

Interpure

SERVICE MANUAL

IP1U • IP2U





Warning

To prevent fire or shock hazard, do not expose this unit to rain or moisture.

Power System

This unit operates on voltage of 120V 60Hz in U.S.A, 230V 50Hz in European countries.

Caution

To prevent electric shock and fire hazards, do not use with other than specified power source

Changes or modifications not approved by PHSI could void user's authority to operate this unit, and the product warranty.

Use appropriate plug adapter for your AC wall outlet.

If unit begins to leak, shut off water supply, unplug and call service center immediately.

If moving the unit is necessary, turn off main power and wait for water to cool completely before draining and unplugging.

Hot water is extremely hot! Avoid dispensing hot water to hands directly.

Hot water may cause burns.

Do not allow young children to press the HOT WATER dispensing key.

If unit will not be used for an extended period of time, drain the system completely before unplugging.

Do not place any type of water container or heavy item on top of the unit.

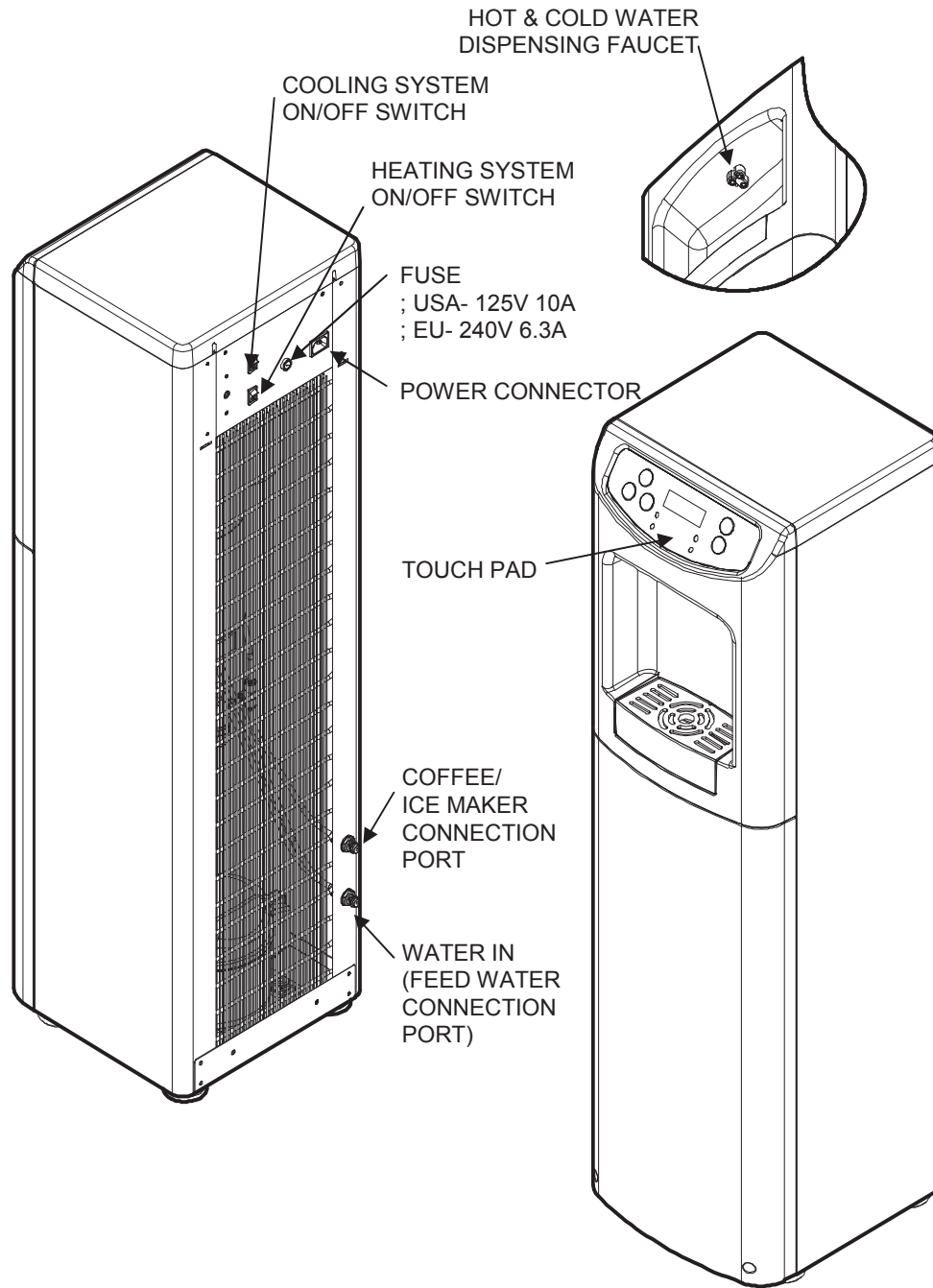
Water may leak into the electrical system causing a fire hazard.

Heavy items may fall off, causing injury.

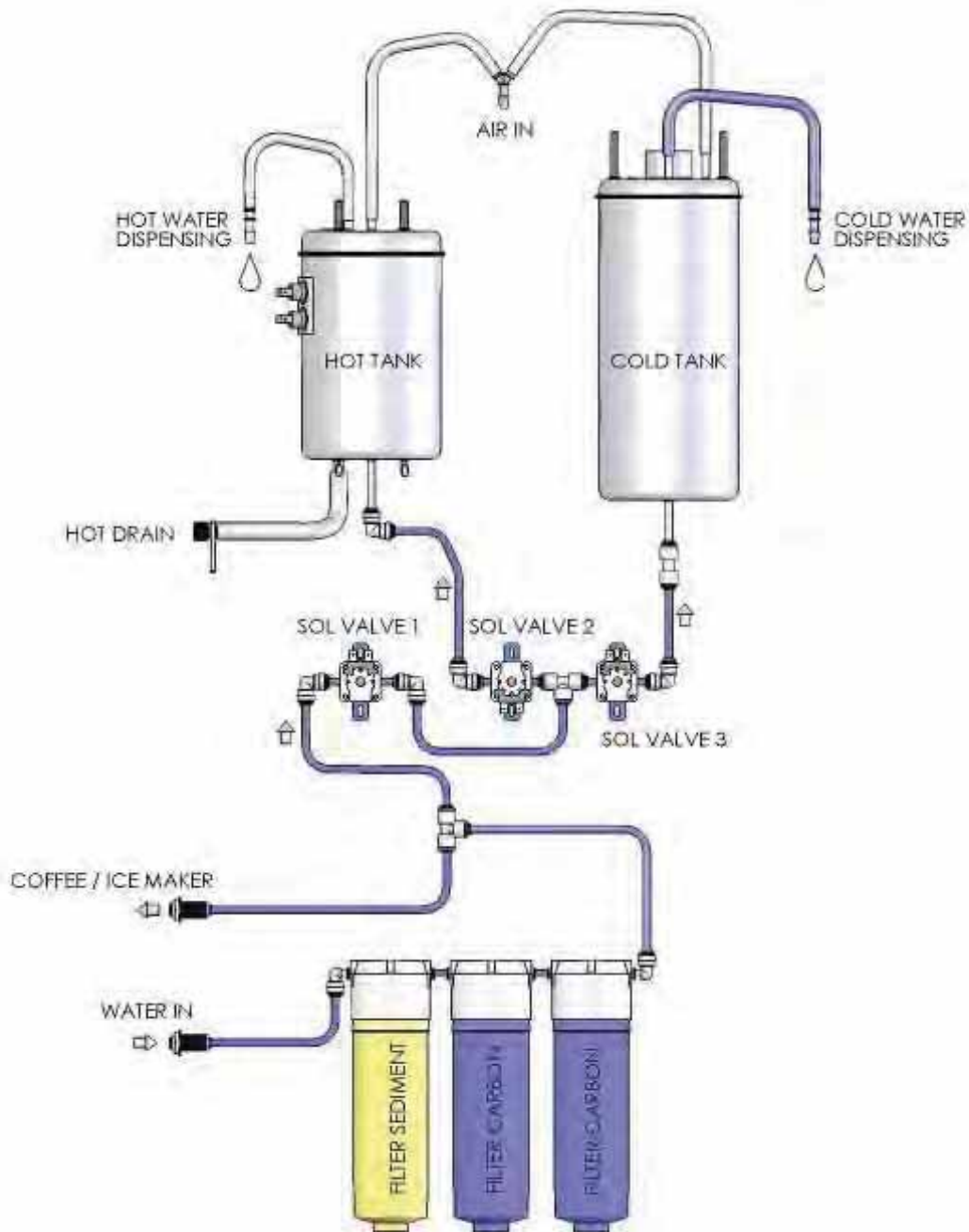
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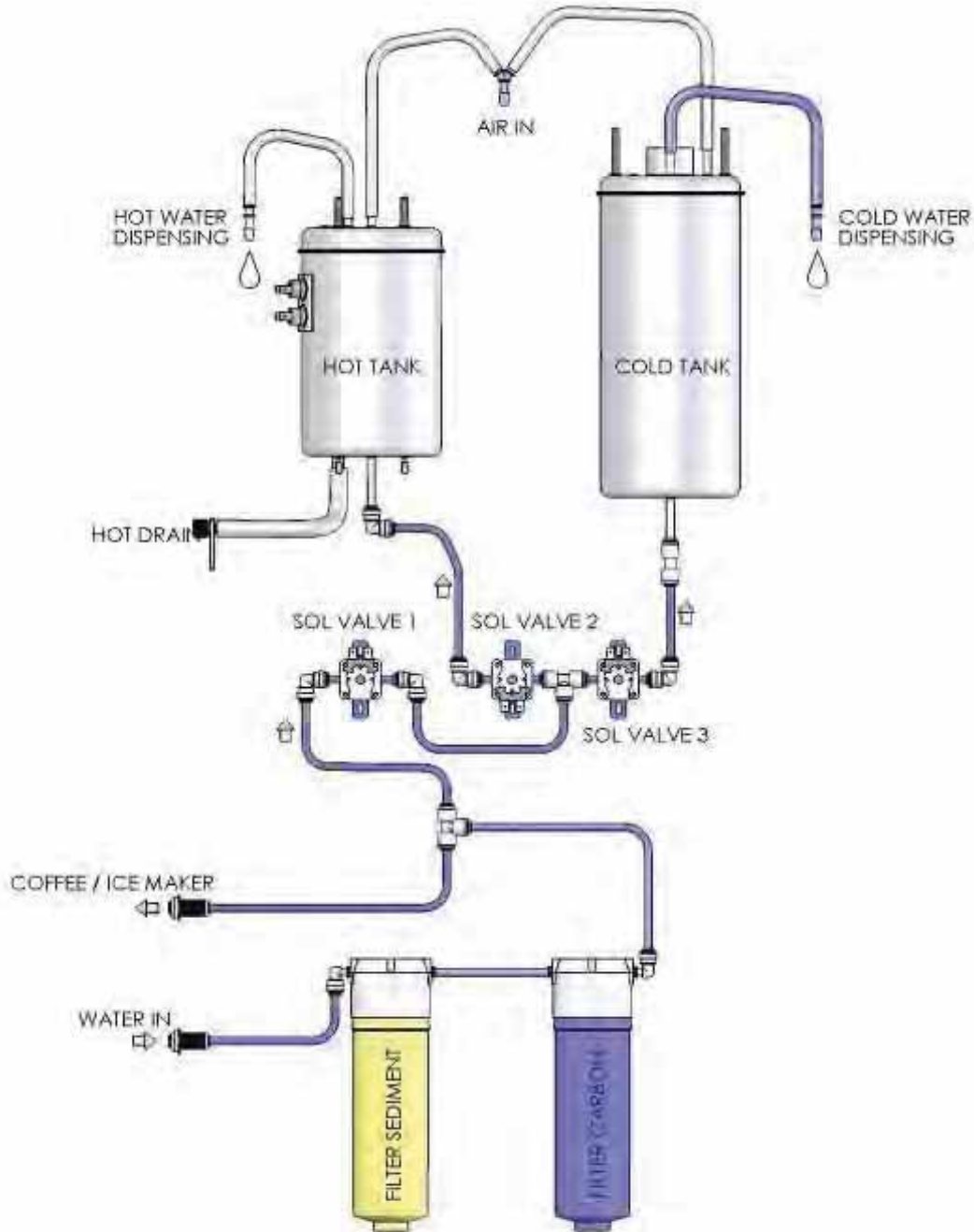
1) Unit Overview



