



- 1. Touch the cold water button " 🏶 ", the device starts discharging cold water; Touch the cold water button " 🛞 " again, the device stops discharging water, finish getting water.
- 2. Touch the normal water button " o ", the device starts discharging normal water; Touch the normal water button " o " again, the device stops discharging water, finish getting water.
- 3. Touch the child lock button " (a)", then touch the hot water button " (ss)", the indicator turns on and the device starts discharging hot water. Touch the anyone button, the device stops discharging water, finish getting water.
- 4.Long press the cold water button "* + warm water button "* " for 3 seconds to enter the filter reset mode. The indicator light and name of the first filter flash, and the remaining percentage of filter life displays in the bottom right corner of the screen. Long press the cold water button "* "for 3 seconds to reset the filter, and the life of the filter is restored to 100%. Press the cold water button "* "to switch to the next filter display, and operate the same to reset and switch to the next filter. When it comes to the last filter, press the cold water button "* "to exit the filter reset mode.

5. Additional remarks

Non-filter reset mode, the button functions are as follows:

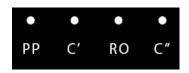
Button	Operation	Function
Hot water + warm water	Hold for 3 seconds	Reset the expired filter
Warm water + cold water	Hold for 3 seconds	Enter single filter reset mode
	Completed within 20	
Child lock + cold water	seconds after power-on	Restore factory settings
	Hold for 10 seconds	

Single filter reset mode, the button functions are as follows:

Button	Operation	Function
Cold water	Touch	Select the next filter
Cold water	Hold for 3 seconds	Reset the current filter

Operational precautions

Changing Filters



- 1. The name of the filter keeps on during operation. When the filter life reaches 0, the corresponding filter indicator flashes, otherwise it is always on.
- 2. The filter life data is as follows. The filter life is continuously decreasing when it is powered on (no matter whether it is producing water):

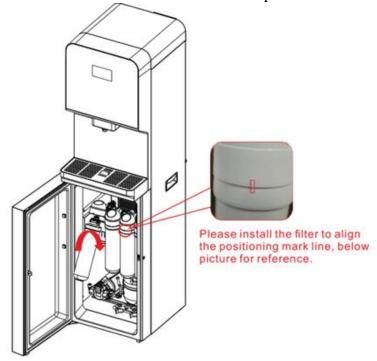
PP	C'	RO	C"
3~6 months	6~12 months	12~24 months	6~12 months

Note: 30 days for 1 month.

- 3. Please cut off the power supply and water supply before replacing the filter.
- 4. Flush the new filter according to the filter flushing requirements in the installation

instructions (except for the RO membrane filter). The RO membrane filter shall be flushed through the mode that repeatedly supply and cut off power of the whole machine for 10 times, and hold for 25 seconds each time.

5. Open the lower door, remove the old filter to be replaced, and replace it with a new filter. Note that the filter must be installed in place.



- 6. Lock the lower door with the original screws.
- 7. Filter forced reset setting

Hold the cold water button + warm water button for 3 seconds to enter the filter reset mode. The first filter indicator and name begin to flash, the digital tube does not flash to display the remaining percentage of life, hold the cold water button for 3 seconds to reset the filter, and the filter life recovers to 100%, press the cold water button to display the next filter, operate to reset and switch to the next filter with the same step, at the last filter, press the cold water button to exit the filter reset setting. The water output buttons are used as normal. During the filter reset process, if no button is pressed for 30 seconds, the filter reset mode is automatically exited. The filter life is accumulated in hours according to the power-on time, and is saved after power-off. Note: In the filter reset mode, press the water output button, the system will not output water, after exiting the filter reset mode, the water output control function is restored.

Maintenance

- 1. Keep this machine in a dry and cool place and avoid direct sunshine. Rearward of the machine shall be at least 25 cm away from the wall. Never put the machine on paper or foam, which may store water and then cause creepage. Never put anything flammable beside this machine. Do not use the machine outdoors or in a place that can be splashed by water.
- 2. For the water purifier, the installation and replacement of filters must be carried out by qualified personnel.