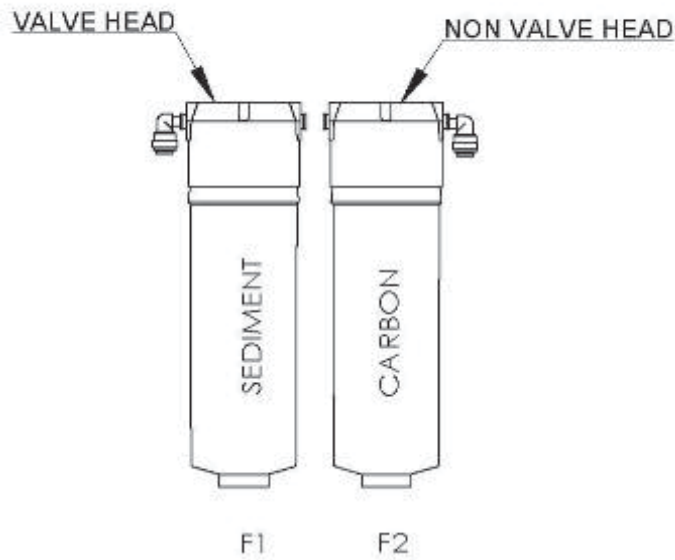
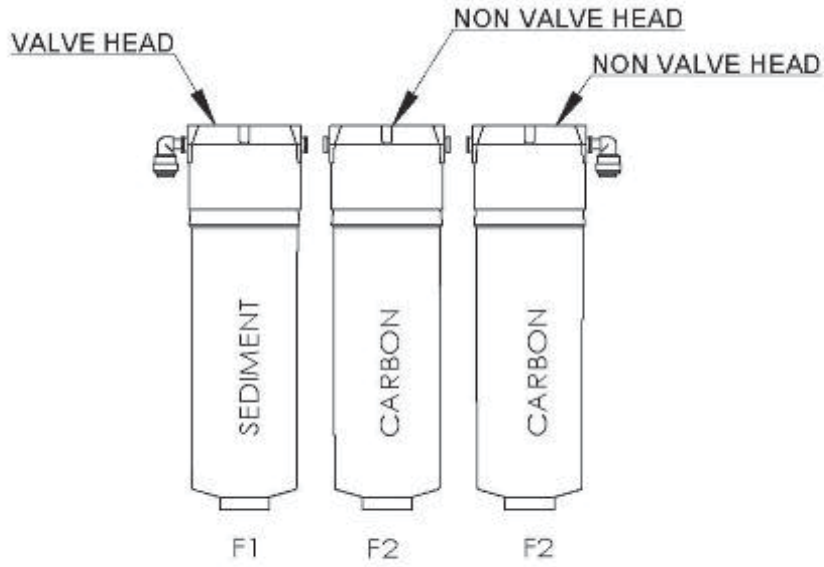
2) Water flow diagram – IP1