- 3. In case the machine is not in use for a long time, turn off the heating switch or the refrigerating switch to save power.
- 4. In case the machine is not needed for a long time, please take off the plug, turn off the copper chrome-plated ball valve and drain off the remaining water through the outlet. For another use, discharge water for 10 min. In the event that the machine is blocked by ice due to the environment below ice point, keep the refrigerating switch closed for 4 hours and then turn it on to continue the operation.
- 5. In case the water supply is cut off, please close the feed water ball valve and cut off the power, after water re-supply, please open the other faucets to discharge sediment and then turn on the feed water ball valve.
- 6. The machine must use an earthed three-pin socket and a reliable creepage protection switch.
- 7. Never use organic solvents such as gasoline to clean the machine: strictly prohibit washing the machine with water or splashing water to the machine.
- 8. Never turn on (off) the machine by inserting the plug into (pulling the plug out from) the socket. Never increase the length of the supply cord to avoid fire.
- 9. If the supply cord is damaged, it must be replaced by the manufacturer or qualified person so as to avoid a hazard.
- 10. The water source for the water purifier is civil tap water.
- 11. Never dismantle spare parts of the machine to avoid water leakage or damage.
- 12. Never turn the machine upside down or lean it more than 45° when moving it so as to avoid any damage to it or any accident.
- 13. Limited warranty: electrical components and water system are warranted for 12 months from date of purchasing.

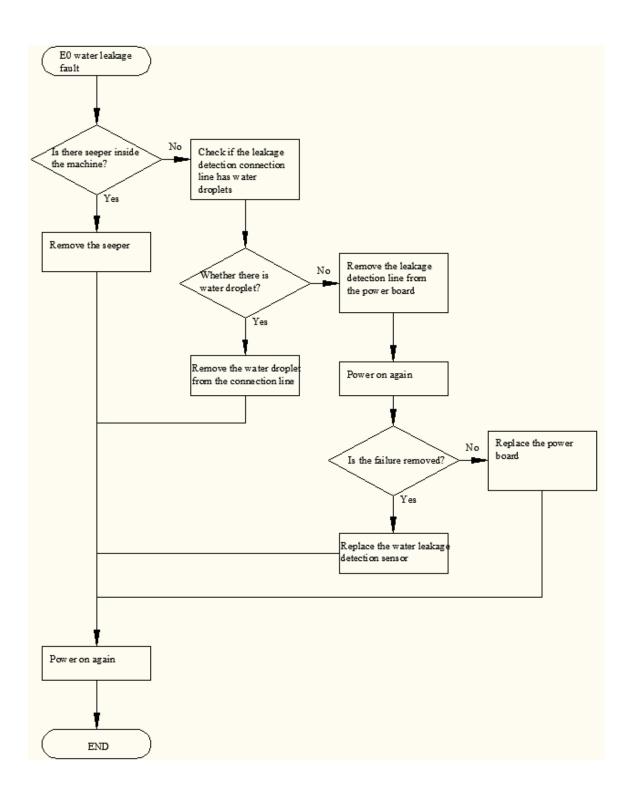
Trouble shooting

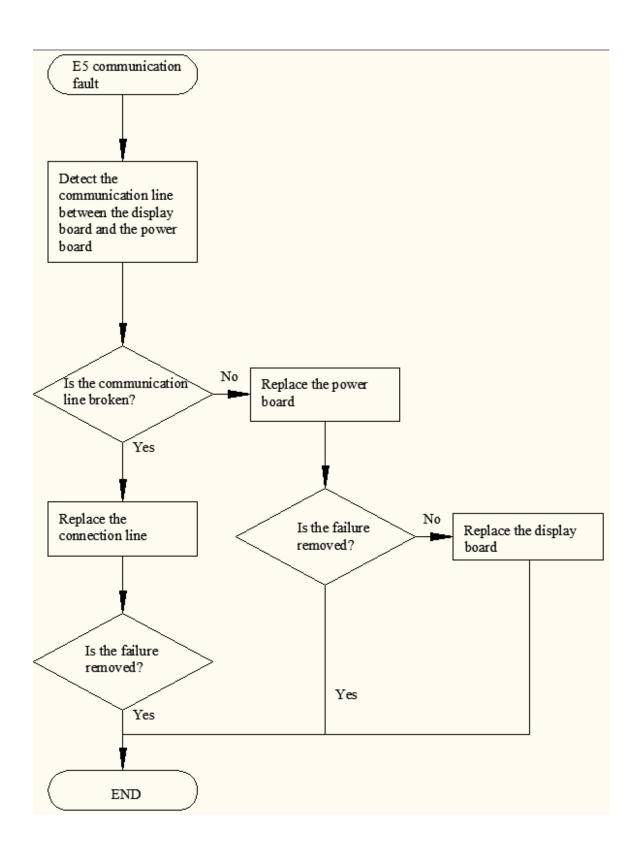
In case of failure, please carry out inspection according to the requirements below. If unresolved, please contact the local service agency.