3) Water flow diagram – IP2

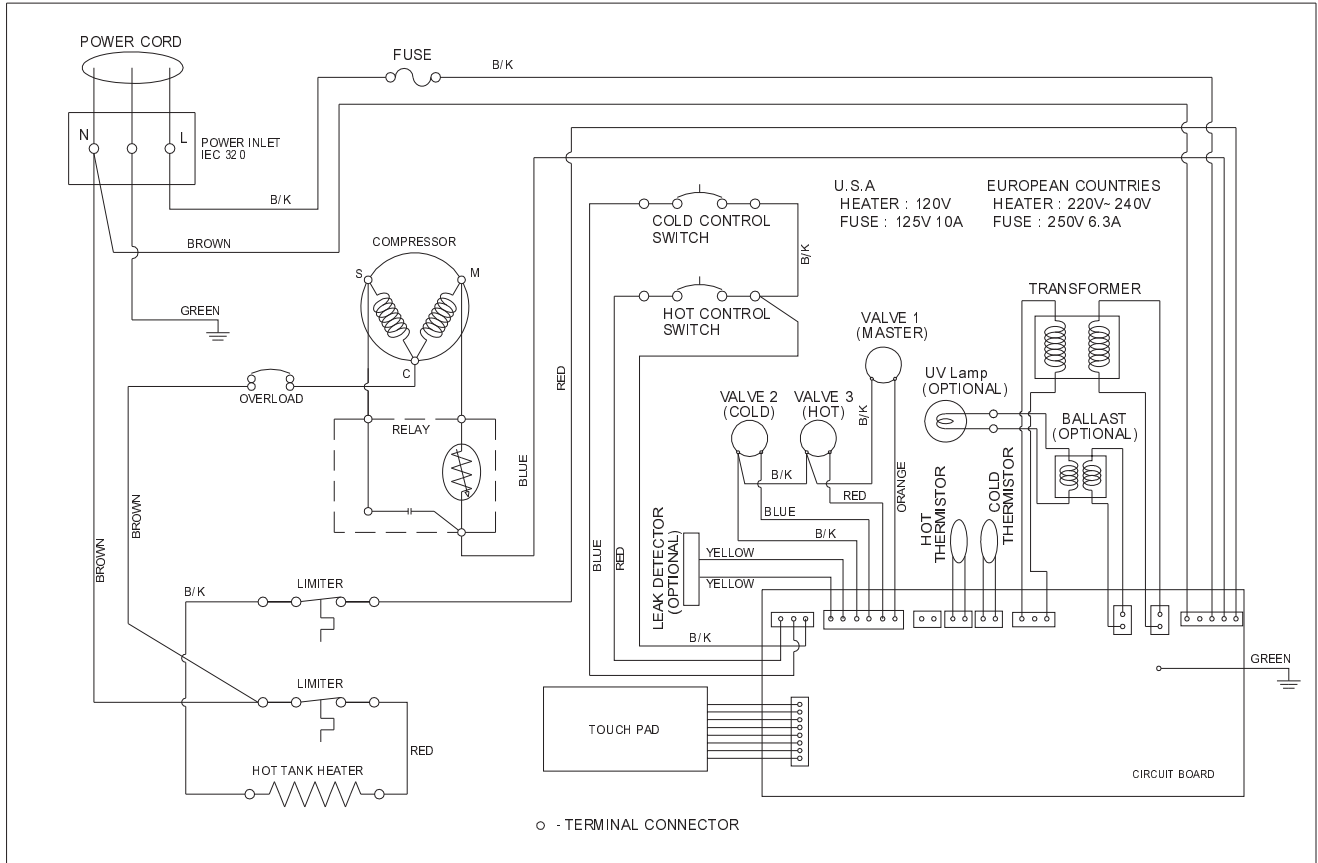


4) Filters

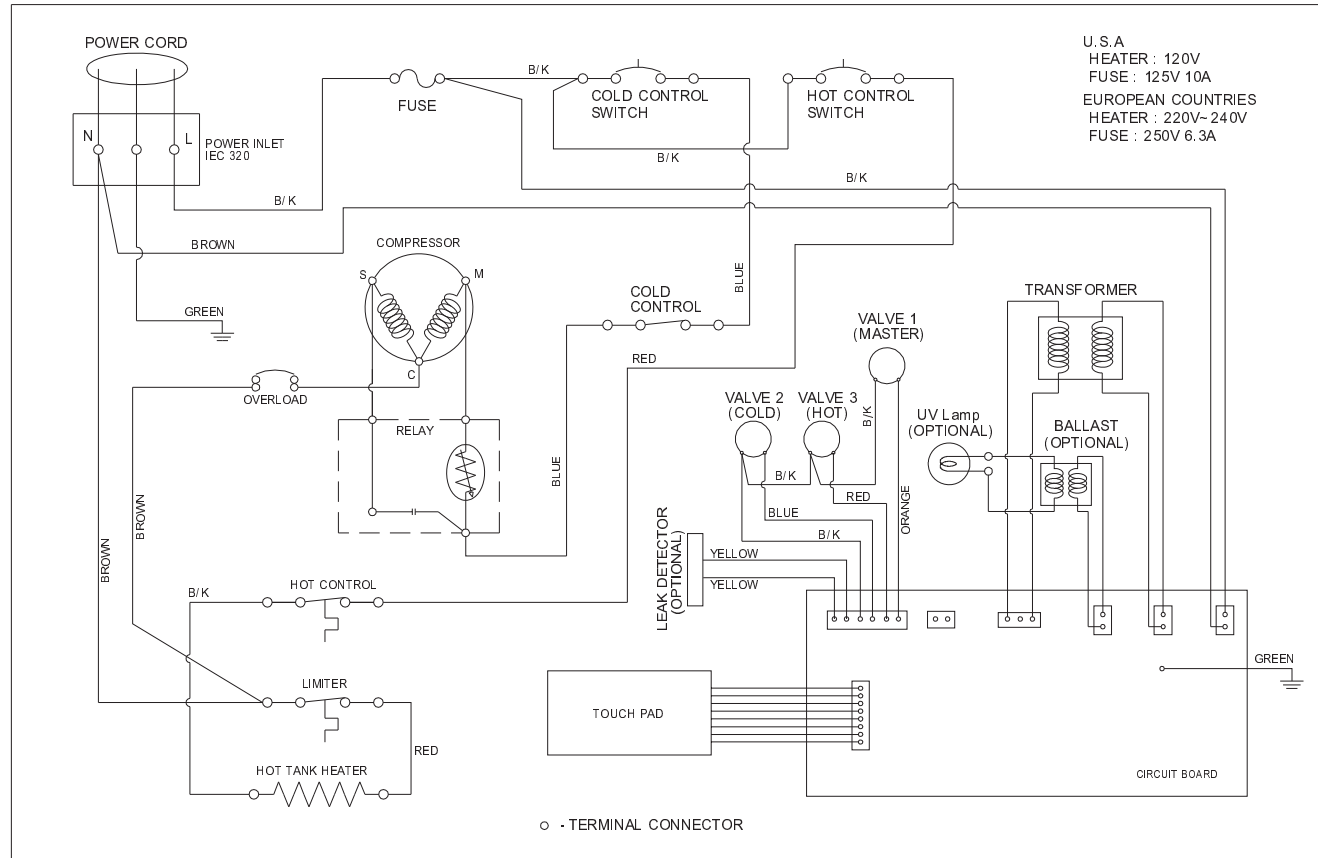


5) Electric Diagram

(1) IP1

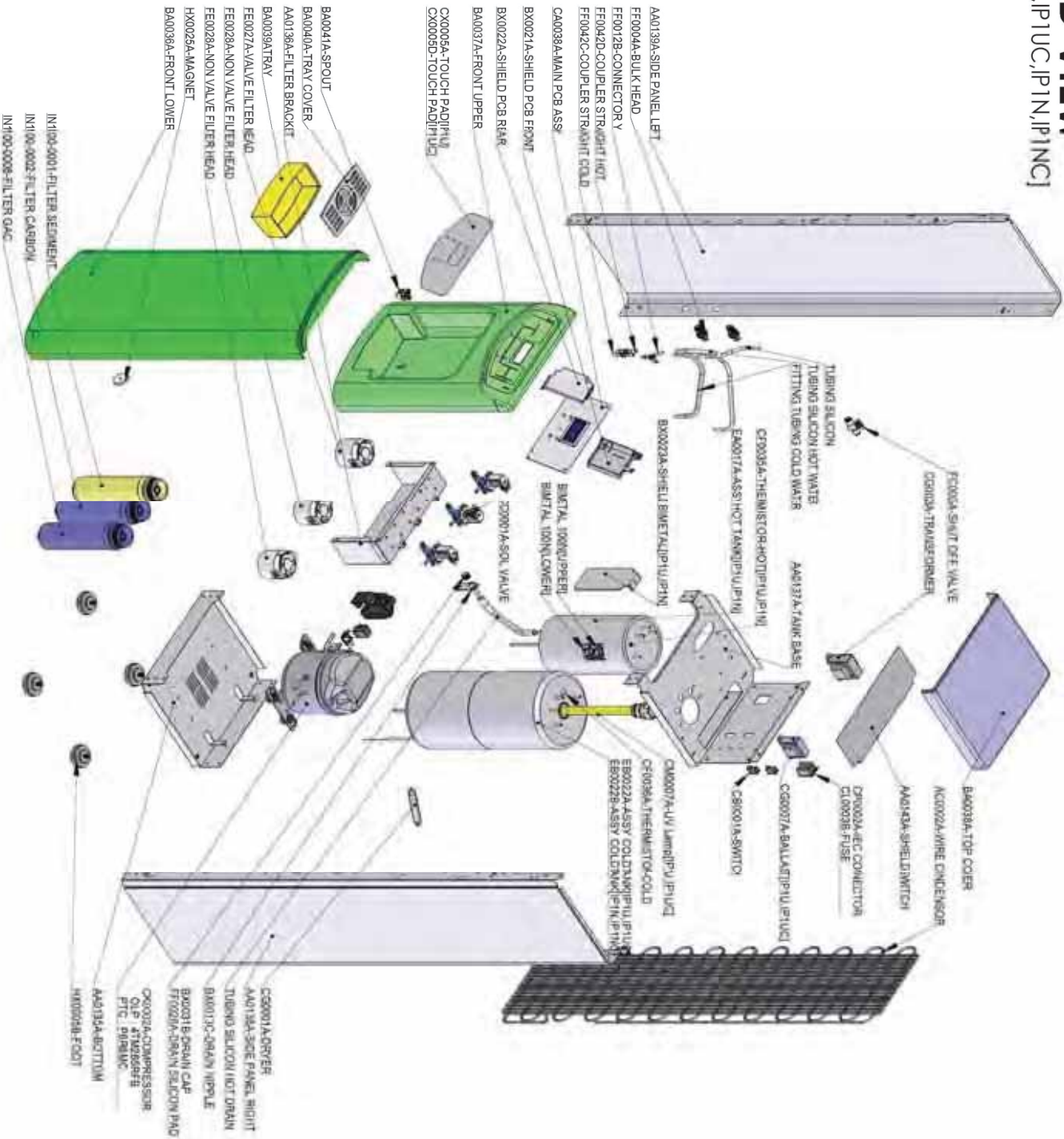


(2) IP2



6) Exploded view – IP1

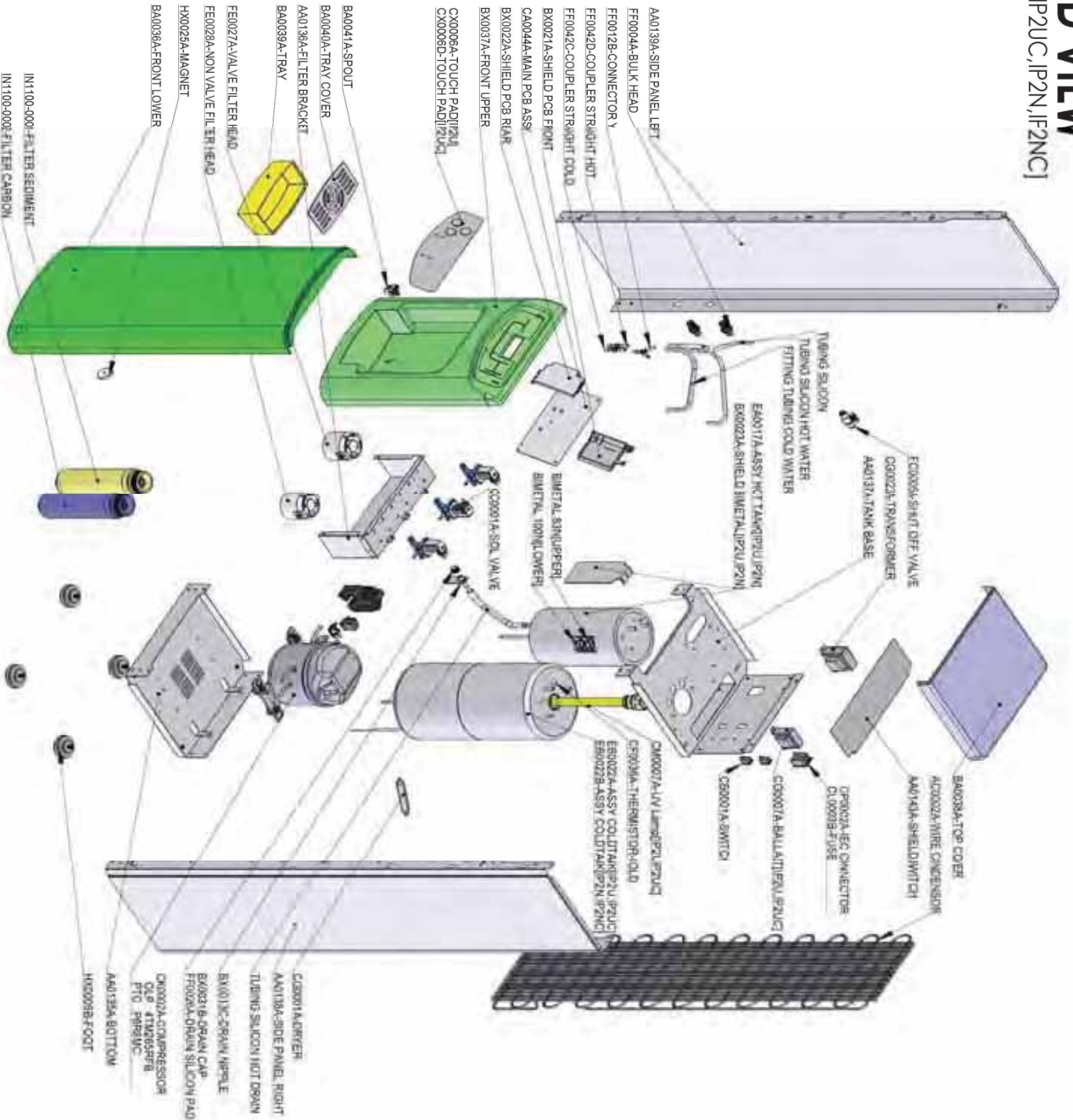
EXPLODED VIEW INTERPURE 1 [IP1U,IP1UC,IP1N,IP1NC]



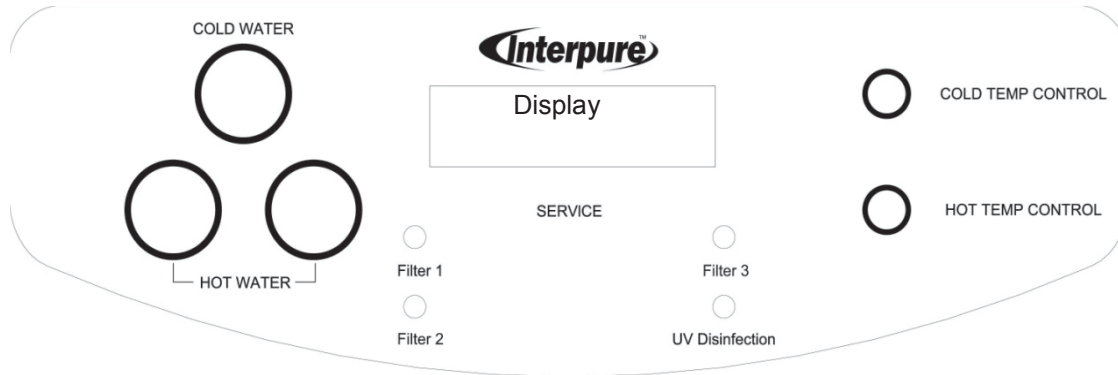
7) Exploded view – IP2

EXPLODED VIEW

INTERPURE 2(IP2U,IP2UC,IP2N,IP2NC)



• IP1 Series



COLD WATER: Press key to dispense Cold Water

HOT WATER: Press two keys simultaneously to dispense Hot Water

COLD TEMP CONTROL: Allows user to control Cold Water Temperature in 4-step increments.
The temperature levels are displayed on the LCD.

HOT TEMP CONTROL: Allows user to control Hot Water Temperature in 4-step increment.
The temperature levels are displayed on the LCD.