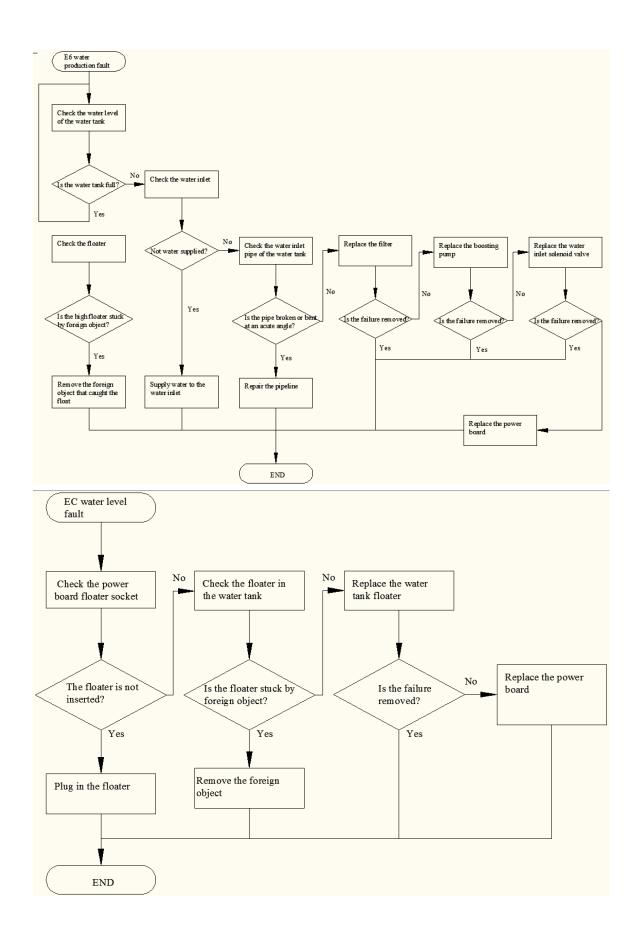
Failure	Cause(s)	Solution
Amount of produced	Filter is blocked or not	Please contact the local service office to
water is reduced	replaced in time	replace the filter in time.
seriously	Water inlet ball valve is not	Fully open the water inlet ball valve
	fully opened	
	Water pressure is too low	Take measures for pressure boosting
Output water quality	Filter failure	Please contact the local service office to
is low		replace the filter in time.
	Long-term shutdown (over	Continuously start and stop the product
	3 days)	for 5 times at 40 seconds intervals to
		automatically flush the filtration system,
		and feed and discharge the water from
		the water storage system according to the
		first step of the Clean Maintenance; after
		that, the output water can be used
		normally

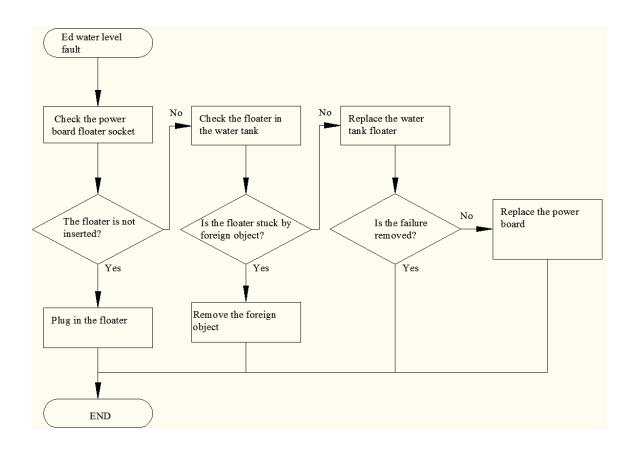
	Source water quality is low	Use municipal tap water
Screen displays E0	Water leakage	See the fault code troubleshooting
		method for details
Screen displays Ec	High floater is closed, low	See the fault code troubleshooting
	floater is closed	method for details
Screen displays Ed	The high floater is closed,	See the fault code troubleshooting
	and the high floater is still	method for details
	closed after 90 seconds of	
	accumulated water output	
Screen displays Fc	Below 85°C, it still fails to	See the fault code troubleshooting
	reach the target temperature	method for details
	if no hot water is taken and	
	the system continuously	
	heats for 2 hours	
Screen displays E5	Communication failure	See the fault code troubleshooting
	between power board and	method for details
	display board	
Screen displays E6	Water is not taken, the water	See the fault code troubleshooting
	purification tank keeps	method for details
	producing water for 3 hours	See the fault code troubleshooting
		method for details
		See the fault code troubleshooting
		method for details
Screen displays F1	Hot water sensor temperature is	See the fault code troubleshooting
bereen displays 1 1	over 120°C or short circuit	method for details
Screen displays F2	Hot water sensor temperature is	See the fault code troubleshooting
Screen displays 1-2	below -11 °C or open circuit	method for details
Screen displays F3	Cold water sensor temperature	See the fault code troubleshooting
Screen displays 1.3	is over 120°C or short circuit	method for details
Screen displays F4	Cold water sensor temperature	See the fault code troubleshooting
Screen displays 1'4	is below -35°C or open circuit	method for details