Filter 1: Filter change alert light - Sediment filter

Filter 2: Filter change alert light - Carbon filter

Filter 3: Filter change alert light – Carbon filter

UV Disinfection: UV Lamp ON signal light

DISPLAY: LCD Display for product operational status

• IP2 Series



COLD WATER : Press key to dispense Cold Water

HOT WATER : Press two keys simultaneously to dispense Hot Water

Power : Power ON status light

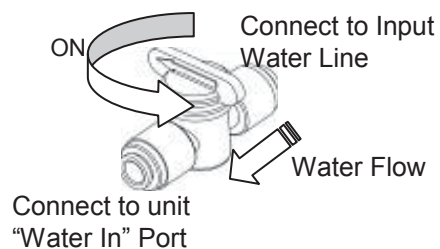
Filters: Filter change alert light

UV Disinfection: UV Lamp ON signal light

- Allow 2 in/5 cm clearance from the wall for adequate ventilation to insure that the unit will not overheat.
- The unit must be installed upright on a solid, stable surface only.
- Level the machine using the adjustable feet.
- Avoid extreme heat and direct sunlight.
- Avoid extreme cold and humidity.
- Check the AC outlet voltage before connecting the power cord.
- When unit is installed or moved, please wait a minimum 30 minutes before connecting the power cord to the AC outlet.
- To prevent fire or shock hazard, please connect plug to a well-grounded outlet
- Inlet feed water should be normal temperature.
(Filters may be damaged if inlet water is higher than 100°F/38 °C)

Pressure Regulation

If incoming water pressure is very high, it may interfere with the function of the unit. Use the included Shut-off Valve to adjust water pressure.



While pressing the Dispensing Button on the Touch Pad, slowly open the Valve. Adjust until dispense volume is approximately one quart (900 ml) in 30 seconds.

- .Shut off feed water supply valve and connect 1/4" supply water tubing to the "Water In" feed water adapter port.
- .Connect power cord to Power Connector and to appropriately rated AC outlet
- .Open the feed water supply valve located at or near water source.
- .Water filtration system will begin operating
- .Press the Cold Water key on the touch pad until water begins dispensing from the Dispensing Faucet
- .Press the Hot Water keys on the touch pad until water begins dispensing from the Dispensing Faucet
- .Turn the Heating System and Cooling System ON/OFF switches on the back of the unit to the "ON" position.

To Dispense Cold Water :

Allow at least 30 minutes for adequate cooling, then press the Cold Water key.

To Dispense Hot Water :

Allow at least 30 minutes for adequate heating, then press the two Hot Water keys simultaneously



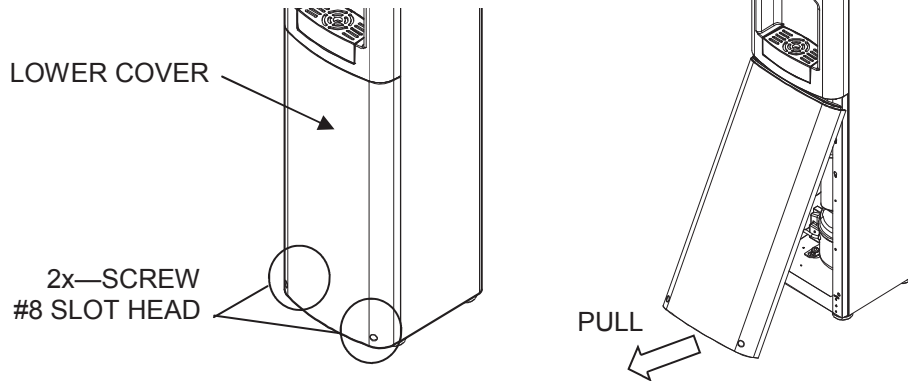
In the event power supply is interrupted.

- When the unit is not used for extended periods of fifteen (15) days or more, please drain water from the water tank and re-fill before using.

Replacement of Fuse:

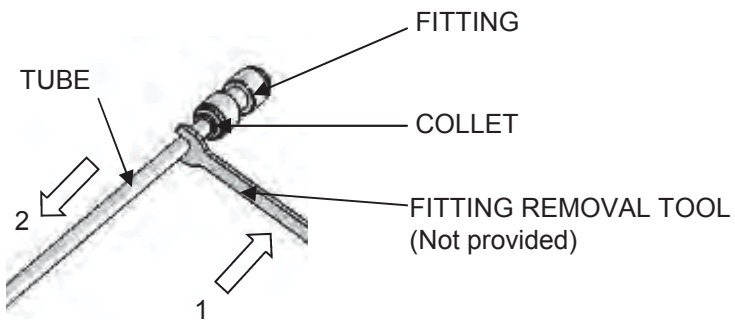
- The fuse is located next to the Main Power Connector.
- Fuse burn-out is an indication of some fault in the unit or in the power being supplied to the unit.
- Disconnect power cord before replacing the fuse.
- Open the fuse cover and remove the fuse.
- After inserting a new fuse (U.S.A-125V 10 Amp, Europe - 250V 6.3 Amp), replace the fuse cover.

●How to open the Lower Cover



Disconnect power supply and close the feed water supply valve before performing this operation.

●How to remove quick connect fitting



1) How to drain

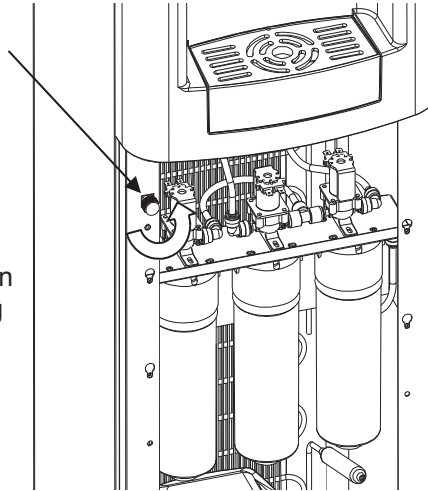
Disconnect power supply and close the feed water supply valve before performing these operations.

●How to drain hot water

Hot water drain cap

! Allow hot water to cool before attempting to drain !

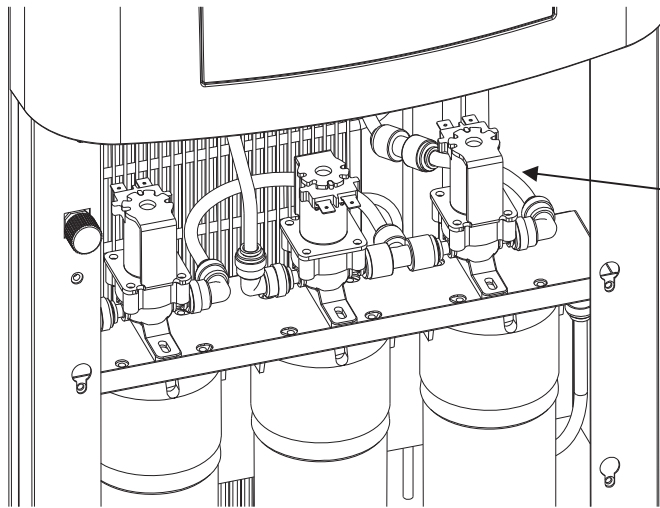
Unscrew drain cap counterclockwise. A receptacle should be in place before removing drain cap.



HOT WATER CAPACITY:
0.5 Gallons/2 Liters

After draining hot water, remember to replace the drain cap by turning clockwise until firmly seated before putting the unit back in service.

●How to drain cold water



COLD WATER
CAPACITY: 0.8 Gallons/3
Liters

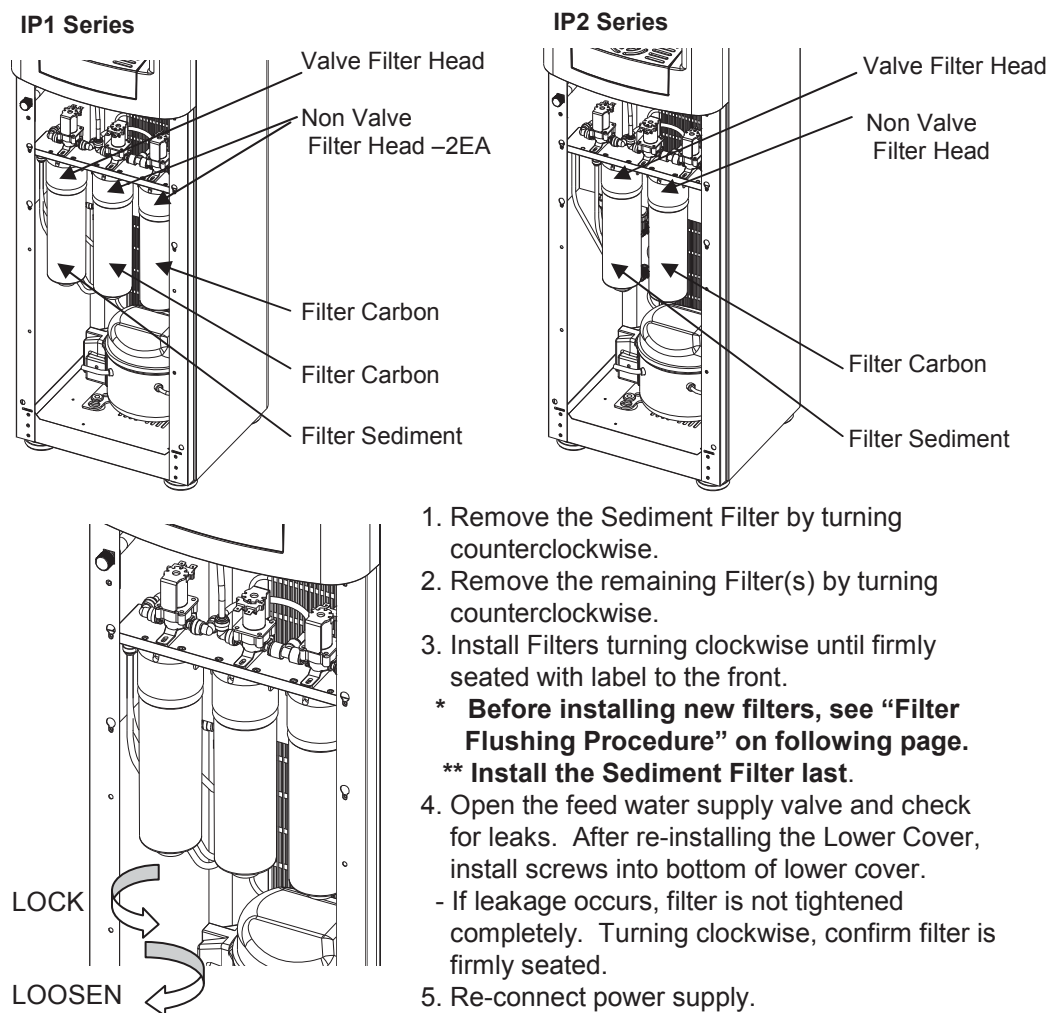
Drain Tube

Drain water through front of the unit after disconnecting the above indicated tube at the straight fitting with a fitting removal tool

2) How to Change the Filters

Disconnect power supply and close the feed water supply valve before performing this operation.

- Open the Lower cover (Page 8)



1. Remove the Sediment Filter by turning counterclockwise.
2. Remove the remaining Filter(s) by turning counterclockwise.
3. Install Filters turning clockwise until firmly seated with label to the front.
 - * **Before installing new filters, see "Filter Flushing Procedure" on following page.**
 - ** **Install the Sediment Filter last.**
4. Open the feed water supply valve and check for leaks. After re-installing the Lower Cover, install screws into bottom of lower cover.
 - If leakage occurs, filter is not tightened completely. Turning clockwise, confirm filter is firmly seated.
5. Re-connect power supply.

- Edges may be sharp. Wear gloves when possible to avoid injury when removing or installing filters.
- Avoid contamination of water contact areas of filter head and filter when handling.
- Small amounts of water may be present in the filter when changing. Use caution to prevent water from dripping into the bottom of the unit.
- Avoid contact with other parts when changing filters. Failure to do so may result in malfunction of parts.

3) Filter flushing procedure

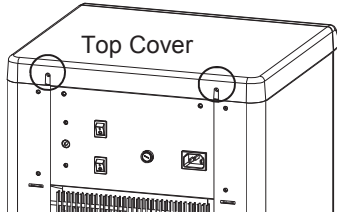
Filter Flushing Procedures for PHSI "Sani-Twist™" Filter Configuration

! All carbon filters must be flushed to rid them of any production by-products and/or carbon fines !

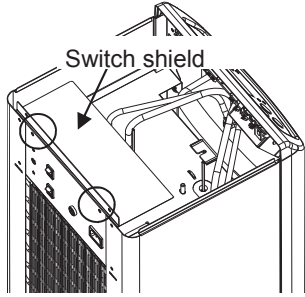
Note: Loosening the Sediment (Yellow) filter one rotation will turn off the water to the filters. Tightening the Sediment filter one rotation will turn the water back on

1. Install the "Water In" water line.
2. Run a water line from the "Coffee/Ice Maker" port to drain.
3. Do not plug the unit into the AC socket. (No Power)
4. Turn on the water to the filters and let it run for 2 minutes.
5. Turn off the water to the filters and remove the drain line from the "Coffee/Ice Maker" port. Replace the plug in the port.
6. Turn water supply on and check for leaks.
7. Flushing is now complete.

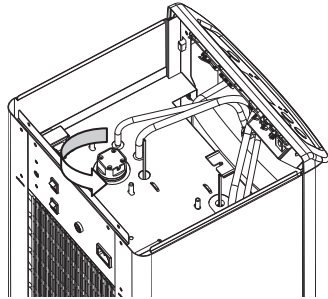
4) How to change the UV lamp – IP1U / IP2U Series



1. Remove the top cover by removing the 2 screws on the back side of the top cover

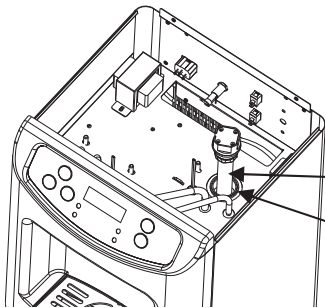


2. Remove the switch shield by removing 2 screws on the rear side of the shield



3. Disconnect the wire between UV Lamp and Ballast.
4. Remove the UV Lamp by turning counterclockwise with a wrench..
5. Insert new UV Lamp, turning clockwise until seated firmly. Turn 1/4 turn with a wrench to insure tight seal

Failure to install UV Lamp correctly or tighten completely may result in water leak..
Use a wrench to assure the seal is tightened completely.



- Avoid touching the glass portion of the lamp with bare hands.
- Threaded portion of tank is stainless steel. Be careful not to contact with glass tube when removing or installing to avoid breakage.

5) How to install the Leak Detection Sensor – IP1U / IP2U Series (Optional)

LEAK SENSOR OPERATION METHOD

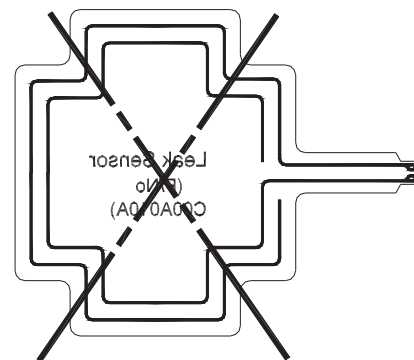
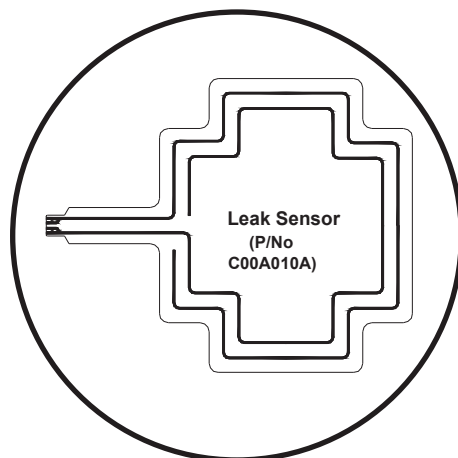
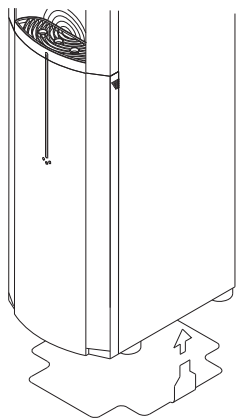
1. The Leak Detection System will activate anytime the Leak Sensor detects moisture on its surface for more than 10 seconds. This will close the solenoid valve and, if applicable, will turn the pump off.
2. When Leak Detection System is activated, the unit will beep once every 30 seconds and keys/dispensing operations will not work.
3. Water must be cleaned from sensor pad and unit power turned OFF then ON again to restore normal function.

LEAK SENSOR INSTALLATION METHOD

1. Unplug the power cord from the outlet.
2. Shut off water supply.
3. Open the front lower panel.
4. Place the Leak Sensor on the floor beneath the purifier.

Caution!: Place sensor with printed side UP.

Do not allow the sensor to be folded, torn or stained by foreign substances.
Use caution when placing the purifier on the sensor to avoid tearing of sensor.



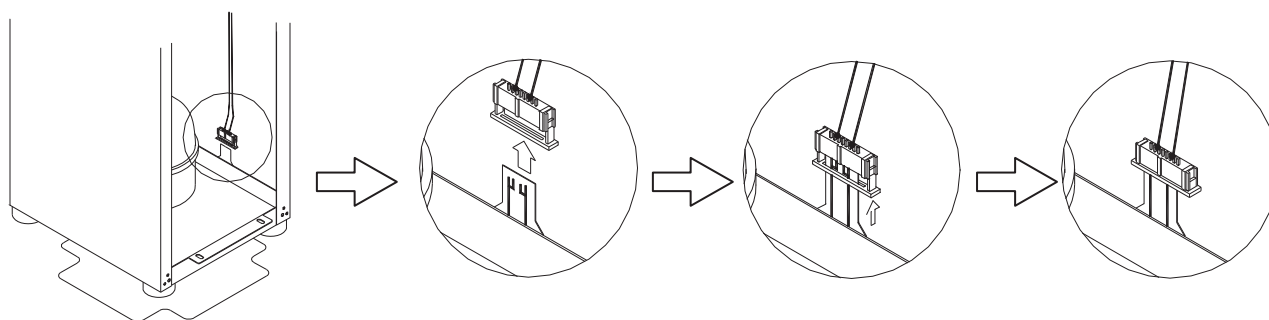
5) How to install the Leak Detection Sensor – IP1U / IP2U Series – cont'd

5. Insert the connector “tail” of the sensor up through the space between the bottom and side of the purifier.

Caution!: Use care to avoid tearing the sensor when inserting through the bottom.
Use care to avoid damage to the terminal connections on the sensor tail.

6. Insert the terminal connectors on the tail into the connectors inside the purifier. Press firmly on the connectors to lock into place.

Caution!: Assure that leak sensor wires do not contact compressor or other parts where damage may result

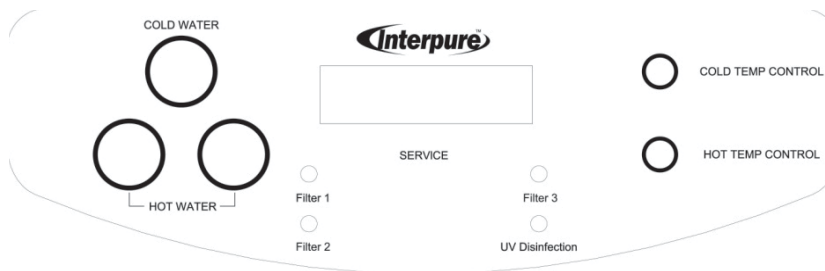


RESTORING PURIFIER OPERATION

1. To restore purifier operation, unplug power cord and shut off water supply.
2. Carefully wipe any moisture from the sensor surface using a soft dry cloth
3. Plug the power cord back in and turn water supply ON
4. Purifier will resume operation.

NOTE: Purifier will not operate after moisture has been detected until purifier power cord has been unplugged then plugged in again.

8. Programming Instructions – IP1



Program Setting Mode consists of two (2) Levels.

Pressing the Cold Temp Control (CTC) and Hot Temp Control (HTC) keys simultaneously for 5 seconds allows Main Menu access for setting menu items 1~9.

Pressing the CTC, HTC and Hot Water 1 keys simultaneously for 5 seconds allows Main Menu access for setting all menu items.

If no actions are executed in Program Mode for 10 seconds, the display will return to Operating Mode

No	Main Menus	Display
1	Time of day set mode	Time of day Settings
2	Energy save set mode	Energy Save Settings
3	Filter 1 Reset mode	Re-set Filter 1 Yes?
4	Filter 2 Reset mode	Re-set Filter 2 Yes?
5	Filter 3 Reset mode	Re-set Filter 3 Yes?
6	UV Lamp Reset Mode	UV Lamp Reset Mode
7	Beep Sound Set Mode	Beep Sound Set Mode
8	Cold Temp Set Mode	Cold Temperature Set
9	Hot Temp Set Mode	Hot Temperature Set
10	UV Lamp Set Mode	UV Lamp Settings
11	UV Lamp Change out Mode	UV Lamp Change Out Settings
12	Filter 1 Change out Mode	Filter 1 Change Out Settings
13	Filter 2 Change out Mode	Filter 2 Change Out Settings
14	Filter 3 Change out Mode	Filter 1 Change Out Settings
15	Cold Temp Set Mode	Cold Temp Set Mode
16	Hot Temp Set Mode	Hot Temp Set Mode
		Exit?

Default Mode or Value

Time of day	12 hour Mode AM 1:00
UV after Dispense	Enable
UV after Dispense ON time	2 minutes
UV Delay Settings	Enable
UV Delay Hours	12 hours
UV Delay UV ON time	2 mintues
UV Change out	12 months
Beep Sound	Enable

8. Programming Instructions – IP1

When Main Menus are displayed, pressing the HTC key will move the display to the Sub menus change mode.