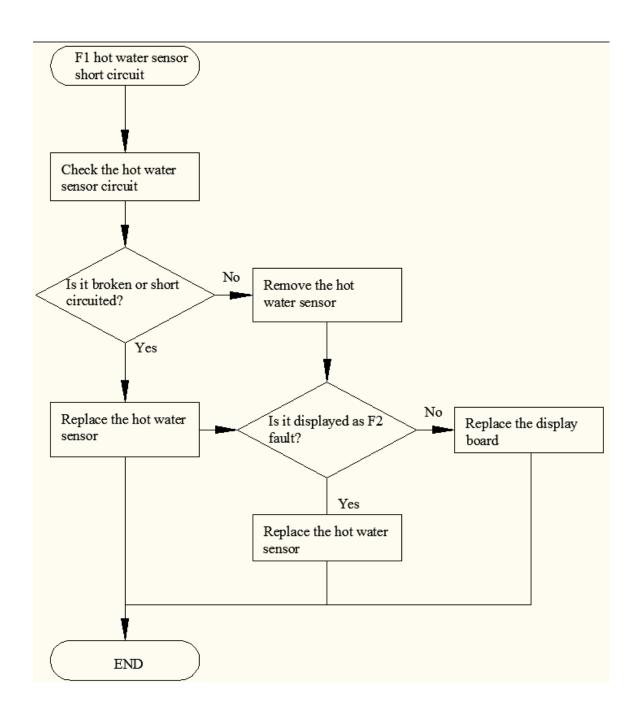
Fault code troubleshooting method

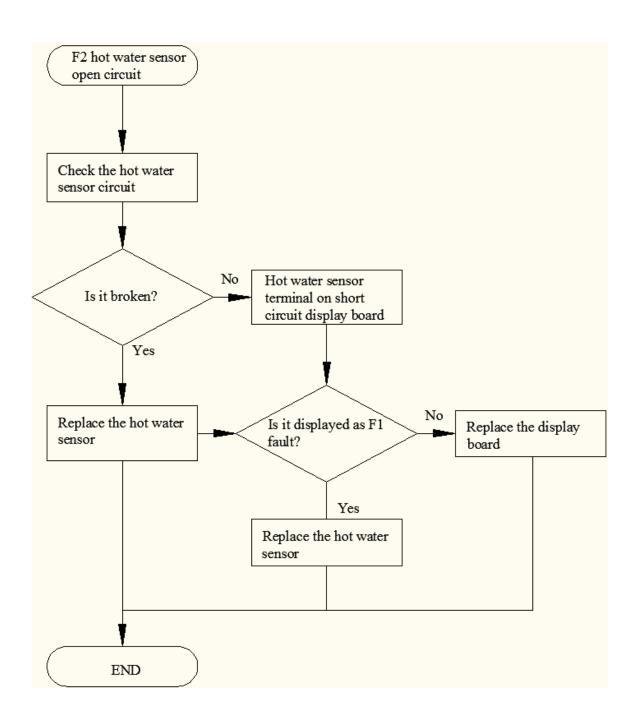


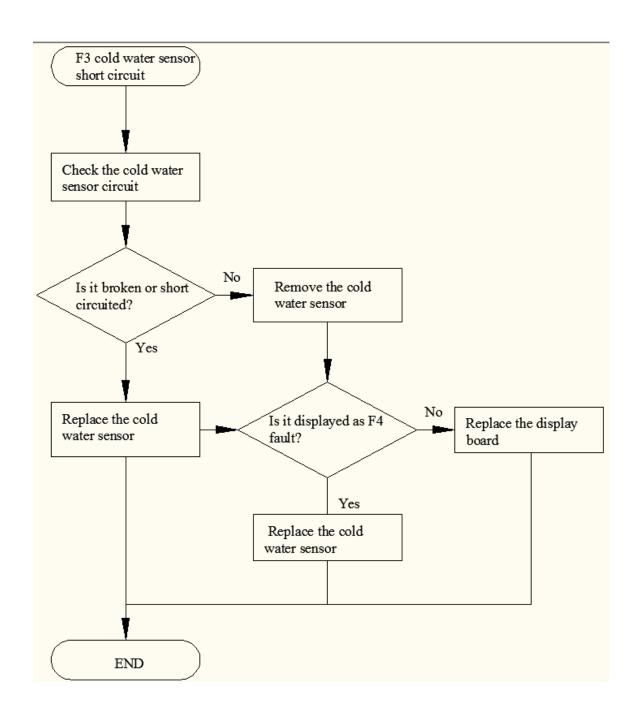


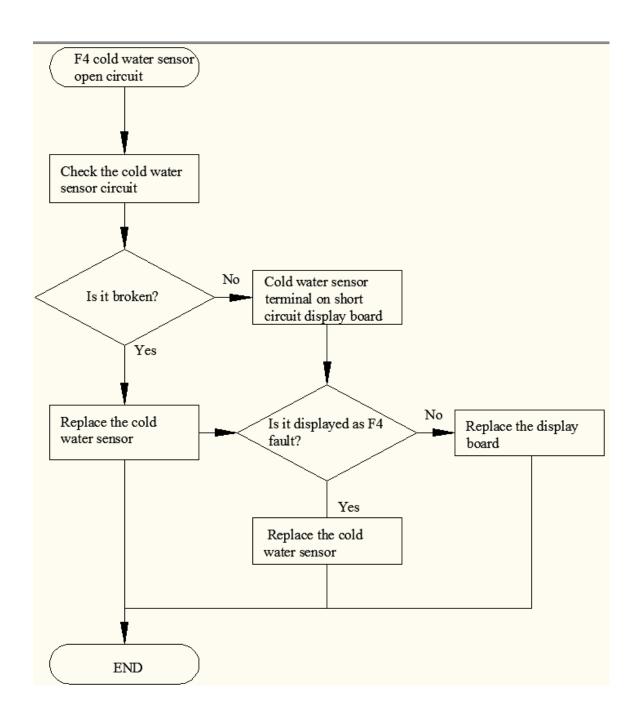


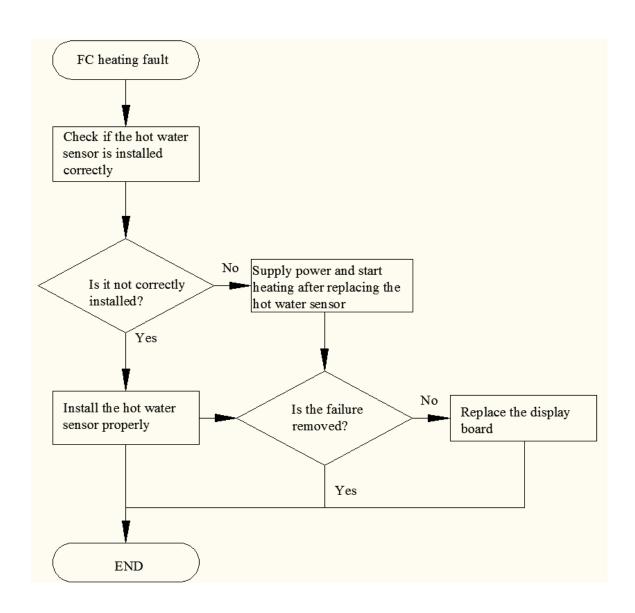












Dismantling/Assembling

This instruction is for demonstration only; the actual operation can be adjusted accordingly



Tools for disassembling

The disassembly steps are as follows:



Remove the 4 screws of the condenser



Remove the condenser (do not bend the pipe)



Remove the rear cover plate

Replace			
the	Remove the screws from the	Remove the wires	Unscrew the fastening
power board	electric box cover		screws on both sides
board			
	Remove the electric box to		
	replace the internal power board		