Main Menus	Key Access	Display
Time of day set mode	<p>Set Enable/Disable using CTC key.</p> <p>Select Enable/Disable using HTC key.</p> <p>If Disable is selected, Exit mode is displayed.</p> <p>If Enable is selected, 12/24 Hr option mode is displayed.</p> <p>Use CTC key to search Hour mode.</p> <p>Use HTC key to select Hour mode..</p> <p>Use CTC key to search Hour mode.</p> <p>By continuously pressing the CTC key, the hour time will slowly scroll for 2 seconds after which, the hour time will increase every 250 ms.</p> <p>Press the HTC key to select the Hour</p> <p>The Minute will begin to blink.</p> <p>Use the CTC key to search Minute mode.</p> <p>By continuously pressing the CTC key, the minute time will slowly scroll for 2 seconds after which, the minute time will increase every 250 ms</p> <p>Press the HTC key to select the Minute</p> <p>Press the HTC key again to return to the initial Time of Day setting sub mode</p> <p>The method of setting time in the 24 Hr mode is the same as 12 Hr mode except for the absence of AM/PM.</p>	<p>Time of day</p> <p>Enable?</p> <p>Time of day</p> <p>Disable?</p> <p>12 Hours Mode</p> <p>24 Hours Mode</p> <p>AM 1:00</p> <p>AM 2:00</p> <p>AM 10:00</p> <p>PM 11:00</p> <p>AM 7:00</p> <p>AM 7:01</p> <p>AM 7:02</p> <p>AM 7:52</p> <p>Exit?</p>

Main Menus	Key Access	Display
<p>UV Lamp Set mode</p>	<p>In the Main Menus, press the HTC key to select UV Lamp set mode</p> <p>Use the CTC key to search Enable/Disable.</p> <p>Use the HTC key to select Enable/Disable If Disable is selected, Exit mode is displayed UV Lamp will not operate</p> <p>If Enable mode is selected, Time choice mode will be displayed</p> <p>Press the CTC key to execute Time search.</p> <p>Press HTC key to select and go to Delay/On time setting mode</p> <p>Press CTC key to search Hours</p> <p>Press HTC key to select hour and go to Delay/ON time search mode</p> <p>Press CTC key to search ON time.</p> <p>After selecting On time, press HTC key to Complete UV Delay On time set mode.</p> <p>Press the Hot water 1 key to go to Main Menu.</p>	<p>UV Lamp Setting</p> <p>UV after Dispense Enable?</p> <p>UV after Dispense Disable?</p> <p>ON time = 2 min.</p> <p>ON time = 4 min</p> <p>Delay = 12 Hour</p> <p>ON time = 2 min</p> <p>Delay = 1 Hour</p> <p>ON time = 2 min</p> <p>;</p> <p>Delay = 12 Hour</p> <p>ON time = 2 min</p> <p>Delay = 12 Hour</p> <p>ON time = 3 min</p> <p>Delay = 12 Hour</p> <p>ON time = 4 min</p> <p>Exit?</p>

8. Programming Instructions – IP1

Main Menus	Key Access	Display
Energy Save Set mode	In the Main Menus, press the HTC key to select Energy Save set mode	Energy Save Settings
	Press CTC key to search Enable/Disable	Energy Save Enable?
	Press HTC key to select Enable/Disable	Energy Save Disable?
	If Disable is selected, press HTC key to go to exit mode	Exit?
	Press HTC key to select Enable	From : PM 1:00 To : AM 2:00
	Press CTC key to search hour time	From : PM 10:00 To : AM 2:00
	Press HTC key to select hour and go to Minute Set mode	From : PM 10:00 To : AM12:00
	Each time CTC key is pressed, time changes in 10 minute increments.	From : PM 10:40 To : AM12:00
	Press HTC key to select Minute and go to Energy save off time Hour Select mode	
	Press CTC key to search hour time	From : PM 10:40 To : AM 5:00
	Press HTC key to select hour and go toMinute Set mode	From : PM 10:40 To : AM 5:00
	Each time CTC key is pressed, time changes in 10 minute increments	From : PM 10:40 To : AM 2:30
	Press HTC key to execute Energy save time set.	Exit?
	Press Hot water 1 key to return to Main menus Press HTC key again to return to initial Energy save sub mode	

24 Hour mode Setting sequence is same with the exception of AM/PM.

Energy save mode is only settable in 10 minute increments.

When Energy Save Mode begins, the Hot Water temperature is maintained at 131~140°F/ 55~60°C. Cold Water temperature is maintained at 50~54°F/ 10~12°C. 20 minutes prior to the end of Energy Save Mode, the hot water will begin returning to normal operating temperature while cold water will begin returning to normal operating temperature 1 hour prior to the end of Energy Save Mode. If either Hot or Cold water Dispensing Key is pressed while in Energy Save Mode, unit will immediately begin operating at normal temperature before again returning to Energy Save Mode.

8. Programming Instructions – IP1

Main Menus	Key Access	Display
Filter Change Out mode	<p>In the Main Menus press HTC key to select Filter 1 Change out mode</p> <p>Press CTC key to search Enable/Disable.</p> <p>Press HTC key to select Enable/Disable</p> <p>Press CTC key to search filter Change period</p> <p>Press HTC key to select filter period.</p> <p>Press Hot water1 key to return to Main menus. Press HTC key again to go to Filter 1 Change out mode</p>	<p>Filter 1 Change Out mode</p> <p>Filter 1 Light: Enable?</p> <p>Filter 1 Light: Disable?</p> <p>Filter 1 Change At: 12 months</p> <p>At : 13 months</p> <p>;</p> <p>At : 24 months</p> <p>At : 1 months</p> <p>;</p> <p>Exit ?</p>

Filter 2, 3 Change mode is same as Filter 1.

If Filter change is disabled, time setting mode will be skipped and menu will go directly to exit

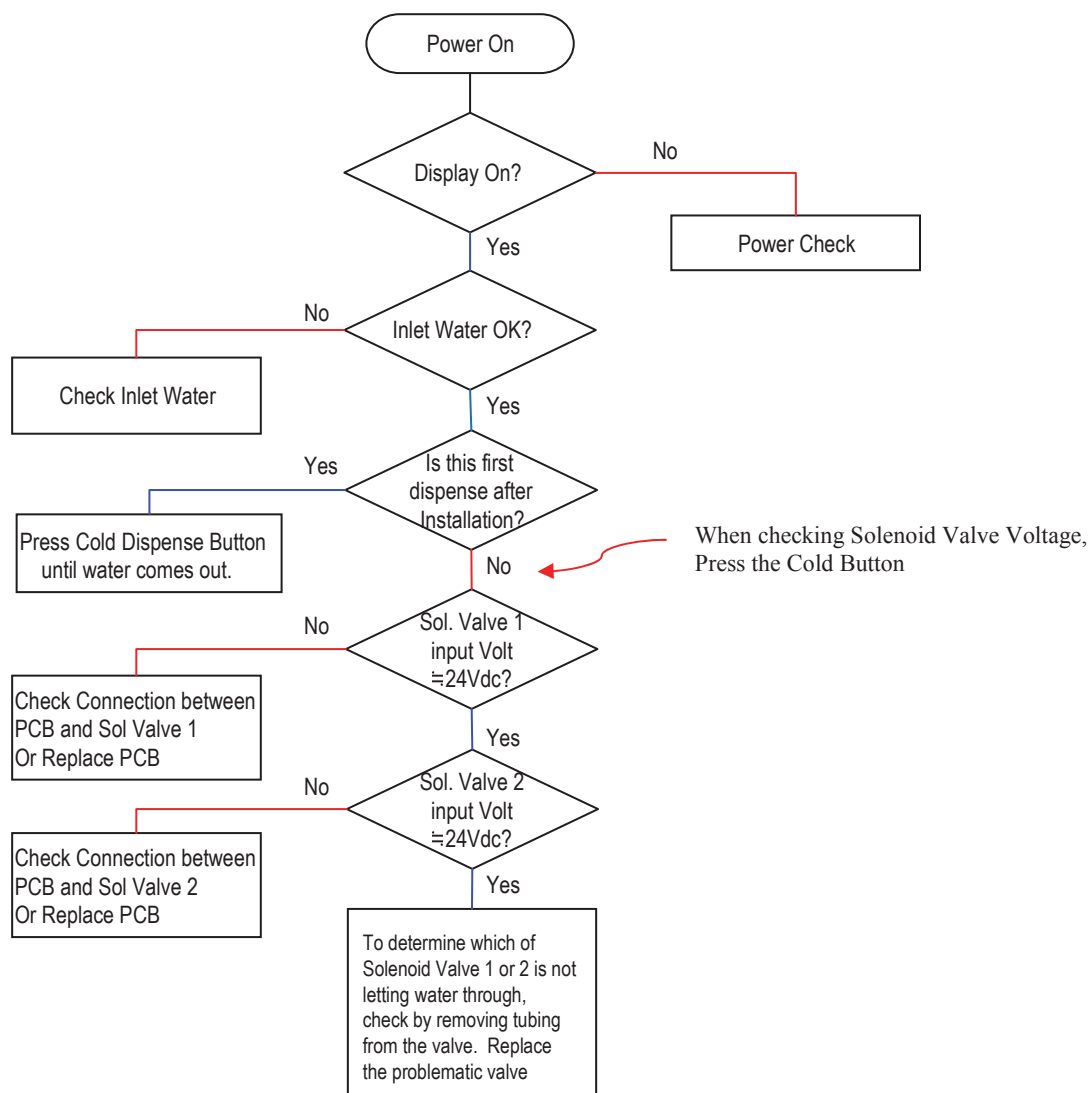
Main Menus	Key Access	Display
Filter Reset	<p>In Main Menus, press HTC key to select Filter 1 Reset mode</p> <p>Press CTC key to search Filter 1 Reset.</p> <p>Press HTC key to select Yes/No</p> <p>Press Hot water 1 key to go to Main Menus Press HTC key again to go to Filter 1 Reset mode</p>	<p>Filter 1 Reset Mode</p> <p>Re-set Filter 1 Yes?</p> <p>Re-set Filter 1 No?</p> <p>Exit ?</p>