Remove and replace the top cover



Remove the 2 screws of the top cover



Lift the edge of the top cover slightly to remove it from the front housing



State of top cover after opening



Remove and water tank cover replace



Open the 2 buckles of the water tank



Open the water tank cover



Find the UV-pair terminal to separate it



Use a wrench to unscrew the UV nut inside the tank cover



Replace it

Replace the water tank

the UV



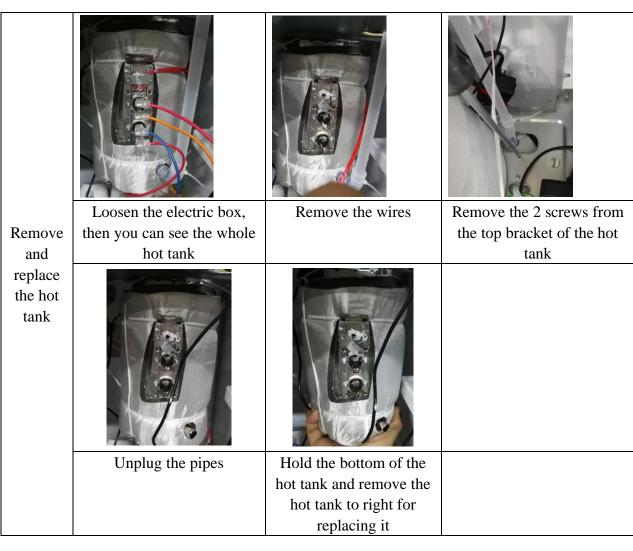
Unplug the connecting pipes and wires

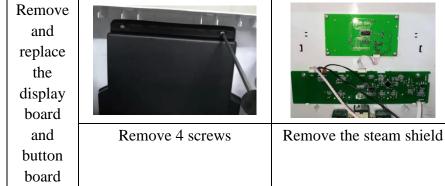


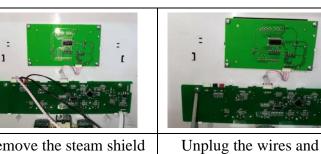
Remove 2 screws



Push the water tank forward and lift it off the side board

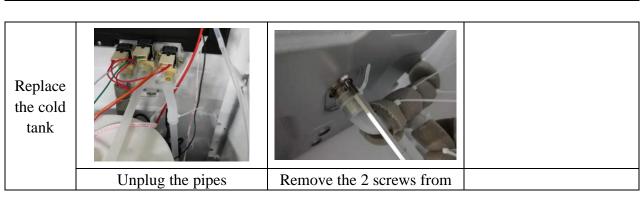






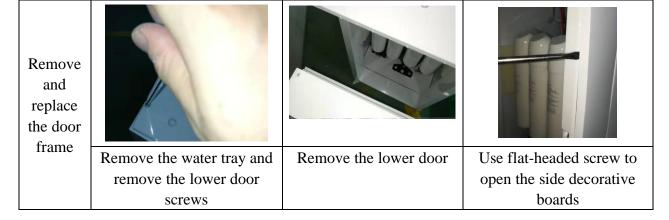
remove the screws for

replacing it



the bottom of the middle support for replacing it

	Remove the right screw cover	Remove the screw with magnetic cross-headed screwdriver	Open the lower door
Remove and replace the filter			
	Lift the filter and turn the filter to the left to replace it (The new filter should be		
	flushed with a special filter holder before installation the new filter)		





Remove the 6 screws on both sides



Pull out the door frame

Remove and replace the front housing



Remove the water tray, remove the 2 screw covers of the front housing



Remove the front 2 screws and the inner 5 screws



Press the front housing down with both hands to remove it from the side board for replacing