Filter 2, 3 Reset Mode is same as Filter 1

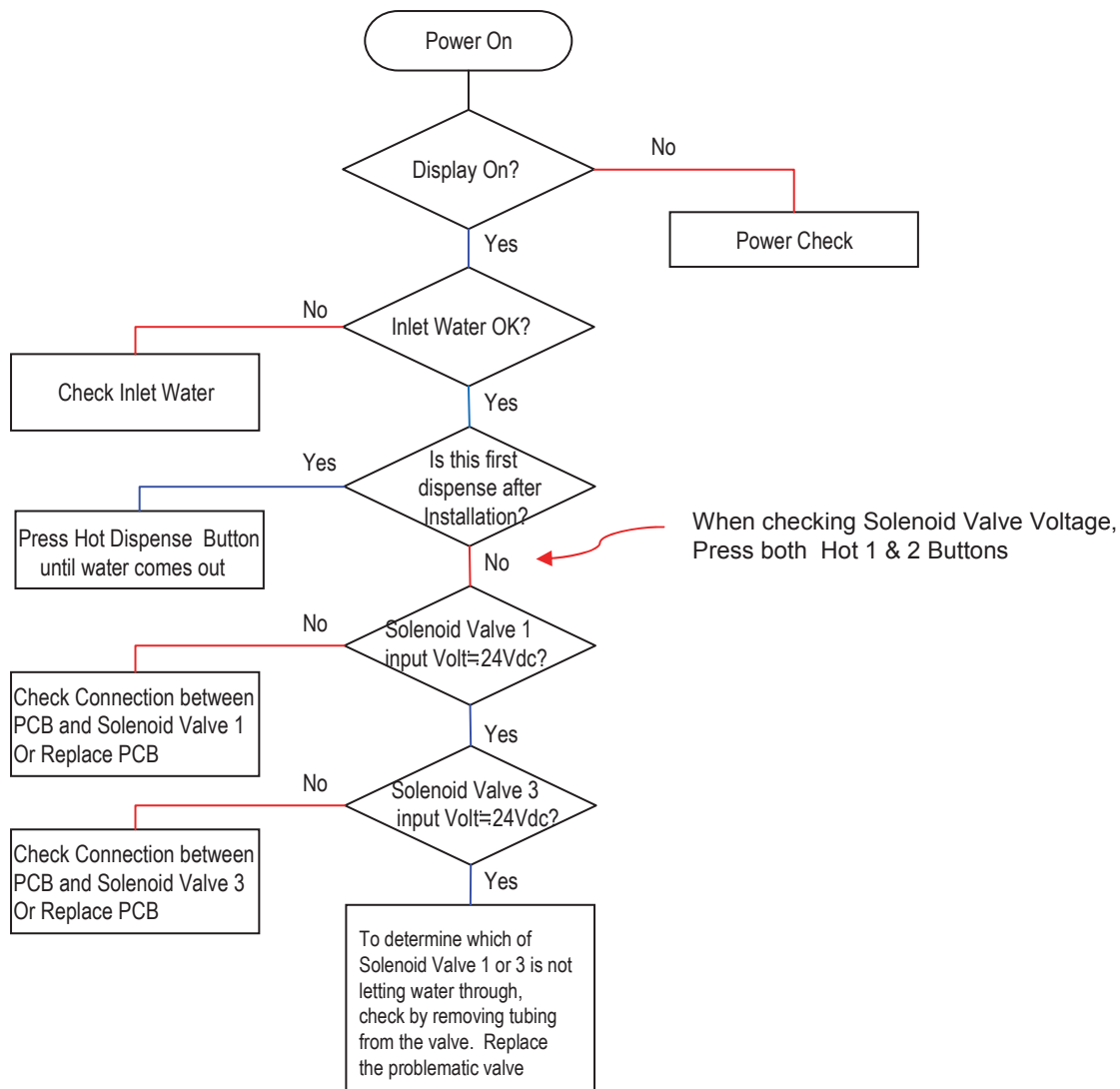
9. Before calling for service

Symptoms	Check point
Abnormal water taste	Have you checked replacement period of filters?
Water purification volume is more or less than specified	Is power cord properly connected to AC outlet? Is the water supply valve opened completely? Is the temperature of inlet water extremely low? If one of filters is plugged, order filter or request service.
Cooling and Heating system is not operating properly	Is water cooling or heating system on/off switch in the ON position? If switch is in the ON position, there may be a problem in the cooling or heating system. Please request service. .
There is no water output	Is power cord connected to AC outlet? Is feed water supply sufficient? If faucet is not operating properly, please request service.
Unit suddenly stops operating	Is power cord connected to AC outlet? Is the circuit breaker operating properly? Is there any overflow or leakage of water in the unit? Is the fuse blown? This could be due to a fault in the unit or power supply? If the cooler or heater is not operating properly due to over-cooling or over-heating, please request service.

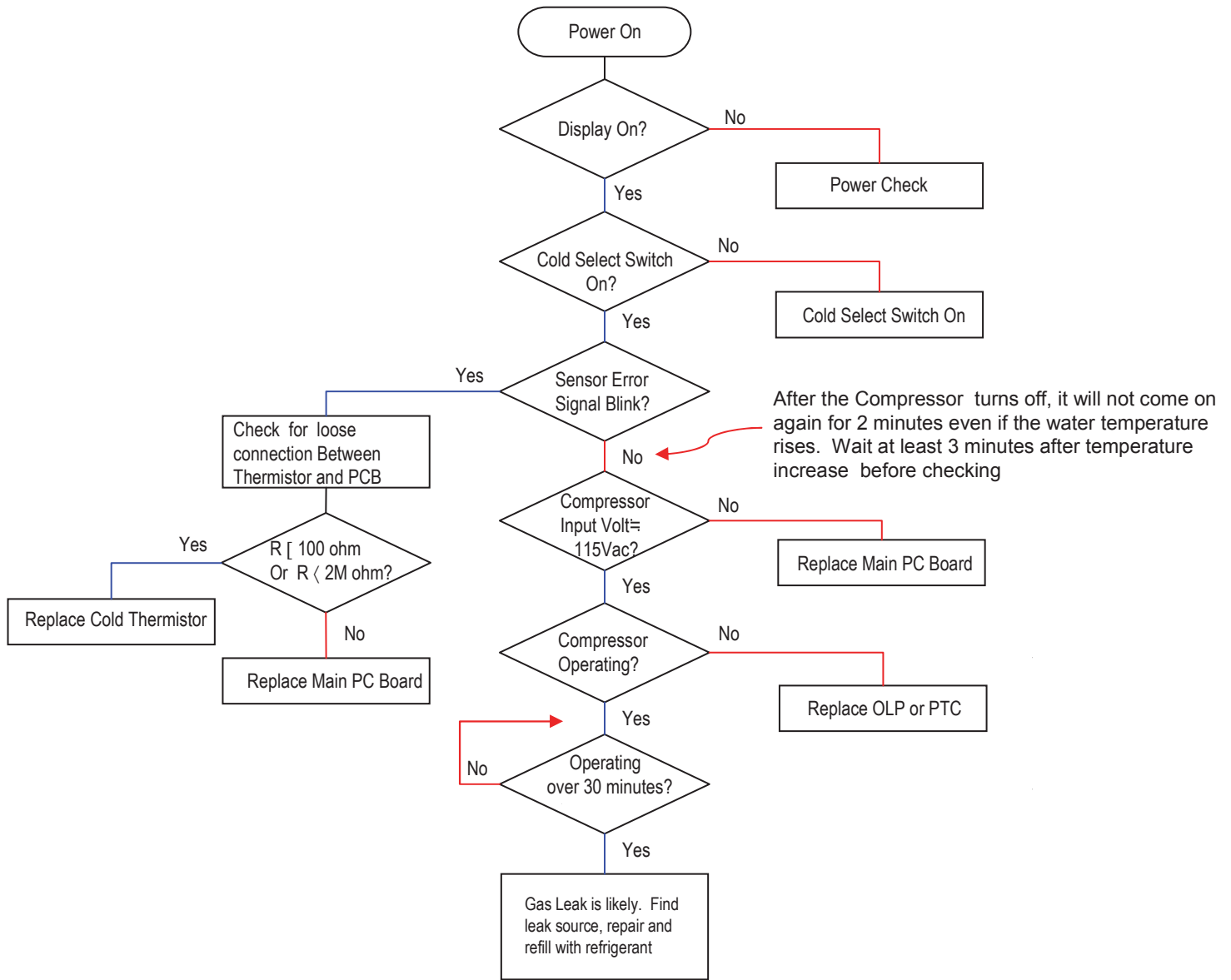
1). Cold water dispensing system – IP1/IP2/IPC1/IPC2



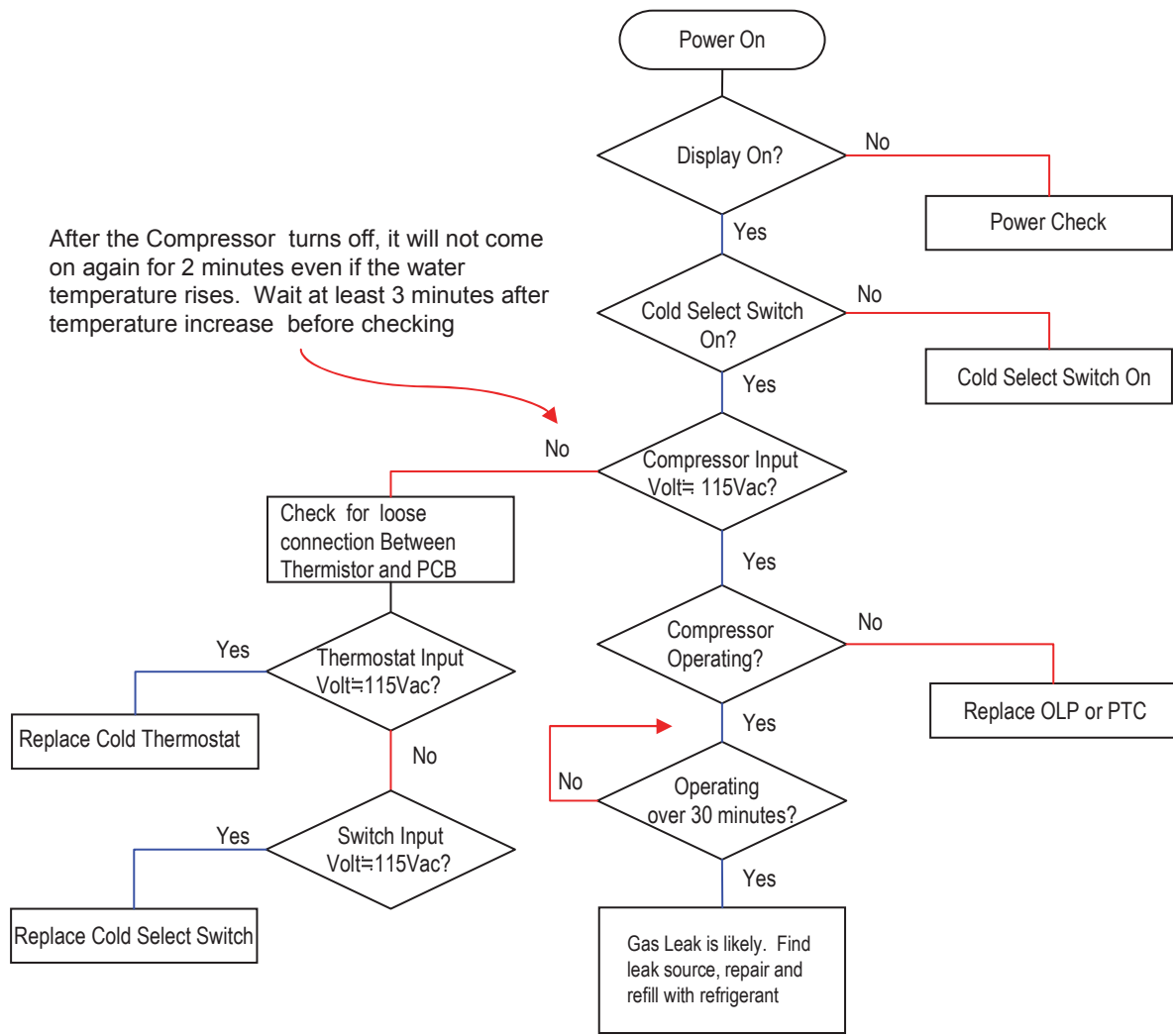
2). Hot water dispensing system – IP1 / IP2 / IPC1 / IPC2



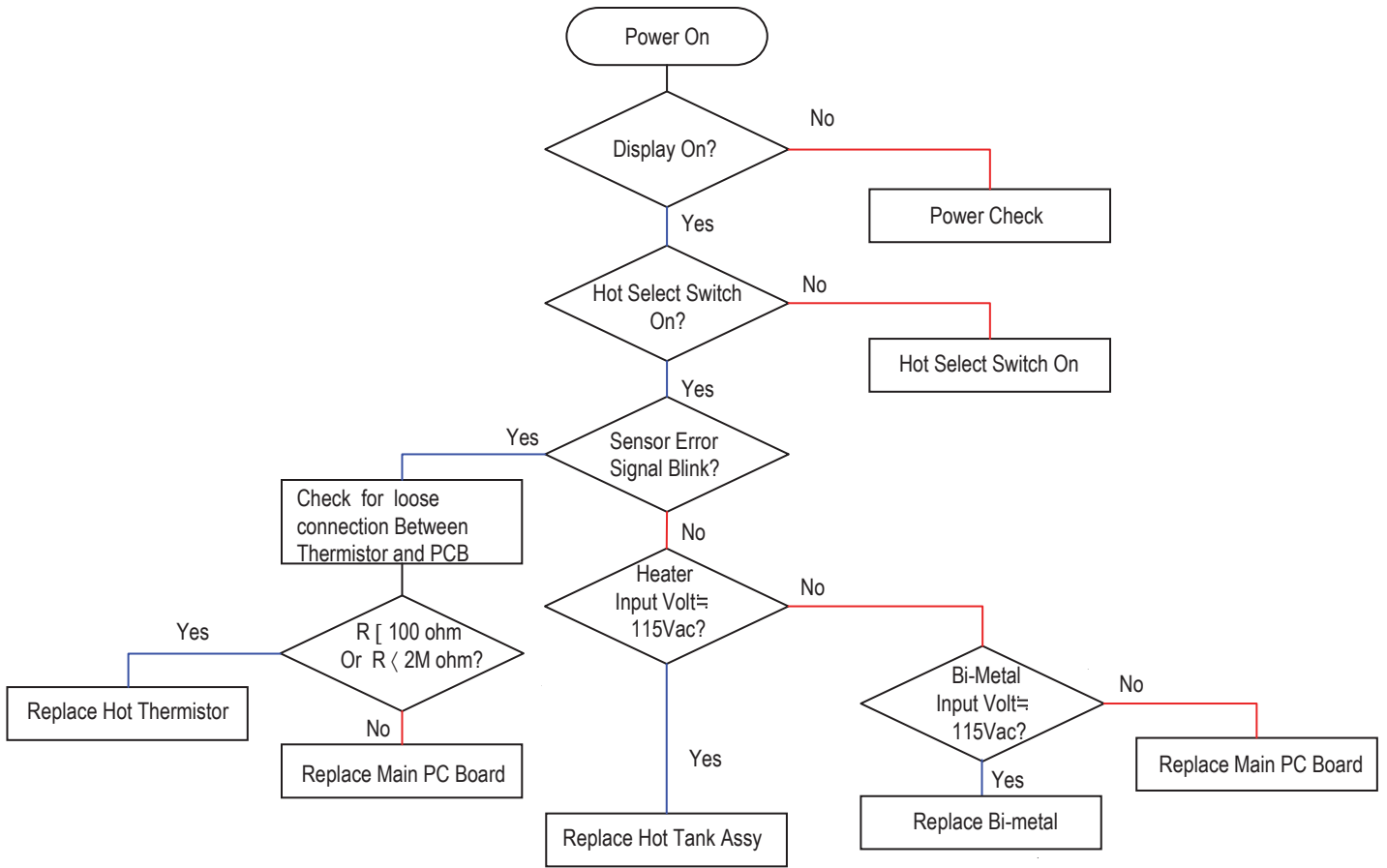
3). Cooling system – IP1 / IPC1 / IPC2



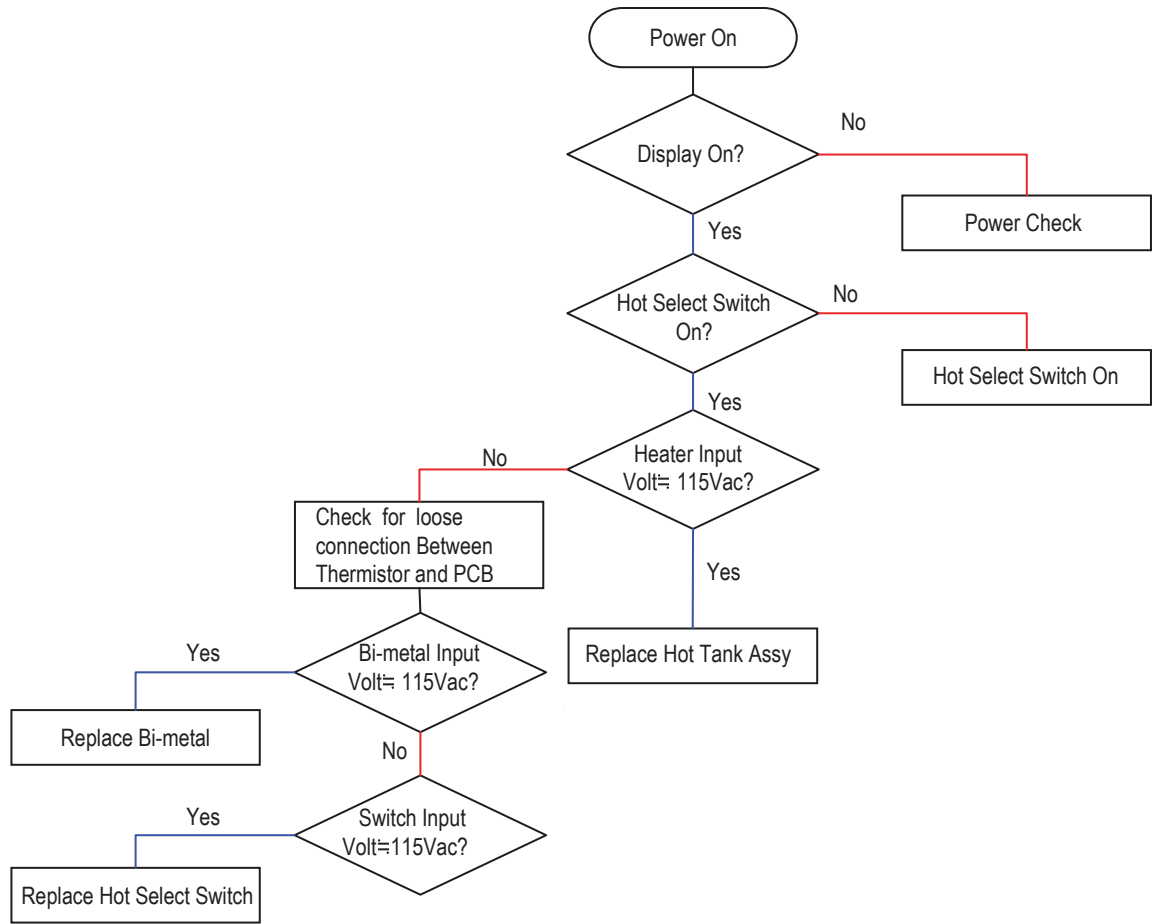
4). Cooling system – IP2



5). Heating System – IP1 / IPC1



6). Heating System – IP2 / IPC2



Warning:

Do not look directly at any operating UV lamp. Looking directly into the lamp can cause severe eye damage.

Note.

Ultra Violet lamp assemblies contain minute traces of mercury and must be disposed of in accordance with all hazardous waste guidelines.

- These models may be equipped with a automatic ultra violet bio film control option to protect the integrity of the filtered water before dispensing.
- The Lamp is controlled by a microprocessor and illuminates as required to assure performance and bulb life.
- The bulb assembly should be replaced every 12 months to assure optimum performance.
- The quartz sleeve should not be handled with bare hands. Should the sleeve become smudged with fingerprints or other foreign matter, it should be carefully wiped clean with a soft, non-abrasive, lint-free cloth.

12. Cooler Flushing Procedure

- 1) Insert the 1/4" feed water tube into the WATER IN port in the lower back of the cooler (DO NOT turn the water on yet)
- 2) Insert a 1/4" tube into the COFFEE/ICE MAKER port by the WATER IN port and run it to a drain or bucket.
- 3) Turn on the feed water and flush water thru the filters for approximately 4 minutes to remove an carbon fines.
- 4) Turn off the feed water.
- 5) Remove the tube from the COFFEE/ICEMAKER port and plug the port back up.
- 6) Turn feed water back on.
- 7) Plug cooler into an A/C outlet.
- 8) Press and hold the cold button until water comes out (Takes about 1 minute).
Dispense approximately one gallon to flush out the cold tank and then turn on the cold switch located on the upper back of the cooler.
- 9) Press and hold both hot buttons until water comes out (Takes about 1 minute).
Dispense approximately one gallon to flush out the hot tank and then turn on the hot switch located on the upper back of the cooler.
- 10) Wait approximately 30 minutes for the cold and hot water to reach optimum levels.
- 11) Cooler should now be ready for water consumption.

Note: If you are only flushing the filters, stop after step number 7.

- The warranty issued through PHSI does not apply to the appearance of the unit. The warranty applies only if your unit fails to function properly under normal use within the manufacturer's specifications.
- Under no circumstances will the following be included as warranty coverage.
 - Any unit not operated in accordance to the instructions contained in the owner's manual.
 - Damage due to an act of nature.
 - Any unit which, in our strict judgment, has been repaired, altered or modified by facility or personnel not authorized by PHSI or our authorized distributor.
- Term of Warranty
Warranty issued by PHSI. to the owner is valid for a period of one (1) year commencing from the date of purchase.

14. SPECIFICATIONS

Item / Model		IP1U	IP2U	IP2UC
INPUT VOLTAGE (As Requested)		120VAC 60 Hz / 220~240VAC 50 HZ		
RATED CURRENT (A)		4		
POWER CONSUMPTION	COMPRESSOR (Watt)	140		
	HEATER (Watt)	300	300	-
TEMP CONTROL SENSOR	COLD	THERMISTOR	THERMISTOR	
	HOT	THERMISTOR	Bi-Metal	-
TANK CAPACITY	COLD	0.79 gallons / 3 liters		
	HOT	0.53 gallons / 2 liters	0.53 gallons / 2 liters	-
WEIGHT		52 lb/24 kg	51 lb/23 kg	48 lb/22 kg
DIMENSIONS (W x D x H)		13" x 13.64" x 44.7" / 330.2 mm x 346.5 mm x 1135 mm		
FILTER SYSTEM		SEDIMENT CARBON 1 μ GAC CARBON	SEDIMENT CARBON 1 μ	
REFRIGERANT		R134A (60 Grams)		