Introduction of key electrical components Parts

Introduction of Key electrical components Part

Display board



Power board



Key board



Power Adapter



Booster pump



UV lamp



Hot tank



Temperature limiter



Float switch



Drainage solenoid valve



Pressure reducing valve



Inlet solenoid valve



Flushing valve



Product Exploded views and Part List

S/N		Part Name		BOM Code
No.	English Name	Part Name	Quantity	BOM Code
	Lower door			
1	assembly	Lower door assembly	1.0	12163100003082
1.1	Tempered glass panel	Tempered glass panel	1.0	12563100000542
1.2	Lower door	Lower door	1.0	12163100002966
1.3	Lower door lining	Lower door lining	1.0	12163100003121
1.4	Doorseal	Doorseal	1.0	12163100000521
2	Silicone Tube	Silicone Tube	1.0	12663100000301
3	Seal ring	Seal ring	2.0	12663100000361
4	Drip tray	Drip tray	1.0	12163100002967
5	Drip tray cover	Drip tray cover	1.0	12263100000581
6	Front housing assembly	front housing assembly	1.0	12163100003061
6.1	Tempered glass panel	Tempered glass panel	1.0	12563100000581
6.2	Front housing	Front housing	1.0	12163100003062
7	Top cover	Top cover	1.0	12163100002968
8	Small plastic parts	Small plastic parts	1.0	17463100000701
9	Plastic cover	Plastic cover	1.0	12163200004642
10	Floater	floater	1.0	12163000009217
11	Water tank	water tank	1.0	12163200A03363
12	Left side panel	Left side panel	1.0	12263100000624
13	Power Cord	Power Cord	1.0	17463000A01682
14	Quick connector	quick connector	1.0	12163200000354

15	Magnetic Ring	Magnetic Ring	3.0	10505701000048
16	Quick connector	quick connector	2.0	12163200000366
17	Liquid level switch	Liquid level switch	1.0	17463200004993
18	AC adapter	AC adapter	1.0	17163200000423
19	Assembled tube	Assembled tube	1.0	12663100001221
20	Anti-steam jacket	anti-steam jacket	1.0	12163100001201
21	Display panel	Display panel	1.0	17163100001985
22	Side handle	side handle	2.0	12163000001804
23	Button board	Button board	1.0	17163100001986
24	Solenoid valve	solenoid valve	3.0	17463000A01762
25	Silicone Tube	Silicone Tube	2.0	12663000000072
26	Assembled tube	Assembled tube	1.0	12663100001224
	plastic decorative			
27	part	plastic decorative part	2.0	12163100003066
28	Small plastic parts	small plastic parts	1.0	12163100003064
29	Sealing Gasket	Sealing Gasket	1.0	12663200000621
30	Lower door	Lower door	1.0	12163100003063
31	Filter	filter	1.0	15663200A03723
32	Filter	filter	1.0	15663200A03724
33	Filter	filter	1.0	15663200A03725
34	Filter	filter	1.0	15663200A03726
35	Shaft	Shaft	1.0	12963000000038
36	Hinge	hinge	1.0	12963100000008
37	Water pump	water pump	1.0	17463200000406
38	Base	Base	1.0	12163100003068
39	Control panel	Control panel	1.0	17163200002704
40	Small plastic parts	small plastic parts	1.0	12163200000447
41	Right side panel	Right side panel	1.0	12263100000621
	Fixed speed			
42	reciprocating	Fixed speed reciprocating compressor	1.0	11101010000085
43	compressor Plug	1 1 5 1	4.0	12163000002138
		plug		
44	Supporter Filter joint	supporter	1.0	12163200002621
45	assembly	filter joint assembly	1.0	15663200001704

46	Condenser	Condenser	1.0	12963100000661
47	Support bar	Support bar	1.0	12963000000099
48	Hot tank	Hot tank	1.0	17463100001885
49	Solenoid valve	solenoid valve	1.0	17463200A01143
50	Solenoid valve	solenoid valve	1.0	17463200A00803
51	Small plastic parts	small plastic parts	1.0	12163000001978
52	Nut	nut	2.0	12163000002137
53	Cover type	cover type	2.0	12163000001632
54	Temperature limiter	temperature limiter	2.0	17463000000155
55	Assembled tube	Assembled tube	1.0	12663100001223
56	Cold tank assembly	Cold tank assembly	1.0	12263100000641
56.1	Evaporator	Evaporator	1.0	12963100000662
56.2	Middle supporting plate	Middle supporting plate	1.0	12263100000622
56.3	Insulation foam	Insulation foam	1.0	16363100000543
56.4	Cold tank	Cold tank	1.0	12263100000623
57	Assembled tube	Assembled tube	1.0	12663100001225
58	Assembled tube	Assembled tube	1.0	12663100001222
59	Cover plate	Cover plate	1.0	12163100003065
60	Rocker Switch	Rocker Switch	1.0	17463000000076
61	Rocker Switch	Rocker Switch	1.0	17463000000094

